

Maine Energy Systems

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USA

## Test report - Pellet fired hydronic heater model Pellematic 22 (non CBI report)

(18 appendices)

*This is a revised version of the test report dated 31/05/2022. This revised version includes missing information according to the below:*

- *Included in appendix 7 discussions of each run's appropriateness, validity and run anomalies.*
- *Included in appendix 7 feed rate settings for each test run.*
- *Translation into English for all run data sheet headers in appendix 16 and 17.*
- *Translation into English for the calibration documents in appendix 11.*
- *Included in appendix 2 table 3a, 3b, 5, 6, 7 and 8 particulate matter calculated with negative filter weights both corrected to zero and uncorrected.*
- *Included in appendix 19 in the owner's manual how to exercise warranty rights.*

### The assignment

Testing the wood pellet fired hydronic heater, model Pellematic 22 (PES 22) in accordance with test method ASTM 2618-13, CSA B415.1:22 and ASTM 2515-11 for compliance with EPA 40 CFR Part 60, March 16, 2015.

### Item for testing

The item tested was a pellet fired hydronic heater– model Pellematic 22 with serial nr.: XUTO1753, year of production 2022 and manufactured by Maine Energy Systems, USA. The hydronic heater arrived at RISE on 16<sup>th</sup> March 2022. The hydronic heater was pre-conditioned and thus in used condition.

**The performance tests were conducted 21<sup>st</sup> of March to 27<sup>th</sup> of April 2022.**

This test report relates only to the actual item tested.

### Technical description

Pellets are charged either manually or via the suction system from the storage location into the hopper and from there via the backfire safety device to the drop stage. The burner auger transports the pellets to the burner plate where the heater rod heats them until they ignite. The ignition is monitored on the basis of the combustion chamber temperature and switches off once the pellets have ignited. The fuel and combustion air volume are automatically controlled by the combustion temperature and modulation level and the vacuum in the combustion chamber is controlled by means of the flue gas fan and burner fan. The heat exchanger is

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cleaned automatically with the cyclically activated cleaning spring in the heat exchanger. The ash is collected underneath the burner plate, and is transported by the ash auger into the ash bin. The boiler is equipped with turbulators within the heat exchanger.

The pellet fired hydronic heater Pellematic 22 is intended for indoor installation.

### **Informative material supplied**

Two manuals were delivered from the manufacturer:

- Operating manual, Pellet heating with auger delivery or vacuum suction system for the end user. AutoPellet PES 20, 22, 32, 56. Version: FA\_V3.10. Valid from 04/2022.
- Installation manual – Pellet heating with vacuum suction system type AutoPellet PES 20, 22, & 32. Version FA-V3.10. Valid from 04/2022

### **Test arrangement**

The hydronic heater was connected to the test rig according to method ASTM E2618-13. The chimney was connected to a dilution tunnel according to ASTM 2515-11 clause 6.1.6 (see appendix 9).

The chimney diameter was 150 mm (5.9 in.), with a height of about 5 m (197 in.) above the upper surface of the scale. The dilution tunnel diameter was 160 mm (6.3 in.).

The manufacturer conducted a pre-test burning of 50 hours to condition the unit before testing (see appendix 16). The wood pellet hydronic heater PES 22 is a non-catalytic appliance.

### **Test procedure**

Testing was carried out at/by RISE Department for Energy and Resources during March 2022 to April 2022 in accordance with EPA regulations 40 CFR Part 60 subpart QQQQ. Testing and evaluation was performed according to ASTM 2618-13, ASTM 2515-11 and CSA B415.1:22.

The particulate matter from the probe assembly was handled according to the alternative method 126 dated March 6 2018 (broadly applicable) by rinsing the probe and probe assembly with acetone, drying down the rinse in beakers, desiccation followed by weighing (see appendix 10).

Calculation of the average overall thermal efficiency ( $\eta_{SLM}$ ) was done in accordance with Canadian standard CSA B415.1:22, clause 6.1.10 using the following average fuel properties for oak: C = 50.0 %, H = 6.6 %, O = 42.9 %, Ash = 0.5 %. The higher heating value (HHV) 8600 Btu/lb (19.99 MJ/kg) and the lower heating value (LHV) 7988 Btu/lb (18.567 MJ/kg) were used when calculating the efficiency.

CO, CO<sub>2</sub> and O<sub>2</sub> emissions were measured continuously in the chimney during the test period. Emissions of CO in g/min were calculated according to the Canadian standard CSA B415.1:22 clause 13.9 (using the spreadsheet in annex F, CSA B415.1:22).

The test fuel used was manufactured by Allspan Spanverarbeitung GmbH, Karlsruhe Germany and is classified as DIN EN plus pellet and according to ISO 17225-2 (see appendix 15). The fuel was delivered in 15 kg plastic bags. Samples for determining the moisture content of the pellet fuel was taken three times and an average was calculated to 7.2 % on dry basis (according to method D4442-16 method A).

Leakage checks of the particulate sampling trains were carried out before and after the tests (see appendix 4).



Instead of the thermopile on the load side of the heat exchanger one pair of PT-100 sensors were used to measure the temperatures. This was communicated with EPA by email (17/05/2016) and was approved. The PT-100 sensor has a higher accuracy and a higher sensitivity compared to the thermocouple.

The appliance was in operation at the specified draw rate two hours before the test started. The test period lasted for 4 hours at each heat output rate category according to method E2618-13 clause 12.3.3.

The manufacturer informed RISE on how to start the boiler (see email in appendix 12) and in addition instructions of the manual was followed when operating the boiler.

Representatives Michael Wögerbauer and Stefan Pumberger from the company Ökofen, Austria were present as observers during the tests.

**Summary of test results (Hangtag information)**

Table 1 show a summary of the test results and a hangtag information for the hydronic heater PES 22. For complete results see appendix 2.

**Table 1. Additional (Hangtag) information.**

MANUFACTURER:	<b>Maine Energy Systems</b> <b>8 Airport Road</b> <b>P.O. Box 547</b> <b>04217 Bethel, Maine 04217</b> <b>USA</b>		
MODEL NUMBER:	<b>Pellematic 22</b>		
8-HOUR OUTPUT RATING	Q <sub>out-8hr</sub>	<b>N.A</b>	Btu/hr
8-HOUR AVERAGE EFFICENCY	$\eta_{avg-8hr}$	<b>N.A</b>	(Using higher heating value)
		<b>N.A</b>	(Using lower heating value)
MAXIMUM OUTPUT RATING	Q <sub>max</sub>	<b>68,300</b>	BTU/HR
ANNUAL EFFICIENCY RATING:	$\eta_{avg}$	<b>82.0</b>	(Using higher heating value)
		<b>90.0</b>	(Using lower heating value)
PARTICLE EMISSIONS:	E <sub>avg</sub>	<b>0.439</b>	Grams/hr (Average)
		<b>(0.437)<sup>l</sup></b>	
		<b>0.053</b>	lbs/mmBtu Output
		<b>(0.052)<sup>l</sup></b>	

CO EMISSIONS	CO <sub>avg</sub>	<b>0.017</b>	Grams/minute
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**N.A** = Not Applicable (The hydronic heater is an automatic pellet fuelled appliance)

<sup>1</sup> *The room air filter catch was weighted as a negative value. In parentheses, particulate emission is given without any correction.*

**Comments and observations**

The wood pellet hydronic heater model Pellematic 22 manufactured by Maine Energy Systems, USA meets the step 2 requirement 2020 for PM emissions in EPA 40 CFR Part 60 of 0.10 lb/mmBtu heat output (average) and at each individual test rate.

When test run 1 in category IV was completed a small leak was detected between the top lid and the convection part in the boiler. The leak was sealed and a second test run was performed in this category IV (see table 3 to 8 in appendix 2).

Test run 1 in category I was discarded and has not been included in the calculations. The boiler operated at a heat output of 16.1 % of the rated output in this test run which was higher than the allowed target output of ≤ 15 % (see table 3 to 8 in appendix 2). Two more test runs were performed in category I according to ASTM 2618-13 clause 12.2.15. See also email conversation with EPA in appendix 12.

The tested model Pellematic 22 has a rated output of 68,300 Btu/hr (20 kW).

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**Quality assurance**

RISE Research Institute of Sweden AB is accredited according to ISO/IEC 17025 as well as accredited by EPA as a test lab to perform tests according to EPA 40 CFR Part 60 subpart QQQQ.

**RISE Research Institutes of Sweden AB  
Department Energy and Resources - Heating and Cooling Technologies**

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**Appendices**

Appendix 1 Identification

Appendix 2 Results

Appendix 3 Dilution tunnel traverse measurements

Appendix 4 Sampling equipment leak check



- Appendix 5 Proportional rate variation
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- Appendix 15 Fuel analyse
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- Appendix 18 Manuals

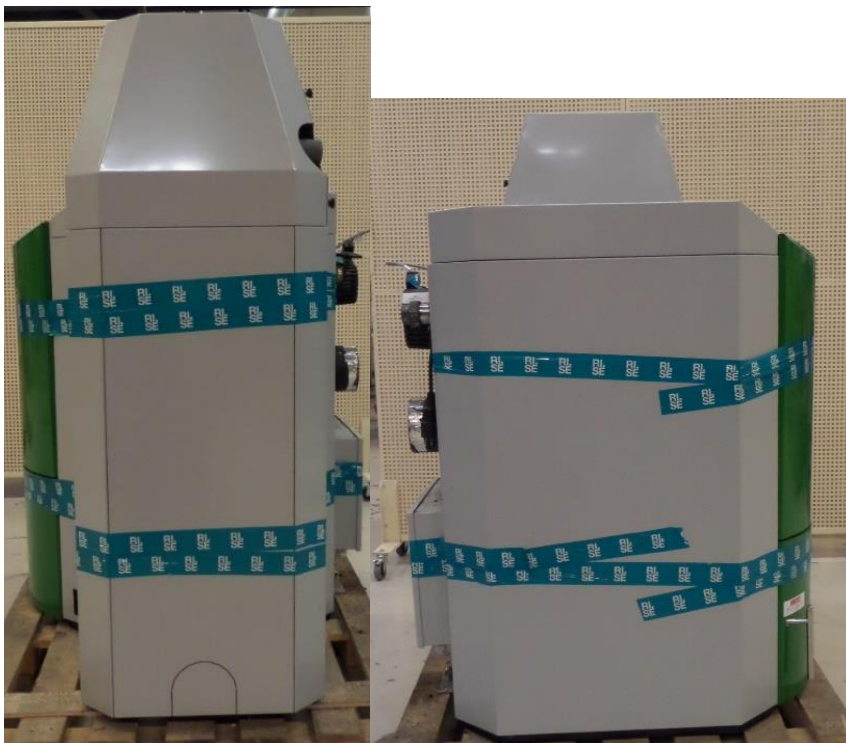
## Appendix 1

**Identification****Figure 1a. Pellematic 22 front and rear view****Figure 1b. Appliance at test stand**

Appendix 1



**Figure 1c: Sealed boiler**



**Figure 1d Sealed boiler**

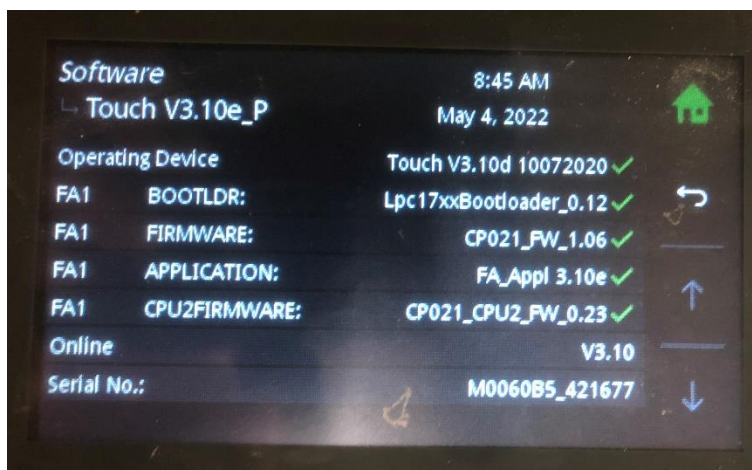
Appendix 1

**Technical data**

A summary of the boiler technical data is shown in table 2

**Table 2. Technical data**

Rated output, Btu/h (kW)	68,300 (20)
Gross weight empty, lbs (kg)	631 (286)
Water content, gal (l)	15.0 (66)
Dimensions, (height x depth x width), inch (mm)	43 x 32 x 44 1/2 (1100 x 814 x 1130)
Electrical connection	208 to 240 VAC, single phase, 60 Hz, 15 amp
Software version	Touch V3.10e_P



**Figure 1e. Software PES 22**



Appendix 2

**Results**

Table 3a and 3b show the test results for the pellet fired hydronic heater model Pellematic 22. Further test results are presented in tables 4 to 8. In table 3a the test category IV to II are presented and in table 3b the category I results are presented.

**Table 3a. Test results of Category IV, III and II.**

	Unit	Category IV Run 1	Category IV Run 2	Category III Run 1	Category II Run 1
Test date		21/03/2022	22/03/2022	30/03/2022	24/03/2022
Atmospheric pressure	mm Hg (mbar)	763 (1017)	759 (1012)	742 (989)	755 (1007)
Test duration	minutes	240	240	240	240
Absolute average gas static pressure in dilution tunnel	mm Hg	763	760	742	756
Average velocity in dilution tunnel	m/s	7.9	7.9	8.1	7.9
Average gas tunnel temperature (at Pitot tube)	°F (°C)	82 (28)	79 (26)	73 (23)	72 (22)
Average temperature at PM filter, sampling train 1	°F (°C)	75 (24)	73 (23)	70 (21)	70 (21)
Average temperature at PM filter, sampling train 2	°F (°C)	73 (23)	72 (22)	68 (20)	70 (21)
Flue gas temp (chimney)	°F (°C)	262 (128)	217 (103)	163 (73)	140 (60)
Average temperature of the appliance and water at start of the test	°F (°C)	147 (64)	144 (62)	155 (68)	160 (71)
Average temperature of the appliance and water at the end of the test	°F (°C)	153 (67)	142 (61)	149 (65)	162 (72)
Average temperature of return water as it enters the appliance	°F (°C)	138 (59)	129 (54)	136 (58)	153 (67)
Average temperature of supply water as it leaves the appliance	°F (°C)	163 (73)	156 (69)	171 (77)	169 (76)
Average inlet temperature load side of the heat exchanger	°F (°C)	127 (53)	118 (48)	111 (44)	113 (45)
Average outlet temperature load side of the heat exchanger	°F (°C)	154 (68)	145 (63)	136 (58)	127 (53)
Test load as fired	lb (kg)	41.28 (18.72)	40.11 (18.19)	18.75 (8.51)	9.93 (4.51)
Fuel moisture content on dry basis	%	7.2	7.2	7.2	7.2
Diameter of pellet	mm	6	6	6	6
Water flow rate load side	gal/min (l/min)	5.36 (20.30)	5.31 (20.11)	2.53 (9.58)	2.22 (8.39)

## Appendix 2

	Unit	Category IV Run 1	Category IV Run 2	Category III Run 1	Category II Run 1
Heat output (load side)	Btu/hr (kW)	70,044 (20.5)	70,099 (20.5)	31,700 (9.3)	15,718 (4.6)
Efficiency delivered (HHV)	%	84.6	87.1	84.3	78.9
Efficiency delivered (LHV)	%	91.1	93.8	90.7	84.9
Stack loss efficiency (HHV) <sup>1</sup>	%	85.6	86.9 <sup>2</sup>	88.2	88.4
CO (mean value)	ppm	62	107	30	28
CO (mean value)	%	0.0062	0.0107	0.0030	0.0028
CO <sub>2</sub> (mean value)	%	13.7	13.3	12.5	9.2
O <sub>2</sub> , (mean value)	%	6.5	7.2	8.0	11.3
CO, (mean) <sup>3</sup>	g/min	0.038	0.066	0.009	0.006
Room air blank filter	mg	0.00 (-0.07) <sup>5</sup>	0.02	0.02	0.00 (-0.01) <sup>5</sup>
Total amount of particulate matter collected in dilution tunnel, sampling train 1	g	5.93 (6.03) <sup>5</sup>	6.68	1.87	1.94 (1.95) <sup>5</sup>
Total amount of particulate matter collected in dilution tunnel, sampling train 2	g	7.23 (7.34) <sup>5</sup>	5.71	1.99	1.91 (1.93) <sup>4</sup>
Average gas flow rate in dilution tunnel	dscm/min	9.11	9.09	9.28	9.18
Absolute average dry gas meter temperature, sampling train 1	K	294	294	293	294
Absolute average dry gas meter temperature, sampling train 2	K	294	294	293	294
Volume of gas sample measured corrected to standard conditions, sampling train 1	dscm	1.3980	1.4020	1.4148	1.3875
Volume of gas sample measured corrected to standard conditions, sampling train 2	dscm	1.2714	1.3057	1.2937	1.3442
Volume of room air gas sample measured corrected to standard conditions	dscm	1.4231	1.3765	1.3776	1.3813
Difference of PM between the two sampling trains and train precisions in percent <sup>4</sup>	g/kg <sub>dry</sub> (%)	0.08 (9.9)	0.06 (7.8)	0.01 (2.9)	0.00 (0.6)

<sup>1</sup> Stack loss efficiency calculated according to CSA B415.1:22.

<sup>2</sup> The overall stack loss efficiency is lower than the delivered efficiency on the load side. A reason for this is that the stack loss method use the moisture content in the fuel on a wet base whilst the method

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ASTM 2618-13 (clause 13) use the moisture content on a dry base, thus giving a lower heat input and a higher efficiency. The difference is also within measurement uncertainty.

<sup>3</sup> CO emission in g/min are calculated according to B415.1:22.

<sup>4</sup> The requirement in ASTM 2515-11 for the difference between the two sampling trains are maximum 0.5 g/kg dry fuel or 7,5 % of total emissions from the average total emissions.

<sup>5</sup> The room air filter catch was weighted as a negative value. In parentheses, total particulate matter is given without any correction.

**Table 3b. Test results Category I run 1, 2 and 3.**

	Unit	Category I Run 1	Category I Run 2	Category I Run 3
Test date		23/03/2022	06/04/2022	27/04/2022
Atmospheric pressure	mm Hg (mbar)	759 (1012)	728 (971)	752 (1003)
Test duration	minute	240	240	240
Absolute average gas static pressure in dilution tunnel	mm Hg	760	729	753
Average velocity in dilution tunnel	m/s	7.8	7.8	7.8
Average gas tunnel temperature (at Pitot tube)	°F (°C)	72 (22)	70 (21)	72 (22)
Average temperature at PM filter, sampling train 1	°F (°C)	70 (21)	68 (20)	70 (21)
Average temperature at PM filter, sampling train 2	°F (°C)	70 (21)	68 (20)	70 (21)
Flue gas temp (chimney)	°F (°C)	133 (56)	113 (45)	113 (45)
Average temperature of the appliance and water at start of the test	°F (°C)	165 (74)	134 (57)	135 (57)
Average temperature of the appliance and water at the end of the test	°F (°C)	187 (86)	135 (57)	135 (57)
Average temperature of return water as it enters the appliance	°F (°C)	174 (79)	126 (52)	126 (52)
Average temperature of supply water as it leaves the appliance	°F (°C)	187 (86)	144 (62)	145 (63)
Average inlet temperature load side of the heat exchanger	°F (°C)	108 (42)	118 (48)	118 (48)
Average outlet temperature load side of the heat exchanger	°F (°C)	117 (47)	138 (59)	138 (59)
Test load as fired	lb (kg)	9.23 (4.19)	5.93 (2.69)	6.20 (2.81)
Fuel moisture content on dry basis	%	7.2	7.2	7.2

### Appendix 2

	Unit	Category I Run 1	Category I Run 2	Category I Run 3
Diameter of pellet	mm	6	6	6
Water flow rate load side	gal/min (l/min)	2.14 (8.11)	1.06 (4.01)	1.06 (4.02)
Heat output (load side)	Btu/hr (kW)	11,007 (3.2)	9999 (2.9)	9855 (2.9)
Efficiency delivered (HHV)	%	59.5	84.1	79.3
Efficiency delivered (LHV)	%	64.1	90.5	85.3
Stack loss efficiency (HHV) <sup>1</sup>	%	88.8	89.8	89.6
CO (mean value)	ppm	72	250	167
CO (mean value)	%	0.0072	0.0250	0.0167
CO <sub>2</sub> (mean value)	%	10.0	11.6	9.6
O <sub>2</sub> , (mean value)	%	10.5	8.8	11.0
CO, (mean) <sup>2</sup>	g/min	0.014	0.026	0.022
Room air blank filter	mg	0.09	0.00 (0.03) <sup>4</sup>	0.00
Total amount of particulate matter collected in dilution tunnel, sampling train 1	g	2.10	0.95 (0.90) <sup>4</sup>	1.01
Total amount of particulate matter collected in dilution tunnel, sampling train 2	g	3.40	1.09 (1.02) <sup>4</sup>	1.04
Average gas flow rate in dilution tunnel	dscm/min	9.22	8.82	9.06
Absolute average dry gas meter temperature, sampling train 1	K	294	293	294
Absolute average dry gas meter temperature, sampling train 2	K	294	293	294
Volume of gas sample measured corrected to standard conditions, sampling train 1	dscm	1.3970	1.3174	1.5102
Volume of gas sample measured corrected to standard conditions, sampling train 2	dscm	1.2935	1.2244	1.3527
Volume of room air gas sample measured corrected to standard conditions	dscm	1.3414	1.3939	1.3830
Difference of PM between the two sampling trains and train precisions in percent <sup>3</sup>	g/kg <sub>dry</sub> (%)	0.33 (23.6)	0.06 (6.8)	0.01 (1.8)

<sup>1</sup> Stack loss efficiency calculated according to CSA B415.1:22.

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<sup>2</sup> CO emission in g/min calculated according to B415.1:22.

<sup>3</sup> The requirement in ASTM 2515-11 for the difference between the two sampling trains are maximum 0.5 g/kg dry fuel or 7,5 % of total emissions from the average total emissions.

<sup>4</sup> The room air filter catch was weighted as a negative value. In parentheses, total particulate matter is given without any correction.

Tables 4 to 7 refers to the corresponding tables in ASTM E2618-13.

**Table 4. Test condition summary**

						$\Theta$	$W_{fuel}$	$MC_{ave}$	$Q_{in}$	$Q_{out}$
Category	Run No	Load % Capacity	Target Load	Actual Load	Actual Load	Test Duration	Wood Weight as-fired	Wood Moisture	Heat Input	Heat Output
			Btu/hr	Btu/hr	% of max	hrs	lb	% DB	Btu	Btu
<b>I</b>	1	≤ 15	≤ 10,245	11,007	16.1 <sup>1</sup>	4.0	9.23	7.2	74,004	44,029
<b>I</b>	2	≤ 15	≤ 10,245	9999	14.6	4.0	5.93	7.2	47,575	39,997
<b>I</b>	3	≤ 15	≤ 10,245	9855	14.4	4.0	6.20	7.2	49,736	39,421
<b>II</b>	1	16 - 24	10,928 – 16,392	15,718	23.0	4.0	9.93	7.2	79,687	62,872
<b>III</b>	1	25 - 50	17,075 – 34,150	31,700	46.4	4.0	18.75	7.2	150,431	126,800
<b>IV</b>	1	100	68,300	70,044	102.6	4.0	41.28	7.2	331,150	280,175
<b>IV</b>	2	100	68,300	70,099	102.5	4.0	40.11	7.2	321,771	280,396

<sup>1</sup> The actual load in category I test run 1 is more than the target load (≤ 15 %). Test run 1 in category I is discarded and is not included in the calculation of the average value. See also comments and observations in page 3.

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Table 5. Test results summary

			T2 min	E <sub>T</sub>	E	E	E <sub>g/hr</sub>	E <sub>g/kg</sub>	η <sub>del</sub>	η <sub>SLM</sub>
Category	Run No	Load % Capacity	Min return water temp	Total PM emissions	PM output based	PM output based	PM rate	PM factor	Delivered efficiency	Stack loss efficiency
			°F	g	lb/mmBtu out	g/MJ	g/hr	g/kg	%	%
I <sup>1</sup>	1	≤ 15	158	2.75	0.138	0.059	0.688	0.705	59.5	88.8
I	2	≤ 15	125	1.03	0.056 (0.053) <sup>2</sup>	0.024 (0.023) <sup>2</sup>	0.254 (0.241) <sup>2</sup>	0.406 (0.384) <sup>2</sup>	84.1	89.8
I	3	≤ 15	124	1.04	0.057	0.025	0.257	0.392	79.3	89.6
II	1	16 - 24	148	1.84	0.068 (0.068) <sup>2</sup>	0.029 (0.029) <sup>2</sup>	0.481 (0.485) <sup>2</sup>	0.459 (0.463) <sup>2</sup>	78.9	88.4
III	1	25 - 50	126	1.93	0.035	0.014	0.482	0.244	84.3	88.2
IV	1	100	134	6.35	0.052 (0.053) <sup>2</sup>	0.022 (0.023) <sup>2</sup>	1.645 (1.672) <sup>2</sup>	0.377 (0.383) <sup>2</sup>	84.6	85.6
IV	2	100	129	6.19	0.049	0.021	1.549	0.365	87.1	86.9 <sup>3</sup>

<sup>1</sup> Category I run 1 was discarded and is not included in the calculation of the average value. See comment page 3 (4).

<sup>2</sup> The room air filter catch was weighted as a negative value. In parentheses, particulate matter is given without any correction.

<sup>3</sup> The overall stack loss efficiency is lower than the delivered efficiency on the load side. A reason can be that the stack loss method use the moisture content in the fuel on a wet base whilst the method ASTM 2618-13 (clause 13) uses the moisture content on a dry base, thus giving a lower heat input and therefore a higher efficiency. The difference is also within the measurement uncertainty.

Table 6. Heating season weighting

Category	Weighting factor (F <sub>i</sub> )	η <sub>del,i</sub> × F <sub>i</sub>	E <sub>g/MJ,i</sub> × F <sub>i</sub>	E <sub>g/kg,i</sub> × F <sub>i</sub>	E <sub>lb/mmBtu Out,i</sub> × F <sub>i</sub>	E <sub>g/hr,i</sub> × F <sub>i</sub>	CO <sub>g/min</sub> × F <sub>i</sub>
I <sup>1</sup>	0.175	14.30	0.0043 (0.0042) <sup>3</sup>	0.0698 (0.0679) <sup>3</sup>	0.0099 (0.0096) <sup>3</sup>	0.0447 (0.0436) <sup>3</sup>	0.0042
II	0.275	21.70	0.0080 (0.0080) <sup>3</sup>	0.1262 (0.1273) <sup>3</sup>	0.0187 (0.0187) <sup>3</sup>	0.1323 (0.1334) <sup>3</sup>	0.0017
III	0.450	37.94	0.0063	0.1098	0.0158	0.2169	0.0041
IV <sup>2</sup>	0.100	8.59	0.0022 (0.0022) <sup>3</sup>	0.0371 (0.0374) <sup>3</sup>	0.0051 (0.0051) <sup>3</sup>	0.1597 (0.1611) <sup>3</sup>	0.0052
<b>Totals</b>	<b>1.000</b>	<b>82.53</b>	<b>0.021</b> (0.021) <sup>3</sup>	<b>0.343</b> (0.342) <sup>3</sup>	<b>0.049</b> (0.049) <sup>3</sup>	<b>0.554</b> (0.555) <sup>3</sup>	<b>0.015</b>



Appendix 2

<sup>1</sup> Results in category I are calculated as the arithmetic average of test run 2 and 3 shown in table 3b and 5 and multiplied by the weighting factor (see also email correspondence with EPA in appendix 12). Test run 1 in category I is discarded and is not included in the calculation of the average value.

<sup>2</sup> Results in category IV are calculated as the arithmetic average of test run 1 and 2 shown in table 3a and 5 and multiplied by the weighting factor (see also email correspondence with EPA in appendix 12).

<sup>3</sup> The room air filter catch was weighted as a negative value. In parentheses, particulate matter is given without any correction.

**Table 7. Year-Round use weighting**

Category	Weighting factor (F <sub>i</sub> )	η <sub>del,i</sub> X F <sub>i</sub>	E <sub>g/MJ,i</sub> X F <sub>i</sub>	E <sub>g/kg,i</sub> X F <sub>i</sub>	E <sub>lb/mmBtu Out,i</sub> X F <sub>i</sub>	E <sub>g/hr,i</sub> X F <sub>i</sub>	CO <sub>g/min</sub> X F <sub>i</sub>
<b>I<sup>1</sup></b>	0.437	35.70	0.0107 (0.0105) <sup>3</sup>	0.1744 (0.1696) <sup>3</sup>	0.0247 (0.0240) <sup>3</sup>	0.1117 (0.1088) <sup>3</sup>	0.0107
<b>II</b>	0.238	18.78	0.0069 (0.0069) <sup>3</sup>	0.1092 (0.1102) <sup>3</sup>	0.0162 (0.0162) <sup>3</sup>	0.1145 (0.1154) <sup>3</sup>	0.0015
<b>III</b>	0.275	23.18	0.0039	0.0671	0.0096	0.1326	0.0024
<b>IV<sup>2</sup></b>	0.050	4.29	0.0011 (0.0011) <sup>3</sup>	0.0186 (0.0187) <sup>3</sup>	0.0025 (0.0026) <sup>3</sup>	0.0799 (0.0805) <sup>3</sup>	0.0026
<b>Totals</b>	<b>1.000</b>	<b>81.95</b>	<b>0.023</b> (0.022) <sup>3</sup>	<b>0.369</b> (0.347) <sup>3</sup>	<b>0.053</b> (0.052) <sup>3</sup>	<b>0.439</b> (0.437) <sup>3</sup>	<b>0.017</b>

<sup>1</sup> Results in category I are calculated as the arithmetic average of test run 2 and 3 shown in table 3b and 5 and multiplied by the weighting factor (see also email correspondence with EPA in appendix 12). Test run 1 in category I is discarded and is not included in the calculation of the average value.

<sup>2</sup> Results in category IV are calculated as the arithmetic average of test run 1 and 2 shown in table 3a and 5 and multiplied by the weighting factor (see also email correspondence with EPA in appendix 12).

<sup>3</sup> The room air filter catch was weighted as a negative value. In parentheses, particulate matter is given without any correction.

Table 8 show the PM emissions from the first hour of measurement measured by one of the two sampling trains (train 2).

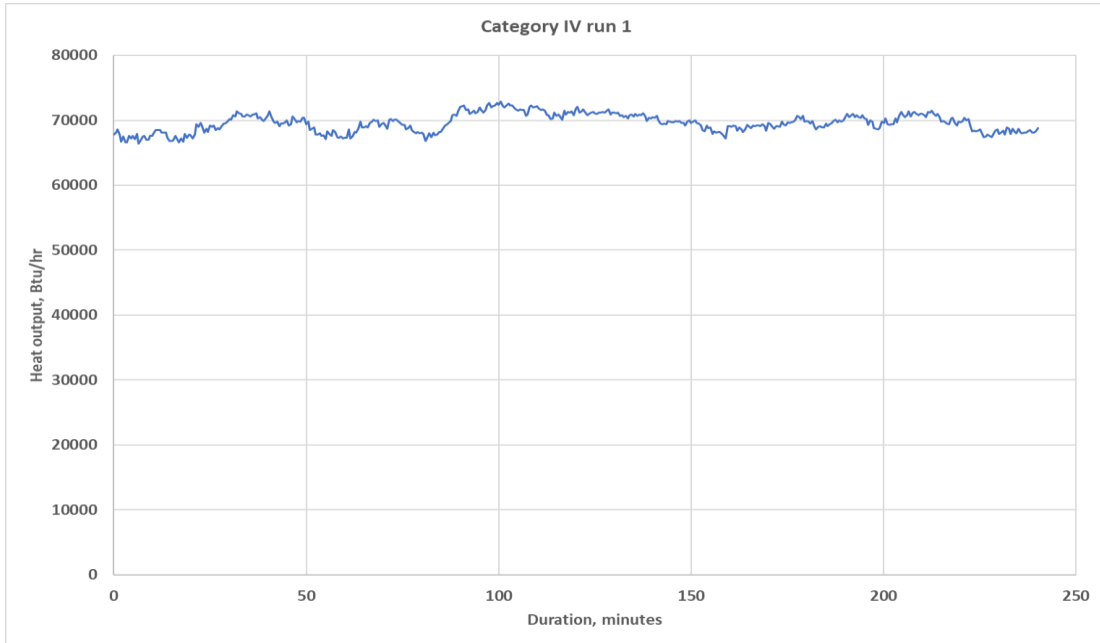
**Table 8. First hour emissions**

Category	1 <sup>st</sup> hour emissions (g/hr)	1 <sup>st</sup> hour emissions (lb/mmBtu)
<b>I run 1</b>	1.02	0.051
<b>I run 2</b>	0.03 (0.01) <sup>1</sup>	0.002 (0.000) <sup>1</sup>
<b>I run 3</b>	0.13	0.007
<b>II run 1</b>	0.95 (0.95) <sup>1</sup>	0.033 (0.033) <sup>1</sup>
<b>III run 1</b>	0.69	0.012
<b>IV run 1</b>	2.56 (2.59) <sup>1</sup>	0.020 (0.020) <sup>1</sup>
<b>IV run 2</b>	2.32	0.018

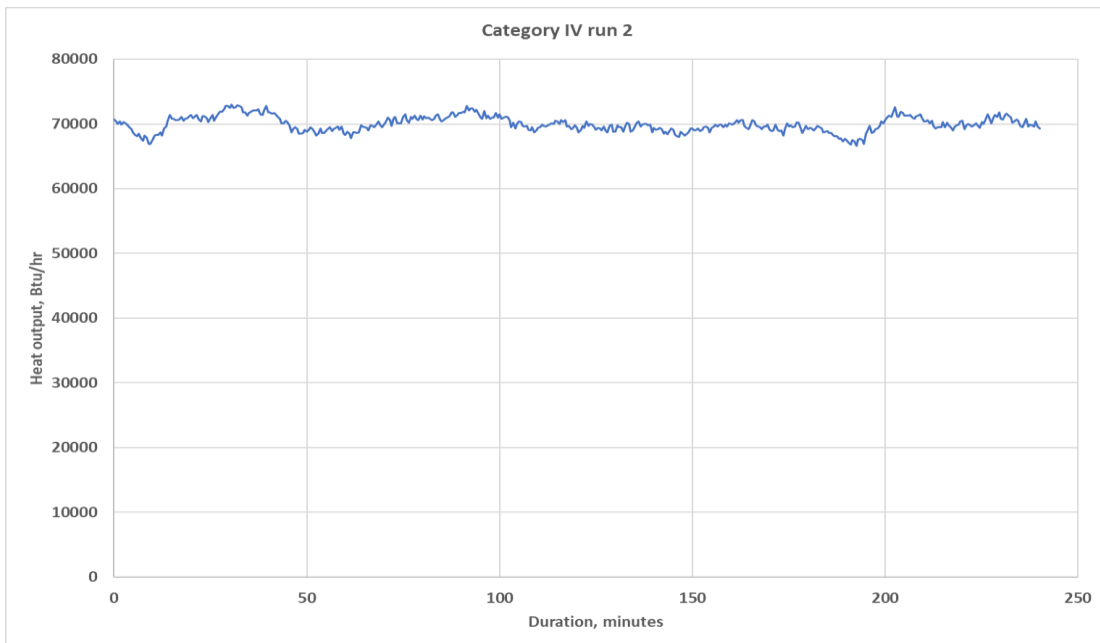
<sup>1</sup> The room air filter catch was weighted as a negative value. In parentheses, PM output is given without any correction.

Appendix 2

Figures 2 a-g show the heat output on load side in Btu/hr during the tests.

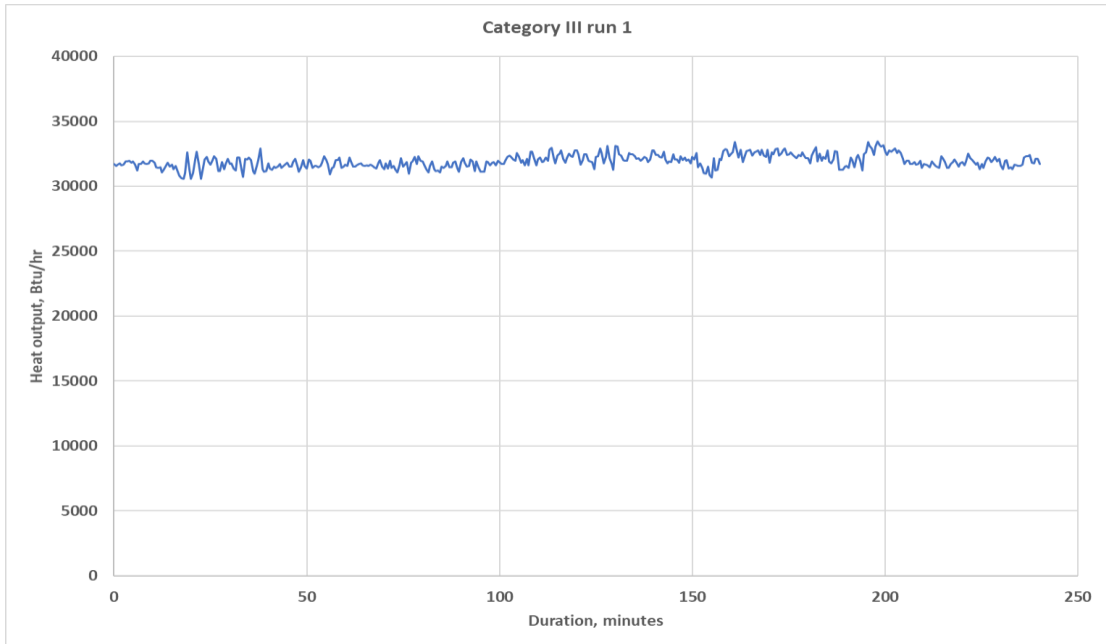


**Figure 2 a. Heat output Category IV run 1**

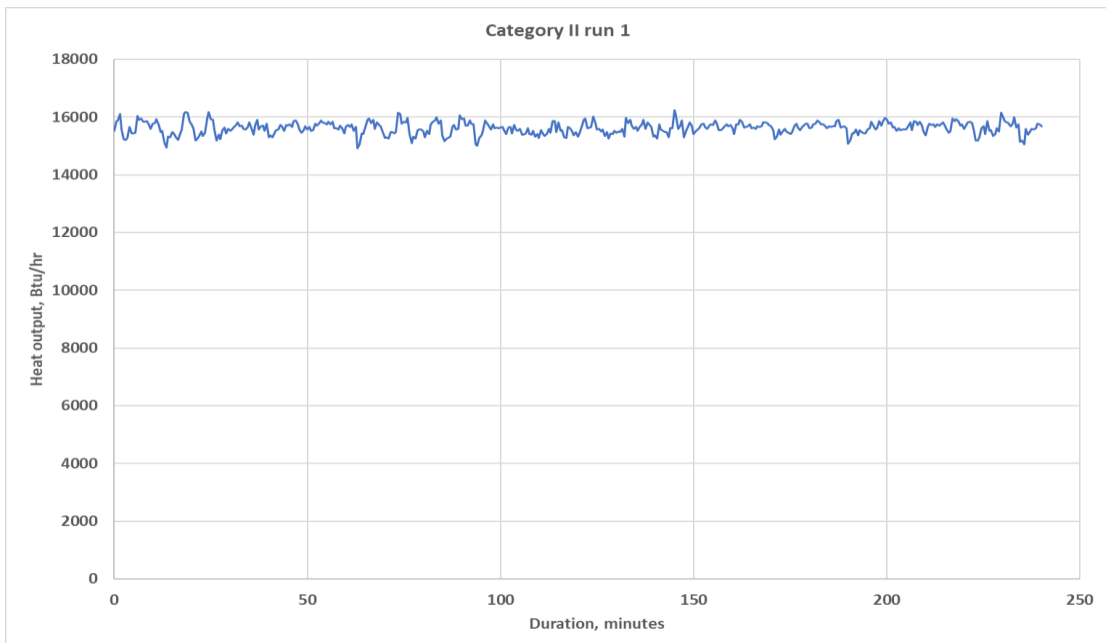


**Figure 2 b. Heat output Category IV run 2**

Appendix 2

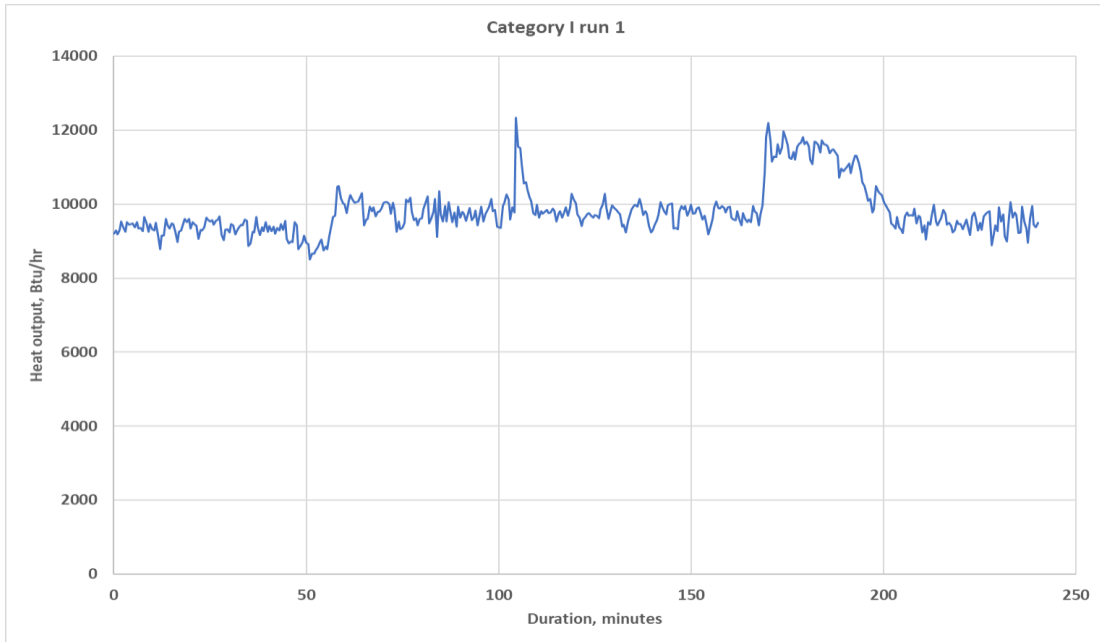


**Figure 2 c. Heat output Category III run 1.**

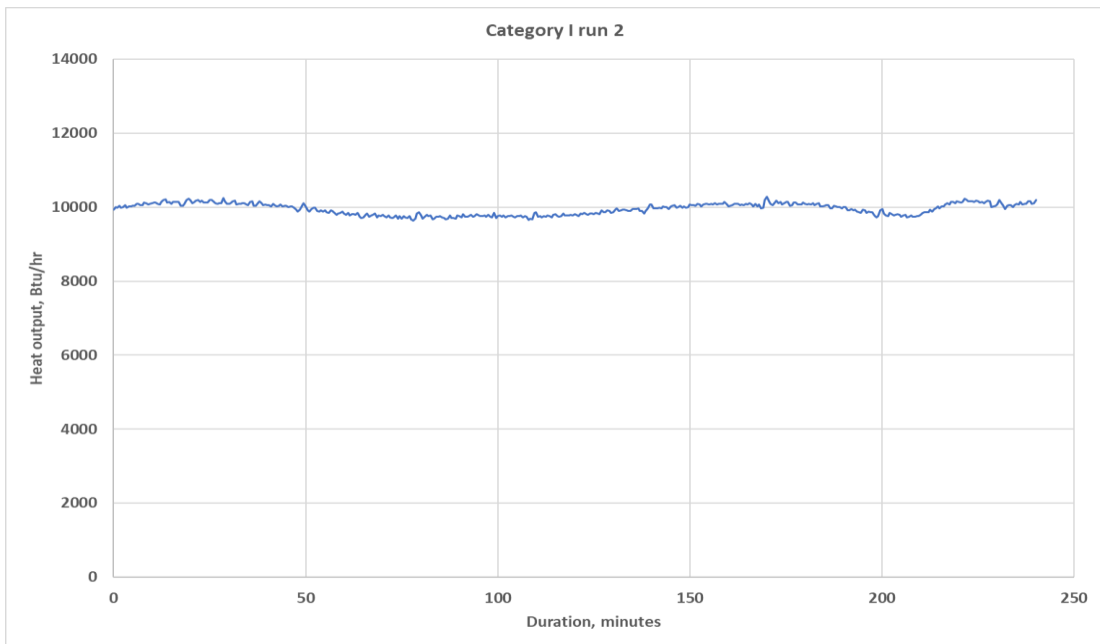


**Figure 2 d. Heat output Category II run 1**

Appendix 2

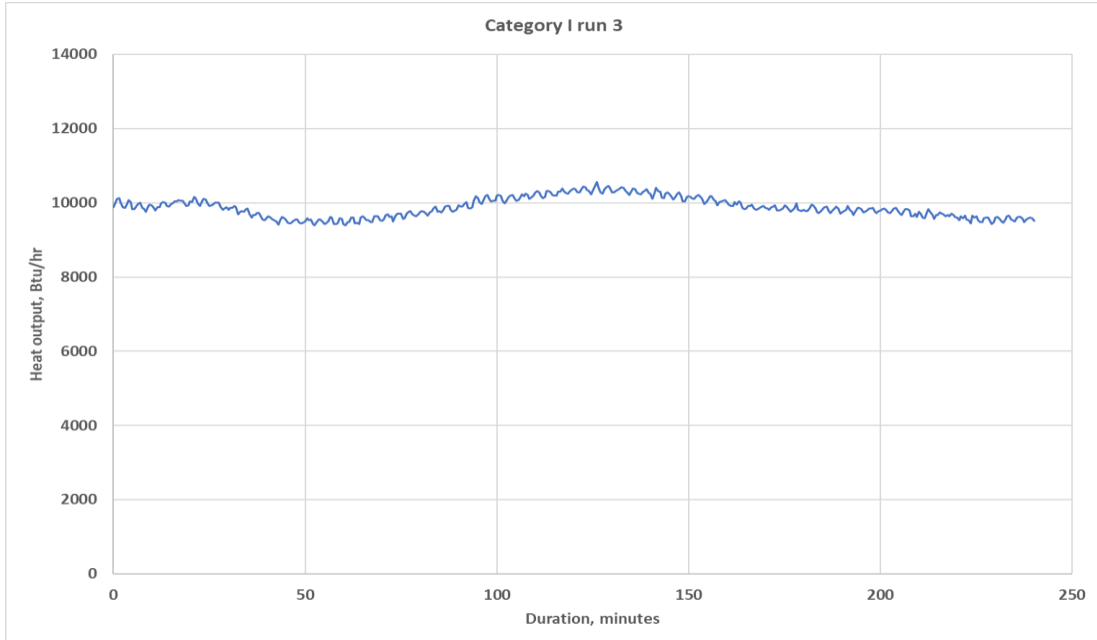


**Figure 2 e. Heat output Category I run 1. This test run is discarded due to that the heat output was more than 15 % of the rated output. See comment page 3.**



**Figure 2 f. Heat output Category I run 2**

Appendix 2



**Figure 2 g. Heat output Category I run 3**

Appendix 3

**Dilution tunnel velocity traverse measurement**

The dilution tunnel inside diameter was 160 mm (6.3 inch) and cross sectional area was 0.02 m<sup>2</sup> ( 0.22 ft<sup>2</sup>). The F<sub>p</sub> factor has been included in the calculations of the particulate emissions.

**Table 9a. Dilution tunnel traverse category I run 1.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	21.0	7.89
Y2	25.0	21.0	8.34
Centre	50.0	21.1	8.28
Y3	75.0	21.0	8.28
Y4	93.3	21.0	7.40
X1	6.7	21.1	7.60
X2	25.0	21.0	8.03
Centre	50.0	21.1	8.47
X3	75.0	21.0	8.30
X4	93.3	21.1	7.47
V <sub>strav</sub> , average (Y + X)	-	-	7.92
V <sub>scnt</sub> , average (Centre)	-	-	8.38

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.92}{8.38} = 0.9449$$

**Table 9b. Dilution tunnel traverse category I run 2.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	20.9	7.55
Y2	25.0	20.9	8.00
Centre	50.0	20.9	8.28
Y3	75.0	20.8	8.10
Y4	93.3	20.9	7.30
X1	6.7	20.9	7.51
X2	25.0	20.9	8.11
Centre	50.0	20.9	8.33
X3	75.0	20.9	8.12
X4	93.3	20.9	7.12
V <sub>strav</sub> , average (Y + X)	-	-	7.73
V <sub>scnt</sub> , average (Centre)	-	-	8.31

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.73}{8.31} = 0.9303$$



Appendix 3

**Table 9c. Dilution tunnel traverse category I run 3.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	19.9	8.05
Y2	25.0	19.9	7.98
Centre	50.0	19.9	8.23
Y3	75.0	19.9	8.08
Y4	93.3	20.0	7.13
X1	6.7	19.9	7.55
X2	25.0	19.9	8.13
Centre	50.0	19.9	8.41
X3	75.0	19.9	8.09
X4	93.3	20.0	7.26
V <sub>strav</sub> , average (Y + X)	-	-	7.78
V <sub>scnt</sub> , average (Centre)	-	-	8.32

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.78}{8.32} = 0.9355$$

**Table 9d. Dilution tunnel traverse category II run 1.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	21.0	7.89
Y2	25.0	21.0	8.34
Centre	50.0	21.1	8.28
Y3	75.0	21.0	8.28
Y4	93.3	21.0	7.40
X1	6.7	21.1	7.60
X2	25.0	21.0	8.03
Centre	50.0	21.1	8.47
X3	75.0	21.0	8.30
X4	93.3	21.1	7.47
V <sub>strav</sub> , average (Y + X)	-	-	7.92
V <sub>scnt</sub> , average (Centre)	-	-	8.38

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.92}{8.38} = 0.9449$$

Appendix 3

**Table 9e. Dilution tunnel traverse category III run 1.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	20.2	7.87
Y2	25.0	20.2	8.09
Centre	50.0	20.2	7.98
Y3	75.0	20.1	8.19
Y4	93.3	20.1	8.03
X1	6.7	20.2	7.46
X2	25.0	20.2	8.03
Centre	50.0	20.2	8.35
X3	75.0	20.2	8.23
X4	93.3	20.2	7.33
V <sub>strav</sub> , average (Y + X)	-	-	7.92
V <sub>scnt</sub> , average (Centre)	-	-	8.38

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.90}{8.17} = 0.9680$$

**Table 9f. Dilution tunnel traverse category IV run 1.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	20.8	8.09
Y2	25.0	20.7	8.39
Centre	50.0	20.8	8.52
Y3	75.0	20.8	8.02
Y4	93.3	20.7	7.21
X1	6.7	20.8	7.66
X2	25.0	20.8	8.26
Centre	50.0	20.8	8.52
X3	75.0	20.8	8.31
X4	93.3	20.8	7.37
V <sub>strav</sub> , average (Y + X)	-	-	7.92
V <sub>scnt</sub> , average (Centre)	-	-	8.38

$$F_p = \frac{V_{strav}}{V_{scnt}} = \frac{7.91}{8.46} = 0.9360$$

Appendix 3

**Table 9g. Dilution tunnel traverse category IV run 2.**

Traverse point	% of diameter (160 mm)	Temperature, °C	Velocity, m/s
Y1	6.7	20.8	8.09
Y2	25.0	20.7	8.39
Centre	50.0	20.8	8.52
Y3	75.0	20.8	8.02
Y4	93.3	20.7	7.21
X1	6.7	20.8	7.66
X2	25.0	20.8	8.26
Centre	50.0	20.8	8.52
X3	75.0	20.8	8.31
X4	93.3	20.8	7.37
V <sub>strav</sub> , average (Y + X)	-	-	7.92
V <sub>scent</sub> , average (Centre)	-	-	8.38

$$F_p = \frac{V_{strav}}{V_{scent}} = \frac{7.91}{8.46} = 0.9360$$

Appendix 4

### Sampling equipment leak check

The leak check of the sampling trains were performed at a vacuum of 380 mm Hg (0.5 bar). This vacuum was not exceeded during the test periods

Table 10a. Category I run 1

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.00015	0.0002	OK
<b>Sampling train 2</b>	0.0002	0.0001	OK
<b>Sampling train 3</b>	0.0002	0.0002	OK
<b>Ambient train</b>	0.0002	0.0002	OK

Table 10b. Category I run 2

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.00025	0.0002	OK
<b>Sampling train 2</b>	0.0002	0.0001	OK
<b>Sampling train 3</b>	0.00015	0.0002	OK
<b>Ambient train</b>	0.00025	0.0002	OK

Table 10c. Category I run 3

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.0002	0.00025	OK
<b>Sampling train 2</b>	0.00025	0.0002	OK
<b>Sampling train 3</b>	0.0001	0.0001	OK
<b>Ambient train</b>	0.0001	0.0001	OK

Table 10d. Category II run 1

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.00015	0.0002	OK
<b>Sampling train 2</b>	0.0002	0.0001	OK
<b>Sampling train 3</b>	0.00015	0.0001	OK
<b>Ambient train</b>	0.00015	0.0001	OK

Appendix 4

**Table 10e. Category III run 1**

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.00025	0.00025	OK
<b>Sampling train 2</b>	0.00025	0.00010	OK
<b>Sampling train 3</b>	0.0001	0.0001	OK
<b>Ambient train</b>	0.0002	0.00025	OK

**Table 10f. Category IV run 1**

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.00018	0.0001	OK
<b>Sampling train 2</b>	0.00005	0.0001	OK
<b>Sampling train 3</b>	0.0002	0.0002	OK
<b>Ambient train</b>	0.0001	0.00005	OK

**Table 10g. Category IV run 2**

	Leakage rate, m <sup>3</sup> /min		Requirement, 0.0003 m <sup>3</sup> /min
	Pre-test	Post-test	
<b>Sampling train 1</b>	0.0002	0.0002	OK
<b>Sampling train 2</b>	0.0002	0.0001	OK
<b>Sampling train 3</b>	0.0002	0.00025	OK
<b>Ambient train</b>	0.0002	0.0002	OK

Appendix 5

**Proportional rate variation**

Table 11a to 11j show the proportional rate variation of the sampling trains.

**Table 11a. Category I run 1 sampling train 1**

PROBE 1, Cat 1, run 1, 03-23-2022																									
	i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25	
Time total, minute	θ	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,05	
Average gas velocity in tunnel, m/s	V <sub>t</sub>	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	
Absolute average dry gas meter temperature, K	T <sub>m</sub>	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>g</sub>	295,12	295,10	294,74	294,66	294,68	294,62	294,69	294,73	294,69	294,80	294,79	294,90	294,89	294,94	294,95	295,00	295,04	294,91	295,01	294,86	294,86	294,74	294,84	294,82
Volume of gas sample total, m <sup>3</sup>	V <sub>m</sub>	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>t</sub>	8,38	8,38	8,37	8,38	8,39	8,39	8,39	8,39	8,39	8,39	8,39	8,38	8,39	8,39	8,39	8,38	8,37	8,38	8,39	8,39	8,38	8,39	8,39	8,37
Absolute average gas temperature in tunnel (pitot), K	T <sub>g</sub>	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>m</sub>	293,47	293,55	293,60	293,67	293,72	293,75	293,77	293,81	293,83	293,88	293,94	293,98	294,00	294,03	294,06	294,08	294,11	294,13	294,14	294,17	294,17	294,18	294,19	294,23
Actual time when reading, minute	θ	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		109	110	104	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	89
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120

**Table 11b. Category I run 1 sampling train 2 and 3**

PROBE 1, Cat 1, run 1, 03-23-2022																									
	i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25	
Time total, minute	θ	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,05	
Average gas velocity in tunnel, m/s	V <sub>t</sub>	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	8,385	
Absolute average dry gas meter temperature, K	T <sub>m</sub>	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	293,935	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>g</sub>	295,12	295,10	294,74	294,66	294,68	294,62	294,69	294,73	294,69	294,80	294,79	294,90	294,89	294,94	294,95	295,00	295,04	294,91	295,01	294,86	294,86	294,74	294,84	294,82
Volume of gas sample total, m <sup>3</sup>	V <sub>m</sub>	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>t</sub>	8,38	8,38	8,37	8,38	8,39	8,39	8,39	8,39	8,39	8,39	8,39	8,38	8,39	8,39	8,39	8,38	8,37	8,38	8,39	8,39	8,38	8,39	8,39	8,37
Absolute average gas temperature in tunnel (pitot), K	T <sub>g</sub>	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85	294,85
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>m</sub>	293,47	293,55	293,60	293,67	293,72	293,75	293,77	293,81	293,83	293,88	293,94	293,98	294,00	294,03	294,06	294,08	294,11	294,13	294,14	294,17	294,17	294,18	294,19	294,23
Actual time when reading, minute	θ	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		109	110	104	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	89
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120





### Appendix 5

**Table 11c. Category I run 2 sampling train 1**

PROBE 1, Cat 1, run 2, 04-06-2022																									
	i1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Time total, minute	θ	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,05	
Average gas velocity in tunnel, m/s	V <sub>g</sub>	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	
Absolute average dry gas meter temperature, K	T <sub>m</sub>	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	292,967	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>g</sub>	294,57	294,59	294,57	294,56	294,59	294,60	294,60	294,56	294,48	294,41	294,39	294,30	294,24	294,34	294,33	294,31	294,33	294,30	294,35	294,41	294,57	294,53	294,40	294,49
Volume of gas sample total, m <sup>3</sup>	V <sub>tot</sub>	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	1,34	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>g</sub>	8,31	8,31	8,31	8,31	8,31	8,32	8,31	8,31	8,32	8,31	8,31	8,32	8,31	8,32	8,30	8,31	8,31	8,31	8,31	8,30	8,31	8,31	8,32	8,31
Absolute average gas temperature in tunnel (pitot), K	T <sub>g</sub>	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45	294,45
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>mi</sub>	292,73	292,75	292,79	292,83	292,88	292,91	292,94	292,99	292,98	292,97	292,99	292,99	292,98	292,97	292,98	293,02	293,04	293,04	293,07	293,04	293,08	293,09	293,07	293,05
Actual time when reading, minute	θ <sub>i</sub>	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		104	113	101	99	99	99	99	99	99	99	104	99	99	99	99	99	99	99	99	99	100	99	99	98
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		OK	Fail	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
Fail 2/ok			OK																						

**Table 11d. Category I run 2 sampling train 2 and 3**

PROBE 2-3, Cat 1, run 2, 06-04-2022																									
	Probe2	Probe2	Probe2	Probe2	Probe2	Probe2	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	
	i1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Time total, minute	θ	60,00	60,00	60,00	60,00	60,00	60,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	178,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,05	0,05	0,05	0,05	0,05	0,05	0,04	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,06	0,06	0,05	0,05
Average gas velocity in tunnel, m/s	V <sub>g</sub>	8,313	8,313	8,313	8,313	8,313	8,313	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311	8,311
Absolute average dry gas meter temperature, K	T <sub>m</sub>	292,825	292,825	292,825	292,825	292,825	292,825	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064	293,064
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>g</sub>	294,57	294,59	294,57	294,56	294,59	294,60	294,61	294,56	294,48	294,41	294,39	294,30	294,24	294,34	294,33	294,31	294,33	294,30	294,35	294,41	294,57	294,53	294,40	294,49
Volume of gas sample total, m <sup>3</sup>	V <sub>tot</sub>	0,32	0,32	0,32	0,32	0,32	0,32	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>g</sub>	8,31	8,31	8,31	8,31	8,31	8,32	8,31	8,31	8,32	8,31	8,31	8,32	8,31	8,32	8,30	8,31	8,31	8,31	8,31	8,30	8,31	8,31	8,32	8,31
Absolute average gas temperature in tunnel (pitot), K	T <sub>g</sub>	294,58	294,58	294,58	294,58	294,58	294,58	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41	294,41
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>mi</sub>	292,74	292,75	292,80	292,84	292,89	292,92	292,96	293,00	293,00	293,00	293,03	293,02	293,02	293,01	293,03	293,07	293,09	293,10	293,13	293,11	293,15	293,15	293,15	293,13
Actual time when reading, minute	θ <sub>i</sub>	10	10	10	10	10	10	8	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		101	99	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120



### Appendix 5

**Table 11g. Category II run 1 sampling train 1**

PROBE 1, Cat II, run 1, 24-09-2022																									
	i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25	
Time total, minute	θ	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,07	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	
Average gas velocity in tunnel, m/s	V <sub>s</sub>	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	
Absolute average dry gas meter temperature, K	T <sub>m</sub>	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	293,664	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>s</sub>	295,12	295,19	295,33	295,43	295,53	295,65	295,65	295,60	295,64	295,43	294,84	294,86	295,04	295,15	295,17	295,19	295,23	295,14	295,13	294,99	295,02	295,10	295,13	295,19
Volume of gas sample total, m <sup>3</sup>	V <sub>m</sub>	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>s</sub>	8,37	8,37	8,38	8,38	8,37	8,37	8,36	8,36	8,37	8,37	8,38	8,37	8,36	8,38	8,38	8,38	8,38	8,38	8,38	8,38	8,38	8,36	8,36	8,36
Absolute average gas temperature in tunnel (pitot), K	T <sub>s</sub>	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24	295,24
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>m</sub>	292,86	292,96	293,06	293,16	293,25	293,36	293,45	293,56	293,61	293,67	293,70	293,77	293,83	293,87	293,89	293,91	293,97	293,94	293,96	293,97	294,00	294,04	294,06	294,10
Actual time when reading, minute	θ <sub>i</sub>	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		119	109	100	98	99	98	99	99	99	99	99	98	99	98	99	98	99	99	99	98	99	99	99	100
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		Fail	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
Fail 2/ok		OK																							

**Table 11h. Category II run 1 sampling train 2 and 3**

PROBE 2-3, Cat II, run 1, 24-09-2022																									
	Probe2	Probe2	Probe2	Probe2	Probe2	Probe2	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	Probe3	
	i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25	
Time total, minute	θ	60,00	60,00	60,00	60,00	60,00	60,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	179,00	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	V <sub>m</sub>	0,05	0,05	0,06	0,06	0,06	0,06	0,05	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	
Average gas velocity in tunnel, m/s	V <sub>s</sub>	8,374	8,374	8,374	8,374	8,374	8,374	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	8,372	
Absolute average dry gas meter temperature, K	T <sub>m</sub>	293,074	293,074	293,074	293,074	293,074	293,074	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	293,953	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	T <sub>s</sub>	295,12	295,19	295,33	295,43	295,53	295,65	295,65	295,60	295,64	295,43	294,84	294,86	295,04	295,15	295,17	295,19	295,23	295,14	295,13	294,99	295,02	295,10	295,13	295,19
Volume of gas sample total, m <sup>3</sup>	V <sub>m</sub>	0,33	0,33	0,33	0,33	0,33	0,33	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	1,04	
Average gas velocity in tunnel for 10 min interval, m/s	V <sub>s</sub>	8,37	8,37	8,38	8,38	8,37	8,37	8,35	8,36	8,37	8,37	8,38	8,37	8,36	8,38	8,38	8,38	8,38	8,38	8,38	8,38	8,38	8,36	8,36	8,36
Absolute average gas temperature in tunnel (pitot), K	T <sub>s</sub>	295,38	295,38	295,38	295,38	295,38	295,38	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	295,19	
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	T <sub>m</sub>	292,84	292,92	293,01	293,12	293,22	293,33	293,45	293,56	293,63	293,71	293,74	293,83	293,90	293,96	294,00	294,03	294,11	294,09	294,12	294,14	294,17	294,20	294,22	294,26
Actual time when reading, minute	θ <sub>i</sub>	10	10	10	10	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Results		83	93	105	105	105	108	94	101	100	100	100	100	100	100	100	100	100	100	100	101	99	105	100	98
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		Fail	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
Fail 2/ok		OK																							





### Appendix 5

**Table 11m. Category IV run 2 sampling train 1**

PROBE 1, Cat IV, run 2, 22-09-2022		i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25
Time total, minute	$\theta$	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00	240,00
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	$V_m$	0,06	0,05	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06
Average gas velocity in tunnel, m/s	$V_s$	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432
Absolute average dry gas meter temperature, K	$T_m$	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047	294,047
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	$T_s$	301,37	301,00	301,28	301,48	301,42	301,26	301,44	301,19	301,15	301,15	301,05	301,01	301,03	300,82	301,00	301,27	301,30	301,33	301,26	301,23	301,22	301,20	301,21	301,14
Volume of gas sample total, m <sup>3</sup>	$V_m$	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38	1,38
Average gas velocity in tunnel for 10 min interval, m/s	$V_s$	8,43	8,44	8,44	8,43	8,43	8,43	8,43	8,43	8,43	8,42	8,44	8,43	8,43	8,43	8,44	8,43	8,43	8,42	8,44	8,43	8,43	8,43	8,43	8,43
Absolute average gas temperature in tunnel (pitot), K	$T_s$	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20	301,20
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	$T_m$	293,68	293,74	293,79	293,84	293,88	293,93	293,98	294,02	294,04	294,06	294,13	294,14	294,16	294,20	294,19	294,18	294,18	294,19	294,16	294,15	294,13	294,12	294,16	294,11
Actual time when reading, minute	$\theta_i$	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Results		100	95	101	100	101	100	101	100	100	101	100	100	100	100	101	100	100	100	101	100	100	100	100	98
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110
Fail/ok		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120

**Table 11n. Category IV run 2 sampling train 2 and 3**

PROBE 2+3, Cat IV, run 2, 22-09-2022		Probe 2					Probe 3																			
		i1	i2	i4	i5	i6	i7	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i22	i23	i24	i25	
Time total, minute	$\theta$	60,00	60,00	60,00	60,00	60,00	60,00	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	178,50	
Gas meter volume of gas sample during 10 min interval, m <sup>3</sup>	$V_m$	0,06	0,05	0,05	0,06	0,06	0,06	0,05	0,06	0,05	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	
Average gas velocity in tunnel, m/s	$V_s$	8,433	8,433	8,433	8,433	8,433	8,433	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	
Absolute average dry gas meter temperature, K	$T_m$	293,802	293,802	293,802	293,802	293,802	293,802	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	294,116	
Absolute average gas temperature in tunnel during 10 minute interval, K (pitot)	$T_s$	301,37	301,00	301,28	301,48	301,42	301,26	301,46	301,19	301,15	301,15	301,05	301,01	301,03	300,82	301,00	301,27	301,30	301,33	301,26	301,23	301,22	301,20	301,21	301,14	
Volume of gas sample total, m <sup>3</sup>	$V_m$	0,32	0,32	0,32	0,32	0,32	0,32	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	
Average gas velocity in tunnel for 10 min interval, m/s	$V_s$	8,43	8,44	8,44	8,43	8,43	8,43	8,43	8,43	8,43	8,42	8,44	8,43	8,43	8,43	8,43	8,44	8,43	8,43	8,42	8,44	8,43	8,43	8,43	8,43	
Absolute average gas temperature in tunnel (pitot), K	$T_s$	301,30	301,30	301,30	301,30	301,30	301,30	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	301,17	
Absolute average dry gas meter temperature during 10 minute interval, K (probe i)	$T_m$	293,67	293,72	293,78	293,83	293,88	293,93	293,99	294,02	294,04	294,07	294,14	294,16	294,18	294,22	294,21	294,18	294,17	294,16	294,13	294,12	294,09	294,06	294,10	294,04	
Actual time when reading, minute	$\theta_i$	10	10	10	10	10	10	8,5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Results		106	91	95	104	103	103	107	99	95	101	99	99	101	100	100	100	100	100	100	100	100	100	100	99	
Requirement		90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	90-110	
Fail/ok		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Requirement 2		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	

## Appendix 6

**Weight from filter, gasket and rinse**

The tables below show the results from the filter, gasket and probe rinse weighting. The filters and gasket have been weighted in pairs. The underlined values have been used in the calculations.

**Table 12 a: Filter weights.**

Category Run no.	Filter nr. Probe nr.	Pre-weight 1 g (date, RH %)	Pre-weight 2 g (date, RH %)	Post-weight 1 g (date, RH %)	Post-weight 2 g (date, RH %)
Cat I Run 1	AF3 (filter)	0.12267 (18/03/22, 27)	<u>0.12262</u> (23/03/22, 16)	0.12271 (24/03/22, 22)	<u>0.12271</u> (06/04/22, 18)
Cat I Run 1	F7, probe 1 (front+back)	0.25627 (18/03/22, 27)	<u>0.25623</u> (23/03/22, 16)	0.25628 (24/03/22, 22)	<u>0.25629</u> (06/04/22, 22)
Cat I Run 1	F8, probe 2 (front+back)	0.25774 (18/03/22, 27)	<u>0.25768</u> (23/03/22, 16)	0.25786 (24/03/22, 22)	<u>0.25782</u> (06/04/22, 22)
Cat I Run 1	F9, probe 3 (front+back)	0.25297 (18/03/22, 27)	<u>0.25298</u> (23/03/22, 16)	0.25330 (24/03/22, 22)	<u>0.25334</u> (06/04/22, 22)
Cat I Run 2	AF2 (filter)	0.12717 (29/03/22, 15)	<u>0.12717</u> <sup>1</sup> (06/04/22, 15)	0.12694 (11/04/22, 19)	<u>0.12698</u> <sup>1</sup> (13/04/22, 19)
Cat I Run 2	F4, probe 1 (front+back)	0.25454 (29/03/22, 15)	<u>0.25457</u> (06/04/22, 15)	0.25457 (11/04/22, 19)	<u>0.25462</u> (13/04/22, 19)
Cat I Run 2	F5, probe 2 (front+back)	0.25126 (29/03/22, 15)	<u>0.25129</u> (06/04/22, 15)	0.25132 (11/04/22, 19)	<u>0.25130</u> (13/04/22, 19)
Cat I Run 2	F6, probe 3 (front+back)	0.25476 (29/03/22, 15)	<u>0.25479</u> (06/04/22, 15)	0.25488 (11/04/22, 19)	<u>0.25489</u> (13/04/22, 19)
Cat I Run 3	AF4 (filter)	0.12566 (25/04/22, 14)	<u>0.12569</u> (27/04/22, 18)	0.12566 (28/04/22, 25)	<u>0.12569</u> (29/04/22, 14)
Cat I Run 3	F10, probe 1 (front+back)	0.25699 (25/04/22, 14)	<u>0.25701</u> (27/04/22, 18)	0.25705 (28/04/22, 25)	<u>0.25702</u> (29/04/22, 14)
Cat I Run 3	F11, probe 2 (front+back)	0.25531 (25/04/22, 14)	<u>0.25532</u> (27/04/22, 18)	0.25533 (28/04/22, 25)	<u>0.25535</u> (29/04/22, 14)
Cat I Run 3	F12, probe 3 (front+back)	0.25376 (25/04/22, 14)	<u>0.25376</u> (27/04/22, 18)	0.25380 (28/04/22, 25)	<u>0.25386</u> (29/04/22, 14)
Cat II Run 1	AF4 (filter)	0.12286 (18/03/22, 15)	<u>0.12288</u> <sup>1</sup> (24/03/22, 18)	0.12273 (30/03/22, 7)	<u>0.12273</u> <sup>1</sup> (06/04/22, 18)
Cat II Run 1	F10, probe 1 (front/back)	0.25369 (18/03/22, 15)	<u>0.25371</u> (24/03/22, 18)	0.25378 (30/03/22, 7)	<u>0.25381</u> (06/04/22, 18)
Cat II Run 1	F11, probe 2 (front/back)	0.25628 (18/03/22, 15)	<u>0.25631</u> (24/03/22, 18)	0.25640 (30/03/22, 7)	<u>0.25641</u> (06/04/22, 18)
Cat II Run 1	F12, probe 3 (front/back)	0.25637 (18/03/22, 15)	<u>0.25635</u> (24/03/22, 18)	0.25652 (30/03/22, 7)	<u>0.25655</u> (06/04/22, 18)
Cat III Run 1	AF3 (filter)	0.12733 (29/03/22, 12)	<u>0.12729</u> (30/03/22, 13)	0.12727 (06/04/22, 24)	<u>0.12731</u> (11/04/22, 19)
Cat III Run 1	F1, probe 1 (front/back)	0.25416 (29/03/22, 12)	<u>0.25416</u> (30/03/22, 13)	0.25460 (06/04/22, 24)	<u>0.25460</u> (11/04/22, 19)
Cat III Run 1	F2, probe 2 (front/back)	0.25519 (29/03/22, 12)	<u>0.25516</u> (30/03/22, 13)	0.25522 (06/04/22, 24)	<u>0.25518</u> (11/04/22, 19)
Cat III Run 1	F3, probe 3 (front/back)	0.25212 (29/03/22, 12)	<u>0.25213</u> (30/03/22, 13)	0.25234 (06/04/22, 24)	<u>0.25230</u> (11/04/22, 19)

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Cat IV Run 1	AF1 (filter)	0.12775 (18/03/22, 26)	0.12770 <sup>1</sup> (21/03/22, 15)	0.12766 (22/03/22, 16)	0.12763 <sup>1</sup> (23/03/22, 17)
Cat IV Run 1	F1, probe 1 (front/back)	0.25447 (18/03/22, 26)	0.25442 (21/03/22, 15)	0.25741 (22/03/22, 16)	0.25741 (23/03/22, 17)
Cat IV Run 1	F2, probe 3 (front/back)	0.25428 (18/03/22, 26)	0.25426 (21/03/22, 15)	0.25476 (22/03/22, 16)	0.25475 (23/03/22, 17)
Cat IV Run 1	F3, probe 2 (front/back)	0.24693 (18/03/22, 26)	0.24691 (21/03/22, 15)	0.24867 (22/03/22, 16)	0.24866 (23/03/22, 17)
Cat IV Run 2	AF2 (filter)	0.12763 (18/03/22, 26)	0.12764 (22/03/22, 15)	0.12768 (24/03/22, 23)	0.12766 (28/03/22, 24)
Cat IV Run 2	F4, probe 1 (front+back)	0.24508 (18/03/22, 26)	0.24503 (22/03/22, 15)	0.24789 (24/03/22, 23)	0.24792 (28/03/22, 24)
Cat IV Run 2	F5, probe 2 (front+back)	0.24617 (18/03/22, 26)	0.24614 (22/03/22, 15)	0.24613 (24/03/22, 23)	0.24617 (28/03/22, 24)
Cat IV Run 2	F6, probe 3 (front+back)	0.24493 (18/03/22, 26)	0.24489 (22/03/22, 15)	0.24666 (24/03/22, 23)	0.24666 (28/03/22, 24)
	Blank filter	0.25670	0.25669	0.25674	0.25674

<sup>1</sup> Particulate catch (filter+gasket) is treated as zero according to ASTM 2515-11 clause 10.2.2.3.

Table 12 b: Gasket weights

Category Run no.	Gasket nr. Probe nr.	Pre-weight 1 g (date)	Pre-weight 2 g (date)	Post-weight 1 g (date)	Post-weight 2 g (date)
Cat I Run 1	AG3 (gasket)	2.44621 (18/03/22)	2.44619 (23/03/22)	2.44622 (24/03/22)	2.44619 (06/04/22)
Cat I Run 1	G7, probe 1 (front/back)	4.90380 (18/03/22)	4.90376 (23/03/22)	4.90410 (24/03/22)	4.90405 (06/04/22)
Cat I Run 1	G8, probe 2 (front/back)	4.91075 (18/03/22)	4.91076 (23/03/22)	4.91077 (24/03/22)	4.91076 (06/04/22)
Cat I Run 1	G9, probe 3 (front/back)	4.35571 (18/03/22)	4.35566 (23/03/22)	4.35565 (24/03/22)	4.35562 (24/03/22)
Cat I Run 2	AG2 (gasket)	2.44560 (29/03/22)	2.44563 (06/04/22)	2.44587 (11/04/22)	2.44584 (13/04/22)
Cat I Run 2	G4, probe 1 (front/back)	4.90562 (29/03/22)	4.90565 (06/04/22)	4.90628 (11/04/22)	4.90619 (13/04/22)
Cat I Run 2	G5, probe 2 (front/back)	4.91629 (29/03/22)	4.91627 (06/04/22)	4.91628 (11/04/22)	4.91628 (13/04/22)
Cat I Run 2	G6, probe 3 (front/back)	4.92113 (29/03/22)	4.92111 (06/04/22)	4.92112 (11/04/22)	4.92111 (13/04/22)
Cat I Run 3	AG4 (gasket)	2.48809 (25/04/22)	2.48807 (27/04/22)	2.48817 (28/04/22)	2.48807 (29/04/22)
Cat I Run 3	G10, probe 1 (front/back)	4.39622 (25/04/22)	4.39619 (27/04/22)	4.39632 (28/04/22)	4.39633 (29/04/22)
Cat I Run 3	G11, probe 2 (front/back)	4.93334 (25/04/22)	4.93331 (27/04/22)	4.93330 (28/04/22)	4.93331 (29/04/22)
Cat I Run 3	G12, probe 3 (front/back)	4.89196 (25/04/22)	4.89195 (27/04/22)	4.89200 (28/04/22)	4.89195 (29/04/22)
Cat II Run 1	AG4 (gasket)	2.48808 (18/03/22)	2.48808 (24/03/22)	2.48827 (30/03/22)	2.48822 (06/04/22)
Cat II Run 1	G10, probe 1	4.39604	4.39620	4.39630	4.39633



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Run 1	(front/back)	(18/03/22)	(24/03/22)	(30/03/22)	(06/04/22)
Cat II	G11, probe 2	4.93323	<u>4.93329</u>	4.93330	<u>4.93336</u>
Run 1	(front/back)	(18/03/22)	(24/03/22)	(30/03/22)	(06/04/22)
Cat II	G12, probe 3	4.89189	<u>4.89198</u>	4.89200	<u>4.89208</u>
Run 1	(front/back)	(18/03/22)	(24/03/22)	(30/03/22)	(06/04/22)
Cat III	AG4	2.50078	<u>2.50081</u>	2.50087	<u>2.50081</u>
Run 1	(gasket)	(29/03/22)	(30/03/22)	(06/04/22)	(11/04/22)
Cat III	G1, probe 1	5.02685	<u>5.02687</u>	5.02726	<u>5.02722</u>
Run 1	(front/back)	(29/03/22)	(30/03/22)	(06/04/22)	(11/04/22)
Cat III	G2, probe 3	5.01216	<u>5.01219</u>	5.01235	<u>5.01231</u>
Run 1	(front/back)	(29/03/22)	(30/03/22)	(06/04/22)	(11/04/22)
Cat III	G3, probe 2	4.95038	<u>4.95040</u>	4.95077	<u>4.95073</u>
Run 1	(front/back)	(29/03/22)	(30/03/22)	(06/04/22)	(11/04/22)
Cat IV	AG1	2.50088	<u>2.50089</u>	2.50090	<u>2.50089</u>
Run 1	(gasket)	(18/03/22)	(21/03/22)	(22/03/22)	(23/03/22)
Cat IV	G1, probe 1	5.02670	<u>5.02672</u>	5.02722	<u>5.02715</u>
Run 1	(front/back)	(18/03/22)	(21/03/22)	(22/03/22)	(23/03/22)
Cat IV	G2, probe 3	5.01205	<u>5.01202</u>	5.01226	<u>5.01226</u>
Run 1	(front/back)	(18/03/22)	(21/03/22)	(22/03/22)	(23/03/22)
Cat IV	G3, probe 2	4.95025	<u>4.95027</u>	4.95085	<u>4.95079</u>
Run 1	(front/back)	(18/03/22)	(21/03/22)	(22/03/22)	(23/03/22)
Cat IV	AG2	2.44555	<u>2.44557</u>	2.44558	<u>2.44557</u>
Run 2	(gasket)	(18/03/22)	(22/03/22)	(24/03/22)	(28/03/22)
Cat IV	G4, probe 1	4.90552	<u>4.90546</u>	4.90639	4.90639
Run 2	(front/back)	(18/03/22)	(22/03/22)	(24/03/22)	(28/03/22)
Cat IV	G5, probe 2	4.91614	<u>4.91609</u>	4.91692	<u>4.91689</u>
Run 2	(front/back)	(18/03/22)	(22/03/22)	(24/03/22)	(28/03/22)
Cat IV	G6, probe 3	4.92098	<u>4.92094</u>	4.92089	<u>4.92094</u>
Run 2	(front/back)	(18/03/22)	(22/03/22)	(24/03/22)	(28/03/22)
	Blank gasket	5.02675	5.02678	5.02678	5.02676

Table 12 c: Probe rinse weights.

Test Cat.	Rinse nr. container Probe nr.	Pre-weight 1 container, g (date)	Pre-weight 2 container, g (date)	Post-weight 1 (cont.+rinse), g (date)	Post-weight 2 (cont.+rinse), g (date)
Cat I	R7	46.84333	<u>46.84333</u>	46.84425	<u>46.84440</u>
Run 1	Probe 1	(18/03/22)	(23/03/22)	(05/04/22)	(06/04/22)
Cat I	R8	47.94099	<u>47.94115</u>	47.94173	<u>47.94170</u>
Run 1	Probe 2	(18/03/22)	(23/03/22)	(29/03/22)	(01/04/22)
Cat I	R9	46.94222	<u>46.94242</u>	46.94312	<u>46.94297</u>
Run 1	Probe 3	(18/03/22)	(23/03/22)	(05/04/22)	(06/04/22)
Cat I	R4	41.59223	<u>41.59222<sup>1</sup></u>	41.59203	<u>41.59220<sup>1</sup></u>
Run 2	Probe 1	(29/03/22)	(06/04/22)	(12/04/22)	(13/04/22)
Cat I	R5	39.70400	<u>39.70398<sup>1</sup></u>	39.70395	<u>39.70397<sup>1</sup></u>
Run 2	Probe 2	(29/03/22)	(06/04/22)	(12/04/22)	(13/04/22)
Cat I	R6	46.30954	<u>46.30948</u>	46.30942	<u>46.30948</u>
Run 2	Probe 3	(29/04/22)	(06/04/22)	(12/04/22)	(13/04/22)
Cat I	R9	46.94237	<u>46.94224</u>	46.94259	<u>46.94279</u>
Run 3	Probe 1	(25/04/22)	(27/04/22)	(29/04/22)	(02/05/22)

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Cat I Run 3	R10 Probe 2	45.24950 (25/04/22)	<u>45.24935</u> (27/04/22)	45.24929 (29/04/22)	<u>45.24941</u> (02/05/22)
Cat I run 3	R11 Probe 3	46.06592 (25/04/22)	<u>46.06553</u> (27/04/22)	46.06579 (29/04/22)	<u>46.06598</u> (02/05/22)
Cat II Run 1	R10 Probe 1	45.24894 (18/03/22)	<u>45.24902</u> (24/03/22)	45.25021 (30/03/22)	<u>45.25001</u> (01/04/22)
Cat II Run 1	R11 Probe 2	46.06546 (18/03/22)	<u>46.06553</u> (24/03/22)	46.06577 (30/03/22)	<u>46.06591</u> (01/04/22)
Cat II Run 1	R12 Probe 3	17.33550 (18/03/22)	<u>17.33560</u> (24/03/22)	17.33584 (30/03/22)	<u>17.33590</u> (01/04/22)
Cat III Run 1	R1 Probe 1	45.07800 (29/03/22)	<u>45.07782</u> (30/03/22)	45.07839 (11/04/22)	<u>45.07824</u> (12/04/22)
Cat III Run 1	R2 Probe 2	48.85300 (29/03/22)	<u>48.85281</u> (30/03/22)	48.85322 (11/04/22)	<u>48.85307</u> (12/04/22)
Cat III Run 1	R3 Probe 3	41.92160 (29/03/22)	<u>41.92164</u> (30/03/22)	41.92191 (11/04/22)	<u>41.92191</u> (12/04/22)
Cat IV Run 1	R1 Probe 1	45.07802 (18/03/22)	<u>45.07791</u> (21/03/22)	45.07848 (11/04/22)	<u>45.07828</u> (12/04/22)
Cat IV Run 1	R2 Probe 2	48.85289 (18/03/22)	<u>48.85241</u> (21/03/22)	48.85302 (11/04/22)	<u>48.85320</u> (12/04/22)
Cat IV Run 1	R3 Probe 3	41.92126 (18/03/22)	<u>41.92142</u> (21/03/22)	41.92203 (11/04/22)	<u>41.92185</u> (12/04/22)
Cat IV Run 2	R4 Probe 1	41.59173 (18/03/22)	<u>41.59179</u> (21/03/22)	41.59247 (11/04/22)	<u>41.59228</u> (12/04/22)
Cat IV Run 2	R5 Probe 2	39.70364 (18/03/22)	<u>39.70361</u> (21/03/22)	39.70412 (11/04/22)	<u>39.70389</u> (12/04/22)
Cat IV Run 2	R6 Probe 3	46.30866 (18/03/22)	<u>46.30878</u> (21/03/22)	46.30932 (11/04/22)	<u>46.30919</u> (12/04/22)
	Aceton blank (Rinse)	45.07823	45.07827	45.07820	45.07816

<sup>1</sup>Particulate sample probe catch is treated as zero according to ASTM 2515-11 clause 10.2.2.1.

## Appendix 7

## Technician notes

## Logg PES 22 (Pellematic 22), 2022

## Preparations:

- Scale weight with water filled in the boiler = 67.8 kg and scale weight without water filled in the boiler = 1.1 kg thus water weight in the boiler is 66.7 kg. According to the manual the water capacity is 66.0 l.
- Dilution tunnel induced static pressure at the boiler:  $8.5 \text{ m/s} = 0,2 \text{ Pa}$
- Observing the tests from the company Ökofen in Austria were Michael Wögerbauer and Stefan Pumberger.
- First moisture pellets:  $(972.2-368.8)-(931.4-368.8)/(931.4-368.8)*100=7.25\% \text{ dry}(6.76 \% \text{ wet})$
- Second moisture:  $(1056.2-368.7)-(1009.2-368.7)/(1009.2-368.7)*100= 7.34\% \text{ dry} (6.84 \% \text{ wet})$
- Third moisture:  $(915.9-368.7)-(879.6-368.7)/(879.6-368.7)*100= 7.11\% \text{ dry} (6.63 \% \text{ wet})$
- Average the three moisture samples: MC (dry base):  $(7.25+7.34+7.11)/3 = \mathbf{7.23 \% \text{ dry}} (6.74 \% \text{ wet})$
- Sampling trains adjusted to a sample flow below  $0,007 \text{ m}^3/\text{min}$ .
- Software version: Touch V3.10e\_P



## Day 1, Cat IV run 1, 2022-03-21

- Air velocity: 0.11 m/s
- 220 V and 60 Hz
- Static pressure induced by the draught = 0,2 Pa (at 8.5 m/s in the dilution tunnel)
- Settings on the boiler: boiler temperature = 70 C, Under pressure =90 units
- *Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures.*
- Pstat in tunnel = 79.5 Pa
- Scale with calibrated 20 kg weight= 21,07 and without weight =1,07 kg

### Appendix 7

Test	Time (computer time)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 202743)	Ambient	barometer/humidity/temp.	Comments
Start pre-burn test	0:00 120:33	26.662					1017mbar/ RH 25 %/20 C	Test category IV run 1
Start test 1 (probe 1+2)	123:83	24.477	F2, G2	F1, G1		AF1, AG1		Stop Probe 2 (1 hour)=183,83  Gas volume=0,3303 m <sup>3</sup>
Start test probe 3	185:83				F3, G3			
End test	363:83	5.7535						

**Anomalies:** The manufacturer detected a small leak in the top lid of the boiler (lid over the convection part) after the test run was completed. The leak was sealed. A new test run will be performed the next day.

#### Day 2, Cat IV run 2, 2022-03-22

- Air velocity: 0.11 m/s (ALNOR Compuflow GCA-65P, inv.nr 201 457)
- 220 V and 60 Hz
- Static pressure induced by the draught = 0,2 Pa (at 8.5 m/s in the dilution tunnel)
- Settings on the boiler: boiler temperature = 70 C, Under pressure =90 units
- *Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures*
- Pstat in tunnel = 79.2 Pa
- Scale with calibrated 20 kg weight= 21,07 and without weight =1,07 kg

Test	Time (computer time)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 202743)	Ambient	barometer/humidity/temp.	Comments
Start pre-burn test	2:33 122:33	26.163					1012mbar/ RH 27 %/21 C	Test category IV run 2
Start	125:83	24.353	F5, G5	F4, G4		AF2, AG2		Stop Probe 2 (1

### Appendix 7

test 1 (probe 1+2)								hour)=185,83 Gas volume=0,2668 m <sup>3</sup>
Start test probe 3	187:33				F6, G6			
End test	365:83	6.160						

**Anomalies:** No anomalies were detected. *The test is considered to be valid.*

### Day 3 2022-03-23

#### Cat I run 1

- Air velocity: 0.11 m/s
- Static induced by the draught = 0.3 Pa
- Settings on the boiler: boiler temperature at 70 C, unit 90.
- *Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures*
- Pstat in tunnel = 78.9 Pa
- Scale with calibrated 20 kg weight= 26,66 and without weight =6,66 kg

Test	Time (computer)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 901070)	Ambient	barometer/humidity/temp.	Comments
Start pre-burn test 1	0:33 – 120:33	3.974				AF2, AG2	1012 mbar/30 %/20 C	Test category I run 1 Signal from static pressure wrong, shall be -3-4 Pa!
Start test 1 (probe 1+2)	125:83	13.847	F8, G8	F7, G7				Stop Probe 2 (1 hour)=185,83 Gas volume=0,3699 m <sup>3</sup>
Start test probe 3	187:33				F9, G9			The boiler temperature increased.
	230							The boiler temperature still was increasing. The cooling on the load side was increased

### Appendix 7

								and due to that a spike in load output!
End test	365:83	9.659						

**Anomalies:** Evaluation of the test run showed that the heat output on load side has been more than 15 % of the rated output which is more than the requirement. The signal from the static pressure instrument was missing. A new test run will be performed in category I.

#### Day 4 2022-03-24

##### Cat II run 1

- Air velocity: 0.12 m/s
- Static induced by the draught = 0.3 Pa
- Settings on the boiler: boiler temperature at 70 C, unit 90.
- *Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures*
- Pstat in tunnel = 78.6 Pa
- Scale with calibrated 20 kg weight= 31,57 and without weight =11.57 kg

Test	Time (computer)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 202743)	Ambient (200721)	barometer/humidity/temp.	Comments
Start pre-burn test 1	2:83-122:83	9.100					1007 mbar/31%/20 C	Test category II run 1
Start test 1 (probe 1+2)	126:83	22.758	F11, G11	F10, G10				Stop Probe 2 (1 hour)=186,83 Gas volume=0,3287 m <sup>3</sup>
Start test probe 3	187:83				F12, G12			
End test 1	366:83	18.252						

**Anomalies:** No anomalies were detected. *The test is considered to be valid.*

#### Day 5, Cat III run 1, 2022-03-30

- Air velocity: 0.10 m/s
- 220 V and 60 Hz
- Static pressure induced by the draught = 0.2 Pa (at 8 m/s in the dilution tunnel)

### Appendix 7

- Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures
- Pstat in tunnel = 78.6 Pa
- Scale with calibrated 20 kg weight= 34,48 and without weight =14.47 kg
- Boiler parameter: Burner auger 15-18Zs, Pause time 82 Zs, flue gas fan speed 17%

Test	Time (computer time)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 202743)	Ambient	barometer/humidity/temp.	Comments
Start pre-burn test	2:33-122:33	29.978					989mbar/RH 24 %/19 C	Test category III run 1
Start test 1 (probe 1+2)	132:33	25.166	F2, G2	F1, G1		AF1, AG1		Stop Probe 2 (1 hour)=192,33 Gas volume=0,3332 m <sup>3</sup>
Start test probe 3	193:33				F3, G3			
End test	372:33	16.660					988mbar/RH 17 %/20 C	

**Anomalies:** No anomalies were detected. *The test is considered to be valid.*

#### Day 6, Cat I run 2, 2022-04-06

- Air velocity: 0.10 m/s
- 220 V and 60 Hz
- Static pressure induced by the draught = 0.3 Pa (at 8.3 m/s in the dilution tunnel)
- Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures
- Pstat in tunnel = 77.1 Pa
- Scale with calibrated 20 kg weight= 39.57 and without weight =19.57 kg
- Boiler parameter (automatic settings): Burner auger 10Zs, Paus time 191 Zs, flue gas fan speed 8%

Test	Time (comput	Weight (scale), kg	Probe 2	Probe 1	Probe 3	Ambient	barometer/humidity/	Comments
------	--------------	--------------------	---------	---------	---------	---------	---------------------	----------

### Appendix 7

	er time)		(gas meter 202743)	(gas meter 901070)	(gas meter 202743)		temp.	
Start pre-burn test	1:83-121:83	17.6					971mbar/R H 28 %/20 C	Test category I run 2
Start test 1 (probe 1+2)	122:83	16.3	F5, G5	F4, G4		AF2, AG2		Stop Probe 2 (1 hour)=182,83  Gas volume=0,3228 m <sup>3</sup>
Start test probe 3	184:83				F6, G6			
End test	362.:83	13.6					971mbar/R H 30 %/21 C	

**Anomalies:** No anomalies were detected. *The test is considered to be valid.*

#### Day 7, Cat I run 3, 2022-04-27

- Air velocity: 0.10 m/s
- 220 V and 60 Hz
- Static pressure induced by the draught = 0.1 Pa (at 8.3 m/s in the dilution tunnel)
- *Feed rate is automatically set by the boiler depending on the combustion and boiler temperatures*
- Pstat in tunnel = 77.8 Pa
- Scale with calibrated 20 kg weight= 19.25 and without weight =39.25 kg
- Boiler parameter (automatic settings): Burner auger 10Zs, Pause time 182 Zs, flue gas fan speed 9%

Test	Time (computer time)	Weight (scale), kg	Probe 2 (gas meter 202743)	Probe 1 (gas meter 901070)	Probe 3 (gas meter 202743)	Ambient	barometer/humidity/temp.	Comments
Start pre-burn test	2:85-122:83	19.35					1003mbar/R H 32 %/19 C	Test category I run 3. Computer logging system hang up at minute 36 to 40.
Start	152:00	17.47	F11, G11	F10,		AF4, AG4		Stop Probe 2 (1.07



Appendix 7

test 1 (probe 1+2)				G10				h)=216:00 Gas volume= 0.3799 m <sup>3</sup>
Start test probe 3	218:50				F12, G12			
End test	392:00	14.66					1003mbar/R H 25 %/21 C	

**Anomalies:** No anomalies were detected. *The test is considered to be valid.*

Appendix 8

**Instrumentation and uncertainty**

**Measuring instruments**

The designations listed below refer to RISE quality system

Resistance thermometer, PT-100	ETf-QD Db 2
Thermocouple, type K	ETf-QD-Db 3
Water flow meter Valmet 9V-MP150 (supply side)	Inv.no. 900 395
Water flow meter Valmet 9V-MP150 (load side)	Inv.no. 201 655
Data logging system	Inv. no. 202 561
Atmospheric pressure	Inv.no. 701 275
Scale Mettler (filter weight)	Inv.no. BX7 2435
Scale ARD instruments (boiler weight)	Inv no KWP 01056
Particulate sampling equipment (Train 1)	Inv.no. 901 070
Particulate sampling equipment (Train 2, probe 2 and 3)	Inv.no. 202 743
Particulate sampling equipment (ambient)	Inv.no. 200 619
Differential pressure gauge Furness FCO 14 (static pressure)	Inv.no. 200 628
Differential pressure gauge Furness FCO 12 (Dynamic pressure tunnel)	Inv.no. 202 747
CO/CO <sub>2</sub> - analyser XStream (CO 0-2000 ppm)	Inv.no. 901 077
O <sub>2</sub> -analyser PMA 10	Inv.no. 202 589

**Calibration gases**

The calibration gases for calibrating the gas analyser were accredited and delivered by Air Liquide. Oxygen calibration was performed at zero and span (21 %) points.

**Table 13. Calibration gases**

	Concentration	Uncertainty	Id. No.
CO	1778 mol-ppm	±18 mol-ppm	5280
CO <sub>2</sub>	16.02 mol-%	± 0.16 mol-%	5280

**Uncertainty of measurement**

**Table 14. Uncertainty of measurement**

	Uncertainty
Temperature difference, load side	± 0.05 °C
Flue gas temperature	± 1 °C
Filter temperature	± 1 °C
Gas meter temperature	± 1 °C

Appendix 8

Ambient temperature	± 1 °C
Atmospheric pressure	± 1 mm Hg
Static pressure in chimney	± 0.9 Pa
Dynamic pressure in dilution tunnel	± 0.9 Pa
Liquide flow, load side	± 1 %-of flow
Fuel quantity	± 0.1 kg
PM filter weight	± 0.1 mg
CO-concentration	± 5 ppm
CO <sub>2</sub> -concentration	± 0.4 %-points
Boiler efficiency <sup>1</sup>	± 2 %-points

<sup>1</sup> Does not include losses in the test rig.

The uncertainty has been calculated according to EA-4/16 with coverage factor k=2 (95 % confidence interval)

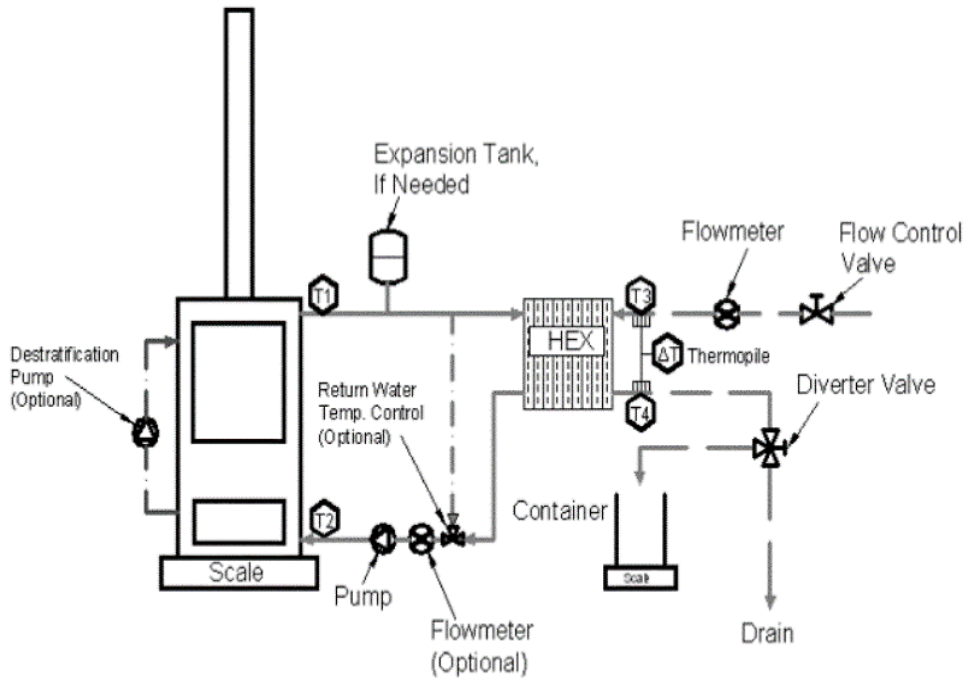
In table 15 the uncertainties of particulate emissions are calculated according to appendix X1 in ASTM 2515-11. The measured values are average from the two sample probes. The uncertainties are calculated with a 95 % confidence level.

**Table 15. Particulate emission uncertainties.**

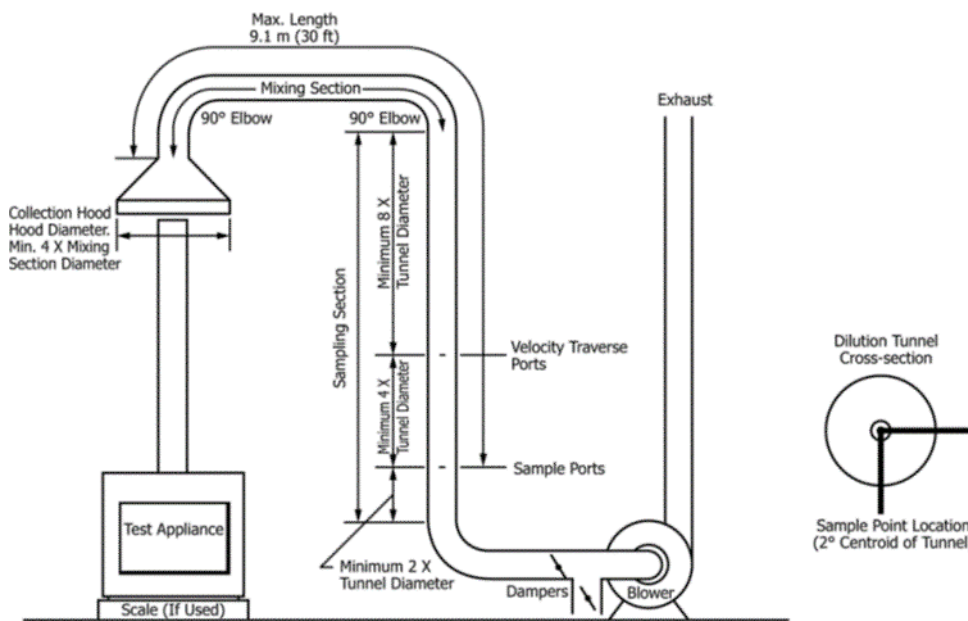
Test category	Measured value	Uncertainty
Particulates (E <sub>T</sub> ) Cat I, Run 1	2.7 g	± 0.061 g (± 2 % )
Particulates (E <sub>T</sub> ) Cat I, Run 2	1.0 g	± 0.094 g (± 9 % )
Particulates (E <sub>T</sub> ) Cat I, Run 3	1.1 g	± 0.053 g (± 5 % )
Particulates (E <sub>T</sub> ) Cat II, Run 1	1.9 g	± 0.038 g (± 2 % )
Particulates (E <sub>T</sub> ) Cat III, Run 1	1.9 g	± 0.096 g (± 5 % )
Particulates (E <sub>T</sub> ) Cat IV, Run 1	6.6 g	± 0.131 g (± 2 % )
Particulates (E <sub>T</sub> ) Cat IV, Run 2	6.1 g	± 0.305 g (± 5 % )

Appendix 9

**Test setup**



**Figure 3a. Test set up**



**Figure 3b. Dilution tunnel**

Appendix 9



**Figure 3c. Dilution tunnel**

## Appendix 10

**Alternative method**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

MAR 06 2018

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

Ms. Kelli O'Brien  
Lab Manager  
ClearStak  
99 Canal Street  
Putnam, CT 06260

Dear Ms. O'Brien,

I am writing in response to your letter dated March 4, 2018, regarding certification testing of the Nova model wood stove, a prototype single burn rate wood stove manufactured by MF Fire. You are requesting to use alternative test procedures for recovery and preparation of the particulate matter (PM) samples from the front half filter and probe assembly. In particular, you propose use of the acetone probe rinse and filter sample recovery and preparation procedures described in sections 8.7 and 11.0 of Method 5, Determination of Particulate Matter Emissions from Stationary Sources (40 CFR 60, Appendix A), in lieu of the procedures in section 10.2.2 of ASTM E2515-11, Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel which is required under 40 CFR 60, Subparts AAA and QQQQ.

The difference between the sample recovery and preparation procedures of Method 5 and ASTM E2515-11 is that Method 5 determines PM in the probe and filter assembly by (1) collecting PM in the probe through acetone rinses of the probe, drying down the rinse in beakers, dessication, followed by weighing and (2) removal of the filter, dessicating, and then weighing, as opposed to ASTM E2515-11 where the entire 100+ gram probe assembly is weighed before and after a test run. We understand that ClearStak typically performs gravimetric analysis of their PM samples (acetone rinses and filters) at an offsite location and not in the wood heater emission testing laboratory to ensure quality low mass (e.g., milligram) measurements uninfluenced by ground vibrations caused by daily operations of testing facilities.

You state that through past experience, you have found that probe PM collected through acetone rinses which are then transported in sample jars offer far less possible sample contamination than handling the front half probe and filter assembly. You propose to collect the acetone rinses after testing according to section 8.7 of Method 5, transport them to your laboratory, then transfer the rinses from the jars to clean and desiccated pre-weighed 100 mL beakers where they are dried down and desiccated according to section 11.2.2 of Method 5, and finally weighed according ASTM E2515-11 in 6-hour intervals until two consecutive weights are achieved within 0.2mg. Likewise, the filters (which were pre-weighed before testing as required in section 8.1.3 of Method 5) are recovered according to section 8.7 of Method 5, transported to the laboratory, dessicated according to section 11.2.1 of Method 5, and weighed according ASTM E2515-11.

We understand ClearStak is requesting to use these alternative procedures for PM recovery, dry down, and desiccation of the front half probe and filter assembly samples for ASTM E2515-11 testing of MF Fire's prototype single burn rate stove, Nova, and for all future ASTM E2515-11 emissions testing of residential wood heaters, hydronic heaters, and forced-air furnaces per 40 CFR Part 60 Subparts AAA and QQQQ.

## Appendix 10

2

With this letter, we are approving your alternative test procedures detailed above in conjunction with ASTM E2515-11 for certification testing of the MF Fire's prototype single burn rate stove, Nova, as well as all wood heaters, hydronic heaters, and forced-air furnaces subject to 40 CFR Part 60 Subpart AAA and QQQQ. A copy of this letter must be included in each certification test report where this alternative test method is utilized.

It is reasonable that this alternative test method approval be broadly applicable to certification testing of all wood heaters, hydronic heaters, and forced-air furnaces subject to the requirements of 40 CFR part 60, Subparts AAA and QQQQ. For this reason, we will post this letter as ALT-126 on our website at <http://www3.epa.gov/ttn/emc/approalt.html> for use by other interested parties. This alternative method approval is valid until such time that Subparts AAA and QQQQ are revised or replaced to require a different certification method, and at such time, this alternative will be reconsidered and possibly withdrawn.

If you have additional questions regarding this approval, please contact Michael Toney of my staff at 919-541-5247 or [toney.mike@epa.gov](mailto:toney.mike@epa.gov).

Sincerely,



Steffan M. Johnson, Group Leader  
Measurement Technology Group

cc: Amanda Aldridge, EPA/OAQPS/OID  
Adam Baumgart-Getz, EPA/OAQPS/OID  
Rafael Sanchez, EPA/OECA  
Michael Toney, EPA/OAQPS/AQAD



## Appendix 11

## Calibrations

*This is a revised appendix where the documents in Swedish have been translated into English. Some of the documents are internal RISE documents where the Swedish text has been difficult to replace with an English translation. Therefore, these documents are displayed both with the Swedish text and the English translation next to it.*

### Calibration of manometer for dynamic pressure in dilution tunnel



#### KALIBRERINGSBEVIS CALIBRATION CERTIFICATE

utförd av ackrediterat kalibreringslaboratorium Issued by an accredited laboratory

Kontaktperson RISE: Contact

Mattias Ekerind  
Säkerhet och transport  
+46 10 516 58 59  
mattias.ekerind@ri.se

Datum Date

2021-09-29

Beteckning Reference

105403-I10135-K12

Sida

1 (3)

RISE

104102 / Värme- och kylteknik

#### Kalibrering av manometer Calibration of a manometer

(1 bilaga) (1 appendix)

##### Objekt Object

Instrument: Instrument Furness FCO12 inv.nr. 202747.

Ankomstdatum: Intern. Arrival date: Internal

Ankomstkick: Utan anmärkning. Arrival condition: Without remark

Kalibreringsdatum: 2021-09-29. Calibration date: 2021-09-29

##### Mätutrustning Measuring equipment

Manometer Furness PPC500 inv.nr 202 521. Manometer Furness

Temperatur och fuktgivare Vaisala HMT 361, inv.nr BX9 1524. Temperature and humidity sensor

Barometer Druck DPI 260, inv.nr 201 637. Barometer

##### Omgivning Environment

Atmosfärstryck: 999 ± 5 hPa. Atmospheric pressure

Temperatur: 22,7 ± 0,5°C. Temperature

Luftfuktighet: 48 ± 5%-rh. Humidity

##### Kalibreringsförfarande Calibration procedure

Kalibreringen är utförd enligt SP-Metod 3635, utgåva 2.

The calibration is carried out according to SP-Method 3635, edition 2.

##### Resultat Results

Givaren monterades vertikalt under kalibreringen.

Kalibreringsresultatet redovisas i tabell 1 och 2, samt i diagramform i bilaga 1.

Verkligt värde = avläst värde + korrektion.

The sensor was mounted vertically during calibration.

The calibration results are reported in tables 1 and 2, as well as in diagram form in appendix 1.

Corrected value = actual value + correction

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writing otherwise

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Denna rapport får endast återges i sin helhet, om inte  
utfärdande laboratorium i förväg skriftligen godkänt annat.



Akred.nr. 1002  
Kalibrering  
ISO/IEC 17025





## Appendix 11


**KALIBRERINGSBEVIS**  
**CALIBRATION CERTIFICATE**

 Datum **Date**  
 2021-09-29  
 Beteckning **Reference**  
 105403-II10135-K12

 Sida  
 2 (3)

Table 1. Calibration results 0-200 Pa (10 % range)

Tabell 1. Kalibreringsresultat 0-200 Pa (10%-området)

Referens <b>Reference</b>	Objekt <b>Object</b>		
Verkligt tryck	Avläst tryck	Korrektion	Mätosäkerhet
[Pa]	[Pa]	[Pa]	[Pa]
0,0	0,0	0,0	±0,41
2,1	2,0	0,1	±0,41
6,1	6,0	0,1	±0,41
10,1	10,0	0,1	±0,41
20,2	20,0	0,2	±0,41
30,3	30,0	0,3	±0,41
40,3	40,0	0,3	±0,41
50,4	50,0	0,4	±0,41
100,6	100,0	0,6	±0,41
150,7	150,0	0,7	±0,46
200,1	199,0	1,1	±0,61
0,0	0,0	0,0	±0,41
200,1	199,0	1,1	±0,61
0,0	0,0	0,0	±0,41
200,1	199,0	1,1	±0,61
0,0	0,0	0,0	±0,41
200,1	199,0	1,1	±0,61
0,0	0,0	0,0	±0,41

Corrected pressure
Actual pressure
Correction
Uncertainty

## Appendix 11

## Calibration of manometer for static pressure in chimney



## KALIBRERINGSBEVIS

CALIBRATION CERTIFICATE

utfärdad av ackrediterat kalibreringslaboratorium

Kontaktperson RISE	Contact	Datum	Date	Sida
Magnus Bremholt (Konsult)		2022-02-09		1 (3)
Säkerhet och transport		Beteckning	Reference	
+46 10 516 67 27		105403-I10427-K01		
magnus.bremholt@ri.se				

RISE  
104102Kalibrering av manometer Calibration of manometer  
(1 bilaga)

## Objekt Object

Instrument:	Furness FCO14 inv. nr 200628.
Ankomstdatum:	Intern. Arrival date:
Ankomstkick:	Utan anmärkning. Arrival condition: Without remark
Kalibreringsdatum:	2022-02-09. Calibration date

## Mätutrustning Measuring equipment

Manometer Furness PPC500 inv.nr 202 521.	
Temperatur och fuktgivare Vaisala HMT 361, inv.nr BX9 1524.	Temperature and humidity sensor
Barometer Druck DPI 260, inv.nr 201 637.	

## Omgivning Environment

Atmosfärstryck:	986 ± 5 hPa.	Atmospheric pressure:
Temperatur:	22,0 ± 0,5°C.	Temperature:
Luftfuktighet:	28 ± 5%-rh.	Humidity:

## Kalibreringsförfarande Calibration procedure (see translation below)

Kalibreringen är utförd enligt SP-Metod 3635, utgåva 2.

## Resultat

Givaren monterades horisontellt under kalibreringen.  
Kalibreringsresultatet redovisas i tabell 1 och 2, samt i diagramform i bilaga 1.

Verkligt värde = avläst värde + korrektion.

## Calibration procedure

The calibration object was connected in parallel with the laboratory reference. At the different pressure levels the pressure display of the reference manometer and the object were read at the same time.

Actual value = read value + correction.

## RISE Research Institutes of Sweden AB

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utfärdande laboratorium i förväg skriftligen godkänt annat.Ackred. nr. 1002  
Kalibrering  
JANUARI 17025

Transaktion 09222115557462757506



Signerat MB, ME



## Appendix 11



KALIBRERINGSBEVIS  
CALIBRATION CERTIFICATE

Date  
2022-02-09  
Reference  
105403-II0427-K01

Sida  
3 (3)

Table 2. Calibration results negative pressure in 10 % range  
Tabell 2. Kalibreringsresultat Negativa tryck i 10%-området

Referens Reference	Objekt Object		
Verkligt tryck [Pa]	Avläst tryck [Pa]	Korrektion [Pa]	Mätosäkerhet [Pa]
0,0	0	0,0	±0,71
-20,2	-20	-0,2	±0,71
-40,7	-40	-0,7	±0,71
-61,1	-60	-1,1	±0,71
-81,2	-80	-1,2	±0,71
-101,9	-100	-1,9	±0,71
0,0	0	0,0	±0,71
-101,9	-100	-1,9	±0,71
0,0	0	0,0	±0,71
-101,9	-100	-1,9	±0,71
0,0	0	0,0	±0,71

Corrected pressure      Actual pressure      Correction      Uncertainty of measurement

Mätosäkerhet och spårbarhet      Measurement uncertainty and traceability (See below)

Mätresultaten är genom regelbunden kalibrering av samtliga använda instrument, spårbara till Sveriges riksmätplats (RMP) för temperatur resp tryck samt RISE för luftfuktighet. Den angivna utvidgade mätosäkerheten är produkten av standardmätosäkerhet och täckningsfaktorn  $k=2$ , som bestäms i enlighet med EA-4/02. Mätosäkerheten relateras enbart till aktuell kalibreringspunkt och tar ingen hänsyn till objektets långtidsstabilitet och hysteres.

RISE Research Institutes of Sweden AB

Kontroll och kalibrering - Kalibrering      Control and calibration - calibration

Utfört av      Performed by

Granskat av      Reviewed by

*Magnus Bremholt*  
Magnus Bremholt (Konsult)

*Mattias Ekerind*  
Mattias Ekerind

Bilaga      Appendix

1      Kalibreringsdiagram      Calibration diagram

Measurement uncertainty and traceability

All instruments used are traceable to the national measurement site or equivalent international organisation. The given expanded measurement uncertainty is the product of the standard measurement uncertainty and the coverage factor  $k=2$ , as determined in accordance with EA-4/02. The measurement uncertainty is related only to the current calibration point and does not take into account the object's long term stability and hysteresis.

## Appendix 11

## Calibration of gas meter in sampling train 1

**KALIBRERINGSBEVIS** CALIBRATION CERTIFICATE

utförd av ackrediterat kalibreringslaboratorium Issued by an accredited laboratory

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Sida

1 (2)

RISE  
Henrik Persson  
Värme- och kylteknik, Hus 14  
BORÅS**Kalibrering av gasflödesmätare** Calibration of a gas flow meter

(1 bilaga) (1 appendix)

## Objekt Object

Flödesmätare Flow meter Itron Gallus G4 s/n 0021189014, inv.nr 901070.

Ankomstdatum: Intern. Arrival date: Internal

Ankomstskick: Utan anmärkning. Arrival condition: Without remark

Kalibreringsdatum: 2021-06-08 Calibration date

## Mätutrustning Measuring equipment

Gasflödesmät rör L5, inv.nr 202 885. Gas flow pipe

Manometer Furness FCO510, inv.nr 900 068. Manometer Furness

Manometer Furness FCO510, inv.nr 900 069. Manometer Furness

Termometer Testo 635, inv.nr 900 061. Thermometer Testo 635

Barometer Druck PACE1000, inv.nr 902 243. Barometer

Tidtagarur Toppa, inv.nr BX60683. Time watch Toppa

## Omgivning Environment

Atmosfärstryck: 1001 ± 5 hPa Atmospheric pressure

Temperatur: 23,9 ± 0,5°C Temperature

Luftfuktighet: 42 ± 5%-rh Humidity

## Kalibreringsförfarande Calibration procedure

Kalibreringen är utförd enligt SP-metod 2527, version 3.

Gas trycktes genom kalibreringsobjektet, som placerades nedströms referensen. Flödet reglerades med tryckregulator. See translation below

## Spårbarhet och mätosäkerhet. Traceability and measuring uncertainty

Mätresultaten är genom regelbunden kalibrering av samtliga använda instrument, spårbara till Sveriges riksmätplats (RMP) för temperatur, spänning resp tryck samt RISE för luftfuktighet. Flödesnormalerna är spårbara till NEL resp NIST. Den angivna utvidgade mätosäkerheten är produkten av standardmätosäkerhet och täckningsfaktorn  $k=2$ , vilket för en normalfördelning svarar mot en täckningssannolikhet av ungefär 95%. Standardmätosäkerheten har bestämts i enlighet med EA-4/02. Mätosäkerheten relateras enbart till aktuell kalibreringspunkt och tar ingen hänsyn till objektets långtidsstabilitet och hysteres. See translation on page 2

The calibration is performed according to SP method 2527, version 3. Gas was pushed through the calibration object, which was placed downstream of the reference. The flow was regulated with a pressure regulator

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## Appendix 11



KALIBRERINGSBEVIS  
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2021-06-08

Referens Reference  
105403-I10115-K19

Sida  
2 (2)

The result is presented in table 1, where also measurement uncertainty for the corrections in each point specified. In Appendix 1, the calibration results are reported in diagram form

## Resultat Results

Resultatet presenteras i tabell 1, där även mätosäkerhet för korrektionerna i respektive punkt anges. I bilaga 1 redovisas kalibreringsresultaten i diagramform. See translation above.

Tabell 1. Kalibreringsresultat. Table 1. calibration results

Referens	Objekt		Objekt					
Verkligt flöde	Temperatur	Gasdensitet	Avläst volym	Avläst tid	Beräknat flöde	Korrektion	Mät	
[m <sup>3</sup> /h]	[°C]	[kg/m <sup>3</sup> ]	[l]	[s]	[m <sup>3</sup> /h]	[%]	[%]	
0,202	23,5	1,174	20,0	366,2	0,197	2,5	± 1,1	
0,501	23,7	1,174	40,0	293,7	0,490	2,3	± 0,96	
1,011	23,8	1,173	80,0	290,9	0,990	2,1	± 0,95	
1,81	23,8	1,173	160,0	326,1	1,77	2,5	± 0,92	
2,95	23,8	1,173	200,0	251,8	2,86	3,1	± 0,92	

Corrected flow, Temperature, Gas density, Actual volume, Time, Calculated flow, Correction, Calibration gas: Luft. Calibration gas: Air Uncertainty

Angivna gasflöden avser volymflöden ut ur objektet vid aktuella kalibreringsbetingelser.

Specified gas flows refer to volume flows out of the object under current calibration conditions.

$$\dot{V}_{\text{Beräknat}} = \frac{V_{\text{Avläst}}}{t} \text{ Actual reading}$$

$$\dot{V}_{\text{Verkligt}} = \dot{V}_{\text{Beräknat}} \cdot \left( 1 + \frac{\dot{V}_{\text{Korrektion}}}{100} \right) \text{ Correction}$$

där

$V_{\text{Avläst}}$  Avläst gasvolym Actual read gas volume  
 $t$  Avläst mättid Actual read measuring time  
 $\dot{V}_{\text{Beräknat}}$  Beräknat volymflöde Calculated volume flow  
 $\dot{V}_{\text{Korrektion}}$  Korrektion vid beräknat volymflöde Correction at calculated volume flow  
 $\dot{V}_{\text{Verkligt}}$  Verkligt volymflöde Corrected volume flow

RISE Research Institutes of Sweden AB  
 Kontroll och kalibrering, RISE AB - Kalibrering

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Bilaga  
 1 Kalibreringsdiagram

The measurement results are traceable through regular calibration of all instruments used Sweden's national measuring station (RMP) for temperature, voltage and pressure as well as RISE for humidity. The flow standards are traceable to NEL or NIST. The specified expanded measurement uncertainty is the product of standard measurement uncertainty and the coverage factor  $k=2$ , which gives a normal distribution corresponds to a coverage probability of approximately 95%. The standard measurement uncertainty has been determined in accordance with EA-4/02. The measurement uncertainty is related solely to the current calibration point and takes no consideration of the object's long-term stability and hysteresis

RISE Research Institutes of Sweden AB

## Appendix 11

## Calibration of gas meter in sampling trains 2 and 3



## KALIBRERINGSBEVIS

CALIBRATION CERTIFICATE

utförd av ackrediterat kalibreringslaboratorium Issued by an accredited calibration laboratory

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## Kalibrering av gasflödesmätare Calibration of a gas flow meter

(1 bilaga) (1 appendix)

## Objekt Object

Flödesmätare: Flow meter Actaris G6 RF1 s/n 20749299, inv.nr 202743.

Ankomstdatum: Intern. Arrival date: Internal

Ankomstskick: Utan anmärkning. Arrival condition: Without remarks

Kalibreringsdatum: 2021-06-07 Calibration date: 2021-06-07

## Mätutrustning Measuring equipment

Gasflödesmät rör L5, inv.nr 202 885. Gas flow pipe

Manometer Furness FCO510, inv.nr 900 068. Manometer Furness

Manometer Furness FCO510, inv.nr 900 069. Manometer Furness

Termometer Testo 635, inv.nr 900 061. Thermometer Testo 635

Barometer Druck PACE1000, inv.nr 902 243. Barometer

Tidtagarur Toppa, inv.nr BX60683. Time watch Toppa

## Omgivning Environment

Atmosfärstryck:  $1002 \pm 5$  hPa Atmospheric pressureTemperatur:  $24,9 \pm 0,5$  °C TemperatureLuftfuktighet:  $47 \pm 5\%$ -rh Humidity

## Kalibreringsförfarande Calibration procedure

Kalibreringen är utförd enligt SP-metod 2527, version 3.

Gas trycktes genom kalibreringsobjektet, som placerades nedströms referensen. Flödet reglerades med tryckregulator. See translation below.

## Spårbarhet och mätosäkerhet. Traceability and measuring uncertainty

Mätresultaten är genom regelbunden kalibrering av samtliga använda instrument, spårbara till Sveriges riksmätplats (RMP) för temperatur, spänning resp tryck samt RISE för luftfuktighet. Flödesnormalerna är spårbara till NEL resp NIST. Den angivna utvidgade mätosäkerheten är produkten av standardmätosäkerhet och täckningsfaktor  $k=2$ , vilket för en normalfördelning svarar mot en täckningssannolikhet av ungefär 95%. Standardmätosäkerheten har bestämts i enlighet med EA-4/02. Mätosäkerheten relateras enbart till aktuell kalibreringspunkt och tar ingen hänsyn till objektets långtidsstabilitet och hysteres. See translation on page 2.

The calibration is performed according to SP method 2527, version 3.

Gas was pushed through the calibration object, which was placed downstream of the reference. The flow was regulated with a pressure regulator.

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Ackred.nr. 1002  
Kalibrering  
ISO/IEC 17025



## Appendix 11



**KALIBRERINGSBEVIS**  
**CALIBRATION CERTIFICATE**  
 Datum Date  
 2021-06-08  
 Beteckning Reference  
 105403-II0115-K18

Sida  
2 (2)

The result is presented in table 1, where also measurement uncertainty for the corrections in each point specified. In Appendix 1, the calibration results are reported in diagram form.

**Resultat Results**

Resultatet presenteras i tabell 1, där även mätosäkerhet för korrektionerna i respektive punkt anges. I bilaga 1 redovisas kalibreringsresultaten i diagramform. See translation above.

Tabell 1. Kalibreringsresultat. Table 1. calibration results

Referens Verkligt flöde	Objekt betingelser		Objekt				
	Temperatur	Gasdensitet	Avläst volym	Avläst tid	Beräknat flöde	Korrektion	Mätosäkerhet
[m <sup>3</sup> /h]	[°C]	[kg/m <sup>3</sup> ]	[l]	[s]	[m <sup>3</sup> /h]	[%]	[%]
0,202	24,9	1,170	20,0	350,0	0,206	-1,8	± 1,1
0,504	24,7	1,171	40,0	281,1	0,512	-1,6	± 0,98
1,00	24,7	1,171	80,0	282,5	1,02	-1,6	± 0,95
1,73	24,7	1,171	140,0	289,7	1,74	-0,8	± 0,93
2,94	24,8	1,170	200,0	246,3	2,92	0,5	± 0,92

Corrected flow, Temperature, Gas density, Actual volume, Time, Calculated flow, Correction, Uncertainty  
 Kalibreringsgas: Luft. Calibration gas: Air

Angivna gasflöden avser volymflöden ut ur objektet vid aktuella kalibreringsbetingelser.

Specified gas flows refer to volume flows out of the object under current calibration conditions.

$$\dot{V}_{\text{Beräknat}} = \frac{V_{\text{Avläst}}}{t} \quad \text{Actual reading}$$

Calculated

$$\dot{V}_{\text{Verkligt}} = \dot{V}_{\text{Beräknat}} \cdot \left( 1 + \frac{\dot{V}_{\text{Korrektion}}}{100} \right) \quad \text{Correction}$$

Corrected

Calculated

dar

$V_{\text{Avläst}}$  Avläst gasvolym Actual read gas volume

$t$  Avläst mättid Actual read measuring time

$\dot{V}_{\text{Beräknat}}$  Beräknat volymflöde Calculated volume flow

$\dot{V}_{\text{Korrektion}}$  Korrektion vid beräknat volymflöde Correction at calculated volume flow

$\dot{V}_{\text{Verkligt}}$  Verkligt volymflöde Corrected volume flow

**RISE Research Institutes of Sweden AB****Kontroll och kalibrering, RISE AB - Kalibrering**

Utfört av

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**Bilaga****1 Kalibreringsdiagram**

The measurement results are traceable through regular calibration of all instruments used Sweden's national measuring station (RMP) for temperature, voltage and pressure as well as RISE for humidity. The flow standards are traceable to NEL or NIST. The specified expanded measurement uncertainty is the product of standard measurement uncertainty and the coverage factor  $k=2$ , which gives a normal distribution corresponds to a coverage probability of approximately 95%. The standard measurement uncertainty has been determined in accordance with EA-4/02. The measurement uncertainty is related solely to the current calibration point and takes no consideration of the object's long-term stability and hysteresis.

RISE Research Institutes of Sweden AB

## Appendix 11

## Calibration of gas meter for sampling train ambient



## KALIBRERINGSBEVIS

CALIBRATION CERTIFICATE

utförd av ackrediterat kalibreringslaboratorium

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105403-110319-K01

Sida  
1 (2)

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Hus 14  
Borås

## Kalibrering av gasflödesmätare Calibration of gas flow meter

(1 bilaga)

## Objekt Object

Flödesmätare Flow meter Aichi Tokei Denki s/n 1902298, tillhör inv.nr 200619.

Ankomstdatum: Intern. Arrival date:

Ankomstskick: Utan anmärkning. Arrival condition: Without remark

Kalibreringsdatum: 2021-10-27 Calibration date:

## Mätutrustning Measuring equipment

Gasflödesmät rör L4, inv.nr 202 884. Gas flowmeter pipe

Gasflödesmät rör L5, inv.nr 202 885. Gas flowmeter pipe

Manometer Furness FCO510, inv.nr 900 068. Manometer

Manometer Furness FCO510, inv.nr 900 069. Manometer

Termometer Testo 635, inv.nr 900 061. Thermometer

Barometer Druck PACE1000, inv.nr 902 243. Barometer

Tidtagarur Toppa, inv.nr BX60683. Time watch

## Omgivning Environment

Atmosfärstryck: 986 ± 5 hPa Atmospheric pressure:

Temperatur: 23,1 ± 0,5°C Temperature:

Luftfuktighet: 47 ± 5%-rh Humidity:

## Kalibreringsförfarande Calibration procedure

Kalibreringen är utförd enligt SP-metod 2527, version 3.

Gas trycktes genom kalibreringsobjektet, som placerades nedströms referensen. Flödet reglerades med tryckregulator. See translation below

## Spårbarhet och mätosäkerhet Traceability and measuring uncertainty

Mätresultaten är genom regelbunden kalibrering av samtliga använda instrument, spårbara till Sveriges riksmätplats (RMP) för temperatur, spänning resp tryck samt RISE för luftfuktighet. Flödesnormalerna är spårbara till NEL resp NIST. Den angivna utvidgade mätosäkerheten är produkten av standardmätosäkerhet och täckningsfaktor  $k=2$ , vilket för en normalfördelning svarar mot en täckningssannolikhet av ungefär 95%. Standardmätosäkerheten har bestämts i enlighet med EA-4/02. Mätosäkerheten relateras enbart till aktuell kalibreringspunkt och tar ingen hänsyn till objektets långtidsstabilitet och hysteres. See translation at the end of page 2

Calibration is performed according to SP-method 2527, version 3. Gas was pressurized through the calibration object which was placed downstream the reference. The gas flow was controlled by the pressure regulator.

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Akred. nr. 1002  
Kalibrering  
ISO/IEC 17025





## Appendix 11



KALIBRERINGSBEVIS  
CALIBRATION CERTIFICATE

Date  
2021-10-28  
Reference  
105403-110319-K01

Sida  
2 (2)

### Resultat Results

Resultatet presenteras i tabell 1, där även mätosäkerhet för korrektionerna i respektive punkt anges. I bilaga 1 redovisas kalibreringsresultaten i diagramform.

The results are presented in table 1, where the measuring uncertainty for the corrections also are presented.

Tabell 1. Kalibreringsresultat. Calibration results

Referens Verkligt flöde [l/min]	Objekt betingelser		Avläst volym [l]	Avläst tid [s]	Beräknat flöde [l/min]	Korrektion [%]	Mätosäkerhet [%]
	Temperatur [°C]	Gasdensitet [kg/m <sup>3</sup> ]					
0,278	23,1	1,160	2,00	432,1	0,278	-0,1	± 1,9
2,50	23,0	1,160	20,0	473,9	2,53	-1,2	± 1,0
5,97	22,8	1,161	40,0	396,7	6,05	-1,3	± 0,92
10,12	22,4	1,161	60,0	352,4	10,2	-1,0	± 0,92
14,45	22,2	1,162	80,0	331,1	14,5	-0,3	± 0,92

Corrected flow, Temperature, Gas density, Actual value, Actual time, Calc. flow, Correction,  
Kalibreringsgas: Luft. Calibration gas air

Uncertainty

Angivna gasflöden avser volymflöden ut ur gasrets slangnippel vid aktuella kalibreringsbetingelser. Specified gas flows refer to volume flows out of the hose nipple of the gas meter at current times calibration conditions.

$$\dot{V}_{\text{Beräknat}} = \frac{V_{\text{Avläst}}}{t}$$

$$\dot{V}_{\text{Verkligt}} = \dot{V}_{\text{Beräknat}} \cdot \left( 1 + \frac{\dot{V}_{\text{Korrektion}}}{100} \right)$$

dar Where

$V_{\text{Avläst}}$  Avläst gasvolym Actual read gas flow  
 $t$  Avläst mättid Actual read time  
 $\dot{V}_{\text{Beräknat}}$  Beräknat volymflöde Calculated volume flow  
 $\dot{V}_{\text{Korrektion}}$  Korrektion vid beräknat volymflöde Correction at calculated volume flow  
 $\dot{V}_{\text{Verkligt}}$  Verkligt volymflöde Corrected volume flow

### RISE Research Institutes of Sweden AB Kontroll och kalibrering - Kalibrering

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### Bilaga

1 Kalibreringsdiagram

The measurement results are traceable through regular calibration of all instruments used Sweden's national measuring station (RMP) for temperature, voltage and pressure as well as RISE for humidity. The flow standards are traceable to NEL or NIST. The specified expanded measurement uncertainty is the product of standard measurement uncertainty and the coverage factor  $k=2$ , which gives a normal distribution corresponds to a coverage probability of approximately 95%. The standard measurement uncertainty has been determined in accordance with EA-4/02. The measurement uncertainty is related solely to the current calibration point and takes no consideration of the object's long-term stability and hysteresis

RISE Research Institutes of Sweden AB

## Appendix 11

## Calibration of scale (filter, gasket and rinse)



## KALIBRERINGSBEVIS

CALIBRATION CERTIFICATE

utförd av ackrediterat kalibreringslaboratorium

issued by an accredited calibration laboratory

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## Kalibrering av våg Calibration of a scale

Datum/Date

Kalibreringen utfördes 2021-06-10 Calibration performed 2021-06-10

Mätobjekt/Objekt

Analytvåg tillverkad av Mettler Scale manufactured by Mettler

Typ XS205DR, Serie nr B737651894, Inv. nr BX7 2435.

Type XS205DR, Serial nr. B737651894, Inv. nr BX7 2435. The scale have several weight ranges with different resolutions

Vågen har flera belastningsområden med olika skaldelivårds.

Område nr	Största last Max	Belastning/Weight	Skaldel, d	Resolution
1	81 g	81 g	0,00001 g	Weight range 1, max weight
2	220 g	220 g	0,0001 g	Weight range 2, max. weight

Uppställningsplats/Place of Installation

RISE ETF 14-1029

Mätmiljö/Environment

Vågen var stabilt uppställd på vågfundament. Temperatur 22 °C The scale was placed on a stable ground. Temperature 22 °C

Mätmetod/Measuring method

Kalibrering av våg enligt KVj 18.12 under antagande av referensdensiteten 8000 kg/m<sup>3</sup> och att luftens densitet är 1.2 kg/m<sup>3</sup>. Calibration of scale according to KVj 18.12, under the presumption that the reference density is 8000 kg/m<sup>3</sup> and that the density of air is 1.2 kg/m<sup>3</sup>.

Spårbarhet/Traceability

Mätresultatet är genom regelbunden kalibrering av använda viktmormaler spårbara till riksmätplatsen för massa på RISE Research Institutes of Sweden.

Använd viktsats: AMP70

Övrig referensutrustning: Temperaturinstrument: BX82317

The measurement result is traceable to the National Laboratory for weighing at RISE Research Institutes of Sweden. Use weight kit: AMP70  
Other reference equipment: Temperature instrument: BX82317

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utförande laboratorien i förväg skriftligen godkännt annat.Årskontroll  
2022-05-31

### Appendix 11



**KALIBRERINGSBEVIS**  
CALIBRATION CERTIFICATE

Issue Date  
2021-06-10

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**Resultat Results**  
(Resultaten avser endast de förhåll som är specificerade i detta dokument) (The results are valid only for the specifications in this document)

Före varje belastning har vägskalan nollställd. Before each weighing the scale has been zeroed.

Efter kalibrering med vägska lösliggande vikt. After tuning with the built-in weight of the scale.

Belastning, g	Avläst på väg, g	Måttolfehl, mg
0,5	0,50000	0,00003
1	1,00000	0,00002
10	9,99999	0,00004
40	39,99997	0,00007
80	79,99997	0,00010
150	150,0000	0,00012
200	200,0000	0,00013

Weight, g Actual reading, g Uncertainty  
Samtliga avlästa värden är angivna som medelvärden baserat på tre mätningar.  
All read values are given as averages based on three measurements.

Essentiell placering Essential placed weight

Belastningspunkt	Belastning, g	Avläst på väg, g
1	100	99,9997
2	100	100,0003
3	100	99,9994
4	100	99,9994
5	100	100,0004

Weight point Weight, g Actual reading, g



Måttolfehl Measurement uncertainty

Den angivna utvidgade måttolfehlet är produkten av standardmåttolfehlet och täckningsfaktorn  $k = 2$ , vilket för en normalfördelning svarar mot en täcknings sannolikhet av ungefär 95 %. Standardmåttolfehlet har bestämt i enligt nedan IAL:s publikation EA-4/02.

The stated extended measurement uncertainty is the product of standard measurement uncertainty and the coverage factor  $k = 2$ , which for a normal distribution corresponds to a coverage probability of about 95%. The standard measurement uncertainty has been determined in accordance with the IAL's publication EA-4/02.

RISE Research Institutes of Sweden AB  
Kontroll och kalibrering, RISE AB - Kalibrering

Niklas Sund

Niklas Sund

Kommentar

RISE Research Institutes of Sweden AB

Appendix 11

Calibration of scale (boiler)

**RISE** **KALIBRERINGSBEVIS** CALIBRATION CERTIFICATE  
 utfärdad av ackrediterat kalibreringslaboratorium Issued by an accredited calibration laboratory

Kontaktperson **Contact** **Name** **Date** **Side**  
 Niklas Sund 2021-06-10 1 (2)  
 Säkerhet och transport Reference  
 +46 10 516 61 20 105403-1721 546  
 niklas.sund@rise.se  
 RISE ETF  
 Box 857  
 501 15 Borås

Kalibrering av våg Calibration of a scale

**Datum** **Date**  
 Kalibreringen utfördes 2021-06-10 Calibration date 2021-06-10

**Mätobjekt** **Object**  
 Golvvåg tillverkad av A&D Instruments. Floor scale manufactured by A&D Instruments  
 Typ AD-4401-EC. Serienr K418671. KWP01056. Type AD-4401-EC Serial nr. K 4418671

**Belastning** **Weight** **Skaldel, d** **Resolution**  
 Största last, Max. Max. weight 1500 kg 0,1 kg

**Uppställningsplats** **Place of installation**  
 Förbränningslab Combustion laboratory

**Mätmiljö** **Environment**  
 Temperatur 21 °C Temperature

**Mätmetod** **Measuring method**  
 Kalibrering av våg enligt KVVj 44.11. Calibration of scale according to KVVj 44.11.

**Spårbarhet** **Traceability**  
 Mätresultatet är genom regelbunden kalibrering av använda viktnormaler spårbara till riksmätplatsen för massa på RISE Research Institutes of Sweden.

Använd viktstav: BV21 samt viktstav V-35, Temperaturinstrument BX82317  
 Övrig referensutrustning: Temperaturinstrument: BX82317

The measurement results are traceable through regular calibration of the weight standards used the national measuring site for weighing at RISE Research Institutes of Sweden.  
 Weight kit used: BV21 and weight rod V-35, Temperature instrument BX82317  
 Other reference equipment: Temperature instrument: BX82317

**RISE Research Institutes of Sweden AB**

Postadress Boxadress Tel / Fax / E post  
 Box 857 501 15 BORÅS 010-516 5000 033-1555 02 info@rise.se

Denna rapport får endast störas från helhet, om info  
 utfärdande laboratorium i förväg skriftligen godkännt annat.

**RISE** **KALIBRERINGSBEVIS** **Issue** **Date** **Side**  
**CALIBRATION CERTIFICATE** 2021-06-10 2 (2)  
 105403-1721 546

**Resultat** **Results**  
 Resultatet avser endast de storlekar som är specificerade i detta dokument. (The results are only valid for the specific in the document)

Belastning, kg	Förväntad Avvikelse på våg, kg	Årskänslighet Avvikelse på våg, kg
0	0,0	0,0
20	19,9	19,9
100	99,7	99,9
300	300,4	300,4
500	500,0	500,0
700	700,0	700,0
1000	1000,0	1000,0

**Essenslikt placerad last** **Essentially placed load**

Belastningspunkt	Belastning, kg	Avvikelse på våg, kg
1	500	500,4
2	500	500,7
3	500	500,0

**Point of weight** **Weight, kg** **Actual weight, kg**

1	500	500,4
2	500	500,7
3	500	500,0

**Repetitivitetens** **Repeatability test**

Belastning, kg	Avvikelse på våg, kg
1	1000,3
2	1000,4
3	1000,3

**Point of weight** **Actual weight, kg**  
**Mätosäkerhet** **Measurement uncertainty**

Den utvidgade mätosäkerheten vid belastningar upp till vågens belastade kapacitet beräknas till ±1,7 kg.

Den angivna utvidgade mätosäkerheten är producerad av standardmätosäkerhet och släckningsfaktorn  $k = 2$ , vilket för en normalfördelning avser mot en släckningsosäkerhet av ungefär 95 %. Standardmätosäkerheten har bestämts i enlighet med IAL:s publikation EA-402.

The extended measurement uncertainty at loads up to the scale's loaded capacity is calculated to ±1.7 kg. The given extended measurement uncertainty is the product of the standard measurement uncertainty and the coverage factor  $k = 2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard measurement uncertainty has been determined in accordance with IAL's publication EA-402.

**RISE Research Institutes of Sweden AB**  
 Kontroll och kalibrering, RISE AB - Kalibrering  
 Sida 11

Niklas Sund

RISE Research Institutes of Sweden AB



Appendix 11

Calibration of flow meter on load side

FLOW METER:		Valmet 9V MP115	Inv.nr.	201655	DATE:		2022-03-10	SIGN.:		MJ		
Reference: Flow calibrator Inv.nr. 200 083												
TEMP.	PULS	TIME	WEIGHT	DENSITY	VOLYME	ACTUA FLOW	NOM. METER- FACTOR	MEASURED FLOW	CORRECTION	CORREKION	MEASURING- UNCERTAINTY	NOTES
°C	st	s	kg	kg/m3	dm3	m3/h	puls/dm3	m3/h	%	m3/h	%	
53.2	291843	677.7	50.33	986.6	51.07	0.271	5760	0.269	0.80	0.0021		Flying start
53.2	292121	679.0	50.42	986.6	51.16	0.271	5760	0.269	0.88	0.0024		
53.2	291414	679.4	50.30	986.6	51.04	0.270	5760	0.268	0.88	0.0024		
						0.271		0.269	0.85	0.0023		
52.1	409488	441.7	70.84	987.1	71.84	0.586	5760	0.579	1.06	0.0061		Flying start
52.1	409927	442.2	70.89	987.1	71.89	0.585	5760	0.579	1.02	0.0059		
52.1	410628	442.8	71.01	987.1	72.02	0.585	5760	0.580	1.02	0.0059		
						0.585		0.579	1.03	0.0060		
51.9	587460	319.2	101.64	987.2	103.07	1.163	5760	1.150	1.06	0.0122		Flying start
52.1	585345	318.2	101.27	987.1	102.70	1.162	5760	1.150	1.06	0.0122		
52.4	585169	318.9	101.17	986.9	102.62	1.158	5760	1.147	1.02	0.0116		
						1.161		1.149	1.05	0.0120		
52.7	595311	213.9	102.89	986.8	104.38	1.756	5760	1.739	0.99	0.0172		Flying start
52.8	591039	212.4	102.17	986.8	103.66	1.757	5760	1.739	1.02	0.0177		
52.7	595083	214.2	102.82	986.8	104.31	1.753	5760	1.736	0.97	0.0168		
						1.756		1.738	0.99	0.0173		
53.4	600159	157.6	103.62	986.5	105.16	2.402	5760	2.380	0.92	0.0219		Flying start
53.2	605660	159.3	104.67	986.6	106.22	2.401	5760	2.376	1.01	0.0241		
53.0	596406	157.1	103.03	986.7	104.54	2.396	5760	2.373	0.96	0.0228		
						2.399		2.376	0.97	0.0229		
						0.000		0.000	0.00	0.0000		Flying start
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		

Measuring uncertainty for the reference is ±0,3% at normal applications. See ETL-QD annex DB1 (Quality manual).

Flow	Correction	Flow	Correction
20 °C	20 °C	20 °C	20 °C
0,269	0,85	0,269	0,0023
0,579	1,03	0,579	0,0060
1,149	1,05	1,149	0,0120
1,738	0,99	1,738	0,0173
2,376	0,97	2,376	0,0229
0,000	0,00	0,000	0,0000

Calibration of flow meter on supply side

FLOW METER:		Kamstrup MP 115	Inv.nr.	900 395	DATE:		2022-03-10	SIGN.:		MJ		
Reference: Flow calibrator Inv.nr. 200 083												
TEMP.	PULS	TIME	WEIGHT	DENSITY	VOLYME	ACTUA FLOW	NOM. METER- FACTOR	MEASURED FLOW	CORREKION	CORREKION	MEASURING- UNCERTAINTY	NOTES
°C	st	s	kg	kg/m3	dm3	m3/h	puls/dm3	m3/h	%	m3/h	%	
53.2	296133	677.7	50.33	986.6	51.07	0.271	5760	0.273	-0.66	-0.0018		Flying start
53.2	296408	679.0	50.42	986.6	51.16	0.271	5760	0.273	-0.58	-0.0016		
53.2	295686	679.4	50.30	986.6	51.04	0.270	5760	0.272	-0.58	-0.0016		
						0.271		0.273	-0.61	-0.0017		
52.1	415272	441.7	70.84	987.1	71.84	0.586	5760	0.588	-0.35	-0.0021		Flying start
52.1	415623	442.2	70.89	987.1	71.89	0.585	5760	0.587	-0.37	-0.0021		
52.1	416379	442.8	71.01	987.1	72.02	0.585	5760	0.588	-0.37	-0.0022		
						0.585		0.588	-0.36	-0.0021		
52.1	593683	318.2	101.27	987.1	102.70	1.162	5760	1.166	-0.36	-0.0041		Flying start
52.3	594099	318.6	101.29	987.0	102.74	1.161	5760	1.165	-0.39	-0.0045		
52.4	593659	318.9	101.17	986.9	102.62	1.158	5760	1.163	-0.43	-0.0050		
						1.160		1.165	-0.39	-0.0046		
52.7	603938	213.9	102.89	986.8	104.38	1.756	5760	1.764	-0.45	-0.0080		Flying start
52.8	599545	212.4	102.17	986.8	103.66	1.757	5760	1.764	-0.41	-0.0073		
52.7	603585	214.2	102.82	986.8	104.31	1.753	5760	1.761	-0.45	-0.0080		
						1.756		1.763	-0.44	-0.0078		
53.4	608442	157.6	103.62	986.5	105.16	2.402	5760	2.413	-0.45	-0.0109		Flying start
53.2	614177	159.3	104.67	986.6	106.22	2.401	5760	2.410	-0.39	-0.0093		
53.0	604764	157.1	103.03	986.7	104.54	2.396	5760	2.406	-0.44	-0.0105		
						2.399		2.410	-0.42	-0.0102		
						0.000		0.000	0.00	0.0000		Flying start
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		
						0.000		0.000	0.00	0.0000		

Measuring uncertainty for the reference is ±0,3% at normal applications. See ETL-QD annex DB1 (Quality manual).

Flow	Correktion	Flow	Correktion
20 °C	20 °C	20 °C	20 °C
0,273	-0,61	0,273	-0,0017
0,588	-0,36	0,588	-0,0021
1,165	-0,39	1,165	-0,0046
1,763	-0,44	1,763	-0,0078
2,410	-0,42	2,410	-0,0102
0,000	0,00	0,000	0,0000



## Appendix 11

## Calibration of barometer



## KALIBRERINGSBEVIS CALIBRATION CERTIFICATE

Kontaktperson RISE **Contact**  
Magnus Bremholt  
Säkerhet och transport  
+46 10 516 67 27  
magnus.bremholt@ri.se

Datum **Date**  
2022-04-08  
Referens **Reference**  
105403-110491-K01

Sida  
1 (2)

RISE  
Värme- och kylteknik  
104102  
Hus 14

**Kalibrering av barometer** Calibration of barometer  
(1 bilaga)**Objekt** Object

Instrument: Testo 511 s/n 39101050/707 inv.nr 701 275.  
Ankomstdatum: 2022-03-31. Arrival date:  
Ankomstskick: Utan anmärkning. Arrival condition: Without remark.  
Kalibreringsdatum: 2022-04-07. Calibration date:

**Mätutrustning** Measuring equipment

Manometer: Manometer Druck DPI 260, inv.nr 201 637.  
Temperatur och fuktgivare Vaisala HMT 361, inv.nr BX9 1524.. Temperature and humidity sensor

**Omgivning** Environment

Atmosfärstryck: 957 ± 5 hPa. Atmospheric pressure:  
Temperatur: 21,8 ± 0,5°C. Temperature:  
Luftfuktighet: 28 ± 5%-rh. Humidity:

**Kalibreringsförfarande** Calibration procedure (see translation below)

Kalibreringsobjektet anslöts parallellt med laboratoriereferensen. Vid de olika trycknivåerna avlästes samtidigt referensmanometerns och objektets tryckvisning.

Verkligt värde = avläst värde + korrektion.

**Calibration procedure**

The calibration object was connected in parallel with the laboratory reference. At the different pressure levels the pressure display of the reference manometer and the object were read at the same time.

Actual value = read value + correction.

**RISE Research Institutes of Sweden AB**

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info@ri.se

**Konfidentialitetsnivå**  
K2 - Intern

Detta dokument får endast återges i sin helhet, om inte RISE AB i förväg skriftligen godkänt annat.

## Appendix 11


**KALIBRERINGSBEVIS**  
**CALIBRATION CERTIFICATE**

 Datum **Date**  
 2022-04-08  
 Beträffande **reference**  
 105403-I10491-K01

 Sida  
 2 (2)

**Resultat** **Results**

Kalibreringsresultatet redovisas i tabell 1, samt i diagramform i bilaga 1.

The calibration result is reported in table 1, as well as in diagram form in appendix 1.

 Tabell 1. *Kalibreringsresultat* **Table 1. Calibration results**

Referens	Objekt		
	Verkligt tryck (hPa)	Avläst tryck (hPa)	Korrektion (hPa)
1095,0	1100,0	-5,0	±1
1045,0	1050,0	-5,0	±1
995,0	1000,0	-5,0	±1
945,0	950,0	-5,0	±1
895,1	900,0	-4,9	±1
1095,1	1100,0	-4,9	±1
895,0	900,0	-5,0	±1
1095,1	1100,0	-4,9	±1
895,0	900,0	-5,0	±1

Corrected pressure    Actual pressure    Correction    Uncertainty of measurement

**Mätosäkerhet och spårbarhet** **Measurement uncertainty and traceability (see below)**

Samtliga använda instrument har spårbarhet mot riksmätplats eller motsvarande internationell organisation. Den angivna utvidgade mätosäkerheten är produkten av standardmätosäkerhet och täcknings-faktorn  $k=2$ , som bestämts i enlighet med EA-4/02. Mätosäkerheten relateras enbart till aktuell kalibreringspunkt och tar ingen hänsyn till objektets långtidsstabilitet och hysteres. [See translation below](#)

**RISE Research Institutes of Sweden AB**  
**Kontroll och kalibrering - Kalibrering**

 Utfört av **Performed by**

Magnus Bremholt

 Granskad av **Reviewed by**

Mattias Ekerind

**Bilaga** **Appendix**

 1. **Kalibreringsdiagram.** **Calibration chart.**

Measurement uncertainty and traceability. All instruments used are traceable to the national measurement site or equivalent international organisation. The given expanded measurement uncertainty is the product of the standard measurement uncertainty and the coverage factor  $k=2$ , as determined in accordance with EA-4/02. The measurement uncertainty is related only to the current calibration point and does not take into account the object's long-term stability and hysteresis.



Appendix 11

Calibration of temperature sensors on load side (PT-100)

Tempsensor		Calibration of temperature sensor/instrument				
1 = Sensor 4T1 Channel A Alcohol						
2 = Sensor 4T2 Channel B Water		Instruktion ETvvs 002				
01 = Sensor 0401 Channel A Alcohol						
402 = Sensor 0402 Channel B Water		Reference			Calibration object	
		Calibration bath Heto + System technique S1224			PT04-VV3	
		s/n 3841 with sensor 4T1, 4T2, 0401 and 0402.			Data acquisition TIGER channel 1103	
		Inv. nr 200 437+200 076+202 108			Inv. nr	
		Calibration date 2021-06-29				
		Actual temp	Correction	Corrected temp	Actual temp	Measurement uncertainty
		°C	°C	°C	°C	°C
	2	29,910	0,096	30,006	29,82	±0,07
	2	39,910	0,108	40,018	39,83	±0,07
	2	49,885	0,120	50,005	49,82	±0,07
	2	59,872	0,132	60,004	59,82	±0,07
	2	69,860	0,147	70,007	69,82	±0,07
	2	79,840	0,162	80,002	79,82	±0,07
	402	89,874	0,149	90,023	89,84	±0,07

Tempsensor		Calibration of temperature sensor/instrument				
1 = Sensor 4T1 Channel A Alcohol						
2 = Sensor 4T2 Channel B Water		Instruktion ETvvs 002				
01 = Sensor 0401 Channel A Alcohol						
402 = Sensor 0402 Channel B Water		Reference			Calibration object	
		Calibration bath Heto + System technique S1224			PT06	
		s/n 3841 with sensor 4T1, 4T2, 0401 and 0402.			Data acquisition TIGER channel 1104	
		Inv. nr 200 437+200 076+202 108			Inv. nr	
		Calibration date 2021-06-29				
		Actual temp	Correction	Corrected temp	Actual temp	Measurement uncertainty
		°C	°C	°C	°C	°C
	2	29,910	0,096	30,006	29,83	±0,07
	2	39,910	0,108	40,018	39,85	±0,07
	2	49,885	0,120	50,005	49,83	±0,07
	2	59,872	0,132	60,004	59,83	±0,07
	2	69,860	0,147	70,007	69,83	±0,07
	2	79,840	0,162	80,002	79,82	±0,07
	402	89,874	0,149	90,023	89,85	±0,07



Appendix 11

**Calibration of temperature sensors on supply side (PT-100)**

Tempensor	Calibration of temperature sensor/instrument					
1 = Sensor 4T1 Channel A Alcohol	Instruction ETvvs 002					
2 = Sensor 4T2 Channel B Water						
01 = Sensor 0401 Channel A Alcohol						
402 = Sensor 0402 Channel B Water	Reference			Calibration object		
	Calibration bath Heto + System technique S1224			PT02-VV3		
	s/n 3841 with sensor 4T1, 4T2, 0401 and 0402.			Data acquisition TIGER channel 1105		
	Inv. nr 200 437+200 076+202 108			Inv. nr		
	Calibration date 2021-06-29					
	Actual temp	Correction	Corrected temp	Actual temp	Correction	Measurement uncertainty
	°C	°C	°C	°C	°C	°C
2	29,910	0,096	30,006	30,31	-0,30	±0,07
2	39,910	0,108	40,018	40,34	-0,32	±0,07
2	49,885	0,120	50,005	50,34	-0,34	±0,07
2	59,872	0,132	60,004	60,36	-0,36	±0,07
2	69,860	0,147	70,007	70,38	-0,37	±0,07
2	79,840	0,162	80,002	80,40	-0,40	±0,07
402	89,874	0,149	90,023	90,44	-0,42	±0,07

Tempensor	Calibration of temperature sensor/instrument					
1 = Sensor 4T1 Channel A Alcohol	Instruction ETvvs 002					
2 = Sensor 4T2 Channel B Water						
01 = Sensor 0401 Channel A Alcohol						
402 = Sensor 0402 Channel B Water	Reference			Calibration object		
	Calibration bath Heto + System technique S1224			PT05-VV4		
	s/n 3841 with sensor 4T1, 4T2, 0401 and 0402.			Data acquisition TIGER channel 1106		
	Inv. nr 200 437+200 076+202 108			Inv. nr		
	Calibration date 2021-06-29					
	Actual temp	Correction	Corrected temp	Actual temp	Correction	Measurement uncertainty
	°C	°C	°C	°C	°C	°C
2	29,910	0,096	30,006	29,86	0,15	±0,07
2	39,910	0,108	40,018	39,89	0,13	±0,07
2	49,885	0,120	50,005	49,87	0,13	±0,07
2	59,872	0,132	60,004	59,87	0,13	±0,07
2	69,860	0,147	70,007	69,88	0,13	±0,07
2	79,840	0,162	80,002	79,89	0,11	±0,07
402	89,874	0,149	90,023	89,90	0,12	±0,07

## Appendix 12

**Correspondence with EPA dated 13 to 14 April 2022**

Dear Henrik,

Thank you very much for sending us your questions.

Your understanding is quite correct. If more than 1 test run is conducted then the data would be averaged for the purposes of determining compliance. Both data sets must be included in the test report, and it is the final result (lb/Mmbtu) that would be averaged for each category in terms of compliance determination.

If more than 2 tests are conducted, one of the three may be discarded in terms of NOT being included in the test result average, but those data for the discarded test run **MUST** be reported. The remaining two tests would be averaged (as above) for compliance determination purposes.

If 4 tests are conducted, one may be discarded and the other three must be averaged for compliance determination. At six test runs a second test may be discarded from the averaged calculations. And so on.

Naturally we trust that no one will need to conduct 4 tests or more, as the average begins to be harder to overcome with a single “better” test result.

I hope this is helpful information.

Please let us know if you have any additional questions!

Med uppriktiga hälsningar,

Stef

**From:** Henrik Persson <[henrik.persson@ri.se](mailto:henrik.persson@ri.se)>  
**Sent:** Wednesday, April 13, 2022 10:29 AM  
**To:** Johnson, Steffan <[johnson.steffan@epa.gov](mailto:johnson.steffan@epa.gov)>  
**Subject:** Additional test runs

Dear Steffan,

Hope everything is well with you!

I have a question I would be grateful if you could answer.

We (RISE) have conducted a test on a hydronic pellet heater according to ASTM 2618-13. We did two test runs in the same category due to a leakage in the boiler. My question now is how I should calculate the average from those two test runs? According to clause 12.2.15 in ASTM 2618-13 additional test run results should be used by two thirds in calculating the weighted average emission rate. According to the recently sent email from EPA about test report

## Appendix 12

corrective action there is an explanation to this under subpart AAA where it is said that if two test runs are done then both should be used in the average but if 3 tests are done then 2/3 need to be included, which I interpret that if 3 tests are done in the same category then you can choose two of them to be included in the average. Is that a correct interpretation? And does it only counts for the emission rate in lb/mm btu or should it be calculated for all the test results?

With Kind Regards

**Henrik Persson**

Engineer

Built Environment

Department Energy and Resources

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[henrik.persson@ri.se](mailto:henrik.persson@ri.se)

**RISE Research Institutes of Sweden** | [ri.se](https://ri.se)

Industrigatan 4, 504 62 Borås |

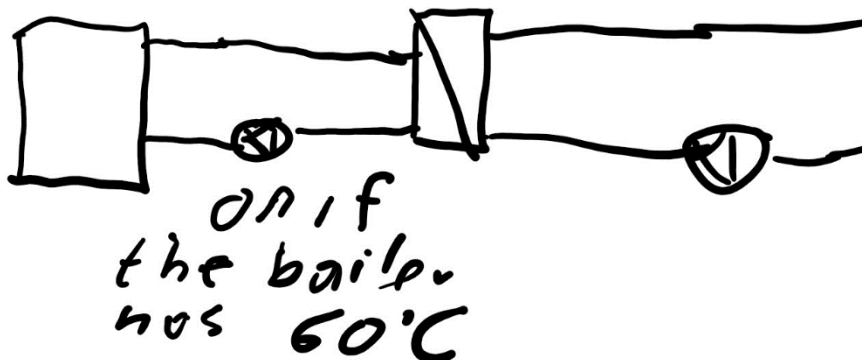
### Correspondence with the manufacturer dated 14 to 17 March 2022

Hi Henrik, we have an internal mix of return and boiler. In our control the pumps start after the boiler has 60°C.

So we can use one pump for the primary circuit, can switch them on when the boiler have 60°C

Best regards

Ernst



## Appendix 12

**Von:** Henrik Persson <[henrik.persson@ri.se](mailto:henrik.persson@ri.se)>  
**Gesendet:** Donnerstag, 17. März 2022 15:22  
**An:** Ernst Wurm <[ernst.wurm@pelletsheizung.at](mailto:ernst.wurm@pelletsheizung.at)>  
**Betreff:** Sv: log files new test

Another quick question: Have the boiler its own internal circulation pump that we should use in the tests or should we use our test rig pump (or bypass it)?

With Best Regards

**Henrik Persson**

Engineer

Built Environment

Department Energy and Resources

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[henrik.persson@ri.se](mailto:henrik.persson@ri.se)

**RISE Research Institutes of Sweden** | [ri.se](http://ri.se)

Industrigatan 4, 504 62 Borås |

**Från:** Ernst Wurm <[ernst.wurm@pelletsheizung.at](mailto:ernst.wurm@pelletsheizung.at)>  
**Skickat:** den 16 mars 2022 09:47  
**Till:** Henrik Persson <[henrik.persson@ri.se](mailto:henrik.persson@ri.se)>  
**Kopia:** Michael Wögerbauer <[michael.woegerbauer@pelletsheizung.at](mailto:michael.woegerbauer@pelletsheizung.at)>  
**Ämne:** AW: log files new test

Hi Henrik,

yes 50°C for the return and 65-70°C for the flow is ok.

Best regards

Ernst

**Von:** Henrik Persson <[henrik.persson@ri.se](mailto:henrik.persson@ri.se)>  
**Gesendet:** Mittwoch, 16. März 2022 09:00  
**An:** Ernst Wurm <[ernst.wurm@pelletsheizung.at](mailto:ernst.wurm@pelletsheizung.at)>  
**Betreff:** Sv: log files new test

Hi Ernst,

Question:

**RISE Research Institutes of Sweden AB**

## Appendix 12

Which return temperature do you want to the boiler? At least it should be 120 F (49 C) according to the method.

**With Best Regards**

**Henrik Persson**

Engineer

Built Environment

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**Från:** Ernst Wurm <[ernst.wurm@pelletsheizung.at](mailto:ernst.wurm@pelletsheizung.at)>

**Skickat:** den 14 mars 2022 14:32

**Till:** Henrik Persson <[henrik.persson@ri.se](mailto:henrik.persson@ri.se)>

**Ämne:** AW: log files new test

Hallo Henrik,

yes

1. Home
2. Pellematic
3. Operation Mode
4. ON

It is fine to start the boiler in the morning. And you can adjust your hydraulic.

The boiler should run at lower 70°C between 65°C and 70°C

You should get the boiler in the next days, so you can assemble the boiler to your heat exchanger chimney

Best regards

Ernst

**Gesendet:** Montag, 14. März 2022 13:45

**An:** Ernst Wurm <[ernst.wurm@pelletsheizung.at](mailto:ernst.wurm@pelletsheizung.at)>

**Betreff:** Sv: log files new test

## Appendix 13

**Example calculations**

The example calculations has been performed according to ASTM 2515-11 and ASTM 2618-13. The values in this example are taken from the test at category II run 1 dated 24/03/2022.

MC	Moisture content (oven dry method according to ASTM D4442), %
$m_n$	Total particulate matter collected, mg
$V_{m(std)}$	Volume of gas sampled corrected to standard conditions, dscm
$V_s$	Average dilution tunnel gas velocity, m/sec
$C_s$	Particulate concentration, g/dscm
$Q_{std}$	Dilution tunnel gas flow rate, dscm/min
$E_T$	Total particulate emissions, grams
PR	Proportional rate variation, %
$Q_{in}$	Heat input, Btu
$Q_{out}$	Heat output, Btu
	Heat output, Btu/hr
$E_{g/MJ}$	Emission rate, g/MJ
$E_{lb/MMBtu\ input}$	Emission rate, lb/MMBtu input
$E_{lb/MMBtu\ output}$	Emission rate, lb/MMBtu output
$E_{g/kg}$	Emission rate, g/kg
$E_{g/hr}$	Emission rate, g/hr
$\eta_{del}$	Delivered efficiency

## Appendix 13

**MC -Moisture content**

ASTM 2618-13 (12.3.2) refers to ASTM D4442-16 method A or B for determining the moisture content of the wood pellet fuel.

Method A:

$$\text{MC, \%} = [(A-B)/B] \times 100$$

Where:

A = Original mass, g

B = Oven dry mass, g

Three samples were taken from different pellet bags and an average was calculated.

**Sample 1**

$$\text{MC, \%} = (603.4 - 562.6)/562.6 \times 100$$

$$\text{MC, \%} = 7.25 \% \text{ db (6.76 \% wb)}$$

**Sample 2**

$$\text{MC, \%} = (687.5 - 640.5)/640.5 \times 100$$

$$\text{MC, \%} = 7.34 \% \text{ db (6.84 \% wb)}$$

**Sample 3**

$$\text{MC, \%} = (547.2 - 510.9)/510.9 \times 100$$

$$\text{MC, \%} = 7.11 \% \text{ db (6.63 \% wb)}$$

$$\text{Average: } (7.25 + 7.34 + 7.11)/3 = \mathbf{7.23 \% \text{ db}} \text{ (6.74 \% wb)}$$

 **$m_n$  – Total particulate matter collected**

ASTM 2515-11 equation (12)

$$m_n = m_p + m_f + m_g$$

where:

$m_n$  = Total particulate matter collected, mg

$m_p$  = mass of particulate from probe, mg

$m_f$  = mass of particulate from filters, mg

$m_g$  = mass of particulate from filter gaskets, mg

Sample calculation train 1:

$$m_n = 0.99 + 0.10 + 0.13$$

$$m_n = 1.22 \text{ mg}$$

Appendix 13

Sample calculation train 2+3:

$$m_n = 0.68 + 0.30 + 0.17$$

$$m_n = 1.15 \text{ mg}$$

**$V_{m(\text{std})}$  – Volume of gas sampled corrected to dry standard conditions, dscf**

ASTM 2515-11 equation (6)

$$V_{m(\text{std})} = V_m \times Y \times K_1 \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m}$$

Where:

$K_1 = 0.3855 \text{ K/mm Hg}$  (for inch pound units  $17.64 \text{ }^\circ\text{R/in.Hg}$ )

$V_m =$  Volume of gas sample measured at the dry gas meter, dcm

$Y =$  Dry gas meter calibration factor, dimensionless

$P_b =$  Barometric pressure at the testing site, in mm Hg

$\Delta H =$  Average pressure differential across the orifice meter, mm  $\text{H}_2\text{O}$

$T_m =$  Absolute average dry gas meter temperature, K

Sample calculation train 1:

$$V_{m(\text{std})} = 1,3986 \times 1 \times 0.3855 \times \frac{755.31 + \frac{0}{13.6}}{293.5}$$

$$V_{m(\text{std})} = 1.3875 \text{ dscm (m}^3\text{)}$$

Sample calculation train 2+3:

$$V_{m(\text{std})} = 1,3554 \times 1 \times 0.3855 \times \frac{748.31 + \frac{0}{13.6}}{293.6}$$

$$V_{m(\text{std})} = 1.3442 \text{ dscm (m}^3\text{)}$$

Sample calculation train ambient:

$$V_{m(\text{std})} = 1,3933 \times 1 \times 0.3855 \times \frac{755.31 + \frac{0}{13.6}}{293.7}$$

$$V_{m(\text{std})} = 1.3813 \text{ dscm (m}^3\text{)}$$



Appendix 13

**V<sub>s</sub> – Dilution tunnel gas velocity, m/sec**

ASTM 2515-11 equation (9)

$$V_s = F_p \times k_p \times C_p \times \sqrt{\Delta P_{avg}} \times \sqrt{\frac{T_s}{P_s \times M_s}}$$

Where:

V<sub>s</sub> = Average gas velocity in the dilution tunnel, m/sec

F<sub>p</sub> = Adjustment factor for center of tunnel pitot tube placement  $F_p = V_{strav}/V_{scent}$

K<sub>p</sub> = pitot tube constant 34.97 m/sec ((g/gxmole)(mmHg)/(K)x(mmwater))

C<sub>p</sub> = Standard pitot tube coefficient 0.99 according to ASTM 2515-11 nomenclature 11.2

ΔP = Velocity pressure in the dilution tunnel, mm water

T<sub>s</sub> = Absolute average gas temperature in the dilution tunnel, K

P<sub>s</sub> = Absolute average gas static pressure in dilution tunnel, mm Hg

M<sub>s</sub> is assumed to be 29 g/g mole according to ASTM 2515-11 nomenclature 11.2

Sample calculation

$$V_s = 0.9449 \times 34.97 \times 0.99 \times \sqrt{4.293} \times \sqrt{\frac{295,1}{755.9 \times 29}}$$

$$V_s = 7.864 \text{ m/sec}$$

**C<sub>s</sub> – Concentration of particulate matter in tunnel gas, dry basis, corrected to standard condition, g/dscm**

ASTM 2515-11 equation (13)

$$C_s = K_2 \times \frac{m_n}{V_{m(std)}}$$

Where:

C<sub>s</sub> = Concentration of particulate matter in tunnel gas, dry basis, corrected to standard condition, g/dscm

K<sub>2</sub> = Constant 0.001 g/mg

m<sub>n</sub> = Total amount of particulate matter collected, mg

V<sub>m(std)</sub> = Volume of gas sample measured by the dry gas meter corrected to standard condition, dscm

Appendix 13

Sample calculation train 1:

$$C_s = 0.001 \times \frac{1.22}{1.3875}$$

$$C_s = 0.000879 \text{ g/dscm}$$

Sample calculation train 2+3:

$$C_s = 0.001 \times \frac{1.15}{1.3442}$$

$$C_s = 0.000856 \text{ g/dscm}$$

Sample calculation train ambient:

$$C_s = 0.001 \times \frac{0}{1.3813}$$

$$C_s = 0.00 \text{ g/dscm}$$

**Q<sub>std</sub> - Average gas flow rate in dilution tunnel, dscm/min**

ASTM 2515-11 equation (3)

$$Q_{std} = 60 \times (1 - B_{ws}) \times V_s \times A \times \left[ \frac{T_{std} \times P_s}{T_s \times P_{std}} \right]$$

Where:

Q<sub>std</sub> = Average gas flow rate in dilution tunnel, dscm/min

B<sub>ws</sub> = Water vapor in the gas stream proportion by volume assumed to be 0.02 (2 %) according to ASTM 2515-11 nomenclature 11.2

V<sub>s</sub> = Average gas velocity in the dilution tunnel, m/sec

A = Cross sectional area of tunnel, m<sup>2</sup>

T<sub>std</sub> = Standard absolute temperature, 293 K

P<sub>s</sub> = Absolute average gas static pressure in dilution tunnel, mm Hg

T<sub>s</sub> = Absolute average gas temperature in the dilution tunnel, K

P<sub>std</sub> = Standard absolute pressure, 760 mm Hg

Sample calculation:

$$Q_{std} = 60 \times (1 - 0.02) \times 7.864 \times 0.020 \times \left[ \frac{293 \times 755.9}{295.1 \times 760} \right]$$

$$Q_{std} = 9.181 \text{ dscm/min}$$

**E<sub>T</sub> – Total particulate emissions, g**

ASTM 2515-11 equation (15)

Appendix 13

$$E_T = (C_s - C_r) \times Q_{std} \times \Theta$$

Where:

$E_T$  = Total particulate emission, g

$C_s$  = Concentration of particulate matter in tunnel gas, dry basis, corrected to standard conditions, g/dscm

$C_r$  = Concentration of particulate matter in room air, dry basis, corrected to standard conditions, g/dscm

$Q_{std}$  = Average gas flow rate in dilution tunnel, dscm/min

$\Theta$  = Total sampling time

Sample calculation:

Train 1:

$$E_T = (0.0008793 - 0.0000) \times 9.181 \times 240$$

$$E_T = 1.937 \text{ g}$$

Train 2+3:

$$E_T = (0.0008686 - 0.0000) \times 9.181 \times 240$$

$$E_T = 1.914 \text{ g}$$

Train difference:

$$\text{Train difference} = 0.461 - 0.457 = 0.004 \text{ g/kg}_{dry}$$

$$\text{Train precision} = ((1.937 - ((1.937 + 1.914) / 2)) / ((1.937 + 1.914) / 2)) * 100 = 0,6 \%$$

**$Q_{in}$  – Heat input, Btu**

ASTM 2618-13 equation (4 and 5)

$$Q_{in} = (W_{fuel} / 1 + (MC_{ave} / 100)) \times HHV$$

$$Q_{in,LHV} = (W_{fuel} / 1 + (MC_{ave} / 100)) \times LHV$$

Where:

$Q_{in}$  = Total heat input in test fuel, Btu

$W_{fuel}$  = Fuel charge weight in pounds

$MC_{ave}$  = Fuel moisture content based on dry fuel weight

HHV = Higher heating value, 8600 Btu/lb

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LHV = Lower heating value, 7988 Btu/lb

Sample calculation:

HHV:

$$Q_{in} = (9.9331/(1+(7.2/100))) \times 8600$$

$$Q_{in} = 79,687 \text{ Btu}$$

LHV:

$$Q_{in} = (9.9331/(1+(7.2/100)) \times 7988$$

$$Q_{in} = 74,016 \text{ Btu}$$

**Q<sub>out</sub> – Heat output, Btu**

Test method ASTM 2618-13 equation (7)

$$Q_{out} = [\Sigma(C_p \times \Delta T \times M \times t)] + (W_{app} \times C_{steel} + C_p \times W_{water}) \times (TF_{avg} - TI_{avg})$$

$$M = V_f \times \sigma$$

$$\sigma = (62.56 + (0.0003413 \times T_3) + (-0.00006225 \times T_3)) \times 0.1337$$

$$C_p = 1.0014 + (-0.00003485 \times T_3)$$

Where:

C<sub>p</sub> = specific heat of water, Btu/lb °F

C<sub>steel</sub> = Specific heat of steel, Btu/lb °F

ΔT = Temperature difference between water entering and exiting the heat exchanger, °F

M = Mass flow rate of water, lb/min

t = data sampling time , minutes

W<sub>app</sub> = Weight of empty appliance , lbs

W<sub>water</sub> = Weight of water in supply side of system, lbs

TF<sub>avg</sub> = Average temperature of the appliance and water at the end of the test, °F

TI<sub>avg</sub> = Average temperature of the appliance and water at the start of the test, °F

T<sub>3</sub> = Temperature of water at the inlet to the load side of the heat exchanger, °F

V<sub>f</sub> = Volumetric flow rate of water in heat exchanger system, gal/min

σ = Density of water, lb/gal

Sample calculation:

$$[\Sigma(C_p \times \Delta T \times M \times t)] = (1.001 \times 14.22 \times 18.302 \times 240)$$

$$[\Sigma(C_p \times \Delta T \times M \times t)] = 62,524 \text{ Btu}$$

$$Q_{out} = 62,524 + (630,52 \times 0.1 + 1.001 \times 145.5) \times (161.7 - 160.4)$$

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$$Q_{out} = 62,795$$

note: This is calculated from the mean values instead of the accumulated value from each sampling. The accumulated value which is used in the calculations is:

$$Q_{out} = 62,872$$

**Q<sub>out</sub> – Heat output rate, Btu/hr**

Test method ASTM 2618-13 equation (15)

$$\text{Heat output rate} = Q_{out} / \text{test duration}$$

$$\text{Heat output rate} = 62,872 / (240/60)$$

$$\text{Heat output rate} = 15,718$$

**η<sub>del</sub> = Delivered efficiency, %**

Test method ASTM 2618-13 equation (20)

$$\eta_{del} = (Q_{out}/Q_{in}) \times 100$$

$$\eta_{delLHV} = (Q_{out}/Q_{inLHV}) \times 100$$

Where:

η<sub>del</sub> = Delivered heating efficiency, %

η<sub>delLHV</sub> = Delivered heating efficiency with lower heating value, %

Sample calculation:

$$\eta_{del} = (62,872/79,687) \times 100$$

$$\eta_{del} = 78.9 \%$$

$$\eta_{delLHV} = (62,872/74,016) \times 100$$

$$\eta_{delLHV} = 84.9 \%$$

**Emission rates, g/MJ, g/kg, lb/MMBtu output, g/hr**

ASTM 2618-13 equations (16 to 19)

$$E_{g/MJ} = E_T / (Q_{out} \times 0.001055)$$

$$E_{g/kg} = E_T / (W_{fuel} / (1 + MC/100))$$

$$E_{lb/MMBtu\ output} = (E_T / 453.59) / (Q_{output} \times 10^{-6})$$

$$E_{g/hr} = E_T / \Theta$$

Sample calculation train 1:

$$E_{g/MJ} = 1.937 / (62,871 \times 0.001055)$$

$$E_{g/MJ} = 0.029 \text{ g/MJ}$$

## Appendix 13

$$E_{g/kg} = 1.937 / (4.506 / (1 + 7.2 / 100))$$

$$E_{g/kg} = 0.461 \text{ g/kg}$$

$$E_{lb/MMBtu \text{ output}} = (1.937 / 453.59) / (62,871 \times 10^{-6})$$

$$E_{lb/MMBtu \text{ output}} = 0.068 \text{ lb/MMBtu}_{\text{output}}$$

$$E_{g/hr} = 1.937 / (240 / 60)$$

$$E_{g/hr} = 0.484 \text{ g/hr}$$

Sample calculation train 2:

$$E_{g/MJ} = 1.914 / (62,871 \times 0.001055)$$

$$E_{g/MJ} = 0.029 \text{ g/MJ}$$

$$E_{g/kg} = 1.914 / (4.506 / (1 + 7.2 / 100))$$

$$E_{g/kg} = 0.457 \text{ g/kg}$$

$$E_{lb/MMBtu \text{ output}} = (1.914 / 453.59) / (62,871 \times 10^{-6})$$

$$E_{lb/MMBtu \text{ output}} = 0.067 \text{ lb/MMBtu}_{\text{output}}$$

$$E_{g/hr} = 1.914 / (240 / 60)$$

$$E_{g/hr} = 0.479 \text{ g/hr}$$

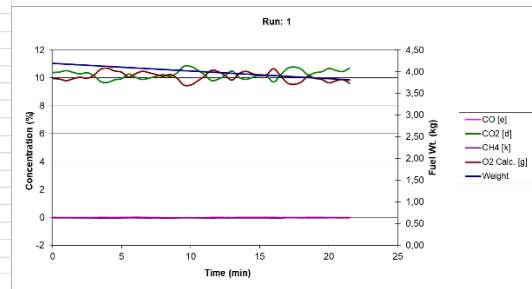
Appendix 14

CSA B415.1:22 results

The tables below are the reports from the calculation sheets according to CSA B415.1:22.

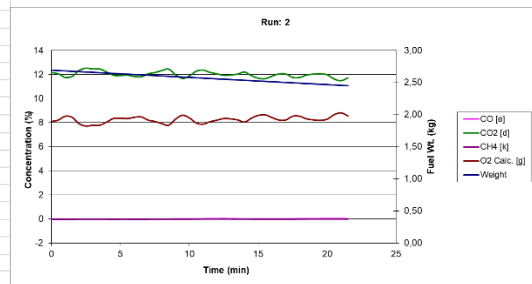
Category I run 1

ABC Laboratories, Inc.			
Manufacturer:	ine energy Systems		Technicians:
Model:	PES 22		
Date:	03-23-22		
Run:	1		
Control #:			
Test Duration:	240		
Output Category:	I		
Test Results in Accordance with CSA B415.1-10			
	HHV Basis	LHV Basis	
Overall Efficiency	88,8%	95,6%	
Combustion Efficiency	99,5%	99,5%	
Heat Transfer Efficiency	89%	96,1%	
Output Rate (kJ/h)	17 340	16 449	(Btu/h)
Burn Rate (kg/h)	0,98	2,15	(lb/h)
Input (kJ/h)	19 520	18 517	(Btu/h)
Test Load Weight (dry kg)	3,91	8,61	dry lb
MC wet (%)	6,74		
MC dry (%)	7,23		
Particulate (g)	2,75		
CO (g)	3		
Test Duration (h)	4,00		
Emissions	Particulate	CO	
g/MJ Output	0,04	0,05	
g/kg Dry Fuel	0,70	0,85	
g/h	0,69	0,83	
lb/MM Btu Output	0,09	0,11	
Air/Fuel Ratio (A/F)	12,27		
VERSION:	2,4	2010-04-15	



Category I run 2

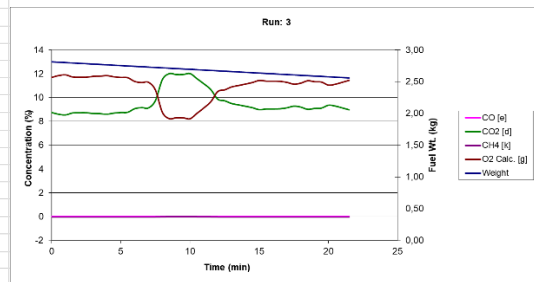
ABC Laboratories, Inc.			
Manufacturer:	ine energy Systems		Technicians:
Model:	PES 22		
Date:	04-06-22		
Run:	2		
Control #:			
Test Duration:	240		
Output Category:	I		
Test Results in Accordance with CSA B415.1-10			
	HHV Basis	LHV Basis	
Overall Efficiency	89,8%	96,7%	
Combustion Efficiency	99,5%	99,5%	
Heat Transfer Efficiency	90%	97,1%	
Output Rate (kJ/h)	11 255	10 676	(Btu/h)
Burn Rate (kg/h)	0,63	1,38	(lb/h)
Input (kJ/h)	12 537	11 893	(Btu/h)
Test Load Weight (dry kg)	2,51	5,53	dry lb
MC wet (%)	6,74		
MC dry (%)	7,23		
Particulate (g)	1,03		
CO (g)	6		
Test Duration (h)	4,00		
Emissions	Particulate	CO	
g/MJ Output	0,02	0,14	
g/kg Dry Fuel	0,41	2,52	
g/h	0,26	1,58	
lb/MM Btu Output	0,05	0,33	
Air/Fuel Ratio (A/F)	10,51		
VERSION:	2,4	2010-04-15	



Appendix 14

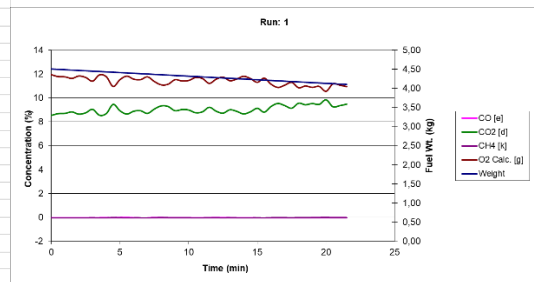
Category I run 3

ABC Laboratories, Inc.		
Manufacturer:	ine energy Systems	Technicians:
Model:	PES 22	
Date:	04-27-22	
Run:	3	
Control #:		
Test Duration:	240	
Output Category:	I	
Test Results in Accordance with CSA B415.1-10		
	HHV Basis	LHV Basis
Overall Efficiency	89,6%	96,5%
Combustion Efficiency	99,5%	99,5%
Heat Transfer Efficiency	90%	97,0%
Output Rate (kJ/h)	11 747	11 143 (Btu/h)
Burn Rate (kg/h)	0,66	1,45 (lb/h)
Input (kJ/h)	13 106	12 433 (Btu/h)
Test Load Weight (dry kg)	2,62	5,78 dry lb
MC wet (%)	6,74	
MC dry (%)	7,23	
Particulate (g)	1,035	
CO (g)	5	
Test Duration (h)	4,00	
Emissions	Particulate	CO
g/MJ Output	0,02	0,12
g/kg Dry Fuel	0,39	2,08
g/h	0,26	1,36
lb/MM Btu Output	0,05	0,27
Air/Fuel Ratio (A/F)	12,80	
VERSION:	2,4	2010-04-15



Category II run 1

ABC Laboratories, Inc.		
Manufacturer:	ine energy Systems	Technicians:
Model:	PES 22	
Date:	03-24-22	
Run:	1	
Control #:		
Test Duration:	240	
Output Category:	II	
Test Results in Accordance with CSA B415.1-10		
	HHV Basis	LHV Basis
Overall Efficiency	88,4%	95,1%
Combustion Efficiency	99,5%	99,5%
Heat Transfer Efficiency	89%	95,6%
Output Rate (kJ/h)	18 558	17 604 (Btu/h)
Burn Rate (kg/h)	1,05	2,32 (lb/h)
Input (kJ/h)	20 999	19 920 (Btu/h)
Test Load Weight (dry kg)	4,20	9,26 dry lb
MC wet (%)	6,74	
MC dry (%)	7,23	
Particulate (g)	1,84	
CO (g)	1	
Test Duration (h)	4,00	
Emissions	Particulate	CO
g/MJ Output	0,02	0,02
g/kg Dry Fuel	0,44	0,35
g/h	0,46	0,37
lb/MM Btu Output	0,06	0,05
Air/Fuel Ratio (A/F)	13,32	
VERSION:	2,4	2010-04-15

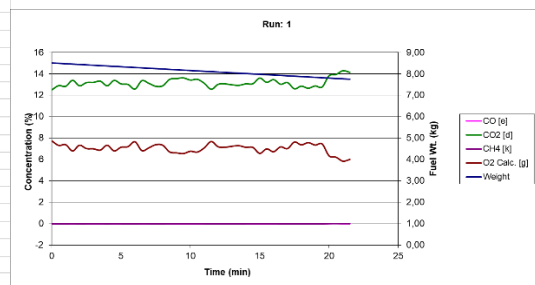




### Appendix 14

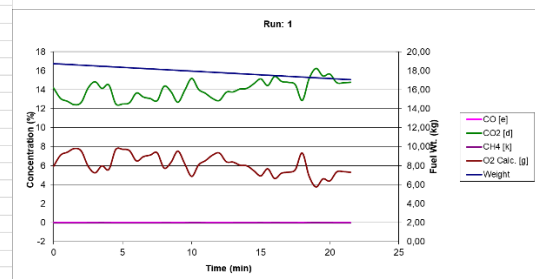
#### Category III run 1

ABC Laboratories, Inc.			
Manufacturer:	ine energy Systems	Technicians:	
Model:	PES 22		
Date:	03-30-22		
Run:	1		
Control #:			
Test Duration:	240		
Output Category:	III		
Test Results in Accordance with CSA B415.1-10			
	HHV Basis	LHV Basis	
Overall Efficiency	88,2%	95,0%	
Combustion Efficiency	99,5%	99,5%	
Heat Transfer Efficiency	89%	95,5%	
Output Rate (kJ/h)	34 979	33 181	(Btu/h)
Burn Rate (kg/h)	1,98	4,37	(lb/h)
Input (kJ/h)	39 642	37 604	(Btu/h)
Test Load Weight (dry kg)	7,93	17,48	dry lb
MC wet (%)	6,74		
MC dry (%)	7,23		
Particulate (g)	1,93		
CO (g)	2		
Test Duration (h)	4,00		
Emissions	Particulate	CO	
g/MJ Output	0,01	0,02	
g/kg Dry Fuel	0,24	0,27	
g/h	0,48	0,53	
lb/MM Btu Output	0,03	0,04	
Air/Fuel Ratio (A/F)	9,80		
VERSION:	2,4	2010-04-15	



#### Category IV run 1

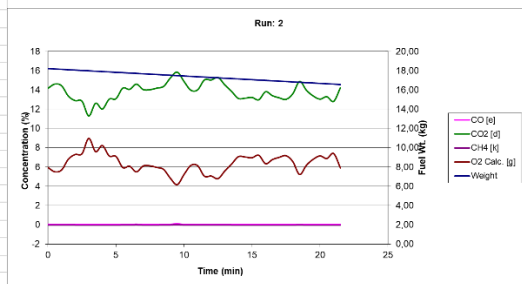
ABC Laboratories, Inc.			
Manufacturer:	ine energy Systems	Technicians:	
Model:	PES 22		
Date:	03-21-22		
Run:	1		
Control #:			
Test Duration:	240		
Output Category:	IV		
Test Results in Accordance with CSA B415.1-10			
	HHV Basis	LHV Basis	
Overall Efficiency	85,6%	92,2%	
Combustion Efficiency	99,5%	99,5%	
Heat Transfer Efficiency	86%	92,7%	
Output Rate (kJ/h)	74 729	70 888	(Btu/h)
Burn Rate (kg/h)	4,37	9,62	(lb/h)
Input (kJ/h)	87 265	82 780	(Btu/h)
Test Load Weight (dry kg)	17,46	38,49	dry lb
MC wet (%)	6,74		
MC dry (%)	7,23		
Particulate (g)	6,58		
CO (g)	9		
Test Duration (h)	4,00		
Emissions	Particulate	CO	
g/MJ Output	0,02	0,03	
g/kg Dry Fuel	0,38	0,52	
g/h	1,65	2,29	
lb/MM Btu Output	0,05	0,07	
Air/Fuel Ratio (A/F)	8,93		
VERSION:	2,4	2010-04-15	



Appendix 14

Category IV run 2

ABC Laboratories, Inc.			
Manufacturer:	Line Energy Systems	Technicians:	
Model:	PES 22		
Date:	03-22-22		
Run:	2		
Control #:			
Test Duration:	240		
Output Category:	IV		
Test Results in Accordance with CSA B415.1-10			
	HHV Basis	LHV Basis	
Overall Efficiency	86,9%	93,5%	
Combustion Efficiency	99,5%	99,5%	
Heat Transfer Efficiency	87%	94,0%	
Output Rate (kJ/h)	73 648	69 863	(Btu/h)
Burn Rate (kg/h)	4,24	9,35	(lb/h)
Input (kJ/h)	84 793	80 436	(Btu/h)
Test Load Weight (dry kg)	16,97	37,40	dry lb
MC wet (%)	6,74		
MC dry (%)	7,23		
Particulate (g)	6,195		
CO (g)	16		
Test Duration (h)	4,00		
Emissions	Particulate	CO	
g/MJ Output	0,02	0,05	
g/kg Dry Fuel	0,37	0,93	
g/h	1,55	3,93	
lb/MM Btu Output	0,05	0,12	
Air/Fuel Ratio (A/F)	9,22		
VERSION:	2,4	2010-04-15	



## Appendix 15

## Fuel analyse

**Prüfbericht zu Auftrag 11206769**

Nr. 1004377001 Seite 1 von 3

EUROFINS Umwelt Ost GmbH Niederlassung Freiberg  
OT Tutendorf, Gewerbehof "Schwarze Kiefern" D-09633 Halsbrücke**ALLSPAN SPANVERARBEITUNG GMBH**  
Herr Nieth  
Südbeckenstraße 2 a

76185 Karlsruhe

Titel: **Prüfbericht zu Auftrag 11206769**  
 Prüfberichtsnummer: **Nr. 1004377001**  
 Projektnummer: **Nr. 1004377**  
 Projektbezeichnung: **Zertifizierung DIN Plus - Probenahme und Analytik 2012**  
 Probenumfang: **2 Proben**  
 Probenart: **Holzpellets**  
 Probenahmezeitraum: **04.07.2012**  
 Probenehmer: **Eurofins Umwelt Ost GmbH NL FG**  
 Probeneingang: **05.07.2012**  
 Prüfzeitraum: **05.07.2012 - 20.07.2012**

Die Prüfergebnisse beziehen sich ausschließlich auf die untersuchten Prüfgegenstände. Sofern die Proben nicht durch unser Labor oder in unserem Auftrag genommen wurden, wird die Verantwortung für die Richtigkeit der Probenahme abgelehnt. Dieser Prüfbericht ist nur mit Unterschrift gültig und darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen in jedem Einzelfall der Genehmigung der EUROFINS UMWELT.

Es gelten die Allgemeinen Verkaufsbedingungen (AVB) Stand Januar 2011, sofern nicht andere Regelungen vereinbart sind. Die aktuellen AVB können Sie jederzeit bei uns anfordern.

Nach DIN EN ISO/IEC 17025 durch die DAkkS Deutsche Akkreditierungsstelle GmbH akkreditiertes Prüflaboratorium. Die Akkreditierung gilt für die in der Urkunde aufgeführten Prüfverfahren.

Freiberg, den 20.07.2012

  
 Dipl.-Chem. A. Ulbricht  
 Laborleiter

 Niederlassung Freiberg  
 OT Tutendorf, Gewerbehof "Schwarze Kiefern"  
 D-09633 Halsbrücke  
 Tel. +49 (0) 3731 2076 500  
 Fax: +49 (0) 3731 2076 555  
 info\_freiberg@eurofins.de

 Hauptsitz:  
 Lobstedter Straße 78  
 D-07749 Jena  
 info\_jena@eurofins.de  
 www.eurofins-umwelt-ost.de

 Geschäftsführer:  
 Dr. Ulrich Eiler,  
 Dr. Birno Schneider  
 Amtsgericht Jena HRB 202596  
 USt-ID Nr.: DE 151 28 1997

 Bankverbindung: NORD LB  
 BLZ 250 500 00  
 Kto 150 334 779  
 IBAN DE91 250 500 00 0150 334 779  
 BIC/SWIFT NOLA DE 2HXXX

Appendix 15



**Prüfbericht zu Auftrag 11206769**

Nr. 1004377001 Seite 2 von 3

Projekt: Zertifizierung DIN Plus - Probenahme und Analytik 2012

Untersuchung nach DIN plus Stand September 2011

Parameter	Einheit	BG	Grenzwerte		Probenbezeichnung	Allspan Holzpellets - lose Ware Feinanteil	Allspan Holzpellets - lose Ware Analytik
			Anforderungen	DIN Plus 2011/09			
<b>Eigenschaften</b>							
Durchmesser, D	mm anl			6 (±1) oder 8 (±1)	DIN EN 16127	-	6,2
Länge, L	mm anl			3,15 ≤ L ≤ 40	DIN EN 16127	-	übereinstimmend
Wassergehalt, M	Ma.-% anl	0,1		≤ 10	DIN EN 14774-2	-	7,6
Aschegehalt, A (550°C)	Ma.-% wf	0,1		≤ 0,7	DIN EN 14775	-	0,32
Mechanische Festigkeit, DU	Ma.-% anl			≥ 97,5	DIN EN 15210-1	-	99,4
Additive	Ma.-% anl			≤ 2 Ma.-% Art und Menge sind anzugeben	Angabe des Auftraggebers	-	keine Zugabe von Additiven
Schüttichte, BD	kg/m³ anl			≥ 600	DIN EN 15103	-	710
Unterer Heizwert, O (Hu,p)	MJ/kg anl	0,2		16,5 ≤ O ≤ 19	DIN EN 14918	-	17,31
Stickstoff gesamt, N	Ma.-% wf	0,05		≤ 0,3	DIN EN 15104	-	< 0,05
Schwefel gesamt, S	Ma.-% wf	0,005		≤ 0,03	DIN EN 5289	-	0,027
Chlor gesamt, Cl	Ma.-% wf	0,005		≤ 0,02	DIN EN 15289	-	0,005
<b>Feinanteil, F (&lt; 3,15 mm)</b>							
größere Verpackungseinheiten und Schüttgut	Ma.-% anl	0,1		≤ 1,0	DIN EN 15148-2	-	< 0,1

Freiberg, den 20.07.2012

Dipl.-Chem. A. Ulbricht  
Laborleiter

### Appendix 15



#### Prüfbericht zu Auftrag 11206769

Nr. 1004377001 Seite 3 von 3

Projekt: Zertifizierung DIN Plus - Probenahme und Analytik 2012

Untersuchung nach DIN plus Stand September 2011

Parameter	Einheit	BG	Grenzwerte Anforderungen DIN Plus 201109	Probenbezeichnung	Allspan Holzpellets - lose Ware Feinanteil	Allspan Holzpellets - lose Ware Analytik
				Probenahmedatum	04.07.2012	04.07.2012
				Labornummer	112036623	112036624
				Methode		

#### Spurenelemente im Aufschluss nach DIN EN 15297

Parameter	Einheit	BG	Grenzwerte Anforderungen DIN Plus 201109	Probenbezeichnung	Allspan Holzpellets - lose Ware Feinanteil	Allspan Holzpellets - lose Ware Analytik
Arsen	mg/kg wf	0,8	≤ 1	DIN EN ISO 17294-2	-	< 0,8
Blei	mg/kg wf	2	≤ 10	DIN EN ISO 17294-2	-	< 2
Cadmium	mg/kg wf	0,2	≤ 0,5	DIN EN ISO 17294-2	-	< 0,2
Chrom gesamt	mg/kg wf	1	≤ 10	DIN EN ISO 17294-2	-	< 1
Kupfer	mg/kg wf	1	≤ 10	DIN EN ISO 17294-2	-	< 1
Nickel	mg/kg wf	1	≤ 10	DIN EN ISO 17294-2	-	< 1
Quecksilber	mg/kg wf	0,07	≤ 0,1	DIN EN 1483	-	< 0,07
Zink	mg/kg wf	1	≤ 100	DIN EN ISO 17294-2	-	13

#### Ascheschmelzverhalten oxidierend an der Asche 815°C

Parameter	Einheit	BG	Grenzwerte Anforderungen DIN Plus 201109	Probenbezeichnung	Allspan Holzpellets - lose Ware Feinanteil	Allspan Holzpellets - lose Ware Analytik
Temp. am Beginn der Schrumpfung SST	°C		kann angegeben werden	analog DIN CEN TS 15376(-1)	-	1320
Erweichungstemperatur DT	°C		muß angegeben werden	analog DIN CEN TS 15376(-1)	-	1430
Halbkugeltemperatur HT	°C		kann angegeben werden	analog DIN CEN TS 15376(-1)	-	>1500
Fließtemperatur FT	°C		kann angegeben werden	analog DIN CEN TS 15376(-1)	-	>1500

Anmerkung:  
Länge: bis zu 1 % Anteil Pellets länger 40 mm möglich. Maximallänge 45 mm.

Hu.p.: Heizwert bei konstantem Druck  
anl. - Anlieferungszustand  
wf - wasserfreier Zustand

–EUROFINS UMWELT übernimmt für die Rechtsverbindlichkeit der zitierten Grenzwerte keine Gewähr.

Freiberg, den 20.07.2012

Dipl.-Chem. A. Ulbricht  
Laborleiter

Appendix 15



**ZERTIFIKAT**

**Zertifikatinhaber** Allspan German Horse Produktion GmbH  
Südbeckenstr. 2 a  
76189 Karlsruhe  
DEUTSCHLAND

**Herstellwerk** Karlsruhe

**Produkt** Holzpellets zur Verwendung in Kleinfeuerungsstätten

**Typ, Modell** Allspan Holzpellets

**Prüfgrundlage(n)** DIN EN ISO 17225-2:2014-09  
Zertifizierungsprogramm Holzpellets zur Verwendung in Kleinfeuerungsstätten  
(2015-06)

**Konformitätszeichen**

**Registernummer** 7A119

**Gültig bis** 2024-09-30

**Nutzungsrecht** Dieses Zertifikat berechtigt zum Führen des oben stehenden Konformitätszeichens  
in Verbindung mit der genannten Registernummer.  
Weitere Angaben siehe Anhang.



2019-01-07  
Dipl.-Phys. Carlo Seiser  
Leiter der Zertifizierungsstelle



DIN CERTCO Gesellschaft für Konformitätsbewertung mbH - Albeinstraße 56 - D-12103 Berlin - www.din-certco.de



**ANHANG**

Seite 1 von 1

**Zertifikat** 7A119 von 2019-01-07

**Technische Angaben** Durchmesser: 6 mm

**Prüflaboratorium/  
Überwachungsstelle** Eurofins Umwelt Ost GmbH  
Niederlassung Freiberg  
Gewerbegebiet Freiberg Ost  
Lindestr. 11  
09627 Bobritzsch-Hilbersdorf  
DEUTSCHLAND

**Prüfbericht(e)** Nr.: I-11930351 von 2019-11-04  
Nr.: AR-19-FR-028342-01 von 2019-10-17



## Appendix 16

**Conditioning data**

Conditioning of the boiler PES 22 was conducted by the manufacturer 6<sup>th</sup> March 2022 to 9<sup>th</sup> March 2022.

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	00:03:12	79,2	102,8	0	51,2	100
06.03.2022	00:04:12	79	102,1	0	51,1	100
06.03.2022	00:05:12	78,8	101,5	0	50,7	100
06.03.2022	00:06:12	78,7	100,9	0	51,2	100
06.03.2022	00:07:12	78,5	100,5	0	51	100
06.03.2022	00:08:12	78,4	99,9	0	50,9	100
06.03.2022	00:09:12	78,2	99,2	0	51,1	100
06.03.2022	00:10:12	78	98,7	0	51	100
06.03.2022	00:11:12	77,9	98,4	0	51	100
06.03.2022	00:12:12	77,7	97,7	0	51,1	100
06.03.2022	00:13:12	77,6	97,4	0	50,8	100
06.03.2022	00:14:12	77,5	96,8	0	50,5	100
06.03.2022	00:15:12	77,3	96,5	0	50,7	100
06.03.2022	00:16:12	77,2	96,2	0	50,7	100
06.03.2022	00:17:12	77,1	95,7	0	51,1	100
06.03.2022	00:18:12	76,9	95,3	0	50,4	100
06.03.2022	00:19:12	76,8	95	0	50,6	100
06.03.2022	00:20:12	76,7	94,7	0	50,4	100
06.03.2022	00:21:12	76,6	94,3	0	50,6	100
06.03.2022	00:22:12	76,4	93,9	0	50,1	100
06.03.2022	00:23:12	76,3	93,5	0	50,6	100
06.03.2022	00:24:12	76,1	93,2	0	50,4	100
06.03.2022	00:25:12	76,1	92,9	0	50,4	100
06.03.2022	00:26:12	76	92,5	0	50,2	100
06.03.2022	00:27:12	75,8	92,1	0	50,3	100
06.03.2022	00:28:12	75,8	92	0	50,6	100
06.03.2022	00:29:12	75,6	91,7	0	50,2	100
06.03.2022	00:30:12	75,4	91,3	0	51	100
06.03.2022	00:31:12	75,4	91,1	0	50,2	100
06.03.2022	00:32:12	75,3	90,9	0	50,3	100
06.03.2022	00:33:12	75,2	90,6	0	50,2	100
06.03.2022	00:34:12	75,1	90,3	0	50,2	100
06.03.2022	00:35:12	75	90	0	50,5	100
06.03.2022	00:36:12	74,9	89,8	0	50,9	100
06.03.2022	00:37:12	74,8	89,6	0	50,3	100
06.03.2022	00:38:12	74,7	89,2	0	50,2	100
06.03.2022	00:39:12	74,6	89	0	50,1	100
06.03.2022	00:40:12	74,5	88,8	0	50,2	100
06.03.2022	00:41:12	74,4	88,7	0	50,1	100
06.03.2022	00:42:12	74,3	88,5	0	50,1	100
06.03.2022	00:43:12	74,2	88,4	0	50,2	100
06.03.2022	00:44:12	74,1	88	0	50,1	100
06.03.2022	00:45:12	74	87,8	0	50,2	100
06.03.2022	00:46:12	73,9	87,6	0	50,1	100
06.03.2022	00:47:12	73,8	87,1	34	68,4	100
06.03.2022	00:48:12	73,8	122,7	51	90,3	100
06.03.2022	00:49:12	73,8	171,6	38	79,7	100
06.03.2022	00:50:12	73,9	172,3	35	83,1	100
06.03.2022	00:51:12	74	241,1	33	79,6	100
06.03.2022	00:52:12	74,4	301,7	33	81,1	100
06.03.2022	00:53:12	74,8	362,3	33	80	100
06.03.2022	00:54:12	75,5	448,1	34	80,8	100
06.03.2022	00:55:12	76,6	564,8	34	81,2	100
06.03.2022	00:56:12	78,1	662,8	33	79,8	100
06.03.2022	00:57:12	80,3	733,3	30	79	100
06.03.2022	00:58:12	82,4	691,4	33	80,9	100
06.03.2022	00:59:12	84,3	601,2	32	80,9	100
06.03.2022	01:00:12	85,7	516,2	32	81,5	100
06.03.2022	01:01:12	86,7	444,5	30	95,1	100
06.03.2022	01:02:12	87,3	387,9	30	107,6	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	01:03:12	87,8	345,6	30	111,7	100
06.03.2022	01:04:12	88,2	312,7	30	128,3	100
06.03.2022	01:05:12	88,5	288,9	30	128,9	100
06.03.2022	01:06:12	88,6	268,3	30	129,3	100
06.03.2022	01:07:12	88,7	249,8	30	129,4	100
06.03.2022	01:08:12	88,7	233,9	30	128,8	100
06.03.2022	01:09:12	88,7	219,8	30	128,7	100
06.03.2022	01:10:12	88,7	207,9	30	129,2	100
06.03.2022	01:11:12	88,6	197,5	0	56,5	100
06.03.2022	01:12:12	88,4	192,4	0	53,3	100
06.03.2022	01:13:12	88,3	188,7	0	53,3	100
06.03.2022	01:14:12	88,1	181,9	0	53,4	100
06.03.2022	01:15:12	87,9	175,3	0	52,6	100
06.03.2022	01:16:12	87,8	169,7	0	52,5	100
06.03.2022	01:17:12	87,5	164,6	0	53	100
06.03.2022	01:18:12	87,3	160,2	0	52,3	100
06.03.2022	01:19:12	87,1	156	0	52,4	100
06.03.2022	01:20:12	86,8	152,4	0	52,7	100
06.03.2022	01:21:12	86,5	149	0	52,2	100
06.03.2022	01:22:12	86,2	145,8	0	51,9	100
06.03.2022	01:23:12	85,9	142,8	0	52,4	100
06.03.2022	01:24:12	85,6	140,3	0	54,5	100
06.03.2022	01:25:12	85,3	137,8	0	52,3	100
06.03.2022	01:26:12	85	135,5	0	52,1	100
06.03.2022	01:27:12	84,7	133,5	0	52	100
06.03.2022	01:28:12	84,4	131,5	0	51,7	100
06.03.2022	01:29:12	84,1	129,6	0	51,8	100
06.03.2022	01:30:12	83,9	127,9	0	51,3	100
06.03.2022	01:31:12	83,6	126,1	0	51,8	100
06.03.2022	01:32:12	83,3	124,8	0	52	100
06.03.2022	01:33:12	83,1	123	0	51,4	100
06.03.2022	01:34:12	82,9	121,8	0	52,1	100
06.03.2022	01:35:12	82,7	120,4	0	51,4	100
06.03.2022	01:36:12	82,4	119,1	0	51,6	100
06.03.2022	01:37:12	82,2	117,9	0	51,4	100
06.03.2022	01:38:12	82	116,5	0	51,2	100
06.03.2022	01:39:12	81,9	115,6	0	51,3	100
06.03.2022	01:40:12	81,6	114,4	0	51,4	100
06.03.2022	01:41:12	81,4	113,6	0	51,7	100
06.03.2022	01:42:12	81,3	112,6	0	51,2	100
06.03.2022	01:43:12	81,1	111,6	0	51,2	100
06.03.2022	01:44:12	80,9	110,6	0	51,2	100
06.03.2022	01:45:12	80,8	109,6	0	51,2	100
06.03.2022	01:46:12	80,6	108,6	0	51,2	100
06.03.2022	01:47:12	80,4	107,8	0	51,2	100
06.03.2022	01:48:12	80,3	107,1	0	51,2	100
06.03.2022	01:49:12	80,1	106,2	0	51,7	100
06.03.2022	01:50:12	80,1	105,3	0	51,1	100
06.03.2022	01:51:12	79,8	104,8	0	51,2	100
06.03.2022	01:52:12	79,7	104,1	0	51,2	100
06.03.2022	01:53:12	79,4	103,3	0	51	100
06.03.2022	01:54:12	79,3	102,7	0	51,1	100
06.03.2022	01:55:12	79,2	102,1	0	51,3	100
06.03.2022	01:56:12	79	101,4	0	51,2	100
06.03.2022	01:57:12	79	101	0	51	100
06.03.2022	01:58:12	78,8	100,3	0	51,2	100
06.03.2022	01:59:12	78,6	99,6	0	50,6	100
06.03.2022	02:00:12	78,5	99	0	51,1	100
06.03.2022	02:01:12	78,3	98,7	0	51	100
06.03.2022	02:02:12	78,1	98,1	0	51,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	02:03:12	78,1	97,9	0	51,1	100
06.03.2022	02:04:12	77,9	97,3	0	50,7	100
06.03.2022	02:05:12	77,8	96,7	0	51,2	100
06.03.2022	02:06:12	77,6	96,4	0	51,6	100
06.03.2022	02:07:12	77,4	95,8	0	51,5	100
06.03.2022	02:08:12	77,3	95,4	0	50,6	100
06.03.2022	02:09:12	77,2	95	0	51,1	100
06.03.2022	02:10:12	77,1	94,5	0	50,5	100
06.03.2022	02:11:12	76,9	94,1	0	50,4	100
06.03.2022	02:12:12	76,8	93,8	0	50,4	100
06.03.2022	02:13:12	76,7	93,3	0	51	100
06.03.2022	02:14:12	76,6	92,9	0	50,3	100
06.03.2022	02:15:12	76,4	92,5	0	50,5	100
06.03.2022	02:16:12	76,4	92,2	0	50,7	100
06.03.2022	02:17:12	76,2	92	0	50,3	100
06.03.2022	02:18:12	76,1	91,5	0	50,3	100
06.03.2022	02:19:12	76	91,1	0	51,3	100
06.03.2022	02:20:12	75,9	90,7	0	51,1	100
06.03.2022	02:21:12	75,8	90,2	0	51	100
06.03.2022	02:22:12	75,7	90	0	51	100
06.03.2022	02:23:12	75,5	89,8	0	50,5	100
06.03.2022	02:24:12	75,5	89,5	0	50,2	100
06.03.2022	02:25:12	75,4	89,1	0	50,3	100
06.03.2022	02:26:12	75,3	88,9	0	50,2	100
06.03.2022	02:27:12	75,2	88,7	0	50,1	100
06.03.2022	02:28:12	75,1	88,5	0	50,2	100
06.03.2022	02:29:12	75	88,1	0	50,2	100
06.03.2022	02:30:12	74,9	87,8	0	50,2	100
06.03.2022	02:31:12	74,8	87,6	0	50,1	100
06.03.2022	02:32:12	74,7	87,5	0	50,2	100
06.03.2022	02:33:12	74,6	87,1	0	51,5	100
06.03.2022	02:34:12	74,5	86,7	0	50	100
06.03.2022	02:35:12	74,4	86,5	0	51,1	100
06.03.2022	02:36:12	74,4	86,2	0	50,2	100
06.03.2022	02:37:12	74,2	86	0	50,7	100
06.03.2022	02:38:12	74,2	85,6	0	52,3	100
06.03.2022	02:39:12	74	85,4	0	51,7	100
06.03.2022	02:40:12	74	85,3	0	50,1	100
06.03.2022	02:41:12	73,9	85,2	30	76,2	100
06.03.2022	02:42:12	73,8	90,9	50	83,4	100
06.03.2022	02:43:12	73,8	158	37	85,1	100
06.03.2022	02:44:12	73,8	168,9	33	81,2	100
06.03.2022	02:45:12	74	194,2	33	80,3	100
06.03.2022	02:46:12	74,2	262	33	80	100
06.03.2022	02:47:12	74,6	318,3	33	80,5	100
06.03.2022	02:48:12	75,2	379,9	33	80,9	100
06.03.2022	02:49:12	76	459,8	34	79,4	100
06.03.2022	02:50:12	77,1	573,6	32	84,7	100
06.03.2022	02:51:12	78,7	677,7	32	80,1	100
06.03.2022	02:52:12	80,8	737,4	34	76,1	100
06.03.2022	02:53:12	82,9	679,4	35	92,2	100
06.03.2022	02:54:12	84,7	590,2	33	80	100
06.03.2022	02:55:12	86,1	506,7	32	80,8	100
06.03.2022	02:56:12	87,1	441,1	30	94,3	100
06.03.2022	02:57:12	87,8	387,7	30	106,3	100
06.03.2022	02:58:12	88,2	346,6	30	113	100
06.03.2022	02:59:12	88,6	315	30	129,2	100
06.03.2022	03:00:12	88,8	290,2	30	129,6	100
06.03.2022	03:01:12	89	269,3	30	129,5	100
06.03.2022	03:02:12	89,1	250,9	30	129,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	03:03:12	89,1	235	30	129,3	100
06.03.2022	03:04:12	89,1	220,7	30	130	100
06.03.2022	03:05:12	89,1	208,6	30	129,4	100
06.03.2022	03:06:12	89	199,1	0	53,4	100
06.03.2022	03:07:12	89	194,9	0	53,4	100
06.03.2022	03:08:12	88,8	187,1	0	53	100
06.03.2022	03:09:12	88,6	179,9	0	52,7	100
06.03.2022	03:10:12	88,5	173,6	0	52,6	100
06.03.2022	03:11:12	88,3	168	0	52,5	100
06.03.2022	03:12:12	88,1	163,1	0	52,9	100
06.03.2022	03:13:12	87,8	158,6	0	52,3	100
06.03.2022	03:14:12	87,6	154,8	0	52,2	100
06.03.2022	03:15:12	87,3	151,4	0	52	100
06.03.2022	03:16:12	87,1	148,2	0	52	100
06.03.2022	03:17:12	86,8	145,1	0	52,1	100
06.03.2022	03:18:12	86,5	142,5	0	51,9	100
06.03.2022	03:19:12	86,2	140,1	0	53,4	100
06.03.2022	03:20:12	85,9	137,6	0	51,8	100
06.03.2022	03:21:12	85,6	135,4	0	51,7	100
06.03.2022	03:22:12	85,3	133,4	0	51,6	100
06.03.2022	03:23:12	84,9	131,6	0	51,7	100
06.03.2022	03:24:12	84,7	129,7	0	51,6	100
06.03.2022	03:25:12	84,4	127,9	0	51,7	100
06.03.2022	03:26:12	84	126,2	0	51,5	100
06.03.2022	03:27:12	83,8	124,8	0	52,6	100
06.03.2022	03:28:12	83,5	123,2	0	51,5	100
06.03.2022	03:29:12	83,3	121,9	0	51,3	100
06.03.2022	03:30:12	83	120,6	0	51,3	100
06.03.2022	03:31:12	82,8	119,3	0	51,2	100
06.03.2022	03:32:12	82,6	118,1	0	52,6	100
06.03.2022	03:33:12	82,4	116,8	0	51,3	100
06.03.2022	03:34:12	82,1	115,8	0	51,4	100
06.03.2022	03:35:12	82	114,7	0	51,2	100
06.03.2022	03:36:12	81,8	113,8	0	51,1	100
06.03.2022	03:37:12	81,6	112,8	0	51,3	100
06.03.2022	03:38:12	81,5	111,9	0	51,2	100
06.03.2022	03:39:12	81,3	110,9	0	51,2	100
06.03.2022	03:40:12	81,1	109,9	0	51,4	100
06.03.2022	03:41:12	80,9	109,3	0	51,1	100
06.03.2022	03:42:12	80,7	108,6	0	51,3	100
06.03.2022	03:43:12	80,7	107,6	0	51,2	100
06.03.2022	03:44:12	80,5	107,1	0	51,2	100
06.03.2022	03:45:12	80,3	106,4	0	50,9	100
06.03.2022	03:46:12	80,2	105,5	0	51	100
06.03.2022	03:47:12	79,9	105,2	0	51,2	100
06.03.2022	03:48:12	79,9	104,4	0	51,1	100
06.03.2022	03:49:12	79,7	103,8	0	51,1	100
06.03.2022	03:50:12	79,6	103,2	0	51,8	100
06.03.2022	03:51:12	79,3	102,4	0	50,1	100
06.03.2022	03:52:12	79,2	102	0	50,8	100
06.03.2022	03:53:12	79	101,4	0	51,2	100
06.03.2022	03:54:12	78,9	100,9	0	50,3	100
06.03.2022	03:55:12	78,9	100,3	0	50,5	100
06.03.2022	03:56:12	78,6	100	0	50,8	100
06.03.2022	03:57:12	78,5	99,3	0	50,3	100
06.03.2022	03:58:12	78,3	98,9	0	50,7	100
06.03.2022	03:59:12	78,3	98,6	0	50,9	100
06.03.2022	04:00:12	78	98	0	50,6	100
06.03.2022	04:01:12	77,8	97,5	0	50,4	100
06.03.2022	04:02:12	77,8	97	0	50,6	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	04:03:12	77,8	96,8	0	50,5	100
06.03.2022	04:04:12	77,6	96,4	0	50,7	100
06.03.2022	04:05:12	77,4	95,6	0	50,5	100
06.03.2022	04:06:12	77,3	95,5	0	50,3	100
06.03.2022	04:07:12	77,2	95,1	0	50,4	100
06.03.2022	04:08:12	76,8	94,6	0	50,2	100
06.03.2022	04:09:12	76,9	94,2	0	50,2	100
06.03.2022	04:10:12	76,8	93,8	0	50,4	100
06.03.2022	04:11:12	76,6	93,4	0	50,3	100
06.03.2022	04:12:12	76,5	93	0	50,4	100
06.03.2022	04:13:12	76,4	92,5	0	50,3	100
06.03.2022	04:14:12	76,3	92,2	0	50,3	100
06.03.2022	04:15:12	76,1	92	0	50,3	100
06.03.2022	04:16:12	76,1	91,5	0	50,6	100
06.03.2022	04:17:12	76	91,2	0	50,3	100
06.03.2022	04:18:12	75,9	90,9	0	50,1	100
06.03.2022	04:19:12	75,8	90,4	0	50,1	100
06.03.2022	04:20:12	75,6	90,2	0	50,2	100
06.03.2022	04:21:12	75,6	89,9	0	50,2	100
06.03.2022	04:22:12	75,4	89,6	0	50,1	100
06.03.2022	04:23:12	75,3	89	0	50,2	100
06.03.2022	04:24:12	75,3	88,9	0	50,1	100
06.03.2022	04:25:12	75,2	88,6	0	50,1	100
06.03.2022	04:26:12	75,1	88,2	0	50,1	100
06.03.2022	04:27:12	74,9	87,9	0	50,1	100
06.03.2022	04:28:12	74,9	87,7	0	50,2	100
06.03.2022	04:29:12	74,8	87,5	0	50,1	100
06.03.2022	04:30:12	74,7	87,2	0	50,1	100
06.03.2022	04:31:12	74,6	86,9	0	50,2	100
06.03.2022	04:32:12	74,5	86,6	0	50,2	100
06.03.2022	04:33:12	74,4	86,4	0	50	100
06.03.2022	04:34:12	74,3	86,1	0	50,1	100
06.03.2022	04:35:12	74,2	85,7	0	50	100
06.03.2022	04:36:12	74,2	85,5	0	50,2	100
06.03.2022	04:37:12	74,1	85,3	0	50,1	100
06.03.2022	04:38:12	74	85,2	0	50	100
06.03.2022	04:39:12	73,9	84,9	0	50	100
06.03.2022	04:40:12	73,8	84,4	30	70,1	100
06.03.2022	04:41:12	73,7	112,4	53	74,6	100
06.03.2022	04:42:12	73,8	166,1	37	79,8	100
06.03.2022	04:43:12	73,9	162,2	33	79	100
06.03.2022	04:44:12	74	200,2	33	80,4	100
06.03.2022	04:45:12	74,2	262,5	33	81,3	100
06.03.2022	04:46:12	74,7	319,4	33	80	100
06.03.2022	04:47:12	75,2	388,1	34	80,8	100
06.03.2022	04:48:12	76,1	513,3	34	80,3	100
06.03.2022	04:49:12	77,6	656,6	33	80,2	100
06.03.2022	04:50:12	79,7	736,7	30	78,2	100
06.03.2022	04:51:12	82	726,5	32	81,8	100
06.03.2022	04:52:12	84	637,1	32	81,5	100
06.03.2022	04:53:12	85,5	544,5	32	81,8	100
06.03.2022	04:54:12	86,7	465,7	30	92,3	100
06.03.2022	04:55:12	87,5	403,3	30	94,4	100
06.03.2022	04:56:12	88	355,4	30	106,9	100
06.03.2022	04:57:12	88,4	317,8	30	122,6	100
06.03.2022	04:58:12	88,7	291	30	129,1	100
06.03.2022	04:59:12	88,8	269,9	30	129,2	100
06.03.2022	05:00:12	89	251,3	30	129,2	100
06.03.2022	05:01:12	89	234,9	30	129,3	100
06.03.2022	05:02:12	89,1	219	30	129,1	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	05:03:12	89	204,9	30	130	100
06.03.2022	05:04:12	89	192,5	0	79,8	100
06.03.2022	05:05:12	88,8	184	0	53,4	100
06.03.2022	05:06:12	88,7	177,7	0	53,3	100
06.03.2022	05:07:12	88,6	172,3	0	52,8	100
06.03.2022	05:08:12	88,4	167,4	0	52,8	100
06.03.2022	05:09:12	88,3	163	0	52,5	100
06.03.2022	05:10:12	88,1	159,1	0	52,5	100
06.03.2022	05:11:12	87,9	155,3	0	52,4	100
06.03.2022	05:12:12	87,7	151,8	0	52,3	100
06.03.2022	05:13:12	87,4	148,7	0	52,3	100
06.03.2022	05:14:12	87,2	145,8	0	52,2	100
06.03.2022	05:15:12	86,9	143	0	52,2	100
06.03.2022	05:16:12	86,6	140,6	0	52,1	100
06.03.2022	05:17:12	86,3	138,4	0	52,1	100
06.03.2022	05:18:12	86,1	136,2	0	52,3	100
06.03.2022	05:19:12	85,7	134,2	0	51,9	100
06.03.2022	05:20:12	85,4	132,5	0	51,8	100
06.03.2022	05:21:12	85,2	130,7	0	51,5	100
06.03.2022	05:22:12	84,9	129,4	0	51,6	100
06.03.2022	05:23:12	84,6	127,8	0	51,6	100
06.03.2022	05:24:12	84,3	126,3	0	51,4	100
06.03.2022	05:25:12	84	125,1	0	51,4	100
06.03.2022	05:26:12	83,7	123,8	0	51,3	100
06.03.2022	05:27:12	83,4	122,5	0	51,3	100
06.03.2022	05:28:12	83,1	121,6	0	51,3	100
06.03.2022	05:29:12	82,9	120,4	0	51,4	100
06.03.2022	05:30:12	82,7	119,3	0	51,3	100
06.03.2022	05:31:12	82,5	118,4	0	51,3	100
06.03.2022	05:32:12	82,3	117,3	0	51,3	100
06.03.2022	05:33:12	82,1	116,4	0	51,3	100
06.03.2022	05:34:12	82	115,7	0	51,2	100
06.03.2022	05:35:12	81,9	114,9	0	51,4	100
06.03.2022	05:36:12	81,6	114	0	51,2	100
06.03.2022	05:37:12	81,3	113,2	0	51,2	100
06.03.2022	05:38:12	81,2	112,3	0	51,2	100
06.03.2022	05:39:12	81,1	111,6	0	51,3	100
06.03.2022	05:40:12	80,9	110,8	0	51,2	100
06.03.2022	05:41:12	80,6	109,9	0	51,1	100
06.03.2022	05:42:12	80,5	109,5	0	51,2	100
06.03.2022	05:43:12	80,4	108,8	0	51,2	100
06.03.2022	05:44:12	80,2	108,1	0	51,1	100
06.03.2022	05:45:12	80,1	107,6	0	51,1	100
06.03.2022	05:46:12	79,9	107,3	0	51,1	100
06.03.2022	05:47:12	79,8	106,6	0	51	100
06.03.2022	05:48:12	79,6	106,2	0	50,9	100
06.03.2022	05:49:12	79,4	105,7	0	50,8	100
06.03.2022	05:50:12	79,3	105,3	0	50,6	100
06.03.2022	05:51:12	79,1	104,7	0	50,7	100
06.03.2022	05:52:12	79	104,3	0	50,9	100
06.03.2022	05:53:12	78,8	103,5	0	50,6	100
06.03.2022	05:54:12	78,7	103	0	50,6	100
06.03.2022	05:55:12	78,5	102,5	0	50,7	100
06.03.2022	05:56:12	78,3	102,2	0	50,8	100
06.03.2022	05:57:12	78,2	101,5	0	50,7	100
06.03.2022	05:58:12	78,1	101,1	0	50,8	100
06.03.2022	05:59:12	78	100,7	0	50,6	100
06.03.2022	06:00:12	77,9	100,4	0	50,6	100
06.03.2022	06:01:12	77,7	100,1	0	50,6	100
06.03.2022	06:02:12	77,5	99,5	0	50,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	06:03:12	77,4	99,2	0	50,4	100
06.03.2022	06:04:12	77,3	98,9	0	50,5	100
06.03.2022	06:05:12	77,2	98,5	0	50,4	100
06.03.2022	06:06:12	77,2	98,1	0	50,3	100
06.03.2022	06:07:12	77	97,9	0	50,4	100
06.03.2022	06:08:12	76,9	97,7	0	50,6	100
06.03.2022	06:09:12	76,6	97,1	0	50,5	100
06.03.2022	06:10:12	75	96,4	0	50,4	100
06.03.2022	06:11:12	72,5	95	30	71,1	100
06.03.2022	06:12:12	70,3	128,1	47	90,4	100
06.03.2022	06:13:12	68,6	172,2	37	81,4	100
06.03.2022	06:14:12	67,2	168,6	48	81	100
06.03.2022	06:15:12	65,7	214,3	48	81,3	100
06.03.2022	06:16:12	64,6	278,9	51	79,1	100
06.03.2022	06:17:12	63,6	413	68	78,9	100
06.03.2022	06:18:12	63,3	635,3	68	80,1	100
06.03.2022	06:19:12	63,7	772,3	68	81,7	100
06.03.2022	06:20:12	64,7	805,9	68	79,7	100
06.03.2022	06:21:12	65,7	802,4	68	78,7	100
06.03.2022	06:22:12	66,4	799,8	68	80,4	100
06.03.2022	06:23:12	67,4	792,8	68	79,5	100
06.03.2022	06:24:12	68,1	777,8	67	81,1	100
06.03.2022	06:25:12	68,8	759,3	67	81	100
06.03.2022	06:26:12	69,5	774,1	59	83,3	100
06.03.2022	06:27:12	70,1	773,3	53	83,9	100
06.03.2022	06:28:12	70,8	767,8	48	79,5	100
06.03.2022	06:29:12	71,1	742,3	48	80,5	100
06.03.2022	06:30:12	71,4	737,3	47	81,5	100
06.03.2022	06:31:12	71,8	763,4	48	78,9	100
06.03.2022	06:32:12	72,2	772,6	48	80,9	100
06.03.2022	06:33:12	72,7	766,9	48	79,8	100
06.03.2022	06:34:12	73,1	772,6	48	78,9	100
06.03.2022	06:35:12	73,7	761,5	48	80,8	100
06.03.2022	06:36:12	74	738,1	48	80,5	100
06.03.2022	06:37:12	74,3	746,1	48	80,4	100
06.03.2022	06:38:12	74,6	746,5	47	82,2	100
06.03.2022	06:39:12	74,9	738,6	47	82,9	100
06.03.2022	06:40:12	75,2	736,8	40	82,3	100
06.03.2022	06:41:12	75,4	753,7	38	81,3	100
06.03.2022	06:42:12	75,7	765,1	38	79,9	100
06.03.2022	06:43:12	76,1	772,2	38	79,9	100
06.03.2022	06:44:12	76,4	767,9	37	80,1	100
06.03.2022	06:45:12	76,6	745,5	37	81,7	100
06.03.2022	06:46:12	76,7	739	37	81	100
06.03.2022	06:47:12	76,6	742,4	37	81	100
06.03.2022	06:48:12	76,8	741,3	36	81	100
06.03.2022	06:49:12	77	743,8	36	79,6	100
06.03.2022	06:50:12	77,1	756,7	36	81,4	100
06.03.2022	06:51:12	77,4	771,8	37	81,6	100
06.03.2022	06:52:12	77,6	774,2	37	80,2	100
06.03.2022	06:53:12	77,7	768,9	33	81,4	100
06.03.2022	06:54:12	77,9	767,7	32	80,2	100
06.03.2022	06:55:12	77,9	765,3	32	80,7	100
06.03.2022	06:56:12	77,9	752,8	32	80,9	100
06.03.2022	06:57:12	77,9	729,6	31	80,3	100
06.03.2022	06:58:12	77,6	723,6	31	80,7	100
06.03.2022	06:59:12	77,3	724,3	30	79,9	100
06.03.2022	07:00:12	77,1	733,6	30	82	100
06.03.2022	07:01:12	77	734,8	30	80,4	100
06.03.2022	07:02:12	76,8	731,6	30	79,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	07:03:12	76,7	731,6	30	81,1	100
06.03.2022	07:04:12	76,3	734,2	30	80,4	100
06.03.2022	07:05:12	76,3	740,4	30	81,7	100
06.03.2022	07:06:12	76,1	744,4	30	80	100
06.03.2022	07:07:12	76	743,7	30	80,3	100
06.03.2022	07:08:12	75,7	736,5	30	80,5	100
06.03.2022	07:09:12	75,6	728,5	30	80,2	100
06.03.2022	07:10:12	75,4	721,2	30	81,7	100
06.03.2022	07:11:12	75,1	715,2	30	80,9	100
06.03.2022	07:12:12	74,9	712,1	30	74,6	100
06.03.2022	07:13:12	74,7	715,5	36	80,5	100
06.03.2022	07:14:12	74,6	706,1	33	81,3	100
06.03.2022	07:15:12	74,3	698,8	31	80,9	100
06.03.2022	07:16:12	74,2	711,4	30	81,1	100
06.03.2022	07:17:12	74	708,6	30	81,6	100
06.03.2022	07:18:12	73,8	703,3	30	78	100
06.03.2022	07:19:12	73,8	703	35	80,5	100
06.03.2022	07:20:12	73,7	719	35	80,7	100
06.03.2022	07:21:12	73,6	719	33	79,6	100
06.03.2022	07:22:12	73,6	717,7	33	81,7	100
06.03.2022	07:23:12	73,7	712,1	33	80	100
06.03.2022	07:24:12	73,6	721,5	33	80,4	100
06.03.2022	07:25:12	73,7	716,3	33	79,9	100
06.03.2022	07:26:12	73,7	717	33	81,3	100
06.03.2022	07:27:12	73,6	711,9	33	80,6	100
06.03.2022	07:28:12	73,6	708	33	81,3	100
06.03.2022	07:29:12	73,5	710,6	33	80,7	100
06.03.2022	07:30:12	73,6	728,3	35	78,9	100
06.03.2022	07:31:12	73,8	748,4	36	79,9	100
06.03.2022	07:32:12	73,9	750,1	36	81	100
06.03.2022	07:33:12	74,1	740,9	36	81,3	100
06.03.2022	07:34:12	74,3	727,6	36	79,2	100
06.03.2022	07:35:12	74,3	715	35	80,9	100
06.03.2022	07:36:12	74,3	716,3	35	80,8	100
06.03.2022	07:37:12	74,2	722,7	33	82	100
06.03.2022	07:38:12	74,3	723,2	32	80,5	100
06.03.2022	07:39:12	74,3	732,6	32	79,5	100
06.03.2022	07:40:12	74,4	752,8	33	79,8	100
06.03.2022	07:41:12	74,5	743,6	31	81,1	100
06.03.2022	07:42:12	74,5	746,1	32	81,2	100
06.03.2022	07:43:12	74,5	750,3	32	80,7	100
06.03.2022	07:44:12	74,5	743,2	31	81,4	100
06.03.2022	07:45:12	74,6	738,5	30	80,9	100
06.03.2022	07:46:12	74,7	744,4	31	80,6	100
06.03.2022	07:47:12	74,6	729,9	30	80,7	100
06.03.2022	07:48:12	74,5	728,1	30	80,7	100
06.03.2022	07:49:12	74,4	742,3	30	81,1	100
06.03.2022	07:50:12	74,5	741,2	30	79,5	100
06.03.2022	07:51:12	74,5	731,4	30	80,5	100
06.03.2022	07:52:12	74,4	727,2	30	81	100
06.03.2022	07:53:12	74,3	716,3	30	81,1	100
06.03.2022	07:54:12	74,2	721,8	30	80,8	100
06.03.2022	07:55:12	74,2	730	30	81,7	100
06.03.2022	07:56:12	74,1	732,3	30	96	100
06.03.2022	07:57:12	74	731,3	30	95,2	100
06.03.2022	07:58:12	73,9	725,4	30	85,3	100
06.03.2022	07:59:12	73,8	713,1	30	81,3	100
06.03.2022	08:00:12	73,7	701,2	30	83	100
06.03.2022	08:01:12	73,4	699,7	30	81,9	100
06.03.2022	08:02:12	73,3	712,6	30	80,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	08:03:12	73,3	709,7	30	80,8	100
06.03.2022	08:04:12	73,2	706,9	30	80,1	100
06.03.2022	08:05:12	73,1	708	30	81,1	100
06.03.2022	08:06:12	73	694,5	30	81	100
06.03.2022	08:07:12	72,9	683	30	80,8	100
06.03.2022	08:08:12	72,8	678,7	36	77,2	100
06.03.2022	08:09:12	72,5	686,6	34	81,6	100
06.03.2022	08:10:12	72,5	696	33	81,2	100
06.03.2022	08:11:12	72,5	691	33	79,9	100
06.03.2022	08:12:12	72,3	685	33	81,2	100
06.03.2022	08:13:12	72,4	700,7	34	79,2	100
06.03.2022	08:14:12	72,5	723,4	33	80,8	100
06.03.2022	08:15:12	72,6	720,9	33	80,2	100
06.03.2022	08:16:12	72,7	711,2	33	80,1	100
06.03.2022	08:17:12	72,7	695,3	34	79,5	100
06.03.2022	08:18:12	72,7	704,4	33	80,6	100
06.03.2022	08:19:12	72,6	704	33	80,8	100
06.03.2022	08:20:12	72,6	714,5	34	80,6	100
06.03.2022	08:21:12	72,7	721,7	34	80,6	100
06.03.2022	08:22:12	72,8	735,2	34	79,4	100
06.03.2022	08:23:12	73	741,4	34	80,4	100
06.03.2022	08:24:12	73,1	735	33	80	100
06.03.2022	08:25:12	73,2	750,6	34	80,7	100
06.03.2022	08:26:12	73,5	751,6	34	79,8	100
06.03.2022	08:27:12	73,7	745	34	82	100
06.03.2022	08:28:12	73,9	738,9	35	79,7	100
06.03.2022	08:29:12	73,9	735,4	32	80,3	100
06.03.2022	08:30:12	73,9	729,3	32	79,4	100
06.03.2022	08:31:12	73,9	740,1	32	81,1	100
06.03.2022	08:32:12	73,9	751,3	32	81	100
06.03.2022	08:33:12	73,9	752,8	32	81,3	100
06.03.2022	08:34:12	74	767,2	32	80,6	100
06.03.2022	08:35:12	74,1	757,4	30	81,3	100
06.03.2022	08:36:12	74,1	736,9	30	81,5	100
06.03.2022	08:37:12	74,1	726,8	30	81,2	100
06.03.2022	08:38:12	73,9	729,7	30	96,1	100
06.03.2022	08:39:12	73,9	729,3	30	82,1	100
06.03.2022	08:40:12	73,8	718,6	30	80,8	100
06.03.2022	08:41:12	73,6	718,8	30	80,9	100
06.03.2022	08:42:12	73,6	719,5	30	81,8	100
06.03.2022	08:43:12	73,4	717,4	30	80,5	100
06.03.2022	08:44:12	73,3	705,2	30	80	100
06.03.2022	08:45:12	73,1	698,3	30	81,6	100
06.03.2022	08:46:12	72,9	704,6	30	80,3	100
06.03.2022	08:47:12	72,9	713,1	30	81,4	100
06.03.2022	08:48:12	72,8	713,9	30	81	100
06.03.2022	08:49:12	72,7	712,8	30	82,1	100
06.03.2022	08:50:12	72,6	707,2	37	76,2	100
06.03.2022	08:51:12	72,6	715,1	37	80,6	100
06.03.2022	08:52:12	72,6	721	37	79,3	100
06.03.2022	08:53:12	72,7	722,2	37	80,5	100
06.03.2022	08:54:12	72,8	723	37	80,9	100
06.03.2022	08:55:12	72,7	711,5	36	80,4	100
06.03.2022	08:56:12	72,7	696,3	37	79,5	100
06.03.2022	08:57:12	72,6	704,2	36	81,6	100
06.03.2022	08:58:12	72,6	708,9	37	81,4	100
06.03.2022	08:59:12	72,6	706	37	80,2	100
06.03.2022	09:00:12	72,6	716,9	37	80,5	100
06.03.2022	09:01:12	72,6	721,1	100	157,6	100
06.03.2022	09:02:12	72,7	649	100	160,1	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	09:03:12	72,2	569,5	100	164,9	100
06.03.2022	09:04:12	71,7	498,1	40	77,6	100
06.03.2022	09:05:12	70,8	484	48	79,7	100
06.03.2022	09:06:12	70,1	514,2	48	79,1	100
06.03.2022	09:07:12	69,7	587,6	48	80	100
06.03.2022	09:08:12	69,7	672,3	47	80,8	100
06.03.2022	09:09:12	70,1	733,4	47	81,9	100
06.03.2022	09:10:12	70,7	766,1	48	80	100
06.03.2022	09:11:12	71,4	788,4	48	79,2	100
06.03.2022	09:12:12	72,2	778,8	48	80,8	100
06.03.2022	09:13:12	72,9	777,7	48	81	100
06.03.2022	09:14:12	73,6	794,9	47	80,4	100
06.03.2022	09:15:12	74,4	784,9	42	82,3	100
06.03.2022	09:16:12	75	772,6	38	82,5	100
06.03.2022	09:17:12	75,4	750,6	37	81,2	100
06.03.2022	09:18:12	75,6	752	38	79,5	100
06.03.2022	09:19:12	76	751	37	81,2	100
06.03.2022	09:20:12	76,1	741,1	37	80,8	100
06.03.2022	09:21:12	76,2	728,2	36	80,8	100
06.03.2022	09:22:12	76,2	717,3	37	80,4	100
06.03.2022	09:23:12	76,2	712,2	37	78,8	100
06.03.2022	09:24:12	76,2	724,8	37	80,8	100
06.03.2022	09:25:12	76,3	735,5	37	80,2	100
06.03.2022	09:26:12	76,4	747,6	37	79,7	100
06.03.2022	09:27:12	76,7	744,5	36	81,8	100
06.03.2022	09:28:12	76,7	729,5	36	79,7	100
06.03.2022	09:29:12	76,7	734,2	32	81,3	100
06.03.2022	09:30:12	76,7	735,5	31	80,8	100
06.03.2022	09:31:12	76,6	723,5	30	80,6	100
06.03.2022	09:32:12	76,4	724	30	80,1	100
06.03.2022	09:33:12	76,3	738,3	30	80,5	100
06.03.2022	09:34:12	76,3	753,5	30	81,1	100
06.03.2022	09:35:12	76,3	750,7	30	79,9	100
06.03.2022	09:36:12	76,1	736,1	30	81,7	100
06.03.2022	09:37:12	76,1	717	30	79,4	100
06.03.2022	09:38:12	75,8	707,2	30	80,7	100
06.03.2022	09:39:12	75,7	717,6	30	80	100
06.03.2022	09:40:12	75,5	728,3	30	78,7	100
06.03.2022	09:41:12	75,5	749,3	30	81,8	100
06.03.2022	09:42:12	75,6	752,9	30	79,1	100
06.03.2022	09:43:12	75,6	745,7	30	79,8	100
06.03.2022	09:44:12	75,7	742,4	30	81,6	100
06.03.2022	09:45:12	75,7	735,4	30	81,1	100
06.03.2022	09:46:12	75,7	722	30	80,5	100
06.03.2022	09:47:12	75,6	708,3	30	81,5	100
06.03.2022	09:48:12	75,5	688,5	30	81,2	100
06.03.2022	09:49:12	75,4	688,7	30	82,8	100
06.03.2022	09:50:12	75,3	701,8	30	81,6	100
06.03.2022	09:51:12	75,3	693,6	30	82,2	100
06.03.2022	09:52:12	75,2	707,2	30	96,5	100
06.03.2022	09:53:12	75,3	734	30	96,3	100
06.03.2022	09:54:12	75,6	751,4	30	96,1	100
06.03.2022	09:55:12	75,8	761,8	30	95,4	100
06.03.2022	09:56:12	76	764,7	30	94,3	100
06.03.2022	09:57:12	76,2	772,1	30	96,6	100
06.03.2022	09:58:12	76,5	754,8	30	96,7	100
06.03.2022	09:59:12	76,6	734,6	30	96,7	100
06.03.2022	10:00:12	76,6	723,5	30	96,3	100
06.03.2022	10:01:12	76,6	708,4	30	96,5	100
06.03.2022	10:02:12	76,6	693,7	30	96,9	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	10:03:12	76,5	678,5	30	97,3	100
06.03.2022	10:04:12	76,4	675,2	30	97,7	100
06.03.2022	10:05:12	76,3	670,7	30	96,9	100
06.03.2022	10:06:12	76,2	665,9	30	97,3	100
06.03.2022	10:07:12	76,2	652,6	30	98,1	100
06.03.2022	10:08:12	76,2	651	30	98,4	100
06.03.2022	10:09:12	76,4	653,3	30	97,2	100
06.03.2022	10:10:12	76,4	665,4	30	96,4	100
06.03.2022	10:11:12	76,7	671,6	30	98,1	100
06.03.2022	10:12:12	77	675,2	30	95,5	100
06.03.2022	10:13:12	77,3	679,4	30	98,1	100
06.03.2022	10:14:12	77,6	675,5	30	95,8	100
06.03.2022	10:15:12	77,9	675,6	30	95,9	100
06.03.2022	10:16:12	78,3	677,7	30	97,1	100
06.03.2022	10:17:12	78,7	679,7	30	97,9	100
06.03.2022	10:18:12	79,2	689,5	30	96,6	100
06.03.2022	10:19:12	79,7	676,7	30	74,9	100
06.03.2022	10:20:12	80,3	593	34	88,9	100
06.03.2022	10:21:12	81,3	517	32	80,3	100
06.03.2022	10:22:12	82,3	451,8	32	80,8	100
06.03.2022	10:23:12	83,1	399,2	30	93,4	100
06.03.2022	10:24:12	83,9	357,8	30	107,1	100
06.03.2022	10:25:12	84,4	324,7	30	115,2	100
06.03.2022	10:26:12	84,8	298,4	30	128,4	100
06.03.2022	10:27:12	85,1	277,9	30	129,4	100
06.03.2022	10:28:12	85,3	259,6	30	129	100
06.03.2022	10:29:12	85,3	242,9	30	128,5	100
06.03.2022	10:30:12	85,1	228,2	30	127,5	100
06.03.2022	10:31:12	84,9	215,4	30	128,7	100
06.03.2022	10:32:12	84,7	204	30	129,4	100
06.03.2022	10:33:12	84,5	194,6	0	57,6	100
06.03.2022	10:34:12	84,3	188,2	0	52,7	100
06.03.2022	10:35:12	84	182,8	0	54	100
06.03.2022	10:36:12	83,8	177,6	0	54,3	100
06.03.2022	10:37:12	83,6	172,9	0	53,3	100
06.03.2022	10:38:12	83,4	168,7	0	54,7	100
06.03.2022	10:39:12	83,2	164,6	0	53,5	100
06.03.2022	10:40:12	83	160,9	0	54	100
06.03.2022	10:41:12	82,8	157,4	0	52,7	100
06.03.2022	10:42:12	82,6	154,1	0	54	100
06.03.2022	10:43:12	82,4	150,9	0	53,3	100
06.03.2022	10:44:12	82,2	148,2	0	52,7	100
06.03.2022	10:45:12	82	145,3	0	51,5	100
06.03.2022	10:46:12	81,8	142,7	0	56,7	100
06.03.2022	10:47:12	81,6	140,3	0	55	100
06.03.2022	10:48:12	81,4	137,9	0	53,5	100
06.03.2022	10:49:12	81,2	135,7	0	54,5	100
06.03.2022	10:50:12	81,1	133,6	0	53,1	100
06.03.2022	10:51:12	80,8	131,6	0	52	100
06.03.2022	10:52:12	80,6	129,5	0	52,6	100
06.03.2022	10:53:12	80,4	127,7	0	52,4	100
06.03.2022	10:54:12	80,2	126	0	52,4	100
06.03.2022	10:55:12	80	124,3	0	51,8	100
06.03.2022	10:56:12	79,7	122,6	0	50,9	100
06.03.2022	10:57:12	79,5	121,1	0	52,8	100
06.03.2022	10:58:12	79,3	119,4	0	52	100
06.03.2022	10:59:12	79,1	118	0	52,2	100
06.03.2022	11:00:12	78,9	116,6	0	51,9	100
06.03.2022	11:01:12	78,6	115,2	0	52,4	100
06.03.2022	11:02:12	78,3	113,7	0	52,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	11:03:12	78,2	112,4	0	52,2	100
06.03.2022	11:04:12	78	111,2	0	51,4	100
06.03.2022	11:05:12	77,7	110	0	51	100
06.03.2022	11:06:12	77,5	108,9	0	51,2	100
06.03.2022	11:07:12	77,3	107,8	0	51,5	100
06.03.2022	11:08:12	77,2	106,7	0	51,6	100
06.03.2022	11:09:12	77	105,6	0	51	100
06.03.2022	11:10:12	76,8	104,6	0	51,3	100
06.03.2022	11:11:12	76,6	103,5	0	51,2	100
06.03.2022	11:12:12	76,3	102,6	0	54,3	100
06.03.2022	11:13:12	76,1	101,6	0	53,8	100
06.03.2022	11:14:12	75,9	100,9	0	50,3	100
06.03.2022	11:15:12	75,7	99,8	0	51,5	100
06.03.2022	11:16:12	75,6	98,9	0	51,1	100
06.03.2022	11:17:12	75,3	98,1	0	54,6	100
06.03.2022	11:18:12	75,2	97,3	0	49,4	100
06.03.2022	11:19:12	75	96,5	0	51,3	100
06.03.2022	11:20:12	74,8	95,9	0	51,8	100
06.03.2022	11:21:12	74,7	95,1	0	49,9	100
06.03.2022	11:22:12	74,4	94,3	0	51,2	100
06.03.2022	11:23:12	74,3	93,7	0	51,2	100
06.03.2022	11:24:12	74,1	92,9	0	50,7	100
06.03.2022	11:25:12	73,9	92,2	0	50,5	100
06.03.2022	11:26:12	73,7	91	45	75,3	100
06.03.2022	11:27:12	73,6	111,3	52	77,5	100
06.03.2022	11:28:12	73,5	151,4	37	80,7	100
06.03.2022	11:29:12	73,7	149,6	38	81,2	100
06.03.2022	11:30:12	73,6	181,7	38	80,7	100
06.03.2022	11:31:12	73,9	243	41	77,9	100
06.03.2022	11:32:12	74,3	309,1	36	81,1	100
06.03.2022	11:33:12	74,8	381,2	36	79,1	100
06.03.2022	11:34:12	75,7	453,5	36	80,5	100
06.03.2022	11:35:12	76,8	526,4	37	79,8	100
06.03.2022	11:36:12	78,1	586,8	31	91,6	100
06.03.2022	11:37:12	79,7	647,4	32	80,8	100
06.03.2022	11:38:12	81,4	651,9	33	81,1	100
06.03.2022	11:39:12	83,1	589,3	33	80,4	100
06.03.2022	11:40:12	84,3	521,6	32	81,1	100
06.03.2022	11:41:12	85	456,8	30	93,5	100
06.03.2022	11:42:12	85,3	403,4	30	100,2	100
06.03.2022	11:43:12	85,6	359,5	30	104,9	100
06.03.2022	11:44:12	85,6	324,6	30	122,9	100
06.03.2022	11:45:12	85,6	298,8	30	126,5	100
06.03.2022	11:46:12	85,5	278,3	30	127	100
06.03.2022	11:47:12	85,3	259,9	30	127,3	100
06.03.2022	11:48:12	85,2	243,6	30	127,1	100
06.03.2022	11:49:12	85	229	30	127,5	100
06.03.2022	11:50:12	84,7	214,9	30	127,6	100
06.03.2022	11:51:12	84,4	201,8	0	69,5	100
06.03.2022	11:52:12	84,1	192,2	0	53,7	100
06.03.2022	11:53:12	83,9	184,7	0	51,6	100
06.03.2022	11:54:12	83,6	178,4	0	52,8	100
06.03.2022	11:55:12	83,3	172,7	0	52,4	100
06.03.2022	11:56:12	82,9	167,4	0	52,5	100
06.03.2022	11:57:12	82,7	162,8	0	52,5	100
06.03.2022	11:58:12	82,4	158,4	0	52,2	100
06.03.2022	11:59:12	82,2	154,6	0	51,9	100
06.03.2022	12:00:12	81,9	150,9	0	51,8	100
06.03.2022	12:01:12	81,6	147,5	0	52,3	100
06.03.2022	12:02:12	81,3	144,5	0	51,9	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	12:03:12	81,1	141,5	0	51,8	100
06.03.2022	12:04:12	80,8	138,9	0	51,5	100
06.03.2022	12:05:12	80,6	136,5	0	51,2	100
06.03.2022	12:06:12	80,3	134,1	0	49,8	100
06.03.2022	12:07:12	80,1	131,8	0	51,6	100
06.03.2022	12:08:12	79,8	129,9	0	51,6	100
06.03.2022	12:09:12	79,6	127,9	0	52,9	100
06.03.2022	12:10:12	79,4	125,9	0	51,8	100
06.03.2022	12:11:12	79,1	124,3	0	51,1	100
06.03.2022	12:12:12	78,9	122,5	0	51,3	100
06.03.2022	12:13:12	78,6	121,1	0	52,1	100
06.03.2022	12:14:12	78,4	119,5	0	51,4	100
06.03.2022	12:15:12	78,2	118,1	0	51	100
06.03.2022	12:16:12	78	116,9	0	50,4	100
06.03.2022	12:17:12	77,8	115,5	0	50,9	100
06.03.2022	12:18:12	77,6	114,3	0	50,3	100
06.03.2022	12:19:12	77,4	113	0	51,2	100
06.03.2022	12:20:12	77,2	111,9	0	49,7	100
06.03.2022	12:21:12	77,1	110,6	0	51,1	100
06.03.2022	12:22:12	76,9	109,6	0	51,7	100
06.03.2022	12:23:12	76,7	108,6	0	50,5	100
06.03.2022	12:24:12	76,5	107,6	0	51,5	100
06.03.2022	12:25:12	76,3	106,7	0	54,4	100
06.03.2022	12:26:12	76,1	105,7	0	51,2	100
06.03.2022	12:27:12	76	104,8	0	50	100
06.03.2022	12:28:12	75,8	104	0	52,1	100
06.03.2022	12:29:12	75,6	103,2	0	50,4	100
06.03.2022	12:30:12	75,5	102,3	0	51,7	100
06.03.2022	12:31:12	75,4	101,4	0	50,2	100
06.03.2022	12:32:12	75,2	101	0	51,1	100
06.03.2022	12:33:12	75,1	100	0	50,3	100
06.03.2022	12:34:12	74,9	99,3	0	50,2	100
06.03.2022	12:35:12	74,8	98,8	0	50,3	100
06.03.2022	12:36:12	74,6	98	0	50,1	100
06.03.2022	12:37:12	74,5	97,5	0	50,1	100
06.03.2022	12:38:12	74,4	96,9	0	50,2	100
06.03.2022	12:39:12	74,2	96,1	0	50	100
06.03.2022	12:40:12	74,1	95,6	0	50,2	100
06.03.2022	12:41:12	74	95,1	0	50,1	100
06.03.2022	12:42:12	73,9	94,5	0	47,1	100
06.03.2022	12:43:12	73,8	93,6	39	70,3	100
06.03.2022	12:44:12	73,7	118,7	52	86,3	100
06.03.2022	12:45:12	73,8	162,8	36	83,8	100
06.03.2022	12:46:12	74	159,1	36	79,3	100
06.03.2022	12:47:12	74	154,2	36	80,9	100
06.03.2022	12:48:12	74,1	191,4	37	79,9	100
06.03.2022	12:49:12	74,4	275,8	37	79,2	100
06.03.2022	12:50:12	75,1	350,3	37	80,4	100
06.03.2022	12:51:12	76	446,6	37	82,3	100
06.03.2022	12:52:12	77,2	567,4	33	83,3	100
06.03.2022	12:53:12	79,1	655	30	87,8	100
06.03.2022	12:54:12	81,2	691,8	35	82,2	100
06.03.2022	12:55:12	83,4	637,2	34	87,8	100
06.03.2022	12:56:12	85	563,3	32	79,9	100
06.03.2022	12:57:12	86,2	490	32	80,9	100
06.03.2022	12:58:12	87,1	425,1	30	92,2	100
06.03.2022	12:59:12	87,8	374,3	30	104,2	100
06.03.2022	13:00:12	88,4	335,1	30	114,1	100
06.03.2022	13:01:12	88,8	305,8	30	127,4	100
06.03.2022	13:02:12	88,8	282,9	30	124,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	13:03:12	89,3	263,3	30	127	100
06.03.2022	13:04:12	89,3	246	30	127,7	100
06.03.2022	13:05:12	89,4	230,6	30	125,5	100
06.03.2022	13:06:12	89,5	217,3	30	126,7	100
06.03.2022	13:07:12	89,6	205,8	30	127,7	100
06.03.2022	13:08:12	89,7	197	0	52,2	100
06.03.2022	13:09:12	89,6	189,5	0	53,3	100
06.03.2022	13:10:12	89,7	182,6	0	53,7	100
06.03.2022	13:11:12	89,8	176,5	0	50,6	100
06.03.2022	13:12:12	89,8	171,1	0	52,3	100
06.03.2022	13:13:12	89,8	166,2	0	51,9	100
06.03.2022	13:14:12	89,7	161,7	0	51,7	100
06.03.2022	13:15:12	89,7	157,7	0	52	100
06.03.2022	13:16:12	89,7	154	0	49,1	100
06.03.2022	13:17:12	89,8	150,7	0	54,9	100
06.03.2022	13:18:12	89,8	148	0	51,7	100
06.03.2022	13:19:12	89,6	145	0	50,5	100
06.03.2022	13:20:12	89,7	142,6	0	52,1	100
06.03.2022	13:21:12	89,6	140,2	0	49,4	100
06.03.2022	13:22:12	89,6	138	0	50,9	100
06.03.2022	13:23:12	89,6	135,9	0	50,5	100
06.03.2022	13:24:12	89,6	133,9	0	51,1	100
06.03.2022	13:25:12	89,4	132,4	0	52	100
06.03.2022	13:26:12	89,4	130,7	0	51,2	100
06.03.2022	13:27:12	89,3	129,3	0	50,6	100
06.03.2022	13:28:12	89,3	127,7	0	52,6	100
06.03.2022	13:29:12	89,2	126,4	0	51,8	100
06.03.2022	13:30:12	89,2	125,1	0	51	100
06.03.2022	13:31:12	89,1	123,9	0	51	100
06.03.2022	13:32:12	88,9	122,7	0	49,9	100
06.03.2022	13:33:12	85,7	121,4	0	52,1	100
06.03.2022	13:34:12	82,1	120,1	0	51,2	100
06.03.2022	13:35:12	79,5	118,7	0	51,8	100
06.03.2022	13:36:12	77,6	117,4	0	50,6	100
06.03.2022	13:37:12	76,3	116,1	0	54,5	100
06.03.2022	13:38:12	75,5	114,6	0	52,3	100
06.03.2022	13:39:12	74,7	113,1	0	50,5	100
06.03.2022	13:40:12	74	111,8	0	50,1	100
06.03.2022	13:41:12	73,5	110,2	30	69,3	100
06.03.2022	13:42:12	73,3	148,4	37	91,6	100
06.03.2022	13:43:12	73,3	168,8	37	81,2	100
06.03.2022	13:44:12	73,5	166,2	45	78,2	100
06.03.2022	13:45:12	73,8	233,3	48	77,8	100
06.03.2022	13:46:12	74,3	305,9	37	84,7	100
06.03.2022	13:47:12	75	372,3	36	81,2	100
06.03.2022	13:48:12	76	463,6	37	80,6	100
06.03.2022	13:49:12	77,5	615,1	40	81,7	100
06.03.2022	13:50:12	79,7	730,7	32	81,2	100
06.03.2022	13:51:12	82,2	728,3	37	78,4	100
06.03.2022	13:52:12	84,4	648,6	32	81,2	100
06.03.2022	13:53:12	86,1	557,3	33	80	100
06.03.2022	13:54:12	87,4	479,2	30	92,2	100
06.03.2022	13:55:12	88,3	417,3	30	93,1	100
06.03.2022	13:56:12	88,9	367,8	30	104,3	100
06.03.2022	13:57:12	89,3	328,7	30	119,6	100
06.03.2022	13:58:12	89,7	300,8	30	128,1	100
06.03.2022	13:59:12	89,9	278,5	30	129,4	100
06.03.2022	14:00:12	90,1	259,3	30	127,3	100
06.03.2022	14:01:12	90,3	242,8	30	126,2	100
06.03.2022	14:02:12	90,4	228	30	125,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	14:03:12	90,5	215,5	30	126,9	100
06.03.2022	14:04:12	90,6	204,7	0	87,6	100
06.03.2022	14:05:12	90,7	198,3	0	53,4	100
06.03.2022	14:06:12	90,7	195,6	0	53,3	100
06.03.2022	14:07:12	90,7	192	0	50,1	100
06.03.2022	14:08:12	90,8	184,6	0	52,3	100
06.03.2022	14:09:12	90,8	177,6	0	44,9	100
06.03.2022	14:10:12	90,8	171,5	0	53,3	100
06.03.2022	14:11:12	90,8	166,2	0	51,3	100
06.03.2022	14:12:12	90,7	161,5	0	53,3	100
06.03.2022	14:13:12	90,8	157,5	0	54,4	100
06.03.2022	14:14:12	90,7	153,8	0	51,3	100
06.03.2022	14:15:12	90,7	150,4	0	52,5	100
06.03.2022	14:16:12	90,5	147,6	0	50,4	100
06.03.2022	14:17:12	90,5	144,7	0	53,1	100
06.03.2022	14:18:12	90,6	142,3	0	51,7	100
06.03.2022	14:19:12	90,5	139,9	0	52,3	100
06.03.2022	14:20:12	90,3	137,8	0	53,7	100
06.03.2022	14:21:12	90,3	135,8	0	54,5	100
06.03.2022	14:22:12	90,1	133,8	0	51,8	100
06.03.2022	14:23:12	90	132,1	0	49,6	100
06.03.2022	14:24:12	90	130,4	0	49,9	100
06.03.2022	14:25:12	89,9	129	0	49,1	100
06.03.2022	14:26:12	89,7	127,5	0	51,8	100
06.03.2022	14:27:12	89,6	126	0	51,2	100
06.03.2022	14:28:12	89,5	124,8	0	51,4	100
06.03.2022	14:29:12	89,3	123,5	0	51,5	100
06.03.2022	14:30:12	89,2	122,4	0	50,7	100
06.03.2022	14:31:12	89	121,2	0	50,9	100
06.03.2022	14:32:12	88,8	120,1	0	51,1	100
06.03.2022	14:33:12	88,7	119	0	50,2	100
06.03.2022	14:34:12	88,5	118	0	49,7	100
06.03.2022	14:35:12	88,3	117	0	51,6	100
06.03.2022	14:36:12	88,1	116	0	52,7	100
06.03.2022	14:37:12	88	115,1	0	48,3	100
06.03.2022	14:38:12	87,8	114,1	0	51	100
06.03.2022	14:39:12	87,6	113,3	0	50,7	100
06.03.2022	14:40:12	87,4	112,6	0	49,4	100
06.03.2022	14:41:12	87,2	111,8	0	51,3	100
06.03.2022	14:42:12	87	110,9	0	49,9	100
06.03.2022	14:43:12	86,9	110,3	0	51,4	100
06.03.2022	14:44:12	86,6	109,6	0	40,1	100
06.03.2022	14:45:12	86,4	108,8	0	51,1	100
06.03.2022	14:46:12	86,3	108,2	0	51,3	100
06.03.2022	14:47:12	86,1	107,4	0	50,3	100
06.03.2022	14:48:12	85,9	106,8	0	49,5	100
06.03.2022	14:49:12	85,7	106,3	0	50,2	100
06.03.2022	14:50:12	85,5	105,6	0	49,6	100
06.03.2022	14:51:12	85,3	105,1	0	50	100
06.03.2022	14:52:12	85,2	104,4	0	49,6	100
06.03.2022	14:53:12	85	104	0	50	100
06.03.2022	14:54:12	84,8	103,3	0	51,9	100
06.03.2022	14:55:12	84,6	103	0	48,2	100
06.03.2022	14:56:12	84,5	102,3	0	49,5	100
06.03.2022	14:57:12	84,3	101,9	0	48	100
06.03.2022	14:58:12	84,2	101,5	0	52,4	100
06.03.2022	14:59:12	84	100,9	0	51,2	100
06.03.2022	15:00:12	83,9	100,6	0	50,1	100
06.03.2022	15:01:12	83,7	100	0	50,1	100
06.03.2022	15:02:12	83,6	99,7	0	50,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	15:03:12	83,4	99,4	0	48,6	100
06.03.2022	15:04:12	83,3	98,9	0	51,6	100
06.03.2022	15:05:12	83,1	98,5	0	50	100
06.03.2022	15:06:12	83	98,1	0	50,9	100
06.03.2022	15:07:12	82,8	97,6	0	50,6	100
06.03.2022	15:08:12	82,6	97,1	0	50,1	100
06.03.2022	15:09:12	82,5	96,8	0	55,7	100
06.03.2022	15:10:12	82,3	96,4	0	50	100
06.03.2022	15:11:12	82,1	96,2	0	49,7	100
06.03.2022	15:12:12	81,9	95,8	0	50,2	100
06.03.2022	15:13:12	81,8	95,4	0	49,7	100
06.03.2022	15:14:12	81,5	95,2	0	50,4	100
06.03.2022	15:15:12	81,3	94,9	0	49,3	100
06.03.2022	15:16:12	81,2	94,5	0	50,1	100
06.03.2022	15:17:12	81	94,2	0	50,4	100
06.03.2022	15:18:12	80,8	93,8	0	49,7	100
06.03.2022	15:19:12	80,7	93,3	0	50	100
06.03.2022	15:20:12	80,4	93,1	0	51,2	100
06.03.2022	15:21:12	80,2	93	0	49,7	100
06.03.2022	15:22:12	80	92,7	0	50,1	100
06.03.2022	15:23:12	79,9	92,3	0	50,2	100
06.03.2022	15:24:12	79,7	92	0	50,2	100
06.03.2022	15:25:12	79,5	91,9	0	50,2	100
06.03.2022	15:26:12	79,3	91,5	0	49,9	100
06.03.2022	15:27:12	79,2	91,2	0	49,8	100
06.03.2022	15:28:12	79	90,8	0	49,9	100
06.03.2022	15:29:12	78,8	90,6	0	50,4	100
06.03.2022	15:30:12	78,7	90,4	0	50,3	100
06.03.2022	15:31:12	78,5	90,1	0	50	100
06.03.2022	15:32:12	78,3	89,7	0	49,3	100
06.03.2022	15:33:12	78,2	89,5	0	51,5	100
06.03.2022	15:34:12	78	89,1	0	50,6	100
06.03.2022	15:35:12	77,9	88,7	0	49,8	100
06.03.2022	15:36:12	77,7	88,5	0	53,5	100
06.03.2022	15:37:12	77,5	88,3	0	49	100
06.03.2022	15:38:12	77,4	88,1	0	49,3	100
06.03.2022	15:39:12	77,3	87,7	0	52,2	100
06.03.2022	15:40:12	77,1	87,4	0	49,1	100
06.03.2022	15:41:12	77	87,2	0	51,4	100
06.03.2022	15:42:12	76,8	87	0	52,2	100
06.03.2022	15:43:12	76,7	86,7	0	50,3	100
06.03.2022	15:44:12	76,5	86,4	0	49,7	100
06.03.2022	15:45:12	76,5	86,2	0	50,1	100
06.03.2022	15:46:12	76,3	86,1	0	50,1	100
06.03.2022	15:47:12	76,2	85,9	0	50,7	100
06.03.2022	15:48:12	76,1	85,6	0	51,6	100
06.03.2022	15:49:12	76	85,5	0	50,1	100
06.03.2022	15:50:12	75,7	85,2	0	51,5	100
06.03.2022	15:51:12	75,8	85	0	50,2	100
06.03.2022	15:52:12	75,6	84,7	0	49,6	100
06.03.2022	15:53:12	75,4	84,5	0	49,5	100
06.03.2022	15:54:12	75,3	84,3	0	49,1	100
06.03.2022	15:55:12	75,2	84,1	0	49,5	100
06.03.2022	15:56:12	75,1	83,8	0	49,6	100
06.03.2022	15:57:12	75	83,7	0	50,6	100
06.03.2022	15:58:12	74,9	83,5	0	52,3	100
06.03.2022	15:59:12	74,8	83,4	0	63,8	100
06.03.2022	16:00:12	74,7	83,3	0	52	100
06.03.2022	16:01:12	74,6	82,9	0	50,5	100
06.03.2022	16:02:12	74,5	82,7	0	49,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	16:03:12	74,4	82,5	0	48,9	100
06.03.2022	16:04:12	74,3	82,5	0	51,2	100
06.03.2022	16:05:12	74,2	82,3	0	48,8	100
06.03.2022	16:06:12	74,1	82,2	0	51,9	100
06.03.2022	16:07:12	74	81,9	0	49,9	100
06.03.2022	16:08:12	73,9	81,7	30	75,3	100
06.03.2022	16:09:12	73,8	80,9	48	77,4	100
06.03.2022	16:10:12	73,7	111,8	60	76,5	100
06.03.2022	16:11:12	73,7	167,3	37	80,7	100
06.03.2022	16:12:12	73,8	165,3	37	79,5	100
06.03.2022	16:13:12	73,9	227,4	37	78,2	100
06.03.2022	16:14:12	74,2	301,8	34	80,9	100
06.03.2022	16:15:12	74,6	361,3	36	79,9	100
06.03.2022	16:16:12	75,2	424	38	79,3	100
06.03.2022	16:17:12	76,2	528,6	38	83,8	100
06.03.2022	16:18:12	77,7	658,9	33	80,9	100
06.03.2022	16:19:12	79,8	754,1	30	77,5	100
06.03.2022	16:20:12	82,2	743,8	33	82,4	100
06.03.2022	16:21:12	84,5	661,1	33	80,7	100
06.03.2022	16:22:12	86	564,6	33	80,6	100
06.03.2022	16:23:12	87,1	482	30	91	100
06.03.2022	16:24:12	88	418	30	93,8	100
06.03.2022	16:25:12	88,6	368	30	105,3	100
06.03.2022	16:26:12	89	330	30	119,6	100
06.03.2022	16:27:12	89,1	302,1	30	124,5	100
06.03.2022	16:28:12	89,3	279,5	30	121,8	100
06.03.2022	16:29:12	89,4	259,4	30	124,7	100
06.03.2022	16:30:12	89,6	242,3	30	126,4	100
06.03.2022	16:31:12	89,4	227,5	30	126,6	100
06.03.2022	16:32:12	89,2	213,7	30	126,5	100
06.03.2022	16:33:12	89,3	201,2	0	74,9	100
06.03.2022	16:34:12	89	191,5	0	52,2	100
06.03.2022	16:35:12	88,9	184,5	0	52,5	100
06.03.2022	16:36:12	88,8	178,3	0	52	100
06.03.2022	16:37:12	88,5	172,6	0	52,3	100
06.03.2022	16:38:12	88,4	167,4	0	52,7	100
06.03.2022	16:39:12	88,1	162,8	0	51,5	100
06.03.2022	16:40:12	87,8	158,6	0	52	100
06.03.2022	16:41:12	87,5	155	0	52,9	100
06.03.2022	16:42:12	87,3	151,4	0	51,6	100
06.03.2022	16:43:12	87	148,1	0	52,2	100
06.03.2022	16:44:12	86,7	145,1	0	51,2	100
06.03.2022	16:45:12	86,4	142,4	0	52,3	100
06.03.2022	16:46:12	86,1	139,8	0	50,8	100
06.03.2022	16:47:12	85,8	137,3	0	51,2	100
06.03.2022	16:48:12	85,5	135,2	0	51,5	100
06.03.2022	16:49:12	85,2	133,1	0	52,2	100
06.03.2022	16:50:12	85	131,2	0	51,7	100
06.03.2022	16:51:12	84,7	129,4	0	50,2	100
06.03.2022	16:52:12	84,5	127,7	0	52,2	100
06.03.2022	16:53:12	84,2	126,2	0	51,4	100
06.03.2022	16:54:12	84	124,6	0	51,2	100
06.03.2022	16:55:12	83,7	123,1	0	51,7	100
06.03.2022	16:56:12	83,5	121,7	0	51,3	100
06.03.2022	16:57:12	83,4	120,4	0	51,2	100
06.03.2022	16:58:12	83,2	118,9	0	50,8	100
06.03.2022	16:59:12	83	117,9	0	51,2	100
06.03.2022	17:00:12	82,8	116,5	0	52,1	100
06.03.2022	17:01:12	82,6	115,4	0	52,3	100
06.03.2022	17:02:12	82,5	114,4	0	51,8	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	17:03:12	82,3	113,5	0	51,2	100
06.03.2022	17:04:12	82,1	112,5	0	51,3	100
06.03.2022	17:05:12	81,9	111,7	0	51,7	100
06.03.2022	17:06:12	81,7	110,7	0	51,3	100
06.03.2022	17:07:12	81,7	109,9	0	50,8	100
06.03.2022	17:08:12	81,5	109	0	50	100
06.03.2022	17:09:12	81,3	108,3	0	52,7	100
06.03.2022	17:10:12	81,1	107,6	0	50,3	100
06.03.2022	17:11:12	81	107	0	50,3	100
06.03.2022	17:12:12	80,9	106,1	0	51,4	100
06.03.2022	17:13:12	80,7	105,6	0	51,9	100
06.03.2022	17:14:12	80,5	104,8	0	50,3	100
06.03.2022	17:15:12	80,5	104,3	0	49,7	100
06.03.2022	17:16:12	80,3	103,6	0	51,5	100
06.03.2022	17:17:12	80,1	103,2	0	50,8	100
06.03.2022	17:18:12	80	102,8	0	50,1	100
06.03.2022	17:19:12	79,8	102,2	0	50,3	100
06.03.2022	17:20:12	79,7	101,9	0	50,4	100
06.03.2022	17:21:12	79,5	101,2	0	51,9	100
06.03.2022	17:22:12	79,3	101	0	50,9	100
06.03.2022	17:23:12	79,1	100,7	0	51,8	100
06.03.2022	17:24:12	79,1	100,4	0	50,8	100
06.03.2022	17:25:12	79	99,9	0	52,5	100
06.03.2022	17:26:12	79	99,4	0	51,4	100
06.03.2022	17:27:12	78,8	99	0	54,3	100
06.03.2022	17:28:12	78,6	98,5	0	50,8	100
06.03.2022	17:29:12	78,4	98,2	0	50,6	100
06.03.2022	17:30:12	78,3	97,9	0	50,1	100
06.03.2022	17:31:12	78,2	97,7	0	49,2	100
06.03.2022	17:32:12	78,2	97,4	0	49	100
06.03.2022	17:33:12	78	97,1	0	51,2	100
06.03.2022	17:34:12	78	96,8	0	51,1	100
06.03.2022	17:35:12	77,7	96,5	0	52,3	100
06.03.2022	17:36:12	77,6	95,9	0	48,6	100
06.03.2022	17:37:12	77,5	95,4	0	52,7	100
06.03.2022	17:38:12	77,3	94,9	0	50,1	100
06.03.2022	17:39:12	77,3	94,7	0	51,7	100
06.03.2022	17:40:12	77,1	94,3	0	49,3	100
06.03.2022	17:41:12	77	94	0	50	100
06.03.2022	17:42:12	76,8	93,6	0	50,4	100
06.03.2022	17:43:12	76,8	93,3	0	51	100
06.03.2022	17:44:12	76,7	93,1	0	50	100
06.03.2022	17:45:12	76,6	92,8	0	49,1	100
06.03.2022	17:46:12	76,4	92,6	0	50,4	100
06.03.2022	17:47:12	76,3	92,2	0	50	100
06.03.2022	17:48:12	76,2	91,9	0	50	100
06.03.2022	17:49:12	76,1	91,4	0	50,2	100
06.03.2022	17:50:12	76	91,2	0	41,4	100
06.03.2022	17:51:12	75,8	90,6	0	49,9	100
06.03.2022	17:52:12	75,7	90,4	0	50,9	100
06.03.2022	17:53:12	75,6	90,3	0	50	100
06.03.2022	17:54:12	75,5	90	0	49,4	100
06.03.2022	17:55:12	75,4	89,7	0	50,2	100
06.03.2022	17:56:12	75,3	89,3	0	48,8	100
06.03.2022	17:57:12	75,3	89	0	50,2	100
06.03.2022	17:58:12	75,2	88,7	0	50,2	100
06.03.2022	17:59:12	75,1	88,3	0	49,7	100
06.03.2022	18:00:12	75	88,1	0	49	100
06.03.2022	18:01:12	74,8	87,9	0	48,9	100
06.03.2022	18:02:12	74,8	87,7	0	49,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	18:03:12	74,7	87,6	0	49,7	100
06.03.2022	18:04:12	74,6	87,1	0	54,1	100
06.03.2022	18:05:12	74,5	86,8	0	49	100
06.03.2022	18:06:12	74,4	86,7	0	49,8	100
06.03.2022	18:07:12	74,3	86,6	0	49,7	100
06.03.2022	18:08:12	74,2	86,3	0	51,6	100
06.03.2022	18:09:12	74,1	85,9	0	49,7	100
06.03.2022	18:10:12	74	85,9	0	46,6	100
06.03.2022	18:11:12	74	85,7	0	49,9	100
06.03.2022	18:12:12	73,9	85,5	30	83,5	100
06.03.2022	18:13:12	73,8	84,7	51	83,7	100
06.03.2022	18:14:12	73,8	142,4	42	98,7	100
06.03.2022	18:15:12	73,8	171,4	37	80,3	100
06.03.2022	18:16:12	73,9	162,3	33	80,4	100
06.03.2022	18:17:12	74	179	36	82,6	100
06.03.2022	18:18:12	74,1	255,6	35	80,6	100
06.03.2022	18:19:12	74,5	339,3	37	79,6	100
06.03.2022	18:20:12	75,2	442,4	37	79,1	100
06.03.2022	18:21:12	76,2	571,2	38	79,7	100
06.03.2022	18:22:12	77,9	681	32	81,1	100
06.03.2022	18:23:12	80,1	739,5	30	77,5	100
06.03.2022	18:24:12	82,3	714,4	33	78,5	100
06.03.2022	18:25:12	84,3	640	33	79,7	100
06.03.2022	18:26:12	85,9	555,6	33	79,8	100
06.03.2022	18:27:12	87	480	30	93,4	100
06.03.2022	18:28:12	87,9	420	30	104,7	100
06.03.2022	18:29:12	88,5	371,4	30	106,9	100
06.03.2022	18:30:12	88,8	333,9	30	120,4	100
06.03.2022	18:31:12	89,1	305,6	30	125,4	100
06.03.2022	18:32:12	89,3	282,4	30	128,9	100
06.03.2022	18:33:12	89,4	262,5	30	127,7	100
06.03.2022	18:34:12	89,5	245,1	30	127,1	100
06.03.2022	18:35:12	89,5	229,5	30	127	100
06.03.2022	18:36:12	89,4	214,6	30	127,3	100
06.03.2022	18:37:12	89,4	201,7	0	82,9	100
06.03.2022	18:38:12	89,2	192,2	0	53,1	100
06.03.2022	18:39:12	89,1	184,8	0	51,4	100
06.03.2022	18:40:12	89	178,7	0	47,4	100
06.03.2022	18:41:12	88,7	173	0	52,6	100
06.03.2022	18:42:12	88,6	167,9	0	49,7	100
06.03.2022	18:43:12	88,3	163,3	0	52,2	100
06.03.2022	18:44:12	88,2	159,1	0	52,3	100
06.03.2022	18:45:12	87,8	155,3	0	51,8	100
06.03.2022	18:46:12	87,5	151,8	0	55,2	100
06.03.2022	18:47:12	87,2	148,7	0	52,3	100
06.03.2022	18:48:12	86,9	145,6	0	52,1	100
06.03.2022	18:49:12	86,7	142,9	0	52,3	100
06.03.2022	18:50:12	86,4	140,3	0	57,3	100
06.03.2022	18:51:12	86,1	137,8	0	52,4	100
06.03.2022	18:52:12	85,8	135,6	0	52,3	100
06.03.2022	18:53:12	85,5	133,7	0	52,2	100
06.03.2022	18:54:12	85,2	131,7	0	53,5	100
06.03.2022	18:55:12	85	129,9	0	50,2	100
06.03.2022	18:56:12	84,7	128	0	52,4	100
06.03.2022	18:57:12	84,3	126,3	0	51,3	100
06.03.2022	18:58:12	84,2	124,9	0	52,2	100
06.03.2022	18:59:12	84	123,3	0	54,4	100
06.03.2022	19:00:12	83,6	121,9	0	55,1	100
06.03.2022	19:01:12	83,4	120,5	0	50,8	100
06.03.2022	19:02:12	83,3	119,1	0	50,9	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	19:03:12	83,1	117,9	0	52,4	100
06.03.2022	19:04:12	82,9	116,8	0	50,3	100
06.03.2022	19:05:12	82,7	115,7	0	52,7	100
06.03.2022	19:06:12	82,5	114,7	0	50,8	100
06.03.2022	19:07:12	82,4	113,5	0	50,7	100
06.03.2022	19:08:12	82,1	112,5	0	51,7	100
06.03.2022	19:09:12	82	111,8	0	57,9	100
06.03.2022	19:10:12	81,8	110,9	0	50,4	100
06.03.2022	19:11:12	81,6	110,1	0	51	100
06.03.2022	19:12:12	81,5	109,2	0	51	100
06.03.2022	19:13:12	81,4	108,6	0	50,5	100
06.03.2022	19:14:12	81,2	107,9	0	53,5	100
06.03.2022	19:15:12	81,1	107,1	0	51,2	100
06.03.2022	19:16:12	80,9	106,4	0	51,4	100
06.03.2022	19:17:12	80,8	105,7	0	50,8	100
06.03.2022	19:18:12	80,6	104,9	0	51,4	100
06.03.2022	19:19:12	80,5	104,5	0	50,4	100
06.03.2022	19:20:12	80,3	103,8	0	50,8	100
06.03.2022	19:21:12	80,3	103,4	0	50,8	100
06.03.2022	19:22:12	80	102,7	0	50	100
06.03.2022	19:23:12	79,9	102,2	0	50,8	100
06.03.2022	19:24:12	79,8	101,6	0	52,8	100
06.03.2022	19:25:12	79,6	101,2	0	52,5	100
06.03.2022	19:26:12	79,5	100,6	0	51,3	100
06.03.2022	19:27:12	79,4	100,1	0	51,1	100
06.03.2022	19:28:12	79,2	99,5	0	52,7	100
06.03.2022	19:29:12	79,1	99,2	0	56,1	100
06.03.2022	19:30:12	79	98,5	0	51,5	100
06.03.2022	19:31:12	78,8	98,2	0	50,2	100
06.03.2022	19:32:12	78,7	97,9	0	51,2	100
06.03.2022	19:33:12	78,5	97,5	0	51,7	100
06.03.2022	19:34:12	78,4	97,1	0	50,3	100
06.03.2022	19:35:12	78,3	96,8	0	50,3	100
06.03.2022	19:36:12	78,2	96,4	0	51,1	100
06.03.2022	19:37:12	78	96	0	50	100
06.03.2022	19:38:12	77,9	95,7	0	50,7	100
06.03.2022	19:39:12	77,8	95,2	0	50,1	100
06.03.2022	19:40:12	77,7	95	0	51,3	100
06.03.2022	19:41:12	77,6	94,6	0	56,1	100
06.03.2022	19:42:12	77,4	94,2	0	50,2	100
06.03.2022	19:43:12	77,4	93,8	0	53	100
06.03.2022	19:44:12	77,2	93,5	0	49,6	100
06.03.2022	19:45:12	77,1	93,1	0	50	100
06.03.2022	19:46:12	77,1	92,8	0	50,7	100
06.03.2022	19:47:12	77	92,5	0	51,5	100
06.03.2022	19:48:12	76,8	91,9	0	50,2	100
06.03.2022	19:49:12	76,7	91,7	0	52,5	100
06.03.2022	19:50:12	76,6	91,5	0	49,9	100
06.03.2022	19:51:12	76,5	91,1	0	50,4	100
06.03.2022	19:52:12	76,5	90,6	0	50,5	100
06.03.2022	19:53:12	76,4	90,4	0	51	100
06.03.2022	19:54:12	76,3	90,1	0	53,9	100
06.03.2022	19:55:12	76,2	89,8	0	53,6	100
06.03.2022	19:56:12	76,2	89,4	0	49,1	100
06.03.2022	19:57:12	76,1	89,3	0	50,3	100
06.03.2022	19:58:12	76	89,1	0	50,3	100
06.03.2022	19:59:12	76	89	0	56,6	100
06.03.2022	20:00:12	75,9	88,5	0	50,3	100
06.03.2022	20:01:12	75,7	88,1	100	237,2	100
06.03.2022	20:02:12	75,7	85,4	0	65,5	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	20:03:12	75,7	83,8	0	51,4	100
06.03.2022	20:04:12	75,6	83,7	0	49,6	100
06.03.2022	20:05:12	75,5	83,8	0	48,7	100
06.03.2022	20:06:12	75,4	84	0	51,1	100
06.03.2022	20:07:12	75,3	84,2	0	49,9	100
06.03.2022	20:08:12	75,2	84,3	0	51,3	100
06.03.2022	20:09:12	75,3	84,4	0	50,2	100
06.03.2022	20:10:12	75,1	84,3	0	52,2	100
06.03.2022	20:11:12	75,1	84,1	0	50,1	100
06.03.2022	20:12:12	75	84	0	49,5	100
06.03.2022	20:13:12	74,9	84,1	0	49,9	100
06.03.2022	20:14:12	74,8	84,1	0	50,4	100
06.03.2022	20:15:12	74,8	84,2	0	50,1	100
06.03.2022	20:16:12	74,7	84,3	0	50,8	100
06.03.2022	20:17:12	74,6	84,2	0	45,8	100
06.03.2022	20:18:12	74,6	84,1	0	50,4	100
06.03.2022	20:19:12	74,5	84,1	0	50,4	100
06.03.2022	20:20:12	74,5	84,1	0	50,8	100
06.03.2022	20:21:12	74,1	83,8	0	51,3	100
06.03.2022	20:22:12	72,1	83,3	53	75,4	100
06.03.2022	20:23:12	70,3	133,3	48	91,3	100
06.03.2022	20:24:12	69,2	173,6	33	88,8	100
06.03.2022	20:25:12	68,6	177,7	44	76,5	100
06.03.2022	20:26:12	68,1	235	48	79,8	100
06.03.2022	20:27:12	68	294,7	48	80,3	100
06.03.2022	20:28:12	68,1	377,2	48	81,2	100
06.03.2022	20:29:12	68,6	529,4	48	80,6	100
06.03.2022	20:30:12	69,8	700,7	47	82,2	100
06.03.2022	20:31:12	71,3	781,9	47	84,3	100
06.03.2022	20:32:12	73	820,3	48	80,2	100
06.03.2022	20:33:12	74,8	841,2	44	82,1	100
06.03.2022	20:34:12	76,5	805,2	40	83	100
06.03.2022	20:35:12	77,7	736,9	36	83,9	100
06.03.2022	20:36:12	78,3	687,6	31	80,2	100
06.03.2022	20:37:12	78,8	648,2	30	80,1	100
06.03.2022	20:38:12	79,1	630,2	30	98,9	100
06.03.2022	20:39:12	79,3	623,3	30	91,3	100
06.03.2022	20:40:12	79,5	591,7	30	75,2	100
06.03.2022	20:41:12	79,4	507	32	80,3	100
06.03.2022	20:42:12	78,9	436,4	32	81,2	100
06.03.2022	20:43:12	78,4	380,6	30	94,2	100
06.03.2022	20:44:12	77,8	337,5	30	96,6	100
06.03.2022	20:45:12	77,1	303,7	30	109	100
06.03.2022	20:46:12	76,5	276,8	30	116,4	100
06.03.2022	20:47:12	76	257	30	128,7	100
06.03.2022	20:48:12	75,8	241,8	30	128,6	100
06.03.2022	20:49:12	75,9	226,4	30	129	100
06.03.2022	20:50:12	76,1	211,8	30	129,1	100
06.03.2022	20:51:12	76,3	199,2	30	129,7	100
06.03.2022	20:52:12	76,4	187,8	30	129	100
06.03.2022	20:53:12	76,6	178,1	0	103,3	100
06.03.2022	20:54:12	76,7	171,2	0	52,8	100
06.03.2022	20:55:12	76,8	166,2	0	53,9	100
06.03.2022	20:56:12	76,9	161,8	0	51,9	100
06.03.2022	20:57:12	77,1	157,9	0	56,5	100
06.03.2022	20:58:12	77,1	154,2	0	53,8	100
06.03.2022	20:59:12	77,2	150,8	0	53,9	100
06.03.2022	21:00:12	77,2	147,6	0	52,5	100
06.03.2022	21:01:12	77,4	144,5	0	50,6	100
06.03.2022	21:02:12	77,3	141,8	0	52,1	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	21:03:12	77,4	139,1	0	52,6	100
06.03.2022	21:04:12	77,4	136,6	0	53,9	100
06.03.2022	21:05:12	77,5	134,4	0	51,5	100
06.03.2022	21:06:12	77,5	132,3	0	52,1	100
06.03.2022	21:07:12	77,5	130,2	0	51,8	100
06.03.2022	21:08:12	77,6	128,3	0	51,4	100
06.03.2022	21:09:12	77,6	126,6	0	52,8	100
06.03.2022	21:10:12	77,5	124,8	0	50,8	100
06.03.2022	21:11:12	77,6	123,2	0	51,9	100
06.03.2022	21:12:12	77,6	121,6	0	52	100
06.03.2022	21:13:12	77,5	120,1	0	51,6	100
06.03.2022	21:14:12	77,5	118,8	0	54,9	100
06.03.2022	21:15:12	77,5	117,5	0	50,6	100
06.03.2022	21:16:12	77,5	116,2	0	52	100
06.03.2022	21:17:12	77,5	114,9	0	51,4	100
06.03.2022	21:18:12	77,5	113,7	0	54,3	100
06.03.2022	21:19:12	77,5	112,6	0	50,6	100
06.03.2022	21:20:12	77,4	111,6	0	51,6	100
06.03.2022	21:21:12	77,4	110,5	0	51,2	100
06.03.2022	21:22:12	77,3	109,5	0	50,6	100
06.03.2022	21:23:12	77,3	108,7	0	52,4	100
06.03.2022	21:24:12	77,3	107,8	0	51	100
06.03.2022	21:25:12	77,3	106,9	0	52,2	100
06.03.2022	21:26:12	77,3	106	0	51,4	100
06.03.2022	21:27:12	77,3	105,1	0	51	100
06.03.2022	21:28:12	77,2	104,3	0	50,5	100
06.03.2022	21:29:12	77,2	103,6	0	52	100
06.03.2022	21:30:12	77,1	102,7	0	51,2	100
06.03.2022	21:31:12	77,1	102,1	0	51,1	100
06.03.2022	21:32:12	77,1	101,5	0	52,8	100
06.03.2022	21:33:12	77	100,7	0	51,4	100
06.03.2022	21:34:12	77	100,1	0	51,5	100
06.03.2022	21:35:12	77	99,4	0	47,7	100
06.03.2022	21:36:12	77	99	0	51,4	100
06.03.2022	21:37:12	76,9	98,3	0	46,4	100
06.03.2022	21:38:12	76,8	97,7	0	48	100
06.03.2022	21:39:12	76,8	97,1	0	50,7	100
06.03.2022	21:40:12	76,8	96,6	0	50,7	100
06.03.2022	21:41:12	76,7	96,1	0	50,5	100
06.03.2022	21:42:12	76,7	95,7	0	52,7	100
06.03.2022	21:43:12	76,6	95,2	0	51,1	100
06.03.2022	21:44:12	76,6	94,8	0	49,7	100
06.03.2022	21:45:12	76,6	94,4	0	51,1	100
06.03.2022	21:46:12	76,5	94	0	51,4	100
06.03.2022	21:47:12	76,5	93,5	0	51,5	100
06.03.2022	21:48:12	76,4	93	0	50,8	100
06.03.2022	21:49:12	76,4	92,7	0	52,3	100
06.03.2022	21:50:12	76,3	92,5	0	50,1	100
06.03.2022	21:51:12	76,2	92	0	50	100
06.03.2022	21:52:12	76,2	91,7	0	54,3	100
06.03.2022	21:53:12	76,2	91,2	0	52	100
06.03.2022	21:54:12	76,1	90,9	0	50,3	100
06.03.2022	21:55:12	76,1	90,5	0	48,7	100
06.03.2022	21:56:12	76	90,3	0	49,6	100
06.03.2022	21:57:12	76	90	0	53,9	100
06.03.2022	21:58:12	75,9	89,6	0	50,2	100
06.03.2022	21:59:12	75,6	89,4	0	51	100
06.03.2022	22:00:12	73,8	88,8	30	56,9	100
06.03.2022	22:01:12	71,7	87,4	52	80,9	100
06.03.2022	22:02:12	70,4	130,2	47	85,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	22:03:12	69,8	164	37	81,2	100
06.03.2022	22:04:12	69,3	163,7	38	82,5	100
06.03.2022	22:05:12	69	218,8	38	79,4	100
06.03.2022	22:06:12	69	277,7	41	78,1	100
06.03.2022	22:07:12	69,2	335,1	47	77,9	100
06.03.2022	22:08:12	69,4	393,6	47	81,9	100
06.03.2022	22:09:12	69,9	479,3	47	81,1	100
06.03.2022	22:10:12	70,6	589,1	48	79,8	100
06.03.2022	22:11:12	71,8	667,2	48	81,6	100
06.03.2022	22:12:12	73	697,2	47	82,4	100
06.03.2022	22:13:12	74,2	705,3	42	84	100
06.03.2022	22:14:12	75,5	709,7	38	80,7	100
06.03.2022	22:15:12	76,6	699,5	35	80,1	100
06.03.2022	22:16:12	77,5	684,8	34	78,2	100
06.03.2022	22:17:12	78,4	683,9	32	79,2	100
06.03.2022	22:18:12	79,9	685	30	77,7	100
06.03.2022	22:19:12	81,7	630,9	33	80,1	100
06.03.2022	22:20:12	83,4	553,4	32	82,4	100
06.03.2022	22:21:12	84,6	484,4	32	83,2	100
06.03.2022	22:22:12	85,7	423,8	30	92,1	100
06.03.2022	22:23:12	86,4	374,8	30	101,9	100
06.03.2022	22:24:12	86,9	336,6	30	108,1	100
06.03.2022	22:25:12	87,2	307	30	125,8	100
06.03.2022	22:26:12	87,3	285,8	30	128,1	100
06.03.2022	22:27:12	87,3	266,8	30	126,1	100
06.03.2022	22:28:12	87,1	250,1	30	129,2	100
06.03.2022	22:29:12	86,9	235,3	30	128,2	100
06.03.2022	22:30:12	86,6	222,5	30	129,4	100
06.03.2022	22:31:12	86,4	210,9	30	129,8	100
06.03.2022	22:32:12	86,1	201,1	0	61,1	100
06.03.2022	22:33:12	85,8	193,3	0	53,3	100
06.03.2022	22:34:12	85,6	186,1	0	53,4	100
06.03.2022	22:35:12	85,3	179,8	0	54,6	100
06.03.2022	22:36:12	85	174	0	53,1	100
06.03.2022	22:37:12	84,7	168,7	0	52,7	100
06.03.2022	22:38:12	84,4	164,1	0	53,9	100
06.03.2022	22:39:12	84,2	159,8	0	53,2	100
06.03.2022	22:40:12	83,8	156	0	49,5	100
06.03.2022	22:41:12	83,6	152,4	0	50,1	100
06.03.2022	22:42:12	83,3	149,4	0	51,9	100
06.03.2022	22:43:12	83	146,3	0	47,4	100
06.03.2022	22:44:12	82,8	143,5	0	53	100
06.03.2022	22:45:12	82,6	140,7	0	52,1	100
06.03.2022	22:46:12	82,3	138,4	0	52,4	100
06.03.2022	22:47:12	82,1	136,2	0	52,3	100
06.03.2022	22:48:12	81,8	134	0	49,4	100
06.03.2022	22:49:12	81,7	132	0	52,4	100
06.03.2022	22:50:12	81,4	130,1	0	51,5	100
06.03.2022	22:51:12	81,2	128,3	0	55,9	100
06.03.2022	22:52:12	81	126,4	0	51,1	100
06.03.2022	22:53:12	80,7	124,9	0	51,1	100
06.03.2022	22:54:12	80,7	123,1	0	51	100
06.03.2022	22:55:12	80,4	121,9	0	51	100
06.03.2022	22:56:12	80,1	120,5	0	50,7	100
06.03.2022	22:57:12	80	119,3	0	51	100
06.03.2022	22:58:12	79,7	117,8	0	51,4	100
06.03.2022	22:59:12	79,6	116,6	0	50,7	100
06.03.2022	23:00:12	79,4	115,6	0	51,6	100
06.03.2022	23:01:12	79,2	114,4	0	51,7	100
06.03.2022	23:02:12	79	113,4	0	51,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
06.03.2022	23:03:12	78,9	112,4	0	51,2	100
06.03.2022	23:04:12	78,6	111,3	0	51,1	100
06.03.2022	23:05:12	78,5	110,3	0	51,9	100
06.03.2022	23:06:12	78,3	109,6	0	51,8	100
06.03.2022	23:07:12	78,1	108,6	0	51,8	100
06.03.2022	23:08:12	78	107,7	0	53,2	100
06.03.2022	23:09:12	77,8	106,8	0	50,4	100
06.03.2022	23:10:12	77,7	105,9	0	50,9	100
06.03.2022	23:11:12	77,5	105,4	0	51,5	100
06.03.2022	23:12:12	77,4	104,4	0	51,6	100
06.03.2022	23:13:12	77,2	103,7	0	51,8	100
06.03.2022	23:14:12	77,1	103,1	0	51,2	100
06.03.2022	23:15:12	76,9	102,4	0	50,7	100
06.03.2022	23:16:12	76,8	101,5	0	51,2	100
06.03.2022	23:17:12	76,6	101,1	0	50,3	100
06.03.2022	23:18:12	76,5	100,2	0	51,5	100
06.03.2022	23:19:12	76,4	99,7	0	50,2	100
06.03.2022	23:20:12	76,3	99	0	49,2	100
06.03.2022	23:21:12	76,1	98,5	0	50,4	100
06.03.2022	23:22:12	76,1	97,8	0	50,2	100
06.03.2022	23:23:12	75,9	97,3	0	49,2	100
06.03.2022	23:24:12	75,9	96,8	0	50,2	100
06.03.2022	23:25:12	75,6	96,3	0	48,6	100
06.03.2022	23:26:12	75,6	95,8	0	50,7	100
06.03.2022	23:27:12	75,5	95,3	0	49,3	100
06.03.2022	23:28:12	75,4	94,8	0	50,3	100
06.03.2022	23:29:12	75,4	94,4	0	50,3	100
06.03.2022	23:30:12	75,3	93,8	0	50,1	100
06.03.2022	23:31:12	75,2	93,4	0	50,8	100
06.03.2022	23:32:12	75,2	92,9	0	50,1	100
06.03.2022	23:33:12	75,1	92,5	0	50,3	100
06.03.2022	23:34:12	75,1	92,2	0	50,3	100
06.03.2022	23:35:12	75,1	91,7	0	50,4	100
06.03.2022	23:36:12	75,1	91,3	0	50,2	100
06.03.2022	23:37:12	75	91,1	0	50,7	100
06.03.2022	23:38:12	75	90,7	0	51,4	100
06.03.2022	23:39:12	74,9	90,3	0	50,2	100
06.03.2022	23:40:12	74,9	90	0	49,8	100
06.03.2022	23:41:12	74,9	89,8	0	50,3	100
06.03.2022	23:42:12	74,9	89,3	0	50,2	100
06.03.2022	23:43:12	74,9	89	0	51,1	100
06.03.2022	23:44:12	74,9	88,8	0	50,2	100
06.03.2022	23:45:12	74,8	88,6	0	49,8	100
06.03.2022	23:46:12	74,8	88,3	0	50,1	100
06.03.2022	23:47:12	74,8	88,1	0	50,4	100
06.03.2022	23:48:12	74,7	87,8	0	50,3	100
06.03.2022	23:49:12	74,7	87,6	0	51	100
06.03.2022	23:50:12	74,6	87,3	0	49,9	100
06.03.2022	23:51:12	74,6	87,1	0	54,3	100
06.03.2022	23:52:12	74,6	86,8	0	51,1	100
06.03.2022	23:53:12	74,6	86,6	0	49,7	100
06.03.2022	23:54:12	74,5	86,5	0	50,2	100
06.03.2022	23:55:12	74,5	86,4	0	50	100
06.03.2022	23:56:12	74,5	86,1	0	49,3	100
06.03.2022	23:57:12	74,5	86	0	50	100
06.03.2022	23:58:12	74,5	85,8	0	50,1	100
06.03.2022	23:59:12	74,4	85,5	0	50,1	100
07.03.2022	00:00:12	74,4	85,3	0	49,8	100
07.03.2022	00:03:12	74,3	84,7	0	49,2	100
07.03.2022	00:04:12	74,3	84,4	0	49,9	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	00:05:12	74,2	84,2	0	50,5	100
07.03.2022	00:06:12	74,2	84,1	0	47,3	100
07.03.2022	00:07:12	74,2	84	0	54	100
07.03.2022	00:08:12	74,1	83,8	0	51,9	100
07.03.2022	00:09:12	74,1	83,6	0	50,9	100
07.03.2022	00:10:12	74,1	83,3	0	50,4	100
07.03.2022	00:11:12	74	83,1	0	47,3	100
07.03.2022	00:12:12	74	83	0	46,4	100
07.03.2022	00:13:12	73,9	82,9	0	47,3	100
07.03.2022	00:14:12	73,9	82,7	30	57	100
07.03.2022	00:15:12	73,8	81,6	48	74,9	100
07.03.2022	00:16:12	73,8	112,4	55	79,5	100
07.03.2022	00:17:12	74	163	37	79,9	100
07.03.2022	00:18:12	74,2	160,4	36	81,3	100
07.03.2022	00:19:12	74,4	208,9	33	81,8	100
07.03.2022	00:20:12	74,8	274,6	33	81,2	100
07.03.2022	00:21:12	75,3	324,2	32	81,8	100
07.03.2022	00:22:12	75,9	374	33	80,6	100
07.03.2022	00:23:12	76,7	439,2	33	78,9	100
07.03.2022	00:24:12	77,5	478,9	31	80,1	100
07.03.2022	00:25:12	78,6	515,9	32	80,1	100
07.03.2022	00:26:12	79,9	572,8	30	90	100
07.03.2022	00:27:12	81,3	552,5	33	80,8	100
07.03.2022	00:28:12	82,5	497,9	33	78,9	100
07.03.2022	00:29:12	83,4	439,9	32	80,2	100
07.03.2022	00:30:12	84,1	389,1	30	95	100
07.03.2022	00:31:12	84,7	346,7	30	106,3	100
07.03.2022	00:32:12	85,1	311,7	30	113,4	100
07.03.2022	00:33:12	85,3	283,7	30	127,6	100
07.03.2022	00:34:12	85,5	263,6	30	128,5	100
07.03.2022	00:35:12	85,7	246	30	136,5	100
07.03.2022	00:36:12	85,9	230,2	30	127,9	100
07.03.2022	00:37:12	85,9	215,2	30	129,1	100
07.03.2022	00:38:12	86	201,2	30	129,2	100
07.03.2022	00:39:12	86,1	189	30	130	100
07.03.2022	00:40:12	86,1	178,6	0	55,1	100
07.03.2022	00:41:12	86,1	172	0	53,3	100
07.03.2022	00:42:12	86,2	166,5	0	52,2	100
07.03.2022	00:43:12	86,1	161,4	0	52,8	100
07.03.2022	00:44:12	86,1	157	0	51,9	100
07.03.2022	00:45:12	86,1	153,1	0	56,1	100
07.03.2022	00:46:12	86,1	149,5	0	50,8	100
07.03.2022	00:47:12	86,1	146,1	0	52,6	100
07.03.2022	00:48:12	86	143,1	0	52,1	100
07.03.2022	00:49:12	86	140,3	0	51,3	100
07.03.2022	00:50:12	86	137,7	0	51,7	100
07.03.2022	00:51:12	85,9	135,3	0	56,2	100
07.03.2022	00:52:12	85,8	133	0	51,7	100
07.03.2022	00:53:12	85,8	130,8	0	51,2	100
07.03.2022	00:54:12	85,8	128,7	0	52,8	100
07.03.2022	00:55:12	85,8	127	0	50,4	100
07.03.2022	00:56:12	85,7	125,1	0	51,3	100
07.03.2022	00:57:12	85,6	123,4	0	51,2	100
07.03.2022	00:58:12	85,6	121,9	0	49,8	100
07.03.2022	00:59:12	85,5	120,5	0	51,1	100
07.03.2022	01:00:12	85,5	119	0	50,4	100
07.03.2022	01:01:12	85,4	117,7	0	50,6	100
07.03.2022	01:02:12	85,4	116,5	0	50,3	100
07.03.2022	01:03:12	85,4	115,4	0	51	100
07.03.2022	01:04:12	85,2	114,3	0	51,2	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	01:05:12	85,2	113,2	0	51,7	100
07.03.2022	01:06:12	85,1	112,1	0	51,3	100
07.03.2022	01:07:12	85,1	111,1	0	51,2	100
07.03.2022	01:08:12	85	110,3	0	49,9	100
07.03.2022	01:09:12	84,9	109,5	0	51,3	100
07.03.2022	01:10:12	84,9	108,4	0	50,2	100
07.03.2022	01:11:12	84,8	107,7	0	51,6	100
07.03.2022	01:12:12	84,6	106,9	0	55,4	100
07.03.2022	01:13:12	84,7	106,2	0	54,7	100
07.03.2022	01:14:12	84,7	105,5	0	52,2	100
07.03.2022	01:15:12	84,5	104,7	0	54,1	100
07.03.2022	01:16:12	84,4	104,2	0	51,7	100
07.03.2022	01:17:12	84,4	103,5	0	50,2	100
07.03.2022	01:18:12	84,4	102,9	0	50,5	100
07.03.2022	01:19:12	84,3	102,2	0	50,4	100
07.03.2022	01:20:12	84,2	101,7	0	52,6	100
07.03.2022	01:21:12	84,2	101,1	0	51,4	100
07.03.2022	01:22:12	84,1	100,6	0	49,7	100
07.03.2022	01:23:12	83,9	100	0	52,1	100
07.03.2022	01:24:12	83,9	99,5	0	52	100
07.03.2022	01:25:12	83,8	99	0	51,1	100
07.03.2022	01:26:12	83,8	98,6	0	50	100
07.03.2022	01:27:12	83,7	98,3	0	49,8	100
07.03.2022	01:28:12	83,6	97,9	0	49,8	100
07.03.2022	01:29:12	83,6	97,6	0	50,3	100
07.03.2022	01:30:12	83,5	97,1	0	50,6	100
07.03.2022	01:31:12	83,4	96,7	0	50,3	100
07.03.2022	01:32:12	83,4	96,3	0	51,2	100
07.03.2022	01:33:12	83,3	95,9	0	50,5	100
07.03.2022	01:34:12	83,2	95,6	0	49,4	100
07.03.2022	01:35:12	83	95,3	0	50,1	100
07.03.2022	01:36:12	83,1	94,8	0	50,2	100
07.03.2022	01:37:12	83	94,5	0	52,9	100
07.03.2022	01:38:12	82,8	94,3	0	50,5	100
07.03.2022	01:39:12	82,8	94	0	51,1	100
07.03.2022	01:40:12	82,7	93,6	0	50,5	100
07.03.2022	01:41:12	82,7	93,4	0	50,7	100
07.03.2022	01:42:12	82,5	93	0	49,9	100
07.03.2022	01:43:12	82,6	92,6	0	51,7	100
07.03.2022	01:44:12	82,5	92,4	0	50,2	100
07.03.2022	01:45:12	82,4	92,2	0	49,5	100
07.03.2022	01:46:12	82,4	91,9	0	50,3	100
07.03.2022	01:47:12	82,1	91,6	0	48,9	100
07.03.2022	01:48:12	82,1	91,2	0	50,1	100
07.03.2022	01:49:12	82	91,1	0	49,4	100
07.03.2022	01:50:12	81,8	90,7	0	51,4	100
07.03.2022	01:51:12	81,9	90,4	0	50,4	100
07.03.2022	01:52:12	81,7	90,2	0	51	100
07.03.2022	01:53:12	81,7	90	0	49,8	100
07.03.2022	01:54:12	81,6	89,9	0	46,9	100
07.03.2022	01:55:12	81,5	89,6	0	49,2	100
07.03.2022	01:56:12	81,4	89,1	0	51,8	100
07.03.2022	01:57:12	81,4	89	0	50,7	100
07.03.2022	01:58:12	81,3	88,9	0	50,3	100
07.03.2022	01:59:12	81,3	88,7	0	51,2	100
07.03.2022	02:00:12	81,1	88,5	0	47,3	100
07.03.2022	02:01:12	81,1	88,2	0	49,1	100
07.03.2022	02:02:12	80,9	88,1	0	51,2	100
07.03.2022	02:03:12	80,9	87,9	0	48,4	100
07.03.2022	02:04:12	80,8	87,8	0	49,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	02:05:12	80,8	87,7	0	50,1	100
07.03.2022	02:06:12	80,7	87,4	0	50,3	100
07.03.2022	02:07:12	80,6	87,1	0	47,1	100
07.03.2022	02:08:12	80,5	86,9	0	49,9	100
07.03.2022	02:09:12	80,4	86,7	0	50,1	100
07.03.2022	02:10:12	80,3	86,7	0	49	100
07.03.2022	02:11:12	80,3	86,5	0	51,1	100
07.03.2022	02:12:12	80,2	86,3	0	49,1	100
07.03.2022	02:13:12	79	86	0	50,1	100
07.03.2022	02:14:12	75,8	85,6	0	48,3	100
07.03.2022	02:15:12	73,3	85,3	30	88,1	100
07.03.2022	02:16:12	71,9	85,3	50	84,9	100
07.03.2022	02:17:12	71	140	41	99,4	100
07.03.2022	02:18:12	70,5	163,6	38	76,5	100
07.03.2022	02:19:12	70,1	166,9	38	80,3	100
07.03.2022	02:20:12	70	227	39	81,9	100
07.03.2022	02:21:12	70	296,1	43	80,8	100
07.03.2022	02:22:12	70,2	365	47	80	100
07.03.2022	02:23:12	70,6	456,5	48	79,4	100
07.03.2022	02:24:12	71,4	576,2	47	82,1	100
07.03.2022	02:25:12	72,5	670,3	48	80,4	100
07.03.2022	02:26:12	74	728,9	47	82,5	100
07.03.2022	02:27:12	75,5	760,8	42	81,6	100
07.03.2022	02:28:12	76,9	759,6	38	80,8	100
07.03.2022	02:29:12	78,9	738,4	32	81,4	100
07.03.2022	02:30:12	81	699,1	34	77,8	100
07.03.2022	02:31:12	83	597,3	32	88,7	100
07.03.2022	02:32:12	84,6	510,3	32	81	100
07.03.2022	02:33:12	85,7	441,8	32	78,6	100
07.03.2022	02:34:12	86,5	387,8	30	93,3	100
07.03.2022	02:35:12	87,1	345,2	30	106,5	100
07.03.2022	02:36:12	87,5	310,3	30	114,2	100
07.03.2022	02:37:12	87,8	284,1	30	132,5	100
07.03.2022	02:38:12	88,2	264,9	30	128,6	100
07.03.2022	02:39:12	88,4	248,2	30	128,9	100
07.03.2022	02:40:12	88,5	233,1	30	130	100
07.03.2022	02:41:12	88,7	220	30	128,1	100
07.03.2022	02:42:12	88,8	208,6	30	127,5	100
07.03.2022	02:43:12	89	198,4	30	129,1	100
07.03.2022	02:44:12	89	189,9	0	54,5	100
07.03.2022	02:45:12	89,1	183,5	0	48,5	100
07.03.2022	02:46:12	89,2	177,8	0	53,9	100
07.03.2022	02:47:12	89,2	172,6	0	52,3	100
07.03.2022	02:48:12	89,3	167,9	0	40,3	100
07.03.2022	02:49:12	89,2	163,4	0	54,5	100
07.03.2022	02:50:12	89,3	159,8	0	59,1	100
07.03.2022	02:51:12	89,2	156,2	0	56,4	100
07.03.2022	02:52:12	89,4	152,8	0	53,5	100
07.03.2022	02:53:12	89,3	149,9	0	50,4	100
07.03.2022	02:54:12	89,1	147	0	53,2	100
07.03.2022	02:55:12	89,2	144,5	0	50,5	100
07.03.2022	02:56:12	89,2	142,2	0	51,1	100
07.03.2022	02:57:12	89,2	140	0	53,2	100
07.03.2022	02:58:12	89,1	137,9	0	52,8	100
07.03.2022	02:59:12	89,1	136,1	0	51,1	100
07.03.2022	03:00:12	89,1	134,4	0	52,5	100
07.03.2022	03:01:12	89	132,7	0	49,5	100
07.03.2022	03:02:12	88,9	131,1	0	51,7	100
07.03.2022	03:03:12	88,8	129,5	0	53,9	100
07.03.2022	03:04:12	88,7	128,1	0	52,2	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	03:05:12	88,6	126,8	0	52,2	100
07.03.2022	03:06:12	88,6	125,4	0	49,3	100
07.03.2022	03:07:12	88,5	124,2	0	51,4	100
07.03.2022	03:08:12	88,4	123	0	55,4	100
07.03.2022	03:09:12	88,3	122	0	50,1	100
07.03.2022	03:10:12	88,2	120,9	0	51,3	100
07.03.2022	03:11:12	88,1	119,8	0	51,8	100
07.03.2022	03:12:12	88	119	0	52,3	100
07.03.2022	03:13:12	87,9	117,9	0	51,6	100
07.03.2022	03:14:12	87,8	117,1	0	52,8	100
07.03.2022	03:15:12	87,7	116,1	0	57,3	100
07.03.2022	03:16:12	87,6	115,1	0	51,8	100
07.03.2022	03:17:12	87,5	114,3	0	49,9	100
07.03.2022	03:18:12	87,4	113,6	0	51,2	100
07.03.2022	03:19:12	87,2	112,9	0	56,6	100
07.03.2022	03:20:12	87,1	112	0	51,7	100
07.03.2022	03:21:12	87	111,5	0	51,1	100
07.03.2022	03:22:12	86,9	110,8	0	49,6	100
07.03.2022	03:23:12	86,7	110,3	0	52	100
07.03.2022	03:24:12	86,7	109,6	0	51,1	100
07.03.2022	03:25:12	86,6	109,3	0	58,8	100
07.03.2022	03:26:12	86,4	108,5	0	51,1	100
07.03.2022	03:27:12	86,3	107,9	0	53	100
07.03.2022	03:28:12	86,2	107,4	0	51,1	100
07.03.2022	03:29:12	86	106,8	0	50,9	100
07.03.2022	03:30:12	86	106,4	0	51,3	100
07.03.2022	03:31:12	85,9	105,7	0	51	100
07.03.2022	03:32:12	85,7	105,3	0	48,2	100
07.03.2022	03:33:12	85,6	104,8	0	50,8	100
07.03.2022	03:34:12	85,5	104,4	0	52,8	100
07.03.2022	03:35:12	85,3	104	0	50,9	100
07.03.2022	03:36:12	85,3	103,4	0	49,9	100
07.03.2022	03:37:12	85,2	103,1	0	50,5	100
07.03.2022	03:38:12	85,1	102,6	0	47,5	100
07.03.2022	03:39:12	84,9	102,1	0	51,2	100
07.03.2022	03:40:12	84,9	101,8	0	51,3	100
07.03.2022	03:41:12	84,8	101,2	0	51,6	100
07.03.2022	03:42:12	84,7	100,9	0	51,2	100
07.03.2022	03:43:12	84,6	100,5	0	49,5	100
07.03.2022	03:44:12	84,5	100,2	0	51,3	100
07.03.2022	03:45:12	84,4	99,9	0	49,3	100
07.03.2022	03:46:12	84,3	99,5	0	51,2	100
07.03.2022	03:47:12	84,2	99,1	0	54,2	100
07.03.2022	03:48:12	84	98,9	0	49,8	100
07.03.2022	03:49:12	84	98,7	0	50,8	100
07.03.2022	03:50:12	84	98,4	0	51,4	100
07.03.2022	03:51:12	83,8	98	0	49,4	100
07.03.2022	03:52:12	83,7	97,6	0	51,4	100
07.03.2022	03:53:12	83,6	97,2	0	50,5	100
07.03.2022	03:54:12	83,5	96,8	0	47,4	100
07.03.2022	03:55:12	83,5	96,6	0	48,2	100
07.03.2022	03:56:12	83,4	96,1	0	50,9	100
07.03.2022	03:57:12	83,3	95,8	0	49,8	100
07.03.2022	03:58:12	83,2	95,7	0	50,8	100
07.03.2022	03:59:12	83,1	95,6	0	50,5	100
07.03.2022	04:00:12	83	95,5	0	48,4	100
07.03.2022	04:01:12	83	95,1	0	49	100
07.03.2022	04:02:12	82,9	94,7	0	49,4	100
07.03.2022	04:03:12	82,7	94,5	0	51,6	100
07.03.2022	04:04:12	82,6	94,2	0	52,8	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	04:05:12	82,6	93,8	0	47,1	100
07.03.2022	04:06:12	82,5	93,5	0	50,3	100
07.03.2022	04:07:12	82,4	93,5	0	51,3	100
07.03.2022	04:08:12	82,3	93,2	0	50,1	100
07.03.2022	04:09:12	82,3	93,1	0	51,4	100
07.03.2022	04:10:12	82,1	93	0	47,6	100
07.03.2022	04:11:12	82,1	92,8	0	50,7	100
07.03.2022	04:12:12	82	92,5	0	50,7	100
07.03.2022	04:13:12	82	92,3	0	51,3	100
07.03.2022	04:14:12	81,8	92,1	0	49,5	100
07.03.2022	04:15:12	81,8	92,1	0	48,3	100
07.03.2022	04:16:12	81,7	91,8	0	50	100
07.03.2022	04:17:12	81,6	91,5	0	49,8	100
07.03.2022	04:18:12	81,6	91,3	0	53,3	100
07.03.2022	04:19:12	81,5	91	0	51	100
07.03.2022	04:20:12	81,4	91	0	50,8	100
07.03.2022	04:21:12	81,3	90,7	0	50,6	100
07.03.2022	04:22:12	81,2	90,4	0	50,5	100
07.03.2022	04:23:12	81,1	90,2	0	49,5	100
07.03.2022	04:24:12	81	90	0	55	100
07.03.2022	04:25:12	81,1	89,8	0	50,3	100
07.03.2022	04:26:12	80,9	89,8	0	50,4	100
07.03.2022	04:27:12	80,9	89,6	0	50,9	100
07.03.2022	04:28:12	80,8	89,4	0	49,1	100
07.03.2022	04:29:12	80,7	89,1	0	49,3	100
07.03.2022	04:30:12	80,6	88,8	0	53,2	100
07.03.2022	04:31:12	80,5	88,6	0	50,5	100
07.03.2022	04:32:12	80,4	88,6	0	51,6	100
07.03.2022	04:33:12	80,4	88,4	0	54,7	100
07.03.2022	04:34:12	80,3	88,1	0	49,6	100
07.03.2022	04:35:12	80,2	87,9	0	49,3	100
07.03.2022	04:36:12	80,1	87,7	0	49,1	100
07.03.2022	04:37:12	80,1	87,5	0	49	100
07.03.2022	04:38:12	80	87,4	0	52	100
07.03.2022	04:39:12	79,9	87,3	0	50,5	100
07.03.2022	04:40:12	79,9	87,1	0	52,4	100
07.03.2022	04:41:12	79,8	86,9	0	51,4	100
07.03.2022	04:42:12	79,7	86,6	0	51,5	100
07.03.2022	04:43:12	79,7	86,4	0	50,3	100
07.03.2022	04:44:12	79,5	86,3	0	50,1	100
07.03.2022	04:45:12	79,5	86,2	0	47,8	100
07.03.2022	04:46:12	79,4	86,2	0	51,2	100
07.03.2022	04:47:12	79,3	86,1	0	49	100
07.03.2022	04:48:12	79,3	85,8	0	48,1	100
07.03.2022	04:49:12	79,2	85,7	0	50,1	100
07.03.2022	04:50:12	79,1	85,7	0	49,1	100
07.03.2022	04:51:12	79	85,6	0	49,2	100
07.03.2022	04:52:12	78,9	85,4	0	48,7	100
07.03.2022	04:53:12	78,9	85,2	0	49,5	100
07.03.2022	04:54:12	78,8	85,2	0	52,6	100
07.03.2022	04:55:12	78,7	85,1	0	47,8	100
07.03.2022	04:56:12	78,6	84,9	0	50,7	100
07.03.2022	04:57:12	78,6	84,9	0	50,9	100
07.03.2022	04:58:12	78,5	84,8	0	50,1	100
07.03.2022	04:59:12	78,5	84,6	0	50,5	100
07.03.2022	05:00:12	78,3	84,4	0	49,5	100
07.03.2022	05:01:12	78,3	84,1	0	50,3	100
07.03.2022	05:02:12	78,2	84	0	50,2	100
07.03.2022	05:03:12	78,1	84	0	50,2	100
07.03.2022	05:04:12	78	83,9	0	50,1	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	05:05:12	78	83,9	0	48,1	100
07.03.2022	05:06:12	77,9	83,7	0	50,3	100
07.03.2022	05:07:12	77,8	83,6	0	51,7	100
07.03.2022	05:08:12	77,7	83,5	0	50,8	100
07.03.2022	05:09:12	77,7	83,4	0	50,3	100
07.03.2022	05:10:12	77,7	83,3	0	50	100
07.03.2022	05:11:12	77,5	83,3	0	48,2	100
07.03.2022	05:12:12	77,4	82,9	0	50,1	100
07.03.2022	05:13:12	77,4	82,7	0	48,5	100
07.03.2022	05:14:12	77,3	82,7	0	50,4	100
07.03.2022	05:15:12	77,2	82,6	0	49,1	100
07.03.2022	05:16:12	77,1	82,5	0	49,9	100
07.03.2022	05:17:12	77,1	82,4	0	48,9	100
07.03.2022	05:18:12	77	82,3	0	50,4	100
07.03.2022	05:19:12	76,9	82,3	0	49,8	100
07.03.2022	05:20:12	76,8	82,1	0	49,8	100
07.03.2022	05:21:12	76,8	81,8	0	49,6	100
07.03.2022	05:22:12	76,6	81,6	0	50,2	100
07.03.2022	05:23:12	76,7	81,5	0	51,1	100
07.03.2022	05:24:12	76,6	81,5	0	49,5	100
07.03.2022	05:25:12	76,5	81,3	0	49,1	100
07.03.2022	05:26:12	76,4	81,3	0	49,4	100
07.03.2022	05:27:12	76,4	81,3	0	50,1	100
07.03.2022	05:28:12	76,3	81,1	0	49,6	100
07.03.2022	05:29:12	76,2	81,1	0	49,9	100
07.03.2022	05:30:12	76,2	80,8	0	50	100
07.03.2022	05:31:12	76,1	80,8	0	49	100
07.03.2022	05:32:12	76	80,7	0	50,2	100
07.03.2022	05:33:12	75,9	80,6	0	50,1	100
07.03.2022	05:34:12	75,8	80,5	0	49,5	100
07.03.2022	05:35:12	75,8	80,2	0	48,9	100
07.03.2022	05:36:12	75,7	80,2	0	50,8	100
07.03.2022	05:37:12	75,6	80	0	49,8	100
07.03.2022	05:38:12	75,6	80	0	48,9	100
07.03.2022	05:39:12	75,5	79,9	0	50	100
07.03.2022	05:40:12	75,4	79,8	0	49,8	100
07.03.2022	05:41:12	75,4	79,7	0	50	100
07.03.2022	05:42:12	75,3	79,6	0	49,4	100
07.03.2022	05:43:12	75,2	79,5	0	49,5	100
07.03.2022	05:44:12	75,2	79,4	0	48,6	100
07.03.2022	05:45:12	75,1	79,4	0	50	100
07.03.2022	05:46:12	73,3	78,9	30	85,8	100
07.03.2022	05:47:12	70,7	77,5	48	78,7	100
07.03.2022	05:48:12	69,1	100,7	57	82,5	100
07.03.2022	05:49:12	68,3	162,4	37	80,6	100
07.03.2022	05:50:12	67,8	160,6	42	76,7	100
07.03.2022	05:51:12	67,5	181,3	47	82,3	100
07.03.2022	05:52:12	67,4	236,8	47	81,4	100
07.03.2022	05:53:12	67,6	299,3	48	79,7	100
07.03.2022	05:54:12	67,9	377,9	55	77,2	100
07.03.2022	05:55:12	68,6	513,5	67	82,9	100
07.03.2022	05:56:12	69,7	662,9	59	84,4	100
07.03.2022	05:57:12	71,4	741,4	49	86,4	100
07.03.2022	05:58:12	73	760,4	47	81,9	100
07.03.2022	05:59:12	74,7	783,2	43	83,2	100
07.03.2022	06:00:12	76,1	761,6	37	81,7	100
07.03.2022	06:01:12	77,4	739,3	37	81,4	100
07.03.2022	06:02:12	78,5	717,9	32	81,1	100
07.03.2022	06:03:12	79,4	704,2	30	80,4	100
07.03.2022	06:04:12	80,8	659,6	33	81,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	06:05:12	82,2	573,7	32	81,4	100
07.03.2022	06:06:12	83,7	501,1	32	80,5	100
07.03.2022	06:07:12	84,8	440,7	30	94,2	100
07.03.2022	06:08:12	85,6	391,3	30	97,7	100
07.03.2022	06:09:12	86,2	351,5	30	106,3	100
07.03.2022	06:10:12	86,7	319,6	30	124,1	100
07.03.2022	06:11:12	86,9	295,8	30	127,4	100
07.03.2022	06:12:12	87	275,6	30	126,7	100
07.03.2022	06:13:12	87	257,9	30	127	100
07.03.2022	06:14:12	86,9	242	30	127,9	100
07.03.2022	06:15:12	86,6	228,2	30	127,7	100
07.03.2022	06:16:12	86,5	215,8	30	127,9	100
07.03.2022	06:17:12	86,2	205,1	0	71,6	100
07.03.2022	06:18:12	85,9	197,7	0	54,5	100
07.03.2022	06:19:12	85,7	189,9	0	54,5	100
07.03.2022	06:20:12	85,4	182,7	0	53,1	100
07.03.2022	06:21:12	85,1	176,6	0	52,5	100
07.03.2022	06:22:12	84,9	171,1	0	53,9	100
07.03.2022	06:23:12	84,7	166,2	0	53,5	100
07.03.2022	06:24:12	84,4	161,7	0	53,3	100
07.03.2022	06:25:12	84,1	157,8	0	53,3	100
07.03.2022	06:26:12	83,8	154,2	0	53,2	100
07.03.2022	06:27:12	83,6	150,6	0	52,7	100
07.03.2022	06:28:12	83,3	147,6	0	52,9	100
07.03.2022	06:29:12	83,1	144,8	0	53,3	100
07.03.2022	06:30:12	83	142	0	53	100
07.03.2022	06:31:12	82,7	139,7	0	52,8	100
07.03.2022	06:32:12	82,6	137,6	0	53,4	100
07.03.2022	06:33:12	82,2	135,5	0	56,8	100
07.03.2022	06:34:12	82	133,3	0	53,2	100
07.03.2022	06:35:12	81,8	131,4	0	52,1	100
07.03.2022	06:36:12	81,6	129,7	0	51,3	100
07.03.2022	06:37:12	81,4	127,9	0	51,3	100
07.03.2022	06:38:12	81,2	126,3	0	52,9	100
07.03.2022	06:39:12	81	124,7	0	51,8	100
07.03.2022	06:40:12	80,8	123,3	0	52,3	100
07.03.2022	06:41:12	80,6	122	0	52,4	100
07.03.2022	06:42:12	80,4	120,5	0	51,7	100
07.03.2022	06:43:12	80,2	119,2	0	51,9	100
07.03.2022	06:44:12	80,1	118,1	0	51,3	100
07.03.2022	06:45:12	79,9	117	0	51,4	100
07.03.2022	06:46:12	79,7	115,9	0	52,2	100
07.03.2022	06:47:12	79,5	114,8	0	51,1	100
07.03.2022	06:48:12	79,4	113,7	0	51,9	100
07.03.2022	06:49:12	79,2	112,7	0	53,2	100
07.03.2022	06:50:12	79	111,7	0	53,1	100
07.03.2022	06:51:12	78,9	110,7	0	51,6	100
07.03.2022	06:52:12	78,7	110	0	50,3	100
07.03.2022	06:53:12	78,5	109,2	0	51,3	100
07.03.2022	06:54:12	78,3	108,3	0	51,9	100
07.03.2022	06:55:12	78,1	107,6	0	50,7	100
07.03.2022	06:56:12	78,1	106,9	0	53	100
07.03.2022	06:57:12	77,8	106,2	0	51,9	100
07.03.2022	06:58:12	77,7	105,5	0	51	100
07.03.2022	06:59:12	77,6	104,9	0	51,3	100
07.03.2022	07:00:12	77,4	104,1	0	51,8	100
07.03.2022	07:01:12	77,3	103,6	0	51,3	100
07.03.2022	07:02:12	77,1	102,9	0	51,4	100
07.03.2022	07:03:12	77	102,2	0	51,5	100
07.03.2022	07:04:12	76,9	101,8	0	52,3	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	07:05:12	76,8	101,3	0	51,1	100
07.03.2022	07:06:12	76,6	100,7	0	51,5	100
07.03.2022	07:07:12	76,5	100,1	0	51,6	100
07.03.2022	07:08:12	76,4	99,6	0	51	100
07.03.2022	07:09:12	76,3	99,2	0	51,2	100
07.03.2022	07:10:12	76,1	98,7	0	51,2	100
07.03.2022	07:11:12	76	98,2	0	50,2	100
07.03.2022	07:12:12	75,9	97,8	0	51,1	100
07.03.2022	07:13:12	75,8	97,2	0	51,1	100
07.03.2022	07:14:12	75,7	96,8	0	51,1	100
07.03.2022	07:15:12	75,6	96,4	0	50,9	100
07.03.2022	07:16:12	75,5	96	0	51,3	100
07.03.2022	07:17:12	75,4	95,5	0	51,2	100
07.03.2022	07:18:12	75,4	95,1	0	51,3	100
07.03.2022	07:19:12	75,3	94,6	0	50,6	100
07.03.2022	07:20:12	75,2	94,2	0	50,5	100
07.03.2022	07:21:12	75,2	93,8	0	50,5	100
07.03.2022	07:22:12	75,2	93,3	0	50,3	100
07.03.2022	07:23:12	75,2	93	0	50,8	100
07.03.2022	07:24:12	75,1	92,7	0	50,7	100
07.03.2022	07:25:12	75,1	92,2	0	50,9	100
07.03.2022	07:26:12	75	91,9	0	51,3	100
07.03.2022	07:27:12	75,1	91,7	0	50,6	100
07.03.2022	07:28:12	75	91,3	0	52,5	100
07.03.2022	07:29:12	75	90,9	0	51,2	100
07.03.2022	07:30:12	75	90,6	0	51,1	100
07.03.2022	07:31:12	75	90,3	0	50,6	100
07.03.2022	07:32:12	74,8	90,1	0	51,1	100
07.03.2022	07:33:12	74,9	89,8	0	51	100
07.03.2022	07:34:12	74,9	89,5	0	50,9	100
07.03.2022	07:35:12	74,8	89,4	0	50,8	100
07.03.2022	07:36:12	74,8	89,2	0	50,7	100
07.03.2022	07:37:12	74,8	89	0	50,5	100
07.03.2022	07:38:12	74,8	88,8	0	50,4	100
07.03.2022	07:39:12	74,7	88,5	0	50,7	100
07.03.2022	07:40:12	74,7	88,4	0	50,6	100
07.03.2022	07:41:12	74,7	88,3	0	50,3	100
07.03.2022	07:42:12	74,7	88,2	0	50,5	100
07.03.2022	07:43:12	74,6	88,1	0	52	100
07.03.2022	07:44:12	74,6	87,7	0	51,6	100
07.03.2022	07:45:12	74,6	87,5	0	50,6	100
07.03.2022	07:46:12	74,6	87,2	0	50,3	100
07.03.2022	07:47:12	74,4	87,1	0	50,2	100
07.03.2022	07:48:12	74,5	87	0	50,1	100
07.03.2022	07:49:12	74,4	86,9	0	50,5	100
07.03.2022	07:50:12	74,4	86,8	0	50,1	100
07.03.2022	07:51:12	74,4	86,8	0	50,9	100
07.03.2022	07:52:12	74,3	86,6	0	50,3	100
07.03.2022	07:53:12	74,3	86,4	0	51,7	100
07.03.2022	07:54:12	74,2	86,2	0	50,2	100
07.03.2022	07:55:12	74,3	86,1	0	50,4	100
07.03.2022	07:56:12	74,2	85,8	0	50,5	100
07.03.2022	07:57:12	74,1	85,7	0	50,2	100
07.03.2022	07:58:12	74,1	85,5	0	50,3	100
07.03.2022	07:59:12	74,1	85,5	0	50,3	100
07.03.2022	08:00:12	74	85,2	0	50,2	100
07.03.2022	08:01:12	74	84,9	0	50,2	100
07.03.2022	08:02:12	74	84,7	0	50,3	100
07.03.2022	08:03:12	73,9	84,5	0	50,2	100
07.03.2022	08:04:12	73,4	83,3	46	74,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	08:05:12	71,4	121,7	53	79,2	100
07.03.2022	08:06:12	69,7	166,2	36	83,7	100
07.03.2022	08:07:12	68,7	165	41	78,5	100
07.03.2022	08:08:12	68	215,8	47	77,8	100
07.03.2022	08:09:12	67,6	276	49	79,2	100
07.03.2022	08:10:12	67,6	336,8	54	78,2	100
07.03.2022	08:11:12	67,8	429,4	68	79,7	100
07.03.2022	08:12:12	68,3	578,5	67	81,3	100
07.03.2022	08:13:12	69,4	697,1	66	82,6	100
07.03.2022	08:14:12	70,8	743,5	59	82,1	100
07.03.2022	08:15:12	72,1	807,7	59	81,4	100
07.03.2022	08:16:12	73,7	814,5	55	83,8	100
07.03.2022	08:17:12	75	778,2	46	85,2	100
07.03.2022	08:18:12	76,1	764,8	41	81,8	100
07.03.2022	08:19:12	77,1	752	38	82,1	100
07.03.2022	08:20:12	77,9	736,6	37	80,4	100
07.03.2022	08:21:12	78,5	725,9	38	79,9	100
07.03.2022	08:22:12	79,1	711,8	32	82,2	100
07.03.2022	08:23:12	79,6	713,5	30	82,1	100
07.03.2022	08:24:12	79,9	627,9	33	80,6	100
07.03.2022	08:25:12	79,7	538,2	33	79,9	100
07.03.2022	08:26:12	79,2	461,7	33	78,5	100
07.03.2022	08:27:12	78,4	400,6	30	95,3	100
07.03.2022	08:28:12	77,6	355	30	107,2	100
07.03.2022	08:29:12	76,7	320,2	30	114,5	100
07.03.2022	08:30:12	75,9	293,7	30	128,3	100
07.03.2022	08:31:12	75	274,5	30	128,3	100
07.03.2022	08:32:12	74,3	257,1	30	128,5	100
07.03.2022	08:33:12	73,6	241,3	30	82,2	100
07.03.2022	08:34:12	73,1	235,5	30	73,4	100
07.03.2022	08:35:12	72,7	301,3	48	77,6	100
07.03.2022	08:36:12	72,7	377,7	47	81,4	100
07.03.2022	08:37:12	72,9	462,3	48	80,1	100
07.03.2022	08:38:12	73,5	559,6	47	79,8	100
07.03.2022	08:39:12	74,4	632,9	42	83,4	100
07.03.2022	08:40:12	75,4	686	38	81,6	100
07.03.2022	08:41:12	76,6	714	37	81,8	100
07.03.2022	08:42:12	77,6	724,6	37	80,6	100
07.03.2022	08:43:12	78,6	716	32	80,8	100
07.03.2022	08:44:12	79,8	697,7	31	79,9	100
07.03.2022	08:45:12	81,6	625,1	33	79,7	100
07.03.2022	08:46:12	83,1	539,7	33	80,6	100
07.03.2022	08:47:12	84,5	469,9	32	80,1	100
07.03.2022	08:48:12	85,4	412	30	96	100
07.03.2022	08:49:12	86	366,8	30	104,8	100
07.03.2022	08:50:12	86,5	332	30	110,2	100
07.03.2022	08:51:12	86,8	303,7	30	126,6	100
07.03.2022	08:52:12	86,9	282,8	30	127,7	100
07.03.2022	08:53:12	86,8	264,6	30	127,5	100
07.03.2022	08:54:12	86,6	248,4	30	128,4	100
07.03.2022	08:55:12	86,4	234	30	128,5	100
07.03.2022	08:56:12	86,1	220,8	30	128,2	100
07.03.2022	08:57:12	85,8	207,7	30	128,7	100
07.03.2022	08:58:12	85,6	196	0	60,1	100
07.03.2022	08:59:12	85,3	188,2	0	54,3	100
07.03.2022	09:00:12	85	182,1	0	53,4	100
07.03.2022	09:01:12	84,7	174,6	100	222,1	100
07.03.2022	09:02:12	84,4	162,5	0	65,3	100
07.03.2022	09:03:12	84,2	157,1	0	54,5	100
07.03.2022	09:04:12	83,9	154,2	0	55	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	09:05:12	83,6	151,6	0	55	100
07.03.2022	09:06:12	83,3	148,9	0	54,1	100
07.03.2022	09:07:12	83	146,6	0	53,5	100
07.03.2022	09:08:12	82,9	144,4	0	53,4	100
07.03.2022	09:09:12	82,6	142	0	52,7	100
07.03.2022	09:10:12	82,3	139,9	0	53	100
07.03.2022	09:11:12	82,1	137,7	0	52,7	100
07.03.2022	09:12:12	81,8	135,9	0	52,6	100
07.03.2022	09:13:12	81,5	134,1	0	52,4	100
07.03.2022	09:14:12	81,3	132,3	0	52,6	100
07.03.2022	09:15:12	81,1	130,8	0	52,4	100
07.03.2022	09:16:12	80,8	129,1	0	52,4	100
07.03.2022	09:17:12	80,6	127,6	0	52,2	100
07.03.2022	09:18:12	80,4	126,1	0	52,3	100
07.03.2022	09:19:12	80,2	124,6	0	52,2	100
07.03.2022	09:20:12	79,9	123,3	0	52,2	100
07.03.2022	09:21:12	79,7	122	0	52,2	100
07.03.2022	09:22:12	79,5	120,8	0	51,7	100
07.03.2022	09:23:12	79,3	119,6	0	51,8	100
07.03.2022	09:24:12	79,1	118,5	0	52,1	100
07.03.2022	09:25:12	78,9	117,5	0	51,6	100
07.03.2022	09:26:12	78,7	116,4	0	51,8	100
07.03.2022	09:27:12	78,5	115,4	0	53	100
07.03.2022	09:28:12	78,3	114,3	0	51,8	100
07.03.2022	09:29:12	78,1	113,3	0	53,2	100
07.03.2022	09:30:12	78	112,3	0	52,3	100
07.03.2022	09:31:12	77,8	111,5	0	52,3	100
07.03.2022	09:32:12	77,6	110,8	0	51,5	100
07.03.2022	09:33:12	77,5	110	0	52,4	100
07.03.2022	09:34:12	77,3	109,1	0	52,1	100
07.03.2022	09:35:12	77,1	108,6	0	51,6	100
07.03.2022	09:36:12	76,9	107,8	0	51,5	100
07.03.2022	09:37:12	76,8	107	0	51,3	100
07.03.2022	09:38:12	76,6	106,4	0	53	100
07.03.2022	09:39:12	76,5	105,6	0	51,8	100
07.03.2022	09:40:12	76,3	104,9	0	51,5	100
07.03.2022	09:41:12	76,2	104,4	0	51,6	100
07.03.2022	09:42:12	76,1	103,6	0	51,6	100
07.03.2022	09:43:12	75,9	103,2	0	51,3	100
07.03.2022	09:44:12	75,8	102,4	0	51,1	100
07.03.2022	09:45:12	75,7	101,9	0	51,5	100
07.03.2022	09:46:12	75,6	101,2	0	51,2	100
07.03.2022	09:47:12	75,4	100,8	0	51,2	100
07.03.2022	09:48:12	75,3	100,1	0	51,5	100
07.03.2022	09:49:12	75,2	99,7	0	51,1	100
07.03.2022	09:50:12	75,1	99	0	51,3	100
07.03.2022	09:51:12	75	98,7	0	51,2	100
07.03.2022	09:52:12	74,9	98,1	0	51,4	100
07.03.2022	09:53:12	74,8	97,5	0	51,1	100
07.03.2022	09:54:12	74,8	97,1	0	51,2	100
07.03.2022	09:55:12	74,7	96,7	0	50,9	100
07.03.2022	09:56:12	74,7	96,3	0	50,9	100
07.03.2022	09:57:12	74,6	95,7	0	50,7	100
07.03.2022	09:58:12	74,6	95,4	0	51,2	100
07.03.2022	09:59:12	74,6	95,1	0	50,2	100
07.03.2022	10:00:12	74,6	94,5	0	51,3	100
07.03.2022	10:01:12	74,4	94,1	0	50,5	100
07.03.2022	10:02:12	74,5	93,7	0	50,5	100
07.03.2022	10:03:12	74,5	93,3	0	50,7	100
07.03.2022	10:04:12	74,4	93,1	0	50,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	10:05:12	74,4	92,8	0	50	100
07.03.2022	10:06:12	74,3	92,4	0	50,2	100
07.03.2022	10:07:12	74,4	92	0	50,6	100
07.03.2022	10:08:12	74,4	91,7	0	50,6	100
07.03.2022	10:09:12	74,3	91,3	0	50,4	100
07.03.2022	10:10:12	74,3	91	0	50,5	100
07.03.2022	10:11:12	74,3	90,8	0	50,3	100
07.03.2022	10:12:12	74,3	90,5	0	50,3	100
07.03.2022	10:13:12	74,3	90,1	0	50,1	100
07.03.2022	10:14:12	74,2	89,8	0	50,4	100
07.03.2022	10:15:12	74,2	89,6	0	50,1	100
07.03.2022	10:16:12	74,1	89,4	0	51,1	100
07.03.2022	10:17:12	74,2	89,2	0	50,3	100
07.03.2022	10:18:12	74,1	88,9	0	50,3	100
07.03.2022	10:19:12	74,1	88,6	0	50,3	100
07.03.2022	10:20:12	74,1	88,4	0	50,4	100
07.03.2022	10:21:12	74,1	88,2	0	50,5	100
07.03.2022	10:22:12	74	88	0	50,2	100
07.03.2022	10:23:12	74	87,6	0	50,2	100
07.03.2022	10:24:12	74	87,3	0	50,2	100
07.03.2022	10:25:12	74	87,2	0	50,2	100
07.03.2022	10:26:12	73,9	87,2	0	50,2	100
07.03.2022	10:27:12	73,9	86,2	38	78,2	100
07.03.2022	10:28:12	73,9	118,6	54	78,1	100
07.03.2022	10:29:12	74	165	37	81	100
07.03.2022	10:30:12	74,3	160,1	34	85,7	100
07.03.2022	10:31:12	74,5	210,3	33	79,6	100
07.03.2022	10:32:12	74,9	279,6	33	81	100
07.03.2022	10:33:12	75,4	331,7	33	81,3	100
07.03.2022	10:34:12	76,1	377,2	33	80,3	100
07.03.2022	10:35:12	76,9	428,1	33	80,5	100
07.03.2022	10:36:12	77,9	476,7	30	81,1	100
07.03.2022	10:37:12	78,9	517,6	30	80,3	100
07.03.2022	10:38:12	80,2	545,8	30	74	100
07.03.2022	10:39:12	81,4	512,7	32	81,8	100
07.03.2022	10:40:12	82,5	470,1	33	79,4	100
07.03.2022	10:41:12	83,4	422,9	33	79,9	100
07.03.2022	10:42:12	84	379,4	30	95,8	100
07.03.2022	10:43:12	84,6	341,7	30	107,3	100
07.03.2022	10:44:12	84,9	310,3	30	114,2	100
07.03.2022	10:45:12	85,2	285,1	30	127,4	100
07.03.2022	10:46:12	85,5	265,8	30	127,3	100
07.03.2022	10:47:12	85,6	248,2	30	127,8	100
07.03.2022	10:48:12	85,8	232,4	30	127,7	100
07.03.2022	10:49:12	85,9	218,1	30	127,6	100
07.03.2022	10:50:12	85,9	205,7	30	128,4	100
07.03.2022	10:51:12	86,1	193,3	30	127,4	100
07.03.2022	10:52:12	86,1	182,7	0	53,4	100
07.03.2022	10:53:12	86,1	175,4	0	52,7	100
07.03.2022	10:54:12	86,2	169,5	0	53	100
07.03.2022	10:55:12	86,1	164,1	0	52,3	100
07.03.2022	10:56:12	86,2	159,4	0	52,6	100
07.03.2022	10:57:12	86,1	155,1	0	52,2	100
07.03.2022	10:58:12	86,1	151,1	0	51,8	100
07.03.2022	10:59:12	86,1	147,6	0	51,7	100
07.03.2022	11:00:12	86	144,4	0	52,3	100
07.03.2022	11:01:12	86	141,4	0	52	100
07.03.2022	11:02:12	86	138,6	0	51,8	100
07.03.2022	11:03:12	86	136,2	0	51,6	100
07.03.2022	11:04:12	85,9	133,6	0	51,4	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	11:05:12	85,9	131,4	0	51,4	100
07.03.2022	11:06:12	85,8	129,4	0	51,4	100
07.03.2022	11:07:12	85,8	127,4	0	51,2	100
07.03.2022	11:08:12	85,8	125,5	0	51,3	100
07.03.2022	11:09:12	85,8	124	0	51,3	100
07.03.2022	11:10:12	85,7	122,3	0	51,6	100
07.03.2022	11:11:12	85,6	120,8	0	51,2	100
07.03.2022	11:12:12	85,5	119,6	0	51,3	100
07.03.2022	11:13:12	85,5	118,4	0	51,2	100
07.03.2022	11:14:12	85,4	117,1	0	51,1	100
07.03.2022	11:15:12	85,4	116,1	0	51,2	100
07.03.2022	11:16:12	85,3	114,9	0	51,2	100
07.03.2022	11:17:12	85,3	114	0	51	100
07.03.2022	11:18:12	85,2	112,9	0	51,2	100
07.03.2022	11:19:12	85,2	111,8	0	52	100
07.03.2022	11:20:12	85	110,9	0	51,2	100
07.03.2022	11:21:12	85	109,9	0	51,1	100
07.03.2022	11:22:12	85	109,2	0	51	100
07.03.2022	11:23:12	84,9	108,3	0	51,1	100
07.03.2022	11:24:12	84,8	107,6	0	50,9	100
07.03.2022	11:25:12	84,8	106,7	0	50,8	100
07.03.2022	11:26:12	84,7	106	0	51	100
07.03.2022	11:27:12	84,7	105,4	0	50,8	100
07.03.2022	11:28:12	84,5	104,7	0	50,6	100
07.03.2022	11:29:12	84,6	104,1	0	50,9	100
07.03.2022	11:30:12	84,4	103,3	0	50,5	100
07.03.2022	11:31:12	84,4	102,9	0	50,6	100
07.03.2022	11:32:12	84,3	102,1	0	51,6	100
07.03.2022	11:33:12	84,3	101,4	0	50,8	100
07.03.2022	11:34:12	84,2	100,9	0	50,8	100
07.03.2022	11:35:12	84	100,4	0	50,6	100
07.03.2022	11:36:12	84	99,8	0	50,4	100
07.03.2022	11:37:12	84	99,3	0	50,5	100
07.03.2022	11:38:12	84	98,8	0	50,5	100
07.03.2022	11:39:12	83,8	98,4	0	50,8	100
07.03.2022	11:40:12	83,7	97,8	0	50,8	100
07.03.2022	11:41:12	83,6	97,5	0	50,7	100
07.03.2022	11:42:12	83,6	97	0	51,3	100
07.03.2022	11:43:12	83,5	96,6	0	50,6	100
07.03.2022	11:44:12	83,5	96,1	0	50,5	100
07.03.2022	11:45:12	83,4	95,7	0	50,6	100
07.03.2022	11:46:12	83,3	95,5	0	50,5	100
07.03.2022	11:47:12	83,2	95,1	0	50,7	100
07.03.2022	11:48:12	83,1	94,5	0	50,8	100
07.03.2022	11:49:12	83,1	94,4	0	50,7	100
07.03.2022	11:50:12	83	94,1	0	50,4	100
07.03.2022	11:51:12	82,9	93,5	0	51,5	100
07.03.2022	11:52:12	82,9	93,3	0	51,1	100
07.03.2022	11:53:12	82,7	92,9	0	50,4	100
07.03.2022	11:54:12	82,6	92,6	0	50,4	100
07.03.2022	11:55:12	82,6	92,3	0	51,2	100
07.03.2022	11:56:12	82,5	92,1	0	51,1	100
07.03.2022	11:57:12	82,4	91,9	0	50,7	100
07.03.2022	11:58:12	82,3	91,4	0	50,2	100
07.03.2022	11:59:12	82,2	91,1	0	50,3	100
07.03.2022	12:00:12	82,2	91	0	51,3	100
07.03.2022	12:01:12	82,1	90,8	0	51,3	100
07.03.2022	12:02:12	82	90,4	0	50,3	100
07.03.2022	12:03:12	82	90,1	0	49,7	100
07.03.2022	12:04:12	81,9	90	0	50,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	12:05:12	81,8	89,9	0	50,3	100
07.03.2022	12:06:12	81,7	89,7	0	50,1	100
07.03.2022	12:07:12	81,6	89,4	0	50,1	100
07.03.2022	12:08:12	79,4	89	0	50,6	100
07.03.2022	12:09:12	76,1	88,6	0	50,1	100
07.03.2022	12:10:12	74,1	88	0	50,8	100
07.03.2022	12:11:12	72,7	86,7	44	76,2	100
07.03.2022	12:12:12	71,7	111,2	51	81,2	100
07.03.2022	12:13:12	71,2	166,9	37	82,2	100
07.03.2022	12:14:12	70,9	164,4	37	83,1	100
07.03.2022	12:15:12	70,7	215,2	38	80,3	100
07.03.2022	12:16:12	70,6	291,9	42	77,7	100
07.03.2022	12:17:12	70,8	364,1	47	78,5	100
07.03.2022	12:18:12	71,2	429,5	47	80,5	100
07.03.2022	12:19:12	71,7	519,8	47	81,4	100
07.03.2022	12:20:12	72,6	637,6	48	79	100
07.03.2022	12:21:12	74	704,8	47	81,8	100
07.03.2022	12:22:12	75,3	740,1	41	80,9	100
07.03.2022	12:23:12	77	745,5	36	82,7	100
07.03.2022	12:24:12	79,4	738,2	32	79,9	100
07.03.2022	12:25:12	81,8	693,2	32	81,4	100
07.03.2022	12:26:12	83,8	599,4	33	80,9	100
07.03.2022	12:27:12	85,3	514,3	32	81,5	100
07.03.2022	12:28:12	86,5	444,8	30	86,6	100
07.03.2022	12:29:12	87,2	390,9	30	95,7	100
07.03.2022	12:30:12	87,9	348,8	30	106,6	100
07.03.2022	12:31:12	88,4	316,1	30	113,1	100
07.03.2022	12:32:12	88,7	291,7	30	127,9	100
07.03.2022	12:33:12	89	272,2	30	127,9	100
07.03.2022	12:34:12	89,2	254,7	30	127,7	100
07.03.2022	12:35:12	89,4	239,6	30	127,3	100
07.03.2022	12:36:12	89,6	226,1	30	127,7	100
07.03.2022	12:37:12	89,7	214,3	30	127,7	100
07.03.2022	12:38:12	89,8	203,2	0	126,5	100
07.03.2022	12:39:12	89,9	193,6	0	53,7	100
07.03.2022	12:40:12	90	186,7	0	54	100
07.03.2022	12:41:12	90	180,4	0	53,3	100
07.03.2022	12:42:12	90	174,9	0	53,5	100
07.03.2022	12:43:12	90,1	170,2	0	55,3	100
07.03.2022	12:44:12	90,1	165,8	0	53,1	100
07.03.2022	12:45:12	90,1	161,7	0	52,6	100
07.03.2022	12:46:12	90,1	158	0	52,5	100
07.03.2022	12:47:12	90,1	154,8	0	52,3	100
07.03.2022	12:48:12	90,1	151,7	0	52,8	100
07.03.2022	12:49:12	90	148,9	0	52,2	100
07.03.2022	12:50:12	89,9	146,3	0	52,4	100
07.03.2022	12:51:12	89,9	143,9	0	52,4	100
07.03.2022	12:52:12	89,9	141,7	0	52,4	100
07.03.2022	12:53:12	89,8	139,6	0	52,4	100
07.03.2022	12:54:12	89,8	137,8	0	52,4	100
07.03.2022	12:55:12	89,7	135,7	0	51,9	100
07.03.2022	12:56:12	89,6	134,1	0	51,8	100
07.03.2022	12:57:12	89,6	132,6	0	52	100
07.03.2022	12:58:12	89,5	131,1	0	52,1	100
07.03.2022	12:59:12	89,4	129,7	0	52	100
07.03.2022	13:00:12	89,3	128,1	0	52	100
07.03.2022	13:01:12	89,2	127	0	51,6	100
07.03.2022	13:02:12	89,1	125,8	0	51,6	100
07.03.2022	13:03:12	89,1	124,7	0	51,5	100
07.03.2022	13:04:12	89	123,5	0	51,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	13:05:12	88,9	122,5	0	51,5	100
07.03.2022	13:06:12	88,8	121,5	0	51,5	100
07.03.2022	13:07:12	88,7	120,4	0	51,5	100
07.03.2022	13:08:12	88,6	119,5	0	51,5	100
07.03.2022	13:09:12	88,4	118,7	0	51,4	100
07.03.2022	13:10:12	88,3	117,8	0	51,3	100
07.03.2022	13:11:12	88,2	117,1	0	51,3	100
07.03.2022	13:12:12	88,1	116,2	0	51,3	100
07.03.2022	13:13:12	88	115,6	0	51,3	100
07.03.2022	13:14:12	87,9	115	0	51,2	100
07.03.2022	13:15:12	87,8	114,1	0	51,1	100
07.03.2022	13:16:12	87,7	113,4	0	51,2	100
07.03.2022	13:17:12	87,5	112,8	0	50,9	100
07.03.2022	13:18:12	87,5	112,2	0	51	100
07.03.2022	13:19:12	87,3	111,7	0	51,1	100
07.03.2022	13:20:12	87,2	111	0	51,1	100
07.03.2022	13:21:12	87,2	110,5	0	51,1	100
07.03.2022	13:22:12	87,1	110	0	51,1	100
07.03.2022	13:23:12	86,9	109,5	0	50,9	100
07.03.2022	13:24:12	86,8	109	0	51	100
07.03.2022	13:25:12	86,8	108,6	0	50,9	100
07.03.2022	13:26:12	86,6	108,3	0	51	100
07.03.2022	13:27:12	86,5	107,8	0	51,1	100
07.03.2022	13:28:12	86,3	107,3	0	51,2	100
07.03.2022	13:29:12	86,3	106,9	0	51,3	100
07.03.2022	13:30:12	86,1	106,5	0	51,2	100
07.03.2022	13:31:12	86,1	106,2	0	51,2	100
07.03.2022	13:32:12	85,9	105,7	0	51,2	100
07.03.2022	13:33:12	85,8	105,4	0	51,1	100
07.03.2022	13:34:12	85,8	104,8	0	51	100
07.03.2022	13:35:12	85,7	104,4	0	51,1	100
07.03.2022	13:36:12	85,6	104,1	0	51,1	100
07.03.2022	13:37:12	85,5	103,9	0	51,1	100
07.03.2022	13:38:12	85,4	103,4	0	51,1	100
07.03.2022	13:39:12	85,3	103,2	0	50,9	100
07.03.2022	13:40:12	85,1	102,9	0	51	100
07.03.2022	13:41:12	85,1	102,5	0	50,8	100
07.03.2022	13:42:12	85	102,2	0	50,8	100
07.03.2022	13:43:12	84,9	101,9	0	50,8	100
07.03.2022	13:44:12	84,8	101,7	0	50,9	100
07.03.2022	13:45:12	84,8	101,3	0	51,2	100
07.03.2022	13:46:12	84,6	101	0	51,2	100
07.03.2022	13:47:12	84,6	100,8	0	51,2	100
07.03.2022	13:48:12	84,5	100,5	0	51,1	100
07.03.2022	13:49:12	84,4	100	0	51	100
07.03.2022	13:50:12	84,3	99,9	0	51	100
07.03.2022	13:51:12	84,2	99,7	0	51,1	100
07.03.2022	13:52:12	84,1	99,4	0	51,1	100
07.03.2022	13:53:12	84	99,1	0	51	100
07.03.2022	13:54:12	83,9	98,8	0	50,9	100
07.03.2022	13:55:12	83,9	98,7	0	50,7	100
07.03.2022	13:56:12	83,8	98,5	0	51	100
07.03.2022	13:57:12	83,7	98,2	0	50,8	100
07.03.2022	13:58:12	83,6	97,9	0	50,8	100
07.03.2022	13:59:12	83,6	97,5	0	50,7	100
07.03.2022	14:00:12	83,4	97,2	0	50,8	100
07.03.2022	14:01:12	83,4	97,1	0	50,7	100
07.03.2022	14:02:12	83,3	96,9	0	50,7	100
07.03.2022	14:03:12	83,2	96,6	0	50,9	100
07.03.2022	14:04:12	83,1	96,5	0	50,5	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	14:05:12	83	96,2	0	50,6	100
07.03.2022	14:06:12	82,9	96,1	0	50,5	100
07.03.2022	14:07:12	82,9	95,8	0	50,3	100
07.03.2022	14:08:12	82,8	95,5	0	50,3	100
07.03.2022	14:09:12	82,7	95,4	0	50,1	100
07.03.2022	14:10:12	82,7	95,2	0	50,1	100
07.03.2022	14:11:12	82,6	95	0	50,1	100
07.03.2022	14:12:12	82,5	95	0	50,2	100
07.03.2022	14:13:12	82,3	94,5	0	50,1	100
07.03.2022	14:14:12	82,2	94,4	0	50,3	100
07.03.2022	14:15:12	82,3	94,2	0	50,2	100
07.03.2022	14:16:12	82,2	94,1	0	50,2	100
07.03.2022	14:17:12	82	93,8	0	50,1	100
07.03.2022	14:18:12	82	93,6	0	50,2	100
07.03.2022	14:19:12	82	93,4	0	50,2	100
07.03.2022	14:20:12	81,9	93,3	0	50,2	100
07.03.2022	14:21:12	81,8	93,2	0	50,3	100
07.03.2022	14:22:12	81,7	93	0	50,2	100
07.03.2022	14:23:12	81,6	93	0	50,2	100
07.03.2022	14:24:12	81,6	92,8	0	50,2	100
07.03.2022	14:25:12	81,5	92,7	0	50,2	100
07.03.2022	14:26:12	81,4	92,4	0	50,1	100
07.03.2022	14:27:12	81,3	92,2	0	50,1	100
07.03.2022	14:28:12	81,2	92,1	0	50,1	100
07.03.2022	14:29:12	81,2	91,9	0	50,1	100
07.03.2022	14:30:12	81,1	91,8	0	50,1	100
07.03.2022	14:31:12	81,1	91,7	0	50,1	100
07.03.2022	14:32:12	81	91,5	0	50,2	100
07.03.2022	14:33:12	80,9	91,2	0	50,1	100
07.03.2022	14:34:12	80,8	90,9	0	50,1	100
07.03.2022	14:35:12	80,7	90,8	0	50,1	100
07.03.2022	14:36:12	80,7	90,8	0	50,1	100
07.03.2022	14:37:12	80,6	90,7	0	50,1	100
07.03.2022	14:38:12	80,6	90,6	0	50,1	100
07.03.2022	14:39:12	80,5	90,4	0	50,1	100
07.03.2022	14:40:12	80,4	90,4	0	50,2	100
07.03.2022	14:41:12	80,3	90,3	0	50,1	100
07.03.2022	14:42:12	80,3	90,2	0	50,1	100
07.03.2022	14:43:12	80,2	89,9	0	50,1	100
07.03.2022	14:44:12	80,1	89,8	0	50	100
07.03.2022	14:45:12	80,1	89,7	0	50	100
07.03.2022	14:46:12	79,9	89,4	0	50,1	100
07.03.2022	14:47:12	79,8	89,3	0	50	100
07.03.2022	14:48:12	79,8	89,3	0	50,1	100
07.03.2022	14:49:12	79,7	89,2	0	50,2	100
07.03.2022	14:50:12	79,6	89,2	0	50,1	100
07.03.2022	14:51:12	79,5	89,1	0	50,1	100
07.03.2022	14:52:12	79,5	88,9	0	50,2	100
07.03.2022	14:53:12	79,4	88,7	0	50,1	100
07.03.2022	14:54:12	79,4	88,7	0	50,1	100
07.03.2022	14:55:12	79,3	88,5	0	50,1	100
07.03.2022	14:56:12	79,2	88,4	0	50,1	100
07.03.2022	14:57:12	79,1	88,2	0	50,1	100
07.03.2022	14:58:12	79	88,1	0	50	100
07.03.2022	14:59:12	79	88	0	50	100
07.03.2022	15:00:12	78,9	87,9	0	50	100
07.03.2022	15:01:12	78,9	87,8	0	50	100
07.03.2022	15:02:12	78,7	87,8	0	50,1	100
07.03.2022	15:03:12	78,7	87,4	0	50	100
07.03.2022	15:04:12	78,6	87,2	0	50	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	15:05:12	78,5	87,1	0	50,1	100
07.03.2022	15:06:12	78,4	87	0	50,1	100
07.03.2022	15:07:12	78,3	86,9	0	50	100
07.03.2022	15:08:12	78,2	86,8	0	49,7	100
07.03.2022	15:09:12	78,2	86,8	0	49,8	100
07.03.2022	15:10:12	78,1	86,6	0	49,7	100
07.03.2022	15:11:12	78,1	86,4	0	49,8	100
07.03.2022	15:12:12	77,3	86,3	0	49,8	100
07.03.2022	15:13:12	74,6	85,8	0	49,7	100
07.03.2022	15:14:12	72,3	84,6	37	69,6	100
07.03.2022	15:15:12	70,9	111,7	55	79	100
07.03.2022	15:16:12	70,2	169,7	37	80,8	100
07.03.2022	15:17:12	69,6	167	38	81,6	100
07.03.2022	15:18:12	69,4	214,7	37	81	100
07.03.2022	15:19:12	69,3	275,5	39	79,5	100
07.03.2022	15:20:12	69,5	331,2	45	78,7	100
07.03.2022	15:21:12	69,8	420	47	81,8	100
07.03.2022	15:22:12	70,4	556,9	47	80,8	100
07.03.2022	15:23:12	71,6	678,3	48	79,7	100
07.03.2022	15:24:12	73,1	744	48	79,8	100
07.03.2022	15:25:12	74,7	745,5	43	82,1	100
07.03.2022	15:26:12	76	757,9	40	82,1	100
07.03.2022	15:27:12	77,4	751,4	38	79,8	100
07.03.2022	15:28:12	78,6	729,3	32	80,8	100
07.03.2022	15:29:12	80,1	713,7	32	81,9	100
07.03.2022	15:30:12	81,9	646,9	33	80,2	100
07.03.2022	15:31:12	83,7	561,9	32	80,7	100
07.03.2022	15:32:12	85	488,3	32	80,6	100
07.03.2022	15:33:12	86	426,6	30	93,2	100
07.03.2022	15:34:12	86,7	377,1	30	105,6	100
07.03.2022	15:35:12	87,2	337,9	30	110,8	100
07.03.2022	15:36:12	87,7	308,1	30	126,2	100
07.03.2022	15:37:12	87,8	286	30	127,1	100
07.03.2022	15:38:12	87,9	266,9	30	127,6	100
07.03.2022	15:39:12	87,8	249,4	30	128	100
07.03.2022	15:40:12	87,7	234,3	30	128,3	100
07.03.2022	15:41:12	87,4	219,1	30	128	100
07.03.2022	15:42:12	87,2	205,6	30	128,2	100
07.03.2022	15:43:12	86,9	193,8	0	56,7	100
07.03.2022	15:44:12	86,5	186,2	0	53,5	100
07.03.2022	15:45:12	86,3	180,1	0	53,2	100
07.03.2022	15:46:12	85,9	174,6	0	53,4	100
07.03.2022	15:47:12	85,8	169,3	0	53,1	100
07.03.2022	15:48:12	85,5	164,8	0	53,1	100
07.03.2022	15:49:12	85,1	160,7	0	52,7	100
07.03.2022	15:50:12	84,9	156,7	0	52,6	100
07.03.2022	15:51:12	84,6	153,1	0	52,5	100
07.03.2022	15:52:12	84,3	149,9	0	52,7	100
07.03.2022	15:53:12	84	146,7	0	52,7	100
07.03.2022	15:54:12	83,7	143,7	0	52,4	100
07.03.2022	15:55:12	83,4	141,2	0	52,3	100
07.03.2022	15:56:12	83,2	138,8	0	52,2	100
07.03.2022	15:57:12	83	136,4	0	52,2	100
07.03.2022	15:58:12	82,7	134,2	0	52,3	100
07.03.2022	15:59:12	82,5	132,1	0	52,2	100
07.03.2022	16:00:12	82,3	130,2	0	52,1	100
07.03.2022	16:01:12	82	128,3	0	52,1	100
07.03.2022	16:02:12	81,9	126,7	0	51,9	100
07.03.2022	16:03:12	81,6	125,1	0	51,6	100
07.03.2022	16:04:12	81,4	123,7	0	51,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	16:05:12	81,2	122,3	0	51,7	100
07.03.2022	16:06:12	81	120,8	0	51,7	100
07.03.2022	16:07:12	80,8	119,5	0	51,6	100
07.03.2022	16:08:12	80,6	118,2	0	51,6	100
07.03.2022	16:09:12	80,4	117,1	0	51,6	100
07.03.2022	16:10:12	80,2	115,9	0	51,5	100
07.03.2022	16:11:12	80	115	0	51,3	100
07.03.2022	16:12:12	79,8	113,9	0	51,3	100
07.03.2022	16:13:12	79,6	112,8	0	51,2	100
07.03.2022	16:14:12	79,4	111,9	0	51,2	100
07.03.2022	16:15:12	79,2	111	0	51,2	100
07.03.2022	16:16:12	79	110,3	0	51,2	100
07.03.2022	16:17:12	78,9	109,4	0	51,2	100
07.03.2022	16:18:12	78,7	108,6	0	51,2	100
07.03.2022	16:19:12	78,6	108	0	51,2	100
07.03.2022	16:20:12	78,4	107,1	0	51,1	100
07.03.2022	16:21:12	78,2	106,4	0	51,1	100
07.03.2022	16:22:12	78,1	105,6	0	51	100
07.03.2022	16:23:12	77,9	105	0	51	100
07.03.2022	16:24:12	77,8	104,1	0	50,8	100
07.03.2022	16:25:12	77,5	103,9	0	50,9	100
07.03.2022	16:26:12	77,5	103,1	0	50,8	100
07.03.2022	16:27:12	77,5	102,4	0	50,9	100
07.03.2022	16:28:12	77,3	101,9	0	50,9	100
07.03.2022	16:29:12	77,2	101,5	0	50,9	100
07.03.2022	16:30:12	77,1	100,8	0	50,8	100
07.03.2022	16:31:12	76,8	100,3	0	50,6	100
07.03.2022	16:32:12	76,7	99,7	0	50,6	100
07.03.2022	16:33:12	76,5	99,3	0	50,5	100
07.03.2022	16:34:12	76,6	98,8	0	50,8	100
07.03.2022	16:35:12	76,5	98,4	0	50,7	100
07.03.2022	16:36:12	76,3	97,8	0	50,7	100
07.03.2022	16:37:12	76,2	97,2	0	50,5	100
07.03.2022	16:38:12	76,2	96,8	0	50,5	100
07.03.2022	16:39:12	76	96,4	0	50,5	100
07.03.2022	16:40:12	76	95,9	0	50,5	100
07.03.2022	16:41:12	75,8	95,4	0	50,4	100
07.03.2022	16:42:12	75,8	95,2	0	50,2	100
07.03.2022	16:43:12	75,8	94,9	0	50,4	100
07.03.2022	16:44:12	75,7	94,4	0	50,3	100
07.03.2022	16:45:12	75,7	94,1	0	50,4	100
07.03.2022	16:46:12	75,7	93,7	0	50,3	100
07.03.2022	16:47:12	75,7	93,3	0	50,3	100
07.03.2022	16:48:12	75,6	93	0	50,4	100
07.03.2022	16:49:12	75,6	92,8	0	50,3	100
07.03.2022	16:50:12	75,6	92,4	0	50,2	100
07.03.2022	16:51:12	75,5	92,1	0	50,2	100
07.03.2022	16:52:12	75,5	91,8	0	50,3	100
07.03.2022	16:53:12	75,5	91,6	0	50,2	100
07.03.2022	16:54:12	75,5	91,2	0	50,3	100
07.03.2022	16:55:12	75,4	90,8	0	50,3	100
07.03.2022	16:56:12	75,4	90,7	0	50,3	100
07.03.2022	16:57:12	75,4	90,4	0	50,4	100
07.03.2022	16:58:12	75,4	90	0	50,4	100
07.03.2022	16:59:12	75,4	89,8	0	50,3	100
07.03.2022	17:00:12	75,3	89,6	0	50,2	100
07.03.2022	17:01:12	75,3	89,4	0	50,3	100
07.03.2022	17:02:12	75,2	89,1	0	50,2	100
07.03.2022	17:03:12	75,2	88,7	0	50,1	100
07.03.2022	17:04:12	75,2	88,5	0	50,2	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	17:05:12	75,2	88,3	0	50,1	100
07.03.2022	17:06:12	75,1	88,2	0	50,3	100
07.03.2022	17:07:12	75,1	87,9	0	50,3	100
07.03.2022	17:08:12	75,1	87,6	0	50,1	100
07.03.2022	17:09:12	75,1	87,4	0	50,2	100
07.03.2022	17:10:12	75	87,1	0	50,1	100
07.03.2022	17:11:12	74,9	87	0	50,1	100
07.03.2022	17:12:12	75	86,7	0	50,1	100
07.03.2022	17:13:12	74,9	86,5	0	50,2	100
07.03.2022	17:14:12	74,8	86,1	0	50,1	100
07.03.2022	17:15:12	74,8	85,9	0	50	100
07.03.2022	17:16:12	74,8	85,8	0	49,9	100
07.03.2022	17:17:12	74,8	85,7	0	50,1	100
07.03.2022	17:18:12	74,7	85,5	0	49,8	100
07.03.2022	17:19:12	74,7	85,2	0	49,7	100
07.03.2022	17:20:12	74,7	85	0	50	100
07.03.2022	17:21:12	74,7	84,8	0	50,1	100
07.03.2022	17:22:12	74,5	84,8	0	50,1	100
07.03.2022	17:23:12	74,6	84,6	0	50	100
07.03.2022	17:24:12	74,5	84,3	0	50	100
07.03.2022	17:25:12	74,4	84,2	0	49,9	100
07.03.2022	17:26:12	74,3	83,9	0	50	100
07.03.2022	17:27:12	74,4	83,8	0	49,5	100
07.03.2022	17:28:12	74,3	83,6	0	50	100
07.03.2022	17:29:12	74,3	83,5	0	49,7	100
07.03.2022	17:30:12	74,2	83,4	0	49,8	100
07.03.2022	17:31:12	74,2	83,3	0	49,5	100
07.03.2022	17:32:12	74,1	83,2	0	49,8	100
07.03.2022	17:33:12	74,1	83	0	50,3	100
07.03.2022	17:34:12	74,1	82,6	0	50,1	100
07.03.2022	17:35:12	74	82,5	0	49,9	100
07.03.2022	17:36:12	74	82,3	0	50	100
07.03.2022	17:37:12	74	82,2	0	50	100
07.03.2022	17:38:12	73,9	81,3	44	73,2	100
07.03.2022	17:39:12	73,8	109,5	51	84,3	100
07.03.2022	17:40:12	73,9	165	37	80,7	100
07.03.2022	17:41:12	74,2	162,4	32	80,1	100
07.03.2022	17:42:12	74,3	188,7	34	80,6	100
07.03.2022	17:43:12	74,6	261,6	33	80,2	100
07.03.2022	17:44:12	75,1	333,5	33	79,2	100
07.03.2022	17:45:12	75,7	389,4	33	81,1	100
07.03.2022	17:46:12	76,5	439	34	79,7	100
07.03.2022	17:47:12	77,6	507,5	32	80,8	100
07.03.2022	17:48:12	78,8	579,2	32	81,2	100
07.03.2022	17:49:12	80,3	634,5	30	76,9	100
07.03.2022	17:50:12	81,9	600,5	33	80,8	100
07.03.2022	17:51:12	83,5	541,2	33	80,8	100
07.03.2022	17:52:12	84,4	474,4	32	82,8	100
07.03.2022	17:53:12	85,3	414,6	30	94,4	100
07.03.2022	17:54:12	85,9	365,6	30	104,8	100
07.03.2022	17:55:12	86,3	326,8	30	111,7	100
07.03.2022	17:56:12	86,6	296,4	30	125,7	100
07.03.2022	17:57:12	86,8	273,3	30	126,7	100
07.03.2022	17:58:12	85,1	253,7	30	126	100
07.03.2022	17:59:12	81,7	236,2	30	127,3	100
07.03.2022	18:00:12	79,1	221	30	126,5	100
07.03.2022	18:01:12	77,2	206,6	30	127,3	100
07.03.2022	18:02:12	75,8	193,4	30	127,6	100
07.03.2022	18:03:12	74,8	182,5	0	53,4	100
07.03.2022	18:04:12	74	175	0	54,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	18:05:12	73,2	166	30	75,7	100
07.03.2022	18:06:12	72,6	197,9	47	76,5	100
07.03.2022	18:07:12	72,1	288,6	48	79,1	100
07.03.2022	18:08:12	72,2	380,3	47	80	100
07.03.2022	18:09:12	72,5	503,9	47	81,8	100
07.03.2022	18:10:12	73,2	626,3	48	80,4	100
07.03.2022	18:11:12	74,3	706,3	44	82,3	100
07.03.2022	18:12:12	75,6	731,1	42	81,4	100
07.03.2022	18:13:12	76,7	730,5	38	81,7	100
07.03.2022	18:14:12	77,7	730,8	38	79,8	100
07.03.2022	18:15:12	78,9	721,2	32	80	100
07.03.2022	18:16:12	79,7	714,6	30	86,8	100
07.03.2022	18:17:12	80,3	642,8	33	81,7	100
07.03.2022	18:18:12	80,6	556,9	33	79,6	100
07.03.2022	18:19:12	80,8	479,9	32	80,1	100
07.03.2022	18:20:12	81,4	416,5	30	95,9	100
07.03.2022	18:21:12	82	366,5	30	104,9	100
07.03.2022	18:22:12	82,5	329,3	30	112,5	100
07.03.2022	18:23:12	83	300,5	30	126,6	100
07.03.2022	18:24:12	83,3	279,3	30	126,4	100
07.03.2022	18:25:12	83,4	260,8	30	126,9	100
07.03.2022	18:26:12	83,5	243,6	30	127,9	100
07.03.2022	18:27:12	83,5	227,3	30	126,9	100
07.03.2022	18:28:12	83,4	213,1	30	127,5	100
07.03.2022	18:29:12	83,2	200,6	30	128,2	100
07.03.2022	18:30:12	83	189,6	0	55	100
07.03.2022	18:31:12	82,8	182,7	0	54,3	100
07.03.2022	18:32:12	82,6	176,7	0	53,4	100
07.03.2022	18:33:12	82,3	171,3	0	52,5	100
07.03.2022	18:34:12	82,1	166,6	0	53	100
07.03.2022	18:35:12	81,8	162,2	0	54,1	100
07.03.2022	18:36:12	81,6	158	0	53,1	100
07.03.2022	18:37:12	81,3	154,4	0	52,6	100
07.03.2022	18:38:12	81	150,9	0	52,5	100
07.03.2022	18:39:12	80,7	147,7	0	52,7	100
07.03.2022	18:40:12	80,6	144,8	0	52,4	100
07.03.2022	18:41:12	80,3	141,9	0	52,3	100
07.03.2022	18:42:12	79,9	139,3	0	52,4	100
07.03.2022	18:43:12	79,7	136,8	0	51,7	100
07.03.2022	18:44:12	79,6	134,5	0	52,5	100
07.03.2022	18:45:12	79,3	132,5	0	52,1	100
07.03.2022	18:46:12	79	130,3	0	52,3	100
07.03.2022	18:47:12	78,8	128,4	0	52,4	100
07.03.2022	18:48:12	78,6	126,8	0	52,2	100
07.03.2022	18:49:12	78,3	125	0	52,1	100
07.03.2022	18:50:12	78,2	123,4	0	51,9	100
07.03.2022	18:51:12	77,9	121,8	0	52,4	100
07.03.2022	18:52:12	77,7	120,4	0	52	100
07.03.2022	18:53:12	77,4	119	0	52,5	100
07.03.2022	18:54:12	77,3	117,8	0	52,2	100
07.03.2022	18:55:12	77,1	116,5	0	51,7	100
07.03.2022	18:56:12	76,8	115,3	0	51,9	100
07.03.2022	18:57:12	76,6	114,1	0	52,3	100
07.03.2022	18:58:12	76,4	113,1	0	51,6	100
07.03.2022	18:59:12	76,2	112,1	0	51,3	100
07.03.2022	19:00:12	76	111	0	51,4	100
07.03.2022	19:01:12	75,8	110,1	0	51,8	100
07.03.2022	19:02:12	75,6	109,3	0	51,5	100
07.03.2022	19:03:12	75,3	108,3	0	51,6	100
07.03.2022	19:04:12	75,1	107,4	0	52	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	19:05:12	74,9	106,5	0	51,4	100
07.03.2022	19:06:12	74,7	105,8	0	52,8	100
07.03.2022	19:07:12	74,6	105,1	0	52,3	100
07.03.2022	19:08:12	74,3	104,3	0	51,6	100
07.03.2022	19:09:12	74,1	103,7	0	51,6	100
07.03.2022	19:10:12	73,9	103,1	0	51,3	100
07.03.2022	19:11:12	73,7	101,7	47	62,9	100
07.03.2022	19:12:12	73,6	160,5	36	86,2	100
07.03.2022	19:13:12	73,7	175,5	37	79,9	100
07.03.2022	19:14:12	73,8	181,6	41	80,3	100
07.03.2022	19:15:12	73,8	246,1	42	78,5	100
07.03.2022	19:16:12	74,2	309,8	33	81,9	100
07.03.2022	19:17:12	74,6	371	33	81,6	100
07.03.2022	19:18:12	75,3	423,4	33	78,8	100
07.03.2022	19:19:12	76,3	487,4	33	80	100
07.03.2022	19:20:12	77,5	577,6	33	81,7	100
07.03.2022	19:21:12	79	633	32	79,7	100
07.03.2022	19:22:12	80,7	662,3	34	76,7	100
07.03.2022	19:23:12	82,2	611,6	32	81,7	100
07.03.2022	19:24:12	83,5	547,7	33	79,5	100
07.03.2022	19:25:12	84,3	477,4	32	80,2	100
07.03.2022	19:26:12	84,7	417,5	30	96,4	100
07.03.2022	19:27:12	85	368,3	30	107,8	100
07.03.2022	19:28:12	85	329,7	30	115,1	100
07.03.2022	19:29:12	85	300,2	30	128,9	100
07.03.2022	19:30:12	84,8	278,2	30	128,2	100
07.03.2022	19:31:12	84,6	258,9	30	129	100
07.03.2022	19:32:12	84,4	242,1	30	129	100
07.03.2022	19:33:12	84,2	227,4	30	128,3	100
07.03.2022	19:34:12	84	214	30	129,1	100
07.03.2022	19:35:12	83,7	201	30	129,1	100
07.03.2022	19:36:12	83,4	190,2	0	54,5	100
07.03.2022	19:37:12	83	182,8	0	54,7	100
07.03.2022	19:38:12	82,8	176,5	0	53,9	100
07.03.2022	19:39:12	82,5	171	0	52,8	100
07.03.2022	19:40:12	82,2	165,8	0	52	100
07.03.2022	19:41:12	81,9	161,3	0	54,7	100
07.03.2022	19:42:12	81,5	157	0	52,6	100
07.03.2022	19:43:12	81,3	153,2	0	52,5	100
07.03.2022	19:44:12	81	149,5	0	52,5	100
07.03.2022	19:45:12	80,7	146,4	0	52	100
07.03.2022	19:46:12	80,5	143,3	0	51,6	100
07.03.2022	19:47:12	80,2	140,4	0	53,1	100
07.03.2022	19:48:12	80	137,8	0	53,4	100
07.03.2022	19:49:12	79,7	135,5	0	52,5	100
07.03.2022	19:50:12	79,5	133,4	0	51,8	100
07.03.2022	19:51:12	79,2	131,3	0	52,1	100
07.03.2022	19:52:12	79	129,2	0	51,9	100
07.03.2022	19:53:12	78,8	127,5	0	51,4	100
07.03.2022	19:54:12	78,5	125,7	0	51,8	100
07.03.2022	19:55:12	78,3	124	0	53,4	100
07.03.2022	19:56:12	78	122,4	0	51,5	100
07.03.2022	19:57:12	77,8	121,1	0	51,5	100
07.03.2022	19:58:12	77,6	119,8	0	51,3	100
07.03.2022	19:59:12	77,3	118,4	0	51,9	100
07.03.2022	20:00:12	77,1	117,1	0	52,1	100
07.03.2022	20:01:12	76,8	115,2	100	228,6	100
07.03.2022	20:02:12	76,6	110,7	0	53,8	100
07.03.2022	20:03:12	76,4	109,2	0	52,2	100
07.03.2022	20:04:12	76,1	108,8	0	51,7	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	20:05:12	75,9	108	0	51,5	100
07.03.2022	20:06:12	75,5	107,5	0	51,3	100
07.03.2022	20:07:12	75,3	107	0	51,8	100
07.03.2022	20:08:12	75,1	106,4	0	51,3	100
07.03.2022	20:09:12	74,8	105,7	0	51,3	100
07.03.2022	20:10:12	74,6	105,1	0	51,6	100
07.03.2022	20:11:12	74,3	104,4	0	50,5	100
07.03.2022	20:12:12	74	103,9	0	51,4	100
07.03.2022	20:13:12	73,8	103,2	30	86,5	100
07.03.2022	20:14:12	73,6	125,7	46	86,4	100
07.03.2022	20:15:12	73,5	181,7	33	80,2	100
07.03.2022	20:16:12	73,5	173,1	37	80,4	100
07.03.2022	20:17:12	73,4	218	41	80,6	100
07.03.2022	20:18:12	73,6	289,2	43	80,5	100
07.03.2022	20:19:12	74	356,2	43	88,1	100
07.03.2022	20:20:12	74,7	446,5	34	81,4	100
07.03.2022	20:21:12	75,8	585,1	33	81,3	100
07.03.2022	20:22:12	77,4	702,3	33	81,3	100
07.03.2022	20:23:12	79,6	738,4	32	81,3	100
07.03.2022	20:24:12	81,8	701,2	37	80,8	100
07.03.2022	20:25:12	83,5	619,2	33	78,9	100
07.03.2022	20:26:12	84,6	534,4	32	80,3	100
07.03.2022	20:27:12	85,3	460,5	30	94	100
07.03.2022	20:28:12	85,6	403,9	30	96,3	100
07.03.2022	20:29:12	85,6	359,5	30	107,1	100
07.03.2022	20:30:12	85,6	325,5	30	121,1	100
07.03.2022	20:31:12	85,4	299,7	30	128	100
07.03.2022	20:32:12	85,2	277,6	30	129,1	100
07.03.2022	20:33:12	85	258,3	30	129,4	100
07.03.2022	20:34:12	84,7	241,4	30	129,1	100
07.03.2022	20:35:12	84,3	226,6	30	129,1	100
07.03.2022	20:36:12	84	213,5	30	129,2	100
07.03.2022	20:37:12	83,6	201,4	0	87,3	100
07.03.2022	20:38:12	83,3	191,6	0	53,4	100
07.03.2022	20:39:12	82,9	184,1	0	52,7	100
07.03.2022	20:40:12	82,5	177,7	0	52,8	100
07.03.2022	20:41:12	82,1	172	0	52,8	100
07.03.2022	20:42:12	81,8	166,8	0	53,5	100
07.03.2022	20:43:12	81,5	162	0	52,6	100
07.03.2022	20:44:12	81,1	157,6	0	53,4	100
07.03.2022	20:45:12	80,7	153,5	0	53,3	100
07.03.2022	20:46:12	80,4	149,9	0	53,3	100
07.03.2022	20:47:12	80,1	146,6	0	52,6	100
07.03.2022	20:48:12	79,8	143,4	0	52	100
07.03.2022	20:49:12	79,5	140,4	0	53,7	100
07.03.2022	20:50:12	79,1	137,6	0	52,7	100
07.03.2022	20:51:12	78,9	135,2	0	52,4	100
07.03.2022	20:52:12	78,6	132,9	0	52,4	100
07.03.2022	20:53:12	78,3	130,8	0	52,6	100
07.03.2022	20:54:12	78	128,7	0	53,8	100
07.03.2022	20:55:12	77,8	126,6	0	52,1	100
07.03.2022	20:56:12	77,5	124,9	0	52,1	100
07.03.2022	20:57:12	77,3	123,2	0	51,4	100
07.03.2022	20:58:12	77	121,6	0	53,2	100
07.03.2022	20:59:12	76,8	120	0	51,1	100
07.03.2022	21:00:12	76,5	118,6	0	52,7	100
07.03.2022	21:01:12	76,4	117,2	0	52,3	100
07.03.2022	21:02:12	76,2	115,9	0	51,6	100
07.03.2022	21:03:12	75,9	114,5	0	51,5	100
07.03.2022	21:04:12	75,7	113,4	0	51,1	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	21:05:12	75,5	112,2	0	55,2	100
07.03.2022	21:06:12	75,3	111,1	0	52,1	100
07.03.2022	21:07:12	75,1	110,1	0	51,2	100
07.03.2022	21:08:12	74,9	109	0	51,8	100
07.03.2022	21:09:12	74,7	108,2	0	50,7	100
07.03.2022	21:10:12	74,5	107,3	0	51,2	100
07.03.2022	21:11:12	74,3	106,4	0	50,8	100
07.03.2022	21:12:12	74,1	105,5	0	50,8	100
07.03.2022	21:13:12	73,9	104,5	0	51,8	100
07.03.2022	21:14:12	73,8	103,1	41	61,6	100
07.03.2022	21:15:12	73,6	156,9	35	87,7	100
07.03.2022	21:16:12	73,7	171,3	33	80	100
07.03.2022	21:17:12	73,7	191,2	41	81,6	100
07.03.2022	21:18:12	73,9	269,7	43	80,5	100
07.03.2022	21:19:12	74,3	333,9	33	80,8	100
07.03.2022	21:20:12	75	387,9	33	78,9	100
07.03.2022	21:21:12	75,7	441,4	33	80,5	100
07.03.2022	21:22:12	76,8	523,9	33	81	100
07.03.2022	21:23:12	78,1	622,9	31	84	100
07.03.2022	21:24:12	80	681,6	31	80,1	100
07.03.2022	21:25:12	81,8	666	37	80,3	100
07.03.2022	21:26:12	83,5	592,2	33	80,2	100
07.03.2022	21:27:12	84,7	512,2	32	81	100
07.03.2022	21:28:12	85,4	444	30	93,9	100
07.03.2022	21:29:12	85,8	390	30	105,7	100
07.03.2022	21:30:12	85,9	347,9	30	107,3	100
07.03.2022	21:31:12	85,9	314,7	30	126,4	100
07.03.2022	21:32:12	85,8	290,5	30	128,9	100
07.03.2022	21:33:12	85,6	270,1	30	128,9	100
07.03.2022	21:34:12	85,4	251,9	30	129,7	100
07.03.2022	21:35:12	85,2	235,9	30	128,8	100
07.03.2022	21:36:12	84,9	221,8	30	127,7	100
07.03.2022	21:37:12	84,6	209,7	30	130,1	100
07.03.2022	21:38:12	84,3	199	0	61,9	100
07.03.2022	21:39:12	84	197,6	0	53,4	100
07.03.2022	21:40:12	83,7	197,1	0	53,2	100
07.03.2022	21:41:12	83,5	188,5	0	51,9	100
07.03.2022	21:42:12	83,2	180,3	0	52,1	100
07.03.2022	21:43:12	82,9	173,1	0	52,1	100
07.03.2022	21:44:12	82,6	167	0	51	100
07.03.2022	21:45:12	82,3	161,7	0	50	100
07.03.2022	21:46:12	82	156,8	0	51,4	100
07.03.2022	21:47:12	81,7	152,5	0	56,3	100
07.03.2022	21:48:12	81,5	148,8	0	52,4	100
07.03.2022	21:49:12	81,2	145,4	0	52,4	100
07.03.2022	21:50:12	81	142,1	0	49,7	100
07.03.2022	21:51:12	80,7	139,4	0	47,6	100
07.03.2022	21:52:12	80,5	136,6	0	49,9	100
07.03.2022	21:53:12	80,2	134,2	0	59,6	100
07.03.2022	21:54:12	80	131,9	0	50,3	100
07.03.2022	21:55:12	79,7	129,8	0	45	100
07.03.2022	21:56:12	79,5	127,7	0	50,9	100
07.03.2022	21:57:12	79,4	125,8	0	53,9	100
07.03.2022	21:58:12	79,1	124	0	54,6	100
07.03.2022	21:59:12	78,9	122,2	0	42,7	100
07.03.2022	22:00:12	78,7	120,8	0	56,3	100
07.03.2022	22:01:12	78,5	119,4	0	51,2	100
07.03.2022	22:02:12	78,3	118	0	51,7	100
07.03.2022	22:03:12	78,1	116,6	0	53,6	100
07.03.2022	22:04:12	77,9	115,5	0	65,5	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	22:05:12	77,7	114,2	0	53,8	100
07.03.2022	22:06:12	77,5	113,1	0	49,4	100
07.03.2022	22:07:12	77,4	111,9	0	54,1	100
07.03.2022	22:08:12	77,2	110,9	0	53,2	100
07.03.2022	22:09:12	77,1	110	0	49,6	100
07.03.2022	22:10:12	76,9	108,8	0	49,5	100
07.03.2022	22:11:12	76,7	107,9	0	54,4	100
07.03.2022	22:12:12	76,6	107	0	51	100
07.03.2022	22:13:12	76,4	106,4	0	51	100
07.03.2022	22:14:12	76,3	105,5	0	50,5	100
07.03.2022	22:15:12	76,2	104,8	0	54,8	100
07.03.2022	22:16:12	76	104,1	0	50	100
07.03.2022	22:17:12	75,9	103,3	0	51,9	100
07.03.2022	22:18:12	75,8	102,5	0	53,2	100
07.03.2022	22:19:12	75,7	101,9	0	58,6	100
07.03.2022	22:20:12	75,6	101,1	0	62,1	100
07.03.2022	22:21:12	75,5	100,4	0	48,3	100
07.03.2022	22:22:12	75,3	99,8	0	49,2	100
07.03.2022	22:23:12	75,3	99	0	52,1	100
07.03.2022	22:24:12	75,2	98,6	0	56,4	100
07.03.2022	22:25:12	75,2	97,8	0	48,2	100
07.03.2022	22:26:12	75,2	97,3	0	49,7	100
07.03.2022	22:27:12	75,1	96,8	0	47,9	100
07.03.2022	22:28:12	75,1	96,5	0	53	100
07.03.2022	22:29:12	75	95,9	0	47,2	100
07.03.2022	22:30:12	74,9	95,6	0	40,9	100
07.03.2022	22:31:12	75	94,9	0	63,8	100
07.03.2022	22:32:12	74,9	94,4	0	50,9	100
07.03.2022	22:33:12	75	94,1	0	50,8	100
07.03.2022	22:34:12	74,9	93,6	0	53,1	100
07.03.2022	22:35:12	74,9	93,3	0	47,5	100
07.03.2022	22:36:12	74,9	92,9	0	52,8	100
07.03.2022	22:37:12	74,8	92,4	0	48,1	100
07.03.2022	22:38:12	74,9	92,2	0	44,1	100
07.03.2022	22:39:12	74,8	91,8	0	49,5	100
07.03.2022	22:40:12	74,8	91,5	0	50,1	100
07.03.2022	22:41:12	74,8	91,2	0	53,6	100
07.03.2022	22:42:12	74,7	90,9	0	49	100
07.03.2022	22:43:12	74,8	90,8	0	53	100
07.03.2022	22:44:12	74,7	90,4	0	49,7	100
07.03.2022	22:45:12	74,6	90	0	55,1	100
07.03.2022	22:46:12	74,5	89,8	0	43,7	100
07.03.2022	22:47:12	74,6	89,6	0	49,4	100
07.03.2022	22:48:12	74,5	89,2	0	48,5	100
07.03.2022	22:49:12	74,5	89	0	49,8	100
07.03.2022	22:50:12	74,5	88,8	0	49,8	100
07.03.2022	22:51:12	74,4	88,6	0	47,9	100
07.03.2022	22:52:12	74,4	88,3	0	51,8	100
07.03.2022	22:53:12	74,4	87,9	0	45,5	100
07.03.2022	22:54:12	74,3	87,7	0	47,9	100
07.03.2022	22:55:12	74,3	87,5	0	53,7	100
07.03.2022	22:56:12	74,3	87,3	0	51,2	100
07.03.2022	22:57:12	74,2	87,2	0	50,4	100
07.03.2022	22:58:12	74,2	87	0	48,9	100
07.03.2022	22:59:12	74,1	86,7	0	49,6	100
07.03.2022	23:00:12	74,1	86,5	0	47,8	100
07.03.2022	23:01:12	74,1	86,3	0	54,9	100
07.03.2022	23:02:12	74	86,2	0	45	100
07.03.2022	23:03:12	74	86	0	63,7	100
07.03.2022	23:04:12	73,9	85,8	0	56,7	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
07.03.2022	23:05:12	73,9	85,3	0	49,1	100
07.03.2022	23:06:12	73,8	85,1	30	72	100
07.03.2022	23:07:12	73,8	92	48	83,3	100
07.03.2022	23:08:12	73,9	166,6	36	83,5	100
07.03.2022	23:09:12	74,3	172	31	80,6	100
07.03.2022	23:10:12	74,4	181,7	34	79,3	100
07.03.2022	23:11:12	74,7	266,4	32	82,2	100
07.03.2022	23:12:12	75,3	340,8	37	77,4	100
07.03.2022	23:13:12	76	403,5	33	80,1	100
07.03.2022	23:14:12	77	449,2	33	80,8	100
07.03.2022	23:15:12	78	505,6	31	82,5	100
07.03.2022	23:16:12	79,4	593,4	30	90,7	100
07.03.2022	23:17:12	81,1	651,2	33	82,5	100
07.03.2022	23:18:12	82,8	606,8	32	82,4	100
07.03.2022	23:19:12	84,4	542,1	31	83	100
07.03.2022	23:20:12	85,3	471	30	92,6	100
07.03.2022	23:21:12	86,2	408,6	30	94,7	100
07.03.2022	23:22:12	86,8	360,2	30	107,5	100
07.03.2022	23:23:12	87,2	322,9	30	117	100
07.03.2022	23:24:12	87,5	295,7	30	126,7	100
07.03.2022	23:25:12	87,6	273,4	30	127,5	100
07.03.2022	23:26:12	88	253,8	30	131,1	100
07.03.2022	23:27:12	88	236,6	30	128,7	100
07.03.2022	23:28:12	88,1	220,8	30	127,8	100
07.03.2022	23:29:12	88,2	206	30	130,9	100
07.03.2022	23:30:12	88,2	193	0	108,6	100
07.03.2022	23:31:12	88,2	183,6	0	53,2	100
07.03.2022	23:32:12	88,3	176,9	0	50,7	100
07.03.2022	23:33:12	88,2	171,2	0	51,2	100
07.03.2022	23:34:12	88,2	166	0	53,8	100
07.03.2022	23:35:12	88,2	161,4	0	48,9	100
07.03.2022	23:36:12	88,2	157,3	0	53	100
07.03.2022	23:37:12	88,1	153,6	0	49	100
07.03.2022	23:38:12	88,1	150,2	0	55,3	100
07.03.2022	23:39:12	87,9	147,3	0	53,1	100
07.03.2022	23:40:12	88	144,3	0	46,9	100
07.03.2022	23:41:12	88	141,6	0	51,1	100
07.03.2022	23:42:12	88	139,1	0	51,2	100
07.03.2022	23:43:12	87,9	136,8	0	52,1	100
07.03.2022	23:44:12	87,9	134,8	0	50,9	100
07.03.2022	23:45:12	87,8	132,9	0	51	100
07.03.2022	23:46:12	87,8	131,1	0	55,3	100
07.03.2022	23:47:12	87,7	129,3	0	51,6	100
07.03.2022	23:48:12	87,7	127,7	0	57	100
07.03.2022	23:49:12	87,6	126,1	0	54,9	100
07.03.2022	23:50:12	87,5	124,7	0	53,6	100
07.03.2022	23:51:12	87,5	123,4	0	51,2	100
07.03.2022	23:52:12	87,4	122,4	0	61,6	100
07.03.2022	23:53:12	87,3	121,2	0	50,9	100
07.03.2022	23:54:12	87,3	120,1	0	47,7	100
07.03.2022	23:55:12	87,2	119,2	0	55,9	100
07.03.2022	23:56:12	87,1	118,1	0	54	100
07.03.2022	23:57:12	87,1	117,5	0	47,3	100
07.03.2022	23:58:12	87,1	116,5	0	54	100
07.03.2022	23:59:12	87	115,7	0	52,2	100
08.03.2022	00:00:12	86,9	114,8	0	46,8	100
08.03.2022	00:03:12	86,7	112,5	0	52,9	100
08.03.2022	00:04:12	86,6	111,6	0	60,3	100
08.03.2022	00:05:12	86,5	110,9	0	49,8	100
08.03.2022	00:06:12	86,5	110,2	0	50,6	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	00:07:12	86,4	109,7	0	55,9	100
08.03.2022	00:08:12	86,3	109,1	0	51,4	100
08.03.2022	00:09:12	86,2	108,4	0	55,1	100
08.03.2022	00:10:12	86,2	107,8	0	51,6	100
08.03.2022	00:11:12	86,1	107,2	0	51,2	100
08.03.2022	00:12:12	86	106,8	0	51,7	100
08.03.2022	00:13:12	85,9	106,3	0	51,6	100
08.03.2022	00:14:12	85,9	106	0	48,7	100
08.03.2022	00:15:12	85,8	105,4	0	51,2	100
08.03.2022	00:16:12	85,7	105	0	48,6	100
08.03.2022	00:17:12	85,7	104,6	0	55,5	100
08.03.2022	00:18:12	85,6	104	0	59,4	100
08.03.2022	00:19:12	85,5	103,6	0	50,9	100
08.03.2022	00:20:12	85,4	103,2	0	52	100
08.03.2022	00:21:12	85,4	102,8	0	50,8	100
08.03.2022	00:22:12	85,3	102,3	0	50,9	100
08.03.2022	00:23:12	85,2	101,8	0	46,7	100
08.03.2022	00:24:12	85,1	101,5	0	58,7	100
08.03.2022	00:25:12	85,1	101,1	0	51,3	100
08.03.2022	00:26:12	85	100,7	0	49,4	100
08.03.2022	00:27:12	85	100,5	0	56,4	100
08.03.2022	00:28:12	84,8	100,3	0	51,2	100
08.03.2022	00:29:12	84,8	100	0	54,8	100
08.03.2022	00:30:12	84,7	99,5	0	48,2	100
08.03.2022	00:31:12	84,6	99,2	0	50,7	100
08.03.2022	00:32:12	84,5	98,9	0	50,8	100
08.03.2022	00:33:12	84,4	98,6	0	49,1	100
08.03.2022	00:34:12	84,4	98,2	0	51,3	100
08.03.2022	00:35:12	84,3	97,6	0	50,4	100
08.03.2022	00:36:12	84,2	97,3	0	55,4	100
08.03.2022	00:37:12	84,1	96,9	0	35,2	100
08.03.2022	00:38:12	84,1	96,5	0	51,1	100
08.03.2022	00:39:12	84	96,2	0	52,2	100
08.03.2022	00:40:12	83,9	96	0	54,9	100
08.03.2022	00:41:12	83,8	95,6	0	50,1	100
08.03.2022	00:42:12	82,6	95,1	0	47,9	100
08.03.2022	00:43:12	79,1	94,6	0	46,3	100
08.03.2022	00:44:12	76,3	93,9	0	57,7	100
08.03.2022	00:45:12	74,6	93,3	0	48,7	100
08.03.2022	00:46:12	73,4	92,6	30	83,5	100
08.03.2022	00:47:12	72,6	107,3	48	79,4	100
08.03.2022	00:48:12	72,1	171,2	33	86,8	100
08.03.2022	00:49:12	71,8	169,7	41	79,5	100
08.03.2022	00:50:12	71,7	220,4	44	80,7	100
08.03.2022	00:51:12	71,6	288,6	45	78,3	100
08.03.2022	00:52:12	71,9	354,7	47	82,5	100
08.03.2022	00:53:12	72,2	446,4	47	80,3	100
08.03.2022	00:54:12	73	591,5	47	82,7	100
08.03.2022	00:55:12	74,5	720,7	44	81,4	100
08.03.2022	00:56:12	76,6	783,8	43	80,3	100
08.03.2022	00:57:12	79,5	789,6	30	85,2	100
08.03.2022	00:58:12	82,2	721,5	32	82,2	100
08.03.2022	00:59:12	84,4	615	35	77,4	100
08.03.2022	01:00:12	86,1	519,3	30	80,2	100
08.03.2022	01:01:12	87,2	445,1	30	90	100
08.03.2022	01:02:12	88	387,9	30	95,5	100
08.03.2022	01:03:12	88,6	344	30	106,4	100
08.03.2022	01:04:12	89	310,3	30	115	100
08.03.2022	01:05:12	89,4	285,4	30	127,4	100
08.03.2022	01:06:12	89,6	266	30	126,6	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	01:07:12	89,9	248,8	30	128,2	100
08.03.2022	01:08:12	90	234	30	131,9	100
08.03.2022	01:09:12	90,1	220,3	30	128,7	100
08.03.2022	01:10:12	90,2	208,4	30	127,8	100
08.03.2022	01:11:12	90,3	198	0	119	100
08.03.2022	01:12:12	90,4	194,5	0	53,9	100
08.03.2022	01:13:12	90,4	197,9	0	55,2	100
08.03.2022	01:14:12	90,5	197,3	0	53,1	100
08.03.2022	01:15:12	90,5	188	0	51,5	100
08.03.2022	01:16:12	90,5	179,4	0	55,2	100
08.03.2022	01:17:12	90,5	172,3	0	53,1	100
08.03.2022	01:18:12	90,6	166,5	0	51,4	100
08.03.2022	01:19:12	90,6	161,6	0	51,9	100
08.03.2022	01:20:12	90,6	157,3	0	50,8	100
08.03.2022	01:21:12	90,6	153,2	0	53,3	100
08.03.2022	01:22:12	90,5	149,7	0	53,4	100
08.03.2022	01:23:12	90,6	147	0	52	100
08.03.2022	01:24:12	90,4	144,2	0	53,4	100
08.03.2022	01:25:12	90,4	141,8	0	50,6	100
08.03.2022	01:26:12	90,4	139,5	0	48,4	100
08.03.2022	01:27:12	90,3	137,2	0	49,1	100
08.03.2022	01:28:12	90,4	135,2	0	52,9	100
08.03.2022	01:29:12	90,3	133,4	0	54,3	100
08.03.2022	01:30:12	90,3	131,9	0	51,4	100
08.03.2022	01:31:12	90,2	130,4	0	52,8	100
08.03.2022	01:32:12	90,1	128,7	0	52,3	100
08.03.2022	01:33:12	90,1	127,6	0	53,9	100
08.03.2022	01:34:12	90,1	126,2	0	53,3	100
08.03.2022	01:35:12	90	125,1	0	51,3	100
08.03.2022	01:36:12	89,9	124,1	0	50,1	100
08.03.2022	01:37:12	89,9	123,1	0	52,4	100
08.03.2022	01:38:12	89,8	122	0	53,5	100
08.03.2022	01:39:12	89,7	121,1	0	62,8	100
08.03.2022	01:40:12	89,7	119,9	0	52,3	100
08.03.2022	01:41:12	89,6	119,4	0	53,3	100
08.03.2022	01:42:12	89,5	118,5	0	54,1	100
08.03.2022	01:43:12	89,5	117,7	0	53,2	100
08.03.2022	01:44:12	89,3	116,9	0	52,5	100
08.03.2022	01:45:12	89,3	116,2	0	53,4	100
08.03.2022	01:46:12	89,2	115,3	0	52,8	100
08.03.2022	01:47:12	89,1	114,5	0	54,1	100
08.03.2022	01:48:12	89,1	113,8	0	52,3	100
08.03.2022	01:49:12	89	113,3	0	58,6	100
08.03.2022	01:50:12	88,9	112,5	0	52,5	100
08.03.2022	01:51:12	88,9	112	0	52,3	100
08.03.2022	01:52:12	88,7	111,3	0	51,6	100
08.03.2022	01:53:12	88,7	110,8	0	54,5	100
08.03.2022	01:54:12	88,6	110,1	0	51,1	100
08.03.2022	01:55:12	88,5	109,7	0	51,8	100
08.03.2022	01:56:12	88,4	109,2	0	52,3	100
08.03.2022	01:57:12	88,3	108,6	0	51,6	100
08.03.2022	01:58:12	88,3	108,2	0	50	100
08.03.2022	01:59:12	88,2	108	0	50,5	100
08.03.2022	02:00:12	88,1	107,5	0	52,3	100
08.03.2022	02:01:12	88,1	107	0	52,4	100
08.03.2022	02:02:12	88	106,5	0	52,3	100
08.03.2022	02:03:12	87,8	106,1	0	52,8	100
08.03.2022	02:04:12	87,8	105,9	0	47,5	100
08.03.2022	02:05:12	87,7	105,4	0	49,5	100
08.03.2022	02:06:12	87,6	104,9	0	50,3	100

Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	02:07:12	87,5	104,6	0	50,5	100
08.03.2022	02:08:12	87,4	104,1	0	52,5	100
08.03.2022	02:09:12	87,3	103,8	0	50,3	100
08.03.2022	02:10:12	87,2	103,7	0	48,5	100
08.03.2022	02:11:12	87,2	103,2	0	49,6	100
08.03.2022	02:12:12	87,1	102,8	0	53,6	100
08.03.2022	02:13:12	87	102,6	0	49,8	100
08.03.2022	02:14:12	86,9	102,5	0	52,7	100
08.03.2022	02:15:12	86,8	101,9	0	50	100
08.03.2022	02:16:12	86,7	101,5	0	52	100
08.03.2022	02:17:12	86,7	101,2	0	52,5	100
08.03.2022	02:18:12	86,6	100,8	0	51,7	100
08.03.2022	02:19:12	86,4	100,4	0	50,6	100
08.03.2022	02:20:12	86,4	100,3	0	48	100
08.03.2022	02:21:12	86,3	99,9	0	51,1	100
08.03.2022	02:22:12	86,2	99,5	0	49,8	100
08.03.2022	02:23:12	86,1	99,3	0	48,8	100
08.03.2022	02:24:12	86,1	98,9	0	43,9	100
08.03.2022	02:25:12	85,9	98,6	0	51,5	100
08.03.2022	02:26:12	85,8	98,4	0	46,7	100
08.03.2022	02:27:12	85,8	98,1	0	47,3	100
08.03.2022	02:28:12	85,7	97,7	0	50,5	100
08.03.2022	02:29:12	85,7	97,3	0	50,9	100
08.03.2022	02:30:12	85,5	97,1	0	51,6	100
08.03.2022	02:31:12	85,4	97	0	49,9	100
08.03.2022	02:32:12	85,3	96,8	0	51,2	100
08.03.2022	02:33:12	85,3	96,4	0	52,2	100
08.03.2022	02:34:12	85,2	96,2	0	51	100
08.03.2022	02:35:12	85,1	96,1	0	52,1	100
08.03.2022	02:36:12	85	96	0	51,9	100
08.03.2022	02:37:12	84,9	95,8	0	45,6	100
08.03.2022	02:38:12	84,9	95,4	0	48,6	100
08.03.2022	02:39:12	84,8	95,1	0	49,1	100
08.03.2022	02:40:12	84,7	95	0	50,6	100
08.03.2022	02:41:12	84,5	94,8	0	50,6	100
08.03.2022	02:42:12	84,5	94,7	0	50,2	100
08.03.2022	02:43:12	84,4	94,5	0	51,3	100
08.03.2022	02:44:12	84,4	94,3	0	52,1	100
08.03.2022	02:45:12	84,3	94,2	0	52	100
08.03.2022	02:46:12	84,2	93,9	0	49,8	100
08.03.2022	02:47:12	84,1	93,8	0	52,3	100
08.03.2022	02:48:12	84	93,7	0	49,6	100
08.03.2022	02:49:12	83,9	93,5	0	46,3	100
08.03.2022	02:50:12	83,8	93,2	0	51,4	100
08.03.2022	02:51:12	83,7	93	0	51,9	100
08.03.2022	02:52:12	83,6	92,7	0	52,8	100
08.03.2022	02:53:12	83,6	92,5	0	49	100
08.03.2022	02:54:12	83,5	92,3	0	51,8	100
08.03.2022	02:55:12	83,4	92,1	0	47,3	100
08.03.2022	02:56:12	83,3	92	0	49,2	100
08.03.2022	02:57:12	83,2	91,8	0	51,2	100
08.03.2022	02:58:12	83,2	91,6	0	50,6	100
08.03.2022	02:59:12	83,1	91,6	0	50,3	100
08.03.2022	03:00:12	83	91,3	0	49,9	100
08.03.2022	03:01:12	82,9	91,2	0	52,4	100
08.03.2022	03:02:12	82,8	91	0	52,3	100
08.03.2022	03:03:12	82,7	90,8	0	55,6	100
08.03.2022	03:04:12	82,7	90,5	0	49,4	100
08.03.2022	03:05:12	82,6	90,4	0	37,3	100
08.03.2022	03:06:12	80,8	90,1	0	53,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	03:07:12	77,3	89,6	0	50,2	100
08.03.2022	03:08:12	74,6	89,3	0	50,4	100
08.03.2022	03:09:12	72,5	88,5	30	69,3	100
08.03.2022	03:10:12	70,7	107,2	53	78,9	100
08.03.2022	03:11:12	69,1	173,6	36	80,6	100
08.03.2022	03:12:12	67,5	171,1	50	79,9	100
08.03.2022	03:13:12	66	223,9	48	82	100
08.03.2022	03:14:12	64,7	282,8	49	76,2	100
08.03.2022	03:15:12	63,5	350,6	51	79,8	100
08.03.2022	03:16:12	62,6	485,5	67	80,8	100
08.03.2022	03:17:12	62,2	642,1	68	79,9	100
08.03.2022	03:18:12	62,4	750,6	68	80,9	100
08.03.2022	03:19:12	63,1	780,3	69	80,4	100
08.03.2022	03:20:12	63,8	770,7	67	81,5	100
08.03.2022	03:21:12	64,5	794,7	69	77,9	100
08.03.2022	03:22:12	65,5	792,3	67	81,8	100
08.03.2022	03:23:12	66,3	802,1	69	78,1	100
08.03.2022	03:24:12	67,3	779,8	67	83	100
08.03.2022	03:25:12	67,9	765,9	68	80,6	100
08.03.2022	03:26:12	68,4	778,3	67	80,2	100
08.03.2022	03:27:12	69,1	787,2	62	84,7	100
08.03.2022	03:28:12	69,8	796,8	57	80,6	100
08.03.2022	03:29:12	70,5	794,8	47	81,9	100
08.03.2022	03:30:12	71	788,1	46	84,7	100
08.03.2022	03:31:12	71,6	791,8	47	81	100
08.03.2022	03:32:12	72	776,6	47	81,1	100
08.03.2022	03:33:12	72,4	780,5	48	80,7	100
08.03.2022	03:34:12	72,9	776,4	48	81	100
08.03.2022	03:35:12	73,3	769,4	48	79,4	100
08.03.2022	03:36:12	73,6	766,7	47	82,3	100
08.03.2022	03:37:12	73,9	759,5	47	82,1	100
08.03.2022	03:38:12	74,1	750,6	48	80	100
08.03.2022	03:39:12	74,3	745,5	47	81	100
08.03.2022	03:40:12	74,6	753,8	48	78,6	100
08.03.2022	03:41:12	74,7	759,6	48	79,2	100
08.03.2022	03:42:12	74,9	779,9	44	87,1	100
08.03.2022	03:43:12	75,5	797,5	40	85,3	100
08.03.2022	03:44:12	75,9	793,6	38	82,8	100
08.03.2022	03:45:12	76,2	774,1	35	80,1	100
08.03.2022	03:46:12	76,3	756	37	80,5	100
08.03.2022	03:47:12	76,5	760,8	38	79,8	100
08.03.2022	03:48:12	76,7	775,2	37	81	100
08.03.2022	03:49:12	76,9	764,1	34	86,3	100
08.03.2022	03:50:12	77	735,5	37	80,6	100
08.03.2022	03:51:12	77	737,7	33	83	100
08.03.2022	03:52:12	77,1	747	35	80,3	100
08.03.2022	03:53:12	77,1	754	36	79,1	100
08.03.2022	03:54:12	77,4	763,4	38	83,5	100
08.03.2022	03:55:12	77,6	750,2	35	84,5	100
08.03.2022	03:56:12	77,7	735,8	31	83,3	100
08.03.2022	03:57:12	77,7	730,8	30	83,6	100
08.03.2022	03:58:12	77,7	737,1	30	80,6	100
08.03.2022	03:59:12	77,8	746,1	30	79,7	100
08.03.2022	04:00:12	77,8	742,3	30	80,5	100
08.03.2022	04:01:12	77,8	739	30	81	100
08.03.2022	04:02:12	77,8	740,7	30	81	100
08.03.2022	04:03:12	77,7	735,6	30	79,8	100
08.03.2022	04:04:12	77,7	733,7	30	80,7	100
08.03.2022	04:05:12	77,9	738,2	30	82,8	100
08.03.2022	04:06:12	78	741,7	30	95,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	04:07:12	78,1	744,3	30	94,6	100
08.03.2022	04:08:12	78	732,8	30	96,5	100
08.03.2022	04:09:12	78,1	744,5	30	96,5	100
08.03.2022	04:10:12	78,1	746,3	30	94,2	100
08.03.2022	04:11:12	78,2	727,9	30	97,7	100
08.03.2022	04:12:12	78,2	718,4	30	96,2	100
08.03.2022	04:13:12	78,2	710	30	97,2	100
08.03.2022	04:14:12	78,2	705,8	30	92,7	100
08.03.2022	04:15:12	78,1	707,6	30	94,4	100
08.03.2022	04:16:12	78,1	706,5	30	97,4	100
08.03.2022	04:17:12	78,1	708	30	94,8	100
08.03.2022	04:18:12	78,1	703,7	30	96,3	100
08.03.2022	04:19:12	77,9	695,3	30	98,1	100
08.03.2022	04:20:12	77,9	688,1	30	93,9	100
08.03.2022	04:21:12	77,8	688,7	30	95,8	100
08.03.2022	04:22:12	77,8	686,5	30	97	100
08.03.2022	04:23:12	77,7	685,1	30	99,8	100
08.03.2022	04:24:12	77,6	678,3	30	100,8	100
08.03.2022	04:25:12	77,5	673,3	30	97,1	100
08.03.2022	04:26:12	77,4	665,7	30	96,4	100
08.03.2022	04:27:12	77,1	658,1	30	99,6	100
08.03.2022	04:28:12	77	659,2	30	96	100
08.03.2022	04:29:12	76,9	663,3	30	97,8	100
08.03.2022	04:30:12	76,7	674,1	30	98,3	100
08.03.2022	04:31:12	76,5	678,5	30	96,3	100
08.03.2022	04:32:12	76,4	683,9	30	96,8	100
08.03.2022	04:33:12	76,4	685,9	30	97,2	100
08.03.2022	04:34:12	76,3	685,7	30	92,2	100
08.03.2022	04:35:12	76,3	708,7	30	95,6	100
08.03.2022	04:36:12	76,3	719	30	93	100
08.03.2022	04:37:12	76,3	716,6	30	94,7	100
08.03.2022	04:38:12	76,4	715,9	30	97,9	100
08.03.2022	04:39:12	76,4	709	30	97,8	100
08.03.2022	04:40:12	76,3	708,6	30	99,2	100
08.03.2022	04:41:12	76,2	695,8	30	92,6	100
08.03.2022	04:42:12	76,2	697,1	30	95,3	100
08.03.2022	04:43:12	76,1	691,4	30	99,1	100
08.03.2022	04:44:12	76,1	697,2	30	98,2	100
08.03.2022	04:45:12	76	701,9	30	93,5	100
08.03.2022	04:46:12	76	707,5	30	97,3	100
08.03.2022	04:47:12	76	709,7	30	98,2	100
08.03.2022	04:48:12	76	694,8	30	95,7	100
08.03.2022	04:49:12	76	688,6	30	95,1	100
08.03.2022	04:50:12	76	685	30	98,1	100
08.03.2022	04:51:12	75,9	684,1	30	98,9	100
08.03.2022	04:52:12	75,9	679,8	30	98,3	100
08.03.2022	04:53:12	75,8	674,9	30	97,7	100
08.03.2022	04:54:12	75,6	671,5	30	97,6	100
08.03.2022	04:55:12	75,6	674,7	30	98	100
08.03.2022	04:56:12	75,4	682,4	30	98,7	100
08.03.2022	04:57:12	75,6	690,3	30	98,4	100
08.03.2022	04:58:12	75,6	691,9	30	96,3	100
08.03.2022	04:59:12	75,6	687,1	30	100,7	100
08.03.2022	05:00:12	75,7	687	30	98,7	100
08.03.2022	05:01:12	75,6	693,7	30	98,1	100
08.03.2022	05:02:12	75,8	698,4	30	95,5	100
08.03.2022	05:03:12	75,9	709,1	30	101,7	100
08.03.2022	05:04:12	76	713,3	30	96,4	100
08.03.2022	05:05:12	76,1	716,1	30	92,8	100
08.03.2022	05:06:12	76,3	710,7	30	97	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	05:07:12	76,4	701,7	30	94,3	100
08.03.2022	05:08:12	76,4	698,9	30	98,7	100
08.03.2022	05:09:12	76,5	702,3	30	97,3	100
08.03.2022	05:10:12	76,5	699,5	30	97,3	100
08.03.2022	05:11:12	76,6	696,2	30	94,7	100
08.03.2022	05:12:12	76,7	693,9	30	99,5	100
08.03.2022	05:13:12	76,6	688,8	30	94,3	100
08.03.2022	05:14:12	76,6	691,4	30	97,6	100
08.03.2022	05:15:12	76,7	682,8	30	97	100
08.03.2022	05:16:12	76,7	675,5	30	96,2	100
08.03.2022	05:17:12	76,7	679,4	30	98,9	100
08.03.2022	05:18:12	76,7	677,2	30	95,3	100
08.03.2022	05:19:12	76,8	678,9	30	98,5	100
08.03.2022	05:20:12	76,8	675	30	97,8	100
08.03.2022	05:21:12	76,7	676,3	30	97,5	100
08.03.2022	05:22:12	76,7	679,5	30	97,8	100
08.03.2022	05:23:12	76,7	679,3	30	99,3	100
08.03.2022	05:24:12	76,7	677,3	30	96,9	100
08.03.2022	05:25:12	76,7	682,6	30	96	100
08.03.2022	05:26:12	76,8	698,9	30	97	100
08.03.2022	05:27:12	77	698,1	30	96,8	100
08.03.2022	05:28:12	77,1	699,9	30	96,9	100
08.03.2022	05:29:12	77	694,1	30	96,4	100
08.03.2022	05:30:12	77,1	688,6	30	96,7	100
08.03.2022	05:31:12	77,1	683,4	30	97,6	100
08.03.2022	05:32:12	77,1	675,2	30	97,2	100
08.03.2022	05:33:12	77,1	670,9	30	97,9	100
08.03.2022	05:34:12	77,2	673,4	30	94,9	100
08.03.2022	05:35:12	77,3	685,3	30	95,9	100
08.03.2022	05:36:12	77,3	696,5	30	96,7	100
08.03.2022	05:37:12	77,5	704,5	30	97,9	100
08.03.2022	05:38:12	77,6	702,7	30	97,6	100
08.03.2022	05:39:12	77,7	705,3	30	94,9	100
08.03.2022	05:40:12	77,9	709,8	30	102,1	100
08.03.2022	05:41:12	78	708,9	30	95,5	100
08.03.2022	05:42:12	78,1	710,3	30	95,2	100
08.03.2022	05:43:12	78,2	711,5	30	97,1	100
08.03.2022	05:44:12	78,4	711,6	30	98,2	100
08.03.2022	05:45:12	78,6	709,7	30	97,9	100
08.03.2022	05:46:12	78,7	707,5	30	95,7	100
08.03.2022	05:47:12	78,8	701,8	30	96,5	100
08.03.2022	05:48:12	78,9	693,7	30	95,1	100
08.03.2022	05:49:12	78,9	687,2	30	97	100
08.03.2022	05:50:12	78,9	677,6	30	96,2	100
08.03.2022	05:51:12	78,9	680,1	30	97,2	100
08.03.2022	05:52:12	79	678,5	30	98,4	100
08.03.2022	05:53:12	78,9	679,4	30	96,8	100
08.03.2022	05:54:12	79	687,3	30	95,7	100
08.03.2022	05:55:12	79,1	691,9	30	95,7	100
08.03.2022	05:56:12	79,1	692,2	30	99	100
08.03.2022	05:57:12	79,1	683,2	30	97,4	100
08.03.2022	05:58:12	79,2	677	30	94,3	100
08.03.2022	05:59:12	79,1	677,3	30	92,8	100
08.03.2022	06:00:12	79,2	681,4	30	96,8	100
08.03.2022	06:01:12	79,2	682,8	30	96,6	100
08.03.2022	06:02:12	79,2	685,8	30	97	100
08.03.2022	06:03:12	79,3	692	30	98,7	100
08.03.2022	06:04:12	79,4	686,4	30	75,1	100
08.03.2022	06:05:12	79,3	605	33	77,9	100
08.03.2022	06:06:12	78,9	533,4	33	79,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	06:07:12	78,3	466,9	32	83,4	100
08.03.2022	06:08:12	77,6	410,4	30	96,5	100
08.03.2022	06:09:12	76,8	365,2	30	107,3	100
08.03.2022	06:10:12	76	328,9	30	107,9	100
08.03.2022	06:11:12	75,1	300,1	30	127,9	100
08.03.2022	06:12:12	74,2	277,5	30	131	100
08.03.2022	06:13:12	73,3	256,6	30	85,9	100
08.03.2022	06:14:12	72,5	266,8	36	85,9	100
08.03.2022	06:15:12	72	351,7	38	76,5	100
08.03.2022	06:16:12	71,9	430	47	81,7	100
08.03.2022	06:17:12	71,8	495	48	78,9	100
08.03.2022	06:18:12	72	562	47	80,6	100
08.03.2022	06:19:12	72,4	625,9	47	81,4	100
08.03.2022	06:20:12	73,1	684,9	48	79,5	100
08.03.2022	06:21:12	73,9	715,1	48	79,1	100
08.03.2022	06:22:12	74,8	729,6	38	82,5	100
08.03.2022	06:23:12	75,6	734,9	39	81,8	100
08.03.2022	06:24:12	76,4	739,2	39	81,9	100
08.03.2022	06:25:12	77,2	731,6	36	83,6	100
08.03.2022	06:26:12	77,8	714,9	36	80,2	100
08.03.2022	06:27:12	78,4	708,7	30	82,5	100
08.03.2022	06:28:12	78,8	700,1	30	81,8	100
08.03.2022	06:29:12	79,2	698,6	30	93,7	100
08.03.2022	06:30:12	79,4	701,7	30	85,5	100
08.03.2022	06:31:12	79,6	633	30	77,9	100
08.03.2022	06:32:12	79,4	554,9	32	84,5	100
08.03.2022	06:33:12	79	486,5	33	79,8	100
08.03.2022	06:34:12	78,4	427	30	92,1	100
08.03.2022	06:35:12	77,7	377,9	30	107,8	100
08.03.2022	06:36:12	76,8	339,9	30	112,4	100
08.03.2022	06:37:12	76	310,2	30	130,6	100
08.03.2022	06:38:12	75,2	288,5	30	129	100
08.03.2022	06:39:12	74,4	269,7	30	129	100
08.03.2022	06:40:12	73,5	252,9	30	77,3	100
08.03.2022	06:41:12	72,7	260,4	33	78,2	100
08.03.2022	06:42:12	72,3	337,8	48	77,9	100
08.03.2022	06:43:12	72,2	409	48	79,2	100
08.03.2022	06:44:12	72,1	475,2	48	79,4	100
08.03.2022	06:45:12	72,3	543	48	80,9	100
08.03.2022	06:46:12	72,7	604,5	48	80,2	100
08.03.2022	06:47:12	73,2	649,9	48	81,5	100
08.03.2022	06:48:12	73,9	690,8	48	78	100
08.03.2022	06:49:12	74,6	718,1	38	85,2	100
08.03.2022	06:50:12	75,3	727,7	35	81,6	100
08.03.2022	06:51:12	75,9	717,2	35	78,8	100
08.03.2022	06:52:12	76,4	704,4	35	76	100
08.03.2022	06:53:12	76,8	708,9	37	82,2	100
08.03.2022	06:54:12	77	692	33	82,4	100
08.03.2022	06:55:12	77,1	673,7	34	78,6	100
08.03.2022	06:56:12	77	661	31	81,9	100
08.03.2022	06:57:12	76,8	660,8	34	79,8	100
08.03.2022	06:58:12	76,7	666,7	34	78,5	100
08.03.2022	06:59:12	76,5	678,8	33	81,6	100
08.03.2022	07:00:12	76,5	686,2	32	83,3	100
08.03.2022	07:01:12	76,3	689,6	36	81	100
08.03.2022	07:02:12	76,3	699,2	34	80,4	100
08.03.2022	07:03:12	76,2	706,1	30	83,9	100
08.03.2022	07:04:12	76,2	702,6	30	83,4	100
08.03.2022	07:05:12	76	707,4	30	81,5	100
08.03.2022	07:06:12	76	718	30	81,5	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	07:07:12	75,9	724,9	30	80,7	100
08.03.2022	07:08:12	75,9	734,3	31	81,7	100
08.03.2022	07:09:12	76	740	31	81,4	100
08.03.2022	07:10:12	76	747,2	30	80	100
08.03.2022	07:11:12	76,1	744,6	30	81,9	100
08.03.2022	07:12:12	76,2	734,1	30	81,3	100
08.03.2022	07:13:12	76,2	717,2	30	82,7	100
08.03.2022	07:14:12	76,1	717,6	30	82,5	100
08.03.2022	07:15:12	76,1	716,4	30	79	100
08.03.2022	07:16:12	76	706,3	30	81,1	100
08.03.2022	07:17:12	76	696,6	30	95,6	100
08.03.2022	07:18:12	75,9	703,4	30	82,1	100
08.03.2022	07:19:12	75,7	716	30	81,8	100
08.03.2022	07:20:12	75,8	726	30	82,8	100
08.03.2022	07:21:12	75,8	706	30	82	100
08.03.2022	07:22:12	75,8	699,7	30	83,2	100
08.03.2022	07:23:12	75,8	695,1	30	81,3	100
08.03.2022	07:24:12	75,7	700,5	30	100,3	100
08.03.2022	07:25:12	75,7	714,1	30	91,4	100
08.03.2022	07:26:12	75,8	729,1	30	97,2	100
08.03.2022	07:27:12	75,9	738,8	30	98	100
08.03.2022	07:28:12	76	731,9	30	97,7	100
08.03.2022	07:29:12	76,1	727,9	30	95,3	100
08.03.2022	07:30:12	76,2	720	30	96,3	100
08.03.2022	07:31:12	76,3	710,9	30	98,4	100
08.03.2022	07:32:12	76,3	711,5	30	97	100
08.03.2022	07:33:12	76,4	706,2	30	97,6	100
08.03.2022	07:34:12	76,4	710,9	30	96,2	100
08.03.2022	07:35:12	76,4	721,4	30	99,4	100
08.03.2022	07:36:12	76,5	723,6	30	98,9	100
08.03.2022	07:37:12	76,8	709,5	30	97,1	100
08.03.2022	07:38:12	76,9	702,2	30	96,5	100
08.03.2022	07:39:12	77	689,7	30	97,9	100
08.03.2022	07:40:12	77,2	677,8	30	95,8	100
08.03.2022	07:41:12	77,4	666,2	30	97,3	100
08.03.2022	07:42:12	77,5	653,2	30	97,5	100
08.03.2022	07:43:12	77,7	657,3	30	98,1	100
08.03.2022	07:44:12	77,9	659,4	30	97,6	100
08.03.2022	07:45:12	78,1	662,1	30	98,4	100
08.03.2022	07:46:12	78,5	670,1	30	96,8	100
08.03.2022	07:47:12	78,8	683,7	30	96,3	100
08.03.2022	07:48:12	79,2	680	30	95,3	100
08.03.2022	07:49:12	79,6	668,3	30	88,7	100
08.03.2022	07:50:12	80,4	591,2	38	79,1	100
08.03.2022	07:51:12	81,5	519,1	32	81,7	100
08.03.2022	07:52:12	82,5	457,3	32	81	100
08.03.2022	07:53:12	83,4	404,2	30	96,1	100
08.03.2022	07:54:12	84,1	359,9	30	107,1	100
08.03.2022	07:55:12	84,7	324,4	30	111,6	100
08.03.2022	07:56:12	85,1	296,7	30	130,9	100
08.03.2022	07:57:12	85,3	274,7	30	130,6	100
08.03.2022	07:58:12	85,5	255,9	30	128,3	100
08.03.2022	07:59:12	85,5	239,7	30	130	100
08.03.2022	08:00:12	85,3	225,6	30	131,5	100
08.03.2022	08:01:12	85,1	213,1	30	130,9	100
08.03.2022	08:02:12	84,8	202	30	132,6	100
08.03.2022	08:03:12	84,6	192,7	0	58,3	100
08.03.2022	08:04:12	84,4	186,4	0	57,2	100
08.03.2022	08:05:12	84,2	181	0	59,2	100
08.03.2022	08:06:12	83,9	176,2	0	54,5	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	08:07:12	83,7	171,6	0	54,9	100
08.03.2022	08:08:12	83,5	167,3	0	55,8	100
08.03.2022	08:09:12	83,3	163,4	0	54,7	100
08.03.2022	08:10:12	83,1	159,7	0	54,2	100
08.03.2022	08:11:12	82,9	156,2	0	51,9	100
08.03.2022	08:12:12	82,7	152,9	0	54,2	100
08.03.2022	08:13:12	82,5	150	0	54,3	100
08.03.2022	08:14:12	82,4	147,1	0	48,7	100
08.03.2022	08:15:12	82,2	144,5	0	56,6	100
08.03.2022	08:16:12	82	141,9	0	61,8	100
08.03.2022	08:17:12	81,8	139,4	0	55	100
08.03.2022	08:18:12	81,6	137,2	0	54,7	100
08.03.2022	08:19:12	81,4	135	0	57,3	100
08.03.2022	08:20:12	81,2	133,3	0	54,1	100
08.03.2022	08:21:12	81,1	131,1	0	54,9	100
08.03.2022	08:22:12	80,9	129,2	0	54,1	100
08.03.2022	08:23:12	80,7	127,5	0	55,3	100
08.03.2022	08:24:12	80,5	125,6	0	53,8	100
08.03.2022	08:25:12	80,3	124,1	0	54,5	100
08.03.2022	08:26:12	80,1	122,5	0	51,1	100
08.03.2022	08:27:12	79,9	121	0	53,3	100
08.03.2022	08:28:12	79,6	119,5	0	50,9	100
08.03.2022	08:29:12	79,4	118	0	53,7	100
08.03.2022	08:30:12	79,2	116,7	0	58,4	100
08.03.2022	08:31:12	78,9	115,3	0	53,9	100
08.03.2022	08:32:12	78,8	114,2	0	54,4	100
08.03.2022	08:33:12	78,5	112,8	0	62,6	100
08.03.2022	08:34:12	78,3	111,6	0	52,3	100
08.03.2022	08:35:12	78	110,5	0	53,2	100
08.03.2022	08:36:12	77,8	109,3	0	52,7	100
08.03.2022	08:37:12	77,5	108,3	0	53,3	100
08.03.2022	08:38:12	77,3	107,3	0	55,6	100
08.03.2022	08:39:12	77,1	106,3	0	52,4	100
08.03.2022	08:40:12	76,8	105,3	0	52,2	100
08.03.2022	08:41:12	76,6	104,3	0	53,8	100
08.03.2022	08:42:12	76,4	103,2	0	50,4	100
08.03.2022	08:43:12	76,1	102,2	0	45,1	100
08.03.2022	08:44:12	75,9	101,4	0	49,4	100
08.03.2022	08:45:12	75,2	100,5	0	53	100
08.03.2022	08:46:12	73,7	99,5	30	67,6	100
08.03.2022	08:47:12	72,4	97,8	53	74,5	100
08.03.2022	08:48:12	71,4	138,1	38	101,5	100
08.03.2022	08:49:12	70,9	156,3	37	80,5	100
08.03.2022	08:50:12	70,4	171,6	38	79,7	100
08.03.2022	08:51:12	70,1	241,1	44	78,9	100
08.03.2022	08:52:12	70,1	316,9	44	81,7	100
08.03.2022	08:53:12	70,3	387,9	47	81,5	100
08.03.2022	08:54:12	70,6	466,6	48	78,8	100
08.03.2022	08:55:12	71,2	559,1	47	81,8	100
08.03.2022	08:56:12	72,1	654,6	47	82,6	100
08.03.2022	08:57:12	73,4	716,6	48	79,8	100
08.03.2022	08:58:12	74,7	738,3	41	84,5	100
08.03.2022	08:59:12	75,9	740,6	37	85,7	100
08.03.2022	09:00:12	77,1	740,8	34	82,4	100
08.03.2022	09:01:12	78,1	726,5	100	162,6	100
08.03.2022	09:02:12	79	634,6	100	166	100
08.03.2022	09:03:12	79,4	542,4	100	173,1	100
08.03.2022	09:04:12	79,5	465,8	37	78	100
08.03.2022	09:05:12	79,8	404,3	36	81,5	100
08.03.2022	09:06:12	80,3	355,7	32	78,7	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	09:07:12	80,9	314,9	30	80,8	100
08.03.2022	09:08:12	81,3	281,6	30	96,5	100
08.03.2022	09:09:12	81,6	254,6	30	110,2	100
08.03.2022	09:10:12	81,9	233,3	30	115,1	100
08.03.2022	09:11:12	82,1	216,9	30	129,8	100
08.03.2022	09:12:12	82,3	205,3	30	137	100
08.03.2022	09:13:12	82,4	195,5	30	130,4	100
08.03.2022	09:14:12	82,3	186,6	30	131,2	100
08.03.2022	09:15:12	82,3	178,5	30	131,9	100
08.03.2022	09:16:12	82,1	171,3	30	130,1	100
08.03.2022	09:17:12	81,9	164,7	30	130,1	100
08.03.2022	09:18:12	81,8	159,1	0	55,9	100
08.03.2022	09:19:12	81,6	155,2	0	52,6	100
08.03.2022	09:20:12	81,4	151,9	0	57	100
08.03.2022	09:21:12	81,3	148,7	0	57,3	100
08.03.2022	09:22:12	81	145,8	0	48,8	100
08.03.2022	09:23:12	80,8	143,1	0	51,7	100
08.03.2022	09:24:12	80,6	140,4	0	53	100
08.03.2022	09:25:12	80,5	138,1	0	52,9	100
08.03.2022	09:26:12	80,3	135,8	0	56,8	100
08.03.2022	09:27:12	80,1	133,6	0	56,4	100
08.03.2022	09:28:12	79,9	131,8	0	52,2	100
08.03.2022	09:29:12	79,7	129,9	0	52,9	100
08.03.2022	09:30:12	79,5	127,9	0	55,6	100
08.03.2022	09:31:12	79,3	126,5	0	52,7	100
08.03.2022	09:32:12	79,2	124,8	0	55,2	100
08.03.2022	09:33:12	79	123,3	0	54,2	100
08.03.2022	09:34:12	78,9	122,1	0	53,2	100
08.03.2022	09:35:12	78,7	120,8	0	53,4	100
08.03.2022	09:36:12	78,5	119,4	0	53,5	100
08.03.2022	09:37:12	78,3	118,3	0	50,4	100
08.03.2022	09:38:12	78,2	117,1	0	52,1	100
08.03.2022	09:39:12	78	115,9	0	52,1	100
08.03.2022	09:40:12	77,8	114,9	0	53,2	100
08.03.2022	09:41:12	77,7	114	0	54,4	100
08.03.2022	09:42:12	77,5	113	0	57,2	100
08.03.2022	09:43:12	77,5	111,9	0	55,7	100
08.03.2022	09:44:12	77,3	111	0	51,8	100
08.03.2022	09:45:12	77,1	110,2	0	53,1	100
08.03.2022	09:46:12	76,9	109,5	0	51,2	100
08.03.2022	09:47:12	76,8	108,5	0	52,2	100
08.03.2022	09:48:12	76,7	107,7	0	53,1	100
08.03.2022	09:49:12	76,5	107,1	0	53,1	100
08.03.2022	09:50:12	76,5	106,3	0	48,1	100
08.03.2022	09:51:12	76,3	105,6	0	54,6	100
08.03.2022	09:52:12	76,2	105,1	0	50	100
08.03.2022	09:53:12	76	104,3	0	50,8	100
08.03.2022	09:54:12	76	103,7	0	51,5	100
08.03.2022	09:55:12	75,8	103	0	51	100
08.03.2022	09:56:12	75,7	102,5	0	52,1	100
08.03.2022	09:57:12	75,6	101,8	0	50,9	100
08.03.2022	09:58:12	75,5	101,4	0	50,2	100
08.03.2022	09:59:12	75,4	100,7	0	52,6	100
08.03.2022	10:00:12	75,2	100,3	0	48,5	100
08.03.2022	10:01:12	75,2	99,6	0	51,6	100
08.03.2022	10:02:12	75,1	99,2	0	51,8	100
08.03.2022	10:03:12	75	98,6	0	51,6	100
08.03.2022	10:04:12	74,9	98,2	0	49,7	100
08.03.2022	10:05:12	74,8	97,6	0	52	100
08.03.2022	10:06:12	74,8	97,1	0	52,9	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	10:07:12	74,6	96,8	0	51,2	100
08.03.2022	10:08:12	74,6	96,2	0	50,5	100
08.03.2022	10:09:12	74,6	95,8	0	55	100
08.03.2022	10:10:12	74,5	95,5	0	50,5	100
08.03.2022	10:11:12	74,5	95	0	51,2	100
08.03.2022	10:12:12	74,4	94,5	0	51,9	100
08.03.2022	10:13:12	74,4	94,3	0	49,6	100
08.03.2022	10:14:12	74,3	93,7	0	51,7	100
08.03.2022	10:15:12	74,3	93,5	0	51	100
08.03.2022	10:16:12	74,4	93,1	0	50,2	100
08.03.2022	10:17:12	74,3	92,9	0	50,5	100
08.03.2022	10:18:12	74,3	92,5	0	54,3	100
08.03.2022	10:19:12	74,3	92,1	0	52,5	100
08.03.2022	10:20:12	74,2	91,8	0	50,3	100
08.03.2022	10:21:12	74,2	91,3	0	50,3	100
08.03.2022	10:22:12	74,2	91,1	0	50,8	100
08.03.2022	10:23:12	74,2	90,9	0	52,7	100
08.03.2022	10:24:12	74,2	90,7	0	51,2	100
08.03.2022	10:25:12	74,2	90,3	0	51,1	100
08.03.2022	10:26:12	74,1	89,9	0	50,4	100
08.03.2022	10:27:12	74,1	89,8	0	50,6	100
08.03.2022	10:28:12	74,1	89,6	0	52,8	100
08.03.2022	10:29:12	74	89,2	0	51,7	100
08.03.2022	10:30:12	74,1	88,9	0	49,9	100
08.03.2022	10:31:12	74	88,7	0	51,2	100
08.03.2022	10:32:12	74	88,4	0	49,1	100
08.03.2022	10:33:12	74	88,2	0	51,4	100
08.03.2022	10:34:12	74	88,1	0	50,5	100
08.03.2022	10:35:12	73,9	87,7	0	49,7	100
08.03.2022	10:36:12	73,8	87,3	30	72,2	100
08.03.2022	10:37:12	73,8	107,9	49	77,9	100
08.03.2022	10:38:12	74	167,9	38	76,8	100
08.03.2022	10:39:12	74,3	166,1	37	76,9	100
08.03.2022	10:40:12	74,5	215,8	34	80,3	100
08.03.2022	10:41:12	74,8	288,2	32	85,4	100
08.03.2022	10:42:12	75,4	338,7	33	79,2	100
08.03.2022	10:43:12	76,2	378,8	32	81,8	100
08.03.2022	10:44:12	77	437,8	32	82,1	100
08.03.2022	10:45:12	78	498,6	30	82	100
08.03.2022	10:46:12	79,2	549,1	30	93	100
08.03.2022	10:47:12	80,6	585,6	30	74,1	100
08.03.2022	10:48:12	81,9	550,5	32	83,2	100
08.03.2022	10:49:12	83,2	502,1	32	82,8	100
08.03.2022	10:50:12	84,1	447,8	32	80,4	100
08.03.2022	10:51:12	84,9	397,2	30	96,6	100
08.03.2022	10:52:12	85,5	354,3	30	107,9	100
08.03.2022	10:53:12	85,9	318,5	30	112,8	100
08.03.2022	10:54:12	86,3	291	30	122	100
08.03.2022	10:55:12	86,4	268,9	30	130,2	100
08.03.2022	10:56:12	86,7	250	30	128,8	100
08.03.2022	10:57:12	86,9	233,6	30	126,9	100
08.03.2022	10:58:12	86,9	219,2	30	129,6	100
08.03.2022	10:59:12	87,1	206,5	30	129,7	100
08.03.2022	11:00:12	87,2	195,1	30	131,1	100
08.03.2022	11:01:12	87,2	185,3	0	53,9	100
08.03.2022	11:02:12	87,2	178,4	0	54,2	100
08.03.2022	11:03:12	87,2	172,5	0	54,4	100
08.03.2022	11:04:12	87,2	167,3	0	53,9	100
08.03.2022	11:05:12	87,2	162,5	0	58	100
08.03.2022	11:06:12	87,2	158,2	0	55,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	11:07:12	87,2	154,2	0	53,2	100
08.03.2022	11:08:12	87,2	150,7	0	59,4	100
08.03.2022	11:09:12	87,2	147,6	0	50	100
08.03.2022	11:10:12	87,2	144,5	0	51,7	100
08.03.2022	11:11:12	87,2	141,8	0	50,7	100
08.03.2022	11:12:12	87,1	139,2	0	52,5	100
08.03.2022	11:13:12	87,1	136,8	0	51,4	100
08.03.2022	11:14:12	87,1	134,7	0	52	100
08.03.2022	11:15:12	87	132,8	0	53	100
08.03.2022	11:16:12	87	130,9	0	55,6	100
08.03.2022	11:17:12	86,9	129	0	54,1	100
08.03.2022	11:18:12	86,8	127,5	0	50	100
08.03.2022	11:19:12	86,9	125,7	0	48,1	100
08.03.2022	11:20:12	86,8	124,3	0	53,3	100
08.03.2022	11:21:12	86,7	122,8	0	55,4	100
08.03.2022	11:22:12	86,7	121,4	0	50,5	100
08.03.2022	11:23:12	86,6	120,1	0	51,7	100
08.03.2022	11:24:12	86,5	118,9	0	51,5	100
08.03.2022	11:25:12	86,5	117,7	0	46,6	100
08.03.2022	11:26:12	86,5	116,6	0	50,5	100
08.03.2022	11:27:12	86,4	115,5	0	51	100
08.03.2022	11:28:12	86,4	114,6	0	51,3	100
08.03.2022	11:29:12	86,3	113,5	0	50,7	100
08.03.2022	11:30:12	86,3	112,6	0	52,5	100
08.03.2022	11:31:12	86,2	111,8	0	49,8	100
08.03.2022	11:32:12	86,1	110,9	0	52,6	100
08.03.2022	11:33:12	86	110	0	52,9	100
08.03.2022	11:34:12	86	109,2	0	50,6	100
08.03.2022	11:35:12	85,9	108,4	0	51,4	100
08.03.2022	11:36:12	85,9	107,7	0	52,7	100
08.03.2022	11:37:12	85,8	106,9	0	50,2	100
08.03.2022	11:38:12	85,7	106,2	0	52,1	100
08.03.2022	11:39:12	85,5	105,6	0	49,9	100
08.03.2022	11:40:12	85,6	104,8	0	54	100
08.03.2022	11:41:12	85,5	104,3	0	51,9	100
08.03.2022	11:42:12	85,4	103,6	0	51,4	100
08.03.2022	11:43:12	85,4	103,2	0	51,5	100
08.03.2022	11:44:12	85,3	102,4	0	52,5	100
08.03.2022	11:45:12	85,1	101,8	0	53,5	100
08.03.2022	11:46:12	85,1	101,3	0	52,2	100
08.03.2022	11:47:12	85	100,8	0	51,8	100
08.03.2022	11:48:12	84,9	100,2	0	51,2	100
08.03.2022	11:49:12	84,9	99,6	0	65,6	100
08.03.2022	11:50:12	84,7	99,1	0	51,9	100
08.03.2022	11:51:12	84,7	98,7	0	51,6	100
08.03.2022	11:52:12	84,6	98,2	0	51,3	100
08.03.2022	11:53:12	84,4	97,8	0	51,9	100
08.03.2022	11:54:12	84,4	97,3	0	51,2	100
08.03.2022	11:55:12	84,3	96,8	0	51,2	100
08.03.2022	11:56:12	84,1	96,3	0	52	100
08.03.2022	11:57:12	84,1	95,9	0	51,2	100
08.03.2022	11:58:12	84	95,6	0	50,3	100
08.03.2022	11:59:12	84	95,1	0	55,3	100
08.03.2022	12:00:12	83,9	94,7	0	52	100
08.03.2022	12:01:12	83,7	94,4	0	52,8	100
08.03.2022	12:02:12	83,7	94	0	50,7	100
08.03.2022	12:03:12	83,5	93,6	0	51,2	100
08.03.2022	12:04:12	83,5	93,4	0	50,7	100
08.03.2022	12:05:12	83,3	93,1	0	52,8	100
08.03.2022	12:06:12	83,3	92,7	0	51,1	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	12:07:12	83,2	92,5	0	51,8	100
08.03.2022	12:08:12	83,2	92,2	0	50,7	100
08.03.2022	12:09:12	83,1	91,8	0	50,9	100
08.03.2022	12:10:12	83,1	91,5	0	53,1	100
08.03.2022	12:11:12	82,8	91,2	0	50	100
08.03.2022	12:12:12	82,8	90,7	0	50	100
08.03.2022	12:13:12	82,5	90,5	0	52,7	100
08.03.2022	12:14:12	82,6	90,3	0	50,2	100
08.03.2022	12:15:12	82,6	90,1	0	50,1	100
08.03.2022	12:16:12	82,4	89,8	0	57,8	100
08.03.2022	12:17:12	82,4	89,4	0	49,7	100
08.03.2022	12:18:12	82,2	89,2	0	49,2	100
08.03.2022	12:19:12	82,1	89,1	0	51,8	100
08.03.2022	12:20:12	82	88,9	0	50,5	100
08.03.2022	12:21:12	81,9	88,6	0	50,5	100
08.03.2022	12:22:12	81,9	88,4	0	50,5	100
08.03.2022	12:23:12	81,8	88,2	0	51,2	100
08.03.2022	12:24:12	81,7	88,1	0	51	100
08.03.2022	12:25:12	81,6	87,9	0	50,6	100
08.03.2022	12:26:12	81,5	87,8	0	51,2	100
08.03.2022	12:27:12	81,4	87,6	0	52,1	100
08.03.2022	12:28:12	81,4	87,2	0	51,5	100
08.03.2022	12:29:12	81,2	87	0	49,3	100
08.03.2022	12:30:12	81,2	86,9	0	50	100
08.03.2022	12:31:12	81,1	86,8	0	50,3	100
08.03.2022	12:32:12	81,1	86,7	0	50,5	100
08.03.2022	12:33:12	80,9	86,5	0	54,7	100
08.03.2022	12:34:12	80,8	86,2	0	51,2	100
08.03.2022	12:35:12	80,7	86	0	52	100
08.03.2022	12:36:12	80,6	85,9	0	50,6	100
08.03.2022	12:37:12	80,6	85,8	0	51,3	100
08.03.2022	12:38:12	80,5	85,7	0	53,2	100
08.03.2022	12:39:12	80,4	85,6	0	51,5	100
08.03.2022	12:40:12	80,3	85,3	0	51,9	100
08.03.2022	12:41:12	80,2	85,2	0	55,5	100
08.03.2022	12:42:12	80,2	84,9	0	54,3	100
08.03.2022	12:43:12	80,1	84,6	0	42,6	100
08.03.2022	12:44:12	80	84,6	0	48,4	100
08.03.2022	12:45:12	80	84,5	0	50,7	100
08.03.2022	12:46:12	79,8	84,4	0	51,5	100
08.03.2022	12:47:12	79,8	84,3	0	51,9	100
08.03.2022	12:48:12	79,7	84,1	0	51,8	100
08.03.2022	12:49:12	79,6	83,9	0	51	100
08.03.2022	12:50:12	79,5	83,6	0	49,3	100
08.03.2022	12:51:12	79,4	83,5	0	56,6	100
08.03.2022	12:52:12	79,3	83,5	0	50,2	100
08.03.2022	12:53:12	79,3	83,4	0	50,3	100
08.03.2022	12:54:12	79,1	83,3	0	50,3	100
08.03.2022	12:55:12	79,1	83,2	0	52,1	100
08.03.2022	12:56:12	79	83,2	0	49,5	100
08.03.2022	12:57:12	78,9	82,9	0	52,8	100
08.03.2022	12:58:12	78,9	82,8	0	52,7	100
08.03.2022	12:59:12	78,8	82,5	0	49,8	100
08.03.2022	13:00:12	78,7	82,4	0	53,3	100
08.03.2022	13:01:12	78,6	82,2	0	50,2	100
08.03.2022	13:02:12	78,5	82,2	0	50,1	100
08.03.2022	13:03:12	78,4	82,1	0	51,4	100
08.03.2022	13:04:12	78,3	82	0	49,3	100
08.03.2022	13:05:12	78,3	81,8	0	50,4	100
08.03.2022	13:06:12	78,2	81,6	0	57,1	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	13:07:12	78,1	81,4	0	51,7	100
08.03.2022	13:08:12	78	81,2	0	51,5	100
08.03.2022	13:09:12	78	81,2	0	54,5	100
08.03.2022	13:10:12	77,8	81,1	0	50,6	100
08.03.2022	13:11:12	77,8	81	0	50,8	100
08.03.2022	13:12:12	77,8	80,9	0	50,2	100
08.03.2022	13:13:12	77,6	80,7	0	68,6	100
08.03.2022	13:14:12	77,5	80,6	0	46,5	100
08.03.2022	13:15:12	77,4	80,6	0	50,3	100
08.03.2022	13:16:12	77,3	80,4	0	49,5	100
08.03.2022	13:17:12	77,2	80,2	0	48,5	100
08.03.2022	13:18:12	77,2	80,2	0	52,7	100
08.03.2022	13:19:12	77	79,9	0	50,3	100
08.03.2022	13:20:12	77	79,9	0	48,6	100
08.03.2022	13:21:12	76,9	79,7	0	51,5	100
08.03.2022	13:22:12	76,7	79,7	0	49	100
08.03.2022	13:23:12	76,6	79,6	0	53,3	100
08.03.2022	13:24:12	76,5	79,5	0	50,9	100
08.03.2022	13:25:12	76,5	79,3	0	52,5	100
08.03.2022	13:26:12	76,3	79,1	0	50,2	100
08.03.2022	13:27:12	76,2	78,9	0	49,2	100
08.03.2022	13:28:12	76	78,8	0	51	100
08.03.2022	13:29:12	75,9	78,6	0	49,2	100
08.03.2022	13:30:12	75,8	78,5	0	53,3	100
08.03.2022	13:31:12	75,7	78,5	0	53,2	100
08.03.2022	13:32:12	75,6	78,3	0	51,8	100
08.03.2022	13:33:12	75,4	78,1	0	51,1	100
08.03.2022	13:34:12	75,3	77,9	0	53	100
08.03.2022	13:35:12	75,2	77,6	0	50,5	100
08.03.2022	13:36:12	75,1	77,5	0	49,3	100
08.03.2022	13:37:12	74,9	77,4	0	49,3	100
08.03.2022	13:38:12	74,8	77,3	0	49,1	100
08.03.2022	13:39:12	74,7	77,2	0	47,8	100
08.03.2022	13:40:12	74,6	77,2	0	50,2	100
08.03.2022	13:41:12	74,4	77	0	47,2	100
08.03.2022	13:42:12	74,3	76,8	0	49,7	100
08.03.2022	13:43:12	74,2	76,6	0	64,3	100
08.03.2022	13:44:12	74,1	76,4	0	50,1	100
08.03.2022	13:45:12	74	76,3	0	52,8	100
08.03.2022	13:46:12	73,9	76,2	30	83,9	100
08.03.2022	13:47:12	73,7	75,3	53	74,9	100
08.03.2022	13:48:12	73,6	115,4	55	78	100
08.03.2022	13:49:12	73,5	163,6	37	79,5	100
08.03.2022	13:50:12	73,6	160,2	41	80,1	100
08.03.2022	13:51:12	73,6	207,9	39	79,7	100
08.03.2022	13:52:12	73,7	267,6	47	79,6	100
08.03.2022	13:53:12	74,1	332,9	41	87,7	100
08.03.2022	13:54:12	74,5	415	37	80,9	100
08.03.2022	13:55:12	75,2	503,4	38	80,3	100
08.03.2022	13:56:12	76,3	602	33	84,7	100
08.03.2022	13:57:12	77,9	669,9	37	81,8	100
08.03.2022	13:58:12	79,9	710,2	32	80,3	100
08.03.2022	13:59:12	81,9	676,3	38	78,4	100
08.03.2022	14:00:12	83,6	602	32	81,5	100
08.03.2022	14:01:12	85	529,5	33	79,9	100
08.03.2022	14:02:12	86,1	460,7	30	94,9	100
08.03.2022	14:03:12	86,9	403,6	30	102,1	100
08.03.2022	14:04:12	87,5	358,1	30	110,5	100
08.03.2022	14:05:12	87,9	321,9	30	125,1	100
08.03.2022	14:06:12	88,2	295,6	30	130,8	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	14:07:12	88,4	273,6	30	128,5	100
08.03.2022	14:08:12	88,6	254,2	30	131,1	100
08.03.2022	14:09:12	88,6	237,4	30	132,4	100
08.03.2022	14:10:12	88,6	222,7	30	128,4	100
08.03.2022	14:11:12	88,7	210	30	129,9	100
08.03.2022	14:12:12	88,6	199,2	0	69,6	100
08.03.2022	14:13:12	88,6	190,6	0	56,7	100
08.03.2022	14:14:12	88,5	183,4	0	55,5	100
08.03.2022	14:15:12	88,4	177,2	0	52,6	100
08.03.2022	14:16:12	88,3	171,6	0	53,1	100
08.03.2022	14:17:12	88,2	166,6	0	52,8	100
08.03.2022	14:18:12	88,1	162,1	0	54	100
08.03.2022	14:19:12	88	157,9	0	50,8	100
08.03.2022	14:20:12	87,7	154,3	0	55,8	100
08.03.2022	14:21:12	87,6	150,9	0	47,1	100
08.03.2022	14:22:12	87,5	147,5	0	53	100
08.03.2022	14:23:12	87,3	144,6	0	51,4	100
08.03.2022	14:24:12	87,1	142,1	0	53,3	100
08.03.2022	14:25:12	86,9	139,4	0	51,5	100
08.03.2022	14:26:12	86,7	137	0	52	100
08.03.2022	14:27:12	86,4	134,8	0	52,6	100
08.03.2022	14:28:12	86,3	132,8	0	60,1	100
08.03.2022	14:29:12	86,1	130,8	0	51,8	100
08.03.2022	14:30:12	85,8	129	0	52,6	100
08.03.2022	14:31:12	85,7	127,1	0	51,5	100
08.03.2022	14:32:12	85,4	125,5	0	52,5	100
08.03.2022	14:33:12	85,5	124	0	51,1	100
08.03.2022	14:34:12	84,9	122,6	0	52,3	100
08.03.2022	14:35:12	84,8	121,2	0	51,4	100
08.03.2022	14:36:12	84,7	119,9	0	50,3	100
08.03.2022	14:37:12	84,5	118,4	0	53,6	100
08.03.2022	14:38:12	84,2	117,2	0	53,3	100
08.03.2022	14:39:12	84	116,1	0	53,4	100
08.03.2022	14:40:12	83,8	114,9	0	52,3	100
08.03.2022	14:41:12	83,7	114	0	51	100
08.03.2022	14:42:12	83,5	112,9	0	52,9	100
08.03.2022	14:43:12	83,3	111,9	0	51,2	100
08.03.2022	14:44:12	83,1	111,1	0	53,4	100
08.03.2022	14:45:12	83	110,1	0	52,2	100
08.03.2022	14:46:12	82,8	109,5	0	51,2	100
08.03.2022	14:47:12	82,7	108,5	0	55,9	100
08.03.2022	14:48:12	82,5	107,7	0	52,3	100
08.03.2022	14:49:12	82,3	107,1	0	50,3	100
08.03.2022	14:50:12	82,2	106,3	0	52	100
08.03.2022	14:51:12	82,1	105,5	0	50,6	100
08.03.2022	14:52:12	82	105	0	55,6	100
08.03.2022	14:53:12	81,8	104,3	0	53,1	100
08.03.2022	14:54:12	81,7	103,6	0	53,3	100
08.03.2022	14:55:12	81,6	103,1	0	51,3	100
08.03.2022	14:56:12	81,4	102,4	0	48,7	100
08.03.2022	14:57:12	81,3	101,9	0	50,1	100
08.03.2022	14:58:12	81,2	101,1	0	53,4	100
08.03.2022	14:59:12	81,1	100,8	0	52,1	100
08.03.2022	15:00:12	81	100	0	52,4	100
08.03.2022	15:01:12	80,9	99,7	0	52,9	100
08.03.2022	15:02:12	80,8	99	0	49,8	100
08.03.2022	15:03:12	80,7	98,7	0	51,9	100
08.03.2022	15:04:12	80,5	98,1	0	57,4	100
08.03.2022	15:05:12	80,4	97,7	0	56,8	100
08.03.2022	15:06:12	80,3	97,2	0	49,7	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	15:07:12	80,2	96,6	0	49,9	100
08.03.2022	15:08:12	80,1	96,1	0	51,6	100
08.03.2022	15:09:12	80	95,7	0	51,2	100
08.03.2022	15:10:12	79,9	95,4	0	51,6	100
08.03.2022	15:11:12	79,8	94,7	0	51,3	100
08.03.2022	15:12:12	79,7	94,4	0	51,8	100
08.03.2022	15:13:12	79,6	94,1	0	51,6	100
08.03.2022	15:14:12	79,5	93,5	0	52,7	100
08.03.2022	15:15:12	79,4	93,3	0	53,4	100
08.03.2022	15:16:12	79,3	92,7	0	51,5	100
08.03.2022	15:17:12	79,2	92,4	0	50,7	100
08.03.2022	15:18:12	79,1	92,2	0	52,7	100
08.03.2022	15:19:12	79	91,7	0	52,6	100
08.03.2022	15:20:12	79	91,3	0	51,4	100
08.03.2022	15:21:12	78,9	91	0	53,9	100
08.03.2022	15:22:12	78,7	90,7	0	51,2	100
08.03.2022	15:23:12	78,7	90,3	0	51	100
08.03.2022	15:24:12	78,5	90,1	0	50,7	100
08.03.2022	15:25:12	78,5	89,9	0	52,2	100
08.03.2022	15:26:12	78,4	89,6	0	50,8	100
08.03.2022	15:27:12	78,3	89,2	0	51,3	100
08.03.2022	15:28:12	78,2	89	0	53,3	100
08.03.2022	15:29:12	78,1	88,8	0	53	100
08.03.2022	15:30:12	78	88,4	0	50,4	100
08.03.2022	15:31:12	77,9	88,1	0	50,5	100
08.03.2022	15:32:12	77,9	87,9	0	52,4	100
08.03.2022	15:33:12	77,7	87,6	0	50,3	100
08.03.2022	15:34:12	77,7	87,3	0	50,6	100
08.03.2022	15:35:12	77,6	87	0	51	100
08.03.2022	15:36:12	77,5	86,9	0	51,6	100
08.03.2022	15:37:12	77,4	86,7	0	51,6	100
08.03.2022	15:38:12	77,3	86,4	0	51,5	100
08.03.2022	15:39:12	77,3	86	0	51,2	100
08.03.2022	15:40:12	77,2	85,8	0	50,7	100
08.03.2022	15:41:12	77,1	85,8	0	51,6	100
08.03.2022	15:42:12	77	85,6	0	51,8	100
08.03.2022	15:43:12	76,9	85,3	0	52,6	100
08.03.2022	15:44:12	76,9	85,1	0	49,6	100
08.03.2022	15:45:12	76,8	84,8	0	51,7	100
08.03.2022	15:46:12	76,7	84,6	0	50,9	100
08.03.2022	15:47:12	76,6	84,5	0	52,2	100
08.03.2022	15:48:12	76,5	84,4	0	49,7	100
08.03.2022	15:49:12	76,5	84,1	0	51,1	100
08.03.2022	15:50:12	76,4	83,9	0	51	100
08.03.2022	15:51:12	76,3	83,7	0	50,6	100
08.03.2022	15:52:12	76,2	83,5	0	50	100
08.03.2022	15:53:12	76,2	83,4	0	50,7	100
08.03.2022	15:54:12	76,1	83,3	0	50,8	100
08.03.2022	15:55:12	76	83,2	0	55,2	100
08.03.2022	15:56:12	75,9	83	0	50,9	100
08.03.2022	15:57:12	75,8	82,7	0	49,6	100
08.03.2022	15:58:12	75,8	82,5	0	50,6	100
08.03.2022	15:59:12	75,7	82,3	0	50,5	100
08.03.2022	16:00:12	75,6	82,2	0	51,6	100
08.03.2022	16:01:12	75,5	82	0	49,9	100
08.03.2022	16:02:12	75,4	81,9	0	50,6	100
08.03.2022	16:03:12	75,4	81,8	0	51,2	100
08.03.2022	16:04:12	75,3	81,6	0	50,4	100
08.03.2022	16:05:12	75,2	81,5	0	52	100
08.03.2022	16:06:12	75,2	81,3	0	50,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	16:07:12	75,2	81,2	0	51	100
08.03.2022	16:08:12	75,1	81	0	54,5	100
08.03.2022	16:09:12	75	80,9	0	54,1	100
08.03.2022	16:10:12	74,8	80,8	0	50,4	100
08.03.2022	16:11:12	74,8	80,7	0	52,2	100
08.03.2022	16:12:12	74,7	80,7	0	51,3	100
08.03.2022	16:13:12	74,7	80,5	0	51,1	100
08.03.2022	16:14:12	74,6	80,4	0	51,1	100
08.03.2022	16:15:12	74,5	80,1	0	51,1	100
08.03.2022	16:16:12	74,5	79,9	0	51,2	100
08.03.2022	16:17:12	74,4	79,8	0	51	100
08.03.2022	16:18:12	74,3	79,7	0	50,8	100
08.03.2022	16:19:12	74,2	79,6	0	51,2	100
08.03.2022	16:20:12	74,2	79,6	0	48,5	100
08.03.2022	16:21:12	74,1	79,4	0	51,2	100
08.03.2022	16:22:12	74	78,7	44	72,4	100
08.03.2022	16:23:12	73,9	118,4	52	79,1	100
08.03.2022	16:24:12	74	164,9	38	78,2	100
08.03.2022	16:25:12	73,9	170,1	37	82,9	100
08.03.2022	16:26:12	74,2	251	37	80,9	100
08.03.2022	16:27:12	74,6	312,8	37	81,2	100
08.03.2022	16:28:12	75,2	377,2	37	79	100
08.03.2022	16:29:12	75,7	440,2	36	79,3	100
08.03.2022	16:30:12	76,5	502,9	36	81	100
08.03.2022	16:31:12	77,7	594,6	32	79,9	100
08.03.2022	16:32:12	79,4	661,9	30	87,7	100
08.03.2022	16:33:12	81,1	669,6	34	83,5	100
08.03.2022	16:34:12	82,8	612,4	33	79,1	100
08.03.2022	16:35:12	84,2	543,1	32	81,7	100
08.03.2022	16:36:12	85,4	473,7	30	91,2	100
08.03.2022	16:37:12	86,1	416,3	30	93,3	100
08.03.2022	16:38:12	86,8	369,8	30	105,8	100
08.03.2022	16:39:12	87,3	332,6	30	114,3	100
08.03.2022	16:40:12	87,6	305,1	30	127	100
08.03.2022	16:41:12	87,8	282,4	30	126,4	100
08.03.2022	16:42:12	88	262	30	127,1	100
08.03.2022	16:43:12	88,2	243,8	30	128,1	100
08.03.2022	16:44:12	88,2	226,4	30	128,6	100
08.03.2022	16:45:12	88,3	211,5	30	128,5	100
08.03.2022	16:46:12	88,4	198,7	0	115,7	100
08.03.2022	16:47:12	88,4	188,9	0	52,9	100
08.03.2022	16:48:12	88,4	181,9	0	53,4	100
08.03.2022	16:49:12	88,3	175,7	0	52,6	100
08.03.2022	16:50:12	88,2	170	0	53	100
08.03.2022	16:51:12	88,3	165,1	0	52,6	100
08.03.2022	16:52:12	88,1	160,6	0	50,1	100
08.03.2022	16:53:12	88,1	156,6	0	52,2	100
08.03.2022	16:54:12	87,9	152,9	0	50,4	100
08.03.2022	16:55:12	87,9	149,5	0	52,1	100
08.03.2022	16:56:12	87,6	146,3	0	50,9	100
08.03.2022	16:57:12	87,6	143,6	0	50,7	100
08.03.2022	16:58:12	87,5	140,7	0	51,3	100
08.03.2022	16:59:12	87,3	138,2	0	52	100
08.03.2022	17:00:12	87,2	135,9	0	52,2	100
08.03.2022	17:01:12	87,1	133,7	0	54,6	100
08.03.2022	17:02:12	86,9	131,7	0	52,8	100
08.03.2022	17:03:12	86,7	129,8	0	53	100
08.03.2022	17:04:12	86,6	128,1	0	51,3	100
08.03.2022	17:05:12	86,4	126,4	0	50	100
08.03.2022	17:06:12	86,2	124,8	0	51	100



### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	17:07:12	86	123,3	0	50,4	100
08.03.2022	17:08:12	85,8	121,9	0	51,6	100
08.03.2022	17:09:12	85,6	120,5	0	50,8	100
08.03.2022	17:10:12	85,4	119,3	0	51,2	100
08.03.2022	17:11:12	85,2	118,1	0	51,2	100
08.03.2022	17:12:12	85,1	117	0	50,2	100
08.03.2022	17:13:12	84,8	116	0	51,1	100
08.03.2022	17:14:12	84,6	114,9	0	51	100
08.03.2022	17:15:12	84,4	113,9	0	50,9	100
08.03.2022	17:16:12	84,2	112,9	0	50,3	100
08.03.2022	17:17:12	84	112	0	50,9	100
08.03.2022	17:18:12	83,8	111,3	0	52,1	100
08.03.2022	17:19:12	83,6	110,4	0	51,1	100
08.03.2022	17:20:12	83,4	109,6	0	51	100
08.03.2022	17:21:12	83,2	108,9	0	50,4	100
08.03.2022	17:22:12	83	108,3	0	50,4	100
08.03.2022	17:23:12	82,9	107,3	0	50,2	100
08.03.2022	17:24:12	82,7	106,8	0	49,9	100
08.03.2022	17:25:12	82,5	106,1	0	50,5	100
08.03.2022	17:26:12	82,3	105,3	0	51,3	100
08.03.2022	17:27:12	82,2	104,7	0	51,2	100
08.03.2022	17:28:12	82	104	0	51,1	100
08.03.2022	17:29:12	81,9	103,3	0	51,4	100
08.03.2022	17:30:12	81,7	102,8	0	51,2	100
08.03.2022	17:31:12	81,5	102,1	0	51	100
08.03.2022	17:32:12	81,4	101,6	0	51	100
08.03.2022	17:33:12	81,3	101	0	51,2	100
08.03.2022	17:34:12	81,2	100,5	0	50,7	100
08.03.2022	17:35:12	81	99,8	0	51,1	100
08.03.2022	17:36:12	80,9	99,3	0	51,4	100
08.03.2022	17:37:12	80,8	98,7	0	51,3	100
08.03.2022	17:38:12	80,7	98,4	0	51,2	100
08.03.2022	17:39:12	80,5	97,7	0	51,1	100
08.03.2022	17:40:12	80,4	97,3	0	51,1	100
08.03.2022	17:41:12	80,3	96,9	0	50,7	100
08.03.2022	17:42:12	80,2	96,2	0	51,1	100
08.03.2022	17:43:12	80,1	95,7	0	50,9	100
08.03.2022	17:44:12	80	95,3	0	50,9	100
08.03.2022	17:45:12	79,9	94,9	0	51	100
08.03.2022	17:46:12	79,8	94,4	0	50,9	100
08.03.2022	17:47:12	79,7	94,2	0	51	100
08.03.2022	17:48:12	79,6	93,8	0	50,7	100
08.03.2022	17:49:12	79,5	93,2	0	50,6	100
08.03.2022	17:50:12	79,4	92,9	0	50,8	100
08.03.2022	17:51:12	79,3	92,5	0	50,8	100
08.03.2022	17:52:12	79,2	92,1	0	50,8	100
08.03.2022	17:53:12	79,1	91,8	0	50,5	100
08.03.2022	17:54:12	79	91,5	0	50,8	100
08.03.2022	17:55:12	78,9	91,1	0	50,5	100
08.03.2022	17:56:12	78,8	90,8	0	50,5	100
08.03.2022	17:57:12	78,7	90,3	0	52,9	100
08.03.2022	17:58:12	78,6	89,9	0	51,6	100
08.03.2022	17:59:12	78,5	89,7	0	51,1	100
08.03.2022	18:00:12	78,4	89,5	0	50,8	100
08.03.2022	18:01:12	78,4	89,2	0	50,5	100
08.03.2022	18:02:12	78,2	88,9	0	50,7	100
08.03.2022	18:03:12	78,1	88,6	0	50,5	100
08.03.2022	18:04:12	78,1	88,5	0	50,5	100
08.03.2022	18:05:12	77,9	88,2	0	50,4	100
08.03.2022	18:06:12	77,8	88	0	50,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	18:07:12	77,8	87,8	0	50,5	100
08.03.2022	18:08:12	77,7	87,4	0	53,3	100
08.03.2022	18:09:12	77,5	87,3	0	52,7	100
08.03.2022	18:10:12	77,6	87	0	51,1	100
08.03.2022	18:11:12	77,5	86,7	0	50,6	100
08.03.2022	18:12:12	77,4	86,4	0	50,5	100
08.03.2022	18:13:12	77,3	86,2	0	50,3	100
08.03.2022	18:14:12	77,2	86	0	50,6	100
08.03.2022	18:15:12	77,1	85,8	0	50,4	100
08.03.2022	18:16:12	77	85,7	0	50,3	100
08.03.2022	18:17:12	76,9	85,4	0	50,5	100
08.03.2022	18:18:12	76,9	85,2	0	50,4	100
08.03.2022	18:19:12	76,8	84,9	0	50,4	100
08.03.2022	18:20:12	76,7	84,8	0	50,4	100
08.03.2022	18:21:12	76,6	84,5	0	50,4	100
08.03.2022	18:22:12	76,5	84,4	0	50,4	100
08.03.2022	18:23:12	76,5	84,3	0	50,4	100
08.03.2022	18:24:12	76,4	84	0	50,4	100
08.03.2022	18:25:12	76,3	83,7	0	50,3	100
08.03.2022	18:26:12	76,2	83,5	0	50,3	100
08.03.2022	18:27:12	76,1	83,3	0	50,3	100
08.03.2022	18:28:12	76,1	83,2	0	50,3	100
08.03.2022	18:29:12	76,1	83,1	0	50,3	100
08.03.2022	18:30:12	75,9	83	0	50,2	100
08.03.2022	18:31:12	75,8	82,7	0	50,1	100
08.03.2022	18:32:12	75,8	82,6	0	50,1	100
08.03.2022	18:33:12	75,7	82,3	0	50,1	100
08.03.2022	18:34:12	75,6	82,3	0	50,1	100
08.03.2022	18:35:12	75,5	82,1	0	50,1	100
08.03.2022	18:36:12	75,4	82	0	50,1	100
08.03.2022	18:37:12	75,4	81,8	0	50	100
08.03.2022	18:38:12	75,3	81,7	0	50,2	100
08.03.2022	18:39:12	75,2	81,6	0	50,1	100
08.03.2022	18:40:12	75,2	81,5	0	50,2	100
08.03.2022	18:41:12	75,1	81,2	0	50,1	100
08.03.2022	18:42:12	75	81	0	50,2	100
08.03.2022	18:43:12	74,9	80,9	0	50,1	100
08.03.2022	18:44:12	74,9	80,8	0	50,2	100
08.03.2022	18:45:12	74,8	80,8	0	50,2	100
08.03.2022	18:46:12	74,8	80,6	0	50,2	100
08.03.2022	18:47:12	74,6	80,3	0	50,1	100
08.03.2022	18:48:12	74,6	80,1	0	50,1	100
08.03.2022	18:49:12	74,4	80,1	0	50,1	100
08.03.2022	18:50:12	74,6	80	0	50,2	100
08.03.2022	18:51:12	74,3	79,6	0	50,1	100
08.03.2022	18:52:12	74,3	79,6	0	50,1	100
08.03.2022	18:53:12	74,2	79,5	0	50,1	100
08.03.2022	18:54:12	74,1	79,5	0	50,1	100
08.03.2022	18:55:12	74	79,4	0	50,1	100
08.03.2022	18:56:12	74	79,3	0	50,1	100
08.03.2022	18:57:12	73,9	79	30	68,6	100
08.03.2022	18:58:12	73,8	96	54	77	100
08.03.2022	18:59:12	73,8	159,1	37	83,5	100
08.03.2022	19:00:12	73,9	164,1	33	80,9	100
08.03.2022	19:01:12	74	204,8	37	81,6	100
08.03.2022	19:02:12	74,2	278,1	37	80,9	100
08.03.2022	19:03:12	74,7	341,7	37	80,2	100
08.03.2022	19:04:12	75,3	404,1	37	79,8	100
08.03.2022	19:05:12	76	471	37	81,6	100
08.03.2022	19:06:12	77	558,5	35	86,3	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	19:07:12	78,5	640,6	33	80,2	100
08.03.2022	19:08:12	80,3	700,6	30	85,5	100
08.03.2022	19:09:12	82,2	669,1	33	80,7	100
08.03.2022	19:10:12	83,9	599,6	33	79,5	100
08.03.2022	19:11:12	85,3	520,4	32	82,5	100
08.03.2022	19:12:12	86,3	449,4	30	95	100
08.03.2022	19:13:12	87	391,8	30	105,5	100
08.03.2022	19:14:12	87,6	349,3	30	112,8	100
08.03.2022	19:15:12	88	316,6	30	127,1	100
08.03.2022	19:16:12	88,2	291,9	30	127,1	100
08.03.2022	19:17:12	88,5	270,6	30	127,8	100
08.03.2022	19:18:12	88,7	251,8	30	127,3	100
08.03.2022	19:19:12	88,9	235,8	30	127,9	100
08.03.2022	19:20:12	88,9	220,3	30	127,7	100
08.03.2022	19:21:12	88,9	206,3	30	127,8	100
08.03.2022	19:22:12	88,9	194,4	0	55	100
08.03.2022	19:23:12	88,9	186,4	0	53,7	100
08.03.2022	19:24:12	88,9	179,9	0	53,4	100
08.03.2022	19:25:12	89	174	0	53,1	100
08.03.2022	19:26:12	88,9	168,7	0	52,8	100
08.03.2022	19:27:12	88,8	163,8	0	52,7	100
08.03.2022	19:28:12	88,7	159,5	0	52,6	100
08.03.2022	19:29:12	88,7	155,6	0	52,6	100
08.03.2022	19:30:12	88,6	152,2	0	52,7	100
08.03.2022	19:31:12	88,6	148,9	0	52,5	100
08.03.2022	19:32:12	88,4	145,8	0	52,6	100
08.03.2022	19:33:12	88,3	143,2	0	52,6	100
08.03.2022	19:34:12	88,1	140,6	0	52,5	100
08.03.2022	19:35:12	88,1	138,2	0	52,4	100
08.03.2022	19:36:12	87,9	136	0	52,3	100
08.03.2022	19:37:12	87,8	134,1	0	52,3	100
08.03.2022	19:38:12	87,6	132,1	0	54,4	100
08.03.2022	19:39:12	87,5	130,3	0	53,1	100
08.03.2022	19:40:12	87,3	128,6	0	52,5	100
08.03.2022	19:41:12	87,2	127	0	52,3	100
08.03.2022	19:42:12	87	125,5	0	52,2	100
08.03.2022	19:43:12	86,8	124	0	52,1	100
08.03.2022	19:44:12	86,7	122,6	0	52,2	100
08.03.2022	19:45:12	86,4	121,3	0	52,1	100
08.03.2022	19:46:12	86,2	120	0	52,1	100
08.03.2022	19:47:12	86	118,9	0	52	100
08.03.2022	19:48:12	85,8	117,6	0	52	100
08.03.2022	19:49:12	85,6	116,5	0	52	100
08.03.2022	19:50:12	85,4	115,4	0	51,9	100
08.03.2022	19:51:12	85,1	114,5	0	51,9	100
08.03.2022	19:52:12	84,9	113,4	0	51,7	100
08.03.2022	19:53:12	84,7	112,4	0	51,6	100
08.03.2022	19:54:12	84,6	111,5	0	51,6	100
08.03.2022	19:55:12	84,3	110,7	0	51,7	100
08.03.2022	19:56:12	84,1	110,1	0	51,6	100
08.03.2022	19:57:12	83,9	109,2	0	51,6	100
08.03.2022	19:58:12	83,6	108,2	0	51,8	100
08.03.2022	19:59:12	83,4	107,6	0	51,6	100
08.03.2022	20:00:12	83,2	106,8	0	51,5	100
08.03.2022	20:01:12	83	106,1	0	51,7	100
08.03.2022	20:02:12	82,9	105,5	0	51,4	100
08.03.2022	20:03:12	82,6	104,8	0	51,5	100
08.03.2022	20:04:12	82,5	104,1	0	51,5	100
08.03.2022	20:05:12	82,3	103,6	0	51,5	100
08.03.2022	20:06:12	82,1	102,9	0	51,4	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	20:07:12	81,9	102,4	0	51,4	100
08.03.2022	20:08:12	81,8	101,8	0	51,3	100
08.03.2022	20:09:12	81,6	101,4	0	51,2	100
08.03.2022	20:10:12	81,5	100,7	0	51,2	100
08.03.2022	20:11:12	81,4	100,2	0	51,2	100
08.03.2022	20:12:12	81,2	99,6	0	51,3	100
08.03.2022	20:13:12	81,1	99,2	0	51,3	100
08.03.2022	20:14:12	80,9	98,6	0	51,4	100
08.03.2022	20:15:12	80,8	98,1	0	51,2	100
08.03.2022	20:16:12	80,7	97,5	0	51,3	100
08.03.2022	20:17:12	80,5	97,1	0	51,3	100
08.03.2022	20:18:12	80,4	96,7	0	51,3	100
08.03.2022	20:19:12	80,3	96,2	0	51,2	100
08.03.2022	20:20:12	80,2	96	0	51,3	100
08.03.2022	20:21:12	80,1	95,5	0	51,3	100
08.03.2022	20:22:12	80	95,1	0	51,3	100
08.03.2022	20:23:12	79,8	94,6	0	51,3	100
08.03.2022	20:24:12	79,7	94,2	0	51,2	100
08.03.2022	20:25:12	79,6	94	0	51,2	100
08.03.2022	20:26:12	79,5	93,6	0	51,2	100
08.03.2022	20:27:12	79,4	93,1	0	51,2	100
08.03.2022	20:28:12	79,3	92,9	0	51,2	100
08.03.2022	20:29:12	79,2	92,5	0	51,2	100
08.03.2022	20:30:12	79,1	92,1	0	51,2	100
08.03.2022	20:31:12	79	91,8	0	51,2	100
08.03.2022	20:32:12	78,9	91,5	0	51,2	100
08.03.2022	20:33:12	78,7	91,1	0	51,2	100
08.03.2022	20:34:12	78,7	90,8	0	51,2	100
08.03.2022	20:35:12	78,6	90,5	0	51,2	100
08.03.2022	20:36:12	78,5	90,2	0	51,2	100
08.03.2022	20:37:12	78,4	89,8	0	51,2	100
08.03.2022	20:38:12	78,3	89,6	0	51,2	100
08.03.2022	20:39:12	78,2	89,3	0	51,1	100
08.03.2022	20:40:12	78,1	88,9	0	51,1	100
08.03.2022	20:41:12	78	88,7	0	51,1	100
08.03.2022	20:42:12	77,9	88,5	0	50,9	100
08.03.2022	20:43:12	77,9	88,4	0	50,9	100
08.03.2022	20:44:12	77,8	88,1	0	50,8	100
08.03.2022	20:45:12	77,7	87,7	0	50,8	100
08.03.2022	20:46:12	77,6	87,5	0	50,9	100
08.03.2022	20:47:12	77,5	87,3	0	50,9	100
08.03.2022	20:48:12	77,4	87,1	0	50,8	100
08.03.2022	20:49:12	77,3	86,7	0	50,7	100
08.03.2022	20:50:12	77,3	86,5	0	50,8	100
08.03.2022	20:51:12	77,2	86,3	0	50,7	100
08.03.2022	20:52:12	77,1	86,1	0	50,7	100
08.03.2022	20:53:12	77	85,8	0	50,7	100
08.03.2022	20:54:12	76,9	85,6	0	50,5	100
08.03.2022	20:55:12	76,9	85,4	0	50,4	100
08.03.2022	20:56:12	76,8	85,2	0	50,5	100
08.03.2022	20:57:12	76,7	85	0	50,4	100
08.03.2022	20:58:12	76,6	84,8	0	50,5	100
08.03.2022	20:59:12	76,5	84,6	0	50,4	100
08.03.2022	21:00:12	76,4	84,4	0	50,3	100
08.03.2022	21:01:12	76,4	84,2	0	50,5	100
08.03.2022	21:02:12	76,3	84,1	0	50,8	100
08.03.2022	21:03:12	76,2	83,9	0	50,6	100
08.03.2022	21:04:12	76,1	83,8	0	50,5	100
08.03.2022	21:05:12	76,1	83,6	0	50,6	100
08.03.2022	21:06:12	76	83,4	0	50,7	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	21:07:12	75,9	83,1	0	50,5	100
08.03.2022	21:08:12	75,9	83	0	50,7	100
08.03.2022	21:09:12	75,7	82,9	0	50,6	100
08.03.2022	21:10:12	75,6	82,8	0	50,6	100
08.03.2022	21:11:12	75,6	82,7	0	50,5	100
08.03.2022	21:12:12	75,5	82,4	0	50,5	100
08.03.2022	21:13:12	75,4	82,2	0	50,4	100
08.03.2022	21:14:12	75,3	82	0	50,4	100
08.03.2022	21:15:12	75,3	81,8	0	50,3	100
08.03.2022	21:16:12	75,2	81,7	0	50,3	100
08.03.2022	21:17:12	75,1	81,7	0	50,3	100
08.03.2022	21:18:12	75	81,6	0	50,4	100
08.03.2022	21:19:12	74,9	81,5	0	50,4	100
08.03.2022	21:20:12	74,9	81,4	0	50,3	100
08.03.2022	21:21:12	74,8	81,2	0	50,4	100
08.03.2022	21:22:12	74,8	81	0	50,4	100
08.03.2022	21:23:12	74,6	80,8	0	50,4	100
08.03.2022	21:24:12	74,5	80,7	0	50,6	100
08.03.2022	21:25:12	74,5	80,5	0	50,5	100
08.03.2022	21:26:12	74,4	80,5	0	50,4	100
08.03.2022	21:27:12	74,4	80,4	0	50,5	100
08.03.2022	21:28:12	74,3	80,3	0	50,4	100
08.03.2022	21:29:12	74,2	80,1	0	50,4	100
08.03.2022	21:30:12	74,1	79,9	0	50,4	100
08.03.2022	21:31:12	74	79,8	0	50,3	100
08.03.2022	21:32:12	74	79,6	0	50,3	100
08.03.2022	21:33:12	73,9	79,5	0	50,3	100
08.03.2022	21:34:12	73,7	79,1	42	72,4	100
08.03.2022	21:35:12	73,7	107,4	51	86,4	100
08.03.2022	21:36:12	73,7	165,7	38	79,2	100
08.03.2022	21:37:12	73,9	163,3	38	78,7	100
08.03.2022	21:38:12	74	226,7	37	80,6	100
08.03.2022	21:39:12	74,4	305,3	37	81,6	100
08.03.2022	21:40:12	74,9	365,7	36	82	100
08.03.2022	21:41:12	75,5	424,1	36	79,9	100
08.03.2022	21:42:12	76,3	495,7	37	79,5	100
08.03.2022	21:43:12	77,5	604,5	33	79,8	100
08.03.2022	21:44:12	79,3	703,9	30	90,9	100
08.03.2022	21:45:12	81,3	713,4	33	83,3	100
08.03.2022	21:46:12	83,4	642	32	79,9	100
08.03.2022	21:47:12	84,9	561,9	33	79,3	100
08.03.2022	21:48:12	86,2	486,9	32	82	100
08.03.2022	21:49:12	87	424,6	30	91,8	100
08.03.2022	21:50:12	87,7	374,6	30	106,4	100
08.03.2022	21:51:12	88,2	334,9	30	113,5	100
08.03.2022	21:52:12	88,6	306,1	30	128,6	100
08.03.2022	21:53:12	88,8	283,2	30	127,9	100
08.03.2022	21:54:12	89	263,1	30	129,2	100
08.03.2022	21:55:12	89,1	245,8	30	129,2	100
08.03.2022	21:56:12	89,3	230,5	30	129,9	100
08.03.2022	21:57:12	89,4	217,5	30	129,2	100
08.03.2022	21:58:12	89,5	205,9	30	129,3	100
08.03.2022	21:59:12	89,5	198,7	0	53,5	100
08.03.2022	22:00:12	89,5	193,6	0	53,4	100
08.03.2022	22:01:12	89,6	186	0	53,3	100
08.03.2022	22:02:12	89,6	179,1	0	53	100
08.03.2022	22:03:12	89,6	172,9	0	53,2	100
08.03.2022	22:04:12	89,6	167,6	0	52,9	100
08.03.2022	22:05:12	89,6	162,8	0	52,8	100
08.03.2022	22:06:12	89,5	158,5	0	52,7	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	22:07:12	89,5	154,6	0	52,7	100
08.03.2022	22:08:12	89,4	151,3	0	52,6	100
08.03.2022	22:09:12	89,4	148,1	0	52,5	100
08.03.2022	22:10:12	89,4	145,1	0	52,5	100
08.03.2022	22:11:12	89,5	142,3	0	52,5	100
08.03.2022	22:12:12	89,2	140	0	52,6	100
08.03.2022	22:13:12	89,3	137,6	0	52,4	100
08.03.2022	22:14:12	89,2	135,5	0	52,3	100
08.03.2022	22:15:12	89,2	133,4	0	52,2	100
08.03.2022	22:16:12	89,2	131,6	0	51,8	100
08.03.2022	22:17:12	89,1	129,8	0	52,2	100
08.03.2022	22:18:12	89	128,1	0	52,3	100
08.03.2022	22:19:12	89	126,8	0	52,2	100
08.03.2022	22:20:12	88,9	125,3	0	52,2	100
08.03.2022	22:21:12	88,8	123,8	0	52,2	100
08.03.2022	22:22:12	88,8	122,6	0	52,2	100
08.03.2022	22:23:12	88,7	121,3	0	52,2	100
08.03.2022	22:24:12	88,7	120,2	0	52,2	100
08.03.2022	22:25:12	88,6	119,1	0	51,9	100
08.03.2022	22:26:12	88,5	118	0	51,8	100
08.03.2022	22:27:12	88,4	117	0	52	100
08.03.2022	22:28:12	88,3	116	0	51,7	100
08.03.2022	22:29:12	88,2	115	0	51,8	100
08.03.2022	22:30:12	88,2	114,3	0	51,5	100
08.03.2022	22:31:12	88,1	113,4	0	51,8	100
08.03.2022	22:32:12	88	112,7	0	51,7	100
08.03.2022	22:33:12	87,9	111,8	0	51,3	100
08.03.2022	22:34:12	87,8	111,1	0	51,6	100
08.03.2022	22:35:12	87,7	110,4	0	52,1	100
08.03.2022	22:36:12	87,6	109,7	0	51,5	100
08.03.2022	22:37:12	87,5	109,2	0	51,7	100
08.03.2022	22:38:12	87,4	108,4	0	51,4	100
08.03.2022	22:39:12	87,3	108,1	0	51,7	100
08.03.2022	22:40:12	87,2	107,3	0	51,7	100
08.03.2022	22:41:12	87,1	106,8	0	51,5	100
08.03.2022	22:42:12	87	106,2	0	51,3	100
08.03.2022	22:43:12	86,9	105,7	0	51,4	100
08.03.2022	22:44:12	86,8	105,2	0	51,4	100
08.03.2022	22:45:12	86,7	104,8	0	51,4	100
08.03.2022	22:46:12	86,6	104,2	0	51,4	100
08.03.2022	22:47:12	86,5	104	0	51,3	100
08.03.2022	22:48:12	86,3	103,5	0	51,4	100
08.03.2022	22:49:12	86,3	103,1	0	51,3	100
08.03.2022	22:50:12	86,2	102,8	0	51,2	100
08.03.2022	22:51:12	86,1	102,4	0	51,2	100
08.03.2022	22:52:12	86	102,1	0	51,2	100
08.03.2022	22:53:12	85,8	101,8	0	51,2	100
08.03.2022	22:54:12	85,8	101,6	0	51,3	100
08.03.2022	22:55:12	85,6	101,2	0	51,3	100
08.03.2022	22:56:12	85,3	100,9	0	51,2	100
08.03.2022	22:57:12	85,5	100,6	0	51,2	100
08.03.2022	22:58:12	85,3	100,1	0	51,2	100
08.03.2022	22:59:12	85,1	99,8	0	51,2	100
08.03.2022	23:00:12	85,1	99,5	0	51,3	100
08.03.2022	23:01:12	84,9	99	0	51,2	100
08.03.2022	23:02:12	84,7	98,7	0	51,2	100
08.03.2022	23:03:12	84,8	98,4	0	51,3	100
08.03.2022	23:04:12	84,4	98	0	51,2	100
08.03.2022	23:05:12	84,5	97,6	0	51,3	100
08.03.2022	23:06:12	84,4	97,4	0	51,2	100

### Conditioning data

Date	Time	PE1 KT[°C]	PE1 FRT Ist[°C]	PE1 Induced draft [%]	PE1 Underpressure Ist [EH]	PE1 Motor UW[%]
08.03.2022	23:07:12	84,2	97	0	51,1	100
08.03.2022	23:08:12	84,1	96,8	0	51,2	100
08.03.2022	23:09:12	84	96,5	0	51,2	100
08.03.2022	23:10:12	83,9	96,3	0	51,2	100
08.03.2022	23:11:12	83,7	95,8	0	51,2	100
08.03.2022	23:12:12	83,5	95,6	0	51,2	100
08.03.2022	23:13:12	83,6	95,3	0	51,2	100
08.03.2022	23:14:12	83,4	95,1	0	51,2	100
08.03.2022	23:15:12	83,4	94,9	0	51,2	100
08.03.2022	23:16:12	83,3	94,7	0	51,2	100
08.03.2022	23:17:12	83,2	94,4	0	51,2	100
08.03.2022	23:18:12	82,8	94,2	0	51,1	100
08.03.2022	23:19:12	82,9	94	0	50,7	100
08.03.2022	23:20:12	82,8	93,7	0	50,9	100
08.03.2022	23:21:12	82,6	93,5	0	51,1	100
08.03.2022	23:22:12	82,5	93,3	0	51,1	100
08.03.2022	23:23:12	82,4	93	0	51,2	100
08.03.2022	23:24:12	82,3	93	0	51,2	100
08.03.2022	23:25:12	82,2	92,8	0	51,2	100
08.03.2022	23:26:12	82,1	92,5	0	51,1	100
08.03.2022	23:27:12	81,9	92,2	0	51	100
08.03.2022	23:28:12	81,8	92	0	50,9	100
08.03.2022	23:29:12	81,8	91,7	0	50,7	100
08.03.2022	23:30:12	81,6	91,4	0	50,4	100
08.03.2022	23:31:12	81,6	91,2	0	51	100
08.03.2022	23:32:12	81,5	90,9	0	51,1	100
08.03.2022	23:33:12	81,4	90,8	0	50,8	100
08.03.2022	23:34:12	81,3	90,7	0	51	100
08.03.2022	23:35:12	81,1	90,6	0	51,1	100
08.03.2022	23:36:12	81	90,4	0	51,1	100
08.03.2022	23:37:12	80,9	90,1	0	51,1	100
08.03.2022	23:38:12	80,8	89,8	0	51,1	100
08.03.2022	23:39:12	80,8	89,8	0	51,1	100
08.03.2022	23:40:12	80,7	89,6	0	51	100
08.03.2022	23:41:12	80,6	89,4	0	50,6	100
08.03.2022	23:42:12	80,5	89,3	0	50,6	100
08.03.2022	23:43:12	80,4	89,1	0	51	100
08.03.2022	23:44:12	80,3	88,9	0	51	100
08.03.2022	23:45:12	80,1	88,7	0	50,9	100
08.03.2022	23:46:12	80,1	88,6	0	51,2	100
08.03.2022	23:47:12	80	88,5	0	50,8	100
08.03.2022	23:48:12	79,9	88,3	0	51	100
08.03.2022	23:49:12	79,8	88,1	0	50,7	100
08.03.2022	23:50:12	79,7	87,8	0	50,6	100
08.03.2022	23:51:12	79,6	87,5	0	50,3	100
08.03.2022	23:52:12	79,5	87,4	0	50,4	100
08.03.2022	23:53:12	79,4	87,3	0	50,7	100
08.03.2022	23:54:12	79,3	87,2	0	50,6	100
08.03.2022	23:55:12	79,2	87,1	0	50,6	100
08.03.2022	23:56:12	79,1	86,9	0	50,6	100
08.03.2022	23:57:12	79	86,7	0	50,4	100
08.03.2022	23:58:12	79	86,4	0	50,1	100
08.03.2022	23:59:12	78,9	86,4	0	50,2	100
09.03.2022	00:00:12	78,8	86,3	0	50,3	100

Appendix 17

**Raw data**



PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321.KONF

Saved: 2022-03-21 09:03

In plain text: 2022-03-21 09:03

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
0,334	0,258	0,432	1,056	-0,214	0,008	0,491	0,464	62,844	21,812	19,846	19,704	19,639	19,640	19,724	19,715
0,835	0,247	0,460	1,056	-0,212	-0,012	0,463	0,464	62,708	21,908	19,925	19,787	19,723	19,729	19,808	19,795
1,334	0,241	0,504	1,060	-0,214	0,021	0,432	0,464	62,521	21,901	19,891	19,754	19,689	19,698	19,781	19,764
1,834	0,264	0,486	1,063	-0,215	-0,004	0,456	0,462	62,303	21,959	19,926	19,783	19,733	19,728	19,815	19,801
2,334	0,263	0,435	1,058	-0,212	0,041	0,491	0,464	62,229	22,007	19,924	19,776	19,734	19,726	19,814	19,806
2,833	0,262	0,430	1,057	-0,210	0,003	0,492	0,462	62,077	21,897	19,884	19,737	19,683	19,693	19,773	19,761
3,333	0,252	0,443	1,059	-0,208	-0,005	0,480	0,463	61,837	21,834	19,880	19,729	19,682	19,692	19,777	19,761
3,833	0,243	0,479	1,060	-0,209	0,010	0,452	0,463	61,608	21,849	19,853	19,696	19,658	19,660	19,733	19,728
4,333	0,256	0,484	1,061	-0,207	0,004	0,455	0,462	61,393	21,794	19,825	19,680	19,645	19,650	19,726	19,718
4,833	0,295	0,445	1,055	-0,206	0,041	0,486	0,463	61,398	21,924	19,914	19,765	19,736	19,730	19,825	19,805
5,333	0,301	0,434	1,054	-0,205	0,033	0,489	0,505	61,170	21,934	19,927	19,774	19,749	19,750	19,831	19,818
5,833	0,262	0,448	1,059	-0,207	0,018	0,476	0,584	60,996	21,840	19,907	19,749	19,714	19,721	19,800	19,784
6,333	0,250	0,489	1,061	-0,205	0,026	0,445	0,585	60,721	21,833	19,887	19,738	19,690	19,704	19,784	19,771
6,834	0,281	0,466	1,052	-0,206	-0,009	0,471	0,585	60,612	21,898	19,892	19,752	19,710	19,716	19,797	19,784
7,334	0,308	0,429	1,062	-0,204	0,020	0,496	0,584	60,628	21,982	19,957	19,804	19,770	19,763	19,850	19,836
7,834	0,296	0,429	1,054	-0,203	-0,018	0,492	0,584	60,483	21,912	19,894	19,748	19,695	19,707	19,796	19,785
8,334	0,269	0,444	1,059	-0,201	-0,002	0,479	0,584	60,450	21,912	19,963	19,812	19,774	19,771	19,862	19,847
8,834	0,249	0,484	1,065	-0,200	0,047	0,447	0,585	60,221	21,895	19,932	19,784	19,748	19,751	19,832	19,825
9,334	0,284	0,479	1,064	-0,203	0,003	0,462	0,584	60,102	21,880	19,942	19,799	19,766	19,768	19,853	19,842
9,833	0,402	0,432	1,060	-0,201	0,034	0,492	0,584	60,023	21,891	19,962	19,821	19,788	19,785	19,870	19,859
10,411	0,347	0,426	1,062	-0,199	0,036	0,495	0,584	59,879	21,875	19,966	19,818	19,795	19,792	19,872	19,867
10,833	0,322	0,430	1,059	-0,198	-0,004	0,490	0,583	59,740	21,870	19,965	19,809	19,785	19,790	19,865	19,864
11,333	0,272	0,465	1,055	-0,199	-0,011	0,463	0,584	59,526	21,838	19,911	19,753	19,734	19,737	19,828	19,812
11,833	0,277	0,472	1,065	-0,200	0,033	0,463	0,584	59,330	21,773	19,903	19,753	19,726	19,739	19,820	19,810
12,333	0,316	0,436	1,062	-0,198	-0,005	0,490	0,584	59,298	21,872	19,960	19,805	19,794	19,797	19,885	19,871
12,833	0,329	0,427	1,058	-0,196	0,057	0,495	0,583	59,142	21,850	19,927	19,777	19,758	19,758	19,844	19,839
13,333	0,286	0,441	1,056	-0,198	0,037	0,481	0,584	59,139	21,887	19,970	19,813	19,800	19,793	19,889	19,877
13,834	0,270	0,471	1,069	-0,197	0,033	0,459	0,584	59,011	21,854	19,978	19,827	19,798	19,810	19,895	19,886
14,334	0,303	0,466	1,058	-0,197	-0,011	0,470	0,584	58,912	21,849	19,942	19,787	19,773	19,787	19,864	19,859
14,834	0,332	0,432	1,066	-0,194	-0,023	0,492	0,584	58,857	21,854	19,961	19,796	19,790	19,803	19,887	19,880
15,334	0,338	0,431	1,062	-0,195	0,004	0,492	0,583	58,759	21,788	19,965	19,797	19,788	19,803	19,882	19,877
15,834	0,309	0,440	1,064	-0,194	0,025	0,484	0,584	58,462	21,684	19,846	19,686	19,681	19,683	19,775	19,766
16,334	0,278	0,462	1,066	-0,194	0,007	0,467	0,584	58,420	21,798	19,932	19,778	19,765	19,776	19,862	19,857
16,833	0,312	0,458	1,061	-0,193	0,035	0,474	0,583	58,266	21,760	19,917	19,754	19,754	19,764	19,853	19,841

## PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,334	48,960	44,178	70,982	76,340	2,235	2,110	12291,513	12832,794	142,137	5,873	14,725	-52,139	42,432	8,410	3,974	2022-03-23 10:53
0,835	48,972	44,140	70,890	76,320	0,495	0,476	2752,735	2942,398	102,791	6,829	13,900	-52,124	42,126	8,379	3,974	2022-03-23 10:53
1,334	48,921	44,126	70,872	76,285	0,499	0,476	2754,075	2930,547	114,369	7,826	12,965	-52,136	42,514	8,418	3,974	2022-03-23 10:54
1,834	48,945	44,119	70,802	76,293	0,504	0,476	2799,838	2974,218	171,887	6,571	13,677	-52,147	42,728	8,439	3,974	2022-03-23 10:54
2,334	48,983	44,121	70,730	76,292	0,505	0,476	2823,871	3012,236	162,613	5,710	14,715	-52,124	42,325	8,399	3,974	2022-03-23 10:55
2,833	49,067	44,128	70,615	76,256	0,514	0,476	2917,281	3053,917	161,223	5,854	14,747	-52,101	41,951	8,362	3,974	2022-03-23 10:55
3,333	49,098	44,155	70,435	76,230	0,515	0,470	2926,155	3098,545	116,746	6,297	14,387	-52,084	42,143	8,381	3,974	2022-03-23 10:56
3,833	49,107	44,202	70,423	76,219	0,508	0,470	2863,196	3100,878	116,975	7,193	13,573	-52,089	42,294	8,396	3,943	2022-03-23 10:56
4,333	49,117	44,225	70,448	76,212	0,508	0,470	2857,733	3084,150	163,629	6,893	13,647	-52,065	42,467	8,413	3,850	2022-03-23 10:57
4,833	49,086	44,225	70,429	76,143	0,510	0,470	2853,891	3053,284	237,018	5,836	14,566	-52,064	42,011	8,368	3,850	2022-03-23 10:57
5,333	49,069	44,160	70,420	76,121	0,509	0,469	2873,851	3044,018	234,441	5,943	14,668	-52,049	42,391	8,405	11,569	2022-03-23 10:58
5,833	48,969	44,081	70,361	76,079	0,512	0,470	2879,057	3054,270	132,104	6,431	14,275	-52,072	42,239	8,390	11,474	2022-03-23 10:58
6,333	48,971	44,103	70,339	76,053	0,511	0,469	2859,245	3050,388	131,394	7,441	13,355	-52,054	42,579	8,424	11,569	2022-03-23 10:59
6,834	48,978	44,136	70,308	76,040	0,511	0,469	2847,902	3060,518	255,291	6,165	14,136	-52,057	42,293	8,396	11,569	2022-03-23 10:59
7,334	48,989	44,186	70,341	76,024	0,504	0,469	2780,986	3034,400	285,663	5,577	14,871	-52,039	42,416	8,408	11,474	2022-03-23 11:00
7,834	48,917	44,198	70,410	75,986	0,503	0,469	2730,204	2976,839	216,623	5,804	14,749	-52,030	42,236	8,390	11,474	2022-03-23 11:00
8,334	48,913	44,188	70,461	75,938	0,505	0,469	2744,525	2924,730	147,421	6,331	14,368	-52,012	41,946	8,361	11,474	2022-03-23 11:01
8,834	48,861	44,165	70,432	75,906	0,504	0,469	2720,787	2923,037	130,867	7,488	13,419	-52,004	42,565	8,423	11,474	2022-03-23 11:01
9,334	48,856	44,195	70,430	75,886	0,501	0,470	2683,976	2916,676	308,476	6,441	13,849	-52,026	42,109	8,377	11,474	2022-03-23 11:02
9,833	48,923	44,211	70,415	75,808	0,504	0,470	2730,774	2881,758	538,460	5,653	14,769	-52,007	42,428	8,409	11,474	2022-03-23 11:02
10,411	48,842	44,100	70,339	75,826	0,505	0,470	2754,102	2932,266	354,875	5,666	14,846	-51,986	42,447	8,411	11,474	2022-03-23 11:03
10,833	48,769	44,027	70,289	75,789	0,502	0,470	2737,179	2938,419	267,198	5,897	14,707	-51,983	42,432	8,410	11,346	2022-03-23 11:03
11,333	48,758	44,037	70,314	75,738	0,503	0,469	2731,944	2895,544	176,377	6,826	13,879	-51,993	41,982	8,365	11,474	2022-03-23 11:04
11,833	48,919	44,102	70,270	75,746	0,499	0,469	2765,271	2924,391	215,372	6,603	13,890	-51,997	42,570	8,423	11,474	2022-03-23 11:04
12,333	48,995	44,153	70,208	75,708	0,494	0,469	2747,973	2935,653	337,311	5,678	14,711	-51,980	42,627	8,429	11,474	2022-03-23 11:05
12,833	49,004	44,164	70,149	75,683	0,494	0,469	2751,073	2954,278	286,873	5,680	14,837	-51,964	42,268	8,393	11,446	2022-03-23 11:05
13,333	48,969	44,172	70,167	75,665	0,495	0,469	2731,336	2934,958	185,255	6,279	14,434	-51,980	42,231	8,390	11,474	2022-03-23 11:06
13,834	48,933	44,182	70,186	75,640	0,491	0,469	2680,100	2912,045	193,898	6,954	13,776	-51,968	42,716	8,438	11,474	2022-03-23 11:06
14,334	49,003	44,182	70,173	75,610	0,492	0,469	2729,039	2902,579	293,141	6,245	14,095	-51,966	42,272	8,394	11,474	2022-03-23 11:07
14,834	49,123	44,173	70,070	75,586	0,493	0,469	2806,705	2943,860	342,445	5,732	14,773	-51,941	43,058	8,471	11,474	2022-03-23 11:07
15,334	49,146	44,156	69,944	75,564	0,493	0,469	2832,051	3000,624	328,699	5,812	14,768	-51,950	42,990	8,465	11,346	2022-03-23 11:08
15,834	49,098	44,144	69,873	75,519	0,494	0,469	2816,788	3014,363	239,233	6,115	14,532	-51,942	42,487	8,415	11,474	2022-03-23 11:08
16,334	49,080	44,148	69,860	75,473	0,498	0,469	2823,465	2995,677	193,323	6,728	14,008	-51,936	42,448	8,411	11,474	2022-03-23 11:09
16,833	49,106	44,165	69,820	75,448	0,495	0,469	2810,030	3005,068	295,646	6,262	14,213	-51,934	42,699	8,436	11,474	2022-03-23 11:09

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
17,333	0,301	0,442	1,068	-0,192	0,009	0,484	0,584	58,204	21,808	19,970	19,812	19,802	19,809	19,901	19,896
17,833	0,317	0,431	1,065	-0,191	0,060	0,492	0,584	58,091	21,793	19,905	19,749	19,752	19,757	19,853	19,840
18,333	0,311	0,438	1,056	-0,193	-0,022	0,485	0,583	58,004	21,757	19,891	19,736	19,732	19,738	19,831	19,821
18,833	0,287	0,468	1,062	-0,190	0,016	0,457	0,583	57,926	21,775	19,921	19,758	19,758	19,767	19,866	19,853
19,333	0,290	0,488	1,063	-0,193	0,009	0,451	0,582	57,854	21,776	19,942	19,779	19,783	19,798	19,885	19,874
19,833	0,362	0,448	1,061	-0,189	0,018	0,481	0,584	57,681	21,654	19,833	19,677	19,682	19,684	19,782	19,769
20,334	0,348	0,439	1,058	-0,190	0,064	0,485	0,584	57,735	21,756	19,980	19,815	19,825	19,828	19,920	19,912
20,834	0,313	0,452	1,066	-0,189	0,028	0,474	0,584	57,575	21,753	19,961	19,809	19,806	19,811	19,894	19,893
21,334	0,299	0,469	1,066	-0,187	0,026	0,461	0,584	57,427	21,827	19,990	19,831	19,823	19,838	19,929	19,918
21,834	0,311	0,476	1,058	-0,188	0,006	0,460	0,584	57,268	21,846	19,935	19,765	19,778	19,792	19,882	19,872
22,334	0,369	0,446	1,062	-0,186	-0,006	0,482	0,583	57,224	21,821	19,938	19,772	19,795	19,789	19,899	19,879
22,834	0,353	0,438	1,057	-0,186	-0,025	0,486	0,584	57,144	21,845	19,947	19,791	19,805	19,812	19,910	19,893
23,333	0,330	0,448	1,056	-0,186	-0,026	0,475	0,584	56,998	21,902	19,975	19,822	19,830	19,846	19,931	19,922
23,833	0,328	0,474	1,060	-0,185	-0,008	0,455	0,582	56,845	21,806	19,891	19,730	19,741	19,756	19,849	19,832
24,333	0,331	0,481	1,068	-0,185	0,048	0,456	0,583	56,801	21,769	19,876	19,723	19,738	19,742	19,845	19,827
24,833	0,375	0,448	1,062	-0,182	-0,015	0,480	0,582	56,815	21,798	19,905	19,760	19,757	19,774	19,863	19,854
25,333	0,353	0,442	1,061	-0,184	0,028	0,483	0,582	56,761	21,809	19,969	19,820	19,828	19,844	19,944	19,924
25,833	0,317	0,446	1,064	-0,183	-0,008	0,479	0,582	56,580	21,741	19,920	19,775	19,779	19,792	19,885	19,869
26,333	0,321	0,455	1,064	-0,184	0,022	0,471	0,582	56,575	21,833	19,976	19,832	19,847	19,853	19,942	19,928
26,833	0,293	0,478	1,066	-0,184	-0,013	0,453	0,582	56,547	21,791	19,982	19,834	19,847	19,854	19,949	19,935
27,334	0,325	0,465	1,063	-0,185	0,002	0,469	0,582	56,518	21,768	19,985	19,826	19,838	19,851	19,952	19,936
27,834	0,348	0,444	1,066	-0,182	0,039	0,481	0,582	56,423	21,692	19,948	19,797	19,806	19,819	19,919	19,902
28,334	0,336	0,448	1,068	-0,182	0,025	0,477	0,582	56,283	21,666	19,909	19,765	19,771	19,783	19,890	19,867
28,834	0,319	0,460	1,065	-0,180	0,028	0,467	0,582	56,225	21,737	19,956	19,811	19,812	19,828	19,917	19,912
29,334	0,310	0,476	1,064	-0,180	0,003	0,456	0,582	56,150	21,777	19,984	19,842	19,847	19,855	19,958	19,941
29,834	0,357	0,461	1,060	-0,180	0,002	0,472	0,583	56,038	21,737	19,922	19,784	19,780	19,803	19,898	19,884
30,333	0,385	0,444	1,057	-0,179	0,005	0,480	0,582	56,064	21,774	20,007	19,863	19,869	19,882	19,974	19,962
30,833	0,341	0,452	1,057	-0,179	0,048	0,475	0,582	55,910	21,737	19,963	19,832	19,829	19,842	19,942	19,928
31,333	0,328	0,454	1,066	-0,179	0,010	0,472	0,582	55,849	21,755	19,966	19,828	19,839	19,846	19,946	19,929
31,833	0,332	0,467	1,064	-0,178	0,006	0,463	0,582	55,801	21,744	19,973	19,830	19,842	19,842	19,944	19,934
32,333	0,380	0,454	1,063	-0,178	0,037	0,476	0,581	55,837	21,781	20,005	19,858	19,873	19,881	19,974	19,969
32,833	0,390	0,445	1,060	-0,177	0,020	0,481	0,582	55,744	21,751	19,960	19,819	19,841	19,848	19,933	19,933
33,333	0,375	0,449	1,065	-0,176	0,007	0,477	0,582	55,625	21,754	19,947	19,802	19,822	19,825	19,932	19,917
33,833	0,351	0,464	1,061	-0,176	-0,012	0,463	0,582	55,525	21,801	19,971	19,818	19,836	19,837	19,940	19,934
34,334	0,341	0,473	1,068	-0,175	0,041	0,459	0,582	55,557	21,767	19,965	19,815	19,834	19,839	19,947	19,931
34,834	0,368	0,462	1,061	-0,176	-0,017	0,469	0,581	55,395	21,737	19,918	19,770	19,793	19,794	19,887	19,886
35,334	0,383	0,446	1,061	-0,175	0,012	0,482	0,581	55,207	21,759	19,963	19,819	19,827	19,836	19,943	19,935

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
17,333	49,102	44,172	69,785	75,402	0,497	0,469	2819,439	2998,608	252,557	5,950	14,534	-51,922	42,787	8,445	11,474	2022-03-23 11:10
17,833	49,133	44,153	69,744	75,337	0,493	0,469	2823,945	2985,379	297,993	5,740	14,769	-51,915	42,269	8,393	11,474	2022-03-23 11:10
18,333	48,970	44,113	69,684	75,316	0,498	0,469	2778,815	3005,990	258,830	6,100	14,537	-51,930	42,204	8,387	11,474	2022-03-23 11:11
18,833	48,871	44,072	69,745	75,264	0,500	0,469	2757,396	2948,190	201,795	7,122	13,710	-51,899	42,449	8,411	11,474	2022-03-23 11:11
19,333	48,850	44,103	69,759	75,269	0,498	0,469	2716,061	2941,565	273,116	6,969	13,518	-51,930	42,189	8,385	11,474	2022-03-23 11:12
19,833	48,843	44,146	69,772	75,215	0,497	0,470	2685,025	2908,338	412,243	6,005	14,439	-51,888	42,603	8,426	11,474	2022-03-23 11:12
20,334	48,826	44,157	69,808	75,160	0,498	0,469	2671,827	2858,030	344,063	5,985	14,562	-51,904	42,146	8,381	11,569	2022-03-23 11:13
20,834	48,819	44,149	69,779	75,115	0,495	0,469	2659,811	2850,089	262,323	6,511	14,208	-51,891	42,647	8,431	11,474	2022-03-23 11:13
21,334	48,921	44,124	69,803	75,096	0,495	0,470	2729,511	2827,653	245,839	6,857	13,842	-51,874	42,379	8,404	11,474	2022-03-23 11:14
21,834	48,926	44,095	69,670	75,106	0,494	0,470	2742,188	2904,764	350,990	6,688	13,801	-51,881	42,534	8,420	11,474	2022-03-23 11:14
22,334	48,846	44,091	69,631	75,043	0,490	0,469	2680,929	2891,030	415,676	6,008	14,454	-51,864	42,381	8,404	11,474	2022-03-23 11:15
22,834	49,037	44,115	69,678	75,029	0,483	0,469	2735,784	2858,975	369,895	5,939	14,573	-51,864	42,408	8,407	11,474	2022-03-23 11:15
23,333	49,047	44,133	69,560	74,970	0,486	0,469	2746,890	2890,176	323,915	6,393	14,256	-51,863	42,405	8,407	11,474	2022-03-23 11:16
23,833	49,095	44,148	69,476	74,962	0,487	0,469	2772,969	2929,502	321,568	7,055	13,661	-51,848	42,162	8,383	11,380	2022-03-23 11:16
24,333	49,094	44,183	69,421	74,931	0,488	0,469	2757,778	2940,057	354,754	6,771	13,672	-51,853	42,444	8,411	11,346	2022-03-23 11:17
24,833	49,028	44,205	69,416	74,941	0,488	0,469	2709,297	2949,388	434,967	6,076	14,398	-51,823	42,474	8,414	11,346	2022-03-23 11:17
25,333	49,001	44,217	69,497	74,859	0,489	0,469	2689,314	2861,894	345,121	6,050	14,482	-51,842	42,584	8,425	11,351	2022-03-23 11:18
25,833	48,946	44,179	69,510	74,795	0,488	0,469	2673,961	2819,979	292,784	6,194	14,385	-51,834	42,774	8,443	11,346	2022-03-23 11:18
26,333	48,843	44,117	69,497	74,768	0,488	0,469	2651,339	2811,953	298,201	6,510	14,131	-51,835	42,870	8,453	11,346	2022-03-23 11:19
26,833	48,718	44,051	69,485	74,765	0,487	0,469	2613,825	2817,631	215,804	7,093	13,600	-51,835	42,582	8,424	11,345	2022-03-23 11:19
27,334	48,760	44,055	69,466	74,728	0,487	0,469	2635,386	2807,053	356,396	6,334	14,063	-51,846	42,366	8,403	11,346	2022-03-23 11:20
27,834	48,970	44,100	69,398	74,740	0,486	0,469	2722,751	2848,505	376,078	6,056	14,434	-51,822	42,644	8,430	11,346	2022-03-23 11:20
28,334	49,083	44,146	69,235	74,674	0,485	0,469	2755,734	2901,112	320,463	6,278	14,312	-51,825	42,667	8,433	11,346	2022-03-23 11:21
28,834	49,132	44,165	69,145	74,644	0,485	0,469	2770,233	2933,332	297,315	6,604	14,002	-51,802	42,294	8,396	11,346	2022-03-23 11:21
29,334	49,062	44,153	69,110	74,655	0,488	0,469	2756,087	2957,379	268,621	6,967	13,679	-51,800	42,467	8,413	11,345	2022-03-23 11:22
29,834	49,028	44,170	69,133	74,593	0,487	0,469	2722,066	2912,344	481,761	6,220	14,174	-51,800	42,328	8,399	11,474	2022-03-23 11:22
30,333	49,013	44,194	69,126	74,579	0,486	0,468	2694,894	2907,844	438,097	6,163	14,397	-51,788	42,334	8,400	11,346	2022-03-23 11:23
30,833	49,015	44,196	69,124	74,578	0,490	0,469	2716,520	2908,967	331,563	6,310	14,246	-51,789	42,380	8,404	11,474	2022-03-23 11:23
31,333	48,949	44,144	69,056	74,495	0,493	0,469	2724,361	2901,132	322,984	6,449	14,171	-51,789	42,804	8,446	11,346	2022-03-23 11:24
31,833	48,908	44,075	69,026	74,463	0,494	0,469	2747,307	2900,837	332,137	6,734	13,877	-51,780	42,383	8,405	11,474	2022-03-23 11:24
32,333	48,892	44,054	68,984	74,450	0,493	0,469	2744,789	2915,203	511,186	6,144	14,280	-51,778	42,885	8,454	11,158	2022-03-23 11:25
32,833	48,962	44,075	68,863	74,405	0,494	0,468	2776,393	2952,829	458,916	6,111	14,420	-51,769	42,477	8,414	11,345	2022-03-23 11:25
33,333	48,951	44,099	68,818	74,371	0,498	0,468	2777,019	2961,204	434,049	6,286	14,311	-51,761	42,760	8,442	11,346	2022-03-23 11:26
33,833	49,030	44,134	68,762	74,362	0,498	0,468	2802,726	2986,202	355,042	6,746	13,899	-51,763	42,604	8,427	11,346	2022-03-23 11:26
34,334	49,068	44,196	68,732	74,312	0,498	0,468	2789,605	2974,444	357,251	6,801	13,756	-51,752	42,841	8,450	11,345	2022-03-23 11:27
34,834	49,071	44,211	68,693	74,257	0,499	0,468	2788,955	2967,349	443,002	6,410	14,081	-51,762	42,414	8,408	11,258	2022-03-23 11:27
35,334	49,024	44,205	68,708	74,228	0,494	0,468	2737,879	2941,779	450,619	6,055	14,454	-51,749	42,451	8,411	11,252	2022-03-23 11:28

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
35,834	0,373	0,441	1,059	-0,176	0,021	0,483	0,581	55,140	21,762	19,976	19,839	19,852	19,849	19,959	19,951
36,334	0,356	0,456	1,062	-0,175	0,023	0,468	0,582	55,134	21,843	20,016	19,874	19,886	19,897	20,002	19,993
36,833	0,337	0,478	1,059	-0,174	-0,014	0,452	0,582	55,102	21,797	20,011	19,864	19,879	19,888	19,989	19,983
37,333	0,375	0,467	1,062	-0,173	0,034	0,467	0,582	55,055	21,783	19,981	19,839	19,864	19,872	19,971	19,962
37,833	0,413	0,443	1,055	-0,173	0,027	0,482	0,581	54,959	21,734	19,964	19,823	19,849	19,851	19,952	19,950
38,333	0,389	0,443	1,063	-0,174	0,016	0,482	0,581	54,909	21,773	19,996	19,851	19,876	19,883	19,978	19,977
38,833	0,381	0,444	1,062	-0,173	0,017	0,481	0,581	54,853	21,807	20,013	19,866	19,892	19,899	19,996	19,996
39,333	0,345	0,460	1,059	-0,171	0,004	0,463	0,580	54,761	21,747	19,976	19,831	19,848	19,859	19,967	19,958
39,833	0,330	0,478	1,066	-0,169	0,025	0,454	0,581	54,813	21,763	19,999	19,850	19,875	19,880	19,994	19,985
40,333	0,361	0,466	1,062	-0,169	-0,026	0,466	0,580	54,715	21,741	19,976	19,826	19,854	19,857	19,962	19,964
40,834	0,359	0,459	1,061	-0,171	-0,032	0,469	0,581	54,662	21,784	19,993	19,849	19,879	19,887	19,991	19,986
41,334	0,347	0,462	1,065	-0,171	-0,004	0,465	0,581	54,736	21,832	20,022	19,871	19,906	19,914	20,015	20,016
41,834	0,337	0,476	1,063	-0,169	0,006	0,452	0,581	54,702	21,822	20,035	19,888	19,925	19,922	20,032	20,028
42,334	0,324	0,491	1,060	-0,167	0,027	0,443	0,581	54,567	21,798	19,988	19,846	19,874	19,887	19,992	19,987
42,834	0,345	0,485	1,062	-0,169	0,024	0,450	0,581	54,494	21,784	19,976	19,819	19,868	19,874	19,983	19,974
43,334	0,348	0,476	1,064	-0,169	-0,026	0,455	0,581	54,375	21,820	19,935	19,788	19,829	19,837	19,949	19,944
43,833	0,339	0,479	1,061	-0,167	-0,006	0,451	0,581	54,282	21,801	19,949	19,797	19,847	19,852	19,955	19,955
44,333	0,323	0,485	1,062	-0,167	0,037	0,445	0,581	54,464	21,880	20,023	19,877	19,922	19,927	20,040	20,036
44,833	0,323	0,493	1,060	-0,165	0,027	0,442	0,581	54,434	21,821	19,993	19,850	19,892	19,902	20,010	20,001
45,333	0,346	0,489	1,066	-0,165	0,021	0,444	0,581	54,266	21,803	20,006	19,854	19,903	19,907	20,015	20,015
45,833	0,329	0,492	1,056	-0,166	-0,022	0,442	0,580	54,219	21,813	20,036	19,887	19,931	19,935	20,045	20,040
46,333	0,325	0,492	1,063	-0,164	-0,002	0,441	0,581	54,229	21,833	20,047	19,895	19,930	19,934	20,048	20,043
46,833	0,320	0,497	1,055	-0,163	0,010	0,435	0,581	54,155	21,771	19,984	19,834	19,876	19,885	19,993	19,989
47,333	0,316	0,503	1,063	-0,163	0,039	0,432	0,580	54,120	21,813	20,010	19,869	19,902	19,911	20,023	20,016
47,834	0,332	0,504	1,066	-0,163	-0,019	0,433	0,580	54,059	21,827	20,039	19,894	19,927	19,943	20,047	20,047
48,334	0,319	0,500	1,062	-0,165	0,025	0,436	0,580	53,894	21,784	19,981	19,838	19,884	19,886	19,999	19,991
48,834	0,312	0,499	1,066	-0,165	0,034	0,436	0,576	53,937	21,774	20,001	19,854	19,887	19,904	20,006	20,006
49,334	0,321	0,495	1,062	-0,161	-0,025	0,438	0,579	53,969	21,815	20,056	19,902	19,952	19,952	20,050	20,057
49,834	0,313	0,508	1,068	-0,161	0,017	0,426	0,579	53,880	21,810	20,010	19,862	19,895	19,904	20,019	20,014
50,334	0,312	0,510	1,061	-0,160	-0,015	0,429	0,579	53,810	21,816	20,000	19,860	19,903	19,906	20,016	20,016
50,833	0,330	0,502	1,063	-0,162	0,043	0,434	0,579	53,820	21,792	20,022	19,872	19,911	19,925	20,031	20,034
51,333	0,330	0,505	1,060	-0,160	0,045	0,429	0,579	53,844	21,814	20,059	19,914	19,955	19,962	20,071	20,070
51,833	0,335	0,510	1,068	-0,159	0,007	0,426	0,579	53,747	21,830	20,059	19,904	19,952	19,951	20,060	20,065
52,333	0,325	0,515	1,061	-0,158	0,002	0,421	0,579	53,701	21,836	20,025	19,874	19,919	19,915	20,027	20,029
52,833	0,296	0,528	1,062	-0,157	-0,009	0,409	0,579	53,760	21,866	20,062	19,917	19,959	19,962	20,071	20,073
53,333	0,295	0,540	1,059	-0,159	0,010	0,402	0,579	53,709	21,871	20,063	19,918	19,966	19,968	20,079	20,078
53,833	0,309	0,528	1,059	-0,160	0,008	0,412	0,579	53,662	21,816	20,065	19,915	19,958	19,965	20,070	20,077

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
35,834	48,988	44,170	68,711	74,200	0,494	0,468	2735,814	2926,148	434,814	6,069	14,505	-51,762	42,583	8,424	11,346	2022-03-23 11:28
36,334	48,907	44,108	68,696	74,132	0,495	0,468	2732,453	2896,995	373,029	6,610	14,053	-51,748	42,691	8,435	11,346	2022-03-23 11:29
36,833	48,899	44,060	68,659	74,123	0,494	0,468	2749,242	2910,353	333,810	7,061	13,569	-51,736	42,448	8,411	11,346	2022-03-23 11:29
37,333	48,847	44,074	68,637	74,103	0,497	0,468	2728,141	2912,834	530,333	6,331	14,006	-51,727	42,539	8,420	11,345	2022-03-23 11:30
37,833	48,846	44,093	68,605	74,067	0,492	0,468	2689,024	2912,295	513,557	6,047	14,459	-51,727	42,158	8,382	11,346	2022-03-23 11:30
38,333	48,877	44,146	68,628	73,988	0,497	0,468	2701,474	2857,380	462,478	6,090	14,469	-51,735	42,508	8,417	11,346	2022-03-23 11:31
38,833	48,929	44,174	68,593	73,975	0,497	0,468	2716,393	2869,038	440,068	6,132	14,421	-51,725	42,535	8,420	11,346	2022-03-23 11:31
39,333	48,959	44,215	68,516	73,961	0,497	0,468	2713,345	2902,593	332,838	6,723	13,903	-51,706	42,209	8,387	11,252	2022-03-23 11:32
39,833	48,943	44,284	68,492	73,926	0,494	0,468	2648,299	2897,517	355,352	6,917	13,613	-51,693	42,450	8,411	11,346	2022-03-23 11:32
40,333	48,908	44,209	68,561	73,892	0,494	0,468	2669,086	2840,609	423,182	6,520	13,966	-51,692	42,499	8,416	11,252	2022-03-23 11:33
40,834	48,755	44,106	68,569	73,829	0,493	0,468	2636,976	2802,677	381,960	6,514	14,059	-51,707	42,312	8,398	11,252	2022-03-23 11:33
41,334	48,703	44,021	68,497	73,801	0,496	0,469	2670,804	2829,946	362,158	6,615	13,936	-51,705	42,399	8,406	11,345	2022-03-23 11:34
41,834	48,861	44,038	68,456	73,776	0,494	0,468	2739,282	2835,217	328,682	7,053	13,558	-51,690	42,173	8,384	11,371	2022-03-23 11:34
42,334	48,887	44,117	68,309	73,741	0,496	0,468	2717,991	2894,998	319,287	7,339	13,294	-51,673	42,438	8,410	11,252	2022-03-23 11:35
42,834	48,941	44,183	68,292	73,725	0,498	0,468	2726,653	2895,233	376,976	7,026	13,504	-51,688	42,693	8,435	11,252	2022-03-23 11:35
43,334	48,929	44,219	68,301	73,736	0,489	0,468	2650,725	2895,930	366,266	6,891	13,649	-51,688	42,735	8,440	11,345	2022-03-23 11:36
43,833	48,935	44,223	68,329	73,666	0,497	0,468	2691,292	2842,551	337,442	7,023	13,537	-51,675	42,517	8,418	11,346	2022-03-23 11:36
44,333	48,933	44,196	68,289	73,667	0,495	0,468	2697,976	2867,058	296,221	7,241	13,349	-51,667	42,531	8,419	11,252	2022-03-23 11:37
44,833	49,018	44,128	68,243	73,667	0,497	0,468	2794,054	2888,788	342,091	7,295	13,248	-51,650	42,360	8,402	11,252	2022-03-23 11:37
45,333	48,983	44,095	68,096	73,606	0,496	0,468	2788,337	2934,726	368,740	7,220	13,323	-51,647	42,573	8,423	11,346	2022-03-23 11:38
45,833	48,915	44,070	68,086	73,566	0,493	0,468	2746,957	2917,983	308,989	7,315	13,249	-51,658	42,306	8,397	11,346	2022-03-23 11:38
46,333	48,924	44,119	68,063	73,562	0,496	0,468	2742,161	2927,814	313,229	7,320	13,237	-51,642	42,358	8,402	11,346	2022-03-23 11:39
46,833	48,944	44,161	68,034	73,534	0,496	0,468	2727,092	2929,955	300,012	7,502	13,063	-51,632	42,312	8,398	11,346	2022-03-23 11:39
47,333	48,949	44,190	68,040	73,535	0,496	0,468	2713,982	2926,837	292,820	7,644	12,945	-51,628	42,475	8,414	11,252	2022-03-23 11:40
47,834	48,900	44,185	68,066	73,506	0,491	0,468	2663,327	2898,463	327,829	7,567	12,983	-51,630	42,641	8,430	11,252	2022-03-23 11:40
48,334	49,033	44,170	68,083	73,466	0,494	0,467	2764,816	2864,180	290,045	7,510	13,067	-51,651	42,637	8,430	11,158	2022-03-23 11:41
48,834	49,092	44,146	67,895	73,475	0,495	0,468	2814,401	2970,976	280,202	7,447	13,093	-51,649	42,481	8,414	11,158	2022-03-23 11:41
49,334	49,033	44,122	67,849	73,459	0,491	0,449	2775,197	2867,118	327,142	7,368	13,144	-51,613	42,711	8,437	11,158	2022-03-23 11:42
49,834	49,033	44,108	67,578	73,468	0,490	0,405	2774,172	2718,040	272,939	7,839	12,792	-51,607	42,761	8,442	11,158	2022-03-23 11:42
50,334	48,958	44,115	67,222	73,474	0,493	0,405	2748,447	2885,007	291,273	7,668	12,865	-51,597	42,537	8,420	11,158	2022-03-23 11:43
50,833	48,986	44,171	67,118	73,483	0,494	0,405	2737,183	2937,840	339,592	7,498	13,030	-51,622	42,226	8,389	11,158	2022-03-23 11:43
51,333	48,972	44,195	67,128	73,487	0,492	0,405	2700,828	2934,235	317,714	7,713	12,876	-51,603	42,298	8,396	11,252	2022-03-23 11:44
51,833	48,934	44,184	67,191	73,491	0,492	0,405	2686,692	2907,120	353,266	7,759	12,767	-51,587	42,833	8,449	11,158	2022-03-23 11:44
52,333	48,939	44,153	67,199	73,488	0,490	0,405	2696,000	2904,523	295,080	7,943	12,620	-51,582	42,506	8,417	11,158	2022-03-23 11:45
52,833	48,850	44,135	67,224	73,480	0,492	0,405	2670,287	2887,519	218,229	8,352	12,275	-51,571	42,765	8,442	11,158	2022-03-23 11:45
53,333	48,824	44,123	67,248	73,472	0,490	0,405	2649,562	2873,604	254,794	8,447	12,068	-51,593	42,514	8,418	11,158	2022-03-23 11:46
53,833	48,861	44,120	67,253	73,460	0,493	0,405	2685,757	2867,163	278,561	8,140	12,374	-51,598	42,294	8,396	11,252	2022-03-23 11:46

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
54,334	0,303	0,523	1,062	-0,158	0,015	0,414	0,579	53,595	21,786	20,013	19,864	19,910	19,906	20,015	20,024
54,834	0,312	0,523	1,055	-0,157	-0,009	0,416	0,579	53,514	21,768	19,968	19,824	19,866	19,866	19,985	19,985
55,334	0,335	0,513	1,059	-0,156	0,025	0,424	0,578	53,574	21,866	20,084	19,934	19,974	19,978	20,092	20,094
55,834	0,313	0,513	1,061	-0,157	0,026	0,423	0,578	53,504	21,846	20,057	19,903	19,946	19,946	20,053	20,062
56,334	0,288	0,520	1,063	-0,157	0,026	0,418	0,578	53,517	21,907	20,094	19,946	19,982	19,977	20,101	20,107
56,834	0,286	0,525	1,064	-0,156	-0,011	0,412	0,578	53,418	21,823	20,032	19,887	19,922	19,927	20,037	20,049
57,333	0,281	0,538	1,057	-0,156	0,011	0,401	0,578	53,484	21,878	20,107	19,960	20,002	19,995	20,127	20,123
57,833	0,294	0,543	1,059	-0,155	0,024	0,397	0,579	53,457	21,988	20,113	19,959	20,013	20,013	20,139	20,136
58,333	0,282	0,549	1,059	-0,154	0,009	0,394	0,578	53,363	21,966	20,104	19,958	20,005	20,004	20,126	20,128
58,833	0,286	0,547	1,059	-0,154	-0,007	0,396	0,577	53,387	21,971	20,093	19,953	19,996	19,997	20,121	20,124
59,333	0,288	0,542	1,059	-0,155	-0,009	0,400	0,578	53,414	21,944	20,091	19,948	19,998	19,999	20,114	20,121
59,833	0,297	0,538	1,062	-0,155	0,008	0,403	0,578	53,251	21,925	20,094	19,947	19,987	19,996	20,111	20,121
60,333	0,293	0,540	1,062	-0,154	0,019	0,401	0,576	53,228	21,900	20,109	19,964	20,012	20,014	20,131	20,136
60,833	0,294	0,538	1,062	-0,156	0,008	0,403	0,577	53,127	21,849	20,064	19,920	19,971	19,961	20,085	20,097
61,334	0,311	0,534	1,060	-0,154	0,024	0,407	0,577	53,118	21,867	20,088	19,948	20,002	19,990	20,113	20,122
61,834	0,318	0,532	1,065	-0,154	-0,031	0,407	0,577	53,104	21,895	20,096	19,941	20,001	19,994	20,116	20,122
62,334	0,314	0,534	1,062	-0,154	0,016	0,405	0,578	53,128	21,918	20,111	19,968	20,014	20,009	20,132	20,142
62,834	0,301	0,541	1,060	-0,154	-0,007	0,402	0,576	53,022	21,913	20,102	19,960	20,016	20,008	20,134	20,138
63,334	0,295	0,532	1,062	-0,155	0,048	0,409	0,577	52,989	21,896	20,121	19,968	20,033	20,025	20,140	20,153
63,834	0,281	0,528	1,056	-0,155	0,037	0,411	0,576	53,052	21,927	20,094	19,946	20,003	20,008	20,125	20,134
64,333	0,273	0,529	1,065	-0,153	0,003	0,408	0,576	53,038	21,936	20,086	19,941	19,997	20,000	20,121	20,128
64,833	0,276	0,531	1,067	-0,151	-0,029	0,410	0,576	53,008	21,935	20,111	19,964	20,020	20,017	20,139	20,145
65,333	0,285	0,526	1,062	-0,153	0,034	0,413	0,576	52,933	21,936	20,136	19,983	20,043	20,044	20,169	20,175
65,833	0,290	0,525	1,066	-0,153	0,012	0,414	0,574	52,888	21,972	20,127	19,980	20,041	20,040	20,157	20,168
66,333	0,283	0,526	1,061	-0,153	-0,003	0,413	0,576	52,855	21,990	20,135	19,987	20,042	20,048	20,166	20,175
66,833	0,272	0,525	1,063	-0,154	0,002	0,414	0,576	52,849	21,898	20,056	19,914	19,975	19,975	20,091	20,100
67,333	0,272	0,524	1,056	-0,151	-0,009	0,414	0,576	52,911	21,982	20,132	19,985	20,053	20,054	20,172	20,175
67,833	0,269	0,528	1,060	-0,151	0,035	0,413	0,577	52,726	21,918	20,051	19,902	19,966	19,963	20,087	20,090
68,334	0,275	0,521	1,064	-0,153	0,029	0,419	0,575	52,782	22,004	20,145	19,994	20,055	20,053	20,177	20,183
68,834	0,278	0,521	1,060	-0,153	0,023	0,417	0,575	52,815	21,994	20,151	20,011	20,067	20,065	20,188	20,194
69,334	0,277	0,528	1,062	-0,151	0,066	0,411	0,576	52,842	22,009	20,163	20,015	20,056	20,068	20,195	20,193
69,834	0,288	0,526	1,065	-0,150	0,026	0,414	0,576	52,819	21,945	20,124	19,967	20,023	20,028	20,143	20,152
70,334	0,285	0,528	1,059	-0,152	0,016	0,412	0,576	52,783	21,919	20,156	20,009	20,058	20,058	20,191	20,190
70,833	0,276	0,529	1,060	-0,151	0,032	0,410	0,576	52,639	21,905	20,116	19,966	20,024	20,020	20,143	20,149
71,333	0,275	0,536	1,058	-0,149	0,017	0,404	0,576	52,623	21,959	20,160	20,006	20,060	20,061	20,189	20,193
71,833	0,275	0,545	1,063	-0,150	0,029	0,396	0,576	52,521	21,926	20,110	19,959	20,018	20,012	20,137	20,143
72,333	0,272	0,546	1,063	-0,149	0,029	0,396	0,574	52,593	21,958	20,161	20,019	20,075	20,082	20,198	20,204

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
54,334	49,006	44,134	67,227	73,460	0,489	0,406	2736,983	2880,109	255,120	8,049	12,432	-51,579	42,323	8,399	11,158	2022-03-23 11:47
54,834	49,042	44,154	67,114	73,431	0,490	0,405	2755,508	2915,664	322,275	7,991	12,492	-51,569	42,305	8,397	11,158	2022-03-23 11:47
55,334	49,019	44,161	67,091	73,454	0,490	0,405	2735,428	2937,032	337,517	7,779	12,730	-51,560	42,588	8,425	11,065	2022-03-23 11:48
55,834	48,989	44,185	67,047	73,438	0,491	0,405	2712,947	2949,227	256,654	7,886	12,675	-51,575	42,395	8,406	11,065	2022-03-23 11:48
56,334	49,014	44,190	67,065	73,405	0,493	0,405	2736,640	2926,436	215,306	8,015	12,531	-51,571	42,358	8,402	11,065	2022-03-23 11:49
56,834	48,981	44,175	67,057	73,429	0,493	0,405	2726,266	2941,059	218,499	8,211	12,354	-51,557	42,434	8,410	11,158	2022-03-23 11:49
57,333	48,927	44,159	67,066	73,419	0,495	0,405	2713,443	2932,957	218,881	8,565	12,024	-51,557	41,986	8,365	11,065	2022-03-23 11:50
57,833	48,980	44,149	67,065	73,411	0,494	0,405	2744,179	2928,894	221,251	8,646	11,908	-51,546	42,414	8,408	11,158	2022-03-23 11:50
58,333	48,951	44,143	67,072	73,445	0,496	0,405	2744,925	2940,507	209,175	8,730	11,811	-51,540	42,302	8,397	11,065	2022-03-23 11:51
58,833	48,921	44,130	67,055	73,414	0,492	0,405	2712,634	2932,085	219,148	8,644	11,882	-51,544	42,282	8,395	11,065	2022-03-23 11:51
59,333	48,880	44,122	67,105	73,407	0,494	0,405	2704,634	2908,632	227,543	8,546	11,988	-51,552	42,415	8,408	11,158	2022-03-23 11:52
59,833	48,965	44,130	67,091	73,436	0,496	0,405	2755,333	2927,692	258,568	8,418	12,081	-51,545	42,482	8,414	11,065	2022-03-23 11:52
60,333	48,923	44,157	67,054	73,423	0,494	0,405	2704,754	2938,471	218,895	8,566	12,022	-51,541	42,508	8,417	11,012	2022-03-23 11:53
60,833	48,925	44,192	67,084	73,450	0,496	0,405	2696,966	2937,983	250,822	8,414	12,102	-51,556	42,355	8,402	10,971	2022-03-23 11:53
61,334	48,916	44,185	67,096	73,447	0,492	0,405	2677,924	2931,171	307,876	8,274	12,217	-51,535	42,395	8,406	11,065	2022-03-23 11:54
61,834	48,972	44,173	67,131	73,466	0,491	0,405	2710,708	2923,952	282,051	8,325	12,211	-51,543	42,563	8,423	11,065	2022-03-23 11:54
62,334	48,993	44,168	67,166	73,456	0,493	0,405	2732,804	2904,728	288,766	8,443	12,145	-51,540	42,428	8,409	11,065	2022-03-23 11:55
62,834	48,982	44,176	67,126	73,484	0,490	0,405	2708,114	2933,316	242,056	8,477	12,050	-51,544	42,638	8,430	11,065	2022-03-23 11:55
63,334	48,962	44,163	67,156	73,482	0,493	0,405	2721,985	2920,429	231,887	8,229	12,280	-51,551	42,276	8,394	11,065	2022-03-23 11:56
63,834	48,966	44,185	67,131	73,499	0,492	0,405	2706,571	2938,717	191,412	8,179	12,338	-51,550	42,131	8,380	10,971	2022-03-23 11:56
64,333	48,906	44,173	67,181	73,472	0,491	0,405	2671,185	2902,390	186,343	8,275	12,251	-51,531	42,725	8,438	10,971	2022-03-23 11:57
64,833	48,947	44,125	67,203	73,447	0,495	0,405	2745,945	2881,800	206,378	8,221	12,287	-51,509	42,861	8,452	10,971	2022-03-23 11:57
65,333	48,847	44,099	67,192	73,527	0,493	0,405	2689,392	2923,286	214,689	8,138	12,400	-51,532	42,765	8,442	11,065	2022-03-23 11:58
65,833	48,841	44,127	67,212	73,517	0,491	0,405	2659,552	2909,018	235,257	8,108	12,432	-51,529	42,779	8,444	10,971	2022-03-23 11:58
66,333	49,011	44,132	67,265	73,541	0,487	0,405	2734,289	2894,620	191,679	8,179	12,378	-51,534	42,297	8,396	10,971	2022-03-23 11:59
66,833	49,065	44,136	67,169	73,647	0,488	0,405	2763,386	2991,176	185,347	8,094	12,407	-51,536	42,695	8,436	10,971	2022-03-23 11:59
67,333	49,075	44,161	67,129	73,691	0,487	0,405	2750,083	3028,218	179,728	8,144	12,423	-51,512	42,177	8,384	10,971	2022-03-23 12:00
67,833	49,109	44,219	67,119	73,673	0,488	0,405	2743,824	3024,762	176,038	8,159	12,391	-51,507	42,495	8,416	10,971	2022-03-23 12:00
68,334	49,168	44,236	67,121	73,639	0,490	0,405	2781,145	3006,871	198,580	7,960	12,557	-51,526	42,589	8,425	10,847	2022-03-23 12:01
68,834	48,941	44,243	67,104	73,673	0,496	0,405	2679,565	3029,695	195,827	8,072	12,505	-51,529	42,345	8,401	10,971	2022-03-23 12:01
69,334	48,828	44,167	67,233	73,844	0,489	0,405	2621,520	3049,572	202,933	8,225	12,332	-51,511	42,711	8,437	10,971	2022-03-23 12:02
69,834	48,896	44,186	67,387	73,941	0,493	0,405	2668,229	3022,939	225,856	8,099	12,405	-51,501	42,617	8,428	10,971	2022-03-23 12:02
70,334	48,914	44,222	67,294	73,877	0,494	0,405	2664,665	3036,670	211,198	8,199	12,347	-51,520	42,304	8,397	10,971	2022-03-23 12:03
70,833	48,835	44,186	67,329	73,903	0,488	0,405	2610,476	3032,543	190,713	8,268	12,310	-51,509	42,574	8,424	10,971	2022-03-23 12:03
71,333	49,014	44,112	67,347	73,866	0,489	0,405	2759,249	3008,523	191,812	8,445	12,119	-51,488	42,447	8,411	10,971	2022-03-23 12:04
71,833	48,926	44,050	67,263	73,935	0,491	0,405	2751,040	3079,043	186,480	8,665	11,866	-51,496	42,714	8,437	10,971	2022-03-23 12:04
72,333	48,935	44,139	67,234	73,946	0,488	0,405	2691,746	3095,706	183,828	8,632	11,880	-51,491	42,764	8,442	10,846	2022-03-23 12:05



## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
72,833	0,273	0,546	1,053	-0,147	0,004	0,396	0,574	52,552	21,952	20,165	20,009	20,061	20,074	20,193	20,198
73,333	0,273	0,550	1,060	-0,149	0,031	0,393	0,574	52,519	21,959	20,149	19,989	20,049	20,046	20,175	20,179
73,833	0,270	0,552	1,061	-0,150	-0,023	0,390	0,574	52,593	22,028	20,172	20,021	20,080	20,080	20,200	20,210
74,333	0,266	0,552	1,057	-0,148	-0,023	0,390	0,575	52,475	22,034	20,170	20,014	20,072	20,080	20,204	20,206
74,834	0,270	0,552	1,060	-0,149	0,019	0,391	0,574	52,515	21,966	20,132	19,976	20,035	20,036	20,157	20,163
75,334	0,283	0,547	1,064	-0,149	0,014	0,397	0,574	52,552	21,967	20,175	20,015	20,076	20,074	20,206	20,209
75,834	0,274	0,548	1,063	-0,148	0,040	0,394	0,574	52,458	21,952	20,150	20,009	20,065	20,062	20,186	20,190
76,334	0,270	0,552	1,059	-0,148	0,026	0,390	0,574	52,461	22,011	20,189	20,032	20,085	20,085	20,218	20,220
76,834	0,266	0,563	1,060	-0,148	0,006	0,381	0,574	52,433	21,944	20,138	19,994	20,049	20,054	20,179	20,180
77,334	0,271	0,559	1,055	-0,149	0,036	0,387	0,574	52,457	21,992	20,178	20,027	20,082	20,073	20,204	20,214
77,833	0,285	0,552	1,065	-0,149	-0,022	0,391	0,575	52,459	22,013	20,209	20,056	20,100	20,100	20,235	20,238
78,333	0,275	0,557	1,064	-0,149	-0,011	0,387	0,575	52,346	21,989	20,159	20,002	20,060	20,063	20,188	20,194
78,833	0,259	0,563	1,060	-0,148	0,037	0,382	0,573	52,356	22,045	20,219	20,059	20,124	20,115	20,247	20,248
79,333	0,261	0,562	1,056	-0,148	0,005	0,382	0,573	52,343	22,040	20,222	20,064	20,113	20,128	20,241	20,253
79,833	0,278	0,556	1,061	-0,147	0,045	0,388	0,574	52,333	22,013	20,172	20,026	20,066	20,077	20,203	20,210
80,333	0,281	0,554	1,063	-0,146	0,032	0,389	0,574	52,372	22,032	20,225	20,070	20,123	20,123	20,254	20,256
80,833	0,284	0,556	1,061	-0,148	0,019	0,388	0,573	52,368	22,032	20,220	20,069	20,121	20,131	20,252	20,258
81,333	0,270	0,566	1,061	-0,148	-0,005	0,376	0,572	52,397	22,085	20,225	20,075	20,124	20,134	20,263	20,263
81,834	0,260	0,577	1,060	-0,144	-0,010	0,370	0,572	52,305	22,038	20,167	20,018	20,064	20,073	20,200	20,201
82,334	0,274	0,572	1,057	-0,146	0,045	0,373	0,573	52,360	22,078	20,226	20,070	20,124	20,127	20,251	20,260
82,834	0,294	0,569	1,059	-0,146	0,040	0,378	0,572	52,299	22,116	20,233	20,078	20,129	20,140	20,257	20,264
83,334	0,300	0,567	1,065	-0,146	-0,022	0,379	0,572	52,245	22,050	20,184	20,028	20,073	20,074	20,215	20,213
83,834	0,291	0,568	1,056	-0,146	0,009	0,378	0,572	52,302	22,058	20,228	20,076	20,132	20,132	20,265	20,265
84,334	0,281	0,573	1,061	-0,145	0,000	0,373	0,572	52,268	22,010	20,225	20,087	20,137	20,129	20,263	20,262
84,833	0,287	0,566	1,057	-0,146	-0,004	0,381	0,572	52,291	22,004	20,236	20,085	20,134	20,132	20,268	20,264
85,333	0,306	0,556	1,062	-0,145	0,012	0,389	0,572	52,198	22,010	20,209	20,066	20,108	20,115	20,237	20,242
85,833	0,295	0,560	1,060	-0,146	0,028	0,382	0,573	52,254	22,047	20,247	20,099	20,143	20,146	20,272	20,275
86,333	0,272	0,574	1,059	-0,145	0,061	0,371	0,572	52,203	22,021	20,218	20,058	20,102	20,112	20,242	20,244
86,833	0,276	0,578	1,054	-0,145	0,005	0,369	0,572	52,263	22,034	20,262	20,111	20,148	20,157	20,290	20,287
87,333	0,297	0,569	1,062	-0,144	-0,028	0,378	0,571	52,156	22,008	20,215	20,069	20,109	20,110	20,236	20,242
87,833	0,297	0,559	1,057	-0,147	0,025	0,387	0,571	52,200	22,041	20,270	20,117	20,169	20,164	20,294	20,296
88,334	0,300	0,551	1,058	-0,147	0,027	0,393	0,571	52,184	22,063	20,264	20,113	20,160	20,164	20,295	20,296
88,834	0,312	0,548	1,058	-0,145	0,020	0,394	0,572	52,058	22,033	20,216	20,068	20,104	20,110	20,240	20,244
89,334	0,297	0,552	1,059	-0,146	0,033	0,390	0,572	52,018	22,045	20,230	20,081	20,121	20,121	20,253	20,259
89,834	0,293	0,554	1,051	-0,145	0,020	0,388	0,571	51,958	22,016	20,215	20,062	20,100	20,106	20,244	20,240
90,334	0,289	0,564	1,058	-0,145	0,027	0,380	0,571	52,022	22,065	20,271	20,112	20,161	20,164	20,296	20,300
90,834	0,292	0,570	1,059	-0,146	-0,010	0,374	0,571	51,973	22,079	20,276	20,118	20,162	20,172	20,302	20,303

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
72,833	49,004	44,212	67,274	73,993	0,491	0,405	2703,552	3099,789	184,014	8,704	11,874	-51,474	42,148	8,381	10,971	2022-03-23 12:05
73,333	48,999	44,232	67,348	73,969	0,488	0,405	2675,204	3055,111	186,948	8,777	11,780	-51,491	42,338	8,400	10,846	2022-03-23 12:06
73,833	48,884	44,145	67,386	73,937	0,488	0,405	2660,945	3022,358	173,042	8,822	11,692	-51,496	42,313	8,398	10,971	2022-03-23 12:06
74,333	48,816	44,079	67,430	73,919	0,488	0,405	2660,450	2993,989	166,735	8,790	11,706	-51,477	42,515	8,418	10,971	2022-03-23 12:07
74,834	48,928	44,101	67,436	73,992	0,489	0,405	2716,777	3023,408	194,993	8,783	11,735	-51,487	42,532	8,419	10,971	2022-03-23 12:07
75,334	49,048	44,177	67,403	74,015	0,487	0,405	2727,725	3049,089	209,519	8,654	11,896	-51,485	42,726	8,439	10,846	2022-03-23 12:08
75,834	49,082	44,206	67,319	74,017	0,487	0,405	2729,072	3091,264	183,088	8,729	11,831	-51,484	42,594	8,426	10,846	2022-03-23 12:08
76,334	49,110	44,194	67,306	74,039	0,487	0,405	2753,261	3104,741	173,946	8,906	11,695	-51,476	42,256	8,392	10,846	2022-03-23 12:09
76,834	49,132	44,176	67,342	74,075	0,490	0,405	2793,726	3105,826	163,301	9,098	11,440	-51,483	42,384	8,405	10,846	2022-03-23 12:09
77,334	48,998	44,136	67,332	74,066	0,489	0,405	2733,865	3106,242	195,433	8,876	11,599	-51,487	42,209	8,387	10,846	2022-03-23 12:10
77,833	49,049	44,113	67,350	74,101	0,492	0,405	2791,615	3114,636	209,847	8,820	11,744	-51,487	42,448	8,411	10,846	2022-03-23 12:10
78,333	49,036	44,112	67,286	74,094	0,490	0,405	2773,924	3141,335	178,016	8,951	11,599	-51,487	42,582	8,424	10,971	2022-03-23 12:11
78,833	49,014	44,142	67,394	74,118	0,487	0,405	2728,527	3102,632	144,758	9,099	11,452	-51,476	42,257	8,392	10,846	2022-03-23 12:11
79,333	49,062	44,172	67,428	74,109	0,491	0,405	2761,007	3082,121	160,438	9,039	11,468	-51,476	42,752	8,441	10,846	2022-03-23 12:12
79,833	48,944	44,177	67,398	74,095	0,491	0,405	2692,495	3089,305	218,396	8,808	11,639	-51,475	42,522	8,418	10,883	2022-03-23 12:12
80,333	48,876	44,194	67,547	74,019	0,498	0,405	2679,812	2984,115	207,799	8,834	11,683	-51,459	42,546	8,421	10,971	2022-03-23 12:13
80,833	48,895	44,190	67,553	74,219	0,497	0,405	2691,637	3074,376	207,126	8,911	11,636	-51,478	42,644	8,431	10,846	2022-03-23 12:13
81,333	48,841	44,117	67,573	74,273	0,493	0,405	2678,005	3088,685	165,413	9,324	11,292	-51,476	42,242	8,391	10,753	2022-03-23 12:14
81,834	48,811	44,069	67,643	74,231	0,491	0,405	2679,345	3039,998	155,257	9,388	11,095	-51,443	42,585	8,425	10,752	2022-03-23 12:14
82,334	48,883	44,099	67,642	74,281	0,495	0,405	2723,722	3063,905	200,864	9,349	11,202	-51,459	42,274	8,394	10,846	2022-03-23 12:15
82,834	48,917	44,182	67,618	74,227	0,493	0,405	2682,405	3048,199	252,846	9,150	11,336	-51,464	42,231	8,390	10,753	2022-03-23 12:15
83,334	48,955	44,194	67,682	74,286	0,492	0,405	2696,020	3046,443	249,021	9,176	11,372	-51,461	42,713	8,437	10,753	2022-03-23 12:16
83,834	49,065	44,218	67,669	74,361	0,488	0,405	2721,402	3086,610	215,718	9,229	11,327	-51,463	42,238	8,390	10,753	2022-03-23 12:16
84,334	49,095	44,204	67,652	74,413	0,494	0,405	2778,192	3119,475	204,808	9,348	11,189	-51,450	42,774	8,443	10,753	2022-03-23 12:17
84,833	49,085	44,173	67,592	74,468	0,493	0,405	2783,400	3174,361	235,232	9,025	11,420	-51,457	42,368	8,403	10,753	2022-03-23 12:17
85,333	49,057	44,129	67,643	74,509	0,489	0,405	2771,361	3168,081	280,913	8,841	11,663	-51,454	42,471	8,413	10,753	2022-03-23 12:18
85,833	49,014	44,091	67,674	74,525	0,493	0,405	2792,128	3158,937	213,817	9,136	11,465	-51,458	42,238	8,390	10,753	2022-03-23 12:18
86,333	49,032	44,137	67,663	74,483	0,491	0,405	2763,505	3144,853	180,879	9,415	11,143	-51,448	42,303	8,397	10,753	2022-03-23 12:19
86,833	49,011	44,147	67,711	74,559	0,492	0,405	2751,153	3158,422	202,618	9,425	11,073	-51,455	42,386	8,405	10,753	2022-03-23 12:19
87,333	49,095	44,161	67,723	74,581	0,488	0,405	2769,308	3164,738	249,223	9,158	11,326	-51,438	42,449	8,411	10,752	2022-03-23 12:20
87,833	49,037	44,172	67,776	74,603	0,492	0,405	2751,575	3151,447	244,737	8,872	11,599	-51,467	42,315	8,398	10,753	2022-03-23 12:20
88,334	48,998	44,160	67,779	74,643	0,492	0,405	2737,064	3167,094	268,674	8,735	11,790	-51,474	42,157	8,382	10,753	2022-03-23 12:21
88,834	48,979	44,147	67,838	74,613	0,489	0,405	2715,332	3127,343	279,113	8,719	11,806	-51,449	42,229	8,389	10,658	2022-03-23 12:21
89,334	49,022	44,143	67,911	74,688	0,492	0,405	2763,063	3127,133	227,905	8,849	11,690	-51,457	42,354	8,402	10,752	2022-03-23 12:22
89,834	48,987	44,158	67,865	74,662	0,491	0,405	2725,970	3134,738	236,938	8,871	11,642	-51,450	41,968	8,363	10,658	2022-03-23 12:22
90,334	48,968	44,168	67,939	74,745	0,489	0,405	2699,164	3139,839	227,517	9,179	11,413	-51,445	42,308	8,397	10,659	2022-03-23 12:23
90,834	48,925	44,165	67,961	74,730	0,493	0,405	2697,810	3123,356	217,259	9,367	11,216	-51,457	42,349	8,401	10,658	2022-03-23 12:23

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
91,333	0,279	0,579	1,055	-0,144	0,012	0,367	0,571	51,968	22,104	20,266	20,113	20,167	20,169	20,297	20,302
91,833	0,276	0,580	1,058	-0,144	0,032	0,367	0,571	52,001	22,155	20,273	20,114	20,167	20,177	20,307	20,312
92,333	0,292	0,570	1,051	-0,144	0,030	0,376	0,571	51,981	22,172	20,264	20,098	20,164	20,172	20,309	20,307
92,833	0,302	0,561	1,059	-0,145	0,041	0,383	0,571	51,939	22,074	20,210	20,068	20,128	20,134	20,259	20,264
93,333	0,305	0,564	1,055	-0,143	0,018	0,379	0,571	51,939	22,022	20,232	20,074	20,144	20,145	20,271	20,281
93,833	0,293	0,578	1,062	-0,140	-0,011	0,365	0,571	51,955	21,974	20,260	20,105	20,169	20,177	20,304	20,310
94,333	0,279	0,594	1,061	-0,141	0,034	0,354	0,571	52,095	21,985	20,284	20,130	20,193	20,190	20,326	20,332
94,833	0,293	0,591	1,056	-0,141	0,039	0,358	0,570	52,173	21,941	20,247	20,083	20,152	20,156	20,287	20,292
95,334	0,300	0,586	1,056	-0,141	0,016	0,361	0,571	52,147	21,951	20,239	20,095	20,153	20,152	20,284	20,291
95,834	0,303	0,593	1,059	-0,142	0,060	0,355	0,570	52,136	21,938	20,195	20,061	20,110	20,105	20,242	20,247
96,334	0,295	0,593	1,060	-0,144	0,028	0,355	0,570	52,258	22,020	20,306	20,152	20,205	20,211	20,342	20,347
96,834	0,275	0,591	1,060	-0,143	0,037	0,358	0,570	52,253	21,982	20,280	20,132	20,203	20,195	20,325	20,334
97,334	0,275	0,583	1,062	-0,143	0,029	0,364	0,569	52,294	22,006	20,302	20,150	20,218	20,218	20,341	20,351
97,834	0,271	0,584	1,057	-0,142	-0,002	0,364	0,569	52,239	21,968	20,277	20,134	20,189	20,200	20,322	20,333
98,333	0,278	0,582	1,058	-0,143	0,043	0,365	0,570	52,207	21,980	20,295	20,154	20,221	20,227	20,342	20,357
98,833	0,284	0,585	1,054	-0,142	0,009	0,362	0,569	52,154	21,931	20,255	20,112	20,167	20,178	20,302	20,314
99,333	0,301	0,588	1,059	-0,143	-0,011	0,358	0,568	52,210	21,987	20,291	20,146	20,210	20,220	20,347	20,355
99,833	0,307	0,591	1,054	-0,143	0,059	0,358	0,568	52,188	21,929	20,252	20,111	20,174	20,190	20,313	20,320
100,333	0,310	0,586	1,060	-0,143	0,036	0,361	0,568	52,131	21,881	20,222	20,086	20,155	20,156	20,285	20,295
100,833	0,286	0,598	1,060	-0,140	0,032	0,349	0,568	52,291	21,975	20,302	20,168	20,224	20,236	20,357	20,371
101,333	0,294	0,607	1,054	-0,142	0,046	0,344	0,568	52,239	21,918	20,228	20,087	20,158	20,174	20,295	20,302
101,833	0,303	0,601	1,050	-0,143	0,008	0,349	0,568	52,216	21,889	20,304	20,152	20,218	20,233	20,347	20,364
102,334	0,301	0,596	1,054	-0,142	0,017	0,353	0,567	52,185	21,931	20,313	20,158	20,228	20,242	20,364	20,370
102,834	0,288	0,599	1,060	-0,141	-0,017	0,352	0,568	52,135	21,913	20,280	20,142	20,208	20,217	20,339	20,351
103,334	0,287	0,598	1,065	-0,140	-0,007	0,352	0,568	52,166	21,964	20,302	20,156	20,225	20,237	20,360	20,370
103,834	0,277	0,604	1,061	-0,141	0,011	0,346	0,568	52,252	21,955	20,303	20,151	20,222	20,236	20,355	20,364
104,334	0,263	0,610	1,058	-0,141	0,007	0,342	0,568	52,280	21,915	20,304	20,149	20,231	20,240	20,355	20,365
104,833	0,266	0,600	1,061	-0,143	0,029	0,352	0,566	52,350	21,959	20,320	20,182	20,233	20,262	20,371	20,388
105,333	0,273	0,587	1,063	-0,144	-0,005	0,363	0,567	52,289	21,937	20,278	20,136	20,205	20,219	20,332	20,348
105,833	0,276	0,582	1,061	-0,143	0,012	0,365	0,566	52,322	21,946	20,298	20,148	20,211	20,230	20,348	20,361
106,333	0,270	0,590	1,054	-0,143	0,031	0,357	0,566	52,294	21,880	20,260	20,122	20,184	20,204	20,316	20,333
106,833	0,271	0,596	1,060	-0,144	-0,013	0,354	0,566	52,176	21,906	20,237	20,105	20,172	20,187	20,301	20,317
107,333	0,275	0,589	1,058	-0,145	0,021	0,361	0,566	52,254	21,864	20,267	20,120	20,183	20,200	20,318	20,333
107,833	0,283	0,583	1,059	-0,144	-0,019	0,364	0,566	52,335	21,949	20,332	20,182	20,254	20,271	20,381	20,399
108,333	0,282	0,590	1,060	-0,142	0,023	0,357	0,566	52,258	21,885	20,269	20,120	20,194	20,213	20,322	20,341
108,834	0,277	0,594	1,050	-0,143	-0,028	0,355	0,567	52,304	21,891	20,285	20,151	20,206	20,232	20,335	20,360
109,334	0,276	0,592	1,065	-0,143	0,005	0,357	0,565	52,297	21,913	20,296	20,148	20,212	20,239	20,352	20,369

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
91,333	48,784	44,149	68,066	74,714	0,494	0,405	2633,512	3066,909	184,720	9,497	11,013	-51,440	42,196	8,386	10,707	2022-03-23 12:24
91,833	48,811	44,170	68,161	74,728	0,494	0,405	2634,388	3029,253	213,700	9,423	11,021	-51,443	42,482	8,414	10,658	2022-03-23 12:24
92,333	48,820	44,161	68,134	74,782	0,496	0,405	2655,842	3068,787	240,115	9,147	11,282	-51,440	41,770	8,344	10,658	2022-03-23 12:25
92,833	48,860	44,164	68,137	74,818	0,495	0,405	2670,749	3081,497	266,423	9,027	11,476	-51,446	42,346	8,401	10,658	2022-03-23 12:25
93,333	48,887	44,164	68,164	74,804	0,494	0,405	2685,635	3062,758	257,497	9,131	11,377	-51,429	42,483	8,415	10,658	2022-03-23 12:26
93,833	49,045	44,171	68,218	74,838	0,492	0,405	2757,857	3054,745	219,556	9,619	10,964	-51,399	42,628	8,429	10,658	2022-03-23 12:26
94,333	49,072	44,170	68,136	74,870	0,492	0,405	2770,721	3108,244	203,659	9,921	10,607	-51,414	42,594	8,426	10,658	2022-03-23 12:27
94,833	49,040	44,183	68,147	74,888	0,494	0,405	2761,252	3109,787	251,230	9,664	10,755	-51,409	42,411	8,407	10,565	2022-03-23 12:27
95,334	48,904	44,192	68,140	74,882	0,488	0,405	2644,351	3111,156	245,334	9,711	10,818	-51,411	42,398	8,406	10,658	2022-03-23 12:28
95,834	48,997	44,195	68,261	75,039	0,490	0,405	2704,686	3125,388	253,894	9,868	10,662	-51,418	42,595	8,426	10,659	2022-03-23 12:28
96,334	49,024	44,206	68,281	75,113	0,492	0,405	2723,308	3151,166	223,067	9,804	10,656	-51,444	42,173	8,384	10,565	2022-03-23 12:29
96,834	48,999	44,191	68,275	75,095	0,494	0,405	2733,304	3147,004	187,965	9,747	10,729	-51,426	42,441	8,410	10,658	2022-03-23 12:29
97,334	49,001	44,171	68,266	75,126	0,494	0,405	2742,966	3164,642	181,995	9,600	10,912	-51,432	42,549	8,421	10,565	2022-03-23 12:30
97,834	49,048	44,145	68,279	75,151	0,494	0,405	2783,231	3169,419	192,568	9,558	10,933	-51,421	41,987	8,365	10,565	2022-03-23 12:30
98,333	48,935	44,132	68,331	75,129	0,492	0,405	2717,978	3135,980	195,588	9,556	10,962	-51,430	42,181	8,385	10,565	2022-03-23 12:31
98,833	49,014	44,136	68,381	75,112	0,493	0,405	2765,921	3106,431	237,993	9,612	10,869	-51,423	42,106	8,377	10,565	2022-03-23 12:31
99,333	49,073	44,170	68,332	75,158	0,494	0,405	2786,590	3147,865	252,533	9,791	10,725	-51,428	42,116	8,378	10,470	2022-03-23 12:32
99,833	49,203	44,248	68,342	75,258	0,497	0,405	2834,677	3188,438	282,154	9,715	10,728	-51,434	42,296	8,396	10,470	2022-03-23 12:32
100,333	48,994	44,311	68,326	75,285	0,502	0,405	2703,654	3210,112	264,802	9,694	10,817	-51,434	42,406	8,407	10,470	2022-03-23 12:33
100,833	48,921	44,217	68,493	75,224	0,501	0,405	2707,335	3105,485	206,743	10,086	10,474	-51,405	42,553	8,422	10,470	2022-03-23 12:33
101,333	48,829	44,112	68,592	75,358	0,499	0,405	2707,668	3120,590	261,578	10,131	10,331	-51,416	42,439	8,410	10,470	2022-03-23 12:34
101,833	48,747	44,011	68,641	75,396	0,500	0,405	2724,526	3115,636	258,437	9,941	10,484	-51,429	41,861	8,353	10,470	2022-03-23 12:34
102,334	48,812	44,095	68,640	75,420	0,498	0,405	2704,050	3126,593	245,502	9,936	10,584	-51,415	42,305	8,397	10,565	2022-03-23 12:35
102,834	48,923	44,199	68,648	75,455	0,499	0,405	2710,512	3139,990	219,071	9,956	10,560	-51,409	42,617	8,428	10,565	2022-03-23 12:35
103,334	48,874	44,228	68,742	75,478	0,491	0,405	2623,205	3106,253	222,100	9,978	10,551	-51,399	42,696	8,436	10,471	2022-03-23 12:36
103,834	48,978	44,212	68,858	75,558	0,495	0,405	2712,208	3091,448	178,866	10,178	10,377	-51,414	42,443	8,411	10,470	2022-03-23 12:36
104,334	48,900	44,172	68,851	75,554	0,492	0,376	2675,287	2871,437	155,585	10,262	10,258	-51,407	42,210	8,388	10,470	2022-03-23 12:37
104,833	49,112	44,110	68,547	75,656	0,493	0,350	2836,410	2833,792	173,441	9,859	10,563	-51,434	42,431	8,409	10,470	2022-03-23 12:37
105,333	49,016	44,106	68,088	75,714	0,493	0,350	2784,823	3039,157	194,472	9,600	10,880	-51,443	42,605	8,427	10,470	2022-03-23 12:38
105,833	48,972	44,168	68,014	75,828	0,490	0,350	2704,821	3115,217	187,127	9,553	10,953	-51,426	42,137	8,380	10,346	2022-03-23 12:38
106,333	48,953	44,171	68,050	75,949	0,489	0,350	2690,486	3151,481	170,407	9,853	10,702	-51,426	42,510	8,417	10,346	2022-03-23 12:39
106,833	48,997	44,206	68,052	75,976	0,491	0,350	2703,095	3159,464	192,310	9,860	10,631	-51,442	42,576	8,424	10,346	2022-03-23 12:39
107,333	49,126	44,220	68,094	76,035	0,494	0,350	2789,595	3165,665	193,362	9,684	10,820	-51,451	42,082	8,375	10,346	2022-03-23 12:40
107,833	49,103	44,173	68,125	76,077	0,495	0,350	2803,563	3171,559	216,382	9,607	10,929	-51,443	42,546	8,421	10,346	2022-03-23 12:40
108,333	49,011	44,129	68,143	76,104	0,494	0,350	2772,090	3175,767	196,486	9,850	10,712	-51,420	42,259	8,392	10,470	2022-03-23 12:41
108,834	48,952	44,091	68,183	76,168	0,487	0,350	2724,988	3185,397	200,219	9,827	10,664	-51,431	42,053	8,372	10,565	2022-03-23 12:41
109,334	49,047	44,152	68,293	76,195	0,494	0,350	2782,103	3151,389	181,614	9,739	10,720	-51,434	42,943	8,460	10,346	2022-03-23 12:42

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
109,993	0,268	0,582	1,061	-0,146	-0,009	0,366	0,566	52,294	21,985	20,332	20,181	20,257	20,280	20,381	20,407
110,387	0,269	0,577	1,061	-0,145	-0,009	0,369	0,566	52,244	21,974	20,286	20,138	20,223	20,245	20,343	20,367
110,833	0,255	0,594	1,061	-0,143	-0,004	0,352	0,565	52,322	21,973	20,331	20,188	20,254	20,276	20,379	20,407
111,334	0,250	0,612	1,060	-0,143	0,030	0,339	0,565	52,365	21,994	20,335	20,198	20,263	20,286	20,399	20,414
111,834	0,255	0,615	1,056	-0,145	0,057	0,338	0,565	52,388	21,976	20,344	20,201	20,269	20,280	20,400	20,417
112,334	0,276	0,608	1,066	-0,147	0,010	0,346	0,565	52,353	21,926	20,291	20,159	20,224	20,245	20,352	20,371
112,834	0,293	0,598	1,055	-0,147	-0,002	0,353	0,564	52,415	21,957	20,328	20,174	20,243	20,263	20,369	20,390
113,334	0,290	0,598	1,059	-0,149	0,019	0,351	0,564	52,355	21,991	20,347	20,197	20,259	20,284	20,391	20,414
113,834	0,268	0,603	1,058	-0,147	0,005	0,348	0,564	52,443	21,981	20,361	20,216	20,287	20,306	20,417	20,435
114,333	0,269	0,600	1,055	-0,147	0,023	0,351	0,563	52,395	21,912	20,317	20,172	20,236	20,262	20,370	20,390
114,833	0,272	0,600	1,059	-0,147	0,032	0,351	0,566	52,306	21,916	20,330	20,181	20,251	20,274	20,381	20,402
115,333	0,269	0,601	1,061	-0,147	-0,011	0,350	0,564	52,308	21,915	20,321	20,176	20,243	20,278	20,378	20,401
115,833	0,265	0,601	1,051	-0,146	0,000	0,349	0,564	52,358	21,899	20,360	20,210	20,285	20,306	20,410	20,433
116,334	0,260	0,604	1,058	-0,148	0,050	0,346	0,564	52,297	21,816	20,288	20,139	20,215	20,237	20,339	20,364
116,834	0,271	0,594	1,052	1,285	0,009	0,357	0,564	52,375	21,913	20,345	20,187	20,268	20,299	20,391	20,418
117,334	0,273	0,584	1,061	0,021	0,006	0,363	0,564	52,368	21,888	20,328	20,165	20,243	20,265	20,375	20,400
117,834	0,268	0,588	1,059	-0,043	0,006	0,360	0,564	52,468	21,927	20,366	20,219	20,292	20,327	20,415	20,449
118,334	0,264	0,594	1,054	-0,147	0,012	0,353	0,563	52,503	21,917	20,329	20,175	20,242	20,278	20,373	20,404
118,834	0,259	0,606	1,056	-0,143	0,017	0,342	0,564	52,557	21,930	20,313	20,166	20,235	20,274	20,364	20,399
119,333	0,252	0,611	1,058	-0,144	-0,019	0,340	0,564	52,555	21,992	20,367	20,226	20,299	20,323	20,418	20,455
119,833	0,242	0,615	1,054	-0,143	-0,014	0,336	0,563	52,450	21,895	20,272	20,125	20,192	20,234	20,320	20,360
120,333	0,238	0,626	1,057	-0,144	0,023	0,328	0,563	52,527	21,906	20,326	20,183	20,266	20,291	20,382	20,422
120,833	0,242	0,625	1,056	-0,144	-0,014	0,329	0,563	52,535	21,892	20,302	20,157	20,243	20,269	20,359	20,399
121,333	0,238	0,633	1,067	-0,146	0,021	0,323	0,563	52,588	21,925	20,353	20,203	20,285	20,321	20,410	20,445
121,833	0,247	0,625	1,052	-0,147	0,009	0,331	0,563	52,563	21,932	20,356	20,215	20,283	20,319	20,407	20,450
122,334	0,268	0,610	1,054	-0,146	0,012	0,344	0,563	52,449	21,903	20,343	20,191	20,269	20,300	20,385	20,427
122,834	0,277	0,611	1,054	-0,147	0,030	0,341	0,562	52,526	21,976	20,419	20,246	20,312	20,344	20,436	20,477
123,334	0,279	0,609	1,051	-0,146	-0,020	0,342	0,563	52,406	21,926	20,377	20,193	20,255	20,291	20,381	20,419
123,834	0,269	0,616	1,051	-0,145	0,003	0,335	0,601	52,446	21,915	20,394	20,219	20,276	20,314	20,403	20,438
124,334	0,260	0,622	1,050	-0,145	-0,008	0,332	0,621	52,519	21,960	20,428	20,252	20,302	20,334	20,429	20,465
124,833	0,260	0,617	1,049	-0,146	-0,006	0,338	0,622	52,487	21,987	20,445	20,274	20,320	20,357	20,444	20,484
125,333	0,264	0,607	1,060	-0,146	-0,002	0,346	0,622	52,549	21,993	20,451	20,266	20,318	20,355	20,438	20,479
125,833	0,256	0,612	1,051	-0,146	0,021	0,340	0,622	52,622	21,975	20,458	20,282	20,325	20,363	20,455	20,488
126,333	0,249	0,615	1,053	-0,146	0,042	0,338	0,622	52,702	21,904	20,576	20,429	20,278	20,275	20,391	20,442
126,833	0,242	0,619	1,059	-0,144	0,014	0,335	0,621	52,841	22,009	20,731	20,456	20,329	20,323	20,441	20,496
127,333	0,243	0,618	1,054	-0,147	0,030	0,337	0,621	52,847	21,997	20,784	20,441	20,344	20,335	20,455	20,503
127,833	0,245	0,612	1,057	-0,146	-0,012	0,342	0,619	52,804	22,028	20,816	20,449	20,319	20,325	20,435	20,489

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
109,993	49,032	44,186	68,301	76,208	0,494	0,350	2751,869	3154,508	180,610	9,383	10,986	-51,457	42,313	8,398	10,346	2022-03-23 12:43
110,387	49,083	44,192	68,349	76,229	0,488	0,350	2743,309	3140,486	162,546	9,491	11,067	-51,445	42,618	8,428	10,346	2022-03-23 12:43
110,833	49,026	44,200	68,451	76,322	0,492	0,350	2730,967	3137,941	132,503	10,046	10,565	-51,429	42,619	8,428	10,346	2022-03-23 12:43
111,334	48,849	44,216	68,499	76,326	0,497	0,350	2647,940	3123,580	128,324	10,367	10,167	-51,426	42,408	8,407	10,253	2022-03-23 12:44
111,834	48,764	44,124	68,628	76,360	0,495	0,350	2641,510	3082,417	155,492	10,350	10,155	-51,448	42,330	8,399	10,253	2022-03-23 12:44
112,334	48,739	44,081	68,739	76,403	0,493	0,350	2640,146	3056,351	207,390	10,117	10,367	-51,470	42,878	8,454	10,346	2022-03-23 12:45
112,834	48,917	44,133	68,743	76,443	0,495	0,350	2722,415	3070,110	242,607	9,925	10,578	-51,469	41,930	8,360	10,253	2022-03-23 12:45
113,334	48,892	44,169	68,733	76,531	0,496	0,350	2695,421	3110,237	215,558	9,967	10,544	-51,488	42,440	8,410	10,253	2022-03-23 12:46
113,834	48,963	44,190	68,771	76,596	0,497	0,350	2727,415	3119,211	160,788	10,106	10,433	-51,469	42,164	8,383	10,253	2022-03-23 12:46
114,333	48,877	44,183	68,815	76,595	0,496	0,350	2676,916	3103,999	178,811	9,976	10,518	-51,473	42,014	8,368	10,253	2022-03-23 12:47
114,833	48,977	44,208	68,899	76,630	0,492	0,350	2699,821	3083,091	182,264	10,018	10,518	-51,469	42,406	8,407	10,253	2022-03-23 12:47
115,333	49,099	44,194	68,953	76,704	0,493	0,350	2781,628	3090,024	169,759	10,029	10,509	-51,474	42,441	8,410	10,253	2022-03-23 12:48
115,833	48,984	44,138	68,872	76,714	0,494	0,350	2751,485	3128,121	160,279	10,028	10,467	-51,463	42,067	8,373	10,253	2022-03-23 12:48
116,334	49,021	44,110	68,851	76,744	0,493	0,350	2784,439	3145,443	155,537	10,107	10,393	-51,479	42,286	8,395	10,253	2022-03-23 12:49
116,834	49,075	44,133	68,854	76,792	0,495	0,350	2813,862	3164,482	182,501	9,673	10,722	-37,149	42,182	8,385	10,253	2022-03-23 12:49
117,334	49,064	44,193	68,899	76,850	0,494	0,350	2766,641	3171,257	181,375	9,624	10,883	-49,791	42,515	8,418	10,159	2022-03-23 12:50
117,834	49,121	44,220	68,957	76,903	0,495	0,350	2788,989	3169,323	174,363	9,693	10,806	-50,434	42,480	8,414	10,159	2022-03-23 12:50
118,334	49,134	44,221	68,995	76,940	0,496	0,350	2802,597	3167,047	153,514	9,966	10,591	-51,472	42,270	8,393	10,159	2022-03-23 12:51
118,834	48,880	44,165	69,022	76,987	0,496	0,351	2690,630	3178,663	147,243	10,225	10,268	-51,430	42,002	8,367	10,253	2022-03-23 12:51
119,333	48,778	44,113	69,223	77,014	0,494	0,350	2647,920	3105,326	126,659	10,249	10,193	-51,444	42,676	8,434	10,253	2022-03-23 12:52
119,833	48,823	44,104	69,433	77,095	0,496	0,350	2694,071	3056,276	99,059	10,494	10,075	-51,434	42,129	8,379	10,159	2022-03-23 12:52
120,333	48,930	44,144	69,433	77,070	0,496	0,350	2731,310	3046,520	100,039	10,697	9,849	-51,440	41,919	8,358	10,159	2022-03-23 12:53
120,833	48,865	44,148	69,461	77,127	0,496	0,351	2688,493	3059,302	107,348	10,634	9,875	-51,445	42,541	8,420	10,253	2022-03-23 12:53
121,333	48,933	44,160	69,475	77,178	0,492	0,350	2697,182	3072,367	99,457	10,839	9,695	-51,457	42,798	8,446	10,159	2022-03-23 12:54
121,833	49,196	44,162	69,523	77,131	0,493	0,350	2855,635	3033,756	132,955	10,507	9,944	-51,469	42,103	8,377	10,159	2022-03-23 12:54
122,334	49,144	44,163	69,379	77,072	0,494	0,350	2830,196	3068,076	193,073	10,123	10,312	-51,456	42,256	8,392	10,159	2022-03-23 12:55
122,834	49,191	44,177	69,364	77,124	0,495	0,350	2856,430	3094,513	199,953	10,304	10,223	-51,469	42,159	8,382	10,159	2022-03-23 12:55
123,334	49,178	44,190	69,384	77,140	0,493	0,350	2824,940	3093,237	199,781	10,235	10,273	-51,460	41,648	8,331	10,159	2022-03-23 12:56
123,834	49,012	44,196	69,480	77,181	0,494	0,351	2733,529	3073,650	164,085	10,520	10,039	-51,446	42,019	8,368	13,847	2022-03-23 12:56
124,334	48,945	44,213	69,632	77,256	0,496	0,351	2700,398	3041,921	150,126	10,524	9,969	-51,453	41,841	8,351	13,753	2022-03-23 12:57
124,833	49,046	44,203	69,778	77,297	0,497	0,351	2765,383	2999,542	157,926	10,342	10,145	-51,457	41,989	8,366	13,847	2022-03-23 12:57
125,333	48,922	44,149	69,835	77,313	0,493	0,351	2708,027	2985,897	162,623	10,135	10,368	-51,461	42,350	8,401	13,972	2022-03-23 12:58
125,833	48,818	44,074	69,939	77,367	0,493	0,351	2691,041	2963,932	134,860	10,372	10,201	-51,457	42,133	8,380	13,847	2022-03-23 12:58
126,333	48,870	44,103	69,975	77,411	0,496	0,351	2716,444	2968,352	115,216	10,416	10,130	-51,462	42,278	8,394	13,847	2022-03-23 12:59
126,833	48,898	44,162	69,987	77,458	0,493	0,351	2686,112	2982,360	104,838	10,515	10,040	-51,440	42,103	8,377	13,847	2022-03-23 12:59
127,333	48,983	44,178	70,031	77,559	0,493	0,350	2721,341	3001,568	114,977	10,385	10,111	-51,472	42,311	8,398	13,847	2022-03-23 13:00
127,833	49,114	44,190	70,041	77,595	0,493	0,351	2791,890	3014,834	117,502	10,282	10,249	-51,459	42,247	8,391	13,754	2022-03-23 13:00

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
128,333	0,246	0,612	1,059	-0,148	-0,023	0,340	0,621	52,866	22,037	20,869	20,487	20,356	20,349	20,475	20,517
128,834	0,241	0,611	1,053	-0,149	-0,021	0,343	0,620	52,898	21,941	20,851	20,478	20,323	20,324	20,444	20,491
129,334	0,250	0,595	1,049	-0,149	0,047	0,357	0,620	52,816	22,028	20,885	20,520	20,347	20,350	20,466	20,514
129,834	0,251	0,588	1,058	-0,149	-0,012	0,361	0,620	52,807	22,021	20,920	20,537	20,368	20,359	20,478	20,525
130,334	0,247	0,592	1,052	-0,147	0,013	0,357	0,620	52,763	22,007	20,931	20,538	20,347	20,357	20,481	20,519
130,834	0,250	0,597	1,054	-0,146	0,020	0,352	0,619	52,733	21,929	20,851	20,459	20,267	20,263	20,386	20,429
131,334	0,249	0,607	1,054	-0,147	0,006	0,343	0,619	52,902	22,039	20,964	20,575	20,368	20,363	20,493	20,534
131,833	0,256	0,609	1,056	-0,150	0,017	0,346	0,619	52,855	21,958	20,879	20,504	20,287	20,296	20,416	20,454
132,333	0,263	0,595	1,051	-0,150	-0,006	0,355	0,619	52,836	21,946	20,917	20,537	20,325	20,323	20,438	20,487
132,833	0,247	0,598	1,054	-0,149	0,045	0,352	0,620	52,761	21,907	20,880	20,505	20,277	20,284	20,394	20,441
133,333	0,246	0,603	1,049	-0,148	0,004	0,348	0,619	52,930	22,065	20,980	20,597	20,368	20,381	20,487	20,527
133,833	0,238	0,607	1,054	-0,148	0,002	0,344	0,618	52,897	21,997	20,943	20,572	20,327	20,328	20,445	20,485
134,333	0,235	0,607	1,054	-0,148	0,006	0,346	0,619	52,986	21,945	20,918	20,556	20,288	20,293	20,407	20,450
134,833	0,238	0,608	1,045	-0,148	0,008	0,342	0,619	53,099	21,925	20,933	20,583	20,311	20,309	20,426	20,468
135,333	0,233	0,627	1,051	-0,148	-0,004	0,327	0,618	53,162	21,816	20,878	20,537	20,253	20,252	20,364	20,411
135,834	0,231	0,635	1,056	-0,150	-0,006	0,323	0,618	53,260	21,968	21,000	20,662	20,382	20,376	20,491	20,531
136,334	0,232	0,625	1,054	-0,150	0,010	0,331	0,618	53,278	21,996	21,004	20,651	20,372	20,376	20,486	20,528
136,834	0,233	0,613	1,050	-0,150	0,035	0,342	0,617	53,199	21,961	20,963	20,623	20,334	20,328	20,445	20,484
137,334	0,249	0,596	1,055	-0,151	0,023	0,355	0,618	53,153	22,038	21,037	20,697	20,397	20,402	20,513	20,554
137,834	0,254	0,594	1,052	-0,149	0,017	0,354	0,619	53,109	22,001	20,999	20,661	20,361	20,357	20,484	20,515
138,334	0,250	0,603	1,054	-0,146	0,032	0,346	0,619	53,225	22,054	21,019	20,682	20,375	20,374	20,495	20,526
138,833	0,239	0,617	1,055	-0,150	0,013	0,335	0,617	53,164	22,103	21,053	20,724	20,415	20,417	20,537	20,571
139,333	0,250	0,607	1,058	-0,150	0,048	0,347	0,617	53,090	22,023	21,075	20,748	20,438	20,439	20,561	20,586
139,833	0,256	0,597	1,053	-0,150	0,028	0,353	0,618	53,070	22,037	21,047	20,726	20,412	20,413	20,525	20,561
140,333	0,258	0,599	1,054	-0,150	0,021	0,349	0,617	53,101	21,984	20,994	20,663	20,350	20,359	20,480	20,506
140,833	0,249	0,608	1,052	-0,149	0,034	0,343	0,618	53,151	22,003	21,043	20,710	20,399	20,398	20,519	20,547
141,333	0,248	0,605	1,057	-0,149	0,006	0,345	0,617	53,146	21,989	21,014	20,683	20,365	20,366	20,494	20,513
141,833	0,255	0,593	1,054	-0,149	0,011	0,356	0,616	53,137	21,963	20,983	20,657	20,333	20,344	20,455	20,483
142,334	0,243	0,599	1,052	-0,151	0,023	0,346	0,617	53,276	22,025	21,060	20,726	20,393	20,408	20,523	20,552
142,834	0,243	0,621	1,054	-0,148	0,004	0,330	0,616	53,326	22,020	21,059	20,738	20,402	20,410	20,540	20,550
143,334	0,246	0,631	1,050	-0,149	0,008	0,324	0,617	53,356	21,947	21,088	20,778	20,448	20,453	20,580	20,596
143,834	0,242	0,628	1,054	-0,149	0,000	0,328	0,618	53,285	21,799	21,038	20,731	20,412	20,410	20,543	20,559
144,334	0,249	0,614	1,051	-0,149	0,031	0,340	0,616	53,366	21,814	21,058	20,761	20,445	20,454	20,569	20,592
144,834	0,249	0,611	1,054	-0,150	0,000	0,339	0,616	53,419	21,781	21,039	20,736	20,427	20,434	20,562	20,576
145,333	0,251	0,616	1,050	-0,149	0,011	0,334	0,615	53,565	21,844	21,051	20,753	20,440	20,442	20,580	20,591
145,833	0,244	0,625	1,055	-0,149	-0,007	0,327	0,614	53,603	21,653	21,014	20,728	20,423	20,423	20,548	20,563
146,333	0,246	0,625	1,051	-0,147	0,022	0,329	0,614	53,520	21,771	21,002	20,721	20,409	20,424	20,540	20,556

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
128,333	49,007	44,168	70,110	77,660	0,493	0,351	2743,969	3013,668	109,576	10,364	10,204	-51,484	42,523	8,419	13,754	2022-03-23 13:01
128,834	48,929	44,175	70,169	77,708	0,495	0,351	2705,370	3008,891	105,426	10,142	10,298	-51,486	42,139	8,380	13,754	2022-03-23 13:01
129,334	49,101	44,192	70,224	77,758	0,493	0,351	2785,326	3006,913	142,504	9,725	10,706	-51,492	41,943	8,361	13,753	2022-03-23 13:02
129,834	49,070	44,217	70,238	77,801	0,495	0,351	2764,117	3020,184	125,215	9,684	10,828	-51,493	42,345	8,401	13,754	2022-03-23 13:02
130,334	49,152	44,284	70,277	77,830	0,494	0,351	2766,869	3015,614	121,422	9,866	10,701	-51,474	41,667	8,333	13,660	2022-03-23 13:03
130,834	49,059	44,202	70,335	77,916	0,497	0,351	2776,677	3024,309	132,855	9,942	10,569	-51,464	42,420	8,408	13,659	2022-03-23 13:03
131,334	48,904	44,063	70,363	77,974	0,493	0,351	2745,813	3037,773	122,536	10,275	10,278	-51,473	42,053	8,372	13,660	2022-03-23 13:04
131,833	48,926	44,050	70,473	78,035	0,497	0,351	2785,572	3020,511	163,684	10,044	10,381	-51,500	42,567	8,423	13,659	2022-03-23 13:04
132,333	48,961	44,133	70,477	78,070	0,492	0,351	2731,923	3028,783	142,940	9,886	10,652	-51,502	41,961	8,363	13,753	2022-03-23 13:05
132,833	49,025	44,207	70,550	78,130	0,494	0,351	2738,568	3026,435	117,164	9,982	10,555	-51,492	42,332	8,400	13,754	2022-03-23 13:05
133,333	49,015	44,232	70,584	78,193	0,493	0,351	2713,403	3036,773	118,092	10,110	10,454	-51,482	41,863	8,353	13,659	2022-03-23 13:06
133,833	49,126	44,192	70,640	78,234	0,498	0,351	2827,256	3029,478	91,082	10,229	10,321	-51,482	41,968	8,363	13,659	2022-03-23 13:06
134,333	49,076	44,182	70,607	78,307	0,494	0,351	2781,742	3075,490	93,000	10,100	10,389	-51,485	41,907	8,357	13,659	2022-03-23 13:07
134,833	48,930	44,159	70,689	78,390	0,494	0,351	2710,206	3075,644	95,527	10,345	10,273	-51,484	41,724	8,339	13,659	2022-03-23 13:07
135,333	49,030	44,146	70,787	78,430	0,493	0,351	2768,767	3054,452	79,425	10,818	9,799	-51,480	42,394	8,406	13,659	2022-03-23 13:08
135,834	48,936	44,112	70,846	78,501	0,492	0,351	2729,640	3055,776	81,344	10,814	9,683	-51,496	42,043	8,371	13,566	2022-03-23 13:08
136,334	48,954	44,160	70,905	78,537	0,493	0,351	2717,103	3048,497	79,936	10,544	9,925	-51,497	42,176	8,384	13,644	2022-03-23 13:09
136,834	49,082	44,194	70,943	78,613	0,494	0,351	2779,390	3064,676	93,333	10,217	10,250	-51,496	42,204	8,387	13,566	2022-03-23 13:09
137,334	48,930	44,216	70,961	78,703	0,495	0,351	2682,424	3091,794	132,977	9,815	10,649	-51,505	42,132	8,380	13,659	2022-03-23 13:10
137,834	48,731	44,212	71,129	78,815	0,494	0,351	2568,493	3068,768	139,053	9,910	10,631	-51,489	42,087	8,375	13,659	2022-03-23 13:10
138,334	48,884	44,182	71,309	78,911	0,495	0,351	2677,951	3033,165	119,215	10,174	10,381	-51,465	42,234	8,390	13,566	2022-03-23 13:11
138,833	48,873	44,143	71,364	78,952	0,493	0,351	2679,488	3030,577	97,963	10,484	10,057	-51,496	42,141	8,381	13,566	2022-03-23 13:11
139,333	49,050	44,102	71,410	78,948	0,494	0,351	2811,870	3010,527	140,122	10,033	10,404	-51,500	42,465	8,413	13,566	2022-03-23 13:12
139,833	49,016	44,137	71,272	79,012	0,492	0,351	2763,077	3090,684	138,797	9,888	10,602	-51,495	42,130	8,380	13,566	2022-03-23 13:12
140,333	49,006	44,179	71,264	79,015	0,492	0,351	2731,111	3094,618	147,660	10,050	10,480	-51,499	42,101	8,377	13,566	2022-03-23 13:13
140,833	49,108	44,209	71,271	79,058	0,492	0,351	2772,323	3111,203	122,618	10,184	10,295	-51,491	42,176	8,384	13,566	2022-03-23 13:13
141,333	49,074	44,219	71,322	79,344	0,496	0,351	2769,394	3203,720	125,450	10,113	10,359	-51,489	42,418	8,408	13,566	2022-03-23 13:14
141,833	49,032	44,258	71,349	79,285	0,494	0,351	2710,438	3168,073	142,974	9,706	10,680	-51,492	42,257	8,392	13,471	2022-03-23 13:14
142,334	48,842	44,234	71,523	79,338	0,495	0,351	2625,364	3120,565	96,630	10,187	10,393	-51,507	41,979	8,365	13,566	2022-03-23 13:15
142,834	48,902	44,144	71,719	79,388	0,495	0,351	2709,839	3061,874	125,348	10,677	9,897	-51,476	42,133	8,380	13,471	2022-03-23 13:15
143,334	48,860	44,105	71,749	79,562	0,497	0,351	2717,911	3119,169	109,951	10,766	9,725	-51,486	41,968	8,363	13,566	2022-03-23 13:16
143,834	49,043	44,149	71,760	79,687	0,493	0,351	2774,990	3166,871	110,615	10,617	9,842	-51,485	42,408	8,407	13,471	2022-03-23 13:16
144,334	49,128	44,182	71,680	79,677	0,494	0,351	2811,176	3193,549	134,782	10,213	10,186	-51,492	42,205	8,387	13,471	2022-03-23 13:17
144,834	49,099	44,196	71,673	79,588	0,494	0,351	2785,055	3159,980	125,279	10,365	10,177	-51,502	42,129	8,379	13,471	2022-03-23 13:17
145,333	49,152	44,224	71,706	79,643	0,496	0,351	2809,937	3169,172	128,799	10,440	10,033	-51,492	41,982	8,365	13,349	2022-03-23 13:18
145,833	49,018	44,256	71,606	79,664	0,499	0,351	2731,626	3219,033	108,200	10,670	9,802	-51,486	42,174	8,384	13,349	2022-03-23 13:18
146,333	49,062	44,239	71,759	79,712	0,502	0,352	2784,683	3179,002	127,505	10,534	9,882	-51,471	42,195	8,386	13,349	2022-03-23 13:19



## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
146,833	0,249	0,618	1,051	-0,150	-0,005	0,334	0,614	53,449	21,651	20,991	20,710	20,413	20,409	20,543	20,555
147,333	0,245	0,624	1,054	-0,150	-0,002	0,329	0,614	53,457	21,648	20,990	20,718	20,414	20,421	20,545	20,556
147,833	0,236	0,629	1,052	-0,150	-0,007	0,325	0,614	53,444	21,576	20,931	20,650	20,357	20,364	20,497	20,502
148,333	0,232	0,632	1,048	-0,151	0,017	0,322	0,614	53,555	21,550	21,001	20,744	20,453	20,458	20,590	20,591
148,833	0,236	0,628	1,045	-0,152	0,023	0,329	0,614	53,533	21,603	21,020	20,760	20,472	20,480	20,606	20,609
149,334	0,244	0,610	1,048	-0,156	-0,004	0,344	0,613	53,516	21,571	21,008	20,753	20,459	20,470	20,600	20,598
149,834	0,240	0,605	1,052	-0,153	0,030	0,346	0,613	53,452	21,399	20,929	20,677	20,390	20,403	20,533	20,529
150,334	0,233	0,606	1,052	-0,154	-0,010	0,345	0,613	53,556	21,548	20,983	20,732	20,456	20,458	20,592	20,585
150,834	0,228	0,608	1,051	-0,152	0,009	0,343	0,613	53,528	21,534	20,982	20,730	20,457	20,455	20,595	20,583
151,334	0,233	0,602	1,052	-0,155	-0,028	0,351	0,612	53,489	21,357	20,918	20,677	20,398	20,416	20,549	20,535
151,834	0,234	0,595	1,056	-0,154	-0,007	0,352	0,613	53,637	21,565	21,005	20,762	20,487	20,497	20,632	20,616
152,333	0,226	0,615	1,058	-0,151	0,027	0,335	0,612	53,818	21,507	21,011	20,780	20,513	20,519	20,657	20,635
152,833	0,219	0,635	1,058	-0,152	-0,019	0,319	0,612	53,825	21,470	20,967	20,739	20,478	20,483	20,624	20,599
153,333	0,218	0,639	1,050	-0,153	0,033	0,319	0,612	53,891	21,525	20,998	20,769	20,508	20,522	20,653	20,627
153,833	0,227	0,626	1,055	-0,153	-0,008	0,331	0,612	53,793	21,510	20,921	20,692	20,425	20,426	20,572	20,547
154,333	0,233	0,618	1,052	-0,154	-0,007	0,335	0,612	53,873	21,652	21,029	20,791	20,522	20,533	20,675	20,647
154,833	0,233	0,627	1,046	-0,151	0,052	0,325	0,611	53,842	21,711	20,983	20,740	20,471	20,484	20,617	20,592
155,333	0,227	0,645	1,048	-0,152	0,030	0,311	0,612	53,887	21,830	21,026	20,770	20,498	20,516	20,656	20,616
155,833	0,231	0,637	1,054	-0,154	0,008	0,322	0,612	53,914	21,680	20,987	20,745	20,461	20,477	20,615	20,580
156,334	0,240	0,623	1,055	-0,154	0,047	0,331	0,612	53,966	21,595	21,019	20,785	20,510	20,518	20,665	20,619
156,834	0,244	0,625	1,059	-0,156	-0,009	0,329	0,614	53,988	21,492	21,027	20,797	20,529	20,538	20,685	20,642
157,334	0,241	0,635	1,048	-0,151	-0,022	0,319	0,612	54,004	21,483	20,982	20,757	20,495	20,504	20,646	20,605
157,834	0,238	0,642	1,049	-0,153	0,022	0,316	0,611	54,001	21,370	20,926	20,718	20,465	20,472	20,619	20,569
158,334	0,241	0,623	1,060	-0,155	-0,005	0,333	0,611	53,997	21,311	20,893	20,701	20,444	20,456	20,594	20,551
158,833	0,244	0,612	1,052	-0,154	0,041	0,341	0,612	54,083	21,489	21,003	20,797	20,544	20,563	20,701	20,654
159,333	0,238	0,613	1,061	-0,155	0,026	0,337	0,610	54,139	21,418	20,980	20,780	20,538	20,550	20,694	20,639
159,833	0,237	0,624	1,056	-0,154	0,023	0,328	0,609	54,187	21,535	21,006	20,793	20,548	20,559	20,718	20,651
160,333	0,235	0,631	1,047	-0,154	0,024	0,324	0,610	54,082	21,468	20,874	20,658	20,424	20,436	20,571	20,520
160,833	0,234	0,622	1,049	-0,153	0,005	0,333	0,610	54,228	21,560	20,979	20,755	20,519	20,534	20,681	20,618
161,333	0,235	0,617	1,050	-0,156	0,040	0,336	0,609	54,191	21,595	20,988	20,768	20,521	20,536	20,691	20,620
161,833	0,234	0,618	1,056	-0,155	0,004	0,336	0,608	54,174	21,710	20,991	20,766	20,527	20,544	20,687	20,620
162,333	0,233	0,617	1,052	-0,155	-0,011	0,334	0,610	54,063	21,697	20,969	20,738	20,498	20,519	20,658	20,591
162,834	0,233	0,616	1,059	-0,153	0,021	0,338	0,610	54,120	21,582	20,989	20,766	20,531	20,547	20,696	20,626
163,334	0,237	0,603	1,057	-0,155	0,030	0,349	0,609	54,240	21,541	21,022	20,807	20,569	20,584	20,741	20,668
163,834	0,235	0,599	1,053	-0,157	0,041	0,350	0,609	54,224	21,495	20,961	20,764	20,527	20,549	20,707	20,621
164,334	0,229	0,612	1,056	-0,155	0,004	0,337	0,608	54,173	21,428	20,934	20,733	20,505	20,531	20,673	20,598
164,834	0,227	0,622	1,054	-0,154	0,038	0,332	0,608	54,300	21,414	20,987	20,787	20,564	20,599	20,744	20,663

PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
146,833	48,989	44,195	71,827	79,784	0,501	0,351	2763,595	3177,612	120,940	10,447	10,031	-51,500	42,368	8,403	13,349	2022-03-23 13:19
147,333	48,926	44,121	71,887	79,799	0,499	0,352	2758,913	3162,821	110,260	10,694	9,859	-51,497	41,717	8,338	13,349	2022-03-23 13:20
147,833	48,704	44,060	71,970	79,896	0,496	0,351	2649,380	3165,697	87,894	10,752	9,755	-51,503	41,667	8,333	13,349	2022-03-23 13:20
148,333	48,916	44,127	72,096	79,921	0,495	0,352	2725,043	3129,557	76,738	10,846	9,675	-51,506	42,138	8,380	13,349	2022-03-23 13:21
148,833	48,946	44,193	72,144	79,986	0,497	0,351	2716,260	3132,124	105,094	10,562	9,871	-51,518	41,701	8,337	13,349	2022-03-23 13:21
149,334	49,027	44,219	72,199	80,034	0,496	0,352	2742,002	3132,231	114,162	10,145	10,311	-51,560	41,997	8,366	13,349	2022-03-23 13:22
149,834	49,130	44,224	72,244	80,136	0,500	0,351	2820,328	3152,908	95,786	10,122	10,387	-51,525	41,575	8,324	13,256	2022-03-23 13:22
150,334	49,076	44,185	72,281	80,106	0,498	0,352	2802,880	3129,283	82,472	10,155	10,350	-51,535	42,075	8,374	13,272	2022-03-23 13:23
150,834	48,983	44,126	72,375	80,171	0,499	0,351	2786,939	3113,984	69,873	10,219	10,286	-51,515	41,981	8,365	13,256	2022-03-23 13:23
151,334	48,995	44,104	72,410	80,227	0,498	0,352	2801,436	3124,166	91,072	9,913	10,528	-51,549	42,074	8,374	13,256	2022-03-23 13:24
151,834	48,949	44,149	72,425	80,318	0,501	0,352	2763,719	3155,790	82,075	10,017	10,563	-51,537	42,065	8,373	13,349	2022-03-23 13:24
152,333	49,072	44,208	72,435	80,361	0,500	0,351	2796,216	3166,363	62,668	10,560	10,038	-51,513	42,661	8,432	13,256	2022-03-23 13:25
152,833	49,110	44,216	72,496	80,407	0,498	0,352	2804,355	3164,772	47,562	10,969	9,570	-51,517	42,176	8,384	13,256	2022-03-23 13:25
153,333	49,157	44,220	72,597	80,445	0,499	0,352	2830,030	3136,369	52,414	10,937	9,561	-51,529	42,022	8,369	13,256	2022-03-23 13:26
153,833	48,843	44,163	72,620	80,483	0,498	0,352	2682,514	3142,249	78,806	10,534	9,926	-51,527	42,332	8,400	13,349	2022-03-23 13:26
154,333	48,737	44,112	72,793	80,577	0,497	0,352	2640,400	3111,409	88,649	10,471	10,045	-51,542	42,126	8,379	13,310	2022-03-23 13:27
154,833	48,929	44,134	72,975	80,625	0,493	0,352	2720,706	3057,086	81,028	10,839	9,740	-51,507	41,767	8,343	12,974	2022-03-23 13:27
155,333	48,946	44,145	73,042	80,691	0,495	0,352	2731,061	3058,791	65,999	11,231	9,332	-51,516	42,124	8,379	13,256	2022-03-23 13:28
155,833	48,923	44,158	72,931	80,764	0,494	0,352	2704,748	3131,067	91,810	10,703	9,655	-51,540	42,026	8,369	13,162	2022-03-23 13:28
156,334	49,035	44,150	73,006	80,837	0,493	0,352	2769,609	3132,374	110,481	10,580	9,920	-51,538	42,158	8,382	13,162	2022-03-23 13:29
156,834	49,012	44,175	73,060	80,907	0,496	0,352	2757,007	3137,353	112,635	10,679	9,864	-51,557	42,221	8,389	13,162	2022-03-23 13:29
157,334	48,944	44,184	73,062	81,022	0,491	0,352	2688,589	3182,310	101,851	11,002	9,566	-51,508	41,962	8,363	13,283	2022-03-23 13:30
157,834	48,987	44,210	73,164	81,111	0,494	0,352	2714,135	3175,115	92,429	11,009	9,474	-51,528	41,785	8,345	13,162	2022-03-23 13:30
158,334	49,075	44,235	73,197	81,104	0,493	0,352	2745,870	3160,786	113,510	10,406	9,998	-51,552	42,483	8,415	13,162	2022-03-23 13:31
158,833	49,083	44,180	73,259	81,199	0,490	0,352	2765,266	3174,514	112,133	10,249	10,222	-51,540	42,329	8,399	13,471	2022-03-23 13:31
159,333	49,016	44,115	73,361	81,275	0,490	0,352	2759,074	3167,412	96,292	10,401	10,125	-51,551	42,556	8,422	13,068	2022-03-23 13:32
159,833	49,035	44,114	73,461	81,302	0,496	0,352	2805,433	3137,686	96,206	10,692	9,836	-51,544	42,115	8,378	13,068	2022-03-23 13:32
160,333	49,176	44,269	73,381	81,372	0,495	0,352	2793,292	3194,952	88,005	10,708	9,731	-51,541	41,759	8,343	13,162	2022-03-23 13:33
160,833	48,850	44,299	73,438	81,411	0,497	0,352	2598,745	3188,928	86,631	10,512	9,980	-51,525	41,675	8,334	13,162	2022-03-23 13:33
161,333	48,808	44,219	73,659	81,464	0,495	0,352	2614,793	3121,588	93,682	10,436	10,089	-51,561	42,060	8,373	13,068	2022-03-23 13:34
161,833	48,883	44,126	73,840	81,480	0,495	0,352	2709,763	3051,816	87,727	10,376	10,086	-51,551	42,130	8,380	13,084	2022-03-23 13:34
162,333	48,736	44,019	73,883	81,572	0,498	0,337	2704,231	2944,209	83,947	10,522	10,023	-51,553	42,214	8,388	13,068	2022-03-23 13:35
162,834	49,055	44,101	73,655	81,680	0,496	0,337	2824,461	3070,990	89,402	10,273	10,152	-51,530	42,562	8,422	13,068	2022-03-23 13:35
163,334	49,058	44,208	73,509	81,737	0,492	0,337	2743,033	3149,687	99,461	9,970	10,483	-51,546	42,236	8,390	13,068	2022-03-23 13:36
163,834	49,004	44,272	73,543	81,827	0,493	0,337	2684,496	3168,231	86,626	10,032	10,495	-51,569	42,260	8,392	12,974	2022-03-23 13:36
164,334	49,058	44,231	73,647	81,859	0,494	0,337	2744,716	3142,754	70,363	10,431	10,119	-51,551	42,367	8,403	12,974	2022-03-23 13:37
164,834	48,967	44,185	73,679	81,947	0,494	0,337	2715,288	3163,555	73,522	10,522	9,951	-51,538	41,941	8,361	12,974	2022-03-23 13:37

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
165,334	0,234	0,616	1,063	-0,156	0,058	0,337	0,608	54,372	21,431	21,003	20,802	20,585	20,610	20,767	20,678
165,833	0,237	0,614	1,059	-0,156	-0,033	0,339	0,608	54,374	21,490	20,979	20,789	20,588	20,604	20,753	20,671
166,333	0,240	0,616	1,059	-0,155	0,020	0,335	0,608	54,373	21,414	20,964	20,771	20,572	20,592	20,743	20,655
166,833	0,234	0,628	1,058	-0,153	0,038	0,325	0,608	54,412	21,505	20,949	20,764	20,552	20,580	20,726	20,636
167,333	0,230	0,641	1,059	-0,154	0,042	0,316	0,608	54,495	21,678	21,000	20,793	20,590	20,611	20,753	20,662
167,833	0,235	0,634	1,059	-0,156	-0,007	0,324	0,608	54,433	21,541	20,946	20,737	20,530	20,559	20,704	20,610
168,333	0,244	0,624	1,053	-0,157	0,005	0,331	0,608	54,386	21,411	20,898	20,694	20,485	20,514	20,668	20,574
168,833	0,246	0,620	1,054	-0,158	0,055	0,334	0,605	54,474	21,508	20,980	20,777	20,589	20,604	20,752	20,658
169,333	0,240	0,623	1,065	-0,156	0,019	0,329	0,607	54,530	21,420	20,982	20,794	20,593	20,626	20,773	20,672
169,834	0,233	0,628	1,050	-0,156	0,029	0,327	0,607	54,490	21,526	20,954	20,751	20,556	20,584	20,734	20,631
170,334	0,232	0,620	1,056	-0,158	0,015	0,335	0,612	54,545	21,497	20,970	20,775	20,588	20,614	20,770	20,663
170,834	0,239	0,613	1,058	-0,158	0,021	0,339	0,608	54,577	21,461	20,959	20,777	20,578	20,616	20,768	20,656
171,334	0,239	0,627	1,058	-0,155	0,000	0,325	0,607	54,530	21,563	20,950	20,759	20,563	20,595	20,751	20,640
171,834	0,234	0,636	1,057	-0,155	-0,014	0,320	0,606	54,554	21,715	20,953	20,753	20,548	20,584	20,737	20,620
172,334	0,235	0,635	1,052	-0,156	0,017	0,321	0,605	54,559	21,594	20,938	20,726	20,532	20,569	20,719	20,605
172,833	0,241	0,624	1,062	-0,156	0,020	0,332	0,606	54,535	21,578	20,902	20,700	20,495	20,526	20,681	20,563
173,333	0,248	0,615	1,061	-0,157	-0,002	0,340	0,606	54,468	21,500	20,931	20,722	20,522	20,558	20,716	20,593
173,833	0,241	0,610	1,055	-0,158	0,031	0,342	0,604	54,562	21,508	20,988	20,789	20,595	20,631	20,786	20,665
174,333	0,233	0,614	1,052	-0,156	0,009	0,337	0,605	54,555	21,488	20,968	20,767	20,579	20,616	20,772	20,648
174,833	0,230	0,617	1,062	-0,157	0,021	0,335	0,604	54,663	21,438	20,977	20,780	20,596	20,633	20,778	20,664
175,333	0,231	0,616	1,053	-0,155	0,034	0,338	0,604	54,608	21,603	20,990	20,807	20,609	20,647	20,798	20,678
175,833	0,237	0,607	1,059	-0,158	0,004	0,345	0,604	54,619	21,593	20,999	20,815	20,612	20,657	20,811	20,681
176,334	0,235	0,607	1,063	-0,157	0,042	0,344	0,604	54,563	21,471	20,893	20,709	20,528	20,561	20,720	20,587
176,834	0,232	0,605	1,059	-0,157	-0,002	0,347	0,604	54,595	21,478	20,949	20,755	20,579	20,620	20,764	20,638
177,334	0,236	0,596	1,053	-0,158	-0,010	0,355	0,604	54,532	21,440	20,976	20,783	20,610	20,643	20,806	20,670
177,834	0,239	0,584	1,051	-0,159	0,020	0,365	0,604	54,511	21,537	21,000	20,802	20,622	20,661	20,811	20,683
178,334	0,239	0,579	1,053	-0,160	0,022	0,368	0,602	54,615	21,387	20,923	20,738	20,572	20,607	20,753	20,623
178,834	0,237	0,588	1,055	-0,158	0,025	0,360	0,602	54,625	21,289	20,893	20,717	20,548	20,591	20,750	20,609
179,333	0,236	0,596	1,058	-0,159	0,012	0,354	0,602	54,569	21,425	20,912	20,730	20,564	20,608	20,763	20,625
179,833	0,237	0,589	1,057	-0,159	0,043	0,362	0,603	54,619	21,393	20,923	20,736	20,580	20,614	20,770	20,627
180,333	0,237	0,581	1,058	-0,158	-0,039	0,364	0,603	54,656	21,421	20,935	20,765	20,605	20,644	20,805	20,658
180,833	0,231	0,594	1,051	-0,160	0,009	0,354	0,603	54,675	21,292	20,948	20,786	20,638	20,682	20,840	20,689
181,333	0,230	0,602	1,048	-0,157	-0,018	0,347	0,604	54,734	21,415	20,931	20,751	20,611	20,650	20,802	20,655
181,833	0,226	0,610	1,053	-0,157	-0,004	0,341	0,605	54,773	21,610	20,982	20,792	20,636	20,684	20,829	20,685
182,333	0,232	0,601	1,056	-0,159	0,038	0,350	0,601	54,801	21,574	20,984	20,795	20,640	20,689	20,838	20,687
182,833	0,237	0,591	1,051	-0,158	-0,024	0,357	0,602	54,765	21,609	20,980	20,793	20,636	20,680	20,834	20,681
183,334	0,239	0,593	1,057	-0,160	0,003	0,356	0,602	54,633	21,556	20,891	20,697	20,537	20,589	20,743	20,585

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
165,334	49,033	44,144	73,755	81,986	0,496	0,337	2786,795	3152,992	89,990	10,406	10,099	-51,561	42,193	8,386	12,974	2022-03-23 13:38
165,833	48,929	44,124	73,775	82,039	0,490	0,337	2707,006	3162,334	100,862	10,338	10,173	-51,556	42,545	8,421	12,974	2022-03-23 13:38
166,333	48,961	44,112	73,894	82,111	0,494	0,337	2754,041	3144,302	95,085	10,497	10,059	-51,554	42,631	8,429	12,974	2022-03-23 13:39
166,833	48,949	44,133	73,937	82,164	0,489	0,337	2710,657	3145,812	83,877	10,805	9,750	-51,534	42,079	8,374	12,974	2022-03-23 13:39
167,333	49,021	44,173	74,026	82,186	0,493	0,337	2748,220	3122,600	75,903	11,047	9,494	-51,541	42,647	8,431	12,974	2022-03-23 13:40
167,833	49,000	44,244	74,060	82,239	0,493	0,337	2694,484	3129,962	100,130	10,719	9,722	-51,556	42,217	8,388	12,974	2022-03-23 13:40
168,333	49,097	44,268	74,092	82,342	0,493	0,337	2738,533	3159,688	118,376	10,575	9,933	-51,573	42,192	8,386	12,974	2022-03-23 13:41
168,833	49,030	44,236	74,134	82,369	0,493	0,337	2715,788	3152,864	113,059	10,499	10,007	-51,579	42,257	8,392	12,849	2022-03-23 13:41
169,333	49,040	44,149	74,235	82,429	0,492	0,337	2769,742	3139,001	98,993	10,653	9,880	-51,559	42,581	8,424	12,849	2022-03-23 13:42
169,834	48,872	44,076	74,292	82,460	0,494	0,337	2723,188	3125,153	82,692	10,642	9,818	-51,562	42,044	8,371	12,849	2022-03-23 13:42
170,334	49,081	44,141	74,270	82,551	0,492	0,337	2794,798	3170,921	87,695	10,420	10,049	-51,584	42,032	8,370	12,974	2022-03-23 13:43
170,834	48,948	44,258	74,316	82,605	0,492	0,337	2650,702	3174,251	103,323	10,349	10,160	-51,577	42,346	8,401	13,068	2022-03-23 13:43
171,334	48,900	44,275	74,394	82,700	0,492	0,337	2615,278	3181,384	96,876	10,825	9,763	-51,552	42,356	8,402	12,974	2022-03-23 13:44
171,834	48,823	44,229	74,594	82,727	0,498	0,337	2631,932	3113,218	87,216	10,889	9,608	-51,551	42,197	8,386	12,974	2022-03-23 13:44
172,334	48,765	44,195	74,774	82,846	0,500	0,337	2628,562	3091,414	89,321	10,877	9,643	-51,559	42,114	8,378	12,849	2022-03-23 13:45
172,833	49,041	44,151	74,794	82,893	0,495	0,337	2782,649	3101,968	112,683	10,517	9,946	-51,557	42,376	8,404	12,756	2022-03-23 13:45
173,333	48,945	44,116	74,831	82,950	0,497	0,337	2758,536	3108,703	120,611	10,275	10,191	-51,573	42,291	8,396	12,756	2022-03-23 13:46
173,833	48,642	44,146	74,753	83,023	0,497	0,337	2569,173	3167,981	99,418	10,233	10,255	-51,577	42,149	8,381	12,756	2022-03-23 13:46
174,333	48,621	44,072	74,990	83,095	0,496	0,337	2597,461	3105,831	80,345	10,412	10,119	-51,559	42,140	8,381	12,756	2022-03-23 13:47
174,833	48,404	43,801	75,086	83,123	0,496	0,337	2624,526	3076,200	76,405	10,413	10,060	-51,573	42,168	8,383	12,756	2022-03-23 13:47
175,333	48,288	43,590	75,141	83,190	0,496	0,337	2678,053	3082,320	85,223	10,326	10,146	-51,554	41,785	8,345	12,756	2022-03-23 13:48
175,833	48,228	43,642	75,238	83,266	0,497	0,337	2619,884	3075,000	98,879	10,147	10,345	-51,579	42,446	8,411	12,756	2022-03-23 13:48
176,334	48,280	43,758	75,222	83,303	0,502	0,337	2613,328	3094,285	86,047	10,186	10,325	-51,565	42,440	8,410	12,756	2022-03-23 13:49
176,834	47,888	43,523	75,260	83,390	0,496	0,338	2490,589	3116,481	83,780	10,059	10,407	-51,569	42,193	8,386	12,756	2022-03-23 13:49
177,334	47,622	43,183	75,600	83,463	0,496	0,338	2533,675	3013,010	102,731	9,772	10,654	-51,582	41,998	8,366	12,756	2022-03-23 13:50
177,834	47,556	43,100	75,759	83,527	0,495	0,337	2536,155	2975,183	97,789	9,517	10,943	-51,593	42,326	8,399	12,662	2022-03-23 13:50
178,334	47,593	43,145	75,624	83,556	0,501	0,338	2561,357	3040,751	101,603	9,504	11,044	-51,601	42,296	8,396	12,350	2022-03-23 13:51
178,834	47,414	42,923	75,739	83,599	0,501	0,337	2586,696	3010,458	92,596	9,816	10,790	-51,582	42,585	8,425	12,662	2022-03-23 13:51
179,333	47,254	42,685	75,824	83,697	0,500	0,338	2626,315	3016,152	91,751	9,927	10,616	-51,593	42,289	8,395	12,474	2022-03-23 13:52
179,833	47,234	42,617	75,887	83,734	0,498	0,338	2646,723	3006,907	99,970	9,553	10,860	-51,589	42,354	8,402	12,568	2022-03-23 13:52
180,333	47,172	42,721	75,876	83,786	0,500	0,337	2560,279	3028,531	90,091	9,638	10,930	-51,583	42,047	8,371	12,662	2022-03-23 13:53
180,833	47,219	42,657	75,850	83,850	0,493	0,338	2590,162	3065,183	79,612	9,916	10,622	-51,600	41,959	8,363	12,756	2022-03-23 13:53
181,333	46,884	42,340	76,067	83,876	0,491	0,338	2568,183	2993,123	72,965	10,159	10,401	-51,575	41,987	8,365	12,756	2022-03-23 13:54
181,833	46,907	42,136	76,209	83,937	0,487	0,338	2674,616	2962,197	67,764	10,224	10,243	-51,570	42,000	8,367	12,662	2022-03-23 13:54
182,333	47,054	42,107	76,050	84,015	0,485	0,337	2763,124	3049,889	91,149	9,921	10,510	-51,591	41,995	8,366	12,474	2022-03-23 13:55
182,833	46,964	41,940	75,886	84,049	0,489	0,338	2825,286	3126,830	99,722	9,742	10,710	-51,575	42,032	8,370	12,616	2022-03-23 13:55
183,334	46,839	41,758	75,848	84,118	0,485	0,337	2833,912	3166,927	102,409	9,825	10,672	-51,604	42,288	8,395	12,662	2022-03-23 13:56

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
183,834	0,239	0,592	1,054	-0,158	0,047	0,355	0,603	54,626	21,592	20,954	20,770	20,610	20,657	20,806	20,654
184,334	0,239	0,593	1,061	-0,159	0,041	0,358	0,602	54,703	21,350	20,971	20,786	20,636	20,690	20,844	20,685
184,834	0,249	0,580	1,053	-0,159	0,027	0,366	0,601	54,669	21,351	20,945	20,755	20,618	20,674	20,819	20,665
185,334	0,241	0,587	1,057	-0,159	0,008	0,360	0,602	54,629	21,541	20,950	20,764	20,621	20,673	20,823	20,662
185,834	0,232	0,599	1,055	-0,157	0,003	0,349	0,603	54,742	21,545	20,947	20,775	20,631	20,672	20,826	20,663
186,333	0,228	0,608	1,050	-0,157	0,001	0,342	0,602	54,716	21,558	20,925	20,680	20,594	20,660	20,791	20,632
186,833	0,233	0,608	1,047	-0,159	0,039	0,344	0,602	54,694	21,513	20,898	-3337,964	20,579	20,655	20,772	20,608
187,333	0,239	0,599	1,054	-0,160	0,014	0,351	0,601	54,789	21,511	20,904	-27,280	20,580	20,659	20,781	20,613
187,833	0,235	0,607	1,051	-0,160	-0,018	0,342	0,602	54,978	21,609	20,954	20,898	20,603	20,693	20,812	20,643
188,333	0,230	0,623	1,051	-0,159	-0,006	0,329	0,601	55,087	21,470	20,925	20,908	20,600	20,644	20,797	20,627
188,833	0,224	0,647	1,054	-0,156	0,005	0,307	0,602	55,132	21,452	20,931	20,939	20,600	20,654	20,808	20,638
189,333	0,230	0,642	1,054	-0,160	0,000	0,320	0,602	55,237	21,630	21,009	21,006	20,680	20,720	20,878	20,705
189,833	0,240	0,618	1,052	-0,160	-0,002	0,337	0,604	55,237	21,494	20,967	20,972	20,653	20,697	20,840	20,672
190,334	0,241	0,614	1,051	-0,160	-0,010	0,339	0,598	55,229	21,452	20,931	20,947	20,621	20,676	20,832	20,650
190,834	0,237	0,612	1,063	-0,161	0,013	0,340	0,601	55,181	21,555	20,945	20,951	20,625	20,672	20,825	20,647
191,334	0,231	0,610	1,059	-0,161	-0,021	0,342	0,600	55,220	21,525	20,943	20,946	20,622	20,682	20,839	20,654
191,834	0,231	0,603	1,059	-0,162	0,033	0,349	0,600	55,224	21,660	20,994	20,978	20,670	20,723	20,876	20,694
192,334	0,234	0,596	1,060	-0,161	0,036	0,355	0,599	55,087	21,541	20,896	20,878	20,570	20,636	20,785	20,595
192,833	0,233	0,591	1,060	-0,162	0,043	0,359	0,599	55,102	21,582	20,889	20,869	20,562	20,617	20,772	20,585
193,333	0,236	0,590	1,066	-0,162	0,001	0,358	0,600	55,096	21,506	20,917	20,890	20,599	20,655	20,804	20,618
193,833	0,230	0,596	1,060	-0,161	0,026	0,354	0,598	55,163	21,512	20,950	20,916	20,633	20,679	20,838	20,650
194,333	0,231	0,595	1,056	-0,160	-0,018	0,355	0,598	55,160	21,510	20,933	20,900	20,617	20,673	20,820	20,634
194,833	0,229	0,593	1,056	-0,163	0,019	0,357	0,599	55,240	21,557	20,984	20,959	20,681	20,725	20,884	20,689
195,333	0,224	0,594	1,051	-0,162	-0,006	0,354	0,598	55,246	21,507	20,931	20,895	20,610	20,671	20,824	20,634
195,833	0,223	0,606	1,058	-0,161	0,021	0,343	0,598	55,346	21,648	20,997	20,944	20,673	20,738	20,887	20,690
196,333	0,226	0,608	1,060	-0,162	0,052	0,344	0,597	55,283	21,530	20,935	20,884	20,626	20,692	20,837	20,642
196,834	0,230	0,599	1,058	-0,161	0,006	0,351	0,598	55,322	21,507	20,945	20,909	20,640	20,705	20,853	20,658
197,334	0,232	0,596	1,054	-0,160	-0,021	0,353	0,598	55,362	21,587	20,988	20,935	20,690	20,746	20,895	20,693
197,834	0,225	0,604	1,056	-0,161	0,026	0,345	0,598	55,387	21,541	20,925	20,855	20,601	20,665	20,821	20,616
198,334	0,220	0,614	1,052	-0,159	0,025	0,337	0,599	55,412	21,643	20,950	20,879	20,630	20,695	20,844	20,639
198,834	0,221	0,615	1,052	-0,160	0,049	0,338	0,599	55,426	21,749	20,998	20,925	20,685	20,736	20,886	20,684
199,334	0,226	0,601	1,050	-0,161	0,034	0,352	0,598	55,310	21,721	20,984	20,890	20,646	20,705	20,861	20,650
199,833	0,228	0,594	1,054	-0,161	0,001	0,355	0,595	55,300	21,630	20,968	20,880	20,650	20,706	20,861	20,651
200,333	0,224	0,603	1,057	-0,161	0,009	0,347	0,595	55,395	21,613	20,940	20,852	20,625	20,683	20,840	20,625
200,833	0,221	0,605	1,054	-0,162	-0,018	0,348	0,599	55,568	21,660	20,990	20,905	20,673	20,737	20,884	20,674
201,333	0,226	0,596	1,045	-0,163	-0,026	0,354	0,597	55,602	21,660	21,006	20,914	20,690	20,758	20,898	20,691
201,833	0,230	0,593	1,051	-0,163	0,002	0,357	0,597	55,505	21,642	20,995	20,896	20,683	20,742	20,903	20,680

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
183,834	47,111	41,641	75,770	84,155	0,487	0,337	3065,631	3211,031	93,770	9,844	10,658	-51,577	41,956	8,362	12,633	2022-03-23 13:56
184,334	47,173	41,682	75,559	84,198	0,485	0,337	3067,666	3309,559	113,384	9,668	10,738	-51,585	42,413	8,408	12,568	2022-03-23 13:57
184,834	47,081	41,767	75,429	84,274	0,486	0,337	2974,819	3385,645	124,731	9,514	10,994	-51,591	42,081	8,375	12,568	2022-03-23 13:57
185,334	47,009	41,819	75,425	84,297	0,490	0,337	2929,222	3396,687	96,089	9,749	10,796	-51,594	42,563	8,422	12,568	2022-03-23 13:58
185,834	47,041	41,856	75,478	84,327	0,491	0,337	2929,210	3388,962	77,329	10,086	10,467	-51,575	42,101	8,377	12,750	2022-03-23 13:58
186,333	46,838	41,796	75,637	84,390	0,492	0,337	2854,310	3352,435	72,232	10,270	10,264	-51,574	41,802	8,347	12,662	2022-03-23 13:59
186,833	46,977	41,744	75,710	84,372	0,491	0,338	2959,415	3318,592	93,914	10,140	10,321	-51,592	41,857	8,352	12,662	2022-03-23 13:59
187,333	46,934	41,631	75,732	84,407	0,491	0,337	3000,635	3321,944	99,549	9,970	10,528	-51,604	42,268	8,393	12,568	2022-03-23 14:00
187,833	46,844	41,604	75,766	84,416	0,491	0,338	2963,051	3314,589	85,711	10,307	10,259	-51,601	42,071	8,374	12,568	2022-03-23 14:00
188,333	46,946	41,744	75,711	84,425	0,491	0,337	2936,695	3337,057	71,251	10,685	9,862	-51,587	42,267	8,393	12,474	2022-03-23 14:01
188,833	47,026	41,826	75,712	84,472	0,492	0,337	2943,077	3353,688	60,551	11,430	9,207	-51,560	42,218	8,388	12,568	2022-03-23 14:01
189,333	47,005	41,795	75,693	84,471	0,491	0,337	2947,887	3361,244	90,875	10,734	9,594	-51,602	42,444	8,411	12,871	2022-03-23 14:02
189,833	47,004	41,715	75,706	84,496	0,491	0,337	2989,845	3365,132	106,589	10,355	10,096	-51,602	42,143	8,381	12,568	2022-03-23 14:02
190,334	47,055	41,725	75,784	84,491	0,491	0,337	3014,948	3332,714	103,675	10,319	10,166	-51,597	41,894	8,356	12,474	2022-03-23 14:03
190,834	46,659	41,815	75,799	84,526	0,495	0,337	2757,815	3340,172	89,731	10,281	10,201	-51,608	42,461	8,412	12,568	2022-03-23 14:03
191,334	46,719	41,809	75,956	84,552	0,496	0,337	2805,018	3291,826	76,990	10,229	10,262	-51,607	42,200	8,387	12,568	2022-03-23 14:04
191,834	46,693	41,774	76,000	84,570	0,496	0,337	2810,178	3281,206	86,467	9,975	10,472	-51,621	42,040	8,371	12,474	2022-03-23 14:04
192,334	46,781	41,678	76,105	84,587	0,495	0,338	2906,686	3249,951	85,651	9,854	10,641	-51,612	42,532	8,419	12,474	2022-03-23 14:05
192,833	46,629	41,606	76,175	84,629	0,496	0,337	2868,438	3237,833	93,468	9,713	10,770	-51,621	42,539	8,420	12,474	2022-03-23 14:05
193,333	46,740	41,668	76,165	84,670	0,497	0,337	2903,323	3256,484	89,156	9,797	10,748	-51,617	42,580	8,424	12,474	2022-03-23 14:06
193,833	46,752	41,766	76,166	84,701	0,493	0,337	2830,117	3267,745	77,072	9,892	10,620	-51,607	42,493	8,416	12,350	2022-03-23 14:06
194,333	46,857	41,844	76,233	84,725	0,497	0,338	2865,451	3253,766	78,831	9,889	10,641	-51,605	42,239	8,390	12,350	2022-03-23 14:07
194,833	46,861	41,825	76,249	84,702	0,494	0,337	2865,932	3237,113	71,989	9,800	10,706	-51,629	42,481	8,414	12,474	2022-03-23 14:07
195,333	46,845	41,762	76,316	84,811	0,494	0,337	2892,158	3253,482	61,221	9,881	10,626	-51,618	41,902	8,357	12,350	2022-03-23 14:08
195,833	46,832	41,686	76,325	84,830	0,496	0,338	2935,833	3257,236	61,644	10,291	10,277	-51,610	42,285	8,395	12,350	2022-03-23 14:08
196,333	46,810	41,681	76,277	84,877	0,499	0,337	2944,388	3291,984	72,959	10,098	10,311	-51,623	42,245	8,391	12,350	2022-03-23 14:09
196,834	46,852	41,739	76,278	84,879	0,500	0,338	2941,604	3294,263	83,273	9,919	10,522	-51,612	42,682	8,434	12,474	2022-03-23 14:09
197,334	46,910	41,796	76,277	84,947	0,498	0,337	2928,788	3318,830	81,216	9,908	10,585	-51,602	42,168	8,383	12,349	2022-03-23 14:10
197,834	46,843	41,833	76,319	84,947	0,494	0,337	2850,616	3302,256	59,130	10,230	10,346	-51,610	42,003	8,367	12,350	2022-03-23 14:10
198,334	46,942	41,819	76,426	84,925	0,498	0,337	2935,543	3254,035	52,759	10,391	10,120	-51,589	42,349	8,401	12,350	2022-03-23 14:11
198,834	46,831	41,774	76,456	84,961	0,496	0,337	2887,938	3256,247	59,966	10,320	10,134	-51,601	41,850	8,352	12,474	2022-03-23 14:11
199,334	46,491	41,744	76,525	85,017	0,496	0,338	2707,938	3252,746	73,440	9,876	10,547	-51,607	42,061	8,373	12,474	2022-03-23 14:12
199,833	46,604	41,743	76,756	85,040	0,499	0,338	2791,213	3174,506	69,866	9,923	10,635	-51,613	42,165	8,383	12,162	2022-03-23 14:12
200,333	46,470	41,703	76,867	85,072	0,497	0,338	2728,031	3143,005	59,210	10,166	10,404	-51,608	42,313	8,398	12,256	2022-03-23 14:13
200,833	46,419	41,635	76,916	85,160	0,497	0,338	2737,710	3158,167	56,959	10,043	10,433	-51,624	42,401	8,406	12,568	2022-03-23 14:13
201,333	46,399	41,566	76,938	85,211	0,500	0,338	2779,305	3170,363	74,728	9,897	10,626	-51,631	41,973	8,364	12,350	2022-03-23 14:14
201,833	46,746	41,546	76,911	85,216	0,495	0,338	2962,279	3182,535	80,431	9,789	10,712	-51,632	41,793	8,346	12,256	2022-03-23 14:14

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
202,333	0,226	0,598	1,055	-0,165	0,029	0,351	0,596	55,490	21,608	20,956	20,858	20,641	20,702	20,857	20,639
202,833	0,224	0,603	1,053	-0,162	0,030	0,347	0,596	55,546	21,604	20,959	20,844	20,638	20,700	20,840	20,633
203,333	0,226	0,599	1,051	-0,163	-0,023	0,351	0,598	55,538	21,462	20,935	20,832	20,628	20,691	20,854	20,628
203,834	0,235	0,588	1,059	-0,164	0,022	0,361	0,597	55,647	21,559	20,998	20,896	20,703	20,766	20,909	20,695
204,334	0,234	0,587	1,055	-0,163	0,036	0,361	0,598	55,638	21,453	20,966	20,869	20,667	20,749	20,892	20,674
204,834	0,233	0,593	1,060	-0,163	0,022	0,354	0,596	55,626	21,446	20,942	20,835	20,656	20,727	20,868	20,653
205,334	0,230	0,611	1,058	-0,160	0,009	0,337	0,596	55,676	21,571	20,976	20,856	20,681	20,747	20,899	20,672
205,834	0,224	0,631	1,061	-0,160	0,005	0,324	0,598	55,703	21,339	20,953	20,846	20,673	20,756	20,893	20,671
206,334	0,226	0,628	1,057	-0,160	0,018	0,328	0,595	55,698	21,517	20,931	20,819	20,641	20,706	20,859	20,638
206,833	0,231	0,618	1,050	-0,162	-0,023	0,338	0,595	55,727	21,592	20,991	20,876	20,688	20,766	20,924	20,689
207,333	0,233	0,612	1,054	-0,162	-0,010	0,340	0,594	55,827	21,557	21,015	20,891	20,720	20,802	20,947	20,717
207,833	0,228	0,620	1,054	-0,163	0,023	0,333	0,595	55,826	21,566	20,988	20,867	20,696	20,772	20,912	20,693
208,333	0,231	0,616	1,056	-0,163	0,010	0,337	0,596	55,865	21,544	20,995	20,880	20,719	20,793	20,931	20,706
208,833	0,231	0,606	1,056	-0,164	0,034	0,346	0,595	55,789	21,470	20,957	20,834	20,681	20,756	20,893	20,666
209,333	0,229	0,599	1,053	-0,162	0,027	0,350	0,596	55,849	21,587	20,957	20,837	20,673	20,747	20,886	20,659
209,833	0,223	0,610	1,058	-0,163	0,040	0,340	0,595	56,033	21,577	21,001	20,888	20,733	20,807	20,941	20,715
210,334	0,218	0,626	1,064	-0,163	-0,008	0,327	0,595	56,045	21,546	20,951	20,823	20,667	20,741	20,878	20,651
210,834	0,219	0,616	1,059	-0,164	-0,010	0,339	0,597	56,058	21,629	20,976	20,850	20,692	20,766	20,904	20,677
211,334	0,222	0,607	1,061	-0,163	0,051	0,344	0,594	55,944	21,467	20,950	20,815	20,668	20,755	20,889	20,657
211,834	0,223	0,612	1,059	-0,164	0,005	0,339	0,594	55,901	21,348	20,878	20,756	20,614	20,681	20,820	20,598
212,334	0,218	0,619	1,060	-0,162	-0,008	0,332	0,594	56,062	21,468	20,959	20,834	20,693	20,773	20,905	20,677
212,834	0,216	0,625	1,050	-0,165	0,051	0,328	0,595	56,054	21,597	20,922	20,791	20,647	20,731	20,865	20,631
213,333	0,216	0,620	1,058	-0,164	0,037	0,334	0,594	56,019	21,365	20,901	20,780	20,648	20,716	20,860	20,622
213,833	0,220	0,609	1,051	-0,166	0,010	0,344	0,593	56,059	21,528	20,922	20,795	20,659	20,739	20,873	20,639
214,333	0,218	0,608	1,057	-0,164	-0,005	0,343	0,593	55,997	21,618	20,923	20,789	20,641	20,729	20,870	20,625
214,833	0,215	0,616	1,057	-0,163	-0,008	0,336	0,593	56,230	21,731	21,047	20,903	20,767	20,845	20,982	20,742
215,333	0,214	0,620	1,058	-0,163	0,042	0,333	0,593	56,224	21,620	20,986	20,843	20,694	20,787	20,912	20,676
215,833	0,218	0,613	1,055	-0,166	0,027	0,339	0,592	56,317	21,680	21,010	20,866	20,718	20,808	20,935	20,693
216,333	0,219	0,622	1,053	-0,164	0,003	0,331	0,592	56,326	21,687	21,034	20,887	20,747	20,826	20,963	20,719
216,833	0,222	0,627	1,054	-0,165	0,037	0,328	0,593	56,402	21,688	21,030	20,881	20,732	20,816	20,954	20,705
217,334	0,222	0,628	1,053	-0,164	-0,026	0,326	0,591	56,313	21,623	21,003	20,876	20,733	20,814	20,953	20,701
217,834	0,221	0,621	1,054	-0,165	0,034	0,332	0,592	56,279	21,637	21,026	20,872	20,727	20,813	20,955	20,697
218,334	0,223	0,609	1,059	-0,165	-0,019	0,345	0,592	56,183	21,682	20,990	20,838	20,700	20,776	20,905	20,662
218,834	0,225	0,596	1,057	-0,166	0,012	0,354	0,592	56,163	21,798	21,045	20,894	20,735	20,822	20,963	20,703
219,334	0,224	0,594	1,061	-0,166	0,038	0,355	0,593	56,172	21,728	21,021	20,855	20,702	20,783	20,924	20,670
219,834	0,223	0,593	1,056	-0,167	0,020	0,355	0,591	56,245	21,680	21,024	20,850	20,710	20,792	20,935	20,673
220,333	0,220	0,597	1,054	-0,164	-0,004	0,352	0,592	56,307	21,688	21,039	20,873	20,729	20,815	20,949	20,690

PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
202,333	46,678	41,534	76,817	85,190	0,497	0,338	2940,848	3207,603	64,258	10,024	10,537	-51,648	42,032	8,370	12,256	2022-03-23 14:15
202,833	46,686	41,506	76,749	85,169	0,499	0,337	2978,034	3222,357	62,065	10,122	10,410	-51,617	41,897	8,356	12,256	2022-03-23 14:15
203,333	46,451	41,485	76,747	85,213	0,502	0,338	2867,269	3242,201	74,949	9,942	10,537	-51,625	41,971	8,364	12,662	2022-03-23 14:16
203,834	46,469	41,509	76,721	85,241	0,490	0,338	2798,896	3263,694	90,411	9,644	10,845	-51,641	42,479	8,414	12,350	2022-03-23 14:16
204,334	46,518	41,523	76,886	85,260	0,489	0,338	2811,740	3208,618	85,109	9,735	10,821	-51,626	42,233	8,390	12,349	2022-03-23 14:17
204,834	46,396	41,508	76,961	85,274	0,490	0,338	2758,112	3183,745	88,818	9,901	10,629	-51,629	42,664	8,433	12,162	2022-03-23 14:17
205,334	46,513	41,518	77,095	85,298	0,489	0,338	2810,157	3142,376	69,853	10,495	10,109	-51,603	42,207	8,387	12,256	2022-03-23 14:18
205,834	46,551	41,533	77,136	85,336	0,488	0,338	2816,862	3139,899	62,711	10,760	9,724	-51,600	42,208	8,387	12,203	2022-03-23 14:18
206,334	46,613	41,525	77,195	85,335	0,493	0,338	2884,900	3120,170	71,310	10,685	9,825	-51,604	42,122	8,379	12,162	2022-03-23 14:19
206,833	46,792	41,540	77,121	85,409	0,486	0,338	2938,553	3176,298	85,041	10,303	10,130	-51,625	42,042	8,371	12,256	2022-03-23 14:19
207,333	46,850	41,553	77,065	85,454	0,490	0,338	2989,306	3213,354	83,925	10,310	10,207	-51,616	41,944	8,361	12,487	2022-03-23 14:20
207,833	46,469	41,553	76,974	85,487	0,490	0,338	2771,853	3262,125	73,211	10,492	9,988	-51,629	42,254	8,392	12,162	2022-03-23 14:20
208,333	46,518	41,533	77,173	85,490	0,490	0,338	2814,019	3186,176	81,103	10,321	10,119	-51,626	42,392	8,406	12,162	2022-03-23 14:21
208,833	46,592	41,522	77,300	85,516	0,491	0,338	2867,182	3146,359	79,337	10,058	10,385	-51,643	41,962	8,363	12,162	2022-03-23 14:21
209,333	46,727	41,492	77,293	85,575	0,492	0,338	2966,278	3172,175	70,391	10,002	10,506	-51,620	42,068	8,373	12,069	2022-03-23 14:22
209,833	46,268	41,526	77,172	85,600	0,488	0,338	2666,257	3229,000	57,620	10,343	10,189	-51,626	42,222	8,389	12,162	2022-03-23 14:22
210,334	46,943	41,558	77,381	85,623	0,488	0,338	3027,053	3155,712	44,717	10,757	9,802	-51,628	42,597	8,426	12,256	2022-03-23 14:23
210,834	46,629	41,594	77,300	85,702	0,491	0,337	2844,969	3214,017	55,623	10,221	10,160	-51,645	42,553	8,421	12,568	2022-03-23 14:23
211,334	46,538	41,614	77,303	85,690	0,492	0,337	2790,095	3210,229	57,445	10,205	10,313	-51,630	42,327	8,399	12,110	2022-03-23 14:24
211,834	46,707	41,587	77,471	85,751	0,494	0,337	2910,668	3168,259	57,594	10,349	10,164	-51,644	42,706	8,437	12,162	2022-03-23 14:24
212,334	46,458	41,553	77,503	85,812	0,494	0,338	2787,138	3181,401	46,635	10,540	9,962	-51,621	42,212	8,388	11,974	2022-03-23 14:25
212,834	46,660	41,503	77,509	85,847	0,495	0,338	2940,449	3192,826	41,767	10,657	9,834	-51,648	42,212	8,388	12,256	2022-03-23 14:25
213,333	46,491	41,489	77,503	85,854	0,494	0,337	2844,132	3196,614	47,704	10,414	10,023	-51,637	42,358	8,402	12,162	2022-03-23 14:26
213,833	46,388	41,497	77,573	85,890	0,494	0,338	2783,528	3183,781	53,498	10,163	10,311	-51,657	41,970	8,364	12,069	2022-03-23 14:26
214,333	46,573	41,542	77,600	85,942	0,494	0,338	2863,164	3195,676	44,369	10,224	10,297	-51,644	42,305	8,397	12,069	2022-03-23 14:27
214,833	46,423	41,580	77,615	85,961	0,493	0,338	2750,762	3195,311	40,166	10,466	10,083	-51,633	42,129	8,379	11,974	2022-03-23 14:27
215,333	46,809	41,615	77,697	86,009	0,486	0,338	2906,698	3181,425	39,424	10,460	10,005	-51,630	42,357	8,402	12,118	2022-03-23 14:28
215,833	46,623	41,619	77,722	86,028	0,490	0,337	2821,023	3178,173	50,826	10,296	10,173	-51,656	42,168	8,383	12,069	2022-03-23 14:28
216,333	46,572	41,553	77,685	86,069	0,496	0,337	2863,246	3208,544	50,489	10,626	9,933	-51,645	42,084	8,375	11,974	2022-03-23 14:29
216,833	46,530	41,506	77,740	86,127	0,493	0,338	2849,853	3211,042	59,296	10,709	9,826	-51,654	42,443	8,411	12,069	2022-03-23 14:29
217,334	46,434	41,497	77,844	86,182	0,492	0,338	2793,874	3195,097	55,859	10,677	9,791	-51,642	41,772	8,344	11,974	2022-03-23 14:30
217,834	46,481	41,476	77,874	86,187	0,496	0,338	2857,609	3184,245	54,089	10,480	9,962	-51,651	42,071	8,374	11,974	2022-03-23 14:30
218,334	46,612	41,533	77,877	86,243	0,495	0,338	2894,289	3203,602	63,614	10,066	10,351	-51,646	42,441	8,410	11,974	2022-03-23 14:31
218,834	46,514	41,599	77,883	86,264	0,495	0,338	2802,340	3208,780	65,845	9,844	10,633	-51,658	42,346	8,401	11,974	2022-03-23 14:31
219,334	46,612	41,629	77,929	86,331	0,492	0,337	2822,973	3213,990	60,218	9,875	10,646	-51,657	42,496	8,416	12,162	2022-03-23 14:32
219,834	46,677	41,638	78,044	86,357	0,496	0,338	2877,121	3181,430	58,458	9,842	10,657	-51,670	42,237	8,390	11,974	2022-03-23 14:32
220,333	46,471	41,610	78,044	86,365	0,493	0,338	2756,100	3186,117	52,005	9,918	10,570	-51,638	42,173	8,384	11,974	2022-03-23 14:33



## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
220,833	0,220	0,591	1,056	-0,164	0,023	0,358	0,592	56,187	21,725	21,058	20,897	20,746	20,834	20,969	20,705
221,333	0,224	0,585	1,056	-0,166	0,000	0,363	0,591	56,158	21,776	21,064	20,897	20,756	20,834	20,967	20,706
221,833	0,225	0,585	1,060	-0,165	0,022	0,362	0,590	56,095	21,696	21,029	20,859	20,714	20,797	20,928	20,672
222,333	0,224	0,586	1,054	-0,165	-0,007	0,361	0,590	56,106	21,558	21,021	20,868	20,734	20,822	20,945	20,687
222,833	0,222	0,584	1,057	-0,165	-0,021	0,364	0,590	56,149	21,565	21,002	20,859	20,720	20,809	20,929	20,674
223,333	0,227	0,572	1,064	-0,164	-0,002	0,374	0,590	56,181	21,536	20,986	20,834	20,700	20,793	20,916	20,653
223,833	0,229	0,569	1,057	-0,166	0,011	0,375	0,590	56,178	21,506	21,021	20,880	20,756	20,835	20,968	20,699
224,334	0,226	0,582	1,056	-0,164	0,015	0,361	0,589	56,097	21,619	21,002	20,849	20,720	20,817	20,943	20,670
224,834	0,223	0,598	1,058	-0,163	0,024	0,351	0,590	56,076	21,648	21,021	20,862	20,722	20,822	20,946	20,679
225,334	0,227	0,596	1,056	-0,167	0,014	0,352	0,590	56,127	21,567	21,039	20,881	20,755	20,844	20,973	20,700
225,834	0,231	0,604	1,057	-0,163	-0,008	0,345	0,589	56,203	21,654	21,060	20,901	20,763	20,856	20,985	20,713
226,334	0,230	0,606	1,057	-0,166	0,018	0,346	0,589	56,206	21,756	21,087	20,918	20,779	20,873	20,996	20,726
226,833	0,227	0,608	1,053	-0,164	0,033	0,341	0,590	56,233	21,686	21,013	20,851	20,718	20,808	20,937	20,658
227,333	0,220	0,621	1,053	-0,165	0,026	0,331	0,590	56,300	21,640	21,059	20,903	20,766	20,854	20,980	20,705
227,833	0,219	0,625	1,055	-0,166	0,004	0,329	0,588	56,356	21,564	21,050	20,894	20,757	20,846	20,967	20,692
228,333	0,222	0,619	1,058	-0,164	0,020	0,335	0,589	56,377	21,625	21,028	20,868	20,731	20,819	20,948	20,669
228,833	0,223	0,616	1,055	-0,164	0,012	0,336	0,590	56,393	21,698	21,084	20,928	20,786	20,881	21,007	20,728
229,333	0,223	0,616	1,062	-0,165	0,008	0,337	0,588	56,486	21,476	21,055	20,902	20,775	20,864	20,995	20,710
229,833	0,224	0,617	1,060	-0,165	0,022	0,335	0,588	56,562	21,681	21,112	20,958	20,829	20,923	21,045	20,763
230,333	0,224	0,615	1,057	-0,165	0,047	0,338	0,587	56,501	21,787	21,134	20,966	20,834	20,926	21,052	20,768
230,834	0,230	0,610	1,056	-0,166	0,015	0,342	0,587	56,492	21,693	21,129	20,980	20,834	20,935	21,058	20,771
231,334	0,226	0,607	1,059	-0,166	0,016	0,345	0,588	56,528	21,520	21,086	20,925	20,815	20,912	21,028	20,746
231,834	0,223	0,610	1,059	-0,167	0,001	0,341	0,588	56,452	21,585	21,059	20,896	20,779	20,875	21,002	20,711
232,334	0,220	0,611	1,063	-0,164	0,027	0,342	0,588	56,412	21,644	21,070	20,906	20,794	20,889	21,016	20,724
232,834	0,224	0,600	1,056	-0,164	-0,030	0,352	0,588	56,492	21,710	21,073	20,909	20,793	20,891	21,011	20,723
233,334	0,225	0,602	1,058	-0,168	0,022	0,348	0,587	56,536	21,669	21,065	20,894	20,776	20,878	20,993	20,704
233,833	0,225	0,605	1,053	-0,165	0,044	0,347	0,587	56,558	21,712	21,107	20,937	20,827	20,912	21,043	20,750
234,333	0,225	0,601	1,057	-0,167	0,027	0,349	0,587	56,529	21,704	21,104	20,935	20,827	20,915	21,039	20,749
234,833	0,225	0,598	1,057	-0,166	0,004	0,352	0,588	56,510	21,659	21,069	20,904	20,799	20,890	21,010	20,716
235,333	0,228	0,593	1,055	-0,164	0,034	0,357	0,588	56,615	21,570	21,080	20,921	20,819	20,923	21,039	20,743
235,833	0,229	0,590	1,052	-0,169	0,007	0,359	0,587	56,634	21,504	21,086	20,929	20,829	20,938	21,063	20,760
236,333	0,228	0,592	1,053	-0,164	0,030	0,355	0,587	56,533	21,497	21,026	20,873	20,782	20,872	21,000	20,701
236,833	0,225	0,601	1,056	-0,165	0,033	0,349	0,587	56,569	21,559	21,102	20,939	20,852	20,955	21,071	20,771
237,333	0,222	0,603	1,058	-0,166	0,041	0,349	0,587	56,496	21,719	21,102	20,933	20,836	20,936	21,064	20,756
237,834	0,225	0,591	1,053	-0,165	0,026	0,359	0,587	56,599	21,802	21,103	20,936	20,839	20,935	21,057	20,751
238,334	0,224	0,597	1,056	-0,165	-0,020	0,350	0,587	56,750	21,842	21,133	20,944	20,861	20,953	21,069	20,769
238,834	0,223	0,620	1,057	-0,164	0,004	0,332	0,587	56,741	21,858	21,133	20,948	20,848	20,946	21,069	20,761

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
220,833	46,642	41,623	78,119	86,412	0,493	0,338	2846,019	3174,283	56,615	9,726	10,742	-51,638	42,314	8,398	11,974	2022-03-23 14:33
221,333	46,687	41,580	78,199	86,450	0,494	0,338	2904,141	3159,589	64,918	9,543	10,900	-51,661	42,466	8,413	11,974	2022-03-23 14:34
221,833	46,366	41,469	78,199	86,488	0,494	0,338	2787,357	3173,820	64,744	9,652	10,867	-51,650	42,406	8,407	11,850	2022-03-23 14:34
222,333	46,348	41,350	78,223	86,507	0,496	0,338	2850,966	3171,194	62,326	9,649	10,836	-51,648	42,073	8,374	11,850	2022-03-23 14:35
222,833	46,281	41,261	78,228	86,526	0,497	0,338	2871,027	3176,568	60,829	9,532	10,917	-51,651	41,939	8,361	11,850	2022-03-23 14:35
223,333	46,349	41,281	78,241	86,570	0,498	0,338	2906,373	3187,562	74,897	9,212	11,228	-51,645	42,785	8,444	11,850	2022-03-23 14:36
223,833	46,521	41,338	78,185	86,597	0,498	0,338	2968,814	3220,504	72,042	9,275	11,258	-51,663	42,393	8,406	11,974	2022-03-23 14:36
224,334	46,392	41,367	78,186	86,616	0,497	0,338	2872,975	3226,292	63,580	9,772	10,838	-51,641	42,144	8,381	11,850	2022-03-23 14:37
224,834	46,397	41,370	78,222	86,645	0,498	0,338	2879,671	3225,323	61,400	9,961	10,521	-51,627	42,623	8,428	11,850	2022-03-23 14:37
225,334	46,150	41,397	78,282	86,688	0,502	0,338	2746,724	3218,568	78,678	9,905	10,553	-51,668	42,263	8,393	11,850	2022-03-23 14:38
225,834	46,082	41,325	78,458	86,714	0,501	0,338	2744,588	3160,521	77,929	10,197	10,357	-51,633	42,251	8,392	11,756	2022-03-23 14:38
226,334	45,913	41,134	78,647	86,701	0,498	0,338	2736,217	3085,309	78,923	10,096	10,367	-51,660	41,904	8,357	11,850	2022-03-23 14:39
226,833	46,043	40,949	78,718	86,750	0,496	0,338	2910,142	3073,995	65,182	10,303	10,243	-51,641	42,089	8,376	11,719	2022-03-23 14:39
227,333	46,054	40,927	78,624	86,743	0,497	0,388	2935,918	3569,328	47,974	10,612	9,921	-51,651	42,253	8,392	11,756	2022-03-23 14:40
227,833	46,266	41,065	79,263	86,756	0,501	0,409	3002,583	3470,466	52,663	10,597	9,877	-51,658	42,092	8,376	11,850	2022-03-23 14:40
228,333	46,330	41,146	79,506	86,694	0,496	0,409	2962,378	3329,225	58,963	10,386	10,059	-51,642	42,304	8,397	11,756	2022-03-23 14:41
228,833	46,074	41,154	79,668	86,705	0,495	0,409	2804,238	3259,346	60,383	10,459	10,077	-51,640	42,321	8,399	11,767	2022-03-23 14:41
229,333	46,141	41,105	79,870	86,665	0,500	0,409	2899,843	3149,166	63,232	10,349	10,116	-51,649	42,356	8,402	11,756	2022-03-23 14:42
229,833	46,043	41,049	79,926	86,728	0,498	0,409	2861,446	3151,838	61,894	10,423	10,058	-51,655	42,552	8,421	11,662	2022-03-23 14:42
230,333	47,256	40,995	79,764	86,725	0,501	0,413	3600,276	3254,101	70,804	10,303	10,135	-51,654	42,176	8,384	11,662	2022-03-23 14:43
230,834	46,826	40,961	71,241	86,729	0,501	0,412	3381,597	7268,119	77,137	10,231	10,269	-51,657	42,183	8,385	11,662	2022-03-23 14:43
231,334	46,897	41,046	69,914	86,758	0,500	0,413	3369,489	7919,887	65,842	10,140	10,357	-51,658	42,224	8,389	11,756	2022-03-23 14:44
231,834	46,768	41,182	73,647	86,762	0,504	0,415	3243,387	6183,243	57,032	10,336	10,230	-51,672	42,147	8,381	11,756	2022-03-23 14:44
232,334	46,571	41,236	76,396	86,665	0,503	0,415	3090,106	4836,389	52,916	10,179	10,270	-51,640	42,669	8,433	11,756	2022-03-23 14:45
232,834	46,322	41,088	77,707	86,469	0,514	0,415	3098,111	4119,812	69,695	9,879	10,560	-51,644	42,327	8,399	11,756	2022-03-23 14:45
233,334	46,136	40,953	78,549	86,165	0,509	0,415	3037,269	3581,345	64,495	10,142	10,438	-51,676	42,113	8,378	11,756	2022-03-23 14:46
233,833	46,055	40,976	78,947	85,886	0,509	0,415	2975,576	3266,401	64,828	10,072	10,413	-51,655	42,086	8,375	11,662	2022-03-23 14:46
234,333	46,084	41,025	79,059	85,730	0,507	0,415	2954,510	3137,218	64,330	10,023	10,460	-51,666	42,453	8,412	11,662	2022-03-23 14:47
234,833	45,982	41,017	79,084	85,721	0,500	0,415	2856,626	3123,073	69,193	9,872	10,561	-51,662	42,348	8,401	11,662	2022-03-23 14:47
235,333	45,962	41,031	79,143	85,758	0,501	0,415	2841,588	3113,613	74,476	9,816	10,700	-51,643	42,344	8,401	11,662	2022-03-23 14:48
235,833	46,079	41,045	79,090	85,728	0,504	0,415	2922,425	3122,825	76,328	9,718	10,777	-51,685	42,282	8,395	11,662	2022-03-23 14:48
236,333	45,941	41,048	78,961	85,760	0,500	0,415	2818,116	3199,852	72,389	9,887	10,655	-51,641	42,278	8,394	11,662	2022-03-23 14:49
236,833	45,973	41,038	79,009	85,795	0,506	0,415	2872,345	3192,827	63,338	10,040	10,457	-51,649	42,278	8,394	11,662	2022-03-23 14:49
237,333	46,005	41,041	78,991	85,813	0,499	0,415	2849,815	3211,443	58,114	10,024	10,458	-51,658	42,031	8,370	11,662	2022-03-23 14:50
237,834	46,066	41,085	79,052	85,889	0,500	0,415	2865,492	3216,782	67,179	9,675	10,763	-51,648	42,164	8,383	11,662	2022-03-23 14:50
238,334	46,087	41,115	79,079	85,909	0,503	0,415	2879,570	3211,093	58,998	10,139	10,494	-51,649	42,155	8,382	11,662	2022-03-23 14:51
238,834	46,061	41,126	79,057	85,924	0,503	0,415	2857,609	3231,895	63,235	10,662	9,950	-51,643	42,320	8,398	11,662	2022-03-23 14:51

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
239,334	0,225	0,627	1,052	-0,166	0,040	0,329	0,587	56,719	21,908	21,140	20,943	20,847	20,941	21,065	20,759
239,834	0,229	0,610	1,049	-0,165	0,021	0,345	0,586	56,638	21,889	21,105	20,909	20,815	20,905	21,026	20,721
240,334	0,234	0,595	1,059	-0,168	0,028	0,355	0,586	56,635	21,816	21,122	20,925	20,827	20,923	21,049	20,738
240,833	0,234	0,598	1,054	-0,165	0,019	0,351	0,586	56,613	21,810	21,098	20,891	20,804	20,905	21,021	20,713
241,333	0,228	0,607	1,056	-0,165	0,003	0,342	0,585	56,740	21,862	21,147	20,941	20,851	20,956	21,076	20,764
241,833	0,226	0,609	1,051	-0,164	0,010	0,342	0,586	56,739	21,807	21,152	20,961	20,875	20,975	21,090	20,781
242,333	0,228	0,602	1,055	-0,165	0,012	0,349	0,586	56,661	21,699	21,086	20,890	20,808	20,911	21,026	20,712
242,833	0,234	0,590	1,056	-0,165	0,019	0,358	0,585	56,827	21,770	21,122	20,933	20,847	20,956	21,076	20,758
243,333	0,229	0,600	1,054	-0,165	0,021	0,349	0,585	56,686	21,756	21,088	20,898	20,814	20,913	21,035	20,716
243,833	0,226	0,603	1,052	-0,166	0,031	0,346	0,585	56,822	21,843	21,128	20,948	20,849	20,959	21,067	20,755
244,334	0,222	0,607	1,056	-0,165	0,012	0,343	0,585	56,875	21,905	21,141	20,956	20,859	20,954	21,076	20,759
244,834	0,220	0,606	1,061	-0,165	0,028	0,345	0,585	56,716	21,954	21,147	20,955	20,852	20,953	21,067	20,756
245,334	0,221	0,603	1,054	-0,168	0,018	0,347	0,585	56,655	21,705	21,058	20,871	20,771	20,878	20,995	20,675
245,834	0,221	0,611	1,057	-0,166	0,019	0,340	0,585	56,870	21,690	21,121	20,938	20,850	20,952	21,065	20,748
246,334	0,221	0,617	1,064	-0,164	0,028	0,334	0,585	56,819	21,572	21,011	20,825	20,752	20,859	20,972	20,651
246,834	0,219	0,624	1,062	-0,164	0,017	0,329	0,585	56,978	21,550	21,089	20,907	20,837	20,935	21,057	20,733
247,333	0,223	0,619	1,061	-0,164	0,020	0,335	0,584	56,897	21,710	21,131	20,945	20,871	20,970	21,085	20,765
247,833	0,228	0,607	1,058	-0,167	-0,010	0,344	0,584	56,872	21,706	21,127	20,949	20,863	20,980	21,077	20,762
248,333	0,228	0,608	1,066	-0,164	0,012	0,341	0,584	56,768	21,570	21,051	20,869	20,799	20,914	21,014	20,695
248,833	0,225	0,616	1,058	-0,163	-0,002	0,335	0,584	56,781	21,715	21,133	20,950	20,864	20,986	21,090	20,767
249,333	0,222	0,621	1,055	-0,164	0,021	0,333	0,584	56,658	21,711	21,114	20,941	20,863	20,974	21,081	20,755
249,833	0,229	0,609	1,059	-0,167	0,045	0,344	0,584	56,737	21,762	21,128	20,940	20,875	20,976	21,078	20,761
250,333	0,231	0,604	1,059	-0,167	-0,005	0,345	0,584	56,761	21,817	21,114	20,929	20,850	20,964	21,066	20,741
250,833	0,226	0,617	1,051	-0,165	-0,012	0,334	0,583	56,856	21,835	21,143	20,959	20,879	20,987	21,083	20,763
251,334	0,225	0,623	1,054	-0,167	0,052	0,329	0,584	56,802	21,789	21,107	20,922	20,829	20,945	21,043	20,721
251,834	0,222	0,622	1,054	-0,166	0,003	0,333	0,583	56,891	21,851	21,175	20,974	20,899	21,012	21,106	20,782
252,334	0,222	0,613	1,054	-0,166	-0,001	0,340	0,582	56,836	21,812	21,087	20,887	20,799	20,921	21,013	20,696
252,834	0,222	0,609	1,056	-0,168	0,006	0,342	0,583	56,953	21,775	21,118	20,933	20,855	20,972	21,066	20,744
253,334	0,221	0,618	1,057	-0,166	-0,009	0,332	0,583	56,961	21,809	21,152	20,958	20,882	20,997	21,091	20,769
253,834	0,216	0,629	1,056	-0,166	-0,006	0,325	0,586	56,995	21,813	21,170	20,969	20,899	21,016	21,097	20,779
254,333	0,216	0,619	1,057	-0,166	0,022	0,336	0,583	56,965	21,803	21,123	20,927	20,857	20,959	21,057	20,732
254,833	0,219	0,603	1,053	-0,168	-0,022	0,348	0,583	56,951	21,713	21,124	20,932	20,853	20,961	21,061	20,736
255,333	0,222	0,597	1,048	-0,167	-0,003	0,352	0,582	56,954	21,807	21,154	20,946	20,864	20,983	21,071	20,752
255,833	0,222	0,596	1,056	-0,166	0,018	0,351	0,582	57,004	21,762	21,169	20,969	20,897	21,014	21,102	20,780
256,333	0,219	0,606	1,055	-0,166	0,000	0,343	0,582	56,950	21,681	21,139	20,958	20,885	21,004	21,091	20,768
256,833	0,222	0,600	1,052	-0,168	0,030	0,351	0,582	56,869	21,726	21,144	20,961	20,887	21,013	21,094	20,774
257,333	0,224	0,592	1,052	-0,166	0,036	0,356	0,582	56,884	21,806	21,167	20,983	20,916	21,026	21,115	20,790

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
239,334	46,085	41,126	79,109	85,978	0,501	0,415	2861,808	3232,888	67,171	10,577	9,884	-51,660	41,959	8,363	11,662	2022-03-23 14:52
239,834	46,038	41,064	79,177	85,975	0,505	0,415	2892,275	3199,389	82,272	10,038	10,346	-51,654	42,321	8,398	11,662	2022-03-23 14:52
240,334	45,955	41,003	79,157	86,061	0,504	0,415	2874,235	3250,031	92,067	9,873	10,637	-51,675	42,273	8,394	11,568	2022-03-23 14:53
240,833	45,841	40,951	79,189	86,062	0,496	0,415	2791,537	3233,329	84,372	10,007	10,523	-51,654	42,244	8,391	11,568	2022-03-23 14:53
241,333	45,994	40,970	79,312	86,076	0,493	0,415	2850,059	3183,170	68,272	10,255	10,256	-51,652	42,161	8,383	11,568	2022-03-23 14:54
241,833	46,101	41,069	79,339	86,111	0,495	0,415	2868,515	3187,090	69,030	10,192	10,267	-51,642	42,201	8,387	11,568	2022-03-23 14:54
242,333	46,078	41,127	79,353	86,126	0,495	0,416	2821,119	3189,340	80,581	9,934	10,471	-51,650	41,863	8,353	11,568	2022-03-23 14:55
242,833	46,159	41,138	79,380	86,177	0,495	0,415	2863,298	3198,416	88,564	9,768	10,728	-51,646	42,432	8,410	11,568	2022-03-23 14:55
243,333	46,103	41,047	79,377	86,173	0,498	0,416	2899,743	3199,382	72,811	10,086	10,460	-51,646	42,282	8,395	11,568	2022-03-23 14:56
243,833	45,958	40,975	79,352	86,215	0,494	0,416	2835,578	3231,451	63,897	10,121	10,386	-51,657	42,040	8,371	11,568	2022-03-23 14:56
244,334	46,072	40,968	79,457	86,246	0,494	0,415	2901,478	3195,529	55,013	10,178	10,297	-51,653	42,089	8,375	11,568	2022-03-23 14:57
244,834	46,323	41,052	79,434	86,267	0,495	0,415	3006,884	3215,053	53,003	10,101	10,349	-51,654	42,235	8,390	11,568	2022-03-23 14:57
245,334	46,390	41,118	79,255	86,299	0,488	0,415	2962,776	3314,574	57,787	10,095	10,398	-51,676	41,897	8,356	11,568	2022-03-23 14:58
245,834	46,310	41,133	79,322	86,297	0,492	0,415	2931,023	3283,736	55,277	10,355	10,201	-51,662	42,220	8,388	11,568	2022-03-23 14:58
246,334	46,164	41,153	79,377	86,366	0,493	0,415	2842,618	3288,183	54,774	10,475	10,031	-51,641	42,597	8,426	11,568	2022-03-23 14:59
246,834	46,012	41,101	79,483	86,387	0,499	0,415	2819,151	3249,323	51,418	10,626	9,881	-51,643	42,306	8,397	11,474	2022-03-23 14:59
247,333	45,820	41,008	79,644	86,428	0,497	0,416	2755,905	3193,710	67,420	10,378	10,047	-51,635	41,995	8,366	11,474	2022-03-23 15:00
247,833	45,844	40,936	79,723	86,443	0,497	0,416	2806,580	3163,297	75,821	10,104	10,334	-51,667	42,501	8,416	11,474	2022-03-23 15:00
248,333	45,896	40,958	79,776	86,441	0,497	0,415	2826,401	3136,455	71,704	10,307	10,230	-51,639	42,520	8,418	11,474	2022-03-23 15:01
248,833	45,995	40,995	79,809	86,525	0,495	0,415	2851,790	3160,255	59,299	10,480	10,042	-51,634	42,334	8,400	11,474	2022-03-23 15:01
249,333	46,036	41,047	79,741	86,562	0,497	0,416	2856,993	3211,784	62,985	10,444	9,976	-51,637	42,335	8,400	11,474	2022-03-23 15:02
249,833	46,027	41,071	79,761	86,600	0,496	0,416	2832,607	3219,901	82,265	10,104	10,315	-51,669	42,395	8,406	11,474	2022-03-23 15:02
250,333	46,025	41,095	79,738	86,604	0,497	0,416	2818,718	3231,893	74,007	10,191	10,338	-51,674	42,339	8,400	11,474	2022-03-23 15:03
250,833	46,186	41,211	79,830	86,653	0,496	0,416	2840,322	3211,617	67,347	10,542	10,015	-51,651	42,123	8,379	11,474	2022-03-23 15:03
251,334	46,122	41,161	79,830	86,634	0,496	0,416	2835,544	3205,024	61,822	10,593	9,884	-51,666	42,408	8,407	11,474	2022-03-23 15:04
251,834	45,927	40,974	79,919	86,716	0,494	0,416	2815,445	3200,718	58,699	10,474	9,982	-51,658	42,244	8,391	11,345	2022-03-23 15:04
252,334	45,899	40,874	79,943	86,764	0,499	0,416	2886,065	3211,402	57,602	10,284	10,205	-51,661	42,058	8,372	11,345	2022-03-23 15:05
252,834	46,123	40,993	79,894	86,786	0,495	0,416	2923,245	3244,885	56,522	10,266	10,254	-51,676	42,641	8,430	11,345	2022-03-23 15:05
253,334	46,386	41,117	79,832	86,808	0,496	0,416	3007,664	3285,899	55,003	10,595	9,975	-51,657	42,023	8,369	11,474	2022-03-23 15:06
253,834	46,255	41,133	79,762	86,841	0,492	0,416	2899,105	3334,787	41,261	10,755	9,740	-51,659	42,076	8,374	11,474	2022-03-23 15:06
254,333	46,129	41,093	79,885	86,873	0,484	0,416	2808,653	3290,302	46,378	10,274	10,077	-51,659	42,482	8,415	11,474	2022-03-23 15:07
254,833	46,127	41,006	80,133	86,932	0,488	0,416	2875,785	3203,336	52,803	10,035	10,433	-51,679	41,934	8,360	11,474	2022-03-23 15:07
255,333	46,122	40,964	80,131	86,937	0,491	0,416	2917,649	3206,632	58,116	9,907	10,563	-51,667	41,710	8,338	11,345	2022-03-23 15:08
255,833	46,062	40,940	80,092	86,998	0,491	0,416	2895,669	3253,760	58,289	9,970	10,539	-51,659	41,957	8,362	11,345	2022-03-23 15:08
256,333	46,087	41,008	80,100	86,949	0,493	0,416	2883,339	3226,437	49,989	10,183	10,300	-51,656	42,121	8,379	11,345	2022-03-23 15:09
256,833	46,173	41,099	80,127	86,987	0,491	0,416	2867,023	3232,105	61,471	9,855	10,526	-51,678	42,434	8,410	11,345	2022-03-23 15:09
257,333	46,181	41,151	80,182	87,057	0,491	0,416	2845,661	3238,548	63,820	9,847	10,667	-51,664	41,993	8,366	11,345	2022-03-23 15:10

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
257,833	0,223	0,609	1,057	-0,164	0,007	0,339	0,581	56,806	21,741	21,082	20,889	20,818	20,936	21,019	20,697
258,334	0,220	0,625	1,058	-0,164	0,022	0,328	0,582	56,855	21,832	21,158	20,975	20,891	21,007	21,094	20,769
258,834	0,219	0,625	1,056	-0,166	0,040	0,329	0,581	56,876	21,839	21,082	20,903	20,812	20,935	21,021	20,693
259,334	0,219	0,618	1,061	-0,167	0,021	0,336	0,580	56,973	21,889	21,110	20,916	20,837	20,956	21,038	20,712
259,834	0,221	0,603	1,057	-0,167	-0,002	0,349	0,580	56,978	21,811	21,074	20,873	20,803	20,913	20,998	20,669
260,334	0,222	0,599	1,057	-0,167	-0,008	0,349	0,580	57,030	21,894	21,136	20,927	20,846	20,969	21,054	20,724
260,833	0,219	0,615	1,055	-0,165	0,026	0,334	0,580	57,069	21,790	21,139	20,949	20,874	20,993	21,062	20,743
261,333	0,216	0,625	1,057	-0,167	0,004	0,329	0,580	57,050	21,785	21,181	20,985	20,933	21,030	21,117	20,791
261,833	0,217	0,618	1,049	-0,167	0,027	0,336	0,580	56,981	21,700	21,148	20,949	20,893	21,017	21,094	20,766
262,333	0,220	0,610	1,056	-0,167	0,041	0,342	0,580	57,065	21,831	21,170	20,974	20,909	21,034	21,104	20,784
262,833	0,221	0,613	1,054	-0,165	0,019	0,337	0,580	57,029	21,830	21,143	20,939	20,893	21,004	21,074	20,751
263,333	0,218	0,625	1,055	-0,164	0,025	0,327	0,580	56,976	21,860	21,123	20,921	20,856	20,978	21,047	20,723
263,833	0,215	0,630	1,060	-0,166	0,031	0,325	0,580	56,999	21,807	21,134	20,942	20,885	21,007	21,067	20,747
264,333	0,217	0,622	1,050	-0,169	0,004	0,332	0,580	57,086	21,798	21,156	20,960	20,903	21,032	21,090	20,767
264,834	0,217	0,622	1,048	-0,165	-0,013	0,330	0,579	57,178	21,722	21,146	20,960	20,911	21,036	21,098	20,772
265,334	0,215	0,634	1,052	-0,165	0,037	0,320	0,580	57,148	21,660	21,133	20,957	20,906	21,025	21,096	20,770
265,834	0,215	0,639	1,055	-0,164	0,026	0,316	0,579	57,314	21,738	21,134	20,962	20,893	21,019	21,091	20,762
266,334	0,214	0,646	1,056	-0,166	-0,009	0,309	0,579	57,297	21,643	21,087	20,912	20,854	20,975	21,039	20,716
266,834	0,214	0,646	1,052	-0,167	-0,002	0,313	0,579	57,421	21,731	21,157	20,985	20,930	21,048	21,117	20,788
267,334	0,215	0,633	1,053	-0,167	0,021	0,323	0,577	57,389	21,750	21,142	20,961	20,916	21,038	21,107	20,777
267,833	0,215	0,627	1,058	-0,167	0,006	0,327	0,579	57,335	21,804	21,157	20,980	20,933	21,045	21,121	20,784
268,333	0,219	0,614	1,048	-0,169	-0,012	0,339	0,577	57,201	21,744	21,145	20,974	20,922	21,042	21,107	20,779
268,833	0,220	0,607	1,056	-0,167	0,003	0,345	0,579	57,170	21,673	21,168	20,998	20,950	21,071	21,142	20,809
269,333	0,220	0,599	1,057	-0,168	-0,035	0,351	0,578	57,095	21,713	21,111	20,936	20,883	21,007	21,069	20,738
269,833	0,220	0,602	1,049	-0,167	0,036	0,345	0,577	57,235	21,821	21,109	20,934	20,879	20,995	21,064	20,734
270,333	0,214	0,625	1,058	-0,166	-0,010	0,325	0,577	57,219	21,824	21,172	20,987	20,935	21,049	21,126	20,790
270,833	0,215	0,628	1,056	-0,167	0,010	0,327	0,578	57,193	21,801	21,068	20,893	20,826	20,949	21,021	20,688
271,333	0,219	0,614	1,058	-0,167	0,011	0,339	0,577	57,327	21,930	21,149	20,950	20,894	21,017	21,080	20,746
271,834	0,223	0,606	1,060	-0,167	0,001	0,344	0,576	57,351	21,821	21,123	20,927	20,874	20,990	21,059	20,724
272,334	0,219	0,618	1,050	-0,167	-0,009	0,333	0,576	57,463	21,841	21,197	21,008	20,948	21,079	21,142	20,807
272,834	0,214	0,629	1,052	-0,168	0,026	0,326	0,576	57,408	21,808	21,137	20,956	20,900	21,017	21,089	20,751
273,334	0,213	0,625	1,051	-0,168	0,030	0,330	0,576	57,433	21,805	21,173	20,989	20,933	21,064	21,124	20,790
273,834	0,214	0,627	1,056	-0,166	0,061	0,327	0,576	57,404	21,864	21,159	20,982	20,930	21,056	21,123	20,780
274,334	0,214	0,623	1,054	-0,167	0,019	0,331	0,576	57,486	21,900	21,207	21,021	20,967	21,097	21,155	20,818
274,833	0,214	0,621	1,053	-0,167	0,012	0,331	0,576	57,439	21,850	21,118	20,937	20,871	20,998	21,074	20,728
275,333	0,211	0,627	1,059	-0,168	0,048	0,327	0,576	57,445	21,891	21,168	20,971	20,909	21,047	21,109	20,766
275,833	0,212	0,615	1,052	-0,168	0,026	0,340	0,576	57,493	21,871	21,188	20,995	20,939	21,066	21,131	20,791

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
257,833	45,945	41,110	80,242	87,086	0,494	0,416	2746,787	3225,548	58,645	10,472	10,169	-51,641	42,464	8,413	11,345	2022-03-23 15:10
258,334	45,914	41,044	80,400	87,096	0,493	0,416	2763,632	3154,139	51,408	10,680	9,850	-51,640	42,091	8,376	11,345	2022-03-23 15:11
258,834	45,776	40,979	80,573	87,131	0,489	0,416	2703,313	3092,782	49,821	10,575	9,880	-51,660	42,250	8,391	11,252	2022-03-23 15:11
259,334	45,864	40,949	80,644	87,157	0,493	0,416	2790,466	3070,225	51,320	10,344	10,084	-51,673	42,448	8,411	11,252	2022-03-23 15:12
259,834	46,057	41,003	80,572	87,200	0,486	0,416	2829,262	3124,772	58,197	9,974	10,463	-51,667	42,176	8,384	11,252	2022-03-23 15:12
260,334	46,177	41,055	80,467	87,239	0,489	0,416	2885,222	3192,137	59,795	10,055	10,457	-51,667	42,471	8,413	11,252	2022-03-23 15:13
260,833	46,235	41,077	80,380	87,280	0,491	0,416	2912,804	3251,448	46,364	10,513	10,030	-51,646	42,264	8,393	11,252	2022-03-23 15:13
261,333	46,255	41,099	80,399	87,338	0,492	0,416	2920,779	3270,018	43,525	10,605	9,864	-51,672	42,197	8,386	11,252	2022-03-23 15:14
261,833	46,300	41,130	80,386	87,330	0,488	0,416	2906,025	3274,770	48,464	10,347	10,092	-51,671	42,009	8,367	11,252	2022-03-23 15:14
262,333	46,263	41,060	80,459	87,356	0,495	0,416	2966,932	3251,927	55,430	10,217	10,250	-51,668	42,325	8,399	11,252	2022-03-23 15:15
262,833	46,179	41,003	80,431	87,371	0,491	0,416	2925,646	3269,073	55,095	10,381	10,116	-51,648	42,262	8,393	11,227	2022-03-23 15:15
263,333	45,999	40,968	80,492	87,428	0,490	0,416	2839,108	3270,790	45,214	10,736	9,799	-51,645	42,293	8,396	11,158	2022-03-23 15:16
263,833	46,087	40,966	80,557	87,498	0,487	0,417	2871,477	3273,523	41,684	10,706	9,752	-51,657	42,543	8,420	11,252	2022-03-23 15:16
264,333	46,021	41,029	80,657	87,523	0,496	0,416	2852,686	3235,321	45,792	10,502	9,958	-51,686	41,587	8,325	11,252	2022-03-23 15:17
264,834	45,929	41,081	80,606	87,533	0,493	0,416	2754,137	3264,615	45,660	10,615	9,906	-51,655	42,279	8,394	11,158	2022-03-23 15:17
265,334	45,876	41,101	80,919	87,553	0,491	0,417	2700,296	3129,312	39,830	10,943	9,587	-51,654	42,168	8,383	11,158	2022-03-23 15:18
265,834	45,891	41,107	81,020	87,570	0,494	0,417	2718,616	3088,882	39,585	10,988	9,494	-51,638	42,234	8,390	11,158	2022-03-23 15:18
266,334	45,921	41,078	81,018	87,594	0,496	0,417	2766,058	3103,195	37,916	11,256	9,270	-51,659	42,650	8,431	11,067	2022-03-23 15:19
266,834	45,929	41,012	80,986	87,655	0,494	0,417	2798,036	3147,740	40,593	11,035	9,393	-51,673	42,635	8,430	11,158	2022-03-23 15:19
267,334	46,018	40,962	81,014	87,720	0,488	0,417	2841,328	3163,853	41,848	10,723	9,692	-51,670	41,980	8,365	10,674	2022-03-23 15:20
267,833	46,133	40,962	80,969	87,778	0,494	0,417	2941,242	3212,750	41,333	10,639	9,818	-51,669	42,413	8,408	11,252	2022-03-23 15:20
268,333	46,158	41,037	80,786	87,861	0,491	0,417	2895,053	3338,091	53,003	10,247	10,163	-51,689	41,729	8,340	10,970	2022-03-23 15:21
268,833	46,175	41,079	80,900	87,881	0,489	0,417	2871,033	3293,806	52,757	10,114	10,353	-51,670	42,281	8,395	10,972	2022-03-23 15:21
269,333	46,199	41,130	81,004	87,915	0,487	0,417	2843,889	3261,658	55,850	9,921	10,540	-51,683	42,520	8,418	11,065	2022-03-23 15:22
269,833	46,257	41,120	81,012	87,912	0,493	0,417	2914,302	3257,446	46,623	10,185	10,362	-51,667	42,032	8,370	10,971	2022-03-23 15:22
270,333	46,216	41,081	81,017	87,965	0,495	0,417	2928,192	3282,838	38,072	10,825	9,761	-51,656	42,718	8,438	11,065	2022-03-23 15:23
270,833	46,197	41,035	81,015	88,020	0,494	0,417	2932,908	3305,000	43,203	10,610	9,815	-51,666	42,179	8,384	11,252	2022-03-23 15:23
271,333	45,826	41,007	81,052	88,035	0,492	0,417	2731,802	3296,600	53,643	10,217	10,173	-51,666	42,223	8,389	11,065	2022-03-23 15:24
271,834	45,827	41,005	81,387	88,079	0,493	0,417	2735,995	3159,159	61,894	10,176	10,325	-51,675	42,467	8,413	10,852	2022-03-23 15:24
272,334	45,869	41,001	81,523	88,101	0,487	0,417	2730,447	3106,868	46,972	10,566	9,981	-51,665	41,890	8,356	10,971	2022-03-23 15:25
272,834	46,061	41,005	81,574	88,098	0,493	0,417	2868,246	3080,378	34,301	10,745	9,772	-51,678	42,062	8,373	10,970	2022-03-23 15:25
273,334	46,132	40,985	81,404	88,175	0,491	0,417	2909,530	3196,932	37,236	10,570	9,907	-51,682	42,403	8,407	10,971	2022-03-23 15:26
273,834	46,127	41,008	81,293	88,195	0,490	0,417	2886,985	3258,766	37,222	10,705	9,815	-51,661	42,387	8,405	11,065	2022-03-23 15:26
274,334	46,275	41,131	81,341	88,251	0,492	0,417	2911,089	3262,824	39,999	10,491	9,943	-51,671	42,179	8,384	10,970	2022-03-23 15:27
274,833	46,198	41,186	81,371	88,328	0,491	0,418	2832,829	3288,512	36,315	10,594	9,924	-51,673	42,274	8,394	10,971	2022-03-23 15:27
275,333	46,168	41,084	81,426	88,348	0,492	0,417	2877,346	3270,533	29,269	10,676	9,809	-51,681	42,215	8,388	10,971	2022-03-23 15:28
275,833	46,090	40,951	81,507	88,328	0,494	0,417	2920,064	3222,501	37,660	10,176	10,201	-51,678	41,774	8,344	10,971	2022-03-23 15:28

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
276,333	0,215	0,602	1,054	-0,167	0,018	0,348	0,575	57,437	21,821	21,151	20,968	20,923	21,041	21,111	20,768
276,833	0,214	0,604	1,046	-0,170	0,024	0,346	0,574	57,372	21,798	21,128	20,945	20,891	21,014	21,090	20,741
277,333	0,213	0,606	1,049	-0,168	0,009	0,344	0,574	57,483	21,723	21,146	20,967	20,933	21,048	21,120	20,773
277,833	0,212	0,605	1,052	-0,168	0,010	0,346	0,574	57,363	21,756	21,144	20,965	20,924	21,052	21,115	20,773
278,334	0,213	0,598	1,052	-0,170	0,036	0,353	0,574	57,339	21,850	21,196	20,998	20,949	21,086	21,146	20,804
278,834	0,214	0,591	1,057	-0,170	0,007	0,359	0,574	57,413	21,857	21,138	20,955	20,902	21,040	21,103	20,753
279,334	0,214	0,598	1,056	-0,167	0,048	0,350	0,578	57,381	21,887	21,150	20,946	20,901	21,029	21,093	20,742
279,834	0,213	0,606	1,052	-0,170	0,016	0,344	0,574	57,441	21,941	21,182	20,982	20,930	21,057	21,123	20,777
280,334	0,213	0,608	1,053	-0,168	0,018	0,343	0,576	57,387	21,851	21,162	20,972	20,910	21,046	21,108	20,759
280,834	0,215	0,603	1,052	-0,170	0,050	0,349	0,574	57,378	21,764	21,120	20,937	20,887	21,014	21,069	20,732
281,333	0,216	0,595	1,054	-0,169	0,035	0,353	0,574	57,529	21,825	21,175	20,990	20,955	21,081	21,135	20,792
281,833	0,217	0,596	1,060	-0,170	-0,031	0,351	0,574	57,532	21,846	21,148	20,962	20,910	21,040	21,100	20,757
282,333	0,214	0,607	1,056	-0,170	-0,008	0,342	0,573	57,612	21,842	21,176	20,993	20,947	21,068	21,134	20,787
282,833	0,212	0,609	1,055	-0,169	0,045	0,343	0,580	57,607	21,843	21,202	21,016	20,963	21,096	21,154	20,808
283,333	0,214	0,602	1,057	-0,168	0,036	0,348	0,574	57,519	21,794	21,135	20,939	20,903	21,029	21,092	20,744
283,833	0,214	0,602	1,057	-0,169	0,030	0,348	0,573	57,438	21,881	21,193	21,004	20,963	21,092	21,143	20,804
284,334	0,215	0,612	1,050	-0,170	-0,001	0,339	0,573	57,462	21,896	21,184	20,998	20,950	21,085	21,133	20,793
284,834	0,215	0,618	1,049	-0,168	0,031	0,334	0,573	57,484	21,935	21,223	21,024	20,989	21,113	21,166	20,825
285,334	0,215	0,612	1,051	-0,169	0,034	0,341	0,573	57,457	21,965	21,209	21,006	20,961	21,103	21,148	20,802
285,834	0,219	0,604	1,061	-0,171	0,010	0,348	0,572	57,455	22,010	21,204	21,001	20,967	21,090	21,145	20,800
286,334	0,218	0,604	1,053	-0,170	0,025	0,345	0,572	57,522	21,988	21,215	21,006	20,972	21,095	21,143	20,807
286,833	0,215	0,613	1,056	-0,169	0,029	0,340	0,572	57,560	21,982	21,203	20,989	20,948	21,088	21,127	20,785
287,333	0,215	0,602	1,052	-0,168	0,014	0,349	0,572	57,668	21,867	21,203	21,015	20,962	21,101	21,150	20,801
287,833	0,217	0,593	1,056	-0,167	0,014	0,356	0,572	57,663	21,819	21,196	21,011	20,949	21,088	21,135	20,794
288,333	0,218	0,589	1,048	-0,169	-0,001	0,359	0,573	57,607	21,887	21,173	20,982	20,927	21,070	21,110	20,767
288,833	0,218	0,589	1,061	-0,170	0,025	0,359	0,572	57,594	22,042	21,188	20,986	20,932	21,075	21,119	20,770
289,333	0,214	0,594	1,052	-0,170	-0,001	0,355	0,572	57,602	22,010	21,183	20,966	20,914	21,059	21,096	20,754
289,833	0,213	0,600	1,049	-0,169	0,036	0,351	0,572	57,639	21,945	21,210	21,006	20,958	21,091	21,137	20,793
290,333	0,217	0,590	1,052	-0,171	0,038	0,360	0,571	57,656	21,870	21,243	21,028	20,996	21,131	21,169	20,828
290,834	0,217	0,588	1,049	-0,170	0,037	0,362	0,571	57,678	21,816	21,152	20,950	20,913	21,047	21,100	20,750
291,334	0,217	0,585	1,049	-0,170	0,016	0,363	0,571	57,722	21,756	21,161	20,974	20,937	21,065	21,114	20,770
291,834	0,216	0,590	1,050	-0,169	0,017	0,358	0,571	57,760	21,802	21,172	20,960	20,930	21,074	21,114	20,771
292,334	0,217	0,593	1,057	-0,171	0,043	0,356	0,571	57,856	21,797	21,192	21,007	20,966	21,107	21,157	20,806
292,834	0,216	0,597	1,054	-0,170	0,045	0,354	0,571	57,867	21,818	21,190	20,999	20,967	21,108	21,152	20,804
293,334	0,218	0,593	1,054	-0,171	0,022	0,357	0,570	57,690	21,865	21,206	21,017	20,974	21,115	21,158	20,812
293,833	0,216	0,593	1,058	-0,172	0,005	0,356	0,570	57,708	21,862	21,228	21,027	20,996	21,137	21,178	20,832
294,333	0,214	0,596	1,051	-0,171	0,004	0,352	0,570	57,744	21,896	21,221	21,025	20,998	21,146	21,186	20,835

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
276,333	46,006	40,941	81,542	88,399	0,489	0,418	2849,404	3240,557	40,423	10,013	10,446	-51,672	42,176	8,384	10,846	2022-03-23 15:29
276,833	46,066	41,011	81,590	88,393	0,490	0,417	2854,331	3212,627	37,318	10,120	10,387	-51,697	41,847	8,351	10,846	2022-03-23 15:29
277,333	46,163	41,051	81,560	88,449	0,491	0,417	2890,185	3254,462	36,812	10,166	10,330	-51,676	41,820	8,349	10,846	2022-03-23 15:30
277,833	46,119	41,008	81,604	88,558	0,493	0,417	2900,244	3284,208	32,037	10,093	10,376	-51,684	42,342	8,401	10,846	2022-03-23 15:30
278,334	46,045	41,023	81,610	88,523	0,492	0,417	2845,266	3264,637	35,007	9,909	10,575	-51,701	42,172	8,384	10,846	2022-03-23 15:31
278,834	46,048	41,091	81,652	88,562	0,491	0,417	2804,251	3264,706	39,832	9,749	10,756	-51,702	42,181	8,385	10,846	2022-03-23 15:31
279,334	46,138	41,133	81,706	88,577	0,492	0,418	2834,000	3248,187	36,979	10,028	10,502	-51,672	42,225	8,389	10,753	2022-03-23 15:32
279,834	45,919	41,102	81,775	88,600	0,497	0,417	2753,224	3223,908	35,150	10,188	10,311	-51,704	42,100	8,377	10,846	2022-03-23 15:32
280,334	45,756	41,011	81,979	88,620	0,492	0,418	2688,698	3138,748	36,233	10,204	10,284	-51,684	41,822	8,349	10,971	2022-03-23 15:33
280,834	45,832	41,014	82,121	88,641	0,495	0,418	2745,683	3081,820	42,188	9,974	10,456	-51,701	42,290	8,395	10,846	2022-03-23 15:33
281,333	46,016	41,033	82,097	88,636	0,490	0,418	2809,438	3093,905	41,934	9,864	10,601	-51,686	42,013	8,368	10,846	2022-03-23 15:34
281,833	46,137	41,002	82,110	88,701	0,490	0,418	2898,528	3117,949	45,205	9,942	10,534	-51,700	42,512	8,417	10,846	2022-03-23 15:34
282,333	46,159	40,973	81,942	88,731	0,493	0,418	2945,899	3208,532	34,903	10,253	10,246	-51,701	42,097	8,376	10,846	2022-03-23 15:35
282,833	46,144	41,015	81,850	88,753	0,491	0,418	2898,497	3261,992	34,715	10,147	10,283	-51,694	42,016	8,368	11,474	2022-03-23 15:35
283,333	46,204	41,089	81,885	88,799	0,491	0,418	2892,744	3269,536	38,326	10,056	10,449	-51,681	42,318	8,398	10,846	2022-03-23 15:36
283,833	46,276	41,140	81,921	88,867	0,492	0,418	2911,257	3281,993	39,745	10,065	10,446	-51,691	42,288	8,395	10,753	2022-03-23 15:36
284,334	46,180	41,093	81,920	88,889	0,494	0,418	2894,308	3293,542	40,581	10,375	10,169	-51,703	42,093	8,376	10,752	2022-03-23 15:37
284,834	46,062	40,993	82,009	88,885	0,490	0,418	2862,132	3250,097	41,092	10,466	10,029	-51,683	42,070	8,374	10,752	2022-03-23 15:37
285,334	46,029	40,928	82,104	88,957	0,494	0,418	2903,576	3238,930	41,515	10,205	10,240	-51,693	41,762	8,343	10,752	2022-03-23 15:38
285,834	46,074	40,979	82,080	88,940	0,496	0,418	2907,073	3241,385	53,170	10,048	10,430	-51,706	42,661	8,432	10,752	2022-03-23 15:38
286,334	46,010	41,041	82,116	88,955	0,493	0,418	2818,051	3231,182	45,615	10,211	10,337	-51,695	41,797	8,346	10,753	2022-03-23 15:39
286,833	46,047	41,086	82,193	88,993	0,491	0,418	2805,933	3213,974	40,677	10,273	10,192	-51,686	42,182	8,385	10,658	2022-03-23 15:39
287,333	46,026	41,101	82,288	88,999	0,493	0,418	2797,217	3169,785	42,773	9,956	10,462	-51,676	42,018	8,368	10,658	2022-03-23 15:40
287,833	46,140	41,094	82,281	89,047	0,494	0,418	2869,195	3196,770	47,719	9,792	10,688	-51,673	42,237	8,390	10,752	2022-03-23 15:40
288,333	45,998	41,049	82,247	89,061	0,492	0,418	2802,519	3220,594	49,147	9,728	10,776	-51,693	42,013	8,368	10,752	2022-03-23 15:41
288,833	45,894	40,979	82,360	89,127	0,487	0,418	2756,042	3198,906	45,879	9,753	10,762	-51,703	42,178	8,384	10,753	2022-03-23 15:41
289,333	45,983	40,967	82,505	89,183	0,495	0,418	2857,742	3156,337	35,805	9,899	10,640	-51,699	42,112	8,378	10,752	2022-03-23 15:42
289,833	45,972	41,022	82,388	89,192	0,493	0,418	2809,850	3215,311	35,380	9,968	10,522	-51,694	42,002	8,367	10,752	2022-03-23 15:42
290,333	46,017	41,076	82,428	89,196	0,489	0,418	2783,903	3198,475	46,541	9,687	10,808	-51,713	41,976	8,364	10,658	2022-03-23 15:43
290,834	46,072	41,119	82,509	89,178	0,492	0,418	2805,129	3152,001	45,622	9,666	10,852	-51,699	42,200	8,386	10,658	2022-03-23 15:43
291,334	46,014	41,126	82,462	89,208	0,495	0,418	2786,688	3187,509	46,884	9,612	10,894	-51,705	41,966	8,363	10,658	2022-03-23 15:44
291,834	46,149	41,071	82,492	89,259	0,498	0,418	2909,154	3197,745	42,106	9,800	10,729	-51,693	41,718	8,339	10,658	2022-03-23 15:44
292,334	46,034	41,000	82,435	89,281	0,495	0,418	2868,534	3235,784	46,628	9,851	10,672	-51,710	42,170	8,383	10,658	2022-03-23 15:45
292,834	45,980	40,942	82,471	89,326	0,492	0,418	2853,225	3239,553	44,056	9,903	10,614	-51,705	41,921	8,359	10,658	2022-03-23 15:45
293,334	45,857	40,974	82,580	89,313	0,491	0,418	2757,764	3184,350	47,889	9,800	10,701	-51,711	42,215	8,388	10,565	2022-03-23 15:46
293,833	46,097	41,075	82,628	89,338	0,491	0,418	2840,593	3173,462	42,349	9,841	10,668	-51,719	42,302	8,397	10,565	2022-03-23 15:46
294,333	46,143	41,010	82,578	89,373	0,494	0,418	2917,990	3211,925	36,897	9,951	10,569	-51,705	41,884	8,355	10,565	2022-03-23 15:47



## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
294,833	0,213	0,597	1,053	-0,171	0,025	0,355	0,571	57,766	21,915	21,207	21,008	20,975	21,121	21,158	20,812
295,333	0,217	0,582	1,047	-0,171	0,024	0,365	0,570	57,708	21,894	21,197	21,001	20,968	21,105	21,147	20,805
295,833	0,217	0,582	1,055	-0,170	0,004	0,365	0,570	57,726	21,874	21,226	21,026	21,001	21,147	21,182	20,836
296,333	0,215	0,586	1,053	-0,171	0,011	0,361	0,571	57,678	21,900	21,249	21,044	21,020	21,165	21,198	20,852
296,833	0,213	0,593	1,055	-0,172	0,038	0,355	0,570	57,684	21,846	21,209	21,012	20,991	21,122	21,169	20,821
297,333	0,212	0,592	1,056	-0,171	0,028	0,355	0,569	57,747	21,846	21,201	20,993	20,972	21,121	21,156	20,808
297,834	0,213	0,591	1,056	-0,173	0,032	0,359	0,570	57,708	21,812	21,162	20,965	20,951	21,089	21,125	20,774
298,334	0,215	0,586	1,052	-0,171	0,007	0,361	0,569	57,847	21,956	21,222	21,026	20,996	21,140	21,172	20,828
298,834	0,214	0,595	1,056	-0,170	0,026	0,352	0,569	57,877	21,663	21,209	21,015	21,004	21,151	21,182	20,838
299,334	0,213	0,601	1,054	-0,170	0,040	0,348	0,569	57,797	21,609	21,151	20,965	20,958	21,097	21,139	20,791
299,834	0,214	0,596	1,058	-0,171	0,003	0,354	0,569	57,804	21,506	21,175	20,994	20,994	21,140	21,179	20,833
300,333	0,215	0,591	1,054	-0,172	0,004	0,358	0,569	57,807	21,572	21,158	20,990	20,996	21,135	21,170	20,825
300,833	0,215	0,589	1,050	-0,173	0,026	0,358	0,570	57,854	21,581	21,166	20,988	20,993	21,142	21,167	20,827
301,333	0,216	0,591	1,049	-0,171	0,035	0,357	0,569	57,816	21,448	21,096	20,933	20,936	21,080	21,116	20,774
301,833	0,215	0,598	1,055	-0,173	0,042	0,352	0,568	57,977	21,672	21,194	21,020	21,025	21,177	21,209	20,862
302,333	0,215	0,589	1,055	-0,171	0,028	0,361	0,568	57,965	21,742	21,153	20,975	20,970	21,116	21,153	20,808
302,833	0,216	0,576	1,047	-0,173	0,023	0,371	0,568	57,920	21,779	21,187	21,003	21,005	21,159	21,182	20,838
303,333	0,219	0,573	1,053	-0,173	0,024	0,372	0,568	57,881	21,827	21,165	20,986	20,979	21,128	21,160	20,809
303,833	0,218	0,578	1,052	-0,170	0,003	0,366	0,568	57,857	21,851	21,124	20,930	20,921	21,074	21,089	20,753
304,334	0,216	0,586	1,051	-0,171	-0,012	0,361	0,568	57,774	21,844	21,115	20,909	20,906	21,053	21,079	20,736
304,834	0,219	0,579	1,063	-0,173	0,006	0,368	0,568	57,725	21,949	21,186	20,979	20,975	21,123	21,150	20,802
305,334	0,222	0,579	1,051	-0,171	-0,008	0,365	0,568	57,724	21,944	21,221	21,014	21,003	21,150	21,169	20,834
305,834	0,221	0,585	1,058	-0,172	-0,011	0,362	0,567	57,675	21,721	21,096	20,896	20,896	21,035	21,064	20,720
306,334	0,225	0,584	1,057	-0,172	0,011	0,363	0,569	57,853	21,695	21,212	21,015	21,020	21,175	21,195	20,852
306,834	0,224	0,582	1,059	-0,170	-0,016	0,363	0,568	57,803	21,739	21,150	20,946	20,963	21,114	21,129	20,789
307,333	0,222	0,587	1,052	-0,170	0,046	0,362	0,568	57,930	21,748	21,183	20,983	20,992	21,156	21,166	20,825
307,833	0,225	0,579	1,053	-0,170	-0,045	0,367	0,568	57,957	21,907	21,218	21,007	21,016	21,166	21,189	20,844
308,333	0,221	0,591	1,053	-0,168	0,048	0,355	0,567	57,868	21,911	21,165	20,960	20,979	21,119	21,132	20,796
308,833	0,218	0,612	1,054	-0,167	0,017	0,338	0,567	57,879	21,951	21,241	21,029	21,040	21,193	21,210	20,868
309,333	0,218	0,612	1,050	-0,170	0,036	0,341	0,566	57,849	21,828	21,202	20,989	20,994	21,149	21,168	20,825
309,833	0,225	0,594	1,059	-0,172	0,027	0,357	0,567	57,825	21,913	21,166	20,956	20,964	21,116	21,128	20,785
310,333	0,228	0,582	1,051	-0,171	-0,006	0,366	0,566	57,931	21,856	21,169	20,954	20,951	21,106	21,123	20,780
310,833	0,229	0,577	1,046	-0,173	-0,013	0,369	0,566	58,082	21,934	21,212	21,003	21,004	21,158	21,178	20,831
311,334	0,226	0,584	1,055	-0,170	-0,020	0,361	0,566	58,060	21,946	21,194	20,986	20,983	21,127	21,153	20,808
311,834	0,222	0,591	1,059	-0,171	0,016	0,357	0,567	58,087	21,855	21,216	21,009	21,028	21,173	21,187	20,846
312,334	0,224	0,586	1,056	-0,172	-0,002	0,362	0,566	58,015	21,755	21,174	20,972	20,988	21,138	21,154	20,810
312,834	0,226	0,579	1,060	-0,170	-0,013	0,368	0,566	57,994	21,903	21,209	21,013	21,017	21,171	21,182	20,840

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
294,833	45,434	39,846	82,578	89,389	0,493	0,442	3173,271	3407,903	39,882	9,766	10,637	-51,713	41,963	8,363	10,658	2022-03-23 15:47
295,333	45,606	39,441	82,736	89,324	0,487	0,473	3457,903	3526,985	45,714	9,528	10,964	-51,712	41,889	8,356	10,658	2022-03-23 15:48
295,833	46,228	39,825	82,439	89,360	0,484	0,473	3568,124	3703,796	45,549	9,560	10,948	-51,700	42,334	8,400	10,565	2022-03-23 15:48
296,333	46,340	40,208	82,137	89,355	0,486	0,473	3431,055	3865,005	39,171	9,728	10,824	-51,712	42,026	8,369	10,658	2022-03-23 15:49
296,833	46,111	40,343	82,255	89,353	0,491	0,473	3263,821	3799,613	33,642	9,867	10,638	-51,719	42,292	8,396	10,658	2022-03-23 15:49
297,333	46,050	40,225	82,559	89,332	0,492	0,473	3303,555	3626,507	35,056	9,808	10,658	-51,710	42,121	8,379	10,565	2022-03-23 15:50
297,834	46,007	40,144	82,609	89,277	0,488	0,473	3297,195	3570,057	39,586	9,677	10,762	-51,728	41,709	8,338	10,565	2022-03-23 15:50
298,334	46,060	40,081	82,624	89,255	0,494	0,473	3402,355	3548,400	41,012	9,705	10,823	-51,706	41,725	8,339	10,565	2022-03-23 15:51
298,834	45,867	40,037	82,521	89,236	0,495	0,473	3323,934	3595,202	38,156	9,953	10,558	-51,704	41,957	8,362	10,565	2022-03-23 15:51
299,334	45,982	40,053	82,462	89,202	0,494	0,473	3374,379	3609,037	36,611	10,046	10,440	-51,704	42,218	8,388	10,565	2022-03-23 15:52
299,834	46,285	40,140	82,376	89,211	0,495	0,473	3500,551	3657,537	39,240	9,775	10,632	-51,714	42,785	8,444	10,565	2022-03-23 15:52
300,333	46,254	40,208	82,112	89,174	0,495	0,473	3449,288	3780,050	40,757	9,731	10,743	-51,718	42,037	8,370	10,565	2022-03-23 15:53
300,833	46,246	40,227	82,198	89,140	0,489	0,473	3389,796	3715,935	41,100	9,776	10,754	-51,731	41,751	8,342	10,658	2022-03-23 15:53
301,333	45,992	40,173	82,286	89,142	0,491	0,473	3291,800	3668,836	43,613	9,813	10,699	-51,708	41,776	8,344	10,565	2022-03-23 15:54
301,833	45,911	40,123	82,324	89,106	0,493	0,473	3283,383	3630,996	37,988	9,949	10,552	-51,727	41,993	8,366	10,470	2022-03-23 15:54
302,333	45,928	40,084	82,421	89,133	0,496	0,473	3340,968	3593,655	41,849	9,608	10,830	-51,712	42,104	8,377	10,470	2022-03-23 15:55
302,833	45,802	40,053	82,332	89,128	0,495	0,473	3278,023	3637,619	45,451	9,316	11,121	-51,729	42,237	8,390	10,470	2022-03-23 15:55
303,333	45,976	40,030	82,366	89,060	0,494	0,473	3381,526	3582,176	51,833	9,349	11,148	-51,734	42,046	8,371	10,470	2022-03-23 15:56
303,833	46,123	40,086	82,241	89,058	0,490	0,473	3406,725	3649,455	47,560	9,519	10,990	-51,702	42,169	8,383	10,470	2022-03-23 15:56
304,334	46,148	40,148	82,132	88,975	0,494	0,473	3412,602	3661,571	42,105	9,676	10,820	-51,711	42,187	8,385	10,470	2022-03-23 15:57
304,834	46,276	40,196	82,034	88,967	0,494	0,473	3455,916	3710,122	56,365	9,374	11,045	-51,732	42,682	8,434	10,470	2022-03-23 15:57
305,334	46,183	40,213	82,085	88,940	0,495	0,473	3401,619	3669,066	55,098	9,567	10,963	-51,711	42,139	8,380	10,470	2022-03-23 15:58
305,834	46,179	40,159	82,077	88,931	0,493	0,473	3421,450	3666,506	60,688	9,586	10,854	-51,724	42,787	8,445	10,565	2022-03-23 15:58
306,334	46,036	40,108	81,995	88,912	0,496	0,473	3386,625	3701,447	64,910	9,585	10,882	-51,716	42,380	8,404	10,470	2022-03-23 15:59
306,834	45,824	40,079	82,089	88,881	0,496	0,473	3279,652	3633,621	62,560	9,550	10,900	-51,700	42,468	8,413	10,470	2022-03-23 15:59
307,333	45,766	40,061	82,224	88,856	0,494	0,473	3245,224	3548,798	58,116	9,640	10,854	-51,702	41,896	8,356	10,470	2022-03-23 16:00
307,833	46,061	40,065	82,191	88,847	0,495	0,473	3420,878	3561,205	68,014	9,463	11,009	-51,703	41,890	8,356	10,470	2022-03-23 16:00
308,333	46,102	40,085	81,937	88,810	0,493	0,473	3418,264	3675,539	50,381	9,967	10,636	-51,680	42,336	8,400	10,470	2022-03-23 16:01
308,833	46,130	40,169	81,937	88,794	0,494	0,473	3394,447	3667,068	47,718	10,420	10,153	-51,675	42,222	8,389	10,470	2022-03-23 16:01
309,333	46,153	40,259	81,899	88,785	0,491	0,473	3332,190	3683,051	50,987	10,218	10,237	-51,696	41,982	8,365	10,346	2022-03-23 16:02
309,833	46,263	40,259	81,923	88,825	0,496	0,473	3428,613	3692,325	70,690	9,707	10,702	-51,722	42,299	8,396	10,470	2022-03-23 16:02
310,333	46,140	40,151	81,866	88,742	0,493	0,473	3398,330	3677,642	75,051	9,482	10,990	-51,712	41,936	8,360	10,346	2022-03-23 16:03
310,833	46,021	40,065	81,918	88,737	0,495	0,472	3393,281	3644,059	74,803	9,447	11,056	-51,734	41,531	8,320	10,470	2022-03-23 16:03
311,334	46,029	40,096	81,861	88,694	0,495	0,473	3384,736	3654,489	63,484	9,684	10,837	-51,702	42,245	8,391	10,470	2022-03-23 16:04
311,834	46,001	40,145	81,854	88,677	0,493	0,472	3326,531	3647,781	58,118	9,779	10,711	-51,713	42,414	8,408	10,346	2022-03-23 16:04
312,334	46,025	40,122	81,865	88,669	0,493	0,472	3354,250	3635,950	65,668	9,563	10,869	-51,720	42,018	8,368	10,470	2022-03-23 16:05
312,834	45,978	40,082	81,831	88,605	0,495	0,473	3360,935	3622,675	68,183	9,487	11,034	-51,695	42,418	8,408	10,346	2022-03-23 16:05

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
313,334	0,226	0,577	1,054	-0,171	-0,002	0,370	0,566	57,971	21,989	21,222	21,024	21,020	21,167	21,186	20,842
313,834	0,227	0,577	1,057	-0,169	0,006	0,370	0,566	58,024	22,020	21,217	20,992	20,991	21,138	21,158	20,813
314,333	0,225	0,580	1,054	-0,169	0,032	0,365	0,566	58,054	22,045	21,219	20,996	20,984	21,138	21,143	20,806
314,833	0,224	0,587	1,059	-0,170	-0,012	0,362	0,566	58,037	21,930	21,226	21,010	20,997	21,148	21,156	20,819
315,333	0,229	0,579	1,054	-0,170	0,050	0,369	0,565	58,014	21,721	21,194	20,997	20,989	21,148	21,151	20,812
315,833	0,230	0,574	1,052	-0,168	-0,032	0,372	0,569	58,129	21,669	21,223	21,029	21,032	21,187	21,191	20,852
316,333	0,223	0,585	1,058	-0,168	0,015	0,361	0,566	58,100	21,546	21,149	20,979	20,973	21,133	21,135	20,799
316,833	0,220	0,599	1,054	-0,171	0,013	0,351	0,566	58,101	21,708	21,163	20,971	20,982	21,129	21,140	20,798
317,333	0,221	0,598	1,060	-0,171	0,008	0,353	0,566	58,068	21,773	21,200	21,013	21,021	21,176	21,182	20,838
317,833	0,224	0,586	1,057	-0,170	-0,004	0,363	0,566	57,889	21,920	21,186	20,976	20,978	21,134	21,148	20,801
318,334	0,227	0,576	1,063	-0,169	0,014	0,370	0,565	57,903	21,809	21,224	21,031	21,023	21,183	21,181	20,850
318,834	0,224	0,581	1,052	-0,170	0,054	0,364	0,566	57,879	21,792	21,205	21,009	21,007	21,167	21,162	20,832
319,334	0,221	0,588	1,057	-0,170	0,015	0,360	0,565	57,953	21,768	21,245	21,054	21,052	21,209	21,207	20,873
319,834	0,220	0,588	1,059	-0,171	0,004	0,360	0,565	58,041	21,641	21,236	21,053	21,066	21,222	21,221	20,887
320,334	0,221	0,584	1,053	-0,169	0,033	0,364	0,564	58,049	21,551	21,192	21,018	21,030	21,191	21,184	20,849
320,833	0,224	0,573	1,051	-0,170	0,026	0,374	0,564	58,086	21,502	21,174	20,998	21,037	21,188	21,179	20,847
321,333	0,224	0,569	1,053	-0,171	0,009	0,376	0,564	58,036	21,593	21,180	21,014	21,041	21,191	21,176	20,855
321,833	0,224	0,570	1,051	-0,170	0,008	0,375	0,564	58,015	21,762	21,192	21,018	21,043	21,196	21,191	20,854
322,333	0,223	0,576	1,055	-0,172	-0,002	0,370	0,564	58,012	21,773	21,178	20,988	21,010	21,163	21,168	20,826
322,833	0,223	0,576	1,059	-0,170	0,044	0,370	0,564	57,994	21,786	21,170	20,978	20,997	21,151	21,145	20,813
323,333	0,224	0,574	1,054	-0,171	0,016	0,373	0,564	58,025	21,915	21,231	21,031	21,046	21,202	21,192	20,859
323,833	0,224	0,575	1,050	-0,171	0,041	0,371	0,564	58,016	21,717	21,158	20,966	20,995	21,151	21,128	20,805
324,333	0,220	0,580	1,057	-0,171	0,010	0,367	0,564	58,020	21,728	21,181	20,979	21,004	21,169	21,160	20,826
324,834	0,219	0,586	1,053	-0,168	0,017	0,361	0,563	57,904	21,652	21,138	20,947	20,967	21,129	21,129	20,791
325,334	0,217	0,591	1,051	-0,170	0,018	0,358	0,564	57,882	21,627	21,156	20,966	20,998	21,149	21,141	20,811
325,834	0,218	0,583	1,056	-0,170	0,024	0,365	0,564	57,877	21,675	21,209	21,022	21,061	21,215	21,205	20,873
326,334	0,220	0,579	1,057	-0,171	0,025	0,368	0,564	57,940	21,785	21,218	21,036	21,077	21,226	21,212	20,887
326,834	0,220	0,580	1,060	-0,170	0,009	0,367	0,563	57,944	21,553	21,156	20,976	21,016	21,179	21,157	20,830
327,334	0,219	0,585	1,055	-0,171	0,051	0,362	0,563	57,885	21,713	21,121	20,948	20,979	21,132	21,112	20,791
327,833	0,218	0,587	1,051	-0,171	0,001	0,362	0,563	57,974	21,870	21,201	21,015	21,040	21,200	21,189	20,856
328,333	0,218	0,583	1,053	-0,170	0,031	0,364	0,563	58,001	21,783	21,184	20,997	21,026	21,182	21,166	20,837
328,833	0,218	0,584	1,051	-0,169	-0,007	0,364	0,563	57,927	21,579	21,102	20,916	20,962	21,104	21,101	20,770
329,333	0,219	0,580	1,058	-0,170	0,004	0,368	0,563	57,847	21,792	21,175	20,983	21,030	21,182	21,167	20,834
329,833	0,219	0,580	1,056	-0,172	-0,004	0,367	0,563	57,879	21,634	21,138	20,944	20,990	21,145	21,134	20,802
330,333	0,220	0,583	1,060	-0,172	0,000	0,363	0,563	57,901	21,609	21,111	20,924	20,979	21,131	21,111	20,784
330,833	0,218	0,592	1,049	-0,169	-0,008	0,356	0,563	57,914	21,695	21,128	20,932	21,000	21,142	21,125	20,801
331,333	0,221	0,584	1,053	-0,173	0,014	0,367	0,563	57,881	21,867	21,165	20,972	21,021	21,177	21,152	20,825

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
313,334	45,972	40,098	81,806	88,593	0,493	0,472	3334,894	3628,949	72,531	9,378	11,086	-51,709	42,634	8,430	10,346	2022-03-23 16:06
313,834	45,991	40,159	81,808	88,551	0,493	0,473	3310,659	3607,054	69,446	9,405	11,086	-51,690	42,345	8,401	10,346	2022-03-23 16:06
314,333	45,724	40,187	81,915	88,555	0,491	0,473	3134,130	3551,428	63,160	9,574	10,949	-51,690	42,170	8,384	10,346	2022-03-23 16:07
314,833	45,804	40,203	82,066	88,514	0,497	0,473	3207,459	3448,196	67,377	9,622	10,864	-51,697	42,872	8,453	10,470	2022-03-23 16:07
315,333	45,783	40,203	81,980	88,529	0,496	0,473	3185,038	3501,457	76,485	9,449	11,056	-51,704	42,697	8,436	10,317	2022-03-23 16:08
315,833	45,756	40,149	81,934	88,493	0,496	0,473	3203,105	3509,389	75,094	9,349	11,163	-51,681	41,974	8,364	10,346	2022-03-23 16:08
316,333	45,706	40,073	81,915	88,506	0,497	0,473	3224,770	3526,106	55,772	9,784	10,824	-51,684	42,098	8,376	10,346	2022-03-23 16:09
316,833	45,719	40,049	81,925	88,468	0,497	0,473	3247,762	3498,336	53,345	10,011	10,528	-51,708	42,115	8,378	10,346	2022-03-23 16:09
317,333	45,767	40,157	81,869	88,442	0,491	0,473	3172,917	3516,143	57,776	9,869	10,594	-51,705	42,629	8,429	10,346	2022-03-23 16:10
317,833	46,015	40,233	81,847	88,445	0,489	0,472	3253,799	3527,585	67,328	9,563	10,895	-51,702	42,146	8,381	10,346	2022-03-23 16:10
318,334	46,044	40,192	81,790	88,456	0,491	0,473	3310,480	3564,718	72,213	9,383	11,114	-51,694	41,980	8,365	10,253	2022-03-23 16:11
318,834	45,941	40,070	81,730	88,436	0,489	0,472	3307,072	3583,574	59,446	9,628	10,935	-51,702	42,242	8,391	10,346	2022-03-23 16:11
319,334	45,834	40,061	81,728	88,443	0,490	0,473	3257,608	3592,287	54,083	9,698	10,805	-51,704	42,017	8,368	10,346	2022-03-23 16:12
319,834	45,853	40,163	81,766	88,383	0,485	0,473	3179,802	3538,670	53,918	9,706	10,791	-51,706	42,461	8,412	10,253	2022-03-23 16:12
320,334	45,801	40,232	81,884	88,351	0,484	0,472	3101,376	3456,733	56,943	9,548	10,914	-51,689	42,085	8,375	10,253	2022-03-23 16:13
320,833	45,664	40,150	81,968	88,309	0,484	0,473	3071,535	3391,141	64,326	9,242	11,222	-51,701	41,607	8,327	10,253	2022-03-23 16:13
321,333	45,487	40,034	81,999	88,332	0,478	0,473	3003,714	3386,925	62,394	9,238	11,282	-51,714	42,148	8,381	10,253	2022-03-23 16:14
321,833	45,472	40,072	82,140	88,352	0,475	0,473	2951,752	3322,728	62,226	9,268	11,245	-51,698	42,151	8,382	10,253	2022-03-23 16:14
322,333	45,586	40,187	82,156	88,302	0,477	0,472	2966,738	3284,887	60,549	9,442	11,110	-51,721	42,047	8,371	10,253	2022-03-23 16:15
322,833	45,476	40,204	82,166	88,304	0,471	0,473	2860,762	3283,970	60,116	9,384	11,103	-51,703	42,235	8,390	10,253	2022-03-23 16:15
323,333	45,416	40,073	82,355	88,284	0,469	0,473	2884,551	3171,124	65,921	9,307	11,179	-51,707	42,157	8,382	10,253	2022-03-23 16:16
323,833	45,705	40,028	82,298	88,310	0,470	0,473	3071,163	3216,432	60,528	9,434	11,120	-51,711	42,507	8,417	10,253	2022-03-23 16:16
324,333	45,734	40,108	82,043	88,297	0,468	0,472	3030,535	3342,201	52,837	9,529	11,006	-51,711	42,351	8,402	10,253	2022-03-23 16:17
324,834	45,755	40,162	82,026	88,307	0,468	0,473	3014,274	3358,295	48,555	9,731	10,823	-51,684	42,454	8,412	10,159	2022-03-23 16:17
325,334	45,788	40,197	82,063	88,340	0,466	0,472	2998,873	3355,583	44,610	9,759	10,732	-51,703	42,114	8,378	10,253	2022-03-23 16:18
325,834	45,680	40,182	82,073	88,340	0,465	0,473	2942,778	3352,658	51,416	9,465	10,960	-51,704	42,454	8,412	10,159	2022-03-23 16:18
326,334	45,550	40,067	82,173	88,355	0,462	0,473	2920,506	3307,463	52,759	9,473	11,037	-51,709	41,989	8,366	10,159	2022-03-23 16:19
326,834	45,473	40,034	82,279	88,341	0,461	0,473	2889,840	3243,822	51,494	9,501	11,017	-51,701	42,393	8,406	10,159	2022-03-23 16:19
327,334	45,516	40,138	82,291	88,354	0,462	0,473	2858,336	3244,030	49,976	9,694	10,870	-51,706	42,333	8,400	10,159	2022-03-23 16:20
327,833	45,462	40,205	82,324	88,362	0,459	0,473	2776,162	3229,584	48,816	9,612	10,870	-51,714	42,094	8,376	10,159	2022-03-23 16:20
328,333	45,410	40,177	82,487	88,339	0,458	0,473	2759,282	3130,401	46,209	9,601	10,908	-51,697	42,129	8,379	10,159	2022-03-23 16:21
328,833	45,276	40,081	82,510	88,337	0,457	0,473	2734,811	3118,314	47,888	9,603	10,907	-51,694	42,050	8,372	10,159	2022-03-23 16:21
329,333	45,354	40,029	82,575	88,369	0,461	0,473	2826,759	3098,577	50,828	9,464	11,050	-51,697	42,297	8,396	10,159	2022-03-23 16:22
329,833	45,298	40,099	82,457	88,414	0,458	0,473	2742,191	3187,000	51,986	9,514	11,012	-51,722	41,956	8,362	10,159	2022-03-23 16:22
330,333	45,379	40,165	82,588	88,390	0,454	0,473	2723,584	3104,775	51,964	9,665	10,879	-51,716	42,469	8,413	10,159	2022-03-23 16:23
330,833	45,391	40,193	82,651	88,441	0,450	0,473	2695,857	3097,342	45,960	9,839	10,667	-51,693	41,785	8,345	10,159	2022-03-23 16:23
331,333	45,617	40,179	82,732	88,430	0,452	0,473	2827,541	3049,096	63,111	9,342	10,995	-51,726	42,137	8,380	10,159	2022-03-23 16:24

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
331,834	0,226	0,564	1,058	-0,171	-0,036	0,380	0,563	57,786	21,907	21,170	20,962	21,008	21,158	21,140	20,813
332,334	0,224	0,566	1,050	-0,172	-0,011	0,377	0,562	57,830	21,849	21,211	21,006	21,042	21,198	21,180	20,852
332,834	0,223	0,580	1,055	-0,171	-0,005	0,365	0,562	57,787	21,759	21,158	20,967	21,014	21,165	21,141	20,818
333,334	0,220	0,585	1,045	-0,172	0,039	0,363	0,562	57,737	21,682	21,188	21,003	21,048	21,213	21,186	20,861
333,834	0,223	0,578	1,057	-0,171	0,020	0,370	0,562	57,786	21,507	21,130	20,956	21,014	21,168	21,143	20,821
334,333	0,227	0,568	1,056	-0,172	0,008	0,378	0,562	57,864	21,646	21,178	21,009	21,074	21,223	21,204	20,878
334,833	0,227	0,570	1,063	-0,171	0,017	0,374	0,562	57,775	21,515	21,048	20,880	20,950	21,100	21,073	20,753
335,333	0,227	0,570	1,052	-0,174	0,048	0,377	0,562	57,896	21,749	21,155	20,971	21,039	21,196	21,162	20,842
335,833	0,227	0,563	1,057	-0,172	0,004	0,381	0,562	57,979	21,753	21,190	21,001	21,073	21,222	21,194	20,874
336,333	0,228	0,562	1,061	-0,170	0,028	0,381	0,562	57,890	21,543	21,145	20,967	21,051	21,210	21,173	20,856
336,833	0,229	0,565	1,054	-0,172	0,008	0,380	0,561	57,865	21,513	21,107	20,928	21,013	21,177	21,129	20,821
337,333	0,228	0,568	1,054	-0,172	0,023	0,376	0,561	57,902	21,468	21,113	20,930	21,035	21,182	21,143	20,834
337,833	0,226	0,570	1,055	-0,171	-0,011	0,374	0,561	57,940	21,446	21,109	20,936	21,045	21,196	21,153	20,845
338,334	0,224	0,576	1,049	-0,172	-0,019	0,369	0,561	58,030	21,611	21,106	20,934	21,028	21,174	21,135	20,828
338,834	0,227	0,572	1,054	-0,170	-0,016	0,374	0,562	58,068	21,800	21,167	20,977	21,074	21,224	21,173	20,868
339,334	0,230	0,567	1,056	-0,172	-0,015	0,378	0,561	57,896	21,756	21,137	20,949	21,034	21,181	21,148	20,833
339,834	0,230	0,568	1,065	-0,170	-0,008	0,377	0,561	57,803	21,789	21,162	20,964	21,046	21,202	21,172	20,857
340,334	0,231	0,563	1,056	-0,172	-0,012	0,382	0,561	57,811	21,578	21,135	20,954	21,055	21,205	21,158	20,854
340,834	0,232	0,559	1,059	-0,170	0,043	0,385	0,560	57,834	21,451	21,098	20,919	21,019	21,173	21,126	20,825
341,333	0,233	0,554	1,057	-0,169	-0,024	0,388	0,560	57,811	21,455	21,081	20,913	21,020	21,178	21,124	20,824
341,833	0,233	0,557	1,055	-0,172	0,023	0,387	0,560	57,723	21,557	21,090	20,912	21,026	21,177	21,129	20,826
342,333	0,234	0,553	1,053	-0,171	0,025	0,391	0,560	57,783	21,660	21,135	20,959	21,060	21,205	21,163	20,856
342,833	0,235	0,550	1,057	-0,170	0,008	0,392	0,560	57,799	21,431	21,082	20,909	21,021	21,166	21,118	20,821
343,333	0,235	0,552	1,058	-0,173	0,023	0,390	0,560	57,717	21,589	21,061	20,886	20,998	21,135	21,090	20,787
343,833	0,236	0,550	1,053	-0,172	0,012	0,392	0,560	57,788	21,746	21,098	20,917	21,013	21,165	21,110	20,810
344,333	0,238	0,547	1,057	-0,171	0,064	0,395	0,560	57,758	21,700	21,087	20,908	21,001	21,144	21,109	20,804
344,833	0,242	0,545	1,056	-0,172	0,007	0,396	0,560	57,645	21,604	21,097	20,915	21,011	21,159	21,120	20,813
345,334	0,239	0,552	1,053	-0,170	0,031	0,389	0,559	57,598	21,508	21,111	20,930	21,043	21,190	21,151	20,845
345,834	0,232	0,560	1,058	-0,171	0,020	0,383	0,560	57,737	21,499	21,078	20,911	21,028	21,174	21,126	20,821
346,334	0,230	0,562	1,055	-0,172	-0,017	0,381	0,560	57,819	21,643	21,120	20,952	21,060	21,204	21,159	20,853
346,834	0,231	0,564	1,053	-0,171	-0,013	0,381	0,560	57,793	21,530	21,111	20,938	21,052	21,194	21,148	20,844
347,334	0,235	0,559	1,055	-0,170	0,045	0,384	0,559	57,796	21,592	21,059	20,891	20,982	21,131	21,082	20,781
347,834	0,235	0,562	1,060	-0,173	-0,018	0,381	0,560	57,908	21,675	21,126	20,944	21,044	21,197	21,148	20,847
348,333	0,231	0,566	1,048	-0,173	0,000	0,377	0,559	57,925	21,768	21,128	20,942	21,054	21,201	21,147	20,843
348,833	0,229	0,568	1,056	-0,171	0,052	0,376	0,558	57,858	21,676	21,081	20,894	20,995	21,149	21,093	20,795
349,333	0,232	0,561	1,055	-0,173	0,033	0,383	0,558	57,787	21,717	21,107	20,929	21,033	21,181	21,134	20,832
349,833	0,240	0,548	1,051	-0,170	0,051	0,393	0,557	57,719	21,795	21,126	20,928	21,042	21,189	21,144	20,844

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
331,834	45,540	40,072	82,535	88,471	0,454	0,473	2861,284	3175,314	66,176	9,091	11,409	-51,714	42,345	8,401	10,159	2022-03-23 16:24
332,334	45,448	40,000	82,483	88,476	0,452	0,473	2833,799	3206,141	61,981	9,224	11,309	-51,716	41,757	8,342	10,159	2022-03-23 16:25
332,834	45,530	40,062	82,573	88,486	0,451	0,473	2841,055	3163,798	57,209	9,602	10,961	-51,707	42,051	8,372	10,159	2022-03-23 16:25
333,334	45,557	40,122	82,586	88,502	0,453	0,473	2833,373	3165,461	53,259	9,653	10,880	-51,719	41,873	8,354	10,065	2022-03-23 16:26
333,834	45,695	40,142	82,536	88,518	0,452	0,473	2891,548	3200,026	66,619	9,349	11,105	-51,708	42,109	8,377	10,159	2022-03-23 16:26
334,333	45,502	40,142	82,612	88,525	0,449	0,473	2771,961	3163,946	71,040	9,144	11,343	-51,718	42,376	8,404	10,159	2022-03-23 16:27
334,833	45,562	40,130	82,700	88,526	0,453	0,473	2833,685	3115,841	68,600	9,351	11,231	-51,712	42,601	8,426	10,159	2022-03-23 16:27
335,333	45,530	40,118	82,607	88,521	0,453	0,473	2823,650	3164,413	71,960	9,129	11,325	-51,737	41,603	8,327	10,065	2022-03-23 16:28
335,833	45,307	40,096	82,621	88,517	0,451	0,473	2705,598	3153,940	71,318	9,054	11,417	-51,719	42,699	8,436	10,065	2022-03-23 16:28
336,333	45,333	40,087	82,832	88,542	0,457	0,473	2758,728	3053,764	74,387	9,061	11,430	-51,698	42,164	8,383	10,065	2022-03-23 16:29
336,833	45,169	40,099	82,862	88,566	0,453	0,473	2644,538	3049,722	76,567	9,115	11,414	-51,721	42,366	8,403	10,065	2022-03-23 16:29
337,333	45,482	40,124	82,901	88,556	0,451	0,473	2782,440	3024,473	70,112	9,269	11,282	-51,716	41,828	8,349	10,065	2022-03-23 16:30
337,833	45,451	40,114	82,750	88,564	0,450	0,473	2764,176	3110,555	66,593	9,284	11,218	-51,713	42,125	8,379	10,065	2022-03-23 16:30
338,334	45,546	40,097	82,729	88,598	0,452	0,473	2836,268	3142,088	63,065	9,444	11,056	-51,717	41,548	8,321	10,065	2022-03-23 16:31
338,834	45,695	40,097	82,713	88,624	0,453	0,473	2919,118	3162,796	76,398	9,225	11,222	-51,701	42,439	8,410	10,065	2022-03-23 16:31
339,334	45,505	40,135	82,721	88,627	0,451	0,473	2789,662	3157,601	79,757	9,196	11,331	-51,723	42,442	8,410	10,065	2022-03-23 16:32
339,834	45,470	40,163	82,793	88,666	0,451	0,473	2759,227	3141,180	76,653	9,186	11,317	-51,700	42,710	8,437	10,066	2022-03-23 16:32
340,334	45,546	40,183	82,786	88,649	0,452	0,473	2793,199	3135,988	84,700	9,000	11,468	-51,723	42,353	8,402	10,065	2022-03-23 16:33
340,834	45,587	40,167	82,841	88,633	0,451	0,473	2814,955	3098,003	80,767	8,963	11,542	-51,704	42,293	8,396	9,971	2022-03-23 16:33
341,333	45,626	40,118	82,858	88,646	0,454	0,473	2882,099	3096,125	86,582	8,897	11,633	-51,688	42,179	8,384	9,971	2022-03-23 16:34
341,833	45,543	40,100	82,827	88,692	0,454	0,473	2848,276	3137,611	84,963	8,905	11,610	-51,719	42,384	8,405	10,065	2022-03-23 16:34
342,333	45,398	40,083	82,853	88,664	0,451	0,473	2762,374	3108,279	88,546	8,788	11,720	-51,708	42,004	8,367	9,971	2022-03-23 16:35
342,833	45,378	40,064	82,894	88,699	0,454	0,473	2778,075	3105,788	92,341	8,733	11,761	-51,704	41,956	8,362	9,971	2022-03-23 16:35
343,333	45,308	40,045	82,868	88,694	0,454	0,473	2754,131	3116,112	90,247	8,824	11,690	-51,728	42,306	8,397	9,971	2022-03-23 16:36
343,833	45,327	40,114	82,891	88,675	0,450	0,473	2700,623	3093,681	94,355	8,733	11,748	-51,715	42,190	8,386	9,971	2022-03-23 16:36
344,333	45,419	40,175	83,004	88,651	0,451	0,473	2724,324	3020,572	100,041	8,646	11,843	-51,710	42,293	8,396	9,971	2022-03-23 16:37
344,833	45,565	40,184	82,980	88,705	0,451	0,473	2795,361	3061,854	109,784	8,663	11,875	-51,719	42,408	8,407	9,971	2022-03-23 16:37
345,334	45,434	40,110	82,894	88,732	0,452	0,473	2769,159	3122,833	93,525	8,906	11,668	-51,701	41,909	8,358	9,846	2022-03-23 16:38
345,834	45,355	40,022	82,937	88,702	0,451	0,473	2769,232	3083,591	79,509	9,040	11,476	-51,714	42,501	8,416	9,971	2022-03-23 16:38
346,334	45,243	40,002	82,930	88,698	0,452	0,473	2727,782	3085,855	77,664	9,082	11,416	-51,719	41,927	8,359	9,971	2022-03-23 16:39
346,834	45,382	40,063	82,950	88,703	0,451	0,473	2760,418	3077,066	82,864	9,079	11,418	-51,705	42,007	8,367	9,971	2022-03-23 16:39
347,334	45,490	40,103	82,936	88,755	0,452	0,473	2802,287	3113,439	91,998	8,964	11,534	-51,701	41,885	8,355	9,846	2022-03-23 16:40
347,834	45,356	40,132	82,929	88,770	0,453	0,473	2726,264	3123,786	88,061	9,113	11,418	-51,726	42,483	8,415	9,971	2022-03-23 16:40
348,333	45,337	40,139	82,953	88,738	0,448	0,473	2683,506	3095,566	77,229	9,176	11,308	-51,732	41,889	8,355	9,971	2022-03-23 16:41
348,833	45,639	40,146	83,076	88,682	0,447	0,473	2830,161	2999,276	75,897	9,164	11,279	-51,714	42,274	8,394	9,846	2022-03-23 16:41
349,333	45,637	40,141	82,823	88,776	0,452	0,473	2859,470	3184,413	91,439	8,932	11,503	-51,726	42,284	8,395	9,846	2022-03-23 16:42
349,833	45,535	40,139	82,659	88,770	0,453	0,473	2816,810	3266,686	103,754	8,657	11,798	-51,697	42,043	8,371	9,846	2022-03-23 16:42

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
350,333	0,237	0,552	1,054	-0,170	0,003	0,388	0,558	57,793	21,809	21,128	20,937	21,041	21,194	21,136	20,841
350,833	0,233	0,562	1,056	-0,170	0,003	0,380	0,558	57,791	21,682	21,144	20,964	21,069	21,219	21,164	20,870
351,333	0,230	0,566	1,058	-0,171	0,039	0,378	0,558	57,752	21,572	21,082	20,901	21,022	21,168	21,120	20,819
351,833	0,233	0,561	1,065	-0,170	0,034	0,383	0,558	57,745	21,629	21,079	20,911	21,024	21,164	21,112	20,818
352,334	0,232	0,562	1,061	-0,170	-0,016	0,382	0,558	57,726	21,664	21,133	20,958	21,080	21,222	21,166	20,870
352,834	0,232	0,561	1,051	-0,173	0,028	0,382	0,558	57,601	21,757	21,099	20,918	21,022	21,169	21,112	20,820
353,334	0,230	0,569	1,048	-0,173	0,016	0,374	0,558	57,561	21,773	21,126	20,943	21,052	21,209	21,143	20,849
353,834	0,228	0,576	1,054	-0,171	-0,020	0,370	0,558	57,553	21,742	21,142	20,955	21,067	21,217	21,159	20,865
354,334	0,234	0,574	1,055	-0,171	-0,025	0,373	0,558	57,593	21,678	21,086	20,912	21,017	21,179	21,112	20,819
354,833	0,232	0,570	1,051	-0,172	0,028	0,376	0,557	57,703	21,779	21,160	20,980	21,094	21,242	21,190	20,890
355,333	0,231	0,570	1,062	-0,171	-0,008	0,375	0,558	57,664	21,702	21,098	20,910	21,031	21,177	21,127	20,830
355,833	0,230	0,571	1,054	-0,173	0,049	0,375	0,558	57,779	21,810	21,157	20,966	21,070	21,238	21,169	20,877
356,333	0,231	0,566	1,052	-0,173	0,030	0,379	0,558	57,786	21,694	21,125	20,940	21,057	21,207	21,138	20,854
356,833	0,239	0,555	1,055	-0,174	0,020	0,388	0,557	57,792	21,580	21,083	20,898	21,031	21,182	21,114	20,829
357,333	0,240	0,559	1,051	-0,173	0,006	0,383	0,557	57,766	21,667	21,126	20,928	21,075	21,218	21,151	20,866
357,833	0,236	0,566	1,052	-0,172	0,008	0,378	0,557	57,744	21,539	21,110	20,937	21,079	21,231	21,164	20,876
358,333	0,234	0,567	1,057	-0,172	0,033	0,377	0,557	57,665	21,536	21,068	20,895	21,039	21,182	21,119	20,836
358,834	0,233	0,564	1,053	-0,173	0,015	0,381	0,557	57,714	21,663	21,124	20,943	21,092	21,233	21,176	20,882
359,334	0,235	0,562	1,057	-0,173	0,017	0,381	0,557	57,681	21,572	21,058	20,878	21,027	21,173	21,116	20,823
359,834	0,235	0,565	1,050	-0,173	-0,018	0,379	0,557	57,663	21,725	21,124	20,946	21,092	21,246	21,165	20,884
360,334	0,237	0,561	1,052	-0,172	0,014	0,383	0,557	57,737	21,714	21,135	20,952	21,100	21,244	21,176	20,890
360,834	0,236	0,563	1,057	-0,173	0,006	0,380	0,557	57,628	21,575	21,087	20,920	21,063	21,213	21,141	20,856
361,334	0,235	0,561	1,052	-0,173	-0,022	0,382	0,556	57,668	21,636	21,151	20,967	21,120	21,263	21,197	20,911
361,833	0,241	0,554	1,052	-0,173	0,008	0,388	0,556	57,565	21,720	21,107	20,927	21,069	21,221	21,146	20,865
362,333	0,245	0,551	1,056	-0,172	0,018	0,390	0,556	57,621	21,778	21,131	20,940	21,088	21,235	21,165	20,879
362,833	0,242	0,557	1,046	-0,171	-0,025	0,384	0,556	57,642	21,693	21,077	20,888	21,033	21,183	21,109	20,825
363,333	0,236	0,565	1,057	-0,173	0,025	0,378	0,556	57,638	21,659	21,100	20,916	21,065	21,218	21,135	20,859
363,833	0,234	0,568	1,055	-0,171	0,002	0,376	0,556	57,690	21,761	21,116	20,936	21,080	21,227	21,157	20,874
364,333	0,241	0,564	1,049	-0,171	0,029	0,381	0,558	57,713	21,775	21,163	20,975	21,128	21,279	21,199	20,917
364,833	0,240	0,564	1,051	-0,171	0,021	0,378	0,556	57,652	21,688	21,115	20,937	21,081	21,236	21,159	20,877
365,333	0,230	0,573	1,051	-0,171	0,021	0,370	0,557	57,783	21,702	21,131	20,955	21,103	21,242	21,167	20,889
365,834	0,225	0,584	1,049	-0,169	0,030	0,362	0,556	57,719	21,655	21,121	20,950	21,104	21,248	21,168	20,890
366,334	0,225	0,584	1,052	-0,186	0,026	0,364	0,573	58,277	21,857	20,965	20,829	21,058	21,205	21,117	20,845
366,834	0,274	0,418	1,050	-0,194	-0,014	0,558	0,568	61,732	22,840	20,969	20,828	21,079	21,234	21,146	20,867
367,334	0,367	0,308	1,047	-0,228	0,022	0,589	0,589	67,841	24,833	21,018	20,875	21,124	21,284	21,192	20,914
367,834	0,381	0,366	1,047	0,450	0,032	0,539	0,578	69,772	23,990	21,002	20,865	21,125	21,266	21,186	20,906
368,333	0,266	0,260	1,051	0,068	0,007	0,675	0,562	70,795	23,800	20,971	20,821	21,092	21,238	21,155	20,875

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
350,333	45,345	40,134	82,921	88,761	0,453	0,473	2720,309	3121,557	92,306	8,855	11,655	-51,704	42,299	8,396	9,846	2022-03-23 16:43
350,833	45,521	40,161	83,042	88,801	0,450	0,473	2778,781	3078,698	80,183	9,139	11,396	-51,700	42,094	8,376	9,846	2022-03-23 16:43
351,333	45,406	40,167	83,026	88,765	0,451	0,473	2721,614	3069,599	78,196	9,113	11,347	-51,711	42,401	8,406	9,846	2022-03-23 16:44
351,833	45,560	40,098	83,141	88,789	0,450	0,473	2828,725	3020,692	87,476	8,946	11,494	-51,704	42,418	8,408	9,846	2022-03-23 16:44
352,334	45,531	40,020	82,906	88,744	0,449	0,473	2851,166	3121,080	80,846	9,063	11,454	-51,704	42,608	8,427	9,846	2022-03-23 16:45
352,834	45,521	40,041	82,834	88,798	0,453	0,473	2861,649	3187,221	84,795	9,056	11,464	-51,730	42,055	8,372	9,846	2022-03-23 16:45
353,334	45,628	40,105	82,738	88,779	0,451	0,473	2868,183	3229,495	72,225	9,320	11,217	-51,726	41,833	8,350	9,846	2022-03-23 16:46
353,834	45,197	40,187	82,840	88,798	0,451	0,473	2601,649	3185,588	79,771	9,373	11,112	-51,714	42,130	8,380	9,846	2022-03-23 16:46
354,334	45,321	40,216	83,060	88,834	0,452	0,473	2659,897	3087,564	86,148	9,329	11,186	-51,712	42,572	8,423	9,846	2022-03-23 16:47
354,833	45,403	40,124	83,075	88,905	0,454	0,473	2760,866	3116,490	82,610	9,250	11,267	-51,717	42,139	8,380	9,753	2022-03-23 16:47
355,333	45,222	40,016	83,047	88,968	0,452	0,473	2713,007	3167,923	79,181	9,297	11,252	-51,713	42,310	8,397	9,846	2022-03-23 16:48
355,833	45,618	40,031	83,068	89,379	0,451	0,473	2898,766	3374,847	78,082	9,250	11,240	-51,735	42,011	8,368	9,971	2022-03-23 16:48
356,333	45,480	40,102	82,862	89,354	0,450	0,473	2789,941	3471,436	87,884	9,049	11,384	-51,733	42,149	8,381	9,847	2022-03-23 16:49
356,833	45,649	40,173	82,843	89,323	0,452	0,473	2847,672	3465,237	106,175	8,830	11,647	-51,744	41,528	8,319	9,846	2022-03-23 16:49
357,333	45,368	40,210	82,885	89,183	0,450	0,473	2673,710	3367,704	99,122	9,087	11,484	-51,731	42,060	8,373	9,846	2022-03-23 16:50
357,833	45,295	40,197	83,113	89,263	0,448	0,473	2633,094	3290,121	92,176	9,143	11,343	-51,722	41,913	8,358	9,753	2022-03-23 16:50
358,333	45,533	40,077	83,169	89,168	0,450	0,473	2828,310	3206,724	84,622	9,183	11,305	-51,717	42,082	8,375	9,846	2022-03-23 16:51
358,834	45,619	40,008	82,979	89,041	0,456	0,473	2943,961	3241,396	89,221	8,988	11,434	-51,730	42,312	8,398	9,813	2022-03-23 16:51
359,334	45,465	40,044	82,795	88,995	0,452	0,473	2820,564	3313,570	88,478	9,150	11,418	-51,726	42,297	8,396	9,753	2022-03-23 16:52
359,834	45,631	40,106	82,894	88,993	0,450	0,472	2861,635	3258,583	92,837	9,131	11,362	-51,728	41,789	8,346	9,846	2022-03-23 16:52
360,334	45,629	40,195	82,917	89,011	0,454	0,473	2838,755	3256,683	96,369	8,979	11,483	-51,722	42,364	8,403	9,846	2022-03-23 16:53
360,834	45,437	40,219	82,912	89,007	0,449	0,472	2699,842	3256,287	89,738	9,098	11,394	-51,731	42,202	8,387	9,846	2022-03-23 16:53
361,334	45,287	40,108	83,085	89,013	0,454	0,473	2705,028	3170,337	93,233	8,948	11,475	-51,730	42,073	8,374	9,753	2022-03-23 16:54
361,833	45,591	40,015	83,172	88,988	0,452	0,473	2904,567	3107,701	112,863	8,798	11,644	-51,734	42,155	8,382	9,753	2022-03-23 16:54
362,333	45,426	40,072	82,863	88,881	0,452	0,472	2787,336	3215,287	114,514	8,833	11,686	-51,721	42,106	8,377	9,753	2022-03-23 16:55
362,833	45,378	40,114	82,908	88,945	0,451	0,473	2731,059	3226,210	104,316	8,996	11,530	-51,714	41,903	8,357	9,753	2022-03-23 16:55
363,333	45,220	40,128	83,041	88,929	0,447	0,473	2618,931	3146,014	90,946	9,166	11,335	-51,729	42,198	8,386	9,753	2022-03-23 16:56
363,833	45,550	40,132	83,107	88,960	0,451	0,473	2812,208	3129,214	85,631	9,241	11,274	-51,710	42,096	8,376	9,753	2022-03-23 16:56
364,333	45,664	40,114	82,985	88,998	0,455	0,473	2911,422	3214,593	116,155	9,027	11,432	-51,710	41,859	8,353	9,934	2022-03-23 16:57
364,833	45,404	40,088	82,884	89,078	0,451	0,472	2762,828	3309,248	91,734	9,179	11,341	-51,715	42,414	8,408	9,754	2022-03-23 16:57
365,333	45,376	40,087	82,972	89,052	0,450	0,473	2743,752	3251,013	74,157	9,417	11,104	-51,715	42,120	8,379	9,659	2022-03-23 16:58
365,834	45,460	40,114	83,039	89,083	0,452	0,472	2780,234	3230,006	63,150	9,660	10,852	-51,687	41,925	8,359	9,659	2022-03-23 16:58
366,334	45,664	40,131	82,953	89,065	0,453	0,473	2887,170	3267,587	68,598	9,504	10,929	-51,856	41,947	8,361	10,970	2022-03-23 16:59
366,834	45,423	40,121	82,976	89,061	0,451	0,473	2751,668	3252,057	368,861	1,435	16,726	-51,941	41,697	8,336	11,158	2022-03-23 16:59
367,334	45,570	40,090	83,087	89,100	0,451	0,473	2849,229	3213,492	265,471	1,602	17,679	-52,279	41,965	8,363	15,159	2022-03-23 17:00
367,834	45,457	40,077	83,021	89,172	0,453	0,473	2808,908	3287,465	512,513	4,183	16,161	-45,499	41,913	8,358	10,970	2022-03-23 17:00
368,333	45,378	40,113	83,053	89,205	0,450	0,473	2729,041	3291,062	6,712	0,079	20,248	-49,320	42,059	8,373	9,659	2022-03-23 17:01



## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
368,833	0,199	0,201	1,054	0,001	0,027	0,696	0,554	71,503	23,681	20,971	20,834	21,093	21,248	21,174	20,883
369,333	0,199	0,200	1,053	-0,004	0,037	0,697	0,554	72,335	23,676	20,996	20,856	21,125	21,282	21,189	20,913
369,833	0,199	0,200	1,052	-0,005	0,031	0,697	0,555	72,899	23,605	20,950	20,805	21,079	21,229	21,155	20,871
370,333	0,199	0,200	1,048	-0,005	0,007	0,697	0,557	73,285	23,424	-21,688	20,806	21,174	21,224	21,153	20,867
370,833	0,198	0,200	1,048	-0,006	0,034	0,697	0,583	74,416	24,088	25,522	20,769	21,119	21,193	21,105	20,822
371,333	0,198	0,200	1,195	-0,006	0,046	0,697	0,554	77,059	25,019	30,226	20,760	21,091	21,190	21,098	20,827
371,833	0,198	0,200	0,688	-0,006	0,022	0,697	0,554	76,511	23,929	34,552	20,801	21,144	21,236	21,153	20,871
372,334	0,198	0,200	0,680	-0,005	0,056	0,697	0,553	76,061	23,628	26,344	20,760	21,084	21,194	21,111	20,828
372,834	0,198	0,200	0,674	-0,006	0,009	0,697	0,553	75,659	23,325	43,388	20,795	21,120	21,233	21,140	20,865
373,334	0,198	0,200	0,772	-0,006	0,012	0,697	0,553	75,224	23,477	18,024	20,794	21,134	21,231	21,150	20,875
373,834	0,198	0,200	0,673	-0,006	0,064	0,697	0,574	75,262	23,605	15,225	67,228	21,170	21,258	21,162	20,891
374,334	0,198	0,200	0,672	-0,005	0,033	0,697	0,554	79,937	27,169	20,536	96,863	21,179	21,285	21,177	20,909
374,834	0,198	0,200	0,671	-0,006	0,011	0,697	0,553	83,304	28,513	39,538	82,311	21,157	21,269	21,171	20,899
375,333	0,198	0,200	0,671	-0,006	0,027	0,697	0,573	82,225	25,410	32,555	140,491	21,118	21,221	21,123	20,861
375,833	0,198	0,200	0,669	-0,006	0,023	0,697	0,570	80,663	24,391	34,328	139,993	21,173	21,283	21,188	20,919
376,333	0,198	0,200	0,671	-0,006	0,001	0,697	0,574	79,445	23,826	25,367	134,905	21,091	21,201	21,095	20,831
376,833	0,198	0,200	0,669	-0,005	0,006	0,697	0,567	78,741	23,589	47,349	149,324	21,162	21,278	21,176	20,906
377,333	0,198	0,200	0,669	-0,005	0,025	0,697	0,553	76,138	22,465	39,517	165,988	21,112	21,235	21,135	20,860
377,833	0,198	0,200	0,671	-0,005	0,013	0,697	0,553	72,296	21,859	47,435	140,776	21,116	21,235	21,123	20,864
378,333	0,198	0,200	0,670	-0,002	0,010	0,697	0,553	69,165	21,605	37,219	149,797	21,168	21,280	21,175	20,914
378,833	0,198	0,200	0,670	-0,005	0,034	0,697	0,554	66,868	21,622	26,343	165,739	21,174	21,293	21,190	20,929
379,334	0,198	0,200	0,671	-0,005	0,054	0,697	0,554	64,788	21,672	32,545	158,905	21,096	21,210	21,114	20,848
379,834	0,198	0,200	0,670	-0,004	0,036	0,697	0,554	63,634	21,347	38,994	148,454	21,086	21,212	21,106	20,847
380,334	0,198	0,200	0,669	-0,005	0,035	0,697	0,554	62,619	21,321	36,950	165,380	21,115	21,244	21,120	20,871
380,834	0,198	0,200	0,670	-0,005	0,012	0,697	0,553	61,638	21,162	22,456	144,933	21,089	21,201	21,099	20,841
381,334	0,198	0,200	0,669	-0,005	0,035	0,697	0,554	60,714	21,156	28,099	148,054	21,107	21,229	21,116	20,865
381,834	0,198	0,200	0,670	-0,005	0,047	0,697	0,553	59,962	21,090	16,614	144,089	21,154	21,279	21,159	20,911
382,333	0,198	0,200	0,670	-0,005	0,012	0,697	0,553	59,453	21,291	27,250	138,091	21,122	21,246	21,136	20,883
382,833	0,198	0,200	0,670	-0,005	0,032	0,697	0,554	59,078	21,155	27,438	139,132	21,084	21,213	21,100	20,846
383,333	0,198	0,200	0,669	-0,005	0,033	0,697	0,555	58,583	21,294	18,780	146,271	21,145	21,265	21,156	20,905
383,833	0,198	0,200	0,672	-0,004	0,023	0,697	0,556	58,113	21,427	31,500	142,435	21,163	21,292	21,177	20,927
384,333	0,066	0,067	0,244	-0,004	0,006	0,232	0,555	57,664	21,309	32,728	110,491	21,125	21,248	21,141	20,888
384,833	0,000	0,000	0,026	-0,002	0,000	0,000	0,555	57,290	21,269	36,514	102,622	21,119	21,249	21,133	20,884
385,333	0,000	0,000	0,021	-0,002	0,006	0,000	0,555	57,048	21,450	33,835	98,776	21,144	21,280	21,151	20,907
385,833	0,000	0,000	0,021	-0,002	0,008	0,000	0,555	56,449	21,436	25,084	123,962	21,110	21,245	21,115	20,878
386,334	0,000	0,000	0,021	-0,002	0,011	0,000	0,555	56,221	21,337	18,929	100,325	21,136	21,267	21,147	20,906
386,834	0,000	0,000	0,020	-0,002	0,009	0,000	0,555	56,102	21,366	37,497	102,830	21,126	21,247	21,129	20,887

PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
368,833	45,299	40,128	83,130	89,389	0,447	0,473	2663,801	3345,798	0,593	0,010	20,892	-49,986	42,394	8,406	9,659	2022-03-23 17:01
369,333	45,450	40,120	83,143	89,563	0,450	0,473	2761,736	3432,378	-0,079	0,004	20,896	-50,036	42,023	8,369	9,565	2022-03-23 17:02
369,833	45,361	40,090	83,143	89,674	0,450	0,473	2733,656	3490,754	-0,330	0,002	20,897	-50,053	42,266	8,393	9,659	2022-03-23 17:02
370,333	45,379	40,078	83,309	89,908	0,452	0,473	2757,805	3528,348	-0,496	-0,001	20,901	-50,048	41,659	8,333	9,659	2022-03-23 17:03
370,833	45,557	40,116	83,396	90,085	0,450	0,473	2821,811	3576,992	-0,584	-0,002	20,901	-50,056	41,872	8,354	14,341	2022-03-23 17:03
371,333	45,512	40,143	83,557	90,274	0,451	0,473	2785,616	3592,773	-0,501	-0,003	20,902	-50,060	42,119	8,378	9,565	2022-03-23 17:04
371,833	45,474	40,200	83,773	90,394	0,449	0,473	2724,725	3538,138	-0,591	-0,003	20,897	-50,060	27,311	6,747	9,659	2022-03-23 17:04
372,334	45,416	40,185	84,026	90,583	0,447	0,473	2694,397	3506,462	-0,595	-0,004	20,900	-50,054	27,041	6,713	9,565	2022-03-23 17:05
372,834	45,412	40,085	84,209	90,715	0,446	0,473	2735,932	3479,201	-0,590	-0,004	20,901	-50,059	26,931	6,700	9,565	2022-03-23 17:05
373,334	45,162	39,983	84,382	90,731	0,448	0,473	2670,885	3395,417	-0,588	-0,005	20,903	-50,063	26,925	6,699	9,565	2022-03-23 17:06
373,834	45,668	39,997	84,368	90,728	0,448	0,473	2927,680	3401,367	-0,591	-0,005	20,904	-50,060	26,888	6,694	11,744	2022-03-23 17:06
374,334	45,941	40,087	84,160	90,850	0,449	0,473	3025,439	3577,167	-0,509	-0,005	20,905	-50,054	26,875	6,693	9,565	2022-03-23 17:07
374,834	45,426	40,153	84,178	90,958	0,446	0,473	2709,610	3626,313	-0,585	-0,006	20,902	-50,059	26,834	6,688	9,565	2022-03-23 17:07
375,333	45,481	40,198	84,326	91,093	0,451	0,473	2744,570	3619,418	-0,506	-0,007	20,901	-50,058	26,851	6,690	10,565	2022-03-23 17:08
375,833	45,403	40,195	84,553	90,905	0,451	0,473	2702,710	3396,867	-0,599	-0,006	20,902	-50,057	26,794	6,683	10,565	2022-03-23 17:08
376,333	45,172	40,087	84,783	90,748	0,446	0,473	2612,870	3190,840	-0,591	-0,006	20,905	-50,055	26,761	6,679	10,846	2022-03-23 17:09
376,833	45,154	39,993	84,740	90,597	0,453	0,473	2690,255	3133,280	-0,594	-0,007	20,905	-50,054	26,752	6,677	9,753	2022-03-23 17:09
377,333	45,349	40,028	84,582	90,475	0,446	0,473	2729,743	3150,817	-0,508	-0,007	20,904	-50,053	26,740	6,676	9,565	2022-03-23 17:10
377,833	45,366	40,067	84,392	90,419	0,446	0,473	2721,280	3223,317	-0,594	-0,008	20,905	-50,047	26,945	6,701	9,565	2022-03-23 17:10
378,333	45,719	40,083	84,204	90,366	0,448	0,473	2908,475	3293,266	-0,498	-0,007	20,901	-50,022	26,766	6,679	9,565	2022-03-23 17:11
378,833	45,677	40,094	84,046	90,223	0,447	0,473	2873,895	3301,674	-0,510	-0,008	20,903	-50,050	26,814	6,685	9,565	2022-03-23 17:11
379,334	45,618	40,121	83,972	90,040	0,447	0,473	2832,113	3245,288	-0,508	-0,008	20,904	-50,054	26,867	6,692	9,753	2022-03-23 17:12
379,834	45,644	40,151	83,894	89,894	0,448	0,473	2834,000	3207,347	-0,506	-0,008	20,905	-50,039	26,776	6,680	9,565	2022-03-23 17:12
380,334	45,553	40,172	83,805	89,796	0,450	0,473	2785,382	3201,606	-0,508	-0,008	20,901	-50,051	26,809	6,684	9,659	2022-03-23 17:13
380,834	45,231	40,148	83,756	89,638	0,451	0,473	2641,944	3142,517	-0,506	-0,008	20,902	-50,048	26,822	6,686	9,565	2022-03-23 17:13
381,334	45,132	40,057	83,840	89,463	0,449	0,473	2624,599	3005,016	-0,501	-0,008	20,901	-50,054	26,756	6,678	9,565	2022-03-23 17:14
381,834	45,400	40,018	83,662	89,399	0,448	0,473	2777,023	3065,600	-0,592	-0,008	20,904	-50,046	26,784	6,681	9,565	2022-03-23 17:14
382,333	45,429	40,054	83,328	89,201	0,447	0,473	2769,716	3138,654	-0,510	-0,008	20,903	-50,049	26,825	6,686	9,565	2022-03-23 17:15
382,833	45,542	40,072	83,099	89,057	0,446	0,472	2807,845	3182,136	-0,595	-0,008	20,904	-50,049	26,800	6,683	9,659	2022-03-23 17:15
383,333	45,553	40,109	82,952	89,072	0,446	0,472	2799,542	3269,686	-0,513	-0,009	20,902	-50,053	26,841	6,688	9,659	2022-03-23 17:16
383,833	45,704	40,170	82,801	88,690	0,449	0,472	2859,669	3145,156	-0,502	-0,009	20,902	-50,042	26,855	6,690	9,753	2022-03-23 17:16
384,333	45,402	40,204	82,621	88,526	0,403	0,472	2411,953	3153,497	-495,937	-5,000	6,971	-50,036	1,153	1,386	9,659	2022-03-23 17:17
384,833	45,408	40,187	82,516	88,433	0,000	0,145	0,000	976,659	-495,938	-5,000	0,000	-50,022	0,988	1,283	9,659	2022-03-23 17:17
385,333	45,416	40,183	82,440	88,401	0,000	0,000	0,000	0,000	-495,940	-5,000	0,000	-50,020	0,825	1,173	9,743	2022-03-23 17:18
385,833	45,365	40,138	82,365	88,236	0,000	0,000	0,000	0,000	-495,941	-5,000	0,000	-50,020	0,821	1,170	9,659	2022-03-23 17:18
386,334	45,295	40,039	82,314	88,052	0,000	0,000	0,000	0,000	-495,939	-5,000	0,000	-50,019	0,828	1,175	9,659	2022-03-23 17:19
386,834	45,210	39,947	82,286	87,745	0,000	0,000	0,000	0,000	-495,939	-5,000	0,000	-50,019	0,816	1,166	9,659	2022-03-23 17:19

## PE22\_cat I\_run 1\_220323\_EN.DAT

## Category: I run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambien t	Ambient temperature
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C
387,334	0,000	0,000	0,020	-0,002	0,010	0,000	0,555	55,566	21,399	31,347	101,787	21,080	21,224	21,114	20,859
387,834	0,000	0,000	0,020	-0,002	0,010	0,000	0,554	55,263	21,535	38,246	101,322	21,122	21,261	21,145	20,896

PE22\_cat I\_run 1\_220323\_EN.DAT

Category: I run 1

	1103	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T4 outlet load side	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
387,334	45,120	39,864	82,274	87,491	0,000	0,000	0,000	0,000	-495,938	-5,000	0,000	-50,019	0,818	1,168	9,659	2022-03-23 17:20
387,834	45,028	39,786	82,273	87,415	0,000	0,000	0,000	0,000	-495,936	-5,000	0,000	-50,018	0,819	1,168	9,565	2022-03-23 17:20

## PE22\_cat I\_run 2\_220406\_EN.DAT

Category: I run 2

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321.KONF

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,410	0,350	0,548	1,038	-0,126	0,022	0,396	0,682	44,160	21,523	19,859	20,086	19,383	19,407	19,397	19,377	58,400
0,833	0,297	0,555	1,037	-0,123	0,026	0,388	0,681	44,186	21,511	19,837	20,064	19,369	19,400	19,391	19,373	58,397
1,333	0,280	0,570	1,040	-0,123	0,031	0,377	0,681	44,254	21,528	19,857	20,070	19,404	19,423	19,416	19,402	58,363
1,834	0,331	0,563	1,035	-0,124	0,014	0,386	0,681	44,174	21,515	19,831	20,048	19,400	19,425	19,414	19,396	58,336
2,333	0,390	0,556	1,038	-0,124	-0,014	0,389	0,681	44,114	21,442	19,789	19,998	19,358	19,394	19,381	19,365	58,318
2,870	0,367	0,565	1,038	-0,122	0,020	0,381	0,682	44,152	21,525	19,803	20,014	19,382	19,416	19,413	19,391	58,329
3,333	0,352	0,568	1,042	-0,123	0,009	0,377	0,681	44,220	21,521	19,819	20,014	19,403	19,433	19,415	19,406	58,289
3,833	0,325	0,577	1,042	-0,123	-0,028	0,370	0,682	44,207	21,498	19,799	20,000	19,407	19,433	19,427	19,411	58,273
4,334	0,374	0,570	1,042	-0,121	0,014	0,380	0,681	44,046	21,386	19,739	19,923	19,356	19,376	19,372	19,354	58,248
4,833	0,479	0,553	1,042	-0,124	0,001	0,391	0,681	43,899	21,373	19,679	19,871	19,311	19,324	19,328	19,311	58,253
5,333	0,470	0,551	1,039	-0,123	0,009	0,393	0,681	43,845	21,439	19,715	19,899	19,349	19,368	19,366	19,352	58,215
5,833	0,442	0,549	1,042	-0,122	0,002	0,394	0,681	43,787	21,459	19,712	19,894	19,364	19,386	19,377	19,363	58,188
6,333	0,395	0,551	1,047	-0,122	0,042	0,392	0,681	43,808	21,520	19,723	19,910	19,395	19,413	19,414	19,396	58,185
6,833	0,369	0,554	1,043	-0,122	-0,014	0,392	0,682	43,729	21,469	19,718	19,909	19,411	19,421	19,420	19,405	58,171
7,333	0,473	0,543	1,042	-0,123	0,056	0,401	0,681	43,531	21,364	19,600	19,782	19,292	19,312	19,307	19,297	58,129
7,833	0,489	0,546	1,037	-0,121	0,033	0,396	0,681	43,627	21,436	19,683	19,846	19,381	19,399	19,408	19,385	58,103
8,333	0,477	0,555	1,036	-0,119	-0,024	0,388	0,681	43,706	21,487	19,683	19,845	19,393	19,418	19,418	19,399	58,108
8,833	0,437	0,567	1,038	-0,118	-0,004	0,378	0,681	43,748	21,463	19,659	19,813	19,379	19,401	19,401	19,383	58,083
9,333	0,409	0,575	1,039	-0,118	0,033	0,372	0,681	43,763	21,481	19,651	19,806	19,380	19,406	19,401	19,383	58,054
9,833	0,431	0,574	1,041	-0,118	0,006	0,374	0,681	43,686	21,420	19,583	19,741	19,326	19,352	19,353	19,331	58,039
10,333	0,456	0,568	1,038	-0,119	-0,011	0,379	0,681	43,737	21,443	19,603	19,742	19,342	19,369	19,363	19,350	57,998
10,833	0,408	0,567	1,037	-0,118	0,026	0,381	0,680	43,709	21,453	19,613	19,758	19,379	19,392	19,391	19,373	57,974
11,333	0,384	0,564	1,039	-0,118	0,020	0,381	0,681	43,739	21,426	19,614	19,752	19,385	19,400	19,408	19,389	57,984
11,833	0,353	0,574	1,035	-0,117	0,008	0,372	0,680	43,731	21,364	19,568	19,708	19,335	19,363	19,357	19,345	57,965
12,333	0,331	0,583	1,034	-0,116	0,005	0,365	0,680	43,859	21,451	19,611	19,750	19,390	19,419	19,407	19,398	57,948
12,834	0,385	0,581	1,044	-0,117	0,004	0,369	0,680	43,769	21,401	19,559	19,681	19,336	19,365	19,366	19,351	57,913

## PE22\_cat I\_run 2\_220406\_EN.DAT

Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,410	48,442	51,491	61,512	1,028	1,032	11773,535	11939,538	312,391	8,697	11,879	-2,517	41,527	8,319	17,564	2022-04-06 09:32
0,833	48,442	51,456	61,392	0,241	0,248	2756,553	2831,727	222,512	8,989	11,636	-2,451	41,174	8,284	17,564	2022-04-06 09:32
1,333	48,438	51,518	61,453	0,242	0,249	2756,240	2831,699	205,973	9,313	11,307	-2,457	41,529	8,320	17,564	2022-04-06 09:33
1,834	48,439	51,411	61,343	0,243	0,249	2761,034	2831,564	379,748	8,940	11,574	-2,486	41,511	8,318	17,564	2022-04-06 09:33
2,333	48,447	51,462	61,403	0,241	0,249	2733,310	2833,586	482,257	8,936	11,661	-2,473	41,637	8,330	17,564	2022-04-06 09:34
2,870	48,444	51,341	61,330	0,241	0,249	2739,238	2849,889	414,289	9,165	11,433	-2,450	41,744	8,341	17,657	2022-04-06 09:34
3,333	48,441	51,419	61,337	0,242	0,248	2742,186	2826,194	357,590	9,269	11,314	-2,455	41,320	8,299	17,564	2022-04-06 09:35
3,833	48,445	51,470	61,329	0,241	0,248	2714,548	2809,641	303,333	9,487	11,091	-2,463	41,786	8,345	17,564	2022-04-06 09:35
4,334	48,433	51,448	61,356	0,242	0,248	2724,297	2824,081	568,236	9,041	11,387	-2,417	41,537	8,320	17,564	2022-04-06 09:36
4,833	48,442	51,449	61,337	0,241	0,249	2712,301	2818,836	712,599	8,801	11,732	-2,485	41,457	8,312	17,564	2022-04-06 09:36
5,333	48,454	51,407	61,312	0,242	0,248	2708,242	2821,289	658,604	8,773	11,795	-2,453	41,816	8,348	17,470	2022-04-06 09:37
5,833	48,447	51,457	61,296	0,243	0,249	2713,608	2805,660	575,929	8,719	11,828	-2,447	41,557	8,322	17,563	2022-04-06 09:37
6,333	48,450	51,429	61,280	0,241	0,249	2696,707	2808,184	439,021	8,803	11,770	-2,437	41,888	8,355	17,564	2022-04-06 09:38
6,833	48,447	51,439	61,215	0,241	0,248	2695,852	2786,231	464,187	8,788	11,760	-2,442	41,812	8,348	17,657	2022-04-06 09:38
7,333	48,448	51,429	61,231	0,242	0,249	2685,623	2795,260	768,777	8,507	12,021	-2,465	41,704	8,337	17,564	2022-04-06 09:39
7,833	48,446	51,392	61,258	0,241	0,249	2674,404	2813,925	693,492	8,732	11,876	-2,414	41,645	8,331	17,564	2022-04-06 09:39
8,333	48,463	51,394	61,235	0,241	0,248	2670,169	2805,160	676,100	8,956	11,645	-2,379	41,691	8,336	17,564	2022-04-06 09:40
8,833	48,442	51,389	61,162	0,242	0,249	2678,744	2786,892	556,115	9,280	11,337	-2,353	41,462	8,313	17,564	2022-04-06 09:40
9,333	48,462	51,388	61,133	0,241	0,248	2655,252	2776,463	530,044	9,406	11,161	-2,366	41,259	8,292	17,564	2022-04-06 09:41
9,833	48,454	51,358	61,110	0,242	0,249	2660,553	2779,756	636,922	9,271	11,228	-2,354	41,782	8,345	17,564	2022-04-06 09:41
10,333	48,447	51,389	61,072	0,243	0,248	2668,994	2759,430	572,374	9,186	11,378	-2,379	41,329	8,300	17,469	2022-04-06 09:42
10,833	48,455	51,413	61,095	0,242	0,248	2642,255	2758,892	519,859	9,122	11,443	-2,369	41,305	8,297	17,564	2022-04-06 09:42
11,333	48,447	51,352	61,042	0,241	0,249	2639,321	2764,240	430,826	9,135	11,444	-2,364	41,477	8,314	17,564	2022-04-06 09:43
11,833	48,444	51,366	61,026	0,241	0,248	2638,834	2753,514	364,191	9,439	11,151	-2,347	41,365	8,303	17,470	2022-04-06 09:43
12,333	48,457	51,360	60,998	0,241	0,248	2627,756	2747,248	328,344	9,599	10,942	-2,329	41,193	8,286	17,470	2022-04-06 09:44
12,834	48,452	51,371	60,978	0,242	0,248	2633,440	2736,666	545,014	9,425	11,063	-2,343	41,764	8,343	17,564	2022-04-06 09:44

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
13,333	0,443	0,576	1,041	-0,119	0,028	0,373	0,680	43,816	21,439	19,606	19,741	19,409	19,433	19,427	19,412	57,907
13,833	0,410	0,573	1,040	-0,117	0,025	0,374	0,680	43,857	21,429	19,621	19,748	19,421	19,452	19,444	19,431	57,889
14,333	0,362	0,582	1,038	-0,116	0,018	0,365	0,680	43,847	21,458	19,595	19,713	19,403	19,432	19,426	19,415	57,847
14,834	0,321	0,587	1,042	-0,116	-0,002	0,361	0,680	43,866	21,475	19,588	19,706	19,408	19,429	19,427	19,414	57,848
15,333	0,300	0,586	1,040	-0,117	0,006	0,365	0,680	43,796	21,455	19,581	19,697	19,423	19,442	19,445	19,427	57,813
15,833	0,352	0,568	1,041	-0,119	0,003	0,380	0,680	43,651	21,419	19,509	19,618	19,354	19,374	19,378	19,361	57,794
16,333	0,391	0,562	1,035	-0,119	0,034	0,384	0,680	43,641	21,449	19,533	19,650	19,385	19,405	19,409	19,388	57,797
16,833	0,354	0,566	1,041	-0,116	-0,021	0,378	0,680	43,664	21,401	19,517	19,627	19,384	19,400	19,403	19,386	57,776
17,334	0,321	0,580	1,043	-0,116	0,049	0,367	0,680	43,622	21,278	19,418	19,540	19,287	19,310	19,311	19,300	57,756
17,833	0,326	0,585	1,041	-0,117	0,042	0,364	0,680	43,720	21,508	19,553	19,659	19,422	19,446	19,447	19,432	57,756
18,333	0,355	0,579	1,039	-0,117	-0,006	0,370	0,680	43,626	21,447	19,470	19,573	19,351	19,381	19,382	19,362	57,722
18,833	0,386	0,567	1,038	-0,119	0,004	0,380	0,680	43,464	21,390	19,414	19,517	19,289	19,313	19,319	19,309	57,713
19,333	0,381	0,565	1,041	-0,118	0,038	0,380	0,679	43,541	21,459	19,478	19,566	19,377	19,398	19,399	19,381	57,705
19,833	0,369	0,572	1,040	-0,116	0,018	0,373	0,680	43,552	21,381	19,471	19,571	19,375	19,395	19,394	19,381	57,692
20,333	0,333	0,587	1,037	-0,115	-0,040	0,358	0,680	43,760	21,455	19,539	19,632	19,445	19,465	19,475	19,449	57,697
20,833	0,293	0,609	1,039	-0,112	0,041	0,343	0,680	43,960	21,532	19,541	19,626	19,453	19,479	19,481	19,461	57,661
21,333	0,297	0,608	1,034	-0,114	0,042	0,345	0,679	43,993	21,483	19,500	19,589	19,418	19,444	19,445	19,431	57,640
21,834	0,354	0,601	1,046	-0,116	0,002	0,352	0,679	43,955	21,459	19,463	19,541	19,380	19,404	19,411	19,390	57,616
22,334	0,393	0,594	1,044	-0,116	0,005	0,356	0,678	43,985	21,424	19,452	19,522	19,379	19,397	19,400	19,385	57,579
22,833	0,359	0,598	1,041	-0,114	0,031	0,353	0,678	43,990	21,415	19,429	19,507	19,352	19,383	19,395	19,372	57,595
23,333	0,344	0,599	1,040	-0,115	0,032	0,352	0,678	43,989	21,436	19,407	19,479	19,352	19,364	19,373	19,360	57,596
23,833	0,326	0,596	1,042	-0,117	0,022	0,356	0,679	43,869	21,432	19,385	19,451	19,334	19,351	19,359	19,339	57,591
24,333	0,343	0,582	1,040	-0,119	0,018	0,368	0,678	43,849	21,465	19,458	19,521	19,404	19,427	19,434	19,415	57,577
24,833	0,342	0,579	1,039	-0,117	-0,017	0,368	0,678	43,833	21,445	19,473	19,534	19,421	19,448	19,460	19,434	57,580
25,333	0,348	0,583	1,033	-0,117	-0,002	0,365	0,678	43,785	21,432	19,411	19,465	19,361	19,393	19,397	19,381	57,560
25,833	0,350	0,585	1,037	-0,116	-0,021	0,363	0,678	43,883	21,500	19,478	19,531	19,436	19,462	19,462	19,450	57,537
26,333	0,337	0,591	1,040	-0,117	0,024	0,359	0,678	43,872	21,485	19,451	19,502	19,416	19,437	19,441	19,427	57,536
26,833	0,338	0,587	1,046	-0,116	0,033	0,362	0,678	43,800	21,412	19,404	19,456	19,374	19,389	19,397	19,380	57,540
27,333	0,340	0,584	1,036	-0,118	0,020	0,365	0,678	43,804	21,398	19,399	19,454	19,370	19,398	19,401	19,385	57,512

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
13,333	48,445	51,301	60,961	0,241	0,249	2615,584	2754,326	605,919	9,372	11,180	-2,383	41,558	8,322	17,564	2022-04-06 09:45
13,833	48,450	51,298	60,942	0,242	0,249	2620,922	2750,899	479,836	9,363	11,209	-2,349	41,436	8,310	17,564	2022-04-06 09:45
14,333	48,441	51,329	60,936	0,241	0,248	2602,882	2738,132	378,036	9,605	10,957	-2,318	41,444	8,311	17,470	2022-04-06 09:46
14,834	48,442	51,317	60,901	0,242	0,248	2617,890	2731,853	267,436	9,738	10,822	-2,311	41,582	8,325	17,470	2022-04-06 09:46
15,333	48,446	51,259	60,900	0,242	0,248	2605,105	2747,087	265,603	9,520	10,962	-2,338	41,529	8,320	17,470	2022-04-06 09:47
15,833	48,442	51,259	60,866	0,241	0,248	2592,656	2738,041	452,237	9,075	11,411	-2,382	41,381	8,305	17,470	2022-04-06 09:47
16,333	48,447	51,266	60,840	0,241	0,249	2590,436	2729,711	469,309	9,044	11,524	-2,386	41,668	8,333	17,469	2022-04-06 09:48
16,833	48,456	51,246	60,833	0,242	0,248	2588,843	2731,321	348,749	9,264	11,355	-2,328	41,659	8,333	17,470	2022-04-06 09:48
17,334	48,447	51,288	60,825	0,241	0,248	2574,097	2718,196	289,097	9,619	11,003	-2,312	41,712	8,338	17,564	2022-04-06 09:49
17,833	48,449	51,361	60,822	0,242	0,248	2583,900	2693,994	349,644	9,597	10,918	-2,340	41,665	8,333	17,470	2022-04-06 09:49
18,333	48,451	51,246	60,810	0,242	0,248	2576,256	2723,808	419,457	9,357	11,114	-2,349	41,652	8,332	17,469	2022-04-06 09:50
18,833	48,446	51,228	60,784	0,242	0,249	2571,805	2724,157	482,080	9,119	11,394	-2,383	41,650	8,332	17,470	2022-04-06 09:50
19,333	48,518	51,151	60,731	0,242	0,248	2547,725	2727,877	445,033	9,160	11,405	-2,360	41,966	8,363	17,470	2022-04-06 09:51
19,833	48,561	51,251	60,733	0,241	0,248	2529,566	2701,035	398,490	9,408	11,198	-2,314	41,795	8,346	17,470	2022-04-06 09:51
20,333	48,492	51,238	60,721	0,242	0,248	2555,867	2702,016	290,045	9,887	10,741	-2,293	41,362	8,303	17,469	2022-04-06 09:52
20,833	48,372	51,279	60,706	0,242	0,248	2584,223	2685,293	223,435	10,288	10,303	-2,246	41,331	8,300	17,469	2022-04-06 09:52
21,333	48,339	51,236	60,702	0,242	0,249	2581,225	2698,774	268,443	10,177	10,342	-2,277	41,284	8,295	17,470	2022-04-06 09:53
21,834	48,405	51,152	60,689	0,242	0,248	2556,510	2717,792	460,614	9,938	10,561	-2,318	41,892	8,356	17,470	2022-04-06 09:53
22,334	48,470	51,180	60,671	0,242	0,248	2535,110	2704,464	473,227	9,857	10,692	-2,321	41,904	8,357	17,347	2022-04-06 09:54
22,833	48,473	51,103	60,645	0,242	0,248	2540,220	2717,847	376,752	10,005	10,581	-2,289	41,262	8,293	17,347	2022-04-06 09:54
23,333	48,435	51,194	60,624	0,242	0,248	2542,397	2686,861	344,371	9,960	10,566	-2,306	41,525	8,319	17,347	2022-04-06 09:55
23,833	48,451	51,224	60,642	0,241	0,248	2534,156	2684,368	326,427	9,826	10,675	-2,342	41,535	8,320	17,348	2022-04-06 09:55
24,333	48,466	51,233	60,589	0,241	0,248	2525,040	2664,595	365,106	9,406	11,037	-2,378	41,737	8,340	17,347	2022-04-06 09:56
24,833	48,447	51,177	60,587	0,242	0,248	2536,318	2682,229	351,507	9,529	11,044	-2,343	41,467	8,313	17,347	2022-04-06 09:56
25,333	48,452	51,192	60,590	0,243	0,248	2545,095	2678,121	380,429	9,599	10,963	-2,348	41,321	8,299	17,347	2022-04-06 09:57
25,833	48,440	51,227	60,573	0,242	0,248	2528,145	2663,671	368,248	9,696	10,878	-2,324	41,418	8,308	17,347	2022-04-06 09:57
26,333	48,455	51,172	60,574	0,241	0,248	2516,175	2676,924	337,514	9,788	10,763	-2,344	41,466	8,313	17,447	2022-04-06 09:58
26,833	48,439	51,198	60,578	0,242	0,248	2524,537	2673,401	347,478	9,635	10,862	-2,329	41,926	8,359	17,347	2022-04-06 09:58
27,333	48,442	51,160	60,557	0,242	0,248	2524,739	2675,197	357,822	9,558	10,958	-2,352	41,278	8,294	17,347	2022-04-06 09:59



PE22\_cat I\_run 2\_220406\_EN.DAT

Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
27,833	0,339	0,581	1,035	-0,117	0,020	0,367	0,678	43,780	21,436	19,448	19,491	19,422	19,444	19,446	19,434	57,501
28,333	0,308	0,589	1,039	-0,115	0,005	0,358	0,678	43,928	21,486	19,469	19,510	19,446	19,467	19,473	19,454	57,517
28,833	0,290	0,601	1,033	-0,114	0,056	0,348	0,678	43,917	21,472	19,455	19,493	19,437	19,463	19,467	19,452	57,519
29,333	0,295	0,608	1,031	-0,115	0,003	0,344	0,678	44,005	21,481	19,451	19,470	19,425	19,454	19,461	19,442	57,483
29,833	0,349	0,599	1,032	-0,117	0,047	0,353	0,678	43,929	21,395	19,377	19,411	19,358	19,384	19,395	19,377	57,486
30,333	0,398	0,592	1,039	-0,118	-0,024	0,359	0,677	44,082	21,434	19,467	19,497	19,452	19,471	19,484	19,464	57,492
30,833	0,396	0,594	1,041	-0,114	0,003	0,355	0,677	44,101	21,459	19,466	19,496	19,466	19,485	19,494	19,476	57,481
31,333	0,349	0,609	1,039	-0,113	0,042	0,342	0,677	44,221	21,444	19,429	19,453	19,422	19,450	19,462	19,440	57,462
31,833	0,300	0,623	1,038	-0,113	-0,004	0,330	0,678	44,313	21,477	19,446	19,470	19,443	19,468	19,481	19,462	57,456
32,333	0,272	0,635	1,037	-0,114	-0,003	0,323	0,678	44,406	21,413	19,378	19,407	19,382	19,409	19,416	19,400	57,443
32,833	0,305	0,627	1,033	-0,116	0,036	0,331	0,678	44,418	21,447	19,401	19,415	19,414	19,427	19,442	19,423	57,449
33,333	0,363	0,620	1,039	-0,115	0,020	0,336	0,678	44,451	21,436	19,386	19,406	19,398	19,416	19,431	19,412	57,450
33,833	0,384	0,621	1,038	-0,115	0,017	0,334	0,678	44,507	21,456	19,409	19,428	19,419	19,442	19,449	19,436	57,448
34,333	0,324	0,626	1,037	-0,116	-0,009	0,329	0,678	44,559	21,401	19,378	19,389	19,406	19,412	19,430	19,411	57,456
34,833	0,292	0,630	1,030	-0,117	0,042	0,326	0,677	44,532	21,423	19,404	19,412	19,433	19,450	19,450	19,440	57,466
35,333	0,348	0,615	1,036	-0,118	0,027	0,341	0,677	44,358	21,417	19,360	19,368	19,381	19,411	19,417	19,403	57,445
35,834	0,395	0,603	1,042	-0,118	0,038	0,349	0,676	44,282	21,335	19,318	19,314	19,343	19,356	19,374	19,353	57,449
36,333	0,362	0,600	1,043	-0,118	0,002	0,351	0,677	44,265	21,396	19,339	19,340	19,361	19,393	19,404	19,381	57,437
36,833	0,316	0,605	1,033	-0,117	0,040	0,344	0,677	44,309	21,425	19,363	19,356	19,390	19,413	19,414	19,401	57,431
37,333	0,295	0,614	1,039	-0,118	0,023	0,338	0,676	44,262	21,380	19,314	19,319	19,351	19,365	19,380	19,364	57,414
37,834	0,314	0,610	1,038	-0,118	0,030	0,343	0,676	44,161	21,305	19,261	19,254	19,296	19,319	19,326	19,312	57,445
38,333	0,324	0,602	1,040	-0,117	0,014	0,349	0,676	44,271	21,419	19,397	19,391	19,438	19,460	19,462	19,449	57,421
38,833	0,321	0,604	1,040	-0,118	0,003	0,346	0,676	44,226	21,346	19,302	19,291	19,342	19,369	19,384	19,358	57,424
39,333	0,354	0,610	1,040	-0,116	0,033	0,341	0,676	44,316	21,384	19,342	19,323	19,377	19,398	19,413	19,398	57,443
39,833	0,313	0,626	1,045	-0,112	0,001	0,325	0,676	44,433	21,334	19,372	19,355	19,417	19,439	19,440	19,430	57,431
40,333	0,266	0,645	1,042	-0,114	-0,023	0,312	0,676	44,563	21,392	19,402	19,382	19,429	19,463	19,479	19,457	57,429
40,833	0,268	0,638	1,035	-0,116	0,014	0,321	0,676	44,585	21,442	19,398	19,383	19,446	19,469	19,484	19,463	57,420
41,333	0,310	0,625	1,042	-0,116	0,042	0,330	0,676	44,538	21,459	19,407	19,383	19,453	19,472	19,491	19,470	57,442
41,833	0,321	0,622	1,041	-0,114	-0,027	0,333	0,676	44,491	21,379	19,342	19,313	19,392	19,415	19,422	19,407	57,431

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
27,833	48,441	51,207	60,513	0,242	0,248	2517,105	2650,074	328,361	9,521	10,998	-2,339	41,279	8,295	17,347	2022-04-06 09:59
28,333	48,451	51,170	60,506	0,240	0,249	2502,197	2663,180	247,039	9,843	10,746	-2,292	41,538	8,320	17,347	2022-04-06 10:00
28,833	48,439	51,229	60,509	0,241	0,248	2509,020	2642,725	223,848	10,098	10,451	-2,275	41,342	8,301	17,470	2022-04-06 10:00
29,333	48,438	51,292	60,521	0,242	0,249	2517,565	2630,956	261,529	10,196	10,327	-2,307	41,253	8,292	17,347	2022-04-06 10:01
29,833	48,437	51,234	60,504	0,241	0,248	2502,989	2642,122	445,513	9,856	10,596	-2,348	41,423	8,309	17,347	2022-04-06 10:01
30,333	48,431	51,239	60,500	0,242	0,248	2518,297	2639,516	514,267	9,769	10,762	-2,351	41,257	8,292	17,347	2022-04-06 10:02
30,833	48,441	51,266	60,464	0,241	0,249	2506,164	2622,337	466,517	9,933	10,637	-2,286	41,612	8,328	17,347	2022-04-06 10:02
31,333	48,433	51,188	60,455	0,242	0,248	2510,226	2640,722	339,535	10,348	10,250	-2,267	41,519	8,319	17,347	2022-04-06 10:03
31,833	48,434	51,179	60,457	0,242	0,248	2506,169	2642,150	205,921	10,701	9,891	-2,250	41,603	8,327	17,347	2022-04-06 10:03
32,333	48,450	51,161	60,448	0,242	0,248	2496,490	2645,529	199,945	10,834	9,685	-2,287	41,737	8,340	17,347	2022-04-06 10:04
32,833	48,434	51,098	60,458	0,242	0,248	2506,989	2667,663	308,846	10,599	9,928	-2,314	41,383	8,305	17,347	2022-04-06 10:04
33,333	48,432	51,178	60,461	0,241	0,248	2494,216	2645,674	446,675	10,474	10,078	-2,307	41,356	8,302	17,347	2022-04-06 10:05
33,833	48,444	51,181	60,482	0,241	0,248	2495,782	2648,664	437,879	10,559	10,007	-2,299	41,561	8,323	17,347	2022-04-06 10:05
34,333	48,440	51,124	60,457	0,241	0,248	2496,303	2656,802	268,336	10,719	9,869	-2,315	41,037	8,270	17,347	2022-04-06 10:06
34,833	48,431	51,118	60,463	0,242	0,248	2507,543	2663,160	237,635	10,726	9,792	-2,338	41,095	8,276	17,254	2022-04-06 10:06
35,333	48,440	51,160	60,459	0,241	0,248	2491,516	2649,425	459,338	10,209	10,220	-2,354	41,708	8,337	17,254	2022-04-06 10:07
35,834	48,443	51,222	60,458	0,243	0,248	2514,253	2629,900	482,969	10,005	10,479	-2,352	41,910	8,358	17,254	2022-04-06 10:07
36,333	48,437	51,229	60,451	0,242	0,248	2505,936	2625,991	365,845	9,972	10,524	-2,355	41,733	8,340	17,347	2022-04-06 10:08
36,833	48,433	51,228	60,462	0,243	0,248	2509,123	2630,228	262,843	10,215	10,328	-2,336	41,277	8,294	17,254	2022-04-06 10:08
37,333	48,442	51,236	60,463	0,242	0,248	2497,733	2625,252	238,186	10,367	10,145	-2,352	41,686	8,335	17,254	2022-04-06 10:09
37,834	48,446	51,213	60,463	0,242	0,248	2497,141	2633,723	295,054	10,198	10,292	-2,357	41,520	8,319	17,303	2022-04-06 10:09
38,333	48,446	51,215	60,446	0,243	0,248	2505,330	2628,753	322,339	10,028	10,466	-2,347	41,303	8,297	17,253	2022-04-06 10:10
38,833	48,449	51,148	60,480	0,241	0,248	2479,847	2658,331	314,744	10,158	10,387	-2,352	41,254	8,292	17,254	2022-04-06 10:10
39,333	48,456	51,202	60,455	0,242	0,248	2499,757	2633,781	398,649	10,303	10,217	-2,312	41,973	8,364	17,254	2022-04-06 10:11
39,833	48,457	51,226	60,463	0,242	0,248	2496,235	2631,780	225,513	10,863	9,755	-2,237	41,686	8,335	17,253	2022-04-06 10:11
40,333	48,453	51,273	60,451	0,243	0,248	2502,406	2613,631	152,644	11,193	9,353	-2,281	41,518	8,318	17,253	2022-04-06 10:12
40,833	48,462	51,282	60,454	0,242	0,248	2486,198	2611,707	200,519	10,798	9,638	-2,317	41,728	8,339	17,254	2022-04-06 10:12
41,333	48,463	51,272	60,474	0,242	0,248	2492,311	2621,050	304,348	10,568	9,902	-2,313	41,851	8,352	17,253	2022-04-06 10:13
41,833	48,452	51,249	60,479	0,242	0,248	2495,617	2629,699	301,915	10,534	9,998	-2,289	41,568	8,323	17,160	2022-04-06 10:13

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
42,333	0,302	0,624	1,037	-0,114	0,042	0,328	0,676	44,591	21,429	19,378	19,358	19,430	19,455	19,474	19,445	57,444
42,834	0,284	0,637	1,039	-0,114	0,007	0,319	0,676	44,607	21,440	19,363	19,325	19,414	19,430	19,448	19,432	57,440
43,333	0,304	0,633	1,042	-0,116	0,027	0,326	0,676	44,460	21,458	19,396	19,365	19,451	19,471	19,481	19,468	57,437
43,833	0,360	0,617	1,040	-0,116	0,020	0,339	0,676	44,474	21,482	19,405	19,378	19,465	19,494	19,501	19,485	57,463
44,333	0,429	0,609	1,045	-0,117	-0,013	0,344	0,675	44,376	21,429	19,368	19,320	19,422	19,443	19,448	19,435	57,457
44,833	0,362	0,612	1,036	-0,118	0,040	0,340	0,675	44,333	21,382	19,338	19,305	19,399	19,421	19,436	19,420	57,471
45,333	0,326	0,617	1,036	-0,117	0,005	0,335	0,675	44,402	21,411	19,331	19,292	19,397	19,418	19,427	19,411	57,459
45,833	0,299	0,624	1,044	-0,113	0,036	0,329	0,675	44,401	21,408	19,342	19,298	19,387	19,412	19,432	19,411	57,456
46,333	0,297	0,624	1,043	-0,114	0,039	0,332	0,675	44,254	21,329	19,281	19,248	19,344	19,366	19,381	19,367	57,454
46,834	0,320	0,618	1,045	-0,114	0,027	0,335	0,675	44,353	21,449	19,399	19,354	19,452	19,485	19,486	19,475	57,453
47,333	0,319	0,620	1,045	-0,115	0,018	0,334	0,675	44,387	21,451	19,380	19,333	19,438	19,463	19,481	19,461	57,446
47,833	0,316	0,623	1,040	-0,114	-0,015	0,330	0,675	44,431	21,451	19,399	19,365	19,473	19,500	19,505	19,491	57,466
48,333	0,291	0,628	1,039	-0,114	0,013	0,325	0,675	44,425	21,410	19,360	19,316	19,424	19,466	19,472	19,452	57,501
48,833	0,283	0,632	1,043	-0,113	0,030	0,324	0,675	44,457	21,412	19,365	19,315	19,436	19,455	19,467	19,457	57,496
49,333	0,291	0,627	1,037	-0,115	-0,036	0,328	0,675	44,529	21,500	19,403	19,351	19,471	19,505	19,507	19,496	57,478
49,833	0,305	0,633	1,041	-0,114	0,003	0,323	0,675	44,578	21,450	19,366	19,319	19,440	19,464	19,473	19,461	57,467
50,334	0,327	0,640	1,039	-0,113	0,024	0,316	0,675	44,552	21,373	19,278	19,219	19,347	19,372	19,376	19,369	57,491
50,833	0,357	0,651	1,039	-0,111	0,037	0,305	0,675	44,771	21,491	19,404	19,342	19,474	19,497	19,508	19,494	57,490
51,333	0,438	0,667	1,039	-0,110	0,040	0,292	0,675	44,807	21,357	19,294	19,243	19,378	19,395	19,409	19,392	57,509
51,833	0,515	0,666	1,039	-0,111	0,020	0,295	0,675	44,807	21,327	19,299	19,237	19,366	19,391	19,406	19,391	57,507
52,333	0,637	0,660	1,040	-0,112	-0,016	0,299	0,675	44,960	21,498	19,430	19,365	19,499	19,521	19,533	19,521	57,496
52,833	0,557	0,660	1,035	-0,113	0,027	0,297	0,674	44,913	21,428	19,339	19,283	19,419	19,439	19,457	19,445	57,518
53,333	0,504	0,664	1,039	-0,111	0,063	0,295	0,674	44,988	21,477	19,385	19,321	19,462	19,492	19,491	19,483	57,533
53,834	0,516	0,664	1,043	-0,113	0,034	0,295	0,674	44,969	21,463	19,356	19,292	19,435	19,460	19,466	19,465	57,531
54,333	0,549	0,659	1,038	-0,116	-0,003	0,300	0,674	44,906	21,402	19,301	19,247	19,389	19,421	19,430	19,413	57,542
54,833	0,614	0,651	1,034	-0,114	0,032	0,306	0,673	44,955	21,463	19,389	19,329	19,474	19,499	19,525	19,503	57,551
55,333	0,663	0,649	1,041	-0,113	0,032	0,306	0,673	44,833	21,326	19,296	19,230	19,374	19,400	19,416	19,403	57,568
55,833	0,654	0,656	1,040	-0,114	0,014	0,301	0,674	44,896	21,419	19,338	19,278	19,420	19,448	19,459	19,451	57,567
56,333	0,650	0,658	1,042	-0,113	0,042	0,299	0,673	44,966	21,458	19,397	19,333	19,488	19,515	19,523	19,514	57,576

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
42,333	48,459	51,271	60,476	0,242	0,248	2497,557	2622,332	226,261	10,717	9,847	-2,286	41,444	8,311	17,160	2022-04-06 10:14
42,834	48,447	51,250	60,491	0,244	0,248	2514,569	2631,097	215,555	10,957	9,579	-2,287	41,535	8,320	17,254	2022-04-06 10:14
43,333	48,458	51,141	60,470	0,242	0,248	2495,842	2658,242	302,831	10,692	9,784	-2,319	41,540	8,321	17,253	2022-04-06 10:15
43,833	48,456	51,185	60,492	0,242	0,248	2503,967	2651,552	450,955	10,320	10,173	-2,327	41,572	8,324	17,160	2022-04-06 10:15
44,333	48,456	51,171	60,498	0,241	0,249	2492,901	2659,177	579,006	10,223	10,320	-2,336	41,897	8,356	17,160	2022-04-06 10:16
44,833	48,453	51,246	60,497	0,242	0,248	2502,256	2634,771	343,160	10,352	10,213	-2,361	41,234	8,290	17,160	2022-04-06 10:16
45,333	48,451	51,164	60,506	0,243	0,248	2511,336	2660,232	297,814	10,438	10,062	-2,332	41,409	8,307	17,160	2022-04-06 10:17
45,833	48,457	51,191	60,509	0,242	0,248	2500,054	2653,775	241,395	10,686	9,862	-2,261	41,842	8,351	17,160	2022-04-06 10:17
46,333	48,460	51,217	60,491	0,242	0,248	2499,156	2641,635	260,091	10,520	9,959	-2,270	41,812	8,348	17,160	2022-04-06 10:18
46,834	48,459	51,162	60,511	0,243	0,248	2511,189	2663,465	309,599	10,477	10,059	-2,275	41,649	8,332	17,159	2022-04-06 10:18
47,333	48,457	51,171	60,493	0,243	0,248	2512,592	2653,726	302,843	10,508	10,018	-2,304	41,753	8,342	17,159	2022-04-06 10:19
47,833	48,462	51,234	60,528	0,242	0,248	2500,674	2646,418	278,286	10,642	9,905	-2,290	41,532	8,320	17,159	2022-04-06 10:19
48,333	48,459	51,229	60,546	0,241	0,248	2498,920	2652,432	215,839	10,757	9,763	-2,276	41,389	8,306	17,160	2022-04-06 10:20
48,833	48,454	51,152	60,543	0,243	0,248	2523,733	2673,460	211,940	10,763	9,710	-2,267	41,618	8,328	17,159	2022-04-06 10:20
49,333	48,483	51,168	60,578	0,243	0,248	2512,568	2679,388	240,008	10,691	9,831	-2,298	41,508	8,317	17,160	2022-04-06 10:21
49,833	48,538	51,169	60,583	0,243	0,248	2492,402	2681,176	278,688	10,855	9,699	-2,275	41,368	8,303	17,160	2022-04-06 10:21
50,334	48,532	51,198	60,616	0,243	0,248	2495,286	2680,242	360,072	11,086	9,478	-2,252	41,288	8,295	17,160	2022-04-06 10:22
50,833	48,465	51,204	60,591	0,243	0,248	2522,826	2673,086	442,194	11,408	9,149	-2,221	41,580	8,325	17,160	2022-04-06 10:22
51,333	48,371	51,217	60,597	0,242	0,248	2543,587	2671,184	645,540	11,744	8,769	-2,201	41,542	8,321	17,159	2022-04-06 10:23
51,833	48,381	51,243	60,605	0,242	0,248	2537,172	2666,223	904,513	11,604	8,841	-2,213	41,651	8,332	17,160	2022-04-06 10:23
52,333	48,468	51,198	60,631	0,242	0,248	2510,049	2685,780	1073,822	11,461	8,973	-2,242	41,492	8,316	17,160	2022-04-06 10:24
52,833	48,456	51,079	60,649	0,242	0,248	2515,388	2724,711	833,888	11,581	8,918	-2,250	41,351	8,302	17,066	2022-04-06 10:24
53,333	48,447	51,172	60,672	0,242	0,248	2525,047	2703,990	703,618	11,601	8,862	-2,228	41,618	8,328	17,066	2022-04-06 10:25
53,834	48,472	51,130	60,671	0,244	0,248	2535,250	2719,159	860,728	11,601	8,843	-2,257	41,677	8,334	17,066	2022-04-06 10:25
54,333	48,457	51,238	60,687	0,243	0,248	2531,244	2690,706	928,220	11,379	9,012	-2,320	41,466	8,313	17,066	2022-04-06 10:26
54,833	48,441	51,246	60,757	0,243	0,248	2545,589	2708,657	1076,211	11,186	9,181	-2,288	41,223	8,289	17,066	2022-04-06 10:26
55,333	48,446	51,257	60,690	0,242	0,248	2537,727	2684,953	1219,153	11,306	9,172	-2,264	41,660	8,333	17,066	2022-04-06 10:27
55,833	48,442	51,082	60,832	0,244	0,248	2555,439	2775,689	1076,786	11,393	9,035	-2,289	41,685	8,335	17,159	2022-04-06 10:27
56,333	48,447	51,209	60,779	0,243	0,248	2547,429	2725,037	1165,265	11,453	8,983	-2,250	41,581	8,325	17,074	2022-04-06 10:28

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
56,833	0,671	0,658	1,037	-0,113	-0,016	0,299	0,673	44,911	21,426	19,375	19,301	19,459	19,482	19,499	19,485	57,575
57,333	0,644	0,654	1,035	-0,115	0,056	0,304	0,674	44,768	21,359	19,293	19,229	19,383	19,407	19,421	19,410	57,598
57,833	0,546	0,646	1,036	-0,116	0,035	0,310	0,673	44,847	21,475	19,371	19,307	19,465	19,491	19,498	19,490	57,627
58,333	0,444	0,645	1,040	-0,116	0,023	0,311	0,673	44,865	21,485	19,410	19,345	19,505	19,522	19,538	19,534	57,615
58,833	0,429	0,654	1,042	-0,113	0,036	0,301	0,673	44,879	21,390	19,324	19,246	19,416	19,447	19,455	19,448	57,612
59,333	0,469	0,666	1,035	-0,111	-0,024	0,292	0,673	45,002	21,443	19,382	19,301	19,477	19,497	19,514	19,506	57,605
59,833	0,518	0,669	1,028	-0,115	-0,016	0,291	0,673	45,038	21,461	19,379	19,307	19,475	19,505	19,515	19,510	57,629
60,333	0,554	0,655	1,037	-0,114	0,005	0,303	0,673	45,014	21,484	19,403	19,326	19,501	19,523	19,533	19,530	57,637
60,833	0,588	0,649	1,036	-0,115	0,000	0,307	0,673	44,957	21,502	19,393	19,325	19,502	19,514	19,531	19,524	57,646
61,333	0,523	0,648	1,039	-0,115	0,002	0,307	0,672	44,883	21,414	19,325	19,246	19,419	19,442	19,462	19,453	57,667
61,833	0,462	0,656	1,033	-0,113	0,067	0,299	0,673	44,985	21,431	19,324	19,253	19,422	19,451	19,460	19,456	57,692
62,333	0,429	0,671	1,042	-0,113	0,021	0,288	0,672	45,052	21,438	19,338	19,253	19,438	19,472	19,476	19,470	57,700
62,833	0,423	0,676	1,040	-0,112	0,011	0,287	0,672	45,037	21,446	19,334	19,267	19,446	19,473	19,490	19,480	57,717
63,333	0,461	0,659	1,037	-0,115	0,053	0,301	0,672	45,027	21,483	19,398	19,304	19,490	19,517	19,535	19,525	57,714
63,833	0,441	0,654	1,043	-0,113	0,021	0,304	0,672	44,982	21,449	19,326	19,245	19,429	19,452	19,467	19,459	57,718
64,333	0,409	0,657	1,042	-0,113	0,043	0,301	0,672	44,985	21,326	19,336	19,255	19,434	19,457	19,472	19,470	57,743
64,833	0,417	0,664	1,047	-0,112	-0,011	0,295	0,672	45,040	21,448	19,390	19,306	19,490	19,516	19,535	19,527	57,763
65,334	0,429	0,663	1,042	-0,113	-0,004	0,298	0,672	44,909	21,431	19,351	19,270	19,463	19,485	19,499	19,495	57,759
65,833	0,448	0,648	1,038	-0,113	-0,022	0,310	0,672	44,848	21,409	19,329	19,261	19,434	19,458	19,473	19,470	57,760
66,333	0,468	0,644	1,033	-0,114	0,010	0,311	0,672	44,867	21,462	19,355	19,269	19,468	19,483	19,499	19,497	57,805
66,833	0,444	0,651	1,042	-0,113	0,012	0,305	0,671	44,954	21,490	19,396	19,304	19,494	19,523	19,543	19,530	57,807
67,333	0,376	0,660	1,038	-0,110	0,037	0,297	0,672	44,939	21,427	19,378	19,291	19,480	19,498	19,518	19,511	57,802
67,833	0,340	0,672	1,044	-0,111	0,004	0,288	0,671	44,972	21,385	19,312	19,225	19,414	19,436	19,448	19,446	57,815
68,333	0,388	0,669	1,040	-0,113	0,022	0,292	0,672	45,006	21,456	19,369	19,283	19,474	19,497	19,510	19,507	57,819
68,833	0,426	0,661	1,041	-0,113	0,037	0,298	0,670	45,038	21,405	19,401	19,326	19,507	19,524	19,542	19,542	57,830
69,333	0,407	0,659	1,044	-0,113	0,043	0,298	0,672	45,066	21,369	19,381	19,293	19,475	19,510	19,523	19,517	57,868
69,833	0,348	0,666	1,040	-0,113	0,003	0,293	0,670	45,097	21,317	19,362	19,280	19,469	19,496	19,513	19,504	57,885
70,334	0,324	0,668	1,036	-0,113	0,014	0,292	0,670	44,967	21,364	19,325	19,243	19,429	19,457	19,470	19,466	57,898
70,833	0,345	0,659	1,040	-0,114	0,027	0,301	0,670	44,993	21,440	19,404	19,326	19,509	19,538	19,557	19,554	57,895

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
56,833	48,448	51,249	60,758	0,243	0,248	2549,203	2708,515	1200,034	11,453	8,964	-2,257	41,442	8,311	17,127	2022-04-06 10:28
57,333	48,463	51,148	60,730	0,242	0,248	2538,386	2725,832	1035,389	11,234	9,117	-2,292	41,270	8,294	17,066	2022-04-06 10:29
57,833	48,460	51,024	60,743	0,242	0,248	2545,566	2766,134	784,891	11,142	9,296	-2,329	41,483	8,315	17,066	2022-04-06 10:29
58,333	48,443	51,179	60,768	0,243	0,248	2557,484	2730,663	540,703	11,133	9,315	-2,313	41,485	8,315	17,066	2022-04-06 10:30
58,833	48,452	51,232	60,759	0,243	0,248	2557,346	2713,159	625,946	11,469	9,021	-2,256	41,533	8,320	17,066	2022-04-06 10:30
59,333	48,443	51,134	60,722	0,243	0,248	2553,477	2730,853	698,757	11,720	8,756	-2,222	41,654	8,332	17,066	2022-04-06 10:31
59,833	48,457	51,204	60,803	0,243	0,248	2561,864	2734,566	831,199	11,679	8,730	-2,292	40,814	8,248	17,066	2022-04-06 10:31
60,333	48,447	51,205	60,779	0,242	0,248	2558,102	2727,235	956,253	11,282	9,081	-2,271	41,400	8,307	17,066	2022-04-06 10:32
60,833	48,448	51,135	60,758	0,243	0,248	2564,864	2739,904	953,030	11,206	9,203	-2,305	41,377	8,304	17,066	2022-04-06 10:32
61,333	48,446	51,217	60,777	0,242	0,248	2562,585	2724,072	748,443	11,215	9,213	-2,305	41,550	8,322	16,972	2022-04-06 10:33
61,833	48,449	51,253	60,856	0,242	0,248	2566,594	2732,780	632,411	11,534	8,974	-2,262	41,451	8,312	17,066	2022-04-06 10:33
62,333	48,445	51,308	60,845	0,242	0,248	2571,613	2715,372	557,887	11,864	8,625	-2,250	41,759	8,343	16,972	2022-04-06 10:34
62,833	48,446	51,282	60,817	0,242	0,248	2574,904	2713,529	582,273	11,778	8,617	-2,248	41,586	8,325	16,972	2022-04-06 10:34
63,333	48,449	51,341	60,827	0,243	0,248	2583,179	2702,429	680,388	11,404	9,017	-2,294	41,466	8,313	16,972	2022-04-06 10:35
63,833	48,474	51,221	60,839	0,241	0,248	2558,170	2737,456	557,063	11,365	9,111	-2,257	41,630	8,330	16,972	2022-04-06 10:35
64,333	48,449	51,235	60,867	0,242	0,248	2577,434	2742,945	545,331	11,484	9,018	-2,256	41,709	8,338	16,972	2022-04-06 10:36
64,833	48,443	51,296	60,886	0,242	0,248	2593,195	2730,814	553,439	11,631	8,836	-2,247	41,909	8,358	16,972	2022-04-06 10:36
65,334	48,462	51,321	60,891	0,243	0,248	2594,499	2724,438	586,445	11,481	8,938	-2,264	41,691	8,336	16,972	2022-04-06 10:37
65,833	48,462	51,191	60,915	0,241	0,248	2578,304	2770,608	659,659	11,094	9,299	-2,261	41,627	8,329	16,972	2022-04-06 10:37
66,333	48,469	51,162	60,940	0,243	0,248	2602,112	2784,129	661,950	11,135	9,322	-2,273	41,152	8,282	16,972	2022-04-06 10:38
66,833	48,470	51,203	60,934	0,242	0,248	2591,400	2772,628	579,788	11,365	9,138	-2,258	41,948	8,361	16,972	2022-04-06 10:38
67,333	48,457	51,165	60,949	0,243	0,248	2612,183	2785,678	360,505	11,587	8,900	-2,206	41,494	8,316	16,972	2022-04-06 10:39
67,833	48,454	51,277	60,713	0,242	0,248	2596,789	2686,425	364,823	11,847	8,625	-2,229	41,798	8,346	16,972	2022-04-06 10:39
68,333	48,456	51,228	60,886	0,244	0,248	2621,106	2748,500	515,872	11,618	8,771	-2,265	41,578	8,324	16,972	2022-04-06 10:40
68,833	48,463	51,341	61,031	0,243	0,248	2614,727	2758,551	581,840	11,478	8,951	-2,252	41,789	8,346	16,972	2022-04-06 10:40
69,333	48,456	51,300	61,039	0,242	0,248	2617,605	2775,788	474,833	11,548	8,948	-2,262	41,874	8,354	16,972	2022-04-06 10:41
69,833	48,456	51,267	61,016	0,242	0,248	2625,181	2776,366	335,498	11,658	8,792	-2,252	41,698	8,336	16,894	2022-04-06 10:41
70,334	48,454	51,240	61,083	0,242	0,248	2624,213	2802,976	303,278	11,690	8,764	-2,260	41,337	8,300	16,919	2022-04-06 10:42
70,833	48,451	51,357	61,105	0,243	0,248	2634,811	2775,007	402,830	11,373	9,019	-2,276	41,555	8,322	16,847	2022-04-06 10:42

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
71,333	0,360	0,652	1,045	-0,115	0,044	0,306	0,670	44,990	21,458	19,402	19,313	19,510	19,537	19,550	19,551	57,914
71,833	0,347	0,655	1,043	-0,113	0,024	0,303	0,670	45,069	21,449	19,418	19,328	19,523	19,544	19,569	19,567	57,917
72,334	0,340	0,662	1,045	-0,111	-0,007	0,296	0,670	45,109	21,497	19,408	19,326	19,526	19,550	19,567	19,565	57,957
72,833	0,329	0,668	1,040	-0,111	0,020	0,291	0,670	45,138	21,525	19,410	19,321	19,516	19,543	19,569	19,559	57,955
73,333	0,339	0,674	1,043	-0,111	-0,011	0,287	0,670	45,155	21,502	19,410	19,320	19,522	19,550	19,568	19,565	57,961
73,833	0,361	0,664	1,043	-0,113	0,054	0,298	0,670	45,005	21,440	19,355	19,259	19,465	19,489	19,502	19,507	57,999
74,333	0,348	0,653	1,039	-0,114	0,021	0,304	0,670	44,795	21,411	19,311	19,220	19,427	19,445	19,466	19,465	58,003
74,833	0,330	0,654	1,040	-0,112	0,026	0,303	0,670	44,997	21,540	19,425	19,341	19,545	19,561	19,581	19,582	58,016
75,333	0,283	0,660	1,038	-0,112	-0,005	0,297	0,670	45,005	21,459	19,374	19,288	19,494	19,515	19,529	19,535	58,016
75,833	0,273	0,670	1,038	-0,113	0,043	0,290	0,670	45,051	21,544	19,413	19,319	19,529	19,551	19,567	19,574	58,078
76,333	0,276	0,670	1,041	-0,113	0,004	0,292	0,669	45,124	21,573	19,439	19,353	19,564	19,582	19,603	19,605	58,063
76,833	0,296	0,663	1,042	-0,114	0,001	0,298	0,670	44,947	21,470	19,333	19,247	19,456	19,490	19,499	19,502	58,066
77,334	0,315	0,657	1,041	-0,113	0,042	0,301	0,670	44,970	21,457	19,325	19,243	19,451	19,477	19,488	19,497	58,091
77,833	0,291	0,667	1,043	-0,110	0,017	0,290	0,668	45,028	21,405	19,316	19,214	19,428	19,453	19,474	19,474	58,122
78,333	0,273	0,683	1,038	-0,109	-0,001	0,278	0,668	45,132	21,322	19,325	19,244	19,457	19,482	19,485	19,495	58,160
78,833	0,289	0,690	1,040	-0,110	0,023	0,273	0,668	45,247	21,365	19,329	19,239	19,454	19,479	19,503	19,503	58,161
79,333	0,342	0,691	1,038	-0,110	-0,021	0,274	0,668	45,311	21,385	19,353	19,275	19,487	19,510	19,523	19,532	58,155
79,833	0,416	0,684	1,034	-0,114	0,023	0,280	0,668	45,378	21,433	19,360	19,284	19,493	19,521	19,535	19,542	58,162
80,333	0,508	0,674	1,038	-0,113	0,013	0,287	0,668	45,409	21,510	19,410	19,323	19,545	19,568	19,584	19,591	58,204
80,833	0,494	0,674	1,041	-0,113	0,045	0,285	0,668	45,475	21,498	19,418	19,335	19,540	19,577	19,583	19,597	58,251
81,333	0,470	0,680	1,042	-0,113	0,021	0,282	0,668	45,348	21,454	19,333	19,251	19,469	19,494	19,507	19,519	58,244
81,833	0,398	0,671	1,047	-0,114	0,042	0,291	0,669	45,240	21,391	19,324	19,231	19,454	19,472	19,497	19,504	58,214
82,333	0,359	0,662	1,047	-0,113	0,007	0,298	0,668	45,140	21,416	19,336	19,241	19,464	19,484	19,498	19,511	58,218
82,833	0,309	0,657	1,045	-0,113	0,021	0,301	0,668	45,184	21,434	19,403	19,315	19,530	19,555	19,571	19,580	58,258
83,333	0,277	0,659	1,041	-0,112	0,029	0,300	0,668	45,146	21,412	19,357	19,262	19,494	19,516	19,532	19,542	58,258
83,833	0,257	0,665	1,038	-0,113	0,030	0,294	0,669	45,080	21,350	19,305	19,216	19,439	19,455	19,480	19,485	58,289
84,333	0,249	0,670	1,037	-0,112	0,030	0,290	0,668	45,090	21,368	19,319	19,222	19,448	19,474	19,493	19,498	58,282
84,833	0,247	0,670	1,037	-0,114	0,020	0,292	0,668	45,147	21,499	19,424	19,335	19,550	19,575	19,599	19,608	58,301
85,333	0,259	0,658	1,043	-0,114	0,039	0,302	0,668	44,978	21,391	19,352	19,265	19,487	19,516	19,526	19,538	58,330

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
71,333	48,446	51,193	61,107	0,243	0,248	2645,152	2821,228	384,665	11,285	9,168	-2,294	41,998	8,366	16,847	2022-04-06 10:43
71,833	48,457	51,286	61,121	0,243	0,248	2638,068	2802,194	362,650	11,390	9,077	-2,257	41,827	8,349	16,847	2022-04-06 10:43
72,334	48,447	51,327	61,135	0,243	0,248	2651,104	2792,083	348,471	11,614	8,876	-2,216	41,548	8,321	16,847	2022-04-06 10:44
72,833	48,455	51,262	61,180	0,244	0,248	2656,686	2825,724	318,453	11,728	8,739	-2,223	41,704	8,337	16,847	2022-04-06 10:44
73,333	48,460	51,291	60,375	0,242	0,248	2644,227	2587,834	361,211	11,867	8,612	-2,224	41,919	8,359	16,847	2022-04-06 10:45
73,833	48,452	51,250	61,154	0,242	0,248	2652,510	2820,018	392,996	11,420	8,931	-2,253	41,804	8,347	16,847	2022-04-06 10:45
74,333	48,454	51,251	61,080	0,242	0,248	2655,385	2797,504	364,416	11,320	9,128	-2,276	41,494	8,316	16,847	2022-04-06 10:46
74,833	48,458	51,271	61,178	0,243	0,248	2669,070	2821,913	286,105	11,370	9,102	-2,231	41,748	8,341	16,847	2022-04-06 10:46
75,333	48,471	51,156	61,189	0,243	0,248	2659,610	2856,286	183,441	11,588	8,905	-2,231	41,362	8,303	16,847	2022-04-06 10:47
75,833	48,460	51,218	61,140	0,241	0,248	2665,222	2826,545	191,049	11,796	8,693	-2,255	41,528	8,319	16,847	2022-04-06 10:47
76,333	48,466	51,306	61,205	0,244	0,248	2689,338	2817,902	198,693	11,680	8,745	-2,264	41,741	8,341	16,772	2022-04-06 10:48
76,833	48,458	51,338	61,224	0,242	0,248	2664,724	2814,642	273,901	11,471	8,945	-2,287	41,699	8,337	16,847	2022-04-06 10:48
77,334	48,467	51,275	61,294	0,242	0,248	2672,917	2853,236	272,050	11,447	9,015	-2,263	41,714	8,338	16,847	2022-04-06 10:49
77,833	48,474	51,259	61,286	0,241	0,248	2674,002	2855,114	211,943	11,829	8,708	-2,196	41,777	8,344	16,753	2022-04-06 10:49
78,333	48,458	51,354	61,308	0,242	0,248	2692,914	2836,016	178,630	12,162	8,347	-2,182	41,305	8,297	16,753	2022-04-06 10:50
78,833	48,469	51,300	61,290	0,241	0,248	2684,946	2847,326	260,144	12,296	8,177	-2,201	41,861	8,353	16,753	2022-04-06 10:50
79,333	48,449	51,328	61,303	0,242	0,248	2699,263	2841,404	394,422	12,235	8,211	-2,199	41,280	8,295	16,753	2022-04-06 10:51
79,833	48,520	51,341	61,328	0,242	0,248	2678,944	2845,145	656,434	12,021	8,401	-2,272	41,411	8,308	16,754	2022-04-06 10:51
80,333	48,563	51,390	61,355	0,242	0,248	2677,458	2839,263	807,307	11,836	8,606	-2,265	41,060	8,272	16,754	2022-04-06 10:52
80,833	48,491	51,341	61,344	0,241	0,248	2702,702	2849,709	692,066	11,911	8,552	-2,252	41,836	8,350	16,754	2022-04-06 10:52
81,333	48,371	51,417	61,447	0,244	0,248	2763,782	2857,273	658,126	11,971	8,467	-2,270	41,748	8,341	16,753	2022-04-06 10:53
81,833	48,340	51,317	61,452	0,244	0,248	2764,506	2886,994	450,707	11,681	8,727	-2,270	41,912	8,358	16,753	2022-04-06 10:53
82,333	48,431	51,356	61,484	0,243	0,248	2735,167	2883,742	357,630	11,495	8,952	-2,252	41,922	8,359	16,754	2022-04-06 10:54
82,833	48,466	51,330	61,469	0,243	0,248	2730,851	2888,020	245,593	11,433	9,042	-2,262	41,738	8,340	16,754	2022-04-06 10:54
83,333	48,466	51,280	61,479	0,242	0,248	2719,725	2904,873	171,570	11,503	8,989	-2,249	41,627	8,329	16,753	2022-04-06 10:55
83,833	48,433	51,327	61,540	0,244	0,248	2758,259	2909,690	153,853	11,685	8,829	-2,254	41,680	8,335	16,847	2022-04-06 10:55
84,333	48,442	51,396	61,466	0,243	0,248	2743,964	2867,938	113,391	11,780	8,694	-2,245	41,538	8,320	16,753	2022-04-06 10:56
84,833	48,462	51,335	61,478	0,243	0,248	2745,069	2887,537	130,081	11,681	8,749	-2,281	41,440	8,311	16,753	2022-04-06 10:56
85,333	48,444	51,432	61,491	0,243	0,248	2761,804	2864,978	154,811	11,364	9,066	-2,289	41,724	8,339	16,753	2022-04-06 10:57



## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
85,833	0,259	0,652	1,042	-0,113	-0,025	0,306	0,667	44,988	21,444	19,417	19,309	19,547	19,561	19,585	19,596	58,343
86,333	0,242	0,658	1,037	-0,112	0,018	0,299	0,667	45,012	21,386	19,373	19,274	19,501	19,521	19,536	19,550	58,358
86,833	0,232	0,673	1,041	-0,110	-0,024	0,286	0,667	45,029	21,376	19,323	19,216	19,454	19,479	19,488	19,501	58,372
87,333	0,229	0,683	1,037	-0,112	0,029	0,280	0,667	45,101	21,416	19,380	19,278	19,511	19,531	19,544	19,563	58,408
87,833	0,235	0,671	1,035	-0,115	0,039	0,291	0,667	45,001	21,471	19,412	19,319	19,556	19,579	19,588	19,603	58,418
88,333	0,236	0,661	1,040	-0,115	0,046	0,299	0,667	44,918	21,353	19,292	19,187	19,423	19,448	19,464	19,471	58,415
88,833	0,240	0,665	1,036	-0,112	-0,001	0,293	0,667	45,085	21,447	19,373	19,275	19,504	19,531	19,552	19,561	58,438
89,333	0,259	0,678	1,042	-0,110	0,013	0,283	0,667	45,226	21,504	19,428	19,316	19,554	19,579	19,588	19,607	58,444
89,833	0,272	0,687	1,045	-0,109	0,005	0,276	0,666	45,258	21,507	19,429	19,324	19,564	19,588	19,595	19,615	58,463
90,333	0,281	0,686	1,040	-0,113	0,041	0,281	0,667	45,178	21,475	19,371	19,268	19,508	19,533	19,554	19,559	58,473
90,833	0,276	0,667	1,031	-0,115	0,006	0,296	0,667	45,157	21,473	19,404	19,305	19,543	19,564	19,575	19,593	58,492
91,333	0,287	0,660	1,036	-0,113	0,049	0,300	0,667	45,074	21,398	19,367	19,269	19,509	19,533	19,552	19,562	58,506
91,833	0,270	0,661	1,034	-0,113	0,024	0,299	0,666	45,045	21,391	19,370	19,266	19,502	19,536	19,546	19,559	58,510
92,333	0,261	0,670	1,042	-0,112	0,026	0,290	0,666	45,145	21,411	19,390	19,285	19,522	19,552	19,572	19,578	58,527
92,834	0,265	0,674	1,044	-0,113	0,010	0,288	0,665	45,158	21,394	19,375	19,258	19,507	19,527	19,549	19,559	58,528
93,333	0,280	0,672	1,039	-0,112	0,002	0,291	0,666	45,050	21,423	19,415	19,310	19,547	19,571	19,588	19,600	58,546
93,833	0,288	0,661	1,040	-0,113	-0,010	0,300	0,666	45,000	21,453	19,385	19,284	19,522	19,545	19,565	19,579	58,547
94,334	0,272	0,661	1,046	-0,112	-0,012	0,298	0,665	45,003	21,362	19,359	19,236	19,472	19,510	19,517	19,536	58,545
94,833	0,266	0,671	1,038	-0,112	-0,019	0,289	0,665	45,073	21,412	19,386	19,280	19,513	19,539	19,566	19,572	58,546
95,333	0,261	0,674	1,045	-0,112	0,042	0,287	0,665	45,045	21,343	19,324	19,216	19,447	19,477	19,490	19,507	58,567
95,833	0,286	0,672	1,047	-0,113	0,038	0,290	0,665	45,073	21,357	19,369	19,266	19,505	19,528	19,548	19,563	58,591
96,333	0,299	0,661	1,042	-0,114	-0,006	0,300	0,665	44,968	21,310	19,325	19,215	19,454	19,478	19,500	19,514	58,605
96,833	0,314	0,659	1,035	-0,114	-0,013	0,300	0,665	45,060	21,384	19,339	19,236	19,485	19,505	19,518	19,536	58,584
97,333	0,322	0,670	1,037	-0,113	0,008	0,290	0,665	45,251	21,483	19,441	19,326	19,566	19,596	19,616	19,631	58,566
97,833	0,328	0,683	1,038	-0,111	0,039	0,278	0,665	45,363	21,455	19,425	19,316	19,559	19,584	19,608	19,615	58,613
98,333	0,340	0,689	1,042	-0,112	0,022	0,275	0,665	45,318	21,408	19,409	19,294	19,533	19,565	19,586	19,599	58,607
98,833	0,321	0,679	1,041	-0,112	0,044	0,285	0,665	45,239	21,366	19,374	19,261	19,505	19,529	19,548	19,562	58,622
99,333	0,366	0,673	1,039	-0,112	0,022	0,288	0,665	45,246	21,370	19,406	19,294	19,534	19,564	19,587	19,597	58,636
99,833	0,369	0,677	1,035	-0,111	-0,007	0,285	0,665	45,289	21,461	19,397	19,289	19,526	19,551	19,576	19,590	58,642

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
85,833	48,452	51,413	61,477	0,242	0,248	2750,729	2867,286	144,710	11,289	9,187	-2,251	41,785	8,345	16,659	2022-04-06 10:57
86,333	48,452	51,437	61,424	0,242	0,248	2754,635	2845,949	94,352	11,545	8,969	-2,245	41,421	8,309	16,659	2022-04-06 10:58
86,833	48,471	51,466	61,512	0,242	0,248	2753,745	2859,953	76,671	11,969	8,571	-2,200	41,275	8,294	16,659	2022-04-06 10:58
87,333	48,450	51,474	61,554	0,242	0,248	2773,073	2871,494	82,513	12,034	8,410	-2,235	41,487	8,315	16,659	2022-04-06 10:59
87,833	48,450	51,484	61,557	0,242	0,248	2765,852	2867,407	90,074	11,639	8,744	-2,303	41,665	8,333	16,659	2022-04-06 10:59
88,333	48,474	51,411	61,512	0,242	0,249	2767,099	2879,735	100,075	11,501	8,960	-2,295	41,793	8,346	16,660	2022-04-06 11:00
88,833	48,457	51,375	61,621	0,242	0,248	2778,500	2918,620	103,151	11,746	8,797	-2,234	41,425	8,309	16,659	2022-04-06 11:00
89,333	48,437	51,374	61,636	0,242	0,248	2781,100	2922,596	160,403	12,006	8,489	-2,199	41,630	8,330	16,659	2022-04-06 11:01
89,833	48,438	51,416	61,656	0,241	0,248	2772,787	2917,420	182,744	12,231	8,266	-2,185	41,792	8,346	16,659	2022-04-06 11:01
90,333	48,457	51,455	61,666	0,242	0,248	2782,739	2906,689	215,773	12,005	8,422	-2,265	41,759	8,343	16,659	2022-04-06 11:02
90,833	48,452	51,395	61,699	0,242	0,248	2787,242	2935,279	189,955	11,573	8,866	-2,305	40,803	8,246	16,659	2022-04-06 11:02
91,333	48,450	51,478	61,725	0,241	0,248	2783,548	2918,658	215,964	11,468	9,013	-2,261	41,480	8,315	16,659	2022-04-06 11:03
91,833	48,446	51,409	61,720	0,241	0,248	2790,132	2937,028	162,709	11,542	8,960	-2,256	41,349	8,302	16,566	2022-04-06 11:03
92,333	48,439	51,402	61,710	0,241	0,248	2791,213	2936,257	170,398	11,838	8,704	-2,239	41,659	8,333	16,659	2022-04-06 11:04
92,834	48,455	51,503	61,760	0,242	0,248	2803,322	2920,500	166,121	11,856	8,642	-2,260	41,642	8,331	16,566	2022-04-06 11:04
93,333	48,450	51,429	61,711	0,241	0,249	2793,298	2931,020	213,526	11,741	8,722	-2,241	41,525	8,319	16,566	2022-04-06 11:05
93,833	48,442	51,500	61,720	0,242	0,249	2807,752	2914,624	213,486	11,455	8,998	-2,256	41,762	8,343	16,659	2022-04-06 11:05
94,334	48,458	51,554	61,800	0,243	0,249	2810,076	2920,425	180,995	11,580	8,927	-2,247	41,846	8,351	16,566	2022-04-06 11:06
94,833	48,443	51,495	61,758	0,242	0,248	2807,260	2922,877	164,026	11,822	8,679	-2,236	41,337	8,300	16,566	2022-04-06 11:06
95,333	48,446	51,598	61,739	0,242	0,248	2812,992	2888,529	156,252	11,854	8,608	-2,239	41,737	8,340	16,566	2022-04-06 11:07
95,833	48,454	51,432	61,860	0,241	0,248	2805,426	2968,720	232,454	11,742	8,698	-2,259	42,203	8,387	16,566	2022-04-06 11:07
96,333	48,454	51,451	61,659	0,241	0,248	2811,719	2906,731	277,351	11,470	8,987	-2,271	41,706	8,337	16,566	2022-04-06 11:08
96,833	48,449	51,509	61,700	0,243	0,248	2831,959	2900,359	307,378	11,533	8,987	-2,270	41,407	8,307	16,566	2022-04-06 11:08
97,333	48,457	51,535	61,888	0,243	0,248	2819,130	2946,713	287,344	11,844	8,700	-2,255	41,452	8,312	16,566	2022-04-06 11:09
97,833	48,446	51,446	61,732	0,242	0,248	2826,602	2929,546	351,493	12,190	8,346	-2,228	41,500	8,317	16,566	2022-04-06 11:09
98,333	48,445	51,468	61,715	0,243	0,248	2835,576	2917,042	353,094	12,205	8,262	-2,236	41,645	8,331	16,566	2022-04-06 11:10
98,833	48,449	51,534	61,560	0,242	0,248	2831,431	2855,044	331,435	11,878	8,545	-2,240	41,494	8,316	16,566	2022-04-06 11:10
99,333	48,434	51,444	61,814	0,242	0,248	2831,322	2952,033	461,757	11,835	8,633	-2,243	41,509	8,318	16,566	2022-04-06 11:11
99,833	48,452	51,536	61,825	0,243	0,248	2843,817	2927,117	370,897	11,929	8,536	-2,218	41,334	8,300	16,566	2022-04-06 11:11

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
100,333	0,332	0,682	1,039	-0,112	0,012	0,280	0,665	45,287	21,411	19,342	19,226	19,472	19,495	19,519	19,534	58,646
100,833	0,327	0,682	1,039	-0,111	-0,042	0,281	0,665	45,350	21,470	19,403	19,281	19,539	19,565	19,579	19,599	58,691
101,333	0,323	0,677	1,036	-0,112	-0,005	0,287	0,664	45,191	21,397	19,380	19,268	19,521	19,539	19,566	19,580	58,697
101,833	0,329	0,666	1,038	-0,112	0,028	0,296	0,664	45,228	21,468	19,445	19,316	19,578	19,603	19,625	19,632	58,698
102,333	0,323	0,663	1,046	-0,112	0,038	0,296	0,664	45,276	21,450	19,445	19,332	19,575	19,610	19,632	19,642	58,699
102,833	0,282	0,675	1,042	-0,110	0,025	0,285	0,664	45,229	21,408	19,383	19,271	19,527	19,547	19,564	19,582	58,708
103,333	0,262	0,688	1,039	-0,111	-0,007	0,277	0,664	45,249	21,422	19,403	19,280	19,529	19,560	19,579	19,596	58,728
103,833	0,255	0,685	1,036	-0,110	0,022	0,279	0,664	45,333	21,507	19,446	19,333	19,584	19,612	19,627	19,647	58,718
104,333	0,262	0,680	1,038	-0,111	0,016	0,284	0,664	45,292	21,516	19,443	19,333	19,579	19,609	19,623	19,642	58,713
104,833	0,267	0,674	1,045	-0,112	0,028	0,289	0,664	45,218	21,380	19,405	19,293	19,532	19,561	19,586	19,599	58,760
105,333	0,249	0,671	1,043	-0,112	0,000	0,289	0,664	45,362	21,434	19,445	19,327	19,572	19,609	19,626	19,643	58,711
105,833	0,242	0,682	1,041	-0,109	-0,005	0,278	0,664	45,383	21,413	19,402	19,290	19,525	19,563	19,584	19,599	58,758
106,333	0,256	0,700	1,042	-0,107	0,049	0,265	0,664	45,439	21,366	19,332	19,225	19,464	19,503	19,526	19,537	58,772
106,834	0,247	0,698	1,041	-0,109	0,009	0,268	0,663	45,418	21,383	19,362	19,239	19,492	19,525	19,542	19,558	58,793
107,333	0,241	0,687	1,036	-0,113	0,001	0,280	0,664	45,374	21,509	19,455	19,347	19,590	19,624	19,635	19,659	58,805
107,833	0,246	0,670	1,043	-0,113	-0,005	0,293	0,663	45,241	21,386	19,361	19,246	19,500	19,530	19,555	19,568	58,786
108,333	0,251	0,668	1,038	-0,112	0,011	0,290	0,663	45,355	21,392	19,373	19,261	19,512	19,546	19,556	19,579	58,803
108,833	0,249	0,685	1,044	-0,110	0,004	0,276	0,663	45,230	21,400	19,322	19,206	19,461	19,488	19,511	19,529	58,822
109,333	0,240	0,692	1,039	-0,110	0,009	0,273	0,663	45,383	21,505	19,418	19,307	19,563	19,594	19,610	19,630	58,841
109,833	0,247	0,687	1,039	-0,110	0,005	0,279	0,662	45,310	21,483	19,371	19,267	19,522	19,540	19,572	19,585	58,850
110,333	0,257	0,679	1,039	-0,110	-0,004	0,284	0,662	45,401	21,520	19,445	19,335	19,590	19,617	19,634	19,654	58,853
110,833	0,253	0,679	1,041	-0,112	0,016	0,283	0,662	45,424	21,476	19,384	19,271	19,520	19,550	19,560	19,589	58,892
111,333	0,241	0,688	1,046	-0,111	0,024	0,273	0,662	45,477	21,406	19,350	19,243	19,492	19,512	19,537	19,556	58,861
111,833	0,236	0,701	1,044	-0,111	-0,004	0,264	0,662	45,486	21,365	19,308	19,195	19,451	19,475	19,493	19,519	58,871
112,333	0,239	0,701	1,040	-0,111	0,041	0,267	0,662	45,607	21,490	19,425	19,304	19,562	19,589	19,610	19,632	58,853
112,833	0,248	0,683	1,041	-0,113	0,043	0,281	0,662	45,576	21,442	19,464	19,347	19,603	19,622	19,650	19,671	58,872
113,333	0,251	0,676	1,040	-0,113	-0,003	0,285	0,662	45,403	21,318	19,311	19,202	19,452	19,470	19,504	19,526	58,912
113,833	0,240	0,686	1,036	-0,112	0,004	0,277	0,662	45,562	21,489	19,400	19,283	19,542	19,565	19,589	19,607	58,903
114,333	0,245	0,695	1,037	-0,111	0,005	0,269	0,662	45,670	21,445	19,374	19,264	19,507	19,542	19,571	19,587	58,933

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
100,333	48,447	51,395	61,675	0,242	0,248	2836,486	2926,822	313,628	12,073	8,405	-2,238	41,901	8,357	16,566	2022-04-06 11:12
100,833	48,444	51,519	61,737	0,240	0,248	2829,045	2910,223	307,552	12,020	8,438	-2,223	41,713	8,338	16,566	2022-04-06 11:12
101,333	48,476	51,562	61,782	0,242	0,248	2842,570	2910,490	299,505	11,835	8,608	-2,239	41,313	8,298	16,472	2022-04-06 11:13
101,833	48,477	51,527	61,700	0,243	0,248	2850,016	2896,497	355,253	11,581	8,875	-2,235	41,716	8,338	16,472	2022-04-06 11:13
102,333	48,464	51,457	61,572	0,241	0,248	2837,452	2879,517	268,655	11,599	8,891	-2,237	41,860	8,353	16,472	2022-04-06 11:14
102,833	48,447	51,584	61,744	0,242	0,248	2856,880	2893,274	178,116	12,023	8,558	-2,200	41,503	8,317	16,472	2022-04-06 11:14
103,333	48,438	51,594	61,667	0,242	0,248	2860,361	2869,523	140,087	12,156	8,306	-2,214	41,298	8,296	16,472	2022-04-06 11:15
103,833	48,435	51,541	61,464	0,243	0,248	2870,000	2824,000	142,162	12,099	8,362	-2,202	41,443	8,311	16,472	2022-04-06 11:15
104,333	48,439	51,555	61,764	0,243	0,248	2864,980	2908,518	168,656	11,938	8,511	-2,215	41,428	8,309	16,472	2022-04-06 11:16
104,833	48,451	51,565	61,277	0,242	0,248	2865,473	2764,023	153,016	11,747	8,670	-2,237	41,878	8,354	16,472	2022-04-06 11:16
105,333	48,446	51,483	61,517	0,244	0,248	2879,891	2856,797	116,737	11,836	8,663	-2,239	41,744	8,341	16,472	2022-04-06 11:17
105,833	48,450	51,484	61,922	0,242	0,248	2863,588	2973,984	112,535	12,189	8,343	-2,175	41,526	8,319	16,472	2022-04-06 11:17
106,333	48,460	51,542	61,619	0,242	0,248	2867,548	2869,663	151,864	12,597	7,951	-2,144	41,620	8,329	16,472	2022-04-06 11:18
106,834	48,442	51,504	61,818	0,241	0,248	2862,616	2936,622	105,869	12,400	8,051	-2,177	41,528	8,319	16,566	2022-04-06 11:18
107,333	48,436	51,474	61,343	0,241	0,248	2875,162	2810,385	108,407	12,024	8,385	-2,259	41,328	8,299	16,472	2022-04-06 11:19
107,833	48,434	51,598	61,536	0,243	0,248	2889,215	2829,267	126,032	11,632	8,778	-2,260	41,888	8,355	16,347	2022-04-06 11:19
108,333	48,436	51,572	61,692	0,243	0,248	2888,622	2880,740	133,557	11,814	8,686	-2,234	41,630	8,330	16,472	2022-04-06 11:20
108,833	48,458	51,470	61,647	0,241	0,248	2873,247	2895,812	113,220	12,230	8,282	-2,207	41,873	8,354	16,347	2022-04-06 11:20
109,333	48,484	51,579	61,764	0,241	0,248	2864,413	2900,263	102,644	12,265	8,195	-2,199	41,468	8,313	16,472	2022-04-06 11:21
109,833	48,528	51,618	61,756	0,243	0,248	2875,224	2887,634	129,899	12,106	8,359	-2,199	41,723	8,339	16,472	2022-04-06 11:21
110,333	48,555	51,520	61,468	0,242	0,248	2858,986	2832,521	148,411	11,975	8,527	-2,210	41,243	8,291	16,347	2022-04-06 11:22
110,833	48,480	51,610	61,598	0,243	0,248	2900,010	2846,223	124,119	12,006	8,480	-2,232	41,884	8,355	16,347	2022-04-06 11:22
111,333	48,363	51,694	61,702	0,243	0,248	2929,590	2849,601	100,096	12,336	8,204	-2,215	41,764	8,343	16,462	2022-04-06 11:23
111,833	48,333	51,596	61,767	0,241	0,248	2914,667	2895,477	96,526	12,605	7,909	-2,215	41,720	8,339	16,347	2022-04-06 11:23
112,333	48,429	51,474	61,910	0,243	0,248	2906,929	2972,767	107,095	12,349	8,021	-2,216	41,977	8,364	16,347	2022-04-06 11:24
112,833	48,467	51,525	61,693	0,241	0,248	2884,947	2894,866	130,867	11,941	8,441	-2,259	41,549	8,322	16,347	2022-04-06 11:24
113,333	48,466	51,554	61,508	0,242	0,248	2896,963	2832,880	124,294	11,948	8,544	-2,263	41,707	8,337	16,347	2022-04-06 11:25
113,833	48,452	51,569	61,512	0,243	0,248	2916,096	2833,380	101,255	12,236	8,304	-2,235	41,221	8,289	16,347	2022-04-06 11:25
114,333	48,424	51,631	61,947	0,241	0,248	2906,262	2936,750	122,366	12,473	8,060	-2,225	41,593	8,326	16,347	2022-04-06 11:26

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
114,833	0,237	0,691	1,039	-0,114	-0,011	0,276	0,662	45,566	21,439	19,379	19,263	19,523	19,544	19,576	19,593	58,938
115,334	0,236	0,673	1,045	-0,114	0,013	0,291	0,661	45,414	21,402	19,339	19,222	19,483	19,515	19,532	19,559	58,922
115,833	0,239	0,663	1,037	-0,114	-0,032	0,297	0,661	45,369	21,451	19,360	19,245	19,504	19,539	19,562	19,582	58,932
116,333	0,232	0,667	1,035	-0,112	0,047	0,293	0,662	45,336	21,483	19,368	19,283	19,516	19,544	19,574	19,591	58,962
116,833	0,233	0,678	1,033	-0,111	0,006	0,283	0,661	45,451	21,441	19,372	19,282	19,512	19,536	19,566	19,584	59,019
117,333	0,241	0,687	1,040	-0,111	0,034	0,275	0,662	45,488	21,439	19,374	19,273	19,490	19,521	19,548	19,567	59,072
117,833	0,237	0,689	1,037	-0,113	0,001	0,276	0,660	45,518	21,497	19,499	19,381	19,582	19,621	19,647	19,660	59,062
118,333	0,241	0,682	1,036	-0,114	-0,002	0,283	0,661	45,476	21,468	19,497	19,375	19,561	19,586	19,618	19,637	59,106
118,833	0,240	0,670	1,034	-0,115	0,036	0,292	0,660	45,468	21,495	19,526	19,405	19,590	19,611	19,644	19,657	59,102
119,333	0,234	0,674	1,039	-0,112	0,016	0,286	0,660	45,513	21,465	19,510	19,384	19,553	19,585	19,610	19,630	59,100
119,833	0,232	0,684	1,035	-0,112	-0,034	0,278	0,660	45,523	21,438	19,484	19,367	19,529	19,556	19,585	19,603	59,096
120,334	0,240	0,693	1,031	-0,113	0,040	0,272	0,660	45,576	21,464	19,505	19,393	19,550	19,580	19,605	19,624	59,107
120,833	0,257	0,686	1,030	-0,114	0,011	0,280	0,661	45,412	21,428	19,430	19,328	19,481	19,515	19,532	19,555	59,116
121,334	0,261	0,675	1,032	-0,117	0,041	0,288	0,660	45,499	21,514	19,543	19,446	19,601	19,637	19,655	19,674	59,108
121,833	0,252	0,669	1,030	-0,115	0,025	0,293	0,660	45,426	21,463	19,502	19,405	19,559	19,587	19,613	19,631	59,136
122,333	0,239	0,671	1,033	-0,115	0,022	0,289	0,660	45,452	21,474	19,505	19,427	19,572	19,593	19,624	19,644	59,173
122,833	0,229	0,683	1,036	-0,112	0,020	0,279	0,660	45,566	21,425	19,575	19,500	19,635	19,665	19,694	19,712	59,172
123,333	0,225	0,684	1,040	-0,112	0,017	0,280	0,660	45,536	21,424	19,712	19,581	19,631	19,655	19,665	19,705	59,161
123,833	0,229	0,673	1,038	-0,114	0,024	0,290	0,660	45,313	21,358	19,686	19,502	19,508	19,511	19,554	19,583	59,184
124,333	0,238	0,670	1,034	-0,114	0,010	0,290	0,660	45,478	21,434	19,835	19,655	19,605	19,616	19,650	19,680	59,147
124,834	0,242	0,686	1,042	-0,111	0,012	0,275	0,660	45,567	21,365	19,788	19,589	19,533	19,538	19,568	19,600	59,147
125,333	0,235	0,699	1,039	-0,111	0,000	0,266	0,660	45,652	21,404	19,855	19,647	19,571	19,578	19,619	19,642	59,176
125,833	0,232	0,699	1,036	-0,111	0,008	0,267	0,659	45,614	21,383	19,847	19,630	19,540	19,552	19,584	19,615	59,138
126,334	0,229	0,697	1,038	-0,113	-0,007	0,268	0,659	45,634	21,399	19,868	19,663	19,547	19,558	19,587	19,618	59,163
126,833	0,233	0,692	1,037	-0,113	0,003	0,275	0,659	45,595	21,359	19,860	19,639	19,519	19,529	19,554	19,587	59,189
127,333	0,240	0,680	1,034	-0,116	-0,003	0,284	0,659	45,522	21,362	19,892	19,669	19,521	19,533	19,561	19,595	59,181
127,833	0,245	0,676	1,037	-0,114	0,010	0,286	0,659	45,521	21,441	19,950	19,712	19,564	19,575	19,606	19,635	59,211
128,333	0,253	0,676	1,037	-0,115	0,039	0,286	0,659	45,466	21,419	19,932	19,693	19,545	19,553	19,577	19,611	59,194
128,833	0,251	0,673	1,032	-0,116	0,055	0,289	0,658	45,448	21,428	19,988	19,749	19,588	19,589	19,624	19,655	59,211

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
114,833	48,404	51,609	61,630	0,242	0,248	2924,607	2852,725	89,221	12,134	8,278	-2,271	41,586	8,325	16,347	2022-04-06 11:26
115,334	48,428	51,628	61,804	0,242	0,249	2921,742	2900,958	100,965	11,667	8,727	-2,287	41,893	8,356	16,347	2022-04-06 11:27
115,833	48,458	51,602	61,879	0,242	0,248	2909,191	2925,922	95,100	11,583	8,916	-2,289	41,413	8,308	16,347	2022-04-06 11:27
116,333	48,463	51,632	61,905	0,242	0,248	2916,873	2926,989	79,236	11,743	8,791	-2,247	41,488	8,315	16,347	2022-04-06 11:28
116,833	48,429	51,655	61,862	0,237	0,248	2886,119	2907,993	95,237	12,020	8,499	-2,217	41,205	8,287	16,254	2022-04-06 11:28
117,333	48,398	51,646	61,692	0,237	0,248	2907,165	2863,012	109,272	12,248	8,261	-2,219	41,533	8,320	16,347	2022-04-06 11:29
117,833	48,429	51,730	61,894	0,238	0,248	2902,523	2896,205	89,559	12,160	8,284	-2,259	41,490	8,316	16,254	2022-04-06 11:29
118,333	48,437	51,739	61,809	0,236	0,248	2895,324	2867,467	112,957	11,976	8,489	-2,270	41,651	8,332	16,336	2022-04-06 11:30
118,833	48,406	51,739	62,070	0,237	0,248	2910,367	2942,156	96,188	11,693	8,768	-2,298	41,176	8,284	16,254	2022-04-06 11:30
119,333	48,417	51,716	61,885	0,238	0,248	2914,456	2896,177	86,293	11,953	8,588	-2,233	41,356	8,302	16,254	2022-04-06 11:31
119,833	48,461	51,732	61,672	0,238	0,248	2903,897	2831,171	90,395	12,198	8,329	-2,237	41,395	8,306	16,254	2022-04-06 11:31
120,334	48,455	51,705	61,736	0,237	0,248	2904,298	2857,161	115,171	12,338	8,165	-2,252	40,926	8,259	16,254	2022-04-06 11:32
120,833	48,418	51,710	61,945	0,238	0,248	2917,712	2915,444	155,907	12,052	8,389	-2,276	41,318	8,298	16,254	2022-04-06 11:32
121,334	48,403	51,745	62,033	0,238	0,248	2930,165	2929,582	156,007	11,830	8,649	-2,331	41,402	8,307	16,254	2022-04-06 11:33
121,833	48,440	51,675	61,843	0,236	0,248	2900,803	2897,523	123,094	11,697	8,780	-2,302	41,215	8,288	16,254	2022-04-06 11:33
122,333	48,463	51,667	61,821	0,236	0,248	2908,751	2891,978	91,438	11,877	8,655	-2,298	41,480	8,315	16,160	2022-04-06 11:34
122,833	48,446	51,768	61,901	0,236	0,248	2908,731	2885,948	72,428	12,146	8,374	-2,233	41,097	8,276	16,254	2022-04-06 11:34
123,333	48,415	51,742	62,343	0,237	0,248	2929,237	3018,797	63,466	12,034	8,406	-2,244	41,372	8,304	16,254	2022-04-06 11:35
123,833	48,416	51,760	61,921	0,236	0,248	2923,552	2893,656	84,392	11,736	8,713	-2,272	41,247	8,291	16,254	2022-04-06 11:35
124,333	48,445	51,730	61,530	0,239	0,248	2938,232	2791,768	101,628	11,826	8,709	-2,285	41,447	8,311	16,160	2022-04-06 11:36
124,834	48,440	51,704	61,643	0,238	0,248	2924,751	2832,016	107,447	12,318	8,253	-2,212	41,524	8,319	16,160	2022-04-06 11:36
125,333	48,416	51,751	61,673	0,237	0,248	2928,149	2825,332	87,463	12,503	7,983	-2,226	41,492	8,316	16,254	2022-04-06 11:37
125,833	48,420	51,657	61,698	0,239	0,248	2941,488	2861,811	80,524	12,439	8,009	-2,229	41,677	8,334	16,160	2022-04-06 11:37
126,334	48,460	51,732	62,044	0,238	0,248	2926,007	2936,762	74,410	12,438	8,054	-2,257	41,369	8,303	16,160	2022-04-06 11:38
126,833	48,459	51,780	62,245	0,238	0,248	2934,804	2982,428	96,246	12,190	8,242	-2,268	41,446	8,311	16,160	2022-04-06 11:38
127,333	48,419	51,652	62,255	0,238	0,248	2935,606	3019,020	108,383	11,911	8,530	-2,316	40,985	8,265	16,160	2022-04-06 11:39
127,833	48,400	51,630	62,323	0,237	0,248	2940,866	3044,432	123,931	11,896	8,583	-2,271	41,575	8,324	16,160	2022-04-06 11:39
128,333	48,418	51,736	62,334	0,237	0,248	2938,675	3016,752	135,270	11,921	8,589	-2,291	41,252	8,292	16,254	2022-04-06 11:40
128,833	48,420	51,686	62,331	0,238	0,248	2953,118	3032,598	128,976	11,823	8,667	-2,323	41,191	8,286	16,160	2022-04-06 11:40

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
129,333	0,248	0,672	1,036	-0,115	0,007	0,290	0,659	45,465	21,433	19,993	19,736	19,565	19,570	19,609	19,637	59,180
129,833	0,246	0,677	1,037	-0,112	-0,016	0,284	0,659	45,566	21,418	20,009	19,754	19,575	19,583	19,612	19,644	59,198
130,333	0,247	0,685	1,037	-0,112	-0,003	0,279	0,659	45,667	21,487	20,080	19,823	19,641	19,650	19,687	19,711	59,215
130,833	0,245	0,690	1,038	-0,112	-0,017	0,274	0,659	45,766	21,471	20,087	19,830	19,644	19,657	19,682	19,710	59,242
131,333	0,250	0,698	1,042	-0,113	-0,002	0,269	0,659	45,750	21,532	20,100	19,835	19,639	19,656	19,681	19,711	59,224
131,833	0,255	0,685	1,042	-0,115	0,062	0,282	0,659	45,664	21,468	20,116	19,851	19,645	19,654	19,680	19,713	59,215
132,333	0,266	0,669	1,030	-0,115	0,012	0,293	0,659	45,582	21,374	20,052	19,791	19,578	19,585	19,623	19,647	59,232
132,833	0,266	0,671	1,040	-0,114	0,018	0,289	0,658	45,601	21,443	20,077	19,818	19,605	19,612	19,636	19,666	59,235
133,333	0,267	0,685	1,034	-0,113	0,013	0,277	0,658	45,649	21,424	20,044	19,787	19,559	19,560	19,593	19,618	59,242
133,834	0,287	0,694	1,040	-0,113	0,001	0,271	0,658	45,658	21,454	20,076	19,793	19,575	19,572	19,600	19,630	59,243
134,333	0,285	0,688	1,038	-0,113	0,042	0,277	0,657	45,645	21,382	20,082	19,796	19,567	19,575	19,605	19,630	59,248
134,833	0,299	0,684	1,028	-0,113	0,016	0,281	0,657	45,697	21,372	20,077	19,807	19,574	19,578	19,600	19,630	59,243
135,333	0,315	0,677	1,038	-0,116	0,007	0,286	0,657	45,672	21,498	20,151	19,877	19,634	19,643	19,666	19,689	59,266
135,833	0,302	0,677	1,037	-0,115	0,003	0,285	0,657	45,593	21,467	20,120	19,844	19,594	19,595	19,627	19,651	59,261
136,333	0,285	0,679	1,037	-0,115	0,021	0,282	0,657	45,615	21,423	20,097	19,816	19,571	19,566	19,596	19,620	59,245
136,833	0,276	0,687	1,042	-0,113	0,005	0,277	0,657	45,673	21,427	20,150	19,884	19,619	19,629	19,656	19,678	59,244
137,333	0,281	0,681	1,040	-0,116	0,009	0,284	0,657	45,608	21,486	20,202	19,916	19,646	19,655	19,689	19,707	59,263
137,833	0,274	0,668	1,038	-0,115	0,009	0,293	0,657	45,575	21,554	20,240	19,952	19,673	19,691	19,710	19,736	59,274
138,334	0,268	0,666	1,038	-0,114	-0,028	0,294	0,657	45,472	21,497	20,185	19,896	19,628	19,634	19,664	19,679	59,258
138,833	0,258	0,670	1,040	-0,114	0,040	0,289	0,657	45,458	21,456	20,146	19,853	19,575	19,574	19,610	19,628	59,239
139,333	0,258	0,679	1,041	-0,113	0,003	0,282	0,657	45,501	21,494	20,179	19,886	19,606	19,611	19,640	19,659	59,271
139,833	0,265	0,682	1,032	-0,115	0,022	0,281	0,657	45,524	21,530	20,239	19,935	19,660	19,663	19,692	19,708	59,272
140,333	0,271	0,674	1,042	-0,114	0,021	0,289	0,657	45,455	21,508	20,236	19,931	19,645	19,656	19,678	19,698	59,245
140,833	0,290	0,668	1,037	-0,113	0,029	0,292	0,657	45,450	21,464	20,195	19,887	19,605	19,600	19,632	19,650	59,296
141,333	0,296	0,675	1,040	-0,113	0,024	0,286	0,656	45,381	21,291	20,100	19,799	19,521	19,516	19,547	19,563	59,294
141,833	0,307	0,681	1,034	-0,112	0,020	0,282	0,656	45,467	21,403	20,181	19,890	19,598	19,601	19,635	19,643	59,281
142,333	0,308	0,681	1,033	-0,112	-0,002	0,280	0,656	45,447	21,337	20,138	19,849	19,563	19,566	19,592	19,609	59,276
142,833	0,317	0,680	1,035	-0,113	0,006	0,283	0,656	45,444	21,360	20,139	19,849	19,562	19,567	19,589	19,602	59,253
143,333	0,322	0,669	1,040	-0,114	0,040	0,294	0,656	45,363	21,483	20,205	19,919	19,623	19,625	19,644	19,662	59,257

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
129,333	48,425	51,713	62,365	0,239	0,248	2951,910	3034,235	121,849	11,785	8,702	-2,294	41,389	8,306	16,226	2022-04-06 11:41
129,833	48,429	51,733	62,360	0,238	0,248	2942,519	3025,679	117,241	12,035	8,525	-2,248	41,683	8,335	16,160	2022-04-06 11:41
130,333	48,430	51,757	62,345	0,238	0,248	2945,634	3014,405	123,103	12,145	8,372	-2,250	41,307	8,297	16,160	2022-04-06 11:42
130,833	48,431	51,823	62,331	0,239	0,248	2964,016	2990,038	114,297	12,310	8,220	-2,234	41,763	8,343	16,160	2022-04-06 11:42
131,333	48,415	51,816	62,393	0,238	0,248	2958,279	3014,009	131,158	12,430	8,057	-2,251	41,629	8,330	16,160	2022-04-06 11:43
131,833	48,433	51,722	62,418	0,238	0,248	2947,624	3046,955	157,033	11,958	8,448	-2,309	41,521	8,319	16,160	2022-04-06 11:43
132,333	48,446	51,732	62,336	0,238	0,248	2953,540	3019,649	169,168	11,659	8,796	-2,296	40,949	8,261	16,160	2022-04-06 11:44
132,833	48,435	51,789	62,421	0,239	0,248	2959,293	3029,622	170,389	11,862	8,671	-2,275	41,543	8,321	16,160	2022-04-06 11:44
133,333	48,414	51,664	62,454	0,238	0,248	2965,142	3072,803	185,319	12,255	8,325	-2,253	41,494	8,316	16,160	2022-04-06 11:45
133,834	48,400	51,779	62,536	0,238	0,248	2966,679	3063,727	217,411	12,350	8,140	-2,253	41,536	8,320	16,066	2022-04-06 11:45
134,333	48,430	51,841	62,511	0,238	0,248	2952,493	3037,487	233,902	12,156	8,324	-2,253	41,426	8,309	16,067	2022-04-06 11:46
134,833	48,462	51,779	62,266	0,238	0,248	2950,375	2987,904	262,198	12,035	8,432	-2,267	41,259	8,292	16,066	2022-04-06 11:46
135,333	48,439	51,756	62,461	0,239	0,248	2971,142	3047,266	294,883	11,908	8,577	-2,324	41,465	8,313	16,066	2022-04-06 11:47
135,833	48,397	51,799	62,287	0,239	0,248	2986,216	2985,986	245,149	11,935	8,546	-2,294	41,287	8,295	16,066	2022-04-06 11:47
136,333	48,416	51,812	62,046	0,240	0,248	2988,950	2915,370	201,928	12,018	8,473	-2,303	41,570	8,324	16,066	2022-04-06 11:48
136,833	48,454	51,772	62,261	0,239	0,248	2962,888	2987,364	190,639	12,186	8,296	-2,265	41,774	8,344	16,066	2022-04-06 11:48
137,333	48,459	51,796	62,280	0,239	0,248	2970,285	2985,758	198,992	11,884	8,527	-2,326	41,417	8,308	16,066	2022-04-06 11:49
137,833	48,459	51,759	62,084	0,238	0,248	2954,041	2938,643	181,075	11,668	8,781	-2,309	41,565	8,323	15,972	2022-04-06 11:49
138,334	48,452	51,766	62,339	0,239	0,248	2971,812	3012,006	163,124	11,628	8,814	-2,287	41,594	8,326	16,066	2022-04-06 11:50
138,833	48,440	51,808	62,469	0,239	0,248	2968,551	3034,112	140,813	11,841	8,684	-2,279	41,643	8,331	16,066	2022-04-06 11:50
139,333	48,435	51,761	62,447	0,239	0,248	2971,417	3041,052	161,208	12,030	8,467	-2,251	41,772	8,344	16,066	2022-04-06 11:51
139,833	48,463	51,784	62,397	0,239	0,248	2968,784	3023,230	168,227	12,021	8,423	-2,303	41,317	8,298	16,066	2022-04-06 11:51
140,333	48,537	51,822	62,525	0,239	0,248	2939,230	3047,315	183,068	11,733	8,661	-2,280	41,504	8,317	16,066	2022-04-06 11:52
140,833	48,563	51,794	62,056	0,238	0,248	2937,365	2922,708	252,186	11,732	8,746	-2,268	41,012	8,268	16,066	2022-04-06 11:52
141,333	48,496	51,730	61,963	0,238	0,248	2954,050	2914,519	254,600	11,933	8,573	-2,263	41,518	8,318	15,972	2022-04-06 11:53
141,833	48,381	51,863	62,421	0,238	0,248	2985,405	3006,097	263,853	12,012	8,460	-2,234	40,937	8,260	15,972	2022-04-06 11:53
142,333	48,312	51,754	62,149	0,238	0,248	2996,503	2958,787	285,126	12,046	8,413	-2,249	41,364	8,303	15,972	2022-04-06 11:54
142,833	48,397	51,661	62,368	0,239	0,248	2982,750	3048,199	296,862	11,953	8,488	-2,260	41,480	8,315	15,972	2022-04-06 11:54
143,333	48,471	51,701	62,208	0,239	0,248	2959,044	2993,676	325,309	11,610	8,808	-2,281	41,807	8,347	15,972	2022-04-06 11:55



## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
143,833	0,335	0,659	1,039	-0,116	0,022	0,299	0,656	45,364	21,464	20,251	19,959	19,658	19,654	19,683	19,697	59,277
144,333	0,311	0,665	1,041	-0,113	0,011	0,293	0,656	45,437	21,467	20,264	19,984	19,675	19,680	19,697	19,716	59,267
144,833	0,276	0,674	1,033	-0,112	0,004	0,286	0,655	45,453	21,480	20,247	19,957	19,650	19,648	19,677	19,689	59,270
145,333	0,270	0,680	1,032	-0,112	-0,021	0,284	0,655	45,413	21,425	20,205	19,926	19,617	19,614	19,641	19,651	59,271
145,833	0,286	0,666	1,046	-0,114	0,025	0,296	0,656	45,290	21,358	20,197	19,914	19,605	19,602	19,629	19,639	59,261
146,333	0,291	0,657	1,042	-0,113	0,024	0,301	0,656	45,302	21,430	20,255	19,981	19,668	19,667	19,690	19,704	59,273
146,833	0,314	0,657	1,035	-0,114	0,033	0,301	0,656	45,288	21,409	20,266	19,990	19,667	19,671	19,704	19,706	59,256
147,334	0,331	0,661	1,036	-0,114	-0,024	0,298	0,655	45,250	21,396	20,202	19,934	19,614	19,619	19,636	19,651	59,275
147,833	0,317	0,661	1,035	-0,115	0,047	0,298	0,656	45,176	21,402	20,219	19,946	19,626	19,626	19,651	19,665	59,272
148,333	0,308	0,658	1,038	-0,116	0,045	0,300	0,655	45,198	21,437	20,291	20,025	19,709	19,705	19,737	19,741	59,257
148,833	0,318	0,652	1,031	-0,115	-0,011	0,306	0,656	45,054	21,419	20,239	19,970	19,648	19,657	19,681	19,686	59,270
149,333	0,322	0,655	1,042	-0,111	-0,001	0,302	0,656	45,047	21,351	20,208	19,938	19,617	19,626	19,639	19,652	59,275
149,833	0,310	0,668	1,040	-0,111	0,018	0,291	0,655	45,146	21,314	20,201	19,937	19,619	19,624	19,650	19,653	59,275
150,333	0,318	0,675	1,039	-0,112	0,013	0,287	0,656	45,308	21,429	20,259	20,003	19,690	19,698	19,709	19,720	59,266
150,833	0,336	0,672	1,036	-0,110	0,030	0,290	0,654	45,262	21,436	20,244	19,981	19,661	19,664	19,693	19,694	59,263
151,333	0,321	0,667	1,036	-0,113	0,036	0,294	0,654	45,227	21,459	20,270	20,015	19,689	19,692	19,710	19,718	59,263
151,833	0,319	0,663	1,031	-0,113	-0,040	0,299	0,654	45,296	21,438	20,255	20,000	19,675	19,671	19,690	19,700	59,228
152,333	0,325	0,658	1,036	-0,112	0,014	0,301	0,654	45,210	21,406	20,239	19,980	19,653	19,657	19,676	19,684	59,230
152,833	0,327	0,657	1,040	-0,113	-0,001	0,302	0,654	45,144	21,362	20,180	19,932	19,600	19,596	19,623	19,627	59,247
153,333	0,315	0,659	1,041	-0,112	0,033	0,299	0,654	45,209	21,414	20,247	20,002	19,664	19,669	19,682	19,694	59,271
153,833	0,305	0,668	1,036	-0,111	0,031	0,292	0,654	45,299	21,439	20,253	19,994	19,669	19,676	19,695	19,697	59,259
154,333	0,333	0,664	1,042	-0,113	0,026	0,297	0,654	45,225	21,411	20,233	19,978	19,649	19,655	19,667	19,677	59,238
154,833	0,324	0,657	1,035	-0,113	-0,006	0,301	0,654	45,287	21,442	20,291	20,039	19,715	19,722	19,748	19,741	59,222
155,333	0,302	0,664	1,037	-0,111	0,008	0,294	0,654	45,252	21,397	20,230	19,987	19,670	19,666	19,694	19,689	59,243
155,833	0,294	0,673	1,034	-0,111	-0,035	0,287	0,654	45,335	21,313	20,240	19,984	19,666	19,671	19,686	19,691	59,236
156,333	0,283	0,681	1,030	-0,108	0,035	0,280	0,654	45,469	21,383	20,277	20,028	19,710	19,718	19,726	19,735	59,249
156,833	0,308	0,686	1,042	-0,110	-0,011	0,277	0,654	45,523	21,378	20,235	19,988	19,666	19,662	19,677	19,689	59,242
157,333	0,323	0,679	1,035	-0,115	0,022	0,286	0,654	45,514	21,422	20,242	19,988	19,662	19,671	19,687	19,689	59,241
157,833	0,311	0,665	1,043	-0,114	0,010	0,296	0,653	45,412	21,386	20,218	19,961	19,647	19,650	19,667	19,668	59,254

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
143,833	48,454	51,767	62,241	0,239	0,248	2970,994	2982,109	330,460	11,463	8,977	-2,314	41,479	8,315	15,972	2022-04-06 11:55
144,333	48,409	51,788	62,427	0,239	0,248	2979,311	3029,471	249,480	11,705	8,801	-2,259	41,706	8,337	15,972	2022-04-06 11:56
144,833	48,405	51,795	62,337	0,239	0,248	2986,900	3001,585	182,538	11,966	8,574	-2,248	41,436	8,310	15,972	2022-04-06 11:56
145,333	48,424	51,788	62,447	0,238	0,248	2968,081	3035,168	179,079	11,940	8,519	-2,242	41,194	8,286	15,972	2022-04-06 11:57
145,833	48,434	51,773	62,408	0,239	0,248	2977,364	3029,707	231,300	11,531	8,877	-2,272	42,014	8,368	15,972	2022-04-06 11:57
146,333	48,459	51,717	62,485	0,239	0,248	2966,231	3066,280	235,607	11,420	9,041	-2,252	41,519	8,319	15,972	2022-04-06 11:58
146,833	48,482	51,755	62,427	0,240	0,248	2964,448	3037,191	319,428	11,415	9,033	-2,280	41,223	8,289	15,972	2022-04-06 11:58
147,334	48,483	51,730	62,443	0,239	0,248	2965,070	3048,675	317,835	11,541	8,930	-2,272	41,057	8,272	15,850	2022-04-06 11:59
147,833	48,434	51,795	62,508	0,240	0,248	2985,275	3049,689	287,515	11,509	8,947	-2,297	41,312	8,298	15,972	2022-04-06 11:59
148,333	48,414	51,780	62,364	0,240	0,248	2985,898	3013,202	265,448	11,441	9,007	-2,313	41,554	8,322	15,847	2022-04-06 12:00
148,833	48,423	51,770	62,404	0,239	0,248	2975,646	3025,202	312,805	11,253	9,186	-2,303	41,311	8,298	15,972	2022-04-06 12:00
149,333	48,449	51,771	62,409	0,238	0,248	2959,810	3028,255	286,750	11,424	9,054	-2,227	41,683	8,335	15,972	2022-04-06 12:01
149,833	48,475	51,738	62,341	0,238	0,248	2956,413	3016,720	280,036	11,800	8,719	-2,214	41,616	8,328	15,972	2022-04-06 12:01
150,333	48,476	51,796	62,326	0,239	0,248	2958,069	2996,257	338,964	11,878	8,596	-2,239	41,640	8,331	15,972	2022-04-06 12:02
150,833	48,440	51,708	62,396	0,238	0,248	2961,565	3042,267	321,396	11,737	8,691	-2,206	41,238	8,290	15,847	2022-04-06 12:02
151,333	48,404	51,701	62,297	0,240	0,248	2998,238	3014,806	303,620	11,667	8,817	-2,256	41,312	8,298	15,847	2022-04-06 12:03
151,833	48,418	51,805	62,137	0,240	0,248	2975,340	2942,323	309,064	11,499	8,957	-2,258	41,199	8,286	15,847	2022-04-06 12:03
152,333	48,478	51,730	62,168	0,239	0,248	2956,393	2969,599	321,069	11,464	9,029	-2,247	41,460	8,313	15,847	2022-04-06 12:04
152,833	48,489	51,755	62,314	0,239	0,248	2952,148	3006,524	319,350	11,416	9,058	-2,256	41,414	8,308	15,847	2022-04-06 12:04
153,333	48,437	51,714	62,282	0,238	0,248	2956,788	3006,961	265,722	11,541	8,959	-2,247	41,597	8,326	15,847	2022-04-06 12:05
153,833	48,414	51,830	62,311	0,239	0,248	2974,198	2982,433	283,974	11,702	8,757	-2,223	41,487	8,315	15,847	2022-04-06 12:05
154,333	48,417	51,809	62,299	0,240	0,248	2980,297	2984,537	343,953	11,508	8,919	-2,256	41,578	8,324	15,847	2022-04-06 12:06
154,833	48,458	51,835	62,364	0,238	0,248	2946,795	2994,875	289,550	11,454	9,033	-2,259	41,035	8,270	15,847	2022-04-06 12:06
155,333	48,481	51,655	62,439	0,239	0,248	2952,088	3067,034	247,504	11,657	8,832	-2,218	41,658	8,333	15,847	2022-04-06 12:07
155,833	48,445	51,743	62,243	0,238	0,248	2951,669	2988,598	221,772	11,864	8,623	-2,220	41,215	8,288	15,847	2022-04-06 12:07
156,333	48,408	51,748	62,424	0,238	0,248	2960,478	3037,118	211,612	12,108	8,396	-2,167	41,396	8,306	15,847	2022-04-06 12:08
156,833	48,434	51,852	62,216	0,238	0,248	2958,934	2948,555	299,665	12,145	8,304	-2,200	41,434	8,310	15,847	2022-04-06 12:08
157,333	48,470	51,800	62,423	0,238	0,248	2948,401	3023,215	301,747	11,841	8,569	-2,292	41,314	8,298	15,847	2022-04-06 12:09
157,833	48,456	51,743	62,384	0,237	0,248	2942,961	3026,098	273,083	11,527	8,886	-2,283	41,681	8,335	15,847	2022-04-06 12:09

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
158,333	0,313	0,662	1,028	-0,114	0,020	0,297	0,653	45,501	21,487	20,326	20,069	19,749	19,753	19,767	19,771	59,262
158,833	0,292	0,667	1,034	-0,113	0,028	0,291	0,653	45,504	21,410	20,252	20,013	19,683	19,694	19,715	19,710	59,218
159,333	0,273	0,677	1,036	-0,114	0,003	0,285	0,652	45,477	21,431	20,273	20,029	19,698	19,719	19,718	19,721	59,205
159,833	0,271	0,668	1,040	-0,115	0,009	0,294	0,653	45,457	21,474	20,296	20,041	19,722	19,724	19,738	19,740	59,229
160,333	0,286	0,660	1,034	-0,115	0,050	0,300	0,652	45,401	21,343	20,206	19,966	19,641	19,650	19,660	19,660	59,228
160,833	0,287	0,660	1,039	-0,115	0,040	0,299	0,652	45,473	21,467	20,276	20,026	19,711	19,721	19,725	19,730	59,208
161,333	0,284	0,668	1,039	-0,112	0,011	0,291	0,652	45,416	21,383	20,246	19,996	19,680	19,689	19,699	19,701	59,200
161,834	0,276	0,674	1,038	-0,113	0,049	0,288	0,652	45,462	21,418	20,242	19,984	19,673	19,674	19,685	19,685	59,206
162,333	0,270	0,671	1,040	-0,112	0,011	0,291	0,652	45,407	21,427	20,251	19,998	19,672	19,691	19,694	19,696	59,206
162,833	0,288	0,658	1,036	-0,115	0,030	0,303	0,652	45,375	21,469	20,295	20,038	19,710	19,727	19,736	19,733	59,215
163,333	0,293	0,652	1,042	-0,115	0,016	0,306	0,652	45,292	21,413	20,249	19,991	19,673	19,678	19,695	19,687	59,206
163,833	0,283	0,656	1,035	-0,114	0,032	0,302	0,652	45,289	21,372	20,239	19,997	19,670	19,676	19,689	19,683	59,198
164,333	0,276	0,664	1,039	-0,112	-0,028	0,295	0,652	45,353	21,441	20,253	20,013	19,693	19,697	19,699	19,702	59,208
164,833	0,277	0,671	1,039	-0,112	0,010	0,290	0,652	45,440	21,405	20,274	20,031	19,710	19,720	19,730	19,725	59,184
165,333	0,305	0,667	1,039	-0,115	0,005	0,294	0,653	45,384	21,462	20,296	20,049	19,739	19,736	19,752	19,746	59,188
165,833	0,313	0,657	1,037	-0,116	0,005	0,303	0,652	45,228	21,450	20,276	20,031	19,715	19,728	19,729	19,723	59,197
166,333	0,302	0,649	1,037	-0,113	-0,012	0,309	0,652	45,293	21,423	20,328	20,088	19,767	19,777	19,783	19,777	59,177
166,833	0,291	0,651	1,034	-0,114	-0,023	0,307	0,652	45,213	21,431	20,293	20,060	19,742	19,740	19,743	19,746	59,189
167,333	0,278	0,656	1,040	-0,112	0,036	0,302	0,652	45,267	21,396	20,280	20,044	19,723	19,738	19,749	19,735	59,189
167,833	0,271	0,658	1,039	-0,114	0,039	0,301	0,651	45,268	21,465	20,314	20,077	19,754	19,776	19,765	19,769	59,166
168,333	0,279	0,645	1,037	-0,116	0,016	0,314	0,651	45,151	21,494	20,332	20,096	19,775	19,786	19,788	19,779	59,163
168,834	0,288	0,632	1,036	-0,114	0,007	0,323	0,651	45,047	21,421	20,330	20,094	19,789	19,789	19,793	19,785	59,181
169,333	0,276	0,631	1,037	-0,115	-0,013	0,323	0,651	44,948	21,431	20,283	20,051	19,734	19,744	19,740	19,736	59,176
169,833	0,259	0,636	1,035	-0,113	0,029	0,319	0,651	44,978	21,485	20,315	20,092	19,769	19,783	19,775	19,767	59,152
170,334	0,250	0,643	1,038	-0,112	0,008	0,312	0,651	45,024	21,497	20,342	20,093	19,783	19,801	19,796	19,787	59,139
170,833	0,244	0,649	1,036	-0,111	0,068	0,308	0,651	44,956	21,456	20,278	20,046	19,725	19,739	19,743	19,727	59,119
171,333	0,252	0,647	1,039	-0,113	0,030	0,312	0,651	44,897	21,459	20,286	20,061	19,726	19,750	19,745	19,735	59,130
171,833	0,273	0,637	1,043	-0,113	0,004	0,320	0,651	44,798	21,402	20,253	20,033	19,712	19,723	19,718	19,709	59,139
172,333	0,270	0,634	1,037	-0,112	0,009	0,322	0,651	44,792	21,454	20,276	20,051	19,730	19,745	19,747	19,731	59,111

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
158,333	48,414	51,715	62,396	0,238	0,248	2970,403	3040,512	270,748	11,553	8,912	-2,272	41,122	8,279	15,847	2022-04-06 12:10
158,833	48,410	51,876	62,451	0,240	0,248	2973,466	3010,982	220,765	11,775	8,745	-2,260	41,272	8,294	15,847	2022-04-06 12:10
159,333	48,459	51,649	62,451	0,238	0,248	2936,527	3073,748	170,459	11,927	8,536	-2,280	41,404	8,307	15,754	2022-04-06 12:11
159,833	48,482	51,706	62,462	0,238	0,248	2937,588	3060,563	193,308	11,617	8,825	-2,295	41,726	8,339	15,847	2022-04-06 12:11
160,333	48,445	51,664	62,523	0,238	0,248	2952,355	3091,186	233,572	11,465	9,009	-2,302	41,335	8,300	15,754	2022-04-06 12:12
160,833	48,398	51,730	62,513	0,240	0,248	2973,564	3070,438	230,312	11,566	8,977	-2,302	41,650	8,332	15,754	2022-04-06 12:12
161,333	48,408	51,741	62,518	0,239	0,248	2960,176	3066,648	195,751	11,773	8,743	-2,234	41,634	8,330	15,754	2022-04-06 12:13
161,834	48,450	51,759	62,519	0,238	0,248	2944,487	3060,812	182,635	11,869	8,628	-2,256	41,617	8,328	15,754	2022-04-06 12:13
162,333	48,447	51,762	62,537	0,239	0,248	2949,874	3064,047	186,400	11,710	8,743	-2,249	41,482	8,315	15,754	2022-04-06 12:14
162,833	48,454	51,764	62,517	0,238	0,248	2942,195	3058,023	231,582	11,334	9,077	-2,309	41,591	8,326	15,754	2022-04-06 12:14
163,333	48,479	51,765	62,539	0,239	0,248	2944,332	3067,021	228,805	11,327	9,175	-2,299	41,575	8,324	15,754	2022-04-06 12:15
163,833	48,463	51,778	62,534	0,238	0,248	2935,467	3059,161	202,911	11,452	9,046	-2,283	41,122	8,279	15,754	2022-04-06 12:15
164,333	48,450	51,814	62,559	0,239	0,248	2952,401	3056,694	185,268	11,661	8,849	-2,238	41,531	8,320	15,754	2022-04-06 12:16
164,833	48,473	51,759	62,572	0,239	0,248	2944,491	3079,021	207,109	11,773	8,712	-2,247	41,763	8,343	15,754	2022-04-06 12:16
165,333	48,488	51,826	62,560	0,239	0,248	2935,278	3051,489	296,646	11,631	8,823	-2,293	41,580	8,325	15,754	2022-04-06 12:17
165,833	48,489	51,700	62,587	0,239	0,248	2936,552	3098,939	270,521	11,352	9,098	-2,316	41,350	8,302	15,754	2022-04-06 12:17
166,333	48,472	51,755	62,547	0,240	0,248	2949,817	3069,588	258,508	11,210	9,270	-2,268	41,244	8,291	15,754	2022-04-06 12:18
166,833	48,452	51,767	62,519	0,238	0,248	2935,568	3058,664	213,466	11,319	9,198	-2,280	41,449	8,312	15,754	2022-04-06 12:18
167,333	48,462	51,784	62,535	0,238	0,248	2936,395	3059,614	194,825	11,434	9,061	-2,237	41,958	8,362	15,754	2022-04-06 12:19
167,833	48,485	51,698	62,547	0,240	0,248	2938,123	3086,977	176,695	11,410	9,043	-2,280	41,480	8,315	15,754	2022-04-06 12:19
168,333	48,478	51,764	62,553	0,239	0,248	2926,839	3070,621	206,395	10,975	9,424	-2,315	41,587	8,325	15,660	2022-04-06 12:20
168,834	48,463	51,756	62,521	0,238	0,248	2932,117	3062,855	219,486	10,796	9,687	-2,285	41,433	8,310	15,660	2022-04-06 12:20
169,333	48,469	51,754	62,531	0,239	0,248	2936,066	3065,629	180,467	10,812	9,689	-2,299	41,489	8,316	15,660	2022-04-06 12:21
169,833	48,493	51,725	62,519	0,239	0,248	2921,338	3071,598	136,532	10,914	9,558	-2,262	41,208	8,287	15,660	2022-04-06 12:21
170,334	48,565	51,784	62,470	0,239	0,248	2906,935	3036,008	124,213	11,132	9,372	-2,238	41,389	8,306	15,660	2022-04-06 12:22
170,833	48,600	51,825	62,445	0,240	0,248	2895,148	3020,404	110,112	11,257	9,241	-2,212	41,419	8,308	15,660	2022-04-06 12:22
171,333	48,538	51,780	62,386	0,239	0,248	2908,490	3014,579	159,422	11,093	9,365	-2,252	41,551	8,322	15,660	2022-04-06 12:23
171,833	48,427	51,794	62,370	0,239	0,248	2937,969	3006,566	185,337	10,841	9,615	-2,254	41,671	8,334	15,660	2022-04-06 12:23
172,333	48,331	51,782	62,364	0,239	0,248	2961,330	3009,975	170,425	10,847	9,659	-2,247	41,437	8,310	15,660	2022-04-06 12:24

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
172,833	0,258	0,635	1,034	-0,112	0,041	0,320	0,651	44,759	21,425	20,267	20,036	19,726	19,735	19,729	19,720	59,054
173,333	0,252	0,641	1,043	-0,110	0,007	0,314	0,651	44,801	21,438	20,287	20,061	19,738	19,751	19,744	19,732	59,060
173,833	0,252	0,647	1,044	-0,110	0,012	0,310	0,651	44,843	21,499	20,348	20,107	19,805	19,811	19,810	19,793	59,079
174,333	0,259	0,641	1,039	-0,112	0,023	0,316	0,651	44,751	21,454	20,304	20,074	19,766	19,772	19,771	19,757	59,085
174,833	0,263	0,637	1,037	-0,112	0,012	0,319	0,651	44,680	21,382	20,246	20,012	19,698	19,716	19,709	19,697	59,084
175,334	0,271	0,639	1,037	-0,111	-0,020	0,315	0,650	44,843	21,488	20,328	20,090	19,774	19,785	19,781	19,767	59,057
175,833	0,262	0,649	1,034	-0,110	0,002	0,308	0,651	44,864	21,461	20,360	20,137	19,824	19,834	19,829	19,814	59,044
176,333	0,251	0,649	1,035	-0,110	-0,028	0,309	0,651	44,839	21,423	20,295	20,077	19,760	19,781	19,771	19,753	59,066
176,833	0,249	0,647	1,034	-0,113	-0,023	0,310	0,650	44,861	21,490	20,323	20,088	19,780	19,790	19,795	19,771	59,049
177,333	0,247	0,646	1,037	-0,113	-0,008	0,311	0,650	44,894	21,468	20,331	20,096	19,795	19,807	19,804	19,783	59,043
177,833	0,246	0,643	1,037	-0,112	0,035	0,314	0,650	44,902	21,519	20,353	20,122	19,817	19,826	19,826	19,801	59,026
178,333	0,237	0,643	1,031	-0,110	-0,029	0,312	0,650	44,852	21,482	20,288	20,069	19,751	19,769	19,751	19,737	59,007
178,833	0,233	0,651	1,038	-0,109	0,010	0,305	0,650	44,854	21,361	20,241	20,034	19,723	19,732	19,730	19,708	59,030
179,333	0,229	0,656	1,036	-0,111	0,029	0,302	0,649	44,912	21,484	20,295	20,075	19,776	19,783	19,777	19,750	59,016
179,833	0,230	0,653	1,039	-0,111	0,022	0,307	0,650	44,884	21,468	20,301	20,081	19,768	19,786	19,775	19,753	59,001
180,333	0,233	0,644	1,039	-0,111	0,005	0,313	0,649	44,814	21,425	20,304	20,079	19,784	19,798	19,779	19,762	58,984
180,833	0,230	0,648	1,043	-0,111	0,039	0,308	0,649	44,844	21,503	20,314	20,090	19,786	19,799	19,783	19,769	58,985
181,333	0,231	0,656	1,034	-0,107	-0,013	0,302	0,650	44,838	21,394	20,248	20,029	19,722	19,736	19,723	19,704	58,985
181,833	0,233	0,659	1,035	-0,110	0,053	0,300	0,649	44,820	21,360	20,230	20,007	19,711	19,727	19,710	19,692	58,978
182,333	0,235	0,660	1,034	-0,111	0,010	0,300	0,649	44,824	21,344	20,196	19,980	19,672	19,689	19,681	19,656	58,964
182,833	0,249	0,654	1,032	-0,110	0,011	0,306	0,649	44,918	21,527	20,348	20,133	19,835	19,847	19,828	19,809	58,936
183,333	0,252	0,647	1,035	-0,111	-0,013	0,311	0,649	44,850	21,469	20,271	19,914	19,756	19,785	19,770	19,734	58,947
183,833	0,248	0,647	1,034	-0,111	-0,028	0,311	0,649	44,776	21,386	20,225	-21,631	19,715	19,751	19,713	19,684	58,949
184,333	0,245	0,651	1,035	-0,112	0,002	0,307	0,649	44,888	21,396	20,270	96,600	19,758	19,793	19,760	19,726	58,955
184,833	0,243	0,649	1,035	-0,111	0,008	0,309	0,649	44,823	21,401	20,276	19,925	19,749	19,793	19,755	19,729	58,949
185,333	0,253	0,643	1,037	-0,113	-0,011	0,315	0,649	44,832	21,500	20,359	20,049	19,839	19,858	19,839	19,806	58,960
185,833	0,271	0,634	1,034	-0,114	0,014	0,322	0,650	44,750	21,463	20,291	20,017	19,756	19,782	19,750	19,731	58,951
186,334	0,266	0,636	1,034	-0,111	-0,018	0,317	0,649	44,797	21,513	20,328	20,061	19,800	19,807	19,797	19,763	58,911
186,834	0,257	0,655	1,036	-0,108	-0,010	0,301	0,649	44,955	21,535	20,340	20,074	19,794	19,799	19,798	19,762	58,893

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
172,833	48,408	51,772	62,410	0,240	0,248	2934,663	3024,935	139,805	10,920	9,611	-2,243	41,331	8,300	15,690	2022-04-06 12:24
173,333	48,506	51,685	62,411	0,239	0,248	2901,545	3050,886	129,825	11,091	9,432	-2,194	41,851	8,352	15,660	2022-04-06 12:25
173,833	48,517	51,684	62,330	0,239	0,248	2894,035	3026,283	140,977	11,166	9,314	-2,196	41,880	8,355	15,660	2022-04-06 12:25
174,333	48,459	51,713	62,379	0,239	0,248	2915,742	3034,835	147,605	10,945	9,478	-2,231	41,489	8,316	15,660	2022-04-06 12:26
174,833	48,446	51,722	62,401	0,239	0,248	2923,495	3035,546	169,542	10,918	9,575	-2,247	41,762	8,343	15,660	2022-04-06 12:26
175,334	48,459	51,739	62,399	0,240	0,248	2921,818	3031,461	169,726	11,032	9,461	-2,221	41,533	8,320	15,660	2022-04-06 12:27
175,833	48,492	51,690	62,369	0,239	0,248	2899,795	3035,506	153,656	11,293	9,227	-2,197	41,602	8,327	15,660	2022-04-06 12:27
176,333	48,503	51,668	62,335	0,238	0,248	2892,627	3032,625	131,099	11,217	9,261	-2,193	41,473	8,314	15,660	2022-04-06 12:28
176,833	48,490	51,675	62,331	0,239	0,248	2901,334	3028,851	117,669	11,136	9,308	-2,255	41,618	8,328	15,660	2022-04-06 12:28
177,333	48,463	51,694	62,309	0,238	0,248	2892,707	3018,242	119,996	11,119	9,340	-2,255	41,563	8,323	15,566	2022-04-06 12:29
177,833	48,459	51,734	62,229	0,239	0,248	2901,736	2982,609	108,693	11,060	9,412	-2,232	41,563	8,323	15,660	2022-04-06 12:29
178,333	48,476	51,778	62,222	0,239	0,248	2888,458	2968,651	92,323	11,123	9,368	-2,195	41,398	8,306	15,660	2022-04-06 12:30
178,833	48,482	51,724	62,156	0,238	0,248	2883,783	2965,885	81,925	11,342	9,158	-2,182	41,700	8,337	15,660	2022-04-06 12:30
179,333	48,475	51,751	62,243	0,240	0,248	2902,823	2982,573	72,036	11,414	9,058	-2,211	41,481	8,315	15,566	2022-04-06 12:31
179,833	48,465	51,787	62,186	0,239	0,248	2897,010	2960,910	85,709	11,218	9,201	-2,226	41,652	8,332	15,566	2022-04-06 12:31
180,333	48,489	51,721	62,225	0,239	0,248	2883,509	2988,268	82,686	11,084	9,390	-2,225	41,447	8,311	15,566	2022-04-06 12:32
180,833	48,506	51,714	62,168	0,239	0,248	2869,933	2971,430	76,820	11,281	9,243	-2,215	41,774	8,344	15,566	2022-04-06 12:32
181,333	48,494	51,674	62,140	0,239	0,248	2877,501	2973,327	86,121	11,450	9,064	-2,150	41,340	8,301	15,566	2022-04-06 12:33
181,833	48,461	51,682	62,154	0,238	0,248	2880,154	2978,098	85,285	11,489	8,993	-2,193	41,319	8,299	15,566	2022-04-06 12:33
182,333	48,448	51,706	62,151	0,239	0,248	2890,940	2969,924	98,688	11,458	9,002	-2,214	41,201	8,287	15,566	2022-04-06 12:34
182,833	48,460	51,725	62,096	0,239	0,248	2876,234	2948,319	134,592	11,266	9,186	-2,201	41,347	8,301	15,566	2022-04-06 12:34
183,333	48,471	51,693	61,984	0,238	0,248	2868,130	2926,545	128,317	11,162	9,320	-2,223	41,342	8,301	15,566	2022-04-06 12:35
183,833	48,483	51,708	62,118	0,240	0,248	2881,882	2959,531	121,855	11,191	9,316	-2,212	41,605	8,327	15,566	2022-04-06 12:35
184,333	48,497	51,699	62,066	0,238	0,248	2863,572	2948,475	111,288	11,309	9,212	-2,232	41,453	8,312	15,566	2022-04-06 12:36
184,833	48,492	51,685	62,142	0,239	0,248	2871,747	2974,950	116,375	11,200	9,272	-2,218	41,282	8,295	15,566	2022-04-06 12:36
185,333	48,455	51,689	61,880	0,238	0,248	2873,340	2898,472	142,079	11,014	9,447	-2,258	41,496	8,316	15,566	2022-04-06 12:37
185,833	48,450	51,690	62,075	0,238	0,248	2868,075	2951,160	188,128	10,764	9,669	-2,272	41,192	8,286	15,566	2022-04-06 12:37
186,334	48,457	51,771	62,046	0,240	0,248	2881,379	2920,848	158,539	11,023	9,513	-2,216	41,412	8,308	15,566	2022-04-06 12:38
186,834	48,477	51,715	62,080	0,239	0,248	2854,300	2946,863	141,984	11,521	9,022	-2,159	41,531	8,320	15,566	2022-04-06 12:38

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
187,333	0,259	0,669	1,040	-0,109	0,003	0,291	0,649	45,112	21,562	20,395	20,144	19,867	19,872	19,861	19,825	58,911
187,833	0,265	0,669	1,043	-0,108	-0,005	0,292	0,649	45,053	21,495	20,342	20,097	19,810	19,819	19,811	19,774	58,912
188,333	0,275	0,662	1,042	-0,109	-0,009	0,298	0,649	44,987	21,443	20,316	20,081	19,788	19,797	19,785	19,749	58,906
188,833	0,282	0,660	1,034	-0,110	0,344	0,300	0,649	45,064	21,333	20,284	20,055	19,774	19,791	19,769	19,733	58,881
189,333	0,288	0,658	1,032	-0,109	0,028	0,300	0,648	45,091	21,370	20,277	20,040	19,750	19,766	19,751	19,711	58,898
189,833	0,305	0,668	1,038	-0,110	0,026	0,291	0,648	45,266	21,506	20,354	20,125	19,845	19,852	19,838	19,799	58,910
190,333	0,309	0,672	1,040	-0,110	0,014	0,289	0,648	45,238	21,501	20,322	20,090	19,800	19,804	19,791	19,753	58,892
190,833	0,303	0,663	1,037	-0,111	-0,003	0,299	0,648	45,164	21,490	20,316	20,090	19,798	19,806	19,792	19,752	58,900
191,333	0,310	0,649	1,035	-0,112	0,024	0,309	0,648	45,124	21,367	20,282	20,053	19,769	19,773	19,767	19,720	58,878
191,833	0,307	0,651	1,040	-0,111	-0,011	0,306	0,648	45,174	21,376	20,299	20,083	19,796	19,812	19,790	19,751	58,894
192,334	0,276	0,659	1,037	-0,111	0,046	0,299	0,648	45,172	21,448	20,320	20,097	19,806	19,820	19,804	19,764	58,858
192,833	0,267	0,665	1,036	-0,109	0,017	0,295	0,648	45,200	21,453	20,319	20,086	19,802	19,826	19,807	19,762	58,867
193,333	0,272	0,664	1,041	-0,109	0,020	0,296	0,648	45,263	21,514	20,373	20,157	19,866	19,885	19,876	19,826	58,852
193,833	0,282	0,658	1,035	-0,113	0,024	0,303	0,648	45,102	21,413	20,311	20,089	19,813	19,818	19,803	19,762	58,875
194,333	0,287	0,647	1,042	-0,111	0,032	0,310	0,648	45,192	21,448	20,341	20,134	19,853	19,867	19,859	19,808	58,847
194,833	0,271	0,653	1,034	-0,111	0,010	0,303	0,648	45,243	21,498	20,346	20,116	19,852	19,864	19,846	19,800	58,854
195,333	0,263	0,665	1,035	-0,109	0,024	0,293	0,648	45,282	21,539	20,356	20,121	19,859	19,866	19,845	19,800	58,873
195,833	0,256	0,669	1,035	-0,113	0,021	0,292	0,647	45,290	21,392	20,299	20,078	19,810	19,838	19,813	19,764	58,871
196,333	0,258	0,660	1,035	-0,113	-0,005	0,300	0,648	45,225	21,405	20,333	20,108	19,847	19,865	19,852	19,801	58,842
196,833	0,263	0,651	1,039	-0,114	0,044	0,307	0,647	45,098	21,362	20,224	20,017	19,758	19,780	19,759	19,710	58,843
197,333	0,269	0,647	1,040	-0,112	0,027	0,308	0,646	45,221	21,461	20,337	20,117	19,865	19,885	19,858	19,811	58,840
197,833	0,265	0,660	1,038	-0,112	-0,005	0,299	0,646	45,210	21,368	20,271	20,035	19,787	19,812	19,791	19,739	58,831
198,333	0,262	0,663	1,037	-0,110	-0,014	0,296	0,646	45,301	21,445	20,315	20,099	19,853	19,872	19,850	19,801	58,838
198,833	0,263	0,669	1,040	-0,110	0,028	0,291	0,646	45,384	21,506	20,349	20,126	19,874	19,906	19,870	19,826	58,825
199,333	0,266	0,663	1,030	-0,113	0,041	0,300	0,646	45,231	21,391	20,308	20,101	19,857	19,879	19,853	19,804	58,836
199,833	0,264	0,647	1,036	-0,115	-0,004	0,310	0,646	45,077	21,342	20,219	20,005	19,772	19,796	19,761	19,718	58,829
200,333	0,253	0,647	1,026	-0,114	-0,019	0,310	0,646	45,117	21,357	20,317	20,100	19,867	19,891	19,864	19,811	58,809
200,833	0,249	0,652	1,036	-0,113	0,016	0,304	0,646	45,089	21,235	20,236	20,034	19,815	19,827	19,804	19,754	58,816
201,333	0,247	0,660	1,039	-0,113	-0,023	0,298	0,646	45,150	21,334	20,259	20,090	19,860	19,862	19,843	19,792	58,831

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
187,333	48,534	51,647	62,031	0,238	0,248	2841,744	2951,769	162,634	11,766	8,737	-2,174	41,595	8,326	15,566	2022-04-06 12:39
187,833	48,510	51,715	62,042	0,238	0,248	2848,186	2936,490	167,383	11,674	8,769	-2,157	41,616	8,328	15,472	2022-04-06 12:39
188,333	48,425	51,763	62,056	0,238	0,248	2866,673	2926,443	197,633	11,531	8,940	-2,177	41,445	8,311	15,472	2022-04-06 12:40
188,833	48,434	51,747	62,096	0,240	0,248	2878,632	2940,584	211,354	11,460	8,997	-2,208	41,542	8,321	15,566	2022-04-06 12:40
189,333	48,497	51,709	62,107	0,239	0,248	2852,113	2957,028	247,149	11,475	9,009	-2,182	41,378	8,304	15,472	2022-04-06 12:41
189,833	48,495	51,656	62,113	0,239	0,248	2861,844	2972,172	271,650	11,797	8,742	-2,202	41,536	8,320	15,566	2022-04-06 12:41
190,333	48,448	51,683	62,148	0,239	0,248	2866,513	2974,264	284,495	11,784	8,682	-2,192	41,505	8,317	15,479	2022-04-06 12:42
190,833	48,438	51,685	62,122	0,239	0,248	2876,416	2966,255	261,418	11,417	8,981	-2,221	41,406	8,307	15,472	2022-04-06 12:42
191,333	48,483	51,703	62,136	0,238	0,248	2845,095	2965,547	285,452	11,204	9,281	-2,235	41,457	8,312	15,472	2022-04-06 12:43
191,833	48,509	51,699	62,149	0,240	0,248	2859,971	2973,567	252,996	11,306	9,185	-2,220	41,701	8,337	15,472	2022-04-06 12:43
192,334	48,461	51,677	62,141	0,239	0,248	2855,073	2977,023	174,122	11,555	8,973	-2,210	41,461	8,313	15,472	2022-04-06 12:44
192,833	48,433	51,675	62,129	0,239	0,248	2868,293	2973,757	176,666	11,626	8,843	-2,185	41,360	8,303	15,472	2022-04-06 12:44
193,333	48,459	51,679	62,117	0,239	0,248	2855,031	2966,322	184,266	11,578	8,877	-2,183	41,701	8,337	15,472	2022-04-06 12:45
193,833	48,477	51,642	62,113	0,238	0,248	2847,242	2978,545	225,442	11,298	9,103	-2,250	41,409	8,308	15,472	2022-04-06 12:45
194,333	48,471	51,622	62,099	0,240	0,248	2863,423	2976,993	202,042	11,170	9,295	-2,224	41,814	8,348	15,472	2022-04-06 12:46
194,833	48,466	51,620	62,131	0,239	0,248	2846,749	2986,856	164,935	11,433	9,092	-2,213	41,316	8,298	15,472	2022-04-06 12:46
195,333	48,461	51,625	62,089	0,238	0,248	2844,250	2973,283	161,102	11,714	8,804	-2,189	41,434	8,310	15,472	2022-04-06 12:47
195,833	48,462	51,664	62,099	0,238	0,248	2848,633	2966,543	135,965	11,704	8,746	-2,253	41,430	8,310	15,344	2022-04-06 12:47
196,333	48,469	51,684	62,087	0,240	0,248	2861,779	2957,781	152,554	11,394	8,990	-2,251	41,345	8,301	15,472	2022-04-06 12:48
196,833	48,475	51,658	62,093	0,238	0,248	2836,071	2965,325	166,457	11,204	9,219	-2,275	41,631	8,330	15,344	2022-04-06 12:48
197,333	48,482	51,710	62,096	0,240	0,248	2857,509	2954,355	177,176	11,258	9,254	-2,243	41,645	8,331	15,346	2022-04-06 12:49
197,833	48,488	51,705	62,103	0,239	0,248	2837,918	2954,332	161,115	11,534	8,972	-2,237	41,552	8,322	15,472	2022-04-06 12:49
198,333	48,476	51,534	62,094	0,240	0,248	2857,868	3002,088	150,377	11,603	8,884	-2,207	41,428	8,309	15,344	2022-04-06 12:50
198,833	48,470	51,619	62,118	0,239	0,248	2847,041	2983,992	163,794	11,765	8,744	-2,205	41,647	8,331	15,344	2022-04-06 12:50
199,333	48,471	51,703	62,123	0,239	0,248	2842,989	2961,471	174,530	11,397	8,992	-2,253	41,238	8,290	15,344	2022-04-06 12:51
199,833	48,475	51,726	62,128	0,240	0,248	2857,572	2958,524	155,735	11,126	9,302	-2,294	41,684	8,335	15,464	2022-04-06 12:51
200,333	48,530	51,684	62,091	0,240	0,248	2832,405	2957,077	125,547	11,191	9,302	-2,285	40,911	8,257	15,344	2022-04-06 12:52
200,833	48,579	51,689	62,121	0,240	0,248	2820,255	2964,609	134,696	11,389	9,128	-2,268	41,598	8,326	15,344	2022-04-06 12:52
201,333	48,505	51,690	62,110	0,239	0,248	2838,494	2960,455	114,079	11,541	8,940	-2,268	41,370	8,304	15,344	2022-04-06 12:53



## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
201,833	0,247	0,662	1,041	-0,114	0,344	0,298	0,646	45,127	21,435	20,229	20,087	19,872	19,879	19,864	19,815	58,828
202,333	0,254	0,657	1,036	-0,115	0,025	0,302	0,646	45,032	21,331	20,097	19,987	19,792	19,806	19,781	19,742	58,804
202,833	0,252	0,652	1,035	-0,114	0,018	0,306	0,645	45,051	21,471	20,146	20,053	19,879	19,894	19,866	19,830	58,780
203,333	0,251	0,649	1,033	-0,113	0,004	0,308	0,646	44,835	21,361	20,042	19,931	19,784	19,791	19,761	19,728	58,790
203,833	0,255	0,655	1,042	-0,113	0,070	0,302	0,646	44,974	21,405	20,101	19,971	19,835	19,855	19,817	19,784	58,793
204,333	0,256	0,661	1,037	-0,111	0,037	0,298	0,644	44,994	21,397	20,099	19,961	19,840	19,855	19,822	19,782	58,803
204,833	0,266	0,659	1,037	-0,111	0,004	0,300	0,645	45,038	21,472	20,163	20,007	19,889	19,910	19,865	19,837	58,799
205,333	0,281	0,656	1,040	-0,109	-0,026	0,301	0,644	45,070	21,422	20,131	19,972	19,870	19,889	19,841	19,812	58,798
205,833	0,266	0,664	1,032	-0,110	-0,015	0,294	0,645	45,016	21,295	20,015	19,853	19,755	19,778	19,730	19,696	58,769
206,333	0,253	0,672	1,042	-0,109	-0,005	0,288	0,644	45,113	21,310	20,019	19,847	19,758	19,781	19,721	19,694	58,796
206,834	0,244	0,679	1,038	-0,108	-0,012	0,282	0,644	45,219	21,426	20,143	19,961	19,874	19,895	19,837	19,812	58,786
207,333	0,236	0,679	1,033	-0,110	-0,012	0,283	0,644	45,164	21,248	20,060	19,904	19,807	19,838	19,774	19,747	58,735
207,833	0,237	0,677	1,045	-0,108	0,036	0,285	0,645	45,178	21,212	20,006	19,828	19,750	19,778	19,714	19,688	58,750
208,333	0,242	0,672	1,037	-0,110	0,023	0,290	0,644	45,269	21,280	20,073	19,899	19,820	19,853	19,774	19,749	58,743
208,833	0,241	0,673	1,043	-0,110	0,015	0,286	0,644	45,337	21,356	20,082	19,903	19,825	19,846	19,773	19,750	58,773
209,334	0,256	0,686	1,033	-0,110	0,024	0,275	0,644	45,468	21,366	20,162	19,968	19,896	19,914	19,833	19,818	58,777
209,833	0,262	0,694	1,035	-0,109	0,006	0,271	0,644	45,475	21,257	20,063	19,858	19,790	19,814	19,736	19,714	58,782
210,333	0,259	0,686	1,041	-0,111	0,055	0,279	0,644	45,423	21,257	20,082	19,890	19,811	19,840	19,756	19,740	58,794
210,833	0,266	0,679	1,034	-0,112	0,027	0,283	0,644	45,424	21,242	20,065	19,865	19,795	19,815	19,728	19,712	58,781
211,333	0,273	0,675	1,035	-0,112	0,015	0,288	0,644	45,486	21,342	20,144	19,934	19,873	19,884	19,798	19,781	58,776
211,833	0,269	0,674	1,039	-0,110	-0,019	0,286	0,644	45,547	21,295	20,106	19,898	19,833	19,855	19,766	19,745	58,793
212,333	0,257	0,690	1,035	-0,109	0,043	0,272	0,644	45,578	21,250	20,115	19,909	19,846	19,873	19,779	19,761	58,796
212,833	0,259	0,699	1,037	-0,111	-0,006	0,267	0,644	45,615	21,240	20,078	19,869	19,802	19,825	19,735	19,713	58,779
213,333	0,288	0,681	1,039	-0,114	0,018	0,285	0,644	45,589	21,325	20,152	19,953	19,885	19,910	19,814	19,795	58,796
213,833	0,295	0,658	1,040	-0,115	0,040	0,303	0,644	45,277	21,178	19,982	19,777	19,706	19,736	19,641	19,617	58,785
214,333	0,289	0,650	1,040	-0,114	-0,001	0,307	0,643	45,342	21,313	20,140	19,934	19,867	19,892	19,795	19,773	58,782
214,834	0,272	0,655	1,035	-0,114	-0,015	0,302	0,644	45,271	21,250	20,100	19,888	19,819	19,848	19,753	19,724	58,807
215,333	0,256	0,662	1,040	-0,114	0,044	0,296	0,643	45,159	21,311	20,094	19,885	19,809	19,836	19,744	19,715	58,799
215,833	0,257	0,663	1,039	-0,114	0,032	0,297	0,643	45,081	21,316	20,115	19,906	19,822	19,851	19,763	19,734	58,822

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
201,833	48,391	51,683	62,122	0,240	0,248	2876,966	2968,476	129,441	11,490	8,945	-2,279	41,657	8,332	15,344	2022-04-06 12:53
202,333	48,321	51,705	62,138	0,240	0,248	2887,940	2964,135	137,633	11,395	9,048	-2,309	41,263	8,293	15,344	2022-04-06 12:54
202,833	48,395	51,644	62,144	0,240	0,248	2862,251	2983,729	130,122	11,245	9,177	-2,283	41,459	8,313	15,251	2022-04-06 12:54
203,333	48,440	51,469	62,122	0,239	0,248	2838,229	3027,945	132,680	11,213	9,234	-2,268	41,487	8,315	15,344	2022-04-06 12:55
203,833	48,421	51,539	62,132	0,239	0,248	2851,961	3011,027	139,841	11,466	9,057	-2,252	41,339	8,301	15,344	2022-04-06 12:55
204,333	48,384	51,626	62,105	0,239	0,248	2865,167	2977,508	148,369	11,551	8,937	-2,223	41,419	8,309	15,251	2022-04-06 12:56
204,833	48,390	51,631	62,097	0,239	0,248	2855,777	2973,969	181,758	11,444	9,008	-2,216	41,489	8,316	15,251	2022-04-06 12:56
205,333	48,427	51,534	62,123	0,240	0,248	2861,954	3008,849	203,616	11,393	9,041	-2,182	41,500	8,317	15,251	2022-04-06 12:57
205,833	48,463	51,589	62,133	0,239	0,248	2831,869	2993,863	146,621	11,683	8,810	-2,192	40,851	8,251	15,344	2022-04-06 12:57
206,333	48,475	51,576	62,087	0,239	0,248	2838,642	2987,187	134,941	11,846	8,630	-2,190	41,789	8,346	15,344	2022-04-06 12:58
206,834	48,483	51,535	62,133	0,241	0,248	2849,725	3011,150	98,818	12,023	8,454	-2,166	41,620	8,329	15,251	2022-04-06 12:58
207,333	48,453	51,549	62,100	0,242	0,248	2851,791	2997,585	94,665	11,919	8,485	-2,207	41,281	8,295	15,251	2022-04-06 12:59
207,833	48,438	51,537	62,109	0,241	0,248	2858,212	3005,156	100,456	11,914	8,543	-2,156	41,743	8,341	15,344	2022-04-06 12:59
208,333	48,453	51,530	62,084	0,241	0,248	2847,951	2999,078	108,934	11,728	8,691	-2,203	41,255	8,292	15,251	2022-04-06 13:00
208,833	48,476	51,552	62,080	0,240	0,248	2840,471	2992,162	101,218	11,916	8,583	-2,193	42,006	8,367	15,251	2022-04-06 13:00
209,334	48,496	51,481	62,059	0,240	0,248	2833,550	3006,196	159,623	12,243	8,259	-2,194	41,365	8,303	15,251	2022-04-06 13:01
209,833	48,473	51,626	62,051	0,240	0,248	2837,323	2965,204	154,649	12,355	8,131	-2,171	41,636	8,330	15,251	2022-04-06 13:01
210,333	48,429	51,709	62,052	0,240	0,248	2860,455	2939,987	152,699	12,042	8,372	-2,226	41,849	8,352	15,251	2022-04-06 13:02
210,833	48,434	51,663	62,034	0,239	0,248	2841,122	2949,339	174,782	11,990	8,495	-2,236	41,159	8,282	15,251	2022-04-06 13:02
211,333	48,468	51,621	62,079	0,240	0,248	2843,855	2974,625	182,317	11,804	8,646	-2,248	41,534	8,320	15,251	2022-04-06 13:03
211,833	48,456	51,546	62,116	0,239	0,248	2837,969	3005,234	169,695	11,950	8,574	-2,197	41,621	8,329	15,251	2022-04-06 13:03
212,333	48,421	51,574	62,144	0,240	0,248	2864,516	3003,448	135,869	12,409	8,167	-2,178	41,519	8,319	15,251	2022-04-06 13:04
212,833	48,421	51,624	62,112	0,240	0,248	2855,448	2981,903	172,908	12,441	8,024	-2,216	41,514	8,318	15,251	2022-04-06 13:04
213,333	48,457	51,582	62,124	0,240	0,248	2846,806	2996,342	242,969	11,802	8,548	-2,274	41,434	8,310	15,251	2022-04-06 13:05
213,833	48,443	51,543	62,118	0,242	0,248	2870,190	3008,499	244,818	11,324	9,077	-2,305	41,456	8,312	15,157	2022-04-06 13:05
214,333	48,434	51,561	62,144	0,240	0,248	2853,337	3009,250	214,710	11,255	9,223	-2,288	41,533	8,320	15,251	2022-04-06 13:06
214,834	48,457	51,458	62,170	0,240	0,248	2854,399	3044,854	168,162	11,478	9,046	-2,289	41,331	8,300	15,251	2022-04-06 13:06
215,333	48,454	51,450	62,131	0,241	0,248	2858,436	3038,320	135,946	11,594	8,891	-2,283	41,784	8,345	15,231	2022-04-06 13:07
215,833	48,420	51,417	62,097	0,240	0,248	2864,871	3036,500	153,304	11,526	8,909	-2,276	41,409	8,308	15,157	2022-04-06 13:07

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
216,333	0,271	0,659	1,041	-0,115	0,028	0,301	0,643	45,159	21,338	20,175	19,968	19,885	19,907	19,815	19,795	58,822
216,833	0,280	0,652	1,034	-0,114	0,022	0,306	0,643	45,108	21,347	20,166	19,957	19,873	19,901	19,802	19,780	58,824
217,333	0,278	0,659	1,038	-0,112	-0,004	0,298	0,643	45,096	21,276	20,073	19,866	19,786	19,808	19,707	19,686	58,807
217,833	0,264	0,674	1,038	-0,112	0,001	0,286	0,643	45,224	21,255	20,069	19,844	19,764	19,800	19,702	19,675	58,781
218,333	0,270	0,680	1,033	-0,111	-0,004	0,285	0,643	45,192	21,248	20,085	19,874	19,798	19,821	19,715	19,697	58,784
218,834	0,282	0,662	1,036	-0,115	0,026	0,298	0,643	45,031	21,221	20,044	19,835	19,759	19,788	19,681	19,661	58,788
219,333	0,278	0,655	1,035	-0,113	0,045	0,304	0,643	45,140	21,315	20,167	19,969	19,885	19,910	19,813	19,787	58,794
219,833	0,268	0,654	1,034	-0,113	0,040	0,304	0,643	45,112	21,201	20,101	19,899	19,834	19,857	19,755	19,734	58,786
220,333	0,255	0,660	1,042	-0,111	0,007	0,297	0,642	45,161	21,233	20,136	19,927	19,860	19,874	19,781	19,754	58,801
220,833	0,247	0,672	1,036	-0,111	0,016	0,288	0,642	45,149	21,155	20,038	19,843	19,769	19,802	19,686	19,667	58,792
221,333	0,255	0,675	1,040	-0,110	0,043	0,287	0,643	45,186	21,263	20,145	19,941	19,878	19,901	19,802	19,777	58,820
221,833	0,274	0,664	1,038	-0,112	0,010	0,296	0,642	45,084	21,148	20,041	19,847	19,778	19,800	19,696	19,672	58,806
222,333	0,265	0,656	1,038	-0,113	0,037	0,302	0,642	45,130	21,243	20,121	19,922	19,845	19,877	19,767	19,743	58,772
222,833	0,254	0,663	1,038	-0,111	0,006	0,295	0,642	45,222	21,250	20,163	19,951	19,885	19,923	19,811	19,781	58,806
223,333	0,251	0,670	1,032	-0,111	0,006	0,290	0,642	45,245	21,284	20,174	19,961	19,890	19,924	19,819	19,789	58,797
223,834	0,250	0,671	1,029	-0,111	0,029	0,290	0,641	45,112	21,263	20,161	19,951	19,880	19,920	19,810	19,784	58,804
224,333	0,253	0,661	1,035	-0,113	0,008	0,299	0,641	44,888	21,177	20,039	19,822	19,759	19,790	19,677	19,655	58,790
224,833	0,266	0,651	1,036	-0,113	-0,007	0,307	0,641	45,052	21,304	20,177	19,955	19,891	19,927	19,815	19,789	58,787
225,333	0,258	0,653	1,034	-0,112	0,031	0,304	0,641	44,958	21,138	20,043	19,831	19,765	19,804	19,688	19,660	58,795
225,833	0,249	0,662	1,039	-0,111	0,017	0,294	0,641	45,169	21,306	20,171	19,948	19,882	19,926	19,818	19,785	58,803
226,334	0,255	0,675	1,039	-0,109	0,000	0,284	0,641	45,185	21,252	20,108	19,889	19,832	19,860	19,750	19,719	58,778
226,833	0,278	0,680	1,037	-0,109	-0,030	0,282	0,641	45,189	21,238	20,122	19,897	19,842	19,886	19,763	19,735	58,795
227,333	0,277	0,673	1,031	-0,111	0,003	0,290	0,641	45,164	21,285	20,184	19,958	19,902	19,936	19,825	19,796	58,783
227,833	0,272	0,661	1,038	-0,111	0,040	0,298	0,641	45,069	21,226	20,110	19,897	19,845	19,875	19,760	19,729	58,764
228,333	0,276	0,661	1,040	-0,110	0,024	0,296	0,641	45,001	21,236	20,092	19,867	19,800	19,845	19,731	19,699	58,773
228,833	0,287	0,668	1,042	-0,110	0,013	0,290	0,641	45,114	21,183	20,088	19,876	19,829	19,857	19,747	19,712	58,773
229,333	0,305	0,675	1,041	-0,110	0,015	0,285	0,641	45,144	21,139	20,077	19,857	19,810	19,848	19,734	19,699	58,788
229,833	0,285	0,675	1,031	-0,110	0,019	0,287	0,641	45,049	21,149	20,084	19,857	19,810	19,849	19,736	19,700	58,792
230,333	0,290	0,663	1,035	-0,111	-0,019	0,297	0,641	45,047	21,218	20,108	19,893	19,832	19,875	19,765	19,724	58,781

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
216,333	48,445	51,562	62,105	0,239	0,248	2849,566	2998,122	195,684	11,404	9,043	-2,297	41,602	8,327	15,157	2022-04-06 13:08
216,833	48,438	51,647	62,128	0,240	0,248	2857,933	2982,164	207,727	11,261	9,191	-2,279	41,315	8,298	15,157	2022-04-06 13:08
217,333	48,410	51,501	62,035	0,240	0,248	2870,797	2996,466	181,678	11,640	8,928	-2,244	41,681	8,335	15,157	2022-04-06 13:09
217,833	48,432	51,532	62,106	0,241	0,248	2863,258	3004,486	148,377	11,977	8,567	-2,238	41,634	8,330	15,157	2022-04-06 13:09
218,333	48,436	51,369	62,103	0,240	0,248	2856,632	3049,837	196,211	11,841	8,549	-2,225	41,399	8,307	15,157	2022-04-06 13:10
218,834	48,437	51,631	62,099	0,240	0,248	2857,758	2973,427	205,713	11,465	8,948	-2,299	41,314	8,298	15,157	2022-04-06 13:10
219,333	48,431	51,606	62,111	0,240	0,248	2860,278	2984,592	193,852	11,336	9,117	-2,259	41,448	8,311	15,157	2022-04-06 13:11
219,833	48,450	51,574	62,124	0,240	0,248	2854,172	2998,126	162,625	11,377	9,109	-2,263	41,329	8,300	15,157	2022-04-06 13:11
220,333	48,450	51,441	62,122	0,241	0,248	2865,956	3035,927	127,583	11,588	8,914	-2,214	41,639	8,331	15,157	2022-04-06 13:12
220,833	48,446	51,571	62,109	0,240	0,248	2853,906	2994,419	124,980	11,881	8,628	-2,223	41,301	8,297	15,157	2022-04-06 13:12
221,333	48,457	51,624	62,108	0,239	0,248	2849,047	2978,608	155,960	11,818	8,620	-2,192	41,445	8,311	15,157	2022-04-06 13:13
221,833	48,458	51,527	62,143	0,242	0,248	2881,645	3017,573	178,769	11,524	8,889	-2,238	41,499	8,317	15,064	2022-04-06 13:13
222,333	48,459	51,593	62,158	0,240	0,248	2842,905	3003,354	159,946	11,411	9,052	-2,264	41,287	8,295	15,064	2022-04-06 13:14
222,833	48,449	51,592	62,139	0,240	0,248	2857,294	2996,321	130,557	11,635	8,859	-2,224	41,483	8,315	15,157	2022-04-06 13:14
223,333	48,446	51,643	62,157	0,241	0,248	2864,789	2989,229	128,741	11,775	8,693	-2,212	41,391	8,306	15,157	2022-04-06 13:15
223,834	48,458	51,540	62,128	0,240	0,248	2851,181	3010,222	129,402	11,725	8,710	-2,216	41,200	8,287	15,063	2022-04-06 13:15
224,333	48,455	51,593	62,109	0,241	0,248	2859,807	2988,620	148,440	11,420	8,982	-2,252	41,552	8,322	15,064	2022-04-06 13:16
224,833	48,482	51,583	62,124	0,240	0,248	2845,601	2995,689	171,431	11,247	9,200	-2,250	40,974	8,264	15,064	2022-04-06 13:16
225,333	48,471	51,506	62,135	0,241	0,248	2856,472	3020,930	140,046	11,377	9,111	-2,248	41,064	8,273	15,064	2022-04-06 13:17
225,833	48,436	51,626	62,136	0,240	0,248	2859,250	2986,961	122,023	11,701	8,832	-2,222	41,567	8,323	15,063	2022-04-06 13:17
226,334	48,449	51,601	62,108	0,241	0,247	2864,181	2982,338	151,820	11,976	8,530	-2,190	41,548	8,321	15,063	2022-04-06 13:18
226,833	48,466	51,462	62,137	0,240	0,248	2850,474	3030,815	228,616	12,003	8,446	-2,185	41,681	8,335	15,064	2022-04-06 13:18
227,333	48,451	51,557	62,140	0,240	0,248	2849,284	3008,273	180,061	11,698	8,688	-2,224	41,267	8,293	15,064	2022-04-06 13:19
227,833	48,456	51,599	62,140	0,241	0,248	2856,422	2995,968	181,318	11,463	8,927	-2,220	41,560	8,323	15,064	2022-04-06 13:19
228,333	48,454	51,442	62,159	0,241	0,248	2855,792	3046,005	201,826	11,565	8,886	-2,207	41,560	8,323	15,064	2022-04-06 13:20
228,833	48,455	51,532	62,195	0,241	0,248	2860,720	3030,522	227,759	11,759	8,709	-2,205	41,648	8,332	15,064	2022-04-06 13:20
229,333	48,458	51,578	62,169	0,240	0,248	2847,866	3010,013	243,600	11,883	8,564	-2,197	41,458	8,312	15,063	2022-04-06 13:21
229,833	48,459	51,641	62,193	0,241	0,248	2857,731	2997,864	216,792	11,801	8,613	-2,208	41,066	8,273	15,064	2022-04-06 13:21
230,333	48,475	51,545	62,182	0,241	0,248	2851,864	3022,257	241,275	11,468	8,919	-2,224	41,410	8,308	15,064	2022-04-06 13:22

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
230,833	0,302	0,656	1,040	-0,111	-0,006	0,301	0,641	44,977	21,193	20,062	19,847	19,788	19,827	19,707	19,677	58,792
231,333	0,278	0,666	1,029	-0,111	-0,017	0,290	0,641	45,110	21,344	20,162	19,942	19,877	19,922	19,804	19,768	58,787
231,833	0,273	0,686	1,039	-0,106	0,020	0,274	0,640	45,307	21,317	20,158	19,937	19,876	19,913	19,786	19,758	58,815
232,333	0,279	0,696	1,039	-0,106	0,036	0,268	0,640	45,349	21,203	20,103	19,895	19,832	19,856	19,750	19,711	58,820
232,833	0,283	0,694	1,033	-0,109	0,016	0,272	0,640	45,383	21,296	20,159	19,934	19,881	19,919	19,805	19,762	58,793
233,333	0,306	0,683	1,030	-0,108	0,025	0,280	0,640	45,355	21,245	20,169	19,961	19,895	19,926	19,819	19,777	58,773
233,833	0,324	0,684	1,041	-0,110	0,029	0,280	0,640	45,305	21,199	20,123	19,915	19,852	19,882	19,780	19,729	58,753
234,333	0,322	0,681	1,037	-0,110	0,001	0,281	0,640	45,274	21,166	20,080	19,872	19,801	19,837	19,722	19,679	58,782
234,833	0,315	0,685	1,035	-0,106	0,028	0,275	0,640	45,446	21,196	20,122	19,898	19,832	19,862	19,758	19,711	58,803
235,333	0,325	0,700	1,034	-0,107	0,021	0,265	0,640	45,475	21,188	20,110	19,901	19,830	19,868	19,750	19,704	58,793
235,834	0,330	0,693	1,034	-0,107	-0,003	0,274	0,640	45,455	21,226	20,165	19,961	19,893	19,917	19,806	19,763	58,810
236,333	0,324	0,678	1,040	-0,113	0,037	0,286	0,640	45,287	21,140	20,057	19,858	19,785	19,811	19,702	19,655	58,804
236,833	0,293	0,676	1,045	-0,112	0,049	0,285	0,639	45,463	21,205	20,130	19,946	19,871	19,896	19,796	19,749	58,795
237,333	0,271	0,681	1,040	-0,110	0,015	0,280	0,640	45,318	21,047	19,966	19,775	19,733	19,763	19,649	19,604	58,815
237,833	0,265	0,689	1,045	-0,111	0,010	0,273	0,640	45,530	21,184	20,111	19,931	19,885	19,928	19,811	19,767	58,808
238,333	0,263	0,691	1,037	-0,109	0,053	0,273	0,640	45,421	21,075	20,032	19,858	19,827	19,865	19,757	19,705	58,808
238,833	0,269	0,684	1,044	-0,109	0,009	0,280	0,639	45,429	21,087	20,073	19,901	19,883	19,919	19,807	19,765	58,809
239,333	0,273	0,680	1,035	-0,111	0,034	0,282	0,640	45,445	21,122	20,047	19,870	19,863	19,898	19,790	19,743	58,846
239,833	0,270	0,682	1,034	-0,112	0,041	0,280	0,639	45,407	21,147	20,041	19,860	19,840	19,878	19,766	19,719	58,815
240,333	0,268	0,687	1,030	-0,110	-0,013	0,274	0,640	45,438	21,157	20,017	19,849	19,814	19,864	19,732	19,698	58,828
240,833	0,279	0,694	1,040	-0,109	0,014	0,269	0,638	45,384	21,116	20,002	19,816	19,808	19,849	19,733	19,684	58,813
241,333	0,288	0,689	1,037	-0,111	0,026	0,274	0,638	45,391	21,123	20,061	19,874	19,868	19,904	19,788	19,744	58,832
241,833	0,300	0,677	1,046	-0,112	0,032	0,284	0,638	45,216	20,955	19,928	19,761	19,743	19,783	19,668	19,620	58,839
242,333	0,303	0,673	1,039	-0,112	0,021	0,286	0,638	45,365	21,134	20,059	19,880	19,883	19,920	19,796	19,744	58,827
242,833	0,287	0,683	1,039	-0,110	0,012	0,276	0,638	45,391	21,059	20,017	19,839	19,837	19,883	19,748	19,704	58,827
243,333	0,266	0,700	1,034	-0,109	0,043	0,263	0,638	45,452	21,093	20,005	19,822	19,821	19,853	19,735	19,688	58,841
243,833	0,280	0,711	1,038	-0,108	0,016	0,254	0,638	45,467	21,033	19,980	19,796	19,787	19,838	19,703	19,658	58,859
244,333	0,288	0,709	1,035	-0,112	0,029	0,258	0,638	45,457	21,018	19,946	19,754	19,753	19,794	19,671	19,618	58,863
244,833	0,289	0,699	1,034	-0,111	-0,033	0,266	0,638	45,488	20,963	19,915	19,722	19,719	19,757	19,631	19,584	58,873

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
230,833	48,538	51,650	62,187	0,240	0,248	2828,065	2994,963	260,458	11,438	9,031	-2,220	41,415	8,308	15,064	2022-04-06 13:22
231,333	48,570	51,622	62,174	0,242	0,248	2838,261	2997,815	178,993	11,843	8,714	-2,219	41,101	8,277	15,064	2022-04-06 13:23
231,833	48,514	51,615	62,152	0,239	0,248	2831,079	2995,694	190,552	12,276	8,220	-2,127	41,843	8,351	14,969	2022-04-06 13:23
232,333	48,376	51,643	62,154	0,240	0,248	2881,616	2988,328	218,042	12,425	8,050	-2,126	41,783	8,345	14,969	2022-04-06 13:24
232,833	48,340	51,666	62,128	0,240	0,248	2885,405	2973,570	207,613	12,271	8,158	-2,186	41,321	8,299	14,969	2022-04-06 13:24
233,333	48,440	51,426	62,132	0,240	0,248	2849,562	3043,576	313,486	12,037	8,391	-2,163	41,140	8,281	14,969	2022-04-06 13:25
233,833	48,481	51,510	62,158	0,242	0,248	2855,223	3027,073	297,848	12,069	8,385	-2,197	41,620	8,329	14,970	2022-04-06 13:25
234,333	48,483	51,506	62,165	0,241	0,248	2845,638	3029,983	303,289	12,019	8,432	-2,194	41,511	8,318	14,970	2022-04-06 13:26
234,833	48,469	51,602	62,175	0,241	0,248	2856,862	3001,840	302,689	12,241	8,263	-2,129	41,028	8,269	15,064	2022-04-06 13:26
235,333	48,448	51,531	62,165	0,240	0,248	2854,473	3021,179	306,975	12,544	7,951	-2,139	41,472	8,314	14,970	2022-04-06 13:27
235,834	48,426	51,584	62,142	0,240	0,248	2859,965	3000,200	342,531	12,164	8,228	-2,147	41,312	8,298	14,969	2022-04-06 13:27
236,333	48,461	51,637	62,204	0,241	0,248	2857,245	3001,639	289,916	11,837	8,570	-2,268	41,704	8,337	14,969	2022-04-06 13:28
236,833	48,483	51,529	62,162	0,240	0,248	2844,993	3020,292	208,881	11,948	8,551	-2,247	41,685	8,335	14,969	2022-04-06 13:28
237,333	48,450	51,511	62,183	0,241	0,248	2866,099	3031,267	175,168	12,094	8,389	-2,195	41,460	8,313	14,969	2022-04-06 13:29
237,833	48,413	51,510	62,208	0,240	0,248	2869,937	3038,354	154,086	12,296	8,196	-2,219	41,853	8,352	14,970	2022-04-06 13:29
238,333	48,464	51,407	62,232	0,241	0,248	2858,874	3076,863	163,629	12,268	8,199	-2,182	41,545	8,321	14,969	2022-04-06 13:30
238,833	48,488	51,387	62,195	0,240	0,248	2849,974	3071,515	178,634	12,017	8,392	-2,190	41,548	8,321	14,969	2022-04-06 13:30
239,333	48,444	51,428	62,204	0,239	0,248	2856,193	3062,652	185,512	12,006	8,450	-2,213	41,614	8,328	14,969	2022-04-06 13:31
239,833	48,420	51,478	62,243	0,241	0,248	2877,063	3058,303	172,187	12,026	8,406	-2,232	41,311	8,298	14,848	2022-04-06 13:31
240,333	48,452	51,441	62,234	0,240	0,247	2864,279	3063,833	174,841	12,256	8,221	-2,203	41,527	8,319	14,969	2022-04-06 13:32
240,833	48,457	51,461	62,203	0,241	0,248	2860,404	3053,078	211,291	12,352	8,079	-2,186	41,776	8,344	14,845	2022-04-06 13:32
241,333	48,459	51,510	62,199	0,240	0,248	2861,980	3037,680	226,907	12,143	8,232	-2,215	41,410	8,308	14,845	2022-04-06 13:33
241,833	48,450	51,494	62,216	0,240	0,248	2865,521	3045,532	250,412	11,874	8,530	-2,231	41,545	8,321	14,845	2022-04-06 13:33
242,333	48,455	51,511	62,230	0,240	0,248	2863,581	3045,419	258,531	11,831	8,593	-2,242	41,448	8,311	14,970	2022-04-06 13:34
242,833	48,450	51,527	62,232	0,241	0,248	2869,985	3041,744	198,899	12,222	8,289	-2,198	41,818	8,349	14,845	2022-04-06 13:34
243,333	48,471	51,494	62,272	0,241	0,248	2867,647	3062,343	161,198	12,582	7,885	-2,178	41,238	8,290	14,845	2022-04-06 13:35
243,833	48,485	51,594	62,262	0,240	0,248	2859,010	3030,741	216,842	12,827	7,624	-2,155	41,343	8,301	14,845	2022-04-06 13:35
244,333	48,454	51,541	62,291	0,241	0,248	2877,283	3054,106	230,298	12,668	7,748	-2,235	41,090	8,275	14,845	2022-04-06 13:36
244,833	48,447	51,466	62,269	0,240	0,248	2874,231	3070,229	220,044	12,427	7,975	-2,225	41,324	8,299	14,845	2022-04-06 13:36

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
245,333	0,274	0,700	1,038	-0,109	0,042	0,264	0,638	45,643	21,131	20,026	19,840	19,829	19,865	19,737	19,698	58,862
245,833	0,273	0,707	1,032	-0,108	0,028	0,259	0,638	45,791	21,237	20,106	19,918	19,903	19,939	19,816	19,764	58,846
246,333	0,294	0,709	1,035	-0,107	-0,014	0,257	0,637	45,806	21,073	20,069	19,879	19,871	19,916	19,781	19,731	58,864
246,833	0,299	0,708	1,046	-0,109	0,039	0,258	0,638	45,649	21,035	20,002	19,809	19,804	19,840	19,718	19,665	58,888
247,334	0,320	0,702	1,043	-0,109	0,021	0,263	0,638	45,636	21,087	20,017	19,822	19,822	19,854	19,723	19,674	58,882
247,833	0,333	0,696	1,040	-0,112	0,045	0,269	0,637	45,556	21,059	19,992	19,789	19,788	19,821	19,688	19,642	58,893
248,333	0,343	0,691	1,039	-0,110	-0,002	0,272	0,638	45,611	20,991	20,027	19,847	19,825	19,861	19,736	19,686	58,902
248,833	0,318	0,695	1,030	-0,109	0,023	0,268	0,638	45,633	21,043	20,075	19,885	19,879	19,923	19,789	19,740	58,898
249,333	0,292	0,697	1,035	-0,111	0,007	0,267	0,637	45,552	21,060	20,032	19,841	19,837	19,878	19,759	19,699	58,916
249,834	0,327	0,686	1,036	-0,112	0,001	0,279	0,637	45,457	21,082	20,029	19,833	19,831	19,866	19,744	19,686	58,918
250,333	0,354	0,671	1,034	-0,112	0,015	0,288	0,636	45,388	21,123	20,042	19,853	19,845	19,891	19,755	19,704	58,908
250,833	0,323	0,677	1,039	-0,110	0,055	0,281	0,636	45,388	21,124	20,030	19,836	19,825	19,855	19,733	19,680	58,924
251,333	0,302	0,690	1,041	-0,110	0,019	0,272	0,637	45,488	21,206	20,091	19,889	19,888	19,923	19,785	19,735	58,954
251,833	0,292	0,699	1,036	-0,110	0,003	0,265	0,636	45,530	21,202	20,128	19,927	19,918	19,957	19,828	19,770	58,951
252,333	0,283	0,701	1,039	-0,109	-0,018	0,264	0,637	45,423	21,152	20,040	19,839	19,833	19,871	19,740	19,683	58,963
252,833	0,281	0,699	1,043	-0,112	0,007	0,264	0,637	45,456	21,169	20,070	19,871	19,859	19,901	19,761	19,711	58,978
253,333	0,284	0,694	1,038	-0,111	0,031	0,270	0,636	45,435	21,200	20,043	19,828	19,826	19,862	19,729	19,673	58,979
253,833	0,295	0,686	1,036	-0,112	0,039	0,277	0,636	45,420	21,071	20,033	19,817	19,811	19,857	19,717	19,664	58,933
254,333	0,288	0,684	1,041	-0,110	0,003	0,277	0,637	45,416	21,164	20,067	19,866	19,860	19,888	19,756	19,705	58,946
254,833	0,273	0,688	1,031	-0,111	0,061	0,274	0,636	45,373	21,236	20,095	19,896	19,874	19,907	19,780	19,719	58,977
255,333	0,295	0,681	1,040	-0,112	0,029	0,282	0,636	45,287	21,172	20,076	19,872	19,845	19,886	19,761	19,700	58,968
255,833	0,306	0,670	1,048	-0,112	-0,003	0,290	0,636	45,161	21,108	20,001	19,794	19,772	19,810	19,686	19,626	58,962
256,333	0,308	0,671	1,034	-0,111	0,035	0,287	0,636	45,225	21,171	20,047	19,829	19,803	19,845	19,712	19,653	58,962
256,833	0,299	0,681	1,037	-0,111	0,019	0,278	0,636	45,339	21,252	20,111	19,905	19,870	19,904	19,786	19,720	58,964
257,333	0,284	0,693	1,035	-0,108	0,020	0,268	0,636	45,337	21,243	20,041	19,827	19,792	19,843	19,709	19,647	58,977
257,834	0,283	0,697	1,036	-0,109	0,005	0,268	0,636	45,276	21,097	19,963	19,748	19,721	19,757	19,629	19,569	58,995
258,333	0,295	0,691	1,044	-0,111	0,046	0,272	0,635	45,271	21,129	20,024	19,815	19,774	19,821	19,684	19,627	58,996
258,833	0,301	0,686	1,039	-0,109	0,035	0,277	0,636	45,337	21,118	20,031	19,807	19,788	19,834	19,697	19,635	59,014
259,333	0,318	0,687	1,039	-0,110	0,041	0,274	0,635	45,500	21,265	20,133	19,923	19,899	19,934	19,792	19,739	59,004

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
245,333	48,460	51,554	62,261	0,241	0,248	2881,459	3042,537	174,784	12,575	7,912	-2,176	41,566	8,323	14,844	2022-04-06 13:37
245,833	48,472	51,620	62,302	0,241	0,248	2871,804	3035,873	202,886	12,696	7,762	-2,162	41,549	8,322	14,845	2022-04-06 13:37
246,333	48,450	51,588	62,266	0,240	0,248	2869,389	3031,908	248,583	12,727	7,700	-2,134	41,311	8,298	14,834	2022-04-06 13:38
246,833	48,473	51,589	62,270	0,241	0,248	2877,482	3033,106	261,229	12,653	7,752	-2,190	41,986	8,365	14,845	2022-04-06 13:38
247,334	48,486	51,616	62,243	0,241	0,248	2875,172	3018,560	309,734	12,480	7,904	-2,181	41,796	8,346	14,845	2022-04-06 13:39
247,833	48,452	51,599	62,247	0,240	0,248	2874,727	3024,589	352,835	12,309	8,063	-2,238	41,383	8,305	14,845	2022-04-06 13:39
248,333	48,446	51,606	62,263	0,240	0,248	2881,804	3026,109	352,541	12,286	8,158	-2,205	41,348	8,301	14,845	2022-04-06 13:40
248,833	48,476	51,671	62,285	0,241	0,248	2879,027	3013,569	271,878	12,418	8,033	-2,190	40,978	8,264	14,845	2022-04-06 13:40
249,333	48,458	51,586	62,278	0,239	0,248	2872,309	3037,967	229,771	12,405	8,018	-2,218	41,191	8,286	14,751	2022-04-06 13:41
249,834	48,439	51,588	62,286	0,241	0,248	2901,685	3038,620	394,925	11,953	8,368	-2,242	41,624	8,329	14,751	2022-04-06 13:41
250,333	48,459	51,573	62,302	0,241	0,248	2886,539	3048,683	361,173	11,743	8,649	-2,246	41,340	8,301	14,751	2022-04-06 13:42
250,833	48,448	51,607	62,311	0,240	0,248	2886,629	3041,183	294,197	12,040	8,437	-2,197	41,585	8,325	14,751	2022-04-06 13:42
251,333	48,456	51,472	62,291	0,241	0,248	2900,931	3073,361	245,242	12,311	8,146	-2,203	41,764	8,343	14,845	2022-04-06 13:43
251,833	48,450	51,575	62,297	0,240	0,248	2897,819	3043,933	221,977	12,519	7,942	-2,197	41,458	8,312	14,751	2022-04-06 13:43
252,333	48,452	51,495	62,304	0,239	0,248	2883,729	3070,069	209,164	12,490	7,932	-2,186	41,575	8,324	14,751	2022-04-06 13:44
252,833	48,453	51,604	62,304	0,239	0,248	2888,912	3041,512	201,413	12,487	7,934	-2,234	41,773	8,344	14,751	2022-04-06 13:44
253,333	48,436	51,536	62,314	0,240	0,248	2907,542	3061,467	225,022	12,268	8,112	-2,225	41,713	8,338	14,751	2022-04-06 13:45
253,833	48,433	51,509	62,351	0,242	0,248	2917,113	3080,128	237,599	12,108	8,297	-2,235	41,131	8,280	14,751	2022-04-06 13:45
254,333	48,449	51,515	62,325	0,240	0,248	2896,859	3071,337	205,817	12,112	8,311	-2,204	41,283	8,295	14,751	2022-04-06 13:46
254,833	48,459	51,526	62,325	0,240	0,248	2901,298	3067,649	182,282	12,182	8,217	-2,212	41,654	8,332	14,751	2022-04-06 13:46
255,333	48,451	51,545	62,319	0,241	0,248	2908,272	3060,372	257,310	11,910	8,447	-2,242	41,376	8,304	14,751	2022-04-06 13:47
255,833	48,448	51,464	62,345	0,241	0,248	2907,582	3090,581	270,138	11,698	8,695	-2,241	42,020	8,369	14,751	2022-04-06 13:47
256,333	48,445	51,498	62,352	0,240	0,248	2902,841	3083,974	273,802	11,821	8,618	-2,229	41,248	8,291	14,751	2022-04-06 13:48
256,833	48,457	51,564	62,360	0,240	0,248	2900,407	3065,931	238,038	12,147	8,353	-2,213	41,549	8,322	14,751	2022-04-06 13:48
257,333	48,479	51,490	62,375	0,240	0,248	2897,539	3093,697	204,221	12,439	8,053	-2,152	41,366	8,303	14,657	2022-04-06 13:49
257,834	48,465	51,490	62,375	0,241	0,248	2915,109	3091,610	222,910	12,338	8,051	-2,185	41,048	8,271	14,751	2022-04-06 13:49
258,333	48,422	51,614	62,376	0,240	0,248	2914,435	3057,975	245,444	12,271	8,162	-2,212	41,869	8,354	14,657	2022-04-06 13:50
258,833	48,418	51,562	62,381	0,239	0,248	2914,133	3073,276	264,018	12,117	8,320	-2,185	41,717	8,338	14,748	2022-04-06 13:50
259,333	48,438	51,524	62,360	0,241	0,248	2919,449	3078,192	303,277	12,260	8,223	-2,195	41,426	8,309	14,657	2022-04-06 13:51



## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
259,833	0,320	0,695	1,042	-0,107	0,013	0,267	0,635	45,498	21,274	20,135	19,916	19,883	19,930	19,804	19,734	59,000
260,334	0,311	0,705	1,039	-0,107	0,018	0,259	0,635	45,530	21,189	20,091	19,882	19,852	19,899	19,774	19,699	59,039
260,833	0,318	0,707	1,039	-0,109	0,056	0,260	0,635	45,420	21,157	20,056	19,836	19,812	19,857	19,726	19,655	59,047
261,333	0,332	0,695	1,039	-0,111	-0,042	0,271	0,635	45,356	21,215	20,062	19,849	19,814	19,850	19,732	19,661	59,029
261,833	0,319	0,689	1,035	-0,108	-0,019	0,273	0,635	45,494	21,238	20,103	19,887	19,856	19,905	19,776	19,706	59,027
262,333	0,328	0,697	1,036	-0,108	-0,033	0,266	0,635	45,438	21,193	20,013	19,788	19,753	19,799	19,676	19,603	59,037
262,833	0,366	0,707	1,039	-0,108	0,009	0,257	0,635	45,558	21,235	20,087	19,873	19,836	19,875	19,749	19,675	59,005
263,333	0,410	0,712	1,035	-0,108	0,025	0,254	0,635	45,605	21,249	20,138	19,921	19,887	19,925	19,803	19,729	58,995
263,833	0,400	0,698	1,037	-0,110	0,020	0,269	0,634	45,407	21,083	20,004	19,798	19,769	19,804	19,676	19,606	59,017
264,333	0,426	0,680	1,033	-0,110	0,015	0,281	0,635	45,283	21,099	20,001	19,790	19,760	19,800	19,672	19,597	59,028
264,833	0,378	0,685	1,036	-0,109	0,007	0,275	0,634	45,353	21,226	20,045	19,824	19,786	19,835	19,704	19,631	59,013
265,333	0,366	0,697	1,030	-0,110	0,022	0,266	0,635	45,399	21,215	20,034	19,818	19,774	19,824	19,692	19,618	59,058
265,833	0,393	0,704	1,034	-0,108	-0,020	0,260	0,635	45,566	21,268	20,116	19,899	19,852	19,892	19,770	19,690	59,040
266,333	0,394	0,702	1,034	-0,110	0,017	0,264	0,635	45,460	21,176	20,062	19,840	19,785	19,835	19,705	19,627	59,050
266,833	0,393	0,692	1,027	-0,109	0,002	0,272	0,635	45,395	21,154	20,105	19,889	19,848	19,894	19,769	19,688	59,061
267,333	0,398	0,687	1,035	-0,111	0,012	0,274	0,635	45,431	21,109	20,091	19,893	19,848	19,885	19,764	19,684	59,057
267,833	0,383	0,695	1,039	-0,109	0,026	0,267	0,634	45,595	21,151	20,087	19,871	19,837	19,888	19,756	19,676	59,067
268,333	0,358	0,702	1,033	-0,107	0,038	0,263	0,634	45,593	21,139	20,098	19,885	19,848	19,898	19,767	19,685	59,063
268,834	0,359	0,702	1,036	-0,109	-0,008	0,262	0,633	45,634	21,188	20,136	19,932	19,898	19,936	19,810	19,731	59,065
269,333	0,348	0,699	1,032	-0,112	0,013	0,265	0,634	45,594	21,260	20,149	19,933	19,905	19,950	19,810	19,738	59,065
269,833	0,324	0,694	1,031	-0,110	0,024	0,270	0,634	45,465	21,147	20,026	19,809	19,769	19,812	19,684	19,608	59,079
270,333	0,338	0,688	1,038	-0,109	0,000	0,275	0,633	45,596	21,275	20,167	19,958	19,909	19,961	19,831	19,746	59,062
270,833	0,393	0,687	1,034	-0,108	0,024	0,274	0,634	45,666	21,221	20,178	19,959	19,925	19,967	19,842	19,755	59,055
271,333	0,379	0,695	1,037	-0,110	-0,002	0,267	0,634	45,457	21,117	20,057	19,851	19,798	19,854	19,721	19,638	59,068
271,833	0,350	0,699	1,037	-0,108	0,037	0,265	0,633	45,610	21,255	20,167	19,954	19,906	19,958	19,842	19,749	59,076
272,333	0,322	0,702	1,036	-0,109	-0,009	0,264	0,633	45,548	21,180	20,101	19,889	19,849	19,892	19,770	19,682	59,090
272,833	0,346	0,690	1,041	-0,112	0,029	0,275	0,633	45,385	20,992	19,967	19,756	19,719	19,772	19,644	19,554	59,113
273,333	0,354	0,683	1,031	-0,113	0,057	0,278	0,633	45,462	21,172	20,098	19,886	19,845	19,896	19,770	19,686	59,075
273,833	0,326	0,685	1,034	-0,112	0,009	0,275	0,634	45,482	21,167	20,107	19,896	19,852	19,904	19,773	19,689	59,083

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
259,833	48,438	51,532	62,317	0,239	0,248	2900,294	3064,720	294,384	12,417	8,019	-2,149	41,739	8,341	14,657	2022-04-06 13:51
260,334	48,484	51,544	62,265	0,239	0,248	2896,646	3046,745	276,479	12,703	7,779	-2,149	41,377	8,304	14,657	2022-04-06 13:52
260,833	48,534	51,669	62,327	0,239	0,248	2879,164	3027,004	337,503	12,606	7,788	-2,188	41,412	8,308	14,657	2022-04-06 13:52
261,333	48,543	51,638	62,387	0,241	0,248	2898,849	3052,148	314,298	12,236	8,116	-2,217	41,682	8,335	14,657	2022-04-06 13:53
261,833	48,457	51,713	62,433	0,241	0,248	2919,206	3044,887	301,217	12,279	8,190	-2,160	41,552	8,322	14,657	2022-04-06 13:53
262,333	48,350	51,660	62,462	0,240	0,248	2951,167	3067,340	338,565	12,505	7,972	-2,159	41,258	8,292	14,657	2022-04-06 13:54
262,833	48,370	51,625	62,427	0,242	0,248	2950,752	3067,552	509,458	12,782	7,716	-2,156	41,189	8,285	14,657	2022-04-06 13:54
263,333	48,443	51,716	62,445	0,241	0,248	2915,999	3048,836	511,724	12,790	7,635	-2,160	41,610	8,328	14,657	2022-04-06 13:55
263,833	48,460	51,655	62,425	0,241	0,248	2920,893	3059,189	503,795	12,249	8,080	-2,192	41,441	8,311	14,657	2022-04-06 13:55
264,333	48,455	51,658	62,415	0,240	0,248	2917,537	3054,960	550,810	11,965	8,425	-2,203	41,416	8,308	14,657	2022-04-06 13:56
264,833	48,448	51,625	62,412	0,241	0,248	2922,971	3062,639	400,430	12,234	8,257	-2,175	41,507	8,317	14,564	2022-04-06 13:56
265,333	48,438	51,555	62,429	0,239	0,248	2918,189	3089,161	430,573	12,474	7,985	-2,198	41,267	8,293	14,657	2022-04-06 13:57
265,833	48,417	51,631	62,409	0,240	0,248	2932,412	3062,217	492,190	12,655	7,813	-2,160	41,467	8,313	14,657	2022-04-06 13:57
266,333	48,425	51,695	62,402	0,240	0,248	2928,614	3039,599	460,097	12,446	7,913	-2,202	41,127	8,279	14,657	2022-04-06 13:58
266,833	48,445	51,689	62,400	0,240	0,248	2927,138	3042,635	501,978	12,216	8,172	-2,174	41,213	8,288	14,657	2022-04-06 13:58
267,333	48,433	51,639	62,446	0,239	0,248	2911,120	3069,260	492,087	12,238	8,213	-2,229	41,031	8,269	14,657	2022-04-06 13:59
267,833	48,447	51,707	62,458	0,241	0,248	2935,169	3054,087	431,785	12,464	8,006	-2,181	41,583	8,325	14,657	2022-04-06 13:59
268,333	48,441	51,672	62,451	0,241	0,248	2936,837	3061,514	379,947	12,546	7,877	-2,136	41,201	8,287	14,657	2022-04-06 14:00
268,834	48,436	51,676	62,448	0,241	0,248	2945,135	3061,014	411,385	12,560	7,865	-2,188	41,459	8,313	14,564	2022-04-06 14:00
269,333	48,446	51,594	62,456	0,240	0,248	2921,984	3085,835	360,336	12,452	7,955	-2,234	41,385	8,305	14,564	2022-04-06 14:01
269,833	48,440	51,670	62,462	0,240	0,248	2930,844	3065,403	309,806	12,302	8,105	-2,200	41,179	8,284	14,564	2022-04-06 14:01
270,333	48,440	51,626	62,467	0,241	0,247	2937,381	3077,332	377,733	12,164	8,261	-2,181	41,422	8,309	14,564	2022-04-06 14:02
270,833	48,455	51,551	62,462	0,240	0,247	2924,053	3097,197	505,724	12,215	8,217	-2,156	41,396	8,306	14,564	2022-04-06 14:02
271,333	48,458	51,506	62,468	0,241	0,248	2931,569	3112,528	397,820	12,425	8,020	-2,194	41,264	8,293	14,564	2022-04-06 14:03
271,833	48,472	51,597	62,479	0,240	0,247	2923,824	3089,244	370,918	12,489	7,941	-2,169	41,451	8,312	14,563	2022-04-06 14:03
272,333	48,458	51,643	62,478	0,240	0,247	2929,498	3075,548	300,843	12,520	7,917	-2,173	41,199	8,286	14,564	2022-04-06 14:04
272,833	48,450	51,611	62,474	0,241	0,248	2950,617	3087,485	415,806	12,116	8,241	-2,236	41,769	8,344	14,563	2022-04-06 14:04
273,333	48,454	51,578	62,449	0,241	0,248	2941,780	3087,813	355,631	12,074	8,344	-2,264	41,175	8,284	14,564	2022-04-06 14:05
273,833	48,452	51,614	62,326	0,241	0,247	2942,379	3038,917	323,307	12,198	8,261	-2,236	41,481	8,315	14,564	2022-04-06 14:05

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
274,333	0,363	0,693	1,041	-0,110	0,014	0,269	0,633	45,497	21,130	20,085	19,870	19,841	19,885	19,760	19,675	59,117
274,833	0,356	0,695	1,035	-0,110	0,017	0,268	0,633	45,627	21,229	20,163	19,948	19,918	19,966	19,831	19,747	59,111
275,334	0,357	0,689	1,041	-0,111	0,038	0,275	0,633	45,484	21,162	20,094	19,877	19,841	19,889	19,766	19,674	59,117
275,833	0,343	0,681	1,035	-0,114	-0,019	0,281	0,633	45,449	21,191	20,135	19,920	19,879	19,937	19,815	19,718	59,115
276,333	0,320	0,679	1,031	-0,112	-0,015	0,281	0,633	45,437	21,191	20,114	19,896	19,859	19,907	19,769	19,686	59,127
276,833	0,300	0,685	1,038	-0,111	-0,003	0,275	0,633	45,563	21,268	20,184	19,959	19,924	19,971	19,846	19,753	59,125
277,334	0,309	0,701	1,034	-0,110	0,018	0,262	0,633	45,569	21,168	20,107	19,895	19,865	19,912	19,778	19,688	59,126
277,833	0,333	0,705	1,033	-0,110	-0,005	0,262	0,632	45,584	21,201	20,136	19,914	19,889	19,937	19,803	19,715	59,110
278,333	0,334	0,692	1,029	-0,111	0,038	0,272	0,634	45,506	21,178	20,115	19,892	19,858	19,908	19,775	19,688	59,112
278,833	0,322	0,685	1,037	-0,111	0,019	0,277	0,632	45,543	21,135	20,178	19,966	19,936	19,978	19,845	19,755	59,129
279,333	0,307	0,686	1,036	-0,111	-0,013	0,276	0,632	45,511	21,011	20,099	19,890	19,854	19,907	19,782	19,686	59,135
279,833	0,319	0,686	1,035	-0,112	-0,007	0,276	0,632	45,533	21,161	20,144	19,934	19,909	19,960	19,826	19,736	59,125
280,333	0,319	0,687	1,029	-0,113	0,024	0,274	0,632	45,456	21,130	20,057	19,855	19,823	19,868	19,738	19,650	59,147
280,833	0,310	0,684	1,039	-0,111	0,056	0,278	0,632	45,434	21,241	20,144	19,935	19,901	19,947	19,816	19,724	59,138
281,333	0,338	0,676	1,041	-0,112	0,037	0,285	0,632	45,425	21,118	20,084	19,871	19,840	19,899	19,768	19,671	59,134
281,833	0,335	0,674	1,042	-0,111	0,045	0,286	0,632	45,478	21,216	20,162	19,951	19,925	19,982	19,846	19,753	59,124
282,333	0,308	0,683	1,037	-0,111	0,016	0,276	0,632	45,478	21,225	20,160	19,945	19,925	19,979	19,842	19,749	59,119
282,833	0,308	0,693	1,036	-0,109	0,036	0,270	0,633	45,466	21,166	20,099	19,891	19,873	19,913	19,779	19,689	59,125
283,333	0,310	0,697	1,032	-0,108	0,030	0,268	0,633	45,565	21,164	20,147	19,944	19,928	19,975	19,842	19,746	59,137
283,833	0,325	0,693	1,035	-0,110	0,022	0,271	0,631	45,633	21,168	20,146	19,946	19,931	19,980	19,843	19,751	59,144
284,333	0,350	0,691	1,034	-0,110	0,014	0,272	0,631	45,529	21,006	19,969	19,758	19,754	19,799	19,664	19,571	59,168
284,833	0,354	0,694	1,037	-0,111	0,000	0,270	0,632	45,672	21,152	20,088	19,873	19,863	19,914	19,777	19,688	59,153
285,333	0,329	0,696	1,040	-0,110	0,017	0,268	0,631	45,752	21,209	20,157	19,942	19,936	19,981	19,848	19,754	59,138
285,833	0,309	0,695	1,038	-0,110	0,012	0,269	0,631	45,634	21,226	20,116	19,896	19,885	19,923	19,796	19,701	59,126
286,333	0,326	0,691	1,039	-0,110	0,033	0,272	0,631	45,509	21,115	20,031	19,816	19,809	19,861	19,724	19,625	59,126
286,834	0,350	0,688	1,040	-0,111	-0,001	0,275	0,632	45,546	21,229	20,105	19,883	19,865	19,925	19,781	19,689	59,135
287,333	0,360	0,683	1,033	-0,113	0,038	0,278	0,631	45,546	21,173	20,101	19,874	19,865	19,923	19,781	19,685	59,140
287,834	0,352	0,682	1,033	-0,111	0,027	0,278	0,631	45,516	21,068	20,033	19,814	19,801	19,857	19,712	19,622	59,150
288,334	0,337	0,691	1,032	-0,110	0,020	0,269	0,630	45,640	21,106	20,093	19,874	19,865	19,925	19,790	19,688	59,143

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
274,333	48,457	51,620	62,373	0,240	0,248	2940,058	3052,728	402,243	12,365	8,067	-2,191	41,487	8,315	14,469	2022-04-06 14:06
274,833	48,444	51,672	62,270	0,241	0,247	2955,630	3008,368	393,074	12,387	8,045	-2,200	41,622	8,329	14,564	2022-04-06 14:06
275,334	48,456	51,616	62,278	0,241	0,248	2946,996	3029,401	371,468	12,128	8,246	-2,216	41,965	8,363	14,564	2022-04-06 14:07
275,833	48,475	51,622	62,367	0,240	0,248	2931,289	3052,120	354,290	11,985	8,425	-2,284	40,958	8,262	14,469	2022-04-06 14:07
276,333	48,454	51,643	62,454	0,240	0,248	2947,372	3071,622	291,350	12,007	8,441	-2,232	41,233	8,290	14,564	2022-04-06 14:08
276,833	48,422	51,668	62,369	0,240	0,248	2953,764	3040,403	244,329	12,233	8,250	-2,223	41,589	8,326	14,469	2022-04-06 14:08
277,334	48,418	51,636	62,396	0,240	0,248	2955,484	3057,049	290,688	12,669	7,848	-2,198	41,289	8,295	14,564	2022-04-06 14:09
277,833	48,450	51,651	62,222	0,241	0,248	2948,895	3001,654	362,821	12,528	7,862	-2,197	41,504	8,317	14,469	2022-04-06 14:09
278,333	48,433	51,692	62,270	0,241	0,248	2954,655	3004,193	325,345	12,203	8,171	-2,219	41,443	8,311	14,469	2022-04-06 14:10
278,833	48,418	51,752	62,413	0,240	0,248	2948,914	3028,766	283,473	12,109	8,308	-2,222	41,438	8,310	14,469	2022-04-06 14:10
279,333	48,443	51,716	62,374	0,241	0,248	2957,615	3029,289	276,881	12,154	8,276	-2,224	41,364	8,303	14,469	2022-04-06 14:11
279,833	48,442	51,710	62,279	0,240	0,248	2950,070	3002,627	305,434	12,166	8,273	-2,239	41,324	8,299	14,470	2022-04-06 14:11
280,333	48,417	51,623	62,255	0,240	0,248	2952,818	3021,113	291,371	12,207	8,226	-2,253	41,026	8,269	14,469	2022-04-06 14:12
280,833	48,427	51,657	62,344	0,240	0,248	2953,358	3036,258	295,080	12,050	8,340	-2,211	41,547	8,321	14,469	2022-04-06 14:12
281,333	48,436	51,620	62,312	0,240	0,248	2952,033	3039,021	363,535	11,850	8,545	-2,246	41,734	8,340	14,469	2022-04-06 14:13
281,833	48,442	51,668	62,270	0,242	0,248	2967,681	3012,261	293,810	11,853	8,578	-2,219	41,536	8,320	14,469	2022-04-06 14:13
282,333	48,442	51,636	62,274	0,241	0,248	2952,295	3023,198	284,643	12,217	8,289	-2,211	41,300	8,297	14,469	2022-04-06 14:14
282,833	48,483	51,600	62,385	0,240	0,248	2935,839	3063,558	263,350	12,361	8,090	-2,176	41,605	8,327	14,564	2022-04-06 14:14
283,333	48,484	51,635	62,434	0,240	0,248	2940,195	3069,265	277,034	12,424	8,026	-2,151	41,250	8,292	14,564	2022-04-06 14:15
283,833	48,436	51,732	62,324	0,239	0,248	2944,472	3008,746	326,218	12,290	8,138	-2,199	41,243	8,291	14,469	2022-04-06 14:15
284,333	48,396	51,780	62,405	0,239	0,248	2954,533	3018,193	396,031	12,307	8,170	-2,202	41,562	8,323	14,469	2022-04-06 14:16
284,833	48,420	51,759	62,377	0,240	0,248	2954,557	3015,238	370,252	12,386	8,095	-2,219	41,267	8,293	14,469	2022-04-06 14:16
285,333	48,428	51,745	62,344	0,240	0,248	2953,374	3011,696	297,825	12,400	8,034	-2,191	41,735	8,340	14,469	2022-04-06 14:17
285,833	48,438	51,736	62,334	0,240	0,248	2943,987	3010,083	282,632	12,371	8,056	-2,208	41,490	8,316	14,469	2022-04-06 14:17
286,333	48,446	51,677	62,394	0,241	0,248	2950,388	3045,765	331,274	12,243	8,168	-2,197	41,447	8,311	14,469	2022-04-06 14:18
286,834	48,439	51,672	62,424	0,240	0,248	2945,003	3055,371	385,291	12,164	8,248	-2,219	41,567	8,323	14,469	2022-04-06 14:18
287,333	48,431	51,773	62,381	0,240	0,248	2955,226	3014,201	409,512	12,049	8,349	-2,264	41,433	8,310	14,469	2022-04-06 14:19
287,834	48,429	51,720	62,381	0,240	0,248	2950,662	3026,785	369,631	12,129	8,332	-2,210	41,175	8,284	14,459	2022-04-06 14:19
288,334	48,435	51,679	62,381	0,241	0,247	2958,002	3037,426	338,507	12,360	8,079	-2,195	41,269	8,293	14,345	2022-04-06 14:20

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
288,833	0,333	0,697	1,040	-0,110	-0,031	0,267	0,630	45,601	21,142	20,144	19,928	19,924	19,979	19,848	19,746	59,132
289,333	0,332	0,689	1,037	-0,112	0,029	0,274	0,630	45,547	21,195	20,129	19,920	19,907	19,966	19,835	19,730	59,156
289,834	0,342	0,676	1,038	-0,113	0,018	0,285	0,630	45,477	21,255	20,158	19,934	19,934	19,982	19,852	19,749	59,149
290,334	0,354	0,669	1,031	-0,112	-0,023	0,288	0,629	45,404	21,183	20,140	19,921	19,922	19,967	19,832	19,737	59,156
290,833	0,354	0,675	1,032	-0,113	0,010	0,284	0,630	45,388	21,149	20,091	19,874	19,874	19,929	19,788	19,690	59,162
291,334	0,329	0,680	1,031	-0,111	-0,002	0,278	0,630	45,381	21,245	20,100	19,880	19,887	19,925	19,792	19,693	59,168
291,833	0,328	0,688	1,037	-0,110	0,003	0,274	0,630	45,443	21,285	20,178	19,942	19,946	19,992	19,850	19,754	59,172
292,333	0,371	0,677	1,038	-0,112	-0,019	0,285	0,630	45,376	21,275	20,169	19,945	19,929	19,986	19,840	19,750	59,181
292,833	0,389	0,669	1,035	-0,112	-0,026	0,290	0,629	45,357	21,220	20,148	19,938	19,931	19,983	19,841	19,745	59,091
293,333	0,372	0,675	1,035	-0,110	0,037	0,285	0,630	45,329	21,151	20,096	19,872	19,863	19,916	19,778	19,680	59,057
293,833	0,370	0,687	1,041	-0,110	0,009	0,274	0,629	45,427	21,184	20,096	19,882	19,877	19,935	19,788	19,687	59,043
294,333	0,377	0,694	1,035	-0,110	-0,004	0,269	0,628	45,489	21,234	20,123	19,888	19,883	19,944	19,793	19,694	59,066
294,833	0,358	0,690	1,037	-0,110	0,033	0,275	0,628	45,485	21,294	20,198	19,969	19,947	20,014	19,867	19,768	59,068
295,333	0,355	0,680	1,033	-0,112	-0,005	0,281	0,628	45,421	21,310	20,167	19,941	19,929	19,985	19,843	19,741	59,043
295,833	0,352	0,672	1,032	-0,113	0,005	0,289	0,628	45,260	21,137	20,126	19,915	19,901	19,948	19,807	19,708	59,059
296,333	0,335	0,672	1,040	-0,112	-0,005	0,286	0,628	45,357	21,156	20,133	19,920	19,904	19,958	19,823	19,714	59,055
296,834	0,306	0,684	1,036	-0,111	0,011	0,277	0,628	45,393	21,090	20,108	19,905	19,902	19,959	19,813	19,707	59,045
297,333	0,302	0,692	1,043	-0,106	-0,019	0,270	0,629	45,374	21,034	20,075	19,862	19,868	19,928	19,779	19,676	59,032
297,833	0,314	0,693	1,035	-0,112	-0,010	0,273	0,628	45,399	21,050	20,071	19,866	19,872	19,925	19,786	19,676	59,033
298,333	0,352	0,675	1,038	-0,112	0,006	0,287	0,628	45,396	21,190	20,138	19,925	19,938	19,991	19,841	19,738	59,017
298,833	0,373	0,667	1,035	-0,114	0,020	0,291	0,629	45,294	21,046	20,014	19,818	19,812	19,865	19,727	19,618	59,045
299,334	0,353	0,676	1,037	-0,112	0,022	0,283	0,628	45,394	21,158	20,138	19,942	19,940	19,991	19,846	19,745	59,063
299,833	0,324	0,687	1,039	-0,110	-0,018	0,274	0,628	45,366	21,008	20,012	19,813	19,811	19,869	19,718	19,618	59,063
300,333	0,320	0,695	1,040	-0,108	0,001	0,268	0,628	45,433	21,040	20,019	19,819	19,819	19,874	19,735	19,626	59,041
300,834	0,324	0,694	1,034	-0,107	0,035	0,271	0,628	45,472	21,206	20,138	19,929	19,919	19,985	19,834	19,733	59,029
301,333	0,377	0,673	1,037	-0,114	0,013	0,289	0,628	45,357	21,200	20,146	19,946	19,936	20,003	19,853	19,752	59,039
301,833	0,408	0,661	1,036	-0,113	-0,008	0,297	0,628	45,188	21,086	20,019	19,809	19,816	19,869	19,718	19,617	59,035
302,333	0,381	0,663	1,038	-0,113	0,023	0,293	0,628	45,366	21,184	20,151	19,945	19,952	20,010	19,862	19,754	59,028
302,833	0,377	0,677	1,032	-0,112	0,010	0,282	0,627	45,390	21,253	20,157	19,946	19,952	20,002	19,867	19,754	59,025

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
288,833	48,440	51,645	62,454	0,240	0,248	2948,857	3070,368	343,435	12,393	8,000	-2,201	41,805	8,347	14,345	2022-04-06 14:20
289,333	48,426	51,639	62,491	0,238	0,248	2936,149	3082,119	323,655	12,126	8,225	-2,231	41,404	8,307	14,345	2022-04-06 14:21
289,834	48,433	51,662	62,419	0,240	0,248	2953,947	3054,496	377,173	11,810	8,550	-2,258	41,649	8,332	14,345	2022-04-06 14:21
290,334	48,454	51,647	62,370	0,239	0,248	2932,515	3045,041	388,743	11,754	8,646	-2,245	41,321	8,299	14,345	2022-04-06 14:22
290,833	48,494	51,654	62,297	0,241	0,248	2949,284	3024,771	378,217	11,905	8,524	-2,251	41,145	8,281	14,345	2022-04-06 14:22
291,334	48,551	51,719	62,377	0,239	0,248	2917,898	3028,620	307,910	12,089	8,354	-2,221	41,307	8,297	14,345	2022-04-06 14:23
291,833	48,522	51,676	62,329	0,239	0,248	2925,237	3029,044	349,093	12,185	8,232	-2,193	41,480	8,315	14,345	2022-04-06 14:23
292,333	48,400	51,717	62,320	0,241	0,248	2985,685	3013,344	478,195	11,823	8,538	-2,239	41,526	8,319	14,345	2022-04-06 14:24
292,833	48,300	51,813	62,378	0,243	0,248	3007,807	3002,563	474,116	11,731	8,693	-2,246	41,470	8,314	14,345	2022-04-06 14:24
293,333	48,385	51,725	62,360	0,243	0,248	2976,015	3020,951	398,495	11,962	8,538	-2,203	41,628	8,329	14,345	2022-04-06 14:25
293,833	48,467	51,589	62,384	0,243	0,248	2953,749	3066,924	455,367	12,279	8,213	-2,203	41,700	8,337	14,345	2022-04-06 14:25
294,333	48,462	51,577	62,403	0,242	0,248	2945,961	3074,760	448,719	12,400	8,064	-2,206	41,496	8,316	14,252	2022-04-06 14:26
294,833	48,434	51,546	62,473	0,243	0,248	2961,768	3102,263	365,863	12,123	8,240	-2,206	41,471	8,314	14,252	2022-04-06 14:26
295,333	48,408	51,658	62,448	0,244	0,248	2981,423	3063,211	416,284	11,961	8,437	-2,236	41,515	8,318	14,252	2022-04-06 14:27
295,833	48,421	51,577	62,461	0,242	0,248	2960,494	3090,727	359,335	11,730	8,660	-2,255	41,270	8,294	14,252	2022-04-06 14:27
296,333	48,463	51,530	62,460	0,244	0,248	2968,380	3103,796	307,204	11,891	8,583	-2,237	41,372	8,304	14,252	2022-04-06 14:28
296,834	48,479	51,535	62,395	0,243	0,248	2951,386	3085,474	257,071	12,181	8,300	-2,216	41,537	8,320	14,252	2022-04-06 14:28
297,333	48,453	51,524	62,442	0,243	0,248	2957,821	3101,078	258,016	12,354	8,104	-2,124	41,280	8,295	14,252	2022-04-06 14:29
297,833	48,425	51,554	62,449	0,244	0,248	2971,078	3094,947	315,778	12,220	8,178	-2,237	41,660	8,333	14,252	2022-04-06 14:29
298,333	48,419	51,569	62,484	0,244	0,248	2967,653	3099,983	419,318	11,758	8,609	-2,240	41,518	8,318	14,252	2022-04-06 14:30
298,833	48,479	51,585	62,473	0,242	0,248	2939,081	3093,249	427,476	11,717	8,730	-2,271	41,221	8,289	14,252	2022-04-06 14:30
299,334	48,483	51,550	62,424	0,242	0,248	2944,090	3088,013	362,530	12,008	8,500	-2,239	41,508	8,317	14,252	2022-04-06 14:31
299,833	48,438	51,554	62,345	0,243	0,248	2965,127	3064,681	290,257	12,252	8,235	-2,199	41,475	8,314	14,252	2022-04-06 14:31
300,333	48,405	51,559	62,231	0,243	0,248	2962,274	3030,680	315,429	12,432	8,035	-2,162	41,842	8,351	14,252	2022-04-06 14:32
300,834	48,446	51,549	62,269	0,243	0,248	2948,177	3046,845	324,935	12,234	8,140	-2,145	41,312	8,298	14,252	2022-04-06 14:32
301,333	48,488	51,526	62,244	0,243	0,248	2946,797	3043,186	479,558	11,658	8,668	-2,283	41,678	8,334	14,252	2022-04-06 14:33
301,833	48,469	51,573	62,373	0,243	0,248	2946,836	3065,943	509,613	11,480	8,897	-2,257	41,221	8,289	14,252	2022-04-06 14:33
302,333	48,428	51,623	62,351	0,243	0,247	2963,865	3044,786	433,208	11,665	8,803	-2,251	41,352	8,302	14,251	2022-04-06 14:34
302,833	48,430	51,589	62,319	0,243	0,247	2951,770	3045,543	454,416	12,044	8,446	-2,249	41,244	8,291	14,158	2022-04-06 14:34

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
303,333	0,371	0,689	1,038	-0,108	0,022	0,272	0,627	45,433	21,153	20,145	19,942	19,943	19,999	19,853	19,745	59,017
303,833	0,382	0,685	1,036	-0,111	-0,003	0,279	0,627	45,389	21,130	20,156	19,943	19,953	20,004	19,859	19,754	59,009
304,333	0,438	0,670	1,030	-0,115	0,014	0,289	0,627	45,339	21,207	20,159	19,945	19,951	20,021	19,865	19,756	59,006
304,833	0,442	0,667	1,033	-0,112	-0,028	0,293	0,627	45,347	21,238	20,158	19,942	19,952	20,000	19,860	19,747	58,988
305,333	0,424	0,665	1,037	-0,111	0,002	0,292	0,627	45,225	21,131	20,093	19,875	19,882	19,946	19,794	19,685	59,003
305,833	0,377	0,670	1,039	-0,110	0,041	0,287	0,627	45,309	21,180	20,146	19,936	19,938	19,996	19,846	19,740	58,993
306,333	0,346	0,679	1,034	-0,111	0,031	0,280	0,627	45,270	21,117	20,092	19,884	19,895	19,946	19,798	19,689	58,985
306,833	0,346	0,678	1,037	-0,112	-0,001	0,284	0,627	45,316	21,214	20,117	19,900	19,891	19,949	19,807	19,698	58,991
307,334	0,409	0,661	1,032	-0,113	0,032	0,299	0,627	45,212	21,167	20,152	19,936	19,958	20,009	19,864	19,752	58,972
307,833	0,455	0,647	1,042	-0,113	0,016	0,308	0,627	45,045	21,243	20,154	19,941	19,953	20,009	19,853	19,749	58,970
308,333	0,392	0,649	1,036	-0,113	0,042	0,305	0,626	45,031	21,161	20,101	19,885	19,887	19,945	19,793	19,686	58,989
308,833	0,331	0,655	1,031	-0,110	0,029	0,300	0,627	45,107	21,253	20,161	19,938	19,936	19,993	19,851	19,736	58,980
309,333	0,303	0,663	1,037	-0,110	0,020	0,294	0,627	44,969	21,123	20,035	19,807	19,809	19,869	19,715	19,610	58,979
309,833	0,308	0,663	1,030	-0,112	0,026	0,296	0,627	45,008	21,278	20,174	19,951	19,945	20,002	19,856	19,744	58,979
310,334	0,385	0,653	1,037	-0,112	-0,026	0,306	0,626	44,881	21,227	20,145	19,932	19,933	19,981	19,836	19,723	58,943
310,833	0,488	0,641	1,036	-0,113	0,039	0,314	0,627	44,772	21,110	20,114	19,891	19,884	19,949	19,797	19,685	58,970
311,334	0,465	0,639	1,039	-0,112	-0,008	0,315	0,626	44,785	21,250	20,167	19,960	19,952	20,003	19,856	19,746	58,953
311,833	0,422	0,643	1,035	-0,112	0,053	0,310	0,626	44,765	21,233	20,114	19,890	19,882	19,952	19,795	19,684	58,911
312,333	0,384	0,651	1,036	-0,110	0,020	0,303	0,625	44,794	21,193	20,123	19,903	19,900	19,955	19,809	19,694	58,932
312,833	0,365	0,658	1,036	-0,108	-0,020	0,298	0,626	44,867	21,274	20,179	19,954	19,949	20,000	19,850	19,740	58,921
313,333	0,397	0,656	1,034	-0,110	-0,019	0,301	0,626	44,829	21,280	20,170	19,948	19,927	19,983	19,841	19,726	58,910
313,833	0,444	0,653	1,032	-0,110	0,010	0,304	0,625	44,726	21,281	20,120	19,893	19,869	19,947	19,786	19,676	58,898
314,333	0,471	0,646	1,041	-0,110	0,025	0,309	0,625	44,677	21,215	20,063	19,837	19,814	19,868	19,724	19,611	58,914
314,833	0,467	0,646	1,030	-0,109	-0,003	0,309	0,625	44,702	21,240	20,124	19,897	19,879	19,938	19,791	19,674	58,886
315,333	0,432	0,649	1,034	-0,109	0,019	0,305	0,625	44,706	21,192	20,082	19,859	19,841	19,900	19,758	19,637	58,873
315,833	0,377	0,657	1,035	-0,109	0,042	0,298	0,625	44,771	21,221	20,138	19,916	19,891	19,966	19,806	19,693	58,859
316,333	0,343	0,661	1,034	-0,110	0,044	0,297	0,625	44,739	21,281	20,139	19,911	19,900	19,960	19,805	19,691	58,844
316,833	0,431	0,644	1,039	-0,109	0,032	0,312	0,625	44,690	21,335	20,211	19,979	19,958	20,021	19,875	19,758	58,850
317,333	0,459	0,638	1,032	-0,110	0,011	0,313	0,625	44,594	21,156	20,060	19,837	19,813	19,877	19,724	19,610	58,847

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
303,333	48,456	51,589	62,262	0,243	0,248	2949,698	3032,109	415,915	12,301	8,173	-2,166	41,684	8,335	14,158	2022-04-06 14:35
303,833	48,459	51,564	62,313	0,244	0,248	2955,983	3052,719	495,697	11,993	8,369	-2,216	41,279	8,294	14,252	2022-04-06 14:35
304,333	48,455	51,569	62,381	0,244	0,248	2950,830	3069,985	637,664	11,696	8,685	-2,302	40,752	8,241	14,158	2022-04-06 14:36
304,833	48,450	51,621	62,398	0,245	0,248	2961,085	3061,734	596,903	11,648	8,781	-2,241	41,211	8,288	14,158	2022-04-06 14:36
305,333	48,442	51,606	62,369	0,243	0,248	2942,430	3056,716	525,559	11,654	8,771	-2,221	41,462	8,313	14,252	2022-04-06 14:37
305,833	48,429	51,583	62,383	0,244	0,248	2954,304	3067,681	404,781	11,830	8,624	-2,192	41,390	8,306	14,158	2022-04-06 14:37
306,333	48,431	51,583	62,392	0,244	0,248	2957,364	3069,128	371,235	12,031	8,407	-2,218	41,339	8,300	14,158	2022-04-06 14:38
306,833	48,483	51,557	62,351	0,243	0,248	2933,039	3064,297	375,597	11,844	8,517	-2,247	41,449	8,312	14,158	2022-04-06 14:38
307,334	48,488	51,585	62,360	0,244	0,248	2932,556	3059,573	600,762	11,363	8,975	-2,263	41,378	8,304	14,158	2022-04-06 14:39
307,833	48,445	51,569	62,332	0,243	0,248	2939,725	3057,736	640,286	11,140	9,229	-2,256	41,798	8,346	14,158	2022-04-06 14:39
308,333	48,418	51,499	62,294	0,243	0,248	2944,678	3064,936	412,843	11,317	9,149	-2,256	41,399	8,306	14,158	2022-04-06 14:40
308,833	48,445	51,545	62,278	0,243	0,248	2943,448	3047,370	302,802	11,438	9,005	-2,210	41,207	8,287	14,158	2022-04-06 14:40
309,333	48,474	51,544	62,269	0,242	0,248	2919,101	3045,833	247,023	11,650	8,811	-2,200	41,481	8,315	14,158	2022-04-06 14:41
309,833	48,484	51,537	62,247	0,242	0,248	2918,822	3041,956	311,461	11,513	8,869	-2,235	41,455	8,312	14,158	2022-04-06 14:41
310,334	48,450	51,543	62,296	0,244	0,248	2939,334	3055,830	582,921	11,213	9,165	-2,242	41,424	8,309	14,158	2022-04-06 14:42
310,833	48,413	51,558	62,139	0,242	0,248	2932,444	3004,125	729,387	10,956	9,420	-2,263	41,542	8,321	14,158	2022-04-06 14:42
311,334	48,438	51,548	62,103	0,243	0,248	2930,450	2997,766	617,003	10,997	9,442	-2,236	41,807	8,347	14,158	2022-04-06 14:43
311,833	48,460	51,585	62,165	0,244	0,248	2930,881	3004,581	527,103	11,116	9,315	-2,231	41,494	8,316	14,158	2022-04-06 14:43
312,333	48,452	51,544	62,213	0,242	0,248	2916,336	3030,975	432,748	11,362	9,097	-2,204	41,299	8,296	14,064	2022-04-06 14:44
312,833	48,442	51,583	62,139	0,243	0,248	2929,758	2999,257	438,774	11,461	8,949	-2,165	41,387	8,305	14,064	2022-04-06 14:44
313,333	48,431	51,542	62,214	0,243	0,248	2927,927	3031,183	537,560	11,369	9,019	-2,207	41,432	8,310	14,064	2022-04-06 14:45
313,833	48,431	51,573	62,184	0,242	0,247	2905,350	3011,961	638,370	11,288	9,106	-2,201	41,322	8,299	14,064	2022-04-06 14:45
314,333	48,438	51,574	62,111	0,241	0,247	2902,534	2990,204	683,501	11,127	9,261	-2,200	41,634	8,330	14,064	2022-04-06 14:46
314,833	48,443	51,504	62,218	0,243	0,248	2914,172	3042,677	643,272	11,159	9,258	-2,179	41,459	8,313	14,064	2022-04-06 14:46
315,333	48,442	51,534	62,125	0,242	0,248	2903,735	3006,760	533,112	11,292	9,157	-2,171	41,019	8,268	14,064	2022-04-06 14:47
315,833	48,446	51,509	62,150	0,243	0,248	2910,634	3021,596	399,686	11,498	8,944	-2,180	41,538	8,320	14,064	2022-04-06 14:47
316,333	48,450	51,493	62,128	0,242	0,247	2894,084	3018,799	382,821	11,445	8,920	-2,191	41,500	8,317	14,064	2022-04-06 14:48
316,833	48,474	51,482	62,147	0,242	0,248	2887,261	3028,516	677,284	10,926	9,362	-2,177	41,511	8,318	14,064	2022-04-06 14:48
317,333	48,476	51,499	62,140	0,242	0,248	2883,741	3021,111	592,423	11,038	9,388	-2,208	41,306	8,297	14,064	2022-04-06 14:49



## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
317,833	0,374	0,656	1,034	-0,105	-0,004	0,297	0,625	44,826	21,298	20,209	19,981	19,967	20,021	19,865	19,758	58,855
318,333	0,331	0,671	1,035	-0,105	0,024	0,287	0,625	44,894	21,273	20,145	19,911	19,902	19,968	19,812	19,693	58,820
318,833	0,337	0,672	1,034	-0,107	0,010	0,288	0,625	44,880	21,219	20,116	19,899	19,882	19,946	19,790	19,675	58,820
319,333	0,406	0,662	1,033	-0,107	-0,027	0,298	0,625	44,814	21,281	20,183	19,964	19,944	20,004	19,853	19,738	58,809
319,833	0,474	0,654	1,035	-0,107	0,019	0,301	0,624	44,881	21,267	20,199	19,979	19,970	20,025	19,869	19,754	58,807
320,333	0,419	0,662	1,034	-0,105	-0,002	0,295	0,624	44,870	21,287	20,128	19,900	19,887	19,949	19,798	19,675	58,806
320,833	0,394	0,668	1,037	-0,107	-0,003	0,290	0,625	44,929	21,310	20,136	19,901	19,883	19,949	19,791	19,672	58,795
321,333	0,394	0,672	1,033	-0,106	0,055	0,286	0,624	45,019	21,319	20,147	19,917	19,892	19,949	19,796	19,676	58,797
321,833	0,390	0,675	1,034	-0,107	0,025	0,285	0,625	45,003	21,260	20,133	19,907	19,877	19,938	19,781	19,666	58,807
322,333	0,438	0,663	1,035	-0,109	-0,015	0,297	0,624	44,850	21,213	20,079	19,844	19,824	19,885	19,731	19,611	58,797
322,833	0,478	0,653	1,032	-0,108	0,042	0,302	0,624	44,910	21,345	20,152	19,919	19,902	19,966	19,804	19,683	58,772
323,333	0,442	0,655	1,030	-0,111	0,014	0,301	0,625	44,811	21,374	20,176	19,939	19,912	19,978	19,821	19,696	58,747
323,833	0,427	0,660	1,031	-0,110	0,002	0,296	0,624	44,997	21,434	20,236	19,991	19,964	20,026	19,877	19,752	58,739
324,333	0,408	0,665	1,041	-0,109	-0,011	0,292	0,624	45,023	21,416	20,207	19,951	19,910	19,985	19,827	19,704	58,761
324,833	0,392	0,667	1,032	-0,108	0,025	0,291	0,624	45,013	21,487	20,258	20,012	19,970	20,036	19,889	19,757	58,756
325,333	0,394	0,666	1,036	-0,109	-0,009	0,292	0,624	44,927	21,381	20,204	19,952	19,902	19,965	19,820	19,693	58,738
325,833	0,461	0,660	1,037	-0,109	0,008	0,297	0,624	44,999	21,459	20,272	20,023	19,973	20,035	19,888	19,754	58,719
326,333	0,523	0,659	1,035	-0,111	0,012	0,297	0,624	44,954	21,294	20,179	19,930	19,885	19,949	19,799	19,674	58,715
326,833	0,476	0,661	1,035	-0,109	0,025	0,296	0,624	44,997	21,414	20,253	20,001	19,951	20,022	19,871	19,738	58,730
327,333	0,416	0,662	1,037	-0,109	0,008	0,294	0,624	44,983	21,356	20,187	19,939	19,891	19,962	19,806	19,679	58,724
327,833	0,403	0,661	1,034	-0,114	-0,019	0,297	0,624	45,136	21,371	20,249	20,000	19,947	20,018	19,862	19,734	58,735
328,333	0,353	0,654	1,030	-0,113	0,053	0,301	0,624	45,295	21,473	20,261	20,001	19,953	20,026	19,871	19,742	58,717
328,833	0,259	0,667	1,039	-0,113	-0,025	0,290	0,624	45,383	21,394	20,200	19,949	19,896	19,965	19,810	19,680	58,708
329,333	0,236	0,671	1,033	-0,115	-0,025	0,290	0,624	45,530	21,528	20,267	20,008	19,948	20,024	19,872	19,738	58,711
329,833	0,228	0,667	1,034	-0,116	0,055	0,292	0,624	45,485	21,445	20,247	19,996	19,942	20,002	19,853	19,720	58,717
330,333	0,220	0,663	1,029	-0,116	0,006	0,293	0,624	45,526	21,469	20,263	20,023	19,969	20,029	19,882	19,748	58,690
330,833	0,218	0,660	1,032	-0,116	0,027	0,298	0,624	45,294	21,331	20,152	19,900	19,841	19,905	19,755	19,624	58,697
331,333	0,218	0,653	1,032	-0,117	0,031	0,303	0,624	45,244	21,329	20,146	19,896	19,831	19,906	19,748	19,617	58,720
331,833	0,218	0,644	1,038	-0,118	0,046	0,312	0,625	45,289	21,508	20,293	20,047	19,986	20,048	19,895	19,766	58,721

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
317,833	48,441	51,528	62,128	0,243	0,248	2909,106	3010,967	373,165	11,599	8,920	-2,104	41,238	8,290	14,064	2022-04-06 14:49
318,333	48,407	51,556	62,182	0,243	0,248	2900,941	3016,749	326,738	11,837	8,622	-2,106	41,319	8,298	14,064	2022-04-06 14:50
318,833	48,446	51,494	62,118	0,242	0,247	2882,173	3015,220	364,741	11,757	8,647	-2,140	41,455	8,312	14,064	2022-04-06 14:50
319,333	48,446	51,445	62,111	0,243	0,247	2893,778	3026,613	647,014	11,409	8,941	-2,133	41,491	8,316	13,970	2022-04-06 14:51
319,833	48,428	51,483	62,070	0,242	0,248	2886,321	3007,157	642,990	11,415	9,025	-2,132	41,447	8,311	13,972	2022-04-06 14:51
320,333	48,429	51,581	62,122	0,242	0,247	2889,165	2991,169	523,244	11,600	8,837	-2,099	41,610	8,328	13,970	2022-04-06 14:52
320,833	48,494	51,495	62,060	0,242	0,248	2862,338	3001,393	479,076	11,757	8,698	-2,145	41,252	8,292	14,064	2022-04-06 14:52
321,333	48,579	51,472	62,089	0,243	0,248	2846,736	3015,718	506,401	11,867	8,576	-2,117	41,021	8,269	13,970	2022-04-06 14:53
321,833	48,533	51,537	62,080	0,242	0,248	2857,859	2993,707	458,985	11,839	8,560	-2,148	41,356	8,302	14,064	2022-04-06 14:53
322,333	48,418	51,577	62,079	0,244	0,248	2903,347	2981,855	694,401	11,409	8,903	-2,183	41,454	8,312	13,970	2022-04-06 14:54
322,833	48,312	51,602	62,068	0,242	0,247	2911,323	2970,949	659,177	11,360	9,051	-2,164	41,157	8,282	13,970	2022-04-06 14:54
323,333	48,381	51,515	61,943	0,242	0,248	2879,494	2960,317	578,389	11,379	9,030	-2,216	40,865	8,253	13,970	2022-04-06 14:55
323,833	48,467	51,486	61,933	0,243	0,247	2860,835	2964,531	547,759	11,560	8,884	-2,207	41,708	8,337	13,970	2022-04-06 14:55
324,333	48,460	51,430	61,961	0,242	0,248	2859,667	2991,840	508,994	11,674	8,763	-2,183	41,503	8,317	14,064	2022-04-06 14:56
324,833	48,411	51,513	61,956	0,243	0,247	2884,308	2964,506	483,109	11,697	8,717	-2,153	41,008	8,267	14,064	2022-04-06 14:56
325,333	48,420	51,478	61,832	0,242	0,248	2871,745	2939,583	496,542	11,627	8,761	-2,172	41,463	8,313	13,970	2022-04-06 14:57
325,833	48,472	51,464	61,921	0,243	0,248	2863,560	2968,996	731,176	11,470	8,903	-2,187	41,480	8,315	13,970	2022-04-06 14:57
326,333	48,465	51,457	61,885	0,244	0,247	2866,208	2959,170	804,522	11,475	8,904	-2,228	41,030	8,269	13,970	2022-04-06 14:58
326,833	48,411	51,446	61,970	0,242	0,248	2871,608	2988,411	631,680	11,530	8,870	-2,175	41,597	8,326	13,970	2022-04-06 14:58
327,333	48,427	51,458	61,977	0,242	0,248	2866,804	2986,709	524,767	11,582	8,831	-2,187	41,322	8,299	13,970	2022-04-06 14:59
327,833	48,439	51,463	61,944	0,241	0,247	2854,463	2975,209	504,484	11,449	8,905	-2,283	41,511	8,318	13,970	2022-04-06 14:59
328,333	48,442	51,424	61,941	0,243	0,248	2861,815	2987,846	275,210	11,391	9,028	-2,254	41,566	8,323	13,970	2022-04-06 15:00
328,833	48,436	51,447	61,951	0,243	0,247	2865,774	2982,052	115,330	11,814	8,708	-2,269	41,670	8,334	13,970	2022-04-06 15:00
329,333	48,436	51,457	61,940	0,241	0,248	2848,572	2976,896	83,972	11,700	8,692	-2,301	41,709	8,338	13,970	2022-04-06 15:01
329,833	48,435	51,444	61,950	0,242	0,247	2854,520	2982,444	64,229	11,636	8,756	-2,320	40,956	8,262	13,970	2022-04-06 15:01
330,333	48,443	51,442	61,950	0,243	0,247	2863,671	2980,878	49,562	11,611	8,802	-2,312	41,222	8,289	13,970	2022-04-06 15:02
330,833	48,445	51,459	62,004	0,242	0,248	2851,277	2993,791	46,874	11,385	8,948	-2,315	41,489	8,316	14,050	2022-04-06 15:02
331,333	48,480	51,436	61,962	0,242	0,247	2851,596	2986,518	49,215	11,321	9,076	-2,334	41,103	8,277	13,970	2022-04-06 15:03
331,833	48,486	51,444	61,982	0,243	0,247	2859,080	2989,053	46,952	10,998	9,350	-2,352	41,695	8,336	13,881	2022-04-06 15:03

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
332,333	0,215	0,635	1,041	-0,119	-0,020	0,318	0,622	45,212	21,511	20,295	20,042	19,978	20,049	19,900	19,762	58,740
332,833	0,214	0,633	1,036	-0,117	0,032	0,319	0,622	45,133	21,489	20,280	20,039	19,959	20,023	19,880	19,745	58,747
333,333	0,214	0,634	1,036	-0,115	-0,019	0,319	0,624	45,126	21,492	20,282	20,049	19,972	20,037	19,887	19,757	58,792
333,833	0,215	0,630	1,043	-0,116	0,016	0,322	0,623	45,014	21,450	20,242	19,992	19,927	19,984	19,835	19,700	58,802
334,333	0,216	0,627	1,035	-0,115	-0,021	0,326	0,623	44,931	21,375	20,210	19,964	19,902	19,969	19,821	19,682	58,818
334,833	0,218	0,616	1,033	-0,115	0,012	0,335	0,622	44,908	21,451	20,307	20,060	19,989	20,058	19,915	19,772	58,864
335,333	0,217	0,613	1,027	-0,113	0,005	0,337	0,621	44,872	21,439	20,309	20,059	19,985	20,060	19,915	19,773	58,901
335,833	0,214	0,615	1,032	-0,113	0,025	0,334	0,621	44,899	21,441	20,314	20,057	19,990	20,058	19,913	19,773	58,918
336,333	0,214	0,621	1,030	-0,113	-0,020	0,329	0,622	44,825	21,401	20,239	20,002	19,919	19,987	19,846	19,699	58,921
336,833	0,214	0,623	1,039	-0,114	-0,008	0,328	0,621	44,788	21,421	20,241	19,999	19,913	19,985	19,843	19,699	58,942
337,333	0,215	0,614	1,035	-0,114	0,036	0,337	0,621	44,697	21,393	20,230	19,996	19,915	19,986	19,837	19,702	58,966
337,833	0,216	0,607	1,034	-0,116	0,035	0,342	0,621	44,622	21,379	20,223	20,007	19,922	19,992	19,850	19,710	58,978
338,333	0,215	0,608	1,030	-0,113	0,013	0,340	0,620	44,589	21,300	20,151	19,943	19,866	19,932	19,797	19,656	58,993
338,833	0,215	0,614	1,026	-0,113	-0,018	0,334	0,620	44,655	21,387	20,184	19,980	19,918	19,975	19,836	19,700	59,019
339,334	0,216	0,621	1,034	-0,112	0,040	0,329	0,620	44,718	21,428	20,164	19,968	19,919	19,967	19,837	19,698	59,026
339,833	0,217	0,623	1,034	-0,113	0,022	0,328	0,620	44,794	21,397	20,194	20,003	19,944	20,018	19,881	19,743	59,064
340,334	0,217	0,626	1,038	-0,112	0,040	0,326	0,620	44,855	21,428	20,197	20,021	19,980	20,038	19,904	19,769	59,064
340,833	0,216	0,621	1,038	-0,113	0,040	0,332	0,620	44,781	21,353	20,124	19,943	19,940	20,017	19,862	19,732	59,094
341,333	0,216	0,612	1,040	-0,109	0,023	0,340	0,620	44,536	21,268	20,131	19,965	19,990	20,045	19,904	19,776	59,089
341,833	0,222	0,611	1,043	-0,109	0,030	0,339	0,620	44,404	21,200	20,053	19,878	19,915	19,978	19,834	19,702	59,159
342,333	0,232	0,610	1,043	-0,106	0,011	0,338	0,620	44,260	21,176	19,990	19,816	19,849	19,909	19,763	19,643	59,179
342,833	0,232	0,617	1,040	-0,104	0,021	0,333	0,620	44,314	21,317	20,077	19,895	19,940	20,014	19,861	19,735	59,177
343,333	0,250	0,616	1,044	-0,105	0,013	0,334	0,620	44,314	21,332	20,116	19,921	19,973	20,036	19,885	19,763	59,197
343,833	0,280	0,617	1,037	-0,107	0,008	0,333	0,620	44,289	21,241	20,090	19,902	19,966	20,027	19,876	19,749	59,236
344,333	0,289	0,621	1,036	-0,105	0,016	0,330	0,620	44,316	21,280	20,095	19,900	19,964	20,031	19,867	19,746	59,223
344,833	0,289	0,628	1,030	-0,108	0,054	0,322	0,619	44,571	21,301	20,094	19,905	19,954	20,023	19,859	19,738	59,204
345,333	0,256	0,636	1,032	-0,104	0,019	0,316	0,619	44,677	21,190	20,100	19,907	19,962	20,024	19,866	19,743	59,202
345,833	0,223	0,639	1,042	-0,104	0,046	0,316	0,619	44,412	21,224	20,086	19,887	19,933	20,002	19,835	19,721	59,222
346,333	0,285	0,633	1,034	-0,104	0,005	0,322	0,619	44,338	21,133	20,050	19,849	19,891	19,959	19,793	19,673	59,190

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
332,333	48,483	51,461	62,031	0,243	0,247	2857,373	2998,313	39,484	10,881	9,541	-2,371	41,847	8,351	13,970	2022-04-06 15:04
332,833	48,470	51,498	62,165	0,243	0,247	2866,687	3024,880	38,319	10,815	9,572	-2,330	41,363	8,303	13,970	2022-04-06 15:04
333,333	48,446	51,512	62,088	0,243	0,247	2882,914	2999,690	40,073	10,850	9,558	-2,296	41,828	8,349	13,970	2022-04-06 15:05
333,833	48,465	51,520	62,150	0,243	0,247	2889,913	3016,955	42,499	10,732	9,659	-2,319	41,705	8,337	13,845	2022-04-06 15:05
334,333	48,479	51,478	62,161	0,243	0,247	2885,848	3031,278	46,280	10,634	9,768	-2,291	41,479	8,315	13,845	2022-04-06 15:06
334,833	48,487	51,482	62,180	0,242	0,248	2889,560	3038,781	49,042	10,331	10,047	-2,309	41,186	8,285	13,845	2022-04-06 15:06
335,333	48,488	51,527	62,196	0,243	0,247	2905,617	3028,890	42,755	10,334	10,098	-2,263	41,147	8,281	13,845	2022-04-06 15:07
335,833	48,484	51,568	62,322	0,242	0,247	2894,722	3049,736	37,299	10,418	10,019	-2,266	41,180	8,285	13,752	2022-04-06 15:07
336,333	48,455	51,522	62,313	0,242	0,247	2912,497	3060,401	37,321	10,552	9,862	-2,252	41,392	8,306	13,970	2022-04-06 15:08
336,833	48,438	51,511	62,275	0,242	0,248	2919,046	3056,370	38,979	10,564	9,833	-2,284	41,572	8,324	13,752	2022-04-06 15:08
337,333	48,429	51,560	62,220	0,242	0,247	2932,154	3025,485	40,830	10,243	10,097	-2,282	41,239	8,290	13,752	2022-04-06 15:09
337,833	48,454	51,541	62,316	0,242	0,247	2920,314	3058,511	42,501	10,151	10,265	-2,317	41,621	8,329	13,845	2022-04-06 15:09
338,333	48,486	51,543	62,347	0,243	0,247	2935,593	3067,244	40,323	10,225	10,200	-2,254	40,964	8,263	13,752	2022-04-06 15:10
338,833	48,465	51,537	62,439	0,242	0,247	2932,412	3094,074	41,674	10,436	10,021	-2,267	41,615	8,328	13,752	2022-04-06 15:10
339,334	48,451	51,542	62,430	0,243	0,247	2949,343	3089,873	45,089	10,547	9,881	-2,249	41,405	8,307	13,752	2022-04-06 15:11
339,833	48,447	51,511	62,467	0,243	0,247	2956,956	3107,743	45,775	10,577	9,827	-2,261	41,244	8,291	13,752	2022-04-06 15:11
340,334	48,455	51,562	62,510	0,242	0,248	2949,832	3108,036	46,046	10,681	9,774	-2,235	41,606	8,327	13,752	2022-04-06 15:12
340,833	48,461	51,562	62,537	0,243	0,247	2967,851	3114,535	42,424	10,405	9,964	-2,268	41,604	8,327	13,752	2022-04-06 15:12
341,333	48,458	51,634	62,562	0,243	0,247	2971,134	3098,766	42,255	10,214	10,185	-2,177	41,568	8,323	13,752	2022-04-06 15:13
341,833	48,460	51,686	62,596	0,241	0,247	2959,309	3094,945	74,703	10,283	10,159	-2,182	42,169	8,383	13,752	2022-04-06 15:13
342,333	48,469	51,677	62,528	0,242	0,247	2972,601	3080,092	81,683	10,307	10,140	-2,118	41,526	8,319	13,752	2022-04-06 15:14
342,833	48,468	51,634	62,610	0,242	0,247	2970,768	3115,064	85,170	10,454	9,978	-2,088	41,390	8,306	13,752	2022-04-06 15:14
343,333	48,477	51,637	62,648	0,241	0,247	2962,403	3124,769	148,348	10,381	10,032	-2,106	41,719	8,339	13,752	2022-04-06 15:15
343,833	48,473	51,629	62,621	0,240	0,247	2971,776	3119,097	226,066	10,412	9,992	-2,138	41,601	8,327	13,752	2022-04-06 15:15
344,333	48,463	51,662	62,604	0,242	0,247	2993,618	3105,481	224,020	10,552	9,895	-2,102	41,329	8,299	13,752	2022-04-06 15:16
344,833	48,478	51,750	62,547	0,242	0,247	2986,236	3064,299	215,113	10,831	9,670	-2,161	41,126	8,279	13,658	2022-04-06 15:16
345,333	48,474	51,701	62,536	0,241	0,247	2974,084	3073,618	90,081	10,993	9,481	-2,080	41,434	8,310	13,687	2022-04-06 15:17
345,833	48,472	51,654	62,547	0,241	0,247	2973,526	3090,115	53,747	10,878	9,470	-2,075	41,560	8,323	13,657	2022-04-06 15:17
346,333	48,482	51,677	62,601	0,242	0,247	2973,340	3097,272	313,564	10,675	9,671	-2,085	41,363	8,303	13,717	2022-04-06 15:18

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
346,833	0,321	0,624	1,042	-0,105	0,019	0,328	0,619	44,368	21,124	20,062	19,886	19,911	19,983	19,819	19,698	59,190
347,333	0,329	0,622	1,045	-0,104	0,037	0,329	0,619	44,338	21,140	20,060	19,874	19,906	19,984	19,814	19,689	59,188
347,833	0,309	0,629	1,036	-0,105	0,022	0,321	0,619	44,446	21,207	20,083	19,886	19,905	19,987	19,814	19,695	59,168
348,333	0,290	0,638	1,039	-0,104	0,021	0,316	0,620	44,388	21,257	20,091	19,885	19,904	19,981	19,819	19,685	59,171
348,833	0,301	0,638	1,035	-0,105	0,035	0,317	0,619	44,330	21,223	20,019	19,817	19,834	19,911	19,739	19,614	59,187
349,333	0,341	0,632	1,036	-0,107	0,030	0,322	0,619	44,474	21,325	20,160	19,952	19,965	20,046	19,873	19,747	59,181
349,833	0,410	0,624	1,035	-0,107	0,026	0,328	0,619	44,323	21,278	20,099	19,881	19,901	19,972	19,801	19,681	59,182
350,333	0,427	0,620	1,038	-0,106	0,010	0,331	0,619	44,310	21,227	20,093	19,884	19,887	19,979	19,803	19,677	59,136
350,833	0,380	0,624	1,033	-0,106	0,024	0,327	0,619	44,367	21,274	20,169	19,943	19,965	20,036	19,869	19,741	59,129
351,333	0,344	0,630	1,035	-0,112	-0,004	0,321	0,619	44,658	21,297	20,136	19,919	19,924	20,006	19,828	19,703	59,117
351,833	0,302	0,636	1,036	-0,110	-0,013	0,318	0,619	44,808	21,398	20,174	19,957	19,950	20,030	19,859	19,731	59,103
352,333	0,263	0,630	1,038	-0,111	-0,001	0,323	0,620	44,792	21,307	20,167	19,948	19,950	20,015	19,847	19,720	59,112
352,833	0,245	0,632	1,027	-0,111	0,013	0,321	0,620	44,830	21,222	20,066	19,841	19,833	19,907	19,744	19,611	59,112
353,333	0,247	0,634	1,036	-0,114	0,015	0,321	0,619	44,972	21,327	20,140	19,913	19,900	19,979	19,801	19,676	59,071
353,833	0,247	0,624	1,032	-0,112	0,026	0,330	0,619	44,947	21,357	20,131	19,897	19,886	19,963	19,788	19,664	59,033
354,333	0,246	0,616	1,036	-0,116	0,025	0,336	0,619	44,910	21,347	20,151	19,915	19,903	19,975	19,806	19,677	59,027
354,833	0,236	0,610	1,037	-0,115	0,023	0,340	0,618	44,847	21,352	20,167	19,935	19,926	19,998	19,822	19,693	59,031
355,333	0,224	0,605	1,037	-0,118	0,021	0,344	0,618	44,660	21,297	20,043	19,794	19,787	19,864	19,689	19,560	59,056
355,833	0,223	0,599	1,032	-0,114	-0,018	0,349	0,617	44,777	21,435	20,228	19,986	19,967	20,046	19,881	19,743	59,062
356,333	0,221	0,598	1,035	-0,115	0,015	0,350	0,617	44,739	21,362	20,162	19,929	19,908	19,990	19,813	19,681	59,051
356,833	0,220	0,601	1,038	-0,115	0,043	0,347	0,617	44,672	21,281	20,090	19,859	19,835	19,913	19,735	19,608	59,070
357,334	0,222	0,602	1,037	-0,115	0,021	0,344	0,617	44,736	21,170	20,051	19,829	19,800	19,880	19,700	19,573	59,061
357,833	0,219	0,612	1,040	-0,112	0,011	0,336	0,617	44,860	21,298	20,151	19,926	19,907	19,976	19,797	19,671	59,071
358,333	0,220	0,610	1,032	-0,115	-0,003	0,342	0,617	44,748	21,267	20,109	19,886	19,861	19,936	19,753	19,630	59,083
358,833	0,221	0,592	1,036	-0,116	0,012	0,354	0,618	44,811	21,421	20,236	20,015	19,990	20,057	19,889	19,751	59,094
359,333	0,220	0,594	1,035	-0,115	0,052	0,352	0,616	44,804	21,417	20,210	19,977	19,948	20,026	19,844	19,715	59,087
359,833	0,220	0,594	1,034	-0,115	-0,008	0,352	0,616	44,807	21,389	20,179	19,952	19,916	19,997	19,815	19,687	59,100
360,333	0,217	0,599	1,038	-0,114	0,009	0,349	0,616	44,883	21,471	20,241	19,997	19,960	20,042	19,869	19,731	59,118
360,833	0,216	0,600	1,042	-0,112	0,027	0,348	0,617	44,844	21,365	20,180	19,937	19,903	19,985	19,800	19,676	59,114

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
346,833	48,471	51,666	62,653	0,241	0,248	2968,790	3120,007	302,508	10,618	9,852	-2,096	41,730	8,340	13,658	2022-04-06 15:18
347,333	48,459	51,628	62,619	0,242	0,247	2978,949	3119,629	331,281	10,547	9,865	-2,078	42,038	8,370	13,658	2022-04-06 15:19
347,833	48,469	51,624	62,564	0,242	0,247	2974,880	3104,324	239,116	10,843	9,641	-2,102	41,583	8,325	13,658	2022-04-06 15:19
348,333	48,485	51,629	62,536	0,241	0,247	2962,289	3093,568	233,456	10,963	9,474	-2,074	41,630	8,330	13,658	2022-04-06 15:20
348,833	48,487	51,652	62,491	0,241	0,247	2966,902	3075,763	270,100	10,917	9,499	-2,110	41,418	8,308	13,658	2022-04-06 15:20
349,333	48,482	51,653	62,554	0,241	0,247	2960,974	3091,090	427,179	10,715	9,665	-2,136	41,563	8,323	13,658	2022-04-06 15:21
349,833	48,468	51,717	62,475	0,241	0,247	2970,962	3053,213	549,399	10,559	9,833	-2,140	41,428	8,309	13,658	2022-04-06 15:21
350,333	48,442	51,627	62,508	0,243	0,247	2980,490	3086,907	561,206	10,476	9,923	-2,116	41,679	8,335	13,752	2022-04-06 15:22
350,833	48,458	51,615	62,435	0,243	0,247	2976,357	3069,247	408,258	10,650	9,798	-2,123	41,327	8,299	13,658	2022-04-06 15:22
351,333	48,547	51,610	62,473	0,241	0,247	2929,592	3080,804	345,736	10,849	9,629	-2,234	41,335	8,300	13,752	2022-04-06 15:23
351,833	48,585	51,647	62,395	0,243	0,247	2932,384	3049,245	201,800	10,907	9,532	-2,202	41,445	8,311	13,752	2022-04-06 15:23
352,333	48,541	51,634	62,402	0,242	0,247	2936,302	3054,964	139,234	10,716	9,687	-2,228	41,603	8,327	13,658	2022-04-06 15:24
352,833	48,459	51,664	62,395	0,241	0,247	2947,380	3043,354	112,631	10,859	9,621	-2,227	40,915	8,258	13,657	2022-04-06 15:24
353,333	48,351	51,667	62,401	0,242	0,247	2985,413	3042,600	125,041	10,809	9,629	-2,272	41,524	8,319	13,658	2022-04-06 15:25
353,833	48,370	51,611	62,404	0,242	0,247	2959,175	3061,701	117,145	10,473	9,896	-2,248	41,201	8,287	13,658	2022-04-06 15:25
354,333	48,473	51,565	62,400	0,243	0,247	2944,038	3074,264	120,670	10,310	10,080	-2,318	41,458	8,312	13,658	2022-04-06 15:26
354,833	48,539	51,510	62,434	0,242	0,247	2915,140	3097,793	74,148	10,229	10,192	-2,300	41,576	8,324	13,658	2022-04-06 15:26
355,333	48,500	51,566	62,365	0,243	0,247	2940,505	3061,287	61,772	10,047	10,317	-2,357	41,322	8,299	13,564	2022-04-06 15:27
355,833	48,446	51,616	62,486	0,242	0,247	2946,230	3084,266	61,463	9,989	10,459	-2,278	41,060	8,272	13,564	2022-04-06 15:27
356,333	48,458	51,620	62,405	0,242	0,247	2945,053	3061,620	50,935	9,976	10,487	-2,299	41,304	8,297	13,564	2022-04-06 15:28
356,833	48,492	51,629	62,196	0,241	0,247	2930,521	2996,841	56,923	10,000	10,423	-2,296	41,371	8,304	13,564	2022-04-06 15:28
357,334	48,494	51,621	62,334	0,242	0,247	2942,475	3040,720	56,846	10,125	10,326	-2,292	41,515	8,318	13,564	2022-04-06 15:29
357,833	48,469	51,623	62,436	0,243	0,247	2953,108	3068,099	51,730	10,382	10,077	-2,241	41,452	8,312	13,564	2022-04-06 15:29
358,333	48,462	51,624	62,397	0,242	0,247	2947,982	3057,924	53,405	10,079	10,253	-2,291	41,474	8,314	13,564	2022-04-06 15:30
358,833	48,468	51,646	62,452	0,243	0,247	2967,332	3065,451	56,835	9,752	10,635	-2,310	41,281	8,295	13,658	2022-04-06 15:30
359,333	48,477	51,579	62,498	0,242	0,247	2951,106	3095,096	53,833	9,867	10,559	-2,293	41,656	8,332	13,564	2022-04-06 15:31
359,833	48,480	51,595	62,555	0,242	0,247	2954,662	3107,896	49,301	9,866	10,572	-2,308	41,608	8,328	13,470	2022-04-06 15:31
360,333	48,472	51,644	62,569	0,242	0,247	2954,162	3099,665	45,276	9,989	10,457	-2,290	41,511	8,318	13,564	2022-04-06 15:32
360,833	48,460	51,631	62,488	0,243	0,247	2972,924	3079,361	42,422	9,980	10,437	-2,237	41,603	8,327	13,564	2022-04-06 15:32

## PE22\_cat I\_run 2\_220406\_EN.DAT

## Category: I run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
361,333	0,216	0,598	1,038	-0,116	0,029	0,350	0,617	44,784	21,358	20,183	19,949	19,913	19,995	19,813	19,680	59,141
361,833	0,219	0,589	1,035	-0,116	0,022	0,358	0,617	44,677	21,371	20,188	19,952	19,911	19,986	19,806	19,680	59,148
362,333	0,219	0,587	1,034	-0,113	0,064	0,360	0,617	44,616	21,348	20,207	19,966	19,920	20,011	19,827	19,697	59,172
362,833	0,220	0,581	1,035	-0,114	0,022	0,364	0,616	44,561	21,376	20,188	19,949	19,913	19,981	19,811	19,680	59,185
363,333	0,219	0,581	1,026	-0,114	0,005	0,364	0,616	44,430	21,226	19,811	19,671	19,784	19,862	19,688	19,549	59,172
363,833	0,218	0,586	1,031	-0,112	0,006	0,359	0,616	44,726	21,329	19,977	19,843	19,993	20,067	19,892	19,756	59,186
364,333	0,216	0,590	1,029	-0,111	-0,011	0,357	0,616	44,735	21,388	19,972	19,839	19,989	20,061	19,885	19,753	59,185

PE22\_cat I\_run 2\_220406\_EN.DAT

Category: I run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
361,333	48,475	51,634	62,526	0,243	0,247	2972,770	3089,441	45,860	9,918	10,492	-2,310	41,385	8,305	13,564	2022-04-06 15:33
361,833	48,484	51,662	62,501	0,241	0,247	2955,905	3073,544	54,074	9,664	10,731	-2,322	41,369	8,304	13,564	2022-04-06 15:33
362,333	48,476	51,671	62,518	0,241	0,247	2957,056	3078,231	50,467	9,632	10,811	-2,265	41,534	8,320	13,564	2022-04-06 15:34
362,833	48,465	51,671	62,568	0,242	0,248	2982,221	3093,630	53,080	9,498	10,933	-2,286	41,071	8,274	13,564	2022-04-06 15:34
363,333	48,475	51,643	62,608	0,242	0,247	2966,977	3108,729	49,801	9,562	10,917	-2,276	40,779	8,244	13,470	2022-04-06 15:35
363,833	48,471	51,625	62,581	0,242	0,247	2977,011	3106,836	45,517	9,703	10,782	-2,249	41,328	8,299	13,469	2022-04-06 15:35
364,333	48,467	51,614	62,622	0,243	0,247	2987,108	3122,276	42,833	9,735	10,710	-2,224	41,231	8,290	13,564	2022-04-06 15:36



## PE22\_cat I\_run 3\_220427\_EN.DAT

Category: I run 3

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321,KONF

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,346	0,261	0,550	1,062	0,000	0,000	0,395	0,710	44,990	20,334	19,892	19,815	19,695	19,728	20,012	20,523	57,231
0,833	0,271	0,545	1,049	0,000	0,000	0,400	0,710	45,036	20,666	20,084	20,015	19,899	19,919	20,198	20,713	57,224
1,333	0,294	0,534	1,055	0,000	0,000	0,410	0,710	44,854	20,552	20,045	19,976	19,855	19,889	20,160	20,678	57,218
1,976	0,319	0,530	1,053	0,000	0,000	0,412	0,710	44,730	20,430	20,013	19,945	19,826	19,855	20,130	20,646	57,223
2,383	0,313	0,533	1,058	0,000	0,000	0,409	0,710	44,742	20,501	20,038	19,969	19,848	19,883	20,159	20,674	57,234
2,857	0,307	0,535	1,051	0,000	0,000	0,406	0,709	44,765	20,684	20,089	20,018	19,903	19,926	20,206	20,719	57,227
3,333	0,306	0,541	1,053	0,000	0,000	0,400	0,709	44,744	20,518	20,038	19,971	19,847	19,879	20,167	20,673	57,226
3,851	0,340	0,541	1,055	0,000	0,000	0,403	0,708	44,605	20,474	19,945	19,869	19,761	19,790	20,072	20,581	57,234
4,333	0,348	0,538	1,055	0,000	0,000	0,405	0,708	44,683	20,576	20,030	19,957	19,856	19,886	20,171	20,676	57,234
4,833	0,321	0,540	1,050	0,000	0,000	0,403	0,708	44,704	20,654	20,022	19,948	19,838	19,872	20,151	20,665	57,255
5,333	0,291	0,546	1,056	0,000	0,000	0,398	0,708	44,749	20,531	20,030	19,955	19,847	19,887	20,166	20,675	57,256
5,833	0,281	0,548	1,057	0,000	0,000	0,396	0,708	44,731	20,503	20,021	19,947	19,854	19,887	20,161	20,674	57,215
6,333	0,281	0,551	1,053	0,000	0,000	0,394	0,708	44,810	20,531	20,007	19,926	19,841	19,868	20,145	20,657	57,199
6,833	0,300	0,546	1,059	0,000	0,000	0,399	0,708	44,806	20,539	20,025	19,951	19,864	19,892	20,169	20,682	57,211
7,333	0,305	0,539	1,047	0,000	0,000	0,404	0,708	44,789	20,497	20,006	19,924	19,849	19,876	20,151	20,666	57,220
7,833	0,281	0,543	1,058	0,000	0,000	0,399	0,708	44,781	20,486	19,968	19,893	19,818	19,852	20,116	20,634	57,248
8,333	0,272	0,549	1,049	0,000	0,000	0,395	0,708	44,927	20,495	20,027	19,949	19,871	19,903	20,170	20,691	57,234
8,833	0,263	0,555	1,054	0,000	0,000	0,389	0,708	45,022	20,524	20,033	19,956	19,882	19,918	20,188	20,702	57,219
9,334	0,263	0,557	1,053	0,000	0,000	0,389	0,708	44,971	20,507	20,024	19,949	19,892	19,918	20,170	20,697	57,212
9,833	0,280	0,549	1,051	0,000	0,000	0,398	0,708	44,803	20,498	20,019	19,947	19,875	19,907	20,166	20,688	57,219
10,333	0,290	0,542	1,060	0,000	0,000	0,403	0,707	44,722	20,574	20,033	19,959	19,892	19,914	20,179	20,701	57,221
10,833	0,303	0,538	1,056	0,000	0,000	0,405	0,708	44,711	20,584	20,014	19,942	19,872	19,897	20,158	20,681	57,244
11,334	0,301	0,540	1,054	0,000	0,000	0,402	0,708	44,705	20,540	20,030	19,954	19,892	19,916	20,181	20,699	57,255
11,833	0,294	0,545	1,051	0,000	0,000	0,399	0,707	44,696	20,531	20,034	19,960	19,894	19,913	20,173	20,701	57,238
12,333	0,294	0,547	1,056	0,000	0,000	0,397	0,708	44,686	20,494	20,013	19,940	19,888	19,913	20,168	20,688	57,226
12,834	0,314	0,545	1,051	0,000	0,000	0,400	0,708	44,505	20,517	20,054	19,984	19,925	19,952	20,203	20,727	57,236

## PE22\_cat I\_run 3\_220427\_EN.DAT

Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,346	48,431	51,064	60,573	1,044	1,009	10535,812	10959,560	160,033	8,743	11,839	0,000	42,470	8,413	19,347	2022-04-27 09:59
0,833	48,435	51,015	60,567	0,241	0,237	2436,024	2596,345	191,562	8,529	12,013	0,000	41,981	8,365	19,347	2022-04-27 10:00
1,333	48,429	51,024	60,598	0,242	0,237	2439,416	2602,889	259,681	8,267	12,306	0,000	42,143	8,381	19,347	2022-04-27 10:00
1,976	48,377	50,992	60,589	0,241	0,237	2452,320	2609,873	306,009	8,288	12,351	-0,001	42,149	8,381	19,347	2022-04-27 10:01
2,383	48,334	50,996	60,588	0,242	0,237	2475,513	2609,010	274,297	8,344	12,263	0,000	42,417	8,408	19,347	2022-04-27 10:01
2,857	48,360	51,143	60,567	0,241	0,237	2459,006	2562,346	268,890	8,416	12,190	0,000	42,124	8,379	19,347	2022-04-27 10:02
3,333	48,424	51,081	60,570	0,241	0,237	2431,200	2580,713	265,579	8,622	12,000	0,001	42,112	8,378	19,253	2022-04-27 10:02
3,851	48,479	50,961	60,573	0,242	0,237	2430,671	2614,172	397,982	8,415	12,101	0,000	42,203	8,387	19,253	2022-04-27 10:03
4,333	48,471	51,079	60,543	0,241	0,237	2425,582	2571,246	350,687	8,476	12,142	0,000	42,425	8,409	19,253	2022-04-27 10:03
4,833	48,371	51,025	60,556	0,240	0,237	2451,757	2592,551	278,062	8,514	12,084	0,000	42,190	8,386	19,253	2022-04-27 10:04
5,333	48,327	50,995	60,552	0,241	0,237	2474,772	2596,314	215,502	8,689	11,936	0,000	42,354	8,402	19,253	2022-04-27 10:04
5,833	48,382	50,930	60,554	0,242	0,237	2458,057	2615,888	204,989	8,706	11,886	-0,001	42,247	8,391	19,253	2022-04-27 10:05
6,333	48,451	50,964	60,522	0,241	0,237	2421,496	2598,077	205,160	8,800	11,810	0,000	42,186	8,385	19,253	2022-04-27 10:05
6,833	48,494	50,949	60,555	0,241	0,237	2411,715	2611,851	288,381	8,586	11,983	0,000	42,311	8,397	19,253	2022-04-27 10:06
7,333	48,451	50,932	60,547	0,240	0,237	2417,509	2614,470	242,778	8,474	12,124	-0,001	41,786	8,345	19,253	2022-04-27 10:06
7,833	48,355	51,011	60,539	0,240	0,237	2447,576	2589,482	194,430	8,663	11,964	0,000	41,927	8,359	19,253	2022-04-27 10:07
8,333	48,333	50,999	60,567	0,240	0,237	2458,021	2601,339	177,914	8,748	11,863	-0,001	41,895	8,356	19,253	2022-04-27 10:07
8,833	48,374	50,976	60,508	0,240	0,237	2433,914	2589,966	151,179	8,926	11,670	0,000	42,080	8,375	19,253	2022-04-27 10:08
9,334	48,433	50,951	60,543	0,241	0,237	2428,367	2608,339	179,018	8,883	11,674	0,000	42,478	8,414	19,253	2022-04-27 10:08
9,833	48,470	51,118	60,566	0,241	0,237	2420,813	2568,623	213,273	8,632	11,932	0,000	42,041	8,371	19,253	2022-04-27 10:09
10,333	48,480	51,134	60,573	0,241	0,237	2415,194	2567,291	237,621	8,509	12,088	0,000	42,181	8,385	19,159	2022-04-27 10:09
10,833	48,418	50,953	60,584	0,240	0,237	2435,599	2619,725	264,958	8,454	12,146	0,000	42,235	8,390	19,253	2022-04-27 10:10
11,334	48,349	51,064	60,583	0,241	0,237	2461,360	2588,812	249,288	8,531	12,062	0,000	41,876	8,354	19,159	2022-04-27 10:10
11,833	48,327	51,056	60,589	0,241	0,237	2464,275	2591,166	234,677	8,634	11,965	0,001	42,055	8,372	19,159	2022-04-27 10:11
12,333	48,380	51,043	60,571	0,240	0,237	2442,866	2589,221	232,266	8,740	11,901	0,000	42,124	8,379	19,159	2022-04-27 10:11
12,834	48,442	51,018	60,590	0,240	0,237	2423,810	2602,020	329,698	8,521	12,009	0,000	42,248	8,391	19,253	2022-04-27 10:12

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
13,333	0,379	0,540	1,057	0,000	0,000	0,403	0,707	44,356	20,366	19,945	19,887	19,822	19,850	20,094	20,623	57,249
13,833	0,376	0,540	1,054	0,000	0,000	0,401	0,707	44,384	20,416	19,946	19,878	19,819	19,845	20,097	20,624	57,249
14,333	0,376	0,546	1,058	0,000	0,000	0,398	0,707	44,432	20,383	19,914	19,843	19,776	19,809	20,046	20,578	57,251
14,833	0,319	0,545	1,052	0,000	0,000	0,398	0,706	44,471	20,406	19,970	19,906	19,843	19,879	20,122	20,642	57,237
15,333	0,313	0,538	1,050	0,000	0,000	0,406	0,708	44,278	20,433	19,925	19,862	19,792	19,822	20,071	20,593	57,230
15,833	0,311	0,531	1,052	0,000	0,000	0,410	0,708	44,143	20,378	19,946	19,875	19,805	19,834	20,073	20,605	57,222
16,333	0,311	0,533	1,051	0,000	0,000	0,408	0,707	44,151	20,317	19,908	19,836	19,776	19,801	20,044	20,568	57,222
16,833	0,311	0,539	1,057	0,000	0,000	0,404	0,707	44,231	20,410	19,983	19,914	19,845	19,871	20,112	20,642	57,211
17,333	0,314	0,544	1,051	0,000	0,000	0,399	0,707	44,215	20,508	19,977	19,913	19,852	19,877	20,110	20,641	57,212
17,833	0,361	0,541	1,058	0,000	0,000	0,403	0,707	44,211	20,475	20,001	19,932	19,875	19,888	20,132	20,657	57,201
18,333	0,385	0,535	1,057	0,000	0,000	0,408	0,707	44,186	20,504	20,018	19,948	19,888	19,908	20,143	20,673	57,202
18,833	0,381	0,534	1,051	0,000	0,000	0,407	0,706	44,238	20,454	20,066	19,996	19,923	19,956	20,185	20,713	57,209
19,333	0,366	0,542	1,060	0,000	0,000	0,400	0,706	44,154	20,463	19,973	19,905	19,834	19,858	20,089	20,625	57,176
19,833	0,360	0,547	1,046	0,000	0,000	0,396	0,707	44,188	20,561	19,999	19,935	19,869	19,898	20,122	20,654	57,156
20,333	0,385	0,542	1,062	0,000	0,000	0,400	0,705	44,124	20,599	20,013	19,943	19,888	19,909	20,118	20,668	57,157
20,833	0,458	0,538	1,061	0,000	0,000	0,404	0,706	43,954	20,488	19,942	19,876	19,819	19,844	20,052	20,595	57,166
21,333	0,494	0,532	1,057	0,000	0,000	0,409	0,706	44,037	20,656	20,108	20,039	19,976	20,003	20,211	20,755	57,175
21,833	0,491	0,534	1,051	0,000	0,000	0,406	0,706	43,989	20,550	20,005	19,914	19,869	19,889	20,112	20,645	57,169
22,333	0,452	0,540	1,050	0,000	0,000	0,399	0,705	44,057	20,543	19,999	19,938	19,880	19,899	20,112	20,656	57,152
22,833	0,408	0,552	1,058	0,000	0,000	0,390	0,705	44,119	20,603	20,070	20,015	19,953	19,982	20,180	20,724	57,136
23,333	0,419	0,556	1,055	0,000	0,000	0,389	0,705	44,141	20,531	20,037	19,969	19,924	19,949	20,140	20,689	57,119
23,833	0,475	0,551	1,053	0,000	0,000	0,393	0,705	44,084	20,441	19,988	19,920	19,875	19,886	20,086	20,637	57,111
24,333	0,497	0,554	1,055	0,000	0,000	0,389	0,705	44,283	20,643	20,038	19,980	19,928	19,950	20,138	20,691	57,112
24,834	0,473	0,569	1,059	0,000	0,000	0,375	0,705	44,496	20,624	20,058	19,992	19,944	19,959	20,152	20,706	57,115
25,333	0,450	0,588	1,058	0,000	0,000	0,360	0,705	44,624	20,577	20,032	19,975	19,913	19,944	20,132	20,682	57,121
25,833	0,443	0,592	1,059	0,000	0,000	0,359	0,705	44,600	20,572	20,047	19,982	19,935	19,954	20,147	20,697	57,113
26,333	0,560	0,576	1,056	0,000	0,000	0,373	0,705	44,620	20,494	19,957	19,887	19,844	19,864	20,054	20,601	57,103
26,833	0,631	0,570	1,063	0,000	0,000	0,376	0,705	44,707	20,536	20,023	19,958	19,916	19,934	20,122	20,674	57,064
27,333	0,606	0,572	1,053	0,000	0,000	0,373	0,705	44,681	20,429	19,922	19,860	19,801	19,825	20,012	20,562	57,051

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
13,333	48,472	51,309	60,582	0,241	0,237	2431,192	2521,156	516,752	8,471	12,098	0,000	42,337	8,400	19,253	2022-04-27 10:12
13,833	48,449	51,076	60,556	0,241	0,237	2437,745	2574,154	396,581	8,544	12,037	-0,001	41,942	8,361	19,160	2022-04-27 10:13
14,333	48,380	51,037	60,587	0,242	0,237	2464,550	2595,875	407,431	8,610	11,951	-0,001	42,334	8,400	19,253	2022-04-27 10:13
14,833	48,319	51,021	60,578	0,241	0,237	2463,810	2598,789	263,864	8,624	11,953	0,000	42,079	8,374	19,254	2022-04-27 10:14
15,333	48,333	50,929	60,568	0,241	0,237	2463,895	2620,851	289,891	8,349	12,168	0,000	41,987	8,365	19,253	2022-04-27 10:14
15,833	48,380	51,011	60,569	0,241	0,237	2442,915	2597,896	277,462	8,264	12,302	0,000	42,396	8,406	19,159	2022-04-27 10:15
16,333	48,419	51,011	60,542	0,241	0,237	2434,657	2589,223	280,821	8,383	12,234	0,001	42,127	8,379	19,159	2022-04-27 10:15
16,833	48,453	50,929	60,539	0,242	0,237	2429,939	2612,209	285,104	8,486	12,122	0,000	42,370	8,403	19,159	2022-04-27 10:16
17,333	48,473	50,962	60,531	0,241	0,237	2422,076	2600,926	293,311	8,646	11,976	0,000	42,628	8,429	19,252	2022-04-27 10:16
17,833	48,449	51,077	60,539	0,242	0,237	2432,667	2569,044	451,660	8,474	12,090	0,000	42,376	8,404	19,159	2022-04-27 10:17
18,333	48,382	50,989	60,511	0,240	0,237	2427,655	2585,154	463,926	8,310	12,245	0,000	42,297	8,396	19,160	2022-04-27 10:17
18,833	48,321	50,949	60,504	0,241	0,237	2460,549	2593,577	433,067	8,422	12,197	0,000	42,061	8,373	19,159	2022-04-27 10:18
19,333	48,335	51,164	60,504	0,241	0,237	2446,706	2534,311	420,723	8,606	11,999	0,000	42,462	8,413	19,083	2022-04-27 10:18
19,833	48,393	50,941	60,500	0,242	0,237	2439,280	2595,912	395,314	8,684	11,866	0,000	42,144	8,381	19,159	2022-04-27 10:19
20,333	48,448	50,962	60,490	0,240	0,237	2397,187	2586,793	528,472	8,473	12,005	-0,001	42,321	8,399	19,066	2022-04-27 10:19
20,833	48,488	50,998	60,482	0,241	0,237	2401,595	2575,369	696,898	8,434	12,117	0,002	42,350	8,401	19,159	2022-04-27 10:20
21,333	48,471	51,035	60,464	0,241	0,237	2405,975	2560,771	757,829	8,240	12,258	0,000	42,208	8,387	19,137	2022-04-27 10:20
21,833	48,406	51,037	60,451	0,241	0,237	2428,803	2557,836	698,548	8,389	12,167	0,000	42,401	8,406	19,160	2022-04-27 10:21
22,333	48,337	51,011	60,432	0,241	0,237	2436,104	2557,989	603,316	8,614	11,968	0,000	42,200	8,387	19,066	2022-04-27 10:21
22,833	48,327	50,954	60,434	0,241	0,237	2438,616	2572,825	493,050	8,872	11,696	0,000	42,381	8,405	19,066	2022-04-27 10:22
23,333	48,372	50,900	60,416	0,247	0,242	2479,806	2642,306	599,290	8,857	11,663	0,000	42,353	8,402	19,066	2022-04-27 10:22
23,833	48,434	50,962	60,407	0,234	0,231	2334,292	2507,799	737,939	8,754	11,778	0,000	42,339	8,400	19,066	2022-04-27 10:23
24,333	48,477	50,886	60,402	0,241	0,237	2386,943	2584,843	733,569	8,958	11,656	-0,001	41,745	8,341	19,066	2022-04-27 10:23
24,834	48,489	50,917	60,382	0,241	0,237	2382,204	2571,657	667,742	9,393	11,249	0,000	42,519	8,418	19,066	2022-04-27 10:24
25,333	48,444	50,935	60,365	0,240	0,237	2392,678	2560,048	597,116	9,810	10,786	-0,001	42,311	8,398	19,066	2022-04-27 10:24
25,833	48,358	50,977	60,370	0,240	0,237	2408,967	2549,812	652,895	9,717	10,783	0,001	42,277	8,394	19,066	2022-04-27 10:25
26,333	48,315	50,970	60,369	0,241	0,237	2432,392	2558,224	1016,830	9,269	11,186	0,001	42,167	8,383	19,066	2022-04-27 10:25
26,833	48,344	50,924	60,362	0,241	0,236	2417,408	2558,560	1076,704	9,231	11,292	0,001	42,320	8,398	19,066	2022-04-27 10:26
27,333	48,391	50,919	60,358	0,241	0,237	2392,275	2561,602	978,711	9,362	11,184	0,000	42,109	8,377	19,066	2022-04-27 10:26

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
27,834	0,526	0,583	1,062	0,000	0,000	0,364	0,705	44,785	20,604	20,020	19,948	19,896	19,920	20,100	20,655	57,046
28,333	0,489	0,584	1,054	0,000	0,000	0,364	0,705	44,825	20,562	20,001	19,930	19,879	19,907	20,090	20,636	57,043
28,833	0,515	0,578	1,047	0,000	0,000	0,370	0,705	44,843	20,647	20,075	20,008	19,962	19,995	20,167	20,722	57,055
29,333	0,623	0,563	1,059	0,000	0,000	0,383	0,705	44,649	20,594	20,015	19,944	19,911	19,939	20,108	20,662	57,050
29,833	0,657	0,552	1,051	0,000	0,000	0,390	0,705	44,491	20,523	19,995	19,923	19,870	19,898	20,069	20,622	57,041
30,333	0,621	0,552	1,050	0,000	0,000	0,389	0,705	44,473	20,415	19,978	19,913	19,869	19,890	20,066	20,614	57,043
30,834	0,547	0,562	1,054	0,000	0,000	0,380	0,705	44,559	20,358	20,025	19,960	19,913	19,930	20,095	20,655	57,034
31,333	0,479	0,570	1,062	0,000	0,000	0,375	0,704	44,618	20,446	20,081	20,021	19,966	19,998	20,162	20,712	57,031
31,834	0,571	0,566	1,062	0,000	0,000	0,379	0,704	44,736	20,544	20,115	20,052	19,993	20,018	20,191	20,740	57,048
32,334	0,581	0,567	1,057	0,000	0,000	0,378	0,704	44,786	20,519	20,148	20,087	20,030	20,055	20,222	20,770	57,057
32,833	0,626	0,571	1,057	0,000	0,000	0,374	0,704	44,712	20,575	20,087	20,019	19,967	19,990	20,157	20,706	57,050
33,333	0,570	0,576	1,049	0,000	0,000	0,369	0,704	44,719	20,624	20,082	20,015	19,955	19,983	20,152	20,698	57,026
33,833	0,513	0,578	1,056	0,000	0,000	0,369	0,704	44,808	20,700	20,141	20,079	20,025	20,046	20,225	20,767	56,995
34,333	0,515	0,572	1,054	0,000	0,000	0,375	0,704	44,655	20,673	20,028	19,961	19,897	19,928	20,093	20,639	56,986
34,833	0,546	0,566	1,057	0,000	0,000	0,379	0,704	44,660	20,757	20,109	20,040	19,989	20,017	20,180	20,727	57,002
35,333	0,535	0,567	1,047	0,000	0,000	0,378	0,704	44,645	20,715	20,089	20,016	19,970	19,982	20,150	20,704	57,018
35,833	0,536	0,574	1,052	0,000	0,000	0,371	0,704	44,729	20,764	20,127	20,060	20,014	20,042	20,200	20,748	57,027
36,333	0,469	0,587	1,048	0,000	0,000	0,360	0,704	44,773	20,694	20,099	20,027	19,990	20,009	20,170	20,721	57,010
40,330	0,619	0,590	1,059	0,000	0,000	0,358	0,702	44,873	20,572	20,037	19,978	19,924	19,940	20,089	20,647	56,997
40,512	0,691	0,587	1,059	0,000	0,000	0,360	0,704	45,027	20,650	20,085	20,023	19,964	19,993	20,128	20,687	56,990
41,000	0,646	0,593	1,050	0,000	0,000	0,353	0,702	45,103	20,709	20,118	20,056	19,999	20,035	20,160	20,723	56,991
41,500	0,588	0,607	1,055	0,000	0,000	0,342	0,702	45,153	20,728	20,073	20,021	19,970	19,987	20,119	20,685	57,029
42,000	0,553	0,616	1,054	0,000	0,000	0,336	0,701	45,192	20,710	20,110	20,053	19,988	20,022	20,149	20,715	57,038
42,500	0,656	0,604	1,052	0,000	0,000	0,349	0,702	45,150	20,694	20,128	20,063	20,008	20,036	20,170	20,725	57,043
43,000	0,750	0,591	1,057	0,000	0,000	0,357	0,702	45,113	20,724	20,113	20,051	19,993	20,020	20,145	20,709	57,034
43,500	0,686	0,597	1,047	0,000	0,000	0,350	0,702	45,142	20,783	20,164	20,105	20,040	20,062	20,199	20,755	57,030
44,000	0,674	0,606	1,051	0,000	0,000	0,343	0,702	45,105	20,798	20,151	20,087	20,036	20,063	20,188	20,751	57,042
44,500	0,592	0,615	1,059	0,000	0,000	0,335	0,702	45,166	20,729	20,114	20,050	19,995	20,022	20,144	20,708	57,060
45,000	0,591	0,616	1,056	0,000	0,000	0,336	0,702	45,218	20,673	20,139	20,078	20,026	20,048	20,174	20,736	57,081

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
27,834	48,439	51,015	60,333	0,241	0,237	2377,059	2529,077	768,294	9,623	10,918	0,000	42,575	8,424	19,066	2022-04-27 10:27
28,333	48,472	50,970	60,341	0,241	0,237	2376,576	2543,284	731,675	9,590	10,915	0,000	42,290	8,395	19,066	2022-04-27 10:27
28,833	48,475	50,926	60,338	0,241	0,236	2375,854	2553,189	843,277	9,354	11,105	0,000	41,716	8,338	18,972	2022-04-27 10:28
29,333	48,412	51,081	60,358	0,241	0,236	2394,156	2516,450	1151,461	8,966	11,485	-0,001	42,274	8,394	19,066	2022-04-27 10:28
29,833	48,333	51,241	60,353	0,241	0,236	2408,989	2471,076	1096,616	8,787	11,703	0,000	42,170	8,383	19,066	2022-04-27 10:29
30,333	48,330	51,026	60,352	0,241	0,236	2406,646	2529,251	1021,430	8,854	11,675	0,000	41,865	8,353	19,066	2022-04-27 10:29
30,834	48,422	50,998	60,339	0,241	0,236	2383,141	2532,515	791,689	9,164	11,398	0,001	42,378	8,404	18,972	2022-04-27 10:30
31,333	48,525	50,939	60,340	0,241	0,236	2355,615	2548,842	691,574	9,278	11,245	0,002	42,543	8,421	19,066	2022-04-27 10:30
31,834	48,505	51,093	60,312	0,241	0,236	2363,491	2499,877	975,709	9,117	11,376	0,000	42,226	8,389	18,972	2022-04-27 10:31
32,334	48,419	51,289	60,291	0,241	0,237	2386,169	2442,012	1003,916	9,189	11,335	0,000	42,288	8,395	18,972	2022-04-27 10:31
32,833	48,313	50,993	60,301	0,241	0,236	2418,216	2524,332	1053,452	9,317	11,223	0,000	42,348	8,401	18,972	2022-04-27 10:32
33,333	48,290	50,935	60,295	0,242	0,236	2426,227	2538,695	849,737	9,438	11,084	0,000	42,219	8,388	18,972	2022-04-27 10:32
33,833	48,346	50,887	60,295	0,241	0,236	2396,999	2549,465	758,360	9,428	11,056	0,000	42,172	8,384	18,972	2022-04-27 10:33
34,333	48,436	50,969	60,296	0,241	0,236	2367,936	2527,843	818,068	9,211	11,243	0,000	41,993	8,366	18,972	2022-04-27 10:33
34,833	48,520	51,014	60,303	0,241	0,236	2342,872	2519,071	884,414	9,145	11,357	0,002	42,342	8,401	18,972	2022-04-27 10:34
35,333	48,468	50,932	60,302	0,241	0,236	2365,579	2540,491	819,740	9,203	11,330	0,000	41,885	8,355	18,972	2022-04-27 10:34
35,833	48,353	50,937	60,278	0,242	0,236	2408,806	2530,817	816,496	9,421	11,123	0,000	41,992	8,366	18,972	2022-04-27 10:35
36,333	48,318	50,961	60,293	0,241	0,236	2403,313	2529,580	623,412	9,771	10,794	0,000	42,184	8,385	19,066	2022-04-27 10:35
40,330	48,357	51,062	60,297	0,240	0,236	2384,042	2501,491	1263,240	9,691	10,747	0,000	42,606	8,427	18,847	2022-04-27 10:39
40,512	48,380	51,000	60,313	0,242	0,236	2391,450	2523,656	1209,604	9,661	10,801	0,000	42,156	8,382	18,972	2022-04-27 10:40
41,000	48,443	50,906	60,321	0,239	0,236	2349,089	2549,090	1093,244	9,915	10,592	0,000	41,862	8,353	18,908	2022-04-27 10:40
41,500	48,499	50,957	60,335	0,240	0,236	2353,525	2541,061	925,251	10,289	10,259	0,000	42,168	8,383	18,847	44678,44514
42,000	48,447	51,123	60,353	0,241	0,236	2377,381	2500,221	890,466	10,436	10,073	0,000	42,500	8,416	18,847	2022-04-27 10:41
42,500	48,325	50,987	60,349	0,241	0,236	2414,862	2534,814	1284,633	9,940	10,461	-0,001	41,733	8,340	18,847	44678,44583
43,000	48,308	51,090	60,358	0,241	0,236	2412,288	2509,778	1360,363	9,743	10,707	-0,001	41,878	8,354	18,847	2022-04-27 10:42
43,500	48,384	51,231	60,377	0,240	0,236	2379,297	2476,282	1166,923	10,036	10,489	0,000	41,722	8,339	18,847	44678,44653
44,000	48,468	51,074	60,384	0,241	0,236	2369,126	2523,054	1151,513	10,198	10,277	0,000	42,252	8,392	18,847	2022-04-27 10:43
44,500	48,500	51,218	60,373	0,240	0,236	2360,395	2481,699	918,600	10,423	10,065	0,002	42,326	8,399	18,847	44678,44722
45,000	48,420	51,164	60,387	0,241	0,236	2394,100	2496,324	1065,427	10,311	10,090	0,000	42,221	8,389	18,847	2022-04-27 10:44

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
45,500	0,713	0,611	1,057	0,000	0,000	0,340	0,702	45,181	20,685	20,141	20,072	20,017	20,050	20,173	20,732	57,081
46,000	0,693	0,611	1,054	0,000	0,000	0,338	0,702	45,154	20,674	20,058	20,003	19,949	19,973	20,100	20,662	57,069
46,500	0,600	0,626	1,054	0,000	0,000	0,324	0,702	45,282	20,640	20,083	20,019	19,972	19,998	20,122	20,681	57,078
47,000	0,560	0,641	1,049	0,000	0,000	0,313	0,701	45,415	20,587	20,038	19,981	19,929	19,950	20,082	20,639	57,094
47,500	0,463	0,644	1,056	0,000	0,000	0,312	0,701	45,580	20,767	20,125	20,070	20,027	20,047	20,172	20,734	57,100
48,000	0,430	0,636	1,054	0,000	0,000	0,321	0,701	45,545	20,854	20,161	20,097	20,064	20,085	20,207	20,769	57,097
48,500	0,416	0,630	1,062	0,000	0,000	0,325	0,701	45,554	20,978	20,156	20,099	20,041	20,078	20,197	20,755	57,108
49,000	0,415	0,634	1,060	0,000	0,000	0,319	0,700	45,507	20,966	20,056	19,996	19,942	19,970	20,090	20,653	57,109
49,500	0,401	0,645	1,058	0,000	0,000	0,310	0,700	45,616	20,961	20,086	20,026	19,976	19,995	20,109	20,681	57,117
50,000	0,417	0,645	1,054	0,000	0,000	0,313	0,700	45,640	20,874	20,092	20,032	19,998	20,011	20,129	20,698	57,133
50,500	0,474	0,632	1,053	0,000	0,000	0,324	0,700	45,537	20,694	20,040	19,976	19,942	19,968	20,073	20,646	57,159
51,000	0,465	0,630	1,049	0,000	0,000	0,324	0,700	45,568	20,627	20,084	20,005	19,976	20,007	20,116	20,689	57,179
51,500	0,407	0,643	1,056	0,000	0,000	0,311	0,701	45,727	20,651	20,119	20,029	20,021	20,030	20,149	20,717	57,218
52,000	0,353	0,656	1,050	0,000	0,000	0,302	0,700	45,830	20,641	20,088	20,001	19,992	20,015	20,126	20,700	57,218
52,500	0,333	0,656	1,058	0,000	0,000	0,306	0,700	45,882	20,689	20,112	20,037	20,033	20,052	20,162	20,733	57,218
53,000	0,335	0,639	1,050	0,000	0,000	0,320	0,700	45,677	20,589	20,006	19,931	19,928	19,942	20,052	20,622	57,242
53,500	0,328	0,631	1,049	0,000	0,000	0,324	0,700	45,896	20,745	20,092	20,033	20,026	20,043	20,158	20,723	57,285
54,000	0,303	0,642	1,052	0,000	0,000	0,313	0,700	45,985	20,863	20,124	20,058	20,048	20,070	20,173	20,745	57,309
54,500	0,290	0,655	1,053	0,000	0,000	0,303	0,700	45,946	20,890	20,060	19,993	19,991	20,011	20,114	20,684	57,350
55,000	0,307	0,659	1,053	0,000	0,000	0,301	0,699	45,778	20,861	20,018	19,949	19,944	19,964	20,066	20,639	57,358
55,500	0,353	0,650	1,051	0,000	0,000	0,310	0,699	45,795	20,913	20,053	19,987	19,981	20,001	20,107	20,676	57,374
56,000	0,385	0,643	1,050	0,000	0,000	0,314	0,699	45,842	20,957	20,075	20,014	20,015	20,042	20,144	20,704	57,404
56,500	0,412	0,651	1,053	0,000	0,000	0,303	0,699	46,011	21,069	20,159	20,104	20,110	20,126	20,229	20,794	57,448
57,000	0,408	0,670	1,043	0,000	0,000	0,287	0,699	45,982	20,970	20,077	20,020	20,020	20,047	20,157	20,709	57,504
57,500	0,460	0,681	1,052	0,000	0,000	0,281	0,699	45,923	20,872	19,974	19,920	19,923	19,946	20,054	20,609	57,526
58,000	0,573	0,677	1,047	0,000	0,000	0,283	0,699	46,093	20,971	20,111	20,062	20,073	20,090	20,193	20,752	57,531
58,500	0,525	0,680	1,052	0,000	0,000	0,280	0,699	46,112	20,844	20,084	20,021	20,026	20,044	20,156	20,712	57,541
59,000	0,485	0,685	1,052	0,000	0,000	0,279	0,699	46,263	20,924	20,160	20,090	20,102	20,123	20,231	20,783	57,564
59,500	0,457	0,683	1,055	0,000	0,000	0,280	0,699	46,196	20,939	20,125	20,058	20,080	20,103	20,208	20,755	57,612

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
45,500	48,327	51,098	60,388	0,241	0,236	2421,043	2516,543	1396,902	10,239	10,203	0,000	42,283	8,395	18,847	44678,44792
46,000	48,317	51,461	60,405	0,240	0,236	2414,194	2421,132	1086,616	10,333	10,153	0,000	42,002	8,367	18,847	2022-04-27 10:45
46,500	48,383	51,420	60,394	0,240	0,236	2395,317	2427,690	979,150	10,830	9,716	0,000	42,046	8,371	18,756	44678,44861
47,000	48,451	51,038	60,418	0,239	0,236	2371,354	2540,492	835,893	11,105	9,382	0,000	41,822	8,349	18,753	2022-04-27 10:46
47,500	48,488	51,196	60,450	0,240	0,236	2378,118	2504,636	587,685	11,089	9,365	0,000	42,237	8,390	18,847	44678,44931
48,000	48,430	51,153	60,439	0,242	0,236	2404,578	2513,232	580,743	10,773	9,642	-0,001	42,244	8,391	18,753	2022-04-27 10:47
48,500	48,334	51,190	60,470	0,242	0,236	2437,739	2511,690	547,273	10,746	9,736	0,001	42,619	8,428	18,753	44678,45
49,000	48,316	51,251	60,488	0,239	0,236	2416,679	2499,381	528,860	10,935	9,576	0,003	42,140	8,381	18,753	2022-04-27 10:48
49,500	48,373	51,117	60,528	0,240	0,236	2409,940	2546,538	509,216	11,185	9,311	0,000	42,420	8,408	18,753	44678,45069
50,000	48,459	50,959	60,545	0,240	0,236	2393,731	2592,867	573,340	11,041	9,393	0,000	41,906	8,357	18,753	2022-04-27 10:49
50,500	48,494	51,046	60,569	0,241	0,236	2395,044	2576,775	704,487	10,716	9,721	0,000	42,102	8,377	18,753	44678,45139
51,000	48,398	51,209	60,578	0,241	0,236	2429,469	2535,210	624,569	10,780	9,713	0,001	42,079	8,374	18,753	2022-04-27 10:50
51,500	48,296	51,330	60,630	0,239	0,236	2447,347	2513,981	464,539	11,231	9,340	0,000	42,301	8,396	18,753	44678,45208
52,000	48,304	51,101	60,656	0,241	0,236	2463,321	2584,429	351,134	11,481	9,056	-0,001	42,314	8,398	18,753	2022-04-27 10:51
52,500	48,356	50,968	60,701	0,240	0,236	2445,249	2633,247	332,373	11,262	9,174	0,000	42,396	8,406	18,753	44678,45278
53,000	48,438	51,073	60,736	0,240	0,236	2421,572	2612,477	354,376	10,869	9,593	0,000	41,800	8,347	18,753	2022-04-27 10:52
53,500	48,499	51,397	60,759	0,240	0,236	2421,378	2533,801	307,202	10,794	9,719	0,000	42,324	8,399	18,753	44678,45347
54,000	48,440	51,121	60,796	0,240	0,236	2443,655	2616,556	234,727	11,181	9,388	-0,001	42,098	8,376	18,659	2022-04-27 10:53
54,500	48,325	51,114	60,827	0,240	0,236	2491,944	2627,684	234,053	11,490	9,080	0,000	42,314	8,398	18,753	44678,45417
55,000	48,298	51,284	60,875	0,241	0,236	2509,638	2592,401	307,393	11,446	9,044	0,000	41,830	8,350	18,659	2022-04-27 10:54
55,500	48,353	51,085	60,922	0,239	0,236	2480,556	2662,413	428,478	11,183	9,293	0,000	42,042	8,371	18,659	44678,45486
56,000	48,433	51,089	60,954	0,240	0,236	2469,614	2667,555	473,074	11,055	9,434	0,001	42,033	8,370	18,659	2022-04-27 10:55
56,500	48,492	51,062	60,972	0,239	0,236	2455,607	2681,578	544,015	11,467	9,096	0,000	41,970	8,364	18,659	44678,45556
57,000	48,434	51,110	61,000	0,239	0,236	2492,463	2672,768	513,921	11,890	8,623	0,000	41,826	8,349	18,659	2022-04-27 10:56
57,500	48,340	51,126	61,043	0,241	0,236	2538,942	2682,343	804,041	11,967	8,433	0,000	41,942	8,361	18,659	44678,45625
58,000	48,310	51,134	61,099	0,239	0,236	2528,093	2694,912	929,812	11,940	8,490	0,000	42,099	8,376	18,659	2022-04-27 10:57
58,500	48,359	51,044	61,141	0,240	0,236	2532,092	2730,424	764,416	12,063	8,413	0,000	42,206	8,387	18,659	44678,45694
59,000	48,428	51,011	61,190	0,240	0,236	2514,119	2754,198	717,499	12,115	8,356	0,000	42,165	8,383	18,659	2022-04-27 10:58
59,500	48,475	51,107	61,227	0,239	0,236	2512,695	2737,263	596,909	12,072	8,408	0,000	42,265	8,393	18,659	44678,45764



## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
60,000	0,485	0,676	1,055	0,000	0,000	0,288	0,699	46,130	20,950	20,134	20,082	20,089	20,106	20,203	20,761	57,657
60,500	0,573	0,668	1,052	0,000	0,000	0,293	0,698	46,072	20,879	20,069	20,018	20,014	20,038	20,139	20,694	57,695
61,000	0,522	0,668	1,046	0,000	0,000	0,292	0,697	46,123	20,901	20,077	20,017	20,020	20,048	20,144	20,695	57,709
61,500	0,383	0,681	1,045	0,000	0,000	0,279	0,698	46,204	21,000	20,043	19,993	19,991	20,016	20,122	20,667	57,729
62,000	0,334	0,698	1,057	0,000	0,000	0,268	0,697	46,272	20,987	20,088	20,033	20,030	20,057	20,170	20,711	57,761
62,500	0,336	0,696	1,050	0,000	0,000	0,272	0,698	46,291	20,935	20,147	20,095	20,080	20,108	20,223	20,759	57,804
63,000	0,356	0,687	1,052	0,000	0,000	0,278	0,697	46,236	20,819	20,043	19,990	19,977	20,000	20,112	20,652	57,859
63,500	0,359	0,689	1,052	0,000	0,000	0,274	0,697	46,328	20,912	20,095	20,045	20,038	20,061	20,168	20,707	57,892
64,000	0,368	0,701	1,052	0,000	0,000	0,265	0,697	46,311	20,838	20,042	19,986	19,977	19,994	20,115	20,651	57,900
64,500	0,351	0,710	1,048	0,000	0,000	0,258	0,697	46,480	20,917	20,171	20,119	20,102	20,126	20,243	20,780	57,934
65,000	0,349	0,715	1,051	0,000	0,000	0,256	0,697	46,506	20,961	20,177	20,115	20,110	20,130	20,245	20,778	57,965
65,500	0,366	0,705	1,055	0,000	0,000	0,265	0,697	46,577	20,990	20,164	20,118	20,099	20,131	20,252	20,775	58,005
66,000	0,354	0,694	1,058	0,000	0,000	0,274	0,697	46,388	20,902	20,012	19,962	19,945	19,967	20,084	20,614	58,033
66,500	0,311	0,693	1,051	0,000	0,000	0,272	0,696	46,509	20,891	20,043	19,995	19,967	19,998	20,116	20,641	58,078
67,000	0,275	0,702	1,051	0,000	0,000	0,266	0,697	46,576	20,929	20,107	20,067	20,036	20,075	20,186	20,710	58,106
67,500	0,268	0,696	1,057	0,000	0,000	0,273	0,696	46,499	20,882	20,089	20,038	20,014	20,047	20,175	20,691	58,142
68,000	0,280	0,683	1,051	0,000	0,000	0,284	0,696	46,280	20,921	20,092	20,057	20,020	20,058	20,186	20,692	58,162
68,500	0,295	0,671	1,050	0,000	0,000	0,292	0,696	46,253	21,038	20,194	20,142	20,113	20,151	20,276	20,784	58,194
69,000	0,285	0,667	1,053	0,000	0,000	0,294	0,696	46,060	20,953	20,065	20,012	19,992	20,018	20,142	20,657	58,230
69,500	0,257	0,677	1,051	0,000	0,000	0,285	0,696	46,168	21,004	20,085	20,040	20,011	20,039	20,163	20,676	58,283
70,000	0,243	0,683	1,050	0,000	0,000	0,283	0,696	46,206	21,073	20,184	20,145	20,114	20,150	20,279	20,783	58,333
70,500	0,233	0,673	1,052	0,000	0,000	0,291	0,696	45,969	20,949	20,076	20,044	20,002	20,042	20,168	20,677	58,340
71,000	0,233	0,660	1,049	0,000	0,000	0,302	0,695	45,773	20,877	20,040	19,989	19,959	19,999	20,124	20,625	58,355
71,500	0,244	0,653	1,049	0,000	0,000	0,308	0,696	45,743	21,031	20,094	20,046	20,013	20,055	20,181	20,682	58,390
72,000	0,252	0,647	1,050	0,000	0,000	0,311	0,696	45,670	20,887	20,090	20,053	20,007	20,052	20,173	20,680	58,434
72,500	0,244	0,657	1,054	0,000	0,000	0,300	0,696	45,687	20,775	20,057	20,011	19,976	20,011	20,136	20,637	58,488
73,000	0,239	0,669	1,052	0,000	0,000	0,292	0,695	45,785	20,913	20,104	20,060	20,026	20,055	20,191	20,686	58,519
73,500	0,245	0,675	1,054	0,000	0,000	0,288	0,695	45,764	20,932	20,098	20,057	20,026	20,061	20,195	20,686	58,571
74,000	0,260	0,668	1,053	0,000	0,000	0,295	0,694	45,762	20,993	20,166	20,126	20,077	20,112	20,248	20,740	58,602

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
60,000	48,471	51,133	61,262	0,239	0,236	2525,645	2741,013	808,855	11,769	8,631	0,001	41,963	8,363	18,659	2022-04-27 10:59
60,500	48,380	51,144	61,304	0,241	0,236	2573,128	2745,888	974,581	11,678	8,802	-0,001	42,033	8,370	18,659	44678,45833
61,000	48,351	51,159	61,348	0,240	0,236	2582,803	2753,862	669,449	11,707	8,761	0,002	41,519	8,319	18,566	2022-04-27 11:00
61,500	48,425	51,110	61,397	0,240	0,236	2563,344	2783,099	384,679	12,196	8,361	0,000	41,796	8,346	18,566	44678,45903
62,000	48,483	51,153	61,434	0,240	0,236	2561,404	2780,856	330,846	12,468	8,043	0,000	42,261	8,393	18,566	2022-04-27 11:01
62,500	48,446	51,090	61,484	0,240	0,236	2574,366	2810,529	363,589	12,296	8,156	0,001	41,855	8,352	18,659	44678,45972
63,000	48,363	51,159	61,532	0,240	0,236	2613,327	2803,919	389,941	12,177	8,329	0,000	42,105	8,377	18,566	2022-04-27 11:02
63,500	48,296	51,137	61,573	0,239	0,236	2630,090	2822,032	398,084	12,349	8,222	0,000	42,211	8,388	18,566	44678,46042
64,000	48,328	51,119	61,626	0,239	0,236	2631,413	2843,151	418,156	12,589	7,941	0,000	42,134	8,380	18,566	2022-04-27 11:03
64,500	48,409	51,467	61,637	0,240	0,236	2620,386	2749,842	366,547	12,813	7,730	0,000	41,995	8,366	18,565	44678,46111
65,000	48,481	51,341	61,686	0,239	0,236	2605,090	2797,390	376,499	12,859	7,673	0,000	41,760	8,343	18,566	2022-04-27 11:04
65,500	48,466	51,163	61,754	0,241	0,236	2634,886	2862,787	420,391	12,543	7,960	0,000	42,361	8,402	18,566	44678,46181
66,000	48,392	51,251	61,783	0,240	0,236	2652,750	2846,941	360,276	12,268	8,222	0,001	42,465	8,413	18,565	2022-04-27 11:05
66,500	48,320	51,463	61,837	0,239	0,236	2675,751	2804,359	238,414	12,439	8,153	0,000	42,044	8,371	18,472	44678,4625
67,000	48,330	51,829	61,870	0,239	0,236	2681,173	2713,067	176,155	12,523	7,988	0,001	42,044	8,371	18,472	2022-04-27 11:06
67,500	48,383	51,645	61,924	0,239	0,235	2676,324	2775,802	183,086	12,286	8,176	0,001	42,241	8,391	18,472	44678,46319
68,000	48,430	51,760	61,954	0,239	0,235	2674,588	2753,007	222,457	11,954	8,509	-0,001	41,933	8,360	18,472	2022-04-27 11:07
68,500	48,456	51,358	62,003	0,240	0,236	2684,648	2875,895	235,882	11,731	8,772	0,000	42,170	8,384	18,472	44678,46389
69,000	48,439	51,372	62,062	0,239	0,236	2689,203	2891,576	192,583	11,704	8,832	-0,001	41,939	8,361	18,472	2022-04-27 11:08
69,500	48,398	51,391	62,100	0,237	0,236	2694,968	2895,983	131,789	12,058	8,540	0,000	42,086	8,375	18,472	44678,46458
70,000	48,359	51,545	62,136	0,239	0,236	2740,528	2862,457	101,704	12,012	8,481	-0,001	41,991	8,366	18,472	2022-04-27 11:09
70,500	48,328	51,482	62,187	0,239	0,236	2752,896	2893,826	81,380	11,707	8,743	0,000	42,257	8,392	18,472	44678,46528
71,000	48,354	51,436	62,250	0,239	0,236	2743,353	2922,816	92,791	11,401	9,072	0,000	41,900	8,357	18,472	2022-04-27 11:10
71,500	48,396	51,640	62,287	0,239	0,236	2741,870	2876,563	119,186	11,297	9,235	0,000	41,779	8,345	18,472	44678,46597
72,000	48,433	51,856	62,341	0,238	0,236	2738,383	2833,956	139,070	11,184	9,340	0,000	42,342	8,401	18,472	2022-04-27 11:11
72,500	48,456	51,746	62,381	0,239	0,236	2757,968	2872,915	104,353	11,560	9,013	0,001	42,128	8,379	18,472	44678,46667
73,000	48,421	51,647	62,445	0,238	0,236	2761,565	2920,052	100,749	11,764	8,774	0,001	42,022	8,369	18,347	2022-04-27 11:12
73,500	48,356	51,479	62,462	0,238	0,236	2796,004	2968,879	129,978	11,898	8,632	0,000	42,393	8,406	18,472	44678,46736
74,000	48,318	51,718	62,521	0,238	0,236	2815,412	2918,863	161,040	11,618	8,850	0,000	42,067	8,373	18,438	2022-04-27 11:13

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
74,500	0,266	0,662	1,047	0,000	0,000	0,300	0,694	45,749	21,098	20,169	20,121	20,076	20,113	20,253	20,733	58,622
75,000	0,258	0,667	1,061	0,000	0,000	0,292	0,694	45,856	21,129	20,218	20,168	20,126	20,163	20,311	20,786	58,665
75,500	0,242	0,685	1,054	0,000	0,000	0,279	0,694	45,898	20,981	20,132	20,088	20,037	20,079	20,224	20,701	58,696
76,000	0,238	0,692	1,049	0,000	0,000	0,273	0,694	45,881	20,992	20,132	20,089	20,038	20,079	20,222	20,698	58,734
76,500	0,243	0,691	1,055	0,000	0,000	0,275	0,694	45,859	21,057	20,176	20,131	20,089	20,127	20,274	20,746	58,761
77,000	0,260	0,679	1,053	0,000	0,000	0,287	0,693	45,734	20,946	20,145	20,102	20,058	20,097	20,251	20,715	58,785
77,500	0,270	0,670	1,057	0,000	0,000	0,293	0,693	45,755	20,912	20,134	20,092	20,040	20,077	20,241	20,695	58,811
78,000	0,255	0,671	1,055	0,000	0,000	0,292	0,694	45,792	20,927	20,185	20,148	20,098	20,136	20,296	20,751	58,832
78,500	0,241	0,672	1,054	0,000	0,000	0,289	0,694	45,892	20,956	20,259	20,223	20,181	20,220	20,375	20,825	58,876
79,000	0,232	0,681	1,052	0,000	0,000	0,284	0,694	45,847	20,853	20,231	20,196	20,142	20,174	20,347	20,792	58,917
79,500	0,236	0,666	1,053	0,000	0,000	0,298	0,694	45,758	20,835	20,274	20,230	20,177	20,212	20,374	20,826	58,966
80,000	0,247	0,659	1,051	0,000	0,000	0,302	0,694	45,623	20,787	20,133	20,103	20,033	20,075	20,243	20,689	58,994
80,500	0,239	0,663	1,051	0,000	0,000	0,298	0,693	45,824	20,996	20,203	20,169	20,106	20,142	20,319	20,759	59,025
81,000	0,232	0,672	1,052	0,000	0,000	0,291	0,692	45,924	20,996	20,276	20,239	20,175	20,226	20,398	20,830	59,058
81,500	0,228	0,676	1,052	0,000	0,000	0,289	0,693	45,823	20,970	20,176	20,139	20,076	20,119	20,295	20,725	59,095
82,000	0,231	0,670	1,053	0,000	0,000	0,296	0,692	45,679	20,905	20,140	20,109	20,041	20,099	20,264	20,694	59,142
82,500	0,234	0,656	1,051	0,000	0,000	0,307	0,692	45,593	20,852	20,150	20,128	20,054	20,090	20,274	20,700	59,172
83,000	0,235	0,646	1,052	0,000	0,000	0,313	0,692	45,566	20,966	20,236	20,202	20,134	20,175	20,352	20,778	59,191
83,500	0,240	0,642	1,052	0,000	0,000	0,317	0,692	45,505	20,958	20,211	20,171	20,106	20,150	20,327	20,748	59,216
84,000	0,244	0,646	1,056	0,000	0,000	0,312	0,692	45,558	20,903	20,212	20,175	20,100	20,145	20,325	20,746	59,230
84,500	0,240	0,655	1,054	0,000	0,000	0,304	0,692	45,560	20,909	20,206	20,177	20,098	20,136	20,332	20,735	59,267
85,000	0,245	0,662	1,057	0,000	0,000	0,300	0,692	45,507	20,879	20,199	20,171	20,084	20,127	20,319	20,726	59,288
85,500	0,265	0,651	1,054	0,000	0,000	0,312	0,692	45,406	20,820	20,205	20,173	20,095	20,137	20,328	20,736	59,325
86,000	0,285	0,641	1,058	0,000	0,000	0,318	0,692	45,424	20,899	20,258	20,227	20,150	20,196	20,374	20,786	59,354
86,500	0,303	0,643	1,054	0,000	0,000	0,314	0,692	45,449	20,899	20,252	20,223	20,144	20,183	20,366	20,778	59,359
87,000	0,308	0,657	1,054	0,000	0,000	0,303	0,691	45,550	20,934	20,255	20,215	20,137	20,181	20,374	20,775	59,364
87,500	0,287	0,671	1,058	0,000	0,000	0,292	0,692	45,604	20,981	20,215	20,176	20,099	20,138	20,330	20,732	59,377
88,000	0,279	0,673	1,062	0,000	0,000	0,290	0,691	45,719	21,143	20,321	20,285	20,199	20,237	20,419	20,830	59,387
88,500	0,275	0,668	1,046	0,000	0,000	0,296	0,691	45,661	21,018	20,294	20,257	20,173	20,217	20,398	20,803	59,432

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
74,500	48,361	51,784	62,544	0,238	0,235	2802,309	2906,026	172,954	11,516	9,010	0,000	42,085	8,375	18,347	44678,46806
75,000	48,421	51,725	62,598	0,238	0,236	2800,114	2937,587	131,284	11,846	8,759	0,000	42,227	8,389	18,347	2022-04-27 11:14
75,500	48,454	51,516	62,625	0,239	0,236	2806,367	3002,714	98,170	12,250	8,357	0,000	41,960	8,363	18,347	44678,46875
76,000	48,441	51,376	62,664	0,238	0,235	2815,403	3047,485	99,971	12,351	8,180	0,001	42,003	8,367	18,347	2022-04-27 11:15
76,500	48,387	51,524	62,717	0,239	0,235	2849,881	3022,693	116,441	12,240	8,257	0,000	42,322	8,399	18,472	44678,46944
77,000	48,328	51,635	62,747	0,239	0,236	2868,551	3003,763	171,043	11,843	8,603	0,000	42,226	8,389	18,254	2022-04-27 11:16
77,500	48,346	51,847	62,796	0,239	0,236	2870,580	2958,473	172,578	11,724	8,791	-0,001	42,114	8,378	18,347	44678,47014
78,000	48,408	51,391	62,829	0,239	0,236	2855,862	3092,461	125,800	11,763	8,757	0,000	42,080	8,375	18,254	2022-04-27 11:17
78,500	48,460	51,763	62,868	0,239	0,236	2861,305	3003,244	97,385	11,900	8,655	0,001	42,024	8,369	18,347	44678,47083
79,000	48,443	51,459	62,922	0,238	0,236	2862,675	3098,663	79,010	11,983	8,511	0,000	42,160	8,383	18,347	2022-04-27 11:18
79,500	48,396	51,525	62,965	0,238	0,236	2889,160	3093,000	102,567	11,537	8,933	0,000	42,057	8,372	18,347	44678,47153
80,000	48,346	51,579	63,016	0,238	0,236	2912,719	3089,916	125,640	11,497	9,049	0,001	42,157	8,382	18,347	2022-04-27 11:19
80,500	48,319	51,617	63,059	0,238	0,236	2923,722	3092,992	89,758	11,656	8,927	0,000	41,850	8,352	18,254	44678,47222
81,000	48,364	51,640	63,098	0,237	0,235	2905,305	3094,961	79,512	11,837	8,717	0,000	41,879	8,355	18,254	2022-04-27 11:20
81,500	48,431	51,759	63,121	0,238	0,236	2910,053	3070,074	71,888	11,902	8,660	0,000	42,148	8,381	18,254	44678,47292
82,000	48,450	51,862	63,155	0,237	0,235	2907,517	3049,332	85,055	11,634	8,866	0,000	42,065	8,373	18,254	2022-04-27 11:21
82,500	48,414	52,008	63,210	0,238	0,236	2935,707	3026,181	88,736	11,293	9,195	-0,001	41,872	8,354	18,245	44678,47361
83,000	48,367	52,015	63,235	0,238	0,235	2961,744	3028,293	91,014	11,134	9,402	0,001	41,978	8,364	18,254	2022-04-27 11:22
83,500	48,336	51,897	63,285	0,238	0,236	2975,109	3076,667	112,592	11,023	9,501	0,000	41,748	8,341	18,254	44678,47431
84,000	48,326	52,104	63,314	0,239	0,236	2991,560	3028,563	106,126	11,244	9,345	0,001	42,200	8,386	18,254	2022-04-27 11:23
84,500	48,388	52,065	63,345	0,237	0,236	2965,699	3048,609	107,565	11,426	9,124	0,000	42,094	8,376	18,254	44678,475
85,000	48,456	51,634	63,377	0,237	0,236	2954,309	3172,078	122,516	11,552	9,012	0,001	42,183	8,385	18,254	2022-04-27 11:24
85,500	48,455	52,020	63,393	0,238	0,235	2975,920	3071,125	188,504	11,133	9,354	0,001	42,251	8,392	18,254	44678,47569
86,000	48,398	52,187	63,406	0,239	0,236	3004,815	3031,317	239,462	11,016	9,536	0,000	42,579	8,424	18,254	2022-04-27 11:25
86,500	48,332	51,962	63,405	0,238	0,236	3016,605	3091,135	265,603	11,151	9,431	0,001	41,966	8,363	18,254	44678,47639
87,000	48,313	52,022	63,430	0,238	0,236	3024,389	3081,970	262,291	11,518	9,085	0,000	42,319	8,398	18,160	2022-04-27 11:26
87,500	48,390	52,235	63,463	0,239	0,235	3016,475	3032,069	206,982	11,860	8,747	0,000	42,336	8,400	18,160	44678,47708
88,000	48,470	51,853	63,463	0,238	0,235	2988,298	3134,462	193,930	11,838	8,714	0,000	42,041	8,371	18,160	2022-04-27 11:27
88,500	48,466	51,789	63,500	0,238	0,235	2998,577	3162,480	195,816	11,641	8,886	0,001	41,591	8,326	18,160	44678,47778

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
89,000	0,296	0,662	1,057	0,000	0,000	0,300	0,691	45,647	20,949	20,230	20,194	20,116	20,152	20,321	20,739	59,457
89,500	0,291	0,668	1,055	0,000	0,000	0,293	0,691	45,804	21,087	20,281	20,234	20,162	20,201	20,385	20,787	59,469
90,000	0,256	0,681	1,057	0,000	0,000	0,284	0,691	45,880	20,944	20,224	20,181	20,110	20,145	20,328	20,732	59,472
90,500	0,252	0,677	1,055	0,000	0,000	0,289	0,691	45,802	21,014	20,221	20,176	20,114	20,157	20,339	20,735	59,462
91,000	0,283	0,666	1,064	0,000	0,000	0,299	0,691	45,736	21,298	20,327	20,300	20,220	20,266	20,440	20,840	59,482
91,500	0,308	0,657	1,062	0,000	0,000	0,305	0,691	45,676	21,360	20,313	20,275	20,196	20,244	20,426	20,815	59,519
92,000	0,316	0,654	1,060	0,000	0,000	0,307	0,691	45,716	21,501	20,366	20,327	20,250	20,292	20,477	20,868	59,520
92,500	0,320	0,657	1,055	0,000	0,000	0,304	0,691	45,720	21,492	20,301	20,267	20,180	20,217	20,411	20,801	59,542
93,000	0,282	0,657	1,044	0,000	0,000	0,304	0,690	45,728	21,555	20,283	20,250	20,175	20,227	20,412	20,791	59,545
93,500	0,249	0,655	1,052	0,000	0,000	0,306	0,691	45,606	21,367	20,244	20,203	20,136	20,170	20,368	20,750	59,511
94,000	0,248	0,646	1,053	0,000	0,000	0,314	0,691	45,546	21,216	20,244	20,197	20,124	20,172	20,361	20,741	59,533
94,500	0,255	0,648	1,055	0,000	0,000	0,311	0,691	45,591	21,181	20,249	20,203	20,143	20,189	20,391	20,753	59,561
95,000	0,270	0,653	1,057	0,000	0,000	0,309	0,690	45,734	21,350	20,376	20,328	20,265	20,308	20,513	20,876	59,589
95,500	0,273	0,653	1,054	0,000	0,000	0,309	0,690	45,580	21,102	20,223	20,175	20,121	20,159	20,355	20,730	59,591
96,000	0,276	0,655	1,050	0,000	0,000	0,307	0,689	45,717	21,178	20,373	20,319	20,276	20,319	20,508	20,879	59,590
96,500	0,287	0,655	1,053	0,000	0,000	0,308	0,689	45,659	21,080	20,284	20,222	20,184	20,221	20,420	20,789	59,599
97,000	0,304	0,645	1,059	0,000	0,000	0,316	0,689	45,588	21,068	20,278	20,221	20,184	20,227	20,423	20,789	59,595
97,500	0,282	0,642	1,057	0,000	0,000	0,317	0,690	45,673	21,059	20,335	20,283	20,245	20,298	20,485	20,851	59,616
98,000	0,255	0,646	1,048	0,000	0,000	0,313	0,689	45,689	21,170	20,343	20,290	20,254	20,309	20,510	20,864	59,656
98,500	0,250	0,651	1,048	0,000	0,000	0,308	0,689	45,589	21,043	20,264	20,204	20,167	20,213	20,414	20,773	59,656
99,000	0,254	0,658	1,049	0,000	0,000	0,303	0,689	45,597	20,995	20,251	20,202	20,164	20,215	20,409	20,767	59,632
99,500	0,274	0,653	1,048	0,000	0,000	0,309	0,689	45,534	20,957	20,231	20,181	20,145	20,194	20,399	20,749	59,601
100,000	0,319	0,640	1,051	0,000	0,000	0,320	0,689	45,549	21,084	20,273	20,221	20,193	20,248	20,452	20,796	59,602
100,500	0,323	0,633	1,045	0,000	0,000	0,324	0,689	45,609	21,277	20,369	20,319	20,285	20,338	20,539	20,886	59,632
101,000	0,277	0,642	1,051	0,000	0,000	0,316	0,692	45,635	21,255	20,321	20,280	20,238	20,294	20,500	20,840	59,683
101,500	0,254	0,649	1,056	0,000	0,000	0,311	0,689	45,722	21,345	20,394	20,342	20,302	20,365	20,573	20,907	59,671
102,000	0,255	0,652	1,048	0,000	0,000	0,309	0,689	45,779	21,347	20,391	20,336	20,299	20,350	20,566	20,898	59,656
102,500	0,258	0,651	1,055	0,000	0,000	0,310	0,689	45,775	21,374	20,408	20,352	20,310	20,360	20,586	20,908	59,643
103,000	0,253	0,646	1,042	0,000	0,000	0,314	0,688	45,757	21,420	20,442	20,378	20,343	20,398	20,626	20,941	59,628

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
89,000	48,392	52,032	63,473	0,238	0,235	3026,571	3088,802	256,936	11,533	9,007	0,000	42,462	8,412	18,160	2022-04-27 11:28
89,500	48,308	51,934	63,504	0,236	0,236	3024,910	3125,636	204,259	11,839	8,778	0,000	42,447	8,411	18,160	44678,47847
90,000	48,299	52,031	63,541	0,237	0,235	3047,566	3106,966	124,480	12,044	8,507	0,001	42,406	8,407	18,160	2022-04-27 11:29
90,500	48,406	51,933	63,555	0,237	0,235	3007,876	3138,753	143,584	11,866	8,664	0,001	42,282	8,395	18,160	44678,47917
91,000	48,509	51,891	63,573	0,238	0,235	3002,311	3153,617	246,849	11,526	8,959	0,000	42,474	8,414	18,160	2022-04-27 11:30
91,500	48,509	51,895	63,599	0,238	0,236	3007,737	3162,684	278,549	11,394	9,162	0,001	42,715	8,438	18,160	44678,47986
92,000	48,416	51,929	63,609	0,239	0,235	3042,524	3152,425	307,146	11,359	9,202	0,000	42,575	8,424	18,160	2022-04-27 11:31
92,500	48,302	51,929	63,619	0,236	0,235	3043,046	3156,793	285,514	11,454	9,134	0,000	42,384	8,405	18,160	44678,48056
93,000	48,257	51,957	63,643	0,239	0,235	3098,979	3153,364	170,419	11,429	9,124	0,000	41,826	8,349	18,160	2022-04-27 11:32
93,500	48,369	51,850	63,625	0,239	0,235	3052,423	3175,863	111,822	11,326	9,188	0,000	42,025	8,369	18,160	44678,48125
94,000	48,479	51,768	63,646	0,239	0,235	3028,416	3205,137	131,009	11,122	9,411	0,000	41,782	8,345	18,160	2022-04-27 11:33
94,500	48,473	51,863	63,673	0,238	0,235	3029,262	3187,094	146,743	11,257	9,345	0,000	42,289	8,395	18,160	44678,48194
95,000	48,409	52,020	63,677	0,238	0,235	3054,445	3145,965	188,475	11,330	9,257	0,000	42,133	8,380	18,066	2022-04-27 11:34
95,500	48,334	52,198	63,677	0,238	0,235	3071,885	3098,946	180,841	11,284	9,268	-0,001	42,278	8,394	18,066	44678,48264
96,000	48,292	51,930	63,705	0,238	0,235	3086,597	3179,792	204,324	11,393	9,197	0,000	42,001	8,367	18,066	2022-04-27 11:35
96,500	48,360	51,823	63,706	0,238	0,236	3066,732	3209,943	235,329	11,327	9,232	0,001	42,191	8,386	18,066	44678,48333
97,000	48,460	51,888	63,707	0,239	0,235	3054,402	3188,002	263,864	11,042	9,483	0,000	42,472	8,414	18,066	2022-04-27 11:36
97,500	48,469	51,796	63,708	0,237	0,235	3038,872	3214,047	173,823	11,047	9,508	0,000	42,436	8,410	18,066	44678,48403
98,000	48,406	51,843	63,705	0,236	0,235	3048,561	3201,432	131,495	11,204	9,389	0,000	42,056	8,372	18,066	2022-04-27 11:37
98,500	48,335	52,054	63,706	0,238	0,235	3098,602	3143,754	126,916	11,322	9,244	0,001	41,949	8,362	18,066	44678,48472
99,000	48,300	51,941	63,726	0,238	0,235	3100,450	3181,806	143,626	11,458	9,098	0,000	42,513	8,418	18,066	2022-04-27 11:38
99,500	48,398	51,701	63,734	0,239	0,235	3072,915	3249,985	222,583	11,251	9,259	0,000	41,851	8,352	18,066	44678,48542
100,000	48,518	51,809	63,751	0,238	0,235	3027,362	3223,217	314,745	10,917	9,602	-0,001	42,285	8,395	18,066	2022-04-27 11:39
100,500	48,483	51,893	63,751	0,238	0,235	3044,656	3199,260	282,063	10,838	9,709	0,000	41,894	8,356	18,066	44678,48611
101,000	48,371	51,931	63,750	0,237	0,235	3080,367	3191,053	165,331	11,151	9,476	0,000	42,061	8,373	18,066	2022-04-27 11:40
101,500	48,291	51,821	63,741	0,237	0,235	3102,587	3218,503	135,886	11,247	9,331	0,000	42,363	8,403	18,066	44678,48681
102,000	48,303	51,791	63,756	0,239	0,235	3115,467	3229,658	149,887	11,316	9,261	0,001	41,859	8,353	18,066	2022-04-27 11:41
102,500	48,399	51,964	63,760	0,238	0,235	3079,435	3182,978	144,764	11,249	9,302	0,000	42,405	8,407	18,066	44678,4875
103,000	48,507	51,859	63,756	0,238	0,235	3041,044	3213,326	130,342	11,106	9,431	0,000	41,571	8,324	17,972	2022-04-27 11:42

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
103,500	0,247	0,644	1,051	0,000	0,000	0,314	0,688	45,675	21,368	20,426	20,373	20,322	20,383	20,602	20,921	59,670
104,000	0,249	0,651	1,051	0,000	0,000	0,310	0,688	45,720	21,352	20,425	20,366	20,320	20,379	20,599	20,922	59,682
104,500	0,260	0,648	1,055	0,000	0,000	0,314	0,688	45,581	21,241	20,325	20,277	20,233	20,293	20,520	20,832	59,669
105,000	0,267	0,645	1,050	0,000	0,000	0,314	0,687	45,734	21,292	20,417	20,358	20,320	20,384	20,613	20,922	59,661
105,500	0,263	0,647	1,054	0,000	0,000	0,311	0,687	45,742	21,272	20,401	20,342	20,310	20,365	20,599	20,904	59,665
106,000	0,251	0,649	1,052	0,000	0,000	0,313	0,688	45,680	21,245	20,363	20,308	20,272	20,322	20,568	20,866	59,662
106,500	0,257	0,640	1,048	0,000	0,000	0,321	0,688	45,514	21,332	20,408	20,355	20,317	20,374	20,611	20,910	59,704
107,000	0,258	0,635	1,041	0,000	0,000	0,323	0,688	45,401	21,360	20,331	20,278	20,241	20,292	20,527	20,829	59,729
107,500	0,264	0,636	1,045	0,000	0,000	0,323	0,687	45,399	21,347	20,347	20,291	20,257	20,322	20,548	20,852	59,731
108,000	0,275	0,636	1,051	0,000	0,000	0,321	0,688	45,390	21,342	20,387	20,324	20,301	20,362	20,591	20,893	59,714
108,500	0,281	0,634	1,050	0,000	0,000	0,325	0,687	45,331	21,179	20,376	20,330	20,295	20,361	20,593	20,888	59,703
109,000	0,277	0,630	1,043	0,000	0,000	0,328	0,687	45,295	21,134	20,415	20,369	20,333	20,395	20,633	20,925	59,695
109,500	0,282	0,629	1,043	0,000	0,000	0,327	0,688	45,311	21,271	20,418	20,368	20,334	20,399	20,633	20,925	59,698
110,000	0,291	0,638	1,047	0,000	0,000	0,319	0,686	45,312	21,278	20,407	20,354	20,323	20,392	20,618	20,910	59,717
110,500	0,291	0,645	1,051	0,000	0,000	0,315	0,686	45,306	21,242	20,379	20,326	20,291	20,353	20,595	20,878	59,726
111,000	0,304	0,646	1,047	0,000	0,000	0,315	0,687	45,314	21,282	20,404	20,358	20,319	20,380	20,632	20,903	59,705
111,500	0,334	0,636	1,050	0,000	0,000	0,324	0,686	45,339	21,368	20,475	20,426	20,385	20,459	20,700	20,974	59,711
112,000	0,356	0,622	1,053	0,000	0,000	0,335	0,686	45,265	21,294	20,449	20,403	20,365	20,421	20,680	20,945	59,687
112,500	0,328	0,616	1,055	0,000	0,000	0,338	0,686	45,154	21,296	20,437	20,390	20,338	20,413	20,657	20,927	59,672
113,000	0,313	0,621	1,056	0,000	0,000	0,334	0,685	45,124	21,253	20,426	20,374	20,320	20,391	20,653	20,906	59,678
113,500	0,331	0,623	1,053	0,000	0,000	0,332	0,686	45,063	21,213	20,352	20,311	20,254	20,316	20,581	20,836	59,680
114,000	0,334	0,633	1,052	0,000	0,000	0,322	0,686	45,215	21,398	20,451	20,409	20,356	20,427	20,687	20,935	59,676
114,500	0,323	0,641	1,046	0,000	0,000	0,319	0,686	45,233	21,477	20,471	20,425	20,378	20,437	20,703	20,950	59,675
115,000	0,341	0,631	1,050	0,000	0,000	0,328	0,686	45,284	21,578	20,489	20,437	20,379	20,451	20,716	20,954	59,676
115,500	0,319	0,629	1,052	0,000	0,000	0,328	0,686	45,297	21,612	20,495	20,444	20,396	20,458	20,724	20,964	59,641
116,000	0,291	0,627	1,050	0,000	0,000	0,329	0,686	45,287	21,561	20,447	20,401	20,340	20,402	20,680	20,915	59,623
116,500	0,285	0,629	1,047	0,000	0,000	0,328	0,685	45,369	21,627	20,547	20,491	20,435	20,507	20,781	21,010	59,621
117,000	0,287	0,629	1,058	0,000	0,000	0,328	0,686	45,263	21,456	20,434	20,395	20,324	20,396	20,689	20,901	59,638
117,500	0,286	0,625	1,050	0,000	0,000	0,331	0,686	45,204	21,442	20,458	20,410	20,347	20,417	20,699	20,914	59,644

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
103,500	48,503	51,968	63,765	0,237	0,235	3044,350	3183,295	118,437	11,170	9,416	0,000	42,224	8,389	17,972	44678,48819
104,000	48,427	52,078	63,765	0,238	0,235	3072,640	3153,705	132,006	11,280	9,307	0,000	41,783	8,345	17,972	2022-04-27 11:43
104,500	48,328	52,180	63,781	0,240	0,235	3124,493	3130,288	159,359	11,126	9,408	0,000	42,436	8,410	17,972	44678,48889
105,000	48,292	51,937	63,776	0,238	0,236	3101,523	3198,051	178,562	11,151	9,415	0,001	42,297	8,396	17,847	2022-04-27 11:44
105,500	48,342	51,864	63,789	0,238	0,235	3096,924	3219,023	144,237	11,235	9,336	0,000	42,134	8,380	17,847	44678,48958
106,000	48,450	51,960	63,803	0,237	0,235	3045,390	3196,123	130,596	11,182	9,387	0,000	42,150	8,382	17,972	2022-04-27 11:45
106,500	48,505	52,016	63,802	0,236	0,235	3040,877	3181,027	148,459	10,921	9,625	-0,001	42,033	8,370	17,972	44678,49028
107,000	48,452	52,117	63,794	0,238	0,235	3076,602	3152,213	148,618	10,886	9,693	0,001	41,888	8,355	17,972	2022-04-27 11:46
107,500	48,376	52,377	63,791	0,238	0,235	3098,261	3081,447	175,777	10,873	9,678	0,000	41,643	8,331	17,847	44678,49097
108,000	48,305	52,286	63,809	0,237	0,235	3100,576	3109,629	201,471	10,927	9,635	0,001	42,155	8,382	17,972	2022-04-27 11:47
108,500	48,304	52,119	63,808	0,237	0,235	3105,054	3152,007	202,923	10,814	9,742	0,000	41,940	8,361	17,847	44678,49167
109,000	48,406	52,115	63,799	0,238	0,235	3082,460	3155,080	193,003	10,721	9,849	0,000	41,490	8,316	17,972	2022-04-27 11:48
109,500	48,510	52,094	63,800	0,238	0,235	3057,922	3159,829	218,664	10,765	9,818	0,000	41,872	8,354	17,972	44678,49236
110,000	48,483	52,083	63,797	0,236	0,235	3050,377	3162,827	231,139	11,056	9,572	0,000	41,899	8,357	17,972	2022-04-27 11:49
110,500	48,405	52,036	63,795	0,239	0,235	3105,750	3172,600	240,806	11,110	9,448	0,000	42,293	8,396	17,847	44678,49306
111,000	48,326	52,098	63,774	0,237	0,235	3100,879	3148,689	281,796	11,157	9,438	0,002	41,917	8,358	17,847	2022-04-27 11:50
111,500	48,284	52,065	63,774	0,238	0,235	3125,875	3160,597	375,725	10,758	9,725	0,000	41,992	8,366	17,847	44678,49375
112,000	48,325	51,951	63,772	0,238	0,235	3100,400	3188,366	388,193	10,444	10,056	-0,001	42,042	8,371	17,847	2022-04-27 11:51
112,500	48,433	52,111	63,762	0,237	0,235	3063,733	3143,009	286,445	10,403	10,137	0,000	42,095	8,376	17,847	44678,49444
113,000	48,509	52,088	63,770	0,239	0,235	3066,877	3150,913	300,047	10,551	10,026	0,000	42,193	8,386	17,847	2022-04-27 11:52
113,500	48,473	52,116	63,761	0,238	0,235	3064,477	3140,105	341,130	10,616	9,950	0,000	41,915	8,358	17,847	44678,49514
114,000	48,389	52,154	63,752	0,239	0,235	3094,621	3127,121	324,771	10,935	9,672	0,000	41,906	8,357	17,847	2022-04-27 11:53
114,500	48,307	52,252	63,730	0,237	0,235	3098,276	3096,875	326,509	10,980	9,568	0,000	41,976	8,364	17,847	44678,49583
115,000	48,308	51,836	63,718	0,238	0,235	3103,722	3205,154	348,537	10,738	9,833	0,001	41,996	8,366	17,847	2022-04-27 11:54
115,500	48,427	51,980	63,705	0,239	0,235	3079,805	3161,290	279,577	10,701	9,848	0,000	42,071	8,374	17,847	44678,49653
116,000	48,508	52,163	63,685	0,240	0,235	3059,645	3105,778	219,684	10,702	9,877	0,000	41,947	8,361	17,847	2022-04-27 11:55
116,500	48,455	52,213	63,691	0,239	0,235	3065,291	3094,779	218,627	10,699	9,852	0,001	42,004	8,367	17,754	44678,49722
117,000	48,370	52,203	63,666	0,238	0,235	3075,819	3091,464	220,929	10,730	9,829	0,000	42,301	8,396	17,847	2022-04-27 11:56
117,500	48,298	52,051	63,675	0,237	0,235	3093,537	3136,560	215,708	10,565	9,936	0,000	42,129	8,379	17,847	44678,49792



	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
118,000	0,293	0,620	1,052	0,000	0,000	0,336	0,686	45,229	21,504	20,480	20,452	20,373	20,449	20,733	20,949	59,617
118,500	0,288	0,618	1,050	0,000	0,000	0,337	0,685	45,258	21,524	20,500	20,458	20,386	20,452	20,745	20,954	59,606
119,000	0,267	0,620	1,046	0,000	0,000	0,335	0,686	45,230	21,399	20,460	20,422	20,349	20,416	20,711	20,916	59,595
119,500	0,256	0,621	1,051	0,000	0,000	0,333	0,684	45,337	21,444	20,483	20,442	20,369	20,434	20,723	20,932	59,606
120,000	0,243	0,630	1,049	0,000	0,000	0,325	0,684	45,353	21,433	20,469	20,423	20,346	20,424	20,706	20,918	59,621
120,500	0,235	0,630	1,051	0,000	0,000	0,327	0,684	45,341	21,509	20,531	20,496	20,421	20,481	20,785	20,983	59,614
121,000	0,258	0,620	1,055	0,000	0,000	0,335	0,685	45,259	21,513	20,553	20,524	20,435	20,512	20,815	21,009	59,594
121,500	0,273	0,620	1,053	0,000	0,000	0,334	0,684	45,182	21,442	20,496	20,455	20,385	20,457	20,757	20,945	59,594
122,000	0,289	0,622	1,051	0,000	0,000	0,334	0,684	45,135	21,383	20,431	20,389	20,317	20,400	20,692	20,880	59,633
122,500	0,293	0,622	1,056	0,000	0,000	0,333	0,684	45,258	21,474	20,558	20,520	20,448	20,529	20,831	21,010	59,631
123,000	0,277	0,627	1,052	0,000	0,000	0,328	0,685	45,344	21,552	20,593	20,561	20,486	20,551	20,873	21,045	59,649
123,500	0,270	0,637	1,049	0,000	0,000	0,321	0,684	45,263	21,438	20,520	20,486	20,405	20,482	20,798	20,969	59,633
124,000	0,287	0,628	1,047	0,000	0,000	0,332	0,684	45,079	21,401	20,462	20,444	20,362	20,441	20,751	20,919	59,627
124,500	0,319	0,611	1,046	0,000	0,000	0,344	0,684	44,950	21,575	20,507	20,479	20,387	20,464	20,807	20,952	59,618
125,000	0,320	0,606	1,047	0,000	0,000	0,348	0,684	44,884	21,642	20,525	20,492	20,412	20,479	20,815	20,963	59,641
125,500	0,302	0,610	1,051	0,000	0,000	0,343	0,684	44,980	21,698	20,582	20,549	20,458	20,533	20,875	21,016	59,636
126,000	0,293	0,620	1,047	0,000	0,000	0,335	0,684	45,050	21,596	20,615	20,568	20,476	20,549	20,907	21,038	59,630
126,500	0,291	0,622	1,051	0,000	0,000	0,336	0,684	44,984	21,656	20,626	20,592	20,492	20,577	20,928	21,051	59,629
127,000	0,301	0,612	1,045	0,000	0,000	0,345	0,684	44,839	21,647	20,592	20,550	20,449	20,536	20,894	21,014	59,615
127,500	0,314	0,601	1,042	0,000	0,000	0,353	0,684	44,786	21,484	20,588	20,540	20,449	20,541	20,898	21,013	59,597
128,000	0,295	0,605	1,045	0,000	0,000	0,348	0,684	44,805	21,420	20,531	20,484	20,402	20,482	20,857	20,964	59,619
128,500	0,284	0,613	1,047	0,000	0,000	0,342	0,684	44,892	21,574	20,601	20,555	20,479	20,558	20,924	21,030	59,606
129,000	0,276	0,613	1,046	0,000	0,000	0,343	0,683	44,994	21,670	20,595	20,567	20,476	20,563	20,934	21,030	59,582
129,500	0,268	0,616	1,044	0,000	0,000	0,339	0,683	45,030	21,632	20,572	20,535	20,443	20,522	20,906	20,998	59,567
130,000	0,263	0,615	1,052	0,000	0,000	0,341	0,683	45,035	21,623	20,585	20,531	20,453	20,533	20,921	21,003	59,527
130,500	0,267	0,606	1,044	0,000	0,000	0,350	0,683	45,051	21,689	20,640	20,589	20,486	20,582	20,969	21,051	59,528
131,000	0,263	0,603	1,052	0,000	0,000	0,349	0,683	45,126	21,716	20,659	20,613	20,524	20,609	20,999	21,077	59,520
131,500	0,251	0,609	1,055	0,000	0,000	0,345	0,683	45,140	21,584	20,670	20,629	20,542	20,628	21,016	21,094	59,520
132,000	0,245	0,606	1,048	0,000	0,000	0,348	0,683	45,071	21,510	20,650	20,603	20,514	20,613	21,001	21,072	59,499

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
118,000	48,328	51,863	63,670	0,238	0,235	3089,255	3185,719	248,194	10,476	10,087	0,000	42,017	8,368	17,847	2022-04-27 11:57
118,500	48,452	51,773	63,692	0,237	0,235	3040,748	3213,324	206,381	10,472	10,102	0,000	42,189	8,385	17,754	44678,49861
119,000	48,495	52,227	63,681	0,239	0,235	3047,030	3090,110	162,567	10,492	10,060	0,002	41,681	8,335	17,847	2022-04-27 11:58
119,500	48,432	52,322	63,662	0,239	0,235	3060,941	3054,769	131,543	10,581	9,993	0,000	41,757	8,342	17,754	44678,49931
120,000	48,343	52,316	63,690	0,238	0,235	3076,271	3065,354	99,257	10,816	9,748	0,001	41,868	8,353	17,754	2022-04-27 11:59
120,500	48,296	51,982	63,700	0,238	0,235	3097,303	3156,881	94,609	10,685	9,809	0,000	41,998	8,366	17,754	44678,5
121,000	48,392	52,173	63,709	0,238	0,235	3060,460	3110,031	175,204	10,419	10,064	0,000	42,219	8,388	17,754	2022-04-27 12:00
121,500	48,547	52,215	63,708	0,238	0,235	3013,282	3097,204	187,548	10,573	10,032	0,001	42,003	8,367	17,754	44678,50069
122,000	48,533	52,410	63,714	0,239	0,235	3041,036	3047,095	245,834	10,555	10,013	0,001	42,109	8,377	17,754	2022-04-27 12:01
122,500	48,406	52,420	63,734	0,239	0,235	3075,938	3047,778	223,719	10,591	10,002	0,000	42,282	8,395	17,660	44678,50139
123,000	48,267	52,266	63,741	0,238	0,235	3110,109	3093,010	188,329	10,747	9,848	0,001	42,073	8,374	17,754	2022-04-27 12:02
123,500	48,268	52,160	63,755	0,238	0,235	3109,634	3124,685	176,060	10,956	9,645	0,000	42,002	8,367	17,753	44678,50208
124,000	48,417	52,141	63,730	0,238	0,235	3063,654	3120,833	262,855	10,506	9,961	0,000	41,917	8,358	17,754	2022-04-27 12:03
124,500	48,514	52,201	63,738	0,239	0,235	3047,539	3108,601	308,919	10,206	10,322	0,000	41,944	8,361	17,753	44678,50278
125,000	48,466	52,133	63,735	0,239	0,235	3066,302	3130,669	284,887	10,137	10,426	0,001	41,498	8,316	17,754	2022-04-27 12:04
125,500	48,361	52,119	63,711	0,240	0,235	3106,514	3126,260	249,929	10,325	10,298	0,001	42,267	8,393	17,754	44678,50347
126,000	48,281	52,347	63,690	0,238	0,235	3102,697	3055,561	231,257	10,587	10,061	0,002	41,930	8,360	17,754	2022-04-27 12:05
126,500	48,339	51,981	63,706	0,238	0,235	3088,007	3158,959	229,232	10,466	10,082	0,000	42,061	8,373	17,754	44678,50417
127,000	48,445	52,121	63,682	0,238	0,235	3059,552	3114,753	274,813	10,193	10,351	-0,001	41,837	8,350	17,660	2022-04-27 12:06
127,500	48,499	52,224	63,664	0,238	0,235	3030,833	3085,412	268,860	10,031	10,584	0,000	41,561	8,323	17,754	44678,50486
128,000	48,462	52,220	63,634	0,239	0,235	3056,076	3076,776	226,480	10,174	10,450	0,000	41,576	8,324	17,753	2022-04-27 12:07
128,500	48,375	52,278	63,599	0,239	0,235	3080,621	3050,747	210,357	10,345	10,261	0,000	42,020	8,369	17,754	44678,50556
129,000	48,305	52,291	63,599	0,238	0,235	3077,916	3047,820	180,578	10,338	10,276	0,000	41,721	8,339	17,660	2022-04-27 12:08
129,500	48,319	52,110	63,576	0,239	0,235	3087,233	3090,090	167,847	10,440	10,181	0,000	41,800	8,347	17,659	44678,50625
130,000	48,441	52,088	63,564	0,238	0,235	3029,461	3092,921	160,628	10,332	10,240	-0,001	41,813	8,348	17,736	2022-04-27 12:09
130,500	48,510	52,092	63,535	0,239	0,235	3029,847	3080,531	183,090	10,017	10,491	0,001	41,470	8,314	17,660	44678,50694
131,000	48,457	51,784	63,540	0,239	0,235	3030,976	3167,758	146,765	10,123	10,474	-0,001	42,218	8,388	17,660	2022-04-27 12:10
131,500	48,369	51,822	63,534	0,238	0,235	3048,512	3154,667	122,555	10,250	10,356	0,001	42,104	8,377	17,660	44678,50764
132,000	48,307	51,755	63,516	0,240	0,235	3086,908	3167,018	112,493	10,119	10,437	0,000	41,971	8,364	17,659	2022-04-27 12:11

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
132,500	0,248	0,603	1,047	0,000	0,000	0,350	0,683	44,944	21,422	20,540	20,497	20,419	20,500	20,900	20,970	59,471
133,000	0,262	0,601	1,038	0,000	0,000	0,352	0,683	44,879	21,499	20,591	20,557	20,470	20,550	20,953	21,021	59,472
133,500	0,281	0,592	1,049	0,000	0,000	0,360	0,683	44,724	21,447	20,537	20,495	20,413	20,503	20,896	20,963	59,468
134,000	0,290	0,589	1,042	0,000	0,000	0,362	0,683	44,828	21,576	20,684	20,651	20,566	20,650	21,055	21,113	59,481
134,500	0,290	0,590	1,051	0,000	0,000	0,360	0,683	44,875	21,498	20,640	20,603	20,504	20,607	20,995	21,061	59,486
135,000	0,277	0,595	1,049	0,000	0,000	0,357	0,683	44,939	21,462	20,656	20,621	20,530	20,616	21,017	21,080	59,454
135,500	0,267	0,598	1,045	0,000	0,000	0,354	0,682	44,860	21,410	20,575	20,542	20,448	20,546	20,937	21,001	59,425
136,000	0,265	0,595	1,052	0,000	0,000	0,357	0,683	44,760	21,539	20,660	20,628	20,533	20,628	21,021	21,081	59,413
136,500	0,273	0,584	1,051	0,000	0,000	0,367	0,683	44,535	21,480	20,595	20,561	20,459	20,556	20,955	21,011	59,420
137,000	0,285	0,576	1,047	0,000	0,000	0,372	0,683	44,556	21,649	20,691	20,652	20,559	20,637	21,058	21,105	59,411
137,500	0,290	0,577	1,046	0,000	0,000	0,371	0,683	44,492	21,602	20,664	20,639	20,529	20,624	21,034	21,076	59,394
138,000	0,287	0,578	1,057	0,000	0,000	0,370	0,682	44,550	21,658	20,691	20,654	20,556	20,640	21,059	21,095	59,366
138,500	0,269	0,587	1,053	0,000	0,000	0,362	0,683	44,683	21,612	20,658	20,622	20,523	20,607	21,034	21,061	59,346
139,000	0,259	0,589	1,045	0,000	0,000	0,361	0,682	44,759	21,671	20,753	20,715	20,613	20,700	21,127	21,155	59,346
139,500	0,255	0,588	1,046	0,000	0,000	0,363	0,681	44,653	21,633	20,719	20,685	20,580	20,660	21,093	21,116	59,341
140,000	0,263	0,577	1,045	0,000	0,000	0,373	0,681	44,501	21,709	20,712	20,680	20,568	20,647	21,088	21,105	59,335
140,500	0,266	0,569	1,049	0,000	0,000	0,378	0,681	44,444	21,698	20,738	20,712	20,577	20,675	21,110	21,123	59,323
141,000	0,260	0,570	1,044	0,000	0,000	0,377	0,681	44,574	21,715	20,784	20,770	20,631	20,730	21,169	21,176	59,318
141,500	0,245	0,581	1,043	0,000	0,000	0,367	0,681	44,610	21,663	20,729	20,708	20,577	20,666	21,111	21,118	59,287
142,000	0,241	0,582	1,042	0,000	0,000	0,368	0,681	44,574	21,718	20,723	20,688	20,564	20,655	21,100	21,103	59,246
142,500	0,247	0,580	1,042	0,000	0,000	0,369	0,681	44,592	21,773	20,719	20,689	20,559	20,656	21,103	21,104	59,206
143,000	0,248	0,576	1,047	0,000	0,000	0,372	0,681	44,488	21,612	20,624	20,596	20,477	20,568	21,016	21,013	59,209
143,500	0,246	0,571	1,045	0,000	0,000	0,378	0,681	44,502	21,491	20,722	20,693	20,579	20,666	21,119	21,112	59,218
144,000	0,245	0,567	1,054	0,000	0,000	0,381	0,681	44,370	21,376	20,662	20,627	20,508	20,601	21,052	21,047	59,190
144,500	0,245	0,565	1,051	0,000	0,000	0,384	0,681	44,257	21,421	20,628	20,597	20,483	20,572	21,027	21,019	59,154
145,000	0,247	0,562	1,046	0,000	0,000	0,385	0,681	44,329	21,665	20,720	20,691	20,561	20,660	21,122	21,108	59,142
145,500	0,245	0,562	1,047	0,000	0,000	0,384	0,681	44,226	21,657	20,644	20,611	20,497	20,580	21,056	21,034	59,142
146,000	0,250	0,559	1,047	0,000	0,000	0,388	0,681	44,207	21,804	20,753	20,726	20,621	20,714	21,182	21,153	59,138
146,500	0,258	0,553	1,051	0,000	0,000	0,393	0,681	43,907	21,673	20,597	20,555	20,438	20,530	21,013	20,975	59,128

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
132,500	48,336	51,717	63,491	0,238	0,235	3044,993	3172,003	131,186	10,053	10,499	0,000	41,841	8,351	17,660	44678,50833
133,000	48,462	51,724	63,490	0,238	0,235	3014,623	3169,405	174,074	9,951	10,569	-0,001	41,373	8,304	17,659	2022-04-27 12:12
133,500	48,511	52,137	63,473	0,238	0,235	2995,464	3056,524	216,406	9,745	10,804	0,002	42,186	8,385	17,659	44678,50903
134,000	48,442	51,948	63,450	0,238	0,235	3015,019	3100,089	234,772	9,734	10,855	0,000	41,745	8,341	17,659	2022-04-27 12:13
134,500	48,340	51,924	63,425	0,238	0,235	3049,212	3102,489	218,970	9,783	10,811	-0,001	41,984	8,365	17,660	44678,50972
135,000	48,296	51,790	63,421	0,238	0,235	3052,350	3134,787	185,401	9,884	10,698	0,000	41,730	8,340	17,659	2022-04-27 12:14
135,500	48,380	51,751	63,414	0,238	0,235	3022,763	3143,413	167,000	9,969	10,608	0,000	41,647	8,331	17,566	44678,51042
136,000	48,483	52,023	63,393	0,238	0,235	2984,763	3065,552	168,593	9,790	10,714	0,000	42,165	8,383	17,659	2022-04-27 12:15
136,500	48,479	52,305	63,364	0,239	0,235	3000,653	2980,537	203,621	9,509	10,998	0,000	42,059	8,372	17,659	44678,51111
137,000	48,417	52,110	63,351	0,238	0,235	3006,210	3029,886	217,990	9,401	11,169	0,000	41,764	8,343	17,660	2022-04-27 12:16
137,500	48,350	52,085	63,353	0,239	0,235	3036,263	3036,896	231,221	9,443	11,144	0,001	41,412	8,308	17,660	44678,51181
138,000	48,310	51,931	63,331	0,239	0,235	3040,111	3071,597	206,751	9,456	11,105	0,000	42,440	8,410	17,566	2022-04-27 12:17
138,500	48,348	51,874	63,297	0,237	0,235	2996,605	3076,249	163,342	9,744	10,873	0,000	42,189	8,385	17,659	44678,5125
139,000	48,431	51,631	63,295	0,237	0,235	2967,054	3145,328	145,197	9,701	10,831	0,000	41,878	8,354	17,659	2022-04-27 12:18
139,500	48,496	51,933	63,287	0,239	0,235	2971,670	3059,655	143,334	9,649	10,879	0,000	41,979	8,364	17,644	44678,51319
140,000	48,470	51,895	63,258	0,239	0,235	2983,261	3063,698	169,341	9,293	11,197	0,000	41,997	8,366	17,566	2022-04-27 12:19
140,500	48,406	51,880	63,257	0,238	0,235	2985,234	3069,115	163,897	9,219	11,337	-0,001	41,934	8,360	17,566	44678,51389
141,000	48,337	52,127	63,220	0,239	0,235	3017,558	2990,445	143,916	9,297	11,296	0,000	41,786	8,345	17,566	2022-04-27 12:20
141,500	48,307	52,142	63,211	0,239	0,235	3012,141	2980,627	106,785	9,598	11,019	0,000	41,846	8,351	17,566	44678,51458
142,000	48,400	52,082	63,193	0,240	0,235	2992,415	2992,709	109,795	9,528	11,037	0,001	41,596	8,326	17,566	2022-04-27 12:21
142,500	48,502	52,327	63,203	0,241	0,235	2963,499	2930,173	124,558	9,498	11,076	0,000	41,730	8,340	17,566	44678,51528
143,000	48,491	52,098	63,194	0,240	0,235	2958,412	2991,930	121,370	9,373	11,161	0,000	41,748	8,342	17,566	2022-04-27 12:22
143,500	48,424	52,203	63,178	0,241	0,235	2981,517	2958,703	118,016	9,185	11,349	0,000	41,820	8,349	17,566	44678,51597
144,000	48,344	52,222	63,162	0,242	0,235	3019,897	2945,761	113,653	9,186	11,417	0,001	42,135	8,380	17,566	2022-04-27 12:23
144,500	48,321	52,084	63,151	0,241	0,235	2994,919	2982,840	118,680	9,069	11,507	0,000	41,938	8,360	17,566	44678,51667
145,000	48,381	51,768	63,123	0,241	0,235	2977,372	3063,680	118,771	9,073	11,539	0,000	41,795	8,346	17,566	2022-04-27 12:24
145,500	48,461	51,868	63,106	0,241	0,235	2956,620	3027,949	114,332	9,056	11,528	0,000	42,026	8,369	17,566	44678,51736
146,000	48,489	51,789	63,101	0,242	0,235	2956,315	3050,114	139,135	8,909	11,632	0,000	41,793	8,346	17,566	2022-04-27 12:25
146,500	48,450	52,164	63,081	0,241	0,235	2958,693	2941,381	142,546	8,832	11,776	-0,001	41,906	8,357	17,566	44678,51806

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
147,000	0,252	0,552	1,052	0,000	0,000	0,393	0,680	44,084	21,823	20,703	20,675	20,552	20,652	21,127	21,089	59,114
147,500	0,243	0,555	1,054	0,000	0,000	0,390	0,680	44,181	21,817	20,771	20,743	20,620	20,717	21,189	21,157	59,112
148,000	0,240	0,557	1,046	0,000	0,000	0,388	0,681	44,088	21,655	20,698	20,659	20,535	20,621	21,103	21,071	59,095
148,500	0,241	0,556	1,050	0,000	0,000	0,390	0,680	43,997	21,608	20,660	20,616	20,503	20,590	21,072	21,034	59,060
149,000	0,240	0,555	1,045	0,000	0,000	0,390	0,681	43,995	21,621	20,732	20,689	20,566	20,659	21,145	21,106	59,062
149,500	0,240	0,551	1,044	0,000	0,000	0,394	0,680	44,008	21,789	20,806	20,769	20,639	20,728	21,210	21,171	59,079
150,000	0,241	0,550	1,045	0,000	0,000	0,394	0,680	44,047	21,752	20,792	20,760	20,608	20,701	21,182	21,141	59,064
150,500	0,238	0,553	1,040	0,000	0,000	0,392	0,680	44,118	21,842	20,858	20,823	20,651	20,752	21,237	21,194	59,052
151,000	0,235	0,559	1,043	0,000	0,000	0,388	0,680	44,009	21,660	20,731	20,691	20,516	20,619	21,100	21,053	59,038
151,500	0,236	0,559	1,045	0,000	0,000	0,388	0,680	44,052	21,661	20,784	20,747	20,562	20,662	21,146	21,103	59,015
152,000	0,248	0,553	1,047	0,000	0,000	0,394	0,680	43,958	21,602	20,833	20,803	20,619	20,717	21,200	21,154	59,016
152,500	0,264	0,546	1,052	0,000	0,000	0,399	0,680	43,875	21,646	20,987	20,906	20,641	20,713	21,221	21,179	59,024
153,000	0,277	0,541	1,046	0,000	0,000	0,402	0,680	43,796	21,710	21,073	20,955	20,660	20,700	21,238	21,195	59,025
153,500	0,267	0,547	1,049	0,000	0,000	0,397	0,680	43,742	21,659	21,011	20,886	20,588	20,621	21,162	21,122	59,016
154,000	0,258	0,549	1,054	0,000	0,000	0,396	0,680	43,653	21,368	20,890	20,769	20,461	20,511	21,046	21,004	58,995
154,500	0,255	0,549	1,047	0,000	0,000	0,396	0,681	43,937	21,528	21,102	20,981	20,687	20,730	21,269	21,224	58,958
155,000	0,251	0,548	1,043	0,000	0,000	0,397	0,678	43,872	21,578	21,044	20,917	20,612	20,648	21,193	21,142	58,950
155,500	0,248	0,545	1,050	0,000	0,000	0,398	0,679	43,786	21,536	21,022	20,906	20,586	20,629	21,173	21,122	58,961
156,000	0,248	0,545	1,050	0,000	0,000	0,400	0,679	43,685	21,643	21,078	20,957	20,639	20,679	21,215	21,168	58,961
156,500	0,252	0,546	1,050	0,000	0,000	0,398	0,680	43,681	21,607	21,016	20,903	20,578	20,608	21,143	21,093	58,923
157,000	0,251	0,549	1,052	0,000	0,000	0,397	0,680	43,809	21,516	21,025	20,902	20,571	20,602	21,130	21,089	58,898
157,500	0,254	0,550	1,048	0,000	0,000	0,395	0,679	44,102	21,629	21,165	21,059	20,703	20,752	21,275	21,231	58,916
158,000	0,243	0,560	1,048	0,000	0,000	0,386	0,680	44,176	21,664	21,119	21,018	20,663	20,688	21,218	21,178	58,932
158,500	0,236	0,565	1,053	0,000	0,000	0,382	0,680	44,213	21,522	21,106	21,012	20,658	20,691	21,221	21,179	58,917
159,000	0,237	0,566	1,049	0,000	0,000	0,383	0,679	44,351	21,400	21,132	21,040	20,696	20,742	21,267	21,218	58,895
159,500	0,244	0,574	1,054	0,000	0,000	0,367	0,678	44,816	21,494	21,153	21,061	20,715	20,753	21,273	21,236	58,864
160,000	0,239	0,639	1,047	0,000	0,000	0,310	0,680	45,689	21,550	21,188	21,091	20,749	20,793	21,310	21,267	58,852
160,500	0,247	0,677	1,048	0,000	0,000	0,287	0,678	45,993	21,446	21,085	20,995	20,656	20,687	21,210	21,171	58,869
161,000	0,252	0,679	1,049	0,000	0,000	0,288	0,678	46,202	21,413	21,037	20,940	20,604	20,644	21,154	21,118	58,871

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
147,000	48,371	52,005	63,079	0,241	0,235	2974,632	2986,179	126,843	8,802	11,799	0,000	42,085	8,375	17,472	2022-04-27 12:26
147,500	48,312	52,297	63,059	0,240	0,235	2974,215	2899,733	105,136	8,924	11,688	0,000	42,202	8,387	17,472	44678,51875
148,000	48,371	51,981	63,063	0,242	0,235	2975,612	2986,098	104,343	8,932	11,652	0,001	41,822	8,349	17,472	2022-04-27 12:27
148,500	48,466	52,206	63,038	0,242	0,235	2945,762	2918,639	106,031	8,866	11,686	0,000	41,878	8,354	17,472	44678,51944
149,000	48,489	52,155	63,011	0,241	0,235	2923,058	2925,241	101,077	8,861	11,707	0,000	41,780	8,345	17,566	2022-04-27 12:28
149,500	48,444	52,175	62,984	0,241	0,235	2938,694	2912,031	106,703	8,734	11,829	0,000	41,717	8,338	17,472	44678,52014
150,000	48,387	51,999	62,994	0,240	0,235	2944,363	2962,208	101,813	8,771	11,826	0,001	41,638	8,330	17,472	2022-04-27 12:29
150,500	48,329	52,033	62,998	0,240	0,235	2950,564	2956,660	95,957	8,841	11,764	-0,001	41,665	8,333	17,472	44678,52083
151,000	48,353	52,251	62,977	0,241	0,235	2955,636	2890,041	89,474	8,997	11,632	0,000	41,707	8,337	17,472	2022-04-27 12:30
151,500	48,496	52,082	62,957	0,241	0,235	2906,969	2929,188	100,476	8,950	11,641	0,000	41,757	8,342	17,472	44678,52153
152,000	48,550	51,812	62,962	0,241	0,235	2893,681	3005,517	137,927	8,745	11,811	0,001	41,788	8,345	17,472	2022-04-27 12:31
152,500	48,463	51,523	62,932	0,242	0,235	2933,685	3073,764	176,126	8,598	11,978	0,000	42,271	8,394	17,472	44678,52222
153,000	48,321	51,994	62,930	0,241	0,235	2957,090	2946,470	196,558	8,539	12,051	0,001	41,497	8,316	17,472	2022-04-27 12:32
153,500	48,258	51,761	62,891	0,240	0,235	2966,061	2999,914	162,806	8,706	11,913	0,000	41,968	8,363	17,472	44678,52292
154,000	48,373	51,868	62,888	0,240	0,235	2928,602	2967,670	142,851	8,725	11,885	0,002	42,349	8,401	17,472	2022-04-27 12:33
154,500	48,498	51,575	62,869	0,241	0,235	2893,817	3040,902	137,296	8,727	11,874	0,000	41,887	8,355	17,566	44678,52361
155,000	48,501	52,021	62,838	0,241	0,235	2888,042	2914,509	126,494	8,663	11,910	0,000	41,948	8,361	17,349	2022-04-27 12:34
155,500	48,414	52,122	62,847	0,240	0,235	2910,672	2890,262	120,620	8,644	11,947	-0,001	41,846	8,351	17,566	44678,52431
156,000	48,323	52,001	62,823	0,241	0,235	2948,204	2916,024	129,337	8,606	12,012	0,000	42,418	8,408	17,472	2022-04-27 12:35
156,500	48,347	51,824	62,821	0,241	0,235	2931,795	2964,779	131,358	8,697	11,954	0,000	42,131	8,380	17,472	44678,525
157,000	48,464	51,699	62,804	0,240	0,235	2876,518	2989,720	130,922	8,748	11,897	0,000	41,791	8,346	17,472	2022-04-27 12:36
157,500	48,505	51,716	62,786	0,241	0,235	2876,102	2980,862	137,684	8,770	11,840	0,000	41,937	8,360	17,472	44678,52569
158,000	48,443	51,940	62,757	0,241	0,235	2900,663	2915,055	103,190	9,066	11,576	0,000	41,901	8,357	17,472	2022-04-27 12:37
158,500	48,325	51,947	62,753	0,240	0,235	2920,629	2913,312	90,767	9,155	11,470	0,000	42,117	8,378	17,472	44678,52639
159,000	48,306	51,939	62,742	0,241	0,235	2929,682	2911,575	97,816	9,137	11,478	0,000	41,854	8,352	17,472	2022-04-27 12:38
159,500	48,390	52,242	62,736	0,240	0,235	2889,035	2828,521	119,863	9,756	10,998	0,000	42,276	8,394	17,349	44678,52708
160,000	48,466	51,928	62,734	0,242	0,235	2884,282	2911,741	94,620	11,519	9,313	0,000	41,976	8,364	17,472	2022-04-27 12:39
160,500	48,472	51,919	62,735	0,239	0,235	2858,970	2916,511	128,763	12,016	8,597	0,001	42,006	8,367	17,349	44678,52778
161,000	48,415	51,927	62,754	0,241	0,235	2896,022	2918,365	145,063	11,938	8,626	0,000	42,048	8,371	17,472	2022-04-27 12:40

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
161,500	0,267	0,677	1,046	0,000	0,000	0,289	0,678	46,476	21,465	21,102	21,013	20,686	20,718	21,227	21,188	58,851
162,000	0,267	0,681	1,052	0,000	0,000	0,286	0,678	46,728	21,556	21,114	21,015	20,687	20,724	21,242	21,193	58,854
162,500	0,258	0,671	1,052	0,000	0,000	0,297	0,678	46,699	21,549	21,060	20,963	20,618	20,652	21,174	21,125	58,849
163,000	0,250	0,651	1,046	0,000	0,000	0,310	0,678	46,786	21,692	21,147	21,024	20,678	20,720	21,227	21,181	58,864
163,500	0,247	0,635	1,045	0,000	0,000	0,325	0,678	46,674	21,828	21,212	21,095	20,733	20,766	21,279	21,233	58,890
164,000	0,246	0,604	1,050	0,000	0,000	0,351	0,678	46,295	21,790	21,200	21,092	20,714	20,761	21,265	21,217	58,895
164,500	0,237	0,591	1,046	0,000	0,000	0,359	0,677	46,182	21,635	21,292	21,185	20,820	20,854	21,352	21,313	58,945
165,000	0,236	0,583	1,051	0,000	0,000	0,367	0,677	45,906	21,399	21,201	21,105	20,749	20,789	21,287	21,245	58,956
165,500	0,240	0,576	1,055	0,000	0,000	0,372	0,678	45,723	21,453	21,222	21,128	20,769	20,813	21,309	21,271	58,959
166,000	0,240	0,573	1,054	0,000	0,000	0,375	0,677	45,515	21,500	21,182	21,077	20,724	20,768	21,271	21,227	58,954
166,500	0,238	0,568	1,048	0,000	0,000	0,379	0,677	45,438	21,442	21,235	21,147	20,798	20,851	21,349	21,301	58,978
167,000	0,242	0,562	1,051	0,000	0,000	0,385	0,677	45,181	21,426	21,141	21,030	20,694	20,745	21,244	21,202	59,007
167,500	0,244	0,560	1,049	0,000	0,000	0,385	0,677	45,199	21,413	21,206	21,104	20,771	20,812	21,305	21,272	59,020
168,000	0,241	0,561	1,045	0,000	0,000	0,384	0,676	45,013	21,345	21,063	20,951	20,628	20,679	21,150	21,124	59,016
168,500	0,238	0,561	1,043	0,000	0,000	0,383	0,676	45,131	21,496	21,192	21,090	20,759	20,807	21,296	21,262	59,009
169,000	0,235	0,565	1,050	0,000	0,000	0,380	0,676	45,165	21,423	21,216	21,116	20,792	20,835	21,320	21,295	59,017
169,500	0,234	0,569	1,048	0,000	0,000	0,375	0,676	45,123	21,369	21,158	21,059	20,750	20,797	21,278	21,250	59,001
170,000	0,234	0,570	1,047	0,000	0,000	0,377	0,677	44,970	21,262	21,075	20,981	20,673	20,718	21,194	21,173	58,985
170,500	0,242	0,562	1,048	0,000	0,000	0,383	0,676	44,965	21,339	21,136	21,044	20,724	20,783	21,253	21,236	58,991
171,000	0,239	0,563	1,055	0,000	0,000	0,383	0,676	44,989	21,259	21,176	21,073	20,778	20,829	21,295	21,279	59,002
171,500	0,237	0,563	1,051	0,000	0,000	0,382	0,676	45,024	21,390	21,195	21,101	20,802	20,859	21,324	21,311	59,025
172,000	0,236	0,571	1,057	0,000	0,000	0,375	0,676	45,076	21,290	21,168	21,073	20,797	20,838	21,300	21,293	59,038
172,500	0,238	0,574	1,054	0,000	0,000	0,374	0,676	44,938	21,254	21,139	21,044	20,774	20,819	21,282	21,274	59,043
173,000	0,248	0,568	1,052	0,000	0,000	0,379	0,676	44,788	21,351	21,124	21,030	20,768	20,807	21,262	21,261	59,030
173,500	0,270	0,561	1,053	0,000	0,000	0,385	0,676	44,732	21,359	21,144	21,032	20,779	20,822	21,277	21,271	59,000
174,000	0,286	0,557	1,053	0,000	0,000	0,388	0,676	44,697	21,330	21,133	21,039	20,794	20,835	21,287	21,279	58,989
174,500	0,275	0,557	1,049	0,000	0,000	0,387	0,676	44,632	21,298	21,091	20,995	20,735	20,787	21,240	21,235	59,004
175,000	0,260	0,564	1,046	0,000	0,000	0,381	0,676	44,770	21,367	21,190	21,088	20,832	20,869	21,317	21,326	59,023
175,500	0,262	0,569	1,048	0,000	0,000	0,377	0,676	44,733	21,289	21,190	21,096	20,856	20,902	21,339	21,345	59,021

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
161,500	48,336	51,951	62,776	0,241	0,235	2911,470	2917,160	174,548	11,942	8,663	0,000	42,138	8,380	17,349	44678,52847
162,000	48,309	51,857	62,770	0,240	0,235	2909,448	2938,832	167,387	12,019	8,584	0,000	41,986	8,365	17,349	2022-04-27 12:41
162,500	48,391	51,915	62,802	0,241	0,235	2890,314	2933,506	137,066	11,591	8,895	0,000	42,028	8,369	17,382	44678,52917
163,000	48,474	51,744	62,842	0,241	0,235	2869,829	2989,689	122,508	11,161	9,303	0,000	41,789	8,346	17,349	2022-04-27 12:42
163,500	48,473	51,928	62,870	0,242	0,235	2891,055	2947,063	125,820	10,673	9,743	0,000	41,920	8,359	17,349	44678,52986
164,000	48,412	51,923	62,873	0,240	0,235	2894,382	2952,812	111,449	9,868	10,522	0,000	42,233	8,390	17,349	2022-04-27 12:43
164,500	48,329	51,842	62,896	0,240	0,235	2923,595	2980,975	92,265	9,734	10,782	0,000	41,985	8,365	17,349	44678,53056
165,000	48,300	51,867	62,922	0,240	0,235	2931,436	2979,332	96,876	9,500	11,018	0,000	42,079	8,375	17,256	2022-04-27 12:44
165,500	48,388	51,886	62,917	0,241	0,235	2928,668	2974,013	106,015	9,388	11,160	0,001	42,040	8,371	17,349	44678,53125
166,000	48,467	51,928	62,930	0,241	0,235	2902,231	2964,531	101,747	9,274	11,241	0,000	42,397	8,406	17,349	2022-04-27 12:45
166,500	48,478	51,810	62,934	0,240	0,235	2895,696	2998,574	98,052	9,153	11,369	0,001	41,779	8,345	17,256	44678,53194
167,000	48,446	51,903	62,933	0,241	0,235	2918,553	2971,557	112,818	8,985	11,548	0,000	42,043	8,371	17,349	2022-04-27 12:46
167,500	48,415	52,222	62,941	0,240	0,235	2923,249	2888,372	111,470	9,039	11,537	0,002	41,750	8,342	17,256	44678,53264
168,000	48,386	52,225	62,943	0,241	0,235	2936,816	2889,137	102,157	9,043	11,525	0,002	41,767	8,343	17,256	2022-04-27 12:47
168,500	48,367	52,057	62,926	0,240	0,235	2938,758	2930,236	93,381	9,059	11,495	0,000	41,851	8,352	17,256	44678,53333
169,000	48,360	51,841	62,944	0,241	0,235	2946,527	2993,398	91,596	9,139	11,395	0,000	41,873	8,354	17,256	2022-04-27 12:48
169,500	48,359	51,965	62,944	0,241	0,235	2941,331	2960,250	85,241	9,283	11,265	0,000	42,009	8,368	17,256	44678,53403
170,000	48,371	51,993	62,955	0,241	0,235	2941,490	2954,366	92,363	9,203	11,300	0,000	41,590	8,326	17,256	2022-04-27 12:49
170,500	48,422	51,884	62,949	0,241	0,235	2928,886	2984,854	111,649	9,010	11,503	0,000	41,747	8,341	17,256	44678,53472
171,000	48,479	52,116	62,951	0,240	0,235	2902,724	2921,921	96,619	9,086	11,478	0,000	42,120	8,379	17,256	2022-04-27 12:50
171,500	48,471	52,053	62,960	0,240	0,235	2910,711	2941,742	93,702	9,118	11,464	0,000	42,102	8,377	17,256	44678,53542
172,000	48,414	52,153	62,973	0,241	0,235	2937,620	2917,459	94,533	9,357	11,250	0,000	42,212	8,388	17,256	2022-04-27 12:51
172,500	48,362	52,047	62,973	0,239	0,235	2933,857	2945,630	103,016	9,287	11,217	0,000	42,311	8,397	17,255	44678,53611
173,000	48,313	51,972	62,976	0,242	0,235	2973,010	2967,534	137,171	9,133	11,367	0,000	42,139	8,380	17,256	2022-04-27 12:52
173,500	48,347	52,235	62,955	0,242	0,235	2962,077	2891,168	192,835	8,971	11,550	0,001	42,226	8,389	17,162	44678,53681
174,000	48,444	52,152	62,954	0,241	0,235	2923,887	2914,455	220,831	8,888	11,633	0,001	42,111	8,378	17,256	2022-04-27 12:53
174,500	48,488	52,054	62,973	0,241	0,235	2905,518	2942,931	173,860	8,969	11,597	0,000	41,964	8,363	17,255	44678,5375
175,000	48,428	51,887	62,951	0,241	0,235	2927,132	2982,365	148,798	9,163	11,417	0,000	41,463	8,313	17,256	2022-04-27 12:54
175,500	48,326	51,842	62,921	0,241	0,235	2957,400	2989,036	161,890	9,227	11,321	-0,001	41,942	8,361	17,255	44678,53819



	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
176,000	0,267	0,571	1,056	0,000	0,000	0,375	0,676	44,755	21,276	21,187	21,099	20,871	20,906	21,346	21,356	59,009
176,500	0,308	0,573	1,054	0,000	0,000	0,375	0,675	44,645	21,184	21,123	21,036	20,806	20,851	21,284	21,301	58,985
177,000	0,361	0,564	1,056	0,000	0,000	0,383	0,675	44,576	21,205	21,133	21,046	20,821	20,858	21,305	21,315	58,977
177,500	0,334	0,562	1,055	0,000	0,000	0,382	0,675	44,600	21,221	21,187	21,094	20,872	20,916	21,344	21,367	58,974
178,000	0,319	0,568	1,049	0,000	0,000	0,378	0,675	44,667	21,225	21,125	21,049	20,827	20,878	21,298	21,318	58,977
178,500	0,308	0,573	1,045	0,000	0,000	0,373	0,675	44,727	21,230	21,105	21,017	20,810	20,861	21,269	21,304	58,976
179,000	0,277	0,577	1,052	0,000	0,000	0,371	0,674	44,814	21,297	21,167	21,072	20,877	20,921	21,334	21,364	58,946
179,500	0,267	0,570	1,051	0,000	0,000	0,378	0,675	44,745	21,270	21,180	21,089	20,893	20,937	21,347	21,382	58,919
180,000	0,268	0,565	1,050	0,000	0,000	0,380	0,675	44,631	21,149	21,100	21,015	20,825	20,862	21,275	21,314	58,889
180,500	0,275	0,569	1,053	0,000	0,000	0,377	0,675	44,723	21,310	21,171	21,076	20,896	20,945	21,346	21,384	58,880
181,000	0,285	0,571	1,048	0,000	0,000	0,377	0,675	44,742	21,248	21,167	21,083	20,901	20,944	21,340	21,384	58,888
181,500	0,277	0,572	1,050	0,000	0,000	0,375	0,675	44,722	21,212	21,135	21,051	20,872	20,923	21,314	21,363	58,878
182,000	0,265	0,574	1,049	0,000	0,000	0,373	0,674	44,698	21,291	21,087	20,998	20,825	20,875	21,250	21,309	58,845
182,500	0,268	0,570	1,049	0,000	0,000	0,378	0,675	44,712	21,383	21,144	21,050	20,867	20,917	21,301	21,357	58,847
183,000	0,276	0,565	1,047	0,000	0,000	0,384	0,675	44,678	21,421	21,174	21,078	20,903	20,958	21,324	21,389	58,830
183,500	0,286	0,555	1,047	0,000	0,000	0,391	0,675	44,497	21,450	21,124	21,028	20,847	20,896	21,267	21,328	58,820
184,000	0,297	0,551	1,049	0,000	0,000	0,393	0,675	44,453	21,536	21,193	21,093	20,907	20,957	21,333	21,391	58,788
184,500	0,315	0,551	1,041	0,000	0,000	0,393	0,675	44,325	21,397	21,106	20,991	20,810	20,859	21,236	21,298	58,770
185,000	0,315	0,555	1,050	0,000	0,000	0,389	0,674	44,236	21,310	21,127	21,025	20,852	20,907	21,273	21,343	58,779
185,500	0,335	0,552	1,043	0,000	0,000	0,392	0,674	44,188	21,186	21,097	21,000	20,860	20,908	21,269	21,337	58,760
186,000	0,357	0,552	1,046	0,000	0,000	0,391	0,673	44,239	21,353	21,150	21,054	20,905	20,950	21,307	21,383	58,755
186,500	0,347	0,555	1,054	0,000	0,000	0,389	0,674	44,228	21,369	21,107	21,007	20,846	20,900	21,251	21,329	58,760
187,000	0,320	0,559	1,050	0,000	0,000	0,386	0,674	44,221	21,375	21,110	20,994	20,852	20,889	21,251	21,325	58,735
187,500	0,293	0,559	1,044	0,000	0,000	0,386	0,673	44,343	21,440	21,172	21,067	20,913	20,950	21,307	21,388	58,692
188,000	0,283	0,562	1,051	0,000	0,000	0,382	0,673	44,357	21,423	21,175	21,078	20,915	20,968	21,313	21,398	58,686
188,500	0,288	0,561	1,047	0,000	0,000	0,384	0,674	44,373	21,402	21,161	21,051	20,908	20,954	21,303	21,386	58,687
189,000	0,295	0,558	1,051	0,000	0,000	0,388	0,673	44,457	21,409	21,198	21,086	20,944	21,000	21,330	21,422	58,658
189,500	0,291	0,553	1,054	0,000	0,000	0,390	0,673	44,475	21,432	21,210	21,108	20,968	21,016	21,361	21,446	58,650
190,000	0,274	0,562	1,055	0,000	0,000	0,381	0,673	44,443	21,361	21,162	21,053	20,932	20,981	21,311	21,403	58,620

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
176,000	48,295	52,247	62,903	0,240	0,235	2953,706	2874,414	181,479	9,338	11,240	-0,002	42,134	8,380	17,162	2022-04-27 12:55
176,500	48,375	52,000	62,888	0,240	0,235	2926,272	2934,655	342,134	9,261	11,239	-0,001	42,391	8,405	17,255	44678,53889
177,000	48,465	51,876	62,879	0,240	0,235	2902,806	2967,075	413,608	9,006	11,499	0,001	42,126	8,379	17,161	2022-04-27 12:56
177,500	48,458	52,028	62,855	0,241	0,235	2906,351	2919,490	311,118	9,091	11,473	0,000	41,899	8,357	17,162	44678,53958
178,000	48,393	52,055	62,827	0,240	0,235	2914,516	2905,067	303,302	9,239	11,338	0,000	41,996	8,366	17,256	2022-04-27 12:57
178,500	48,332	52,189	62,821	0,240	0,235	2928,738	2866,715	241,843	9,400	11,177	0,000	41,792	8,346	17,162	44678,54028
179,000	48,296	51,990	62,780	0,240	0,235	2930,355	2911,756	176,991	9,419	11,119	0,001	42,135	8,380	17,068	2022-04-27 12:58
179,500	48,365	52,023	62,769	0,242	0,235	2929,338	2898,683	168,847	9,151	11,337	0,002	41,904	8,357	17,256	44678,54097
180,000	48,445	51,836	62,747	0,241	0,235	2892,667	2943,538	179,514	9,164	11,410	0,000	41,709	8,338	17,162	2022-04-27 12:59
180,500	48,451	51,783	62,736	0,240	0,235	2874,919	2953,118	195,919	9,271	11,304	0,001	42,117	8,378	17,162	44678,54167
181,000	48,413	51,905	62,699	0,240	0,235	2885,023	2907,846	217,071	9,272	11,297	0,000	42,039	8,370	17,162	2022-04-27 13:00
181,500	48,409	51,775	62,697	0,241	0,235	2891,693	2944,492	184,388	9,316	11,238	-0,002	42,099	8,376	17,162	44678,54236
182,000	48,428	51,662	62,696	0,240	0,235	2874,154	2977,521	161,473	9,349	11,197	0,000	41,854	8,352	17,068	2022-04-27 13:01
182,500	48,404	51,882	62,670	0,241	0,235	2885,798	2908,094	180,342	9,220	11,327	0,000	42,242	8,391	17,162	44678,54306
183,000	48,341	51,980	62,659	0,240	0,235	2885,412	2881,081	207,178	9,019	11,514	0,002	41,917	8,358	17,162	2022-04-27 13:02
183,500	48,263	51,982	62,643	0,240	0,235	2904,772	2875,320	219,091	8,847	11,721	0,000	41,755	8,342	17,162	44678,54375
184,000	48,308	51,839	62,611	0,240	0,235	2892,480	2903,411	266,874	8,767	11,793	0,000	41,995	8,366	17,162	2022-04-27 13:03
184,500	48,411	51,674	62,611	0,239	0,235	2838,678	2951,344	293,480	8,791	11,781	0,000	42,044	8,371	17,162	44678,54444
185,000	48,472	51,862	62,591	0,241	0,235	2854,825	2890,740	294,774	8,880	11,680	0,000	42,069	8,373	17,162	2022-04-27 13:04
185,500	48,435	51,866	62,561	0,241	0,235	2861,171	2884,687	368,124	8,775	11,772	0,000	41,893	8,356	17,162	44678,54514
186,000	48,351	51,921	62,550	0,239	0,235	2858,509	2865,407	387,888	8,853	11,740	0,001	41,855	8,352	17,068	2022-04-27 13:05
186,500	48,284	51,822	62,513	0,239	0,235	2877,526	2884,754	358,839	8,882	11,677	0,000	42,286	8,395	17,093	44678,54583
187,000	48,317	51,843	62,490	0,241	0,235	2881,508	2872,432	272,902	8,985	11,577	0,000	41,600	8,327	17,068	2022-04-27 13:06
187,500	48,401	52,034	62,446	0,240	0,235	2836,133	2806,446	222,216	8,991	11,571	-0,002	41,721	8,339	17,068	44678,54653
188,000	48,455	51,821	62,441	0,239	0,235	2809,626	2864,326	210,029	9,070	11,472	0,000	41,881	8,355	17,068	2022-04-27 13:07
188,500	48,425	51,801	62,409	0,240	0,235	2833,293	2861,604	233,936	8,968	11,525	0,000	42,187	8,385	17,068	44678,54722
189,000	48,363	51,900	62,399	0,240	0,235	2833,256	2829,278	241,655	8,899	11,635	0,000	41,801	8,347	17,068	2022-04-27 13:08
189,500	48,303	51,967	62,370	0,239	0,235	2844,763	2803,585	217,387	8,834	11,708	0,000	42,237	8,390	17,068	44678,54792
190,000	48,303	51,734	62,353	0,240	0,235	2845,998	2862,571	181,946	9,178	11,440	0,000	42,120	8,379	17,068	2022-04-27 13:09

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
190,500	0,271	0,575	1,044	0,000	0,000	0,372	0,673	44,495	21,369	21,147	21,036	20,909	20,965	21,283	21,386	58,577
191,000	0,272	0,575	1,054	0,000	0,000	0,373	0,673	44,539	21,470	21,169	21,072	20,939	20,993	21,304	21,412	58,564
191,500	0,276	0,569	1,049	0,000	0,000	0,378	0,673	44,448	21,295	21,024	20,915	20,778	20,848	21,157	21,263	58,563
192,000	0,274	0,568	1,048	0,000	0,000	0,378	0,673	44,587	21,325	21,119	21,007	20,891	20,947	21,257	21,366	58,557
192,500	0,267	0,572	1,049	0,000	0,000	0,375	0,673	44,591	21,162	21,055	20,955	20,852	20,905	21,210	21,323	58,541
193,000	0,272	0,577	1,048	0,000	0,000	0,370	0,673	44,717	21,286	21,100	21,000	20,896	20,945	21,259	21,366	58,527
193,500	0,270	0,583	1,050	0,000	0,000	0,364	0,673	44,820	21,333	21,138	21,032	20,928	20,979	21,295	21,401	58,509
194,000	0,266	0,585	1,057	0,000	0,000	0,364	0,673	44,839	21,494	21,191	21,090	20,970	21,023	21,343	21,445	58,499
194,500	0,274	0,575	1,051	0,000	0,000	0,373	0,673	44,734	21,388	21,130	21,023	20,914	20,974	21,274	21,381	58,477
195,000	0,273	0,570	1,044	0,000	0,000	0,377	0,673	44,821	21,436	21,184	21,069	20,965	21,029	21,318	21,434	58,477
195,500	0,262	0,574	1,054	0,000	0,000	0,372	0,672	44,891	21,474	21,174	21,066	20,960	21,022	21,312	21,429	58,494
196,000	0,256	0,584	1,048	0,000	0,000	0,364	0,673	44,901	21,396	21,090	20,976	20,871	20,939	21,222	21,343	58,479
196,500	0,255	0,587	1,052	0,000	0,000	0,363	0,672	44,898	21,348	21,119	21,001	20,911	20,974	21,259	21,377	58,472
197,000	0,256	0,578	1,049	0,000	0,000	0,371	0,672	44,722	21,346	21,105	20,989	20,896	20,949	21,240	21,357	58,444
197,500	0,262	0,567	1,048	0,000	0,000	0,380	0,672	44,691	21,489	21,185	21,068	20,980	21,026	21,315	21,438	58,429
198,000	0,266	0,565	1,047	0,000	0,000	0,381	0,672	44,628	21,453	21,144	21,027	20,931	20,990	21,276	21,397	58,451
198,500	0,267	0,565	1,045	0,000	0,000	0,379	0,672	44,694	21,299	21,142	21,025	20,939	21,005	21,276	21,406	58,448
199,000	0,257	0,583	1,053	0,000	0,000	0,363	0,673	44,735	21,119	21,006	20,911	20,826	20,892	21,168	21,293	58,455
199,500	0,251	0,589	1,045	0,000	0,000	0,360	0,672	44,842	21,313	21,108	20,992	20,912	20,989	21,244	21,383	58,453
200,000	0,257	0,584	1,049	0,000	0,000	0,366	0,672	44,833	21,323	21,125	21,019	20,950	21,009	21,271	21,410	58,447
200,500	0,265	0,574	1,050	0,000	0,000	0,373	0,672	44,780	21,323	21,131	21,033	20,957	21,014	21,277	21,414	58,426
201,000	0,268	0,574	1,053	0,000	0,000	0,373	0,671	44,734	21,278	21,066	20,965	20,889	20,960	21,215	21,354	58,442
201,500	0,267	0,574	1,050	0,000	0,000	0,372	0,672	44,787	21,228	21,065	20,980	20,911	20,970	21,227	21,370	58,448
202,000	0,254	0,584	1,048	0,000	0,000	0,363	0,672	44,835	21,183	21,057	20,965	20,906	20,973	21,221	21,365	58,459
202,500	0,251	0,587	1,053	0,000	0,000	0,363	0,671	44,894	21,330	21,158	21,066	21,011	21,076	21,331	21,468	58,458
203,000	0,263	0,575	1,056	0,000	0,000	0,374	0,672	44,755	21,287	21,097	20,997	20,945	21,016	21,252	21,404	58,448
203,500	0,264	0,571	1,050	0,000	0,000	0,376	0,671	44,832	21,381	21,165	21,054	21,004	21,073	21,308	21,461	58,440
204,000	0,266	0,567	1,050	0,000	0,000	0,379	0,671	44,701	21,254	21,104	21,007	20,965	21,034	21,269	21,421	58,436
204,500	0,263	0,566	1,042	0,000	0,000	0,380	0,670	44,738	21,475	21,186	21,082	21,035	21,109	21,333	21,495	58,464

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
190,500	48,371	51,701	62,337	0,240	0,235	2815,803	2868,752	181,335	9,423	11,158	0,000	41,645	8,331	16,974	44678,54861
191,000	48,429	51,946	62,304	0,240	0,235	2797,231	2792,461	181,929	9,311	11,195	-0,001	42,187	8,385	17,068	2022-04-27 13:10
191,500	48,459	51,817	62,300	0,240	0,235	2789,447	2828,981	198,875	9,192	11,332	0,000	41,799	8,347	17,068	44678,54931
192,000	48,415	51,934	62,291	0,241	0,235	2812,588	2792,493	176,363	9,244	11,337	0,002	41,883	8,355	17,068	2022-04-27 13:11
192,500	48,344	51,828	62,265	0,241	0,235	2822,936	2816,929	169,435	9,344	11,241	-0,001	41,879	8,355	17,068	44678,55
193,000	48,303	51,791	62,259	0,240	0,235	2813,505	2823,692	189,652	9,469	11,102	0,000	42,036	8,370	17,068	2022-04-27 13:12
193,500	48,339	51,794	62,254	0,240	0,235	2798,212	2819,743	167,014	9,649	10,927	0,000	42,235	8,390	17,068	44678,55069
194,000	48,400	51,727	62,237	0,241	0,235	2791,852	2833,544	173,428	9,590	10,933	0,001	42,609	8,427	17,068	2022-04-27 13:13
194,500	48,452	51,850	62,230	0,241	0,235	2778,738	2797,344	192,689	9,294	11,204	0,000	42,165	8,383	17,068	44678,55139
195,000	48,459	51,995	62,232	0,240	0,235	2756,862	2758,339	177,578	9,279	11,300	0,000	41,626	8,329	17,068	2022-04-27 13:14
195,500	48,402	51,923	62,223	0,240	0,235	2784,369	2778,182	145,445	9,463	11,146	0,000	42,066	8,373	16,974	44678,55208
196,000	48,327	51,886	62,217	0,242	0,235	2817,854	2786,300	141,078	9,657	10,911	0,002	41,681	8,335	17,068	2022-04-27 13:15
196,500	48,323	51,890	62,202	0,241	0,235	2804,927	2782,729	140,077	9,649	10,879	0,000	42,113	8,378	17,068	44678,55278
197,000	48,379	51,810	62,228	0,242	0,235	2795,750	2807,823	144,850	9,344	11,140	0,000	42,089	8,375	17,068	2022-04-27 13:16
197,500	48,421	51,861	62,217	0,241	0,235	2772,608	2791,577	164,649	9,104	11,402	0,000	41,939	8,360	17,068	44678,55347
198,000	48,447	51,794	62,205	0,241	0,235	2765,040	2805,761	167,759	9,116	11,443	0,000	41,993	8,366	16,974	2022-04-27 13:17
198,500	48,442	52,090	62,211	0,241	0,235	2772,327	2728,248	173,969	9,200	11,373	-0,001	41,920	8,359	17,068	44678,55417
199,000	48,362	51,797	62,200	0,240	0,235	2783,506	2804,112	132,543	9,739	10,881	0,000	42,045	8,371	16,974	2022-04-27 13:18
199,500	48,313	51,804	62,199	0,240	0,235	2798,422	2803,615	134,787	9,666	10,812	0,000	41,857	8,352	16,974	44678,55486
200,000	48,351	51,758	62,209	0,241	0,235	2796,277	2816,364	153,916	9,514	10,966	0,000	42,105	8,377	16,974	2022-04-27 13:19
200,500	48,408	51,763	62,209	0,241	0,235	2770,529	2817,345	169,072	9,320	11,187	-0,001	42,274	8,394	16,974	44678,55556
201,000	48,457	51,751	62,204	0,241	0,235	2763,824	2820,349	171,438	9,336	11,193	0,000	42,117	8,378	16,849	2022-04-27 13:20
201,500	48,464	52,013	62,222	0,241	0,235	2768,142	2753,471	167,192	9,360	11,151	0,000	41,938	8,360	16,974	44678,55625
202,000	48,399	51,914	62,219	0,241	0,235	2779,229	2776,688	125,913	9,701	10,878	-0,001	42,157	8,382	16,974	2022-04-27 13:21
202,500	48,315	51,998	62,230	0,241	0,235	2808,401	2759,588	142,739	9,614	10,893	-0,001	42,177	8,384	16,849	44678,55694
203,000	48,310	51,911	62,226	0,240	0,235	2792,029	2781,366	164,065	9,305	11,211	0,000	42,168	8,383	16,974	2022-04-27 13:22
203,500	48,362	51,805	62,226	0,242	0,235	2795,399	2807,757	166,742	9,259	11,293	0,001	41,916	8,358	16,850	44678,55764
204,000	48,419	51,868	62,230	0,240	0,235	2761,530	2792,133	164,182	9,157	11,376	0,000	41,763	8,343	16,849	2022-04-27 13:23
204,500	48,452	51,691	62,239	0,239	0,235	2747,697	2844,973	164,988	9,125	11,396	0,001	41,496	8,316	16,849	44678,55833

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
205,000	0,268	0,565	1,043	0,000	0,000	0,379	0,670	44,645	21,329	21,073	20,975	20,927	20,992	21,223	21,382	58,489
205,500	0,264	0,568	1,049	0,000	0,000	0,378	0,670	44,701	21,355	21,173	21,076	21,035	21,097	21,318	21,481	58,473
206,000	0,269	0,561	1,051	0,000	0,000	0,384	0,670	44,506	21,260	21,058	20,945	20,905	20,977	21,193	21,363	58,466
206,500	0,271	0,559	1,049	0,000	0,000	0,384	0,670	44,679	21,374	21,128	21,030	20,978	21,038	21,255	21,427	58,464
207,000	0,260	0,569	1,047	0,000	0,000	0,375	0,669	44,790	21,391	21,098	20,992	20,942	21,007	21,212	21,394	58,444
207,500	0,250	0,581	1,048	0,000	0,000	0,365	0,670	44,884	21,283	21,100	21,002	20,953	21,024	21,229	21,408	58,453
208,000	0,249	0,590	1,043	0,000	0,000	0,359	0,670	44,933	21,386	21,163	21,066	21,018	21,095	21,294	21,477	58,461
208,500	0,264	0,588	1,045	0,000	0,000	0,361	0,670	44,861	21,242	21,055	20,947	20,904	20,968	21,167	21,355	58,465
209,000	0,269	0,589	1,045	0,000	0,000	0,361	0,670	44,948	21,269	21,072	20,973	20,929	21,009	21,201	21,386	58,425
209,500	0,262	0,590	1,053	0,000	0,000	0,360	0,670	44,989	21,243	21,092	21,004	20,964	21,036	21,222	21,412	58,420
210,000	0,260	0,590	1,046	0,000	0,000	0,359	0,670	44,989	21,332	21,134	21,038	21,003	21,075	21,251	21,451	58,447
210,500	0,259	0,592	1,050	0,000	0,000	0,358	0,670	45,070	21,300	21,116	21,014	20,987	21,050	21,231	21,429	58,445
211,000	0,259	0,591	1,049	0,000	0,000	0,359	0,669	44,958	21,194	21,052	20,950	20,921	20,998	21,167	21,371	58,441
211,500	0,267	0,579	1,048	0,000	0,000	0,370	0,668	44,856	21,161	21,089	20,986	20,961	21,038	21,216	21,415	58,443
212,000	0,262	0,574	1,045	0,000	0,000	0,373	0,669	44,750	21,159	21,046	20,948	20,928	21,011	21,174	21,376	58,434
212,500	0,255	0,581	1,043	0,000	0,000	0,366	0,669	44,934	21,176	21,091	20,997	20,974	21,050	21,223	21,421	58,438
213,000	0,256	0,588	1,042	0,000	0,000	0,360	0,668	44,991	21,286	21,071	20,975	20,953	21,035	21,191	21,398	58,458
213,500	0,247	0,592	1,045	0,000	0,000	0,357	0,668	45,118	21,394	21,134	21,030	21,002	21,081	21,235	21,447	58,468
214,000	0,237	0,595	1,047	0,000	0,000	0,354	0,669	45,044	21,218	21,030	20,926	20,908	20,983	21,143	21,354	58,477
214,500	0,234	0,592	1,048	0,000	0,000	0,358	0,668	44,954	21,349	21,066	20,962	20,923	20,995	21,157	21,366	58,461
215,000	0,245	0,580	1,045	0,000	0,000	0,369	0,668	44,900	21,490	21,185	21,077	21,036	21,101	21,262	21,476	58,466
215,500	0,251	0,579	1,050	0,000	0,000	0,367	0,669	44,890	21,502	21,178	21,067	21,030	21,110	21,255	21,473	58,482
216,000	0,253	0,582	1,049	0,000	0,000	0,365	0,668	44,900	21,446	21,149	21,035	21,001	21,077	21,218	21,444	58,494
216,500	0,253	0,583	1,048	0,000	0,000	0,364	0,668	44,897	21,402	21,165	21,046	21,019	21,104	21,248	21,462	58,526
217,000	0,245	0,582	1,046	0,000	0,000	0,366	0,668	44,803	21,383	21,156	20,993	21,021	21,128	21,243	21,460	58,500
217,500	0,249	0,570	1,047	0,000	0,000	0,377	0,668	44,666	21,288	21,112	20,951	20,975	21,081	21,195	21,414	58,495
218,000	0,248	0,568	1,051	0,000	0,000	0,378	0,668	44,546	21,318	21,079	20,933	20,949	21,060	21,171	21,393	58,496
218,500	0,249	0,569	1,048	0,000	0,000	0,375	0,668	44,636	21,470	21,178	-8,518	21,036	21,155	21,257	21,483	58,521
219,000	0,250	0,580	1,042	0,000	0,000	0,366	0,668	44,737	21,354	21,190	22,161	21,042	21,152	21,264	21,487	58,529

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
205,000	48,410	51,528	62,239	0,240	0,235	2773,827	2889,053	171,228	9,155	11,365	0,000	41,890	8,356	16,849	2022-04-27 13:24
205,500	48,318	51,804	62,224	0,240	0,235	2798,322	2810,385	162,984	9,191	11,330	0,000	42,005	8,367	16,849	44678,55903
206,000	48,295	51,812	62,222	0,239	0,235	2794,024	2806,945	181,915	8,952	11,528	0,001	41,957	8,362	16,849	2022-04-27 13:25
206,500	48,362	51,794	62,215	0,240	0,235	2781,263	2809,724	175,714	9,037	11,518	0,001	42,131	8,380	16,849	44678,55972
207,000	48,443	51,624	62,233	0,240	0,235	2759,724	2860,526	141,110	9,335	11,249	0,000	41,721	8,339	16,756	2022-04-27 13:26
207,500	48,452	51,695	62,231	0,241	0,235	2767,104	2842,862	126,071	9,632	10,950	0,000	41,901	8,357	16,849	44678,56042
208,000	48,366	51,740	62,216	0,240	0,235	2782,867	2825,238	132,161	9,756	10,770	0,001	41,748	8,342	16,849	2022-04-27 13:27
208,500	48,289	51,911	62,223	0,241	0,235	2815,841	2779,717	173,411	9,680	10,841	0,000	41,766	8,343	16,849	44678,56111
209,000	48,316	51,849	62,213	0,242	0,235	2810,412	2795,956	171,614	9,749	10,815	0,000	42,024	8,369	16,849	2022-04-27 13:28
209,500	48,391	51,772	62,213	0,240	0,235	2760,622	2815,970	157,105	9,713	10,802	0,000	42,223	8,389	16,849	44678,56181
210,000	48,463	51,500	62,215	0,241	0,235	2761,861	2889,825	150,146	9,792	10,771	0,000	42,032	8,370	16,849	2022-04-27 13:29
210,500	48,437	51,685	62,222	0,240	0,235	2763,053	2839,207	151,494	9,786	10,741	-0,002	42,023	8,369	16,849	44678,5625
211,000	48,340	51,646	62,223	0,242	0,235	2803,675	2849,503	153,578	9,709	10,778	0,000	41,896	8,356	16,849	2022-04-27 13:30
211,500	48,304	51,957	62,246	0,241	0,235	2803,329	2772,713	171,131	9,400	11,090	0,001	41,975	8,364	16,756	44678,56319
212,000	48,391	51,595	62,239	0,239	0,235	2760,824	2871,091	152,062	9,383	11,183	-0,001	41,791	8,346	16,849	2022-04-27 13:31
212,500	48,477	51,789	62,239	0,241	0,235	2752,516	2817,342	137,137	9,620	10,979	0,000	41,766	8,343	16,849	44678,56389
213,000	48,460	51,595	62,246	0,242	0,235	2773,556	2873,898	138,709	9,739	10,804	-0,001	41,832	8,350	16,756	2022-04-27 13:32
213,500	48,376	51,590	62,265	0,239	0,235	2773,168	2880,255	108,977	9,824	10,695	-0,001	41,470	8,314	16,756	44678,56458
214,000	48,279	51,772	62,272	0,240	0,235	2811,249	2830,377	90,965	9,868	10,634	-0,001	41,852	8,352	16,756	2022-04-27 13:33
214,500	48,293	51,839	62,281	0,241	0,235	2813,501	2815,249	91,596	9,746	10,739	0,000	41,870	8,354	16,756	44678,56528
215,000	48,392	51,660	62,285	0,239	0,235	2767,772	2868,250	128,040	9,415	11,057	0,000	41,746	8,341	16,756	2022-04-27 13:34
215,500	48,462	51,796	62,280	0,241	0,235	2772,123	2829,079	128,232	9,547	11,019	0,000	42,122	8,379	16,849	44678,56597
216,000	48,430	51,811	62,302	0,239	0,235	2759,082	2828,354	139,241	9,564	10,948	0,000	41,656	8,332	16,756	2022-04-27 13:35
216,500	48,360	51,744	62,308	0,241	0,235	2813,451	2851,225	128,152	9,584	10,912	0,001	42,126	8,379	16,756	44678,56667
217,000	48,300	51,744	62,321	0,241	0,235	2821,455	2852,167	113,902	9,482	10,990	0,000	41,276	8,294	16,756	2022-04-27 13:36
217,500	48,330	51,693	62,339	0,240	0,235	2806,693	2870,472	127,212	9,201	11,307	-0,001	41,777	8,344	16,756	44678,56736
218,000	48,383	51,496	62,336	0,240	0,235	2791,996	2921,751	120,365	9,206	11,338	0,001	41,928	8,359	16,756	2022-04-27 13:37
218,500	48,425	51,622	62,352	0,241	0,235	2790,518	2891,117	128,671	9,280	11,254	0,000	41,728	8,339	16,756	44678,56806
219,000	48,453	51,725	62,363	0,240	0,235	2774,231	2865,452	125,640	9,573	10,975	0,000	41,745	8,341	16,756	2022-04-27 13:38

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
219,500	0,248	0,587	1,044	0,000	0,000	0,360	0,669	44,779	21,304	21,158	22,183	21,013	21,096	21,228	21,455	58,548
220,000	0,248	0,586	1,047	0,000	0,000	0,362	0,668	44,792	21,430	21,258	22,267	21,103	21,181	21,308	21,537	58,579
220,500	0,251	0,581	1,047	0,000	0,000	0,367	0,668	44,601	21,214	21,136	22,133	20,996	21,068	21,200	21,428	58,568
221,000	0,262	0,578	1,046	0,000	0,000	0,369	0,667	44,492	21,178	21,062	22,035	20,924	21,003	21,129	21,360	58,566
221,500	0,268	0,581	1,046	0,000	0,000	0,365	0,667	44,601	21,265	21,128	22,063	20,993	21,065	21,189	21,420	58,575
222,000	0,257	0,589	1,051	0,000	0,000	0,358	0,668	44,747	21,285	21,186	22,087	21,060	21,119	21,250	21,481	58,573
222,500	0,250	0,589	1,052	0,000	0,000	0,360	0,667	44,597	21,149	21,081	21,964	20,961	21,037	21,161	21,388	58,578
223,000	0,250	0,581	1,048	0,000	0,000	0,367	0,667	44,613	21,336	21,175	22,023	21,056	21,129	21,250	21,479	58,588
223,500	0,257	0,578	1,049	0,000	0,000	0,370	0,667	44,636	21,257	21,156	21,979	21,044	21,120	21,234	21,467	58,588
224,000	0,259	0,580	1,043	0,000	0,000	0,366	0,669	44,707	21,301	21,160	21,950	21,044	21,122	21,230	21,466	58,574
224,500	0,250	0,594	1,044	0,000	0,000	0,354	0,668	44,883	21,409	21,162	21,907	21,024	21,116	21,224	21,456	58,590
225,000	0,240	0,601	1,052	0,000	0,000	0,350	0,667	44,848	21,279	21,110	21,839	20,989	21,064	21,176	21,412	58,588
225,500	0,247	0,592	1,044	0,000	0,000	0,359	0,667	44,809	21,303	21,134	21,833	21,020	21,086	21,197	21,429	58,612
226,000	0,253	0,589	1,050	0,000	0,000	0,361	0,667	44,855	21,371	21,146	21,809	21,014	21,098	21,198	21,436	58,603
226,500	0,256	0,586	1,049	0,000	0,000	0,364	0,667	44,901	21,299	21,186	21,825	21,063	21,134	21,246	21,483	58,623
227,000	0,250	0,585	1,051	0,000	0,000	0,363	0,667	44,937	21,228	21,136	21,748	21,023	21,093	21,208	21,436	58,616
227,500	0,238	0,598	1,050	0,000	0,000	0,351	0,668	45,032	21,245	21,121	21,703	21,004	21,081	21,187	21,421	58,615
228,000	0,236	0,602	1,053	0,000	0,000	0,350	0,666	45,000	21,295	21,121	21,681	21,007	21,084	21,196	21,425	58,641
228,500	0,249	0,594	1,048	0,000	0,000	0,357	0,666	45,042	21,360	21,155	21,688	21,042	21,122	21,222	21,459	58,653
229,000	0,247	0,595	1,052	0,000	0,000	0,356	0,667	45,047	21,298	21,144	21,662	21,040	21,109	21,218	21,451	58,649
229,500	0,249	0,595	1,050	0,000	0,000	0,355	0,669	45,053	21,279	21,149	21,635	21,033	21,118	21,223	21,453	58,653
230,000	0,250	0,601	1,051	0,000	0,000	0,349	0,665	45,095	21,222	21,087	21,550	20,986	21,068	21,159	21,398	58,646
230,500	0,250	0,606	1,045	0,000	0,000	0,347	0,669	45,102	21,265	21,133	21,581	21,041	21,116	21,215	21,450	58,648
231,000	0,261	0,598	1,055	0,000	0,000	0,355	0,665	45,018	21,325	21,131	21,564	21,029	21,108	21,208	21,441	58,656
231,500	0,264	0,590	1,048	0,000	0,000	0,359	0,665	45,001	21,370	21,099	21,507	21,001	21,077	21,168	21,408	58,688
232,000	0,253	0,594	1,044	0,000	0,000	0,354	0,665	45,176	21,417	21,189	21,573	21,082	21,172	21,252	21,495	58,693
232,500	0,240	0,607	1,052	0,000	0,000	0,342	0,665	45,265	21,292	21,140	21,500	21,042	21,121	21,213	21,450	58,710
233,000	0,235	0,618	1,043	0,000	0,000	0,335	0,668	45,278	21,339	21,121	21,464	21,016	21,093	21,182	21,422	58,719
233,500	0,239	0,614	1,052	0,000	0,000	0,340	0,665	45,315	21,446	21,221	21,536	21,121	21,199	21,284	21,519	58,727

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
219,500	48,417	51,838	62,382	0,239	0,235	2775,723	2843,145	123,044	9,685	10,814	0,001	41,794	8,346	16,849	44678,56875
220,000	48,341	51,681	62,382	0,240	0,235	2821,927	2885,595	123,034	9,630	10,862	0,000	41,707	8,337	16,756	2022-04-27 13:39
220,500	48,298	51,664	62,379	0,239	0,235	2823,765	2887,937	133,425	9,490	11,010	0,000	42,046	8,371	16,662	44678,56944
221,000	48,345	51,660	62,371	0,240	0,235	2819,298	2890,458	173,535	9,416	11,066	0,002	41,647	8,331	16,662	2022-04-27 13:40
221,500	48,421	51,624	62,382	0,239	0,235	2790,446	2901,927	166,934	9,592	10,951	0,000	41,859	8,353	16,662	44678,57014
222,000	48,463	51,709	62,405	0,240	0,235	2783,787	2885,657	136,200	9,750	10,752	0,001	42,073	8,374	16,687	2022-04-27 13:41
222,500	48,404	51,605	62,404	0,239	0,235	2796,719	2911,897	125,158	9,680	10,805	-0,001	41,883	8,355	16,662	44678,57083
223,000	48,323	51,800	62,414	0,240	0,235	2831,927	2862,758	132,474	9,472	11,018	0,000	42,146	8,381	16,662	2022-04-27 13:42
223,500	48,291	51,698	62,400	0,240	0,235	2834,349	2885,805	150,209	9,433	11,091	0,000	42,078	8,374	16,662	44678,57153
224,000	48,331	51,672	62,389	0,239	0,235	2815,138	2888,132	144,441	9,577	10,995	0,000	41,679	8,335	16,756	2022-04-27 13:43
224,500	48,405	51,742	62,426	0,241	0,235	2820,762	2878,243	119,110	9,983	10,621	-0,001	41,980	8,365	16,662	44678,57222
225,000	48,469	51,593	62,415	0,239	0,235	2782,517	2917,039	101,390	9,994	10,512	0,000	42,130	8,380	16,756	2022-04-27 13:44
225,500	48,427	51,926	62,449	0,241	0,235	2823,562	2838,047	128,990	9,726	10,771	0,000	41,879	8,355	16,756	44678,57292
226,000	48,346	51,803	62,468	0,241	0,235	2840,311	2875,827	139,073	9,730	10,822	0,000	41,879	8,355	16,568	2022-04-27 13:45
226,500	48,295	51,837	62,469	0,239	0,235	2839,515	2866,242	146,883	9,598	10,918	0,000	41,861	8,353	16,662	44678,57361
227,000	48,342	51,872	62,495	0,241	0,235	2842,107	2863,841	114,366	9,692	10,891	0,000	42,079	8,374	16,662	2022-04-27 13:46
227,500	48,422	51,638	62,495	0,239	0,235	2800,785	2926,714	90,091	10,071	10,516	-0,001	42,241	8,391	16,756	44678,57431
228,000	48,463	51,796	62,509	0,240	0,235	2805,520	2885,251	101,141	10,014	10,504	0,000	41,735	8,340	16,568	2022-04-27 13:47
228,500	48,405	51,825	62,517	0,242	0,235	2843,780	2882,037	134,121	9,809	10,711	0,000	42,107	8,377	16,662	44678,575
229,000	48,323	51,907	62,525	0,241	0,235	2857,395	2862,348	117,767	9,883	10,673	0,000	42,147	8,381	16,662	2022-04-27 13:48
229,500	48,291	51,844	62,535	0,241	0,235	2863,807	2883,657	132,481	9,886	10,648	0,000	42,378	8,404	16,474	44678,57569
230,000	48,367	51,828	62,530	0,240	0,235	2838,590	2884,323	124,637	10,114	10,472	0,000	41,580	8,325	16,568	2022-04-27 13:49
230,500	48,453	51,807	62,555	0,241	0,235	2824,135	2896,487	134,687	10,115	10,409	0,000	41,948	8,361	16,756	44678,57639
231,000	48,467	51,661	62,560	0,241	0,235	2823,883	2939,935	164,468	9,845	10,640	0,000	42,208	8,387	16,568	2022-04-27 13:50
231,500	48,404	51,817	62,562	0,240	0,235	2836,177	2897,110	159,020	9,727	10,772	0,000	41,989	8,366	16,568	44678,57708
232,000	48,329	51,712	62,595	0,240	0,235	2856,440	2933,376	124,629	9,935	10,617	0,000	41,588	8,325	16,568	2022-04-27 13:51
232,500	48,300	51,695	62,601	0,239	0,235	2861,196	2941,286	95,974	10,330	10,261	0,000	42,073	8,374	16,568	44678,57778
233,000	48,340	51,884	62,619	0,240	0,235	2859,325	2896,269	91,766	10,445	10,055	0,000	41,846	8,351	16,568	2022-04-27 13:52
233,500	48,389	51,771	62,616	0,239	0,235	2840,153	2923,404	108,949	10,292	10,207	0,000	41,914	8,358	16,568	44678,57847



	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
234,000	0,248	0,607	1,046	0,000	0,000	0,346	0,664	45,144	21,238	21,105	21,420	21,017	21,092	21,183	21,419	58,744
234,500	0,255	0,602	1,048	0,000	0,000	0,349	0,664	45,168	21,241	21,135	21,438	21,051	21,129	21,211	21,450	58,760
235,000	0,251	0,606	1,048	0,000	0,000	0,345	0,664	45,177	21,234	21,097	21,374	21,007	21,087	21,170	21,406	58,763
235,500	0,247	0,612	1,053	0,000	0,000	0,340	0,664	45,275	21,274	21,119	21,396	21,031	21,113	21,192	21,429	58,781
236,000	0,246	0,616	1,047	0,000	0,000	0,337	0,664	45,337	21,324	21,149	21,414	21,062	21,147	21,220	21,467	58,772
236,500	0,240	0,611	1,054	0,000	0,000	0,344	0,664	45,309	21,393	21,213	21,462	21,119	21,212	21,274	21,521	58,780
237,000	0,242	0,598	1,054	0,000	0,000	0,354	0,664	45,062	21,343	21,146	21,385	21,052	21,138	21,209	21,453	58,800
237,500	0,244	0,593	1,054	0,000	0,000	0,357	0,664	45,134	21,383	21,196	21,413	21,107	21,188	21,258	21,500	58,799
238,000	0,243	0,601	1,044	0,000	0,000	0,348	0,664	45,257	21,431	21,212	21,412	21,117	21,202	21,268	21,511	58,820
238,500	0,247	0,608	1,044	0,000	0,000	0,344	0,664	45,239	21,448	21,237	21,423	21,134	21,215	21,281	21,530	58,841
239,000	0,248	0,604	1,056	0,000	0,000	0,348	0,664	45,131	21,342	21,163	21,341	21,067	21,156	21,214	21,461	58,836
239,500	0,253	0,596	1,043	0,000	0,000	0,356	0,664	45,158	21,356	21,231	21,398	21,147	21,223	21,285	21,534	58,830
240,000	0,250	0,589	1,048	0,000	0,000	0,361	0,664	44,951	21,215	21,090	21,268	21,028	21,107	21,172	21,416	58,836
240,500	0,244	0,594	1,044	0,000	0,000	0,355	0,664	45,147	21,482	21,219	21,365	21,127	21,216	21,268	21,516	58,858
241,000	0,239	0,600	1,049	0,000	0,000	0,350	0,663	45,087	21,415	21,140	21,277	21,051	21,137	21,180	21,428	58,910
241,500	0,236	0,599	1,046	0,000	0,000	0,352	0,663	45,113	21,466	21,195	21,323	21,094	21,179	21,231	21,483	58,927
242,000	0,240	0,591	1,046	0,000	0,000	0,359	0,663	44,928	21,469	21,124	21,238	21,020	21,099	21,145	21,396	58,941
242,500	0,246	0,586	1,047	0,000	0,000	0,363	0,663	44,863	21,439	21,161	21,260	21,056	21,129	21,185	21,433	58,936
243,000	0,248	0,584	1,043	0,000	0,000	0,363	0,662	44,820	21,327	21,137	21,241	21,050	21,128	21,184	21,426	58,934
243,500	0,244	0,593	1,046	0,000	0,000	0,354	0,663	44,885	21,293	21,097	21,206	21,012	21,085	21,136	21,388	58,963
244,000	0,239	0,606	1,050	0,000	0,000	0,344	0,664	45,073	21,381	21,164	21,249	21,067	21,155	21,189	21,446	58,934
244,500	0,234	0,611	1,048	0,000	0,000	0,342	0,664	45,033	21,395	21,103	21,188	21,006	21,091	21,140	21,386	58,914
245,000	0,237	0,604	1,044	0,000	0,000	0,349	0,663	45,066	21,345	21,140	21,210	21,045	21,123	21,173	21,424	58,933
245,500	0,240	0,599	1,043	0,000	0,000	0,353	0,664	45,054	21,391	21,166	21,223	21,062	21,146	21,190	21,441	58,974
246,000	0,242	0,599	1,047	0,000	0,000	0,353	0,662	45,113	21,431	21,189	21,248	21,092	21,184	21,219	21,469	58,982
246,500	0,243	0,597	1,048	0,000	0,000	0,354	0,661	45,220	21,509	21,273	21,318	21,154	21,248	21,286	21,538	58,943
247,000	0,241	0,600	1,046	0,000	0,000	0,351	0,662	45,197	21,452	21,225	21,271	21,128	21,199	21,252	21,497	58,892
247,500	0,233	0,603	1,043	0,000	0,000	0,348	0,662	45,157	21,387	21,227	21,286	21,145	21,228	21,258	21,515	58,879
248,000	0,241	0,597	1,048	0,000	0,000	0,355	0,663	45,008	21,312	21,160	21,212	21,089	21,172	21,203	21,455	58,920

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
234,000	48,430	51,721	62,626	0,239	0,235	2824,953	2940,354	130,389	10,126	10,384	0,000	42,021	8,369	16,474	2022-04-27 13:53
234,500	48,430	51,775	62,655	0,240	0,235	2851,276	2932,942	143,085	10,042	10,470	0,002	41,908	8,357	16,474	44678,57917
235,000	48,378	51,807	62,656	0,240	0,235	2861,125	2925,014	125,601	10,223	10,341	0,000	42,013	8,368	16,474	2022-04-27 13:54
235,500	48,305	51,830	62,673	0,240	0,235	2883,951	2922,821	120,625	10,329	10,212	0,000	41,879	8,355	16,474	44678,57986
236,000	48,287	51,905	62,670	0,241	0,235	2898,315	2903,350	114,664	10,399	10,122	0,000	41,966	8,363	16,474	2022-04-27 13:55
236,500	48,342	51,801	62,691	0,238	0,235	2857,620	2938,163	96,794	10,169	10,306	0,000	42,286	8,395	16,474	44678,58056
237,000	48,427	51,750	62,714	0,240	0,235	2861,704	2956,881	116,257	9,872	10,630	0,001	42,020	8,369	16,568	2022-04-27 13:56
237,500	48,446	51,694	62,723	0,240	0,235	2853,857	2972,935	108,449	9,836	10,706	0,001	42,284	8,395	16,474	44678,58125
238,000	48,383	51,872	62,750	0,240	0,235	2874,334	2931,725	120,523	10,130	10,449	0,000	41,636	8,330	16,474	2022-04-27 13:57
238,500	48,309	51,893	62,766	0,240	0,235	2899,142	2931,501	120,290	10,220	10,317	0,001	41,784	8,345	16,474	44678,58194
239,000	48,304	51,671	62,781	0,240	0,235	2904,299	2994,816	125,736	10,056	10,449	-0,001	42,413	8,408	16,474	2022-04-27 13:58
239,500	48,363	51,652	62,789	0,241	0,235	2901,542	3004,601	135,930	9,820	10,677	0,000	41,651	8,332	16,474	44678,58264
240,000	48,411	51,762	62,812	0,240	0,235	2872,995	2982,321	121,882	9,723	10,834	0,000	41,768	8,343	16,474	2022-04-27 13:59
240,500	48,446	51,911	62,826	0,239	0,235	2854,706	2942,691	109,969	9,920	10,648	0,000	41,926	8,359	16,568	44678,58333
241,000	48,452	51,800	62,833	0,239	0,235	2864,846	2977,350	98,736	10,009	10,513	0,000	41,943	8,361	16,474	2022-04-27 14:00
241,500	48,415	51,794	62,826	0,238	0,235	2872,321	2973,571	92,833	9,949	10,564	0,001	41,930	8,360	16,350	44678,58403
242,000	48,392	51,830	62,834	0,240	0,235	2906,178	2968,037	107,277	9,729	10,775	0,000	41,834	8,350	16,350	2022-04-27 14:01
242,500	48,368	51,834	62,845	0,239	0,235	2895,983	2968,689	120,961	9,582	10,891	0,001	41,848	8,351	16,350	44678,58472
243,000	48,330	52,003	62,838	0,238	0,235	2897,545	2922,804	122,383	9,662	10,881	0,000	41,612	8,328	16,474	2022-04-27 14:02
243,500	48,280	51,952	62,854	0,238	0,235	2918,200	2939,532	104,767	9,962	10,621	0,000	42,030	8,370	16,350	44678,58542
244,000	48,301	51,850	62,871	0,240	0,235	2936,003	2971,381	97,943	10,235	10,328	0,000	41,934	8,360	16,474	2022-04-27 14:03
244,500	48,396	51,833	62,906	0,239	0,235	2887,995	2985,335	87,651	10,253	10,249	0,000	41,776	8,344	16,474	44678,58611
245,000	48,456	51,718	62,885	0,240	0,235	2882,129	3011,905	100,373	10,006	10,460	0,001	41,655	8,332	16,350	2022-04-27 14:04
245,500	48,429	51,867	62,892	0,239	0,235	2893,371	2975,851	103,747	9,970	10,580	-0,001	41,943	8,361	16,474	44678,58681
246,000	48,342	51,933	62,930	0,241	0,235	2942,829	2966,299	107,697	9,993	10,590	0,000	41,606	8,327	16,474	2022-04-27 14:05
246,500	48,265	51,792	62,923	0,243	0,235	2981,802	3002,526	114,407	9,913	10,631	0,000	42,008	8,367	16,350	44678,5875
247,000	48,313	51,890	62,934	0,244	0,235	2962,036	2979,173	95,739	10,029	10,517	0,001	41,879	8,355	16,350	2022-04-27 14:06
247,500	48,419	51,788	62,932	0,244	0,235	2932,917	3007,803	84,462	10,090	10,452	0,001	42,034	8,370	16,350	44678,58819
248,000	48,475	51,702	62,965	0,243	0,235	2918,326	3038,035	121,008	9,856	10,642	-0,001	41,988	8,365	16,474	2022-04-27 14:07

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
248,500	0,262	0,593	1,047	0,000	0,000	0,358	0,662	44,909	21,302	21,094	21,140	21,023	21,100	21,137	21,386	58,932
249,000	0,274	0,588	1,048	0,000	0,000	0,361	0,662	44,956	21,380	21,152	21,196	21,072	21,160	21,191	21,445	58,938
249,500	0,249	0,595	1,054	0,000	0,000	0,354	0,662	44,988	21,397	21,133	21,146	21,044	21,130	21,158	21,412	58,940
250,000	0,233	0,610	1,046	0,000	0,000	0,342	0,662	45,098	21,363	21,136	21,163	21,057	21,139	21,166	21,422	58,929
250,500	0,239	0,607	1,047	0,000	0,000	0,346	0,663	45,012	21,335	21,119	21,132	21,038	21,122	21,151	21,402	58,945
251,000	0,262	0,597	1,042	0,000	0,000	0,354	0,661	44,958	21,368	21,155	21,172	21,093	21,164	21,198	21,445	58,960
251,500	0,273	0,596	1,051	0,000	0,000	0,354	0,660	45,058	21,478	21,206	21,216	21,120	21,216	21,241	21,489	58,983
252,000	0,266	0,602	1,046	0,000	0,000	0,349	0,662	45,101	21,455	21,153	21,153	21,061	21,156	21,177	21,426	58,993
252,500	0,253	0,607	1,047	0,000	0,000	0,345	0,661	45,223	21,480	21,172	21,165	21,083	21,174	21,190	21,443	58,980
253,000	0,242	0,611	1,048	0,000	0,000	0,341	0,660	45,262	21,441	21,170	21,144	21,079	21,160	21,183	21,435	58,990
253,500	0,243	0,607	1,050	0,000	0,000	0,346	0,660	45,148	21,490	21,142	21,119	21,047	21,126	21,150	21,402	58,983
254,000	0,244	0,598	1,043	0,000	0,000	0,353	0,664	45,183	21,512	21,195	21,170	21,095	21,179	21,206	21,455	58,990
254,500	0,238	0,601	1,049	0,000	0,000	0,349	0,661	45,309	21,543	21,233	21,202	21,135	21,224	21,237	21,489	59,005
255,000	0,232	0,609	1,049	0,000	0,000	0,342	0,660	45,369	21,489	21,220	21,191	21,123	21,215	21,225	21,477	59,019
255,500	0,227	0,620	1,048	0,000	0,000	0,333	0,660	45,420	21,351	21,133	21,094	21,034	21,123	21,138	21,388	59,011
256,000	0,228	0,621	1,048	0,000	0,000	0,336	0,660	45,377	21,435	21,178	21,139	21,077	21,161	21,185	21,432	59,023
256,500	0,237	0,607	1,049	0,000	0,000	0,346	0,669	45,285	21,460	21,160	21,108	21,061	21,141	21,152	21,401	59,016
257,000	0,239	0,605	1,043	0,000	0,000	0,348	0,660	45,332	21,452	21,231	21,195	21,137	21,223	21,238	21,484	59,009
257,500	0,239	0,604	1,043	0,000	0,000	0,349	0,660	45,290	21,510	21,206	21,169	21,107	21,196	21,206	21,455	59,039
258,000	0,237	0,601	1,047	0,000	0,000	0,349	0,660	45,254	21,506	21,192	21,124	21,073	21,166	21,172	21,419	59,044
258,500	0,236	0,608	1,049	0,000	0,000	0,344	0,659	45,313	21,462	21,211	21,158	21,107	21,196	21,208	21,451	59,055
259,000	0,236	0,607	1,041	0,000	0,000	0,346	0,659	45,252	21,408	21,156	21,102	21,051	21,134	21,158	21,400	59,044
259,500	0,239	0,600	1,053	0,000	0,000	0,352	0,659	45,263	21,405	21,213	21,161	21,110	21,195	21,217	21,458	59,056
260,000	0,241	0,601	1,047	0,000	0,000	0,351	0,659	45,317	21,466	21,238	21,179	21,142	21,235	21,235	21,482	59,046
260,500	0,241	0,605	1,047	0,000	0,000	0,346	0,659	45,319	21,434	21,180	21,126	21,086	21,170	21,183	21,424	59,058
261,000	0,234	0,614	1,046	0,000	0,000	0,339	0,658	45,450	21,492	21,243	21,187	21,148	21,231	21,246	21,483	59,085
261,500	0,229	0,617	1,048	0,000	0,000	0,337	0,659	45,436	21,482	21,213	21,152	21,105	21,205	21,218	21,450	59,098
262,000	0,229	0,616	1,047	0,000	0,000	0,339	0,659	45,390	21,354	21,209	21,150	21,109	21,198	21,223	21,449	59,100
262,500	0,241	0,608	1,046	0,000	0,000	0,346	0,659	45,421	21,397	21,285	21,240	21,204	21,296	21,300	21,538	59,097

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
248,500	48,427	51,626	62,968	0,245	0,235	2952,640	3057,195	181,561	9,788	10,727	-0,001	41,819	8,349	16,350	44678,58889
249,000	48,327	51,657	62,975	0,245	0,235	2980,984	3054,063	176,572	9,688	10,839	0,002	42,105	8,377	16,350	2022-04-27 14:08
249,500	48,278	51,864	62,990	0,244	0,235	2991,600	2999,387	106,581	9,979	10,616	0,000	41,951	8,362	16,350	44678,58958
250,000	48,353	51,818	62,988	0,243	0,235	2956,087	3012,023	80,357	10,344	10,257	0,000	42,133	8,380	16,350	2022-04-27 14:09
250,500	48,441	51,641	62,999	0,244	0,235	2940,225	3064,537	117,834	10,093	10,378	0,001	42,062	8,373	16,563	44678,59028
251,000	48,452	51,668	63,010	0,244	0,235	2942,586	3060,565	175,713	9,867	10,618	0,001	41,586	8,325	16,256	2022-04-27 14:10
251,500	48,412	51,468	63,007	0,243	0,235	2946,310	3113,957	184,938	9,936	10,606	-0,001	42,187	8,385	16,162	44678,59097
252,000	48,335	51,782	63,009	0,244	0,235	2984,341	3027,951	153,218	10,101	10,458	0,000	41,649	8,332	16,350	2022-04-27 14:11
252,500	48,275	51,904	63,017	0,243	0,235	2990,471	2995,701	127,075	10,207	10,346	0,000	41,716	8,338	16,350	44678,59167
253,000	48,313	51,795	63,022	0,243	0,235	2978,283	3025,880	102,587	10,259	10,238	-0,001	41,856	8,352	16,256	2022-04-27 14:12
253,500	48,407	51,773	63,020	0,242	0,235	2944,928	3030,652	111,559	10,101	10,381	0,000	42,002	8,367	16,256	44678,59236
254,000	48,475	51,767	63,023	0,242	0,235	2923,399	3035,064	113,025	9,936	10,580	0,000	41,705	8,337	16,256	2022-04-27 14:13
254,500	48,457	51,815	63,028	0,243	0,235	2949,583	3022,846	92,773	10,076	10,465	0,000	41,877	8,354	16,256	44678,59306
255,000	48,382	51,806	63,034	0,243	0,235	2970,192	3025,598	76,705	10,296	10,269	0,000	41,877	8,354	16,256	2022-04-27 14:14
255,500	48,305	51,907	63,029	0,243	0,235	2983,863	2998,413	68,042	10,582	9,991	0,000	41,963	8,363	16,256	44678,59375
256,000	48,299	51,899	63,043	0,243	0,235	2988,827	3003,938	84,101	10,393	10,093	0,000	41,966	8,363	16,256	2022-04-27 14:15
256,500	48,371	51,798	63,055	0,243	0,235	2970,748	3036,860	99,137	10,155	10,380	-0,001	41,860	8,353	17,631	44678,59444
257,000	48,446	51,734	63,064	0,243	0,235	2944,089	3054,948	102,163	10,117	10,426	0,001	41,624	8,329	16,256	2022-04-27 14:16
257,500	48,454	51,556	63,068	0,243	0,235	2951,298	3103,511	96,517	10,065	10,462	0,000	41,663	8,333	16,256	44678,59514
258,000	48,412	51,712	63,078	0,243	0,235	2965,334	3063,286	93,856	10,046	10,482	0,001	42,009	8,368	16,256	2022-04-27 14:17
258,500	48,371	51,759	63,098	0,244	0,235	2996,982	3060,708	94,202	10,251	10,316	0,000	41,996	8,366	16,162	44678,59583
259,000	48,323	51,904	63,113	0,242	0,235	2978,862	3020,920	94,958	10,101	10,384	0,002	41,931	8,360	16,162	2022-04-27 14:18
259,500	48,335	51,829	63,123	0,244	0,235	3002,286	3044,775	101,664	9,981	10,560	0,002	42,079	8,374	16,162	44678,59653
260,000	48,403	51,771	63,114	0,244	0,235	2987,248	3060,655	107,437	10,041	10,522	0,001	42,143	8,381	16,162	2022-04-27 14:19
260,500	48,463	51,693	63,129	0,243	0,235	2958,551	3083,596	102,658	10,197	10,389	0,000	41,835	8,350	16,162	44678,59722
261,000	48,455	51,733	63,141	0,243	0,235	2968,737	3074,968	82,543	10,384	10,171	0,000	42,055	8,372	16,162	2022-04-27 14:20
261,500	48,406	51,850	63,136	0,243	0,235	2983,670	3040,509	71,041	10,426	10,107	0,001	41,959	8,363	16,162	44678,59792
262,000	48,358	51,911	63,148	0,243	0,235	3003,156	3030,020	81,448	10,371	10,170	0,000	41,634	8,330	16,162	2022-04-27 14:21
262,500	48,321	51,889	63,146	0,244	0,235	3019,017	3035,720	116,158	10,148	10,371	0,000	41,810	8,348	16,162	44678,59861

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
263,000	0,243	0,605	1,048	0,000	0,000	0,347	0,659	45,445	21,352	21,257	21,217	21,196	21,283	21,290	21,526	59,082
263,500	0,233	0,615	1,045	0,000	0,000	0,336	0,659	45,646	21,382	21,271	21,229	21,218	21,316	21,326	21,553	59,094
264,000	0,220	0,633	1,050	0,000	0,000	0,323	0,659	45,783	21,533	21,340	21,289	21,269	21,356	21,368	21,601	59,102
264,500	0,221	0,631	1,041	0,000	0,000	0,327	0,659	45,593	21,541	21,298	21,240	21,216	21,311	21,312	21,549	59,129
265,000	0,239	0,617	1,055	0,000	0,000	0,340	0,658	45,422	21,517	21,264	21,205	21,189	21,270	21,278	21,510	59,132
265,500	0,255	0,608	1,053	0,000	0,000	0,345	0,658	45,399	21,441	21,240	21,177	21,153	21,248	21,269	21,485	59,136
266,000	0,254	0,611	1,050	0,000	0,000	0,342	0,657	45,483	21,539	21,285	21,213	21,195	21,286	21,300	21,525	59,130
266,500	0,243	0,615	1,050	0,000	0,000	0,338	0,658	45,430	21,322	21,117	21,054	21,031	21,119	21,144	21,362	59,141
267,000	0,232	0,628	1,048	0,000	0,000	0,326	0,657	45,660	21,423	21,207	21,146	21,128	21,228	21,245	21,458	59,150
267,500	0,228	0,629	1,048	0,000	0,000	0,329	0,657	45,630	21,482	21,227	21,161	21,154	21,246	21,254	21,473	59,172
268,000	0,232	0,624	1,046	0,000	0,000	0,333	0,657	45,587	21,424	21,183	21,113	21,097	21,188	21,207	21,425	59,197
268,500	0,246	0,620	1,051	0,000	0,000	0,336	0,657	45,625	21,505	21,272	21,197	21,193	21,277	21,285	21,512	59,197
269,000	0,250	0,621	1,049	0,000	0,000	0,335	0,658	45,544	21,534	21,201	21,116	21,102	21,200	21,203	21,422	59,197
269,500	0,249	0,625	1,047	0,000	0,000	0,330	0,657	45,698	21,590	21,289	21,218	21,196	21,286	21,296	21,520	59,202
270,000	0,242	0,631	1,045	0,000	0,000	0,326	0,657	45,638	21,464	21,206	21,132	21,117	21,206	21,230	21,439	59,187
270,500	0,250	0,625	1,049	0,000	0,000	0,333	0,657	45,624	21,482	21,220	21,149	21,131	21,226	21,235	21,452	59,196
271,000	0,255	0,613	1,054	0,000	0,000	0,341	0,657	45,652	21,472	21,281	21,215	21,195	21,290	21,304	21,515	59,223
271,500	0,246	0,613	1,048	0,000	0,000	0,342	0,657	45,667	21,601	21,339	21,260	21,249	21,339	21,355	21,565	59,232
272,000	0,242	0,612	1,051	0,000	0,000	0,343	0,656	45,520	21,527	21,270	21,191	21,168	21,268	21,278	21,493	59,248
272,500	0,238	0,613	1,048	0,000	0,000	0,340	0,656	45,554	21,561	21,280	21,188	21,170	21,266	21,276	21,485	59,241
273,000	0,236	0,620	1,049	0,000	0,000	0,334	0,657	45,607	21,569	21,302	21,216	21,191	21,279	21,301	21,508	59,240
273,500	0,242	0,615	1,050	0,000	0,000	0,342	0,656	45,416	21,510	21,272	21,185	21,166	21,269	21,282	21,485	59,262
274,000	0,254	0,599	1,046	0,000	0,000	0,355	0,656	45,278	21,481	21,302	21,218	21,193	21,289	21,302	21,512	59,279
274,500	0,258	0,590	1,052	0,000	0,000	0,360	0,656	45,230	21,456	21,313	21,239	21,228	21,316	21,330	21,539	59,270
275,000	0,255	0,587	1,046	0,000	0,000	0,364	0,656	45,215	21,586	21,344	21,277	21,251	21,363	21,361	21,570	59,257
275,500	0,253	0,587	1,055	0,000	0,000	0,363	0,656	45,074	21,521	21,255	21,175	21,161	21,251	21,265	21,468	59,264
276,000	0,247	0,588	1,052	0,000	0,000	0,362	0,656	44,918	21,537	21,260	21,173	21,146	21,252	21,262	21,463	59,277
276,500	0,251	0,583	1,054	0,000	0,000	0,367	0,656	44,697	21,353	21,182	21,098	21,090	21,185	21,196	21,393	59,288
277,000	0,269	0,575	1,053	0,000	0,000	0,373	0,655	44,643	21,415	21,225	21,150	21,145	21,237	21,245	21,446	59,327

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
263,000	48,347	51,746	63,159	0,244	0,235	3008,478	3075,675	104,574	10,150	10,416	0,000	41,869	8,354	16,162	2022-04-27 14:22
263,500	48,423	51,754	63,172	0,243	0,235	2982,154	3078,273	73,161	10,525	10,088	0,000	41,719	8,339	16,162	44678,59931
264,000	48,476	51,840	63,173	0,243	0,235	2966,548	3056,252	49,825	10,884	9,690	0,000	42,011	8,368	16,162	2022-04-27 14:23
264,500	48,445	51,843	63,168	0,242	0,235	2973,791	3054,587	62,899	10,681	9,822	0,000	41,941	8,361	16,162	44678,6
265,000	48,367	51,968	63,191	0,244	0,235	3019,696	3026,378	125,093	10,271	10,188	0,000	42,367	8,403	16,069	2022-04-27 14:24
265,500	48,302	51,869	63,213	0,243	0,235	3022,059	3057,435	142,164	10,209	10,347	0,000	42,122	8,379	16,162	44678,60069
266,000	48,340	51,739	63,193	0,243	0,235	3012,405	3086,629	130,485	10,318	10,272	0,000	41,729	8,340	16,069	2022-04-27 14:25
266,500	48,419	51,754	63,217	0,243	0,235	2992,216	3091,111	102,072	10,417	10,139	0,000	41,978	8,364	16,069	44678,60139
267,000	48,471	51,761	63,219	0,243	0,235	2983,827	3088,321	75,579	10,819	9,792	0,000	42,016	8,368	16,069	2022-04-27 14:26
267,500	48,445	51,805	63,233	0,242	0,235	2984,618	3082,980	72,893	10,655	9,861	0,000	42,065	8,373	16,069	44678,60208
268,000	48,396	51,806	63,248	0,243	0,235	3014,341	3088,277	95,393	10,579	9,976	0,000	41,915	8,358	16,069	2022-04-27 14:27
268,500	48,348	51,766	63,263	0,242	0,235	3017,038	3102,865	121,780	10,484	10,067	0,000	41,958	8,362	16,068	44678,60278
269,000	48,315	51,805	63,279	0,243	0,235	3039,226	3093,454	130,168	10,534	10,047	0,000	41,753	8,342	16,162	2022-04-27 14:28
269,500	48,364	51,733	63,297	0,243	0,235	3021,091	3120,242	117,998	10,707	9,887	0,001	41,731	8,340	16,069	44678,60347
270,000	48,446	51,640	63,304	0,244	0,235	3006,209	3145,715	104,764	10,788	9,766	0,002	41,931	8,360	16,069	2022-04-27 14:29
270,500	48,483	51,846	63,324	0,244	0,235	2999,800	3095,547	143,470	10,513	9,990	-0,001	42,033	8,370	15,975	44678,60417
271,000	48,435	51,680	63,324	0,243	0,235	3016,062	3139,269	131,024	10,317	10,242	0,000	42,281	8,394	16,069	2022-04-27 14:30
271,500	48,362	51,740	63,339	0,243	0,235	3029,445	3127,096	116,419	10,301	10,265	0,000	41,821	8,349	15,975	44678,60486
272,000	48,354	51,690	63,362	0,243	0,235	3039,024	3147,803	103,767	10,297	10,277	0,000	41,919	8,359	16,069	2022-04-27 14:31
272,500	48,402	51,587	63,350	0,244	0,235	3037,054	3173,140	94,889	10,374	10,192	0,000	41,929	8,359	15,975	44678,60556
273,000	48,439	51,677	63,361	0,243	0,235	3010,500	3150,920	92,679	10,542	10,035	0,000	42,036	8,370	16,068	2022-04-27 14:32
273,500	48,441	51,685	63,361	0,242	0,235	3008,379	3147,446	119,996	10,229	10,251	0,000	41,904	8,357	15,974	44678,60625
274,000	48,412	51,711	63,368	0,243	0,235	3030,680	3144,379	147,470	9,854	10,647	0,000	41,788	8,345	15,975	2022-04-27 14:33
274,500	48,378	51,769	63,395	0,244	0,235	3054,180	3135,827	142,350	9,725	10,813	0,000	42,239	8,390	15,974	44678,60694
275,000	48,345	51,892	63,398	0,244	0,235	3052,460	3101,929	141,410	9,660	10,909	0,000	42,160	8,383	15,974	2022-04-27 14:34
275,500	48,375	51,709	63,387	0,242	0,235	3030,791	3147,840	127,749	9,705	10,876	0,000	42,203	8,387	15,975	44678,60764
276,000	48,471	51,729	63,390	0,244	0,235	3022,646	3144,676	119,613	9,666	10,869	0,000	42,229	8,389	15,975	2022-04-27 14:35
276,500	48,503	51,737	63,409	0,242	0,235	2996,582	3148,230	139,556	9,549	11,011	0,000	42,218	8,388	15,974	44678,60833
277,000	48,451	51,726	63,412	0,242	0,235	3018,737	3152,109	189,801	9,312	11,203	0,000	42,089	8,375	15,974	2022-04-27 14:36

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
277,500	0,273	0,572	1,051	0,000	0,000	0,375	0,656	44,651	21,423	21,251	21,167	21,154	21,266	21,273	21,470	59,357
278,000	0,266	0,581	1,055	0,000	0,000	0,366	0,656	44,804	21,355	21,234	21,160	21,167	21,258	21,272	21,470	59,311
278,500	0,257	0,596	1,053	0,000	0,000	0,354	0,656	44,952	21,536	21,323	21,252	21,245	21,347	21,361	21,555	59,290
279,000	0,256	0,601	1,051	0,000	0,000	0,351	0,655	44,841	21,520	21,199	21,102	21,098	21,200	21,216	21,412	59,272
279,500	0,276	0,594	1,057	0,000	0,000	0,358	0,655	44,810	21,429	21,179	21,087	21,094	21,191	21,201	21,398	59,289
280,000	0,280	0,586	1,055	0,000	0,000	0,364	0,654	44,850	21,423	21,196	21,096	21,104	21,205	21,213	21,411	59,324
280,500	0,264	0,586	1,047	0,000	0,000	0,363	0,654	44,826	21,491	21,233	21,138	21,136	21,234	21,249	21,441	59,316
281,000	0,253	0,586	1,053	0,000	0,000	0,363	0,654	44,898	21,423	21,288	21,216	21,215	21,318	21,332	21,522	59,305
281,500	0,252	0,587	1,048	0,000	0,000	0,363	0,654	44,752	21,262	21,161	21,074	21,088	21,192	21,200	21,388	59,257
282,000	0,254	0,583	1,050	0,000	0,000	0,367	0,654	44,614	21,244	21,163	21,084	21,105	21,200	21,207	21,403	59,246
282,500	0,261	0,575	1,052	0,000	0,000	0,373	0,654	44,775	21,430	21,307	21,227	21,242	21,343	21,355	21,544	59,259
283,000	0,256	0,577	1,044	0,000	0,000	0,371	0,654	44,711	21,197	21,210	21,147	21,162	21,272	21,278	21,469	59,263
283,500	0,252	0,574	1,047	0,000	0,000	0,374	0,654	44,744	21,201	21,228	21,169	21,206	21,307	21,314	21,503	59,274
284,000	0,250	0,579	1,046	0,000	0,000	0,368	0,654	44,860	21,384	21,313	21,248	21,277	21,378	21,389	21,569	59,261
284,500	0,246	0,588	1,056	0,000	0,000	0,361	0,654	44,784	21,185	21,148	21,091	21,122	21,228	21,234	21,417	59,234
285,000	0,240	0,593	1,049	0,000	0,000	0,359	0,654	44,820	21,200	21,165	21,098	21,141	21,242	21,262	21,437	59,227
285,500	0,244	0,586	1,061	0,000	0,000	0,363	0,654	44,810	21,282	21,249	21,182	21,224	21,317	21,331	21,513	59,227
286,000	0,247	0,581	1,052	0,000	0,000	0,368	0,654	44,693	21,170	21,140	21,078	21,105	21,215	21,233	21,405	59,232
286,500	0,249	0,577	1,052	0,000	0,000	0,371	0,654	44,628	21,242	21,078	21,010	21,037	21,144	21,166	21,337	59,248
287,000	0,246	0,582	1,050	0,000	0,000	0,365	0,654	44,821	21,518	21,249	21,163	21,182	21,285	21,309	21,478	59,267
287,500	0,239	0,593	1,047	0,000	0,000	0,357	0,653	44,880	21,523	21,231	21,146	21,153	21,262	21,295	21,456	59,245
288,000	0,239	0,592	1,053	0,000	0,000	0,359	0,653	44,845	21,609	21,274	21,185	21,197	21,308	21,339	21,490	59,219
288,500	0,245	0,581	1,051	0,000	0,000	0,369	0,654	44,769	21,633	21,317	21,228	21,242	21,347	21,377	21,533	59,229
289,000	0,251	0,570	1,042	0,000	0,000	0,377	0,653	44,710	21,680	21,365	21,276	21,296	21,392	21,422	21,575	59,215
289,500	0,248	0,570	1,050	0,000	0,000	0,377	0,652	44,649	21,391	21,197	21,113	21,130	21,249	21,268	21,425	59,224
290,000	0,248	0,570	1,047	0,000	0,000	0,375	0,652	44,742	21,600	21,287	21,192	21,214	21,313	21,355	21,502	59,227
290,500	0,243	0,580	1,048	0,000	0,000	0,367	0,652	44,850	21,596	21,278	21,175	21,194	21,301	21,339	21,487	59,217
291,000	0,239	0,585	1,052	0,000	0,000	0,365	0,652	44,791	21,561	21,258	21,155	21,172	21,277	21,316	21,467	59,220
291,500	0,244	0,578	1,048	0,000	0,000	0,372	0,652	44,699	21,642	21,246	21,128	21,150	21,263	21,309	21,442	59,189

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
277,500	48,352	51,995	63,386	0,242	0,235	3057,753	3073,423	181,339	9,315	11,264	0,000	42,108	8,377	15,974	44678,60903
278,000	48,296	52,125	63,397	0,244	0,235	3092,144	3038,688	157,290	9,668	10,971	0,000	42,217	8,388	15,974	2022-04-27 14:37
278,500	48,366	51,741	63,383	0,243	0,235	3050,216	3140,644	140,884	9,980	10,633	0,000	42,195	8,386	15,975	44678,60972
279,000	48,458	51,776	63,402	0,243	0,235	3011,478	3135,567	151,845	10,015	10,545	0,000	41,924	8,359	15,975	2022-04-27 14:38
279,500	48,480	51,829	63,369	0,242	0,235	3000,909	3112,182	204,474	9,774	10,742	0,001	42,404	8,407	15,850	44678,61042
280,000	48,427	51,870	63,371	0,242	0,235	3032,324	3102,945	199,883	9,625	10,922	0,000	42,045	8,371	15,975	2022-04-27 14:39
280,500	48,338	51,991	63,346	0,242	0,235	3052,910	3066,623	149,228	9,658	10,904	0,000	41,639	8,331	15,849	44678,61111
281,000	48,297	51,774	63,350	0,242	0,235	3062,015	3123,074	133,862	9,644	10,897	0,000	42,236	8,390	15,849	2022-04-27 14:40
281,500	48,370	51,787	63,352	0,243	0,235	3043,336	3120,235	128,453	9,687	10,884	0,000	41,711	8,338	15,849	44678,61181
282,000	48,446	51,795	63,461	0,243	0,235	3007,797	3145,738	149,037	9,484	11,010	0,000	42,168	8,383	15,849	2022-04-27 14:41
282,500	48,471	51,748	63,454	0,243	0,235	3009,397	3155,835	157,016	9,365	11,177	0,000	42,214	8,388	15,850	44678,6125
283,000	48,435	51,788	63,476	0,243	0,235	3020,443	3152,447	140,742	9,421	11,141	0,000	41,790	8,346	15,849	2022-04-27 14:42
283,500	48,399	51,749	63,471	0,243	0,235	3032,651	3164,713	130,106	9,361	11,210	0,000	42,194	8,386	15,849	44678,61319
284,000	48,375	51,874	63,464	0,243	0,235	3042,703	3127,544	124,726	9,550	11,054	0,000	41,710	8,338	15,850	2022-04-27 14:43
284,500	48,346	51,920	63,483	0,244	0,235	3048,731	3120,706	109,227	9,756	10,833	0,000	42,324	8,399	15,850	44678,61389
285,000	48,338	51,823	63,472	0,243	0,235	3044,168	3142,532	104,042	9,783	10,763	0,000	42,151	8,382	15,850	2022-04-27 14:44
285,500	48,392	51,726	63,473	0,243	0,235	3021,310	3171,756	118,604	9,614	10,904	0,000	42,382	8,405	15,850	44678,61458
286,000	48,468	51,693	63,469	0,244	0,235	3011,285	3178,880	121,332	9,482	11,036	0,000	41,901	8,357	15,849	2022-04-27 14:45
286,500	48,473	51,929	63,460	0,242	0,235	2989,453	3112,149	124,811	9,441	11,119	0,000	42,147	8,381	15,850	44678,61528
287,000	48,421	51,825	63,468	0,243	0,235	3022,220	3140,978	112,093	9,630	10,947	0,000	41,740	8,341	15,850	2022-04-27 14:46
287,500	48,345	51,849	63,441	0,243	0,235	3042,726	3130,029	98,977	9,855	10,707	0,001	41,794	8,346	15,849	44678,61597
288,000	48,308	51,682	63,450	0,242	0,235	3038,173	3176,739	100,813	9,740	10,779	0,001	42,093	8,376	15,850	2022-04-27 14:47
288,500	48,376	51,784	63,443	0,241	0,235	3004,520	3147,581	125,842	9,388	11,072	0,000	42,188	8,385	15,849	44678,61667
289,000	48,454	51,791	63,460	0,243	0,235	2997,436	3150,329	125,675	9,223	11,313	-0,001	41,816	8,348	15,756	2022-04-27 14:48
289,500	48,477	51,838	63,432	0,243	0,235	2993,045	3128,034	121,905	9,268	11,311	0,000	41,976	8,364	15,756	44678,61736
290,000	48,444	51,750	63,439	0,244	0,235	3016,358	3154,850	124,396	9,285	11,264	0,000	41,758	8,342	15,756	2022-04-27 14:49
290,500	48,380	51,825	63,431	0,243	0,235	3020,166	3132,741	103,597	9,603	10,998	0,001	42,117	8,378	15,756	44678,61806
291,000	48,318	51,895	63,432	0,242	0,235	3034,681	3114,615	100,915	9,571	10,953	0,000	42,069	8,373	15,756	2022-04-27 14:50
291,500	48,339	51,875	63,435	0,241	0,235	3007,394	3120,198	124,100	9,346	11,169	0,000	42,090	8,376	15,756	44678,61875



	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
292,000	0,252	0,567	1,055	0,000	0,000	0,380	0,652	44,702	21,531	21,293	21,191	21,204	21,321	21,363	21,505	59,192
292,500	0,252	0,565	1,051	0,000	0,000	0,381	0,652	44,688	21,585	21,318	21,207	21,242	21,349	21,399	21,530	59,211
293,000	0,254	0,566	1,051	0,000	0,000	0,379	0,652	44,677	21,542	21,288	21,178	21,222	21,334	21,385	21,513	59,226
293,500	0,253	0,572	1,049	0,000	0,000	0,374	0,652	44,677	21,608	21,240	21,131	21,163	21,270	21,320	21,452	59,188
294,000	0,247	0,580	1,046	0,000	0,000	0,369	0,652	44,729	21,742	21,296	21,179	21,214	21,326	21,376	21,502	59,166
294,500	0,252	0,574	1,051	0,000	0,000	0,374	0,652	44,704	21,724	21,333	21,208	21,235	21,352	21,402	21,531	59,157
295,000	0,258	0,572	1,050	0,000	0,000	0,376	0,652	44,635	21,640	21,313	21,202	21,239	21,349	21,407	21,526	59,144
295,500	0,265	0,571	1,046	0,000	0,000	0,376	0,652	44,670	21,688	21,331	21,211	21,258	21,368	21,419	21,545	59,179
296,000	0,268	0,571	1,051	0,000	0,000	0,376	0,652	44,690	21,586	21,341	21,215	21,269	21,373	21,435	21,557	59,177
296,500	0,268	0,574	1,040	0,000	0,000	0,371	0,652	44,741	21,517	21,311	21,193	21,250	21,367	21,405	21,542	59,165
297,000	0,262	0,579	1,051	0,000	0,000	0,369	0,652	44,678	21,491	21,211	21,097	21,147	21,265	21,319	21,437	59,159
297,500	0,267	0,577	1,047	0,000	0,000	0,370	0,652	44,659	21,572	21,205	21,087	21,139	21,252	21,314	21,428	59,135
298,000	0,263	0,583	1,049	0,000	0,000	0,367	0,652	44,751	21,520	21,245	21,138	21,194	21,308	21,356	21,479	59,130
298,500	0,278	0,583	1,048	0,000	0,000	0,367	0,651	44,904	21,604	21,363	21,240	21,300	21,425	21,468	21,596	59,141
299,000	0,273	0,585	1,050	0,000	0,000	0,364	0,651	44,950	21,590	21,371	21,261	21,319	21,434	21,490	21,607	59,141
299,500	0,266	0,587	1,049	0,000	0,000	0,363	0,651	44,853	21,596	21,308	21,201	21,246	21,371	21,433	21,547	59,116
300,000	0,287	0,579	1,052	0,000	0,000	0,370	0,651	44,769	21,613	21,302	21,186	21,251	21,367	21,420	21,540	59,097
300,500	0,296	0,577	1,046	0,000	0,000	0,372	0,651	44,802	21,735	21,357	21,237	21,303	21,424	21,475	21,596	59,089
301,000	0,286	0,579	1,041	0,000	0,000	0,371	0,651	44,805	21,724	21,341	21,219	21,279	21,401	21,453	21,573	59,099
301,500	0,289	0,569	1,045	0,000	0,000	0,379	0,651	44,568	21,544	21,189	21,061	21,131	21,253	21,313	21,424	59,120
302,000	0,286	0,564	1,049	0,000	0,000	0,382	0,651	44,657	21,663	21,315	21,176	21,260	21,368	21,434	21,548	59,089
302,500	0,275	0,570	1,049	0,000	0,000	0,377	0,651	44,622	21,644	21,275	21,145	21,228	21,352	21,400	21,520	59,076
303,000	0,282	0,566	1,051	0,000	0,000	0,381	0,651	44,561	21,688	21,319	21,178	21,277	21,395	21,438	21,563	59,049
303,500	0,295	0,558	1,048	0,000	0,000	0,387	0,651	44,537	21,595	21,310	21,180	21,275	21,398	21,442	21,568	59,048
304,000	0,281	0,564	1,055	0,000	0,000	0,381	0,651	44,605	21,541	21,286	21,159	21,251	21,378	21,426	21,547	59,036
304,500	0,260	0,577	1,049	0,000	0,000	0,371	0,651	44,644	21,483	21,252	21,135	21,235	21,358	21,401	21,524	59,016
305,000	0,252	0,586	1,053	0,000	0,000	0,363	0,651	44,688	21,561	21,280	21,159	21,259	21,392	21,426	21,553	59,000
305,500	0,256	0,589	1,049	0,000	0,000	0,363	0,651	44,583	21,502	21,200	21,079	21,193	21,318	21,349	21,479	59,005
306,000	0,280	0,575	1,055	0,000	0,000	0,375	0,651	44,534	21,595	21,273	21,162	21,268	21,395	21,427	21,557	58,999

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
292,000	48,436	51,748	63,415	0,243	0,235	3002,407	3148,976	134,621	9,152	11,402	0,000	42,152	8,382	15,756	2022-04-27 14:51
292,500	48,488	51,815	63,399	0,240	0,235	2959,753	3128,071	134,707	9,099	11,428	0,000	41,832	8,350	15,756	44678,61944
293,000	48,427	51,833	63,398	0,243	0,235	3007,495	3121,606	138,902	9,201	11,370	0,001	42,231	8,390	15,756	2022-04-27 14:52
293,500	48,334	51,966	63,404	0,244	0,235	3043,997	3088,926	128,116	9,361	11,215	0,001	42,060	8,373	15,756	44678,62014
294,000	48,296	51,778	63,378	0,242	0,235	3020,286	3131,061	121,950	9,493	11,066	-0,001	41,876	8,354	15,756	2022-04-27 14:53
294,500	48,379	51,704	63,372	0,243	0,235	3012,970	3150,747	137,306	9,312	11,222	0,000	42,183	8,385	15,756	44678,62083
295,000	48,472	51,695	63,355	0,242	0,235	2969,260	3148,394	155,551	9,292	11,275	0,000	41,942	8,361	15,756	2022-04-27 14:54
295,500	48,475	51,658	63,336	0,241	0,235	2965,519	3150,795	170,683	9,270	11,291	0,000	42,108	8,377	15,756	44678,62153
296,000	48,398	51,820	63,356	0,242	0,235	3001,512	3115,672	177,860	9,273	11,278	0,000	42,197	8,386	15,756	2022-04-27 14:55
296,500	48,309	51,950	63,359	0,242	0,235	3012,309	3078,279	163,234	9,434	11,139	0,001	41,257	8,292	15,756	44678,62222
297,000	48,327	51,677	63,329	0,241	0,235	2996,783	3144,557	167,563	9,410	11,075	-0,001	42,168	8,383	15,662	2022-04-27 14:56
297,500	48,426	51,751	63,322	0,242	0,235	2980,777	3120,585	167,930	9,440	11,115	-0,001	41,873	8,354	15,662	44678,62292
298,000	48,487	51,762	63,307	0,242	0,236	2954,884	3118,573	165,609	9,583	11,013	0,000	41,981	8,365	15,756	2022-04-27 14:57
298,500	48,452	51,767	63,275	0,242	0,235	2975,871	3105,983	204,914	9,560	11,006	0,000	42,244	8,391	15,662	44678,62361
299,000	48,354	51,808	63,278	0,242	0,235	2994,146	3093,905	170,971	9,666	10,914	0,000	42,321	8,399	15,662	2022-04-27 14:58
299,500	48,295	51,693	63,273	0,242	0,235	3008,175	3125,746	174,583	9,641	10,901	0,000	42,054	8,372	15,662	44678,62431
300,000	48,366	51,577	63,298	0,242	0,235	2978,091	3163,446	241,398	9,400	11,110	0,001	41,853	8,352	15,662	2022-04-27 14:59
300,500	48,461	51,555	63,275	0,241	0,236	2940,801	3166,162	239,514	9,424	11,149	0,000	41,563	8,323	15,662	44678,625
301,000	48,492	51,671	63,273	0,241	0,235	2939,399	3131,586	215,324	9,442	11,135	0,000	41,472	8,314	15,662	2022-04-27 15:00
301,500	48,436	51,879	63,264	0,242	0,235	2973,482	3074,152	229,150	9,128	11,378	0,000	41,914	8,358	15,756	44678,62569
302,000	48,390	51,822	63,254	0,242	0,235	2979,196	3084,770	205,999	9,134	11,455	0,000	41,829	8,350	15,662	2022-04-27 15:01
302,500	48,397	51,689	63,240	0,243	0,235	2975,079	3117,779	183,699	9,296	11,298	-0,001	42,274	8,394	15,662	44678,62639
303,000	48,411	51,674	63,231	0,242	0,235	2961,080	3120,399	219,502	9,048	11,442	0,000	41,907	8,357	15,662	2022-04-27 15:02
303,500	48,409	51,593	63,210	0,242	0,235	2958,968	3136,286	246,360	8,941	11,619	0,000	41,965	8,363	15,662	44678,62708
304,000	48,376	51,651	63,174	0,243	0,235	2979,420	3111,203	184,598	9,200	11,429	0,000	42,020	8,369	15,662	2022-04-27 15:03
304,500	48,329	51,690	63,160	0,244	0,235	2990,030	3096,880	138,237	9,503	11,134	0,000	41,771	8,344	15,662	44678,62778
305,000	48,296	51,619	63,164	0,242	0,235	2977,254	3115,778	130,763	9,698	10,900	0,002	42,137	8,380	15,662	2022-04-27 15:04
305,500	48,352	51,591	63,148	0,242	0,236	2957,109	3122,327	161,347	9,646	10,888	0,001	42,152	8,382	15,662	44678,62847
306,000	48,450	51,518	63,124	0,241	0,235	2919,079	3133,585	222,889	9,223	11,261	0,000	42,368	8,403	15,662	2022-04-27 15:05

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
306,500	0,289	0,563	1,049	0,000	0,000	0,384	0,650	44,475	21,533	21,270	21,159	21,260	21,388	21,426	21,553	59,004
307,000	0,280	0,561	1,043	0,000	0,000	0,384	0,650	44,463	21,482	21,270	21,160	21,270	21,403	21,443	21,561	58,994
307,500	0,263	0,567	1,045	0,000	0,000	0,379	0,649	44,460	21,592	21,282	21,178	21,282	21,406	21,444	21,574	58,979
308,000	0,264	0,568	1,045	0,000	0,000	0,378	0,649	44,457	21,649	21,270	21,160	21,256	21,383	21,424	21,548	58,960
308,500	0,259	0,572	1,045	0,000	0,000	0,374	0,650	44,477	21,757	21,316	21,199	21,289	21,419	21,451	21,583	58,941
309,000	0,260	0,571	1,045	0,000	0,000	0,378	0,649	44,311	21,692	21,274	21,145	21,244	21,375	21,397	21,530	58,939
309,500	0,275	0,559	1,047	0,000	0,000	0,387	0,649	44,331	21,758	21,359	21,228	21,317	21,444	21,482	21,607	58,940
310,000	0,275	0,555	1,046	0,000	0,000	0,390	0,650	44,337	21,849	21,417	21,280	21,376	21,502	21,542	21,665	58,951
310,500	0,270	0,556	1,051	0,000	0,000	0,389	0,649	44,278	21,787	21,377	21,242	21,327	21,463	21,499	21,619	58,949
311,000	0,270	0,560	1,046	0,000	0,000	0,385	0,649	44,344	21,831	21,425	21,275	21,374	21,509	21,540	21,665	58,927
311,500	0,269	0,562	1,053	0,000	0,000	0,384	0,649	44,326	21,763	21,389	21,262	21,364	21,489	21,535	21,652	58,910
312,000	0,281	0,559	1,051	0,000	0,000	0,388	0,649	44,258	21,738	21,424	21,300	21,404	21,531	21,568	21,690	58,909
312,500	0,291	0,554	1,045	0,000	0,000	0,391	0,649	44,074	21,548	21,248	21,123	21,227	21,366	21,392	21,517	58,905
313,000	0,289	0,557	1,058	0,000	0,000	0,387	0,649	44,188	21,610	21,297	21,169	21,289	21,417	21,444	21,572	58,888
313,500	0,279	0,566	1,053	0,000	0,000	0,379	0,649	44,240	21,473	21,261	21,151	21,252	21,397	21,422	21,549	58,885
314,000	0,269	0,574	1,050	0,000	0,000	0,373	0,649	44,260	21,453	21,218	21,109	21,233	21,367	21,403	21,519	58,867
314,500	0,264	0,579	1,044	0,000	0,000	0,368	0,649	44,312	21,402	21,209	21,105	21,244	21,369	21,401	21,525	58,844
315,000	0,265	0,581	1,051	0,000	0,000	0,368	0,649	44,444	21,581	21,298	21,195	21,322	21,449	21,479	21,606	58,842
315,500	0,276	0,575	1,050	0,000	0,000	0,372	0,649	44,347	21,489	21,239	21,143	21,269	21,409	21,436	21,560	58,827
316,000	0,280	0,573	1,051	0,000	0,000	0,374	0,649	44,423	21,547	21,296	21,191	21,315	21,452	21,477	21,605	58,804
316,500	0,273	0,573	1,050	0,000	0,000	0,373	0,649	44,376	21,505	21,187	21,078	21,205	21,348	21,363	21,491	58,796
317,000	0,263	0,580	1,040	0,000	0,000	0,366	0,649	44,522	21,651	21,272	21,164	21,279	21,424	21,453	21,573	58,808
317,500	0,249	0,594	1,042	0,000	0,000	0,357	0,648	44,607	21,710	21,293	21,169	21,291	21,429	21,457	21,575	58,799
318,000	0,259	0,588	1,050	0,000	0,000	0,362	0,649	44,578	21,807	21,310	21,187	21,297	21,444	21,466	21,585	58,804
318,500	0,271	0,580	1,045	0,000	0,000	0,369	0,648	44,520	21,778	21,273	21,149	21,253	21,390	21,420	21,542	58,783
319,000	0,268	0,578	1,049	0,000	0,000	0,371	0,648	44,556	21,748	21,340	21,217	21,321	21,478	21,487	21,611	58,775
319,500	0,261	0,576	1,042	0,000	0,000	0,372	0,649	44,572	21,819	21,348	21,221	21,320	21,469	21,486	21,613	58,789
320,000	0,257	0,577	1,052	0,000	0,000	0,370	0,648	44,608	21,808	21,379	21,248	21,355	21,502	21,517	21,644	58,792
320,500	0,260	0,578	1,044	0,000	0,000	0,370	0,648	44,491	21,778	21,363	21,221	21,329	21,475	21,491	21,618	58,791

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
306,500	48,470	51,691	63,131	0,242	0,235	2927,181	3089,776	219,010	9,013	11,531	0,002	41,950	8,362	15,568	44678,62917
307,000	48,403	51,659	63,128	0,243	0,235	2949,847	3097,275	194,753	9,035	11,527	0,001	42,046	8,371	15,568	2022-04-27 15:06
307,500	48,319	51,729	63,115	0,243	0,235	2978,434	3075,523	151,822	9,237	11,375	0,000	41,778	8,344	15,568	44678,62986
308,000	48,257	51,594	63,103	0,242	0,235	2977,982	3108,180	164,827	9,194	11,354	0,000	41,833	8,350	15,568	2022-04-27 15:07
308,500	48,308	51,571	63,091	0,242	0,235	2953,138	3110,822	139,074	9,351	11,230	-0,001	41,977	8,364	15,662	44678,63056
309,000	48,396	51,546	63,047	0,243	0,235	2937,001	3105,420	167,798	9,165	11,327	-0,001	41,857	8,352	15,568	2022-04-27 15:08
309,500	48,447	51,544	63,017	0,241	0,235	2906,322	3098,034	197,524	8,925	11,611	0,000	41,448	8,311	15,568	44678,63125
310,000	48,425	51,672	63,001	0,243	0,235	2934,887	3059,577	185,554	8,870	11,700	0,000	42,109	8,377	15,568	2022-04-27 15:09
310,500	48,382	51,611	62,988	0,242	0,235	2940,456	3072,962	178,324	8,914	11,672	-0,001	42,174	8,384	15,568	44678,63194
311,000	48,341	51,598	62,949	0,242	0,235	2943,259	3064,595	174,968	9,026	11,556	0,000	41,922	8,359	15,568	2022-04-27 15:10
311,500	48,307	51,618	62,906	0,242	0,235	2949,032	3046,450	176,259	9,042	11,515	0,000	42,482	8,415	15,568	44678,63264
312,000	48,335	51,599	62,874	0,241	0,235	2930,197	3042,540	220,251	8,871	11,632	0,000	42,139	8,380	15,568	2022-04-27 15:11
312,500	48,413	51,581	62,875	0,242	0,235	2913,356	3049,866	229,827	8,854	11,733	0,000	42,200	8,387	15,568	44678,63333
313,000	48,456	51,526	62,860	0,242	0,235	2901,803	3057,946	216,630	8,980	11,625	0,000	42,648	8,431	15,568	2022-04-27 15:12
313,500	48,427	51,577	62,859	0,242	0,235	2901,818	3046,986	190,011	9,249	11,359	0,000	42,485	8,415	15,568	44678,63403
314,000	48,381	51,570	62,839	0,244	0,235	2932,611	3042,334	168,416	9,402	11,188	0,000	41,872	8,354	15,568	2022-04-27 15:13
314,500	48,342	51,710	62,812	0,242	0,235	2913,977	2995,795	166,077	9,511	11,048	-0,002	41,915	8,358	15,568	44678,63472
315,000	48,309	51,552	62,821	0,243	0,235	2936,379	3040,195	170,586	9,502	11,025	0,000	42,101	8,377	15,569	2022-04-27 15:14
315,500	48,319	51,513	62,795	0,243	0,236	2933,350	3048,316	200,287	9,339	11,164	0,001	41,844	8,351	15,568	44678,63542
316,000	48,391	51,636	62,790	0,242	0,235	2888,996	3010,112	199,131	9,319	11,221	-0,001	42,354	8,402	15,568	2022-04-27 15:15
316,500	48,446	51,573	62,787	0,242	0,235	2875,840	3026,040	180,684	9,349	11,201	0,002	41,953	8,362	15,568	44678,63611
317,000	48,436	51,634	62,794	0,242	0,236	2884,598	3015,298	145,343	9,632	10,972	0,000	41,482	8,315	15,568	2022-04-27 15:16
317,500	48,379	51,643	62,774	0,243	0,235	2904,310	3005,923	125,390	9,841	10,705	0,001	41,833	8,350	15,568	44678,63681
318,000	48,319	51,709	62,790	0,241	0,235	2901,294	2992,613	165,171	9,639	10,869	0,000	41,748	8,341	15,568	2022-04-27 15:17
318,500	48,310	51,825	62,787	0,242	0,235	2911,103	2959,763	178,832	9,433	11,084	0,000	41,904	8,357	15,474	44678,6375
319,000	48,368	51,699	62,763	0,241	0,235	2885,172	2988,060	166,179	9,415	11,122	0,001	41,699	8,337	15,568	2022-04-27 15:18
319,500	48,427	51,744	62,782	0,241	0,235	2873,271	2981,217	149,037	9,367	11,172	0,000	41,726	8,339	15,568	44678,63819
320,000	48,430	51,540	62,756	0,242	0,235	2878,555	3027,544	144,928	9,464	11,099	0,000	42,139	8,380	15,474	2022-04-27 15:19
320,500	48,384	51,778	62,772	0,242	0,235	2886,388	2969,024	160,060	9,382	11,106	-0,002	41,780	8,345	15,474	44678,63889

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
321,000	0,267	0,574	1,048	0,000	0,000	0,373	0,648	44,493	21,859	21,382	21,240	21,347	21,501	21,517	21,637	58,805
321,500	0,275	0,575	1,048	0,000	0,000	0,373	0,648	44,556	21,776	21,379	21,237	21,354	21,505	21,514	21,644	58,781
322,000	0,260	0,581	1,043	0,000	0,000	0,367	0,648	44,659	21,773	21,380	21,236	21,349	21,503	21,510	21,638	58,776
322,500	0,251	0,590	1,048	0,000	0,000	0,360	0,648	44,768	21,764	21,416	21,277	21,403	21,547	21,559	21,686	58,771
323,000	0,252	0,591	1,039	0,000	0,000	0,359	0,648	44,706	21,793	21,379	21,246	21,363	21,515	21,524	21,651	58,755
323,500	0,255	0,590	1,045	0,000	0,000	0,359	0,648	44,673	21,814	21,385	21,240	21,357	21,511	21,514	21,644	58,761
324,000	0,282	0,584	1,053	0,000	0,000	0,366	0,648	44,633	21,889	21,443	21,297	21,417	21,561	21,567	21,697	58,776
324,500	0,313	0,580	1,047	0,000	0,000	0,368	0,647	44,693	21,838	21,454	21,317	21,429	21,582	21,594	21,718	58,760
325,000	0,306	0,583	1,046	0,000	0,000	0,366	0,647	44,642	21,771	21,397	21,266	21,371	21,530	21,543	21,662	58,742
325,500	0,287	0,583	1,038	0,000	0,000	0,366	0,646	44,619	21,807	21,395	21,257	21,372	21,524	21,530	21,655	58,739
326,000	0,268	0,587	1,043	0,000	0,000	0,361	0,646	44,602	21,787	21,379	21,244	21,351	21,510	21,513	21,639	58,750
326,500	0,264	0,590	1,050	0,000	0,000	0,361	0,646	44,536	21,789	21,371	21,225	21,335	21,501	21,508	21,630	58,750
327,000	0,271	0,582	1,042	0,000	0,000	0,368	0,646	44,525	21,787	21,432	21,294	21,404	21,564	21,567	21,693	58,759
327,500	0,278	0,575	1,053	0,000	0,000	0,374	0,646	44,488	21,829	21,454	21,324	21,446	21,597	21,593	21,717	58,738
328,000	0,276	0,570	1,044	0,000	0,000	0,376	0,646	44,480	21,887	21,462	21,324	21,432	21,590	21,592	21,715	58,721
328,500	0,266	0,575	1,041	0,000	0,000	0,372	0,646	44,448	21,769	21,391	21,264	21,367	21,520	21,514	21,646	58,739
329,000	0,263	0,581	1,041	0,000	0,000	0,367	0,646	44,432	21,799	21,382	21,246	21,348	21,506	21,512	21,635	58,752
329,500	0,268	0,581	1,046	0,000	0,000	0,367	0,645	44,415	21,774	21,396	21,249	21,362	21,527	21,521	21,643	58,760
330,000	0,291	0,572	1,038	0,000	0,000	0,378	0,646	44,242	21,705	21,333	21,194	21,302	21,463	21,467	21,588	58,751
330,500	0,310	0,561	1,048	0,000	0,000	0,384	0,646	44,225	21,749	21,356	21,227	21,329	21,486	21,484	21,615	58,732
331,000	0,306	0,561	1,049	0,000	0,000	0,383	0,646	44,160	21,764	21,356	21,231	21,331	21,487	21,489	21,616	58,742
331,500	0,287	0,566	1,048	0,000	0,000	0,378	0,646	44,217	21,741	21,351	21,210	21,330	21,484	21,477	21,609	58,748
332,000	0,280	0,576	1,050	0,000	0,000	0,371	0,646	44,199	21,612	21,273	21,140	21,265	21,428	21,431	21,549	58,739
332,500	0,279	0,578	1,051	0,000	0,000	0,369	0,645	44,189	21,663	21,302	21,171	21,305	21,464	21,454	21,582	58,743
333,000	0,271	0,574	1,051	0,000	0,000	0,374	0,645	44,187	21,647	21,335	21,203	21,341	21,494	21,492	21,615	58,740
333,500	0,278	0,565	1,049	0,000	0,000	0,381	0,645	44,071	21,533	21,263	21,146	21,286	21,444	21,446	21,565	58,742
334,000	0,279	0,565	1,046	0,000	0,000	0,381	0,645	44,093	21,603	21,325	21,193	21,341	21,501	21,492	21,626	58,731
334,500	0,278	0,565	1,046	0,000	0,000	0,380	0,645	44,044	21,699	21,296	21,161	21,299	21,468	21,453	21,584	58,704
335,000	0,273	0,574	1,045	0,000	0,000	0,373	0,645	44,117	21,645	21,308	21,179	21,323	21,490	21,463	21,601	58,691

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
321,000	48,329	51,703	62,760	0,241	0,235	2900,090	2984,723	180,487	9,330	11,189	0,000	42,122	8,379	15,474	2022-04-27 15:20
321,500	48,317	51,639	62,775	0,241	0,236	2901,706	3008,176	186,753	9,406	11,176	0,000	41,931	8,360	15,474	44678,63958
322,000	48,368	51,641	62,728	0,241	0,236	2885,300	2995,693	137,820	9,628	10,997	0,002	41,855	8,352	15,474	2022-04-27 15:21
322,500	48,421	51,631	62,742	0,242	0,236	2880,351	3002,331	132,274	9,768	10,800	0,000	42,071	8,374	15,474	44678,64028
323,000	48,416	51,764	62,731	0,242	0,235	2873,332	2962,105	134,368	9,786	10,765	0,000	41,538	8,320	15,474	2022-04-27 15:22
323,500	48,364	51,748	62,740	0,242	0,235	2895,106	2967,775	143,815	9,741	10,779	0,000	41,781	8,345	15,474	44678,64097
324,000	48,306	51,665	62,735	0,241	0,236	2898,737	2990,616	260,135	9,494	10,985	0,000	42,137	8,380	15,474	2022-04-27 15:23
324,500	48,323	51,624	62,738	0,243	0,235	2907,023	2999,949	286,604	9,535	11,039	0,000	41,718	8,338	15,347	44678,64167
325,000	48,382	51,704	62,749	0,241	0,235	2868,432	2980,154	250,847	9,591	10,986	0,001	41,807	8,347	15,347	2022-04-27 15:24
325,500	48,438	51,580	62,733	0,243	0,236	2869,023	3012,912	202,593	9,558	10,969	0,000	41,287	8,295	15,347	44678,64236
326,000	48,414	51,686	62,733	0,242	0,236	2874,326	2984,120	161,219	9,742	10,842	0,001	41,474	8,314	15,347	2022-04-27 15:25
326,500	48,352	51,600	62,750	0,241	0,236	2882,805	3012,748	169,004	9,696	10,829	0,000	42,267	8,393	15,474	44678,64306
327,000	48,302	51,518	62,745	0,242	0,235	2907,335	3032,384	184,489	9,471	11,045	0,000	41,593	8,326	15,347	2022-04-27 15:26
327,500	48,334	51,384	62,744	0,243	0,235	2898,441	3065,691	200,291	9,322	11,217	0,001	41,962	8,363	15,347	44678,64375
328,000	48,401	51,432	62,732	0,243	0,235	2877,040	3049,813	184,304	9,275	11,295	0,001	42,247	8,391	15,474	2022-04-27 15:27
328,500	48,445	51,467	62,732	0,242	0,236	2859,355	3043,227	165,991	9,403	11,146	0,001	41,623	8,329	15,347	44678,64444
329,000	48,429	51,620	62,734	0,242	0,235	2866,377	3001,835	159,395	9,568	10,997	0,000	41,186	8,285	15,347	2022-04-27 15:28
329,500	48,367	51,680	62,732	0,242	0,235	2884,191	2985,039	177,503	9,526	11,008	0,000	42,240	8,390	15,253	44678,64514
330,000	48,310	51,772	62,727	0,244	0,235	2921,449	2957,219	256,865	9,137	11,330	0,000	41,398	8,306	15,347	2022-04-27 15:29
330,500	48,325	51,457	62,726	0,241	0,235	2874,682	3044,045	286,934	8,985	11,519	0,000	41,933	8,360	15,347	44678,64583
331,000	48,388	51,447	62,719	0,241	0,236	2865,682	3045,702	255,082	9,056	11,502	0,000	42,232	8,390	15,347	2022-04-27 15:30
331,500	48,438	51,671	62,711	0,242	0,235	2862,646	2981,606	205,060	9,240	11,337	0,000	41,770	8,344	15,347	44678,64653
332,000	48,426	51,482	62,691	0,243	0,236	2873,886	3028,061	206,084	9,440	11,131	0,000	42,176	8,384	15,347	2022-04-27 15:31
332,500	48,429	51,610	62,680	0,242	0,235	2863,655	2989,829	196,522	9,442	11,066	-0,001	42,063	8,373	15,347	44678,64722
333,000	48,430	51,671	62,696	0,242	0,235	2861,229	2975,429	182,833	9,255	11,225	0,000	42,099	8,376	15,347	2022-04-27 15:32
333,500	48,375	51,650	62,681	0,242	0,235	2882,550	2979,099	201,492	9,136	11,427	0,000	42,008	8,367	15,347	44678,64792
334,000	48,292	51,548	62,692	0,243	0,235	2911,026	3009,690	200,634	9,116	11,434	0,001	41,851	8,352	15,253	2022-04-27 15:33
334,500	48,258	51,616	62,679	0,242	0,236	2907,874	2989,676	195,345	9,151	11,408	0,000	42,316	8,398	15,253	44678,64861
335,000	48,345	51,530	62,699	0,243	0,235	2885,366	3015,717	186,054	9,418	11,192	0,001	41,678	8,334	15,347	2022-04-27 15:34

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
335,500	0,282	0,573	1,051	0,000	0,000	0,376	0,644	44,076	21,642	21,307	21,182	21,317	21,479	21,465	21,597	58,682
336,000	0,287	0,565	1,036	0,000	0,000	0,381	0,645	43,938	21,632	21,265	21,137	21,264	21,430	21,416	21,547	58,708
336,500	0,280	0,566	1,039	0,000	0,000	0,380	0,643	44,000	21,627	21,251	21,126	21,255	21,424	21,408	21,542	58,733
337,000	0,269	0,573	1,046	0,000	0,000	0,374	0,644	44,067	21,605	21,266	21,124	21,273	21,442	21,408	21,547	58,740
337,500	0,261	0,577	1,051	0,000	0,000	0,370	0,644	44,144	21,467	21,251	21,126	21,267	21,434	21,418	21,549	58,717
338,000	0,245	0,586	1,048	0,000	0,000	0,361	0,644	44,245	21,484	21,269	21,153	21,294	21,465	21,446	21,577	58,705
338,500	0,246	0,587	1,049	0,000	0,000	0,364	0,644	44,266	21,496	21,306	21,196	21,351	21,528	21,501	21,635	58,708
339,000	0,268	0,575	1,045	0,000	0,000	0,374	0,644	44,228	21,502	21,287	21,186	21,340	21,501	21,481	21,619	58,718
339,500	0,265	0,571	1,044	0,000	0,000	0,376	0,643	44,078	21,388	21,169	21,062	21,228	21,382	21,363	21,499	58,728
340,000	0,256	0,575	1,049	0,000	0,000	0,371	0,645	44,282	21,526	21,321	21,219	21,368	21,539	21,517	21,650	58,721
340,500	0,245	0,586	1,049	0,000	0,000	0,363	0,644	44,188	21,369	21,156	21,047	21,207	21,376	21,352	21,487	58,698
341,000	0,245	0,585	1,039	0,000	0,000	0,365	0,644	44,303	21,493	21,260	21,160	21,314	21,484	21,463	21,602	58,680
341,500	0,251	0,579	1,043	0,000	0,000	0,370	0,644	44,158	21,624	21,218	21,101	21,256	21,429	21,407	21,543	58,685
342,000	0,262	0,570	1,048	0,000	0,000	0,377	0,643	44,075	21,612	21,196	21,073	21,225	21,396	21,369	21,508	58,700
342,500	0,266	0,565	1,047	0,000	0,000	0,381	0,643	44,069	21,670	21,222	21,091	21,234	21,408	21,383	21,519	58,690
343,000	0,262	0,568	1,048	0,000	0,000	0,377	0,643	44,115	21,621	21,219	21,093	21,242	21,404	21,383	21,520	58,700
343,500	0,248	0,576	1,046	0,000	0,000	0,370	0,643	44,272	21,749	21,311	21,177	21,332	21,504	21,482	21,607	58,698
344,000	0,242	0,582	1,046	0,000	0,000	0,366	0,643	44,125	21,632	21,193	21,053	21,211	21,382	21,360	21,488	58,667
344,500	0,246	0,579	1,049	0,000	0,000	0,369	0,643	44,205	21,673	21,291	21,152	21,301	21,473	21,453	21,582	58,677
345,000	0,247	0,578	1,040	0,000	0,000	0,369	0,643	44,328	21,687	21,304	21,172	21,328	21,499	21,485	21,608	58,695
345,500	0,243	0,581	1,050	0,000	0,000	0,367	0,643	44,367	21,669	21,311	21,167	21,323	21,493	21,478	21,608	58,718
346,000	0,242	0,582	1,046	0,000	0,000	0,366	0,643	44,451	21,679	21,355	21,214	21,361	21,539	21,522	21,648	58,708
346,500	0,239	0,586	1,045	0,000	0,000	0,363	0,643	44,443	21,667	21,326	21,182	21,343	21,514	21,504	21,627	58,704
347,000	0,237	0,584	1,050	0,000	0,000	0,366	0,643	44,406	21,736	21,338	21,207	21,370	21,530	21,527	21,643	58,693
347,500	0,246	0,579	1,054	0,000	0,000	0,370	0,642	44,317	21,564	21,312	21,184	21,343	21,523	21,498	21,628	58,680
348,000	0,265	0,567	1,053	0,000	0,000	0,380	0,643	44,245	21,533	21,324	21,201	21,372	21,542	21,519	21,649	58,710
348,500	0,271	0,565	1,050	0,000	0,000	0,381	0,642	44,266	21,653	21,367	21,234	21,404	21,589	21,551	21,689	58,733
349,000	0,275	0,564	1,051	0,000	0,000	0,381	0,643	44,168	21,615	21,332	21,201	21,368	21,544	21,524	21,649	58,735
349,500	0,271	0,566	1,044	0,000	0,000	0,379	0,643	44,141	21,669	21,304	21,174	21,339	21,532	21,507	21,629	58,733

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
335,500	48,428	51,594	62,691	0,242	0,236	2853,532	2998,125	216,967	9,214	11,280	0,000	42,116	8,378	15,253	44678,64931
336,000	48,446	51,466	62,687	0,241	0,235	2844,998	3028,477	219,716	9,109	11,439	0,000	41,664	8,333	15,253	2022-04-27 15:35
336,500	48,400	51,669	62,677	0,241	0,236	2862,739	2974,261	191,342	9,212	11,386	0,000	41,542	8,321	15,253	44678,65
337,000	48,349	51,560	62,685	0,241	0,236	2881,256	3005,347	170,437	9,379	11,209	0,000	41,926	8,359	15,169	2022-04-27 15:36
337,500	48,296	51,667	62,686	0,242	0,235	2891,424	2974,903	141,938	9,445	11,110	0,000	41,982	8,365	15,253	44678,65069
338,000	48,311	51,687	62,690	0,243	0,235	2895,855	2971,421	102,364	9,756	10,843	-0,002	42,148	8,381	15,165	2022-04-27 15:37
338,500	48,369	51,645	62,699	0,241	0,236	2861,092	2987,280	138,310	9,558	10,934	0,000	42,032	8,370	15,253	44678,65139
339,000	48,425	51,469	62,666	0,241	0,236	2849,054	3025,472	179,663	9,314	11,217	0,001	41,649	8,332	15,253	2022-04-27 15:38
339,500	48,430	51,464	62,666	0,242	0,236	2864,830	3027,452	157,835	9,292	11,284	0,001	41,633	8,330	15,160	44678,65208
340,000	48,371	51,571	62,682	0,243	0,236	2884,125	3001,522	131,034	9,483	11,115	0,000	41,923	8,359	15,347	2022-04-27 15:39
340,500	48,309	51,585	62,667	0,243	0,235	2896,593	2992,856	112,130	9,658	10,894	0,002	41,878	8,354	15,160	44678,65278
341,000	48,339	51,475	62,671	0,243	0,236	2882,125	3025,038	125,128	9,560	10,959	0,000	41,289	8,295	15,253	2022-04-27 15:40
341,500	48,395	51,512	62,665	0,241	0,235	2844,181	3012,641	134,320	9,431	11,088	0,000	41,952	8,362	15,254	44678,65347
342,000	48,442	51,494	62,676	0,242	0,236	2852,261	3021,100	166,836	9,204	11,313	0,000	41,969	8,364	15,160	2022-04-27 15:41
342,500	48,412	51,508	62,679	0,242	0,235	2860,645	3016,901	171,778	9,105	11,432	0,000	42,027	8,369	15,160	44678,65417
343,000	48,348	51,419	62,681	0,242	0,235	2872,100	3041,975	147,955	9,251	11,318	-0,001	41,903	8,357	15,253	2022-04-27 15:42
343,500	48,306	51,438	62,677	0,243	0,235	2903,115	3032,896	112,343	9,485	11,103	0,000	41,652	8,332	15,162	44678,65486
344,000	48,351	51,433	62,672	0,242	0,235	2872,207	3035,241	108,800	9,539	10,980	-0,001	41,611	8,328	15,160	2022-04-27 15:43
344,500	48,418	51,426	62,677	0,243	0,235	2857,406	3037,023	121,950	9,435	11,055	0,000	42,010	8,368	15,159	44678,65556
345,000	48,454	51,507	62,660	0,241	0,235	2832,406	3009,164	118,345	9,485	11,066	0,001	41,464	8,313	15,159	2022-04-27 15:44
345,500	48,409	51,542	62,649	0,242	0,236	2864,701	3000,711	108,973	9,557	11,015	0,001	41,821	8,349	15,160	44678,65625
346,000	48,337	51,523	62,656	0,243	0,235	2889,217	3006,785	107,757	9,552	10,994	0,001	41,987	8,365	15,159	2022-04-27 15:45
346,500	48,311	51,485	62,678	0,242	0,235	2889,931	3020,801	96,887	9,685	10,902	0,000	41,860	8,353	15,159	44678,65694
347,000	48,362	51,529	62,689	0,243	0,236	2877,315	3017,037	100,102	9,527	10,970	0,000	42,054	8,372	15,160	2022-04-27 15:46
347,500	48,426	51,573	62,695	0,242	0,236	2852,900	3004,631	138,198	9,397	11,103	-0,001	41,900	8,357	15,159	44678,65764
348,000	48,446	51,531	62,696	0,242	0,236	2857,464	3016,340	173,334	9,104	11,403	0,000	42,241	8,391	15,159	2022-04-27 15:47
348,500	48,397	51,506	62,698	0,241	0,236	2865,517	3023,957	186,039	9,143	11,422	0,001	41,979	8,364	15,159	44678,65833
349,000	48,335	51,556	62,692	0,241	0,236	2880,644	3011,486	185,961	9,088	11,438	0,000	41,883	8,355	15,159	2022-04-27 15:48
349,500	48,297	51,522	62,700	0,241	0,235	2884,862	3019,445	180,331	9,150	11,375	0,000	41,761	8,343	15,160	44678,65903



## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
350,000	0,269	0,570	1,046	0,000	0,000	0,375	0,643	44,142	21,756	21,327	21,187	21,360	21,530	21,508	21,631	58,717
350,500	0,269	0,572	1,048	0,000	0,000	0,374	0,643	44,158	21,740	21,346	21,210	21,381	21,559	21,537	21,661	58,702
351,000	0,275	0,570	1,047	0,000	0,000	0,377	0,642	44,090	21,701	21,295	21,155	21,324	21,506	21,480	21,608	58,712
351,500	0,286	0,561	1,051	0,000	0,000	0,384	0,642	44,044	21,720	21,330	21,192	21,360	21,538	21,514	21,639	58,722
352,000	0,288	0,561	1,051	0,000	0,000	0,383	0,641	43,915	21,585	21,245	21,106	21,287	21,461	21,447	21,567	58,723
352,500	0,288	0,568	1,046	0,000	0,000	0,376	0,641	43,954	21,645	21,259	21,110	21,291	21,470	21,448	21,571	58,734
353,000	0,281	0,575	1,047	0,000	0,000	0,371	0,641	43,969	21,727	21,276	21,124	21,303	21,481	21,466	21,580	58,728
353,500	0,287	0,574	1,048	0,000	0,000	0,373	0,641	44,044	21,739	21,337	21,187	21,361	21,542	21,518	21,635	58,709
354,000	0,296	0,570	1,051	0,000	0,000	0,377	0,642	44,050	21,712	21,395	21,260	21,436	21,614	21,603	21,715	58,721
354,500	0,300	0,562	1,052	0,000	0,000	0,383	0,641	43,895	21,616	21,314	21,177	21,351	21,542	21,524	21,632	58,713
355,000	0,307	0,561	1,050	0,000	0,000	0,384	0,641	43,864	21,507	21,319	21,191	21,379	21,554	21,529	21,651	58,717
355,500	0,312	0,561	1,050	0,000	0,000	0,382	0,641	43,838	21,478	21,247	21,126	21,303	21,481	21,465	21,581	58,708
356,000	0,312	0,568	1,037	0,000	0,000	0,377	0,641	43,921	21,545	21,304	21,183	21,363	21,547	21,528	21,644	58,694
356,500	0,296	0,575	1,047	0,000	0,000	0,370	0,641	44,053	21,434	21,282	21,173	21,357	21,543	21,513	21,638	58,687
357,000	0,279	0,583	1,047	0,000	0,000	0,367	0,641	44,129	21,587	21,309	21,193	21,372	21,554	21,525	21,650	58,689
357,500	0,292	0,571	1,048	0,000	0,000	0,376	0,641	44,057	21,764	21,368	21,237	21,411	21,588	21,583	21,689	58,696
358,000	0,295	0,570	1,048	0,000	0,000	0,375	0,641	44,106	21,697	21,341	21,206	21,386	21,570	21,548	21,662	58,699
358,500	0,287	0,579	1,051	0,000	0,000	0,367	0,641	44,222	21,609	21,285	21,157	21,323	21,512	21,480	21,604	58,695
359,000	0,262	0,593	1,042	0,000	0,000	0,356	0,641	44,321	21,608	21,329	21,200	21,366	21,558	21,526	21,652	58,674
359,500	0,266	0,592	1,054	0,000	0,000	0,360	0,641	44,371	21,743	21,377	21,246	21,417	21,610	21,580	21,699	58,656
360,000	0,284	0,584	1,044	0,000	0,000	0,365	0,641	44,291	21,631	21,303	21,180	21,366	21,547	21,521	21,638	58,657
360,500	0,286	0,580	1,044	0,000	0,000	0,369	0,641	44,278	21,704	21,324	21,179	21,368	21,556	21,521	21,645	58,670
361,000	0,286	0,579	1,044	0,000	0,000	0,370	0,640	44,365	21,823	21,399	21,261	21,439	21,633	21,605	21,720	58,661
361,500	0,286	0,578	1,039	0,000	0,000	0,370	0,640	44,294	21,770	21,339	21,195	21,373	21,549	21,530	21,650	58,704
362,000	0,276	0,581	1,058	0,000	0,000	0,367	0,640	44,289	21,779	21,336	21,184	21,365	21,549	21,518	21,642	58,738
362,500	0,285	0,578	1,044	0,000	0,000	0,371	0,640	44,227	21,736	21,339	21,188	21,358	21,540	21,519	21,638	58,721
363,000	0,295	0,567	1,046	0,000	0,000	0,379	0,640	44,139	21,718	21,346	21,214	21,376	21,571	21,549	21,662	58,706
363,500	0,292	0,564	1,047	0,000	0,000	0,382	0,640	44,055	21,697	21,325	21,179	21,347	21,537	21,512	21,626	58,723
364,000	0,298	0,562	1,047	0,000	0,000	0,383	0,640	44,011	21,720	21,333	21,208	21,377	21,570	21,538	21,654	58,742

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
350,000	48,352	51,664	62,724	0,243	0,235	2889,485	2985,856	170,462	9,302	11,260	0,000	41,875	8,354	15,160	2022-04-27 15:49
350,500	48,419	51,514	62,711	0,242	0,236	2858,526	3025,929	180,943	9,293	11,227	-0,001	42,019	8,368	15,159	44678,65972
351,000	48,449	51,474	62,700	0,242	0,236	2847,572	3033,503	201,946	9,203	11,303	0,001	41,987	8,365	15,066	2022-04-27 15:50
351,500	48,408	51,630	62,700	0,242	0,236	2861,951	2991,588	221,408	8,971	11,528	0,000	41,888	8,355	15,159	44678,66042
352,000	48,353	51,545	62,695	0,241	0,235	2866,314	3011,759	231,229	9,049	11,485	0,000	41,953	8,362	15,066	2022-04-27 15:51
352,500	48,303	51,546	62,686	0,240	0,236	2879,050	3010,986	215,691	9,302	11,266	-0,001	41,917	8,358	15,066	44678,66111
353,000	48,326	51,522	62,685	0,241	0,236	2882,750	3018,145	207,757	9,368	11,143	0,000	41,792	8,346	15,066	2022-04-27 15:52
353,500	48,390	51,466	62,693	0,242	0,236	2864,825	3033,319	226,477	9,332	11,191	0,000	41,847	8,351	15,066	44678,66181
354,000	48,442	51,624	62,670	0,241	0,236	2850,262	2983,992	252,724	9,159	11,317	0,000	42,278	8,394	15,158	2022-04-27 15:53
354,500	48,420	51,537	62,677	0,241	0,236	2847,037	3010,211	247,117	9,036	11,482	0,000	42,123	8,379	15,066	44678,6625
355,000	48,375	51,560	62,686	0,242	0,236	2869,505	3006,912	290,559	8,976	11,530	-0,001	42,110	8,378	15,066	2022-04-27 15:54
355,500	48,326	51,605	62,683	0,242	0,236	2880,840	2993,745	276,203	9,068	11,461	-0,001	42,056	8,372	15,066	44678,66319
356,000	48,303	51,523	62,668	0,242	0,235	2887,851	3010,565	276,069	9,234	11,311	0,000	41,806	8,347	15,066	2022-04-27 15:55
356,500	48,358	51,469	62,664	0,241	0,236	2860,865	3024,614	215,443	9,503	11,108	0,000	41,865	8,353	15,066	44678,66389
357,000	48,424	51,492	62,660	0,242	0,236	2847,976	3017,642	200,785	9,530	11,004	0,001	41,559	8,323	15,066	2022-04-27 15:56
357,500	48,433	51,495	62,662	0,240	0,236	2831,828	3018,416	238,439	9,209	11,288	0,000	41,763	8,343	15,066	44678,66458
358,000	48,380	51,554	62,642	0,241	0,235	2861,255	2995,012	237,154	9,286	11,261	0,000	41,702	8,337	15,066	2022-04-27 15:57
358,500	48,304	51,558	62,640	0,241	0,236	2876,771	2995,821	198,794	9,589	11,002	0,000	42,335	8,400	15,066	44678,66528
359,000	48,286	51,661	62,615	0,241	0,236	2879,844	2960,305	150,137	9,904	10,673	0,000	41,465	8,313	15,066	2022-04-27 15:58
359,500	48,336	51,503	62,619	0,242	0,236	2869,033	3004,004	184,617	9,707	10,793	0,001	42,161	8,383	15,066	44678,66597
360,000	48,389	51,457	62,614	0,239	0,236	2823,197	3015,779	223,275	9,556	10,962	0,000	41,923	8,359	15,066	2022-04-27 15:59
360,500	48,425	51,540	62,628	0,240	0,236	2823,916	2995,529	216,903	9,495	11,074	0,000	41,343	8,301	14,972	44678,66667
361,000	48,407	51,557	62,625	0,241	0,236	2843,486	2991,130	221,520	9,456	11,087	-0,002	41,839	8,351	15,066	2022-04-27 16:00
361,500	48,333	51,508	62,625	0,236	0,236	2815,690	3005,796	208,824	9,479	11,086	0,000	41,655	8,332	14,972	44678,66736
362,000	48,293	51,505	62,613	0,238	0,235	2854,792	3000,646	194,902	9,531	11,025	0,000	42,302	8,397	14,972	2022-04-27 16:01
362,500	48,362	51,585	62,617	0,238	0,235	2835,041	2978,659	232,915	9,379	11,136	0,001	41,670	8,334	14,972	44678,66806
363,000	48,459	51,507	62,624	0,239	0,236	2813,538	3004,821	230,327	9,151	11,381	0,002	41,979	8,365	14,972	2022-04-27 16:02
363,500	48,459	51,627	62,660	0,238	0,236	2808,140	2982,711	235,111	9,103	11,457	0,000	41,913	8,358	14,972	44678,66875
364,000	48,357	51,641	62,622	0,239	0,236	2850,314	2968,438	252,971	9,047	11,504	0,000	41,734	8,340	14,972	2022-04-27 16:03

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
364,500	0,301	0,562	1,045	0,000	0,000	0,382	0,640	43,982	21,761	21,344	21,197	21,368	21,567	21,540	21,650	58,740
365,000	0,298	0,570	1,049	0,000	0,000	0,377	0,640	44,028	21,855	21,392	21,239	21,410	21,607	21,584	21,693	58,725
365,500	0,308	0,565	1,048	0,000	0,000	0,382	0,640	43,868	21,801	21,350	21,201	21,365	21,560	21,535	21,654	58,716
366,000	0,315	0,561	1,042	0,000	0,000	0,384	0,640	43,656	21,691	21,207	21,061	21,219	21,413	21,380	21,502	58,706
366,500	0,327	0,560	1,048	0,000	0,000	0,384	0,640	43,854	21,886	21,367	21,209	21,372	21,569	21,536	21,655	58,725
367,000	0,309	0,569	1,046	0,000	0,000	0,375	0,639	44,018	21,740	21,361	21,209	21,375	21,572	21,543	21,663	58,724
367,500	0,288	0,580	1,042	0,000	0,000	0,368	0,638	43,954	21,580	21,288	21,150	21,330	21,520	21,490	21,607	58,738
368,000	0,281	0,578	1,047	0,000	0,000	0,371	0,640	43,559	21,449	21,145	21,018	21,187	21,388	21,355	21,470	58,718
368,500	0,384	0,573	1,052	0,000	0,000	0,374	0,638	43,721	21,558	21,295	21,177	21,344	21,536	21,509	21,627	58,704
369,000	0,508	0,563	1,048	0,000	0,000	0,382	0,638	43,490	21,341	21,163	21,041	21,223	21,422	21,397	21,509	58,704
369,500	0,508	0,568	1,041	0,000	0,000	0,376	0,638	43,505	21,407	21,179	21,061	21,257	21,451	21,417	21,533	58,683
370,000	0,541	0,578	1,045	0,000	0,000	0,368	0,638	43,785	21,630	21,353	21,219	21,419	21,615	21,584	21,700	58,700
370,500	0,520	0,588	1,050	0,000	0,000	0,359	0,639	44,001	21,636	21,300	21,174	21,363	21,562	21,523	21,643	58,699
371,000	0,372	0,599	1,051	0,000	0,000	0,350	0,638	44,261	21,742	21,395	21,269	21,449	21,648	21,616	21,730	58,676
371,500	0,290	0,600	1,045	0,000	0,000	0,351	0,638	44,254	21,592	21,316	21,199	21,375	21,573	21,542	21,656	58,674
372,000	0,278	0,591	1,055	0,000	0,000	0,360	0,638	44,275	21,759	21,366	21,236	21,414	21,613	21,581	21,695	58,664
372,500	0,282	0,585	1,054	0,000	0,000	0,364	0,638	44,232	21,688	21,347	21,218	21,398	21,594	21,568	21,677	58,640
373,000	0,281	0,583	1,044	0,000	0,000	0,365	0,638	44,109	21,585	21,248	21,107	21,289	21,483	21,452	21,570	58,636
373,500	0,270	0,583	1,045	0,000	0,000	0,365	0,638	44,137	21,755	21,334	21,195	21,367	21,566	21,538	21,649	58,638
374,000	0,267	0,582	1,048	0,000	0,000	0,367	0,638	44,145	21,845	21,340	21,194	21,360	21,562	21,524	21,643	58,635
374,500	0,280	0,571	1,044	0,000	0,000	0,377	0,637	44,019	21,772	21,310	21,159	21,336	21,529	21,500	21,614	58,607
375,000	0,274	0,564	1,050	0,000	0,000	0,381	0,638	43,997	21,697	21,338	21,209	21,374	21,582	21,552	21,661	58,612
375,500	0,272	0,560	1,056	0,000	0,000	0,384	0,638	43,896	21,543	21,255	21,130	21,316	21,511	21,475	21,590	58,617
376,000	0,269	0,561	1,050	0,000	0,000	0,383	0,638	43,889	21,552	21,278	21,150	21,327	21,522	21,491	21,610	58,633
376,500	0,266	0,569	1,051	0,000	0,000	0,376	0,638	43,958	21,444	21,266	21,136	21,323	21,527	21,492	21,605	58,619
377,000	0,263	0,576	1,052	0,000	0,000	0,370	0,637	43,965	21,483	21,280	21,161	21,358	21,557	21,525	21,635	58,600
377,500	0,268	0,573	1,049	0,000	0,000	0,375	0,638	43,962	21,566	21,278	21,165	21,354	21,555	21,522	21,635	58,566
378,000	0,268	0,566	1,045	0,000	0,000	0,379	0,637	43,878	21,539	21,251	21,128	21,314	21,515	21,482	21,596	58,588
378,500	0,262	0,570	1,047	0,000	0,000	0,375	0,637	43,926	21,722	21,299	21,161	21,335	21,544	21,513	21,620	58,590

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
364,500	48,238	51,578	62,599	0,239	0,236	2877,304	2980,030	249,149	9,114	11,462	0,000	41,516	8,318	14,972	44678,66944
365,000	48,266	51,540	62,606	0,238	0,236	2854,009	2989,863	251,457	9,249	11,302	0,002	41,831	8,350	14,972	2022-04-27 16:04
365,500	48,387	51,512	62,615	0,239	0,236	2832,403	2999,788	281,984	9,058	11,451	0,000	41,833	8,350	14,972	44678,67014
366,000	48,459	51,493	62,620	0,238	0,235	2798,695	3005,510	299,019	9,001	11,525	0,000	42,071	8,374	14,972	2022-04-27 16:05
366,500	48,425	51,539	62,608	0,239	0,235	2829,258	2990,114	328,461	8,998	11,524	0,000	41,721	8,339	14,972	44678,67083
367,000	48,361	51,595	62,577	0,238	0,236	2832,114	2967,423	242,863	9,350	11,257	-0,001	41,701	8,337	14,847	2022-04-27 16:06
367,500	48,295	51,618	62,598	0,238	0,236	2851,392	2968,204	222,290	9,523	11,031	-0,001	41,658	8,332	14,847	44678,67153
368,000	48,284	51,609	62,571	0,237	0,236	2840,868	2964,387	202,472	9,395	11,143	0,000	41,798	8,346	14,972	2022-04-27 16:07
368,500	48,328	51,505	62,573	0,238	0,236	2838,948	2990,561	706,145	9,310	11,229	0,000	41,998	8,366	14,847	44678,67222
369,000	48,379	51,499	62,546	0,238	0,236	2823,540	2985,727	751,039	9,041	11,470	0,001	41,974	8,364	14,847	2022-04-27 16:08
369,500	48,408	51,489	62,566	0,240	0,236	2832,237	2992,612	792,887	9,302	11,280	0,000	41,877	8,354	14,972	44678,67292
370,000	48,388	51,545	62,547	0,238	0,235	2822,881	2971,099	894,045	9,518	11,039	0,000	41,824	8,349	14,847	2022-04-27 16:09
370,500	48,311	51,575	62,513	0,238	0,236	2841,571	2956,886	700,024	9,768	10,766	0,000	41,760	8,343	14,972	44678,67361
371,000	48,267	51,527	62,512	0,237	0,235	2833,336	2966,545	317,036	10,033	10,509	0,000	42,152	8,382	14,847	2022-04-27 16:10
371,500	48,322	51,545	62,492	0,237	0,236	2815,657	2957,347	206,157	9,923	10,539	0,000	41,299	8,297	14,858	44678,67431
372,000	48,407	51,487	62,472	0,239	0,236	2810,156	2970,205	199,539	9,700	10,793	-0,001	42,062	8,373	14,847	2022-04-27 16:11
372,500	48,421	51,548	62,447	0,238	0,236	2790,667	2945,845	206,419	9,599	10,921	0,000	42,068	8,373	14,847	44678,675
373,000	48,345	51,544	62,439	0,239	0,236	2819,016	2946,395	200,558	9,567	10,958	0,000	41,660	8,333	14,847	2022-04-27 16:12
373,500	48,282	51,483	62,436	0,236	0,236	2808,606	2961,348	171,392	9,569	10,963	0,001	41,901	8,357	14,847	44678,67569
374,000	48,291	51,547	62,452	0,238	0,236	2824,776	2947,486	176,548	9,506	11,014	0,002	41,976	8,364	14,847	2022-04-27 16:13
374,500	48,351	51,482	62,436	0,237	0,236	2793,696	2961,016	204,005	9,172	11,311	0,000	42,064	8,373	14,847	44678,67639
375,000	48,419	51,449	62,439	0,238	0,236	2789,970	2972,904	181,253	9,072	11,443	0,000	41,978	8,364	14,847	2022-04-27 16:14
375,500	48,402	51,501	62,435	0,236	0,235	2765,272	2953,686	180,765	8,986	11,529	0,000	42,329	8,399	14,847	44678,67708
376,000	48,306	51,548	62,440	0,238	0,236	2825,733	2942,947	175,042	9,082	11,476	0,000	42,241	8,391	14,847	2022-04-27 16:15
376,500	48,259	51,556	62,444	0,236	0,236	2811,046	2942,706	165,737	9,300	11,268	0,000	42,230	8,389	14,847	44678,67778
377,000	48,311	51,542	62,434	0,239	0,235	2819,751	2942,039	158,097	9,428	11,108	0,003	42,231	8,390	14,847	2022-04-27 16:16
377,500	48,379	51,503	62,436	0,239	0,236	2791,895	2954,318	178,566	9,225	11,259	0,000	41,906	8,357	14,847	44678,67847
378,000	48,419	51,513	62,430	0,238	0,236	2776,424	2950,212	167,160	9,162	11,378	0,000	41,477	8,314	14,847	2022-04-27 16:17
378,500	48,421	51,543	62,426	0,238	0,236	2775,980	2941,097	153,404	9,320	11,256	0,000	41,749	8,342	14,847	44678,67917

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
379,000	0,257	0,577	1,050	0,000	0,000	0,370	0,636	43,933	21,659	21,225	21,090	21,261	21,467	21,437	21,546	58,614
379,500	0,257	0,582	1,042	0,000	0,000	0,365	0,636	43,964	21,596	21,207	21,061	21,232	21,441	21,410	21,521	58,604
380,000	0,257	0,589	1,050	0,000	0,000	0,360	0,637	44,121	21,619	21,260	21,133	21,299	21,502	21,470	21,585	58,598
380,500	0,259	0,589	1,053	0,000	0,000	0,361	0,636	44,087	21,607	21,260	21,127	21,305	21,506	21,475	21,583	58,574
381,000	0,266	0,579	1,052	0,000	0,000	0,371	0,636	44,017	21,478	21,251	21,120	21,291	21,497	21,462	21,583	58,572
381,500	0,269	0,573	1,045	0,000	0,000	0,374	0,636	44,028	21,490	21,262	21,146	21,323	21,539	21,492	21,614	58,593
382,000	0,264	0,574	1,051	0,000	0,000	0,372	0,636	43,954	21,466	21,188	21,061	21,252	21,456	21,405	21,535	58,603
382,500	0,265	0,578	1,048	0,000	0,000	0,369	0,637	44,116	21,699	21,276	21,140	21,325	21,532	21,490	21,609	58,603
383,000	0,259	0,582	1,048	0,000	0,000	0,366	0,636	44,148	21,796	21,342	21,208	21,387	21,595	21,552	21,674	58,588
383,500	0,262	0,577	1,049	0,000	0,000	0,371	0,636	44,110	21,859	21,357	21,201	21,383	21,602	21,557	21,677	58,576
384,000	0,262	0,572	1,055	0,000	0,000	0,376	0,636	44,107	21,882	21,416	21,254	21,442	21,650	21,610	21,730	58,573
384,500	0,269	0,565	1,046	0,000	0,000	0,381	0,636	43,958	21,603	21,343	21,209	21,404	21,606	21,570	21,688	58,609
385,000	0,271	0,568	1,050	0,000	0,000	0,377	0,636	43,944	21,553	21,303	21,175	21,358	21,577	21,531	21,658	58,615
385,500	0,276	0,577	1,054	0,000	0,000	0,369	0,636	43,984	21,629	21,314	21,191	21,380	21,589	21,544	21,670	58,597
386,000	0,278	0,587	1,052	0,000	0,000	0,361	0,636	43,966	21,763	21,312	21,175	21,356	21,573	21,520	21,649	58,594
386,500	0,310	0,585	1,052	0,000	0,000	0,365	0,636	43,982	21,701	21,330	21,189	21,365	21,586	21,536	21,664	58,602
387,000	0,337	0,575	1,054	0,000	0,000	0,373	0,635	43,946	21,487	21,330	21,202	21,397	21,610	21,568	21,689	58,605
387,500	0,321	0,569	1,056	0,000	0,000	0,377	0,635	43,901	21,520	21,310	21,197	21,390	21,608	21,560	21,682	58,599
388,000	0,305	0,574	1,051	0,000	0,000	0,372	0,636	43,927	21,443	21,297	21,191	21,385	21,605	21,554	21,683	58,608
388,500	0,288	0,583	1,052	0,000	0,000	0,363	0,635	44,036	21,501	21,287	21,189	21,385	21,600	21,556	21,677	58,617
389,000	0,279	0,590	1,052	0,000	0,000	0,359	0,635	44,033	21,676	21,293	21,164	21,358	21,574	21,528	21,650	58,597
389,500	0,290	0,585	1,050	0,000	0,000	0,363	0,635	44,027	21,645	21,326	21,208	21,400	21,614	21,572	21,693	58,599
390,000	0,294	0,579	1,051	0,000	0,000	0,368	0,635	44,004	21,597	21,311	21,189	21,399	21,615	21,578	21,689	58,605
390,500	0,287	0,580	1,049	0,000	0,000	0,367	0,635	43,960	21,646	21,249	21,119	21,321	21,527	21,495	21,613	58,624
391,000	0,287	0,579	1,049	0,000	0,000	0,367	0,635	43,983	21,752	21,281	21,139	21,334	21,556	21,515	21,635	58,635
391,500	0,273	0,585	1,056	0,000	0,000	0,362	0,635	44,016	21,492	21,192	21,059	21,265	21,489	21,443	21,560	58,613
392,000	0,262	0,591	1,048	0,000	0,000	0,358	0,635	44,261	21,556	21,341	21,223	21,434	21,652	21,615	21,730	58,600
392,500	0,261	0,594	1,042	0,000	0,000	0,355	0,635	44,296	21,459	21,253	21,148	21,403	21,629	21,589	21,704	58,603
393,000	0,224	0,375	1,044	0,000	0,000	0,597	0,635	44,254	21,608	21,181	21,081	21,349	21,569	21,536	21,651	58,631

## PE22\_cat I\_run 3\_220427\_EN.DAT

## Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
379,000	48,345	51,568	62,430	0,238	0,236	2807,059	2936,828	142,080	9,473	11,106	0,000	42,038	8,370	14,754	2022-04-27 16:18
379,500	48,264	51,577	62,437	0,237	0,236	2813,417	2937,287	153,735	9,573	10,958	0,000	41,552	8,322	14,754	44678,67986
380,000	48,287	51,545	62,434	0,237	0,236	2809,771	2945,739	142,839	9,760	10,803	0,000	41,914	8,358	14,753	2022-04-27 16:19
380,500	48,367	51,511	62,441	0,238	0,236	2791,605	2952,551	154,741	9,666	10,837	0,001	42,030	8,370	14,754	44678,68056
381,000	48,430	51,460	62,442	0,237	0,236	2758,777	2968,425	178,957	9,360	11,118	-0,001	42,019	8,369	14,754	2022-04-27 16:20
381,500	48,406	51,518	62,439	0,237	0,236	2775,438	2952,012	167,729	9,340	11,214	0,000	41,770	8,344	14,754	44678,68125
382,000	48,317	51,564	62,439	0,238	0,236	2810,942	2939,207	162,792	9,377	11,174	0,000	42,007	8,367	14,754	2022-04-27 16:21
382,500	48,259	51,597	62,445	0,237	0,236	2818,483	2931,910	163,930	9,488	11,067	0,000	42,066	8,373	14,847	44678,68194
383,000	48,299	51,465	62,448	0,237	0,236	2802,741	2967,474	146,180	9,555	10,993	0,002	42,086	8,375	14,795	2022-04-27 16:22
383,500	48,379	51,490	62,464	0,238	0,236	2786,338	2967,302	162,000	9,398	11,118	0,000	42,194	8,386	14,754	44678,68264
384,000	48,431	51,445	62,472	0,238	0,236	2769,744	2981,271	161,615	9,228	11,267	0,001	42,506	8,417	14,754	2022-04-27 16:23
384,500	48,381	51,459	62,493	0,238	0,236	2796,695	2981,790	179,159	9,119	11,429	0,000	41,988	8,365	14,754	44678,68333
385,000	48,297	51,591	62,482	0,238	0,236	2820,715	2945,086	180,913	9,269	11,322	0,001	42,089	8,375	14,754	2022-04-27 16:24
385,500	48,281	51,555	62,483	0,239	0,236	2827,369	2953,620	195,673	9,491	11,078	0,000	41,832	8,350	14,754	44678,68403
386,000	48,320	51,496	62,477	0,237	0,235	2797,717	2966,101	210,870	9,718	10,827	0,001	42,231	8,390	14,754	2022-04-27 16:25
386,500	48,392	51,473	62,490	0,238	0,235	2790,618	2975,269	318,374	9,557	10,935	0,002	41,796	8,346	14,754	44678,68472
387,000	48,425	51,488	62,500	0,238	0,236	2778,292	2977,792	344,879	9,290	11,201	0,000	42,433	8,410	14,660	2022-04-27 16:26
387,500	48,356	51,541	62,473	0,239	0,236	2812,798	2954,864	295,344	9,205	11,324	-0,001	41,981	8,365	14,754	44678,68542
388,000	48,271	51,567	62,478	0,237	0,236	2815,850	2950,277	250,261	9,423	11,156	0,000	42,009	8,368	14,754	2022-04-27 16:27
388,500	48,285	51,461	62,473	0,237	0,236	2817,254	2979,964	201,485	9,704	10,904	0,000	42,079	8,374	14,660	44678,68611
389,000	48,361	51,424	62,474	0,238	0,236	2799,322	2986,026	207,387	9,748	10,774	0,000	42,161	8,383	14,660	2022-04-27 16:28
389,500	48,423	51,507	62,469	0,238	0,236	2777,304	2965,233	233,596	9,598	10,903	0,000	42,015	8,368	14,660	44678,68681
390,000	48,398	51,519	62,464	0,239	0,236	2796,906	2959,565	236,002	9,460	11,036	-0,001	41,822	8,349	14,660	2022-04-27 16:29
390,500	48,303	51,582	62,461	0,237	0,236	2806,451	2941,012	221,437	9,481	11,025	0,000	42,136	8,380	14,660	44678,6875
391,000	48,267	51,573	62,461	0,236	0,236	2811,591	2944,790	214,085	9,511	11,023	0,000	42,174	8,384	14,660	2022-04-27 16:30
391,500	48,330	51,454	62,475	0,238	0,236	2805,935	2979,670	172,024	9,661	10,874	0,000	42,255	8,392	14,660	44678,68819
392,000	48,402	51,441	62,476	0,238	0,236	2783,995	2982,961	153,517	9,826	10,730	0,001	42,121	8,379	14,660	2022-04-27 16:31
392,500	48,450	51,492	62,475	0,237	0,236	2768,676	2969,712	161,041	9,874	10,654	0,000	41,755	8,342	14,660	44678,68889
393,000	48,434	51,555	62,496	0,237	0,236	2779,010	2958,387	1,688	0,143	17,910	0,000	41,983	8,365	14,660	2022-04-27 16:32

## Category: I run 3

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
393,500	0,199	0,202	1,047	0,000	0,000	0,697	0,635	44,259	21,644	21,209	21,103	21,378	21,598	21,552	21,675	58,641
394,000	0,198	0,201	1,050	0,000	0,000	0,698	0,634	44,357	21,624	21,245	21,148	21,416	21,639	21,590	21,720	58,641

PE22\_cat I\_run 3\_220427\_EN.DAT

Category: I run 3

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
393,500	48,339	51,579	62,476	0,237	0,236	2803,380	2948,259	-0,918	0,026	20,924	0,000	42,103	8,377	14,660	44678,68958
394,000	48,238	51,568	62,477	0,237	0,236	2835,898	2947,393	-1,343	0,013	20,932	0,000	41,531	8,320	14,566	2022-04-27 16:33



PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321,KONF

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,402	0,199	0,200	1,052	-0,162	-0,010	0,697	0,548	53,310	21,599	35,086	142,815	19,144	19,154	19,172	19,081	52,734
1,011	0,199	0,200	1,060	-0,164	0,004	0,697	0,548	53,149	21,550	19,386	140,662	19,123	19,143	19,161	19,068	52,817
1,334	0,199	0,200	1,062	-0,161	-0,019	0,697	0,548	53,025	21,544	4,128	127,896	19,103	19,106	19,138	19,039	52,979
1,834	0,199	0,200	1,059	-0,160	0,038	0,697	0,547	53,062	21,610	15,794	131,340	19,147	19,149	19,188	19,087	53,137
2,333	0,200	0,281	1,056	-0,161	0,020	0,573	0,547	53,039	21,550	21,590	119,691	19,134	19,133	19,165	19,069	53,376
2,833	0,204	0,609	1,057	-0,162	0,021	0,340	0,546	52,948	21,608	24,089	131,183	19,131	19,140	19,170	19,079	53,297
3,333	0,204	0,616	1,057	-0,160	0,028	0,334	0,547	52,899	21,585	18,077	127,461	19,119	19,128	19,162	19,063	53,315
3,833	0,204	0,620	1,056	-0,162	0,017	0,332	0,547	52,965	21,620	23,522	136,344	19,170	19,172	19,201	19,111	53,270
4,333	0,204	0,611	1,055	-0,161	0,016	0,343	0,547	52,880	21,496	25,355	126,916	19,117	19,132	19,156	19,065	53,057
4,833	0,204	0,608	1,056	-0,160	0,034	0,339	0,545	52,832	21,515	29,714	141,682	19,122	19,126	19,163	19,071	53,154
5,333	0,204	0,622	1,057	-0,162	0,003	0,330	0,545	52,888	21,560	19,881	167,668	19,155	19,154	19,193	19,101	52,893
5,833	0,204	0,611	1,056	-0,161	-0,029	0,342	0,545	52,744	21,561	28,072	134,457	19,131	19,140	19,175	19,082	52,670
6,333	0,205	0,604	1,057	-0,159	0,008	0,346	0,545	52,787	21,470	38,195	143,306	19,121	19,124	19,153	19,063	52,698
6,834	0,205	0,607	1,052	-0,159	-0,012	0,342	0,545	52,775	21,553	21,176	134,776	19,155	19,176	19,199	19,113	52,748
7,334	0,205	0,609	1,054	-0,162	0,004	0,342	0,545	52,736	21,508	31,806	137,454	19,120	19,127	19,155	19,071	52,980
7,834	0,204	0,615	1,056	-0,159	0,025	0,336	0,545	52,761	21,533	20,120	133,376	19,139	19,148	19,176	19,089	52,995
8,334	0,204	0,615	1,052	-0,161	0,043	0,337	0,545	52,713	21,510	18,992	135,672	19,106	19,120	19,147	19,064	53,029
8,834	0,204	0,614	1,057	-0,160	0,001	0,338	0,544	52,736	21,523	20,687	116,243	19,163	19,170	19,199	19,115	53,184
9,333	0,204	0,613	1,054	-0,162	-0,025	0,340	0,544	52,685	21,539	139,502	189,278	19,157	19,161	19,184	19,107	53,235
9,833	0,204	0,606	1,056	-0,160	-0,010	0,343	0,544	52,740	21,569	65,220	133,807	19,169	19,184	19,219	19,134	53,341
10,333	0,204	0,615	1,053	-0,164	-0,013	0,338	0,544	52,769	21,562	40,916	126,446	19,138	19,139	19,176	19,090	53,361
10,833	0,204	0,600	1,052	-0,162	0,003	0,351	0,544	52,902	21,615	61,180	121,432	19,185	19,190	19,220	19,140	53,313
11,333	0,204	0,598	1,048	-0,166	0,035	0,352	0,542	52,851	21,499	42,507	140,469	19,140	19,152	19,186	19,104	53,325
11,833	0,205	0,593	1,046	-0,163	-0,016	0,355	0,542	52,789	21,523	0,648	137,533	19,138	19,149	19,189	19,102	53,255
12,333	0,205	0,591	1,061	-0,162	-0,010	0,359	0,542	52,568	21,396	53,521	108,048	19,076	19,077	19,123	19,032	53,191
12,833	0,205	0,578	1,052	-0,159	0,012	0,369	0,542	52,578	21,446	36,278	150,862	19,147	19,147	19,185	19,098	53,282
13,333	0,205	0,588	1,056	-0,159	0,015	0,357	0,542	52,548	21,469	40,310	153,341	19,136	19,148	19,187	19,097	53,297
13,834	0,204	0,603	1,058	-0,160	-0,005	0,348	0,542	52,586	21,563	34,348	174,715	19,182	19,192	19,230	19,145	53,018
14,334	0,204	0,598	1,054	-0,161	-0,010	0,354	0,541	52,589	21,448	39,640	161,594	19,143	19,155	19,200	19,108	52,992
14,834	0,204	0,590	1,051	-0,165	0,002	0,358	0,541	52,659	21,553	30,822	155,253	19,176	19,178	19,222	19,136	53,131
15,334	0,205	0,596	1,062	-0,161	0,044	0,351	0,540	52,782	21,449	33,751	185,401	19,147	19,144	19,189	19,106	53,152
15,834	0,205	0,594	1,058	-0,162	0,008	0,358	0,540	52,894	21,566	26,091	153,575	19,215	19,220	19,255	19,173	53,209
16,333	0,205	0,587	1,056	-0,162	-0,020	0,359	0,540	52,883	21,511	36,749	156,155	19,150	19,160	19,200	19,114	53,230

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,402	45,485	52,330	61,179	2,269	1,979	18888,298	20125,867	0,315	0,002	20,912	-3,232	42,076	8,374	9,256	2022-03-24 09:07
1,011	45,507	52,376	61,310	0,499	0,446	4197,138	4566,048	-0,022	-0,002	20,914	-3,276	42,538	8,420	9,256	2022-03-24 09:08
1,334	45,495	52,463	61,322	0,503	0,446	4328,026	4533,192	-0,109	-0,003	20,916	-3,220	42,377	8,404	9,256	2022-03-24 09:08
1,834	45,491	52,307	61,401	0,504	0,446	4426,423	4655,340	-0,193	-0,004	20,915	-3,194	42,259	8,392	9,162	2022-03-24 09:09
2,333	45,607	52,127	61,544	0,501	0,446	4473,818	4817,406	9,960	6,079	17,178	-3,219	42,263	8,393	9,162	2022-03-24 09:09
2,833	45,652	52,021	61,630	0,507	0,446	4451,480	4912,538	12,894	10,212	10,214	-3,250	42,376	8,404	9,100	2022-03-24 09:10
3,333	45,556	52,066	61,712	0,508	0,446	4528,517	4937,122	12,559	10,464	10,032	-3,206	42,194	8,386	9,162	2022-03-24 09:10
3,833	45,482	52,235	61,805	0,509	0,446	4554,539	4895,909	12,306	10,528	9,954	-3,244	42,138	8,380	9,162	2022-03-24 09:11
4,333	45,385	52,287	61,875	0,504	0,446	4445,009	4904,874	12,229	10,081	10,285	-3,218	42,173	8,384	9,068	2022-03-24 09:11
4,833	45,445	52,419	61,979	0,505	0,446	4479,534	4891,406	12,726	10,429	10,181	-3,193	42,091	8,376	9,068	2022-03-24 09:12
5,333	45,533	52,612	62,030	0,503	0,446	4259,298	4820,959	12,898	10,539	9,909	-3,238	42,035	8,370	9,068	2022-03-24 09:12
5,833	45,605	53,109	62,089	0,502	0,447	4079,562	4602,894	14,738	10,146	10,259	-3,211	42,339	8,400	8,974	2022-03-24 09:13
6,333	45,594	53,374	62,209	0,500	0,447	4081,196	4528,091	15,490	10,109	10,368	-3,189	42,088	8,375	9,069	2022-03-24 09:13
6,834	45,491	53,468	62,275	0,497	0,447	4149,107	4514,412	15,250	10,181	10,274	-3,185	42,425	8,409	9,068	2022-03-24 09:14
7,334	45,369	53,498	62,354	0,506	0,447	4423,589	4538,466	14,748	10,242	10,247	-3,239	41,962	8,363	9,068	2022-03-24 09:14
7,834	45,438	53,298	62,477	0,500	0,447	4343,350	4701,554	13,307	10,467	10,090	-3,178	42,161	8,383	8,974	2022-03-24 09:15
8,334	45,584	53,298	62,556	0,504	0,447	4316,195	4742,201	12,893	10,339	10,118	-3,217	41,827	8,349	8,974	2022-03-24 09:15
8,834	45,646	53,349	62,669	0,506	0,447	4386,847	4775,273	12,399	10,321	10,130	-3,197	42,355	8,402	8,974	2022-03-24 09:16
9,333	45,561	53,377	62,767	0,503	0,447	4433,954	4812,938	12,480	10,287	10,214	-3,233	42,148	8,381	8,974	2022-03-24 09:16
9,833	45,498	53,404	62,905	0,504	0,447	4544,750	4870,210	12,819	10,229	10,278	-3,191	42,240	8,390	8,974	2022-03-24 09:17
10,333	45,465	53,375	62,954	0,508	0,447	4614,003	4909,988	12,563	10,309	10,138	-3,281	42,065	8,373	8,974	2022-03-24 09:17
10,833	45,469	53,415	63,045	0,501	0,447	4521,957	4935,700	13,723	9,939	10,539	-3,245	42,078	8,374	8,974	2022-03-24 09:18
11,333	45,513	53,529	63,141	0,501	0,447	4502,101	4926,153	13,903	9,944	10,562	-3,323	41,723	8,339	8,849	2022-03-24 09:18
11,833	45,548	53,549	63,209	0,498	0,447	4412,808	4952,149	15,089	9,817	10,639	-3,257	41,789	8,346	8,849	2022-03-24 09:19
12,333	45,574	53,820	63,295	0,502	0,448	4393,526	4862,251	15,406	9,709	10,763	-3,238	42,219	8,388	8,849	2022-03-24 09:19
12,833	45,570	53,978	63,360	0,503	0,448	4462,820	4813,315	16,002	9,420	11,072	-3,184	41,733	8,340	8,851	2022-03-24 09:20
13,333	45,523	53,929	63,428	0,505	0,448	4515,761	4876,103	14,993	9,892	10,705	-3,183	42,492	8,416	8,849	2022-03-24 09:20
13,834	45,455	54,041	63,455	0,507	0,448	4404,968	4830,860	14,077	10,071	10,437	-3,209	42,840	8,450	8,849	2022-03-24 09:21
14,334	45,419	54,234	63,599	0,503	0,448	4379,452	4807,370	13,067	9,885	10,610	-3,214	42,508	8,417	8,756	2022-03-24 09:21
14,834	45,456	54,320	63,638	0,505	0,448	4452,967	4783,228	14,234	9,744	10,751	-3,293	42,170	8,383	8,756	2022-03-24 09:22
15,334	45,531	54,351	63,718	0,505	0,448	4427,468	4810,346	14,566	10,038	10,529	-3,214	42,692	8,435	8,756	2022-03-24 09:22
15,834	45,576	54,401	63,786	0,502	0,448	4401,116	4815,343	15,326	9,666	10,750	-3,243	41,882	8,355	8,756	2022-03-24 09:23
16,333	45,593	54,503	63,865	0,499	0,448	4377,553	4808,467	16,747	9,756	10,772	-3,239	42,336	8,400	8,756	2022-03-24 09:23

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
16,833	0,205	0,601	1,052	-0,162	0,008	0,347	0,540	52,830	21,484	31,556	170,195	19,171	19,177	19,221	19,135	53,291
17,333	0,205	0,601	1,055	-0,164	0,032	0,352	0,540	52,691	21,447	22,577	153,781	19,132	19,133	19,183	19,098	53,318
17,833	0,205	0,579	1,056	-0,165	0,013	0,369	0,539	52,836	21,514	26,562	170,450	19,187	19,189	19,238	19,151	53,315
18,333	0,205	0,582	1,058	-0,161	0,004	0,361	0,539	52,916	21,494	25,064	168,771	19,160	19,156	19,210	19,126	53,282
18,833	0,204	0,596	1,055	-0,162	0,025	0,354	0,539	52,965	21,551	29,851	154,083	19,191	19,200	19,247	19,164	53,324
19,333	0,204	0,582	1,064	-0,163	0,005	0,368	0,539	52,877	21,466	37,233	157,733	19,187	19,200	19,236	19,160	53,146
19,833	0,205	0,575	1,059	-0,160	0,032	0,369	0,539	52,858	21,491	28,167	160,175	19,179	19,188	19,222	19,151	53,208
20,334	0,206	0,593	1,051	-0,163	0,021	0,354	0,539	52,781	21,482	19,128	151,719	19,138	19,143	19,184	19,111	53,219
20,834	0,205	0,589	1,055	-0,159	-0,007	0,360	0,539	52,790	21,487	22,364	147,948	19,146	19,158	19,194	19,121	53,260
21,334	0,205	0,590	1,060	-0,162	-0,011	0,356	0,539	52,808	21,435	29,124	170,624	19,133	19,152	19,187	19,118	53,255
21,834	0,205	0,603	1,056	-0,162	-0,007	0,346	0,538	52,805	21,477	33,587	157,981	19,191	19,198	19,229	19,164	53,252
22,334	0,204	0,598	1,058	-0,163	0,004	0,352	0,537	52,863	21,472	27,108	147,288	19,174	19,174	19,211	19,147	53,254
22,833	0,204	0,586	1,052	-0,166	0,005	0,362	0,537	52,856	21,431	22,978	154,496	19,171	19,170	19,209	19,138	53,278
23,333	0,205	0,590	1,058	-0,162	0,011	0,356	0,537	53,048	21,480	27,425	158,799	19,208	19,214	19,253	19,183	53,001
23,833	0,204	0,601	1,053	-0,163	0,002	0,349	0,537	53,176	21,452	29,757	174,520	19,220	19,234	19,267	19,204	53,084
24,333	0,205	0,593	1,055	-0,165	0,005	0,358	0,537	53,038	21,504	21,161	148,008	19,220	19,222	19,263	19,198	53,088
24,833	0,205	0,588	1,054	-0,164	0,024	0,359	0,536	52,969	21,497	23,552	152,906	19,195	19,191	19,235	19,168	53,129
25,333	0,205	0,597	1,053	-0,163	-0,028	0,352	0,536	52,942	21,431	25,020	167,542	19,185	19,183	19,235	19,166	53,136
25,833	0,204	0,590	1,058	-0,164	0,044	0,360	0,536	52,993	21,454	23,352	174,749	19,176	19,180	19,208	19,150	53,149
26,333	0,205	0,585	1,050	-0,161	-0,014	0,362	0,536	53,072	21,574	22,977	149,649	19,227	19,235	19,270	19,209	53,173
26,833	0,205	0,598	1,051	-0,160	0,013	0,351	0,536	53,014	21,469	22,762	153,357	19,144	19,150	19,187	19,125	53,211
27,334	0,205	0,592	1,054	-0,161	-0,021	0,359	0,536	53,144	21,499	26,138	152,088	19,201	19,201	19,234	19,177	53,247
27,834	0,205	0,583	1,056	-0,165	0,009	0,364	0,536	53,206	21,538	24,760	154,279	19,237	19,241	19,274	19,215	53,263
28,334	0,205	0,589	1,052	-0,165	0,030	0,356	0,536	53,291	21,521	18,017	177,218	19,194	19,206	19,237	19,184	53,313
28,834	0,205	0,594	1,058	-0,163	-0,004	0,356	0,534	53,373	21,499	23,832	166,672	19,215	19,219	19,251	19,194	53,362
29,334	0,205	0,588	1,053	-0,165	0,026	0,360	0,534	53,347	21,515	28,331	161,671	19,194	19,201	19,239	19,175	53,338
29,833	0,205	0,590	1,056	-0,163	-0,005	0,357	0,534	53,337	21,532	23,555	164,963	19,227	19,231	19,276	19,211	53,363
30,333	0,205	0,595	1,049	-0,164	0,002	0,354	0,534	53,383	21,551	24,811	188,268	19,237	19,245	19,278	19,221	53,259
30,833	0,205	0,585	1,053	-0,163	0,011	0,365	0,534	53,254	21,551	27,426	154,588	19,250	19,255	19,288	19,233	53,079
31,333	0,206	0,574	1,058	-0,166	0,016	0,371	0,534	53,150	21,556	39,690	162,393	19,243	19,246	19,283	19,227	53,074
31,833	0,205	0,587	1,048	-0,160	0,034	0,357	0,534	53,220	21,523	32,920	160,141	19,247	19,245	19,284	19,229	53,138
32,333	0,205	0,597	1,058	-0,164	0,012	0,354	0,533	53,307	21,452	20,375	155,187	19,188	19,191	19,225	19,175	53,177
32,833	0,206	0,582	1,049	-0,163	0,017	0,368	0,532	53,377	21,505	28,567	158,684	19,198	19,206	19,240	19,183	53,181
33,333	0,207	0,577	1,056	-0,160	0,032	0,366	0,533	53,448	21,574	29,387	163,142	19,271	19,281	19,320	19,264	53,165
33,834	0,205	0,592	1,054	-0,164	-0,002	0,357	0,532	53,292	21,526	26,292	148,632	19,241	19,241	19,277	19,228	53,122
34,334	0,206	0,581	1,059	-0,163	0,013	0,366	0,532	53,350	21,542	20,764	154,338	19,273	19,276	19,316	19,260	53,089
34,834	0,205	0,579	1,050	-0,159	0,025	0,367	0,532	53,055	21,424	23,050	155,559	19,259	19,264	19,302	19,256	53,137

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
16,833	45,550	54,606	63,957	0,500	0,448	4451,381	4803,282	15,082	10,152	10,400	-3,231	41,923	8,359	8,756	2022-03-24 09:24
17,333	45,531	54,623	63,979	0,502	0,448	4494,962	4804,923	14,566	9,839	10,573	-3,273	42,155	8,382	8,756	2022-03-24 09:24
17,833	45,484	54,674	64,114	0,505	0,448	4549,055	4847,604	15,996	9,417	11,058	-3,291	42,245	8,391	8,662	2022-03-24 09:25
18,333	45,419	54,661	64,189	0,507	0,448	4584,200	4890,954	15,604	9,743	10,842	-3,224	42,601	8,426	8,756	2022-03-24 09:25
18,833	45,432	54,651	64,245	0,506	0,448	4591,562	4925,950	13,488	9,848	10,611	-3,243	42,230	8,389	8,662	2022-03-24 09:26
19,333	45,498	54,608	64,308	0,509	0,448	4473,938	4981,643	13,568	9,386	11,034	-3,268	42,362	8,403	8,662	2022-03-24 09:26
19,833	45,555	54,833	64,405	0,504	0,449	4434,056	4918,408	17,348	9,504	11,072	-3,195	41,961	8,363	8,662	2022-03-24 09:27
20,334	45,569	55,021	64,444	0,504	0,449	4430,716	4842,454	16,759	9,904	10,632	-3,251	42,137	8,380	8,662	2022-03-24 09:27
20,834	45,548	55,112	64,457	0,504	0,449	4466,914	4800,687	15,750	9,611	10,795	-3,189	42,078	8,374	8,662	2022-03-24 09:28
21,334	45,524	55,183	64,593	0,509	0,449	4522,105	4838,213	16,089	9,848	10,694	-3,245	42,427	8,409	8,662	2022-03-24 09:28
21,834	45,510	55,176	64,665	0,507	0,449	4507,850	4876,722	14,990	10,117	10,384	-3,236	42,381	8,404	8,568	2022-03-24 09:29
22,334	45,521	55,232	64,694	0,507	0,449	4507,367	4862,305	13,903	9,834	10,567	-3,255	42,401	8,406	8,568	2022-03-24 09:29
22,833	45,494	55,288	64,765	0,505	0,449	4516,525	4871,064	14,820	9,604	10,855	-3,317	42,044	8,371	8,568	2022-03-24 09:30
23,333	45,505	55,354	64,875	0,509	0,449	4387,912	4895,056	15,162	9,896	10,667	-3,240	42,241	8,391	8,568	2022-03-24 09:30
23,833	45,500	55,488	64,919	0,511	0,449	4451,911	4848,040	14,315	10,041	10,457	-3,252	42,122	8,379	8,568	2022-03-24 09:31
24,333	45,514	55,610	64,998	0,508	0,449	4419,969	4827,518	15,493	9,705	10,731	-3,290	42,178	8,384	8,568	2022-03-24 09:31
24,833	45,502	55,681	65,092	0,507	0,449	4440,868	4841,496	15,824	9,659	10,782	-3,274	42,186	8,385	8,474	2022-03-24 09:32
25,333	45,470	55,735	65,152	0,506	0,449	4455,348	4842,342	14,743	9,951	10,552	-3,260	42,110	8,378	8,474	2022-03-24 09:32
25,833	45,467	55,811	65,196	0,508	0,449	4489,933	4825,524	14,738	9,634	10,814	-3,286	42,041	8,371	8,474	2022-03-24 09:33
26,333	45,484	55,829	65,281	0,505	0,449	4466,801	4860,838	15,831	9,690	10,851	-3,222	42,051	8,372	8,474	2022-03-24 09:33
26,833	45,507	55,904	65,365	0,510	0,449	4513,173	4866,844	15,329	10,054	10,528	-3,201	42,343	8,401	8,474	2022-03-24 09:34
27,334	45,532	55,945	65,420	0,509	0,449	4515,471	4869,748	15,585	9,669	10,774	-3,229	42,159	8,382	8,474	2022-03-24 09:34
27,834	45,538	55,964	65,503	0,507	0,449	4502,195	4908,419	16,929	9,553	10,930	-3,292	42,084	8,375	8,474	2022-03-24 09:35
28,334	45,535	56,029	65,535	0,505	0,449	4518,298	4889,314	15,665	9,833	10,689	-3,292	41,751	8,342	8,474	2022-03-24 09:35
28,834	45,551	56,096	65,603	0,509	0,449	4567,687	4891,602	15,246	9,723	10,684	-3,266	42,155	8,382	8,350	2022-03-24 09:36
29,334	45,566	56,109	65,692	0,506	0,449	4525,035	4926,550	16,092	9,732	10,811	-3,302	42,321	8,399	8,349	2022-03-24 09:36
29,833	45,533	56,175	65,770	0,508	0,449	4567,580	4936,465	16,331	9,811	10,707	-3,259	41,982	8,365	8,350	2022-03-24 09:37
30,333	45,497	56,232	65,811	0,509	0,450	4544,315	4930,160	15,161	9,835	10,635	-3,280	41,944	8,361	8,349	2022-03-24 09:37
30,833	45,460	56,310	65,892	0,510	0,449	4468,420	4930,506	17,633	9,471	10,945	-3,255	42,073	8,374	8,350	2022-03-24 09:38
31,333	45,445	56,459	65,983	0,510	0,450	4470,430	4903,478	18,348	9,357	11,140	-3,314	42,536	8,420	8,349	2022-03-24 09:38
31,833	45,502	56,548	65,941	0,506	0,450	4439,813	4835,121	15,158	9,888	10,719	-3,208	42,102	8,377	8,349	2022-03-24 09:39
32,333	45,613	56,647	66,006	0,504	0,450	4385,484	4820,490	16,169	9,850	10,615	-3,277	42,281	8,395	8,349	2022-03-24 09:39
32,833	45,635	56,814	66,084	0,501	0,450	4348,621	4773,638	18,943	9,411	11,034	-3,256	41,764	8,343	8,256	2022-03-24 09:40
33,333	45,531	56,908	66,168	0,505	0,450	4429,224	4767,923	19,358	9,571	10,994	-3,208	42,428	8,409	8,162	2022-03-24 09:40
33,834	45,418	56,944	66,207	0,503	0,450	4458,284	4771,800	16,257	9,766	10,716	-3,288	42,273	8,394	8,256	2022-03-24 09:41
34,334	45,345	56,981	66,300	0,503	0,450	4479,151	4801,113	17,180	9,471	10,988	-3,257	42,295	8,396	8,256	2022-03-24 09:41
34,834	45,449	56,994	66,341	0,501	0,450	4425,742	4814,812	16,594	9,468	10,997	-3,187	41,837	8,350	8,256	2022-03-24 09:42

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
35,334	0,205	0,586	1,053	-0,158	0,019	0,362	0,532	52,635	21,372	17,505	155,164	19,251	19,258	19,287	19,244	53,291
35,834	0,207	0,578	1,052	-0,159	0,007	0,370	0,532	52,275	21,340	11,283	155,328	19,243	19,247	19,280	19,237	53,329
36,333	0,211	0,568	1,047	-0,157	0,016	0,376	0,532	52,035	21,334	23,356	164,117	19,264	19,252	19,300	19,247	53,258
36,833	0,211	0,592	1,046	-0,158	0,038	0,353	0,532	51,820	21,223	10,480	170,421	19,169	19,167	19,206	19,160	53,265
37,333	0,210	0,599	1,054	-0,157	-0,004	0,355	0,532	51,758	21,321	24,712	153,453	19,256	19,260	19,300	19,247	53,232
37,833	0,215	0,585	1,052	-0,157	0,013	0,361	0,532	51,704	21,266	32,219	157,046	19,233	19,230	19,269	19,218	53,248
38,333	0,217	0,610	1,055	-0,151	-0,005	0,337	0,531	51,711	21,284	31,799	153,628	19,267	19,260	19,306	19,258	53,289
38,833	0,216	0,632	1,049	-0,154	-0,007	0,323	0,531	51,715	21,288	12,379	199,364	19,270	19,279	19,322	19,271	53,293
39,333	0,216	0,637	1,048	-0,155	-0,011	0,317	0,531	51,781	21,311	25,334	171,575	19,232	19,251	19,284	19,239	53,249
39,833	0,212	0,664	1,053	-0,151	0,049	0,292	0,531	51,867	21,293	25,800	159,431	19,219	19,227	19,259	19,214	53,266
40,333	0,210	0,683	1,055	-0,151	-0,016	0,281	0,531	51,960	21,244	29,539	153,278	19,279	19,279	19,318	19,274	53,269
40,834	0,210	0,677	1,056	-0,154	0,002	0,288	0,531	51,863	21,281	38,559	161,608	19,218	19,224	19,267	19,218	52,912
41,334	0,211	0,679	1,053	-0,155	0,010	0,283	0,531	51,973	21,355	30,786	179,033	19,265	19,268	19,306	19,260	52,933
41,834	0,210	0,684	1,058	-0,153	0,053	0,281	0,531	51,933	21,285	23,570	168,948	19,269	19,263	19,293	19,254	52,968
42,334	0,210	0,677	1,050	-0,156	0,006	0,288	0,530	51,929	21,332	27,684	172,582	19,276	19,291	19,321	19,277	53,059
42,834	0,213	0,666	1,058	-0,155	-0,003	0,295	0,530	51,804	21,259	35,379	179,478	19,194	19,193	19,238	19,194	53,233
43,333	0,211	0,681	1,052	-0,152	-0,006	0,277	0,530	51,895	21,240	32,939	160,968	19,215	19,217	19,243	19,212	53,188
43,833	0,209	0,706	1,050	-0,151	0,003	0,263	0,530	51,935	21,275	37,753	163,690	19,256	19,257	19,296	19,255	53,239
44,333	0,213	0,710	1,050	-0,151	0,000	0,256	0,529	52,148	21,402	26,878	172,909	19,301	19,299	19,338	19,297	53,220
44,833	0,223	0,745	1,055	-0,147	0,055	0,226	0,529	52,213	21,357	27,232	158,145	19,265	19,273	19,308	19,269	53,198
45,333	0,222	0,746	1,055	-0,150	0,017	0,230	0,529	52,197	21,357	19,036	153,185	19,302	19,302	19,338	19,303	53,109
45,833	0,220	0,730	1,054	-0,152	0,040	0,245	0,529	52,150	21,402	13,174	157,819	19,306	19,307	19,337	19,309	53,129
46,333	0,217	0,723	1,058	-0,151	0,044	0,246	0,529	52,193	21,381	19,869	156,002	19,271	19,279	19,311	19,276	53,141
46,833	0,214	0,731	1,052	-0,152	-0,004	0,242	0,529	52,120	21,323	26,961	171,230	19,274	19,277	19,315	19,278	53,209
47,333	0,216	0,722	1,055	-0,151	0,014	0,249	0,529	52,049	21,377	15,305	174,437	19,286	19,285	19,318	19,290	53,260
47,834	0,223	0,730	1,056	-0,148	0,000	0,238	0,529	52,114	21,385	12,573	153,055	19,318	19,319	19,351	19,320	53,226
48,334	0,225	0,744	1,054	-0,149	0,003	0,231	0,529	52,040	21,356	22,468	155,003	19,300	19,291	19,339	19,299	53,462
48,834	0,220	0,734	1,048	-0,151	0,060	0,239	0,529	51,974	21,379	23,051	164,201	19,306	19,301	19,338	19,305	53,354
49,334	0,219	0,738	1,051	-0,145	0,007	0,232	0,528	51,961	21,357	13,049	154,302	19,308	19,308	19,343	19,311	53,346
49,834	0,228	0,756	1,053	-0,145	-0,030	0,218	0,528	51,934	21,340	26,965	173,192	19,286	19,289	19,326	19,294	53,363
50,333	0,231	0,750	1,054	-0,146	0,023	0,228	0,528	51,893	21,358	14,267	178,793	19,326	19,316	19,365	19,333	53,354
50,833	0,230	0,738	1,050	-0,148	-0,010	0,235	0,528	51,855	21,378	26,104	154,002	19,291	19,285	19,322	19,295	53,329
51,333	0,224	0,745	1,047	-0,147	0,036	0,225	0,528	51,897	21,445	23,381	158,157	19,309	19,310	19,348	19,318	53,287
51,833	0,221	0,752	1,050	-0,149	0,043	0,224	0,527	51,864	21,378	27,260	162,163	19,274	19,281	19,310	19,284	53,558
52,333	0,226	0,749	1,057	-0,146	0,019	0,224	0,528	51,973	21,389	24,614	173,807	19,321	19,326	19,366	19,333	53,554
52,833	0,235	0,769	1,049	-0,146	0,013	0,205	0,528	52,043	21,384	32,483	162,711	19,308	19,319	19,363	19,328	53,482
53,333	0,246	0,783	1,054	-0,144	0,018	0,198	0,554	52,059	21,389	25,255	160,747	19,318	19,307	19,353	19,322	53,374

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
35,334	45,563	57,058	66,399	0,502	0,450	4457,482	4812,508	15,839	9,662	10,852	-3,150	41,842	8,351	8,256	2022-03-24 09:42
35,834	45,610	57,102	66,472	0,502	0,450	4452,973	4825,023	25,811	9,326	11,104	-3,186	41,996	8,366	8,256	2022-03-24 09:43
36,333	45,532	57,183	66,518	0,500	0,450	4443,530	4809,745	33,444	9,244	11,271	-3,143	41,848	8,351	8,256	2022-03-24 09:43
36,833	45,444	57,251	66,511	0,503	0,450	4519,566	4771,341	27,487	10,101	10,589	-3,158	41,660	8,333	8,256	2022-03-24 09:44
37,333	45,404	57,265	66,483	0,501	0,450	4510,146	4749,373	32,982	9,784	10,637	-3,143	41,946	8,361	8,162	2022-03-24 09:44
37,833	45,436	57,262	66,506	0,502	0,450	4511,598	4765,004	42,591	9,665	10,838	-3,147	41,964	8,363	8,256	2022-03-24 09:45
38,333	45,494	57,238	66,409	0,502	0,450	4501,360	4723,784	45,525	10,537	10,105	-3,030	42,194	8,386	8,162	2022-03-24 09:45
38,833	45,522	57,228	66,454	0,503	0,450	4497,541	4752,856	42,605	10,840	9,685	-3,078	41,765	8,343	8,162	2022-03-24 09:46
39,333	45,533	57,218	66,413	0,506	0,450	4489,243	4735,518	43,860	11,100	9,503	-3,103	41,659	8,333	8,163	2022-03-24 09:46
39,833	45,547	57,235	66,391	0,506	0,450	4493,163	4716,564	29,584	11,873	8,768	-3,022	42,175	8,384	8,162	2022-03-24 09:47
40,333	45,548	57,218	66,415	0,505	0,450	4483,746	4738,253	26,565	12,112	8,425	-3,018	42,372	8,404	8,162	2022-03-24 09:47
40,834	45,508	57,223	66,404	0,507	0,450	4316,470	4731,589	30,090	11,823	8,629	-3,087	42,279	8,394	8,162	2022-03-24 09:48
41,334	45,458	57,357	66,367	0,507	0,450	4360,011	4641,563	30,679	12,036	8,499	-3,092	41,951	8,362	8,162	2022-03-24 09:48
41,834	45,420	57,402	66,397	0,511	0,450	4431,401	4635,044	27,663	12,100	8,416	-3,057	42,442	8,410	8,162	2022-03-24 09:49
42,334	45,417	57,348	66,366	0,508	0,450	4458,721	4647,507	30,675	11,798	8,629	-3,126	42,108	8,377	8,069	2022-03-24 09:49
42,834	45,471	57,300	66,393	0,505	0,450	4501,968	4684,624	36,565	11,628	8,843	-3,109	41,924	8,359	8,069	2022-03-24 09:50
43,333	45,535	57,221	66,379	0,504	0,450	4431,293	4715,735	27,306	12,304	8,318	-3,033	42,243	8,391	8,156	2022-03-24 09:50
43,833	45,567	57,189	66,370	0,504	0,450	4443,545	4725,765	25,210	12,606	7,885	-3,024	42,019	8,368	8,069	2022-03-24 09:51
44,333	45,562	57,268	66,403	0,498	0,450	4381,556	4703,751	44,206	12,939	7,679	-3,014	41,911	8,358	8,078	2022-03-24 09:51
44,833	45,487	57,314	66,362	0,502	0,450	4449,347	4662,953	66,736	13,840	6,785	-2,941	42,259	8,392	8,069	2022-03-24 09:52
45,333	45,399	57,301	66,333	0,500	0,450	4428,638	4653,379	51,304	13,551	6,902	-2,999	42,250	8,392	8,069	2022-03-24 09:52
45,833	45,422	57,277	66,388	0,499	0,450	4423,358	4694,340	53,573	13,060	7,340	-3,047	42,113	8,378	8,069	2022-03-24 09:53
46,333	45,530	57,266	66,390	0,500	0,450	4370,861	4700,381	42,505	13,192	7,366	-3,025	42,099	8,376	8,069	2022-03-24 09:53
46,833	45,577	57,272	66,404	0,500	0,450	4388,230	4704,519	36,972	13,205	7,246	-3,030	42,015	8,368	8,114	2022-03-24 09:54
47,333	45,574	57,307	66,410	0,499	0,450	4411,825	4689,070	46,027	13,032	7,457	-3,019	42,161	8,383	8,069	2022-03-24 09:54
47,834	45,491	57,312	66,375	0,499	0,450	4440,036	4666,125	65,750	13,456	7,143	-2,969	41,900	8,357	8,069	2022-03-24 09:55
48,334	45,391	57,279	66,371	0,498	0,450	4616,368	4683,694	62,138	13,561	6,920	-2,985	42,224	8,389	8,069	2022-03-24 09:55
48,834	45,429	57,153	66,376	0,500	0,450	4555,174	4748,167	51,640	13,298	7,172	-3,013	41,781	8,345	7,974	2022-03-24 09:56
49,334	45,516	57,121	66,417	0,506	0,450	4555,236	4785,629	50,809	13,565	6,967	-2,902	42,059	8,372	7,974	2022-03-24 09:56
49,834	45,601	57,097	66,395	0,506	0,450	4511,751	4788,331	79,747	13,955	6,554	-2,894	42,201	8,387	7,974	2022-03-24 09:57
50,333	45,576	57,113	66,458	0,505	0,450	4517,309	4813,647	81,417	13,592	6,846	-2,927	41,948	8,361	7,974	2022-03-24 09:57
50,833	45,439	57,170	66,419	0,508	0,450	4604,028	4762,226	68,588	13,470	7,045	-2,963	41,853	8,352	7,974	2022-03-24 09:58
51,333	45,389	57,132	66,445	0,504	0,450	4578,571	4794,622	60,952	13,754	6,761	-2,932	41,720	8,339	7,974	2022-03-24 09:58
51,833	45,469	57,108	66,412	0,505	0,450	4699,639	4791,555	54,495	13,679	6,727	-2,972	42,293	8,396	7,974	2022-03-24 09:59
52,333	45,581	56,988	66,408	0,501	0,450	4588,017	4847,819	77,305	13,810	6,709	-2,923	42,044	8,371	7,974	2022-03-24 09:59
52,833	45,576	57,044	66,445	0,502	0,450	4561,756	4840,143	100,933	14,436	6,136	-2,919	41,994	8,366	7,974	2022-03-24 10:00
53,333	45,499	57,106	66,402	0,501	0,450	4534,277	4789,750	126,378	14,550	5,942	-2,881	41,858	8,352	13,036	2022-03-24 10:00

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
53,833	0,259	0,782	1,054	-0,145	0,013	0,197	0,707	52,113	21,391	23,664	160,351	19,327	19,322	19,360	19,333	53,310
54,334	0,261	0,796	1,052	-0,143	0,026	0,184	0,755	52,236	21,425	38,923	188,326	19,334	19,323	19,364	19,346	53,257
54,834	0,257	0,806	1,045	-0,146	-0,024	0,181	0,797	52,199	21,467	24,663	181,370	19,353	19,344	19,382	19,357	53,274
55,334	0,241	0,781	1,051	-0,148	0,012	0,203	0,796	52,158	21,436	25,446	185,797	19,328	19,331	19,371	19,339	53,318
55,834	0,238	0,774	1,056	-0,147	0,039	0,202	0,797	52,239	21,406	35,325	158,019	19,353	19,352	19,385	19,363	53,376
56,334	0,248	0,792	1,048	-0,146	-0,022	0,189	0,796	52,270	21,382	37,057	178,798	19,322	19,311	19,356	19,329	53,346
56,833	0,254	0,784	1,051	-0,148	0,039	0,197	0,796	52,260	21,459	31,274	144,544	19,334	19,331	19,359	19,340	53,320
57,333	0,304	0,799	1,050	-0,141	0,003	0,179	0,796	52,366	21,464	30,807	120,958	19,325	19,291	19,354	19,331	53,330
57,833	0,404	0,827	1,050	-0,140	-0,026	0,158	0,796	52,524	21,459	33,697	154,415	19,379	19,370	19,417	19,395	53,387
58,333	0,422	0,829	1,048	-0,145	-0,003	0,162	0,795	52,529	21,465	27,616	153,410	19,356	19,351	19,394	19,364	53,426
58,833	0,431	0,814	1,054	-0,152	-0,012	0,169	0,795	53,383	21,767	30,364	103,183	19,387	19,427	19,422	19,396	53,442
59,333	0,548	0,831	1,050	-0,155	0,022	0,150	0,795	54,119	21,842	31,617	114,793	19,354	19,359	19,396	19,368	53,431
59,833	0,353	0,807	1,046	-0,160	0,027	0,180	0,795	54,362	21,922	27,590	107,902	19,366	19,309	19,400	19,372	53,397
60,333	0,241	0,761	1,049	-0,161	0,047	0,215	0,794	54,519	21,956	5,603	138,697	19,379	19,358	19,404	19,389	53,401
60,833	0,223	0,741	1,046	-0,157	0,043	0,232	0,794	54,515	21,937	0,431	113,659	19,348	19,340	19,384	19,360	53,426
61,334	0,215	0,721	1,055	-0,156	0,000	0,248	0,793	54,422	21,987	16,862	113,016	19,382	19,374	19,419	19,392	53,506
61,834	0,214	0,700	1,049	-0,157	-0,014	0,268	0,793	54,134	21,939	22,449	-3246,221	19,350	19,346	19,379	19,359	53,573
62,334	0,212	0,692	1,051	-0,156	0,036	0,273	0,793	54,037	21,913	47,819	9,376	19,363	19,363	19,402	19,379	53,456
62,834	0,210	0,670	1,052	-0,158	-0,007	0,294	0,792	53,972	21,923	64,351	21,179	19,378	19,380	19,423	19,394	53,504
63,334	0,208	0,649	1,055	-0,157	-0,008	0,311	0,792	53,815	21,898	78,432	21,138	19,338	19,345	19,382	19,356	53,510
63,833	0,208	0,635	1,054	-0,158	-0,014	0,320	0,792	53,795	21,928	39,884	21,140	19,405	19,366	19,405	19,382	53,563
64,333	0,208	0,631	1,057	-0,159	0,006	0,324	0,791	53,820	21,976	23,409	21,139	19,427	19,387	19,435	19,406	53,244
64,833	0,207	0,621	1,048	-0,159	0,039	0,333	0,791	54,079	21,890	19,460	21,072	19,390	19,359	19,400	19,371	53,480
65,333	0,207	0,617	1,055	-0,157	-0,003	0,335	0,790	54,298	21,964	58,401	21,086	19,421	19,410	19,440	19,416	53,599
65,833	0,207	0,621	1,055	-0,159	0,041	0,333	0,790	54,507	22,007	-3329,186	21,054	19,424	19,401	19,447	19,415	53,472
66,333	0,207	0,611	1,053	-0,160	0,027	0,341	0,790	54,572	21,967	-11,058	21,018	19,419	19,402	19,439	19,416	53,518
66,833	0,206	0,615	1,053	-0,161	0,029	0,337	0,790	54,745	21,964	47,317	21,000	19,430	19,417	19,450	19,424	53,556
67,333	0,207	0,618	1,057	-0,161	0,004	0,335	0,789	54,987	21,988	-3278,541	20,958	19,412	19,392	19,445	19,410	53,472
67,834	0,207	0,613	1,060	-0,165	0,047	0,340	0,788	55,061	21,915	-3312,549	20,895	19,395	19,359	19,410	19,380	53,273
68,334	0,206	0,605	1,058	-0,165	0,010	0,347	0,788	55,226	21,887	29,371	20,897	19,448	19,390	19,440	19,407	53,323
68,834	0,207	0,596	1,049	-0,165	-0,005	0,354	0,789	55,342	21,902	40,356	20,885	19,444	19,400	19,455	19,420	53,442
69,334	0,207	0,587	1,058	-0,164	0,026	0,363	0,788	55,584	21,907	27,169	20,866	19,448	19,404	19,454	19,425	53,511
69,834	0,207	0,573	1,054	-0,164	0,013	0,374	0,787	55,653	21,874	24,634	20,815	19,420	19,383	19,426	19,398	53,274
70,333	0,207	0,575	1,060	-0,164	0,049	0,368	0,787	55,837	21,921	36,162	20,831	19,457	19,424	19,461	19,443	53,326
70,833	0,207	0,580	1,058	-0,165	-0,012	0,367	0,787	56,039	21,892	35,956	20,796	19,448	19,414	19,459	19,433	53,386
71,333	0,206	0,592	1,051	-0,167	0,010	0,354	0,787	56,307	21,931	32,770	20,774	19,451	19,423	19,461	19,437	53,403
71,833	0,206	0,602	1,050	-0,169	0,019	0,350	0,786	56,566	21,905	23,027	20,735	19,448	19,398	19,446	19,426	53,116

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
53,833	45,425	57,185	66,454	0,504	0,450	4565,059	4774,864	171,787	14,668	5,916	-2,899	42,145	8,381	19,238	2022-03-24 10:01
54,334	45,426	57,218	66,463	0,502	0,450	4520,304	4759,814	144,985	15,049	5,520	-2,866	42,020	8,369	24,761	2022-03-24 10:01
54,834	45,468	57,189	66,498	0,504	0,450	4523,278	4793,000	128,855	15,077	5,424	-2,913	42,046	8,371	24,760	2022-03-24 10:02
55,334	45,555	57,184	66,550	0,503	0,450	4486,871	4822,093	106,247	14,287	6,087	-2,958	42,061	8,373	24,761	2022-03-24 10:02
55,834	45,614	57,226	66,564	0,504	0,450	4500,362	4809,162	99,859	14,498	6,061	-2,939	42,274	8,394	24,761	2022-03-24 10:03
56,334	45,466	57,255	66,532	0,502	0,450	4549,658	4778,381	131,833	14,845	5,674	-2,912	41,705	8,337	24,761	2022-03-24 10:03
56,833	45,391	57,256	66,578	0,503	0,450	4588,372	4801,527	149,093	14,527	5,895	-2,952	42,041	8,371	24,761	2022-03-24 10:04
57,333	45,442	57,235	66,621	0,500	0,450	4533,665	4832,348	364,293	15,243	5,361	-2,818	42,230	8,389	24,761	2022-03-24 10:04
57,833	45,526	57,173	66,628	0,502	0,450	4532,007	4868,160	561,641	15,822	4,749	-2,808	41,929	8,360	24,761	2022-03-24 10:05
58,333	45,581	57,261	66,678	0,502	0,450	4525,899	4851,227	557,732	15,571	4,853	-2,908	41,671	8,334	24,667	2022-03-24 10:05
58,833	45,577	57,282	66,728	0,504	0,450	4559,918	4865,097	674,969	15,262	5,070	-3,048	42,221	8,389	24,667	2022-03-24 10:06
59,333	45,482	57,289	66,770	0,506	0,450	4624,290	4883,196	750,356	15,787	4,501	-3,100	42,155	8,382	24,667	2022-03-24 10:06
59,833	45,459	57,276	66,813	0,504	0,450	4594,974	4910,294	237,458	14,779	5,387	-3,198	41,964	8,363	24,667	2022-03-24 10:07
60,333	45,418	57,309	66,917	0,505	0,450	4631,172	4951,240	68,961	13,770	6,453	-3,217	41,790	8,346	24,667	2022-03-24 10:07
60,833	45,479	57,321	67,132	0,501	0,450	4573,207	5056,135	53,933	13,332	6,966	-3,149	41,728	8,339	24,573	2022-03-24 10:08
61,334	45,502	57,388	67,369	0,500	0,450	4602,531	5143,699	41,497	12,970	7,448	-3,125	41,868	8,353	24,573	2022-03-24 10:08
61,834	45,506	57,487	67,537	0,500	0,450	4641,142	5179,621	35,885	12,262	8,048	-3,138	41,953	8,362	24,573	2022-03-24 10:09
62,334	45,544	57,602	67,769	0,509	0,450	4625,589	5240,099	31,028	12,257	8,189	-3,118	42,097	8,376	24,573	2022-03-24 10:09
62,834	45,593	57,777	68,002	0,507	0,451	4614,703	5273,008	25,317	11,514	8,818	-3,159	42,116	8,378	24,479	2022-03-24 10:10
63,334	45,461	57,994	68,141	0,507	0,451	4686,432	5232,816	22,635	11,065	9,333	-3,131	41,770	8,344	24,479	2022-03-24 10:10
63,833	45,328	58,146	68,308	0,507	0,451	4796,914	5243,149	22,129	10,878	9,596	-3,164	42,247	8,391	24,479	2022-03-24 10:11
64,333	45,352	58,236	68,510	0,504	0,451	4569,852	5302,121	22,039	10,700	9,726	-3,175	42,480	8,414	24,354	2022-03-24 10:11
64,833	45,448	58,485	68,696	0,506	0,451	4676,237	5271,050	20,442	10,485	9,978	-3,172	41,716	8,338	24,355	2022-03-24 10:12
65,333	45,548	58,638	68,903	0,505	0,451	4674,105	5298,252	20,028	10,448	10,043	-3,141	42,299	8,396	24,354	2022-03-24 10:12
65,833	45,550	58,721	69,123	0,507	0,451	4620,803	5370,291	21,293	10,471	9,994	-3,184	42,380	8,404	24,355	2022-03-24 10:13
66,333	45,499	59,063	69,264	0,507	0,452	4677,494	5269,863	19,605	10,289	10,224	-3,206	42,011	8,368	24,355	2022-03-24 10:13
66,833	45,489	59,283	69,475	0,509	0,452	4717,258	5262,698	19,189	10,409	10,103	-3,219	42,157	8,382	24,354	2022-03-24 10:14
67,333	45,437	59,402	69,661	0,507	0,452	4685,713	5302,678	19,776	10,455	10,062	-3,227	42,324	8,399	24,355	2022-03-24 10:14
67,834	45,368	59,585	69,821	0,509	0,452	4628,231	5293,385	19,528	10,276	10,193	-3,292	42,289	8,395	24,261	2022-03-24 10:15
68,334	45,363	59,854	69,975	0,502	0,453	4595,544	5235,163	19,186	10,010	10,423	-3,292	42,069	8,373	24,261	2022-03-24 10:15
68,834	45,424	60,091	70,165	0,504	0,453	4645,035	5210,871	19,769	9,817	10,626	-3,297	41,732	8,340	24,261	2022-03-24 10:16
69,334	45,490	60,214	70,352	0,505	0,452	4652,018	5242,485	20,688	9,571	10,877	-3,282	42,274	8,394	24,261	2022-03-24 10:16
69,834	45,505	60,359	70,509	0,508	0,453	4534,170	5253,594	20,195	9,285	11,219	-3,277	42,280	8,394	24,167	2022-03-24 10:17
70,333	45,516	60,660	70,676	0,505	0,453	4535,463	5185,760	19,605	9,597	11,054	-3,270	42,246	8,391	24,167	2022-03-24 10:17
70,833	45,519	60,909	70,847	0,509	0,453	4601,050	5149,041	20,449	9,448	11,021	-3,293	42,285	8,395	24,167	2022-03-24 10:18
71,333	45,488	61,093	71,004	0,504	0,453	4586,388	5133,936	19,190	10,006	10,620	-3,343	42,032	8,370	24,167	2022-03-24 10:18
71,833	45,473	61,257	71,211	0,509	0,454	4470,166	5157,951	19,447	10,020	10,489	-3,390	42,147	8,381	24,073	2022-03-24 10:19



## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
72,333	0,207	0,595	1,054	-0,168	0,050	0,354	0,786	56,618	21,920	24,938	20,693	19,415	19,383	19,425	19,405	53,103
72,833	0,207	0,583	1,061	-0,173	0,043	0,366	0,786	56,661	21,914	19,109	20,689	19,435	19,398	19,447	19,421	53,058
73,333	0,207	0,582	1,054	-0,171	0,011	0,365	0,785	56,652	21,956	22,828	20,659	19,433	19,408	19,448	19,424	53,012
73,833	0,207	0,573	1,054	-0,171	0,012	0,376	0,785	56,723	21,940	20,952	20,626	19,430	19,398	19,451	19,417	53,124
74,333	0,207	0,559	1,045	-0,174	0,030	0,385	0,784	56,927	22,031	20,988	20,664	19,494	19,467	19,513	19,485	53,181
74,834	0,207	0,567	1,050	-0,175	0,005	0,375	0,784	57,081	21,987	20,900	20,584	19,436	19,406	19,450	19,428	53,207
75,334	0,206	0,581	1,062	-0,170	0,022	0,362	0,784	57,445	21,993	20,910	20,597	19,467	19,436	19,494	19,464	53,181
75,834	0,208	0,599	1,054	-0,171	0,000	0,352	0,784	57,669	21,920	20,842	20,527	19,421	19,392	19,442	19,421	53,066
76,334	0,207	0,591	1,055	-0,174	0,007	0,357	0,783	58,067	21,990	20,884	20,569	19,484	19,465	19,507	19,483	53,055
76,834	0,207	0,601	1,057	-0,170	0,009	0,347	0,783	58,147	22,063	20,873	20,560	19,499	19,466	19,519	19,496	53,071
77,333	0,207	0,598	1,057	-0,175	0,017	0,354	0,782	58,189	22,011	20,798	20,504	19,460	19,423	19,478	19,454	53,281
77,833	0,208	0,582	1,054	-0,175	0,030	0,367	0,782	58,356	21,974	20,768	20,474	19,451	19,424	19,474	19,451	53,427
78,333	0,207	0,581	1,050	-0,175	0,039	0,363	0,782	58,543	21,989	20,778	20,489	19,484	19,460	19,509	19,485	53,447
78,833	0,207	0,588	1,054	-0,173	0,013	0,360	0,781	58,424	21,880	20,682	20,400	19,424	19,395	19,445	19,418	53,490
79,333	0,208	0,585	1,060	-0,175	0,028	0,364	0,781	58,800	22,016	20,723	20,445	19,476	19,449	19,506	19,476	53,113
79,833	0,207	0,592	1,056	-0,177	0,040	0,356	0,780	59,033	22,058	20,704	20,428	19,480	19,459	19,511	19,484	53,151
80,334	0,207	0,593	1,055	-0,178	0,022	0,358	0,780	59,179	22,085	20,685	20,398	19,481	19,449	19,505	19,477	53,211
80,834	0,207	0,584	1,046	-0,183	0,027	0,365	0,780	59,281	22,050	20,673	20,410	19,496	19,482	19,533	19,497	53,224
81,334	0,206	0,586	1,058	-0,179	0,005	0,359	0,779	59,498	22,011	20,649	20,381	19,497	19,474	19,525	19,494	53,206
81,834	0,207	0,592	1,058	-0,180	0,048	0,358	0,779	59,270	21,877	20,657	20,402	19,519	19,495	19,541	19,519	53,272
82,334	0,208	0,576	1,053	-0,181	0,013	0,375	0,779	59,120	21,767	20,636	20,365	19,505	19,484	19,537	19,510	53,477
82,833	0,208	0,565	1,052	-0,183	0,004	0,379	0,779	58,900	21,635	20,544	20,292	19,432	19,407	19,471	19,441	53,118
83,333	0,206	0,558	1,059	-0,180	-0,016	0,388	0,779	58,750	21,702	20,602	20,354	19,520	19,496	19,550	19,523	53,067
83,833	0,206	0,544	1,049	-0,184	-0,013	0,399	0,778	58,660	21,645	20,553	20,315	19,495	19,468	19,529	19,496	53,120
84,333	0,206	0,539	1,058	-0,183	-0,002	0,402	0,778	58,769	21,696	20,561	20,344	19,517	19,494	19,558	19,528	53,195
84,833	0,206	0,537	1,057	-0,185	-0,023	0,404	0,778	58,686	21,719	20,539	20,311	19,523	19,500	19,550	19,527	53,251
85,333	0,206	0,533	1,056	-0,184	-0,015	0,406	0,777	58,707	21,680	20,448	20,238	19,461	19,443	19,488	19,468	53,276
85,833	0,206	0,532	1,055	-0,184	0,023	0,406	0,777	58,691	21,795	20,508	20,301	19,536	19,514	19,580	19,549	53,359
86,333	0,205	0,539	1,052	-0,184	0,042	0,401	0,777	58,797	21,819	20,498	20,278	19,536	19,519	19,575	19,548	53,392
86,833	0,206	0,533	1,062	-0,186	0,004	0,408	0,777	58,690	21,762	20,454	20,242	19,511	19,492	19,549	19,524	53,255
87,334	0,206	0,524	1,054	-0,189	0,025	0,414	0,777	58,733	21,694	20,370	20,159	19,448	19,427	19,482	19,458	53,301
87,834	0,205	0,534	1,058	-0,185	0,034	0,403	0,777	58,944	21,745	20,399	20,187	19,489	19,465	19,530	19,505	53,335
88,334	0,205	0,546	1,062	-0,184	0,013	0,394	0,776	59,139	21,818	20,423	20,214	19,532	19,522	19,580	19,551	53,101
88,834	0,205	0,549	1,058	-0,187	0,044	0,395	0,776	58,904	21,786	20,415	20,192	19,530	19,513	19,572	19,548	53,102
89,334	0,206	0,541	1,053	-0,183	0,033	0,401	0,776	58,809	21,701	20,374	20,171	19,519	19,498	19,557	19,533	53,142
89,833	0,206	0,541	1,060	-0,187	0,004	0,401	0,776	58,782	21,698	20,335	20,127	19,491	19,479	19,532	19,515	53,164
90,333	0,206	0,531	1,056	-0,187	0,014	0,410	0,776	58,673	21,730	20,352	20,129	19,526	19,502	19,567	19,542	53,170

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
72,333	45,363	61,529	71,336	0,508	0,454	4523,270	5082,718	21,375	9,957	10,618	-3,350	42,301	8,396	24,074	2022-03-24 10:19
72,833	45,204	61,728	71,516	0,511	0,454	4617,653	5072,233	20,274	9,428	10,977	-3,457	42,279	8,394	24,167	2022-03-24 10:20
73,333	45,173	61,838	71,623	0,507	0,454	4572,124	5073,661	19,943	9,577	10,961	-3,416	42,354	8,402	24,073	2022-03-24 10:20
73,833	45,230	62,009	71,814	0,510	0,454	4630,632	5084,713	20,114	9,161	11,265	-3,426	42,209	8,387	24,073	2022-03-24 10:21
74,333	45,328	62,052	71,908	0,510	0,454	4604,445	5111,442	19,436	8,954	11,560	-3,471	41,884	8,355	23,980	2022-03-24 10:21
74,834	45,368	62,291	72,033	0,505	0,454	4552,348	5055,066	18,856	9,365	11,259	-3,490	42,477	8,414	23,980	2022-03-24 10:22
75,334	45,352	62,555	72,178	0,504	0,455	4538,507	4995,610	19,572	9,732	10,848	-3,399	42,530	8,419	23,980	2022-03-24 10:22
75,834	45,316	62,807	72,326	0,498	0,455	4435,329	4940,827	23,377	9,874	10,547	-3,410	41,967	8,363	23,979	2022-03-24 10:23
76,334	45,230	63,027	72,508	0,502	0,455	4516,672	4922,811	19,858	9,718	10,720	-3,483	41,922	8,359	23,855	2022-03-24 10:23
76,834	45,184	63,093	72,664	0,504	0,455	4571,983	4970,924	20,867	10,101	10,412	-3,409	42,338	8,400	23,980	2022-03-24 10:24
77,333	45,216	63,144	72,879	0,501	0,455	4639,948	5057,391	21,087	9,794	10,614	-3,501	42,200	8,387	23,855	2022-03-24 10:24
77,833	45,298	63,185	73,027	0,503	0,455	4697,119	5111,016	21,539	9,493	11,011	-3,508	42,104	8,377	23,854	2022-03-24 10:25
78,333	45,346	63,252	73,183	0,501	0,455	4670,624	5158,543	19,361	9,711	10,895	-3,502	42,160	8,383	23,854	2022-03-24 10:25
78,833	45,342	63,381	73,328	0,506	0,455	4737,466	5166,485	20,695	9,636	10,812	-3,455	41,813	8,348	23,854	2022-03-24 10:26
79,333	45,312	63,491	73,458	0,500	0,455	4485,418	5178,325	23,633	9,514	10,912	-3,509	42,039	8,370	23,761	2022-03-24 10:26
79,833	45,259	63,839	73,655	0,502	0,455	4553,437	5100,874	21,130	9,851	10,666	-3,533	42,113	8,378	23,761	2022-03-24 10:27
80,334	45,223	64,004	73,818	0,502	0,456	4606,734	5104,046	20,277	9,769	10,731	-3,558	42,129	8,379	23,761	2022-03-24 10:27
80,834	45,172	64,141	73,911	0,505	0,456	4675,812	5079,937	19,858	9,517	10,940	-3,653	41,949	8,361	23,759	2022-03-24 10:28
81,334	45,232	64,250	74,048	0,501	0,456	4591,722	5095,377	19,440	9,806	10,784	-3,587	41,974	8,364	23,667	2022-03-24 10:28
81,834	45,312	64,367	74,182	0,499	0,456	4569,647	5105,347	22,200	9,842	10,748	-3,594	42,548	8,421	23,667	2022-03-24 10:29
82,334	45,365	64,524	74,353	0,508	0,456	4735,000	5113,563	24,384	9,153	11,260	-3,626	42,188	8,385	23,667	2022-03-24 10:29
82,833	45,311	64,571	74,518	0,512	0,456	4592,662	5174,764	21,869	9,200	11,385	-3,656	41,853	8,352	23,667	2022-03-24 10:30
83,333	45,250	64,787	74,644	0,504	0,456	4527,270	5128,653	18,095	8,755	11,643	-3,592	42,307	8,397	23,667	2022-03-24 10:30
83,833	45,208	65,002	74,719	0,503	0,456	4571,833	5057,293	17,090	8,545	11,968	-3,673	42,181	8,385	23,573	2022-03-24 10:31
84,333	45,193	65,112	74,797	0,509	0,457	4682,933	5043,522	17,082	8,487	12,047	-3,650	42,478	8,414	23,573	2022-03-24 10:31
84,833	45,271	65,194	74,859	0,510	0,457	4675,377	5034,214	16,923	8,357	12,131	-3,692	41,749	8,342	23,573	2022-03-24 10:32
85,333	45,350	65,211	74,945	0,506	0,456	4610,895	5065,437	17,091	8,316	12,180	-3,676	42,225	8,389	23,573	2022-03-24 10:32
85,833	45,376	65,334	75,031	0,507	0,457	4654,063	5049,317	17,344	8,378	12,184	-3,676	42,264	8,393	23,573	2022-03-24 10:33
86,333	45,311	65,385	75,061	0,508	0,457	4719,218	5039,397	16,927	8,483	12,040	-3,675	41,789	8,346	23,573	2022-03-24 10:33
86,833	45,231	65,432	75,114	0,505	0,457	4655,573	5041,005	17,255	8,225	12,245	-3,717	42,346	8,401	23,479	2022-03-24 10:34
87,334	45,194	65,539	75,180	0,508	0,457	4733,316	5023,464	17,262	8,109	12,419	-3,774	42,138	8,380	23,573	2022-03-24 10:34
87,834	45,207	65,553	75,240	0,508	0,457	4743,113	5044,123	16,002	8,461	12,094	-3,708	42,361	8,402	23,479	2022-03-24 10:35
88,334	45,277	65,594	75,300	0,507	0,457	4559,693	5053,683	14,909	8,795	11,829	-3,684	42,631	8,429	23,479	2022-03-24 10:35
88,834	45,320	65,769	75,323	0,509	0,457	4556,668	4979,548	16,761	8,633	11,846	-3,746	42,334	8,400	23,479	2022-03-24 10:36
89,334	45,337	65,891	75,398	0,512	0,457	4594,151	4952,548	17,758	8,514	12,015	-3,656	41,926	8,359	23,573	2022-03-24 10:36
89,833	45,314	65,946	75,438	0,509	0,457	4589,396	4947,225	17,260	8,469	12,026	-3,735	42,525	8,419	23,479	2022-03-24 10:37
90,333	45,285	66,011	75,503	0,511	0,457	4629,813	4944,811	18,852	8,191	12,293	-3,740	42,438	8,410	23,479	2022-03-24 10:37

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
90,833	0,207	0,528	1,054	-0,186	0,029	0,409	0,776	58,828	21,752	20,339	20,123	19,530	19,510	19,567	19,546	53,168
91,333	0,207	0,543	1,061	-0,187	0,027	0,397	0,776	58,885	21,725	20,315	20,096	19,514	19,496	19,551	19,531	53,185
91,833	0,207	0,542	1,042	-0,187	0,033	0,400	0,776	59,027	21,753	20,343	20,130	19,556	19,540	19,595	19,579	53,113
92,333	0,207	0,544	1,052	-0,186	0,023	0,394	0,774	58,986	21,730	20,330	20,114	19,554	19,545	19,602	19,581	53,103
92,833	0,208	0,562	1,056	-0,188	-0,009	0,381	0,775	59,037	21,818	20,323	20,110	19,574	19,547	19,617	19,592	53,207
93,333	0,208	0,559	1,057	-0,189	0,024	0,386	0,774	59,169	21,828	20,305	20,091	19,562	19,536	19,604	19,587	53,258
93,834	0,207	0,542	1,056	-0,188	0,066	0,399	0,774	59,105	21,803	20,288	20,076	19,554	19,536	19,600	19,581	53,161
94,334	0,207	0,552	1,058	-0,187	0,020	0,387	0,774	59,172	21,770	20,216	20,000	19,491	19,487	19,548	19,528	53,149
94,834	0,205	0,574	1,056	-0,188	0,007	0,371	0,774	59,333	21,757	20,214	19,996	19,494	19,491	19,556	19,532	53,131
95,334	0,205	0,558	1,061	-0,188	-0,009	0,387	0,773	59,283	21,825	20,256	20,030	19,578	19,553	19,616	19,596	53,227
95,834	0,205	0,543	1,052	-0,189	0,000	0,397	0,774	59,203	21,762	20,209	19,981	19,528	19,512	19,581	19,557	53,272
96,333	0,206	0,543	1,057	-0,189	0,027	0,396	0,774	59,241	21,781	20,189	19,974	19,521	19,509	19,572	19,551	53,288
96,833	0,206	0,542	1,059	-0,189	0,027	0,400	0,773	59,289	21,747	20,188	19,968	19,532	19,522	19,575	19,561	53,214
97,333	0,207	0,531	1,062	-0,190	0,014	0,407	0,772	59,230	21,797	20,209	19,990	19,563	19,542	19,609	19,593	53,137
97,833	0,207	0,538	1,055	-0,189	-0,004	0,401	0,772	59,261	21,839	20,209	19,988	19,585	19,569	19,635	19,612	53,040
98,333	0,207	0,543	1,054	-0,188	0,020	0,396	0,773	59,277	21,864	20,205	19,988	19,580	19,567	19,638	19,615	52,741
98,833	0,207	0,541	1,060	-0,188	0,007	0,401	0,772	59,326	21,809	20,138	19,917	19,517	19,519	19,582	19,561	52,830
99,333	0,207	0,544	1,060	-0,188	-0,031	0,396	0,772	59,256	21,766	20,090	19,874	19,498	19,473	19,544	19,524	52,863
99,833	0,206	0,550	1,057	-0,189	-0,018	0,391	0,772	59,119	21,824	20,145	19,931	19,548	19,543	19,608	19,589	52,803
100,333	0,207	0,549	1,054	-0,186	0,006	0,395	0,773	59,356	21,856	20,171	19,953	19,584	19,579	19,646	19,626	52,919
100,834	0,207	0,537	1,055	-0,189	0,018	0,406	0,772	59,404	21,810	20,130	19,911	19,558	19,561	19,622	19,597	52,961
101,334	0,208	0,538	1,063	-0,188	-0,013	0,400	0,772	59,468	21,889	20,158	19,941	19,592	19,590	19,657	19,635	53,011
101,834	0,207	0,556	1,057	-0,187	-0,015	0,387	0,772	59,640	21,864	20,151	19,942	19,601	19,600	19,653	19,644	53,006
102,334	0,206	0,555	1,059	-0,190	0,022	0,389	0,771	59,734	21,859	20,142	19,928	19,597	19,593	19,658	19,639	52,945
102,834	0,206	0,552	1,057	-0,191	0,020	0,390	0,771	59,636	21,913	20,140	19,924	19,602	19,603	19,671	19,643	52,956
103,333	0,206	0,558	1,056	-0,189	0,031	0,384	0,771	59,695	21,919	20,140	19,921	19,603	19,601	19,681	19,650	52,964
103,833	0,206	0,565	1,052	-0,186	-0,012	0,380	0,771	59,726	21,927	20,122	19,907	19,592	19,589	19,659	19,634	52,961
104,333	0,206	0,555	1,055	-0,191	-0,014	0,390	0,771	59,657	21,920	20,145	19,931	19,618	19,608	19,688	19,662	53,039
104,833	0,208	0,554	1,056	-0,190	0,023	0,387	0,771	59,370	21,870	20,054	19,835	19,536	19,527	19,596	19,573	53,005
105,333	0,207	0,561	1,051	-0,188	-0,010	0,384	0,771	59,482	21,972	20,124	19,908	19,606	19,606	19,688	19,656	53,043
105,833	0,207	0,546	1,053	-0,189	0,035	0,397	0,770	59,508	21,971	20,113	19,892	19,610	19,604	19,681	19,651	52,986
106,333	0,207	0,537	1,052	-0,186	0,011	0,403	0,770	59,474	22,011	20,120	19,895	19,618	19,615	19,691	19,662	52,931
106,833	0,206	0,546	1,051	-0,189	0,012	0,394	0,769	59,504	21,997	20,080	19,865	19,589	19,586	19,663	19,631	52,949
107,333	0,206	0,544	1,055	-0,192	-0,011	0,399	0,770	59,525	21,917	20,024	19,811	19,539	19,540	19,612	19,584	52,867
107,834	0,206	0,533	1,048	-0,188	0,014	0,407	0,770	59,557	21,883	20,068	19,859	19,585	19,580	19,648	19,625	52,993
108,334	0,206	0,533	1,058	-0,190	-0,029	0,407	0,770	59,547	21,842	20,049	19,830	19,561	19,560	19,634	19,610	53,242
108,834	0,207	0,533	1,058	-0,188	-0,010	0,406	0,769	59,602	21,892	20,084	19,856	19,599	19,596	19,674	19,645	53,196

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
90,833	45,275	66,046	75,493	0,509	0,457	4619,520	4920,509	20,104	8,260	12,278	-3,718	42,262	8,393	23,479	2022-03-24 10:38
91,333	45,247	66,108	75,489	0,512	0,457	4674,999	4885,796	20,285	8,638	11,901	-3,734	42,294	8,396	23,479	2022-03-24 10:38
91,833	45,246	66,095	75,540	0,506	0,457	4572,677	4921,988	20,364	8,440	12,014	-3,738	41,873	8,354	23,479	2022-03-24 10:39
92,333	45,265	66,153	75,561	0,507	0,457	4568,536	4904,245	22,706	8,821	11,831	-3,719	42,059	8,372	23,352	2022-03-24 10:39
92,833	45,359	66,178	75,615	0,502	0,457	4525,896	4919,229	22,545	9,160	11,415	-3,756	42,206	8,387	23,479	2022-03-24 10:40
93,333	45,332	66,241	75,641	0,505	0,457	4600,675	4899,221	21,961	8,775	11,587	-3,787	42,380	8,404	23,352	2022-03-24 10:40
93,834	45,225	66,262	75,681	0,500	0,457	4565,493	4909,134	21,789	8,522	11,962	-3,754	42,128	8,379	23,352	2022-03-24 10:41
94,334	45,143	66,341	75,695	0,502	0,457	4620,367	4875,891	18,011	9,016	11,601	-3,734	42,583	8,425	23,351	2022-03-24 10:41
94,834	45,169	66,352	75,708	0,501	0,458	4581,594	4879,696	15,008	9,384	11,144	-3,765	42,083	8,375	23,351	2022-03-24 10:42
95,334	45,279	66,368	75,734	0,503	0,457	4597,186	4880,163	14,658	8,761	11,620	-3,768	42,481	8,414	23,352	2022-03-24 10:42
95,834	45,366	66,355	75,764	0,504	0,457	4581,501	4904,158	17,508	8,556	11,920	-3,771	41,788	8,345	23,351	2022-03-24 10:43
96,333	45,328	66,399	75,790	0,504	0,457	4609,679	4897,025	18,434	8,619	11,876	-3,772	42,319	8,398	23,352	2022-03-24 10:43
96,833	45,189	66,449	75,797	0,506	0,457	4663,876	4872,442	20,192	8,385	12,011	-3,785	42,389	8,405	23,352	2022-03-24 10:44
97,333	45,066	66,381	75,823	0,509	0,457	4720,432	4920,163	20,706	8,277	12,218	-3,809	42,686	8,435	23,258	2022-03-24 10:44
97,833	45,080	66,346	75,833	0,502	0,457	4596,424	4943,671	19,793	8,492	12,035	-3,782	42,162	8,383	23,258	2022-03-24 10:45
98,333	45,146	66,359	75,865	0,503	0,457	4388,977	4954,391	20,200	8,676	11,886	-3,759	42,150	8,382	23,351	2022-03-24 10:45
98,833	45,168	66,584	75,857	0,506	0,458	4453,142	4836,582	21,457	8,409	12,016	-3,755	42,366	8,403	23,258	2022-03-24 10:46
99,333	45,086	66,593	75,871	0,507	0,457	4535,201	4838,109	18,602	8,682	11,893	-3,756	42,456	8,412	23,258	2022-03-24 10:46
99,833	44,973	66,634	75,870	0,505	0,457	4549,869	4815,583	19,439	8,886	11,721	-3,784	42,451	8,411	23,258	2022-03-24 10:47
100,333	44,983	66,673	75,886	0,509	0,458	4642,997	4806,241	19,521	8,616	11,857	-3,711	42,081	8,375	23,258	2022-03-24 10:47
100,834	45,106	66,588	75,869	0,506	0,458	4572,681	4839,961	21,373	8,320	12,174	-3,773	42,041	8,371	23,258	2022-03-24 10:48
101,334	45,171	66,560	75,846	0,504	0,457	4542,809	4841,732	22,632	8,621	11,987	-3,770	42,273	8,394	23,164	2022-03-24 10:48
101,834	45,127	66,573	75,832	0,506	0,457	4585,616	4826,301	19,269	8,895	11,609	-3,749	42,111	8,378	23,258	2022-03-24 10:49
102,334	45,046	66,607	75,878	0,505	0,457	4589,636	4834,121	17,592	8,845	11,660	-3,791	42,390	8,405	23,164	2022-03-24 10:49
102,834	45,002	66,630	75,869	0,505	0,457	4615,402	4814,840	17,599	8,782	11,715	-3,824	42,659	8,432	23,164	2022-03-24 10:50
103,333	45,018	66,644	75,852	0,503	0,458	4592,973	4802,141	17,097	9,046	11,511	-3,775	42,117	8,378	23,164	2022-03-24 10:50
103,833	45,080	66,660	75,942	0,507	0,458	4595,794	4841,029	19,872	9,108	11,405	-3,729	42,024	8,369	23,164	2022-03-24 10:51
104,333	45,116	66,640	75,947	0,507	0,458	4616,878	4854,744	18,551	8,754	11,703	-3,812	42,383	8,405	23,164	2022-03-24 10:51
104,833	45,128	66,668	75,994	0,504	0,457	4563,652	4860,205	22,880	8,974	11,610	-3,797	42,086	8,375	23,164	2022-03-24 10:52
105,333	45,114	66,732	76,025	0,505	0,458	4599,880	4845,901	20,284	8,960	11,531	-3,766	42,034	8,370	23,164	2022-03-24 10:52
105,833	45,063	66,754	76,113	0,506	0,457	4613,300	4879,651	19,271	8,557	11,906	-3,773	42,195	8,386	23,071	2022-03-24 10:53
106,333	45,042	66,715	76,109	0,505	0,457	4581,329	4897,982	20,154	8,440	12,080	-3,718	42,151	8,382	23,070	2022-03-24 10:53
106,833	45,022	66,743	76,115	0,505	0,458	4599,406	4886,677	18,346	8,711	11,831	-3,772	42,240	8,390	23,071	2022-03-24 10:54
107,333	45,016	66,704	76,129	0,502	0,457	4531,940	4913,966	17,510	8,489	11,965	-3,850	42,042	8,371	23,071	2022-03-24 10:54
107,834	45,012	66,773	76,154	0,501	0,458	4596,605	4893,768	17,925	8,280	12,216	-3,753	41,952	8,362	23,164	2022-03-24 10:55
108,334	45,093	66,747	76,147	0,505	0,458	4728,314	4903,235	18,514	8,361	12,196	-3,807	42,595	8,426	23,145	2022-03-24 10:55
108,834	45,120	66,566	76,111	0,503	0,457	4673,616	4974,935	21,365	8,410	12,177	-3,770	42,302	8,397	23,070	2022-03-24 10:56

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
109,334	0,208	0,533	1,055	-0,189	0,053	0,406	0,769	59,666	21,842	20,060	19,844	19,588	19,584	19,658	19,637	53,177
109,833	0,206	0,538	1,055	-0,189	-0,003	0,402	0,769	59,655	21,858	20,066	19,855	19,599	19,604	19,681	19,655	53,180
110,333	0,206	0,539	1,056	-0,188	0,024	0,400	0,769	59,551	21,844	20,043	19,833	19,586	19,595	19,669	19,647	52,724
110,833	0,206	0,539	1,052	-0,188	0,016	0,401	0,769	59,667	21,820	20,013	19,798	19,574	19,570	19,643	19,620	52,698
111,333	0,206	0,531	1,053	-0,187	0,037	0,410	0,769	59,599	21,847	20,039	19,830	19,603	19,606	19,680	19,656	52,783
111,833	0,206	0,533	1,051	-0,188	0,031	0,405	0,769	59,714	21,886	20,073	19,863	19,648	19,639	19,725	19,696	52,812
112,333	0,206	0,542	1,052	-0,190	0,011	0,398	0,768	59,593	21,846	20,008	19,790	19,593	19,587	19,664	19,641	52,860
112,833	0,205	0,540	1,054	-0,189	0,011	0,401	0,768	59,647	21,891	20,047	19,835	19,629	19,633	19,712	19,688	53,183
113,333	0,206	0,542	1,051	-0,191	-0,004	0,397	0,768	59,682	21,865	20,060	19,837	19,649	19,643	19,734	19,705	53,188
113,833	0,206	0,547	1,052	-0,188	0,003	0,393	0,768	59,758	21,867	20,029	19,815	19,624	19,624	19,699	19,684	53,215
114,334	0,207	0,544	1,059	-0,187	0,047	0,399	0,768	59,828	21,844	20,057	19,850	19,656	19,648	19,733	19,711	53,158
114,834	0,209	0,534	1,051	-0,189	0,028	0,406	0,768	59,859	21,861	20,025	19,822	19,634	19,636	19,712	19,692	53,049
115,334	0,209	0,535	1,052	-0,187	0,003	0,404	0,768	59,769	21,803	19,980	19,774	19,608	19,595	19,679	19,657	53,095
115,834	0,208	0,539	1,056	-0,187	0,008	0,401	0,767	59,782	21,848	20,003	19,786	19,618	19,621	19,702	19,680	53,010
116,334	0,208	0,535	1,052	-0,185	0,020	0,405	0,768	59,786	21,833	20,029	19,822	19,647	19,646	19,730	19,709	52,904
116,833	0,208	0,531	1,051	-0,188	0,033	0,408	0,767	59,785	21,857	20,035	19,808	19,650	19,648	19,733	19,715	53,052
117,333	0,208	0,538	1,059	-0,188	0,042	0,401	0,766	59,795	21,897	20,044	19,833	19,675	19,677	19,753	19,737	53,042
117,833	0,208	0,541	1,058	-0,188	0,006	0,400	0,766	59,816	21,857	19,996	19,791	19,640	19,645	19,732	19,709	52,986
118,333	0,208	0,537	1,059	-0,190	-0,001	0,403	0,766	59,769	21,883	20,003	19,779	19,644	19,647	19,723	19,709	52,934
118,833	0,209	0,549	1,057	-0,188	0,019	0,391	0,766	59,944	21,904	20,008	19,798	19,667	19,669	19,750	19,727	52,603
119,333	0,208	0,557	1,057	-0,190	0,034	0,386	0,766	59,988	21,904	20,000	19,786	19,658	19,660	19,744	19,726	52,692
119,833	0,209	0,546	1,060	-0,188	0,016	0,397	0,766	59,770	21,902	19,987	19,779	19,650	19,654	19,732	19,721	52,725
120,333	0,208	0,542	1,051	-0,188	0,014	0,399	0,766	59,791	21,905	19,984	19,768	19,650	19,651	19,740	19,722	53,037
120,833	0,206	0,544	1,055	-0,188	0,023	0,396	0,766	59,751	21,959	20,018	19,804	19,688	19,697	19,780	19,760	52,935
121,334	0,206	0,544	1,050	-0,188	0,019	0,398	0,765	59,677	21,903	20,004	19,780	19,684	19,679	19,763	19,745	52,997
121,834	0,207	0,540	1,046	-0,188	0,016	0,401	0,765	59,764	21,888	20,019	19,784	19,680	19,676	19,772	19,748	52,955
122,334	0,207	0,544	1,054	-0,191	0,000	0,396	0,765	59,892	21,934	20,037	19,799	19,693	19,689	19,782	19,762	52,914
122,834	0,207	0,548	1,052	-0,188	0,046	0,394	0,765	59,909	21,921	20,042	19,793	19,687	19,685	19,770	19,756	52,918
123,334	0,208	0,541	1,051	-0,189	0,026	0,401	0,765	59,841	21,957	20,094	19,820	19,714	19,707	19,795	19,778	52,985
123,833	0,208	0,543	1,055	-0,186	0,006	0,396	0,764	59,786	21,948	20,103	19,798	19,680	19,680	19,765	19,755	52,899
124,333	0,208	0,554	1,043	-0,187	-0,008	0,388	0,764	59,830	21,907	20,072	19,768	19,645	19,641	19,728	19,713	52,874
124,833	0,208	0,552	1,046	-0,188	0,028	0,392	0,764	59,814	21,893	20,120	19,820	19,685	19,683	19,770	19,754	52,810
125,333	0,208	0,545	1,052	-0,186	0,007	0,396	0,764	59,541	21,937	20,123	19,834	19,689	19,687	19,776	19,759	53,197
125,833	0,208	0,545	1,052	-0,188	0,024	0,395	0,764	59,605	21,918	20,099	19,809	19,658	19,661	19,753	19,737	53,249
126,333	0,207	0,548	1,052	-0,186	-0,007	0,393	0,764	59,591	21,863	20,085	19,790	19,634	19,646	19,725	19,715	53,214
126,833	0,207	0,543	1,047	-0,188	0,011	0,398	0,764	59,592	21,894	20,097	19,798	19,647	19,648	19,732	19,724	53,090
127,333	0,208	0,543	1,060	-0,187	0,023	0,397	0,764	59,770	21,913	20,414	19,844	19,692	19,687	19,775	19,769	53,145

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
109,334	45,136	66,559	76,167	0,501	0,457	4626,792	5009,113	20,709	8,345	12,192	-3,772	41,977	8,364	23,071	2022-03-24 10:56
109,833	45,153	66,656	76,139	0,505	0,458	4659,513	4945,110	17,843	8,456	12,055	-3,776	42,110	8,378	23,071	2022-03-24 10:57
110,333	45,105	66,631	76,164	0,504	0,457	4414,380	4970,104	17,676	8,521	12,013	-3,767	42,500	8,416	23,071	2022-03-24 10:57
110,833	45,039	66,890	76,142	0,506	0,458	4460,229	4825,676	17,178	8,449	12,025	-3,767	41,944	8,361	23,071	2022-03-24 10:58
111,333	44,991	66,948	76,146	0,503	0,458	4509,869	4797,222	19,696	8,196	12,285	-3,745	41,936	8,360	23,070	2022-03-24 10:58
111,833	45,003	66,931	76,148	0,504	0,457	4522,173	4804,910	19,111	8,432	12,137	-3,756	41,880	8,355	22,977	2022-03-24 10:59
112,333	45,056	66,788	76,137	0,504	0,457	4517,908	4873,565	17,101	8,593	11,937	-3,797	42,389	8,405	22,977	2022-03-24 10:59
112,833	45,106	66,868	76,144	0,498	0,457	4625,480	4835,945	16,674	8,451	12,037	-3,772	42,136	8,380	22,977	2022-03-24 11:00
113,333	45,117	66,791	76,150	0,499	0,458	4626,963	4882,232	17,014	8,591	11,916	-3,821	41,676	8,334	22,977	2022-03-24 11:00
113,833	45,125	66,700	76,142	0,504	0,458	4685,467	4925,323	18,111	8,730	11,779	-3,756	42,042	8,371	22,977	2022-03-24 11:01
114,334	45,142	66,663	76,159	0,503	0,457	4636,527	4947,976	23,056	8,430	11,965	-3,742	42,387	8,405	22,977	2022-03-24 11:01
114,834	45,150	66,635	76,179	0,503	0,457	4569,280	4975,037	25,566	8,332	12,187	-3,779	42,307	8,397	22,977	2022-03-24 11:02
115,334	45,071	66,727	76,196	0,505	0,457	4662,971	4936,398	25,519	8,460	12,108	-3,746	42,312	8,398	22,976	2022-03-24 11:02
115,834	44,998	66,683	76,124	0,504	0,457	4645,558	4922,659	23,297	8,451	12,039	-3,738	42,048	8,371	22,851	2022-03-24 11:03
116,334	44,990	66,688	76,155	0,501	0,457	4561,832	4935,137	23,814	8,335	12,160	-3,691	42,248	8,391	22,976	2022-03-24 11:03
116,833	45,060	66,690	76,164	0,501	0,457	4604,588	4937,963	22,389	8,237	12,251	-3,765	42,063	8,373	22,977	2022-03-24 11:04
117,333	45,114	66,709	76,168	0,505	0,457	4602,271	4932,010	23,394	8,540	12,023	-3,767	42,174	8,384	22,977	2022-03-24 11:04
117,833	45,122	66,729	76,145	0,501	0,458	4532,956	4911,047	23,308	8,455	12,011	-3,764	42,139	8,380	22,851	2022-03-24 11:05
118,333	45,129	66,787	76,100	0,504	0,457	4517,495	4854,844	23,651	8,426	12,096	-3,801	42,359	8,402	22,851	2022-03-24 11:05
118,833	45,123	66,797	76,086	0,507	0,457	4363,388	4842,096	25,634	8,894	11,728	-3,751	42,708	8,437	22,851	2022-03-24 11:06
119,333	45,093	66,970	76,135	0,503	0,458	4396,307	4778,989	22,142	8,918	11,594	-3,792	42,048	8,371	22,976	2022-03-24 11:06
119,833	45,039	67,021	76,106	0,505	0,457	4459,786	4735,024	25,483	8,547	11,922	-3,769	42,246	8,391	22,851	2022-03-24 11:07
120,333	44,979	66,969	76,115	0,503	0,457	4661,163	4766,120	21,126	8,532	11,969	-3,765	41,873	8,354	22,851	2022-03-24 11:07
120,833	45,042	66,785	76,129	0,504	0,457	4575,698	4869,901	17,603	8,674	11,880	-3,756	42,363	8,403	22,851	2022-03-24 11:08
121,334	45,126	66,730	76,115	0,503	0,457	4551,358	4890,189	17,771	8,512	11,938	-3,755	41,633	8,330	22,758	2022-03-24 11:08
121,834	45,185	66,774	76,116	0,502	0,457	4481,572	4869,619	20,445	8,498	12,033	-3,756	41,950	8,362	22,851	2022-03-24 11:09
122,334	45,140	66,834	76,120	0,500	0,457	4466,830	4841,577	19,528	8,677	11,877	-3,814	42,215	8,388	22,851	2022-03-24 11:09
122,834	45,154	66,937	76,177	0,501	0,458	4473,097	4818,406	21,282	8,741	11,809	-3,757	42,053	8,372	22,758	2022-03-24 11:10
123,334	45,139	66,900	76,139	0,502	0,457	4527,098	4813,563	23,714	8,449	12,031	-3,772	42,278	8,394	22,758	2022-03-24 11:10
123,833	45,041	66,865	76,154	0,504	0,457	4550,001	4841,417	24,224	8,695	11,890	-3,723	41,893	8,356	22,758	2022-03-24 11:11
124,333	44,941	66,819	76,117	0,504	0,457	4600,504	4845,198	23,690	8,934	11,641	-3,742	41,809	8,348	22,758	2022-03-24 11:11
124,833	44,978	66,790	76,128	0,507	0,458	4562,472	4869,028	23,561	8,728	11,750	-3,769	41,998	8,366	22,758	2022-03-24 11:12
125,333	45,081	66,708	76,140	0,501	0,457	4679,327	4916,599	23,808	8,617	11,881	-3,719	42,212	8,388	22,758	2022-03-24 11:12
125,833	45,133	66,623	76,128	0,503	0,457	4691,859	4949,957	23,722	8,657	11,857	-3,754	41,840	8,351	22,758	2022-03-24 11:13
126,333	45,153	66,576	76,105	0,500	0,457	4635,947	4965,570	20,788	8,680	11,793	-3,730	41,689	8,336	22,758	2022-03-24 11:13
126,833	45,143	66,590	76,101	0,497	0,457	4543,590	4955,739	22,129	8,518	11,951	-3,756	41,904	8,357	22,758	2022-03-24 11:14
127,333	45,084	66,643	76,101	0,501	0,457	4645,007	4925,712	21,972	8,670	11,910	-3,740	42,458	8,412	22,758	2022-03-24 11:14

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
127,834	0,207	0,546	1,052	-0,189	0,007	0,394	0,763	59,739	21,897	20,534	19,856	19,678	19,670	19,764	19,763	53,055
128,334	0,207	0,551	1,056	-0,185	0,005	0,390	0,763	59,761	21,962	20,619	19,908	19,723	19,708	19,816	19,804	53,088
128,834	0,207	0,549	1,058	-0,188	0,032	0,394	0,763	59,894	21,948	20,562	19,898	19,692	19,671	19,779	19,773	52,844
129,334	0,208	0,547	1,051	-0,189	0,034	0,393	0,763	59,812	22,018	20,601	19,917	19,708	19,690	19,804	19,796	52,801
129,834	0,208	0,558	1,049	-0,187	0,027	0,384	0,763	59,807	22,035	20,601	19,932	19,716	19,687	19,802	19,794	52,839
130,333	0,208	0,550	1,057	-0,189	0,026	0,395	0,763	59,743	21,936	20,564	19,898	19,666	19,635	19,742	19,743	52,796
130,833	0,208	0,540	1,051	-0,189	-0,006	0,397	0,763	59,750	21,975	20,596	19,922	19,675	19,658	19,772	19,763	52,826
131,333	0,208	0,568	1,050	-0,186	0,020	0,373	0,763	59,844	22,002	20,658	19,980	19,730	19,697	19,812	19,809	52,782
131,833	0,208	0,565	1,049	-0,186	0,020	0,383	0,763	59,902	21,990	20,659	19,991	19,730	19,693	19,814	19,802	52,889
132,333	0,211	0,547	1,045	-0,187	0,036	0,396	0,763	59,791	21,916	20,606	19,965	19,664	19,633	19,750	19,746	52,997
132,833	0,209	0,549	1,052	-0,188	0,011	0,391	0,762	59,866	22,044	20,711	20,076	19,750	19,716	19,842	19,831	53,217
133,333	0,207	0,558	1,055	-0,186	0,055	0,385	0,762	59,796	21,941	20,666	20,056	19,709	19,664	19,795	19,778	53,093
133,833	0,206	0,549	1,048	-0,188	-0,035	0,393	0,762	59,876	21,988	20,720	20,125	19,749	19,714	19,839	19,825	53,080
134,333	0,209	0,555	1,049	-0,188	0,023	0,385	0,761	60,009	21,973	20,708	20,127	19,735	19,705	19,830	19,811	53,108
134,834	0,209	0,572	1,053	-0,190	0,049	0,373	0,762	60,010	21,913	20,647	20,069	19,668	19,628	19,760	19,744	53,139
135,334	0,208	0,571	1,053	-0,184	0,023	0,375	0,762	60,039	22,016	20,751	20,218	19,785	19,734	19,865	19,850	53,138
135,834	0,207	0,561	1,053	-0,186	-0,022	0,384	0,761	59,925	22,012	20,733	20,213	19,764	19,722	19,855	19,832	53,087
136,334	0,208	0,556	1,058	-0,186	0,004	0,385	0,761	59,918	22,063	20,746	20,230	19,767	19,727	19,853	19,837	53,029
136,834	0,207	0,561	1,051	-0,188	0,002	0,383	0,761	59,957	21,982	20,724	20,215	19,741	19,706	19,834	19,812	53,049
137,333	0,208	0,553	1,052	-0,186	-0,001	0,390	0,761	59,904	22,003	20,757	20,258	19,776	19,734	19,868	19,843	53,006
137,833	0,208	0,549	1,046	-0,188	-0,016	0,391	0,761	59,983	22,009	20,777	20,281	19,801	19,760	19,895	19,863	52,991
138,333	0,208	0,565	1,049	-0,185	0,036	0,378	0,760	59,937	22,025	20,749	20,263	19,766	19,710	19,850	19,825	53,001
138,833	0,209	0,560	1,052	-0,186	0,027	0,385	0,761	59,846	22,004	20,756	20,271	19,765	19,718	19,861	19,829	53,001
139,333	0,210	0,549	1,050	-0,189	0,010	0,393	0,760	59,871	21,997	20,751	20,284	19,773	19,726	19,867	19,835	53,025
139,833	0,209	0,553	1,047	-0,186	-0,005	0,387	0,760	59,870	21,982	20,759	20,288	19,771	19,730	19,876	19,836	52,799
140,333	0,207	0,559	1,050	-0,188	0,029	0,385	0,760	59,929	22,038	20,833	20,368	19,842	19,799	19,938	19,905	52,634
140,833	0,207	0,550	1,049	-0,187	-0,023	0,393	0,760	60,038	22,069	20,837	20,384	19,839	19,809	19,949	19,908	52,719
141,333	0,208	0,549	1,056	-0,188	-0,018	0,391	0,760	60,115	22,071	20,818	20,365	19,833	19,787	19,929	19,888	52,721
141,834	0,207	0,561	1,049	-0,187	0,016	0,381	0,759	60,101	22,047	20,824	20,378	19,828	19,784	19,928	19,888	52,870
142,334	0,206	0,557	1,048	-0,183	-0,010	0,387	0,759	60,019	22,081	20,794	20,362	19,817	19,763	19,909	19,862	52,943
142,834	0,206	0,562	1,044	-0,184	0,034	0,378	0,758	60,007	22,100	20,815	20,398	19,840	19,795	19,940	19,893	52,928
143,334	0,206	0,579	1,054	-0,182	0,043	0,366	0,759	60,037	22,064	20,810	20,406	19,832	19,791	19,938	19,889	52,927
143,833	0,206	0,577	1,047	-0,186	-0,017	0,371	0,758	60,016	22,113	20,835	20,438	19,861	19,809	19,963	19,915	52,924
144,333	0,206	0,566	1,053	-0,185	0,002	0,378	0,758	59,831	22,004	20,768	20,382	19,796	19,758	19,900	19,851	52,879
144,833	0,205	0,576	1,055	-0,183	0,058	0,368	0,758	59,878	22,096	20,853	20,464	19,879	19,833	19,982	19,929	53,172
145,333	0,205	0,580	1,050	-0,182	0,031	0,367	0,758	59,771	22,024	20,784	20,412	19,813	19,770	19,916	19,862	53,254
145,833	0,206	0,579	1,054	-0,182	0,040	0,368	0,758	59,782	22,038	20,809	20,443	19,842	19,803	19,951	19,892	53,221

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
127,834	44,993	66,556	76,120	0,502	0,457	4648,384	4980,538	21,298	8,688	11,809	-3,778	42,004	8,367	22,664	2022-03-24 11:15
128,334	44,999	66,442	76,087	0,507	0,457	4712,693	5024,602	20,042	8,811	11,707	-3,700	42,237	8,390	22,664	2022-03-24 11:15
128,834	45,069	66,439	76,088	0,510	0,457	4559,819	5028,359	22,972	8,622	11,831	-3,763	42,467	8,413	22,664	2022-03-24 11:16
129,334	45,153	66,629	76,068	0,507	0,457	4458,551	4918,820	23,558	8,736	11,801	-3,789	41,830	8,350	22,664	2022-03-24 11:16
129,834	45,168	66,791	76,079	0,505	0,457	4454,870	4842,132	22,296	9,026	11,523	-3,730	41,722	8,339	22,664	2022-03-24 11:17
130,333	45,081	66,860	76,068	0,504	0,458	4470,092	4801,420	23,886	8,534	11,863	-3,780	42,326	8,399	22,664	2022-03-24 11:17
130,833	44,959	66,895	76,100	0,506	0,457	4580,835	4798,193	24,224	8,674	11,922	-3,779	41,896	8,356	22,664	2022-03-24 11:18
131,333	44,985	66,777	76,116	0,504	0,457	4514,991	4868,007	21,370	9,441	11,199	-3,729	41,701	8,337	22,664	2022-03-24 11:18
131,833	45,108	66,744	76,091	0,505	0,457	4518,591	4869,783	27,997	8,901	11,479	-3,717	41,836	8,350	22,664	2022-03-24 11:19
132,333	45,165	66,755	76,079	0,502	0,457	4521,297	4857,828	30,686	8,631	11,868	-3,749	41,790	8,346	22,664	2022-03-24 11:19
132,833	45,129	66,712	76,079	0,505	0,457	4691,872	4882,080	22,292	8,872	11,740	-3,756	42,006	8,367	22,664	2022-03-24 11:20
133,333	45,024	66,599	76,080	0,502	0,457	4654,990	4937,313	18,535	8,907	11,556	-3,727	42,104	8,377	22,570	2022-03-24 11:20
133,833	44,978	66,485	76,093	0,501	0,457	4668,376	5003,960	19,444	8,687	11,787	-3,757	41,911	8,358	22,570	2022-03-24 11:21
134,333	45,056	66,490	76,126	0,501	0,457	4633,538	5019,861	27,420	9,053	11,539	-3,756	41,918	8,358	22,589	2022-03-24 11:21
134,834	45,111	66,524	76,124	0,503	0,457	4637,898	4997,425	24,989	9,315	11,179	-3,804	42,048	8,371	22,664	2022-03-24 11:22
135,334	45,139	66,460	76,116	0,505	0,457	4641,757	5032,950	21,458	9,265	11,264	-3,686	42,153	8,382	22,570	2022-03-24 11:22
135,834	45,140	66,518	76,060	0,504	0,457	4603,430	4972,442	21,800	8,912	11,519	-3,718	42,265	8,393	22,570	2022-03-24 11:23
136,334	45,099	66,603	76,070	0,500	0,457	4562,593	4928,710	21,616	9,007	11,543	-3,723	42,283	8,395	22,570	2022-03-24 11:23
136,834	45,041	66,620	76,052	0,502	0,457	4617,404	4911,118	21,130	8,973	11,494	-3,764	42,181	8,385	22,570	2022-03-24 11:24
137,333	45,003	66,574	76,057	0,503	0,457	4623,658	4938,538	22,638	8,742	11,704	-3,718	42,221	8,389	22,570	2022-03-24 11:24
137,833	45,002	66,592	76,057	0,507	0,457	4659,760	4932,290	23,144	8,819	11,720	-3,768	41,749	8,342	22,570	2022-03-24 11:25
138,333	45,080	66,576	76,094	0,506	0,457	4606,075	4957,858	21,379	9,198	11,333	-3,699	42,065	8,373	22,476	2022-03-24 11:25
138,833	45,138	66,575	76,137	0,501	0,457	4528,375	4977,021	28,000	8,871	11,559	-3,719	42,386	8,405	22,476	2022-03-24 11:26
139,333	45,154	66,634	76,129	0,502	0,457	4545,232	4944,544	27,012	8,708	11,785	-3,775	41,843	8,351	22,476	2022-03-24 11:26
139,833	45,121	66,671	76,176	0,502	0,457	4428,361	4953,465	23,144	8,991	11,611	-3,720	41,905	8,357	22,476	2022-03-24 11:27
140,333	45,065	66,877	76,192	0,503	0,457	4374,380	4853,661	21,205	8,859	11,561	-3,760	42,170	8,384	22,476	2022-03-24 11:27
140,833	45,019	67,013	76,160	0,507	0,457	4486,642	4767,813	22,720	8,643	11,775	-3,745	41,673	8,334	22,476	2022-03-24 11:28
141,333	45,007	66,872	76,179	0,505	0,457	4480,216	4851,450	22,136	8,825	11,722	-3,758	42,399	8,406	22,476	2022-03-24 11:28
141,834	45,034	66,926	76,172	0,503	0,457	4533,278	4815,725	18,528	9,117	11,423	-3,737	41,746	8,341	22,352	2022-03-24 11:29
142,334	45,110	66,859	76,151	0,502	0,457	4519,048	4839,740	18,952	8,790	11,595	-3,667	41,958	8,362	22,476	2022-03-24 11:29
142,834	45,158	66,865	76,189	0,501	0,457	4475,475	4856,804	17,358	9,268	11,332	-3,674	42,005	8,367	22,352	2022-03-24 11:30
143,334	45,174	66,865	76,195	0,499	0,457	4449,107	4859,400	18,192	9,520	10,987	-3,648	41,868	8,353	22,476	2022-03-24 11:30
143,833	45,081	66,960	76,228	0,499	0,457	4498,292	4829,567	16,934	9,335	11,136	-3,719	41,736	8,340	22,352	2022-03-24 11:31
144,333	44,984	66,942	76,273	0,502	0,457	4557,593	4864,660	18,111	9,119	11,354	-3,691	42,169	8,383	22,352	2022-03-24 11:31
144,833	44,998	66,857	76,289	0,501	0,457	4711,038	4912,594	15,421	9,539	11,046	-3,670	42,334	8,400	22,352	2022-03-24 11:32
145,333	45,090	66,705	76,253	0,504	0,457	4730,947	4973,439	15,418	9,407	11,021	-3,647	42,006	8,367	22,352	2022-03-24 11:32
145,833	45,162	66,603	76,249	0,510	0,457	4728,502	5022,341	20,120	9,512	11,051	-3,640	41,865	8,353	22,352	2022-03-24 11:33



## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
146,333	0,207	0,575	1,048	-0,184	0,007	0,370	0,758	59,840	22,078	20,812	20,447	19,836	19,784	19,946	19,884	53,124
146,833	0,208	0,590	1,046	-0,184	0,036	0,357	0,758	59,949	22,067	20,819	20,457	19,837	19,798	19,932	19,881	53,068
147,333	0,207	0,580	1,046	-0,186	0,035	0,370	0,758	59,919	22,112	20,866	20,512	19,881	19,848	19,992	19,932	52,974
147,833	0,207	0,569	1,051	-0,184	0,029	0,374	0,757	59,972	22,116	20,884	20,525	19,902	19,845	19,996	19,936	52,694
148,334	0,207	0,578	1,055	-0,187	-0,009	0,369	0,757	59,982	22,202	20,887	20,538	19,892	19,845	19,995	19,933	52,680
148,834	0,206	0,574	1,053	-0,185	0,017	0,372	0,757	59,892	22,197	20,871	20,522	19,869	19,828	19,976	19,913	52,784
149,334	0,206	0,568	1,049	-0,185	0,007	0,377	0,756	59,874	22,128	20,862	20,517	19,867	19,820	19,965	19,903	52,903
149,834	0,207	0,570	1,057	-0,184	0,039	0,372	0,756	59,948	22,130	20,886	20,555	19,894	19,841	19,997	19,929	52,865
150,334	0,207	0,587	1,059	-0,184	0,000	0,358	0,756	60,166	22,162	20,924	20,591	19,929	19,877	20,029	19,965	52,897
150,833	0,207	0,593	1,048	-0,182	0,024	0,356	0,756	60,079	22,119	20,883	20,562	19,895	19,838	19,998	19,929	53,189
151,333	0,207	0,584	1,052	-0,182	0,024	0,362	0,756	60,000	22,109	20,873	20,552	19,881	19,831	19,991	19,918	53,270
151,833	0,208	0,590	1,054	-0,183	-0,008	0,357	0,756	59,899	22,113	20,874	20,557	19,891	19,843	20,002	19,926	53,154
152,333	0,209	0,589	1,046	-0,183	0,041	0,361	0,756	59,874	22,145	20,889	20,574	19,902	19,863	20,009	19,940	53,166
152,833	0,214	0,578	1,054	-0,184	0,017	0,370	0,755	59,874	22,178	20,906	20,590	19,909	19,862	20,026	19,947	53,098
153,333	0,216	0,575	1,056	-0,185	0,040	0,368	0,755	59,887	22,209	20,910	20,599	19,907	19,863	20,023	19,946	52,888
153,833	0,212	0,585	1,058	-0,182	0,032	0,363	0,755	59,772	22,225	20,942	20,641	19,945	19,893	20,061	19,980	52,847
154,333	0,213	0,572	1,053	-0,183	0,045	0,375	0,755	59,770	22,213	20,923	20,630	19,930	19,887	20,043	19,960	52,721
154,833	0,213	0,562	1,056	-0,185	-0,004	0,381	0,755	59,912	22,258	20,961	20,668	19,947	19,915	20,064	19,993	52,850
155,334	0,210	0,572	1,054	-0,184	-0,013	0,371	0,755	59,999	22,302	20,970	20,679	19,976	19,922	20,085	20,006	52,945
155,834	0,208	0,581	1,055	-0,185	-0,016	0,366	0,755	59,933	22,281	20,975	20,687	19,969	19,926	20,089	20,011	52,953
156,334	0,208	0,573	1,052	-0,184	0,035	0,373	0,754	59,978	22,286	20,981	20,698	19,963	19,931	20,091	20,005	53,026
156,834	0,208	0,569	1,052	-0,183	-0,009	0,376	0,754	59,942	22,186	20,903	20,618	19,895	19,850	20,020	19,931	53,024
157,334	0,207	0,569	1,048	-0,184	0,055	0,375	0,755	60,170	22,248	20,987	20,710	19,974	19,938	20,098	20,013	53,021
157,833	0,207	0,569	1,053	-0,185	0,016	0,377	0,753	60,154	22,237	21,009	20,739	20,003	19,965	20,134	20,041	53,012
158,333	0,208	0,561	1,054	-0,185	-0,018	0,380	0,753	60,018	22,150	20,898	20,628	19,898	19,861	20,027	19,935	52,992
158,833	0,207	0,570	1,052	-0,188	0,046	0,374	0,753	60,039	22,293	20,995	20,728	19,998	19,952	20,118	20,030	52,995
159,333	0,207	0,562	1,046	-0,185	0,028	0,382	0,753	60,020	22,322	21,026	20,765	20,031	19,985	20,158	20,065	52,984
159,833	0,207	0,559	1,059	-0,184	-0,023	0,382	0,753	60,082	22,223	20,966	20,711	19,974	19,931	20,100	20,007	53,029
160,333	0,205	0,570	1,055	-0,186	0,037	0,374	0,753	60,008	22,252	20,999	20,746	20,021	19,971	20,139	20,048	53,051
160,833	0,205	0,567	1,056	-0,186	0,034	0,376	0,754	59,937	22,254	20,963	20,700	19,974	19,934	20,105	20,006	53,047
161,333	0,205	0,564	1,051	-0,184	0,046	0,380	0,752	60,084	22,295	20,991	20,737	20,004	19,966	20,136	20,037	53,063
161,834	0,205	0,563	1,047	-0,185	0,033	0,378	0,752	60,079	22,292	21,002	20,758	20,028	19,984	20,160	20,058	53,083
162,334	0,205	0,576	1,049	-0,186	0,008	0,368	0,752	60,167	22,311	21,000	20,743	20,016	19,972	20,148	20,046	53,054
162,834	0,204	0,581	1,053	-0,187	0,012	0,365	0,753	60,083	22,273	20,973	20,730	19,990	19,953	20,123	20,024	52,962
163,334	0,205	0,569	1,051	-0,187	0,003	0,378	0,752	60,104	22,274	20,956	20,707	19,976	19,932	20,108	20,005	52,996
163,834	0,206	0,561	1,049	-0,186	0,049	0,382	0,752	60,085	22,260	20,993	20,749	20,009	19,977	20,144	20,041	53,042
164,333	0,206	0,562	1,057	-0,183	0,011	0,381	0,752	60,041	22,330	21,034	20,791	20,048	20,010	20,182	20,082	52,976

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
146,333	45,188	66,569	76,293	0,508	0,457	4636,041	5065,192	22,214	9,438	11,103	-3,688	42,328	8,399	22,352	2022-03-24 11:33
146,833	45,113	66,642	76,315	0,505	0,457	4615,295	5037,958	23,049	9,822	10,723	-3,673	41,922	8,359	22,352	2022-03-24 11:34
147,333	45,070	66,695	76,329	0,503	0,457	4569,271	5016,982	22,220	9,243	11,107	-3,722	41,762	8,343	22,352	2022-03-24 11:34
147,833	45,031	66,796	76,301	0,505	0,457	4448,230	4951,502	21,457	9,335	11,227	-3,689	42,166	8,383	22,258	2022-03-24 11:35
148,334	45,008	66,980	76,334	0,506	0,457	4460,922	4872,843	19,700	9,457	11,058	-3,745	42,420	8,408	22,258	2022-03-24 11:35
148,834	45,060	67,009	76,316	0,506	0,457	4492,374	4850,146	18,603	9,318	11,167	-3,690	42,281	8,395	22,258	2022-03-24 11:36
149,334	45,098	66,970	76,363	0,506	0,457	4538,208	4892,687	19,776	9,139	11,313	-3,706	41,987	8,365	22,258	2022-03-24 11:36
149,834	45,090	66,931	76,394	0,503	0,457	4492,166	4929,113	20,535	9,371	11,160	-3,677	42,722	8,438	22,258	2022-03-24 11:37
150,334	45,080	67,006	76,371	0,503	0,457	4524,678	4880,809	20,198	9,758	10,750	-3,683	42,447	8,411	22,258	2022-03-24 11:37
150,833	45,078	66,950	76,404	0,501	0,457	4667,598	4926,886	20,124	9,780	10,694	-3,640	41,956	8,362	22,258	2022-03-24 11:38
151,333	45,093	66,814	76,423	0,503	0,457	4732,166	5004,013	22,808	9,621	10,872	-3,640	41,988	8,365	22,258	2022-03-24 11:38
151,833	45,090	66,739	76,464	0,503	0,457	4662,979	5066,380	22,885	9,801	10,705	-3,651	42,076	8,374	22,258	2022-03-24 11:39
152,333	45,138	66,814	76,512	0,504	0,457	4655,896	5050,158	30,011	9,566	10,815	-3,657	41,741	8,341	22,164	2022-03-24 11:39
152,833	45,219	66,784	76,523	0,502	0,457	4550,878	5073,515	44,521	9,342	11,087	-3,672	42,202	8,387	22,164	2022-03-24 11:40
153,333	45,218	66,843	76,554	0,504	0,457	4448,279	5058,500	37,739	9,515	11,035	-3,705	42,456	8,412	22,164	2022-03-24 11:40
153,833	45,061	67,076	76,592	0,503	0,457	4503,574	4960,848	33,866	9,511	10,897	-3,637	42,584	8,425	22,104	2022-03-24 11:41
154,333	44,983	67,154	76,560	0,501	0,457	4458,477	4902,398	38,323	9,129	11,242	-3,662	42,037	8,370	22,164	2022-03-24 11:41
154,833	44,990	67,132	76,625	0,504	0,457	4549,707	4944,967	34,293	9,109	11,426	-3,691	42,313	8,398	22,164	2022-03-24 11:42
155,334	45,046	67,185	76,588	0,504	0,457	4578,426	4897,595	26,364	9,418	11,122	-3,676	42,127	8,379	22,164	2022-03-24 11:42
155,834	45,120	67,059	76,585	0,502	0,457	4518,945	4963,776	24,317	9,516	10,971	-3,694	42,037	8,370	22,164	2022-03-24 11:43
156,334	45,146	67,171	76,616	0,504	0,457	4566,516	4920,301	24,397	9,268	11,201	-3,672	42,005	8,367	22,164	2022-03-24 11:43
156,834	45,173	67,103	76,666	0,504	0,457	4544,828	4984,750	23,472	9,219	11,272	-3,663	41,936	8,360	22,071	2022-03-24 11:44
157,334	45,142	67,065	76,704	0,503	0,457	4554,097	5024,403	20,214	9,227	11,254	-3,682	42,107	8,377	22,164	2022-03-24 11:44
157,833	45,085	67,153	76,679	0,503	0,457	4586,389	4962,452	20,286	9,154	11,311	-3,701	41,872	8,354	22,071	2022-03-24 11:45
158,333	45,054	67,223	76,696	0,504	0,457	4602,070	4935,683	22,978	9,112	11,411	-3,699	42,379	8,404	22,071	2022-03-24 11:45
158,833	45,034	67,179	76,714	0,506	0,457	4627,235	4967,385	21,040	9,176	11,235	-3,759	42,079	8,374	22,071	2022-03-24 11:46
159,333	45,062	67,201	76,727	0,504	0,457	4591,480	4961,519	21,048	8,976	11,466	-3,694	41,759	8,343	22,071	2022-03-24 11:46
159,833	45,124	67,140	76,771	0,506	0,457	4598,067	5017,120	18,615	9,076	11,446	-3,679	42,511	8,417	22,071	2022-03-24 11:47
160,333	45,148	67,167	76,736	0,503	0,457	4566,235	4983,631	15,595	9,203	11,229	-3,726	42,343	8,401	22,071	2022-03-24 11:47
160,833	45,152	67,253	76,842	0,502	0,457	4555,381	4997,249	15,852	9,197	11,285	-3,712	42,316	8,398	22,071	2022-03-24 11:48
161,333	45,144	67,310	76,802	0,503	0,457	4580,738	4945,356	17,186	8,992	11,414	-3,688	42,258	8,392	21,977	2022-03-24 11:48
161,834	45,136	67,283	76,816	0,506	0,457	4626,901	4965,451	16,761	9,175	11,346	-3,698	41,893	8,356	22,071	2022-03-24 11:49
162,334	45,140	67,305	76,777	0,502	0,457	4567,737	4932,856	14,499	9,523	11,034	-3,715	42,260	8,392	21,977	2022-03-24 11:49
162,834	45,107	67,338	76,787	0,499	0,457	4505,761	4922,659	14,322	9,559	10,959	-3,735	42,270	8,393	22,071	2022-03-24 11:50
163,334	45,062	67,412	76,801	0,504	0,457	4593,659	4893,551	16,177	9,034	11,332	-3,733	41,952	8,362	21,977	2022-03-24 11:50
163,834	45,058	67,368	76,969	0,507	0,457	4655,106	4998,876	17,939	9,040	11,458	-3,724	41,956	8,362	21,977	2022-03-24 11:51
164,333	45,051	67,319	76,929	0,500	0,457	4556,234	5007,466	18,861	9,018	11,444	-3,665	42,394	8,406	21,977	2022-03-24 11:51

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
164,833	0,206	0,557	1,052	-0,185	0,017	0,387	0,752	60,028	22,379	21,044	20,818	20,054	20,017	20,198	20,092	52,992
165,333	0,207	0,557	1,048	-0,185	0,010	0,384	0,751	60,100	22,277	21,008	20,781	20,020	19,995	20,173	20,059	53,042
165,833	0,206	0,568	1,055	-0,185	0,029	0,374	0,752	60,320	22,327	21,057	20,831	20,078	20,049	20,219	20,112	53,040
166,333	0,205	0,581	1,048	-0,184	0,000	0,366	0,752	60,385	22,332	21,047	20,819	20,072	20,033	20,216	20,101	53,165
166,833	0,205	0,573	1,052	-0,184	0,032	0,372	0,751	60,423	22,288	21,033	20,796	20,052	20,016	20,192	20,083	52,895
167,333	0,205	0,570	1,052	-0,185	0,000	0,374	0,750	60,383	22,355	21,070	20,835	20,090	20,055	20,236	20,125	52,834
167,833	0,206	0,572	1,049	-0,183	0,012	0,373	0,750	60,325	22,392	21,085	20,845	20,108	20,066	20,240	20,132	52,784
168,333	0,208	0,559	1,048	-0,186	0,026	0,387	0,750	60,085	22,327	21,058	20,823	20,077	20,037	20,223	20,106	52,821
168,834	0,210	0,554	1,046	-0,185	0,013	0,387	0,750	60,209	22,352	21,090	20,856	20,102	20,070	20,245	20,132	52,798
169,334	0,208	0,572	1,049	-0,185	0,000	0,372	0,750	60,326	22,371	21,084	20,848	20,097	20,057	20,245	20,125	52,909
169,834	0,208	0,574	1,053	-0,186	0,021	0,373	0,750	60,259	22,361	21,067	20,837	20,074	20,036	20,228	20,107	53,001
170,334	0,209	0,564	1,050	-0,185	0,006	0,381	0,750	60,265	22,303	21,028	20,810	20,048	20,010	20,196	20,074	52,971
170,834	0,210	0,566	1,053	-0,185	-0,012	0,378	0,750	60,397	22,349	21,091	20,872	20,104	20,071	20,259	20,134	52,995
171,333	0,207	0,572	1,053	-0,186	-0,028	0,374	0,750	60,277	22,280	21,002	20,784	20,020	19,993	20,170	20,052	53,062
171,833	0,207	0,562	1,050	-0,185	0,012	0,384	0,749	60,170	22,327	21,038	20,815	20,054	20,024	20,207	20,087	53,027
172,333	0,208	0,558	1,051	-0,184	-0,005	0,383	0,749	60,335	22,406	21,119	20,892	20,128	20,102	20,282	20,161	53,044
172,833	0,206	0,571	1,049	-0,184	-0,024	0,373	0,748	60,259	22,438	21,101	20,877	20,103	20,077	20,264	20,139	52,962
173,333	0,206	0,572	1,044	-0,184	-0,002	0,376	0,748	60,305	22,417	21,128	20,895	20,133	20,101	20,285	20,160	52,986
173,833	0,208	0,556	1,055	-0,185	0,022	0,385	0,748	60,365	22,392	21,129	20,898	20,137	20,112	20,294	20,166	53,023
174,333	0,206	0,566	1,051	-0,187	0,015	0,376	0,748	60,415	22,351	21,074	20,845	20,091	20,061	20,254	20,118	53,072
174,833	0,205	0,572	1,056	-0,185	0,039	0,372	0,749	60,604	22,431	21,131	20,907	20,146	20,128	20,318	20,186	53,013
175,333	0,205	0,569	1,047	-0,188	0,038	0,377	0,748	60,332	22,445	21,135	20,919	20,165	20,134	20,325	20,191	53,004
175,834	0,206	0,562	1,053	-0,184	-0,006	0,381	0,748	60,282	22,427	21,114	20,895	20,136	20,111	20,302	20,166	52,983
176,334	0,206	0,572	1,051	-0,187	0,041	0,371	0,748	60,519	22,466	21,098	20,886	20,114	20,092	20,290	20,143	52,975
176,834	0,205	0,580	1,055	-0,187	0,020	0,367	0,747	60,603	22,480	21,142	20,930	20,160	20,130	20,323	20,186	52,898
177,334	0,206	0,570	1,054	-0,186	0,000	0,376	0,747	60,524	22,427	21,139	20,932	20,154	20,136	20,328	20,187	52,897
177,833	0,206	0,562	1,055	-0,186	-0,020	0,381	0,747	60,432	22,416	21,126	20,929	20,147	20,127	20,319	20,183	52,959
178,333	0,207	0,570	1,047	-0,184	0,005	0,374	0,747	60,424	22,459	21,167	20,978	20,208	20,174	20,374	20,228	53,038
178,833	0,208	0,567	1,054	-0,184	0,039	0,379	0,747	60,326	22,426	21,157	20,957	20,190	20,171	20,366	20,218	53,088
179,333	0,210	0,559	1,054	-0,188	-0,009	0,384	0,746	60,297	22,451	21,152	20,952	20,194	20,162	20,356	20,218	52,990
179,833	0,208	0,566	1,048	-0,184	-0,010	0,376	0,747	60,454	22,510	21,167	20,970	20,223	20,195	20,384	20,238	52,963
180,333	0,207	0,576	1,051	-0,185	0,020	0,369	0,747	60,493	22,517	21,172	20,979	20,226	20,205	20,397	20,246	53,009
180,833	0,206	0,570	1,049	-0,187	0,034	0,376	0,747	60,489	22,505	21,172	20,972	20,217	20,195	20,385	20,239	53,069
181,333	0,206	0,562	1,045	-0,185	0,045	0,381	0,745	60,560	22,452	21,111	20,908	20,160	20,132	20,332	20,181	53,085
181,833	0,206	0,570	1,048	-0,185	0,027	0,373	0,746	60,670	22,432	21,140	20,939	20,182	20,151	20,354	20,202	53,092
182,334	0,206	0,571	1,056	-0,186	0,020	0,375	0,745	60,708	22,454	21,157	20,959	20,205	20,177	20,381	20,224	53,094
182,834	0,206	0,564	1,048	-0,187	0,017	0,380	0,745	60,613	22,474	21,149	20,944	20,188	20,168	20,364	20,214	53,041

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
164,833	45,062	67,389	76,959	0,503	0,457	4586,980	4984,032	19,195	8,893	11,607	-3,697	41,920	8,359	21,977	2022-03-24 11:52
165,333	45,114	67,444	76,954	0,504	0,457	4594,110	4952,354	19,749	8,986	11,534	-3,697	41,970	8,364	21,977	2022-03-24 11:52
165,833	45,172	67,375	76,993	0,502	0,457	4544,855	5008,904	17,030	9,294	11,212	-3,697	42,323	8,399	21,977	2022-03-24 11:53
166,333	45,188	67,365	77,021	0,504	0,457	4618,904	5029,937	15,595	9,534	10,974	-3,689	42,060	8,373	21,977	2022-03-24 11:53
166,833	45,140	67,342	76,980	0,502	0,457	4477,891	5019,866	16,180	9,316	11,168	-3,678	42,102	8,377	21,977	2022-03-24 11:54
167,333	45,100	67,481	77,072	0,506	0,457	4500,832	4998,975	16,848	9,209	11,233	-3,701	42,040	8,371	21,862	2022-03-24 11:54
167,833	45,081	67,684	77,042	0,506	0,457	4478,621	4877,523	17,600	9,266	11,204	-3,657	41,864	8,353	21,852	2022-03-24 11:55
168,333	45,049	67,664	77,078	0,506	0,457	4525,641	4905,052	26,723	8,818	11,609	-3,723	41,896	8,356	21,852	2022-03-24 11:55
168,834	45,009	67,638	77,095	0,508	0,457	4548,477	4928,924	27,844	8,969	11,602	-3,707	42,027	8,369	21,852	2022-03-24 11:56
169,334	45,022	67,622	77,125	0,503	0,457	4560,210	4952,428	23,224	9,406	11,147	-3,710	42,321	8,398	21,852	2022-03-24 11:56
169,834	45,057	67,628	77,141	0,504	0,458	4601,461	4961,864	22,720	9,287	11,181	-3,711	42,053	8,372	21,852	2022-03-24 11:57
170,334	45,070	67,554	77,170	0,506	0,457	4592,161	5012,724	28,927	9,048	11,427	-3,695	42,152	8,382	21,852	2022-03-24 11:57
170,834	45,135	67,662	77,189	0,503	0,457	4545,557	4961,401	24,896	9,207	11,325	-3,710	42,183	8,385	21,852	2022-03-24 11:58
171,333	45,155	67,589	77,171	0,507	0,458	4605,696	4995,315	19,362	9,283	11,208	-3,718	42,356	8,402	21,852	2022-03-24 11:58
171,833	45,145	67,591	77,211	0,507	0,458	4594,374	5014,998	21,961	8,907	11,523	-3,696	42,052	8,372	21,758	2022-03-24 11:59
172,333	45,086	67,655	77,233	0,504	0,457	4606,654	4991,905	21,284	9,095	11,495	-3,678	41,870	8,354	21,758	2022-03-24 11:59
172,833	45,039	67,601	77,256	0,503	0,458	4581,299	5033,759	17,860	9,408	11,176	-3,676	42,024	8,369	21,758	2022-03-24 12:00
173,333	45,007	67,633	77,268	0,506	0,457	4640,042	5020,409	19,528	9,128	11,267	-3,683	41,776	8,344	21,758	2022-03-24 12:00
173,833	45,035	67,631	77,262	0,506	0,458	4646,244	5021,505	21,886	8,947	11,557	-3,709	42,231	8,390	21,758	2022-03-24 12:01
174,333	45,101	67,649	77,295	0,503	0,457	4607,721	5025,311	16,945	9,262	11,284	-3,736	42,079	8,374	21,758	2022-03-24 12:01
174,833	45,141	67,681	77,318	0,504	0,458	4558,746	5023,562	15,845	9,318	11,166	-3,710	42,196	8,386	21,758	2022-03-24 12:02
175,333	45,149	67,777	77,326	0,501	0,457	4522,811	4976,357	15,917	9,163	11,295	-3,758	42,110	8,378	21,758	2022-03-24 12:02
175,834	45,126	67,821	77,359	0,504	0,458	4550,293	4972,471	17,261	9,059	11,432	-3,688	42,115	8,378	21,758	2022-03-24 12:03
176,334	45,065	67,786	77,366	0,505	0,457	4590,697	4992,730	16,969	9,435	11,121	-3,733	42,004	8,367	21,758	2022-03-24 12:03
176,834	45,015	67,836	77,382	0,503	0,458	4554,745	4975,766	15,347	9,423	11,021	-3,738	42,131	8,380	21,664	2022-03-24 12:04
177,334	45,008	67,770	77,400	0,505	0,457	4580,093	5018,098	17,531	9,220	11,280	-3,726	42,214	8,388	21,664	2022-03-24 12:04
177,833	45,093	67,805	77,402	0,503	0,457	4545,416	5001,334	19,710	9,077	11,445	-3,710	42,104	8,377	21,664	2022-03-24 12:05
178,333	45,181	67,847	77,380	0,504	0,458	4548,421	4968,731	19,700	9,304	11,215	-3,679	41,780	8,345	21,664	2022-03-24 12:05
178,833	45,172	67,818	77,450	0,507	0,458	4613,917	5021,490	24,655	9,063	11,370	-3,687	42,287	8,395	21,758	2022-03-24 12:06
179,333	45,073	67,810	77,434	0,505	0,458	4593,858	5017,097	27,009	8,962	11,534	-3,756	41,720	8,339	21,664	2022-03-24 12:06
179,833	45,006	67,850	77,446	0,505	0,457	4617,868	4999,270	22,537	9,299	11,274	-3,677	41,887	8,355	21,664	2022-03-24 12:07
180,333	45,040	67,848	77,457	0,507	0,457	4650,093	5005,614	19,362	9,429	11,081	-3,706	42,128	8,379	21,664	2022-03-24 12:07
180,833	45,106	67,838	77,442	0,505	0,457	4626,972	5003,063	17,610	9,099	11,282	-3,747	41,933	8,360	21,664	2022-03-24 12:08
181,333	45,146	67,792	77,471	0,506	0,457	4622,228	5043,322	20,537	9,044	11,433	-3,697	41,537	8,320	21,570	2022-03-24 12:08
181,833	45,159	67,806	77,458	0,506	0,457	4611,085	5030,230	17,091	9,357	11,199	-3,708	42,094	8,376	21,664	2022-03-24 12:09
182,334	45,115	67,818	77,500	0,505	0,458	4636,154	5047,336	17,763	9,230	11,246	-3,722	42,184	8,385	21,570	2022-03-24 12:09
182,834	45,081	67,904	77,504	0,504	0,457	4608,639	5002,443	19,105	9,063	11,402	-3,731	41,936	8,360	21,570	2022-03-24 12:10

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
183,334	0,207	0,569	1,045	-0,188	0,016	0,374	0,745	60,741	22,575	21,201	20,987	20,241	20,225	20,416	20,265	53,116
183,834	0,207	0,583	1,050	-0,185	-0,027	0,361	0,745	60,758	22,504	21,136	20,930	20,183	20,163	20,366	20,202	53,029
184,334	0,206	0,583	1,045	-0,187	-0,010	0,368	0,745	60,692	22,576	21,196	20,977	20,232	20,208	20,422	20,253	52,976
184,833	0,207	0,562	1,048	-0,188	0,015	0,383	0,745	60,587	22,505	21,157	20,941	20,197	20,178	20,387	20,216	52,896
185,333	0,208	0,558	1,049	-0,186	0,046	0,385	0,745	60,566	22,603	21,222	21,006	20,264	20,248	20,446	20,279	52,924
185,833	0,207	0,571	1,044	-0,187	0,025	0,373	0,745	60,516	22,550	21,195	20,976	20,240	20,215	20,430	20,254	53,002
186,333	0,207	0,564	1,047	-0,186	0,011	0,383	0,745	60,605	22,616	21,234	21,008	20,262	20,250	20,453	20,280	53,018
186,833	0,208	0,549	1,054	-0,182	0,035	0,395	0,744	60,615	22,581	21,235	21,022	20,283	20,260	20,469	20,288	53,054
187,333	0,208	0,551	1,044	-0,186	0,019	0,389	0,744	60,491	22,401	21,101	39,269	20,149	20,159	20,334	20,156	53,010
187,833	0,207	0,565	1,046	-0,185	0,023	0,377	0,744	60,623	22,501	21,193	103,942	20,243	20,266	20,433	20,246	52,928
188,333	0,206	0,569	1,041	-0,187	-0,015	0,376	0,744	60,765	22,669	21,276	20,962	20,317	20,339	20,509	20,318	53,020
188,833	0,206	0,563	1,047	-0,184	0,010	0,382	0,744	60,687	22,516	21,193	21,061	20,238	20,220	20,423	20,232	53,011
189,334	0,207	0,562	1,052	-0,185	-0,014	0,381	0,744	60,615	22,538	21,235	21,146	20,282	20,256	20,473	20,277	52,997
189,834	0,207	0,563	1,051	-0,186	-0,009	0,382	0,744	60,612	22,487	21,239	21,179	20,284	20,263	20,477	20,286	52,712
190,334	0,207	0,554	1,056	-0,184	-0,010	0,390	0,742	60,592	22,483	21,260	21,213	20,311	20,285	20,510	20,306	52,732
190,834	0,207	0,549	1,042	-0,187	0,001	0,393	0,742	60,512	22,447	21,224	21,188	20,275	20,264	20,476	20,274	52,869
191,334	0,207	0,554	1,050	-0,187	0,006	0,389	0,742	60,557	22,534	21,309	21,260	20,352	20,337	20,564	20,350	52,766
191,833	0,207	0,553	1,053	-0,185	0,051	0,389	0,742	60,660	22,504	21,321	21,270	20,377	20,346	20,575	20,366	52,929
192,333	0,207	0,548	1,047	-0,186	0,031	0,396	0,742	60,590	22,511	21,289	21,254	20,349	20,333	20,556	20,348	53,198
192,833	0,207	0,540	1,044	-0,187	0,038	0,400	0,742	60,484	22,539	21,272	21,218	20,318	20,309	20,543	20,322	53,234
193,333	0,207	0,550	1,050	-0,185	-0,015	0,391	0,742	60,376	22,506	21,248	21,204	20,305	20,293	20,516	20,298	53,179
193,833	0,207	0,553	1,054	-0,184	0,031	0,389	0,742	60,366	22,518	21,256	21,212	20,304	20,300	20,530	20,310	53,080
194,333	0,206	0,550	1,052	-0,186	0,000	0,393	0,742	60,408	22,448	21,219	21,180	20,287	20,270	20,506	20,283	52,979
194,833	0,207	0,553	1,049	-0,187	0,010	0,389	0,742	60,477	22,464	21,250	21,196	20,321	20,303	20,540	20,312	53,031
195,333	0,207	0,558	1,046	-0,184	-0,011	0,385	0,741	60,472	22,463	21,254	21,203	20,325	20,304	20,546	20,311	53,024
195,834	0,206	0,558	1,047	-0,184	0,012	0,387	0,741	60,409	22,415	21,235	21,190	20,319	20,305	20,541	20,303	53,045
196,334	0,207	0,548	1,050	-0,184	0,026	0,394	0,742	60,392	22,440	21,255	21,201	20,330	20,315	20,558	20,320	53,029
196,834	0,208	0,552	1,057	-0,185	0,002	0,388	0,741	60,512	22,492	21,313	21,261	20,400	20,376	20,624	20,385	52,866
197,334	0,207	0,559	1,052	-0,186	0,023	0,385	0,740	60,496	22,396	21,244	21,185	20,341	20,323	20,564	20,324	52,765
197,834	0,207	0,556	1,046	-0,186	0,008	0,387	0,740	60,568	22,375	21,215	21,151	20,305	20,308	20,543	20,297	52,719
198,333	0,208	0,554	1,044	-0,184	-0,018	0,390	0,740	60,633	22,439	21,264	21,201	20,365	20,359	20,600	20,355	52,825
198,833	0,209	0,551	1,057	-0,185	0,030	0,391	0,740	60,622	22,446	21,234	21,177	20,339	20,334	20,579	20,328	52,868
199,333	0,209	0,554	1,048	-0,185	0,021	0,389	0,740	60,624	22,405	21,251	21,187	20,360	20,357	20,610	20,351	52,873
199,833	0,210	0,547	1,051	-0,185	-0,005	0,396	0,740	60,652	22,535	21,315	21,255	20,434	20,432	20,675	20,419	52,996
200,333	0,210	0,541	1,050	-0,186	0,025	0,399	0,740	60,568	22,456	21,262	21,191	20,383	20,367	20,623	20,366	53,278
200,833	0,209	0,552	1,047	-0,185	0,039	0,388	0,740	60,576	22,409	21,285	21,211	20,411	20,403	20,656	20,394	53,273
201,333	0,208	0,557	1,048	-0,186	0,003	0,387	0,739	60,622	22,450	21,276	21,202	20,404	20,405	20,658	20,393	53,134

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
183,334	45,167	67,899	77,536	0,508	0,457	4638,574	5023,000	21,452	9,315	11,225	-3,765	41,940	8,361	21,570	2022-03-24 12:10
183,834	45,165	67,858	77,572	0,505	0,457	4570,120	5059,972	19,186	9,710	10,842	-3,703	42,232	8,390	21,570	2022-03-24 12:11
184,334	45,080	67,908	77,534	0,503	0,457	4568,631	5016,263	19,526	9,333	11,037	-3,732	41,714	8,338	21,570	2022-03-24 12:11
184,833	44,972	67,976	77,611	0,501	0,457	4559,928	5019,030	20,784	8,971	11,499	-3,750	42,067	8,373	21,570	2022-03-24 12:12
185,333	44,990	68,005	77,567	0,504	0,457	4598,462	4981,954	23,223	8,987	11,536	-3,728	41,967	8,363	21,476	2022-03-24 12:12
185,833	45,107	67,930	77,557	0,504	0,457	4571,289	5016,478	20,296	9,379	11,175	-3,734	41,738	8,340	21,476	2022-03-24 12:13
186,333	45,171	68,028	77,586	0,501	0,457	4518,472	4980,647	20,380	8,923	11,491	-3,711	42,168	8,383	21,476	2022-03-24 12:13
186,833	45,154	68,096	77,591	0,504	0,457	4579,884	4945,320	23,313	8,619	11,846	-3,650	42,368	8,403	21,476	2022-03-24 12:14
187,333	45,064	68,050	77,587	0,504	0,458	4602,631	4972,587	21,162	8,908	11,685	-3,716	41,869	8,354	21,476	2022-03-24 12:14
187,833	45,003	68,077	77,604	0,503	0,458	4584,505	4966,509	19,036	9,264	11,307	-3,695	41,697	8,336	21,476	2022-03-24 12:15
188,333	45,063	68,058	77,560	0,504	0,458	4611,361	4953,835	18,110	9,151	11,283	-3,741	41,488	8,315	21,476	2022-03-24 12:15
188,833	45,110	68,101	77,607	0,500	0,458	4545,650	4954,340	19,286	8,991	11,461	-3,674	41,745	8,341	21,476	2022-03-24 12:16
189,334	45,155	68,106	77,612	0,508	0,457	4583,134	4953,403	21,804	9,137	11,434	-3,706	41,956	8,362	21,476	2022-03-24 12:16
189,834	45,143	68,124	77,620	0,502	0,457	4365,094	4948,454	19,357	9,014	11,471	-3,725	41,684	8,335	21,476	2022-03-24 12:17
190,334	45,113	68,351	77,635	0,503	0,458	4408,035	4841,260	21,040	8,747	11,696	-3,687	41,854	8,352	21,354	2022-03-24 12:17
190,834	45,044	68,388	77,647	0,502	0,458	4519,863	4826,797	21,710	8,709	11,781	-3,749	41,383	8,305	21,476	2022-03-24 12:18
191,334	44,966	68,333	77,665	0,503	0,458	4512,782	4864,645	19,694	8,887	11,658	-3,734	42,034	8,370	21,354	2022-03-24 12:18
191,833	45,019	68,266	77,658	0,504	0,458	4585,359	4896,063	20,699	8,844	11,680	-3,708	42,021	8,369	21,476	2022-03-24 12:19
192,333	45,135	68,264	77,678	0,502	0,458	4657,054	4907,609	20,614	8,575	11,884	-3,725	41,974	8,364	21,354	2022-03-24 12:19
192,833	45,198	68,127	77,688	0,505	0,457	4667,233	4979,045	22,068	8,570	11,989	-3,736	41,635	8,330	21,354	2022-03-24 12:20
193,333	45,174	68,086	77,714	0,502	0,457	4620,920	5017,221	20,110	8,811	11,719	-3,694	41,734	8,340	21,354	2022-03-24 12:20
193,833	45,099	68,094	77,679	0,507	0,457	4654,771	4992,424	19,286	8,828	11,680	-3,676	42,139	8,380	21,354	2022-03-24 12:21
194,333	45,050	68,086	77,708	0,500	0,457	4561,927	5013,027	20,705	8,664	11,790	-3,716	42,115	8,378	21,354	2022-03-24 12:21
194,833	45,029	68,163	77,691	0,503	0,458	4625,919	4966,163	21,550	8,899	11,661	-3,732	41,809	8,348	21,354	2022-03-24 12:22
195,333	45,096	68,173	77,698	0,505	0,457	4603,439	4963,114	20,284	8,990	11,536	-3,685	42,050	8,372	21,260	2022-03-24 12:22
195,834	45,144	68,200	77,693	0,505	0,457	4589,610	4946,552	19,462	8,837	11,603	-3,680	41,946	8,361	21,354	2022-03-24 12:23
196,334	45,164	68,211	77,684	0,501	0,457	4533,591	4935,036	22,398	8,708	11,826	-3,688	41,941	8,361	21,354	2022-03-24 12:23
196,834	45,159	68,188	77,701	0,505	0,457	4473,783	4956,151	23,653	8,893	11,651	-3,700	42,455	8,412	21,354	2022-03-24 12:24
197,334	45,098	68,289	77,713	0,508	0,457	4478,652	4910,233	21,052	8,993	11,538	-3,723	42,049	8,371	21,260	2022-03-24 12:24
197,834	45,035	68,415	77,710	0,505	0,458	4464,309	4844,624	21,468	8,909	11,619	-3,728	41,898	8,356	21,260	2022-03-24 12:25
198,333	45,007	68,418	77,758	0,504	0,458	4529,050	4867,609	22,887	8,788	11,702	-3,682	42,024	8,369	21,260	2022-03-24 12:25
198,833	45,060	68,385	77,708	0,505	0,457	4532,298	4857,228	25,569	8,825	11,716	-3,696	42,057	8,372	21,260	2022-03-24 12:26
199,333	45,092	68,347	77,686	0,505	0,457	4518,667	4865,454	27,587	8,791	11,659	-3,707	42,055	8,372	21,260	2022-03-24 12:26
199,833	45,143	68,319	77,676	0,502	0,457	4530,550	4876,008	28,176	8,583	11,878	-3,699	42,127	8,379	21,260	2022-03-24 12:27
200,333	45,155	68,267	77,703	0,506	0,458	4727,089	4917,312	29,431	8,585	11,969	-3,717	42,192	8,386	21,260	2022-03-24 12:27
200,833	45,144	68,039	77,685	0,505	0,457	4717,234	5025,648	24,495	8,918	11,646	-3,704	42,161	8,383	21,260	2022-03-24 12:28
201,333	45,165	68,065	77,687	0,504	0,457	4618,905	5013,474	23,816	8,860	11,608	-3,724	41,943	8,361	21,166	2022-03-24 12:28

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
201,833	0,209	0,546	1,047	-0,184	-0,005	0,395	0,740	60,649	22,477	21,312	21,241	20,439	20,445	20,700	20,432	53,128
202,333	0,209	0,543	1,047	-0,187	-0,023	0,398	0,739	60,581	22,491	21,308	21,237	20,450	20,453	20,707	20,433	53,089
202,834	0,208	0,546	1,057	-0,186	0,026	0,395	0,739	60,593	22,436	21,280	21,193	20,412	20,422	20,677	20,399	53,056
203,334	0,207	0,553	1,049	-0,186	0,009	0,389	0,739	60,710	22,454	21,302	21,221	20,446	20,453	20,703	20,430	52,812
203,834	0,207	0,544	1,042	-0,187	0,012	0,398	0,739	60,549	22,443	21,281	21,200	20,424	20,425	20,691	20,406	52,743
204,334	0,209	0,541	1,046	-0,185	-0,006	0,400	0,739	60,498	22,463	21,303	21,212	20,446	20,460	20,716	20,434	52,905
204,834	0,211	0,535	1,054	-0,186	0,029	0,405	0,739	60,581	22,482	21,295	21,206	20,447	20,450	20,717	20,431	52,864
205,333	0,213	0,529	1,047	-0,187	0,009	0,410	0,739	60,512	22,515	21,302	21,201	20,445	20,451	20,720	20,431	52,962
205,833	0,213	0,525	1,042	-0,185	0,044	0,413	0,739	60,389	22,423	21,283	21,182	20,442	20,442	20,709	20,419	52,952
206,333	0,213	0,527	1,044	-0,182	-0,016	0,412	0,738	60,395	22,440	21,295	21,183	20,451	20,455	20,723	20,431	52,877
206,833	0,212	0,534	1,049	-0,186	0,029	0,405	0,737	60,365	22,411	21,252	21,137	20,405	20,416	20,682	20,387	52,854
207,333	0,212	0,535	1,043	-0,185	0,037	0,406	0,738	60,416	22,463	21,300	21,190	20,464	20,465	20,742	20,442	52,866
207,833	0,214	0,529	1,049	-0,186	0,021	0,410	0,737	60,319	22,419	21,265	21,153	20,435	20,432	20,703	20,400	52,928
208,333	0,213	0,532	1,047	-0,186	-0,004	0,406	0,737	60,318	22,348	21,223	21,107	20,400	20,399	20,676	20,367	52,883
208,833	0,211	0,546	1,045	-0,186	0,027	0,394	0,737	60,532	22,451	21,287	21,161	20,449	20,455	20,733	20,427	53,179
209,333	0,210	0,544	1,048	-0,185	-0,006	0,399	0,737	60,514	22,453	21,313	21,205	20,488	20,492	20,783	20,466	53,221
209,834	0,211	0,532	1,044	-0,188	0,009	0,406	0,738	60,342	22,407	21,280	21,161	20,463	20,471	20,747	20,432	53,207
210,334	0,209	0,544	1,049	-0,186	0,031	0,395	0,737	60,374	22,451	21,279	21,165	20,467	20,468	20,762	20,435	53,197
210,834	0,208	0,551	1,047	-0,185	0,007	0,391	0,737	60,325	22,469	21,289	21,160	20,464	20,479	20,754	20,440	53,066
211,334	0,208	0,540	1,047	-0,186	0,039	0,402	0,737	60,398	22,453	21,301	21,177	20,483	20,494	20,773	20,452	53,098
211,833	0,209	0,538	1,049	-0,186	0,041	0,401	0,736	60,535	22,446	21,289	21,157	20,469	20,487	20,773	20,445	52,858
212,333	0,209	0,545	1,054	-0,188	0,006	0,396	0,737	60,557	22,478	21,274	21,147	20,457	20,475	20,764	20,433	52,758
212,833	0,209	0,543	1,056	-0,185	-0,011	0,398	0,736	60,461	22,482	21,303	21,173	20,484	20,510	20,791	20,461	52,808
213,333	0,209	0,542	1,054	-0,187	-0,018	0,399	0,736	60,432	22,493	21,273	21,135	20,450	20,476	20,757	20,427	52,869
213,833	0,209	0,541	1,050	-0,186	-0,003	0,400	0,736	60,380	22,537	21,279	21,138	20,457	20,481	20,764	20,432	52,910
214,333	0,209	0,545	1,049	-0,188	0,021	0,395	0,736	60,441	22,598	21,296	21,143	20,468	20,487	20,768	20,437	52,897
214,833	0,208	0,545	1,051	-0,188	0,024	0,397	0,736	60,534	22,586	21,293	21,139	20,468	20,493	20,783	20,438	52,882
215,333	0,208	0,540	1,049	-0,185	0,027	0,400	0,736	60,577	22,631	21,351	21,197	20,514	20,547	20,821	20,490	52,860
215,833	0,208	0,540	1,053	-0,185	0,021	0,401	0,736	60,517	22,578	21,300	21,143	20,469	20,494	20,777	20,441	53,006
216,334	0,208	0,544	1,051	-0,184	0,033	0,395	0,736	60,644	22,586	21,275	21,115	20,456	20,472	20,760	20,414	53,273
216,834	0,207	0,544	1,048	-0,187	0,029	0,399	0,736	60,587	22,515	21,316	21,163	20,494	20,515	20,806	20,459	53,236
217,334	0,209	0,531	1,054	-0,187	0,030	0,408	0,736	60,569	22,536	21,331	21,192	20,521	20,550	20,837	20,490	53,163
217,834	0,209	0,535	1,045	-0,187	-0,025	0,404	0,736	60,523	22,511	21,313	21,179	20,515	20,554	20,825	20,480	53,032
218,334	0,209	0,539	1,050	-0,190	0,028	0,401	0,734	60,554	22,452	21,311	21,175	20,513	20,542	20,821	20,480	53,003
218,833	0,208	0,537	1,051	-0,187	0,035	0,403	0,734	60,571	22,487	21,313	21,166	20,513	20,549	20,831	20,480	53,050
219,333	0,209	0,528	1,043	-0,185	-0,014	0,412	0,734	60,504	22,429	21,264	21,130	20,481	20,515	20,792	20,446	53,031
219,833	0,210	0,523	1,053	-0,184	-0,011	0,414	0,734	60,459	22,373	21,222	21,087	20,449	20,476	20,758	20,413	53,083

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
201,833	45,160	68,130	77,677	0,506	0,457	4633,470	4974,491	24,825	8,669	11,861	-3,683	42,057	8,372	21,170	2022-03-24 12:29
202,333	45,077	68,134	77,688	0,503	0,457	4629,560	4976,203	25,989	8,594	11,929	-3,730	41,634	8,330	21,166	2022-03-24 12:29
202,834	45,001	68,087	77,648	0,505	0,457	4673,652	4979,790	22,297	8,663	11,853	-3,717	42,107	8,377	21,166	2022-03-24 12:30
203,334	45,050	68,140	77,660	0,505	0,457	4505,646	4960,426	19,540	8,841	11,684	-3,719	42,017	8,368	21,166	2022-03-24 12:30
203,834	45,126	68,223	77,628	0,505	0,458	4419,915	4902,305	22,617	8,557	11,938	-3,749	41,686	8,335	21,166	2022-03-24 12:31
204,334	45,163	68,369	77,591	0,504	0,458	4485,242	4807,347	26,080	8,488	11,998	-3,697	42,135	8,380	21,166	2022-03-24 12:31
204,834	45,151	68,379	77,637	0,503	0,458	4463,752	4825,189	31,534	8,361	12,149	-3,724	41,974	8,364	21,166	2022-03-24 12:32
205,333	45,103	68,364	77,637	0,503	0,458	4547,991	4833,649	34,301	8,204	12,310	-3,750	41,705	8,337	21,166	2022-03-24 12:32
205,833	45,064	68,338	77,642	0,503	0,457	4558,541	4847,884	35,045	8,137	12,398	-3,704	41,705	8,337	21,166	2022-03-24 12:33
206,333	45,023	68,255	77,566	0,504	0,457	4555,719	4850,550	35,215	8,169	12,358	-3,650	41,904	8,357	21,073	2022-03-24 12:33
206,833	45,035	68,259	77,558	0,504	0,457	4534,157	4845,390	32,116	8,391	12,162	-3,727	41,704	8,337	21,073	2022-03-24 12:34
207,333	45,091	68,259	77,572	0,501	0,457	4478,645	4852,652	32,692	8,292	12,194	-3,697	41,742	8,341	21,166	2022-03-24 12:34
207,833	45,141	68,295	77,572	0,507	0,457	4542,574	4833,420	39,074	8,256	12,304	-3,722	41,939	8,361	21,073	2022-03-24 12:35
208,333	45,146	68,194	77,594	0,507	0,458	4508,470	4899,109	34,733	8,352	12,172	-3,729	42,098	8,376	21,073	2022-03-24 12:35
208,833	45,166	68,177	77,565	0,500	0,457	4606,068	4890,796	28,089	8,735	11,822	-3,712	41,865	8,353	21,073	2022-03-24 12:36
209,333	45,148	68,071	77,500	0,500	0,457	4638,720	4913,398	29,017	8,460	11,979	-3,707	42,142	8,381	21,073	2022-03-24 12:36
209,834	45,111	67,976	77,499	0,499	0,457	4647,207	4959,801	30,437	8,320	12,193	-3,752	41,879	8,355	21,166	2022-03-24 12:37
210,334	45,084	67,981	77,491	0,502	0,457	4684,152	4953,445	23,730	8,722	11,838	-3,725	42,280	8,394	21,073	2022-03-24 12:37
210,834	45,090	67,909	77,491	0,503	0,457	4614,183	4988,969	22,712	8,751	11,743	-3,695	41,979	8,364	21,073	2022-03-24 12:38
211,334	45,109	67,939	77,489	0,506	0,457	4647,100	4971,852	23,892	8,389	12,069	-3,723	41,967	8,363	21,073	2022-03-24 12:38
211,833	45,118	67,936	77,477	0,506	0,457	4499,522	4968,260	24,807	8,499	12,037	-3,727	41,714	8,338	21,073	2022-03-24 12:39
212,333	45,113	68,028	77,395	0,505	0,457	4439,943	4877,533	24,399	8,671	11,871	-3,755	42,424	8,409	21,073	2022-03-24 12:39
212,833	45,109	68,136	77,411	0,505	0,457	4467,533	4831,178	24,981	8,577	11,936	-3,695	42,093	8,376	20,979	2022-03-24 12:40
213,333	45,170	68,171	77,407	0,505	0,457	4468,650	4810,072	24,907	8,569	11,963	-3,735	42,137	8,380	20,979	2022-03-24 12:40
213,833	45,138	68,083	77,389	0,502	0,457	4487,337	4848,254	26,834	8,513	11,994	-3,727	41,728	8,339	20,979	2022-03-24 12:41
214,333	44,999	68,023	77,411	0,505	0,457	4583,366	4888,094	25,655	8,692	11,841	-3,756	41,793	8,346	20,979	2022-03-24 12:41
214,833	44,977	67,957	77,425	0,506	0,457	4603,000	4930,034	23,885	8,533	11,911	-3,751	42,183	8,385	20,979	2022-03-24 12:42
215,333	45,025	68,008	77,380	0,506	0,457	4556,720	4881,713	24,228	8,493	12,013	-3,698	41,990	8,366	20,979	2022-03-24 12:42
215,833	45,122	67,999	77,345	0,503	0,457	4563,400	4867,450	23,981	8,446	12,024	-3,701	42,109	8,377	20,979	2022-03-24 12:43
216,334	45,166	67,993	77,328	0,504	0,457	4697,938	4862,119	21,705	8,693	11,845	-3,681	42,135	8,380	20,979	2022-03-24 12:43
216,834	45,154	67,821	77,278	0,502	0,457	4663,944	4923,080	23,051	8,420	11,963	-3,737	42,105	8,377	20,979	2022-03-24 12:44
217,334	45,116	67,810	77,264	0,504	0,457	4665,619	4920,285	26,151	8,243	12,244	-3,743	42,365	8,403	20,979	2022-03-24 12:44
217,834	45,081	67,738	77,255	0,503	0,457	4595,019	4954,113	25,654	8,428	12,120	-3,737	42,062	8,373	20,979	2022-03-24 12:45
218,334	45,056	67,716	77,260	0,503	0,457	4598,072	4967,740	24,899	8,477	12,033	-3,806	42,135	8,380	20,854	2022-03-24 12:45
218,833	45,042	67,761	77,267	0,505	0,457	4648,154	4946,203	23,722	8,376	12,090	-3,741	42,158	8,382	20,854	2022-03-24 12:46
219,333	45,073	67,719	77,233	0,504	0,457	4614,170	4951,390	27,159	8,079	12,355	-3,704	41,589	8,326	20,979	2022-03-24 12:46
219,833	45,138	67,676	77,193	0,505	0,457	4611,297	4954,218	26,917	8,166	12,405	-3,677	42,188	8,385	20,854	2022-03-24 12:47



## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
220,333	0,209	0,532	1,050	-0,187	0,011	0,406	0,734	60,429	22,436	21,267	21,127	20,500	20,529	20,809	20,459	52,740
220,833	0,208	0,534	1,046	-0,184	-0,004	0,405	0,734	60,434	22,398	21,266	21,140	20,530	20,556	20,825	20,481	52,718
221,333	0,208	0,536	1,052	-0,187	-0,016	0,402	0,734	60,501	22,442	21,316	21,182	20,563	20,601	20,869	20,528	52,810
221,833	0,208	0,541	1,048	-0,186	0,016	0,400	0,734	60,513	22,354	21,268	21,147	20,527	20,568	20,827	20,490	52,801
222,333	0,208	0,539	1,056	-0,187	0,008	0,401	0,734	60,570	22,309	21,238	21,117	20,508	20,547	20,813	20,472	52,877
222,833	0,208	0,538	1,044	-0,185	0,006	0,402	0,734	60,615	22,260	21,243	21,115	20,530	20,566	20,834	20,485	53,135
223,334	0,209	0,536	1,049	-0,190	0,046	0,403	0,734	60,633	22,139	21,246	21,135	20,566	20,599	20,857	20,520	53,144
223,834	0,209	0,537	1,046	-0,186	0,016	0,402	0,733	60,555	22,028	21,170	21,065	20,496	20,545	20,796	20,453	53,151
224,334	0,208	0,543	1,041	-0,187	0,056	0,397	0,733	60,549	22,122	21,203	21,096	20,537	20,579	20,838	20,494	53,028
224,834	0,208	0,546	1,045	-0,186	0,032	0,397	0,732	60,426	21,992	21,181	21,066	20,532	20,580	20,833	20,493	52,974
225,334	0,209	0,540	1,046	-0,184	0,010	0,400	0,733	60,378	22,026	21,170	21,060	20,549	20,587	20,842	20,498	52,902
225,833	0,209	0,547	1,039	-0,189	0,013	0,394	0,732	60,347	22,050	21,169	21,048	20,542	20,588	20,841	20,498	52,950
226,333	0,208	0,545	1,049	-0,188	0,025	0,397	0,732	60,464	22,043	21,169	21,056	20,554	20,597	20,852	20,508	53,000
226,833	0,209	0,536	1,052	-0,186	0,026	0,405	0,733	60,440	21,924	21,108	21,004	20,507	20,556	20,802	20,461	53,004
227,333	0,210	0,531	1,054	-0,187	-0,020	0,407	0,732	60,396	21,877	21,084	20,974	20,486	20,532	20,779	20,437	53,008
227,833	0,208	0,546	1,045	-0,188	0,025	0,393	0,732	60,551	21,961	21,131	21,026	20,552	20,584	20,838	20,496	52,980
228,333	0,207	0,546	1,048	-0,186	-0,005	0,396	0,732	60,537	21,831	21,117	21,006	20,562	20,598	20,848	20,506	52,953
228,833	0,208	0,541	1,050	-0,184	0,027	0,400	0,732	60,324	21,644	21,037	20,932	20,501	20,550	20,793	20,447	53,014
229,333	0,209	0,533	1,050	-0,184	0,005	0,407	0,732	60,320	21,611	21,021	20,919	20,496	20,534	20,787	20,443	52,975
229,834	0,209	0,535	1,049	-0,188	-0,013	0,403	0,732	60,305	21,762	21,103	20,991	20,588	20,623	20,869	20,524	52,889
230,334	0,209	0,537	1,054	-0,186	0,008	0,404	0,731	60,160	21,711	21,012	20,920	20,507	20,548	20,803	20,450	52,964
230,834	0,209	0,530	1,060	-0,185	0,010	0,409	0,732	60,172	21,698	21,002	20,906	20,505	20,553	20,798	20,446	52,939
231,334	0,210	0,532	1,046	-0,188	0,047	0,407	0,731	60,237	21,674	21,039	20,943	20,550	20,588	20,847	20,488	52,953
231,834	0,210	0,538	1,051	-0,184	0,033	0,400	0,731	60,323	21,832	21,090	20,970	20,586	20,637	20,878	20,525	52,972
232,333	0,209	0,540	1,057	-0,181	0,018	0,402	0,731	59,808	21,667	20,995	20,894	20,511	20,547	20,799	20,443	52,912
232,833	0,213	0,525	1,056	-0,184	0,032	0,415	0,731	59,363	21,500	21,030	20,939	20,570	20,627	20,872	20,509	52,932
233,333	0,215	0,529	1,051	-0,183	-0,012	0,408	0,731	59,057	21,565	21,034	20,929	20,569	20,623	20,877	20,511	52,942
233,833	0,214	0,546	1,055	-0,184	-0,020	0,394	0,731	58,822	21,504	20,986	20,899	20,554	20,608	20,846	20,488	52,905
234,333	0,212	0,559	1,053	-0,181	0,030	0,385	0,730	58,743	21,630	21,048	20,958	20,614	20,666	20,922	20,548	52,851
234,833	0,214	0,552	1,056	-0,181	0,038	0,393	0,731	58,578	21,623	21,037	20,932	20,602	20,659	20,906	20,540	52,839
235,333	0,217	0,547	1,057	-0,183	0,015	0,392	0,731	58,517	21,638	21,024	20,901	20,598	20,639	20,894	20,518	52,895
235,833	0,215	0,565	1,055	-0,181	0,036	0,378	0,731	58,297	21,491	20,923	20,815	20,502	20,559	20,796	20,432	52,874
236,333	0,214	0,570	1,046	-0,180	-0,027	0,375	0,731	58,199	21,596	20,981	20,882	20,573	20,629	20,881	20,499	52,967
236,834	0,215	0,562	1,042	-0,180	0,037	0,383	0,731	58,029	21,656	20,955	20,841	20,532	20,586	20,835	20,457	52,910
237,334	0,218	0,558	1,055	-0,180	-0,012	0,383	0,731	58,014	21,741	21,034	20,919	20,611	20,664	20,922	20,532	52,948
237,834	0,218	0,570	1,050	-0,177	0,014	0,375	0,731	57,889	21,680	20,981	20,861	20,561	20,612	20,872	20,484	52,889
238,334	0,220	0,568	1,053	-0,178	0,068	0,378	0,731	57,831	21,672	21,051	20,928	20,635	20,694	20,954	20,559	52,874

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
220,333	45,179	67,710	77,206	0,507	0,457	4406,680	4940,857	23,550	8,302	12,188	-3,746	41,972	8,364	20,854	2022-03-24 12:47
220,833	45,157	67,918	77,162	0,506	0,457	4396,015	4811,977	23,723	8,357	12,149	-3,690	42,076	8,374	20,854	2022-03-24 12:48
221,333	45,087	67,972	77,161	0,504	0,457	4471,680	4785,300	21,793	8,488	12,071	-3,732	42,024	8,369	20,854	2022-03-24 12:48
221,833	45,011	67,897	77,167	0,502	0,457	4498,552	4825,377	23,049	8,493	11,999	-3,729	41,877	8,354	20,854	2022-03-24 12:49
222,333	45,002	67,892	77,117	0,502	0,457	4542,491	4800,407	23,797	8,466	12,031	-3,735	41,878	8,354	20,854	2022-03-24 12:49
222,833	45,106	67,798	77,090	0,503	0,457	4647,000	4835,436	25,905	8,437	12,060	-3,705	41,684	8,335	20,854	2022-03-24 12:50
223,334	45,188	67,663	77,079	0,505	0,457	4618,495	4899,101	24,460	8,437	12,101	-3,793	41,918	8,358	20,854	2022-03-24 12:50
223,834	45,201	67,531	77,056	0,503	0,456	4597,175	4951,141	25,315	8,471	12,067	-3,720	41,799	8,347	20,760	2022-03-24 12:51
224,334	45,114	67,515	77,042	0,501	0,457	4556,976	4958,670	22,538	8,640	11,903	-3,736	41,562	8,323	20,854	2022-03-24 12:51
224,834	45,036	67,613	77,059	0,505	0,457	4610,528	4914,159	23,623	8,571	11,901	-3,717	41,904	8,357	20,760	2022-03-24 12:52
225,334	45,002	67,563	77,051	0,503	0,457	4572,231	4939,789	27,251	8,494	12,002	-3,681	41,918	8,358	20,854	2022-03-24 12:52
225,833	45,052	67,589	76,706	0,504	0,457	4578,842	4742,866	25,149	8,773	11,808	-3,782	41,723	8,339	20,760	2022-03-24 12:53
226,333	45,113	67,604	76,793	0,504	0,456	4572,891	4777,268	23,887	8,536	11,904	-3,764	42,383	8,405	20,760	2022-03-24 12:53
226,833	45,126	67,581	76,750	0,505	0,456	4577,438	4768,765	27,841	8,293	12,153	-3,722	42,361	8,402	20,760	2022-03-24 12:54
227,333	45,120	67,496	76,714	0,505	0,457	4583,611	4795,020	26,331	8,336	12,209	-3,739	42,189	8,385	20,760	2022-03-24 12:54
227,833	45,128	67,534	76,703	0,502	0,456	4535,390	4767,306	21,294	8,805	11,797	-3,767	41,555	8,322	20,760	2022-03-24 12:55
228,333	45,125	67,571	76,712	0,501	0,456	4511,063	4750,585	20,951	8,564	11,875	-3,712	42,207	8,387	20,760	2022-03-24 12:55
228,833	45,093	67,495	76,700	0,503	0,457	4578,910	4788,891	23,470	8,473	12,004	-3,678	42,089	8,375	20,760	2022-03-24 12:56
229,333	45,074	67,498	76,652	0,505	0,456	4584,611	4759,991	25,565	8,226	12,214	-3,689	42,069	8,373	20,760	2022-03-24 12:56
229,834	45,067	67,450	76,654	0,503	0,456	4520,444	4785,515	24,984	8,446	12,088	-3,761	41,979	8,365	20,760	2022-03-24 12:57
230,334	45,057	67,513	76,667	0,506	0,456	4602,386	4758,957	25,060	8,326	12,119	-3,722	42,465	8,413	20,666	2022-03-24 12:57
230,834	45,081	67,388	76,660	0,504	0,456	4551,646	4820,643	26,660	8,235	12,281	-3,699	42,166	8,383	20,666	2022-03-24 12:58
231,334	45,114	67,491	76,650	0,504	0,456	4542,501	4761,046	28,418	8,339	12,197	-3,753	41,614	8,328	20,666	2022-03-24 12:58
231,834	45,130	67,463	76,555	0,506	0,456	4560,842	4725,247	27,745	8,526	12,011	-3,683	42,285	8,395	20,666	2022-03-24 12:59
232,333	45,139	67,424	76,563	0,504	0,456	4507,025	4751,792	24,899	8,366	12,073	-3,621	42,482	8,414	20,666	2022-03-24 12:59
232,833	45,137	67,439	76,520	0,503	0,456	4505,374	4721,627	39,742	8,053	12,453	-3,673	42,121	8,379	20,666	2022-03-24 13:00
233,333	45,108	67,438	76,504	0,502	0,456	4520,225	4714,726	39,506	8,376	12,244	-3,663	42,288	8,395	20,666	2022-03-24 13:00
233,833	45,066	67,435	76,347	0,507	0,456	4572,599	4632,418	36,332	8,749	11,825	-3,681	41,930	8,360	20,666	2022-03-24 13:01
234,333	45,036	67,336	76,336	0,502	0,456	4512,452	4678,173	33,202	8,988	11,539	-3,612	42,001	8,367	20,573	2022-03-24 13:01
234,833	45,026	67,410	76,348	0,502	0,456	4506,707	4648,960	42,435	8,651	11,780	-3,624	42,523	8,419	20,666	2022-03-24 13:02
235,333	45,064	67,350	76,267	0,505	0,456	4546,883	4634,507	45,111	8,797	11,765	-3,665	42,539	8,420	20,666	2022-03-24 13:02
235,833	45,097	67,230	76,245	0,501	0,456	4482,996	4687,087	40,327	9,186	11,330	-3,621	42,409	8,407	20,666	2022-03-24 13:03
236,333	45,115	67,197	76,219	0,500	0,456	4511,089	4688,915	39,942	9,207	11,250	-3,592	41,498	8,316	20,666	2022-03-24 13:03
236,834	45,106	67,207	76,186	0,498	0,456	4469,685	4666,246	44,185	8,918	11,491	-3,606	41,917	8,358	20,666	2022-03-24 13:04
237,334	45,103	67,171	76,134	0,505	0,456	4553,395	4659,441	46,539	9,113	11,480	-3,597	41,791	8,346	20,666	2022-03-24 13:04
237,834	45,093	67,086	76,085	0,503	0,456	4508,589	4672,904	50,147	9,248	11,240	-3,549	42,130	8,380	20,666	2022-03-24 13:05
238,334	45,096	66,982	76,030	0,502	0,456	4493,598	4700,836	55,145	9,135	11,344	-3,560	41,624	8,329	20,666	2022-03-24 13:05

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
238,834	0,223	0,563	1,062	-0,178	0,008	0,381	0,731	57,678	21,738	21,010	20,890	20,592	20,660	20,912	20,518	52,927
239,333	0,226	0,569	1,054	-0,177	-0,008	0,373	0,731	57,633	21,558	21,030	20,917	20,630	20,689	20,942	20,550	52,962
239,833	0,224	0,584	1,055	-0,176	0,002	0,362	0,730	57,528	21,351	20,932	20,823	20,550	20,610	20,866	20,468	52,916
240,333	0,224	0,581	1,050	-0,173	-0,005	0,367	0,730	57,528	21,526	21,022	20,909	20,635	20,701	20,955	20,558	53,136
240,833	0,228	0,582	1,052	-0,173	0,006	0,363	0,729	57,519	21,471	20,928	20,823	20,559	20,611	20,880	20,469	53,112
241,333	0,223	0,602	1,053	-0,175	-0,001	0,346	0,729	57,638	21,515	20,992	20,895	20,627	20,690	20,949	20,538	52,959
241,833	0,219	0,604	1,052	-0,173	0,017	0,348	0,730	57,583	21,572	21,023	20,910	20,658	20,720	20,985	20,571	53,046
242,333	0,218	0,587	1,049	-0,176	0,002	0,362	0,729	57,470	21,496	20,959	20,844	20,605	20,666	20,931	20,518	52,985
242,833	0,222	0,579	1,045	-0,175	-0,014	0,366	0,729	57,473	21,579	21,012	20,895	20,648	20,715	20,988	20,565	52,955
243,334	0,218	0,593	1,052	-0,171	0,000	0,352	0,729	57,418	21,640	21,008	20,885	20,644	20,706	20,968	20,554	52,926
243,834	0,216	0,607	1,053	-0,174	0,032	0,344	0,729	57,220	21,724	20,939	20,814	20,572	20,638	20,902	20,480	52,977
244,334	0,224	0,600	1,050	-0,172	0,026	0,351	0,729	57,273	21,920	21,042	20,912	20,659	20,722	20,996	20,564	52,988
244,834	0,226	0,590	1,053	-0,171	0,031	0,358	0,729	57,214	21,924	21,056	20,915	20,654	20,723	20,998	20,566	52,869
245,334	0,228	0,594	1,041	-0,171	-0,002	0,352	0,729	57,239	21,989	21,093	20,945	20,687	20,750	21,019	20,589	52,821
245,833	0,228	0,602	1,057	-0,171	-0,008	0,348	0,730	57,092	21,955	21,022	20,870	20,607	20,681	20,954	20,515	52,890
246,333	0,228	0,591	1,041	-0,169	0,029	0,359	0,729	57,020	22,107	21,102	20,949	20,681	20,748	21,023	20,587	52,971
246,833	0,231	0,584	1,046	-0,170	-0,008	0,362	0,729	57,003	22,022	21,079	20,926	20,657	20,720	20,996	20,557	52,931
247,333	0,236	0,591	1,044	-0,171	-0,003	0,355	0,729	56,953	21,958	21,113	20,964	20,692	20,772	21,040	20,598	52,916
247,833	0,234	0,599	1,044	-0,169	0,000	0,349	0,729	56,793	21,739	21,006	20,863	20,594	20,673	20,948	20,500	53,042
248,333	0,248	0,591	1,044	-0,169	0,011	0,357	0,729	56,809	21,730	21,062	20,924	20,676	20,741	21,016	20,571	53,175
248,833	0,240	0,591	1,047	-0,167	0,029	0,354	0,729	56,833	21,800	21,086	20,957	20,703	20,776	21,049	20,601	53,094
249,333	0,229	0,609	1,046	-0,169	-0,017	0,339	0,729	56,629	21,694	20,989	20,848	20,608	20,676	20,957	20,504	53,029
249,833	0,225	0,620	1,052	-0,167	-0,010	0,333	0,729	56,619	21,818	21,076	20,941	20,698	20,770	21,055	20,596	53,086
250,334	0,235	0,612	1,053	-0,168	0,034	0,340	0,728	56,493	21,864	21,018	20,878	20,648	20,717	20,986	20,537	53,094
250,834	0,232	0,614	1,060	-0,167	0,024	0,336	0,728	56,629	21,924	21,086	20,943	20,709	20,778	21,060	20,598	53,139
251,334	0,224	0,634	1,057	-0,165	0,028	0,318	0,728	56,616	21,938	21,102	20,950	20,714	20,790	21,072	20,609	53,029
251,834	0,231	0,632	1,056	-0,167	-0,004	0,324	0,728	56,511	21,920	21,068	20,918	20,673	20,756	21,026	20,568	52,943
252,334	0,243	0,623	1,054	-0,167	-0,010	0,329	0,728	56,440	21,877	21,022	20,878	20,639	20,711	20,988	20,524	52,920
252,833	0,243	0,628	1,049	-0,165	-0,027	0,325	0,728	56,545	21,913	21,092	20,941	20,699	20,777	21,051	20,584	52,855
253,333	0,237	0,637	1,051	-0,164	0,002	0,316	0,728	56,542	21,869	21,023	20,877	20,638	20,715	20,987	20,525	52,860
253,833	0,232	0,648	1,051	-0,165	0,003	0,310	0,728	56,485	21,940	21,083	20,930	20,690	20,767	21,050	20,581	52,863
254,333	0,235	0,626	1,050	-0,165	0,031	0,329	0,728	56,375	21,958	21,075	20,923	20,679	20,758	21,038	20,563	52,906
254,833	0,235	0,622	1,048	-0,166	0,022	0,330	0,728	56,374	21,935	21,063	20,920	20,673	20,752	21,032	20,555	52,843
255,333	0,243	0,627	1,050	-0,164	-0,003	0,325	0,728	56,335	21,914	21,081	20,943	20,702	20,783	21,058	20,584	52,914
255,833	0,241	0,627	1,053	-0,163	0,020	0,328	0,727	56,222	21,917	21,081	20,940	20,693	20,785	21,062	20,582	52,845
256,333	0,245	0,618	1,046	-0,164	0,033	0,335	0,728	56,076	21,884	21,053	20,908	20,666	20,752	21,029	20,551	52,950
256,833	0,237	0,627	1,050	-0,162	0,009	0,324	0,728	56,149	22,001	21,121	20,984	20,746	20,825	21,099	20,626	52,922

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
238,834	45,115	66,978	75,948	0,502	0,456	4510,248	4659,991	63,974	9,087	11,434	-3,555	42,593	8,425	20,666	2022-03-24 13:06
239,333	45,103	66,914	75,936	0,505	0,456	4564,060	4687,999	68,174	9,364	11,204	-3,548	42,116	8,378	20,666	2022-03-24 13:06
239,833	45,097	66,838	75,851	0,503	0,456	4521,653	4682,184	61,032	9,662	10,871	-3,523	42,145	8,381	20,666	2022-03-24 13:07
240,333	45,088	66,752	75,774	0,502	0,456	4643,319	4684,491	69,674	9,427	11,001	-3,463	41,866	8,353	20,666	2022-03-24 13:07
240,833	45,081	66,600	75,731	0,503	0,456	4640,931	4741,728	67,003	9,651	10,882	-3,465	41,701	8,337	20,573	2022-03-24 13:08
241,333	45,066	66,510	75,646	0,500	0,456	4532,850	4744,010	55,269	10,188	10,395	-3,497	42,322	8,399	20,573	2022-03-24 13:08
241,833	45,071	66,501	75,603	0,505	0,456	4628,688	4726,916	47,047	10,042	10,437	-3,462	41,904	8,357	20,664	2022-03-24 13:09
242,333	45,091	66,373	75,551	0,501	0,455	4544,476	4765,249	53,155	9,536	10,854	-3,510	41,844	8,351	20,573	2022-03-24 13:09
242,833	45,089	66,344	75,506	0,503	0,456	4552,200	4757,548	58,779	9,500	10,974	-3,501	42,247	8,391	20,572	2022-03-24 13:10
243,334	45,145	66,299	75,433	0,500	0,455	4475,134	4742,088	42,605	10,046	10,554	-3,430	41,980	8,365	20,572	2022-03-24 13:10
243,834	45,201	66,225	75,358	0,501	0,456	4474,676	4742,980	53,144	10,131	10,309	-3,474	42,074	8,374	20,573	2022-03-24 13:11
244,334	45,081	66,249	75,254	0,504	0,455	4580,851	4675,380	66,102	9,892	10,528	-3,431	42,231	8,390	20,573	2022-03-24 13:11
244,834	44,982	66,164	75,164	0,504	0,455	4569,895	4671,399	66,580	9,720	10,731	-3,428	42,319	8,398	20,573	2022-03-24 13:12
245,334	44,989	66,050	75,145	0,504	0,455	4534,064	4720,366	77,562	9,944	10,554	-3,413	41,850	8,352	20,572	2022-03-24 13:12
245,833	45,081	65,981	75,102	0,501	0,455	4496,136	4732,363	69,187	10,022	10,432	-3,430	42,059	8,372	20,573	2022-03-24 13:13
246,333	45,154	66,006	75,067	0,504	0,455	4530,525	4698,805	78,153	9,615	10,762	-3,385	41,729	8,340	20,573	2022-03-24 13:13
246,833	45,151	65,926	74,996	0,502	0,455	4487,470	4705,730	79,337	9,621	10,856	-3,393	41,937	8,360	20,573	2022-03-24 13:14
247,333	45,114	65,919	74,939	0,504	0,455	4516,852	4682,034	96,191	9,885	10,648	-3,430	41,623	8,329	20,573	2022-03-24 13:14
247,833	45,059	65,845	74,896	0,499	0,455	4583,716	4694,313	86,694	9,952	10,485	-3,386	41,842	8,351	20,573	2022-03-24 13:15
248,333	45,016	65,753	74,836	0,496	0,455	4656,591	4711,697	125,857	9,647	10,724	-3,370	41,567	8,323	20,572	2022-03-24 13:15
248,833	44,989	65,576	74,765	0,501	0,455	4669,666	4766,169	96,114	9,893	10,630	-3,349	41,850	8,352	20,573	2022-03-24 13:16
249,333	45,056	65,468	74,724	0,499	0,455	4572,707	4798,718	62,084	10,430	10,157	-3,379	42,173	8,384	20,573	2022-03-24 13:16
249,833	45,120	65,485	74,661	0,499	0,455	4573,985	4758,511	78,083	10,483	10,002	-3,331	42,232	8,390	20,478	2022-03-24 13:17
250,334	45,168	65,400	74,609	0,503	0,455	4583,614	4776,118	94,342	10,256	10,203	-3,368	42,305	8,397	20,573	2022-03-24 13:17
250,834	45,171	65,342	74,536	0,512	0,455	4687,990	4767,069	70,744	10,476	10,075	-3,337	42,156	8,382	20,478	2022-03-24 13:18
251,334	45,118	65,161	74,522	0,508	0,455	4623,448	4854,082	63,054	11,042	9,547	-3,291	42,319	8,398	20,573	2022-03-24 13:18
251,834	45,074	65,130	74,444	0,504	0,454	4555,988	4827,830	88,298	10,651	9,729	-3,344	42,392	8,406	20,478	2022-03-24 13:19
252,334	45,037	65,216	74,375	0,503	0,454	4561,404	4745,852	109,858	10,614	9,882	-3,333	42,083	8,375	20,573	2022-03-24 13:19
252,833	45,006	65,200	74,324	0,503	0,455	4535,494	4732,033	102,103	10,788	9,740	-3,300	41,996	8,366	20,478	2022-03-24 13:20
253,333	44,994	65,146	74,262	0,504	0,455	4556,115	4725,776	88,977	11,001	9,489	-3,277	42,098	8,376	20,478	2022-03-24 13:20
253,833	45,047	65,064	74,220	0,500	0,455	4493,308	4747,063	81,683	11,174	9,293	-3,303	41,993	8,366	20,478	2022-03-24 13:21
254,333	45,088	65,051	74,169	0,504	0,454	4533,686	4725,941	93,499	10,463	9,878	-3,294	42,011	8,368	20,478	2022-03-24 13:21
254,833	45,104	64,992	74,110	0,502	0,455	4463,022	4726,894	94,562	10,566	9,893	-3,311	41,423	8,309	20,478	2022-03-24 13:22
255,333	45,097	65,016	74,089	0,503	0,454	4519,678	4702,056	105,338	10,761	9,757	-3,275	42,224	8,389	20,478	2022-03-24 13:22
255,833	45,078	64,952	74,018	0,505	0,454	4512,792	4698,427	108,442	10,607	9,841	-3,256	41,458	8,312	20,478	2022-03-24 13:23
256,333	45,089	64,899	73,977	0,503	0,454	4544,548	4704,327	116,341	10,401	10,048	-3,272	41,552	8,322	20,544	2022-03-24 13:23
256,833	45,102	64,885	73,932	0,503	0,454	4525,492	4683,169	94,349	10,834	9,717	-3,246	42,120	8,379	20,478	2022-03-24 13:24

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
257,334	0,239	0,642	1,052	-0,164	0,007	0,313	0,727	56,039	21,966	21,102	20,961	20,729	20,802	21,084	20,605	52,913
257,834	0,240	0,644	1,045	-0,162	-0,001	0,315	0,727	55,908	21,895	21,066	20,930	20,701	20,776	21,056	20,578	52,901
258,334	0,235	0,625	1,053	-0,163	-0,007	0,331	0,727	55,908	21,848	21,050	20,919	20,687	20,775	21,041	20,566	52,927
258,834	0,239	0,618	1,055	-0,161	0,014	0,332	0,726	55,811	21,840	21,012	20,890	20,656	20,750	21,016	20,538	52,879
259,334	0,230	0,630	1,048	-0,165	0,014	0,323	0,726	56,012	21,948	21,062	20,934	20,715	20,803	21,058	20,585	53,213
259,833	0,235	0,627	1,057	-0,174	0,002	0,327	0,726	56,549	22,027	21,064	20,910	20,686	20,774	21,044	20,565	53,094
260,333	0,217	0,628	1,053	-0,168	0,028	0,324	0,726	57,058	22,081	21,125	20,979	20,750	20,853	21,116	20,631	53,055
260,833	0,214	0,634	1,052	-0,169	0,014	0,319	0,726	57,363	22,076	21,099	20,954	20,726	20,823	21,077	20,601	53,054
261,333	0,207	0,638	1,052	-0,169	0,022	0,315	0,726	57,529	22,017	21,063	20,916	20,689	20,783	21,043	20,561	53,012
261,833	0,206	0,641	1,055	-0,171	0,001	0,316	0,726	57,559	22,075	21,098	20,962	20,740	20,826	21,087	20,606	53,053
262,333	0,210	0,620	1,057	-0,171	-0,002	0,334	0,726	57,576	22,017	21,056	20,911	20,701	20,788	21,049	20,569	53,039
262,833	0,213	0,614	1,056	-0,171	0,023	0,336	0,724	57,653	22,017	21,079	20,935	20,722	20,811	21,064	20,591	53,027
263,333	0,211	0,612	1,052	-0,172	0,033	0,339	0,725	57,803	22,037	21,082	20,944	20,723	20,819	21,076	20,595	53,046
263,834	0,212	0,600	1,054	-0,169	-0,018	0,349	0,724	57,605	22,024	21,069	20,925	20,711	20,812	21,054	20,582	53,011
264,334	0,214	0,594	1,051	-0,173	0,022	0,352	0,724	57,582	22,062	21,099	20,949	20,751	20,834	21,076	20,609	52,941
264,834	0,208	0,603	1,051	-0,167	0,014	0,344	0,724	57,644	22,034	21,094	20,960	20,747	20,849	21,087	20,616	53,042
265,334	0,206	0,611	1,050	-0,172	-0,002	0,338	0,724	57,771	21,990	21,042	20,905	20,699	20,798	21,034	20,566	53,045
265,834	0,206	0,606	1,051	-0,170	0,022	0,345	0,724	57,736	22,022	21,071	20,930	20,726	20,823	21,072	20,598	53,039
266,333	0,208	0,593	1,055	-0,171	-0,022	0,356	0,724	57,833	21,951	21,064	20,925	20,719	20,837	21,058	20,596	52,805
266,833	0,208	0,592	1,058	-0,171	-0,018	0,354	0,724	57,971	21,978	21,078	20,932	20,751	20,848	21,077	20,614	52,786
267,333	0,208	0,592	1,054	-0,168	0,020	0,355	0,724	58,067	22,070	21,092	20,949	20,758	20,862	21,082	20,625	52,780
267,833	0,208	0,586	1,042	-0,171	-0,020	0,362	0,723	57,976	22,049	21,117	20,962	20,780	20,889	21,114	20,650	52,910
268,333	0,208	0,586	1,049	-0,169	0,021	0,358	0,724	57,922	21,959	21,022	20,871	20,695	20,794	21,014	20,559	52,810
268,833	0,207	0,597	1,048	-0,170	0,001	0,350	0,723	57,948	21,950	21,029	20,881	20,704	20,808	21,023	20,567	52,838
269,333	0,206	0,599	1,053	-0,171	0,000	0,351	0,723	58,122	21,992	21,064	20,929	20,747	20,858	21,069	20,613	52,900
269,833	0,212	0,582	1,049	-0,171	0,048	0,364	0,723	58,214	22,008	21,064	20,921	20,745	20,850	21,061	20,606	52,970
270,333	0,211	0,582	1,041	-0,172	0,003	0,363	0,723	58,147	22,005	21,056	20,912	20,744	20,843	21,046	20,599	52,938
270,834	0,207	0,585	1,051	-0,170	0,019	0,360	0,722	58,176	21,977	21,049	20,901	20,726	20,840	21,050	20,592	52,995
271,334	0,206	0,585	1,050	-0,171	-0,001	0,362	0,723	58,046	21,999	21,035	20,888	20,713	20,826	21,027	20,580	52,922
271,834	0,207	0,576	1,049	-0,174	0,017	0,369	0,723	57,924	22,000	21,010	20,855	20,681	20,794	20,996	20,550	53,226
272,334	0,207	0,588	1,053	-0,173	-0,001	0,357	0,722	58,050	21,995	21,053	20,909	20,738	20,854	21,037	20,598	53,172
272,834	0,206	0,600	1,056	-0,173	0,010	0,348	0,722	57,968	21,980	21,025	20,876	20,715	20,822	21,022	20,575	53,080
273,333	0,205	0,598	1,052	-0,171	-0,001	0,353	0,722	58,066	22,062	21,104	20,955	20,793	20,908	21,107	20,654	53,164
273,833	0,206	0,588	1,059	-0,173	0,008	0,359	0,721	57,957	21,964	21,004	20,859	20,688	20,814	21,009	20,558	53,215
274,333	0,206	0,598	1,049	-0,171	0,012	0,350	0,721	58,024	22,006	21,058	20,918	20,750	20,861	21,057	20,609	52,809
274,833	0,205	0,605	1,058	-0,171	0,049	0,345	0,721	58,060	22,004	21,023	20,873	20,714	20,831	21,019	20,572	52,784
275,333	0,205	0,600	1,054	-0,173	0,035	0,349	0,722	58,216	22,081	21,043	20,902	20,731	20,847	21,037	20,591	52,822

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
257,334	45,095	64,780	73,896	0,504	0,454	4534,006	4719,297	106,010	11,131	9,390	-3,275	41,638	8,330	20,478	2022-03-24 13:24
257,834	45,092	64,676	73,859	0,505	0,454	4530,641	4755,848	100,969	10,947	9,454	-3,243	42,142	8,381	20,478	2022-03-24 13:25
258,334	45,097	64,665	73,863	0,507	0,454	4566,162	4763,763	90,975	10,480	9,920	-3,255	42,095	8,376	20,478	2022-03-24 13:25
258,834	45,097	64,572	73,788	0,501	0,454	4485,237	4773,863	93,656	10,511	9,972	-3,229	42,077	8,374	20,354	2022-03-24 13:26
259,334	45,101	64,627	73,740	0,501	0,454	4673,263	4720,655	80,295	10,838	9,676	-3,293	42,086	8,375	20,354	2022-03-24 13:26
259,833	45,064	64,455	73,726	0,501	0,454	4624,845	4800,316	73,583	10,581	9,812	-3,471	42,298	8,396	20,478	2022-03-24 13:27
260,333	45,059	64,376	73,694	0,506	0,454	4652,951	4823,390	39,074	10,754	9,717	-3,368	42,284	8,395	20,354	2022-03-24 13:27
260,833	45,071	64,303	73,674	0,501	0,454	4595,873	4850,894	33,263	10,884	9,577	-3,390	41,989	8,366	20,354	2022-03-24 13:28
261,333	45,095	64,276	73,662	0,501	0,454	4562,053	4860,417	18,021	11,002	9,451	-3,387	42,256	8,392	20,354	2022-03-24 13:28
261,833	45,095	64,319	73,660	0,501	0,454	4580,194	4834,868	20,235	10,893	9,494	-3,427	42,150	8,382	20,354	2022-03-24 13:29
262,333	45,106	64,300	73,687	0,498	0,454	4544,913	4859,067	33,874	10,367	10,008	-3,425	42,186	8,385	20,354	2022-03-24 13:29
262,833	45,094	64,304	73,704	0,503	0,454	4584,291	4864,476	35,552	10,392	10,091	-3,425	42,302	8,397	20,261	2022-03-24 13:30
263,333	45,044	64,301	73,705	0,501	0,454	4611,688	4867,850	28,171	10,199	10,160	-3,446	42,254	8,392	20,261	2022-03-24 13:30
263,834	44,993	64,307	73,724	0,505	0,454	4655,595	4875,828	38,237	9,903	10,476	-3,376	42,356	8,402	20,260	2022-03-24 13:31
264,334	45,020	64,238	73,763	0,501	0,453	4563,406	4927,845	31,256	9,890	10,575	-3,454	42,085	8,375	20,261	2022-03-24 13:31
264,834	45,092	64,296	73,790	0,506	0,454	4627,865	4914,655	20,623	10,132	10,329	-3,345	42,065	8,373	20,261	2022-03-24 13:32
265,334	45,108	64,232	73,752	0,505	0,454	4609,564	4929,059	17,096	10,333	10,133	-3,435	41,813	8,348	20,260	2022-03-24 13:32
265,834	45,109	64,344	73,763	0,503	0,454	4581,787	4875,773	19,857	10,065	10,343	-3,407	42,078	8,374	20,261	2022-03-24 13:33
266,333	45,106	64,372	73,794	0,507	0,454	4487,121	4876,232	24,477	9,713	10,678	-3,417	42,105	8,377	20,261	2022-03-24 13:33
266,833	45,099	64,388	73,837	0,509	0,454	4496,273	4893,288	22,808	9,895	10,628	-3,412	42,232	8,390	20,260	2022-03-24 13:34
267,333	45,100	64,450	73,865	0,506	0,454	4467,545	4875,533	22,550	9,784	10,653	-3,360	42,304	8,397	20,261	2022-03-24 13:34
267,833	45,045	64,557	73,886	0,510	0,454	4609,538	4830,495	23,983	9,542	10,857	-3,420	41,437	8,310	20,167	2022-03-24 13:35
268,333	44,968	64,523	73,925	0,506	0,454	4559,298	4869,594	21,550	9,757	10,749	-3,388	41,998	8,366	20,261	2022-03-24 13:35
268,833	45,011	64,525	73,967	0,505	0,454	4541,104	4888,003	18,023	10,009	10,490	-3,394	42,096	8,376	20,166	2022-03-24 13:36
269,333	45,094	64,592	73,976	0,505	0,454	4530,675	4860,648	21,437	9,875	10,533	-3,417	42,013	8,368	20,166	2022-03-24 13:36
269,833	45,164	64,658	74,066	0,505	0,454	4528,830	4870,876	33,541	9,517	10,911	-3,417	41,978	8,364	20,167	2022-03-24 13:37
270,333	45,173	64,590	74,064	0,501	0,454	4475,328	4904,953	28,357	9,546	10,896	-3,435	41,738	8,340	20,167	2022-03-24 13:37
270,834	45,097	64,736	74,063	0,503	0,454	4568,872	4832,255	18,016	9,677	10,811	-3,399	41,978	8,364	20,181	2022-03-24 13:38
271,334	45,014	64,755	74,082	0,503	0,454	4570,737	4831,099	17,353	9,558	10,864	-3,422	42,019	8,369	20,167	2022-03-24 13:38
271,834	44,974	64,697	74,127	0,501	0,454	4756,687	4882,014	22,057	9,399	11,063	-3,473	41,950	8,362	20,166	2022-03-24 13:39
272,334	45,048	64,538	74,150	0,503	0,454	4694,124	4978,712	20,888	9,852	10,703	-3,450	42,523	8,418	20,167	2022-03-24 13:39
272,834	45,140	64,540	74,169	0,500	0,454	4564,255	4983,465	16,606	10,087	10,428	-3,454	42,508	8,417	20,073	2022-03-24 13:40
273,333	45,198	64,636	74,205	0,502	0,454	4595,434	4955,330	17,184	9,777	10,595	-3,426	42,125	8,379	20,073	2022-03-24 13:40
273,833	45,200	64,689	74,224	0,504	0,454	4647,226	4937,587	18,841	9,730	10,756	-3,451	42,433	8,410	20,073	2022-03-24 13:41
274,333	45,098	64,706	74,249	0,505	0,454	4477,075	4942,165	15,425	10,070	10,500	-3,430	42,226	8,389	20,073	2022-03-24 13:41
274,833	44,984	64,833	74,330	0,506	0,454	4541,135	4919,892	15,337	10,159	10,353	-3,415	42,520	8,418	20,073	2022-03-24 13:42
275,333	44,984	64,952	74,304	0,508	0,454	4576,848	4844,773	16,925	10,053	10,464	-3,466	42,153	8,382	20,073	2022-03-24 13:42

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
275,833	0,205	0,600	1,053	-0,174	-0,005	0,350	0,721	58,300	22,112	21,113	20,944	20,790	20,904	21,086	20,646	52,932
276,333	0,206	0,593	1,051	-0,172	-0,012	0,354	0,721	58,301	22,092	21,108	20,948	20,789	20,912	21,095	20,649	52,945
276,833	0,206	0,597	1,054	-0,170	0,004	0,350	0,721	58,305	22,034	21,053	20,905	20,741	20,851	21,031	20,594	52,953
277,334	0,205	0,591	1,053	-0,174	0,043	0,357	0,721	58,334	22,015	21,057	20,914	20,750	20,868	21,045	20,604	52,971
277,834	0,205	0,593	1,054	-0,174	-0,031	0,353	0,720	58,395	22,066	21,057	20,908	20,753	20,864	21,042	20,605	52,999
278,334	0,206	0,602	1,054	-0,172	0,014	0,346	0,720	58,368	21,987	21,028	20,875	20,725	20,846	21,018	20,576	52,993
278,834	0,205	0,614	1,057	-0,172	0,024	0,338	0,720	58,265	22,080	21,098	20,948	20,791	20,914	21,091	20,645	53,001
279,334	0,205	0,602	1,053	-0,175	0,021	0,347	0,720	58,189	22,027	21,022	20,866	20,720	20,836	21,000	20,564	52,928
279,833	0,205	0,607	1,051	-0,171	0,032	0,343	0,720	58,433	22,124	21,094	20,944	20,793	20,913	21,081	20,639	52,966
280,333	0,205	0,609	1,051	-0,175	0,012	0,340	0,720	58,502	22,091	21,047	20,887	20,726	20,853	21,018	20,582	52,981
280,833	0,205	0,613	1,062	-0,172	0,038	0,338	0,720	58,587	22,032	21,065	20,922	20,775	20,893	21,066	20,623	53,025
281,333	0,205	0,603	1,056	-0,172	0,006	0,349	0,718	58,616	22,016	21,015	20,854	20,706	20,840	21,001	20,563	53,043
281,833	0,204	0,596	1,053	-0,172	-0,007	0,352	0,718	58,584	22,002	21,012	20,854	20,710	20,838	20,994	20,561	53,045
282,333	0,205	0,607	1,055	-0,171	0,018	0,340	0,718	58,701	22,060	21,100	20,955	20,807	20,933	21,096	20,656	53,100
282,833	0,204	0,617	1,052	-0,173	0,005	0,338	0,718	58,527	21,974	20,980	20,835	20,678	20,808	20,966	20,531	53,069
283,333	0,204	0,599	1,054	-0,176	0,000	0,351	0,718	58,492	22,085	21,066	20,907	20,763	20,891	21,046	20,610	52,996
283,833	0,204	0,596	1,049	-0,173	0,009	0,351	0,718	58,481	22,107	21,098	20,942	20,790	20,928	21,082	20,643	52,960
284,334	0,204	0,610	1,055	-0,175	0,002	0,339	0,718	58,575	22,048	21,069	20,922	20,759	20,901	21,056	20,617	52,960
284,834	0,204	0,607	1,054	-0,174	0,022	0,345	0,718	58,499	22,055	21,074	20,925	20,775	20,903	21,063	20,627	52,946
285,334	0,204	0,595	1,049	-0,175	0,008	0,354	0,717	58,586	22,026	21,073	20,924	20,785	20,912	21,061	20,627	52,914
285,834	0,205	0,599	1,045	-0,175	-0,020	0,349	0,716	58,593	22,002	21,030	20,882	20,737	20,867	21,025	20,589	52,942
286,334	0,205	0,598	1,058	-0,170	0,029	0,351	0,716	58,556	22,028	21,065	20,918	20,776	20,912	21,057	20,626	52,975
286,833	0,205	0,595	1,054	-0,174	-0,011	0,354	0,716	58,599	22,064	21,097	20,956	20,819	20,946	21,083	20,658	53,000
287,333	0,205	0,586	1,056	-0,178	0,002	0,361	0,716	58,617	21,996	21,004	20,858	20,711	20,840	20,998	20,557	53,032
287,833	0,206	0,592	1,056	-0,173	0,045	0,353	0,716	58,752	22,057	21,061	20,918	20,776	20,913	21,058	20,624	53,087
288,333	0,205	0,598	1,056	-0,174	-0,017	0,352	0,716	58,807	22,091	21,117	20,976	20,827	20,969	21,116	20,679	53,063
288,833	0,206	0,586	1,052	-0,175	0,003	0,362	0,716	58,862	22,098	21,109	20,971	20,825	20,957	21,100	20,668	53,012
289,333	0,206	0,584	1,052	-0,174	0,027	0,362	0,716	58,945	22,116	21,143	20,997	20,860	20,993	21,137	20,701	52,978
289,833	0,205	0,591	1,051	-0,171	-0,006	0,355	0,715	59,102	22,138	21,135	20,987	20,856	20,981	21,119	20,692	52,962
290,333	0,205	0,601	1,054	-0,173	0,008	0,349	0,715	59,152	22,065	21,078	20,929	20,797	20,921	21,063	20,636	53,009
290,833	0,205	0,599	1,052	-0,178	0,007	0,351	0,715	59,120	22,044	21,087	20,947	20,812	20,946	21,082	20,653	53,028
291,334	0,205	0,598	1,054	-0,175	0,038	0,351	0,715	59,137	22,073	21,113	20,973	20,842	20,976	21,100	20,680	53,040
291,834	0,205	0,602	1,057	-0,175	0,050	0,348	0,715	59,005	22,112	21,123	20,973	20,834	20,974	21,105	20,682	53,006
292,334	0,205	0,595	1,052	-0,173	0,006	0,355	0,715	58,896	22,132	21,123	20,979	20,847	20,982	21,102	20,682	52,991
292,834	0,206	0,588	1,056	-0,177	0,017	0,361	0,715	58,912	22,029	21,049	20,910	20,775	20,910	21,027	20,614	53,007
293,334	0,206	0,583	1,057	-0,177	0,025	0,363	0,714	59,129	22,126	21,128	20,978	20,853	20,987	21,106	20,694	52,998
293,833	0,205	0,589	1,051	-0,174	0,029	0,359	0,714	59,240	22,026	21,112	20,973	20,856	20,982	21,107	20,689	52,978

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
275,833	45,013	64,959	74,310	0,508	0,454	4625,958	4844,507	17,082	9,936	10,510	-3,470	41,853	8,352	20,073	2022-03-24 13:43
276,333	45,080	64,853	74,366	0,507	0,454	4587,055	4928,235	18,191	9,834	10,625	-3,445	42,019	8,368	19,992	2022-03-24 13:43
276,833	45,135	64,909	74,443	0,502	0,454	4513,748	4939,783	16,099	9,999	10,507	-3,402	41,986	8,365	20,073	2022-03-24 13:44
277,334	45,144	65,039	74,399	0,504	0,454	4535,104	4847,739	15,760	9,692	10,720	-3,473	42,121	8,379	20,073	2022-03-24 13:44
277,834	45,114	65,052	74,471	0,503	0,454	4558,245	4879,996	16,433	9,941	10,602	-3,483	42,345	8,401	19,982	2022-03-24 13:45
278,334	45,071	65,086	74,533	0,502	0,454	4570,436	4892,395	17,852	10,129	10,376	-3,447	42,267	8,393	19,979	2022-03-24 13:45
278,834	45,039	65,124	74,557	0,504	0,454	4611,301	4888,249	14,580	10,354	10,129	-3,430	42,424	8,409	19,979	2022-03-24 13:46
279,334	45,008	65,113	74,596	0,507	0,454	4613,568	4912,025	15,928	9,995	10,421	-3,493	42,046	8,371	19,979	2022-03-24 13:46
279,833	45,017	65,143	74,652	0,502	0,454	4585,309	4926,245	15,262	10,207	10,281	-3,428	42,336	8,400	19,979	2022-03-24 13:47
280,333	45,066	65,167	74,715	0,502	0,454	4563,642	4947,366	15,927	10,323	10,202	-3,507	41,869	8,354	19,979	2022-03-24 13:47
280,833	45,092	65,215	74,743	0,504	0,454	4595,088	4934,564	15,582	10,314	10,147	-3,446	42,811	8,447	19,979	2022-03-24 13:48
281,333	45,096	65,245	74,824	0,504	0,454	4606,190	4962,422	14,747	9,891	10,469	-3,430	41,914	8,358	19,854	2022-03-24 13:48
281,833	45,093	65,267	74,886	0,503	0,454	4602,774	4983,796	14,417	9,915	10,564	-3,434	41,953	8,362	19,854	2022-03-24 13:49
282,333	45,096	65,323	74,925	0,505	0,454	4645,794	4975,795	14,249	10,375	10,206	-3,425	42,129	8,379	19,854	2022-03-24 13:49
282,833	45,109	65,369	74,963	0,505	0,454	4625,537	4971,917	12,740	10,303	10,130	-3,464	42,024	8,369	19,854	2022-03-24 13:50
283,333	45,108	65,452	74,991	0,502	0,454	4551,579	4943,932	12,737	9,887	10,535	-3,515	42,049	8,372	19,854	2022-03-24 13:50
283,833	45,100	65,492	75,040	0,504	0,454	4551,182	4947,860	14,412	9,945	10,539	-3,465	42,063	8,373	19,854	2022-03-24 13:51
284,334	45,063	65,528	75,084	0,502	0,455	4560,944	4955,938	13,743	10,342	10,166	-3,505	42,293	8,396	19,854	2022-03-24 13:51
284,834	45,017	65,629	75,093	0,504	0,455	4591,932	4906,296	13,155	10,056	10,343	-3,474	42,216	8,388	19,854	2022-03-24 13:52
285,334	44,986	65,654	75,178	0,506	0,455	4612,418	4937,328	14,080	9,847	10,613	-3,509	42,033	8,370	19,760	2022-03-24 13:52
285,834	45,020	65,628	75,230	0,504	0,455	4592,772	4977,696	14,912	10,043	10,472	-3,495	41,920	8,359	19,760	2022-03-24 13:53
286,334	45,056	65,620	75,245	0,506	0,454	4605,272	4988,906	16,166	9,931	10,528	-3,409	42,010	8,368	19,760	2022-03-24 13:53
286,833	45,101	65,697	75,302	0,503	0,454	4567,366	4976,265	15,329	9,822	10,617	-3,470	42,469	8,413	19,760	2022-03-24 13:54
287,333	45,166	65,761	75,346	0,499	0,455	4510,735	4970,696	16,752	9,589	10,838	-3,556	42,157	8,382	19,760	2022-03-24 13:54
287,833	45,159	65,880	75,400	0,506	0,455	4608,683	4934,942	17,668	9,945	10,600	-3,469	42,094	8,376	19,760	2022-03-24 13:55
288,333	45,095	65,887	75,445	0,503	0,455	4606,872	4956,269	15,802	9,843	10,553	-3,477	42,304	8,397	19,760	2022-03-24 13:55
288,833	45,025	65,839	75,475	0,507	0,455	4655,376	4997,641	17,756	9,567	10,863	-3,500	42,065	8,373	19,760	2022-03-24 13:56
289,333	44,999	65,860	75,498	0,505	0,455	4632,761	4998,782	17,850	9,658	10,859	-3,483	42,009	8,368	19,761	2022-03-24 13:56
289,833	45,033	65,934	75,531	0,502	0,454	4574,237	4973,368	16,428	9,868	10,660	-3,412	41,971	8,364	19,666	2022-03-24 13:57
290,333	45,094	65,973	75,594	0,504	0,455	4585,291	4988,186	15,589	10,055	10,466	-3,461	41,988	8,365	19,666	2022-03-24 13:57
290,833	45,115	65,962	75,629	0,505	0,455	4592,284	5011,293	15,746	9,982	10,529	-3,552	41,999	8,367	19,666	2022-03-24 13:58
291,334	45,112	66,082	75,677	0,506	0,455	4611,006	4976,801	15,419	9,977	10,528	-3,498	42,202	8,387	19,666	2022-03-24 13:58
291,834	45,111	66,121	75,699	0,503	0,455	4569,866	4966,068	15,684	10,004	10,449	-3,496	42,357	8,402	19,666	2022-03-24 13:59
292,334	45,113	66,123	75,763	0,505	0,455	4573,556	5001,205	16,173	9,762	10,662	-3,469	42,400	8,406	19,666	2022-03-24 13:59
292,834	45,101	66,242	75,785	0,502	0,455	4562,126	4949,090	18,099	9,707	10,815	-3,531	42,264	8,393	19,666	2022-03-24 14:00
293,334	45,083	66,241	75,815	0,504	0,455	4589,481	4966,058	17,519	9,574	10,892	-3,544	42,265	8,393	19,478	2022-03-24 14:00
293,833	45,070	66,312	75,863	0,504	0,455	4585,123	4956,082	15,752	9,731	10,762	-3,487	41,857	8,352	19,666	2022-03-24 14:01



## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
294,333	0,205	0,584	1,058	-0,174	-0,013	0,364	0,713	59,268	22,084	21,099	20,955	20,841	20,969	21,085	20,675	52,984
294,833	0,205	0,580	1,051	-0,176	0,022	0,366	0,713	59,110	22,026	21,041	20,897	20,787	20,929	21,036	20,627	53,020
295,333	0,206	0,578	1,052	-0,176	-0,010	0,367	0,714	58,902	22,089	21,104	20,963	20,846	20,985	21,091	20,684	53,016
295,833	0,206	0,581	1,047	-0,178	0,030	0,364	0,713	59,013	22,075	21,097	20,955	20,841	20,968	21,085	20,671	53,000
296,333	0,206	0,578	1,053	-0,176	0,050	0,369	0,714	59,204	22,102	21,096	20,953	20,836	20,979	21,083	20,676	53,013
296,833	0,206	0,574	1,044	-0,176	0,020	0,373	0,713	59,160	22,071	21,089	20,943	20,818	20,960	21,066	20,658	53,024
297,333	0,206	0,570	1,055	-0,180	0,030	0,374	0,713	59,054	21,942	21,005	20,858	20,753	20,882	20,984	20,579	52,923
297,834	0,209	0,575	1,051	-0,176	0,012	0,370	0,713	59,105	22,004	21,093	20,948	20,825	20,976	21,085	20,674	52,735
298,334	0,210	0,572	1,049	-0,179	0,012	0,374	0,713	59,037	21,947	21,002	20,865	20,742	20,882	20,995	20,588	52,822
298,834	0,209	0,565	1,047	-0,178	0,048	0,379	0,712	59,099	22,058	21,084	20,938	20,823	20,963	21,066	20,664	52,849
299,334	0,208	0,580	1,049	-0,178	-0,005	0,363	0,712	59,107	21,956	21,030	20,894	20,780	20,924	21,017	20,618	52,788
299,834	0,208	0,595	1,053	-0,176	0,045	0,355	0,712	59,149	22,019	21,098	20,969	20,850	21,002	21,094	20,691	52,889
300,333	0,209	0,588	1,055	-0,179	0,048	0,361	0,712	59,211	22,065	21,094	20,956	20,838	20,993	21,077	20,682	52,942
300,833	0,208	0,587	1,061	-0,178	0,012	0,359	0,712	59,294	21,960	20,982	20,845	20,721	20,873	20,968	20,567	52,914
301,333	0,206	0,599	1,052	-0,180	-0,004	0,349	0,712	59,532	21,991	21,022	20,889	20,769	20,922	21,010	20,616	52,915
301,833	0,206	0,591	1,051	-0,177	0,021	0,358	0,712	59,519	21,980	21,047	20,903	20,791	20,944	21,033	20,633	52,991
302,333	0,207	0,574	1,061	-0,180	0,021	0,373	0,711	59,392	22,000	21,034	20,908	20,792	20,937	21,023	20,633	52,995
302,833	0,207	0,566	1,050	-0,178	0,026	0,378	0,711	59,353	22,029	21,074	20,936	20,833	20,971	21,061	20,667	53,015
303,333	0,208	0,565	1,054	-0,180	0,008	0,379	0,710	59,431	22,010	21,061	20,922	20,819	20,966	21,046	20,660	52,975
303,833	0,209	0,558	1,058	-0,178	-0,031	0,386	0,710	59,329	22,039	21,067	20,933	20,812	20,975	21,051	20,662	52,986
304,333	0,210	0,552	1,059	-0,178	0,002	0,389	0,710	59,182	21,958	20,984	20,839	20,740	20,877	20,959	20,576	53,053
304,834	0,208	0,562	1,050	-0,179	0,067	0,379	0,710	59,311	22,073	21,074	20,929	20,823	20,970	21,047	20,664	53,051
305,334	0,207	0,571	1,049	-0,180	-0,007	0,373	0,710	59,327	21,962	21,031	20,903	20,785	20,940	21,010	20,635	52,979
305,834	0,206	0,571	1,047	-0,179	0,003	0,375	0,710	59,277	21,925	20,990	20,859	20,753	20,909	20,976	20,599	52,911
306,334	0,207	0,563	1,049	-0,180	0,038	0,381	0,710	59,348	21,923	21,020	20,895	20,795	20,948	21,014	20,640	53,022
306,834	0,207	0,566	1,052	-0,180	-0,045	0,376	0,709	59,566	21,946	21,039	20,913	20,818	20,960	21,025	20,653	53,063
307,333	0,206	0,575	1,056	-0,179	0,011	0,371	0,709	59,448	21,830	20,921	20,801	20,699	20,854	20,920	20,544	53,073
307,833	0,206	0,566	1,054	-0,181	0,014	0,379	0,709	59,424	21,928	21,012	20,898	20,805	20,951	21,013	20,640	53,096
308,333	0,206	0,562	1,051	-0,182	0,042	0,380	0,708	59,495	21,966	20,978	20,849	20,760	20,912	20,967	20,599	53,054
308,833	0,206	0,571	1,046	-0,180	0,021	0,371	0,708	59,552	21,941	21,004	20,882	20,789	20,939	20,990	20,630	53,081
309,333	0,205	0,577	1,053	-0,182	0,012	0,369	0,708	59,560	21,865	20,938	20,814	20,730	20,890	20,936	20,574	53,048
309,833	0,206	0,563	1,045	-0,183	0,038	0,382	0,708	59,627	21,986	21,039	20,919	20,837	20,985	21,036	20,672	52,998
310,333	0,206	0,559	1,052	-0,180	0,030	0,381	0,708	59,650	22,013	21,069	20,943	20,852	21,013	21,068	20,699	53,003
310,833	0,206	0,578	1,051	-0,183	-0,022	0,366	0,708	59,567	22,032	21,038	20,908	20,818	20,987	21,021	20,666	53,034
311,334	0,206	0,572	1,056	-0,183	-0,004	0,374	0,708	59,670	22,061	21,062	20,930	20,852	20,992	21,042	20,683	53,061
311,834	0,207	0,563	1,053	-0,181	0,023	0,380	0,708	59,729	22,023	21,063	20,926	20,840	21,005	21,043	20,687	53,169
312,334	0,207	0,572	1,059	-0,182	0,038	0,371	0,708	59,844	22,048	21,058	20,923	20,846	20,996	21,030	20,682	53,067

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
294,333	45,061	66,352	75,903	0,504	0,455	4589,403	4953,820	16,677	9,541	10,907	-3,473	42,521	8,418	19,573	2022-03-24 14:01
294,833	45,047	66,367	75,859	0,505	0,455	4627,057	4923,249	16,348	9,498	10,985	-3,513	42,086	8,375	19,573	2022-03-24 14:02
295,333	45,045	66,358	75,970	0,505	0,455	4625,900	4983,247	17,269	9,436	11,012	-3,527	41,816	8,348	19,573	2022-03-24 14:02
295,833	45,056	66,340	75,961	0,506	0,455	4620,504	4989,069	17,268	9,581	10,931	-3,553	42,122	8,379	19,573	2022-03-24 14:03
296,333	45,062	66,385	75,983	0,503	0,455	4599,484	4979,596	17,594	9,356	11,063	-3,510	42,231	8,390	19,573	2022-03-24 14:03
296,833	45,079	66,433	75,986	0,502	0,455	4590,175	4953,022	17,606	9,275	11,190	-3,528	41,762	8,343	19,573	2022-03-24 14:04
297,333	45,074	66,489	75,988	0,504	0,455	4551,201	4924,469	20,117	9,280	11,226	-3,598	42,140	8,381	19,573	2022-03-24 14:04
297,834	45,076	66,556	76,033	0,506	0,455	4457,216	4914,417	27,907	9,420	11,085	-3,529	41,738	8,340	19,573	2022-03-24 14:05
298,334	45,075	66,738	76,054	0,504	0,455	4487,607	4831,996	27,242	9,245	11,230	-3,583	41,825	8,349	19,573	2022-03-24 14:05
298,834	45,075	66,775	76,096	0,510	0,455	4558,378	4835,830	24,814	9,160	11,361	-3,563	41,815	8,348	19,478	2022-03-24 14:06
299,334	45,055	66,763	76,120	0,507	0,455	4505,141	4852,459	22,902	9,766	10,885	-3,557	42,194	8,386	19,478	2022-03-24 14:06
299,834	45,040	66,810	76,182	0,503	0,455	4537,571	4863,719	24,388	9,813	10,639	-3,530	42,339	8,400	19,478	2022-03-24 14:07
300,333	45,055	66,815	76,216	0,503	0,455	4565,802	4874,615	25,320	9,628	10,819	-3,572	42,193	8,386	19,478	2022-03-24 14:07
300,833	45,060	66,821	76,226	0,502	0,455	4535,933	4878,261	20,616	9,755	10,756	-3,567	42,525	8,419	19,478	2022-03-24 14:08
301,333	45,106	66,852	76,231	0,504	0,455	4521,394	4864,050	16,761	10,020	10,478	-3,595	42,076	8,374	19,478	2022-03-24 14:08
301,833	45,165	66,879	76,297	0,501	0,455	4512,401	4884,072	19,109	9,640	10,752	-3,538	42,015	8,368	19,478	2022-03-24 14:09
302,333	45,163	66,926	76,323	0,503	0,455	4527,563	4874,846	20,456	9,225	11,189	-3,594	42,574	8,424	19,345	2022-03-24 14:09
302,833	45,089	66,952	76,407	0,503	0,455	4586,660	4902,579	22,463	9,159	11,327	-3,562	42,147	8,381	19,479	2022-03-24 14:10
303,333	45,014	66,942	76,424	0,504	0,455	4616,842	4917,358	23,976	9,047	11,385	-3,594	42,090	8,376	19,345	2022-03-24 14:10
303,833	45,066	66,943	76,484	0,502	0,455	4574,774	4948,560	26,067	8,870	11,569	-3,553	42,411	8,407	19,345	2022-03-24 14:11
304,333	45,149	66,979	76,525	0,501	0,455	4551,295	4950,849	27,663	8,818	11,676	-3,564	42,076	8,374	19,345	2022-03-24 14:11
304,834	45,113	67,029	76,522	0,502	0,455	4584,713	4922,822	21,623	9,175	11,380	-3,589	42,090	8,376	19,389	2022-03-24 14:12
305,334	44,994	67,070	76,487	0,501	0,455	4596,948	4887,372	19,123	9,326	11,183	-3,598	41,857	8,352	19,345	2022-03-24 14:12
305,834	44,908	67,089	76,481	0,502	0,455	4619,049	4870,290	19,366	9,184	11,253	-3,578	41,827	8,349	19,345	2022-03-24 14:13
306,334	45,009	67,049	76,534	0,501	0,455	4618,642	4917,914	20,278	9,027	11,424	-3,591	42,237	8,390	19,345	2022-03-24 14:13
306,834	45,128	67,065	76,573	0,501	0,455	4571,178	4931,156	18,773	9,272	11,289	-3,598	42,330	8,399	19,251	2022-03-24 14:14
307,333	45,174	67,062	76,602	0,504	0,455	4577,017	4948,841	18,024	9,346	11,129	-3,580	42,043	8,371	19,251	2022-03-24 14:14
307,833	45,133	67,110	76,613	0,503	0,455	4608,058	4928,250	18,102	9,056	11,377	-3,611	42,165	8,383	19,252	2022-03-24 14:15
308,333	45,082	67,142	76,610	0,503	0,455	4613,029	4910,304	17,682	9,073	11,410	-3,637	42,317	8,398	19,251	2022-03-24 14:15
308,833	45,048	67,135	76,650	0,503	0,455	4648,594	4936,829	17,335	9,455	11,121	-3,610	42,002	8,367	19,251	2022-03-24 14:16
309,333	45,019	67,100	76,630	0,503	0,455	4638,734	4945,012	16,330	9,383	11,065	-3,635	41,888	8,355	19,251	2022-03-24 14:16
309,833	44,990	67,159	76,666	0,501	0,455	4612,557	4931,910	17,429	8,953	11,448	-3,655	42,013	8,368	19,251	2022-03-24 14:17
310,333	44,997	67,184	76,709	0,501	0,455	4608,543	4939,851	18,528	9,066	11,421	-3,601	42,262	8,393	19,251	2022-03-24 14:17
310,833	45,040	67,173	76,667	0,500	0,455	4598,568	4924,690	17,269	9,531	10,975	-3,664	42,106	8,377	19,251	2022-03-24 14:18
311,334	45,126	67,176	76,701	0,501	0,455	4572,374	4941,238	18,779	9,182	11,207	-3,662	42,354	8,402	19,252	2022-03-24 14:18
311,834	45,192	67,165	76,715	0,500	0,455	4586,997	4955,661	20,124	9,071	11,388	-3,624	42,018	8,368	19,251	2022-03-24 14:19
312,334	45,134	67,184	76,756	0,503	0,455	4584,511	4963,432	19,614	9,338	11,142	-3,644	42,426	8,409	19,251	2022-03-24 14:19

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
312,834	0,206	0,575	1,052	-0,181	0,028	0,369	0,707	59,700	22,000	20,968	20,837	20,744	20,912	20,945	20,589	53,014
313,334	0,206	0,572	1,058	-0,183	-0,005	0,375	0,707	59,818	22,099	21,067	20,936	20,848	21,009	21,043	20,689	52,970
313,833	0,207	0,562	1,065	-0,184	-0,024	0,381	0,707	59,892	22,045	21,057	20,916	20,834	20,994	21,020	20,672	53,048
314,333	0,206	0,568	1,061	-0,182	-0,009	0,375	0,707	59,926	22,044	21,063	20,919	20,835	20,999	21,031	20,674	53,074
314,833	0,206	0,570	1,060	-0,181	0,013	0,375	0,707	59,979	22,082	21,073	20,930	20,840	21,015	21,038	20,685	53,021
315,333	0,206	0,566	1,054	-0,180	-0,007	0,378	0,707	59,976	22,107	21,073	20,930	20,844	21,007	21,043	20,681	53,077
315,833	0,206	0,562	1,052	-0,184	0,037	0,381	0,707	60,166	22,005	21,075	20,930	20,836	21,004	21,038	20,682	53,039
316,333	0,206	0,567	1,057	-0,182	-0,005	0,375	0,707	60,022	21,723	20,997	20,864	20,788	20,951	20,979	20,632	52,922
316,833	0,206	0,575	1,051	-0,183	0,050	0,370	0,707	59,999	21,789	21,013	20,893	20,815	20,985	21,009	20,655	52,627
317,333	0,206	0,574	1,047	-0,187	0,041	0,373	0,705	60,020	21,773	20,983	20,860	20,783	20,955	20,982	20,625	52,699
317,833	0,206	0,563	1,055	-0,184	0,040	0,380	0,705	60,111	21,641	21,025	20,896	20,837	21,011	21,042	20,682	52,835
318,334	0,206	0,564	1,054	-0,186	0,020	0,379	0,705	60,200	21,787	21,021	20,899	20,842	21,010	21,032	20,680	52,850
318,834	0,207	0,559	1,059	-0,184	0,021	0,384	0,705	60,224	21,905	21,011	20,877	20,813	20,982	21,013	20,655	52,903
319,334	0,207	0,548	1,063	-0,183	0,017	0,393	0,705	60,163	21,873	20,984	20,843	20,798	20,957	20,981	20,626	52,899
319,834	0,207	0,547	1,059	-0,185	-0,001	0,393	0,705	60,081	22,047	21,067	20,921	20,861	21,019	21,045	20,691	52,951
320,334	0,206	0,554	1,056	-0,185	0,048	0,387	0,705	59,943	21,908	21,028	20,887	20,822	20,989	21,011	20,656	52,969
320,833	0,206	0,555	1,052	-0,184	0,010	0,387	0,705	59,941	21,814	21,013	20,873	20,818	20,977	21,003	20,646	52,951
321,333	0,206	0,548	1,054	-0,184	0,049	0,395	0,705	59,950	21,905	21,013	20,853	20,790	20,963	20,983	20,627	52,952
321,833	0,207	0,541	1,054	-0,184	0,024	0,399	0,704	59,910	21,889	21,051	20,898	20,836	21,004	21,037	20,668	52,963
322,333	0,206	0,547	1,051	-0,186	0,018	0,393	0,704	60,062	21,881	21,049	20,913	20,850	21,018	21,044	20,678	52,926
322,833	0,206	0,549	1,048	-0,183	0,025	0,393	0,704	60,134	21,915	21,040	20,884	20,820	20,992	21,018	20,652	52,978
323,333	0,207	0,544	1,050	-0,187	0,006	0,396	0,704	60,136	21,855	21,008	20,864	20,788	20,970	20,997	20,624	52,907
323,833	0,207	0,547	1,052	-0,186	-0,012	0,394	0,704	59,996	21,833	21,022	20,873	20,817	20,987	21,004	20,640	52,938
324,333	0,206	0,552	1,048	-0,184	0,028	0,390	0,704	60,011	21,695	21,029	20,880	20,828	20,995	21,023	20,657	53,009
324,833	0,206	0,549	1,044	-0,184	0,061	0,394	0,704	60,058	21,770	20,972	20,832	20,775	20,953	20,973	20,604	53,103
325,334	0,206	0,544	1,050	-0,187	0,031	0,396	0,704	60,245	21,885	21,037	20,882	20,827	20,988	21,027	20,649	53,086
325,834	0,206	0,549	1,049	-0,185	0,034	0,392	0,704	60,203	21,888	21,042	20,891	20,831	21,003	21,029	20,650	53,091
326,334	0,207	0,556	1,051	-0,182	0,015	0,386	0,704	60,160	21,735	21,010	20,871	20,815	20,983	21,011	20,635	53,063
326,834	0,207	0,556	1,050	-0,186	0,020	0,387	0,704	60,182	21,794	21,056	20,919	20,859	21,024	21,064	20,679	53,052
327,334	0,207	0,552	1,053	-0,186	0,049	0,389	0,702	60,214	21,729	21,054	20,914	20,859	21,030	21,069	20,683	53,007
327,833	0,207	0,559	1,050	-0,183	0,012	0,384	0,702	60,311	21,836	21,070	20,931	20,869	21,035	21,078	20,684	52,978
328,333	0,207	0,557	1,050	-0,183	0,036	0,386	0,702	60,160	21,687	20,946	20,792	20,738	20,899	20,941	20,555	52,959
328,833	0,207	0,546	1,051	-0,186	0,027	0,396	0,704	60,108	21,796	21,002	20,845	20,790	20,967	20,995	20,606	52,978
329,333	0,207	0,541	1,048	-0,188	-0,001	0,399	0,702	60,146	21,864	21,079	20,925	20,862	21,036	21,073	20,678	53,000
329,833	0,208	0,543	1,051	-0,184	-0,002	0,396	0,701	60,040	21,813	21,044	20,896	20,831	20,997	21,042	20,643	53,024
330,333	0,208	0,542	1,050	-0,185	0,013	0,400	0,702	60,057	21,932	21,104	20,954	20,880	21,045	21,086	20,690	52,985
330,833	0,209	0,535	1,050	-0,184	0,047	0,403	0,702	60,118	21,818	21,023	20,874	20,803	20,973	21,014	20,615	52,991

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
312,834	45,056	67,264	76,775	0,502	0,455	4590,127	4932,976	18,355	9,398	11,072	-3,619	42,157	8,382	19,158	2022-03-24 14:20
313,334	45,011	67,255	76,792	0,501	0,455	4586,716	4948,043	19,118	9,170	11,241	-3,666	42,108	8,377	19,158	2022-03-24 14:20
313,833	44,988	67,254	76,804	0,501	0,455	4644,413	4955,082	19,365	9,047	11,433	-3,689	42,658	8,432	19,158	2022-03-24 14:21
314,333	45,028	67,210	76,875	0,503	0,455	4654,533	5013,975	18,018	9,260	11,244	-3,649	42,451	8,411	19,158	2022-03-24 14:21
314,833	45,139	67,282	76,861	0,505	0,455	4573,695	4967,502	17,184	9,203	11,236	-3,623	42,273	8,394	19,158	2022-03-24 14:22
315,333	45,177	67,366	76,899	0,505	0,455	4585,816	4946,090	17,011	9,119	11,331	-3,596	41,841	8,351	19,158	2022-03-24 14:22
315,833	45,103	67,388	76,905	0,503	0,455	4589,693	4935,632	17,512	9,041	11,425	-3,670	41,730	8,340	19,158	2022-03-24 14:23
316,333	45,045	67,371	76,960	0,505	0,455	4571,778	4975,921	18,107	9,305	11,258	-3,641	42,510	8,417	19,158	2022-03-24 14:23
316,833	45,012	67,462	76,950	0,504	0,455	4409,666	4923,482	17,774	9,424	11,087	-3,669	41,899	8,357	19,158	2022-03-24 14:24
317,333	44,994	67,650	76,949	0,502	0,455	4443,040	4824,379	17,018	9,287	11,179	-3,745	41,709	8,338	19,064	2022-03-24 14:24
317,833	45,043	67,611	76,969	0,504	0,455	4515,272	4853,021	17,101	9,061	11,404	-3,681	42,334	8,400	19,064	2022-03-24 14:25
318,334	45,060	67,556	76,975	0,504	0,455	4515,885	4886,418	18,017	9,090	11,379	-3,726	41,925	8,359	19,064	2022-03-24 14:25
318,834	45,063	67,607	77,038	0,506	0,455	4557,544	4893,853	20,360	8,905	11,532	-3,688	42,428	8,409	19,064	2022-03-24 14:26
319,334	45,080	67,601	77,056	0,501	0,456	4500,209	4906,952	21,029	8,625	11,801	-3,656	42,601	8,426	19,064	2022-03-24 14:26
319,834	45,111	67,585	77,082	0,505	0,455	4547,284	4926,697	20,195	8,729	11,790	-3,701	42,339	8,400	19,064	2022-03-24 14:27
320,334	45,126	67,597	77,131	0,502	0,455	4531,015	4945,569	18,011	8,858	11,616	-3,695	42,274	8,394	19,064	2022-03-24 14:27
320,833	45,132	67,651	77,153	0,503	0,455	4520,101	4928,714	19,107	8,892	11,619	-3,673	42,258	8,392	19,064	2022-03-24 14:28
321,333	45,131	67,666	77,173	0,502	0,455	4514,550	4931,024	19,610	8,628	11,836	-3,684	42,086	8,375	19,064	2022-03-24 14:28
321,833	45,080	67,610	77,184	0,503	0,455	4555,709	4965,630	19,856	8,514	11,980	-3,678	42,092	8,376	18,970	2022-03-24 14:29
322,333	45,034	67,651	77,220	0,503	0,455	4567,193	4964,324	18,854	8,738	11,783	-3,715	41,937	8,360	18,970	2022-03-24 14:29
322,833	44,997	67,637	77,152	0,505	0,456	4635,097	4939,999	19,528	8,673	11,803	-3,662	41,964	8,363	18,970	2022-03-24 14:30
323,333	45,020	67,629	77,132	0,507	0,455	4596,232	4930,315	19,781	8,653	11,879	-3,732	41,858	8,352	18,970	2022-03-24 14:30
323,833	45,093	67,573	77,208	0,505	0,455	4554,926	4997,398	19,949	8,653	11,825	-3,713	42,044	8,371	18,970	2022-03-24 14:31
324,333	45,127	67,603	77,129	0,504	0,455	4569,271	4942,256	18,856	8,850	11,699	-3,684	42,060	8,373	18,970	2022-03-24 14:31
324,833	45,132	67,611	77,122	0,506	0,456	4641,294	4936,826	19,104	8,659	11,810	-3,688	41,753	8,342	18,970	2022-03-24 14:32
325,334	45,119	67,564	77,089	0,502	0,455	4597,469	4940,045	19,108	8,634	11,893	-3,748	42,159	8,382	18,970	2022-03-24 14:32
325,834	45,066	67,589	77,095	0,502	0,455	4633,015	4928,862	19,525	8,775	11,749	-3,700	42,167	8,383	18,970	2022-03-24 14:33
326,334	45,043	67,535	77,080	0,507	0,455	4674,240	4951,247	19,530	8,933	11,568	-3,633	42,009	8,368	18,970	2022-03-24 14:33
326,834	45,033	67,511	77,079	0,505	0,455	4654,572	4961,819	21,051	8,848	11,615	-3,718	42,154	8,382	18,970	2022-03-24 14:34
327,334	45,028	67,603	77,049	0,503	0,455	4616,767	4900,067	20,955	8,869	11,658	-3,727	42,367	8,403	18,845	2022-03-24 14:34
327,833	45,024	67,642	77,025	0,506	0,455	4630,899	4862,836	19,700	8,981	11,512	-3,668	42,101	8,377	18,845	2022-03-24 14:35
328,333	45,035	67,601	77,037	0,502	0,456	4577,002	4897,603	20,015	8,863	11,587	-3,652	41,875	8,354	18,845	2022-03-24 14:35
328,833	45,055	67,628	77,022	0,503	0,456	4585,549	4875,421	22,032	8,574	11,893	-3,711	42,363	8,403	18,970	2022-03-24 14:36
329,333	45,108	67,644	77,012	0,501	0,455	4546,006	4861,648	21,622	8,512	11,971	-3,756	41,886	8,355	18,845	2022-03-24 14:36
329,833	45,130	67,666	77,016	0,504	0,456	4572,596	4852,693	22,040	8,684	11,875	-3,681	42,316	8,398	18,752	2022-03-24 14:37
330,333	45,128	67,684	77,012	0,504	0,455	4553,308	4839,687	22,962	8,426	12,013	-3,706	42,032	8,370	18,845	2022-03-24 14:37
330,833	45,111	67,681	77,002	0,503	0,455	4554,955	4836,194	24,977	8,428	12,078	-3,684	42,112	8,378	18,970	2022-03-24 14:38

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
331,333	0,208	0,551	1,057	-0,187	-0,015	0,389	0,702	60,263	21,871	21,056	20,904	20,826	20,999	21,049	20,644	52,992
331,834	0,208	0,562	1,062	-0,186	0,000	0,380	0,702	60,303	21,854	21,053	20,908	20,814	20,988	21,041	20,635	52,924
332,334	0,207	0,561	1,050	-0,184	0,020	0,383	0,701	60,421	21,903	21,114	20,975	20,892	21,064	21,114	20,702	52,921
332,834	0,208	0,556	1,061	-0,187	0,030	0,384	0,701	60,456	21,880	21,118	20,972	20,891	21,061	21,109	20,700	52,982
333,334	0,208	0,563	1,049	-0,185	0,011	0,379	0,701	60,434	21,944	21,111	20,951	20,865	21,034	21,088	20,674	52,962
333,834	0,208	0,562	1,052	-0,184	0,011	0,381	0,701	60,441	21,949	21,077	20,932	20,841	21,001	21,055	20,643	53,156
334,333	0,209	0,554	1,055	-0,183	0,024	0,389	0,700	60,383	21,970	21,144	20,986	20,903	21,067	21,131	20,705	53,101
334,833	0,209	0,546	1,050	-0,187	-0,012	0,394	0,700	60,290	21,947	21,089	20,940	20,837	21,013	21,073	20,647	52,949
335,333	0,208	0,563	1,058	-0,185	0,006	0,378	0,700	60,450	22,056	21,163	20,998	20,909	21,073	21,133	20,708	52,831
335,833	0,207	0,571	1,047	-0,185	0,011	0,374	0,700	60,487	21,880	21,091	20,953	20,840	21,011	21,068	20,645	52,860
336,333	0,209	0,564	1,052	-0,186	-0,001	0,381	0,700	60,549	21,938	21,152	21,008	20,902	21,075	21,129	20,709	52,871
336,833	0,208	0,559	1,053	-0,184	0,027	0,384	0,700	60,544	21,878	21,097	20,949	20,850	21,011	21,071	20,647	52,853
337,333	0,208	0,566	1,048	-0,185	-0,028	0,377	0,700	60,617	21,962	21,141	20,997	20,886	21,052	21,115	20,686	52,932
337,833	0,208	0,570	1,057	-0,185	0,018	0,376	0,699	60,506	21,989	21,172	21,023	20,915	21,072	21,148	20,712	52,966
338,333	0,208	0,560	1,051	-0,186	0,037	0,382	0,700	60,409	22,008	21,158	21,018	20,899	21,057	21,131	20,694	52,970
338,834	0,208	0,555	1,051	-0,186	0,001	0,388	0,699	60,355	21,970	21,098	20,937	20,817	20,990	21,054	20,620	52,966
339,334	0,210	0,554	1,048	-0,186	-0,008	0,387	0,699	60,474	22,050	21,190	21,038	20,911	21,083	21,152	20,712	52,981
339,834	0,211	0,556	1,051	-0,185	0,012	0,387	0,699	60,359	21,955	21,173	21,019	20,898	21,057	21,141	20,696	52,952
340,334	0,210	0,547	1,052	-0,186	-0,020	0,394	0,699	60,398	21,922	21,184	21,021	20,916	21,071	21,149	20,707	53,008
340,834	0,209	0,547	1,046	-0,185	-0,006	0,395	0,699	60,385	21,958	21,136	20,982	20,863	21,023	21,105	20,654	53,021
341,333	0,210	0,544	1,050	-0,184	-0,002	0,395	0,699	60,384	22,035	21,207	21,055	20,925	21,087	21,164	20,719	53,012
341,833	0,209	0,553	1,052	-0,185	-0,021	0,388	0,699	60,460	22,048	21,201	21,048	20,921	21,080	21,157	20,710	52,963
342,333	0,208	0,545	1,057	-0,187	0,002	0,397	0,699	60,427	22,009	21,196	21,040	20,913	21,077	21,157	20,703	52,944
342,833	0,208	0,543	1,059	-0,184	0,032	0,397	0,699	60,416	21,843	21,134	20,978	20,855	21,012	21,095	20,642	52,893
343,333	0,208	0,541	1,049	-0,185	-0,005	0,399	0,698	60,301	21,828	21,138	20,993	20,864	21,036	21,113	20,656	52,967
343,833	0,208	0,542	1,049	-0,185	0,023	0,399	0,698	60,259	21,867	21,103	20,951	20,823	20,988	21,074	20,611	53,172
344,333	0,210	0,531	1,050	-0,184	0,032	0,408	0,698	60,345	21,825	21,124	20,976	20,858	21,018	21,107	20,643	53,117
344,833	0,209	0,528	1,062	-0,184	0,017	0,410	0,697	60,418	21,927	21,211	21,057	20,943	21,107	21,187	20,723	53,121
345,334	0,209	0,543	1,048	-0,184	0,005	0,395	0,697	60,446	21,995	21,210	21,064	20,935	21,103	21,186	20,718	53,158
345,834	0,208	0,551	1,049	-0,182	0,014	0,391	0,698	60,585	21,927	21,201	21,054	20,920	21,084	21,167	20,703	53,128
346,334	0,209	0,544	1,049	-0,185	0,005	0,398	0,697	60,496	21,984	21,190	21,045	20,917	21,075	21,159	20,692	53,114
346,834	0,209	0,547	1,045	-0,187	0,047	0,392	0,697	60,493	22,001	21,194	21,050	20,905	21,072	21,159	20,689	53,030
347,334	0,208	0,559	1,054	-0,185	0,017	0,382	0,697	60,551	21,994	21,234	21,070	20,934	21,099	21,184	20,716	53,020
347,833	0,207	0,554	1,051	-0,186	0,008	0,390	0,697	60,539	21,998	21,218	21,074	20,926	21,077	21,169	20,702	53,025
348,333	0,207	0,546	1,056	-0,182	0,013	0,396	0,697	60,555	21,946	21,218	21,077	20,925	21,095	21,184	20,712	53,015
348,833	0,207	0,548	1,054	-0,186	0,004	0,392	0,697	60,470	21,799	21,082	20,943	20,792	20,960	21,045	20,574	53,050
349,333	0,207	0,558	1,053	-0,186	0,015	0,384	0,696	60,631	21,815	21,144	21,008	20,866	21,021	21,118	20,643	53,038

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
331,333	45,090	67,678	77,011	0,502	0,455	4557,685	4840,885	23,051	8,890	11,662	-3,741	42,729	8,439	18,845	2022-03-24 14:38
331,834	45,029	67,698	76,942	0,502	0,455	4554,866	4796,338	22,132	9,160	11,398	-3,712	42,473	8,414	18,845	2022-03-24 14:39
332,334	44,990	67,673	76,973	0,503	0,455	4588,574	4825,680	22,129	8,948	11,495	-3,673	42,236	8,390	18,845	2022-03-24 14:39
332,834	44,994	67,619	76,979	0,504	0,455	4631,205	4853,266	22,548	8,977	11,533	-3,749	42,286	8,395	18,752	2022-03-24 14:40
333,334	45,108	67,572	76,986	0,504	0,455	4549,376	4883,017	22,710	9,062	11,378	-3,705	41,898	8,356	18,845	2022-03-24 14:40
333,834	45,240	67,582	76,962	0,510	0,455	4640,715	4863,791	23,639	9,031	11,430	-3,685	42,356	8,402	18,752	2022-03-24 14:41
334,333	45,213	67,573	76,981	0,511	0,455	4636,663	4877,138	25,402	8,771	11,681	-3,653	42,092	8,376	18,752	2022-03-24 14:41
334,833	45,061	67,582	76,957	0,508	0,455	4603,730	4863,446	26,271	8,730	11,808	-3,741	42,209	8,387	18,752	2022-03-24 14:42
335,333	44,945	67,586	77,005	0,511	0,455	4636,789	4885,177	21,963	9,276	11,330	-3,710	42,031	8,370	18,752	2022-03-24 14:42
335,833	45,008	67,572	76,977	0,509	0,455	4595,290	4876,410	22,635	9,257	11,225	-3,705	42,166	8,383	18,752	2022-03-24 14:43
336,333	45,062	67,638	76,983	0,505	0,455	4537,950	4845,684	25,801	9,047	11,424	-3,722	42,300	8,396	18,752	2022-03-24 14:43
336,833	45,077	67,692	76,981	0,503	0,455	4497,300	4819,612	21,872	8,945	11,533	-3,683	41,879	8,355	18,752	2022-03-24 14:44
337,333	45,070	67,607	77,016	0,507	0,455	4585,124	4878,693	24,131	9,214	11,320	-3,700	41,867	8,353	18,752	2022-03-24 14:44
337,833	45,058	67,597	77,013	0,508	0,455	4618,362	4882,643	21,881	9,173	11,287	-3,708	42,281	8,395	18,752	2022-03-24 14:45
338,333	45,047	67,542	76,992	0,506	0,455	4605,650	4899,983	24,395	9,049	11,469	-3,730	41,761	8,343	18,752	2022-03-24 14:45
338,834	45,056	67,594	76,989	0,507	0,455	4608,640	4872,382	24,410	8,799	11,633	-3,719	41,909	8,358	18,658	2022-03-24 14:46
339,334	45,066	67,595	76,992	0,504	0,455	4586,143	4870,848	31,049	8,879	11,612	-3,712	41,718	8,338	18,658	2022-03-24 14:46
339,834	45,068	67,572	77,003	0,509	0,455	4612,610	4889,490	28,931	8,819	11,624	-3,698	42,026	8,369	18,723	2022-03-24 14:47
340,334	45,082	67,507	77,038	0,504	0,455	4595,947	4941,107	26,075	8,701	11,814	-3,718	42,342	8,401	18,658	2022-03-24 14:47
340,834	45,090	67,505	77,014	0,506	0,455	4611,599	4930,846	25,828	8,587	11,851	-3,705	41,773	8,344	18,752	2022-03-24 14:48
341,333	45,086	67,576	77,002	0,508	0,455	4631,840	4889,151	27,253	8,615	11,852	-3,672	42,106	8,377	18,658	2022-03-24 14:48
341,833	45,091	67,567	77,033	0,509	0,455	4603,370	4907,165	24,563	8,870	11,642	-3,698	42,107	8,377	18,658	2022-03-24 14:49
342,333	45,077	67,608	76,994	0,504	0,455	4558,635	4867,692	24,060	8,478	11,921	-3,731	42,209	8,387	18,564	2022-03-24 14:49
342,833	45,072	67,655	76,973	0,503	0,455	4522,191	4831,957	22,764	8,585	11,924	-3,678	41,992	8,366	18,658	2022-03-24 14:50
343,333	45,057	67,725	76,951	0,499	0,455	4538,418	4786,019	22,548	8,528	11,962	-3,704	42,043	8,371	18,658	2022-03-24 14:50
343,833	45,032	67,693	76,947	0,499	0,455	4670,104	4800,763	23,379	8,534	11,970	-3,704	41,830	8,350	18,564	2022-03-24 14:51
344,333	45,013	67,563	76,977	0,498	0,455	4639,394	4880,845	28,165	8,231	12,250	-3,674	42,252	8,392	18,564	2022-03-24 14:51
344,833	45,035	67,472	77,012	0,501	0,455	4660,748	4948,089	26,326	8,243	12,290	-3,688	42,212	8,388	18,564	2022-03-24 14:52
345,334	45,097	67,472	76,959	0,501	0,455	4641,309	4919,442	24,056	8,695	11,853	-3,674	41,932	8,360	18,564	2022-03-24 14:52
345,834	45,152	67,490	76,933	0,501	0,455	4595,737	4895,443	22,891	8,762	11,736	-3,638	41,651	8,332	18,564	2022-03-24 14:53
346,334	45,145	67,538	76,936	0,503	0,455	4609,783	4872,728	28,337	8,516	11,935	-3,691	41,622	8,329	18,564	2022-03-24 14:53
346,834	45,082	67,565	76,948	0,500	0,455	4565,628	4862,531	24,728	8,800	11,753	-3,737	42,070	8,374	18,564	2022-03-24 14:54
347,334	45,007	67,542	76,931	0,500	0,455	4603,481	4866,893	21,370	9,049	11,471	-3,696	41,746	8,341	18,564	2022-03-24 14:54
347,833	44,973	67,549	76,915	0,500	0,455	4632,183	4856,155	21,287	8,734	11,697	-3,711	42,085	8,375	18,564	2022-03-24 14:55
348,333	45,002	67,516	76,906	0,503	0,455	4636,855	4866,558	21,790	8,609	11,889	-3,640	42,448	8,411	18,564	2022-03-24 14:55
348,833	45,065	67,489	76,887	0,503	0,455	4619,178	4874,132	21,204	8,798	11,762	-3,715	42,025	8,369	18,470	2022-03-24 14:56
349,333	45,114	67,473	76,874	0,501	0,455	4565,825	4873,340	21,048	9,012	11,511	-3,715	42,192	8,386	18,564	2022-03-24 14:56

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
349,833	0,207	0,557	1,043	-0,186	-0,005	0,387	0,697	60,618	21,945	21,193	21,060	20,915	21,069	21,167	20,683	52,794
350,333	0,207	0,545	1,055	-0,183	-0,024	0,397	0,696	60,477	21,910	21,131	20,993	20,842	21,008	21,089	20,617	52,805
350,833	0,208	0,542	1,042	-0,184	0,053	0,397	0,696	60,441	21,978	21,212	21,059	20,913	21,073	21,158	20,685	52,868
351,333	0,208	0,552	1,039	-0,184	-0,029	0,390	0,696	60,359	22,009	21,206	21,054	20,907	21,068	21,161	20,679	52,907
351,833	0,208	0,540	1,045	-0,183	0,008	0,402	0,696	60,427	22,063	21,220	21,063	20,916	21,074	21,169	20,687	52,884
352,334	0,208	0,531	1,048	-0,184	0,038	0,407	0,696	60,523	22,073	21,198	21,043	20,893	21,048	21,144	20,662	52,784
352,834	0,208	0,540	1,042	-0,184	-0,028	0,397	0,696	60,505	21,972	21,162	20,999	20,847	21,009	21,102	20,616	52,948
353,334	0,207	0,549	1,047	-0,186	0,040	0,392	0,696	60,620	21,891	21,245	21,089	20,953	21,107	21,200	20,716	52,879
353,834	0,208	0,542	1,043	-0,184	0,007	0,399	0,696	60,598	21,914	21,183	21,032	20,875	21,037	21,141	20,651	52,917
354,334	0,208	0,541	1,045	-0,186	0,041	0,397	0,696	60,696	22,061	21,220	21,063	20,908	21,075	21,167	20,682	52,890
354,833	0,208	0,550	1,048	-0,183	-0,001	0,390	0,695	60,618	22,045	21,220	21,061	20,907	21,072	21,177	20,678	52,932
355,333	0,207	0,557	1,049	-0,185	0,002	0,384	0,694	60,779	22,128	21,269	21,104	20,960	21,115	21,214	20,726	52,966
355,833	0,207	0,553	1,047	-0,187	0,026	0,391	0,694	60,690	22,089	21,288	21,138	20,971	21,127	21,234	20,738	52,903
356,333	0,208	0,544	1,045	-0,184	0,005	0,395	0,695	60,479	21,998	21,279	21,114	20,968	21,133	21,225	20,734	53,135
356,833	0,209	0,552	1,051	-0,184	0,010	0,388	0,694	60,557	21,947	21,221	21,059	20,917	21,075	21,178	20,677	53,115
357,333	0,208	0,560	1,052	-0,184	0,016	0,383	0,694	60,527	21,975	21,274	21,114	20,963	21,125	21,234	20,729	53,046
357,833	0,209	0,552	1,048	-0,186	0,028	0,390	0,694	60,392	21,963	21,259	21,105	20,966	21,110	21,220	20,723	53,130
358,333	0,209	0,552	1,049	-0,185	0,033	0,389	0,694	60,314	22,007	21,234	21,086	20,923	21,092	21,186	20,690	53,195
358,833	0,209	0,555	1,057	-0,186	-0,010	0,388	0,694	60,483	21,968	21,229	21,077	20,926	21,085	21,189	20,691	53,125
359,334	0,210	0,541	1,057	-0,184	-0,025	0,400	0,694	60,432	21,910	21,229	21,076	20,935	21,102	21,204	20,699	53,033
359,834	0,210	0,536	1,052	-0,185	-0,015	0,402	0,694	60,452	22,101	21,264	21,111	20,960	21,116	21,230	20,723	53,054
360,334	0,209	0,547	1,053	-0,184	-0,013	0,391	0,693	60,473	22,079	21,295	21,141	20,996	21,152	21,262	20,755	52,988
360,834	0,208	0,555	1,043	-0,187	0,013	0,386	0,693	60,440	22,129	21,287	21,123	20,972	21,121	21,240	20,728	53,019
361,334	0,207	0,553	1,048	-0,187	0,019	0,389	0,692	60,311	22,132	21,236	21,070	20,908	21,068	21,180	20,670	52,721
361,833	0,207	0,548	1,048	-0,185	0,020	0,391	0,693	60,382	22,173	21,241	21,077	20,904	21,062	21,162	20,665	52,785
362,333	0,207	0,556	1,045	-0,183	0,000	0,384	0,693	60,401	22,141	21,292	21,126	20,951	21,117	21,222	20,712	52,778
362,833	0,207	0,564	1,055	-0,186	-0,022	0,378	0,692	60,391	22,042	21,205	21,037	20,866	21,026	21,146	20,625	53,004
363,333	0,207	0,561	1,054	-0,186	0,030	0,382	0,692	60,496	22,136	21,304	21,128	20,971	21,120	21,231	20,722	52,899
363,833	0,207	0,547	1,047	-0,187	-0,002	0,394	0,692	60,398	21,963	21,286	21,125	20,964	21,123	21,230	20,716	52,968
364,333	0,208	0,549	1,048	-0,183	-0,024	0,390	0,693	60,355	21,940	21,255	21,098	20,933	21,086	21,204	20,689	53,002
364,833	0,209	0,559	1,047	-0,187	-0,020	0,382	0,692	60,514	22,022	21,277	21,118	20,955	21,111	21,226	20,708	52,997
365,333	0,209	0,554	1,049	-0,184	-0,004	0,389	0,692	60,517	22,053	21,287	21,134	20,962	21,116	21,230	20,716	52,954
365,834	0,210	0,544	1,045	-0,184	0,006	0,396	0,692	60,405	22,076	21,295	21,123	20,966	21,116	21,231	20,720	52,898
366,334	0,209	0,552	1,050	-0,181	0,011	0,388	0,692	60,417	22,036	21,307	21,150	20,990	21,153	21,258	20,740	52,898
366,834	0,207	0,558	1,042	-0,184	0,021	0,385	0,692	60,498	22,052	21,324	21,170	21,007	21,160	21,278	20,761	52,948
367,334	0,207	0,554	1,046	-0,184	0,005	0,388	0,692	60,384	21,918	21,121	21,005	20,973	21,120	21,245	20,721	52,929
367,834	0,208	0,555	1,051	-0,186	0,019	0,386	0,691	60,473	21,865	21,050	20,951	20,932	21,096	21,205	20,683	52,992

## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
349,833	45,133	67,504	76,845	0,505	0,455	4444,391	4841,405	21,287	8,799	11,607	-3,717	41,715	8,338	18,564	2022-03-24 14:57
350,333	45,117	67,633	76,843	0,503	0,455	4446,967	4774,476	22,799	8,545	11,903	-3,655	42,015	8,368	18,470	2022-03-24 14:57
350,833	45,100	67,664	76,885	0,502	0,455	4480,741	4780,618	23,640	8,618	11,911	-3,686	41,654	8,332	18,470	2022-03-24 14:58
351,333	45,049	67,631	76,860	0,506	0,455	4567,193	4784,717	22,043	8,833	11,689	-3,683	41,722	8,339	18,470	2022-03-24 14:58
351,833	44,997	67,604	76,842	0,506	0,455	4589,176	4785,447	24,046	8,354	12,074	-3,651	41,995	8,366	18,470	2022-03-24 14:59
352,334	44,970	67,607	76,860	0,502	0,455	4510,000	4795,217	23,879	8,287	12,225	-3,682	41,685	8,335	18,470	2022-03-24 14:59
352,834	45,006	67,656	76,854	0,508	0,455	4638,936	4767,647	22,118	8,655	11,921	-3,690	42,033	8,370	18,470	2022-03-24 15:00
353,334	45,058	67,564	76,830	0,505	0,455	4543,120	4801,064	22,127	8,732	11,750	-3,720	42,036	8,370	18,470	2022-03-24 15:00
353,834	45,110	67,559	76,785	0,507	0,455	4552,094	4782,309	23,137	8,430	11,983	-3,671	41,751	8,342	18,470	2022-03-24 15:01
354,334	45,131	67,565	76,805	0,504	0,455	4492,808	4791,055	21,956	8,595	11,916	-3,717	41,727	8,339	18,470	2022-03-24 15:01
354,833	45,133	67,580	76,756	0,503	0,455	4510,628	4755,521	22,888	8,775	11,695	-3,659	42,212	8,388	18,470	2022-03-24 15:02
355,333	45,097	67,615	76,709	0,505	0,455	4568,444	4714,565	20,374	8,956	11,527	-3,692	41,933	8,360	18,346	2022-03-24 15:02
355,833	45,046	67,585	76,742	0,502	0,455	4538,633	4746,174	21,787	8,645	11,732	-3,743	42,051	8,372	18,346	2022-03-24 15:03
356,333	45,005	67,563	76,722	0,505	0,455	4724,741	4746,199	24,566	8,663	11,861	-3,671	41,484	8,315	18,346	2022-03-24 15:03
356,833	44,989	67,342	76,743	0,502	0,454	4693,719	4868,354	24,727	8,909	11,628	-3,677	42,146	8,381	18,346	2022-03-24 15:04
357,333	45,007	67,302	76,714	0,502	0,455	4639,867	4875,781	23,380	8,930	11,492	-3,679	41,910	8,358	18,346	2022-03-24 15:04
357,833	45,102	67,310	76,719	0,501	0,455	4626,144	4873,938	24,824	8,750	11,697	-3,729	41,338	8,300	18,346	2022-03-24 15:05
358,333	45,198	67,318	76,683	0,503	0,455	4622,756	4851,771	25,483	8,848	11,682	-3,704	41,967	8,363	18,346	2022-03-24 15:05
358,833	45,160	67,339	76,715	0,501	0,455	4591,574	4858,905	26,745	8,856	11,634	-3,713	42,361	8,402	18,346	2022-03-24 15:06
359,334	45,036	67,376	76,677	0,502	0,455	4614,766	4819,717	28,173	8,430	12,008	-3,687	42,040	8,371	18,346	2022-03-24 15:06
359,834	44,979	67,365	76,679	0,504	0,455	4683,170	4826,278	26,741	8,412	12,068	-3,691	42,145	8,381	18,346	2022-03-24 15:07
360,334	44,999	67,323	76,627	0,499	0,455	4579,772	4820,316	23,579	8,846	11,724	-3,682	41,853	8,352	18,346	2022-03-24 15:07
360,834	45,023	67,340	76,664	0,501	0,455	4609,033	4828,985	21,862	8,902	11,588	-3,734	42,016	8,368	18,346	2022-03-24 15:08
361,334	45,076	67,349	76,636	0,505	0,455	4434,968	4810,299	21,275	8,717	11,680	-3,734	41,957	8,362	18,252	2022-03-24 15:08
361,833	45,111	67,480	76,641	0,504	0,455	4448,713	4745,074	21,794	8,749	11,739	-3,709	41,848	8,351	18,252	2022-03-24 15:09
362,333	45,121	67,556	76,640	0,501	0,455	4407,598	4705,418	21,708	8,943	11,533	-3,657	41,815	8,348	18,346	2022-03-24 15:09
362,833	45,116	67,578	76,629	0,504	0,455	4566,173	4689,872	20,530	9,177	11,329	-3,713	42,276	8,394	18,252	2022-03-24 15:10
363,333	45,092	67,509	76,615	0,502	0,455	4504,981	4717,534	19,618	8,897	11,463	-3,728	41,844	8,351	18,252	2022-03-24 15:10
363,833	45,088	67,477	76,630	0,500	0,455	4534,193	4743,541	22,207	8,583	11,805	-3,749	42,092	8,376	18,252	2022-03-24 15:11
364,333	45,135	67,434	76,612	0,504	0,455	4562,509	4754,481	25,322	8,820	11,687	-3,664	41,758	8,343	18,346	2022-03-24 15:11
364,833	45,101	67,352	76,664	0,502	0,455	4557,592	4823,123	26,914	8,999	11,468	-3,733	42,061	8,373	18,252	2022-03-24 15:12
365,333	45,031	67,382	76,658	0,501	0,455	4567,743	4806,793	26,832	8,721	11,661	-3,676	41,985	8,365	18,252	2022-03-24 15:12
365,834	44,945	67,448	76,663	0,505	0,455	4613,828	4774,711	29,182	8,592	11,867	-3,685	42,014	8,368	18,252	2022-03-24 15:13
366,334	44,943	67,410	76,686	0,504	0,455	4608,051	4806,195	23,062	8,913	11,626	-3,625	42,181	8,385	18,252	2022-03-24 15:13
366,834	45,022	67,397	76,679	0,504	0,455	4587,951	4808,569	21,297	8,942	11,537	-3,675	41,753	8,342	18,252	2022-03-24 15:14
367,334	45,076	67,426	76,633	0,505	0,455	4562,872	4771,730	22,075	8,811	11,649	-3,680	41,860	8,353	18,252	2022-03-24 15:14
367,834	45,098	67,431	76,626	0,504	0,455	4578,502	4764,669	26,151	8,916	11,581	-3,712	42,020	8,369	18,158	2022-03-24 15:15



## PE22\_cat II\_run 1\_220324\_EN.DAT

## Category: II run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
368,333	0,210	0,565	1,044	-0,183	0,026	0,377	0,691	60,485	21,940	21,081	20,971	20,961	21,128	21,234	20,712	52,932

PE22\_cat II\_run 1\_220324\_EN.DAT

Category: II run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
368,333	45,116	67,432	76,698	0,505	0,455	4538,273	4802,558	29,595	9,183	11,322	-3,653	42,132	8,380	18,159	2022-03-24 15:15

## PE22\_cat III\_run 1\_220330\_EN.DAT

Category: III run 1

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321,KONF

Saved: 2022-03-24 07:04

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,461	0,212	0,721	1,057	-0,222	0,004	0,253	0,881	67,403	22,085	18,760	18,549	18,818	18,839	18,796	18,816	57,924
0,909	0,210	0,722	1,056	-0,224	0,001	0,248	0,881	67,628	22,080	18,807	18,555	18,817	18,842	18,806	18,819	57,947
1,333	0,208	0,700	1,065	-0,223	0,007	0,269	0,881	67,752	22,067	18,791	18,564	18,816	18,845	18,803	18,818	57,999
1,833	0,212	0,711	1,056	-0,221	0,021	0,255	0,881	67,928	22,041	18,769	18,569	18,820	18,834	18,796	18,814	58,054
2,333	0,216	0,729	1,050	-0,223	0,014	0,240	0,880	68,223	22,145	18,763	18,576	18,830	18,843	18,809	18,829	58,076
2,833	0,211	0,723	1,058	-0,226	0,005	0,249	0,880	68,414	22,085	18,716	18,551	18,817	18,841	18,806	18,821	57,672
3,333	0,228	0,741	1,055	-0,223	0,007	0,232	0,878	68,609	22,052	18,746	18,589	18,853	18,864	18,831	18,848	57,753
3,833	0,250	0,734	1,056	-0,227	-0,020	0,241	0,878	68,735	22,048	18,739	18,587	18,845	18,867	18,825	18,845	57,864
4,333	0,221	0,717	1,060	-0,226	0,001	0,257	0,878	68,757	22,132	18,716	18,566	18,809	18,837	18,794	18,817	57,908
4,833	0,216	0,702	1,053	-0,226	0,017	0,266	0,877	68,816	22,134	18,734	18,593	18,831	18,855	18,818	18,839	57,920
5,333	0,241	0,712	1,052	-0,227	-0,009	0,257	0,877	68,908	22,140	18,769	18,610	18,852	18,873	18,837	18,857	58,009
5,833	0,233	0,719	1,054	-0,227	0,004	0,251	0,876	68,826	22,064	18,805	18,624	18,845	18,873	18,836	18,858	58,052
6,333	0,216	0,715	1,052	-0,228	0,004	0,255	0,876	68,779	22,156	18,795	18,615	18,842	18,857	18,826	18,847	58,039
6,833	0,217	0,724	1,058	-0,227	0,033	0,246	0,876	68,925	22,159	18,781	18,615	18,829	18,855	18,821	18,846	58,074
7,333	0,216	0,719	1,059	-0,230	0,007	0,249	0,875	69,182	22,087	18,797	18,627	18,864	18,871	18,836	18,864	57,763
7,833	0,216	0,725	1,056	-0,227	0,034	0,248	0,875	69,423	22,085	18,788	18,619	18,863	18,881	18,848	18,870	57,553
8,333	0,220	0,719	1,052	-0,229	0,008	0,249	0,876	69,642	22,109	18,778	18,626	18,850	18,864	18,836	18,861	57,600
8,833	0,214	0,708	1,050	-0,230	0,011	0,263	0,875	69,891	22,071	18,777	18,620	18,850	18,867	18,834	18,859	57,611
9,333	0,209	0,700	1,055	-0,231	-0,024	0,266	0,875	69,743	22,116	18,784	18,642	18,881	18,895	18,864	18,890	58,152
9,833	0,209	0,702	1,053	-0,233	0,009	0,263	0,875	69,947	22,151	18,773	18,642	18,874	18,892	18,863	18,893	57,966
10,333	0,209	0,706	1,061	-0,231	0,036	0,263	0,874	70,181	22,082	18,764	18,638	18,864	18,876	18,847	18,878	57,994
10,833	0,209	0,700	1,051	-0,233	0,001	0,265	0,873	70,234	22,142	18,774	18,633	18,864	18,869	18,839	18,871	57,828
11,333	0,209	0,715	1,056	-0,234	0,015	0,257	0,873	70,283	21,908	18,727	18,582	18,804	18,820	18,786	18,821	57,672
11,833	0,208	0,704	1,059	-0,234	-0,033	0,265	0,873	70,571	22,014	18,781	18,644	18,861	18,879	18,845	18,875	57,709
12,333	0,208	0,691	1,052	-0,234	0,011	0,277	0,872	70,461	22,083	18,777	18,637	18,841	18,863	18,836	18,861	57,733
12,833	0,209	0,698	1,058	-0,235	0,034	0,268	0,872	70,616	22,126	18,812	18,646	18,847	18,859	18,835	18,864	58,213

## PE22\_cat III\_run 1\_220330\_EN.DAT

Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,461	43,499	57,277	73,717	1,961	1,770	32517,682	33333,522	27,904	12,810	7,576	-4,448	42,249	8,391	30,071	2022-03-30 09:48
0,909	43,529	57,311	73,803	0,553	0,514	9171,831	9702,673	25,579	13,045	7,431	-4,470	42,355	8,402	30,071	2022-03-30 09:48
1,333	43,548	57,406	73,980	0,554	0,514	9204,546	9748,977	23,976	12,427	8,060	-4,455	42,221	8,389	30,071	2022-03-30 09:49
1,833	43,572	57,424	74,108	0,558	0,514	9295,140	9815,227	37,247	12,837	7,649	-4,430	42,253	8,392	29,978	2022-03-30 09:49
2,333	43,601	57,447	74,251	0,554	0,514	9222,912	9890,001	36,159	13,403	7,196	-4,460	42,245	8,391	29,978	2022-03-30 09:50
2,833	43,614	57,619	74,369	0,556	0,514	8994,300	9854,675	28,604	12,848	7,480	-4,515	42,442	8,410	29,977	2022-03-30 09:50
3,333	43,601	57,957	74,466	0,558	0,515	9085,953	9724,229	101,857	13,649	6,947	-4,452	42,316	8,398	29,852	2022-03-30 09:51
3,833	43,610	58,140	74,644	0,559	0,515	9164,465	9722,825	96,875	13,295	7,236	-4,535	41,968	8,363	29,852	2022-03-30 09:51
4,333	43,575	58,160	74,714	0,563	0,515	9291,716	9752,610	50,238	12,718	7,705	-4,514	42,284	8,395	29,852	2022-03-30 09:52
4,833	43,542	58,153	74,908	0,563	0,515	9311,761	9868,496	46,881	12,538	7,971	-4,526	41,969	8,363	29,759	2022-03-30 09:52
5,333	43,548	58,116	74,872	0,567	0,514	9426,546	9865,349	120,832	12,813	7,707	-4,544	42,135	8,380	29,852	2022-03-30 09:53
5,833	43,581	58,117	75,063	0,565	0,515	9401,580	9982,336	60,795	13,003	7,534	-4,543	42,293	8,396	29,759	2022-03-30 09:53
6,333	43,608	58,220	75,182	0,563	0,515	9356,759	9994,874	47,295	12,925	7,642	-4,558	42,188	8,385	29,759	2022-03-30 09:54
6,833	43,612	58,345	75,335	0,564	0,515	9388,023	10016,841	45,429	13,181	7,387	-4,537	42,276	8,394	29,665	2022-03-30 09:54
7,333	43,618	58,432	75,451	0,564	0,515	9176,040	10035,348	39,404	12,926	7,456	-4,603	42,318	8,398	29,665	2022-03-30 09:55
7,833	43,570	58,992	75,509	0,564	0,516	9079,670	9746,259	43,935	12,900	7,435	-4,545	42,348	8,401	29,758	2022-03-30 09:55
8,333	43,526	59,629	75,622	0,562	0,516	9100,325	9443,368	43,861	13,066	7,465	-4,582	42,148	8,381	29,758	2022-03-30 09:56
8,833	43,466	59,653	75,737	0,564	0,516	9184,185	9496,479	30,879	12,401	7,898	-4,598	41,908	8,357	29,665	2022-03-30 09:56
9,333	43,494	59,444	75,881	0,571	0,516	9622,647	9701,884	24,400	12,588	7,976	-4,613	42,139	8,380	29,665	2022-03-30 09:57
9,833	43,558	59,174	75,904	0,572	0,516	9489,644	9871,753	25,071	12,670	7,895	-4,665	41,973	8,364	29,665	2022-03-30 09:57
10,333	43,625	59,108	76,066	0,577	0,494	9534,538	9578,994	28,251	12,546	7,899	-4,612	42,863	8,452	29,571	2022-03-30 09:58
10,833	43,708	58,453	76,326	0,578	0,452	9393,981	9238,396	26,913	12,680	7,946	-4,655	41,780	8,345	29,571	2022-03-30 09:58
11,333	43,638	57,833	76,446	0,586	0,451	9465,082	9617,278	22,641	12,688	7,712	-4,680	42,140	8,381	29,571	2022-03-30 09:59
11,833	43,579	57,605	76,698	0,589	0,451	9575,094	9865,190	23,222	12,689	7,937	-4,682	42,125	8,379	29,571	2022-03-30 09:59
12,333	43,531	57,416	76,834	0,589	0,451	9618,728	10026,843	24,150	12,099	8,319	-4,682	42,017	8,368	29,478	2022-03-30 10:00
12,833	43,497	57,346	76,988	0,587	0,451	9939,278	10147,313	28,842	12,561	8,025	-4,700	42,525	8,419	29,477	2022-03-30 10:00

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
13,333	0,210	0,689	1,051	-0,238	-0,007	0,277	0,872	70,913	22,186	18,814	18,656	18,852	18,866	18,839	18,867	58,095
13,833	0,209	0,685	1,052	-0,238	0,034	0,282	0,871	71,155	22,239	18,808	18,662	18,857	18,875	18,838	18,877	57,903
14,333	0,210	0,694	1,053	-0,236	0,016	0,269	0,870	71,161	22,206	18,831	18,676	18,864	18,880	18,842	18,885	57,988
14,833	0,212	0,708	1,057	-0,239	0,021	0,263	0,870	71,254	22,197	18,839	18,665	18,864	18,889	18,859	18,891	58,041
15,333	0,213	0,702	1,058	-0,240	0,034	0,263	0,870	71,335	22,246	18,841	18,702	18,880	18,901	18,874	18,904	57,857
15,833	0,209	0,692	1,058	-0,239	0,002	0,279	0,870	71,375	22,286	18,862	18,717	18,895	18,910	18,886	18,924	57,599
16,333	0,209	0,681	1,059	-0,240	0,007	0,282	0,869	71,536	22,355	18,891	18,743	18,910	18,929	18,894	18,939	57,678
16,833	0,208	0,666	1,054	-0,241	0,008	0,295	0,868	71,650	22,301	18,875	18,728	18,899	18,916	18,882	18,925	58,181
17,333	0,208	0,670	1,051	-0,240	0,040	0,294	0,868	71,676	22,268	18,863	18,711	18,879	18,891	18,867	18,904	57,975
17,833	0,208	0,677	1,059	-0,239	-0,029	0,279	0,868	71,803	22,344	18,868	18,711	18,871	18,884	18,858	18,901	57,564
18,333	0,211	0,709	1,055	-0,238	0,023	0,259	0,868	71,857	22,409	18,921	18,749	18,904	18,930	18,898	18,945	57,970
18,833	0,212	0,710	1,059	-0,240	0,036	0,259	0,867	71,734	22,377	18,875	18,713	18,890	18,901	18,863	18,912	57,927
19,333	0,210	0,698	1,053	-0,242	0,008	0,270	0,867	72,012	22,399	18,910	18,737	18,902	18,916	18,891	18,937	57,910
19,833	0,209	0,699	1,054	-0,239	0,019	0,268	0,867	72,032	22,343	18,919	18,760	18,924	18,933	18,898	18,946	58,002
20,333	0,212	0,699	1,058	-0,241	0,026	0,271	0,867	72,114	22,405	18,914	18,764	18,915	18,921	18,896	18,944	58,009
20,833	0,210	0,693	1,055	-0,244	0,020	0,274	0,866	72,331	22,406	18,913	18,774	18,921	18,931	18,904	18,951	57,651
21,333	0,209	0,674	1,052	-0,246	0,017	0,292	0,866	72,380	22,428	18,895	18,776	18,927	18,940	18,908	18,955	57,653
21,833	0,208	0,672	1,057	-0,243	0,041	0,291	0,865	72,319	22,293	18,821	18,705	18,848	18,859	18,831	18,881	57,825
22,333	0,208	0,660	1,054	-0,244	0,016	0,303	0,865	72,515	22,321	18,887	18,754	18,894	18,909	18,881	18,926	58,152
22,833	0,210	0,663	1,057	-0,246	-0,004	0,298	0,865	72,622	22,323	18,932	18,784	18,915	18,929	18,900	18,952	58,033
23,333	0,212	0,658	1,056	-0,242	0,018	0,303	0,864	72,647	22,337	18,948	18,793	18,923	18,939	18,913	18,959	57,959
23,833	0,212	0,667	1,059	-0,244	-0,017	0,292	0,864	72,794	22,365	18,941	18,779	18,908	18,914	18,897	18,944	57,728
24,333	0,210	0,661	1,059	-0,245	0,011	0,299	0,864	72,878	22,396	18,938	18,800	18,922	18,931	18,908	18,953	57,690
24,833	0,210	0,670	1,054	-0,244	-0,003	0,292	0,864	72,845	22,459	18,935	18,797	18,931	18,936	18,919	18,961	57,676
25,333	0,209	0,656	1,057	-0,245	0,043	0,304	0,863	72,979	22,445	18,920	18,777	18,903	18,913	18,900	18,943	58,044
25,833	0,208	0,663	1,056	-0,244	-0,009	0,295	0,863	72,919	22,404	18,909	18,781	18,903	18,918	18,894	18,941	58,089
26,333	0,209	0,670	1,057	-0,243	-0,030	0,293	0,862	72,871	22,513	18,915	18,793	18,923	18,934	18,914	18,956	57,894
26,833	0,209	0,668	1,051	-0,243	-0,017	0,296	0,862	73,119	22,506	18,924	18,798	18,926	18,936	18,921	18,963	57,894
27,333	0,208	0,654	1,059	-0,244	-0,013	0,307	0,861	73,095	22,505	18,917	18,803	18,929	18,928	18,913	18,959	57,968

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
13,333	43,564	57,119	77,090	0,587	0,451	9819,662	10310,857	26,923	12,185	8,324	-4,769	41,682	8,335	29,477	2022-03-30 10:01
13,833	43,677	57,111	77,197	0,591	0,451	9679,353	10368,450	26,998	11,983	8,446	-4,767	41,638	8,330	29,355	2022-03-30 10:01
14,333	43,698	57,311	77,235	0,591	0,451	9718,074	10294,110	28,107	12,574	8,073	-4,714	42,287	8,395	29,355	2022-03-30 10:02
14,833	43,612	57,446	77,444	0,594	0,451	9853,765	10326,660	38,568	12,558	7,878	-4,774	42,092	8,376	29,354	2022-03-30 10:02
15,333	43,536	57,446	77,365	0,590	0,451	9720,821	10288,824	34,818	12,714	7,903	-4,810	42,621	8,428	29,354	2022-03-30 10:03
15,833	43,482	57,593	77,355	0,594	0,451	9642,391	10212,003	26,012	11,904	8,360	-4,778	42,346	8,401	29,354	2022-03-30 10:03
16,333	43,520	57,800	77,449	0,596	0,451	9704,628	10156,935	24,314	12,011	8,475	-4,803	42,457	8,412	29,261	2022-03-30 10:04
16,833	43,588	57,806	77,607	0,595	0,452	9997,478	10239,590	23,712	11,699	8,843	-4,820	41,790	8,346	29,261	2022-03-30 10:04
17,333	43,606	57,541	77,576	0,597	0,451	9869,021	10356,378	24,814	11,606	8,828	-4,810	42,260	8,392	29,262	2022-03-30 10:05
17,833	43,648	57,697	77,606	0,598	0,451	9572,814	10290,600	23,639	12,324	8,372	-4,786	42,244	8,391	29,261	2022-03-30 10:05
18,333	43,694	58,095	77,607	0,592	0,452	9724,883	10092,185	34,621	12,698	7,782	-4,752	42,106	8,377	29,261	2022-03-30 10:06
18,833	43,606	57,980	77,676	0,594	0,452	9788,996	10183,080	30,033	12,766	7,770	-4,798	42,540	8,420	29,167	2022-03-30 10:06
19,333	43,499	57,948	77,738	0,589	0,452	9761,280	10235,295	27,335	12,304	8,108	-4,831	41,764	8,343	29,258	2022-03-30 10:07
19,833	43,485	57,945	77,772	0,594	0,452	9930,504	10251,087	26,659	12,565	8,032	-4,782	42,244	8,391	29,167	2022-03-30 10:07
20,333	43,614	57,785	77,829	0,597	0,451	9882,569	10359,126	40,083	12,432	8,115	-4,813	42,759	8,442	29,167	2022-03-30 10:08
20,833	43,700	57,903	77,915	0,599	0,452	9609,367	10345,112	26,243	12,291	8,207	-4,882	42,170	8,384	29,073	2022-03-30 10:08
21,333	43,674	58,157	77,847	0,601	0,452	9663,005	10183,165	24,142	11,681	8,753	-4,910	42,120	8,379	29,167	2022-03-30 10:09
21,833	43,621	58,264	77,909	0,597	0,452	9759,429	10161,888	22,890	11,854	8,719	-4,869	42,468	8,413	29,073	2022-03-30 10:09
22,333	43,536	58,311	77,932	0,594	0,452	9986,357	10150,427	23,304	11,371	9,079	-4,875	42,477	8,414	29,073	2022-03-30 10:10
22,833	43,450	58,079	77,874	0,593	0,452	9955,809	10238,191	31,439	11,624	8,938	-4,913	42,129	8,379	29,073	2022-03-30 10:10
23,333	43,546	57,986	77,962	0,591	0,452	9799,373	10329,044	33,370	11,383	9,098	-4,834	42,256	8,392	28,980	2022-03-30 10:11
23,833	43,719	58,094	77,927	0,593	0,452	9554,145	10258,712	35,392	11,829	8,770	-4,879	42,437	8,410	28,980	2022-03-30 10:11
24,333	43,742	58,509	77,961	0,596	0,452	9569,402	10065,428	26,496	11,558	8,972	-4,897	42,261	8,393	28,980	2022-03-30 10:12
24,833	43,610	58,561	78,045	0,595	0,452	9631,182	10084,953	27,076	11,730	8,775	-4,880	42,105	8,377	28,980	2022-03-30 10:12
25,333	43,457	58,470	78,026	0,594	0,452	9976,736	10112,070	24,891	11,346	9,131	-4,910	42,442	8,411	28,854	2022-03-30 10:13
25,833	43,435	58,225	78,035	0,592	0,452	9977,598	10241,493	23,725	11,731	8,847	-4,882	42,510	8,417	28,980	2022-03-30 10:13
26,333	43,581	58,016	78,077	0,599	0,451	9857,830	10364,185	25,989	11,765	8,782	-4,851	42,450	8,411	28,854	2022-03-30 10:14
26,833	43,723	58,011	78,060	0,601	0,451	9795,289	10363,151	24,817	11,629	8,868	-4,862	42,041	8,371	28,854	2022-03-30 10:14
27,333	43,696	58,220	78,024	0,597	0,452	9799,770	10238,922	24,057	11,272	9,207	-4,876	42,084	8,375	28,854	2022-03-30 10:15

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
27,833	0,211	0,661	1,050	-0,246	0,026	0,300	0,862	73,185	22,479	18,939	18,816	18,935	18,957	18,928	18,975	57,990
28,333	0,211	0,652	1,063	-0,248	0,019	0,304	0,861	73,422	22,549	18,950	18,828	18,950	18,964	18,938	18,987	57,936
28,833	0,212	0,670	1,063	-0,244	0,045	0,293	0,860	73,396	22,455	18,944	18,802	18,926	18,943	18,920	18,962	57,951
29,333	0,211	0,667	1,061	-0,248	-0,006	0,293	0,860	73,422	22,466	18,918	18,794	18,917	18,923	18,904	18,950	57,983
29,833	0,216	0,678	1,057	-0,244	0,013	0,286	0,860	73,154	22,415	18,913	18,802	18,919	18,947	18,918	18,960	57,880
30,333	0,212	0,662	1,057	-0,248	0,048	0,302	0,860	72,928	22,258	18,789	18,777	18,974	18,974	18,957	19,006	57,529
30,833	0,211	0,653	1,057	-0,245	0,019	0,309	0,860	72,712	22,205	18,205	18,514	18,941	18,944	18,927	18,974	57,645
31,333	0,209	0,634	1,059	-0,245	0,022	0,321	0,859	72,644	22,340	17,761	18,348	18,950	18,947	18,938	18,986	57,971
31,833	0,209	0,637	1,060	-0,243	-0,003	0,318	0,858	72,646	22,307	17,567	18,273	18,952	18,948	18,939	18,986	58,097
32,333	0,206	0,636	1,060	-0,243	-0,011	0,317	0,859	72,531	22,281	17,586	18,257	18,945	18,937	18,920	18,975	57,924
32,833	0,205	0,660	1,062	-0,244	-0,003	0,298	0,859	72,409	22,289	17,661	18,251	18,933	18,944	18,924	18,975	57,769
33,333	0,205	0,672	1,062	-0,243	0,032	0,287	0,859	72,346	22,239	17,720	18,244	18,931	18,922	18,920	18,963	57,786
33,833	0,206	0,680	1,058	-0,240	0,022	0,282	0,859	72,229	22,176	17,830	18,270	18,930	18,928	18,918	18,965	57,740
34,333	0,207	0,694	1,061	-0,239	0,023	0,271	0,858	72,105	22,176	17,949	18,298	18,941	18,934	18,926	18,976	57,744
34,833	0,210	0,690	1,062	-0,243	-0,014	0,282	0,859	71,966	22,131	18,068	18,318	18,952	18,947	18,941	18,988	58,027
35,333	0,207	0,674	1,057	-0,236	-0,008	0,284	0,858	71,694	22,044	18,106	18,287	18,895	18,893	18,876	18,928	58,136
35,833	0,207	0,701	1,055	-0,240	-0,006	0,264	0,857	71,578	21,965	18,238	18,344	18,942	18,953	18,935	18,981	57,915
36,333	0,208	0,702	1,060	-0,237	0,006	0,266	0,857	71,493	21,894	18,273	18,329	18,916	18,918	18,903	18,951	57,591
36,833	0,206	0,695	1,057	-0,238	0,025	0,273	0,858	71,476	21,807	18,364	18,378	18,912	18,921	18,906	18,952	57,576
37,333	0,206	0,704	1,059	-0,234	0,043	0,257	0,857	71,370	21,961	18,465	18,436	18,967	18,974	18,954	19,003	57,655
37,833	0,210	0,722	1,057	-0,235	0,043	0,250	0,857	71,111	21,976	18,496	18,424	18,928	18,938	18,923	18,969	57,889
38,333	0,207	0,707	1,062	-0,236	0,016	0,259	0,857	71,085	22,045	18,548	18,447	18,936	18,937	18,921	18,972	57,797
38,833	0,213	0,735	1,052	-0,234	0,000	0,235	0,856	71,037	22,103	18,613	18,495	18,963	18,961	18,945	18,992	57,812
39,333	0,217	0,742	1,051	-0,237	0,052	0,231	0,856	71,034	22,073	18,652	18,515	18,959	18,960	18,942	18,994	57,849
39,833	0,220	0,748	1,055	-0,237	0,028	0,227	0,856	71,013	22,105	18,673	18,509	18,945	18,954	18,939	18,985	57,838
40,333	0,215	0,742	1,059	-0,235	0,042	0,230	0,856	71,019	22,100	18,714	18,536	18,964	18,968	18,956	18,999	57,745
40,833	0,221	0,759	1,059	-0,233	0,023	0,215	0,855	70,920	22,025	18,719	18,533	18,947	18,956	18,945	18,988	57,699
41,333	0,233	0,761	1,055	-0,232	0,035	0,217	0,855	70,954	21,989	18,730	18,532	18,948	18,952	18,930	18,982	57,650
41,833	0,217	0,749	1,059	-0,234	0,026	0,229	0,856	70,693	21,980	18,766	18,546	18,936	18,956	18,931	18,981	57,627

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
27,833	43,544	58,242	78,030	0,597	0,452	9923,451	10233,139	33,288	11,537	9,000	-4,921	42,056	8,372	28,854	2022-03-30 10:15
28,333	43,446	58,168	78,061	0,594	0,452	9902,303	10289,117	34,202	11,430	9,114	-4,953	42,505	8,417	28,761	2022-03-30 10:16
28,833	43,535	58,134	78,048	0,595	0,452	9863,731	10293,454	30,094	11,761	8,790	-4,890	42,588	8,425	28,761	2022-03-30 10:16
29,333	43,656	58,184	78,033	0,595	0,452	9811,328	10264,624	33,353	11,734	8,793	-4,966	42,081	8,375	28,761	2022-03-30 10:17
29,833	43,689	58,264	78,043	0,591	0,452	9646,329	10234,353	49,562	12,050	8,586	-4,884	42,256	8,392	28,761	2022-03-30 10:17
30,333	43,614	58,443	78,032	0,592	0,452	9477,583	10137,253	28,443	11,455	9,047	-4,953	42,162	8,383	28,667	2022-03-30 10:18
30,833	43,558	58,684	77,984	0,597	0,452	9674,941	9988,805	32,118	11,178	9,278	-4,908	42,342	8,401	28,761	2022-03-30 10:18
31,333	43,527	58,588	77,960	0,597	0,452	9915,532	10025,262	24,489	10,817	9,631	-4,893	42,227	8,389	28,667	2022-03-30 10:19
31,833	43,463	58,260	77,889	0,594	0,452	10007,543	10150,219	24,146	10,894	9,554	-4,853	42,253	8,392	28,573	2022-03-30 10:19
32,333	43,538	57,912	77,839	0,597	0,451	9883,179	10299,942	16,608	11,022	9,498	-4,850	42,150	8,382	28,667	2022-03-30 10:20
32,833	43,661	57,919	77,740	0,595	0,452	9656,585	10255,375	15,834	11,538	8,940	-4,882	42,618	8,428	28,667	2022-03-30 10:20
33,333	43,694	58,224	77,643	0,595	0,452	9648,738	10046,410	17,436	11,916	8,602	-4,855	42,362	8,403	28,667	2022-03-30 10:21
33,833	43,594	58,350	77,578	0,592	0,452	9629,665	9948,456	18,780	12,128	8,450	-4,807	42,241	8,391	28,667	2022-03-30 10:21
34,333	43,486	58,379	77,470	0,595	0,452	9754,553	9877,377	24,731	12,434	8,141	-4,784	42,206	8,387	28,667	2022-03-30 10:22
34,833	43,524	58,221	77,363	0,594	0,452	9914,301	9896,548	29,096	11,896	8,460	-4,859	42,549	8,421	28,667	2022-03-30 10:22
35,333	43,663	57,862	77,279	0,596	0,451	9929,930	10034,958	18,356	12,159	8,514	-4,712	42,370	8,403	28,573	2022-03-30 10:23
35,833	43,652	57,650	77,208	0,596	0,451	9774,647	10108,681	23,309	12,542	7,934	-4,792	42,242	8,391	28,573	2022-03-30 10:23
36,333	43,625	57,671	77,131	0,597	0,452	9591,546	10063,052	20,930	12,451	7,991	-4,732	42,069	8,373	28,573	2022-03-30 10:24
36,833	43,587	57,920	77,047	0,594	0,451	9561,398	9880,511	17,011	12,270	8,186	-4,755	42,276	8,394	28,667	2022-03-30 10:24
37,333	43,515	58,054	76,950	0,588	0,452	9564,013	9770,336	22,488	12,977	7,720	-4,688	42,336	8,400	28,573	2022-03-30 10:25
37,833	43,455	58,033	76,910	0,587	0,452	9742,816	9761,698	24,074	13,006	7,510	-4,698	42,640	8,430	28,573	2022-03-30 10:25
38,333	43,561	57,785	76,770	0,586	0,451	9606,386	9812,842	20,410	12,803	7,759	-4,721	42,484	8,415	28,573	2022-03-30 10:26
38,833	43,646	57,731	76,688	0,584	0,452	9522,423	9803,907	43,260	13,531	7,057	-4,684	41,835	8,350	28,479	2022-03-30 10:26
39,333	43,656	57,710	76,628	0,584	0,452	9528,424	9781,631	42,253	13,497	6,915	-4,736	41,949	8,361	28,479	2022-03-30 10:27
39,833	43,587	57,654	76,576	0,590	0,451	9673,601	9774,562	47,464	13,591	6,814	-4,731	42,323	8,399	28,479	2022-03-30 10:27
40,333	43,542	57,514	76,514	0,586	0,452	9571,215	9822,614	43,656	13,657	6,887	-4,692	42,496	8,416	28,479	2022-03-30 10:28
40,833	43,522	57,459	76,484	0,585	0,451	9537,959	9829,596	75,464	14,057	6,465	-4,670	42,508	8,417	28,480	2022-03-30 10:28
41,333	43,540	57,491	76,447	0,584	0,451	9487,242	9795,084	73,835	13,923	6,497	-4,631	42,062	8,373	28,479	2022-03-30 10:29
41,833	43,583	57,478	76,371	0,583	0,451	9422,891	9762,549	36,275	13,545	6,869	-4,681	42,426	8,409	28,480	2022-03-30 10:29



## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
42,333	0,210	0,729	1,060	-0,229	0,009	0,243	0,854	70,646	22,080	18,813	18,617	19,015	19,016	18,999	19,046	57,682
42,833	0,208	0,721	1,058	-0,232	0,027	0,254	0,854	70,578	22,055	18,791	18,590	18,975	18,985	18,958	19,014	57,670
43,333	0,206	0,707	1,063	-0,236	0,014	0,257	0,854	70,589	22,086	18,779	18,571	18,953	18,961	18,945	18,994	57,727
43,833	0,209	0,734	1,054	-0,231	0,027	0,238	0,854	70,584	22,121	18,816	18,613	18,992	18,987	18,972	19,027	57,812
44,333	0,209	0,722	1,052	-0,231	0,042	0,246	0,854	70,564	22,123	18,797	18,620	18,964	18,975	18,955	19,006	58,084
44,833	0,214	0,750	1,059	-0,231	0,012	0,224	0,854	70,384	22,159	18,792	18,602	18,931	18,946	18,931	18,982	57,924
45,333	0,213	0,752	1,059	-0,235	0,040	0,222	0,853	70,323	22,208	18,861	18,655	18,988	19,002	18,977	19,033	57,899
45,833	0,209	0,760	1,053	-0,230	0,054	0,215	0,852	70,396	22,188	18,903	18,685	19,007	19,024	19,003	19,051	57,600
46,333	0,209	0,760	1,055	-0,229	-0,310	0,215	0,853	70,410	22,141	18,963	18,687	18,999	19,011	18,987	19,042	57,500
46,833	0,208	0,760	1,060	-0,228	0,039	0,217	0,852	70,336	22,105	18,992	18,719	19,019	19,036	19,006	19,065	57,480
47,333	0,208	0,748	1,059	-0,229	0,042	0,227	0,852	70,247	22,135	18,935	18,680	18,967	18,968	18,957	19,014	57,879
47,833	0,206	0,742	1,060	-0,230	0,012	0,232	0,852	70,267	22,160	18,979	18,735	19,021	19,037	19,013	19,068	57,806
48,333	0,210	0,741	1,059	-0,227	-0,010	0,231	0,852	70,269	22,138	18,982	18,739	19,011	19,033	19,000	19,063	57,781
48,833	0,227	0,753	1,057	-0,227	-0,008	0,222	0,852	70,189	22,153	18,995	18,739	18,999	19,018	19,001	19,052	57,776
49,333	0,221	0,757	1,051	-0,228	-0,026	0,217	0,851	70,126	22,179	19,004	18,784	19,030	19,033	19,025	19,078	57,315
49,833	0,226	0,769	1,057	-0,229	0,010	0,209	0,851	70,109	22,076	18,951	18,743	19,000	19,013	18,993	19,048	57,484
50,333	0,234	0,760	1,062	-0,229	0,017	0,216	0,851	70,139	22,115	18,902	18,761	19,061	19,066	19,074	19,110	57,683
50,833	0,214	0,758	1,055	-0,229	0,025	0,220	0,851	70,188	22,150	18,665	18,633	19,047	19,057	19,041	19,098	57,694
51,333	0,213	0,730	1,056	-0,230	0,009	0,244	0,851	70,174	22,160	18,411	18,506	19,009	19,016	19,014	19,067	57,705
51,833	0,217	0,725	1,061	-0,231	-0,034	0,248	0,850	70,133	22,192	18,167	18,418	19,036	19,030	19,032	19,082	57,649
52,333	0,212	0,710	1,057	-0,228	-0,013	0,258	0,849	69,986	22,241	18,033	18,397	19,057	19,047	19,056	19,108	57,669
52,833	0,211	0,726	1,054	-0,225	0,061	0,245	0,850	69,712	22,255	17,927	18,346	18,994	18,998	18,995	19,052	57,635
53,333	0,207	0,713	1,055	-0,229	-0,007	0,257	0,849	69,697	22,291	17,870	18,352	19,053	19,059	19,043	19,103	57,588
53,833	0,205	0,726	1,052	-0,229	-0,006	0,243	0,849	69,751	22,250	17,771	18,277	19,014	19,022	19,006	19,073	57,613
54,333	0,208	0,738	1,056	-0,227	0,012	0,234	0,849	69,801	22,347	17,875	18,293	19,068	19,070	19,057	19,124	57,654
54,833	0,215	0,751	1,055	-0,225	0,041	0,224	0,849	69,886	22,408	18,017	18,294	19,084	19,077	19,071	19,135	57,667
55,333	0,219	0,755	1,054	-0,226	0,015	0,215	0,848	69,877	22,361	18,074	18,268	19,066	19,068	19,056	19,119	57,607
55,833	0,243	0,782	1,060	-0,226	-0,001	0,196	0,848	69,798	22,357	18,242	18,311	19,045	19,057	19,045	19,111	57,545
56,333	0,253	0,788	1,051	-0,222	0,032	0,189	0,848	69,720	22,281	18,332	18,340	19,037	19,039	19,034	19,092	57,763

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
42,333	43,600	57,492	76,276	0,587	0,452	9505,793	9713,212	27,499	13,150	7,280	-4,588	42,559	8,422	28,355	2022-03-30 10:30
42,833	43,593	57,399	76,230	0,583	0,451	9442,612	9730,095	18,577	12,783	7,616	-4,640	42,140	8,381	28,355	2022-03-30 10:30
43,333	43,586	57,336	76,197	0,586	0,451	9541,875	9745,287	18,943	12,841	7,715	-4,718	42,529	8,419	28,355	2022-03-30 10:31
43,833	43,590	57,176	76,065	0,587	0,451	9605,114	9757,832	27,499	13,360	7,139	-4,629	42,408	8,407	28,355	2022-03-30 10:31
44,333	43,585	57,088	76,069	0,580	0,451	9683,209	9803,757	25,062	13,124	7,389	-4,612	41,817	8,348	28,355	2022-03-30 10:32
44,833	43,597	56,914	76,015	0,587	0,451	9670,855	9868,510	38,270	13,816	6,727	-4,624	42,553	8,422	28,355	2022-03-30 10:32
45,333	43,614	56,839	76,026	0,585	0,451	9612,509	9905,216	34,129	13,890	6,649	-4,691	42,485	8,415	28,261	2022-03-30 10:33
45,833	43,660	56,751	75,907	0,588	0,451	9432,196	9889,720	26,244	13,987	6,460	-4,590	42,084	8,375	28,261	2022-03-30 10:33
46,333	43,622	56,951	75,878	0,581	0,451	9275,706	9774,218	24,064	14,047	6,444	-4,570	42,063	8,373	28,355	2022-03-30 10:34
46,833	43,561	57,204	75,844	0,586	0,451	9387,974	9626,167	21,209	13,940	6,520	-4,564	42,436	8,410	28,261	2022-03-30 10:34
47,333	43,490	57,079	75,783	0,587	0,451	9713,236	9655,888	23,887	13,696	6,811	-4,574	42,279	8,394	28,261	2022-03-30 10:35
47,833	43,542	56,706	75,748	0,588	0,451	9647,844	9831,202	17,859	13,521	6,961	-4,591	42,559	8,422	28,261	2022-03-30 10:35
48,333	43,629	56,542	75,832	0,588	0,450	9569,406	9952,010	41,172	13,690	6,929	-4,544	42,450	8,411	28,261	2022-03-30 10:36
48,833	43,682	56,554	75,764	0,586	0,450	9500,655	9912,281	75,605	13,854	6,659	-4,545	42,241	8,391	28,261	2022-03-30 10:36
49,333	43,619	56,658	75,661	0,580	0,451	9141,306	9807,197	67,686	13,996	6,507	-4,566	41,955	8,362	28,167	2022-03-30 10:37
49,833	43,505	57,023	75,639	0,585	0,451	9414,464	9614,953	66,044	14,152	6,278	-4,574	42,211	8,388	28,167	2022-03-30 10:37
50,333	43,517	56,930	75,665	0,583	0,451	9507,705	9674,121	66,650	13,964	6,471	-4,589	42,465	8,413	28,167	2022-03-30 10:38
50,833	43,591	56,678	75,767	0,584	0,451	9472,098	9852,887	36,402	13,802	6,614	-4,586	41,899	8,356	28,167	2022-03-30 10:38
51,333	43,621	56,662	75,622	0,585	0,451	9485,689	9786,725	42,298	13,086	7,315	-4,597	42,052	8,372	28,167	2022-03-30 10:39
51,833	43,615	56,590	75,632	0,585	0,451	9452,684	9827,009	48,377	13,069	7,430	-4,614	42,285	8,395	28,073	2022-03-30 10:39
52,333	43,586	56,550	75,674	0,587	0,451	9512,197	9872,284	30,729	12,774	7,744	-4,568	42,000	8,367	28,073	2022-03-30 10:40
52,833	43,544	56,513	75,609	0,586	0,451	9498,882	9856,095	28,672	13,206	7,363	-4,509	42,077	8,374	28,074	2022-03-30 10:40
53,333	43,517	56,522	75,583	0,584	0,451	9448,000	9837,067	16,856	12,786	7,721	-4,576	42,261	8,393	28,074	2022-03-30 10:41
53,833	43,566	56,576	75,656	0,585	0,451	9454,599	9852,298	17,861	13,348	7,284	-4,581	42,173	8,384	28,074	2022-03-30 10:41
54,333	43,704	56,526	75,462	0,586	0,451	9399,309	9773,645	25,130	13,561	7,011	-4,545	41,852	8,352	28,073	2022-03-30 10:42
54,833	43,664	56,559	75,407	0,584	0,451	9408,088	9730,375	42,815	13,821	6,708	-4,503	42,434	8,410	28,074	2022-03-30 10:42
55,333	43,570	56,543	75,374	0,587	0,450	9472,172	9715,951	63,470	14,092	6,449	-4,517	42,617	8,428	27,980	2022-03-30 10:43
55,833	43,483	56,423	75,409	0,588	0,451	9510,183	9798,379	104,014	14,585	5,895	-4,514	42,265	8,393	27,980	2022-03-30 10:43
56,333	43,425	56,346	75,338	0,584	0,450	9628,937	9797,860	199,338	14,876	5,676	-4,446	41,866	8,353	27,980	2022-03-30 10:44

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
56,833	0,276	0,795	1,053	-0,225	-0,012	0,191	0,848	69,681	22,238	18,487	18,360	19,020	19,032	19,018	19,079	57,856
57,333	0,231	0,770	1,056	-0,226	0,005	0,210	0,848	69,762	22,308	18,597	18,447	19,043	19,061	19,041	19,104	57,607
57,833	0,225	0,762	1,057	-0,223	0,000	0,218	0,848	69,631	22,213	18,565	18,392	18,948	18,962	18,947	19,006	57,486
58,333	0,223	0,759	1,053	-0,225	0,020	0,214	0,846	69,686	22,255	18,732	18,547	19,058	19,061	19,058	19,117	57,670
58,833	0,226	0,770	1,059	-0,225	-0,030	0,209	0,846	69,589	22,182	18,677	18,515	18,982	18,993	18,988	19,042	57,724
59,333	0,214	0,759	1,061	-0,225	0,016	0,217	0,846	69,561	22,231	19,137	18,517	18,971	18,970	18,966	19,022	57,714
59,833	0,210	0,752	1,059	-0,224	0,037	0,226	0,846	69,561	22,290	20,168	18,582	19,007	19,018	19,002	19,062	57,725
60,333	0,208	0,733	1,056	-0,224	0,037	0,236	0,846	69,482	22,185	20,121	18,538	18,958	18,972	18,968	19,013	57,654
60,833	0,210	0,759	1,056	-0,226	0,025	0,215	0,845	69,424	22,182	20,136	18,588	18,987	18,999	18,985	19,040	57,353
61,333	0,208	0,759	1,059	-0,224	0,016	0,218	0,845	69,368	22,201	20,119	18,503	18,979	18,997	18,971	19,034	57,389
61,833	0,208	0,753	1,056	-0,225	0,035	0,224	0,844	69,269	22,046	20,078	18,390	18,942	19,004	18,946	19,006	57,518
62,333	0,211	0,757	1,053	-0,223	0,002	0,216	0,845	69,311	22,037	20,080	18,373	18,989	18,963	18,982	19,038	57,511
62,833	0,227	0,789	1,054	-0,219	0,042	0,190	0,844	69,345	22,071	20,064	18,370	18,993	18,996	18,988	19,046	57,655
63,333	0,274	0,814	1,057	-0,222	0,026	0,162	0,844	69,321	22,052	20,007	18,343	18,962	18,982	18,959	19,016	57,167
63,833	0,447	0,852	1,058	-0,219	0,021	0,139	0,843	69,432	22,060	20,026	18,404	19,002	19,014	18,986	19,054	57,165
64,333	0,386	0,849	1,057	-0,223	-0,012	0,139	0,843	69,507	22,060	19,976	18,415	18,986	19,001	18,981	19,035	57,199
64,833	0,459	0,852	1,051	-0,218	0,032	0,140	0,843	69,540	22,068	19,984	18,450	19,000	19,017	18,993	19,051	57,774
65,333	0,343	0,832	1,058	-0,220	0,017	0,159	0,842	69,501	22,097	19,914	18,423	18,958	18,986	18,955	19,015	57,397
65,833	0,286	0,821	1,054	-0,222	0,007	0,170	0,841	69,785	22,269	19,951	18,489	19,002	19,021	19,001	19,061	57,362
66,333	0,228	0,772	1,054	-0,224	-0,013	0,208	0,841	70,178	22,382	19,918	18,500	18,998	19,018	18,993	19,056	57,538
66,833	0,248	0,795	1,055	-0,220	0,034	0,183	0,842	70,027	22,275	19,867	18,515	18,975	18,989	18,964	19,030	57,881
67,333	0,223	0,791	1,055	-0,219	-0,003	0,197	0,841	70,187	22,312	19,876	18,572	19,005	19,016	18,995	19,064	57,599
67,833	0,215	0,774	1,055	-0,221	0,029	0,210	0,840	70,249	22,271	19,845	18,573	18,990	19,004	18,983	19,052	57,594
68,333	0,210	0,763	1,057	-0,222	0,022	0,213	0,840	70,361	22,269	19,823	18,566	18,986	19,005	18,976	19,043	57,647
68,833	0,213	0,758	1,058	-0,225	0,015	0,226	0,840	70,333	22,190	19,786	18,574	18,965	18,978	18,956	19,026	57,753
69,333	0,206	0,727	1,053	-0,226	0,006	0,245	0,840	70,443	22,207	19,795	18,557	18,975	19,006	18,981	19,043	57,612
69,833	0,206	0,730	1,057	-0,224	0,018	0,244	0,839	70,434	22,293	19,797	18,558	18,997	19,011	18,996	19,060	57,636
70,333	0,206	0,727	1,055	-0,228	0,013	0,244	0,838	70,578	22,353	19,795	18,561	19,020	19,030	19,012	19,075	57,825
70,833	0,208	0,729	1,054	-0,228	0,010	0,245	0,838	70,625	22,346	19,796	20,102	19,037	19,053	19,023	19,092	57,950

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
56,833	43,518	56,120	75,359	0,585	0,450	9655,734	9925,264	147,755	14,677	5,725	-4,495	42,531	8,419	27,980	2022-03-30 10:44
57,333	43,596	55,950	75,354	0,586	0,450	9452,416	10007,817	75,904	14,222	6,313	-4,510	42,084	8,375	27,980	2022-03-30 10:45
57,833	43,661	56,071	75,295	0,584	0,450	9294,160	9914,909	65,042	13,895	6,552	-4,470	41,823	8,349	27,980	2022-03-30 10:45
58,333	43,601	56,238	75,356	0,578	0,451	9356,495	9866,823	80,920	14,171	6,414	-4,499	42,294	8,396	27,855	2022-03-30 10:46
58,833	43,456	56,353	75,281	0,581	0,451	9534,265	9773,032	58,514	14,137	6,271	-4,492	42,163	8,383	27,855	2022-03-30 10:46
59,333	43,497	56,263	75,314	0,582	0,450	9526,755	9827,436	31,196	13,903	6,507	-4,495	42,380	8,404	27,855	2022-03-30 10:47
59,833	43,601	56,210	75,317	0,577	0,450	9380,147	9857,865	26,493	13,592	6,767	-4,488	42,276	8,394	27,855	2022-03-30 10:47
60,333	43,626	56,293	74,851	0,581	0,450	9384,272	9571,780	23,557	13,390	7,080	-4,483	42,038	8,370	27,855	2022-03-30 10:48
60,833	43,603	56,240	74,805	0,584	0,451	9234,116	9580,850	28,336	14,017	6,443	-4,512	42,214	8,388	27,761	2022-03-30 10:48
61,333	43,560	56,660	74,753	0,579	0,451	9206,054	9343,368	22,135	13,941	6,541	-4,487	42,255	8,392	27,853	2022-03-30 10:49
61,833	43,513	56,846	74,850	0,576	0,451	9286,926	9291,165	21,295	13,731	6,725	-4,499	42,361	8,402	27,761	2022-03-30 10:49
62,333	43,517	56,550	74,897	0,573	0,451	9233,527	9469,705	48,809	14,145	6,477	-4,463	41,835	8,350	27,761	2022-03-30 10:50
62,833	43,560	56,934	74,961	0,578	0,451	9379,683	9311,318	80,503	14,922	5,694	-4,386	42,115	8,378	27,761	2022-03-30 10:50
63,333	43,591	57,051	75,114	0,574	0,451	8972,874	9326,929	357,837	15,876	4,861	-4,438	42,189	8,385	27,667	2022-03-30 10:51
63,833	43,572	57,697	75,205	0,571	0,452	8937,094	9050,708	560,825	16,317	4,173	-4,382	42,471	8,413	27,667	2022-03-30 10:51
64,333	43,524	57,860	75,270	0,558	0,452	8781,987	9003,280	523,587	16,277	4,183	-4,451	42,467	8,413	27,667	2022-03-30 10:52
64,833	43,474	57,847	75,350	0,555	0,451	9138,925	9043,581	696,816	16,279	4,210	-4,366	42,015	8,368	27,667	2022-03-30 10:52
65,333	43,480	57,509	75,460	0,553	0,451	8862,417	9277,357	263,542	15,633	4,766	-4,399	42,357	8,402	27,573	2022-03-30 10:53
65,833	43,593	57,504	75,530	0,556	0,451	8803,690	9316,224	177,085	15,513	5,094	-4,445	42,081	8,375	27,573	2022-03-30 10:53
66,333	43,679	57,454	75,527	0,565	0,451	9015,164	9338,285	68,622	14,192	6,234	-4,476	42,089	8,375	27,574	2022-03-30 10:54
66,833	43,615	57,370	75,774	0,564	0,451	9262,780	9510,538	144,276	15,269	5,501	-4,409	42,465	8,413	27,574	2022-03-30 10:54
67,333	43,512	57,017	75,775	0,591	0,451	9574,111	9682,761	44,616	14,535	5,921	-4,379	42,192	8,386	27,480	2022-03-30 10:55
67,833	43,578	57,126	76,093	0,575	0,451	9279,209	9798,111	33,790	14,125	6,303	-4,420	42,251	8,392	27,480	2022-03-30 10:55
68,333	43,592	56,902	76,161	0,596	0,451	9644,214	9942,081	29,665	14,172	6,389	-4,445	42,195	8,386	27,480	2022-03-30 10:56
68,833	43,605	56,982	76,266	0,589	0,451	9591,951	9959,370	23,961	13,574	6,775	-4,494	42,450	8,411	27,480	2022-03-30 10:56
69,333	43,637	56,636	76,421	0,593	0,450	9534,117	10206,143	18,093	13,194	7,356	-4,516	42,389	8,405	27,480	2022-03-30 10:57
69,833	43,610	57,005	76,392	0,591	0,451	9543,349	10009,312	16,847	13,181	7,308	-4,476	42,299	8,396	27,480	2022-03-30 10:57
70,333	43,566	56,871	76,376	0,594	0,451	9740,646	10069,183	20,965	13,247	7,319	-4,569	42,193	8,386	27,351	2022-03-30 10:58
70,833	43,521	56,628	76,461	0,591	0,451	9816,146	10236,637	23,729	13,079	7,345	-4,554	41,940	8,361	27,351	2022-03-30 10:58

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
71,333	0,208	0,729	1,054	-0,228	0,025	0,240	0,838	70,700	22,319	19,743	20,077	18,995	19,002	19,000	19,060	57,829
71,833	0,209	0,743	1,053	-0,227	0,013	0,230	0,838	70,736	22,373	19,728	20,077	19,001	19,011	18,998	19,059	57,594
72,333	0,221	0,750	1,047	-0,229	0,029	0,223	0,837	70,817	22,319	19,720	20,066	19,008	19,014	19,001	19,063	57,990
72,833	0,222	0,754	1,053	-0,226	0,032	0,224	0,837	70,900	22,317	19,748	20,070	19,047	19,070	19,040	19,106	57,479
73,333	0,211	0,733	1,056	-0,229	-0,021	0,240	0,836	70,931	22,316	19,694	20,013	19,004	19,034	18,996	19,065	57,750
73,833	0,210	0,727	1,062	-0,231	0,003	0,245	0,837	71,007	22,390	19,708	20,020	19,027	19,050	19,017	19,090	57,986
74,333	0,211	0,719	1,055	-0,230	0,037	0,252	0,836	71,137	22,423	19,701	20,013	19,034	19,055	19,035	19,097	57,795
74,833	0,208	0,718	1,056	-0,231	0,009	0,252	0,835	71,017	22,380	19,688	20,002	19,036	19,060	19,041	19,098	57,774
75,333	0,213	0,727	1,046	-0,228	-0,002	0,242	0,835	70,996	22,393	19,656	19,967	19,015	19,050	19,008	19,080	57,881
75,833	0,211	0,725	1,055	-0,229	0,021	0,250	0,835	71,087	22,375	19,663	19,956	19,034	19,053	19,036	19,094	57,961
76,333	0,207	0,708	1,054	-0,231	0,018	0,260	0,835	71,162	22,255	19,622	19,915	18,999	19,022	18,993	19,066	57,877
76,833	0,208	0,711	1,054	-0,236	0,006	0,261	0,835	71,243	22,357	19,621	19,906	19,018	19,042	19,008	19,082	57,599
77,333	0,209	0,706	1,047	-0,230	0,018	0,259	0,835	71,367	22,349	19,620	19,909	19,027	19,046	19,025	19,091	57,718
77,833	0,214	0,720	1,053	-0,229	0,002	0,253	0,834	71,417	22,334	19,634	19,919	19,042	19,067	19,046	19,109	57,846
78,333	0,212	0,708	1,048	-0,231	-0,002	0,258	0,834	71,513	22,365	19,599	19,880	19,012	19,037	19,023	19,087	57,781
78,833	0,214	0,727	1,054	-0,231	0,033	0,247	0,834	71,385	22,400	19,591	19,867	19,022	19,049	19,031	19,096	57,795
79,333	0,210	0,717	1,052	-0,232	0,017	0,251	0,833	71,310	22,329	19,597	19,865	19,041	19,059	19,038	19,110	57,650
79,833	0,212	0,729	1,059	-0,233	0,023	0,244	0,833	71,318	22,289	19,564	19,832	19,017	19,038	19,018	19,091	57,853
80,333	0,208	0,719	1,049	-0,233	0,032	0,251	0,833	71,450	22,346	19,591	19,842	19,049	19,075	19,055	19,121	57,757
80,833	0,206	0,718	1,049	-0,231	0,028	0,254	0,832	71,526	22,388	19,585	19,842	19,060	19,072	19,058	19,129	57,781
81,333	0,206	0,723	1,046	-0,233	-0,008	0,244	0,832	71,497	22,366	19,549	19,792	19,022	19,037	19,024	19,095	57,885
81,833	0,209	0,743	1,060	-0,235	-0,003	0,231	0,832	71,603	22,399	19,558	19,799	19,043	19,061	19,051	19,118	57,854
82,333	0,209	0,736	1,057	-0,232	0,011	0,234	0,832	71,535	22,314	19,509	19,730	18,994	19,021	19,010	19,080	57,904
82,833	0,209	0,740	1,051	-0,233	0,022	0,236	0,832	71,614	22,381	19,523	19,740	19,023	19,046	19,031	19,105	57,807
83,333	0,206	0,729	1,056	-0,234	0,024	0,241	0,830	71,672	22,425	19,519	19,731	19,031	19,060	19,042	19,110	57,816
83,833	0,208	0,742	1,057	-0,231	0,007	0,232	0,830	71,718	22,427	19,509	19,711	19,024	19,048	19,036	19,104	57,758
84,333	0,207	0,730	1,053	-0,233	-0,018	0,242	0,830	71,695	22,409	19,506	19,707	19,033	19,052	19,047	19,119	57,722
84,833	0,206	0,725	1,052	-0,235	0,041	0,250	0,830	71,812	22,433	19,529	19,726	19,062	19,083	19,073	19,152	57,817
85,333	0,205	0,708	1,058	-0,233	0,015	0,259	0,830	71,761	22,414	19,494	19,689	19,046	19,068	19,055	19,130	57,769

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
71,333	43,516	56,597	76,503	0,594	0,450	9787,378	10271,233	24,396	13,444	7,191	-4,565	42,200	8,386	27,351	2022-03-30 10:59
71,833	43,625	56,601	76,627	0,593	0,451	9535,418	10339,583	25,826	13,592	6,910	-4,534	42,374	8,404	27,351	2022-03-30 10:59
72,333	43,673	56,890	76,563	0,589	0,451	9698,396	10151,364	71,946	13,897	6,676	-4,581	41,836	8,350	27,257	2022-03-30 11:00
72,833	43,602	56,637	76,645	0,591	0,451	9437,563	10331,502	43,857	13,704	6,718	-4,528	41,835	8,350	27,257	2022-03-30 11:00
73,333	43,490	57,116	76,598	0,591	0,451	9700,674	10064,085	28,508	13,173	7,213	-4,581	42,420	8,408	27,257	2022-03-30 11:01
73,833	43,503	56,875	76,620	0,593	0,451	9885,857	10194,440	21,500	13,067	7,357	-4,627	42,375	8,404	27,257	2022-03-30 11:01
74,333	43,589	56,700	76,576	0,589	0,451	9619,390	10256,269	29,087	12,906	7,564	-4,605	42,471	8,413	27,257	2022-03-30 11:02
74,833	43,649	56,846	76,576	0,593	0,450	9629,586	10176,189	21,300	12,956	7,550	-4,628	42,076	8,374	27,163	2022-03-30 11:02
75,333	43,638	56,933	76,572	0,589	0,451	9652,609	10135,313	45,523	13,358	7,274	-4,557	41,628	8,329	27,257	2022-03-30 11:03
75,833	43,554	56,837	76,641	0,589	0,451	9767,806	10222,467	25,684	12,928	7,514	-4,574	41,894	8,356	27,163	2022-03-30 11:03
76,333	43,489	56,656	76,601	0,590	0,451	9766,713	10295,874	22,644	12,818	7,786	-4,626	42,326	8,399	27,163	2022-03-30 11:04
76,833	43,537	56,709	76,500	0,591	0,450	9562,854	10209,312	22,560	12,670	7,816	-4,721	41,702	8,337	27,163	2022-03-30 11:04
77,333	43,654	56,903	76,544	0,591	0,451	9559,149	10135,104	34,704	12,895	7,768	-4,595	41,906	8,357	27,163	2022-03-30 11:05
77,833	43,642	57,016	76,447	0,593	0,451	9692,964	10030,024	33,034	12,918	7,581	-4,587	42,174	8,384	27,069	2022-03-30 11:05
78,333	43,559	57,103	76,443	0,589	0,451	9638,069	9986,918	35,302	12,875	7,733	-4,622	42,062	8,373	27,070	2022-03-30 11:06
78,833	43,503	57,121	76,378	0,584	0,451	9607,085	9945,080	30,771	13,011	7,401	-4,618	42,403	8,407	27,163	2022-03-30 11:06
79,333	43,499	56,911	76,304	0,582	0,450	9478,475	10004,835	27,335	13,027	7,545	-4,646	42,283	8,395	27,070	2022-03-30 11:07
79,833	43,590	57,047	76,462	0,586	0,451	9612,634	10018,625	33,043	13,187	7,325	-4,655	42,245	8,391	26,976	2022-03-30 11:07
80,333	43,642	57,171	76,437	0,577	0,451	9367,170	9944,626	21,038	13,093	7,516	-4,668	41,972	8,364	27,070	2022-03-30 11:08
80,833	43,612	57,051	76,406	0,579	0,451	9441,985	9995,796	17,186	12,837	7,635	-4,630	42,193	8,386	26,976	2022-03-30 11:08
81,333	43,554	56,920	76,494	0,579	0,451	9545,657	10105,606	20,541	13,255	7,305	-4,670	42,212	8,388	26,976	2022-03-30 11:09
81,833	43,512	56,945	76,486	0,580	0,451	9570,348	10088,387	32,871	13,634	6,921	-4,693	42,565	8,423	26,976	2022-03-30 11:09
82,333	43,531	57,086	76,567	0,581	0,451	9610,667	10058,987	24,737	13,450	7,030	-4,644	42,252	8,392	26,976	2022-03-30 11:10
82,833	43,598	56,891	76,590	0,581	0,451	9497,292	10167,882	22,809	13,362	7,068	-4,666	41,871	8,354	26,976	2022-03-30 11:10
83,333	43,630	56,901	76,550	0,586	0,451	9570,504	10142,106	18,363	13,344	7,226	-4,686	42,276	8,394	26,851	2022-03-30 11:11
83,833	43,635	56,930	76,492	0,582	0,451	9462,377	10093,252	26,996	13,586	6,963	-4,629	42,355	8,402	26,851	2022-03-30 11:11
84,333	43,663	56,925	76,398	0,582	0,451	9421,129	10053,339	18,198	13,268	7,248	-4,652	41,963	8,363	26,851	2022-03-30 11:12
84,833	43,633	57,101	76,315	0,583	0,451	9513,464	9918,908	17,107	12,837	7,503	-4,691	42,336	8,400	26,851	2022-03-30 11:12
85,333	43,493	57,094	76,439	0,586	0,451	9629,012	9987,431	17,695	12,795	7,757	-4,656	42,275	8,394	26,850	2022-03-30 11:13

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
85,833	0,209	0,732	1,058	-0,236	0,005	0,240	0,830	71,787	22,381	19,476	19,672	19,033	19,055	19,051	19,121	57,564
86,333	0,210	0,738	1,056	-0,234	0,021	0,231	0,829	71,892	22,417	19,505	19,691	19,075	19,089	19,091	19,157	57,644
86,833	0,217	0,754	1,053	-0,233	0,002	0,226	0,828	71,923	22,329	19,477	19,639	19,040	19,061	19,054	19,128	57,555
87,333	0,208	0,731	1,056	-0,235	0,051	0,240	0,828	71,979	22,461	19,479	19,647	19,054	19,077	19,070	19,144	57,509
87,833	0,208	0,739	1,053	-0,235	0,024	0,237	0,828	72,020	22,442	19,494	19,653	19,067	19,098	19,092	19,162	57,629
88,333	0,205	0,718	1,060	-0,234	0,072	0,252	0,828	72,013	22,365	19,471	19,625	19,047	19,076	19,065	19,144	57,681
88,833	0,205	0,720	1,059	-0,234	0,039	0,252	0,827	71,989	22,374	19,481	19,638	19,076	19,104	19,094	19,168	57,646
89,333	0,204	0,713	1,052	-0,234	0,029	0,258	0,827	72,034	22,437	19,455	19,597	19,058	19,079	19,090	19,151	57,651
89,833	0,205	0,705	1,056	-0,235	-0,013	0,266	0,827	71,954	22,402	19,465	19,614	19,080	19,107	19,101	19,176	57,634
90,333	0,204	0,687	1,059	-0,239	0,037	0,278	0,827	71,897	22,405	19,433	19,571	19,052	19,074	19,071	19,152	57,594
90,833	0,204	0,699	1,061	-0,235	0,029	0,268	0,826	71,909	22,334	19,412	19,540	19,031	19,058	19,047	19,128	57,560
91,333	0,205	0,700	1,052	-0,237	0,004	0,266	0,827	72,059	22,377	19,458	19,579	19,085	19,116	19,107	19,183	57,538
91,833	0,208	0,711	1,052	-0,239	-0,005	0,258	0,825	72,198	22,387	19,487	19,600	19,121	19,147	19,142	19,216	57,489
92,333	0,207	0,699	1,052	-0,235	0,007	0,270	0,825	72,268	22,372	19,454	19,569	19,087	19,123	19,109	19,191	57,501
92,833	0,206	0,706	1,052	-0,237	0,035	0,260	0,825	72,269	22,351	19,452	19,561	19,095	19,122	19,110	19,196	57,533
93,333	0,207	0,720	1,055	-0,236	0,017	0,247	0,825	72,315	22,409	19,443	19,557	19,093	19,120	19,120	19,197	57,493
93,833	0,208	0,738	1,059	-0,234	0,004	0,236	0,824	72,243	22,436	19,404	19,501	19,070	19,092	19,091	19,170	57,481
94,333	0,206	0,708	1,054	-0,237	-0,016	0,263	0,824	72,303	22,358	19,420	19,515	19,088	19,107	19,102	19,189	57,533
94,833	0,205	0,698	1,060	-0,235	0,019	0,270	0,824	72,259	22,427	19,442	19,529	19,115	19,143	19,138	19,223	57,542
95,333	0,204	0,683	1,054	-0,237	0,034	0,278	0,824	72,238	22,488	19,429	19,516	19,116	19,131	19,134	19,218	57,554
95,833	0,204	0,707	1,054	-0,234	-0,002	0,259	0,823	72,369	22,468	19,423	19,504	19,114	19,138	19,131	19,221	57,578
96,333	0,205	0,715	1,049	-0,237	-0,020	0,255	0,823	72,416	22,448	19,429	19,500	19,113	19,146	19,143	19,225	57,662
96,833	0,206	0,715	1,053	-0,239	0,046	0,258	0,822	72,380	22,432	19,431	19,495	19,125	19,151	19,152	19,233	57,635
97,333	0,205	0,684	1,055	-0,235	0,023	0,282	0,822	72,369	22,480	19,450	19,526	19,159	19,182	19,188	19,266	57,690
97,833	0,204	0,685	1,057	-0,234	-0,035	0,279	0,822	72,427	22,454	19,448	19,508	19,144	19,182	19,180	19,267	57,686
98,333	0,204	0,681	1,051	-0,240	0,021	0,281	0,822	72,471	22,437	19,446	19,502	19,158	19,173	19,174	19,265	57,655
98,833	0,205	0,698	1,055	-0,241	-0,023	0,269	0,822	72,473	22,452	19,421	19,471	19,146	19,162	19,168	19,254	57,657
99,333	0,205	0,689	1,060	-0,240	-0,021	0,275	0,821	72,435	22,420	19,402	19,446	19,126	19,152	19,149	19,241	57,628
99,833	0,205	0,703	1,055	-0,238	0,010	0,263	0,820	72,400	22,469	19,404	19,444	19,135	19,159	19,168	19,254	57,624

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
85,833	43,431	57,248	76,491	0,576	0,451	9373,837	9935,893	27,454	13,342	7,197	-4,727	42,279	8,394	26,851	2022-03-30 11:13
86,333	43,519	57,439	76,382	0,580	0,451	9429,466	9778,211	40,663	13,742	6,915	-4,682	42,431	8,409	26,851	2022-03-30 11:14
86,833	43,630	57,378	76,379	0,579	0,451	9276,171	9812,807	30,458	13,653	6,779	-4,653	41,991	8,366	26,757	2022-03-30 11:14
87,333	43,628	57,456	76,416	0,581	0,451	9277,979	9788,861	26,828	13,362	7,214	-4,694	42,150	8,382	26,757	2022-03-30 11:15
87,833	43,577	57,643	76,432	0,582	0,451	9402,191	9707,520	20,816	13,390	7,110	-4,695	41,822	8,349	26,757	2022-03-30 11:15
88,333	43,519	57,713	76,520	0,582	0,451	9489,798	9715,207	16,434	12,937	7,575	-4,673	42,279	8,394	26,757	2022-03-30 11:16
88,833	43,505	57,754	76,708	0,579	0,451	9412,822	9797,057	15,517	12,977	7,553	-4,675	42,679	8,434	26,663	2022-03-30 11:16
89,333	43,555	57,757	76,754	0,582	0,451	9437,117	9812,372	13,841	12,825	7,739	-4,672	42,166	8,383	26,690	2022-03-30 11:17
89,833	43,597	57,755	76,639	0,579	0,451	9346,014	9756,264	15,342	12,581	7,970	-4,699	42,246	8,391	26,663	2022-03-30 11:17
90,333	43,600	57,834	76,725	0,577	0,451	9293,027	9758,331	13,995	12,130	8,341	-4,777	42,536	8,420	26,663	2022-03-30 11:18
90,833	43,588	57,957	76,718	0,572	0,452	9189,793	9698,603	14,580	12,499	8,029	-4,699	42,562	8,422	26,663	2022-03-30 11:18
91,333	43,529	58,085	76,530	0,574	0,452	9246,638	9533,814	17,731	12,547	7,973	-4,747	42,186	8,385	26,663	2022-03-30 11:19
91,833	43,524	58,128	76,623	0,570	0,452	9151,203	9558,711	24,730	12,822	7,747	-4,774	41,837	8,350	26,569	2022-03-30 11:19
92,333	43,552	58,146	76,768	0,572	0,452	9184,216	9628,970	19,191	12,438	8,088	-4,696	41,996	8,366	26,570	2022-03-30 11:20
92,833	43,560	58,162	76,629	0,572	0,452	9200,591	9546,254	19,113	12,830	7,793	-4,736	42,188	8,385	26,569	2022-03-30 11:20
93,333	43,572	58,120	76,675	0,576	0,452	9224,462	9594,987	21,765	13,207	7,408	-4,727	42,077	8,374	26,569	2022-03-30 11:21
93,833	43,589	58,142	76,658	0,575	0,452	9184,245	9577,131	23,144	13,418	7,090	-4,679	42,159	8,382	26,476	2022-03-30 11:21
94,333	43,575	58,190	76,682	0,575	0,452	9237,862	9561,635	16,841	12,473	7,899	-4,745	42,084	8,375	26,476	2022-03-30 11:22
94,833	43,554	58,231	76,745	0,575	0,452	9250,017	9574,537	14,310	12,330	8,112	-4,709	42,077	8,374	26,476	2022-03-30 11:22
95,333	43,575	58,229	76,772	0,574	0,452	9225,754	9587,478	12,989	12,184	8,331	-4,750	42,267	8,393	26,476	2022-03-30 11:23
95,833	43,590	58,181	76,947	0,572	0,452	9209,203	9700,482	14,084	12,812	7,774	-4,687	42,274	8,394	26,476	2022-03-30 11:23
96,333	43,577	58,131	76,816	0,573	0,452	9286,253	9665,095	18,352	12,939	7,644	-4,747	41,653	8,332	26,351	2022-03-30 11:24
96,833	43,562	58,113	76,940	0,574	0,452	9293,286	9732,415	19,542	12,830	7,730	-4,779	42,099	8,376	26,351	2022-03-30 11:24
97,333	43,589	58,122	76,682	0,572	0,452	9272,821	9592,228	13,920	11,945	8,469	-4,709	42,566	8,423	26,351	2022-03-30 11:25
97,833	43,580	58,162	76,538	0,572	0,451	9277,104	9496,842	14,089	12,160	8,375	-4,677	42,182	8,385	26,351	2022-03-30 11:25
98,333	43,569	58,206	76,564	0,576	0,451	9327,552	9483,972	13,998	12,113	8,441	-4,805	42,282	8,395	26,351	2022-03-30 11:26
98,833	43,589	58,149	76,514	0,573	0,452	9280,900	9492,562	16,510	12,487	8,057	-4,819	41,908	8,357	26,351	2022-03-30 11:26
99,333	43,584	58,122	76,564	0,573	0,452	9262,477	9532,832	15,351	12,314	8,237	-4,792	42,181	8,385	26,257	2022-03-30 11:27
99,833	43,555	58,103	76,571	0,576	0,452	9317,301	9546,535	15,003	12,645	7,883	-4,754	41,969	8,364	26,258	2022-03-30 11:27



## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
100,333	0,205	0,703	1,056	-0,239	0,010	0,261	0,821	72,432	22,477	19,418	19,463	19,153	19,170	19,173	19,268	57,626
100,833	0,206	0,726	1,054	-0,236	0,028	0,244	0,820	72,507	22,442	19,404	19,436	19,129	19,161	19,173	19,256	57,580
101,333	0,206	0,722	1,053	-0,238	0,037	0,250	0,820	72,509	22,405	19,378	19,411	19,113	19,141	19,151	19,237	57,558
101,833	0,207	0,731	1,050	-0,236	-0,014	0,241	0,819	72,469	22,431	19,379	19,406	19,131	19,151	19,155	19,247	57,531
102,333	0,207	0,716	1,054	-0,239	0,019	0,254	0,819	72,482	22,446	19,395	19,414	19,153	19,168	19,180	19,268	57,521
102,833	0,208	0,736	1,057	-0,240	0,043	0,232	0,819	72,541	22,468	19,389	19,400	19,141	19,166	19,179	19,261	57,569
103,333	0,208	0,755	1,048	-0,236	0,017	0,221	0,819	72,658	22,478	19,392	19,402	19,156	19,178	19,185	19,273	57,631
103,833	0,208	0,750	1,055	-0,236	0,020	0,226	0,818	72,618	22,460	19,389	19,402	19,162	19,185	19,190	19,281	57,619
104,333	0,205	0,730	1,058	-0,236	-0,024	0,247	0,818	72,577	22,414	19,384	19,382	19,150	19,182	19,191	19,277	57,645
104,833	0,205	0,716	1,059	-0,234	0,011	0,252	0,817	72,663	22,493	19,384	19,386	19,169	19,187	19,196	19,286	57,683
105,333	0,205	0,712	1,057	-0,235	0,018	0,259	0,817	72,682	22,482	19,393	19,395	19,188	19,204	19,209	19,301	57,555
105,833	0,205	0,702	1,059	-0,236	-0,005	0,267	0,817	72,829	22,526	19,423	19,406	19,198	19,227	19,246	19,325	57,256
106,333	0,204	0,687	1,056	-0,238	0,015	0,280	0,817	72,782	22,490	19,411	19,396	19,203	19,227	19,240	19,322	57,246
106,833	0,205	0,700	1,052	-0,239	0,020	0,264	0,816	72,705	22,473	19,370	19,356	19,163	19,185	19,200	19,285	57,373
107,333	0,206	0,706	1,048	-0,239	-0,011	0,261	0,816	72,662	22,424	19,357	19,345	19,150	19,179	19,189	19,277	57,474
107,833	0,205	0,721	1,051	-0,241	0,023	0,249	0,816	72,720	22,446	19,386	19,362	19,187	19,205	19,228	19,306	57,545
108,333	0,206	0,714	1,054	-0,239	0,009	0,260	0,816	72,786	22,481	19,400	19,373	19,202	19,220	19,235	19,322	57,877
108,833	0,205	0,702	1,047	-0,238	0,034	0,266	0,816	72,697	22,451	19,363	19,329	19,159	19,188	19,204	19,289	57,732
109,333	0,205	0,692	1,050	-0,242	0,011	0,276	0,815	72,768	22,431	19,361	19,327	19,168	19,190	19,215	19,291	57,444
109,833	0,205	0,700	1,052	-0,240	-0,024	0,265	0,815	72,794	22,447	19,370	19,334	19,175	19,197	19,213	19,302	57,507
110,333	0,204	0,690	1,055	-0,237	0,024	0,280	0,814	72,811	22,438	19,391	19,342	19,201	19,229	19,240	19,321	57,540
110,833	0,204	0,675	1,054	-0,241	0,031	0,290	0,814	72,777	22,407	19,359	19,310	19,160	19,192	19,206	19,289	57,451
111,333	0,204	0,660	1,054	-0,242	-0,008	0,300	0,814	72,694	22,430	19,395	19,356	19,198	19,234	19,251	19,328	57,524
111,833	0,205	0,671	1,052	-0,239	0,035	0,291	0,814	72,769	22,478	19,413	19,367	19,234	19,252	19,271	19,353	57,587
112,333	0,205	0,662	1,050	-0,237	0,033	0,299	0,814	72,745	22,396	19,374	19,325	19,196	19,216	19,230	19,316	57,479
112,833	0,204	0,669	1,051	-0,241	0,029	0,292	0,812	72,756	22,459	19,378	19,333	19,204	19,226	19,256	19,331	57,622
113,333	0,204	0,672	1,056	-0,243	0,052	0,288	0,812	72,797	22,475	19,362	19,310	19,196	19,230	19,243	19,321	57,727
113,833	0,205	0,682	1,051	-0,240	-0,028	0,282	0,813	72,789	22,410	19,329	19,267	19,158	19,189	19,201	19,283	57,665
114,333	0,205	0,688	1,056	-0,240	0,016	0,272	0,812	72,925	22,420	19,352	19,287	19,188	19,211	19,227	19,310	57,577

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
100,333	43,572	58,162	76,525	0,576	0,452	9308,192	9493,367	15,419	12,684	7,819	-4,789	42,399	8,406	26,346	2022-03-30 11:28
100,833	43,593	58,201	76,557	0,572	0,452	9208,658	9490,683	19,874	13,221	7,331	-4,716	42,026	8,369	26,257	2022-03-30 11:28
101,333	43,560	58,277	76,542	0,571	0,452	9195,659	9446,030	19,031	13,022	7,503	-4,750	42,108	8,377	26,258	2022-03-30 11:29
101,833	43,570	58,331	76,561	0,571	0,452	9169,158	9424,758	21,211	13,358	7,234	-4,722	41,925	8,359	26,164	2022-03-30 11:29
102,333	43,578	58,391	76,615	0,574	0,452	9207,207	9422,736	19,952	12,849	7,631	-4,780	42,139	8,380	26,164	2022-03-30 11:30
102,833	43,570	58,353	76,592	0,575	0,452	9254,341	9431,755	22,634	13,662	6,961	-4,800	42,550	8,421	26,164	2022-03-30 11:30
103,333	43,571	58,262	76,541	0,576	0,452	9315,112	9451,913	23,982	13,892	6,633	-4,728	41,880	8,355	26,164	2022-03-30 11:31
103,833	43,582	58,129	76,595	0,575	0,452	9287,090	9544,264	20,874	13,665	6,791	-4,716	42,390	8,405	26,070	2022-03-30 11:31
104,333	43,591	58,144	76,612	0,576	0,452	9313,740	9544,743	15,267	12,958	7,402	-4,723	42,303	8,397	26,070	2022-03-30 11:32
104,833	43,585	58,118	76,662	0,577	0,451	9365,005	9583,620	15,766	12,971	7,552	-4,677	42,083	8,375	26,070	2022-03-30 11:32
105,333	43,556	58,064	76,700	0,575	0,452	9257,823	9634,278	14,758	12,657	7,770	-4,704	42,209	8,387	26,070	2022-03-30 11:33
105,833	43,571	58,097	76,705	0,579	0,452	9117,263	9618,662	14,670	12,463	8,005	-4,712	42,280	8,394	26,070	2022-03-30 11:33
106,333	43,586	58,329	76,750	0,577	0,452	9061,974	9521,636	13,887	12,075	8,411	-4,758	42,144	8,381	26,070	2022-03-30 11:34
106,833	43,568	58,741	76,736	0,571	0,452	9068,636	9318,260	17,268	12,807	7,909	-4,784	42,108	8,377	25,976	2022-03-30 11:34
107,333	43,526	59,318	76,716	0,569	0,452	9127,698	9005,631	17,108	12,642	7,838	-4,772	42,021	8,369	25,976	2022-03-30 11:35
107,833	43,519	59,138	76,785	0,570	0,452	9193,857	9131,870	16,430	13,051	7,475	-4,819	42,147	8,381	25,976	2022-03-30 11:35
108,333	43,564	58,291	76,771	0,571	0,452	9409,016	9550,575	18,029	12,659	7,790	-4,786	42,242	8,391	25,976	2022-03-30 11:36
108,833	43,627	58,106	76,776	0,572	0,452	9289,863	9653,667	14,506	12,578	7,970	-4,768	41,781	8,345	25,976	2022-03-30 11:36
109,333	43,668	58,677	76,824	0,571	0,452	9044,485	9394,710	14,676	12,168	8,273	-4,838	41,853	8,352	25,976	2022-03-30 11:37
109,833	43,642	58,823	76,834	0,572	0,452	9125,374	9317,506	14,251	12,634	7,953	-4,800	42,087	8,375	25,976	2022-03-30 11:37
110,333	43,537	58,732	76,835	0,573	0,452	9226,343	9364,694	14,089	11,998	8,396	-4,744	42,074	8,374	25,851	2022-03-30 11:38
110,833	43,497	58,723	77,193	0,578	0,452	9283,796	9554,009	13,001	11,748	8,702	-4,822	42,127	8,379	25,851	2022-03-30 11:38
111,333	43,561	58,649	75,416	0,581	0,452	9335,866	8671,865	13,588	11,563	8,988	-4,841	41,974	8,364	25,851	2022-03-30 11:39
111,833	43,598	58,457	77,385	0,577	0,452	9279,317	9788,000	17,768	11,798	8,718	-4,788	41,893	8,356	25,851	2022-03-30 11:39
112,333	43,581	58,767	77,427	0,575	0,452	9195,284	9655,163	15,600	11,567	8,963	-4,731	41,879	8,355	25,851	2022-03-30 11:40
112,833	43,551	58,664	77,440	0,581	0,452	9413,087	9715,377	13,495	11,714	8,770	-4,821	42,055	8,372	25,758	2022-03-30 11:40
113,333	43,589	58,358	77,496	0,581	0,452	9453,649	9900,484	15,182	11,920	8,646	-4,863	42,071	8,374	25,757	2022-03-30 11:41
113,833	43,604	58,349	77,405	0,579	0,452	9364,522	9858,089	14,927	12,054	8,450	-4,795	41,912	8,358	25,758	2022-03-30 11:41
114,333	43,643	58,347	77,412	0,578	0,452	9268,666	9864,578	19,964	12,485	8,147	-4,795	42,133	8,380	25,758	2022-03-30 11:42

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
114,833	0,211	0,716	1,054	-0,239	0,025	0,255	0,812	72,958	22,487	19,378	19,317	19,212	19,239	19,259	19,338	57,197
115,333	0,209	0,714	1,050	-0,237	0,006	0,252	0,812	73,039	22,504	19,378	19,308	19,219	19,243	19,269	19,343	57,419
115,833	0,210	0,719	1,051	-0,238	0,010	0,254	0,811	72,961	22,521	19,379	19,311	19,212	19,242	19,264	19,343	57,875
116,333	0,207	0,711	1,050	-0,237	0,017	0,254	0,811	73,010	22,485	19,369	19,306	19,211	19,237	19,254	19,335	57,742
116,833	0,205	0,709	1,052	-0,237	0,014	0,261	0,811	72,962	22,445	19,353	19,283	19,195	19,226	19,249	19,331	57,616
117,333	0,205	0,702	1,048	-0,244	0,038	0,266	0,811	72,956	22,549	19,370	19,301	19,231	19,250	19,270	19,354	57,299
117,833	0,204	0,687	1,051	-0,243	0,014	0,280	0,810	73,015	22,378	19,337	19,273	19,194	19,214	19,249	19,325	57,596
118,333	0,204	0,688	1,051	-0,243	-0,004	0,273	0,810	73,026	22,436	19,349	19,291	19,221	19,236	19,267	19,346	57,805
118,833	0,205	0,693	1,050	-0,239	-0,028	0,274	0,810	72,904	22,478	19,322	19,287	19,211	19,229	19,251	19,341	57,830
119,333	0,205	0,700	1,052	-0,238	0,043	0,264	0,809	72,916	22,492	19,334	19,289	19,236	19,245	19,269	19,358	57,492
119,833	0,206	0,714	1,053	-0,238	-0,004	0,255	0,809	72,863	22,487	19,302	19,261	19,222	19,237	19,260	19,351	57,556
120,333	0,207	0,726	1,056	-0,241	0,007	0,242	0,809	72,893	22,522	19,289	19,230	19,209	19,229	19,260	19,341	57,593
120,833	0,208	0,729	1,054	-0,239	0,047	0,243	0,809	72,968	22,467	19,289	19,232	19,226	19,252	19,270	19,359	57,620
121,333	0,212	0,741	1,053	-0,236	-0,021	0,229	0,808	73,030	22,467	19,268	19,208	19,219	19,229	19,255	19,342	57,600
121,833	0,207	0,733	1,051	-0,236	-0,004	0,244	0,808	72,985	22,404	19,231	19,160	19,184	19,208	19,221	19,309	57,651
122,333	0,205	0,722	1,056	-0,240	0,009	0,248	0,808	72,984	22,463	19,231	19,146	19,188	19,205	19,224	19,309	57,671
122,833	0,204	0,720	1,049	-0,237	0,006	0,250	0,807	73,004	22,484	19,245	19,160	19,210	19,231	19,248	19,333	57,656
123,333	0,205	0,729	1,056	-0,236	-0,021	0,243	0,807	73,108	22,483	19,259	19,175	19,239	19,261	19,272	19,353	57,601
123,833	0,205	0,718	1,054	-0,236	0,040	0,255	0,806	72,995	22,469	19,197	19,116	19,183	19,205	19,216	19,300	57,653
124,333	0,204	0,718	1,059	-0,236	0,023	0,249	0,806	72,990	22,448	19,208	19,122	19,198	19,221	19,232	19,314	57,265
124,833	0,206	0,729	1,059	-0,236	0,036	0,243	0,806	72,926	22,429	19,229	19,141	19,212	19,238	19,247	19,331	57,402
125,333	0,211	0,737	1,055	-0,237	-0,029	0,236	0,806	72,947	22,403	19,209	19,103	19,197	19,219	19,236	19,310	57,436
125,833	0,211	0,737	1,049	-0,240	-0,022	0,235	0,806	73,010	22,455	19,221	19,106	19,205	19,226	19,238	19,317	57,871
126,333	0,211	0,757	1,055	-0,235	0,040	0,217	0,804	73,074	22,496	19,227	19,129	19,216	19,248	19,249	19,329	57,762
126,833	0,215	0,759	1,052	-0,239	0,016	0,217	0,805	73,126	22,462	19,237	19,128	19,222	19,252	19,258	19,334	57,469
127,333	0,214	0,760	1,050	-0,237	-0,021	0,219	0,804	73,104	22,392	19,219	19,119	19,213	19,241	19,247	19,326	57,445
127,833	0,208	0,744	1,052	-0,237	0,031	0,229	0,804	73,094	22,392	19,210	19,111	19,211	19,246	19,245	19,321	57,474
128,333	0,206	0,726	1,057	-0,237	0,011	0,252	0,804	73,066	22,391	19,196	19,093	19,201	19,231	19,226	19,307	57,511
128,833	0,204	0,699	1,049	-0,240	0,037	0,268	0,803	73,020	22,360	19,208	19,091	19,197	19,225	19,227	19,308	57,584

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
114,833	43,717	59,033	77,349	0,576	0,453	8935,401	9486,619	29,034	12,841	7,643	-4,776	42,088	8,375	25,758	2022-03-30 11:42
115,333	43,619	59,485	77,416	0,572	0,453	9081,256	9283,816	26,328	13,032	7,548	-4,745	41,945	8,361	25,664	2022-03-30 11:43
115,833	43,452	58,556	77,454	0,574	0,452	9530,270	9769,965	25,251	12,753	7,608	-4,770	41,836	8,350	25,664	2022-03-30 11:43
116,333	43,429	58,095	77,365	0,571	0,452	9411,909	9962,320	19,952	12,955	7,625	-4,742	42,339	8,400	25,745	2022-03-30 11:44
116,833	43,536	58,270	77,397	0,575	0,452	9314,651	9891,522	16,017	12,524	7,839	-4,741	42,042	8,371	25,664	2022-03-30 11:44
117,333	43,683	58,651	77,447	0,573	0,452	8970,465	9727,421	15,342	12,451	7,976	-4,881	42,064	8,373	25,664	2022-03-30 11:45
117,833	43,661	58,751	77,479	0,573	0,452	9184,872	9686,775	13,759	12,008	8,407	-4,861	42,234	8,390	25,663	2022-03-30 11:45
118,333	43,544	58,480	76,958	0,571	0,452	9363,340	9555,538	15,339	12,374	8,196	-4,861	42,148	8,381	25,570	2022-03-30 11:46
118,833	43,463	58,284	76,340	0,577	0,452	9531,052	9333,754	14,669	12,163	8,230	-4,772	42,034	8,370	25,570	2022-03-30 11:46
119,333	43,519	58,076	76,045	0,579	0,452	9303,407	9295,095	15,513	12,688	7,905	-4,769	42,214	8,388	25,570	2022-03-30 11:47
119,833	43,608	58,140	76,794	0,577	0,452	9251,508	9653,935	16,555	12,803	7,650	-4,757	42,022	8,369	25,570	2022-03-30 11:47
120,333	43,638	58,342	76,916	0,576	0,452	9247,063	9612,669	24,977	13,393	7,255	-4,820	42,354	8,402	25,570	2022-03-30 11:48
120,833	43,566	58,424	76,810	0,577	0,452	9332,414	9512,181	21,215	13,174	7,304	-4,784	42,340	8,400	25,476	2022-03-30 11:48
121,333	43,557	58,375	76,861	0,578	0,452	9339,331	9561,283	40,416	13,717	6,874	-4,714	42,190	8,386	25,476	2022-03-30 11:49
121,833	43,583	58,282	76,836	0,579	0,452	9368,372	9596,323	16,904	13,071	7,327	-4,720	42,081	8,375	25,476	2022-03-30 11:49
122,333	43,590	58,277	76,808	0,577	0,452	9355,419	9587,984	15,764	13,076	7,435	-4,799	42,186	8,385	25,476	2022-03-30 11:50
122,833	43,580	58,288	76,887	0,579	0,452	9376,110	9615,810	13,745	13,021	7,507	-4,740	41,906	8,357	25,476	2022-03-30 11:50
123,333	43,556	58,309	76,884	0,577	0,452	9325,859	9610,530	16,342	13,203	7,290	-4,727	42,291	8,396	25,353	2022-03-30 11:51
123,833	43,581	58,301	76,940	0,574	0,452	9299,253	9639,855	13,411	12,789	7,648	-4,729	42,101	8,377	25,353	2022-03-30 11:51
124,333	43,564	58,377	76,950	0,572	0,452	9014,892	9606,674	14,412	13,114	7,461	-4,728	42,417	8,408	25,353	2022-03-30 11:52
124,833	43,575	58,655	77,003	0,578	0,452	9190,021	9493,668	26,332	13,232	7,290	-4,715	42,242	8,391	25,353	2022-03-30 11:52
125,333	43,578	58,642	77,059	0,575	0,452	9168,843	9526,887	37,146	13,558	7,074	-4,749	42,376	8,404	25,354	2022-03-30 11:53
125,833	43,560	58,635	76,987	0,576	0,452	9476,774	9494,670	27,761	13,548	7,047	-4,793	42,080	8,375	25,353	2022-03-30 11:53
126,333	43,568	58,409	76,973	0,576	0,452	9407,261	9598,636	33,292	14,071	6,516	-4,704	42,482	8,414	25,260	2022-03-30 11:54
126,833	43,597	58,337	77,025	0,574	0,452	9166,928	9666,066	38,964	13,960	6,520	-4,781	42,302	8,397	25,260	2022-03-30 11:54
127,333	43,623	58,561	77,115	0,576	0,452	9153,429	9595,340	33,035	13,880	6,556	-4,731	41,838	8,350	25,260	2022-03-30 11:55
127,833	43,600	58,754	77,138	0,575	0,452	9176,466	9513,055	22,304	13,636	6,882	-4,749	42,026	8,369	25,260	2022-03-30 11:55
128,333	43,523	58,733	77,187	0,578	0,452	9304,738	9546,764	14,922	12,745	7,557	-4,731	42,070	8,374	25,166	2022-03-30 11:56
128,833	43,544	58,674	77,207	0,572	0,452	9247,777	9587,129	13,825	12,555	8,032	-4,804	42,042	8,371	25,166	2022-03-30 11:56

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
129,333	0,204	0,690	1,044	-0,237	0,006	0,279	0,802	72,917	22,379	19,242	19,129	19,233	19,262	19,262	19,341	57,636
129,833	0,204	0,680	1,046	-0,239	0,034	0,282	0,803	72,937	22,394	19,215	19,070	19,168	19,208	19,213	19,291	57,657
130,333	0,204	0,689	1,042	-0,240	0,014	0,281	0,802	73,030	22,444	19,279	19,123	19,223	19,254	19,255	19,335	57,653
130,833	0,204	0,680	1,037	-0,241	-0,001	0,281	0,802	73,052	22,449	19,300	19,147	19,240	19,276	19,279	19,352	57,651
131,333	0,204	0,687	1,049	-0,242	-0,002	0,281	0,802	73,013	22,400	19,243	19,104	19,190	19,221	19,225	19,299	57,585
131,833	0,204	0,683	1,042	-0,241	-0,010	0,279	0,801	73,098	22,383	19,279	19,136	19,208	19,244	19,245	19,328	57,534
132,333	0,204	0,699	1,040	-0,236	0,021	0,267	0,802	73,124	22,400	19,301	19,159	19,234	19,269	19,266	19,346	57,520
132,833	0,205	0,709	1,048	-0,240	0,035	0,255	0,801	73,107	22,394	19,732	19,144	19,214	19,246	19,245	19,336	57,528
133,333	0,206	0,718	1,055	-0,240	-0,009	0,252	0,801	73,123	22,462	19,980	19,258	19,229	19,255	19,257	19,345	57,554
133,833	0,206	0,728	1,048	-0,239	0,018	0,240	0,800	73,148	22,506	20,066	19,455	19,242	19,249	19,268	19,358	57,597
134,333	0,206	0,725	1,049	-0,240	0,008	0,250	0,800	73,182	22,501	20,015	19,516	19,243	19,239	19,268	19,355	57,556
134,833	0,205	0,719	1,053	-0,239	-0,021	0,248	0,800	73,207	22,442	20,092	19,558	19,249	19,238	19,272	19,359	57,628
135,333	0,205	0,726	1,049	-0,238	0,001	0,244	0,800	73,141	22,414	20,105	19,578	19,229	19,221	19,245	19,338	57,664
135,833	0,206	0,734	1,052	-0,241	0,024	0,239	0,800	73,159	22,416	20,127	19,620	19,236	19,243	19,264	19,354	57,693
136,333	0,205	0,718	1,049	-0,240	0,004	0,252	0,799	73,222	22,476	20,147	19,641	19,244	19,243	19,270	19,357	57,710
136,833	0,206	0,734	1,050	-0,236	-0,021	0,237	0,798	73,329	22,483	20,170	19,686	19,268	19,275	19,284	19,378	57,598
137,333	0,206	0,725	1,050	-0,238	-0,010	0,247	0,797	73,170	22,412	20,132	19,639	19,203	19,215	19,230	19,322	57,569
137,833	0,207	0,724	1,048	-0,240	0,346	0,249	0,798	73,216	22,403	20,158	19,652	19,214	19,220	19,239	19,328	57,529
138,333	0,205	0,706	1,041	-0,241	0,027	0,262	0,798	73,219	22,421	20,198	19,702	19,242	19,245	19,272	19,355	57,489
138,833	0,208	0,724	1,045	-0,237	0,036	0,243	0,797	73,302	22,462	20,224	19,719	19,246	19,246	19,264	19,360	57,524
139,333	0,210	0,727	1,050	-0,238	0,003	0,246	0,796	73,244	22,446	20,230	19,732	19,251	19,247	19,273	19,357	57,606
139,833	0,207	0,721	1,046	-0,238	0,054	0,253	0,796	73,170	22,375	20,193	19,716	19,208	19,210	19,228	19,319	57,641
140,333	0,205	0,713	1,036	-0,237	0,014	0,255	0,796	73,291	22,470	20,251	19,760	19,239	19,242	19,262	19,356	57,625
140,833	0,207	0,734	1,045	-0,236	-0,027	0,237	0,796	73,206	22,485	20,284	19,795	19,250	19,255	19,282	19,368	57,609
141,333	0,207	0,738	1,047	-0,239	0,028	0,232	0,796	73,218	22,434	20,255	19,768	19,203	19,223	19,244	19,326	57,620
141,833	0,207	0,750	1,053	-0,237	-0,006	0,228	0,795	73,384	22,464	20,317	19,825	19,261	19,261	19,293	19,374	57,647
142,333	0,206	0,733	1,053	-0,238	0,030	0,237	0,795	73,364	22,439	20,329	19,836	19,263	19,272	19,296	19,380	57,688
142,833	0,205	0,742	1,053	-0,238	-0,015	0,234	0,795	73,321	22,420	20,318	19,816	19,235	19,236	19,268	19,351	57,695
143,333	0,204	0,727	1,046	-0,240	0,027	0,246	0,795	73,396	22,434	20,350	19,860	19,273	19,271	19,307	19,383	57,707

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
129,333	43,573	58,714	77,201	0,578	0,452	9345,249	9561,584	12,317	12,040	8,356	-4,746	41,685	8,335	25,127	2022-03-30 11:57
129,833	43,593	58,658	77,282	0,579	0,452	9370,729	9635,063	12,173	12,085	8,471	-4,780	41,794	8,346	25,166	2022-03-30 11:57
130,333	43,605	58,654	77,362	0,577	0,452	9323,559	9677,547	12,166	12,032	8,436	-4,796	41,680	8,335	25,072	2022-03-30 11:58
130,833	43,597	58,663	77,381	0,578	0,452	9352,901	9679,969	12,575	12,219	8,415	-4,813	41,559	8,323	25,072	2022-03-30 11:58
131,333	43,564	58,733	77,342	0,579	0,452	9336,637	9629,524	12,734	12,015	8,438	-4,839	42,214	8,388	25,072	2022-03-30 11:59
131,833	43,561	58,784	77,379	0,577	0,452	9269,631	9614,729	13,495	12,213	8,366	-4,817	41,711	8,338	25,072	2022-03-30 11:59
132,333	43,593	58,844	77,393	0,579	0,452	9276,052	9597,776	14,583	12,495	8,024	-4,720	41,168	8,283	25,166	2022-03-30 12:00
132,833	43,590	58,887	77,411	0,576	0,452	9244,614	9586,238	16,930	12,895	7,649	-4,795	41,730	8,340	25,072	2022-03-30 12:00
133,333	43,563	58,874	77,343	0,576	0,452	9266,984	9555,169	15,518	12,828	7,572	-4,790	42,383	8,405	24,979	2022-03-30 12:01
133,833	43,580	58,871	77,349	0,576	0,452	9293,476	9561,151	18,535	13,386	7,209	-4,781	41,738	8,340	24,979	2022-03-30 12:01
134,333	43,580	58,884	77,390	0,576	0,452	9257,071	9578,689	15,429	12,879	7,508	-4,804	41,780	8,345	24,979	2022-03-30 12:02
134,833	43,588	58,854	77,400	0,573	0,452	9261,451	9593,709	17,437	13,175	7,442	-4,785	42,214	8,388	24,979	2022-03-30 12:02
135,333	43,588	58,852	77,468	0,577	0,452	9343,930	9630,921	16,841	13,193	7,314	-4,750	41,794	8,346	24,979	2022-03-30 12:03
135,833	43,590	58,786	77,474	0,575	0,452	9336,406	9671,344	19,790	13,310	7,174	-4,823	42,450	8,411	24,979	2022-03-30 12:03
136,333	43,590	58,776	77,503	0,576	0,452	9361,682	9680,476	13,158	12,882	7,547	-4,793	42,129	8,379	24,979	2022-03-30 12:04
136,833	43,584	58,801	77,517	0,578	0,452	9314,062	9682,882	20,453	13,382	7,111	-4,729	41,931	8,360	24,854	2022-03-30 12:04
137,333	43,573	58,845	77,536	0,580	0,452	9336,929	9669,145	18,367	13,054	7,401	-4,753	41,812	8,348	24,854	2022-03-30 12:05
137,833	43,578	58,850	77,538	0,577	0,452	9263,095	9671,063	19,087	13,005	7,455	-4,810	41,785	8,345	24,853	2022-03-30 12:05
138,333	43,560	58,980	77,569	0,571	0,452	9144,660	9622,116	14,668	12,572	7,866	-4,824	41,751	8,342	24,854	2022-03-30 12:06
138,833	43,551	59,107	77,583	0,577	0,452	9284,040	9565,893	30,524	13,355	7,297	-4,739	41,903	8,357	24,760	2022-03-30 12:06
139,333	43,595	59,053	77,594	0,576	0,453	9285,863	9600,414	23,897	13,112	7,385	-4,760	41,910	8,358	24,760	2022-03-30 12:07
139,833	43,589	59,020	77,606	0,578	0,452	9342,570	9613,572	17,797	12,831	7,600	-4,768	41,740	8,341	24,760	2022-03-30 12:07
140,333	43,578	58,973	77,611	0,575	0,452	9298,522	9640,188	15,675	12,875	7,650	-4,733	41,345	8,301	24,760	2022-03-30 12:08
140,833	43,585	59,005	77,636	0,576	0,452	9287,251	9640,862	23,452	13,474	7,106	-4,720	42,124	8,379	24,760	2022-03-30 12:08
141,333	43,589	59,054	77,693	0,576	0,452	9295,590	9646,758	21,540	13,552	6,972	-4,780	41,909	8,358	24,666	2022-03-30 12:09
141,833	43,574	59,078	77,684	0,578	0,452	9354,171	9632,183	19,868	13,614	6,827	-4,745	42,019	8,368	24,666	2022-03-30 12:09
142,333	43,596	59,021	77,719	0,577	0,452	9361,485	9670,660	17,440	13,412	7,121	-4,765	42,190	8,386	24,666	2022-03-30 12:10
142,833	43,577	58,972	77,762	0,573	0,452	9307,410	9723,124	14,417	13,484	7,020	-4,756	42,087	8,375	24,666	2022-03-30 12:10
143,333	43,565	59,057	77,809	0,566	0,452	9208,248	9704,154	13,247	13,112	7,394	-4,803	41,935	8,360	24,666	2022-03-30 12:11

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
143,833	0,204	0,709	1,051	-0,239	0,027	0,262	0,795	73,466	22,487	20,358	19,876	19,275	19,271	19,315	19,387	57,648
144,333	0,204	0,712	1,047	-0,240	0,013	0,253	0,794	73,462	22,492	20,387	19,891	19,280	19,273	19,314	19,387	57,593
144,833	0,205	0,724	1,044	-0,240	-0,004	0,248	0,793	73,483	22,470	20,396	19,916	19,293	19,288	19,323	19,397	57,556
145,333	0,205	0,719	1,050	-0,241	-0,018	0,250	0,794	73,540	22,454	20,413	19,936	19,302	19,294	19,336	19,410	57,630
145,833	0,205	0,721	1,052	-0,241	-0,021	0,251	0,793	73,575	22,434	20,405	19,929	19,290	19,286	19,323	19,396	57,588
146,333	0,205	0,717	1,049	-0,238	0,004	0,251	0,793	73,562	22,475	20,429	19,956	19,300	19,302	19,333	19,406	57,566
146,833	0,205	0,724	1,046	-0,238	0,015	0,246	0,792	73,595	22,595	20,477	20,004	19,329	19,332	19,370	19,441	57,556
147,333	0,206	0,741	1,050	-0,241	0,036	0,231	0,792	73,536	22,532	20,457	19,986	19,324	19,307	19,360	19,420	57,577
147,833	0,205	0,733	1,044	-0,239	0,016	0,242	0,791	73,474	22,464	20,428	19,949	19,279	19,273	19,319	19,384	57,528
148,333	0,205	0,733	1,046	-0,237	0,026	0,238	0,792	73,602	22,545	20,447	19,979	19,279	19,280	19,322	19,393	57,533
148,833	0,206	0,729	1,038	-0,240	0,045	0,245	0,791	73,606	22,572	20,493	20,014	19,319	19,308	19,358	19,423	57,418
149,333	0,205	0,726	1,051	-0,236	0,014	0,245	0,790	73,659	22,560	20,506	20,025	19,316	19,311	19,360	19,425	57,186
149,833	0,204	0,712	1,046	-0,241	0,015	0,260	0,790	73,565	22,495	20,505	20,015	19,307	19,316	19,350	19,418	57,272
150,333	0,204	0,708	1,048	-0,239	-0,015	0,258	0,790	73,638	22,481	20,522	20,041	19,326	19,324	19,378	19,434	57,359
150,833	0,204	0,709	1,049	-0,240	-0,001	0,261	0,789	73,592	22,471	20,543	20,050	19,334	19,333	19,380	19,441	57,466
151,333	0,204	0,712	1,052	-0,242	-0,003	0,255	0,790	73,624	22,423	20,550	20,068	19,337	19,340	19,384	19,446	57,993
151,833	0,205	0,710	1,051	-0,245	-0,018	0,257	0,789	73,692	22,435	20,544	20,066	19,321	19,313	19,367	19,429	57,526
152,333	0,216	0,743	1,045	-0,239	-0,007	0,228	0,789	73,738	22,468	20,559	20,077	19,320	19,323	19,371	19,429	57,241
152,833	0,227	0,750	1,039	-0,239	0,057	0,221	0,788	73,865	22,527	20,572	20,092	19,317	19,320	19,371	19,427	57,467
153,333	0,241	0,774	1,047	-0,238	-0,006	0,205	0,788	73,888	22,573	20,601	20,109	19,338	19,332	19,392	19,440	57,907
153,833	0,216	0,763	1,045	-0,240	0,009	0,212	0,788	73,924	22,532	20,603	20,126	19,343	19,335	19,394	19,445	57,848
154,333	0,213	0,766	1,051	-0,238	0,022	0,214	0,787	73,855	22,504	20,596	20,134	19,340	19,327	19,387	19,441	57,763
154,833	0,210	0,754	1,050	-0,240	0,049	0,219	0,787	73,911	22,583	20,627	20,143	19,347	19,345	19,406	19,452	57,286
155,333	0,210	0,769	1,049	-0,237	0,043	0,213	0,787	73,715	22,578	20,624	20,142	19,351	19,342	19,400	19,453	57,328
155,833	0,206	0,743	1,047	-0,241	-0,027	0,234	0,786	73,825	22,497	20,599	20,122	19,329	19,325	19,382	19,432	57,765
156,333	0,205	0,720	1,045	-0,239	-0,007	0,254	0,785	73,858	22,584	20,639	20,155	19,351	19,347	19,405	19,453	57,753
156,833	0,204	0,718	1,044	-0,238	-0,003	0,249	0,785	73,901	22,591	20,626	20,146	19,335	19,327	19,387	19,431	57,617
157,333	0,207	0,726	1,050	-0,240	0,001	0,247	0,785	73,945	22,547	20,628	20,157	19,327	19,324	19,388	19,433	57,644
157,833	0,211	0,736	1,045	-0,237	-0,007	0,231	0,785	73,986	22,599	20,661	20,192	19,353	19,345	19,422	19,457	57,669

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
143,833	43,575	59,277	77,825	0,568	0,453	9200,665	9605,402	11,484	12,553	7,857	-4,783	42,079	8,374	24,666	2022-03-30 12:11
144,333	43,598	59,439	77,830	0,572	0,452	9211,307	9519,912	14,006	13,016	7,597	-4,802	41,781	8,345	24,610	2022-03-30 12:12
144,833	43,717	59,483	77,880	0,571	0,453	9098,550	9527,944	16,256	13,055	7,435	-4,803	42,134	8,380	24,572	2022-03-30 12:12
145,333	43,696	59,510	77,903	0,572	0,452	9171,162	9517,268	15,514	12,971	7,515	-4,811	42,134	8,380	24,572	2022-03-30 12:13
145,833	43,542	59,515	77,939	0,573	0,452	9254,670	9536,853	15,172	12,920	7,515	-4,818	41,901	8,357	24,572	2022-03-30 12:13
146,333	43,439	59,490	77,933	0,573	0,453	9314,002	9555,434	14,676	13,062	7,535	-4,757	41,792	8,346	24,478	2022-03-30 12:14
146,833	43,505	59,416	78,022	0,570	0,453	9217,989	9632,451	15,014	13,068	7,380	-4,752	41,613	8,328	24,478	2022-03-30 12:14
147,333	43,591	59,520	77,985	0,576	0,453	9265,814	9563,087	20,710	13,599	6,940	-4,824	42,281	8,394	24,478	2022-03-30 12:15
147,833	43,617	59,591	78,053	0,573	0,453	9171,716	9557,667	15,001	13,201	7,252	-4,789	42,246	8,391	24,354	2022-03-30 12:15
148,333	43,616	59,689	78,099	0,577	0,453	9245,192	9531,171	18,519	13,454	7,129	-4,740	41,766	8,343	24,478	2022-03-30 12:16
148,833	43,602	59,676	78,128	0,573	0,453	9106,542	9552,630	15,927	13,025	7,365	-4,794	41,558	8,322	24,479	2022-03-30 12:16
149,333	43,553	59,982	78,134	0,575	0,453	9014,955	9408,581	14,593	13,180	7,339	-4,712	42,040	8,371	24,478	2022-03-30 12:17
149,833	43,558	60,619	78,220	0,568	0,453	8960,951	9119,876	13,164	12,600	7,808	-4,814	42,100	8,377	24,354	2022-03-30 12:17
150,333	43,551	60,616	78,258	0,564	0,453	8953,395	9146,816	13,586	12,847	7,749	-4,779	41,842	8,351	24,354	2022-03-30 12:18
150,833	43,501	60,433	78,293	0,565	0,453	9083,854	9251,571	13,581	12,652	7,828	-4,791	42,037	8,370	24,260	2022-03-30 12:18
151,333	43,573	59,858	78,350	0,575	0,453	9545,695	9573,339	15,508	12,865	7,662	-4,831	42,175	8,384	24,354	2022-03-30 12:19
151,833	43,681	59,433	78,364	0,574	0,453	9149,773	9800,972	13,995	12,767	7,716	-4,896	42,040	8,371	24,260	2022-03-30 12:19
152,333	43,693	60,101	78,401	0,574	0,453	8947,698	9486,433	65,655	13,812	6,836	-4,773	41,889	8,356	24,260	2022-03-30 12:20
152,833	43,585	60,832	78,503	0,569	0,453	9080,424	9155,629	106,956	13,932	6,625	-4,771	41,562	8,323	24,260	2022-03-30 12:20
153,333	43,496	60,029	78,558	0,566	0,453	9391,781	9591,304	43,515	14,286	6,154	-4,762	42,059	8,372	24,166	2022-03-30 12:21
153,833	43,494	59,551	78,494	0,579	0,453	9557,978	9806,899	47,561	14,131	6,372	-4,805	41,758	8,342	24,166	2022-03-30 12:21
154,333	43,648	59,656	78,563	0,572	0,453	9283,290	9790,392	30,941	13,985	6,422	-4,751	42,252	8,392	24,167	2022-03-30 12:22
154,833	43,712	59,913	78,677	0,573	0,453	8944,077	9713,024	31,776	13,967	6,556	-4,798	42,036	8,370	24,166	2022-03-30 12:22
155,333	43,564	60,408	78,714	0,576	0,453	9117,946	9493,613	21,465	14,119	6,399	-4,749	41,973	8,364	24,166	2022-03-30 12:23
155,833	43,563	60,455	78,739	0,575	0,453	9389,712	9475,573	18,773	13,459	7,017	-4,821	41,846	8,351	24,073	2022-03-30 12:23
156,333	43,567	59,777	78,788	0,578	0,452	9439,280	9840,476	13,190	12,756	7,625	-4,779	42,076	8,374	24,073	2022-03-30 12:24
156,833	43,588	59,843	78,927	0,579	0,453	9341,725	9884,333	16,687	13,125	7,477	-4,759	41,714	8,338	24,073	2022-03-30 12:24
157,333	43,655	60,037	78,901	0,576	0,453	9276,100	9775,434	20,708	13,050	7,413	-4,800	42,023	8,369	24,073	2022-03-30 12:25
157,833	43,626	60,181	78,926	0,580	0,453	9371,419	9706,204	43,044	13,746	6,918	-4,745	41,742	8,341	23,979	2022-03-30 12:25



## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
158,333	0,219	0,742	1,048	-0,242	0,014	0,234	0,785	74,027	22,610	20,696	20,221	19,372	19,367	19,443	19,478	57,714
158,833	0,210	0,750	1,049	-0,241	0,020	0,223	0,784	74,048	22,506	20,660	20,200	19,355	19,348	19,417	19,455	57,727
159,333	0,207	0,743	1,045	-0,242	0,030	0,234	0,784	74,019	22,506	20,677	20,214	19,358	19,352	19,413	19,459	57,296
159,833	0,207	0,742	1,048	-0,240	-0,018	0,234	0,784	74,061	22,539	20,711	20,255	19,403	19,392	19,464	19,496	57,298
160,333	0,206	0,727	1,052	-0,242	0,028	0,244	0,784	74,064	22,492	20,708	20,244	19,386	19,387	19,463	19,489	57,633
160,833	0,205	0,719	1,046	-0,240	-0,013	0,255	0,783	74,118	22,514	20,711	20,239	19,378	19,371	19,449	19,480	57,405
161,333	0,204	0,702	1,053	-0,241	-0,008	0,265	0,782	74,066	22,489	20,656	20,202	19,346	19,331	19,416	19,437	57,568
161,833	0,204	0,702	1,046	-0,241	0,050	0,265	0,782	74,098	22,492	20,695	20,234	19,364	19,355	19,441	19,467	57,808
162,333	0,204	0,707	1,048	-0,241	-0,030	0,259	0,782	74,171	22,523	20,722	20,271	19,404	19,399	19,472	19,501	57,453
162,833	0,204	0,707	1,052	-0,241	-0,007	0,262	0,782	74,178	22,551	20,711	20,251	19,382	19,368	19,452	19,476	57,651
163,333	0,204	0,711	1,047	-0,246	-0,021	0,255	0,782	74,236	22,479	20,724	20,258	19,390	19,386	19,464	19,488	57,575
163,833	0,204	0,710	1,049	-0,241	-0,010	0,260	0,780	74,268	22,486	20,734	20,280	19,398	19,394	19,471	19,499	57,425
164,333	0,205	0,722	1,042	-0,242	-0,009	0,246	0,780	74,216	22,544	20,739	20,280	19,394	19,385	19,469	19,491	57,916
164,833	0,206	0,727	1,047	-0,240	0,009	0,245	0,780	74,244	22,508	20,740	20,284	19,401	19,393	19,474	19,498	57,841
165,333	0,207	0,738	1,048	-0,241	0,001	0,233	0,780	74,273	22,571	20,770	20,316	19,433	19,424	19,511	19,527	57,354
165,833	0,206	0,726	1,042	-0,236	-0,017	0,246	0,780	74,291	22,601	20,796	20,347	19,453	19,454	19,539	19,552	57,293
166,333	0,205	0,730	1,043	-0,240	0,364	0,243	0,779	74,331	22,654	20,808	20,341	19,466	19,453	19,542	19,555	57,862
166,833	0,205	0,723	1,047	-0,241	0,353	0,247	0,779	74,261	22,659	20,784	20,328	19,427	19,429	19,516	19,528	57,727
167,333	0,205	0,722	1,043	-0,240	-0,008	0,250	0,779	74,270	22,603	20,777	20,311	19,420	19,411	19,503	19,513	57,751
167,833	0,205	0,716	1,053	-0,243	0,003	0,249	0,779	74,345	22,510	20,787	20,338	19,448	19,441	19,525	19,540	57,747
168,333	0,206	0,739	1,049	-0,243	0,035	0,236	0,778	74,338	22,576	20,798	20,350	19,453	19,455	19,532	19,547	57,382
168,833	0,205	0,735	1,052	-0,244	0,042	0,235	0,778	74,350	22,591	20,784	20,340	19,445	19,433	19,530	19,535	57,235
169,333	0,206	0,743	1,051	-0,239	0,028	0,234	0,777	74,423	22,619	20,823	20,373	19,477	19,466	19,553	19,565	57,417
169,833	0,205	0,726	1,046	-0,244	0,017	0,244	0,777	74,452	22,617	20,820	20,373	19,466	19,461	19,550	19,556	57,577
170,333	0,204	0,719	1,045	-0,241	0,011	0,254	0,777	74,479	22,642	20,812	20,356	19,451	19,449	19,541	19,541	58,009
170,833	0,204	0,715	1,046	-0,243	0,008	0,252	0,777	74,481	22,555	20,823	20,387	19,488	19,468	19,563	19,568	57,501
171,333	0,204	0,714	1,041	-0,241	0,006	0,255	0,776	74,466	22,622	20,821	20,389	19,476	19,471	19,561	19,563	57,482
171,833	0,203	0,709	1,045	-0,245	-0,008	0,261	0,776	74,407	22,587	20,827	20,390	19,475	19,469	19,565	19,564	57,509
172,333	0,203	0,700	1,045	-0,244	0,005	0,264	0,775	74,396	22,603	20,798	20,362	19,451	19,448	19,546	19,539	57,667

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
158,333	43,548	60,156	78,995	0,581	0,453	9462,226	9759,252	27,019	13,398	7,012	-4,844	41,944	8,361	24,073	2022-03-30 12:26
158,833	43,543	60,122	79,012	0,576	0,453	9395,167	9787,450	30,692	13,922	6,698	-4,824	41,790	8,346	23,979	2022-03-30 12:26
159,333	43,566	60,176	79,034	0,578	0,453	9125,363	9771,254	19,972	13,483	7,031	-4,833	41,760	8,343	23,979	2022-03-30 12:27
159,833	43,613	60,531	79,065	0,579	0,453	9118,251	9609,482	19,939	13,480	7,012	-4,803	42,074	8,374	23,979	2022-03-30 12:27
160,333	43,603	60,773	79,131	0,577	0,453	9320,474	9515,803	16,683	13,174	7,325	-4,838	42,264	8,393	23,979	2022-03-30 12:28
160,833	43,563	60,685	79,141	0,575	0,454	9163,629	9572,331	13,920	12,712	7,650	-4,809	41,874	8,354	23,854	2022-03-30 12:28
161,333	43,591	61,039	79,230	0,577	0,454	9277,898	9433,046	13,080	12,518	7,943	-4,819	42,324	8,399	23,854	2022-03-30 12:29
161,833	43,610	60,768	79,271	0,575	0,453	9394,486	9580,991	11,653	12,492	7,953	-4,811	41,862	8,353	23,854	2022-03-30 12:29
162,333	43,597	59,925	79,321	0,582	0,453	9286,705	10050,273	14,000	12,778	7,785	-4,826	42,052	8,372	23,906	2022-03-30 12:30
162,833	43,610	60,742	79,321	0,576	0,454	9298,024	9637,346	12,832	12,584	7,856	-4,824	42,028	8,369	23,854	2022-03-30 12:30
163,333	43,625	60,836	79,334	0,572	0,454	9184,390	9594,942	14,586	12,936	7,637	-4,916	41,842	8,351	23,854	2022-03-30 12:31
163,833	43,539	61,174	79,358	0,572	0,454	9131,335	9434,468	12,741	12,653	7,804	-4,810	42,094	8,376	23,760	2022-03-30 12:31
164,333	43,574	61,151	79,437	0,571	0,454	9424,540	9484,883	15,173	13,175	7,368	-4,830	41,456	8,312	23,760	2022-03-30 12:32
164,833	43,601	60,215	79,450	0,575	0,453	9423,105	9965,441	18,784	13,109	7,348	-4,806	42,143	8,381	23,760	2022-03-30 12:32
165,333	43,611	60,408	79,553	0,579	0,453	9156,068	9923,652	24,403	13,637	6,986	-4,814	41,704	8,337	23,760	2022-03-30 12:33
165,833	43,662	61,403	79,481	0,574	0,454	8999,045	9391,039	16,006	13,053	7,386	-4,729	41,724	8,339	23,666	2022-03-30 12:33
166,333	43,593	61,328	79,558	0,572	0,454	9392,669	9462,877	14,907	13,184	7,279	-4,805	41,662	8,333	23,666	2022-03-30 12:34
166,833	43,496	61,008	79,582	0,573	0,454	9380,825	9634,321	15,349	13,126	7,424	-4,819	41,719	8,339	23,666	2022-03-30 12:34
167,333	43,527	60,637	79,560	0,576	0,453	9428,295	9809,676	14,830	12,964	7,507	-4,799	41,746	8,341	23,666	2022-03-30 12:35
167,833	43,662	60,535	79,633	0,578	0,453	9372,433	9902,347	16,341	13,106	7,459	-4,864	42,139	8,380	23,666	2022-03-30 12:35
168,333	43,710	60,898	79,646	0,580	0,454	9120,997	9722,686	18,189	13,397	7,067	-4,858	41,789	8,346	23,666	2022-03-30 12:36
168,833	43,607	61,385	79,694	0,578	0,454	9061,823	9502,165	16,850	13,534	7,036	-4,873	41,827	8,349	23,573	2022-03-30 12:36
169,333	43,516	61,385	79,725	0,578	0,454	9240,690	9522,859	16,595	13,401	7,027	-4,787	42,060	8,373	23,573	2022-03-30 12:37
169,833	43,516	61,093	79,748	0,579	0,454	9371,453	9679,373	16,013	13,165	7,324	-4,884	41,948	8,361	23,573	2022-03-30 12:37
170,333	43,574	60,672	79,824	0,580	0,453	9630,665	9930,610	12,914	12,710	7,633	-4,815	41,825	8,349	23,573	2022-03-30 12:38
170,833	43,654	60,332	79,801	0,575	0,453	9163,523	10089,806	12,490	12,917	7,548	-4,860	42,091	8,376	23,573	2022-03-30 12:38
171,333	43,644	61,270	79,804	0,572	0,454	9109,140	9622,087	12,069	12,845	7,641	-4,823	41,548	8,321	23,479	2022-03-30 12:39
171,833	43,596	61,573	79,853	0,570	0,454	9125,589	9490,793	11,742	12,625	7,836	-4,906	41,429	8,310	23,479	2022-03-30 12:39
172,333	43,542	61,321	79,823	0,572	0,454	9298,872	9601,477	12,244	12,608	7,934	-4,875	41,802	8,347	23,351	2022-03-30 12:40

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
172,833	0,206	0,711	1,048	-0,242	0,001	0,260	0,776	74,433	22,579	20,827	20,392	19,482	19,473	19,569	19,562	57,556
173,333	0,205	0,697	1,044	-0,244	0,049	0,267	0,775	74,411	22,604	20,823	20,386	19,470	19,457	19,553	19,549	57,521
173,833	0,205	0,722	1,044	-0,244	0,011	0,248	0,774	74,459	22,664	20,859	20,416	19,498	19,486	19,585	19,577	57,571
174,333	0,205	0,715	1,039	-0,243	-0,005	0,256	0,774	74,538	22,712	20,885	20,443	19,507	19,501	19,597	19,592	57,575
174,833	0,205	0,723	1,043	-0,244	0,014	0,247	0,774	74,473	22,694	20,881	20,442	19,505	19,497	19,600	19,586	57,694
175,333	0,205	0,716	1,044	-0,242	0,032	0,253	0,774	74,544	22,647	20,892	20,441	19,514	19,513	19,601	19,595	57,777
175,833	0,207	0,727	1,042	-0,242	0,031	0,243	0,774	74,525	22,710	20,890	20,453	19,511	19,508	19,605	19,596	57,375
176,333	0,206	0,724	1,046	-0,244	0,007	0,248	0,773	74,566	22,703	20,903	20,469	19,532	19,519	19,620	19,608	57,363
176,833	0,206	0,723	1,047	-0,241	-0,031	0,249	0,772	74,611	22,733	20,907	20,470	19,534	19,522	19,632	19,611	57,484
177,333	0,205	0,710	1,041	-0,241	0,020	0,260	0,772	74,559	22,691	20,886	20,457	19,508	19,498	19,600	19,588	57,633
177,833	0,206	0,717	1,039	-0,240	0,011	0,250	0,772	74,565	22,739	20,911	20,456	19,526	19,514	19,614	19,599	57,632
178,333	0,205	0,714	1,047	-0,242	0,039	0,259	0,772	74,593	22,673	20,889	20,442	19,503	19,502	19,593	19,582	57,620
178,833	0,205	0,704	1,040	-0,241	0,043	0,261	0,772	74,676	22,715	20,918	20,475	19,539	19,526	19,625	19,608	57,745
179,333	0,204	0,704	1,040	-0,243	0,039	0,267	0,771	74,614	22,710	20,910	20,461	19,520	19,517	19,613	19,595	57,717
179,833	0,205	0,708	1,037	-0,240	0,042	0,256	0,770	74,624	22,753	20,918	20,489	19,544	19,541	19,634	19,617	57,549
180,333	0,205	0,708	1,036	-0,241	0,011	0,264	0,771	74,481	22,674	20,900	20,471	19,520	19,520	19,614	19,596	57,459
180,833	0,204	0,694	1,041	-0,243	0,012	0,272	0,771	74,411	22,712	20,896	20,476	19,522	19,509	19,618	19,594	57,544
181,333	0,204	0,686	1,047	-0,245	0,016	0,281	0,771	74,415	22,719	20,938	20,502	19,549	19,550	19,645	19,624	57,685
181,833	0,203	0,677	1,045	-0,245	0,018	0,287	0,770	74,433	22,740	20,943	20,500	19,553	19,541	19,651	19,628	57,465
182,333	0,203	0,666	1,047	-0,242	0,024	0,295	0,769	74,543	22,757	20,946	20,509	19,560	19,556	19,651	19,631	57,471
182,833	0,203	0,678	1,047	-0,240	-0,011	0,283	0,770	74,475	22,713	20,918	20,481	19,529	19,523	19,614	19,596	57,827
183,333	0,203	0,683	1,046	-0,242	0,028	0,281	0,769	74,538	22,717	20,967	20,529	19,573	19,567	19,669	19,640	57,637
183,833	0,203	0,697	1,049	-0,242	0,007	0,266	0,769	74,643	22,813	20,990	20,560	19,591	19,585	19,684	19,658	57,413
184,333	0,203	0,691	1,041	-0,246	-0,001	0,276	0,769	74,602	22,766	20,972	20,539	19,576	19,566	19,676	19,643	57,573
184,833	0,204	0,696	1,041	-0,243	0,054	0,270	0,768	74,708	22,710	20,979	20,557	19,574	19,576	19,675	19,649	57,554
185,333	0,204	0,691	1,042	-0,242	0,004	0,273	0,768	74,700	22,710	20,966	20,523	19,566	19,557	19,659	19,626	57,491
185,833	0,207	0,722	1,047	-0,242	0,049	0,246	0,768	74,730	22,773	20,959	20,529	19,559	19,556	19,655	19,627	57,459
186,333	0,206	0,723	1,045	-0,245	0,017	0,249	0,768	74,786	22,877	21,006	20,570	19,587	19,576	19,686	19,652	57,599
186,833	0,208	0,739	1,044	-0,245	0,040	0,230	0,767	74,887	22,917	21,022	20,589	19,606	19,595	19,695	19,667	57,877

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
172,833	43,561	61,217	79,853	0,570	0,454	9175,879	9674,235	19,460	12,682	7,792	-4,832	41,855	8,352	23,479	2022-03-30 12:40
173,333	43,570	61,405	79,868	0,570	0,454	9146,743	9592,189	13,667	12,574	8,006	-4,871	41,822	8,349	23,479	2022-03-30 12:41
173,833	43,591	61,393	79,871	0,574	0,454	9230,779	9593,372	14,919	13,129	7,427	-4,876	41,699	8,337	23,351	2022-03-30 12:41
174,333	43,617	61,394	79,913	0,573	0,454	9199,370	9612,868	14,501	12,744	7,666	-4,864	41,605	8,327	23,351	2022-03-30 12:42
174,833	43,700	61,309	79,979	0,573	0,454	9222,873	9690,691	15,176	13,133	7,425	-4,882	41,762	8,343	23,351	2022-03-30 12:42
175,333	43,724	61,193	79,936	0,574	0,454	9285,505	9724,558	18,854	12,926	7,587	-4,830	41,533	8,320	23,351	2022-03-30 12:43
175,833	43,588	61,056	79,958	0,579	0,454	9188,955	9810,208	18,698	13,239	7,294	-4,837	41,927	8,359	23,351	2022-03-30 12:43
176,333	43,479	61,393	79,979	0,578	0,454	9232,818	9650,367	16,863	12,991	7,432	-4,873	41,874	8,354	23,351	2022-03-30 12:44
176,833	43,524	61,454	79,974	0,578	0,454	9280,516	9614,529	18,438	12,962	7,481	-4,812	41,883	8,355	23,257	2022-03-30 12:44
177,333	43,576	61,630	80,011	0,576	0,454	9312,656	9546,590	14,758	12,672	7,801	-4,824	41,729	8,340	23,257	2022-03-30 12:45
177,833	43,580	61,389	80,020	0,571	0,454	9230,259	9671,587	18,779	13,103	7,500	-4,801	41,499	8,317	23,258	2022-03-30 12:45
178,333	43,580	61,439	80,051	0,571	0,455	9231,830	9671,439	16,017	12,596	7,784	-4,837	42,039	8,370	23,258	2022-03-30 12:46
178,833	43,597	61,427	80,056	0,573	0,454	9325,758	9671,736	14,423	12,764	7,843	-4,824	41,869	8,354	23,258	2022-03-30 12:46
179,333	43,615	61,284	80,080	0,579	0,454	9396,524	9761,490	13,995	12,468	7,995	-4,860	41,775	8,344	23,164	2022-03-30 12:47
179,833	43,629	61,363	80,125	0,577	0,454	9245,348	9737,167	18,188	12,909	7,681	-4,792	41,366	8,303	23,070	2022-03-30 12:47
180,333	43,642	61,514	80,102	0,573	0,454	9109,613	9652,116	14,217	12,449	7,915	-4,811	41,371	8,304	23,164	2022-03-30 12:48
180,833	43,558	61,588	80,100	0,572	0,454	9209,547	9610,274	14,337	12,296	8,151	-4,854	41,520	8,319	23,164	2022-03-30 12:48
181,333	43,538	61,542	80,148	0,576	0,454	9370,315	9657,737	12,149	12,037	8,425	-4,899	41,942	8,361	23,164	2022-03-30 12:49
181,833	43,588	61,282	80,161	0,579	0,454	9243,790	9794,108	10,814	11,895	8,597	-4,893	41,822	8,349	23,070	2022-03-30 12:49
182,333	43,626	61,613	80,129	0,577	0,454	9182,219	9613,253	10,936	11,574	8,861	-4,850	41,776	8,344	23,070	2022-03-30 12:50
182,833	43,638	61,699	80,121	0,575	0,454	9390,847	9562,177	12,576	12,113	8,479	-4,799	41,619	8,329	23,070	2022-03-30 12:50
183,333	43,560	61,230	80,101	0,578	0,454	9358,448	9793,493	11,478	12,037	8,420	-4,835	41,498	8,316	23,070	2022-03-30 12:51
183,833	43,576	61,319	80,113	0,578	0,454	9197,238	9763,870	11,985	12,612	7,988	-4,833	41,897	8,356	23,070	2022-03-30 12:51
184,333	43,638	61,529	80,081	0,576	0,454	9240,052	9631,618	11,656	12,121	8,285	-4,911	41,578	8,324	23,070	2022-03-30 12:52
184,833	43,598	61,584	80,066	0,575	0,454	9239,108	9598,068	12,908	12,454	8,103	-4,865	41,919	8,359	22,976	2022-03-30 12:52
185,333	43,570	61,453	80,130	0,575	0,454	9215,411	9703,500	12,244	12,342	8,178	-4,834	41,853	8,352	23,070	2022-03-30 12:53
185,833	43,603	61,663	80,126	0,579	0,454	9233,247	9586,662	22,056	13,239	7,376	-4,842	41,984	8,365	22,976	2022-03-30 12:53
186,333	43,606	61,550	80,085	0,578	0,454	9312,292	9619,148	17,777	12,968	7,459	-4,899	41,727	8,339	22,976	2022-03-30 12:54
186,833	43,593	61,442	80,137	0,576	0,454	9461,220	9703,524	29,273	13,715	6,908	-4,900	41,668	8,334	22,851	2022-03-30 12:54

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
187,333	0,207	0,734	1,038	-0,244	0,015	0,240	0,766	74,864	22,848	20,990	20,556	19,564	19,567	19,671	19,635	57,714
187,833	0,206	0,733	1,044	-0,247	-0,009	0,240	0,766	74,859	22,810	20,987	20,546	19,573	19,566	19,675	19,638	57,610
188,333	0,204	0,718	1,048	-0,245	0,051	0,255	0,766	74,855	22,809	21,000	20,572	19,610	19,607	19,711	19,676	57,348
188,833	0,204	0,706	1,045	-0,247	0,021	0,262	0,766	74,869	22,710	20,970	20,538	19,613	19,597	19,697	19,666	57,509
189,333	0,204	0,699	1,039	-0,246	0,012	0,269	0,766	74,921	22,755	20,969	20,547	19,614	19,598	19,705	19,674	57,426
189,833	0,205	0,708	1,044	-0,244	0,017	0,258	0,765	74,928	22,690	20,943	20,518	19,594	19,586	19,684	19,655	57,737
190,333	0,204	0,698	1,049	-0,243	-0,002	0,271	0,764	74,971	22,781	20,982	20,557	19,634	19,613	19,721	19,690	57,768
190,833	0,204	0,696	1,041	-0,246	0,056	0,269	0,764	74,976	22,819	20,988	20,562	19,626	19,615	19,713	19,685	57,727
191,333	0,204	0,698	1,045	-0,245	0,028	0,270	0,764	74,872	22,786	20,984	20,559	19,626	19,620	19,715	19,691	57,414
191,833	0,204	0,709	1,047	-0,250	0,015	0,255	0,763	74,957	22,745	20,936	20,520	19,603	19,589	19,699	19,665	57,419
192,333	0,204	0,715	1,052	-0,246	0,007	0,258	0,763	74,975	22,777	20,925	20,535	19,630	19,609	19,708	19,688	57,465
192,833	0,204	0,709	1,056	-0,246	0,009	0,258	0,763	74,976	22,824	20,917	20,299	19,635	19,634	19,718	19,695	57,557
193,333	0,204	0,715	1,047	-0,243	0,040	0,253	0,763	74,990	22,806	20,870	69,787	19,626	19,640	19,706	19,685	57,750
193,833	0,208	0,734	1,048	-0,245	0,020	0,237	0,763	75,094	22,829	20,841	49,565	19,640	19,660	19,711	19,695	57,697
194,333	0,206	0,727	1,046	-0,245	-0,008	0,245	0,763	75,053	22,840	20,804	20,015	19,646	19,631	19,705	19,695	57,621
194,833	0,206	0,733	1,049	-0,245	0,044	0,238	0,762	75,070	22,829	20,777	20,074	19,628	19,607	19,685	19,682	57,626
195,333	0,205	0,723	1,050	-0,246	0,024	0,251	0,762	75,008	22,856	20,747	20,087	19,614	19,599	19,666	19,670	57,575
195,833	0,204	0,715	1,050	-0,247	-0,021	0,253	0,761	74,927	22,799	20,714	20,099	19,609	19,594	19,656	19,661	57,597
196,333	0,204	0,704	1,051	-0,247	0,011	0,265	0,761	74,957	22,814	20,690	20,109	19,639	19,617	19,679	19,691	57,690
196,833	0,204	0,704	1,048	-0,248	0,026	0,263	0,761	74,986	22,808	20,621	20,057	19,615	19,585	19,650	19,666	57,548
197,333	0,204	0,698	1,053	-0,249	0,013	0,270	0,761	74,930	22,820	20,564	20,015	19,612	19,598	19,646	19,665	57,515
197,833	0,204	0,707	1,043	-0,247	0,018	0,260	0,760	74,953	22,855	20,518	20,001	19,625	19,593	19,640	19,661	57,624
198,333	0,204	0,699	1,044	-0,246	0,003	0,271	0,760	74,892	22,824	20,482	19,960	19,609	19,582	19,608	19,642	57,548
198,833	0,204	0,701	1,053	-0,249	0,008	0,265	0,760	74,985	22,869	20,480	19,993	19,650	19,626	19,650	19,687	57,558
199,333	0,204	0,699	1,046	-0,247	0,012	0,268	0,760	74,949	22,855	20,433	19,947	19,654	19,626	19,650	19,689	57,535
199,833	0,204	0,702	1,051	-0,250	0,011	0,265	0,759	75,001	22,739	20,394	19,913	19,665	19,636	19,639	19,694	57,521
200,333	0,204	0,692	1,042	-0,248	0,020	0,274	0,758	74,921	22,619	20,344	19,886	19,640	19,623	19,608	19,670	57,520
200,833	0,205	0,697	1,036	-0,245	0,008	0,266	0,758	74,915	22,679	20,315	19,865	19,611	19,598	19,588	19,644	57,645
201,333	0,204	0,700	1,042	-0,246	-0,022	0,269	0,758	74,912	22,677	20,341	19,868	19,620	19,601	19,582	19,647	57,714

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
187,333	43,578	60,930	80,204	0,576	0,454	9375,572	9996,335	18,280	13,194	7,206	-4,886	41,535	8,320	22,851	2022-03-30 12:55
187,833	43,605	61,122	80,115	0,576	0,454	9276,262	9860,620	18,944	13,266	7,203	-4,940	41,815	8,348	22,851	2022-03-30 12:55
188,333	43,632	61,708	80,147	0,574	0,454	9051,717	9577,719	13,247	12,765	7,651	-4,897	41,808	8,347	22,851	2022-03-30 12:56
188,833	43,601	61,797	80,117	0,574	0,454	9191,955	9510,938	13,072	12,701	7,866	-4,933	41,565	8,323	22,851	2022-03-30 12:56
189,333	43,566	61,746	80,202	0,578	0,454	9209,943	9585,498	13,668	12,371	8,077	-4,925	41,827	8,349	22,851	2022-03-30 12:57
189,833	43,587	61,664	80,106	0,575	0,454	9368,711	9579,563	15,012	12,816	7,745	-4,877	41,756	8,342	22,758	2022-03-30 12:57
190,333	43,599	61,444	80,180	0,575	0,454	9372,942	9729,123	12,070	12,335	8,128	-4,866	42,212	8,388	22,758	2022-03-30 12:58
190,833	43,603	61,348	80,227	0,580	0,454	9422,840	9794,775	12,317	12,474	8,061	-4,927	41,575	8,324	22,758	2022-03-30 12:58
191,333	43,638	61,250	80,242	0,580	0,454	9200,512	9851,821	13,251	12,374	8,086	-4,909	41,782	8,345	22,757	2022-03-30 12:59
191,833	43,625	61,588	80,224	0,582	0,454	9229,308	9669,250	13,001	13,003	7,645	-4,999	41,769	8,344	22,664	2022-03-30 12:59
192,333	43,560	61,592	80,203	0,580	0,454	9274,880	9656,095	11,892	12,675	7,753	-4,926	42,079	8,374	22,663	2022-03-30 13:00
192,833	43,564	61,633	80,218	0,574	0,454	9246,145	9649,808	13,329	12,871	7,728	-4,927	42,086	8,375	22,663	2022-03-30 13:00
193,333	43,577	61,492	80,344	0,578	0,454	9426,282	9779,786	14,919	12,978	7,602	-4,861	42,007	8,367	22,663	2022-03-30 13:01
193,833	43,589	61,267	80,213	0,575	0,454	9337,955	9828,805	23,318	13,408	7,105	-4,891	41,892	8,356	22,663	2022-03-30 13:01
194,333	43,616	61,528	80,259	0,573	0,454	9228,575	9721,609	16,513	13,132	7,358	-4,901	41,710	8,338	22,663	2022-03-30 13:02
194,833	43,608	61,590	80,259	0,572	0,454	9218,816	9693,445	17,865	13,351	7,130	-4,898	42,005	8,367	22,570	2022-03-30 13:02
195,333	43,578	61,714	80,327	0,575	0,454	9254,514	9662,342	13,657	12,828	7,523	-4,928	42,031	8,370	22,664	2022-03-30 13:03
195,833	43,578	61,681	80,322	0,575	0,454	9278,273	9673,098	12,415	12,927	7,595	-4,935	41,926	8,359	22,570	2022-03-30 13:03
196,333	43,574	61,561	80,377	0,573	0,454	9300,122	9758,982	12,826	12,411	7,959	-4,943	42,205	8,387	22,570	2022-03-30 13:04
196,833	43,576	61,661	80,385	0,575	0,454	9251,835	9717,182	13,074	12,635	7,895	-4,969	42,095	8,376	22,476	2022-03-30 13:04
197,333	43,584	61,692	80,352	0,576	0,454	9240,479	9681,198	12,495	12,395	8,086	-4,981	42,285	8,395	22,570	2022-03-30 13:05
197,833	43,583	61,689	80,431	0,573	0,454	9250,263	9728,995	13,325	12,784	7,795	-4,938	41,702	8,337	22,476	2022-03-30 13:05
198,333	43,562	61,706	80,449	0,574	0,454	9234,583	9731,904	13,321	12,309	8,129	-4,919	41,729	8,340	22,548	2022-03-30 13:06
198,833	43,551	61,781	80,483	0,575	0,454	9265,095	9705,642	14,744	12,625	7,941	-4,977	42,137	8,380	22,476	2022-03-30 13:06
199,333	43,569	61,728	80,448	0,575	0,454	9236,230	9721,751	13,065	12,409	8,031	-4,947	41,645	8,331	22,476	2022-03-30 13:07
199,833	43,591	61,776	80,446	0,575	0,454	9208,347	9692,559	13,407	12,485	7,943	-5,001	41,993	8,366	22,476	2022-03-30 13:07
200,333	43,597	61,863	80,454	0,573	0,454	9187,045	9653,040	13,313	12,220	8,228	-4,956	41,565	8,323	22,351	2022-03-30 13:08
200,833	43,583	61,787	80,544	0,576	0,454	9313,160	9736,510	15,507	12,601	7,975	-4,891	41,807	8,347	22,351	2022-03-30 13:08
201,333	43,584	61,694	80,497	0,576	0,454	9368,974	9762,503	12,311	12,299	8,083	-4,911	41,806	8,347	22,351	2022-03-30 13:09

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
201,833	0,204	0,698	1,057	-0,244	0,039	0,267	0,758	75,026	22,708	20,362	19,864	19,617	19,604	19,568	19,640	57,523
202,333	0,203	0,691	1,056	-0,243	0,041	0,279	0,758	75,045	22,739	20,401	19,882	19,611	19,612	19,573	19,639	57,484
202,833	0,204	0,680	1,056	-0,243	0,042	0,283	0,756	74,974	22,789	20,417	19,893	19,616	19,610	19,569	19,634	57,645
203,333	0,204	0,660	1,049	-0,240	0,005	0,306	0,756	74,857	22,816	20,436	19,910	19,620	19,605	19,566	19,631	57,651
203,833	0,203	0,656	1,053	-0,242	0,009	0,299	0,756	74,875	22,782	20,442	19,924	19,618	19,608	19,552	19,621	57,718
204,333	0,204	0,670	1,040	-0,244	0,044	0,291	0,756	74,894	22,789	20,449	19,918	19,597	19,603	19,536	19,607	57,487
204,833	0,205	0,684	1,041	-0,246	0,031	0,277	0,756	74,926	22,786	20,466	19,934	19,608	19,610	19,536	19,605	57,516
205,333	0,205	0,692	1,046	-0,246	-0,005	0,273	0,755	74,954	22,725	20,445	19,937	19,580	19,586	19,506	19,580	57,513
205,833	0,206	0,703	1,046	-0,248	0,008	0,261	0,755	74,976	22,744	20,467	19,964	19,595	19,610	19,526	19,600	57,389
206,333	0,205	0,705	1,052	-0,248	0,008	0,263	0,755	74,912	22,639	20,467	19,966	19,608	19,615	19,527	19,597	57,548
206,833	0,206	0,713	1,041	-0,244	0,018	0,258	0,755	74,953	22,586	20,444	19,939	19,555	19,569	19,488	19,556	57,734
207,333	0,205	0,702	1,041	-0,244	0,053	0,263	0,755	75,020	22,589	20,480	19,988	19,590	19,598	19,505	19,584	57,343
207,833	0,205	0,714	1,043	-0,246	-0,011	0,256	0,755	75,059	22,667	20,515	20,014	19,608	19,612	19,520	19,599	57,734
208,333	0,205	0,715	1,043	-0,243	0,056	0,252	0,754	75,006	22,632	20,521	20,017	19,604	19,611	19,507	19,592	57,773
208,833	0,210	0,740	1,045	-0,243	0,019	0,231	0,753	75,054	22,720	20,508	19,995	19,573	19,583	19,478	19,559	57,210
209,333	0,208	0,734	1,045	-0,246	0,015	0,241	0,753	75,127	22,722	20,538	20,028	19,597	19,614	19,516	19,590	57,538
209,833	0,212	0,735	1,044	-0,245	0,010	0,237	0,753	75,129	22,653	20,514	20,000	19,558	19,578	19,471	19,549	57,605
210,333	0,206	0,727	1,044	-0,243	0,036	0,244	0,753	75,258	22,723	20,572	20,060	19,604	19,624	19,514	19,588	57,799
210,833	0,213	0,750	1,042	-0,243	-0,024	0,225	0,753	75,243	22,699	20,591	20,082	19,604	19,626	19,525	19,596	57,630
211,333	0,208	0,715	1,047	-0,242	-0,022	0,261	0,753	75,100	22,684	20,582	20,056	19,577	19,604	19,499	19,566	57,877
211,833	0,205	0,695	1,048	-0,244	-0,008	0,271	0,752	75,025	22,715	20,582	20,063	19,561	19,576	19,469	19,549	57,663
212,333	0,204	0,685	1,043	-0,245	0,037	0,280	0,752	75,082	22,662	20,625	20,116	19,596	19,617	19,509	19,584	57,550
212,833	0,204	0,691	1,045	-0,243	-0,010	0,274	0,752	75,102	22,720	20,630	20,129	19,583	19,609	19,504	19,575	57,544
213,333	0,204	0,682	1,040	-0,245	-0,009	0,280	0,752	75,071	22,705	20,661	20,148	19,610	19,621	19,523	19,590	57,347
213,833	0,208	0,706	1,047	-0,242	0,004	0,259	0,752	75,132	22,739	20,667	20,161	19,607	19,633	19,528	19,594	57,352
214,333	0,213	0,711	1,046	-0,242	-0,026	0,259	0,750	75,170	22,722	20,662	20,144	19,584	19,612	19,496	19,569	57,655
214,833	0,208	0,714	1,043	-0,243	0,037	0,252	0,750	75,098	22,684	20,651	20,141	19,573	19,590	19,480	19,549	57,686
215,333	0,208	0,730	1,046	-0,244	0,014	0,242	0,750	75,133	22,718	20,657	20,132	19,561	19,580	19,473	19,541	57,408
215,833	0,208	0,729	1,040	-0,246	-0,029	0,245	0,750	75,256	22,763	20,725	20,194	19,623	19,638	19,534	19,601	57,513

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
201,833	43,598	61,763	80,483	0,576	0,454	9231,987	9719,728	12,655	12,559	8,008	-4,878	42,266	8,393	22,351	2022-03-30 13:09
202,333	43,611	61,950	80,490	0,574	0,454	9170,080	9628,247	11,217	12,073	8,367	-4,870	42,103	8,377	22,351	2022-03-30 13:10
202,833	43,620	61,770	80,526	0,576	0,454	9292,196	9733,598	13,143	12,080	8,495	-4,865	42,247	8,391	22,258	2022-03-30 13:10
203,333	43,587	61,800	80,505	0,568	0,454	9187,087	9708,869	11,474	11,187	9,176	-4,807	41,954	8,362	22,258	2022-03-30 13:11
203,833	43,538	61,731	80,431	0,573	0,454	9349,187	9712,737	11,481	11,716	8,978	-4,833	41,712	8,338	22,258	2022-03-30 13:11
204,333	43,581	61,819	80,487	0,574	0,454	9191,305	9691,388	12,998	11,772	8,739	-4,879	41,478	8,314	22,258	2022-03-30 13:12
204,833	43,666	61,957	80,478	0,580	0,454	9239,216	9616,183	15,842	12,260	8,300	-4,926	41,604	8,327	22,258	2022-03-30 13:12
205,333	43,752	61,852	80,418	0,579	0,454	9162,034	9641,020	14,576	12,238	8,192	-4,915	41,929	8,360	22,164	2022-03-30 13:13
205,833	43,640	61,963	80,398	0,575	0,454	9097,236	9570,050	17,770	12,751	7,838	-4,952	41,779	8,345	22,164	2022-03-30 13:13
206,333	43,489	62,200	80,361	0,572	0,455	9247,144	9433,610	15,929	12,528	7,876	-4,953	41,882	8,355	22,164	2022-03-30 13:14
206,833	43,433	61,871	80,385	0,573	0,454	9421,237	9610,656	17,435	12,720	7,727	-4,888	41,741	8,341	22,164	2022-03-30 13:14
207,333	43,525	61,450	80,380	0,580	0,454	9224,602	9817,647	14,593	12,617	7,904	-4,882	41,600	8,327	22,164	2022-03-30 13:15
207,833	43,674	61,955	80,355	0,574	0,454	9283,348	9552,561	15,336	12,895	7,670	-4,923	41,661	8,333	22,164	2022-03-30 13:15
208,333	43,705	61,774	80,351	0,577	0,454	9334,083	9641,010	19,072	13,016	7,568	-4,865	41,784	8,345	22,071	2022-03-30 13:16
208,833	43,583	61,620	80,431	0,578	0,454	9069,371	9766,693	30,260	13,583	6,940	-4,857	41,749	8,342	22,071	2022-03-30 13:16
209,333	43,522	62,082	80,404	0,578	0,454	9314,239	9508,954	23,889	13,212	7,219	-4,915	41,523	8,319	22,071	2022-03-30 13:17
209,833	43,600	61,886	80,385	0,580	0,454	9343,971	9597,645	36,719	13,523	7,096	-4,893	42,025	8,369	22,071	2022-03-30 13:17
210,333	43,585	61,484	80,475	0,577	0,454	9440,768	9849,109	16,765	13,158	7,324	-4,860	41,812	8,348	22,071	2022-03-30 13:18
210,833	43,575	61,120	80,427	0,574	0,454	9281,762	10014,759	36,798	13,695	6,745	-4,854	41,837	8,350	22,071	2022-03-30 13:18
211,333	43,618	61,337	80,410	0,577	0,454	9463,070	9893,089	16,175	12,410	7,818	-4,843	42,159	8,382	21,977	2022-03-30 13:19
211,833	43,641	61,264	80,453	0,580	0,453	9358,955	9948,551	14,579	12,354	8,128	-4,886	41,958	8,362	21,977	2022-03-30 13:19
212,333	43,600	61,378	80,418	0,582	0,454	9345,473	9877,124	12,147	12,119	8,406	-4,908	41,547	8,321	21,977	2022-03-30 13:20
212,833	43,580	61,526	80,417	0,577	0,454	9270,286	9801,052	14,087	12,317	8,234	-4,860	41,884	8,355	21,977	2022-03-30 13:20
213,333	43,565	61,791	80,421	0,578	0,454	9166,255	9674,714	14,918	12,062	8,385	-4,895	42,047	8,371	21,977	2022-03-30 13:21
213,833	43,609	62,534	80,391	0,575	0,454	9091,422	9272,375	26,735	12,813	7,759	-4,839	42,250	8,391	21,977	2022-03-30 13:21
214,333	43,590	62,298	80,403	0,571	0,454	9246,345	9399,739	30,772	12,700	7,760	-4,837	41,808	8,347	21,852	2022-03-30 13:22
214,833	43,547	61,918	80,431	0,574	0,454	9334,919	9605,120	21,116	12,987	7,547	-4,865	41,553	8,322	21,852	2022-03-30 13:22
215,333	43,569	62,004	80,421	0,575	0,454	9160,790	9556,924	24,481	13,270	7,253	-4,888	41,547	8,321	21,852	2022-03-30 13:23
215,833	43,622	61,889	80,420	0,571	0,454	9124,552	9614,547	22,217	13,098	7,337	-4,918	41,135	8,280	21,852	2022-03-30 13:23



## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
216,333	0,207	0,719	1,044	-0,243	0,000	0,249	0,750	75,224	22,763	20,729	20,212	19,618	19,634	19,532	19,596	57,530
216,833	0,210	0,727	1,044	-0,242	-0,007	0,246	0,749	75,161	22,772	20,743	20,221	19,626	19,647	19,547	19,603	57,422
217,333	0,206	0,699	1,043	-0,241	0,042	0,272	0,748	75,014	22,802	20,763	20,228	19,619	19,646	19,542	19,605	57,607
217,833	0,205	0,693	1,041	-0,243	0,018	0,273	0,749	75,021	22,776	20,772	20,247	19,641	19,657	19,567	19,620	57,632
218,333	0,205	0,685	1,052	-0,246	0,050	0,279	0,748	75,058	22,719	20,766	20,256	19,635	19,653	19,552	19,612	57,638
218,833	0,205	0,699	1,042	-0,245	0,019	0,265	0,748	75,112	22,716	20,780	20,263	19,637	19,661	19,562	19,617	57,724
219,333	0,204	0,706	1,045	-0,245	-0,015	0,258	0,747	75,208	22,696	20,795	20,282	19,652	19,671	19,580	19,632	57,568
219,833	0,211	0,744	1,041	-0,245	0,027	0,228	0,747	75,233	22,717	20,792	20,257	19,618	19,640	19,553	19,606	57,606
220,333	0,208	0,736	1,036	-0,243	-0,012	0,236	0,747	75,294	22,772	20,815	20,294	19,638	19,662	19,566	19,626	57,683
220,833	0,206	0,739	1,041	-0,241	-0,023	0,233	0,747	75,274	22,711	20,797	20,270	19,616	19,639	19,551	19,599	57,709
221,333	0,205	0,729	1,043	-0,243	0,021	0,241	0,747	75,259	22,792	20,812	20,280	19,622	19,641	19,553	19,600	57,500
221,833	0,207	0,731	1,046	-0,238	0,050	0,241	0,746	75,184	22,733	20,814	20,275	19,608	19,643	19,547	19,599	57,316
222,333	0,206	0,714	1,048	-0,239	0,001	0,258	0,746	75,186	22,751	20,843	20,328	19,649	19,666	19,582	19,631	57,625
222,833	0,206	0,718	1,044	-0,240	0,047	0,249	0,746	75,184	22,728	20,828	20,295	19,618	19,646	19,559	19,603	57,774
223,333	0,206	0,728	1,046	-0,240	0,006	0,245	0,745	75,206	22,777	20,861	20,322	19,638	19,660	19,586	19,623	57,606
223,833	0,207	0,735	1,042	-0,242	0,017	0,236	0,745	75,182	22,782	20,862	20,331	19,632	19,669	19,581	19,623	57,499
224,333	0,209	0,728	1,037	-0,243	-0,016	0,246	0,745	75,161	22,779	20,862	20,330	19,630	19,661	19,571	19,616	57,516
224,833	0,207	0,721	1,040	-0,245	0,016	0,250	0,744	75,225	22,782	20,899	20,358	19,653	19,680	19,605	19,644	57,658
225,333	0,205	0,714	1,042	-0,241	0,025	0,256	0,744	75,304	22,767	20,896	20,363	19,658	19,678	19,601	19,640	57,577
225,833	0,207	0,717	1,045	-0,246	-0,014	0,252	0,744	75,334	22,786	20,909	20,367	19,659	19,688	19,618	19,650	57,480
226,333	0,207	0,720	1,042	-0,244	0,021	0,254	0,744	75,346	22,792	20,910	20,376	19,664	19,693	19,619	19,649	57,802
226,833	0,205	0,706	1,047	-0,246	0,039	0,262	0,744	75,309	22,741	20,889	20,356	19,643	19,673	19,599	19,631	57,474
227,333	0,204	0,697	1,042	-0,243	0,020	0,272	0,742	75,318	22,809	20,920	20,391	19,665	19,699	19,624	19,656	57,409
227,833	0,205	0,698	1,041	-0,243	-0,011	0,264	0,742	75,399	22,785	20,929	20,393	19,663	19,685	19,625	19,654	57,440
228,333	0,205	0,703	1,040	-0,241	-0,009	0,268	0,742	75,401	22,767	20,935	20,405	19,679	19,704	19,651	19,667	57,485
228,833	0,204	0,681	1,046	-0,247	0,008	0,282	0,742	75,424	22,805	20,932	20,403	19,673	19,697	19,632	19,658	57,594
229,333	0,203	0,677	1,049	-0,243	0,019	0,289	0,742	75,426	22,783	20,920	20,392	19,663	19,688	19,626	19,651	57,518
229,833	0,203	0,671	1,045	-0,245	0,013	0,289	0,741	75,403	22,772	20,936	20,409	19,678	19,694	19,643	19,666	57,393
230,333	0,203	0,676	1,044	-0,244	0,035	0,291	0,741	75,383	22,741	20,944	20,419	19,675	19,715	19,645	19,675	57,478

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
216,333	43,620	61,860	80,465	0,570	0,454	9130,820	9651,688	22,297	13,066	7,483	-4,859	41,834	8,350	21,852	2022-03-30 13:24
216,833	43,564	62,050	80,557	0,570	0,454	9092,407	9606,471	22,664	13,039	7,374	-4,836	41,976	8,364	21,758	2022-03-30 13:24
217,333	43,578	61,987	80,548	0,572	0,454	9227,841	9633,975	16,341	12,189	8,150	-4,817	41,596	8,326	21,758	2022-03-30 13:25
217,833	43,581	61,756	80,636	0,569	0,454	9193,552	9797,625	17,526	12,252	8,187	-4,863	41,976	8,364	21,852	2022-03-30 13:25
218,333	43,563	61,972	80,553	0,571	0,454	9240,169	9645,190	14,077	12,116	8,360	-4,915	42,403	8,407	21,758	2022-03-30 13:26
218,833	43,566	61,806	80,590	0,574	0,454	9344,025	9753,241	16,837	12,654	7,937	-4,896	41,689	8,336	21,758	2022-03-30 13:26
219,333	43,598	61,900	80,652	0,573	0,454	9211,416	9736,984	14,262	12,845	7,745	-4,891	41,592	8,326	21,664	2022-03-30 13:27
219,833	43,634	61,914	80,653	0,573	0,454	9209,692	9726,178	35,809	13,747	6,830	-4,890	41,650	8,332	21,664	2022-03-30 13:27
220,333	43,636	61,925	80,625	0,576	0,454	9316,508	9701,341	17,772	13,308	7,089	-4,860	41,447	8,311	21,664	2022-03-30 13:28
220,833	43,630	61,775	80,691	0,577	0,454	9341,519	9811,458	19,283	13,492	6,988	-4,828	41,847	8,351	21,664	2022-03-30 13:28
221,333	43,612	61,542	80,675	0,575	0,454	9187,848	9926,301	17,346	13,263	7,235	-4,854	41,461	8,313	21,664	2022-03-30 13:29
221,833	43,583	61,996	80,690	0,576	0,454	9103,309	9705,625	20,457	13,241	7,220	-4,758	42,126	8,379	21,664	2022-03-30 13:29
222,333	43,585	62,310	80,698	0,578	0,454	9332,046	9546,654	16,510	12,634	7,738	-4,780	42,070	8,374	21,571	2022-03-30 13:30
222,833	43,598	61,831	80,697	0,577	0,454	9418,869	9788,777	18,188	13,199	7,458	-4,802	41,974	8,364	21,570	2022-03-30 13:30
223,333	43,592	61,778	80,764	0,578	0,454	9314,884	9859,313	17,596	13,068	7,364	-4,810	42,018	8,368	21,570	2022-03-30 13:31
223,833	43,620	61,954	80,755	0,577	0,454	9218,899	9761,244	22,470	13,512	7,073	-4,843	41,548	8,321	21,570	2022-03-30 13:31
224,333	43,627	62,068	80,748	0,578	0,454	9237,585	9691,204	20,867	13,075	7,373	-4,850	41,525	8,319	21,570	2022-03-30 13:32
224,833	43,574	61,947	80,753	0,579	0,454	9388,354	9759,357	20,852	12,967	7,494	-4,907	41,704	8,337	21,476	2022-03-30 13:32
225,333	43,571	61,857	80,787	0,580	0,454	9342,372	9822,982	15,322	12,806	7,672	-4,814	41,755	8,342	21,476	2022-03-30 13:33
225,833	43,600	62,003	80,799	0,571	0,454	9119,448	9753,080	19,952	12,940	7,548	-4,917	41,777	8,344	21,476	2022-03-30 13:33
226,333	43,609	62,002	78,817	0,572	0,454	9336,350	8725,999	17,932	12,820	7,605	-4,881	41,464	8,313	21,476	2022-03-30 13:34
226,833	43,567	61,952	78,833	0,575	0,454	9207,646	8759,605	14,826	12,707	7,854	-4,911	41,764	8,343	21,476	2022-03-30 13:34
227,333	43,588	62,115	78,828	0,573	0,454	9110,042	8676,617	14,405	12,281	8,175	-4,861	41,647	8,331	21,354	2022-03-30 13:35
227,833	43,594	62,350	80,460	0,572	0,454	9115,459	9397,575	18,432	12,742	7,917	-4,860	41,820	8,349	21,354	2022-03-30 13:35
228,333	43,532	62,360	80,542	0,568	0,455	9113,227	9444,377	13,838	12,390	8,041	-4,813	41,477	8,314	21,354	2022-03-30 13:36
228,833	43,393	62,323	80,502	0,572	0,454	9339,529	9437,151	11,892	11,982	8,464	-4,944	41,801	8,347	21,354	2022-03-30 13:36
229,333	43,377	62,091	80,537	0,573	0,454	9330,565	9578,965	11,399	11,766	8,678	-4,862	41,844	8,351	21,354	2022-03-30 13:37
229,833	43,415	62,238	80,557	0,576	0,455	9260,827	9516,222	11,932	11,974	8,661	-4,895	42,165	8,383	21,260	2022-03-30 13:37
230,333	43,441	62,244	80,570	0,577	0,454	9318,747	9514,754	10,561	11,684	8,731	-4,871	41,766	8,343	21,260	2022-03-30 13:38

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
230,833	0,203	0,662	1,044	-0,244	0,027	0,297	0,741	75,350	22,740	20,910	20,385	19,652	19,676	19,623	19,641	57,453
231,333	0,203	0,670	1,042	-0,246	0,030	0,295	0,740	75,328	22,771	20,951	20,429	19,686	19,703	19,662	19,676	57,374
231,833	0,203	0,643	1,042	-0,247	0,030	0,320	0,740	75,342	22,775	20,965	20,442	19,697	19,716	19,666	19,681	57,456
232,333	0,203	0,630	1,046	-0,246	0,005	0,327	0,740	75,218	22,755	20,964	20,444	19,687	19,730	19,667	19,682	57,350
232,833	0,203	0,623	1,040	-0,246	0,041	0,329	0,740	75,215	22,742	20,926	20,403	19,633	19,676	19,618	19,630	57,380
233,333	0,203	0,647	1,052	-0,247	-0,026	0,309	0,739	75,264	22,825	20,981	20,440	19,699	19,724	19,660	19,682	57,372
233,833	0,203	0,647	1,040	-0,245	0,066	0,310	0,739	75,305	22,824	20,973	20,440	19,688	19,712	19,664	19,675	57,345
234,333	0,203	0,662	1,043	-0,244	0,051	0,297	0,739	75,342	22,812	21,007	20,472	19,708	19,741	19,695	19,700	57,464
234,833	0,204	0,652	1,048	-0,246	-0,035	0,309	0,739	75,276	22,785	20,988	20,448	19,686	19,719	19,667	19,671	57,513
235,333	0,203	0,640	1,049	-0,243	-0,025	0,321	0,739	75,265	22,764	20,984	20,459	19,687	19,719	19,669	19,677	57,460
235,833	0,203	0,619	1,046	-0,246	-0,022	0,335	0,739	75,404	22,835	21,020	20,493	19,720	19,754	19,706	19,708	57,365
236,333	0,203	0,629	1,041	-0,247	-0,020	0,325	0,739	75,364	22,835	21,036	20,488	19,716	19,748	19,705	19,707	57,261
236,833	0,203	0,629	1,044	-0,245	0,054	0,324	0,738	75,320	22,827	21,047	20,513	19,734	19,754	19,719	19,716	57,351
237,333	0,204	0,650	1,041	-0,247	-0,001	0,307	0,738	75,274	22,855	21,046	20,523	19,733	19,762	19,723	19,719	57,234
237,833	0,204	0,646	1,046	-0,245	0,027	0,311	0,737	75,283	22,856	21,045	20,513	19,725	19,760	19,720	19,717	57,134
238,333	0,203	0,656	1,043	-0,246	0,004	0,301	0,737	75,337	22,937	21,057	20,532	19,744	19,773	19,738	19,731	57,334
238,833	0,203	0,653	1,047	-0,248	0,030	0,307	0,737	75,286	22,931	21,070	20,530	19,749	19,781	19,734	19,735	57,247
239,333	0,203	0,665	1,045	-0,245	0,003	0,291	0,737	75,203	22,849	21,022	20,480	19,698	19,728	19,693	19,685	57,319
239,833	0,203	0,666	1,040	-0,247	0,021	0,296	0,738	75,145	22,825	21,029	20,501	19,717	19,753	19,715	19,706	57,189
240,333	0,204	0,668	1,042	-0,247	0,012	0,293	0,737	75,130	22,807	21,046	20,513	19,728	19,758	19,712	19,711	57,671
240,833	0,204	0,662	1,056	-0,245	0,056	0,299	0,736	75,130	22,827	21,077	20,533	19,751	19,783	19,742	19,734	57,597
241,333	0,204	0,675	1,043	-0,242	0,033	0,282	0,736	75,180	22,862	21,087	20,549	19,762	19,783	19,750	19,745	57,214
241,833	0,205	0,690	1,047	-0,243	0,031	0,279	0,736	75,193	22,815	21,066	20,537	19,742	19,772	19,735	19,728	57,152
242,333	0,205	0,676	1,044	-0,245	0,020	0,284	0,736	75,234	22,797	21,071	20,543	19,741	19,763	19,734	19,727	57,483
242,833	0,207	0,696	1,041	-0,243	0,017	0,271	0,736	75,245	22,820	21,106	20,582	19,779	19,811	19,770	19,765	57,403
243,333	0,206	0,688	1,039	-0,245	0,041	0,276	0,736	75,185	22,813	21,107	20,574	19,785	19,817	19,776	19,766	57,221
243,833	0,204	0,678	1,043	-0,246	0,005	0,289	0,736	75,168	22,773	21,101	20,580	19,779	19,809	19,779	19,761	57,231
244,333	0,203	0,663	1,035	-0,246	0,015	0,297	0,734	75,128	22,796	21,070	20,553	19,753	19,785	19,744	19,738	57,317
244,833	0,202	0,658	1,042	-0,246	0,023	0,304	0,734	74,996	22,754	21,088	20,565	19,767	19,795	19,759	19,754	57,209

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
230,833	43,408	62,231	80,558	0,577	0,454	9326,509	9510,860	10,476	11,639	8,914	-4,883	41,752	8,342	21,354	2022-03-30 13:38
231,333	43,360	62,296	80,558	0,574	0,454	9259,934	9479,217	10,880	11,609	8,856	-4,918	41,881	8,355	21,260	2022-03-30 13:39
231,833	43,289	62,225	80,510	0,574	0,454	9360,940	9494,262	10,223	10,820	9,587	-4,933	42,093	8,376	21,260	2022-03-30 13:39
232,333	43,274	62,181	80,494	0,576	0,454	9327,286	9506,829	10,639	10,732	9,805	-4,926	41,442	8,311	21,260	2022-03-30 13:40
232,833	43,320	62,147	80,466	0,573	0,454	9276,131	9507,943	10,814	10,686	9,884	-4,914	41,802	8,347	21,260	2022-03-30 13:40
233,333	43,302	62,088	80,345	0,574	0,454	9289,180	9473,670	11,648	11,285	9,256	-4,934	42,191	8,386	21,260	2022-03-30 13:41
233,833	43,296	62,166	80,383	0,578	0,454	9350,033	9450,398	11,737	11,189	9,294	-4,905	41,467	8,313	21,167	2022-03-30 13:41
234,333	43,324	61,985	80,315	0,580	0,454	9439,076	9514,317	11,648	11,684	8,924	-4,875	41,932	8,360	21,166	2022-03-30 13:42
234,833	43,313	61,711	80,253	0,580	0,454	9470,242	9622,879	12,406	11,257	9,261	-4,912	42,085	8,375	21,166	2022-03-30 13:42
235,333	43,335	61,740	80,225	0,581	0,454	9443,864	9589,568	11,028	10,792	9,622	-4,856	41,982	8,365	21,167	2022-03-30 13:43
235,833	43,301	61,794	80,144	0,580	0,454	9388,556	9514,426	10,136	10,442	10,053	-4,927	41,647	8,331	21,166	2022-03-30 13:43
236,333	43,210	61,808	80,135	0,579	0,454	9356,310	9507,061	10,558	10,777	9,747	-4,947	41,443	8,311	21,166	2022-03-30 13:44
236,833	43,078	61,674	80,039	0,580	0,454	9528,372	9527,890	11,557	10,766	9,731	-4,890	41,825	8,349	21,166	2022-03-30 13:44
237,333	42,936	61,407	79,960	0,574	0,454	9447,547	9619,550	13,233	11,357	9,210	-4,947	41,987	8,365	21,073	2022-03-30 13:45
237,833	43,045	61,595	79,890	0,575	0,454	9317,659	9488,467	12,575	11,133	9,322	-4,908	41,583	8,325	21,073	2022-03-30 13:45
238,333	43,143	61,420	79,837	0,573	0,454	9363,936	9549,868	11,236	11,454	9,043	-4,924	41,696	8,336	21,073	2022-03-30 13:46
238,833	43,120	61,546	79,703	0,569	0,454	9251,483	9418,531	10,814	11,148	9,211	-4,953	42,212	8,388	21,073	2022-03-30 13:46
239,333	43,055	61,589	79,666	0,572	0,454	9397,164	9371,709	11,735	11,914	8,722	-4,896	41,558	8,322	21,073	2022-03-30 13:47
239,833	43,106	61,385	79,603	0,571	0,454	9248,810	9449,704	11,231	11,581	8,888	-4,949	41,788	8,345	21,073	2022-03-30 13:47
240,333	43,131	61,373	79,526	0,572	0,453	9565,832	9410,261	13,239	11,735	8,780	-4,947	41,763	8,343	21,073	2022-03-30 13:48
240,833	43,106	61,050	79,478	0,573	0,453	9552,761	9550,875	13,232	11,483	8,981	-4,895	42,003	8,367	20,979	2022-03-30 13:48
241,333	43,072	60,703	79,409	0,577	0,453	9393,825	9693,302	12,994	12,148	8,446	-4,848	41,475	8,314	20,979	2022-03-30 13:49
241,833	43,134	60,967	79,373	0,574	0,453	9260,683	9539,988	14,416	12,062	8,361	-4,865	42,057	8,372	20,979	2022-03-30 13:49
242,333	43,159	61,176	79,296	0,569	0,454	9384,719	9394,621	15,090	12,066	8,519	-4,908	41,714	8,338	20,979	2022-03-30 13:50
242,833	43,072	61,011	79,256	0,571	0,453	9423,367	9451,357	19,958	12,408	8,121	-4,867	41,496	8,316	20,979	2022-03-30 13:50
243,333	43,050	60,884	79,196	0,572	0,453	9324,043	9488,330	16,761	12,146	8,294	-4,896	41,498	8,316	20,979	2022-03-30 13:51
243,833	43,108	60,892	79,173	0,575	0,453	9340,788	9473,060	11,074	11,741	8,665	-4,918	42,100	8,377	20,979	2022-03-30 13:51
244,333	43,134	60,805	79,136	0,578	0,453	9429,130	9493,687	10,059	11,609	8,905	-4,916	41,346	8,301	20,979	2022-03-30 13:52
244,833	43,126	60,742	79,091	0,577	0,453	9352,113	9507,448	8,887	11,303	9,111	-4,913	42,047	8,371	20,854	2022-03-30 13:52

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
245,333	0,202	0,639	1,051	-0,245	0,027	0,318	0,734	74,951	22,784	21,087	20,577	19,780	19,805	19,775	19,765	57,608
245,833	0,202	0,640	1,047	-0,247	-0,037	0,318	0,734	74,932	22,813	21,110	20,592	19,793	19,829	19,794	19,781	57,635
246,333	0,203	0,645	1,050	-0,245	0,032	0,310	0,734	74,985	22,804	21,110	20,587	19,803	19,833	19,789	19,786	57,313
246,833	0,203	0,654	1,038	-0,241	-0,009	0,309	0,734	75,040	22,887	21,147	20,612	19,830	19,850	19,823	19,809	57,113
247,333	0,203	0,650	1,045	-0,244	0,027	0,303	0,734	75,026	22,870	21,091	20,560	19,778	19,799	19,782	19,760	57,488
247,833	0,204	0,678	1,048	-0,243	0,026	0,285	0,733	74,980	22,828	21,098	20,567	19,796	19,811	19,783	19,768	57,463
248,333	0,203	0,667	1,046	-0,244	-0,002	0,295	0,733	74,885	22,810	21,092	20,570	19,789	19,815	19,781	19,771	57,428
248,833	0,204	0,671	1,050	-0,243	0,032	0,290	0,733	74,938	22,846	21,108	20,594	19,809	19,838	19,802	19,790	57,188
249,333	0,204	0,668	1,045	-0,245	0,036	0,293	0,732	74,826	22,763	21,091	20,576	19,790	19,816	19,783	19,770	57,210
249,833	0,203	0,671	1,047	-0,242	0,023	0,292	0,732	74,801	22,819	21,118	20,599	19,834	19,847	19,819	19,801	57,261
250,333	0,204	0,670	1,045	-0,246	0,034	0,289	0,732	74,786	22,808	21,095	20,575	19,789	19,819	19,786	19,770	57,332
250,833	0,204	0,683	1,043	-0,240	0,004	0,281	0,732	74,832	22,813	21,107	20,603	19,824	19,838	19,815	19,796	57,299
251,333	0,204	0,684	1,036	-0,240	0,032	0,280	0,732	74,772	22,796	21,117	20,607	19,832	19,856	19,821	19,807	57,350
251,833	0,205	0,695	1,045	-0,242	0,006	0,269	0,731	74,768	22,824	21,113	20,607	19,827	19,856	19,821	19,804	57,577
252,333	0,206	0,697	1,041	-0,241	-0,006	0,273	0,731	74,726	22,844	21,116	20,610	19,825	19,858	19,816	19,803	57,641
252,833	0,206	0,697	1,045	-0,242	0,014	0,267	0,731	74,709	22,852	21,110	20,584	19,817	19,840	19,817	19,791	57,461
253,333	0,207	0,690	1,046	-0,243	-0,012	0,280	0,731	74,679	22,842	21,107	20,597	19,820	19,853	19,808	19,799	57,136
253,833	0,205	0,674	1,043	-0,239	-0,016	0,286	0,731	74,661	22,874	21,122	20,608	19,836	19,854	19,828	19,812	57,487
254,333	0,205	0,677	1,042	-0,243	-0,001	0,286	0,730	74,629	22,863	21,131	20,619	19,841	19,869	19,834	19,816	57,581
254,833	0,204	0,688	1,046	-0,240	0,009	0,274	0,730	74,581	22,834	21,141	20,614	19,846	19,870	19,844	19,819	57,476
255,333	0,203	0,679	1,049	-0,240	-0,022	0,287	0,730	74,550	22,810	21,137	20,617	19,846	19,871	19,847	19,825	57,267
255,833	0,203	0,685	1,046	-0,242	0,032	0,276	0,729	74,540	22,843	21,139	20,625	19,860	19,877	19,853	19,830	57,271
256,333	0,203	0,687	1,053	-0,240	0,001	0,279	0,729	74,441	22,802	21,124	20,608	19,837	19,861	19,838	19,811	57,335
256,833	0,204	0,686	1,046	-0,241	0,058	0,277	0,729	74,501	22,809	21,118	20,621	19,844	19,876	19,840	19,824	57,064
257,333	0,204	0,685	1,044	-0,241	0,015	0,281	0,729	74,416	22,874	21,131	20,625	19,861	19,884	19,857	19,835	57,523
257,833	0,204	0,686	1,046	-0,240	0,022	0,279	0,729	74,347	22,946	21,135	20,636	19,875	19,902	19,858	19,845	57,421
258,333	0,203	0,677	1,037	-0,238	0,034	0,289	0,728	74,340	22,943	21,148	20,640	19,870	19,897	19,859	19,844	57,608
258,833	0,203	0,675	1,043	-0,244	0,027	0,286	0,728	74,344	22,947	21,142	20,641	19,876	19,892	19,862	19,848	57,596
259,333	0,204	0,675	1,044	-0,242	0,034	0,290	0,728	74,381	22,864	21,141	20,650	19,874	19,900	19,872	19,850	57,155

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
245,333	43,086	60,687	79,048	0,574	0,453	9596,470	9505,096	9,388	10,909	9,546	-4,891	41,902	8,357	20,854	2022-03-30 13:53
245,833	43,072	59,984	78,941	0,576	0,452	9652,450	9806,690	9,286	10,926	9,527	-4,932	41,898	8,356	20,979	2022-03-30 13:53
246,333	43,097	59,479	78,949	0,576	0,452	9419,300	10075,314	10,217	11,317	9,304	-4,903	41,907	8,357	20,854	2022-03-30 13:54
246,833	43,168	60,348	78,879	0,579	0,453	9295,074	9599,752	10,391	11,225	9,264	-4,812	41,691	8,336	20,969	2022-03-30 13:54
247,333	43,202	60,657	78,759	0,576	0,453	9475,076	9377,131	12,901	11,547	9,104	-4,889	41,967	8,363	20,854	2022-03-30 13:55
247,833	43,106	60,195	78,692	0,576	0,453	9519,944	9576,585	12,654	11,980	8,554	-4,858	41,913	8,358	20,760	2022-03-30 13:55
248,333	43,005	60,010	78,604	0,578	0,452	9586,479	9621,928	11,146	11,605	8,836	-4,886	41,772	8,344	20,854	2022-03-30 13:56
248,833	43,111	60,062	78,570	0,580	0,452	9393,698	9578,383	12,739	11,840	8,704	-4,859	41,931	8,360	20,760	2022-03-30 13:56
249,333	43,173	60,061	78,478	0,577	0,452	9313,915	9529,833	11,653	11,739	8,792	-4,891	41,432	8,310	20,760	2022-03-30 13:57
249,833	43,121	60,024	78,453	0,579	0,453	9420,814	9540,120	11,994	11,710	8,753	-4,846	41,665	8,333	20,760	2022-03-30 13:57
250,333	43,042	59,936	78,401	0,578	0,452	9511,107	9549,004	12,408	11,956	8,670	-4,915	41,651	8,332	20,760	2022-03-30 13:58
250,833	43,067	59,691	78,315	0,577	0,452	9451,119	9627,281	11,816	12,186	8,421	-4,807	41,548	8,321	20,760	2022-03-30 13:58
251,333	43,108	59,659	78,277	0,576	0,452	9441,429	9629,391	13,413	12,203	8,395	-4,800	41,669	8,334	20,760	2022-03-30 13:59
251,833	43,127	59,557	78,212	0,577	0,452	9587,415	9647,031	15,504	12,489	8,077	-4,839	41,845	8,351	20,666	2022-03-30 13:59
252,333	43,129	59,278	78,162	0,574	0,452	9590,159	9755,977	16,264	12,197	8,181	-4,824	41,676	8,334	20,666	2022-03-30 14:00
252,833	43,111	58,947	78,074	0,575	0,452	9500,160	9887,191	19,950	12,576	8,008	-4,836	41,937	8,360	20,666	2022-03-30 14:00
253,333	43,123	59,358	78,037	0,575	0,452	9270,146	9660,061	18,617	11,991	8,386	-4,853	41,751	8,342	20,666	2022-03-30 14:01
253,833	43,154	59,871	77,956	0,568	0,452	9364,138	9350,998	16,013	11,910	8,582	-4,790	41,501	8,317	20,666	2022-03-30 14:01
254,333	43,100	59,557	77,903	0,570	0,452	9501,582	9485,959	14,584	11,889	8,569	-4,858	42,013	8,368	20,666	2022-03-30 14:02
254,833	43,038	59,235	77,887	0,572	0,452	9507,107	9641,562	12,654	12,337	8,225	-4,792	41,750	8,342	20,572	2022-03-30 14:02
255,333	43,100	58,988	77,877	0,573	0,452	9349,514	9763,806	10,896	11,836	8,611	-4,803	41,780	8,345	20,636	2022-03-30 14:03
255,833	43,167	59,365	77,791	0,576	0,452	9344,456	9528,313	10,725	12,354	8,272	-4,831	41,641	8,331	20,573	2022-03-30 14:03
256,333	43,176	59,309	77,752	0,572	0,452	9324,676	9536,555	11,468	12,085	8,374	-4,798	42,106	8,377	20,573	2022-03-30 14:04
256,833	43,096	59,642	77,715	0,570	0,452	9167,303	9344,373	12,401	12,199	8,316	-4,822	41,871	8,354	20,573	2022-03-30 14:04
257,333	43,027	59,781	77,707	0,566	0,452	9443,617	9273,649	12,644	12,025	8,420	-4,811	41,567	8,323	20,573	2022-03-30 14:05
257,833	43,059	59,389	77,649	0,572	0,452	9461,548	9437,597	12,570	12,145	8,357	-4,807	42,009	8,368	20,478	2022-03-30 14:05
258,333	43,134	59,130	77,610	0,578	0,452	9631,682	9550,562	10,298	11,798	8,657	-4,762	41,657	8,332	20,478	2022-03-30 14:06
258,833	43,174	58,483	77,623	0,575	0,451	9534,104	9882,791	12,067	11,979	8,569	-4,877	41,988	8,365	20,478	2022-03-30 14:06
259,333	43,152	58,533	77,617	0,577	0,451	9298,148	9858,711	12,661	11,737	8,694	-4,849	41,615	8,328	20,478	2022-03-30 14:07

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
259,833	0,204	0,666	1,049	-0,239	0,020	0,294	0,728	74,398	22,851	21,143	20,639	19,871	19,891	19,868	19,845	57,382
260,333	0,204	0,672	1,044	-0,242	0,016	0,292	0,728	74,398	22,801	21,152	20,653	19,884	19,914	19,878	19,859	57,591
260,833	0,204	0,669	1,050	-0,243	0,036	0,291	0,727	74,327	22,817	21,143	20,642	19,878	19,899	19,867	19,846	57,346
261,333	0,203	0,683	1,041	-0,238	0,019	0,281	0,727	74,324	22,825	21,155	20,657	19,891	19,912	19,877	19,862	57,083
261,833	0,204	0,681	1,049	-0,237	-0,007	0,282	0,726	74,241	22,834	21,147	20,655	19,896	19,914	19,872	19,859	57,165
262,333	0,204	0,685	1,039	-0,240	0,027	0,280	0,726	74,239	22,852	21,148	20,652	19,894	19,914	19,872	19,858	57,748
262,833	0,203	0,671	1,047	-0,243	0,039	0,293	0,726	74,218	22,882	21,147	20,662	19,896	19,911	19,876	19,860	57,547
263,333	0,203	0,663	1,051	-0,242	0,015	0,299	0,726	74,205	22,826	21,151	20,662	19,894	19,920	19,879	19,863	57,500
263,833	0,203	0,654	1,042	-0,237	0,031	0,305	0,726	74,068	22,815	21,119	20,629	19,871	19,886	19,851	19,839	57,483
264,333	0,203	0,657	1,039	-0,239	0,009	0,305	0,726	74,033	22,816	21,147	20,662	19,906	19,915	19,888	19,867	57,407
264,833	0,203	0,648	1,039	-0,238	-0,029	0,308	0,726	74,013	22,800	21,139	20,647	19,895	19,911	19,880	19,863	57,111
265,333	0,203	0,657	1,043	-0,240	0,018	0,304	0,725	73,975	22,837	21,150	20,664	19,906	19,928	19,893	19,873	57,221
265,833	0,203	0,645	1,046	-0,241	0,009	0,311	0,725	73,957	22,882	21,159	20,663	19,905	19,931	19,882	19,870	57,417
266,333	0,203	0,660	1,043	-0,244	0,040	0,301	0,724	73,927	22,879	21,179	20,682	19,918	19,945	19,894	19,882	57,423
266,833	0,203	0,642	1,039	-0,236	-0,005	0,316	0,724	73,935	22,825	21,177	20,674	19,920	19,944	19,905	19,884	57,442
267,333	0,203	0,661	1,042	-0,239	-0,043	0,296	0,724	73,988	22,802	21,179	20,685	19,934	19,955	19,915	19,900	57,406
267,833	0,203	0,660	1,042	-0,238	0,013	0,300	0,724	73,917	22,786	21,167	20,686	19,927	19,947	19,908	19,893	57,402
268,333	0,203	0,665	1,049	-0,236	-0,002	0,296	0,724	73,844	22,822	21,166	20,687	19,929	19,948	19,898	19,894	57,378
268,833	0,203	0,660	1,044	-0,237	0,008	0,300	0,723	73,819	22,829	21,172	20,682	19,935	19,951	19,909	19,895	57,320
269,333	0,204	0,672	1,036	-0,235	0,049	0,288	0,723	73,802	22,792	21,154	20,672	19,923	19,939	19,901	19,885	57,324
269,833	0,204	0,666	1,037	-0,236	-0,014	0,295	0,723	73,784	22,810	21,167	20,685	19,947	19,962	19,917	19,903	57,296
270,333	0,204	0,675	1,040	-0,238	-0,018	0,287	0,723	73,729	22,787	21,140	20,645	19,918	19,931	19,892	19,877	57,230
270,833	0,203	0,667	1,038	-0,232	-0,004	0,296	0,722	73,751	22,864	21,181	20,682	19,946	19,963	19,920	19,909	57,247
271,333	0,203	0,669	1,042	-0,237	0,010	0,289	0,723	73,764	22,878	21,184	20,684	19,948	19,973	19,918	19,911	57,269
271,833	0,203	0,671	1,045	-0,235	0,034	0,293	0,723	73,732	22,840	21,151	20,660	19,925	19,950	19,904	19,893	57,697
272,333	0,202	0,659	1,041	-0,234	-0,008	0,302	0,722	73,659	22,838	21,156	20,674	19,937	19,960	19,911	19,903	57,522
272,833	0,202	0,645	1,040	-0,237	0,007	0,314	0,722	73,599	22,826	21,160	20,674	19,939	19,957	19,916	19,906	57,435
273,333	0,202	0,648	1,043	-0,238	0,036	0,306	0,721	73,604	22,856	21,161	20,668	19,929	19,958	19,909	19,901	57,444
273,833	0,203	0,661	1,049	-0,238	0,037	0,302	0,721	73,533	22,895	21,175	20,685	19,946	19,975	19,922	19,908	57,402

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
259,833	43,109	59,146	77,561	0,575	0,452	9439,851	9520,761	12,982	11,712	8,815	-4,774	41,743	8,341	20,478	2022-03-30 14:07
260,333	43,094	59,046	77,494	0,580	0,451	9683,946	9528,161	12,655	11,731	8,748	-4,841	41,889	8,356	20,478	2022-03-30 14:08
260,833	43,059	58,695	77,485	0,573	0,452	9418,672	9711,823	11,734	11,821	8,722	-4,859	41,850	8,352	20,407	2022-03-30 14:08
261,333	43,112	59,293	77,423	0,577	0,452	9280,180	9374,781	11,895	12,107	8,434	-4,769	41,721	8,339	20,478	2022-03-30 14:09
261,833	43,173	59,413	77,347	0,569	0,452	9156,926	9270,173	12,815	12,117	8,447	-4,743	41,580	8,325	20,354	2022-03-30 14:09
262,333	43,125	58,943	77,311	0,576	0,451	9691,621	9487,495	13,243	12,027	8,407	-4,808	41,660	8,333	20,354	2022-03-30 14:10
262,833	43,050	58,075	77,279	0,580	0,451	9682,623	9913,504	11,149	11,561	8,791	-4,861	42,047	8,371	20,354	2022-03-30 14:10
263,333	43,098	58,243	77,273	0,573	0,451	9503,462	9831,791	10,480	11,512	8,956	-4,830	41,916	8,358	20,354	2022-03-30 14:11
263,833	43,197	58,409	77,227	0,576	0,451	9466,071	9717,334	10,975	11,365	9,148	-4,745	41,674	8,334	20,354	2022-03-30 14:11
264,333	43,192	58,400	77,162	0,573	0,451	9376,479	9693,461	11,403	11,297	9,156	-4,790	41,641	8,331	20,354	2022-03-30 14:12
264,833	43,143	58,435	77,076	0,582	0,451	9354,060	9628,634	11,397	11,288	9,248	-4,769	41,343	8,301	20,354	2022-03-30 14:12
265,333	43,194	58,597	77,025	0,579	0,451	9349,046	9518,256	11,058	11,377	9,117	-4,793	41,879	8,355	20,261	2022-03-30 14:13
265,833	43,136	58,627	76,966	0,580	0,451	9528,634	9473,517	11,329	11,156	9,320	-4,826	41,727	8,339	20,354	2022-03-30 14:13
266,333	42,992	58,500	76,927	0,572	0,451	9506,091	9515,928	11,225	11,441	9,025	-4,887	41,595	8,326	20,261	2022-03-30 14:14
266,833	42,964	58,268	76,835	0,571	0,451	9505,825	9587,390	10,730	11,010	9,466	-4,721	41,564	8,323	20,261	2022-03-30 14:14
267,333	43,047	58,228	76,802	0,572	0,451	9451,110	9592,240	11,723	11,686	8,890	-4,777	41,894	8,356	20,261	2022-03-30 14:15
267,833	43,133	58,225	76,704	0,572	0,451	9397,536	9537,695	11,056	11,470	9,000	-4,767	41,898	8,356	20,261	2022-03-30 14:15
268,333	43,188	58,217	76,689	0,577	0,451	9415,952	9546,098	11,810	11,594	8,876	-4,725	42,107	8,377	20,167	2022-03-30 14:16
268,833	43,197	58,190	76,600	0,576	0,451	9358,646	9513,572	11,730	11,475	8,994	-4,737	41,731	8,340	20,167	2022-03-30 14:16
269,333	43,138	58,169	76,548	0,575	0,451	9381,360	9497,361	13,753	11,886	8,642	-4,694	41,712	8,338	20,167	2022-03-30 14:17
269,833	43,060	58,121	76,484	0,577	0,451	9444,894	9489,061	12,825	11,554	8,841	-4,712	41,450	8,312	20,167	2022-03-30 14:17
270,333	43,000	57,991	76,416	0,575	0,451	9419,580	9516,442	13,064	11,876	8,614	-4,767	41,589	8,326	20,167	2022-03-30 14:18
270,833	43,075	57,932	76,385	0,572	0,451	9325,084	9531,819	11,051	11,550	8,889	-4,646	41,686	8,335	20,073	2022-03-30 14:18
271,333	43,182	57,956	76,341	0,579	0,451	9387,099	9498,209	10,379	11,865	8,684	-4,732	41,487	8,315	20,167	2022-03-30 14:19
271,833	43,186	57,911	76,257	0,574	0,451	9592,778	9475,198	9,714	11,657	8,791	-4,694	41,558	8,322	20,167	2022-03-30 14:19
272,333	43,132	57,604	76,241	0,579	0,451	9587,132	9622,554	9,135	11,389	9,069	-4,684	41,895	8,356	20,073	2022-03-30 14:20
272,833	43,070	57,457	76,191	0,574	0,451	9491,731	9674,695	9,303	11,041	9,423	-4,745	41,774	8,344	20,073	2022-03-30 14:20
273,333	43,078	57,403	76,097	0,574	0,451	9490,832	9648,940	9,895	11,457	9,166	-4,761	41,937	8,360	20,073	2022-03-30 14:21
273,833	43,054	57,457	76,077	0,572	0,451	9439,999	9611,667	10,722	11,411	9,052	-4,759	41,638	8,330	20,073	2022-03-30 14:21



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Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
274,333	0,203	0,661	1,044	-0,237	0,006	0,296	0,721	73,507	22,890	21,180	20,688	19,961	19,979	19,928	19,919	57,385
274,833	0,204	0,671	1,050	-0,235	-0,024	0,290	0,721	73,396	22,866	21,177	20,673	19,960	19,976	19,929	19,917	57,449
275,333	0,203	0,678	1,043	-0,237	0,021	0,285	0,721	73,401	22,922	21,147	20,653	19,929	19,937	19,891	19,885	57,392
275,833	0,203	0,667	1,048	-0,239	0,033	0,298	0,721	73,398	22,915	21,186	20,689	19,958	19,983	19,932	19,921	57,122
276,333	0,203	0,659	1,049	-0,235	0,018	0,299	0,720	73,365	22,900	21,186	20,679	19,956	19,976	19,928	19,914	57,126
276,833	0,203	0,666	1,047	-0,234	0,024	0,295	0,720	73,349	22,881	21,184	20,684	19,964	19,993	19,935	19,921	57,145
277,333	0,203	0,666	1,045	-0,237	0,016	0,292	0,720	73,352	22,843	21,171	20,673	19,945	19,963	19,922	19,906	57,481
277,833	0,203	0,675	1,039	-0,234	0,022	0,289	0,719	73,238	22,856	21,185	20,691	19,967	19,982	19,937	19,923	57,316
278,333	0,203	0,671	1,047	-0,235	-0,013	0,286	0,720	73,231	22,844	21,192	20,706	19,970	19,989	19,935	19,927	57,355
278,833	0,205	0,702	1,048	-0,236	0,029	0,262	0,719	73,216	22,916	21,211	20,713	19,977	19,989	19,954	19,933	57,379
279,333	0,210	0,725	1,047	-0,235	0,017	0,241	0,719	73,213	22,856	21,205	20,713	19,981	19,993	19,950	19,937	57,370
279,833	0,209	0,735	1,047	-0,233	0,012	0,241	0,718	73,092	22,819	21,151	20,657	19,935	19,954	19,904	19,887	57,210
280,333	0,206	0,709	1,046	-0,233	-0,021	0,261	0,718	73,087	22,901	21,197	20,710	19,975	19,998	19,946	19,931	57,246
280,833	0,206	0,700	1,049	-0,232	-0,030	0,266	0,717	73,103	22,904	21,197	20,715	19,984	20,013	19,954	19,942	57,307
281,333	0,204	0,688	1,043	-0,235	0,342	0,279	0,718	73,027	22,860	21,175	20,688	19,962	19,986	19,924	19,916	57,404
281,833	0,203	0,680	1,046	-0,234	0,032	0,282	0,718	73,133	22,850	21,216	20,730	19,998	20,028	19,967	19,956	57,180
282,333	0,203	0,673	1,047	-0,235	0,050	0,290	0,717	73,063	22,863	21,207	20,722	19,994	20,015	19,975	19,950	57,458
282,833	0,204	0,677	1,050	-0,235	0,049	0,285	0,717	73,148	22,850	21,197	20,712	19,988	20,013	19,955	19,940	57,562
283,333	0,204	0,678	1,051	-0,234	0,028	0,283	0,716	73,062	22,900	21,199	20,717	19,993	20,009	19,951	19,946	57,654
283,833	0,205	0,696	1,042	-0,232	0,000	0,267	0,716	73,045	22,875	21,220	20,733	20,011	20,027	19,977	19,959	57,365
284,333	0,206	0,707	1,042	-0,234	0,059	0,263	0,716	72,931	22,859	21,183	20,701	19,974	19,985	19,935	19,923	57,525
284,833	0,207	0,706	1,054	-0,232	-0,026	0,261	0,716	72,916	22,868	21,183	20,690	19,971	19,990	19,932	19,924	57,395
285,333	0,206	0,694	1,048	-0,229	-0,007	0,275	0,716	72,875	22,875	21,193	20,708	19,983	19,998	19,961	19,938	57,175
285,833	0,209	0,707	1,042	-0,232	-0,007	0,254	0,715	72,817	22,856	21,199	20,718	20,000	20,022	19,973	19,953	57,252
286,333	0,213	0,726	1,044	-0,228	0,021	0,248	0,715	72,849	22,888	21,224	20,731	20,020	20,032	19,976	19,968	57,190
286,833	0,216	0,723	1,042	-0,231	0,021	0,245	0,715	72,861	22,911	21,212	20,725	20,019	20,031	19,981	19,962	57,305
287,333	0,215	0,714	1,049	-0,231	0,032	0,259	0,715	72,768	22,843	21,197	20,719	20,018	20,028	19,981	19,964	57,157
287,833	0,206	0,701	1,046	-0,233	-0,005	0,263	0,715	72,771	22,832	21,202	20,728	20,020	20,039	19,979	19,968	57,583
288,333	0,206	0,703	1,042	-0,232	0,000	0,267	0,714	72,779	22,797	21,175	20,701	19,984	20,007	19,950	19,939	57,263

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Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
274,333	43,043	57,444	75,994	0,571	0,451	9428,565	9572,593	12,654	11,722	8,891	-4,743	41,445	8,311	20,073	2022-03-30 14:22
274,833	43,092	57,361	75,896	0,579	0,451	9566,316	9563,039	12,401	11,786	8,714	-4,693	41,741	8,341	20,073	2022-03-30 14:22
275,333	43,145	57,235	75,819	0,573	0,451	9391,711	9588,470	10,719	11,993	8,557	-4,745	41,711	8,338	20,073	2022-03-30 14:23
275,833	43,183	57,209	75,790	0,580	0,451	9303,867	9589,962	10,304	11,503	8,933	-4,773	42,096	8,376	20,073	2022-03-30 14:23
276,333	43,165	57,255	75,705	0,582	0,451	9346,599	9521,253	11,144	11,556	8,981	-4,700	42,029	8,369	19,979	2022-03-30 14:24
276,833	43,144	57,227	75,595	0,579	0,451	9320,919	9481,208	11,477	11,583	8,865	-4,670	42,168	8,383	19,979	2022-03-30 14:24
277,333	43,053	57,190	75,530	0,572	0,451	9505,117	9469,675	11,308	11,755	8,748	-4,737	41,728	8,339	20,073	2022-03-30 14:25
277,833	42,977	57,091	75,532	0,569	0,451	9386,722	9521,849	11,140	11,775	8,677	-4,671	41,436	8,310	19,935	2022-03-30 14:25
278,333	43,101	57,024	75,477	0,572	0,450	9386,081	9517,826	11,638	12,027	8,573	-4,708	41,992	8,366	19,979	2022-03-30 14:26
278,833	43,204	56,935	75,469	0,571	0,450	9307,408	9560,349	16,929	12,710	7,853	-4,722	41,893	8,356	19,854	2022-03-30 14:26
279,333	43,133	56,939	75,411	0,577	0,450	9454,438	9525,239	36,722	13,436	7,220	-4,701	41,900	8,357	19,979	2022-03-30 14:27
279,833	43,056	56,928	75,359	0,575	0,451	9363,352	9509,850	19,287	13,109	7,242	-4,658	41,740	8,341	19,854	2022-03-30 14:27
280,333	43,026	56,926	75,341	0,576	0,450	9424,915	9496,678	17,846	12,590	7,837	-4,669	42,237	8,390	19,854	2022-03-30 14:28
280,833	43,091	56,792	75,331	0,572	0,450	9356,626	9564,610	17,522	12,489	7,972	-4,648	42,170	8,384	19,854	2022-03-30 14:28
281,333	43,159	56,724	75,251	0,572	0,450	9383,747	9554,202	11,891	11,983	8,385	-4,693	41,912	8,358	19,854	2022-03-30 14:29
281,833	43,163	56,764	75,221	0,576	0,451	9293,578	9523,959	11,743	12,068	8,462	-4,673	41,940	8,361	19,854	2022-03-30 14:29
282,333	43,127	57,227	75,207	0,572	0,451	9437,299	9282,526	10,154	11,695	8,714	-4,701	41,876	8,354	19,854	2022-03-30 14:30
282,833	43,094	56,937	75,164	0,564	0,450	9391,843	9396,432	15,507	11,905	8,561	-4,691	42,018	8,368	19,760	2022-03-30 14:30
283,333	43,063	56,509	75,187	0,568	0,450	9534,845	9631,505	13,497	12,047	8,492	-4,676	42,280	8,394	19,760	2022-03-30 14:31
283,833	43,209	56,741	75,134	0,565	0,450	9209,120	9487,021	15,750	12,502	8,010	-4,635	41,668	8,334	19,760	2022-03-30 14:31
284,333	43,340	57,023	75,133	0,569	0,450	9293,190	9338,857	15,590	12,491	7,898	-4,677	41,589	8,326	19,760	2022-03-30 14:32
284,833	43,397	56,954	75,079	0,571	0,450	9189,408	9348,561	24,058	12,709	7,838	-4,634	42,040	8,371	19,760	2022-03-30 14:32
285,333	43,317	57,442	75,078	0,570	0,451	9083,087	9103,811	17,355	12,111	8,242	-4,583	42,053	8,372	19,760	2022-03-30 14:33
285,833	43,231	57,487	75,050	0,562	0,451	9063,499	9062,163	32,264	13,031	7,606	-4,635	41,564	8,323	19,666	2022-03-30 14:33
286,333	43,220	57,674	75,014	0,574	0,451	9223,903	8948,027	32,535	12,957	7,432	-4,569	41,669	8,334	19,666	2022-03-30 14:34
286,833	43,321	57,487	75,091	0,561	0,451	9033,304	9086,020	48,714	13,209	7,357	-4,624	41,716	8,338	19,666	2022-03-30 14:34
287,333	43,321	57,557	75,119	0,564	0,451	8983,265	9059,680	28,574	12,604	7,772	-4,628	42,053	8,372	19,666	2022-03-30 14:35
287,833	43,222	57,512	75,179	0,569	0,451	9408,320	9114,903	17,361	12,591	7,901	-4,654	42,183	8,385	19,666	2022-03-30 14:35
288,333	43,276	57,244	75,155	0,568	0,450	9141,538	9237,099	17,692	12,390	8,014	-4,643	41,647	8,331	19,573	2022-03-30 14:36

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
288,833	0,205	0,687	1,047	-0,230	0,034	0,278	0,714	72,695	22,794	21,173	20,689	19,976	19,989	19,949	19,928	57,538
289,333	0,203	0,683	1,050	-0,234	-0,027	0,285	0,713	72,621	22,818	21,214	20,728	20,024	20,046	19,977	19,973	57,526
289,833	0,203	0,664	1,052	-0,231	-0,002	0,298	0,713	72,617	22,845	21,208	20,727	20,019	20,032	19,990	19,966	57,444
290,333	0,203	0,665	1,050	-0,233	-0,009	0,298	0,713	72,524	22,812	21,169	20,705	20,001	20,023	19,965	19,949	57,795
290,833	0,203	0,660	1,042	-0,232	0,014	0,297	0,713	72,586	22,798	21,178	20,683	19,982	20,003	19,949	19,932	57,735
291,333	0,204	0,685	1,048	-0,233	0,022	0,279	0,712	72,616	22,843	21,224	20,737	20,037	20,048	19,995	19,986	57,592
291,833	0,204	0,677	1,048	-0,231	-0,006	0,286	0,712	72,576	22,795	21,179	20,701	19,990	20,016	19,958	19,947	57,422
292,333	0,204	0,682	1,045	-0,232	-0,004	0,279	0,712	72,546	22,802	21,178	20,711	19,998	20,022	19,959	19,950	57,560
292,833	0,204	0,693	1,046	-0,234	0,029	0,271	0,712	72,669	22,799	21,218	20,744	20,041	20,054	20,003	19,988	57,632
293,333	0,205	0,692	1,050	-0,229	0,004	0,275	0,712	72,666	22,778	21,215	20,734	20,035	20,059	19,999	19,985	57,802
293,833	0,204	0,685	1,047	-0,233	0,037	0,278	0,712	72,643	22,851	21,218	20,738	20,055	20,063	20,014	19,990	57,562
294,333	0,206	0,700	1,047	-0,230	0,009	0,264	0,711	72,668	22,851	21,218	20,738	20,046	20,059	20,012	19,987	57,598
294,833	0,210	0,706	1,053	-0,230	0,043	0,262	0,710	72,588	22,800	21,182	20,713	20,032	20,041	19,989	19,968	57,762
295,333	0,211	0,711	1,042	-0,233	0,037	0,258	0,711	72,654	22,819	21,224	20,750	20,056	20,075	20,018	20,001	57,482
295,833	0,205	0,692	1,049	-0,230	0,001	0,273	0,710	72,616	22,897	21,233	20,763	20,066	20,084	20,035	20,013	57,591
296,333	0,204	0,696	1,056	-0,232	-0,011	0,270	0,710	72,647	22,857	21,232	20,765	20,074	20,080	20,033	20,011	57,658
296,833	0,204	0,688	1,052	-0,232	0,045	0,277	0,710	72,583	22,865	21,221	20,747	20,056	20,076	20,021	19,998	57,654
297,333	0,204	0,690	1,049	-0,229	0,002	0,275	0,710	72,535	22,833	21,207	20,725	20,030	20,054	20,001	19,978	57,613
297,833	0,204	0,675	1,051	-0,229	0,002	0,287	0,709	72,454	22,812	21,203	20,737	20,042	20,059	20,006	19,980	57,621
298,333	0,204	0,685	1,042	-0,227	-0,038	0,279	0,708	72,397	22,788	21,229	20,756	20,075	20,084	20,037	20,014	57,768
298,833	0,204	0,685	1,044	-0,227	-0,018	0,277	0,709	72,426	22,790	21,219	20,754	20,057	20,082	20,025	20,004	57,643
299,333	0,204	0,701	1,041	-0,227	0,012	0,264	0,708	72,386	22,832	21,228	20,758	20,072	20,079	20,032	20,010	57,551
299,833	0,203	0,691	1,048	-0,229	0,016	0,280	0,708	72,357	22,790	21,214	20,749	20,062	20,076	20,030	20,003	57,576
300,333	0,203	0,672	1,044	-0,227	0,013	0,289	0,708	72,332	22,829	21,229	20,762	20,076	20,084	20,038	20,013	57,792
300,833	0,203	0,676	1,049	-0,228	-0,013	0,289	0,708	72,315	22,810	21,229	20,760	20,070	20,091	20,048	20,020	57,642
301,333	0,203	0,664	1,051	-0,227	0,041	0,298	0,708	72,289	22,824	21,244	20,775	20,091	20,107	20,058	20,039	57,744
301,833	0,203	0,660	1,048	-0,227	0,025	0,301	0,707	72,254	22,799	21,238	20,758	20,086	20,114	20,056	20,035	57,799
302,333	0,202	0,656	1,049	-0,229	-0,012	0,303	0,707	72,269	22,841	21,229	20,755	20,085	20,107	20,055	20,029	57,382
302,833	0,202	0,654	1,039	-0,233	-0,027	0,308	0,707	72,256	22,841	21,238	20,781	20,091	20,114	20,056	20,037	57,583

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
288,833	43,330	57,055	75,265	0,560	0,450	9159,151	9387,309	12,993	12,197	8,340	-4,599	42,170	8,384	19,666	2022-03-30 14:36
289,333	43,281	56,964	75,247	0,573	0,450	9401,303	9427,128	10,564	11,885	8,545	-4,670	42,084	8,375	19,573	2022-03-30 14:37
289,833	43,307	56,864	75,293	0,576	0,450	9370,329	9500,660	9,801	11,526	8,929	-4,619	41,969	8,363	19,573	2022-03-30 14:37
290,333	43,376	56,566	75,293	0,577	0,450	9574,872	9641,972	11,064	11,487	8,942	-4,655	41,840	8,351	19,573	2022-03-30 14:38
290,833	43,327	56,375	75,255	0,580	0,450	9614,033	9724,974	10,896	11,700	8,895	-4,634	41,444	8,311	19,573	2022-03-30 14:38
291,333	43,295	56,397	75,227	0,584	0,450	9610,718	9697,666	16,434	12,150	8,380	-4,666	41,934	8,360	19,479	2022-03-30 14:39
291,833	43,335	56,558	75,186	0,583	0,450	9454,439	9597,467	12,903	11,864	8,585	-4,628	41,983	8,365	19,478	2022-03-30 14:39
292,333	43,385	56,434	75,179	0,584	0,450	9518,081	9653,584	13,659	12,197	8,356	-4,647	41,771	8,344	19,478	2022-03-30 14:40
292,833	43,338	56,340	75,124	0,580	0,450	9546,529	9672,968	14,665	12,434	8,120	-4,679	41,949	8,361	19,478	2022-03-30 14:40
293,333	43,240	56,046	75,076	0,583	0,449	9775,012	9794,768	13,741	12,160	8,261	-4,580	42,074	8,374	19,478	2022-03-30 14:41
293,833	43,219	56,053	75,048	0,579	0,449	9552,535	9780,099	14,581	12,176	8,334	-4,664	41,744	8,341	19,478	2022-03-30 14:41
294,333	43,300	56,151	74,997	0,573	0,449	9435,097	9704,439	27,729	12,705	7,918	-4,595	42,255	8,392	19,478	2022-03-30 14:42
294,833	43,354	56,043	74,930	0,580	0,449	9610,471	9720,626	27,377	12,607	7,854	-4,604	42,120	8,379	19,345	2022-03-30 14:42
295,333	43,429	55,972	74,930	0,577	0,450	9329,565	9763,158	26,332	12,733	7,753	-4,652	42,157	8,382	19,478	2022-03-30 14:43
295,833	43,439	56,258	74,894	0,579	0,450	9422,725	9599,946	15,925	12,291	8,197	-4,593	41,984	8,365	19,345	2022-03-30 14:43
296,333	43,297	56,207	74,875	0,580	0,450	9580,174	9613,570	12,411	12,429	8,094	-4,631	42,333	8,400	19,345	2022-03-30 14:44
296,833	43,182	55,963	74,820	0,576	0,449	9589,068	9708,395	13,745	12,049	8,322	-4,648	42,333	8,400	19,345	2022-03-30 14:44
297,333	43,183	55,968	74,753	0,578	0,449	9602,750	9672,013	14,331	12,300	8,239	-4,579	41,850	8,352	19,345	2022-03-30 14:45
297,833	43,354	55,846	74,737	0,577	0,449	9468,217	9720,456	12,398	11,827	8,618	-4,583	41,915	8,358	19,345	2022-03-30 14:45
298,333	43,404	55,787	74,725	0,578	0,449	9550,430	9742,568	13,065	12,147	8,361	-4,543	41,976	8,364	19,251	2022-03-30 14:46
298,833	43,313	55,680	74,688	0,580	0,449	9564,199	9783,753	12,148	12,197	8,318	-4,541	41,869	8,354	19,251	2022-03-30 14:46
299,333	43,241	55,703	74,659	0,582	0,449	9585,560	9755,746	12,989	12,636	7,926	-4,547	41,520	8,319	19,251	2022-03-30 14:47
299,833	43,235	55,622	74,605	0,575	0,449	9487,557	9769,260	10,728	11,980	8,400	-4,572	41,869	8,354	19,251	2022-03-30 14:47
300,333	43,260	55,643	74,579	0,574	0,449	9599,450	9743,806	10,473	11,875	8,669	-4,543	41,880	8,355	19,251	2022-03-30 14:48
300,833	43,327	55,377	74,530	0,575	0,449	9465,551	9859,479	10,979	11,769	8,672	-4,568	41,773	8,344	19,251	2022-03-30 14:48
301,333	43,409	55,508	74,475	0,573	0,449	9443,093	9757,654	10,141	11,525	8,936	-4,533	41,922	8,359	19,251	2022-03-30 14:49
301,833	43,373	55,423	74,447	0,579	0,449	9608,526	9785,283	9,638	11,460	9,016	-4,539	41,883	8,355	19,157	2022-03-30 14:49
302,333	43,272	55,519	74,418	0,573	0,449	9307,205	9725,374	9,131	11,380	9,082	-4,582	41,665	8,333	19,251	2022-03-30 14:50
302,833	43,214	55,657	74,337	0,577	0,449	9544,701	9612,318	8,544	11,217	9,229	-4,661	41,241	8,291	19,158	2022-03-30 14:50

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
303,333	0,202	0,648	1,045	-0,230	0,009	0,305	0,707	72,157	22,789	21,172	20,715	20,036	20,060	20,004	19,981	57,501
303,833	0,203	0,672	1,042	-0,231	0,034	0,287	0,707	72,146	22,774	21,181	20,721	20,051	20,051	20,000	19,981	57,795
304,333	0,206	0,682	1,044	-0,230	0,013	0,281	0,707	72,259	22,828	21,244	20,771	20,092	20,107	20,059	20,034	57,860
304,833	0,206	0,672	1,045	-0,228	0,024	0,294	0,706	72,165	22,806	21,231	20,762	20,085	20,102	20,052	20,028	57,585
305,333	0,203	0,659	1,041	-0,232	0,041	0,296	0,705	72,128	22,791	21,228	20,765	20,090	20,099	20,052	20,028	57,732
305,833	0,204	0,687	1,041	-0,229	0,021	0,279	0,705	72,169	22,873	21,257	20,782	20,109	20,128	20,075	20,049	57,795
306,333	0,204	0,681	1,047	-0,230	-0,003	0,281	0,705	72,079	22,842	21,234	20,755	20,082	20,105	20,051	20,028	57,774
306,833	0,204	0,692	1,045	-0,228	0,018	0,273	0,705	72,150	22,896	21,249	20,775	20,104	20,117	20,061	20,042	57,601
307,333	0,204	0,684	1,039	-0,230	0,032	0,279	0,705	72,130	22,927	21,240	20,757	20,086	20,115	20,059	20,029	57,762
307,833	0,204	0,695	1,047	-0,230	0,002	0,270	0,705	72,052	22,920	21,257	20,782	20,120	20,127	20,083	20,055	57,700
308,333	0,204	0,678	1,045	-0,230	0,021	0,288	0,704	71,923	22,862	21,248	20,770	20,110	20,126	20,072	20,043	57,559
308,833	0,205	0,669	1,044	-0,226	0,039	0,293	0,704	71,869	22,800	21,203	20,728	20,061	20,078	20,026	20,003	57,444
309,333	0,205	0,666	1,041	-0,229	0,007	0,294	0,704	71,900	22,814	21,239	20,760	20,097	20,122	20,066	20,040	57,506
309,833	0,206	0,681	1,042	-0,228	0,004	0,284	0,704	71,937	22,780	21,221	20,762	20,104	20,119	20,069	20,038	57,658
310,333	0,204	0,668	1,046	-0,227	-0,015	0,295	0,703	71,905	22,732	21,218	20,748	20,105	20,113	20,063	20,036	57,553
310,833	0,203	0,681	1,047	-0,229	-0,008	0,279	0,704	71,963	22,753	21,196	20,727	20,069	20,082	20,038	20,009	57,609
311,333	0,204	0,678	1,044	-0,226	0,025	0,287	0,703	71,888	22,832	21,226	20,760	20,109	20,131	20,072	20,048	57,481
311,833	0,204	0,675	1,047	-0,230	-0,018	0,287	0,702	71,763	22,934	21,241	20,771	20,114	20,124	20,072	20,048	57,389
312,333	0,204	0,669	1,050	-0,229	-0,002	0,295	0,702	71,775	22,943	21,229	20,750	20,091	20,110	20,051	20,028	57,560
312,833	0,204	0,666	1,044	-0,229	0,007	0,296	0,702	71,772	22,992	21,265	20,775	20,116	20,137	20,083	20,053	57,421
313,333	0,203	0,655	1,048	-0,228	0,054	0,306	0,702	71,733	22,953	21,257	20,783	20,111	20,139	20,080	20,052	57,543
313,833	0,203	0,657	1,045	-0,230	0,003	0,300	0,702	71,717	22,926	21,243	20,790	20,122	20,136	20,093	20,060	57,672
314,333	0,204	0,666	1,045	-0,234	0,026	0,293	0,701	71,725	22,882	21,245	20,784	20,135	20,151	20,098	20,069	57,781
314,833	0,205	0,676	1,047	-0,232	0,035	0,287	0,701	71,660	22,833	21,193	20,727	20,110	20,119	20,065	20,035	57,566
315,333	0,205	0,671	1,046	-0,230	0,021	0,291	0,701	71,559	22,747	21,136	20,695	20,082	20,089	20,035	20,009	57,866
315,833	0,205	0,680	1,049	-0,231	-0,003	0,280	0,700	71,498	22,784	21,168	20,737	20,143	20,140	20,088	20,061	57,759
316,333	0,205	0,687	1,048	-0,232	-0,013	0,279	0,700	71,501	22,721	21,108	20,675	20,086	20,098	20,041	20,018	57,794
316,833	0,204	0,683	1,044	-0,231	0,011	0,280	0,700	71,482	22,703	21,074	20,641	20,080	20,086	20,036	20,010	57,657
317,333	0,204	0,677	1,047	-0,230	0,028	0,286	0,700	71,567	22,743	21,078	20,661	20,121	20,121	20,067	20,042	57,947

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
303,333	43,235	55,586	74,286	0,579	0,449	9508,113	9621,043	8,205	11,429	9,163	-4,605	41,629	8,330	19,158	2022-03-30 14:51
303,833	43,347	55,308	74,220	0,579	0,449	9621,463	9728,933	12,484	11,977	8,621	-4,622	41,759	8,343	19,158	2022-03-30 14:51
304,333	43,395	54,975	74,191	0,579	0,449	9634,542	9879,198	19,836	12,097	8,431	-4,596	41,517	8,318	19,157	2022-03-30 14:52
304,833	43,321	55,029	74,133	0,577	0,449	9478,322	9819,966	15,499	11,517	8,833	-4,570	41,652	8,332	19,157	2022-03-30 14:52
305,333	43,283	55,074	74,077	0,572	0,449	9514,116	9774,967	11,978	11,688	8,893	-4,630	41,589	8,326	19,064	2022-03-30 14:53
305,833	43,237	55,075	74,011	0,573	0,448	9596,770	9730,566	12,898	12,182	8,356	-4,590	41,450	8,312	19,064	2022-03-30 14:53
306,333	43,239	55,004	73,925	0,576	0,449	9631,036	9728,189	11,981	12,140	8,420	-4,597	42,030	8,370	19,064	2022-03-30 14:54
306,833	43,346	54,869	73,853	0,578	0,448	9486,842	9757,972	12,569	12,313	8,205	-4,567	41,828	8,349	19,064	2022-03-30 14:54
307,333	43,391	54,616	73,845	0,574	0,448	9494,509	9875,437	12,398	12,123	8,374	-4,596	41,116	8,278	19,064	2022-03-30 14:55
307,833	43,316	54,555	73,801	0,576	0,448	9538,789	9888,153	15,157	12,375	8,107	-4,591	42,024	8,369	19,064	2022-03-30 14:55
308,333	43,228	54,763	73,744	0,576	0,448	9493,307	9755,542	13,157	11,766	8,642	-4,607	41,781	8,345	18,970	2022-03-30 14:56
308,833	43,221	54,891	73,661	0,577	0,448	9437,392	9644,798	15,753	11,767	8,785	-4,513	41,747	8,341	18,970	2022-03-30 14:56
309,333	43,317	54,865	73,625	0,576	0,448	9407,810	9642,653	15,578	11,737	8,813	-4,585	41,748	8,341	18,970	2022-03-30 14:57
309,833	43,380	54,784	73,568	0,577	0,448	9482,505	9654,550	16,761	12,036	8,521	-4,559	41,345	8,301	18,970	2022-03-30 14:57
310,333	43,335	54,749	73,494	0,578	0,448	9456,540	9633,352	11,226	11,598	8,862	-4,540	41,909	8,357	18,970	2022-03-30 14:58
310,833	43,261	54,762	73,454	0,578	0,448	9545,023	9606,538	13,065	12,171	8,383	-4,581	42,006	8,367	18,970	2022-03-30 14:58
311,333	43,242	54,600	73,380	0,577	0,448	9451,344	9647,022	12,904	11,822	8,606	-4,520	41,547	8,321	18,845	2022-03-30 14:59
311,833	43,307	54,739	73,358	0,581	0,448	9406,932	9568,227	12,982	11,942	8,597	-4,608	41,794	8,346	18,845	2022-03-30 14:59
312,333	43,394	54,664	73,330	0,578	0,448	9415,482	9590,978	12,648	11,546	8,862	-4,581	42,020	8,369	18,845	2022-03-30 15:00
312,833	43,365	54,710	73,288	0,574	0,448	9290,491	9544,565	11,333	11,638	8,869	-4,586	41,604	8,327	18,845	2022-03-30 15:00
313,333	43,265	54,717	73,274	0,576	0,448	9467,930	9535,895	9,463	11,278	9,177	-4,569	41,920	8,359	18,845	2022-03-30 15:01
313,833	43,218	54,581	73,184	0,575	0,448	9572,017	9553,611	13,068	11,574	8,993	-4,608	41,782	8,345	18,845	2022-03-30 15:01
314,333	43,285	54,503	73,132	0,579	0,448	9660,737	9571,526	13,186	11,747	8,803	-4,674	41,536	8,320	18,751	2022-03-30 15:02
314,833	43,400	54,404	73,096	0,573	0,448	9335,699	9594,829	15,665	11,938	8,611	-4,631	42,191	8,386	18,751	2022-03-30 15:02
315,333	43,517	54,328	73,045	0,576	0,448	9516,297	9611,170	15,835	11,736	8,728	-4,598	41,955	8,362	18,751	2022-03-30 15:03
315,833	43,569	54,261	73,005	0,573	0,448	9349,589	9624,625	13,910	12,137	8,403	-4,620	41,742	8,341	18,751	2022-03-30 15:03
316,333	43,494	54,316	72,954	0,574	0,448	9445,054	9571,654	16,099	12,078	8,367	-4,633	41,739	8,341	18,751	2022-03-30 15:04
316,833	43,428	54,320	72,927	0,574	0,448	9401,024	9553,936	13,736	11,976	8,409	-4,610	41,774	8,344	18,751	2022-03-30 15:04
317,333	43,499	54,320	72,860	0,576	0,448	9582,334	9520,206	12,237	11,848	8,591	-4,608	41,828	8,349	18,751	2022-03-30 15:05

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
317,833	0,204	0,678	1,043	-0,232	0,006	0,284	0,700	71,523	22,686	21,063	20,629	20,103	20,120	20,056	20,038	57,910
318,333	0,204	0,668	1,045	-0,231	0,004	0,295	0,699	71,541	22,683	21,068	20,645	20,135	20,141	20,082	20,060	57,821
318,833	0,203	0,657	1,046	-0,230	0,024	0,301	0,699	71,550	22,606	21,030	20,621	20,134	20,128	20,073	20,055	57,887
319,333	0,203	0,665	1,048	-0,232	0,030	0,293	0,699	71,546	22,528	20,994	20,582	20,123	20,122	20,055	20,041	58,226
319,833	0,204	0,687	1,049	-0,231	0,014	0,278	0,699	71,452	22,473	20,967	20,565	20,120	20,120	20,043	20,037	58,218
320,333	0,203	0,669	1,046	-0,233	0,023	0,294	0,699	71,364	22,459	20,948	20,545	20,122	20,114	20,042	20,033	57,816
320,833	0,204	0,678	1,046	-0,232	0,019	0,282	0,699	71,369	22,495	20,947	20,548	20,133	20,126	20,056	20,047	57,964
321,333	0,204	0,675	1,043	-0,229	0,001	0,287	0,699	71,354	22,453	20,929	20,534	20,130	20,121	20,045	20,040	57,902
321,833	0,205	0,691	1,044	-0,227	0,057	0,274	0,698	71,265	22,490	20,904	20,506	20,094	20,100	20,016	20,012	57,837
322,333	0,204	0,685	1,048	-0,233	-0,009	0,279	0,697	71,138	22,465	20,884	20,492	20,080	20,083	19,989	19,989	57,948
322,833	0,204	0,694	1,046	-0,229	0,029	0,269	0,697	71,192	22,501	20,925	20,534	20,108	20,113	20,035	20,026	57,893
323,333	0,204	0,685	1,049	-0,231	0,021	0,280	0,697	71,124	22,479	20,934	20,542	20,120	20,129	20,047	20,039	58,166
323,833	0,203	0,682	1,051	-0,228	0,013	0,280	0,697	71,131	22,506	20,943	20,538	20,124	20,132	20,046	20,038	58,235
324,333	0,203	0,678	1,055	-0,229	0,036	0,284	0,696	71,158	22,511	20,909	20,502	20,097	20,097	19,998	20,001	57,922
324,833	0,204	0,690	1,046	-0,228	0,004	0,273	0,696	71,219	22,512	20,937	20,529	20,113	20,130	20,020	20,023	58,159
325,333	0,204	0,696	1,053	-0,224	-0,019	0,270	0,696	71,230	22,513	20,966	20,559	20,144	20,152	20,058	20,053	58,342
325,833	0,204	0,699	1,056	-0,224	0,004	0,267	0,696	71,237	22,537	20,977	20,563	20,143	20,154	20,042	20,054	58,132
326,333	0,203	0,690	1,043	-0,224	0,011	0,276	0,696	71,256	22,570	20,963	20,552	20,130	20,142	20,036	20,036	57,994
326,833	0,204	0,700	1,045	-0,224	0,026	0,264	0,696	71,233	22,614	20,956	20,540	20,113	20,126	20,016	20,017	58,454
327,333	0,204	0,704	1,043	-0,225	0,052	0,263	0,694	71,127	22,577	20,970	20,557	20,115	20,126	20,022	20,023	58,288
327,833	0,205	0,710	1,049	-0,223	-0,019	0,259	0,694	71,174	22,568	20,971	20,553	20,114	20,120	20,024	20,020	58,838
328,333	0,203	0,693	1,051	-0,221	0,020	0,276	0,694	71,151	22,626	20,986	20,562	20,128	20,134	20,028	20,028	58,408
328,833	0,203	0,691	1,054	-0,223	-0,006	0,271	0,694	71,101	22,601	20,979	20,549	20,104	20,116	20,020	20,009	58,534
329,333	0,205	0,695	1,051	-0,226	0,023	0,269	0,694	71,025	22,628	21,004	20,579	20,131	20,146	20,041	20,035	58,344
329,833	0,206	0,711	1,044	-0,224	0,017	0,254	0,694	70,986	22,644	21,009	20,579	20,128	20,141	20,024	20,025	58,617
330,333	0,205	0,706	1,054	-0,223	0,031	0,264	0,693	70,996	22,601	21,013	20,588	20,133	20,145	20,028	20,032	58,681
330,833	0,204	0,699	1,050	-0,226	-0,005	0,265	0,693	70,982	22,635	21,017	20,590	20,128	20,141	20,039	20,033	58,676
331,333	0,204	0,702	1,046	-0,223	0,000	0,265	0,692	70,921	22,619	20,993	20,569	20,100	20,124	20,009	20,006	58,609
331,833	0,204	0,702	1,037	-0,220	-0,019	0,265	0,692	70,966	22,640	21,023	20,594	20,125	20,150	20,037	20,030	58,707

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
317,833	43,706	54,136	72,755	0,572	0,447	9340,648	9552,125	14,076	11,966	8,524	-4,649	41,701	8,337	18,657	2022-03-30 15:05
318,333	43,771	54,254	72,761	0,575	0,448	9291,797	9504,524	11,310	11,548	8,865	-4,629	41,966	8,363	18,657	2022-03-30 15:06
318,833	43,702	54,262	72,729	0,575	0,448	9387,109	9483,765	10,299	11,557	9,030	-4,597	41,432	8,310	18,657	2022-03-30 15:06
319,333	43,608	54,180	72,714	0,569	0,448	9577,229	9512,478	10,721	11,758	8,788	-4,638	41,740	8,341	18,708	2022-03-30 15:07
319,833	43,644	54,066	72,651	0,570	0,448	9554,474	9535,091	13,237	12,207	8,336	-4,623	41,967	8,363	18,657	2022-03-30 15:07
320,333	43,770	54,203	72,607	0,566	0,448	9147,582	9448,195	11,147	11,607	8,826	-4,662	41,611	8,328	18,657	2022-03-30 15:08
320,833	43,926	54,659	72,592	0,567	0,448	9152,523	9211,690	15,058	12,151	8,453	-4,643	41,686	8,335	18,657	2022-03-30 15:08
321,333	43,962	54,705	72,575	0,571	0,448	9156,751	9174,250	12,822	11,819	8,617	-4,580	41,944	8,361	18,657	2022-03-30 15:09
321,833	43,820	54,764	72,572	0,572	0,448	9222,869	9144,870	15,083	12,380	8,205	-4,546	41,785	8,345	18,657	2022-03-30 15:09
322,333	43,824	54,775	72,500	0,569	0,448	9245,767	9106,635	13,493	12,038	8,380	-4,666	41,833	8,350	18,564	2022-03-30 15:10
322,833	43,846	54,641	72,578	0,569	0,448	9195,759	9209,524	13,657	12,488	8,073	-4,574	41,813	8,348	18,564	2022-03-30 15:10
323,333	43,867	54,527	72,511	0,573	0,448	9424,630	9230,262	11,481	11,993	8,406	-4,625	42,279	8,394	18,564	2022-03-30 15:11
323,833	43,902	54,045	72,559	0,568	0,447	9368,837	9497,615	10,726	12,066	8,412	-4,555	42,007	8,367	18,564	2022-03-30 15:11
324,333	43,908	54,340	72,515	0,571	0,448	9206,230	9332,812	10,390	11,944	8,534	-4,574	42,194	8,386	18,470	2022-03-30 15:12
324,833	43,921	54,024	72,519	0,575	0,447	9423,436	9488,850	12,230	12,348	8,196	-4,558	41,834	8,350	18,470	2022-03-30 15:12
325,333	43,963	54,170	72,553	0,574	0,448	9494,063	9433,466	13,496	12,488	8,087	-4,484	42,044	8,371	18,470	2022-03-30 15:13
325,833	44,069	54,266	72,504	0,579	0,448	9362,149	9363,443	11,810	12,506	8,023	-4,478	42,162	8,383	18,470	2022-03-30 15:13
326,333	44,181	54,293	72,502	0,575	0,448	9144,218	9344,752	11,056	12,182	8,279	-4,489	41,892	8,356	18,470	2022-03-30 15:14
326,833	44,143	54,005	72,479	0,577	0,447	9496,265	9476,354	12,222	12,627	7,914	-4,471	41,633	8,330	18,470	2022-03-30 15:14
327,333	44,020	53,589	72,485	0,582	0,447	9545,534	9686,753	13,738	12,575	7,901	-4,498	41,668	8,333	18,345	2022-03-30 15:15
327,833	43,980	53,374	72,486	0,572	0,447	9779,045	9793,409	13,898	12,705	7,777	-4,463	41,919	8,359	18,345	2022-03-30 15:15
328,333	44,042	53,258	72,483	0,586	0,447	9691,424	9855,460	11,466	12,170	8,275	-4,421	42,150	8,382	18,345	2022-03-30 15:16
328,833	44,153	53,378	72,466	0,583	0,447	9637,935	9783,269	11,973	12,393	8,144	-4,466	42,095	8,376	18,470	2022-03-30 15:16
329,333	44,198	53,187	72,443	0,583	0,447	9482,068	9866,156	15,425	12,424	8,063	-4,512	42,277	8,394	18,345	2022-03-30 15:17
329,833	44,077	53,080	72,449	0,579	0,447	9678,032	9925,624	20,699	12,965	7,623	-4,486	41,581	8,325	18,346	2022-03-30 15:17
330,333	43,987	53,066	72,360	0,580	0,446	9799,144	9877,954	13,988	12,498	7,916	-4,462	42,201	8,387	18,252	2022-03-30 15:18
330,833	44,037	53,006	72,335	0,576	0,447	9707,400	9901,273	11,889	12,584	7,952	-4,518	41,935	8,360	18,346	2022-03-30 15:18
331,333	44,113	52,368	72,296	0,580	0,446	9675,139	10192,187	13,567	12,485	7,964	-4,468	41,716	8,338	18,252	2022-03-30 15:19
331,833	44,131	52,638	72,245	0,579	0,446	9709,447	10042,870	11,895	12,562	7,946	-4,407	41,539	8,321	18,252	2022-03-30 15:19



## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
332,333	0,204	0,703	1,040	-0,221	0,012	0,263	0,692	71,063	22,674	21,034	20,602	20,126	20,145	20,030	20,029	58,513
332,833	0,209	0,719	1,047	-0,225	-0,016	0,249	0,692	71,030	22,638	21,028	20,602	20,115	20,141	20,027	20,022	58,512
333,333	0,208	0,716	1,053	-0,225	-0,008	0,252	0,692	71,015	22,635	21,029	20,607	20,118	20,138	20,027	20,023	58,712
333,833	0,213	0,725	1,045	-0,222	0,038	0,243	0,691	71,017	22,597	21,012	20,589	20,105	20,125	20,015	20,010	58,709
334,333	0,218	0,732	1,050	-0,223	0,040	0,241	0,691	70,990	22,598	21,029	20,607	20,119	20,146	20,037	20,025	58,627
334,833	0,214	0,724	1,044	-0,217	0,005	0,246	0,691	70,959	22,645	21,048	20,626	20,138	20,156	20,047	20,039	58,756
335,333	0,215	0,728	1,051	-0,222	-0,001	0,241	0,691	70,844	22,624	21,023	20,601	20,104	20,128	20,010	20,009	58,575
335,833	0,212	0,733	1,053	-0,224	-0,010	0,240	0,690	70,892	22,648	21,051	20,627	20,133	20,152	20,043	20,035	58,589
336,333	0,213	0,733	1,050	-0,221	0,007	0,236	0,689	70,979	22,645	21,054	20,631	20,137	20,152	20,048	20,036	58,438
336,833	0,213	0,740	1,045	-0,223	0,037	0,232	0,689	70,972	22,621	21,056	20,623	20,131	20,156	20,041	20,036	58,266
337,333	0,231	0,753	1,048	-0,221	0,004	0,219	0,689	70,990	22,631	21,059	20,634	20,134	20,164	20,043	20,037	58,233
337,833	0,236	0,765	1,045	-0,222	0,015	0,208	0,690	71,021	22,639	21,078	20,642	20,155	20,178	20,059	20,051	58,376
338,333	0,310	0,782	1,045	-0,219	-0,027	0,198	0,689	71,079	22,663	21,069	20,638	20,140	20,165	20,048	20,045	58,318
338,833	0,401	0,789	1,048	-0,224	-0,006	0,187	0,688	71,093	22,638	21,069	20,631	20,133	20,153	20,051	20,030	58,263
339,333	0,609	0,810	1,052	-0,222	-0,009	0,175	0,688	71,170	22,671	21,087	20,653	20,153	20,173	20,066	20,051	58,218
339,833	0,472	0,796	1,043	-0,222	-0,024	0,186	0,688	71,153	22,624	21,063	20,626	20,131	20,160	20,036	20,031	58,383
340,333	0,665	0,790	1,042	-0,220	0,048	0,195	0,688	71,200	22,627	21,068	20,622	20,133	20,158	20,049	20,037	58,344
340,833	0,499	0,774	1,050	-0,223	0,053	0,204	0,686	71,123	22,611	21,067	20,635	20,133	20,168	20,050	20,039	58,356
341,333	0,446	0,773	1,048	-0,220	0,026	0,206	0,686	71,060	22,637	21,067	20,638	20,136	20,167	20,056	20,042	58,406
341,833	0,331	0,764	1,045	-0,222	-0,012	0,213	0,686	71,024	22,611	21,045	20,613	20,113	20,154	20,030	20,020	58,239
342,333	0,240	0,737	1,047	-0,219	-0,013	0,237	0,686	71,078	22,607	21,072	20,636	20,147	20,171	20,060	20,042	58,302
342,833	0,231	0,733	1,046	-0,221	-0,021	0,239	0,686	71,070	22,615	21,067	20,635	20,132	20,171	20,051	20,037	58,332
343,333	0,216	0,715	1,049	-0,225	0,025	0,255	0,685	71,082	22,572	21,077	20,637	20,141	20,177	20,068	20,048	58,292
343,833	0,211	0,716	1,047	-0,222	0,020	0,254	0,684	71,065	22,597	21,075	20,645	20,134	20,174	20,059	20,043	58,312
344,333	0,210	0,710	1,053	-0,222	0,006	0,255	0,684	71,117	22,645	21,101	20,655	20,139	20,183	20,065	20,051	58,457
344,833	0,223	0,732	1,055	-0,222	0,025	0,242	0,684	71,014	22,630	21,088	20,655	20,162	20,189	20,069	20,058	58,390
345,333	0,217	0,718	1,053	-0,223	0,012	0,250	0,684	71,074	22,590	21,063	20,617	20,132	20,154	20,038	20,026	58,316
345,833	0,210	0,720	1,052	-0,223	0,005	0,253	0,683	71,129	22,612	21,091	20,657	20,154	20,188	20,076	20,056	58,282
346,333	0,207	0,719	1,051	-0,226	0,045	0,246	0,683	71,159	22,574	21,067	20,624	20,131	20,163	20,041	20,031	58,258

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
332,333	44,158	52,408	72,220	0,578	0,446	9549,843	10134,511	16,417	12,621	7,896	-4,428	41,804	8,347	18,252	2022-03-30 15:20
332,833	44,218	52,629	72,108	0,577	0,446	9493,509	9976,565	25,887	13,070	7,468	-4,502	41,848	8,351	18,252	2022-03-30 15:20
333,333	44,285	52,898	72,098	0,578	0,447	9593,674	9833,455	23,129	12,870	7,572	-4,506	42,233	8,390	18,252	2022-03-30 15:21
333,833	44,282	52,764	72,074	0,576	0,446	9559,579	9886,471	42,002	13,263	7,296	-4,438	41,568	8,323	18,158	2022-03-30 15:21
334,333	44,271	52,515	72,016	0,581	0,446	9591,552	9977,446	49,384	13,236	7,219	-4,458	42,129	8,379	18,158	2022-03-30 15:22
334,833	44,314	52,419	72,006	0,580	0,446	9637,401	10024,961	28,677	13,016	7,395	-4,349	41,912	8,358	18,159	2022-03-30 15:22
335,333	44,322	52,717	72,018	0,582	0,446	9535,513	9878,924	46,808	13,266	7,220	-4,431	42,118	8,378	18,158	2022-03-30 15:23
335,833	44,266	52,972	72,007	0,582	0,447	9595,462	9750,759	37,088	13,260	7,205	-4,485	42,216	8,388	18,158	2022-03-30 15:23
336,333	44,256	53,047	72,005	0,584	0,447	9535,276	9710,658	31,774	13,419	7,087	-4,428	42,010	8,368	18,064	2022-03-30 15:24
336,833	44,284	53,087	72,004	0,584	0,446	9398,282	9686,964	33,881	13,422	6,975	-4,455	41,579	8,325	18,065	2022-03-30 15:24
337,333	44,296	53,212	72,006	0,579	0,447	9284,898	9632,096	118,494	14,031	6,577	-4,421	42,157	8,382	18,064	2022-03-30 15:25
337,833	44,276	53,331	72,028	0,577	0,447	9358,994	9575,122	139,768	14,366	6,229	-4,448	41,901	8,357	18,064	2022-03-30 15:25
338,333	44,256	53,333	72,062	0,579	0,447	9362,885	9593,464	203,303	14,458	5,935	-4,381	42,291	8,396	18,064	2022-03-30 15:26
338,833	44,295	53,392	72,138	0,578	0,447	9281,059	9601,479	797,466	14,961	5,606	-4,478	41,839	8,351	17,971	2022-03-30 15:26
339,333	44,313	53,430	72,240	0,581	0,447	9288,682	9638,841	995,466	15,217	5,256	-4,431	41,918	8,358	17,970	2022-03-30 15:27
339,833	44,303	53,538	72,247	0,576	0,447	9332,590	9588,505	836,802	14,902	5,577	-4,432	41,919	8,359	17,970	2022-03-30 15:27
340,333	44,264	53,553	72,346	0,572	0,447	9270,337	9636,512	956,218	14,516	5,836	-4,390	41,619	8,329	17,971	2022-03-30 15:28
340,833	44,241	53,680	72,411	0,572	0,447	9287,927	9604,585	761,375	14,318	6,110	-4,464	41,949	8,362	17,846	2022-03-30 15:28
341,333	44,255	53,654	72,528	0,575	0,447	9363,679	9671,829	416,825	14,133	6,195	-4,400	42,149	8,381	17,845	2022-03-30 15:29
341,833	44,294	53,754	72,634	0,574	0,447	9201,227	9678,996	243,718	13,986	6,392	-4,442	41,920	8,359	17,846	2022-03-30 15:29
342,333	44,305	53,920	72,695	0,576	0,447	9278,316	9633,239	75,159	13,193	7,110	-4,388	42,121	8,379	17,845	2022-03-30 15:30
342,833	44,311	53,970	72,815	0,574	0,448	9265,462	9669,383	79,117	13,378	7,180	-4,428	41,695	8,336	17,846	2022-03-30 15:30
343,333	44,292	54,095	72,836	0,575	0,447	9260,666	9612,412	38,741	12,781	7,647	-4,492	42,051	8,372	17,752	2022-03-30 15:31
343,833	44,268	54,176	72,884	0,570	0,447	9215,382	9597,070	26,667	12,869	7,606	-4,450	42,093	8,376	17,752	2022-03-30 15:31
344,333	44,276	54,244	72,964	0,572	0,448	9336,644	9605,709	37,992	12,934	7,638	-4,446	42,501	8,416	17,658	2022-03-30 15:32
344,833	44,273	54,250	73,009	0,572	0,447	9296,212	9619,935	59,620	13,180	7,251	-4,439	42,047	8,371	17,752	2022-03-30 15:32
345,333	44,287	54,405	73,072	0,572	0,448	9235,385	9585,024	45,357	13,025	7,507	-4,450	42,158	8,382	17,752	2022-03-30 15:33
345,833	44,282	54,516	73,123	0,572	0,448	9217,911	9547,103	23,552	12,871	7,583	-4,469	42,187	8,385	17,658	2022-03-30 15:33
346,333	44,278	54,553	73,182	0,572	0,448	9195,099	9560,806	21,712	13,194	7,376	-4,511	41,962	8,363	17,658	2022-03-30 15:34

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
346,833	0,209	0,737	1,049	-0,224	-0,013	0,233	0,683	71,128	22,574	21,070	20,628	20,130	20,164	20,048	20,034	58,697
347,333	0,234	0,754	1,046	-0,225	0,023	0,217	0,683	71,209	22,640	21,123	20,670	20,176	20,207	20,082	20,074	58,592
347,833	0,260	0,761	1,053	-0,224	0,041	0,215	0,681	71,212	22,610	21,107	20,662	20,151	20,190	20,066	20,052	58,560
348,333	0,281	0,763	1,049	-0,222	-0,011	0,213	0,681	71,288	22,621	21,118	20,673	20,165	20,196	20,076	20,060	58,327
348,833	0,247	0,756	1,050	-0,222	-0,019	0,220	0,681	71,305	22,607	21,108	20,665	20,153	20,193	20,073	20,056	58,272
349,333	0,274	0,769	1,053	-0,222	0,029	0,206	0,681	71,347	22,639	21,102	20,662	20,143	20,182	20,066	20,048	58,366
349,833	0,250	0,767	1,052	-0,225	0,007	0,213	0,681	71,272	22,643	21,093	20,647	20,134	20,170	20,052	20,032	58,382
350,333	0,260	0,759	1,045	-0,223	0,038	0,217	0,680	71,167	22,647	21,098	20,648	20,140	20,167	20,058	20,035	58,362
350,833	0,235	0,747	1,049	-0,220	-0,034	0,229	0,679	71,325	22,707	21,160	20,703	20,200	20,229	20,110	20,094	58,300
351,333	0,235	0,748	1,049	-0,223	0,020	0,227	0,680	71,308	22,644	21,119	20,667	20,150	20,191	20,075	20,051	58,212
351,833	0,218	0,727	1,045	-0,224	0,021	0,245	0,679	71,334	22,661	21,131	20,672	20,169	20,197	20,074	20,058	58,388
352,333	0,211	0,724	1,044	-0,226	0,024	0,246	0,678	71,334	22,647	21,122	20,671	20,164	20,199	20,070	20,055	58,344
352,833	0,209	0,717	1,049	-0,224	0,006	0,254	0,678	71,330	22,636	21,129	20,672	20,162	20,192	20,076	20,059	58,249
353,333	0,217	0,719	1,043	-0,221	0,003	0,255	0,678	71,318	22,633	21,127	20,671	20,164	20,208	20,082	20,064	58,380
353,833	0,209	0,699	1,045	-0,224	0,036	0,268	0,678	71,346	22,683	21,145	20,706	20,188	20,231	20,100	20,088	58,699
354,333	0,209	0,713	1,042	-0,224	-0,014	0,254	0,678	71,354	22,664	21,109	20,670	20,162	20,193	20,077	20,056	58,518
354,833	0,212	0,721	1,049	-0,226	-0,034	0,248	0,676	71,433	22,628	21,141	20,704	20,190	20,237	20,106	20,094	58,460
355,333	0,211	0,717	1,055	-0,223	0,010	0,255	0,676	71,529	22,657	21,133	20,700	20,189	20,233	20,108	20,089	58,473
355,833	0,207	0,697	1,047	-0,226	0,006	0,271	0,676	71,469	22,529	21,051	20,623	20,106	20,149	20,023	20,008	58,502
356,333	0,204	0,693	1,053	-0,226	0,006	0,274	0,676	71,492	22,555	21,068	20,636	20,119	20,154	20,042	20,020	58,471
356,833	0,205	0,690	1,049	-0,227	0,014	0,275	0,676	71,579	22,706	21,164	20,735	20,234	20,258	20,137	20,121	58,082
357,333	0,203	0,689	1,048	-0,226	-0,012	0,277	0,675	71,547	22,710	21,148	20,707	20,201	20,252	20,114	20,100	58,091
357,833	0,203	0,683	1,050	-0,227	0,052	0,280	0,675	71,594	22,655	21,156	20,714	20,224	20,257	20,128	20,113	58,116
358,333	0,203	0,690	1,051	-0,226	0,020	0,275	0,675	71,544	22,676	21,162	20,717	20,218	20,256	20,127	20,106	58,490
358,833	0,205	0,696	1,042	-0,227	0,035	0,263	0,675	71,643	22,646	21,152	20,716	20,213	20,252	20,122	20,104	58,533
359,333	0,209	0,725	1,046	-0,225	0,047	0,244	0,674	71,678	22,695	21,168	20,730	20,221	20,274	20,143	20,118	58,482
359,833	0,208	0,728	1,046	-0,227	0,025	0,241	0,673	71,629	22,712	21,155	20,716	20,214	20,257	20,125	20,105	58,471
360,333	0,206	0,722	1,045	-0,224	-0,023	0,250	0,673	71,680	22,715	21,155	20,714	20,217	20,257	20,126	20,107	58,460
360,833	0,206	0,708	1,043	-0,227	0,025	0,261	0,673	71,703	22,725	21,198	20,761	20,252	20,292	20,158	20,145	58,537

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
346,833	44,278	54,605	73,160	0,570	0,448	9461,829	9522,466	31,938	13,466	6,989	-4,471	41,758	8,342	17,658	2022-03-30 15:34
347,333	44,271	54,442	73,261	0,571	0,448	9409,195	9657,377	125,251	14,036	6,508	-4,502	41,759	8,343	17,658	2022-03-30 15:35
347,833	44,281	54,411	73,320	0,568	0,448	9320,868	9700,621	143,267	13,946	6,451	-4,480	41,833	8,350	17,564	2022-03-30 15:35
348,333	44,311	54,470	73,396	0,570	0,448	9189,809	9716,083	150,226	14,088	6,398	-4,444	42,006	8,367	17,564	2022-03-30 15:36
348,833	44,301	54,780	73,452	0,572	0,448	9198,981	9591,013	114,847	13,891	6,595	-4,441	41,997	8,366	17,564	2022-03-30 15:36
349,333	44,279	54,903	73,538	0,573	0,448	9277,749	9565,043	181,889	14,386	6,180	-4,448	42,026	8,369	17,564	2022-03-30 15:37
349,833	44,245	54,861	73,590	0,574	0,448	9330,906	9623,372	111,494	13,981	6,384	-4,504	42,114	8,378	17,470	2022-03-30 15:37
350,333	44,256	54,909	73,617	0,579	0,448	9390,314	9605,113	174,932	14,008	6,503	-4,452	41,939	8,361	17,564	2022-03-30 15:38
350,833	44,282	54,876	73,692	0,578	0,448	9316,846	9659,617	65,577	13,506	6,875	-4,391	41,978	8,364	17,404	2022-03-30 15:38
351,333	44,324	55,012	73,803	0,577	0,448	9218,625	9652,409	107,600	13,728	6,815	-4,453	41,817	8,348	17,470	2022-03-30 15:39
351,833	44,324	55,039	73,885	0,575	0,448	9304,298	9677,190	35,047	13,098	7,360	-4,486	41,790	8,346	17,470	2022-03-30 15:39
352,333	44,291	55,130	74,010	0,577	0,448	9322,553	9694,423	26,486	13,118	7,395	-4,512	41,856	8,352	17,348	2022-03-30 15:40
352,833	44,243	55,239	74,065	0,575	0,448	9261,162	9667,955	31,239	12,969	7,607	-4,483	41,754	8,342	17,348	2022-03-30 15:40
353,333	44,263	55,374	74,147	0,575	0,448	9343,022	9643,510	44,495	12,781	7,638	-4,411	41,963	8,363	17,348	2022-03-30 15:41
353,833	44,282	55,275	74,188	0,574	0,448	9514,608	9715,205	23,201	12,492	8,041	-4,488	41,390	8,306	17,348	2022-03-30 15:41
354,333	44,279	55,206	74,202	0,574	0,448	9409,620	9760,737	26,286	12,903	7,616	-4,474	41,754	8,342	17,348	2022-03-30 15:42
354,833	44,297	55,321	74,261	0,576	0,448	9382,854	9729,704	37,402	13,052	7,438	-4,514	42,097	8,376	17,254	2022-03-30 15:42
355,333	44,337	55,336	74,297	0,574	0,449	9329,713	9746,652	27,212	12,826	7,653	-4,468	42,128	8,379	17,254	2022-03-30 15:43
355,833	44,393	55,396	74,386	0,571	0,449	9265,862	9760,477	16,002	12,258	8,128	-4,517	42,072	8,374	17,254	2022-03-30 15:43
356,333	44,348	55,576	74,331	0,573	0,448	9308,672	9638,314	13,736	12,251	8,212	-4,526	42,098	8,376	17,254	2022-03-30 15:44
356,833	44,249	55,634	74,370	0,576	0,449	9162,810	9631,669	14,405	12,295	8,240	-4,534	41,970	8,364	17,254	2022-03-30 15:44
357,333	44,159	55,843	74,439	0,579	0,449	9283,272	9557,797	10,975	12,189	8,300	-4,529	41,950	8,362	17,160	2022-03-30 15:45
357,833	44,250	55,783	74,400	0,576	0,449	9192,415	9570,737	10,475	12,152	8,391	-4,539	41,981	8,365	17,160	2022-03-30 15:45
358,333	44,286	55,905	74,400	0,572	0,449	9348,703	9507,717	10,047	12,289	8,239	-4,517	42,045	8,371	17,160	2022-03-30 15:46
358,833	44,250	55,783	74,419	0,574	0,449	9428,960	9580,401	19,617	12,692	7,905	-4,537	42,033	8,370	17,160	2022-03-30 15:46
359,333	44,252	55,620	74,440	0,575	0,448	9408,912	9671,091	29,409	13,170	7,314	-4,509	42,060	8,373	17,160	2022-03-30 15:47
359,833	44,295	55,542	74,439	0,572	0,448	9331,787	9705,942	19,692	13,211	7,242	-4,539	41,840	8,351	17,067	2022-03-30 15:47
360,333	44,315	55,596	74,493	0,577	0,448	9387,646	9709,752	19,262	12,912	7,500	-4,489	41,683	8,335	17,067	2022-03-30 15:48
360,833	44,331	55,587	74,522	0,578	0,448	9437,650	9726,475	15,589	12,647	7,828	-4,547	41,384	8,305	17,067	2022-03-30 15:48

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
361,333	0,204	0,693	1,054	-0,225	0,034	0,276	0,673	71,728	22,710	21,202	20,767	20,266	20,300	20,170	20,153	58,476
361,833	0,203	0,684	1,049	-0,230	0,012	0,278	0,673	71,677	22,684	21,188	20,752	20,243	20,288	20,154	20,138	58,487
362,333	0,204	0,689	1,051	-0,227	0,010	0,277	0,673	71,720	22,762	21,231	20,802	20,298	20,347	20,200	20,183	58,148
362,833	0,203	0,681	1,045	-0,229	0,015	0,282	0,673	71,707	22,733	21,196	20,774	20,259	20,307	20,171	20,152	58,261
363,333	0,203	0,679	1,046	-0,225	0,005	0,285	0,672	71,743	22,680	21,198	20,764	20,251	20,304	20,169	20,147	58,489
363,833	0,203	0,675	1,048	-0,225	0,040	0,286	0,672	71,782	22,724	21,185	20,758	20,248	20,292	20,154	20,130	58,393
364,333	0,203	0,686	1,048	-0,228	-0,030	0,279	0,672	71,821	22,663	21,171	20,736	20,228	20,273	20,141	20,116	58,181
364,833	0,203	0,677	1,050	-0,228	0,022	0,283	0,671	71,723	22,599	21,109	20,670	20,163	20,210	20,068	20,052	58,281
365,333	0,206	0,687	1,047	-0,228	0,009	0,278	0,672	71,766	22,692	21,193	20,761	20,253	20,304	20,153	20,135	58,232
365,833	0,207	0,692	1,049	-0,229	0,054	0,272	0,670	71,809	22,695	21,201	20,769	20,268	20,305	20,170	20,145	58,369
366,333	0,206	0,688	1,050	-0,230	-0,001	0,278	0,670	71,726	22,669	21,158	20,729	20,216	20,261	20,129	20,105	58,310
366,833	0,204	0,675	1,053	-0,230	0,010	0,287	0,670	71,684	22,618	21,159	20,726	20,222	20,269	20,128	20,106	58,226
367,333	0,205	0,689	1,046	-0,226	0,020	0,275	0,670	71,660	22,611	21,155	20,722	20,214	20,253	20,112	20,094	58,310
367,833	0,205	0,696	1,051	-0,226	0,003	0,269	0,669	71,631	22,654	21,138	20,698	20,198	20,247	20,103	20,082	58,352
368,333	0,204	0,695	1,049	-0,228	0,027	0,271	0,669	71,705	22,699	21,132	20,702	20,196	20,245	20,103	20,083	58,561
368,833	0,204	0,690	1,048	-0,227	-0,008	0,273	0,669	71,734	22,659	21,145	20,718	20,222	20,266	20,121	20,099	58,663
369,333	0,204	0,694	1,052	-0,227	0,013	0,272	0,668	71,677	22,620	21,125	20,704	20,200	20,244	20,098	20,082	58,665
369,833	0,204	0,689	1,050	-0,228	0,010	0,277	0,668	71,697	22,649	21,120	20,687	20,196	20,238	20,090	20,073	58,540
370,333	0,204	0,674	1,043	-0,225	-0,029	0,291	0,668	71,623	22,669	21,144	20,716	20,220	20,256	20,112	20,095	58,398
370,833	0,203	0,669	1,050	-0,229	0,016	0,289	0,668	71,618	22,646	21,155	20,729	20,221	20,265	20,129	20,103	58,488
371,333	0,204	0,688	1,055	-0,231	0,039	0,273	0,668	71,721	22,673	21,176	20,750	20,255	20,297	20,157	20,130	58,497
371,833	0,205	0,704	1,049	-0,227	0,027	0,261	0,668	71,697	22,734	21,160	20,728	20,225	20,270	20,142	20,111	58,414
372,333	0,204	0,702	1,043	-0,223	0,037	0,267	0,667	71,710	22,720	21,156	20,708	20,228	20,266	20,124	20,096	58,356
372,833	0,205	0,711	1,038	-0,228	0,033	0,252	0,667	71,779	22,730	20,842	20,511	20,224	20,264	20,130	20,099	58,364
373,333	0,207	0,721	1,047	-0,227	0,018	0,249	0,667	71,752	22,721	20,804	20,471	20,240	20,279	20,141	20,106	58,461
373,833	0,210	0,719	1,051	-0,227	0,046	0,253	0,666	71,746	22,744	20,814	20,487	20,245	20,293	20,160	20,121	58,388

## PE22\_cat III\_run 1\_220330\_EN.DAT

## Category: III run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
361,333	44,309	55,546	74,514	0,573	0,449	9338,939	9748,126	12,315	12,134	8,285	-4,509	41,676	8,334	17,067	2022-03-30 15:49
361,833	44,235	55,631	74,548	0,574	0,449	9405,725	9721,926	11,303	12,263	8,354	-4,590	41,811	8,348	16,973	2022-03-30 15:49
362,333	44,212	55,543	74,552	0,577	0,448	9256,854	9767,556	12,144	12,092	8,316	-4,542	42,069	8,374	16,973	2022-03-30 15:50
362,833	44,285	55,658	74,550	0,571	0,448	9173,644	9705,351	11,978	11,996	8,446	-4,573	41,864	8,353	16,973	2022-03-30 15:50
363,333	44,296	55,808	74,490	0,573	0,449	9354,003	9604,427	10,304	11,903	8,541	-4,493	41,770	8,344	16,973	2022-03-30 15:51
363,833	44,234	55,833	74,492	0,575	0,449	9364,509	9593,502	10,968	11,912	8,565	-4,497	41,761	8,343	16,973	2022-03-30 15:51
364,333	44,253	55,944	74,554	0,573	0,449	9183,911	9569,963	10,965	12,052	8,368	-4,553	41,702	8,337	17,067	2022-03-30 15:52
364,833	44,295	56,049	74,475	0,573	0,449	9215,521	9476,828	11,856	12,115	8,479	-4,563	41,819	8,349	16,848	2022-03-30 15:52
365,333	44,299	56,002	74,516	0,572	0,449	9169,551	9521,981	20,110	12,126	8,351	-4,552	41,785	8,345	16,973	2022-03-30 15:53
365,833	44,268	56,012	74,493	0,571	0,449	9265,619	9502,004	24,228	12,355	8,150	-4,589	42,091	8,376	16,848	2022-03-30 15:53
366,333	44,269	55,952	74,514	0,573	0,449	9248,851	9543,023	15,836	12,046	8,355	-4,600	42,062	8,373	16,848	2022-03-30 15:54
366,833	44,267	55,952	74,515	0,576	0,449	9243,898	9543,481	13,074	11,897	8,597	-4,597	41,998	8,366	16,848	2022-03-30 15:54
367,333	44,293	55,935	74,453	0,573	0,449	9234,814	9522,119	16,505	12,312	8,235	-4,515	41,837	8,350	16,848	2022-03-30 15:55
367,833	44,315	55,861	74,478	0,574	0,449	9275,352	9572,402	14,078	12,433	8,063	-4,520	42,002	8,367	16,754	2022-03-30 15:55
368,333	44,307	55,922	74,438	0,575	0,449	9430,124	9522,325	13,483	12,428	8,119	-4,550	42,141	8,381	16,754	2022-03-30 15:56
368,833	44,297	55,743	74,479	0,573	0,449	9463,671	9629,771	12,062	12,256	8,199	-4,533	41,889	8,355	16,755	2022-03-30 15:56
369,333	44,275	55,442	74,406	0,572	0,448	9462,493	9741,610	11,974	12,251	8,174	-4,546	41,816	8,348	16,754	2022-03-30 15:57
369,833	44,290	55,353	74,454	0,579	0,448	9485,894	9808,970	13,485	12,228	8,298	-4,555	42,292	8,396	16,754	2022-03-30 15:57
370,333	44,337	55,311	74,435	0,576	0,448	9315,298	9825,555	10,980	11,638	8,742	-4,504	41,956	8,362	16,754	2022-03-30 15:58
370,833	44,362	55,506	74,419	0,572	0,448	9302,179	9716,132	11,388	11,868	8,684	-4,575	42,218	8,388	16,754	2022-03-30 15:58
371,333	44,285	55,613	74,387	0,575	0,449	9398,423	9649,329	13,403	12,345	8,201	-4,611	42,226	8,389	16,755	2022-03-30 15:59
371,833	44,201	55,584	74,364	0,575	0,449	9405,616	9652,590	18,849	12,744	7,825	-4,537	41,704	8,337	16,660	2022-03-30 15:59
372,333	44,247	55,571	74,351	0,572	0,448	9281,524	9650,145	11,567	12,354	8,001	-4,469	41,750	8,342	16,660	2022-03-30 16:00
372,833	44,284	55,617	74,281	0,574	0,448	9292,809	9587,590	17,777	13,066	7,570	-4,551	41,606	8,327	16,660	2022-03-30 16:00
373,333	44,297	55,539	74,273	0,577	0,448	9406,712	9624,580	18,791	12,958	7,483	-4,533	42,091	8,376	16,660	2022-03-30 16:01
373,833	44,289	55,449	74,285	0,578	0,448	9370,011	9675,323	32,007	12,823	7,586	-4,533	42,274	8,394	16,660	2022-03-30 16:01

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321,KONF

Saved: 2022-03-21 09:03

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,393	0,227	0,813	1,069	-0,010	0,031	0,168	0,827	136,835	28,646	20,349	20,243	20,258	20,275	20,350	20,449	65,504
0,834	0,222	0,802	1,065	-0,010	0,012	0,174	0,825	137,136	28,657	20,314	20,213	20,238	20,249	20,317	20,417	65,662
1,334	0,221	0,797	1,069	-0,010	0,022	0,186	0,825	137,389	28,725	20,365	20,268	20,288	20,297	20,367	20,468	65,739
1,834	0,238	0,796	1,069	-0,010	0,017	0,174	0,825	137,538	28,821	20,428	20,333	20,342	20,346	20,420	20,526	65,663
2,340	0,327	0,844	1,066	-0,010	0,019	0,135	0,824	137,991	28,797	20,380	20,290	20,298	20,319	20,392	20,487	65,828
2,833	0,232	0,818	1,064	-0,010	0,020	0,162	0,823	137,947	28,769	20,354	20,262	20,275	20,284	20,357	20,458	65,815
3,333	0,223	0,803	1,064	-0,010	0,016	0,178	0,822	138,129	28,773	20,336	20,240	20,257	20,262	20,338	20,440	65,931
3,833	0,220	0,797	1,062	-0,010	0,027	0,181	0,822	138,216	28,834	20,392	20,283	20,318	20,327	20,393	20,495	65,962
4,333	0,245	0,818	1,068	-0,010	0,013	0,160	0,823	138,443	28,894	20,299	20,200	20,224	20,233	20,301	20,402	65,964
4,833	0,224	0,821	1,068	-0,010	0,022	0,158	0,821	138,780	28,949	20,428	20,329	20,348	20,362	20,430	20,530	65,966
5,333	0,220	0,797	1,065	-0,010	0,019	0,184	0,819	138,679	28,855	20,335	20,243	20,265	20,263	20,339	20,435	66,166
5,833	0,220	0,759	1,066	-0,010	0,021	0,213	0,819	138,661	28,738	20,196	20,102	20,133	20,139	20,204	20,300	66,083
6,333	0,220	0,775	1,063	-0,010	0,014	0,191	0,818	138,913	28,521	20,241	20,151	20,161	20,171	20,244	20,343	66,100
6,834	0,219	0,780	1,067	-0,010	0,011	0,202	0,819	138,963	28,578	20,331	20,231	20,252	20,263	20,332	20,426	66,145
7,334	0,220	0,772	1,074	-0,010	0,013	0,191	0,817	139,109	28,581	20,379	20,285	20,312	20,318	20,391	20,484	66,154
7,834	0,221	0,787	1,071	-0,010	0,027	0,189	0,817	139,246	28,487	20,318	20,237	20,254	20,265	20,332	20,425	66,029
8,334	0,220	0,784	1,068	-0,010	0,021	0,186	0,816	139,297	28,608	20,316	20,233	20,264	20,273	20,339	20,427	65,961
8,834	0,226	0,821	1,068	-0,010	0,029	0,157	0,816	139,576	28,801	20,334	20,251	20,270	20,287	20,342	20,441	66,010
9,333	0,245	0,832	1,064	-0,010	0,016	0,147	0,816	139,862	28,742	20,348	20,269	20,288	20,308	20,371	20,463	66,155
9,833	0,249	0,826	1,067	-0,010	0,027	0,158	0,814	139,902	28,684	20,306	20,218	20,244	20,256	20,322	20,415	66,211
10,333	0,226	0,807	1,067	-0,010	0,012	0,174	0,814	140,087	28,844	20,370	20,279	20,309	20,321	20,382	20,471	66,196
10,833	0,224	0,793	1,066	-0,010	0,028	0,191	0,811	139,997	28,765	20,369	20,279	20,302	20,311	20,377	20,467	66,155
11,333	0,222	0,767	1,063	-0,010	0,024	0,202	0,811	139,863	28,600	20,352	20,278	20,302	20,300	20,372	20,462	66,050
11,833	0,220	0,772	1,065	-0,010	0,011	0,206	0,811	139,851	28,494	20,310	20,231	20,249	20,263	20,326	20,415	66,265
12,333	0,218	0,735	1,064	-0,010	0,021	0,233	0,811	139,934	28,675	20,357	20,276	20,294	20,301	20,369	20,459	66,304
12,833	0,217	0,730	1,069	-0,010	0,026	0,245	0,809	139,818	28,547	20,345	20,268	20,280	20,294	20,350	20,445	66,236

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,393	51,941	56,931	70,548	4,336	4,379	67266,772	67139,560	60,903	15,481	5,046	-0,201	42,844	8,450	26,662	2022-03-21 13:40
0,834	51,975	56,988	70,688	1,194	1,238	18744,062	19413,960	48,787	15,272	5,224	-0,203	42,615	8,428	26,568	2022-03-21 13:41
1,334	52,005	57,051	70,677	1,195	1,240	18833,093	19337,882	50,215	14,531	5,574	-0,203	42,795	8,445	26,568	2022-03-21 13:41
1,834	52,042	57,080	70,697	1,195	1,239	18674,907	19310,366	176,064	15,329	5,223	-0,207	42,833	8,449	26,568	2022-03-21 13:42
2,340	51,927	57,063	70,804	1,196	1,240	19071,379	19499,095	466,578	16,403	4,059	-0,202	42,786	8,444	26,475	2022-03-21 13:42
2,833	51,904	57,065	70,954	1,195	1,239	19070,968	19698,638	68,338	15,606	4,865	-0,197	42,426	8,409	26,350	2022-03-21 13:43
3,333	51,909	57,083	71,017	1,194	1,240	19212,331	19774,208	60,442	15,077	5,351	-0,198	42,473	8,414	26,350	2022-03-21 13:43
3,833	51,881	57,093	70,953	1,193	1,239	19274,115	19662,864	53,233	15,185	5,434	-0,197	42,466	8,413	26,350	2022-03-21 13:44
4,333	51,908	57,076	71,134	1,194	1,240	19248,701	19953,848	88,917	15,988	4,801	-0,190	42,645	8,431	26,350	2022-03-21 13:44
4,833	51,898	57,108	71,114	1,194	1,240	19272,175	19878,230	58,518	15,677	4,746	-0,193	42,902	8,456	26,257	2022-03-21 13:45
5,333	51,881	57,145	71,249	1,194	1,240	19560,305	20024,708	49,477	14,630	5,526	-0,205	43,071	8,473	26,163	2022-03-21 13:45
5,833	51,825	57,131	71,164	1,194	1,240	19523,067	19914,389	57,855	13,651	6,377	-0,198	42,457	8,412	26,069	2022-03-21 13:46
6,333	51,839	57,101	71,228	1,193	1,240	19522,040	20059,323	53,818	14,510	5,721	-0,203	42,653	8,431	26,162	2022-03-21 13:46
6,834	51,841	57,110	71,280	1,194	1,241	19598,150	20122,581	58,267	13,908	6,067	-0,198	42,709	8,437	26,163	2022-03-21 13:47
7,334	51,829	57,138	71,172	1,194	1,240	19617,221	19924,305	54,902	14,514	5,727	-0,196	42,961	8,462	26,069	2022-03-21 13:47
7,834	51,791	57,088	71,017	1,195	1,241	19513,795	19786,412	50,543	14,152	5,679	-0,198	43,171	8,482	26,069	2022-03-21 13:48
8,334	51,734	57,035	71,091	1,193	1,241	19476,069	19967,011	47,197	14,589	5,582	-0,198	42,709	8,437	25,975	2022-03-21 13:48
8,834	51,726	57,014	71,150	1,192	1,240	19535,389	20069,632	93,221	15,822	4,718	-0,204	42,781	8,444	25,975	2022-03-21 13:49
9,333	51,734	57,047	71,451	1,189	1,241	19676,853	20459,335	207,839	16,115	4,421	-0,209	42,177	8,384	26,069	2022-03-21 13:49
9,833	51,717	57,097	71,350	1,191	1,240	19802,305	20234,828	66,231	15,510	4,753	-0,201	42,622	8,428	25,850	2022-03-21 13:50
10,333	51,692	57,066	71,309	1,190	1,241	19799,775	20228,285	83,820	15,252	5,218	-0,201	42,590	8,425	25,850	2022-03-21 13:50
10,833	51,693	57,059	71,139	1,191	1,240	19751,981	19981,435	52,393	14,803	5,727	-0,201	42,773	8,443	25,663	2022-03-21 13:51
11,333	51,668	57,023	71,376	1,189	1,241	19621,839	20389,346	72,952	14,827	6,047	-0,200	42,301	8,397	25,663	2022-03-21 13:51
11,833	51,680	57,055	71,591	1,190	1,241	19913,566	20644,184	48,534	14,193	6,189	-0,208	42,655	8,432	25,663	2022-03-21 13:52
12,333	51,631	57,090	71,401	1,189	1,240	20011,452	20323,087	46,613	13,481	6,987	-0,204	42,456	8,412	25,663	2022-03-21 13:52
12,833	51,615	57,048	71,121	1,189	1,240	19937,787	19981,851	46,942	12,918	7,354	-0,201	42,884	8,454	25,569	2022-03-21 13:53



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
13,333	0,217	0,693	1,067	-0,010	0,012	0,265	0,809	139,748	28,566	20,354	20,277	20,294	20,311	20,370	20,457	66,055
13,894	0,217	0,750	1,068	-0,010	0,004	0,196	0,809	139,617	28,644	20,406	20,336	20,344	20,359	20,416	20,508	66,011
14,361	0,255	0,843	1,067	-0,010	0,025	0,141	0,808	139,867	28,758	20,386	20,310	20,333	20,341	20,404	20,492	65,961
14,931	0,236	0,849	1,062	-0,010	0,011	0,141	0,808	139,859	28,699	20,340	20,254	20,279	20,288	20,342	20,434	65,926
15,439	0,218	0,816	1,064	-0,010	0,028	0,175	0,806	139,921	28,500	20,403	20,315	20,328	20,354	20,404	20,495	65,956
15,870	0,215	0,750	1,066	-0,010	0,023	0,223	0,806	139,970	28,698	20,412	20,329	20,345	20,361	20,419	20,506	65,936
16,333	0,216	0,769	1,063	-0,010	0,024	0,195	0,805	139,930	28,649	20,274	20,194	20,216	20,219	20,284	20,371	65,977
16,833	0,216	0,764	1,067	-0,010	0,005	0,203	0,804	139,895	28,687	20,328	20,234	20,256	20,272	20,319	20,411	65,806
17,333	0,214	0,779	1,065	-0,010	0,012	0,198	0,804	139,820	28,581	20,276	20,199	20,201	20,219	20,269	20,360	65,829
17,833	0,215	0,762	1,066	-0,010	0,038	0,208	0,804	139,767	28,571	20,258	20,173	20,181	20,195	20,244	20,337	65,842
18,333	0,224	0,790	1,070	-0,010	0,011	0,180	0,803	140,038	28,508	20,337	20,259	20,252	20,269	20,319	20,410	65,817
18,833	0,223	0,805	1,065	-0,010	0,020	0,176	0,802	139,987	28,559	20,283	20,201	20,206	20,205	20,269	20,354	65,983
19,333	0,214	0,763	1,072	-0,010	0,041	0,210	0,802	139,815	28,615	20,282	20,198	20,189	20,208	20,256	20,349	65,801
19,833	0,215	0,787	1,069	-0,010	0,011	0,186	0,801	139,698	28,674	20,307	20,219	20,216	20,233	20,285	20,373	65,695
20,334	0,214	0,788	1,062	-0,010	0,040	0,185	0,801	139,645	28,695	20,301	20,222	20,208	20,233	20,275	20,370	65,852
20,834	0,213	0,791	1,073	-0,010	0,017	0,176	0,800	140,023	28,699	20,304	20,226	20,229	20,234	20,287	20,376	65,925
21,334	0,219	0,812	1,070	-0,010	0,013	0,169	0,799	140,194	28,670	20,318	20,227	20,219	20,233	20,280	20,376	65,715
21,834	0,239	0,809	1,066	-0,010	0,030	0,171	0,798	140,462	28,687	20,263	20,180	20,177	20,186	20,243	20,328	65,883
22,334	0,216	0,802	1,064	-0,010	0,025	0,178	0,798	140,571	28,920	20,334	20,254	20,251	20,270	20,312	20,403	65,949
22,833	0,213	0,778	1,069	-0,010	0,020	0,192	0,798	140,362	28,805	20,291	20,209	20,197	20,218	20,271	20,355	66,078
23,333	0,214	0,799	1,070	-0,010	0,017	0,174	0,796	140,457	28,763	20,336	20,251	20,242	20,257	20,312	20,404	66,019
23,833	0,214	0,781	1,066	-0,010	0,005	0,198	0,796	140,458	28,688	20,304	20,211	20,208	20,225	20,277	20,364	66,008
24,333	0,213	0,764	1,069	-0,010	0,012	0,206	0,796	140,504	28,543	20,337	20,253	20,255	20,264	20,316	20,407	65,958
24,833	0,213	0,773	1,066	-0,010	0,034	0,198	0,795	140,368	28,638	20,274	20,179	20,186	20,193	20,244	20,336	65,897
25,333	0,212	0,781	1,068	-0,010	0,010	0,188	0,794	140,585	28,738	20,334	20,257	20,245	20,264	20,304	20,401	65,968
25,833	0,235	0,818	1,064	-0,010	0,011	0,155	0,795	140,757	28,834	20,327	20,245	20,238	20,247	20,295	20,392	66,091
26,333	0,237	0,846	1,068	-0,010	0,027	0,141	0,793	140,797	28,851	20,381	20,296	20,285	20,303	20,343	20,432	65,783
26,833	0,215	0,805	1,069	-0,010	0,010	0,184	0,793	140,798	28,748	20,322	20,237	20,226	20,239	20,290	20,381	65,695
27,334	0,211	0,764	1,066	-0,010	0,025	0,210	0,803	140,963	28,693	20,360	20,273	20,250	20,264	20,307	20,405	65,640

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
13,333	51,624	56,995	71,085	1,190	1,240	19706,349	20006,274	46,987	12,533	7,938	-0,193	42,700	8,436	25,569	2022-03-21 13:53
13,894	51,591	56,958	71,091	1,190	1,241	19691,075	20074,619	39,816	14,434	5,873	-0,198	42,539	8,420	25,475	2022-03-21 13:54
14,361	51,595	56,924	71,109	1,190	1,240	19618,516	20139,228	77,144	15,532	4,237	-0,198	42,312	8,398	25,475	2022-03-21 13:54
14,931	51,598	56,948	70,997	1,188	1,241	19536,473	19954,736	80,399	16,158	4,223	-0,203	42,628	8,429	25,475	2022-03-21 13:55
15,439	51,558	56,916	71,088	1,191	1,241	19670,640	20137,938	38,463	14,923	5,242	-0,206	42,001	8,367	25,475	2022-03-21 13:55
15,870	51,550	56,905	71,086	1,188	1,240	19611,820	20133,039	40,141	13,307	6,679	-0,204	42,685	8,435	25,352	2022-03-21 13:56
16,333	51,565	56,913	70,976	1,189	1,240	19654,466	19956,428	47,441	14,420	5,856	-0,202	42,482	8,414	25,259	2022-03-21 13:56
16,833	51,533	56,841	70,777	1,190	1,241	19479,266	19798,649	41,289	13,722	6,092	-0,203	42,605	8,427	25,259	2022-03-21 13:57
17,333	51,622	56,871	70,888	1,190	1,240	19397,564	19906,526	38,490	13,888	5,948	-0,207	42,481	8,414	25,165	2022-03-21 13:57
17,833	51,579	56,895	70,860	1,191	1,240	19489,141	19823,968	40,345	14,238	6,235	-0,203	42,540	8,420	25,165	2022-03-21 13:58
18,333	51,607	56,880	71,094	1,189	1,241	19382,758	20197,604	102,620	15,388	5,414	-0,201	42,566	8,423	25,165	2022-03-21 13:58
18,833	51,585	56,916	71,011	1,190	1,241	19649,466	20023,438	57,966	15,376	5,277	-0,207	42,360	8,402	25,071	2022-03-21 13:59
19,333	51,643	56,912	70,792	1,189	1,241	19308,196	19715,379	36,789	13,930	6,309	-0,201	42,861	8,452	25,071	2022-03-21 13:59
19,833	51,715	56,901	71,009	1,189	1,241	19069,756	20037,671	41,739	15,061	5,593	-0,201	42,898	8,456	25,071	2022-03-21 14:00
20,334	51,665	56,962	70,986	1,188	1,241	19332,498	19921,213	38,798	14,974	5,551	-0,198	42,299	8,396	25,071	2022-03-21 14:00
20,834	51,714	56,990	70,786	1,186	1,241	19337,271	19598,006	35,878	15,305	5,272	-0,207	43,062	8,472	24,978	2022-03-21 14:01
21,334	51,606	56,923	70,795	1,188	1,241	19234,346	19715,815	64,919	15,018	5,063	-0,198	43,301	8,495	24,978	2022-03-21 14:01
21,834	51,714	56,894	70,961	1,188	1,240	19314,989	19975,021	75,603	15,107	5,121	-0,200	42,861	8,452	24,853	2022-03-21 14:02
22,334	51,679	57,016	71,133	1,187	1,240	19433,891	20043,171	37,628	14,970	5,346	-0,203	42,253	8,392	24,853	2022-03-21 14:02
22,833	51,602	56,989	70,982	1,187	1,240	19717,393	19866,780	33,345	14,465	5,766	-0,203	42,899	8,456	24,853	2022-03-21 14:03
23,333	51,642	56,983	71,105	1,187	1,241	19580,739	20069,033	39,085	14,804	5,216	-0,203	42,850	8,451	24,759	2022-03-21 14:03
23,833	51,640	57,000	71,132	1,187	1,241	19560,172	20073,943	37,289	13,711	5,925	-0,208	42,469	8,413	24,759	2022-03-21 14:04
24,333	51,610	56,966	70,979	1,188	1,241	19551,464	19913,278	35,031	13,863	6,193	-0,198	42,957	8,461	24,665	2022-03-21 14:04
24,833	51,637	56,939	71,200	1,187	1,241	19423,149	20266,512	34,686	14,552	5,941	-0,201	42,381	8,404	24,665	2022-03-21 14:05
25,333	51,592	56,970	71,275	1,189	1,240	19606,501	20311,373	36,537	15,035	5,637	-0,203	42,818	8,448	24,665	2022-03-21 14:05
25,833	51,548	56,945	71,305	1,204	1,241	20089,446	20405,875	127,180	15,725	4,663	-0,194	42,636	8,430	24,648	2022-03-21 14:06
26,333	51,588	56,782	71,291	1,235	1,241	20105,499	20611,837	118,875	16,268	4,239	-0,200	42,972	8,463	24,571	2022-03-21 14:06
26,833	51,540	56,727	71,194	1,234	1,241	20046,037	20549,228	42,478	14,947	5,516	-0,206	42,542	8,420	24,571	2022-03-21 14:07
27,334	51,511	56,684	71,106	1,234	1,240	20010,636	20474,120	31,159	14,322	6,307	-0,200	42,408	8,407	24,571	2022-03-21 14:07

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
27,834	0,212	0,735	1,060	-0,010	0,029	0,234	0,793	140,964	28,667	20,344	20,255	20,235	20,239	20,290	20,385	65,793
28,334	0,213	0,748	1,065	-0,010	0,021	0,208	0,791	140,853	28,874	20,397	20,306	20,287	20,297	20,344	20,435	65,643
28,834	0,217	0,813	1,065	-0,010	0,015	0,173	0,791	140,725	28,855	20,305	20,221	20,196	20,201	20,255	20,350	65,581
29,334	0,215	0,776	1,066	-0,010	0,033	0,195	0,790	140,663	28,809	20,347	20,263	20,252	20,257	20,301	20,396	65,804
29,833	0,213	0,787	1,067	-0,010	0,010	0,184	0,789	140,659	28,827	20,380	20,290	20,271	20,275	20,321	20,421	65,767
30,333	0,212	0,783	1,064	-0,010	0,013	0,186	0,788	140,753	28,946	20,441	20,354	20,324	20,344	20,385	20,481	65,673
30,833	0,235	0,820	1,066	-0,010	0,011	0,151	0,788	140,872	28,901	20,359	20,272	20,241	20,259	20,300	20,400	65,687
31,333	0,220	0,838	1,066	-0,010	0,046	0,154	0,787	140,939	28,941	20,381	20,287	20,268	20,277	20,324	20,421	65,529
31,833	0,210	0,791	1,065	-0,010	0,029	0,189	0,787	140,896	28,753	20,354	20,264	20,243	20,253	20,293	20,394	65,492
32,333	0,216	0,783	1,065	-0,010	0,036	0,189	0,787	141,013	28,808	20,386	20,288	20,280	20,284	20,331	20,426	65,527
32,833	0,212	0,765	1,069	-0,009	0,012	0,209	0,786	141,018	28,847	20,366	20,265	20,254	20,267	20,304	20,409	65,608
33,333	0,212	0,767	1,070	-0,010	0,017	0,212	0,785	140,752	28,773	20,381	20,290	20,273	20,291	20,322	20,429	65,564
33,834	0,211	0,727	1,067	-0,010	0,009	0,235	0,784	140,672	28,563	20,391	20,300	20,288	20,297	20,337	20,439	65,590
34,334	0,216	0,768	1,066	-0,010	0,030	0,192	0,784	140,675	28,669	20,363	20,266	20,256	20,262	20,302	20,406	65,571
34,834	0,305	0,842	1,067	-0,010	0,047	0,136	0,784	140,799	28,841	20,335	20,241	20,237	20,248	20,278	20,384	65,525
35,334	0,223	0,822	1,070	-0,009	0,028	0,173	0,784	140,817	28,926	20,344	20,249	20,245	20,252	20,294	20,391	65,514
35,834	0,212	0,781	1,070	-0,010	0,021	0,196	0,782	140,816	28,775	20,410	20,321	20,303	20,311	20,350	20,455	65,413
36,333	0,211	0,744	1,065	-0,009	0,019	0,229	0,782	140,716	28,749	20,388	20,287	20,286	20,286	20,316	20,428	65,342
36,833	0,212	0,750	1,073	-0,010	0,028	0,209	0,782	140,582	28,784	20,347	20,255	20,237	20,247	20,286	20,391	65,364
37,333	0,212	0,764	1,064	-0,010	0,019	0,211	0,780	140,359	28,650	20,345	20,259	20,237	20,245	20,290	20,392	65,391
37,833	0,212	0,769	1,071	-0,009	0,039	0,204	0,780	140,280	28,636	20,354	20,255	20,243	20,258	20,287	20,394	65,386
38,333	0,213	0,776	1,067	-0,009	0,000	0,196	0,779	140,249	28,754	20,406	20,309	20,292	20,300	20,340	20,441	65,475
38,833	0,210	0,775	1,066	-0,010	0,043	0,187	0,779	140,274	28,821	20,399	20,318	20,294	20,292	20,334	20,441	65,347
39,333	0,222	0,827	1,064	-0,009	0,021	0,149	0,778	140,167	28,917	20,387	20,293	20,272	20,288	20,324	20,429	65,227
39,833	0,215	0,835	1,064	-0,005	0,028	0,143	0,787	140,279	28,925	20,413	20,320	20,295	20,307	20,340	20,448	65,287
40,333	0,216	0,842	1,065	-0,398	0,013	0,152	0,773	140,165	28,748	20,369	20,278	20,257	20,258	20,300	20,407	65,174
40,834	0,210	0,795	1,060	-0,480	0,037	0,182	0,783	140,254	28,818	20,406	20,315	20,295	20,298	20,341	20,445	65,322
41,334	0,212	0,796	1,067	-0,484	0,011	0,167	0,777	140,385	28,788	20,420	20,322	20,303	20,313	20,340	20,451	65,214
41,834	0,245	0,834	1,066	-0,488	0,024	0,159	0,777	140,569	28,762	20,421	20,321	20,303	20,314	20,343	20,455	65,203

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
27,834	51,492	56,680	71,169	1,235	1,241	20261,010	20581,516	31,578	13,460	7,029	-0,198	42,558	8,422	24,571	2022-03-21 14:08
28,334	51,457	56,717	70,792	1,234	1,251	20082,040	20163,526	38,876	14,479	6,249	-0,197	42,276	8,394	24,477	2022-03-21 14:08
28,834	51,479	56,664	71,047	1,228	1,252	19874,018	20610,627	40,579	15,197	5,202	-0,200	42,447	8,411	24,235	2022-03-21 14:09
29,334	51,494	56,722	71,340	1,230	1,252	20190,056	20951,870	48,106	14,659	5,853	-0,197	42,576	8,424	24,353	2022-03-21 14:09
29,833	51,463	56,767	71,009	1,229	1,253	20167,416	20427,720	37,693	14,919	5,510	-0,199	42,648	8,431	24,259	2022-03-21 14:10
30,333	51,471	56,718	71,037	1,224	1,252	19944,944	20518,400	35,726	14,607	5,566	-0,194	42,340	8,400	24,259	2022-03-21 14:10
30,833	51,438	56,732	70,872	1,223	1,252	19999,291	20266,104	67,816	15,257	4,527	-0,194	42,482	8,415	24,259	2022-03-21 14:11
31,333	51,407	56,661	70,736	1,224	1,252	19833,976	20185,261	33,603	15,337	4,632	-0,195	42,702	8,436	24,166	2022-03-21 14:11
31,833	51,417	56,621	70,876	1,224	1,252	19763,568	20431,396	28,224	14,384	5,666	-0,197	42,352	8,402	24,166	2022-03-21 14:12
32,333	51,400	56,641	70,981	1,223	1,252	19829,605	20554,666	35,102	14,419	5,656	-0,196	42,477	8,414	24,166	2022-03-21 14:12
32,833	51,378	56,642	70,894	1,222	1,252	19957,173	20433,612	32,254	13,547	6,261	-0,183	42,939	8,460	24,072	2022-03-21 14:13
33,333	51,388	56,636	70,914	1,225	1,252	19919,236	20464,942	33,520	13,891	6,346	-0,195	42,772	8,443	24,072	2022-03-21 14:13
33,834	51,338	56,619	71,001	1,224	1,252	20018,043	20611,127	33,096	13,419	7,043	-0,195	42,659	8,432	24,072	2022-03-21 14:14
34,334	51,315	56,610	70,796	1,223	1,251	19999,016	20326,127	56,838	15,094	5,769	-0,195	42,451	8,411	23,978	2022-03-21 14:14
34,834	51,350	56,594	70,911	1,224	1,252	19902,615	20531,775	300,208	16,562	4,079	-0,195	42,853	8,451	23,978	2022-03-21 14:15
35,334	51,300	56,578	70,784	1,224	1,252	19961,993	20363,763	38,532	14,966	5,198	-0,186	42,503	8,417	23,978	2022-03-21 14:15
35,834	51,306	56,543	70,660	1,223	1,252	19797,467	20236,026	31,748	14,621	5,882	-0,195	43,058	8,471	23,853	2022-03-21 14:16
36,333	51,253	56,507	70,720	1,222	1,252	19756,582	20373,428	29,733	13,549	6,861	-0,184	42,490	8,415	23,853	2022-03-21 14:16
36,833	51,232	56,483	70,732	1,223	1,252	19830,621	20432,637	35,620	14,561	6,281	-0,190	42,734	8,439	23,853	2022-03-21 14:17
37,333	51,244	56,489	70,736	1,222	1,252	19837,646	20419,372	33,437	13,844	6,317	-0,192	42,732	8,439	23,759	2022-03-21 14:17
37,833	51,218	56,464	70,891	1,223	1,252	19887,587	20689,493	34,696	14,317	6,117	-0,188	42,935	8,459	23,666	2022-03-21 14:18
38,333	51,204	56,494	70,821	1,223	1,252	20026,642	20540,681	31,509	14,441	5,887	-0,189	42,545	8,421	23,666	2022-03-21 14:18
38,833	51,204	56,477	70,462	1,223	1,252	19842,158	20046,604	29,911	14,609	5,599	-0,194	42,267	8,393	23,665	2022-03-21 14:19
39,333	51,204	56,413	70,731	1,223	1,253	19680,760	20548,700	44,339	15,515	4,460	-0,180	42,652	8,431	23,572	2022-03-21 14:19
39,833	51,155	56,422	70,709	1,222	1,252	19816,327	20479,484	54,970	15,840	4,303	-0,106	42,593	8,425	25,476	2022-03-21 14:20
40,333	51,177	56,385	70,574	1,224	1,252	19660,866	20347,137	36,722	15,692	4,564	-7,954	42,667	8,433	23,572	2022-03-21 14:20
40,834	51,153	56,393	70,679	1,222	1,252	19874,781	20476,535	28,146	15,018	5,455	-9,595	42,590	8,425	23,572	2022-03-21 14:21
41,334	51,139	56,377	70,556	1,222	1,252	19742,697	20328,661	42,694	15,244	4,999	-9,678	42,607	8,427	23,478	2022-03-21 14:21
41,834	51,134	56,355	70,921	1,223	1,251	19739,627	20869,859	41,511	15,030	4,764	-9,751	42,633	8,429	23,478	2022-03-21 14:22

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
42,334	0,211	0,775	1,074	-0,489	0,030	0,205	0,775	140,492	28,652	20,392	20,289	20,282	20,284	20,324	20,428	65,505
42,834	0,211	0,765	1,070	-0,489	0,002	0,202	0,775	140,515	28,860	20,410	20,315	20,297	20,312	20,339	20,447	65,392
43,333	0,226	0,822	1,064	-0,484	-0,004	0,143	0,774	140,490	28,930	20,413	20,317	20,296	20,306	20,343	20,448	65,315
43,833	0,233	0,853	1,069	-0,483	-0,007	0,137	0,774	140,601	28,926	20,445	20,331	20,317	20,318	20,362	20,465	65,453
44,333	0,224	0,823	1,066	-0,488	0,004	0,164	0,781	140,502	28,896	20,411	20,328	20,302	20,296	20,339	20,440	65,428
44,833	0,225	0,822	1,066	-0,485	-0,003	0,157	0,775	140,674	28,982	20,425	20,333	20,319	20,320	20,361	20,463	65,481
45,333	0,228	0,825	1,070	-0,480	0,051	0,149	0,772	140,832	29,022	20,438	20,334	20,315	20,321	20,366	20,469	65,391
45,833	0,232	0,827	1,065	-0,486	0,030	0,155	0,771	140,729	29,040	20,457	20,355	20,333	20,338	20,380	20,478	65,462
46,333	0,215	0,792	1,070	-0,490	0,035	0,194	0,770	140,766	28,891	20,476	20,370	20,360	20,356	20,401	20,500	65,557
46,833	0,213	0,738	1,069	-0,489	-0,011	0,233	0,770	140,440	28,931	20,469	20,375	20,356	20,356	20,394	20,499	65,457
47,333	0,211	0,749	1,060	-0,492	0,000	0,214	0,770	140,389	28,842	20,455	20,361	20,330	20,336	20,372	20,479	65,483
47,834	0,217	0,788	1,070	-0,485	0,031	0,177	0,769	140,144	28,955	20,459	20,357	20,337	20,330	20,370	20,478	65,488
48,334	0,257	0,825	1,067	-0,483	0,019	0,151	0,768	140,190	28,985	20,428	20,332	20,309	20,305	20,344	20,451	65,537
48,834	0,241	0,809	1,068	-0,487	0,019	0,179	0,768	140,117	28,984	20,461	20,363	20,332	20,333	20,377	20,476	65,426
49,334	0,214	0,761	1,069	-0,486	0,002	0,209	0,765	140,041	29,027	20,447	20,352	20,322	20,321	20,358	20,462	65,406
49,833	0,212	0,788	1,070	-0,485	0,041	0,187	0,765	139,940	28,938	20,449	20,353	20,311	20,310	20,356	20,458	65,331
50,333	0,213	0,772	1,073	-0,490	-0,033	0,196	0,766	139,960	28,960	20,449	20,358	20,316	20,310	20,351	20,457	65,417
50,833	0,215	0,800	1,073	-0,484	0,000	0,173	0,765	140,086	28,919	20,490	20,391	20,361	20,359	20,401	20,503	65,408
51,333	0,213	0,802	1,064	-0,484	0,006	0,181	0,765	140,117	28,886	20,467	20,373	20,339	20,333	20,369	20,479	65,389
51,833	0,211	0,790	1,067	-0,483	0,027	0,182	0,765	140,157	28,951	20,499	20,400	20,362	20,366	20,405	20,506	65,408
52,333	0,218	0,822	1,067	-0,484	0,002	0,161	0,763	140,146	28,964	20,500	20,396	20,361	20,363	20,398	20,506	65,342
52,833	0,213	0,765	1,066	-0,486	0,014	0,209	0,763	140,024	28,822	20,495	20,392	20,367	20,368	20,402	20,507	65,157
53,333	0,212	0,766	1,069	-0,483	0,009	0,201	0,764	139,912	28,901	20,486	20,383	20,350	20,346	20,375	20,488	65,346
53,833	0,215	0,797	1,070	-0,483	0,028	0,179	0,762	139,834	28,862	20,469	20,371	20,340	20,342	20,374	20,481	65,298
54,334	0,231	0,810	1,068	-0,484	-0,016	0,165	0,759	139,788	28,865	20,505	20,410	20,368	20,366	20,405	20,511	65,214
54,834	0,221	0,830	1,065	-0,485	0,005	0,147	0,757	140,192	29,104	20,494	20,386	20,342	20,343	20,381	20,492	65,163
55,334	0,215	0,787	1,067	-0,487	-0,015	0,190	0,761	140,478	29,073	20,433	20,330	20,296	20,286	20,332	20,438	65,214
55,834	0,222	0,785	1,065	-0,483	0,035	0,186	0,757	140,587	29,125	20,500	20,403	20,368	20,359	20,400	20,509	65,162
56,334	0,221	0,779	1,065	-0,485	-0,015	0,204	0,757	140,630	29,127	20,511	20,410	20,376	20,367	20,406	20,513	65,236

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
42,334	51,127	56,411	71,022	1,223	1,252	20174,695	20954,892	29,823	14,268	6,137	-9,781	42,920	8,458	23,572	2022-03-21 14:22
42,834	51,110	56,421	70,775	1,224	1,252	20065,408	20570,285	31,252	14,523	6,056	-9,785	42,694	8,435	23,478	2022-03-21 14:23
43,333	51,063	56,379	70,866	1,223	1,252	20006,630	20772,955	113,784	16,751	4,295	-9,677	42,319	8,398	23,350	2022-03-21 14:23
43,833	51,049	56,371	70,980	1,223	1,251	20208,065	20937,221	82,185	16,434	4,107	-9,651	42,806	8,446	23,350	2022-03-21 14:24
44,333	51,017	56,360	71,159	1,224	1,252	20247,736	21220,331	58,083	15,326	4,923	-9,766	42,589	8,425	23,257	2022-03-21 14:24
44,833	51,006	56,376	70,971	1,224	1,251	20326,593	20912,058	54,654	15,739	4,714	-9,704	42,444	8,411	23,631	2022-03-21 14:25
45,333	51,014	56,359	70,894	1,223	1,253	20173,380	20849,685	92,186	16,203	4,474	-9,609	42,824	8,448	23,257	2022-03-21 14:25
45,833	51,025	56,350	71,257	1,223	1,252	20253,741	21375,082	73,401	15,419	4,659	-9,716	42,709	8,437	23,163	2022-03-21 14:26
46,333	51,022	56,407	71,022	1,222	1,252	20379,976	20951,081	41,158	14,094	5,809	-9,805	42,523	8,419	23,069	2022-03-21 14:26
46,833	51,002	56,376	71,036	1,222	1,252	20268,787	21022,820	31,610	13,013	6,993	-9,781	42,858	8,452	23,069	2022-03-21 14:27
47,333	50,977	56,349	71,072	1,224	1,252	20366,950	21103,075	34,554	13,975	6,406	-9,834	42,510	8,417	23,069	2022-03-21 14:27
47,834	50,971	56,334	71,124	1,222	1,252	20364,557	21205,303	47,354	15,014	5,309	-9,694	42,535	8,420	23,069	2022-03-21 14:28
48,334	50,938	56,346	71,025	1,222	1,253	20481,223	21059,288	168,351	15,614	4,534	-9,658	42,326	8,399	23,069	2022-03-21 14:28
48,834	50,911	56,311	70,963	1,224	1,252	20387,059	21004,934	47,526	14,580	5,375	-9,735	43,000	8,466	22,975	2022-03-21 14:29
49,334	50,919	56,282	70,906	1,223	1,252	20338,342	20976,244	35,192	14,118	6,275	-9,725	42,669	8,433	22,850	2022-03-21 14:29
49,833	50,897	56,262	70,915	1,225	1,252	20292,004	21017,913	29,919	14,720	5,598	-9,704	42,744	8,440	22,757	2022-03-21 14:30
50,333	50,876	56,258	71,115	1,224	1,253	20427,324	21316,121	44,759	14,877	5,887	-9,793	43,222	8,487	22,850	2022-03-21 14:30
50,833	50,859	56,262	71,055	1,224	1,252	20442,671	21218,016	50,361	15,452	5,183	-9,688	43,211	8,486	22,757	2022-03-21 14:31
51,333	50,850	56,256	71,038	1,223	1,253	20411,106	21206,101	32,679	14,950	5,415	-9,675	42,505	8,417	22,757	2022-03-21 14:31
51,833	50,840	56,251	71,014	1,222	1,252	20428,486	21173,900	30,718	14,889	5,459	-9,654	42,759	8,442	22,850	2022-03-21 14:32
52,333	50,818	56,233	70,731	1,222	1,253	20375,888	20802,035	69,492	15,465	4,841	-9,682	42,687	8,435	22,663	2022-03-21 14:32
52,833	50,835	56,142	70,778	1,223	1,253	20095,973	21001,749	31,249	14,086	6,265	-9,719	42,537	8,420	22,663	2022-03-21 14:33
53,333	50,856	56,210	70,783	1,223	1,253	20330,827	20907,468	33,680	14,166	6,039	-9,661	42,973	8,463	22,861	2022-03-21 14:33
53,833	50,818	56,193	70,587	1,223	1,253	20314,151	20648,963	36,394	14,853	5,372	-9,670	42,821	8,448	22,569	2022-03-21 14:34
54,334	50,839	56,173	70,653	1,222	1,253	20162,770	20770,030	45,902	15,181	4,940	-9,671	42,664	8,433	22,475	2022-03-21 14:34
54,834	50,848	56,173	70,654	1,223	1,253	20085,155	20774,420	38,234	15,594	4,412	-9,703	42,518	8,418	22,475	2022-03-21 14:35
55,334	50,931	56,183	70,542	1,222	1,252	20031,100	20595,448	37,003	14,014	5,707	-9,742	42,666	8,433	22,569	2022-03-21 14:35
55,834	50,971	56,220	70,492	1,222	1,252	19906,693	20470,011	86,400	14,385	5,585	-9,660	42,527	8,419	22,257	2022-03-21 14:36
56,334	50,909	56,219	70,688	1,222	1,252	20094,245	20748,319	35,926	13,982	6,115	-9,706	42,749	8,441	22,257	2022-03-21 14:36

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
56,833	0,212	0,750	1,066	-0,485	-0,008	0,219	0,756	140,571	28,986	20,508	20,417	20,357	20,351	20,390	20,503	65,345
57,333	0,215	0,744	1,067	-0,484	0,045	0,222	0,755	140,510	29,023	20,522	20,422	20,367	20,370	20,407	20,520	65,356
57,833	0,214	0,751	1,060	-0,488	-0,003	0,215	0,755	140,408	29,083	20,509	20,405	20,357	20,362	20,397	20,507	65,258
58,333	0,212	0,779	1,074	-0,484	-0,007	0,188	0,754	140,469	28,979	20,451	20,356	20,318	20,314	20,345	20,458	65,308
58,833	0,217	0,812	1,069	-0,480	0,006	0,168	0,753	140,589	28,938	20,482	20,377	20,339	20,333	20,378	20,484	65,469
59,333	0,263	0,818	1,064	-0,482	-0,008	0,156	0,755	140,739	29,180	20,512	20,409	20,377	20,366	20,399	20,519	65,320
59,833	0,229	0,816	1,061	-0,481	0,040	0,170	0,755	140,806	29,174	20,474	20,364	20,338	20,330	20,360	20,479	65,342
60,333	0,213	0,787	1,060	-0,483	0,044	0,194	0,753	140,813	29,067	20,514	20,409	20,374	20,358	20,398	20,519	65,310
60,833	0,211	0,748	1,066	-0,489	-0,029	0,224	0,753	140,573	29,097	20,497	20,400	20,371	20,362	20,400	20,514	65,417
61,334	0,211	0,739	1,062	-0,490	0,055	0,225	0,752	140,337	29,013	20,475	20,382	20,338	20,328	20,375	20,483	65,535
61,834	0,211	0,740	1,065	-0,484	0,014	0,225	0,752	140,213	29,166	20,516	20,415	20,373	20,372	20,409	20,517	65,328
62,334	0,211	0,754	1,064	-0,484	-0,006	0,212	0,752	140,077	29,042	20,497	20,401	20,360	20,355	20,387	20,503	65,427
62,834	0,216	0,750	1,067	-0,482	0,026	0,222	0,750	139,934	28,939	20,489	20,379	20,348	20,343	20,375	20,494	65,446
63,334	0,214	0,760	1,070	-0,481	0,008	0,201	0,749	139,938	28,992	20,514	20,411	20,371	20,364	20,396	20,517	65,228
63,833	0,213	0,795	1,068	-0,482	0,014	0,178	0,750	139,925	29,056	20,487	20,385	20,338	20,341	20,362	20,486	65,204
64,333	0,229	0,817	1,065	-0,482	0,014	0,153	0,747	140,016	29,274	20,489	20,382	20,340	20,329	20,367	20,483	65,303
64,833	0,227	0,821	1,065	-0,478	0,020	0,169	0,750	140,111	29,244	20,495	20,398	20,354	20,344	20,382	20,496	65,373
65,333	0,213	0,782	1,066	-0,480	0,019	0,198	0,752	140,017	29,129	20,516	20,405	20,364	20,358	20,395	20,508	65,435
65,833	0,212	0,738	1,062	-0,479	0,022	0,234	0,746	139,471	28,907	20,460	20,362	20,315	20,302	20,343	20,457	65,337
66,333	0,213	0,744	1,066	-0,480	0,016	0,214	0,744	139,123	28,859	20,508	20,403	20,365	20,355	20,403	20,509	65,329
66,833	0,214	0,784	1,069	-0,478	0,042	0,195	0,745	138,892	28,701	20,446	20,345	20,302	20,295	20,334	20,446	65,254
67,333	0,210	0,740	1,064	-0,481	0,024	0,234	0,741	138,616	28,726	20,504	20,401	20,354	20,347	20,387	20,502	65,263
67,834	0,209	0,723	1,065	-0,481	0,017	0,242	0,743	138,268	28,664	20,499	20,383	20,353	20,350	20,380	20,499	65,232
68,334	0,211	0,749	1,070	-0,475	0,026	0,205	0,741	138,120	28,654	20,490	20,390	20,346	20,336	20,379	20,496	65,184
68,834	0,220	0,796	1,065	-0,478	-0,006	0,186	0,748	138,158	28,712	20,445	20,339	20,300	20,291	20,333	20,447	65,067
69,334	0,209	0,772	1,065	-0,475	0,029	0,198	0,743	138,032	28,772	20,453	20,344	20,308	20,306	20,342	20,453	65,039
69,834	0,211	0,785	1,069	-0,475	0,011	0,189	0,742	137,929	28,817	20,440	20,342	20,301	20,291	20,327	20,445	65,057
70,333	0,214	0,781	1,059	-0,478	0,038	0,190	0,740	137,886	28,690	20,470	20,367	20,322	20,313	20,349	20,470	64,922
70,833	0,213	0,795	1,062	-0,477	-0,012	0,173	0,737	137,750	28,700	20,455	20,351	20,306	20,298	20,329	20,450	64,957

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
56,833	50,909	56,236	70,753	1,222	1,252	20248,789	20820,917	33,099	13,655	6,565	-9,703	42,561	8,422	22,257	2022-03-21 14:37
57,333	51,034	56,305	70,643	1,222	1,252	20090,794	20554,044	39,058	13,726	6,669	-9,686	42,625	8,429	22,163	2022-03-21 14:37
57,833	51,054	56,322	70,518	1,222	1,252	19912,368	20354,629	36,867	14,004	6,461	-9,754	42,777	8,444	22,163	2022-03-21 14:38
58,333	51,035	56,304	70,803	1,222	1,252	20014,597	20790,469	37,340	14,900	5,655	-9,682	42,957	8,461	22,163	2022-03-21 14:38
58,833	50,929	56,333	70,879	1,222	1,253	20394,894	20863,141	42,495	15,447	5,045	-9,598	42,875	8,453	22,070	2022-03-21 14:39
59,333	50,901	56,295	70,732	1,222	1,252	20226,968	20704,966	267,564	16,034	4,688	-9,643	42,455	8,412	22,347	2022-03-21 14:39
59,833	50,967	56,272	70,671	1,224	1,253	20189,436	20656,629	61,312	15,409	5,108	-9,626	42,577	8,424	22,114	2022-03-21 14:40
60,333	50,931	56,295	70,837	1,223	1,253	20180,679	20862,422	34,600	14,536	5,817	-9,650	41,948	8,361	22,070	2022-03-21 14:40
60,833	51,010	56,311	70,883	1,224	1,252	20233,605	20900,082	29,401	13,516	6,728	-9,778	42,575	8,424	22,070	2022-03-21 14:41
61,334	50,986	56,379	70,910	1,222	1,253	20400,360	20845,765	29,666	13,422	6,764	-9,806	42,314	8,398	21,976	2022-03-21 14:41
61,834	50,957	56,345	70,765	1,224	1,253	20183,112	20686,620	31,838	13,231	6,736	-9,681	42,652	8,431	21,976	2022-03-21 14:42
62,334	50,871	56,269	70,855	1,223	1,252	20435,103	20920,126	32,000	13,570	6,355	-9,674	42,447	8,411	21,851	2022-03-21 14:42
62,834	50,876	56,269	70,670	1,221	1,252	20422,749	20645,195	38,052	13,386	6,669	-9,638	42,829	8,449	21,851	2022-03-21 14:43
63,334	50,873	56,221	70,464	1,223	1,252	20153,423	20423,165	40,648	14,458	6,032	-9,623	43,330	8,498	21,893	2022-03-21 14:43
63,833	50,877	56,191	70,662	1,222	1,252	20095,022	20750,859	33,268	14,955	5,338	-9,649	42,488	8,415	22,083	2022-03-21 14:44
64,333	50,846	56,241	70,570	1,223	1,252	20285,442	20547,446	129,386	15,743	4,601	-9,631	42,826	8,448	21,570	2022-03-21 14:44
64,833	50,819	56,209	70,923	1,222	1,252	20403,896	21101,362	60,080	15,067	5,062	-9,556	42,416	8,408	21,851	2022-03-21 14:45
65,333	50,796	56,249	70,768	1,221	1,252	20514,785	20818,401	35,107	14,604	5,942	-9,592	43,047	8,470	21,757	2022-03-21 14:45
65,833	50,808	56,217	70,853	1,223	1,252	20387,447	20983,430	31,927	13,348	7,019	-9,581	42,321	8,398	21,570	2022-03-21 14:46
66,333	50,826	56,216	70,616	1,221	1,252	20327,045	20648,137	47,012	14,513	6,431	-9,609	42,558	8,422	21,476	2022-03-21 14:46
66,833	50,807	56,201	70,588	1,222	1,252	20268,033	20635,698	32,272	14,828	5,844	-9,568	42,621	8,428	21,476	2022-03-21 14:47
67,333	50,781	56,174	70,656	1,223	1,253	20316,982	20777,700	26,050	13,160	7,008	-9,614	42,144	8,381	21,353	2022-03-21 14:47
67,834	50,746	56,146	70,418	1,218	1,252	20248,764	20470,901	26,470	13,161	7,248	-9,622	42,654	8,432	21,570	2022-03-21 14:48
68,334	50,750	56,134	70,415	1,215	1,252	20118,873	20477,570	32,525	14,241	6,139	-9,496	42,720	8,438	21,353	2022-03-21 14:48
68,834	50,741	56,117	70,358	1,214	1,253	19965,040	20430,247	29,406	14,478	5,587	-9,559	42,437	8,410	21,432	2022-03-21 14:49
69,334	50,725	56,067	70,386	1,214	1,253	19944,146	20543,529	27,224	14,341	5,928	-9,508	42,353	8,402	21,344	2022-03-21 14:49
69,834	50,714	56,064	70,191	1,215	1,253	20002,177	20275,864	37,700	14,740	5,659	-9,507	42,637	8,430	21,476	2022-03-21 14:50
70,333	50,729	56,027	70,166	1,215	1,252	19783,179	20267,131	39,172	14,407	5,688	-9,561	42,493	8,416	21,260	2022-03-21 14:50
70,833	50,717	56,032	70,191	1,214	1,252	19838,615	20303,713	32,425	14,876	5,199	-9,536	42,277	8,394	21,260	2022-03-21 14:51



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
71,333	0,226	0,832	1,064	-0,473	0,011	0,150	0,739	137,698	28,777	20,465	20,352	20,315	20,303	20,339	20,456	65,014
71,833	0,224	0,795	1,068	-0,482	0,024	0,185	0,740	137,516	28,672	20,474	20,365	20,317	20,311	20,351	20,465	64,955
72,333	0,211	0,785	1,062	-0,474	0,014	0,191	0,740	137,373	28,766	20,500	20,388	20,344	20,323	20,362	20,480	64,921
72,833	0,209	0,763	1,068	-0,471	0,030	0,211	0,736	137,162	28,880	20,530	20,410	20,368	20,351	20,392	20,507	65,044
73,333	0,209	0,748	1,063	-0,476	0,009	0,223	0,737	137,103	28,774	20,509	20,397	20,340	20,326	20,371	20,486	64,970
73,833	0,209	0,755	1,070	-0,474	0,004	0,212	0,736	136,962	28,626	20,500	20,396	20,344	20,324	20,354	20,482	64,931
74,333	0,209	0,760	1,063	-0,473	-0,004	0,208	0,737	136,958	28,725	20,506	20,396	20,337	20,323	20,363	20,482	64,960
74,834	0,208	0,758	1,062	-0,478	0,028	0,213	0,734	136,843	28,858	20,508	20,402	20,342	20,330	20,370	20,485	64,888
75,334	0,208	0,755	1,060	-0,470	0,007	0,213	0,732	136,669	28,631	20,503	20,391	20,329	20,323	20,354	20,476	65,038
75,834	0,208	0,747	1,064	-0,471	0,045	0,224	0,733	136,621	28,715	20,487	20,379	20,314	20,315	20,353	20,469	64,949
76,334	0,208	0,727	1,062	-0,467	0,017	0,242	0,732	136,419	28,731	20,478	20,375	20,309	20,295	20,330	20,454	64,804
76,834	0,210	0,751	1,070	-0,469	0,059	0,205	0,734	136,295	28,827	20,531	20,412	20,350	20,339	20,370	20,496	64,765
77,333	0,243	0,812	1,061	-0,470	0,008	0,153	0,735	136,339	28,871	20,515	20,419	20,345	20,336	20,370	20,494	64,627
77,833	0,417	0,843	1,061	-0,468	0,020	0,138	0,734	136,340	28,847	20,535	20,427	20,354	20,339	20,374	20,501	64,881
78,333	0,402	0,850	1,066	-0,472	0,010	0,132	0,729	136,301	28,663	20,543	20,437	20,369	20,355	20,383	20,513	64,678
78,833	0,289	0,836	1,067	-0,468	0,020	0,158	0,736	136,477	28,669	20,554	20,452	20,387	20,373	20,408	20,537	64,574
79,333	0,220	0,825	1,059	-0,472	0,019	0,148	0,730	136,577	28,630	20,518	20,413	20,346	20,335	20,380	20,502	64,765
79,833	0,217	0,822	1,066	-0,471	0,023	0,165	0,729	136,556	28,872	20,588	20,477	20,423	20,405	20,442	20,571	64,807
80,333	0,208	0,775	1,067	-0,469	0,003	0,203	0,728	136,272	28,579	20,567	20,452	20,401	20,383	20,415	20,546	64,923
80,833	0,209	0,760	1,063	-0,470	0,004	0,209	0,727	136,193	28,787	20,598	20,493	20,422	20,417	20,445	20,578	64,858
81,333	0,228	0,783	1,064	-0,467	0,028	0,188	0,729	136,132	28,824	20,595	20,492	20,436	20,414	20,457	20,580	64,874
81,834	0,220	0,805	1,067	-0,469	0,003	0,167	0,727	136,057	28,775	20,605	20,503	20,438	20,424	20,463	20,587	64,839
82,334	0,210	0,803	1,067	-0,466	0,027	0,177	0,725	135,856	28,662	20,601	20,485	20,419	20,408	20,446	20,577	64,812
82,834	0,208	0,774	1,060	-0,463	0,003	0,203	0,725	135,837	28,599	20,579	20,474	20,412	20,393	20,437	20,562	64,725
83,334	0,208	0,790	1,061	-0,463	-0,018	0,177	0,725	135,908	28,580	20,557	20,451	20,387	20,370	20,409	20,542	64,843
83,833	0,217	0,828	1,067	-0,468	0,050	0,148	0,724	135,984	28,694	20,595	20,486	20,433	20,418	20,446	20,585	64,779
84,333	0,211	0,825	1,070	-0,464	0,027	0,150	0,723	135,862	28,927	20,603	20,493	20,446	20,424	20,460	20,595	64,845
84,833	0,221	0,804	1,062	-0,464	0,025	0,187	0,723	135,741	28,630	20,612	20,504	20,446	20,437	20,467	20,601	64,865
85,333	0,211	0,770	1,063	-0,470	0,003	0,200	0,722	135,623	28,489	20,650	20,525	20,473	20,460	20,488	20,626	64,829

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
71,333	50,662	56,015	70,397	1,213	1,253	19979,728	20636,227	73,262	15,622	4,489	-9,463	42,560	8,422	21,166	2022-03-21 14:51
71,833	50,644	56,012	70,256	1,214	1,252	19931,835	20429,531	44,338	14,600	5,565	-9,644	42,544	8,421	21,260	2022-03-21 14:52
72,333	50,617	55,984	70,250	1,215	1,252	19938,473	20458,657	29,319	14,757	5,721	-9,478	42,495	8,416	21,166	2022-03-21 14:52
72,833	50,651	55,985	70,292	1,214	1,252	20050,636	20523,440	25,887	14,160	6,333	-9,411	42,678	8,434	20,709	2022-03-21 14:53
73,333	50,632	56,011	70,222	1,214	1,252	19973,145	20384,243	25,127	13,730	6,697	-9,522	42,497	8,416	21,072	2022-03-21 14:53
73,833	50,611	55,961	70,113	1,214	1,252	19957,178	20296,361	28,820	14,328	6,362	-9,474	42,951	8,461	20,978	2022-03-21 14:54
74,333	50,596	55,952	70,297	1,212	1,252	19986,916	20572,445	23,540	14,347	6,245	-9,453	42,966	8,462	21,072	2022-03-21 14:54
74,834	50,593	55,954	70,235	1,214	1,253	19923,416	20490,809	23,533	14,070	6,394	-9,563	42,745	8,440	20,677	2022-03-21 14:55
75,334	50,582	55,952	70,257	1,213	1,253	20123,666	20522,783	25,879	14,008	6,390	-9,392	42,311	8,398	21,072	2022-03-21 14:55
75,834	50,553	55,952	70,160	1,214	1,252	20059,469	20370,081	22,619	13,423	6,726	-9,412	42,720	8,438	20,662	2022-03-21 14:56
76,334	50,553	55,900	69,929	1,215	1,252	19864,140	20122,537	22,020	12,993	7,259	-9,344	42,798	8,446	20,678	2022-03-21 14:56
76,834	50,543	55,878	69,769	1,214	1,253	19813,301	19933,614	32,179	14,428	6,142	-9,373	42,998	8,465	20,853	2022-03-21 14:57
77,333	50,492	55,808	70,023	1,213	1,253	19686,012	20397,698	194,820	15,459	4,585	-9,401	42,562	8,422	21,570	2022-03-21 14:57
77,833	50,478	55,849	70,132	1,214	1,252	20065,120	20489,279	252,797	15,410	4,132	-9,352	42,524	8,419	20,853	2022-03-21 14:58
78,333	50,480	55,824	69,790	1,212	1,253	19755,769	20042,001	699,564	15,966	3,971	-9,434	42,838	8,450	20,450	2022-03-21 14:58
78,833	50,461	55,756	70,129	1,214	1,253	19660,175	20627,423	70,305	15,229	4,739	-9,368	42,641	8,430	20,978	2022-03-21 14:59
79,333	50,448	55,790	70,234	1,213	1,252	19930,539	20718,913	75,012	16,033	4,439	-9,434	42,372	8,404	20,572	2022-03-21 14:59
79,833	50,461	55,819	70,307	1,212	1,252	19957,415	20778,104	26,902	15,052	4,956	-9,413	42,659	8,432	20,572	2022-03-21 15:00
80,333	50,446	55,865	70,159	1,214	1,253	20178,138	20510,824	23,169	14,245	6,096	-9,379	42,736	8,440	20,478	2022-03-21 15:00
80,833	50,425	55,823	70,319	1,212	1,252	20078,732	20791,965	26,383	14,378	6,268	-9,403	42,588	8,425	20,354	2022-03-21 15:01
81,333	50,441	55,835	70,240	1,215	1,253	20122,700	20674,542	138,086	14,835	5,631	-9,344	42,476	8,414	20,760	2022-03-21 15:01
81,834	50,409	55,823	70,123	1,214	1,253	20109,786	20518,812	38,773	15,418	5,011	-9,370	43,174	8,483	20,353	2022-03-21 15:02
82,334	50,369	55,788	70,180	1,213	1,253	20105,623	20655,449	25,045	14,937	5,324	-9,311	42,732	8,439	20,354	2022-03-21 15:02
82,834	50,357	55,764	70,305	1,214	1,253	20012,592	20871,439	21,525	14,278	6,089	-9,251	42,266	8,393	20,354	2022-03-21 15:03
83,334	50,368	55,787	70,029	1,213	1,253	20151,467	20443,291	23,291	15,175	5,321	-9,257	42,379	8,404	20,260	2022-03-21 15:03
83,833	50,343	55,750	70,270	1,213	1,253	20095,138	20848,024	31,284	15,679	4,452	-9,360	42,824	8,448	20,354	2022-03-21 15:04
84,333	50,357	55,781	70,257	1,213	1,253	20168,987	20771,699	31,754	15,479	4,496	-9,282	42,742	8,440	20,166	2022-03-21 15:04
84,833	50,378	55,800	70,293	1,214	1,255	20181,670	20824,459	34,183	13,965	5,616	-9,283	42,631	8,429	20,166	2022-03-21 15:05
85,333	50,358	55,784	70,507	1,212	1,253	20126,938	21130,952	27,561	14,376	5,990	-9,398	42,383	8,405	20,166	2022-03-21 15:05

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
85,833	0,209	0,731	1,065	-0,468	0,026	0,253	0,722	135,652	28,404	20,638	20,518	20,470	20,451	20,491	20,628	65,045
86,333	0,210	0,667	1,065	-0,464	0,028	0,287	0,721	135,712	28,472	20,660	20,551	20,494	20,483	20,525	20,658	63,963
86,833	0,210	0,711	1,071	-0,472	-0,001	0,239	0,718	135,695	28,511	20,638	20,529	20,480	20,464	20,499	20,638	64,075
87,333	0,210	0,752	1,066	-0,466	0,042	0,220	0,722	135,723	28,548	20,656	20,542	20,494	20,481	20,516	20,651	65,121
87,833	0,209	0,764	1,057	-0,463	0,013	0,197	0,720	135,780	28,489	20,663	20,559	20,512	20,488	20,516	20,663	64,743
88,334	0,213	0,785	1,074	-0,464	0,030	0,191	0,723	135,740	28,233	20,653	20,544	20,493	20,469	20,508	20,647	65,430
88,834	0,210	0,769	1,071	-0,468	0,020	0,211	0,719	135,623	28,682	20,704	20,597	20,545	20,526	20,563	20,700	65,135
89,334	0,208	0,706	1,071	-0,466	-0,024	0,253	0,717	135,311	28,553	20,649	20,539	20,491	20,475	20,501	20,643	65,059
89,834	0,209	0,727	1,068	-0,463	0,043	0,242	0,717	135,201	28,302	20,661	20,548	20,499	20,486	20,516	20,657	65,099
90,334	0,209	0,712	1,065	-0,462	0,026	0,243	0,715	135,178	28,289	20,621	20,507	20,463	20,448	20,477	20,622	64,953
90,833	0,219	0,771	1,066	-0,463	0,020	0,190	0,715	135,207	28,446	20,639	20,523	20,486	20,471	20,489	20,642	64,882
91,333	0,223	0,791	1,069	-0,463	0,032	0,185	0,715	135,192	28,368	20,642	20,528	20,484	20,476	20,497	20,647	64,969
91,833	0,217	0,787	1,065	-0,459	-0,006	0,194	0,714	135,220	28,211	20,651	20,549	20,510	20,490	20,520	20,668	64,872
92,333	0,213	0,773	1,064	-0,460	0,015	0,200	0,714	135,172	28,104	20,631	20,525	20,481	20,474	20,502	20,648	65,005
92,833	0,211	0,748	1,066	-0,464	-0,002	0,221	0,712	135,168	28,196	20,669	20,564	20,519	20,518	20,540	20,689	64,958
93,333	0,212	0,770	1,059	-0,461	-0,028	0,196	0,713	135,098	28,328	20,668	20,549	20,526	20,511	20,544	20,685	64,967
93,833	0,210	0,788	1,064	-0,462	0,022	0,185	0,713	134,992	28,036	20,655	20,545	20,511	20,494	20,522	20,668	64,921
94,333	0,220	0,765	1,077	-0,466	0,024	0,215	0,711	134,891	27,945	20,624	20,516	20,482	20,462	20,495	20,645	64,873
94,833	0,211	0,761	1,073	-0,462	0,040	0,206	0,710	134,860	28,125	20,620	20,513	20,472	20,463	20,483	20,635	64,809
95,334	0,209	0,736	1,065	-0,463	0,022	0,233	0,712	134,602	28,311	20,614	20,503	20,467	20,456	20,478	20,627	65,018
95,834	0,210	0,719	1,066	-0,459	0,003	0,238	0,710	134,482	28,167	20,568	20,468	20,421	20,414	20,437	20,585	65,058
96,334	0,218	0,779	1,064	-0,460	0,031	0,184	0,708	134,511	28,548	20,614	20,498	20,462	20,458	20,474	20,624	64,927
96,834	0,228	0,803	1,068	-0,461	-0,019	0,175	0,709	134,514	28,375	20,579	20,466	20,431	20,425	20,442	20,594	64,980
97,334	0,214	0,799	1,068	-0,460	0,003	0,172	0,708	134,567	27,950	20,559	20,447	20,416	20,414	20,429	20,577	65,015
97,833	0,217	0,802	1,069	-0,457	-0,037	0,180	0,707	134,625	28,033	20,561	20,451	20,411	20,413	20,427	20,578	64,936
98,333	0,209	0,774	1,056	-0,460	-0,008	0,206	0,707	134,543	28,017	20,581	20,480	20,440	20,437	20,456	20,602	65,034
98,833	0,209	0,772	1,062	-0,461	0,016	0,191	0,706	134,481	28,049	20,582	20,473	20,434	20,429	20,446	20,594	64,868
99,333	0,212	0,796	1,069	-0,458	-0,003	0,180	0,705	134,521	28,105	20,562	20,457	20,416	20,421	20,433	20,584	64,966
99,833	0,293	0,822	1,067	-0,458	0,009	0,150	0,704	134,621	28,099	20,544	20,447	20,393	20,388	20,408	20,561	64,934

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
85,833	50,346	55,833	70,460	1,212	1,253	20450,241	20996,413	26,381	12,410	7,583	-9,367	42,765	8,442	20,073	2022-03-21 15:06
86,333	50,356	55,895	70,115	1,200	1,225	18750,845	19940,712	28,148	11,696	8,619	-9,287	42,303	8,397	20,073	2022-03-21 15:06
86,833	50,331	56,227	70,717	1,187	1,182	18731,735	19618,665	28,312	13,457	7,158	-9,444	42,786	8,445	19,979	2022-03-21 15:07
87,333	50,393	56,292	70,294	1,199	1,222	20275,676	19593,776	26,563	13,455	6,590	-9,321	42,300	8,396	20,073	2022-03-21 15:07
87,833	50,437	55,731	70,077	1,212	1,254	19901,852	20614,582	25,633	14,595	5,901	-9,265	42,311	8,398	20,073	2022-03-21 15:08
88,334	50,457	56,123	70,307	1,203	1,254	20678,550	20373,307	29,904	14,269	5,732	-9,279	43,170	8,482	20,180	2022-03-21 15:08
88,834	50,534	55,730	70,348	1,215	1,255	20355,616	21011,285	25,551	13,590	6,317	-9,351	42,904	8,456	19,979	2022-03-21 15:09
89,334	50,437	55,695	70,121	1,215	1,254	20393,208	20725,745	22,108	12,602	7,592	-9,327	42,869	8,453	19,854	2022-03-21 15:09
89,834	50,498	55,628	70,085	1,215	1,255	20355,163	20778,242	24,446	12,997	7,265	-9,261	42,574	8,424	19,854	2022-03-21 15:10
90,334	50,556	55,678	69,990	1,214	1,254	20059,681	20560,068	27,466	13,243	7,298	-9,238	42,553	8,422	19,572	2022-03-21 15:10
90,833	50,557	55,645	69,971	1,215	1,254	19980,149	20581,401	86,642	15,201	5,686	-9,258	42,784	8,444	19,666	2022-03-21 15:11
91,333	50,554	55,650	69,858	1,215	1,254	20098,257	20401,510	42,983	14,669	5,550	-9,266	42,915	8,457	19,666	2022-03-21 15:11
91,833	50,758	55,701	69,860	1,216	1,254	19688,405	20341,954	52,189	14,563	5,806	-9,181	42,868	8,453	19,666	2022-03-21 15:12
92,333	50,796	55,775	69,977	1,216	1,254	19834,710	20397,700	26,720	14,699	5,989	-9,199	42,603	8,426	19,572	2022-03-21 15:12
92,833	50,788	55,842	69,709	1,216	1,253	19768,274	19907,671	42,092	13,755	6,617	-9,287	42,332	8,400	19,478	2022-03-21 15:13
93,333	50,718	55,785	69,804	1,214	1,254	19856,253	20131,467	30,671	14,731	5,895	-9,215	42,356	8,402	19,572	2022-03-21 15:13
93,833	50,775	55,777	69,352	1,215	1,254	19717,334	19497,048	28,725	14,988	5,559	-9,230	42,637	8,430	19,572	2022-03-21 15:14
94,333	50,709	55,800	69,630	1,214	1,253	19731,753	19852,355	37,138	13,659	6,455	-9,323	43,266	8,492	19,345	2022-03-21 15:14
94,833	50,755	55,723	69,834	1,214	1,254	19574,199	20261,102	26,802	14,302	6,179	-9,243	42,649	8,431	19,254	2022-03-21 15:15
95,334	50,739	55,796	70,115	1,215	1,253	19903,799	20556,113	27,062	13,089	7,001	-9,254	42,639	8,430	19,572	2022-03-21 15:15
95,834	50,733	55,837	69,863	1,214	1,254	19954,081	20138,226	27,391	12,758	7,141	-9,179	42,712	8,437	19,345	2022-03-21 15:16
96,334	50,761	55,795	69,960	1,215	1,253	19749,312	20335,966	88,125	14,799	5,526	-9,210	42,959	8,462	19,254	2022-03-21 15:16
96,834	50,767	55,817	70,241	1,214	1,254	19797,209	20714,053	44,925	14,968	5,252	-9,213	42,774	8,443	19,251	2022-03-21 15:17
97,334	50,689	55,827	70,070	1,213	1,253	19943,956	20446,301	52,714	15,344	5,165	-9,198	42,880	8,454	19,203	2022-03-21 15:17
97,833	50,671	55,760	70,108	1,214	1,254	19869,399	20602,452	29,585	14,626	5,403	-9,146	43,007	8,466	19,157	2022-03-21 15:18
98,333	50,692	55,799	69,974	1,213	1,254	19969,247	20357,883	24,624	14,096	6,165	-9,201	42,405	8,407	19,064	2022-03-21 15:18
98,833	50,654	55,759	69,989	1,214	1,254	19808,413	20442,678	31,737	14,939	5,733	-9,223	42,640	8,430	19,064	2022-03-21 15:19
99,333	50,692	55,760	69,971	1,213	1,254	19869,570	20418,263	41,727	15,143	5,403	-9,160	42,650	8,431	18,970	2022-03-21 15:19
99,833	50,703	55,789	70,055	1,213	1,254	19805,683	20495,470	376,256	16,466	4,497	-9,164	42,916	8,457	18,970	2022-03-21 15:20

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
100,333	0,234	0,816	1,073	-0,461	0,018	0,172	0,703	134,738	28,041	20,571	20,469	20,420	20,425	20,428	20,587	65,110
100,833	0,211	0,781	1,062	-0,461	0,023	0,195	0,702	134,762	27,964	20,575	20,472	20,431	20,429	20,437	20,592	65,201
101,333	0,212	0,778	1,071	-0,458	0,042	0,193	0,702	134,613	28,156	20,589	20,485	20,446	20,450	20,459	20,603	65,285
101,834	0,218	0,767	1,067	-0,457	0,006	0,207	0,701	134,602	28,177	20,608	20,502	20,464	20,455	20,469	20,621	65,286
102,334	0,213	0,734	1,072	-0,459	0,019	0,231	0,700	134,518	28,045	20,596	20,491	20,445	20,450	20,460	20,609	65,348
102,834	0,211	0,764	1,066	-0,460	0,022	0,200	0,698	134,500	28,190	20,584	20,482	20,447	20,455	20,457	20,608	65,195
103,334	0,213	0,776	1,073	-0,460	0,025	0,198	0,699	134,449	28,124	20,562	20,455	20,418	20,413	20,430	20,579	65,385
103,834	0,213	0,760	1,066	-0,463	-0,005	0,218	0,698	134,409	27,986	20,574	20,472	20,432	20,436	20,437	20,590	65,281
104,333	0,210	0,731	1,067	-0,460	0,006	0,225	0,699	134,288	28,112	20,581	20,484	20,431	20,436	20,442	20,592	65,345
104,833	0,214	0,753	1,070	-0,461	0,001	0,218	0,698	134,265	27,906	20,602	20,500	20,456	20,446	20,465	20,608	65,292
105,333	0,221	0,755	1,071	-0,464	0,009	0,211	0,697	134,144	27,884	20,599	20,509	20,444	20,458	20,464	20,608	65,392
105,833	0,232	0,784	1,065	-0,455	-0,020	0,183	0,696	134,315	28,127	20,608	20,503	20,467	20,467	20,472	20,619	65,326
106,333	0,245	0,791	1,057	-0,457	-0,002	0,186	0,696	134,509	28,237	20,588	20,478	20,438	20,438	20,444	20,596	65,285
106,833	0,218	0,768	1,062	-0,458	-0,010	0,206	0,694	134,518	28,157	20,548	20,441	20,402	20,409	20,404	20,555	65,312
107,333	0,210	0,765	1,072	-0,459	0,043	0,207	0,694	134,617	28,308	20,597	20,489	20,455	20,461	20,458	20,610	65,322
107,833	0,213	0,771	1,068	-0,463	-0,023	0,197	0,694	134,716	28,513	20,587	20,480	20,441	20,447	20,454	20,603	65,450
108,333	0,235	0,792	1,062	-0,461	0,006	0,185	0,693	134,848	28,502	20,571	20,473	20,435	20,448	20,437	20,590	65,484
108,834	0,222	0,770	1,064	-0,459	0,007	0,202	0,693	134,968	28,381	20,616	20,499	20,462	20,478	20,479	20,625	65,557
109,334	0,215	0,746	1,067	-0,461	-0,023	0,221	0,691	134,873	28,232	20,542	20,436	20,399	20,409	20,413	20,555	65,749
109,834	0,213	0,744	1,066	-0,463	0,019	0,222	0,691	134,807	28,368	20,554	20,455	20,426	20,433	20,431	20,577	65,689
110,334	0,213	0,755	1,063	-0,464	0,034	0,217	0,690	134,874	28,305	20,585	20,474	20,447	20,457	20,457	20,600	65,805
110,834	0,214	0,744	1,065	-0,466	0,035	0,220	0,689	134,770	28,214	20,582	20,483	20,456	20,459	20,465	20,602	65,739
111,333	0,211	0,762	1,065	-0,459	0,028	0,204	0,689	134,811	28,244	20,576	20,472	20,448	20,458	20,451	20,594	65,793
111,833	0,210	0,772	1,069	-0,460	-0,001	0,196	0,689	134,900	28,260	20,576	20,479	20,455	20,464	20,470	20,601	65,772
112,333	0,214	0,797	1,061	-0,459	0,024	0,179	0,688	134,887	28,121	20,587	20,485	20,455	20,465	20,474	20,606	65,870
112,833	0,211	0,762	1,066	-0,458	-0,007	0,218	0,687	134,869	28,022	20,588	20,478	20,447	20,462	20,467	20,600	65,895
113,333	0,212	0,717	1,065	-0,465	-0,011	0,252	0,688	134,800	28,001	20,594	20,491	20,462	20,469	20,477	20,614	66,054
113,833	0,225	0,726	1,062	-0,452	-0,009	0,230	0,689	134,745	28,030	20,592	20,487	20,449	20,462	20,473	20,603	66,012
114,333	0,214	0,737	1,065	-0,462	-0,003	0,230	0,682	134,625	28,072	20,581	20,474	20,445	20,461	20,471	20,597	65,960

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
100,333	50,744	55,832	70,252	1,212	1,255	19988,773	20720,899	48,118	14,958	5,175	-9,215	42,757	8,442	18,845	2022-03-21 15:20
100,833	50,739	55,885	70,579	1,213	1,254	20130,823	21107,564	30,159	14,689	5,862	-9,230	42,447	8,411	18,845	2022-03-21 15:21
101,333	50,722	55,921	70,644	1,212	1,254	20264,134	21139,454	30,772	14,421	5,801	-9,166	43,149	8,480	18,970	2022-03-21 15:21
101,834	50,805	55,933	70,517	1,212	1,254	20144,589	20951,994	58,176	13,967	6,215	-9,138	42,834	8,449	18,845	2022-03-21 15:22
102,334	50,826	56,005	70,459	1,212	1,255	20205,204	20773,497	28,917	12,910	6,926	-9,185	43,187	8,484	18,845	2022-03-21 15:22
102,834	50,897	55,975	70,572	1,214	1,255	19910,796	20973,962	29,740	14,283	5,998	-9,192	42,490	8,415	18,751	2022-03-21 15:23
103,334	50,932	56,072	70,506	1,213	1,254	20117,755	20733,971	40,048	14,298	5,930	-9,202	42,888	8,455	18,657	2022-03-21 15:23
103,834	50,923	56,033	70,554	1,214	1,255	19994,677	20864,685	33,510	13,481	6,537	-9,264	42,787	8,445	18,564	2022-03-21 15:24
104,333	50,937	56,093	70,504	1,213	1,255	20056,208	20711,042	31,091	13,537	6,764	-9,191	43,061	8,472	18,657	2022-03-21 15:24
104,833	50,869	56,062	70,491	1,214	1,255	20089,936	20733,174	44,915	13,469	6,548	-9,210	42,869	8,453	18,657	2022-03-21 15:25
105,333	50,864	56,046	70,428	1,212	1,254	20208,166	20656,186	78,780	14,017	6,339	-9,284	42,778	8,444	18,564	2022-03-21 15:25
105,833	50,969	56,050	70,528	1,214	1,254	19999,708	20795,646	154,013	15,202	5,495	-9,108	42,759	8,442	18,470	2022-03-21 15:26
106,333	51,016	56,128	70,304	1,214	1,255	19876,727	20381,996	126,659	14,820	5,593	-9,139	42,108	8,377	18,470	2022-03-21 15:26
106,833	51,031	56,109	69,908	1,212	1,255	19864,948	19823,958	40,687	14,384	6,167	-9,169	42,551	8,421	18,345	2022-03-21 15:27
107,333	51,121	56,174	70,624	1,213	1,256	19767,152	20780,508	28,235	14,318	6,210	-9,179	43,022	8,468	18,345	2022-03-21 15:27
107,833	51,137	56,243	70,500	1,213	1,255	19922,862	20490,823	46,594	14,591	5,922	-9,260	42,761	8,442	18,252	2022-03-21 15:28
108,333	51,116	56,254	70,422	1,214	1,255	20011,496	20365,230	69,727	14,722	5,562	-9,228	42,724	8,438	18,345	2022-03-21 15:28
108,834	51,189	56,291	70,830	1,214	1,255	20006,618	20894,042	47,775	13,767	6,059	-9,184	42,846	8,450	18,252	2022-03-21 15:29
109,334	51,120	56,355	70,657	1,214	1,255	20371,496	20557,874	36,397	13,221	6,623	-9,227	42,586	8,425	18,158	2022-03-21 15:29
109,834	51,188	56,335	70,933	1,213	1,255	20185,957	20981,124	36,875	13,266	6,661	-9,270	42,600	8,426	18,158	2022-03-21 15:30
110,334	51,237	56,426	70,864	1,214	1,254	20293,973	20735,411	33,163	13,558	6,504	-9,275	42,683	8,434	18,064	2022-03-21 15:30
110,834	51,320	56,439	71,082	1,213	1,255	20066,948	21040,864	36,375	13,764	6,611	-9,314	42,651	8,431	18,064	2022-03-21 15:31
111,333	51,237	56,479	70,914	1,213	1,255	20254,229	20740,958	29,401	14,067	6,111	-9,175	42,813	8,447	18,064	2022-03-21 15:31
111,833	51,387	56,470	70,790	1,213	1,255	20022,888	20583,995	26,636	14,436	5,877	-9,192	42,751	8,441	18,064	2022-03-21 15:32
112,333	51,345	56,541	70,982	1,215	1,254	20242,719	20739,072	42,153	14,890	5,374	-9,188	42,174	8,384	17,971	2022-03-21 15:32
112,833	51,425	56,551	71,049	1,215	1,255	20164,269	20831,058	28,813	13,539	6,528	-9,156	42,573	8,423	17,970	2022-03-21 15:33
113,333	51,345	56,634	71,247	1,213	1,255	20476,793	20991,167	40,488	12,823	7,574	-9,290	42,638	8,430	18,064	2022-03-21 15:33
113,833	51,380	56,604	71,010	1,213	1,255	20368,843	20708,342	85,906	13,747	6,899	-9,047	42,606	8,427	17,775	2022-03-21 15:34
114,333	51,496	56,638	71,106	1,213	1,255	20128,516	20785,102	32,920	13,273	6,899	-9,231	42,584	8,425	17,274	2022-03-21 15:34

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
114,833	0,216	0,737	1,066	-0,461	-0,001	0,232	0,689	134,624	28,059	20,592	20,484	20,449	20,476	20,475	20,606	65,906
115,333	0,216	0,751	1,065	-0,460	-0,006	0,209	0,679	134,712	28,249	20,588	20,481	20,451	20,474	20,478	20,605	65,939
115,834	0,221	0,783	1,063	-0,463	0,032	0,194	0,685	134,695	28,285	20,602	20,506	20,475	20,494	20,501	20,623	66,101
116,334	0,219	0,772	1,061	-0,457	0,041	0,194	0,683	134,792	28,174	20,557	20,453	20,428	20,446	20,456	20,573	66,063
116,834	0,242	0,788	1,065	-0,456	-0,014	0,187	0,687	134,861	28,246	20,570	20,468	20,450	20,457	20,468	20,588	65,860
117,334	0,227	0,748	1,062	-0,459	-0,012	0,227	0,683	134,748	28,051	20,600	20,491	20,456	20,482	20,483	20,603	65,976
117,833	0,216	0,744	1,063	-0,461	0,026	0,222	0,714	134,736	28,410	20,603	20,506	20,466	20,488	20,487	20,610	66,033
118,333	0,215	0,749	1,073	-0,462	0,022	0,217	0,762	134,733	28,494	20,597	20,484	20,445	20,465	20,470	20,590	65,966
118,833	0,211	0,741	1,066	-0,460	0,006	0,229	0,800	134,610	28,629	20,628	20,521	20,478	20,502	20,512	20,627	65,967
119,333	0,211	0,744	1,067	-0,465	0,027	0,223	0,799	134,687	28,379	20,665	20,560	20,503	20,537	20,531	20,653	66,006
119,833	0,211	0,741	1,063	-0,460	0,008	0,230	0,798	134,646	28,161	20,633	20,527	20,477	20,493	20,504	20,620	66,080
120,333	0,211	0,722	1,060	-0,459	-0,013	0,246	0,798	134,557	28,334	20,603	20,500	20,460	20,478	20,483	20,601	65,998
120,833	0,210	0,683	1,062	-0,459	0,010	0,274	0,797	134,336	28,322	20,626	20,515	20,475	20,481	20,497	20,611	65,971
121,333	0,211	0,717	1,066	-0,462	0,031	0,237	0,796	134,266	28,445	20,655	20,546	20,514	20,530	20,531	20,643	66,025
121,833	0,211	0,723	1,065	-0,462	-0,015	0,246	0,796	134,118	28,337	20,591	20,486	20,461	20,470	20,478	20,591	65,961
122,334	0,210	0,720	1,057	-0,459	0,014	0,241	0,797	134,069	28,345	20,607	20,498	20,449	20,472	20,475	20,590	65,967
122,834	0,211	0,707	1,067	-0,459	0,002	0,257	0,795	134,049	28,243	20,679	20,557	20,511	20,528	20,539	20,643	65,819
123,334	0,222	0,740	1,067	-0,455	0,031	0,212	0,795	134,030	28,312	20,710	20,576	20,519	20,531	20,550	20,654	65,846
123,834	0,253	0,782	1,066	-0,457	0,020	0,193	0,793	134,052	28,242	20,701	20,557	20,496	20,523	20,541	20,639	65,876
124,334	0,219	0,745	1,066	-0,455	0,017	0,230	0,791	134,023	28,189	21,392	21,495	20,530	20,532	20,550	20,664	65,942
124,833	0,212	0,717	1,064	-0,460	0,022	0,249	0,795	133,838	27,907	21,775	21,656	20,482	20,465	20,499	20,612	65,953
125,333	0,210	0,699	1,056	-0,461	0,023	0,267	0,792	133,712	27,894	21,967	21,528	20,477	20,466	20,492	20,600	65,767
125,833	0,210	0,685	1,065	-0,456	0,015	0,264	0,791	133,660	28,047	22,156	21,603	20,511	20,505	20,536	20,645	65,796
126,333	0,213	0,743	1,064	-0,452	0,024	0,214	0,790	133,599	28,159	22,249	21,633	20,489	20,474	20,494	20,611	65,972
126,833	0,222	0,790	1,061	-0,454	0,028	0,183	0,789	133,697	28,427	22,362	21,692	20,496	20,498	20,509	20,622	65,695
127,333	0,286	0,779	1,060	-0,454	0,050	0,198	0,789	133,693	28,386	22,425	21,723	20,479	20,476	20,501	20,606	65,848
127,833	0,231	0,782	1,071	-0,455	-0,010	0,191	0,788	133,819	28,232	22,498	21,773	20,502	20,489	20,526	20,625	65,962
128,333	0,218	0,731	1,066	-0,460	-0,008	0,245	0,788	133,795	28,160	22,574	21,856	20,548	20,541	20,567	20,671	65,962
128,833	0,219	0,697	1,061	-0,457	0,004	0,258	0,787	133,597	28,148	22,590	21,869	20,517	20,510	20,542	20,634	66,010

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
114,833	51,462	56,662	70,956	1,214	1,255	20119,107	20539,317	40,969	13,149	6,946	-9,221	42,783	8,444	17,846	2022-03-21 15:35
115,333	51,433	56,617	71,209	1,215	1,255	20228,258	20966,457	50,536	14,354	6,263	-9,199	42,405	8,407	17,067	2022-03-21 15:35
115,834	51,466	56,675	71,249	1,213	1,255	20364,613	20940,320	66,045	14,353	5,810	-9,269	42,416	8,408	17,564	2022-03-21 15:36
116,334	51,513	56,720	71,132	1,219	1,254	20340,548	20700,304	61,958	14,278	5,812	-9,137	42,664	8,433	17,658	2022-03-21 15:36
116,834	51,580	56,630	71,167	1,237	1,255	20260,241	20891,757	93,971	14,423	5,624	-9,124	42,457	8,412	18,252	2022-03-21 15:37
117,334	51,655	56,691	71,263	1,236	1,255	20307,680	20941,902	42,905	13,106	6,803	-9,178	42,320	8,398	17,658	2022-03-21 15:37
117,833	51,653	56,728	71,211	1,236	1,256	20383,793	20822,124	45,771	13,754	6,671	-9,214	42,670	8,433	19,573	2022-03-21 15:38
118,333	51,608	56,766	71,221	1,237	1,256	20375,074	20778,250	34,774	13,786	6,506	-9,243	42,692	8,435	25,663	2022-03-21 15:38
118,833	51,591	56,659	71,470	1,236	1,255	20390,014	21286,501	29,562	13,284	6,877	-9,209	42,519	8,418	25,071	2022-03-21 15:39
119,333	51,682	56,761	71,084	1,236	1,255	20307,654	20582,698	33,339	13,821	6,679	-9,291	42,520	8,418	24,853	2022-03-21 15:39
119,833	51,681	56,758	71,482	1,237	1,255	20429,430	21154,207	30,159	13,547	6,887	-9,199	42,438	8,410	24,853	2022-03-21 15:40
120,333	51,658	56,761	71,376	1,237	1,256	20348,923	21011,496	29,512	13,041	7,390	-9,177	42,053	8,372	24,853	2022-03-21 15:40
120,833	51,720	56,744	71,389	1,238	1,255	20231,528	21045,168	27,215	12,112	8,205	-9,187	42,451	8,411	24,759	2022-03-21 15:41
121,333	51,664	56,777	71,587	1,237	1,255	20384,408	21281,864	28,811	13,085	7,098	-9,238	42,695	8,436	24,759	2022-03-21 15:41
121,833	51,798	56,758	71,394	1,237	1,255	20095,486	21032,556	28,821	12,620	7,392	-9,232	42,465	8,413	24,665	2022-03-21 15:42
122,334	51,879	56,857	71,175	1,236	1,255	19980,335	20579,488	29,905	13,081	7,234	-9,187	42,306	8,397	25,071	2022-03-21 15:42
122,834	51,826	56,824	71,256	1,237	1,256	19850,690	20749,401	26,641	12,445	7,723	-9,179	42,729	8,439	24,759	2022-03-21 15:43
123,334	51,797	56,778	71,334	1,237	1,255	19937,436	20922,481	101,851	14,071	6,362	-9,095	42,568	8,423	24,574	2022-03-21 15:43
123,834	51,870	56,813	71,081	1,236	1,255	19859,800	20497,330	100,250	14,171	5,777	-9,147	42,663	8,432	24,477	2022-03-21 15:44
124,334	51,872	56,859	71,324	1,236	1,256	19949,514	20795,077	39,638	13,071	6,896	-9,107	42,352	8,402	24,478	2022-03-21 15:44
124,833	51,788	56,866	70,984	1,236	1,255	20086,376	20288,569	31,077	12,766	7,478	-9,209	42,703	8,436	24,571	2022-03-21 15:45
125,333	51,777	56,729	70,980	1,237	1,256	19848,349	20489,025	27,636	12,402	8,022	-9,224	42,065	8,373	24,477	2022-03-21 15:45
125,833	52,022	56,796	71,333	1,236	1,255	19531,147	20890,546	28,068	12,647	7,932	-9,122	42,669	8,433	24,353	2022-03-21 15:46
126,333	52,024	56,988	70,983	1,236	1,255	19775,566	20112,874	44,811	14,176	6,410	-9,039	42,530	8,419	24,353	2022-03-21 15:46
126,833	51,956	56,858	70,994	1,238	1,256	19508,235	20326,802	60,795	14,835	5,477	-9,084	42,401	8,406	24,259	2022-03-21 15:47
127,333	52,081	56,911	71,125	1,236	1,255	19519,347	20429,555	252,132	14,126	5,949	-9,071	42,222	8,389	24,260	2022-03-21 15:47
127,833	51,997	56,984	71,022	1,236	1,255	19794,381	20162,174	51,669	14,495	5,719	-9,090	42,609	8,427	24,260	2022-03-21 15:48
128,333	52,075	56,950	71,327	1,236	1,254	19690,482	20648,815	42,630	12,491	7,350	-9,198	42,502	8,416	24,259	2022-03-21 15:48
128,833	52,037	57,028	71,098	1,235	1,254	19798,341	20201,194	44,496	12,479	7,736	-9,140	42,425	8,409	24,166	2022-03-21 15:49



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Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
129,334	0,223	0,717	1,065	-0,457	-0,019	0,243	0,787	133,480	28,203	22,654	21,903	20,528	20,524	20,548	20,644	66,001
129,834	0,214	0,744	1,066	-0,461	0,019	0,223	0,786	133,402	28,040	22,667	21,931	20,534	20,518	20,550	20,645	66,105
130,334	0,218	0,731	1,066	-0,457	0,029	0,234	0,787	133,369	28,041	22,702	21,969	20,537	20,519	20,558	20,646	65,922
130,834	0,235	0,724	1,072	-0,460	-0,017	0,240	0,785	133,193	28,360	22,760	22,016	20,513	20,508	20,542	20,630	65,991
131,334	0,218	0,715	1,063	-0,453	0,023	0,245	0,784	133,142	28,298	22,814	22,063	20,529	20,520	20,558	20,639	65,992
131,833	0,223	0,757	1,068	-0,453	0,019	0,205	0,784	133,247	28,294	22,851	22,096	20,512	20,513	20,549	20,629	66,037
132,333	0,222	0,768	1,071	-0,455	-0,003	0,214	0,782	133,242	28,460	22,939	22,179	20,571	20,556	20,599	20,674	65,923
132,833	0,212	0,705	1,068	-0,457	0,045	0,257	0,782	133,128	28,260	22,908	22,149	20,512	20,492	20,537	20,612	65,907
133,333	0,215	0,735	1,070	-0,453	0,042	0,214	0,782	133,195	28,471	22,992	22,224	20,545	20,534	20,565	20,643	66,090
133,833	0,275	0,807	1,069	-0,447	0,023	0,173	0,781	133,184	28,345	23,021	22,259	20,547	20,534	20,571	20,642	65,981
134,333	0,289	0,768	1,068	-0,452	0,037	0,206	0,781	133,145	28,201	23,035	22,279	20,540	20,527	20,567	20,639	66,092
134,833	0,252	0,750	1,066	-0,453	0,029	0,222	0,781	133,112	28,257	23,051	22,314	20,534	20,524	20,550	20,629	66,142
135,333	0,220	0,733	1,069	-0,454	0,032	0,235	0,785	133,083	27,950	23,081	22,380	20,587	20,573	20,615	20,680	66,120
135,834	0,211	0,718	1,064	-0,457	0,038	0,240	0,780	132,551	27,881	23,072	22,316	20,572	20,560	20,589	20,660	66,140
136,334	0,212	0,754	1,061	-0,450	0,026	0,210	0,778	132,210	27,669	23,073	22,316	20,582	20,566	20,612	20,666	66,168
136,834	0,213	0,754	1,068	-0,450	-0,006	0,216	0,779	131,958	27,493	23,093	22,367	20,634	20,618	20,663	20,721	66,171
137,334	0,215	0,749	1,061	-0,451	0,042	0,216	0,777	131,616	27,736	23,108	22,365	20,615	20,597	20,631	20,696	66,075
137,834	0,210	0,755	1,066	-0,453	0,040	0,213	0,777	131,379	27,608	23,082	22,327	20,580	20,559	20,605	20,658	66,032
138,333	0,212	0,765	1,072	-0,448	0,041	0,201	0,778	131,270	27,516	23,080	22,335	20,572	20,551	20,598	20,650	66,057
138,833	0,251	0,795	1,066	-0,448	0,017	0,176	0,776	131,279	27,490	23,046	22,312	20,546	20,539	20,581	20,628	65,961
139,333	0,216	0,783	1,069	-0,447	0,034	0,193	0,776	131,196	27,782	23,106	22,357	20,571	20,563	20,599	20,650	65,966
139,833	0,270	0,805	1,072	-0,447	0,004	0,166	0,774	131,153	27,737	23,176	22,424	20,622	20,611	20,652	20,698	66,099
140,333	0,238	0,793	1,064	-0,451	0,033	0,179	0,773	131,327	27,785	23,144	22,409	20,581	20,570	20,610	20,655	65,952
140,833	0,223	0,799	1,072	-0,447	-0,011	0,175	0,771	131,527	28,087	23,208	22,437	20,592	20,576	20,625	20,665	65,846
141,333	0,239	0,801	1,069	-0,447	0,004	0,179	0,771	131,594	28,113	23,230	22,445	20,584	20,557	20,608	20,650	66,020
141,833	0,213	0,740	1,070	-0,450	0,025	0,230	0,771	131,646	28,163	23,304	22,502	20,622	20,608	20,663	20,695	66,022
142,333	0,279	0,776	1,066	-0,447	0,037	0,181	0,772	131,624	28,166	23,318	22,507	20,596	20,588	20,633	20,670	66,227
142,834	0,279	0,838	1,063	-0,451	-0,020	0,144	0,772	131,710	27,973	23,290	22,484	20,578	20,565	20,615	20,647	66,214
143,334	0,242	0,808	1,060	-0,451	-0,024	0,169	0,769	131,814	27,922	23,315	22,516	20,600	20,590	20,646	20,668	66,256

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
129,334	52,123	57,007	71,368	1,236	1,255	19671,023	20630,981	49,333	12,620	7,283	-9,138	42,396	8,406	24,166	2022-03-21 15:49
129,834	52,081	57,071	70,982	1,236	1,254	19888,760	19978,495	33,765	13,643	6,701	-9,225	42,508	8,417	24,166	2022-03-21 15:50
130,334	52,197	57,032	71,270	1,235	1,255	19443,592	20451,116	77,658	13,214	7,032	-9,133	42,601	8,426	24,072	2022-03-21 15:50
130,834	52,161	57,098	71,234	1,236	1,254	19611,823	20290,827	89,935	13,053	7,208	-9,191	42,809	8,447	24,072	2022-03-21 15:51
131,334	52,060	57,040	71,447	1,237	1,255	19773,015	20696,992	42,673	12,837	7,362	-9,052	42,545	8,421	23,978	2022-03-21 15:51
131,833	52,068	57,048	71,085	1,237	1,254	19815,300	20150,775	74,345	14,358	6,143	-9,055	42,802	8,446	23,978	2022-03-21 15:52
132,333	52,056	57,008	71,056	1,235	1,255	19642,380	20185,956	41,243	13,782	6,410	-9,095	42,958	8,461	23,853	2022-03-21 15:52
132,833	52,062	56,996	71,272	1,236	1,254	19630,210	20501,329	31,423	12,663	7,718	-9,149	43,005	8,466	23,853	2022-03-21 15:53
133,333	52,108	57,047	71,291	1,235	1,255	19809,514	20469,899	52,364	13,946	6,429	-9,062	42,847	8,451	23,853	2022-03-21 15:53
133,833	52,028	57,044	71,135	1,237	1,255	19793,229	20247,922	219,271	15,186	5,190	-8,934	42,647	8,431	23,759	2022-03-21 15:54
134,333	52,000	57,024	71,401	1,235	1,255	19969,644	20654,794	291,480	14,022	6,195	-9,040	42,717	8,438	23,759	2022-03-21 15:54
134,833	51,985	57,033	71,405	1,236	1,255	20070,296	20640,493	69,628	13,605	6,657	-9,070	42,939	8,460	23,749	2022-03-21 15:55
135,333	51,957	57,010	71,326	1,235	1,254	20063,965	20546,952	40,066	13,069	7,041	-9,075	42,504	8,417	24,260	2022-03-21 15:55
135,834	51,990	57,023	71,585	1,235	1,255	20051,777	20920,899	27,045	12,850	7,213	-9,136	42,377	8,404	23,666	2022-03-21 15:56
136,334	52,099	57,060	71,438	1,236	1,254	19941,943	20641,408	32,756	13,721	6,312	-8,992	42,638	8,430	23,572	2022-03-21 15:56
136,834	52,104	57,139	71,339	1,236	1,254	19935,301	20388,601	42,362	13,760	6,476	-9,008	42,436	8,410	23,666	2022-03-21 15:57
137,334	52,013	57,048	71,188	1,236	1,254	19935,104	20301,753	32,653	14,076	6,479	-9,011	42,491	8,415	23,572	2022-03-21 15:57
137,834	52,111	57,027	71,299	1,235	1,254	19720,493	20492,992	30,818	14,142	6,402	-9,050	42,691	8,435	23,572	2022-03-21 15:58
138,333	52,247	57,126	71,238	1,236	1,255	19572,898	20271,620	32,842	14,630	6,024	-8,970	43,047	8,470	23,572	2022-03-21 15:58
138,833	52,152	57,129	71,029	1,235	1,255	19568,247	19968,737	168,911	15,140	5,292	-8,962	42,809	8,447	23,350	2022-03-21 15:59
139,333	52,161	57,067	71,331	1,237	1,255	19586,115	20486,067	31,752	14,432	5,800	-8,936	43,072	8,473	23,478	2022-03-21 15:59
139,833	52,148	57,120	71,220	1,238	1,254	19812,299	20245,496	159,183	15,398	4,987	-8,949	42,902	8,456	23,350	2022-03-21 16:00
140,333	52,114	57,069	71,050	1,237	1,253	19629,016	20061,202	58,974	14,873	5,368	-9,026	42,901	8,456	23,257	2022-03-21 16:00
140,833	52,112	57,025	71,194	1,238	1,255	19506,918	20350,351	78,712	14,772	5,251	-8,931	42,966	8,462	22,877	2022-03-21 16:01
141,333	52,135	57,047	71,167	1,237	1,254	19697,022	20272,347	46,880	14,526	5,378	-8,948	42,675	8,434	23,069	2022-03-21 16:01
141,833	52,245	57,100	71,331	1,237	1,253	19544,649	20419,706	32,868	12,854	6,897	-8,995	42,774	8,443	23,114	2022-03-21 16:02
142,333	52,226	57,184	71,362	1,238	1,255	19877,156	20368,623	218,639	15,172	5,434	-8,939	42,633	8,429	23,257	2022-03-21 16:02
142,834	52,333	57,235	71,585	1,238	1,254	19704,968	20603,405	277,627	16,243	4,325	-9,010	42,713	8,437	23,119	2022-03-21 16:03
143,334	52,260	57,265	71,560	1,238	1,254	19866,022	20523,113	133,644	15,441	5,057	-9,022	42,561	8,422	23,163	2022-03-21 16:03

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
143,834	0,248	0,819	1,070	-0,448	0,010	0,160	0,770	131,941	27,899	23,288	22,481	20,556	20,548	20,608	20,629	66,334
144,334	0,219	0,804	1,067	-0,448	0,031	0,181	0,770	132,027	28,102	23,331	22,529	20,593	20,576	20,633	20,654	66,289
144,834	0,216	0,784	1,073	-0,449	0,013	0,188	0,770	131,938	27,955	23,321	22,515	20,572	20,556	20,605	20,629	66,485
145,333	0,220	0,791	1,068	-0,449	0,000	0,185	0,769	131,908	27,802	23,307	22,551	20,583	20,553	20,622	20,632	66,701
145,833	0,211	0,762	1,073	-0,450	0,051	0,209	0,767	131,867	28,057	23,349	22,585	20,582	20,570	20,626	20,643	66,680
146,333	0,213	0,765	1,067	-0,449	-0,009	0,206	0,766	131,795	27,963	23,384	22,625	20,612	20,588	20,659	20,666	66,768
146,833	0,210	0,734	1,066	-0,451	-0,023	0,232	0,766	131,653	27,813	23,371	22,632	20,612	20,586	20,657	20,663	66,669
147,333	0,209	0,743	1,064	-0,451	-0,015	0,218	0,764	131,568	27,964	23,451	22,708	20,677	20,654	20,727	20,726	66,611
147,833	0,294	0,809	1,069	-0,450	0,007	0,160	0,764	131,648	28,117	23,442	22,680	20,633	20,610	20,680	20,684	66,675
148,333	0,236	0,786	1,063	-0,444	0,019	0,199	0,764	131,685	28,311	23,443	22,677	20,598	20,583	20,653	20,652	66,626
148,833	0,230	0,766	1,062	-0,447	-0,014	0,195	0,765	131,677	28,330	23,477	22,685	20,603	20,590	20,662	20,654	66,867
149,334	0,218	0,793	1,072	-0,444	-0,004	0,186	0,769	131,660	28,212	23,474	22,695	20,612	20,591	20,660	20,659	66,870
149,834	0,216	0,780	1,069	-0,447	0,064	0,193	0,762	131,657	27,918	23,444	22,691	20,605	20,581	20,661	20,646	66,845
150,334	0,212	0,779	1,063	-0,451	-0,008	0,194	0,761	131,631	27,976	23,463	22,693	20,597	20,583	20,655	20,642	66,714
150,834	0,213	0,781	1,064	-0,447	0,029	0,187	0,760	131,763	28,038	23,509	22,747	20,646	20,625	20,706	20,685	66,846
151,334	0,238	0,830	1,065	-0,450	-0,022	0,144	0,760	131,874	28,003	23,525	22,770	20,659	20,642	20,715	20,697	66,830
151,833	0,234	0,800	1,068	-0,446	0,003	0,187	0,758	131,806	27,799	23,489	22,744	20,639	20,623	20,697	20,677	66,837
152,333	0,215	0,746	1,067	-0,446	-0,018	0,221	0,758	131,824	27,950	23,514	22,773	20,647	20,639	20,712	20,688	66,892
152,833	0,211	0,750	1,070	-0,448	0,045	0,216	0,757	131,863	28,138	23,522	22,775	20,641	20,632	20,714	20,674	66,914
153,333	0,225	0,789	1,066	-0,448	-0,018	0,170	0,756	132,116	28,249	23,542	22,778	20,628	20,613	20,686	20,661	66,975
153,833	0,337	0,834	1,069	-0,451	0,031	0,149	0,756	132,464	28,353	23,628	22,846	20,676	20,666	20,746	20,713	67,064
154,333	0,267	0,817	1,067	-0,449	0,019	0,163	0,755	132,577	28,279	23,617	22,836	20,659	20,647	20,726	20,693	67,071
154,833	0,222	0,803	1,070	-0,449	-0,002	0,180	0,753	132,684	28,438	23,710	22,941	20,752	20,739	20,824	20,786	67,219
155,333	0,216	0,760	1,067	-0,454	0,040	0,225	0,754	132,656	28,370	23,695	22,923	20,732	20,720	20,807	20,766	67,137
155,833	0,220	0,723	1,065	-0,453	-0,016	0,234	0,753	132,467	28,381	23,679	22,899	20,702	20,685	20,777	20,734	67,274
156,334	0,213	0,743	1,057	-0,450	0,016	0,221	0,752	132,396	28,206	23,649	22,882	20,674	20,666	20,746	20,708	67,246
156,834	0,240	0,770	1,066	-0,444	0,032	0,194	0,751	132,434	28,214	23,647	22,890	20,674	20,659	20,752	20,702	67,294
157,334	0,258	0,786	1,067	-0,447	0,031	0,189	0,751	132,444	28,199	23,608	22,851	20,637	20,622	20,707	20,661	67,233
157,834	0,231	0,763	1,065	-0,451	0,005	0,212	0,750	132,414	28,170	23,601	22,860	20,622	20,621	20,720	20,662	67,280

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
143,834	52,337	57,274	71,549	1,236	1,254	19844,091	20494,036	107,584	15,650	4,800	-8,959	42,901	8,456	23,069	2022-03-21 16:04
144,334	52,417	57,335	71,447	1,238	1,254	19700,642	20255,857	38,973	14,743	5,436	-8,951	42,654	8,431	23,257	2022-03-21 16:04
144,834	52,483	57,412	72,014	1,238	1,254	19873,454	20963,189	42,932	14,721	5,645	-8,975	42,764	8,442	23,069	2022-03-21 16:05
145,333	52,386	57,506	72,118	1,238	1,254	20318,008	20980,582	57,420	14,781	5,549	-8,974	42,896	8,455	23,359	2022-03-21 16:05
145,833	52,437	57,484	72,106	1,238	1,254	20220,616	20982,893	24,485	13,621	6,263	-8,995	42,842	8,450	22,850	2022-03-21 16:06
146,333	52,405	57,524	72,039	1,238	1,254	20387,696	20839,585	34,186	14,015	6,174	-8,984	42,865	8,452	22,975	2022-03-21 16:06
146,833	52,407	57,478	71,841	1,237	1,254	20236,149	20609,704	26,724	13,036	6,965	-9,022	42,709	8,437	22,975	2022-03-21 16:07
147,333	52,537	57,520	71,827	1,237	1,254	19963,044	20534,909	26,638	13,662	6,527	-9,025	42,580	8,424	22,757	2022-03-21 16:07
147,833	52,491	57,543	72,051	1,236	1,254	20113,156	20822,357	399,471	15,638	4,815	-8,996	42,660	8,432	22,663	2022-03-21 16:08
148,333	52,542	57,552	72,062	1,238	1,253	19993,688	20815,246	39,709	13,868	5,962	-8,884	42,804	8,446	22,663	2022-03-21 16:08
148,833	52,608	57,632	72,270	1,239	1,253	20263,751	21001,543	84,770	14,518	5,840	-8,949	42,371	8,403	23,069	2022-03-21 16:09
149,334	52,657	57,685	72,227	1,240	1,254	20203,263	20865,068	39,364	14,701	5,592	-8,889	42,951	8,461	23,257	2022-03-21 16:09
149,834	52,578	57,698	72,014	1,238	1,254	20262,175	20542,313	35,705	14,670	5,784	-8,934	42,409	8,407	22,663	2022-03-21 16:10
150,334	52,562	57,600	72,259	1,237	1,254	20075,061	21039,233	41,060	14,556	5,832	-9,014	42,683	8,434	22,569	2022-03-21 16:10
150,834	52,659	57,640	72,174	1,239	1,253	20153,267	20847,884	39,133	14,730	5,612	-8,941	43,002	8,466	22,475	2022-03-21 16:11
151,334	52,690	57,714	72,211	1,239	1,254	20089,009	20805,325	68,465	16,064	4,316	-9,006	42,688	8,435	22,351	2022-03-21 16:11
151,833	52,581	57,705	72,206	1,239	1,253	20250,982	20800,085	79,034	14,054	5,608	-8,916	42,648	8,431	22,351	2022-03-21 16:12
152,333	52,555	57,653	72,212	1,238	1,253	20348,982	20886,732	32,927	13,245	6,640	-8,919	42,692	8,435	22,351	2022-03-21 16:12
152,833	52,573	57,665	72,347	1,238	1,253	20360,114	21062,920	29,994	13,767	6,479	-8,956	43,079	8,473	22,257	2022-03-21 16:13
153,333	52,570	57,711	72,427	1,238	1,254	20449,226	21124,299	122,063	15,662	5,099	-8,962	42,650	8,431	22,257	2022-03-21 16:13
153,833	52,600	57,706	72,491	1,240	1,254	20561,896	21229,608	394,882	15,586	4,484	-9,012	42,651	8,431	22,257	2022-03-21 16:14
154,333	52,603	57,774	72,532	1,238	1,254	20537,008	21173,151	89,934	15,275	4,897	-8,978	43,007	8,466	22,163	2022-03-21 16:14
154,833	52,606	57,776	72,732	1,238	1,254	20744,281	21460,415	76,492	14,806	5,405	-8,970	42,703	8,436	22,070	2022-03-21 16:15
155,333	52,579	57,790	72,656	1,238	1,253	20674,559	21312,520	37,447	13,400	6,757	-9,082	42,605	8,427	22,256	2022-03-21 16:15
155,833	52,559	57,775	72,585	1,239	1,254	20904,900	21258,872	62,084	13,557	7,008	-9,054	42,675	8,434	22,070	2022-03-21 16:16
156,334	52,578	57,802	72,754	1,239	1,254	20834,813	21453,121	30,639	13,573	6,639	-9,010	42,225	8,389	21,976	2022-03-21 16:16
156,834	52,652	57,837	72,633	1,238	1,254	20786,612	21238,382	95,836	14,579	5,828	-8,882	42,455	8,412	21,851	2022-03-21 16:17
157,334	52,673	57,869	72,721	1,238	1,254	20667,954	21310,004	92,651	14,427	5,662	-8,948	42,689	8,435	21,851	2022-03-21 16:17
157,834	52,725	57,867	72,694	1,238	1,254	20666,185	21280,960	54,919	13,764	6,359	-9,023	42,424	8,409	21,851	2022-03-21 16:18

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
158,334	0,217	0,761	1,070	-0,448	0,024	0,203	0,750	132,412	28,180	23,615	22,867	20,646	20,640	20,730	20,676	67,348
158,833	0,212	0,747	1,067	-0,448	-0,034	0,226	0,749	132,342	28,338	23,636	22,886	20,661	20,649	20,735	20,680	67,359
159,333	0,211	0,750	1,063	-0,447	0,012	0,211	0,748	132,336	28,310	23,650	22,896	20,661	20,654	20,745	20,685	67,374
159,833	0,213	0,780	1,072	-0,454	0,023	0,189	0,748	132,384	28,543	23,736	22,960	20,706	20,697	20,788	20,733	67,422
160,333	0,213	0,775	1,070	-0,452	-0,001	0,207	0,747	132,431	28,548	23,737	22,982	20,716	20,712	20,797	20,740	67,422
160,833	0,210	0,747	1,069	-0,449	0,021	0,220	0,747	132,322	28,429	23,706	22,944	20,667	20,669	20,752	20,694	67,408
161,333	0,209	0,746	1,066	-0,457	0,037	0,218	0,746	132,295	28,643	23,761	22,989	20,704	20,694	20,782	20,724	67,364
161,833	0,213	0,744	1,065	-0,448	0,046	0,220	0,745	132,215	28,455	23,734	22,961	20,683	20,669	20,758	20,700	67,528
162,333	0,212	0,772	1,058	-0,451	0,036	0,196	0,744	132,209	28,483	23,752	22,982	20,697	20,690	20,780	20,713	67,319
162,833	0,213	0,774	1,069	-0,448	0,031	0,199	0,744	132,316	28,234	23,747	22,994	20,717	20,708	20,798	20,733	67,279
163,334	0,213	0,762	1,062	-0,447	0,018	0,204	0,744	132,327	28,427	23,751	22,986	20,699	20,688	20,783	20,712	67,401
163,834	0,216	0,783	1,066	-0,449	0,031	0,191	0,743	132,356	28,210	23,739	22,990	20,702	20,699	20,787	20,720	67,491
164,334	0,220	0,770	1,067	-0,454	0,041	0,204	0,741	132,379	28,014	23,760	23,033	20,767	20,753	20,849	20,774	67,624
164,834	0,219	0,727	1,073	-0,446	0,020	0,242	0,741	132,172	28,173	23,717	22,988	20,712	20,703	20,793	20,723	67,532
165,334	0,211	0,715	1,068	-0,450	0,003	0,248	0,740	132,128	28,314	23,729	22,977	20,699	20,686	20,787	20,710	67,459
165,833	0,213	0,732	1,066	-0,453	0,006	0,224	0,739	131,994	28,382	23,749	22,988	20,672	20,677	20,771	20,693	67,499
166,333	0,215	0,771	1,065	-0,450	0,007	0,200	0,740	132,091	28,447	23,814	23,058	20,757	20,744	20,840	20,761	67,466
166,833	0,212	0,762	1,060	-0,447	0,005	0,203	0,740	132,026	28,299	23,757	23,017	20,702	20,700	20,790	20,711	67,428
167,333	0,214	0,766	1,072	-0,445	-0,014	0,206	0,738	132,099	28,096	23,739	23,017	20,711	20,718	20,804	20,718	67,569
167,833	0,220	0,779	1,066	-0,450	0,048	0,187	0,737	132,164	28,256	23,797	23,072	20,760	20,762	20,863	20,768	67,475
168,333	0,229	0,797	1,064	-0,450	0,032	0,182	0,737	132,205	28,047	23,747	23,026	20,723	20,727	20,821	20,732	67,580
168,833	0,241	0,797	1,065	-0,447	-0,021	0,179	0,736	132,278	28,376	23,781	23,040	20,732	20,739	20,830	20,740	67,693
169,333	0,220	0,775	1,069	-0,455	0,027	0,203	0,736	132,247	28,449	23,792	23,047	20,730	20,732	20,823	20,735	67,554
169,834	0,213	0,734	1,073	-0,450	-0,026	0,232	0,734	132,218	28,300	23,810	23,076	20,761	20,763	20,862	20,761	67,609
170,334	0,214	0,716	1,061	-0,451	0,007	0,251	0,734	132,070	28,285	23,775	23,041	20,723	20,718	20,825	20,725	67,824
170,834	0,215	0,714	1,067	-0,445	-0,005	0,245	0,734	132,017	28,274	23,791	23,074	20,754	20,749	20,859	20,754	67,828
171,334	0,217	0,727	1,061	-0,451	0,063	0,232	0,732	131,881	28,437	23,795	23,055	20,735	20,734	20,829	20,732	67,682
171,834	0,215	0,756	1,065	-0,449	-0,012	0,213	0,732	131,822	28,441	23,789	23,038	20,708	20,706	20,817	20,710	67,806
172,333	0,221	0,759	1,066	-0,445	-0,037	0,209	0,732	131,793	28,456	23,839	23,100	20,768	20,761	20,869	20,764	67,749

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
158,334	52,715	57,928	72,926	1,238	1,254	20776,237	21521,849	51,037	14,692	6,100	-8,964	42,514	8,418	21,851	2022-03-21 16:18
158,833	52,745	57,939	72,788	1,237	1,254	20735,588	21304,573	29,908	13,303	6,791	-8,965	42,956	8,461	21,761	2022-03-21 16:19
159,333	52,789	57,956	72,792	1,237	1,253	20692,136	21280,260	30,364	14,068	6,315	-8,935	42,505	8,417	21,757	2022-03-21 16:19
159,833	52,793	57,987	72,829	1,238	1,254	20763,103	21298,457	39,706	14,918	5,679	-9,073	43,079	8,473	21,664	2022-03-21 16:20
160,333	52,779	57,999	72,832	1,237	1,254	20776,533	21287,274	32,931	14,061	6,212	-9,043	42,906	8,456	21,668	2022-03-21 16:20
160,833	52,732	57,991	72,775	1,237	1,254	20823,797	21209,609	28,746	13,927	6,594	-8,975	42,947	8,460	21,663	2022-03-21 16:21
161,333	52,859	57,964	72,984	1,238	1,254	20582,584	21548,864	26,050	13,922	6,554	-9,132	42,654	8,431	21,570	2022-03-21 16:21
161,833	52,961	58,111	72,822	1,236	1,253	20641,019	21098,451	44,245	13,465	6,613	-8,955	42,974	8,463	21,570	2022-03-21 16:22
162,333	52,842	58,089	72,786	1,237	1,253	20532,044	21079,507	28,228	14,082	5,879	-9,015	42,526	8,419	21,476	2022-03-21 16:22
162,833	52,841	57,967	72,977	1,237	1,254	20473,440	21541,238	36,962	14,059	5,984	-8,956	42,802	8,446	21,476	2022-03-21 16:23
163,334	52,876	58,064	72,794	1,236	1,254	20594,145	21132,366	35,848	13,930	6,133	-8,941	42,921	8,458	21,476	2022-03-21 16:23
163,834	52,873	58,059	73,232	1,237	1,254	20740,864	21768,566	45,175	14,376	5,727	-8,978	42,606	8,427	21,353	2022-03-21 16:24
164,334	52,895	58,110	73,136	1,238	1,254	20906,354	21556,237	48,460	13,717	6,123	-9,077	42,443	8,411	21,353	2022-03-21 16:24
164,834	52,985	58,163	72,938	1,238	1,254	20651,712	21197,510	37,485	12,699	7,273	-8,919	42,663	8,432	21,260	2022-03-21 16:25
165,334	53,056	58,157	73,061	1,238	1,253	20437,572	21374,058	29,652	12,850	7,445	-8,999	42,829	8,449	21,260	2022-03-21 16:25
165,833	53,129	58,215	72,934	1,238	1,254	20396,544	21126,252	44,633	13,928	6,724	-9,059	42,531	8,419	21,197	2022-03-21 16:26
166,333	53,062	58,218	73,001	1,238	1,254	20453,519	21213,278	45,226	14,470	5,993	-8,995	42,466	8,413	21,166	2022-03-21 16:26
166,833	53,161	58,240	72,905	1,238	1,253	20248,660	21027,581	36,448	14,460	6,102	-8,939	42,319	8,398	21,353	2022-03-21 16:27
167,333	53,214	58,299	73,021	1,237	1,254	20362,118	21124,673	36,263	14,093	6,170	-8,898	42,615	8,428	21,072	2022-03-21 16:27
167,833	53,142	58,295	72,983	1,240	1,254	20372,269	21077,642	71,739	14,787	5,625	-9,001	42,598	8,426	21,072	2022-03-21 16:28
168,333	53,184	58,268	73,148	1,237	1,254	20424,663	21352,129	69,153	14,641	5,449	-9,007	42,638	8,430	20,978	2022-03-21 16:28
168,833	53,243	58,377	73,123	1,238	1,255	20514,097	21167,423	142,932	14,839	5,365	-8,932	42,843	8,450	20,978	2022-03-21 16:29
169,333	53,260	58,365	73,057	1,238	1,255	20283,182	21090,846	39,524	13,944	6,097	-9,107	42,818	8,448	20,978	2022-03-21 16:29
169,834	53,281	58,413	73,379	1,238	1,255	20327,949	21488,994	35,605	13,058	6,968	-9,005	42,693	8,435	20,978	2022-03-21 16:30
170,334	53,256	58,423	73,299	1,238	1,254	20674,575	21348,754	34,714	12,416	7,529	-9,024	42,575	8,424	20,853	2022-03-21 16:30
170,834	53,330	58,481	73,287	1,238	1,254	20576,663	21242,478	44,416	13,223	7,346	-8,906	42,634	8,429	20,853	2022-03-21 16:31
171,334	53,284	58,465	73,130	1,238	1,254	20431,802	21041,406	53,195	13,583	6,954	-9,017	42,737	8,440	20,760	2022-03-21 16:31
171,834	53,375	58,466	73,214	1,238	1,254	20473,937	21158,717	37,120	13,947	6,402	-8,975	42,726	8,439	20,760	2022-03-21 16:32
172,333	53,343	58,507	73,220	1,238	1,255	20449,148	21122,952	80,415	14,337	6,256	-8,901	42,445	8,411	20,745	2022-03-21 16:32

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
172,833	0,218	0,730	1,065	-0,448	0,047	0,243	0,731	131,636	28,373	23,789	23,050	20,720	20,726	20,825	20,716	67,807
173,333	0,213	0,705	1,066	-0,445	-0,005	0,257	0,731	131,514	28,338	23,804	23,077	20,746	20,736	20,850	20,737	67,819
173,833	0,211	0,703	1,058	-0,446	0,015	0,254	0,729	131,415	28,328	23,812	23,072	20,744	20,732	20,846	20,736	67,636
174,333	0,214	0,736	1,065	-0,451	-0,005	0,230	0,729	131,331	28,121	23,758	23,028	20,702	20,713	20,807	20,698	67,666
174,833	0,213	0,716	1,062	-0,445	-0,011	0,242	0,729	131,256	27,981	23,733	23,030	20,709	20,710	20,813	20,700	67,581
175,333	0,212	0,731	1,069	-0,445	0,032	0,233	0,729	131,116	27,845	23,710	23,025	20,721	20,722	20,826	20,708	67,598
175,833	0,210	0,702	1,059	-0,448	0,016	0,264	0,728	131,024	28,145	23,757	23,063	20,751	20,749	20,858	20,739	67,603
176,333	0,212	0,683	1,064	-0,445	0,019	0,270	0,728	130,851	28,011	23,770	23,074	20,772	20,766	20,882	20,756	67,493
176,834	0,211	0,738	1,063	-0,444	-0,017	0,221	0,727	130,760	28,313	23,727	23,007	20,699	20,697	20,807	20,681	67,497
177,334	0,226	0,769	1,070	-0,443	-0,015	0,203	0,726	130,821	28,075	23,731	23,041	20,716	20,714	20,828	20,698	67,473
177,834	0,224	0,772	1,066	-0,443	0,046	0,195	0,726	130,920	27,974	23,753	23,058	20,754	20,747	20,860	20,731	67,355
178,334	0,218	0,773	1,061	-0,446	0,039	0,201	0,725	131,078	28,001	23,793	23,112	20,809	20,806	20,914	20,789	67,489
178,834	0,217	0,758	1,065	-0,445	0,003	0,216	0,724	131,061	28,187	23,754	23,079	20,772	20,769	20,878	20,746	67,462
179,333	0,215	0,739	1,066	-0,445	-0,014	0,223	0,722	130,920	28,138	23,770	23,076	20,782	20,779	20,885	20,754	67,618
179,833	0,215	0,760	1,064	-0,447	0,026	0,204	0,723	130,853	28,375	23,805	23,105	20,798	20,784	20,903	20,763	67,479
180,333	0,216	0,757	1,063	-0,443	-0,019	0,217	0,722	130,763	28,036	23,712	23,027	20,720	20,719	20,822	20,693	67,490
180,833	0,213	0,747	1,070	-0,446	0,037	0,216	0,721	130,930	28,030	23,775	23,090	20,793	20,784	20,898	20,762	67,707
181,333	0,211	0,737	1,070	-0,445	0,024	0,238	0,721	130,918	27,907	23,767	23,084	20,815	20,803	20,907	20,778	67,720
181,833	0,209	0,713	1,065	-0,451	0,012	0,249	0,720	130,908	28,215	23,825	23,151	20,868	20,869	20,972	20,842	67,683
182,333	0,212	0,711	1,073	-0,446	-0,012	0,245	0,720	130,864	28,335	23,885	23,190	20,921	20,921	21,029	20,887	67,756
182,833	0,227	0,764	1,064	-0,443	0,016	0,202	0,719	130,693	28,166	23,779	23,079	20,816	20,808	20,919	20,779	67,922
183,334	0,212	0,759	1,069	-0,449	0,048	0,211	0,718	130,648	28,074	23,733	23,032	20,780	20,775	20,870	20,739	67,893
183,834	0,212	0,744	1,065	-0,444	0,030	0,229	0,718	130,621	27,897	23,699	23,013	20,766	20,762	20,859	20,726	67,863
184,334	0,212	0,732	1,064	-0,445	0,040	0,226	0,716	130,698	28,185	23,774	22,588	20,821	20,835	20,913	20,782	67,932
184,834	0,249	0,800	1,069	-0,444	0,038	0,164	0,716	130,825	28,089	23,719	-3373,923	20,781	20,813	20,879	20,742	68,053
185,334	0,243	0,812	1,062	-0,442	0,040	0,171	0,715	131,002	28,149	23,715	21,889	20,793	20,808	20,885	20,746	67,899
185,833	0,385	0,781	1,065	-0,445	-0,013	0,193	0,715	131,103	27,958	23,657	21,141	20,742	20,749	20,825	20,695	68,019
186,333	0,257	0,784	1,065	-0,441	0,038	0,181	0,714	131,297	28,299	23,716	21,431	20,768	20,766	20,865	20,723	68,135
186,833	0,272	0,812	1,070	-0,445	0,040	0,162	0,713	131,553	28,310	23,827	21,643	20,881	20,879	20,968	20,832	68,133

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
172,833	53,267	58,472	73,307	1,238	1,254	20635,295	21285,080	45,123	12,846	7,277	-8,956	42,473	8,414	20,666	2022-03-21 16:33
173,333	53,282	58,470	73,264	1,237	1,255	20617,051	21235,725	32,924	12,465	7,724	-8,901	42,693	8,435	20,666	2022-03-21 16:33
173,833	53,304	58,451	73,060	1,238	1,254	20334,451	20965,098	33,088	12,831	7,613	-8,928	42,177	8,384	20,478	2022-03-21 16:34
174,333	53,267	58,407	73,092	1,238	1,254	20443,383	21069,601	34,019	13,338	6,904	-9,012	42,848	8,451	20,572	2022-03-21 16:34
174,833	53,447	58,426	72,916	1,239	1,254	20078,400	20796,534	33,081	12,858	7,256	-8,898	42,608	8,427	20,572	2022-03-21 16:35
175,333	53,420	58,518	72,987	1,238	1,254	20121,340	20763,390	33,104	13,339	6,994	-8,892	42,585	8,425	20,572	2022-03-21 16:35
175,833	53,397	58,468	72,770	1,239	1,254	20179,369	20524,038	27,900	12,133	7,921	-8,958	42,531	8,419	20,478	2022-03-21 16:36
176,333	53,502	58,501	72,771	1,238	1,254	19858,802	20479,148	32,084	12,278	8,090	-8,906	42,575	8,424	20,478	2022-03-21 16:36
176,834	53,503	58,518	72,682	1,238	1,255	19862,800	20330,940	32,503	14,015	6,620	-8,871	42,480	8,414	20,354	2022-03-21 16:37
177,334	53,429	58,485	72,628	1,238	1,255	19929,421	20304,484	58,367	14,348	6,075	-8,861	42,896	8,455	20,354	2022-03-21 16:37
177,834	53,401	58,427	72,702	1,239	1,255	19815,798	20500,212	69,001	14,551	5,846	-8,869	42,629	8,429	20,353	2022-03-21 16:38
178,334	53,515	58,453	72,718	1,237	1,254	19824,080	20471,486	48,106	14,271	6,032	-8,912	42,492	8,415	20,260	2022-03-21 16:38
178,834	53,597	58,522	72,820	1,237	1,255	19661,969	20536,646	38,473	13,726	6,494	-8,901	42,439	8,410	20,260	2022-03-21 16:39
179,333	53,523	58,568	72,889	1,239	1,254	20015,056	20549,774	37,489	13,526	6,700	-8,896	42,729	8,439	20,166	2022-03-21 16:39
179,833	53,456	58,530	72,718	1,238	1,255	19899,429	20372,512	38,456	14,060	6,113	-8,944	42,720	8,438	20,166	2022-03-21 16:40
180,333	53,534	58,475	72,983	1,238	1,254	19805,937	20822,275	28,900	13,120	6,499	-8,862	42,242	8,391	20,073	2022-03-21 16:40
180,833	53,552	58,593	73,164	1,237	1,254	20067,660	20913,732	38,793	13,627	6,472	-8,924	42,798	8,446	20,073	2022-03-21 16:41
181,333	53,636	58,629	73,131	1,238	1,254	19988,653	20803,985	27,383	12,884	7,137	-8,904	42,806	8,446	20,073	2022-03-21 16:41
181,833	53,774	58,697	72,927	1,238	1,255	19734,640	20428,401	26,800	13,009	7,473	-9,012	42,757	8,442	19,979	2022-03-21 16:42
182,333	53,749	58,771	73,086	1,228	1,254	19716,326	20545,036	42,239	13,185	7,349	-8,920	43,037	8,469	19,979	2022-03-21 16:42
182,833	53,713	58,836	73,088	1,215	1,255	19787,359	20455,500	44,162	14,307	6,073	-8,863	42,378	8,404	19,853	2022-03-21 16:43
183,334	53,742	58,855	72,967	1,214	1,255	19689,271	20253,473	31,003	13,913	6,329	-8,973	43,139	8,479	19,854	2022-03-21 16:43
183,834	53,701	58,833	73,017	1,215	1,255	19719,112	20357,332	31,162	13,315	6,869	-8,878	42,470	8,413	19,854	2022-03-21 16:44
184,334	53,746	58,867	73,304	1,213	1,255	19718,499	20724,551	33,770	13,728	6,782	-8,901	42,467	8,413	19,760	2022-03-21 16:44
184,834	53,605	58,882	73,198	1,213	1,255	20084,193	20549,892	168,034	15,565	4,935	-8,889	42,691	8,435	19,760	2022-03-21 16:45
185,334	53,742	58,830	73,112	1,214	1,255	19693,222	20497,639	49,879	14,663	5,117	-8,830	42,614	8,428	19,666	2022-03-21 16:45
185,833	53,787	58,918	73,300	1,213	1,254	19789,446	20638,222	332,380	13,804	5,804	-8,909	42,423	8,409	19,666	2022-03-21 16:46
186,333	53,758	58,956	73,472	1,213	1,255	19995,004	20838,405	139,038	14,928	5,431	-8,818	42,613	8,427	19,573	2022-03-21 16:46
186,833	53,786	58,979	73,554	1,214	1,255	19958,974	20925,060	358,913	15,435	4,852	-8,896	42,763	8,442	19,572	2022-03-21 16:47



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
187,333	0,242	0,817	1,060	-0,443	0,055	0,172	0,713	131,574	28,385	23,817	21,706	20,855	20,849	20,939	20,805	68,357
187,833	0,216	0,761	1,069	-0,445	0,013	0,213	0,712	131,571	28,391	23,795	21,739	20,828	20,814	20,911	20,774	68,565
188,333	0,213	0,721	1,067	-0,445	0,025	0,249	0,712	131,613	28,304	23,911	21,907	20,951	20,951	21,038	20,902	68,455
188,833	0,214	0,708	1,067	-0,448	0,004	0,245	0,711	131,474	28,094	23,894	21,954	20,957	20,958	21,046	20,907	68,456
189,333	0,215	0,755	1,070	-0,448	0,036	0,217	0,710	131,146	27,794	23,675	21,795	20,767	20,769	20,849	20,712	68,563
189,833	0,217	0,734	1,064	-0,446	0,028	0,229	0,709	131,213	28,158	23,770	21,927	20,848	20,846	20,926	20,792	68,586
190,334	0,217	0,744	1,069	-0,448	0,019	0,220	0,709	131,090	28,396	23,780	21,965	20,830	20,823	20,906	20,773	68,645
190,834	0,218	0,749	1,059	-0,447	0,011	0,215	0,708	130,977	28,532	23,805	21,985	20,810	20,812	20,891	20,755	68,618
191,334	0,212	0,739	1,062	-0,444	-0,005	0,231	0,708	130,874	28,258	23,830	22,062	20,847	20,848	20,921	20,791	68,619
191,834	0,211	0,721	1,057	-0,449	0,034	0,247	0,707	130,739	27,964	23,720	22,012	20,791	20,772	20,844	20,716	68,604
192,334	0,211	0,697	1,063	-0,450	-0,003	0,258	0,706	130,711	28,519	23,822	22,109	20,833	20,825	20,905	20,767	68,638
192,833	0,214	0,743	1,070	-0,448	-0,001	0,222	0,702	130,570	28,346	23,803	22,125	20,811	20,814	20,877	20,747	68,504
193,333	0,213	0,726	1,063	-0,445	0,015	0,237	0,705	130,465	28,335	23,802	22,161	20,836	20,823	20,889	20,762	68,540
193,833	0,213	0,728	1,065	-0,445	0,047	0,231	0,706	130,346	28,335	23,785	22,168	20,796	20,800	20,861	20,732	68,544
194,333	0,228	0,779	1,069	-0,441	0,031	0,187	0,704	130,447	28,453	23,908	22,309	20,915	20,917	20,980	20,856	68,458
194,833	0,267	0,816	1,068	-0,441	0,028	0,161	0,703	130,500	28,622	23,825	22,246	20,830	20,817	20,871	20,750	68,330
195,333	0,231	0,783	1,066	-0,448	0,035	0,198	0,702	130,553	28,281	23,808	22,275	20,829	20,820	20,874	20,751	68,636
195,833	0,212	0,745	1,064	-0,445	0,007	0,221	0,702	130,470	28,362	23,768	22,257	20,781	20,783	20,837	20,711	68,636
196,333	0,214	0,736	1,066	-0,447	0,033	0,232	0,701	130,424	28,239	23,834	22,358	20,867	20,860	20,920	20,792	68,580
196,833	0,222	0,729	1,071	-0,444	0,022	0,233	0,699	130,405	28,088	23,847	22,401	20,895	20,898	20,942	20,822	68,647
197,334	0,213	0,729	1,065	-0,443	0,016	0,237	0,700	130,276	28,324	23,803	22,356	20,836	20,838	20,891	20,759	68,649
197,834	0,211	0,716	1,067	-0,449	0,030	0,252	0,699	130,193	28,183	23,775	22,367	20,822	20,810	20,860	20,742	68,557
198,334	0,210	0,695	1,064	-0,443	0,002	0,256	0,699	130,078	28,266	23,775	22,383	20,811	20,811	20,862	20,736	68,601
198,834	0,214	0,730	1,071	-0,438	0,029	0,231	0,699	130,042	28,114	23,819	22,446	20,885	20,878	20,931	20,797	68,512
199,334	0,213	0,742	1,069	-0,440	0,012	0,225	0,699	129,845	27,961	23,759	22,426	20,833	20,840	20,880	20,756	68,498
199,833	0,213	0,736	1,071	-0,446	0,041	0,231	0,698	129,798	28,011	23,767	22,466	20,859	20,862	20,906	20,780	68,356
200,333	0,213	0,726	1,063	-0,449	0,004	0,240	0,698	129,919	28,144	23,850	22,561	20,942	20,939	20,990	20,860	68,384
200,833	0,212	0,735	1,063	-0,447	0,033	0,229	0,694	129,725	28,004	23,759	22,493	20,869	20,873	20,909	20,787	68,508
201,333	0,211	0,725	1,069	-0,441	0,016	0,235	0,696	129,670	28,191	23,822	22,568	20,932	20,921	20,973	20,844	68,408

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
187,333	53,856	59,052	73,896	1,212	1,255	20139,524	21317,766	57,563	15,046	5,153	-8,861	42,300	8,396	19,478	2022-03-21 16:47
187,833	53,855	59,157	73,877	1,212	1,254	20444,669	21113,252	50,015	14,078	6,386	-8,896	42,850	8,451	19,478	2022-03-21 16:48
188,333	53,921	59,173	73,656	1,211	1,255	20180,272	20783,443	34,351	12,905	7,474	-8,907	42,730	8,439	19,478	2022-03-21 16:48
188,833	53,942	59,160	74,128	1,213	1,255	20180,218	21479,808	46,491	13,110	7,358	-8,958	42,617	8,428	19,345	2022-03-21 16:49
189,333	54,000	59,244	73,837	1,212	1,254	20238,136	20933,250	34,525	13,836	6,511	-8,955	42,915	8,457	19,345	2022-03-21 16:49
189,833	54,068	59,275	74,065	1,212	1,254	20172,865	21220,341	62,525	13,500	6,878	-8,912	42,732	8,439	19,251	2022-03-21 16:50
190,334	53,966	59,327	73,978	1,212	1,254	20393,112	21013,190	40,673	13,662	6,606	-8,959	42,692	8,435	19,251	2022-03-21 16:50
190,834	53,887	59,242	74,026	1,212	1,255	20462,539	21216,146	37,375	13,677	6,464	-8,932	42,176	8,384	19,157	2022-03-21 16:51
191,334	53,858	59,215	74,083	1,213	1,255	20528,978	21336,513	30,414	13,010	6,934	-8,888	42,595	8,426	19,157	2022-03-21 16:51
191,834	53,852	59,202	74,118	1,211	1,254	20482,918	21399,204	28,396	12,653	7,406	-8,978	42,129	8,379	19,157	2022-03-21 16:52
192,334	53,868	59,214	74,242	1,211	1,255	20510,657	21565,807	38,519	12,492	7,726	-8,990	42,614	8,428	19,064	2022-03-21 16:52
192,833	53,937	59,209	74,207	1,211	1,254	20227,929	21517,088	36,602	13,863	6,669	-8,964	42,640	8,430	19,064	2022-03-21 16:53
193,333	53,925	59,246	74,037	1,213	1,255	20318,175	21234,703	38,456	13,477	7,110	-8,903	42,260	8,392	19,064	2022-03-21 16:53
193,833	53,865	59,207	74,037	1,211	1,255	20377,505	21290,400	41,363	13,713	6,921	-8,900	42,802	8,446	19,064	2022-03-21 16:54
194,333	53,848	59,173	73,791	1,212	1,255	20295,417	20988,550	92,897	15,177	5,616	-8,816	42,584	8,425	18,970	2022-03-21 16:54
194,833	53,847	59,114	74,089	1,212	1,255	20113,870	21505,335	192,643	15,715	4,835	-8,829	42,676	8,434	18,970	2022-03-21 16:55
195,333	53,847	59,179	74,304	1,211	1,254	20531,274	21703,534	48,464	14,323	5,936	-8,957	42,827	8,449	18,845	2022-03-21 16:55
195,833	53,831	59,215	74,179	1,212	1,255	20561,439	21474,189	29,151	13,442	6,642	-8,896	42,821	8,448	18,845	2022-03-21 16:56
196,333	53,832	59,186	74,358	1,212	1,254	20490,355	21766,782	33,192	13,072	6,948	-8,947	42,765	8,442	18,845	2022-03-21 16:56
196,833	53,858	59,211	74,399	1,212	1,255	20541,923	21799,459	50,785	13,192	6,998	-8,882	42,944	8,460	18,658	2022-03-21 16:57
197,334	53,869	59,215	74,251	1,212	1,254	20532,077	21566,924	32,430	12,918	7,103	-8,863	42,299	8,396	18,751	2022-03-21 16:57
197,834	53,852	59,219	74,181	1,212	1,254	20437,110	21465,933	27,816	12,552	7,550	-8,971	42,452	8,412	18,657	2022-03-21 16:58
198,334	53,922	59,200	74,227	1,212	1,254	20387,828	21552,460	34,960	12,786	7,683	-8,861	42,536	8,420	18,657	2022-03-21 16:58
198,834	53,899	59,232	73,920	1,212	1,254	20303,027	21061,811	39,010	13,254	6,942	-8,767	42,905	8,456	18,657	2022-03-21 16:59
199,334	53,864	59,182	73,947	1,211	1,255	20314,003	21187,721	35,184	13,583	6,761	-8,797	42,779	8,444	18,657	2022-03-21 16:59
199,833	53,870	59,147	73,836	1,211	1,254	20112,767	21074,085	36,445	13,439	6,938	-8,919	42,797	8,446	18,564	2022-03-21 17:00
200,333	53,882	59,137	73,984	1,213	1,255	20159,019	21307,282	41,301	13,216	7,213	-8,990	42,340	8,400	18,657	2022-03-21 17:00
200,833	53,901	59,197	73,926	1,211	1,254	20282,104	21132,332	32,419	13,465	6,878	-8,943	42,934	8,459	18,470	2022-03-21 17:01
201,333	53,960	59,190	73,668	1,211	1,254	20060,683	20772,995	29,069	13,074	7,043	-8,819	42,954	8,461	18,470	2022-03-21 17:01

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
201,833	0,211	0,749	1,067	-0,439	0,004	0,215	0,695	129,724	28,102	23,881	22,651	21,019	21,019	21,060	20,933	68,374
202,333	0,210	0,746	1,060	-0,438	0,000	0,220	0,693	129,650	27,924	23,782	22,582	20,937	20,933	20,969	20,848	68,381
202,833	0,211	0,774	1,065	-0,439	0,026	0,194	0,692	129,600	27,926	23,680	22,489	20,826	20,826	20,861	20,739	68,452
203,333	0,212	0,746	1,071	-0,442	-0,004	0,233	0,694	129,542	27,723	23,661	22,491	20,825	20,823	20,861	20,731	68,496
203,834	0,213	0,702	1,062	-0,441	0,030	0,257	0,692	129,389	27,712	23,617	22,466	20,789	20,786	20,825	20,697	68,411
204,334	0,213	0,733	1,072	-0,444	-0,009	0,221	0,692	129,447	27,820	23,705	22,590	20,897	20,887	20,921	20,798	68,490
204,834	0,223	0,779	1,062	-0,435	0,040	0,192	0,692	129,501	27,837	23,738	22,630	20,928	20,923	20,948	20,830	68,355
205,334	0,215	0,767	1,062	-0,440	0,016	0,209	0,691	129,434	27,759	23,609	22,512	20,796	20,806	20,831	20,707	68,473
205,834	0,210	0,747	1,069	-0,438	0,041	0,221	0,691	129,597	28,136	23,808	22,706	20,976	20,983	21,002	20,878	68,474
206,333	0,209	0,737	1,066	-0,440	-0,003	0,228	0,690	129,427	28,115	23,751	22,650	20,912	20,911	20,929	20,811	68,581
206,833	0,211	0,742	1,063	-0,442	0,019	0,220	0,686	129,308	28,170	23,732	22,630	20,874	20,873	20,898	20,774	68,676
207,333	0,214	0,757	1,072	-0,437	0,030	0,206	0,688	129,266	28,071	23,699	22,616	20,853	20,857	20,870	20,749	68,595
207,833	0,228	0,793	1,069	-0,442	-0,029	0,182	0,687	129,368	28,197	23,735	22,645	20,872	20,876	20,890	20,770	68,718
208,333	0,217	0,767	1,060	-0,439	0,030	0,209	0,686	129,455	28,012	23,699	22,635	20,847	20,856	20,866	20,747	68,695
208,833	0,216	0,741	1,068	-0,442	-0,021	0,226	0,686	129,391	27,916	23,667	22,617	20,827	20,833	20,850	20,728	68,712
209,333	0,215	0,774	1,067	-0,439	-0,007	0,192	0,684	129,418	27,710	23,626	22,600	20,812	20,824	20,833	20,716	68,799
209,833	0,222	0,794	1,059	-0,439	0,005	0,175	0,684	129,557	27,869	23,699	22,674	20,902	20,899	20,917	20,795	68,945
210,333	0,263	0,819	1,067	-0,440	0,037	0,161	0,683	129,657	28,186	23,728	22,700	20,899	20,911	20,925	20,799	68,941
210,834	0,251	0,793	1,064	-0,439	0,017	0,182	0,683	129,717	27,944	23,723	22,706	20,918	20,918	20,925	20,804	68,928
211,334	0,248	0,805	1,070	-0,439	-0,008	0,166	0,682	129,874	27,933	23,676	22,674	20,864	20,864	20,876	20,756	69,007
211,834	0,234	0,804	1,063	-0,441	-0,018	0,173	0,682	129,950	27,894	23,674	22,685	20,876	20,878	20,881	20,760	69,174
212,334	0,222	0,793	1,061	-0,438	0,029	0,186	0,681	130,069	28,028	23,754	22,781	20,954	20,966	20,970	20,849	69,210
212,834	0,224	0,776	1,061	-0,442	-0,023	0,196	0,680	129,998	28,075	23,731	22,739	20,902	20,910	20,910	20,794	69,131
213,333	0,218	0,755	1,071	-0,443	0,007	0,221	0,680	129,959	27,902	23,744	22,767	20,950	20,941	20,950	20,829	69,204
213,833	0,212	0,716	1,065	-0,438	0,031	0,240	0,678	129,779	27,902	23,659	22,683	20,870	20,872	20,870	20,747	69,312
214,333	0,217	0,742	1,064	-0,442	-0,013	0,231	0,678	129,690	27,651	23,603	22,667	20,869	20,870	20,869	20,744	69,313
214,833	0,211	0,716	1,068	-0,442	0,050	0,247	0,677	129,567	28,159	23,618	22,668	20,835	20,841	20,842	20,715	69,373
215,333	0,216	0,743	1,075	-0,445	0,010	0,218	0,678	129,579	28,011	23,676	22,727	20,901	20,901	20,897	20,778	69,209
215,833	0,215	0,756	1,068	-0,442	-0,006	0,209	0,676	129,578	28,040	23,672	22,731	20,899	20,904	20,892	20,775	69,219

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
201,833	53,981	59,187	73,868	1,211	1,254	19979,703	21052,976	32,166	13,743	6,460	-8,776	42,704	8,436	18,345	2022-03-21 17:02
202,333	54,043	59,232	73,690	1,212	1,254	19910,348	20730,736	25,276	13,389	6,589	-8,759	41,870	8,354	18,564	2022-03-21 17:02
202,833	54,047	59,257	73,798	1,211	1,254	19989,953	20861,991	35,689	14,494	5,810	-8,789	42,562	8,422	18,023	2022-03-21 17:03
203,333	54,142	59,322	73,560	1,212	1,254	19931,220	20421,599	33,167	13,223	7,003	-8,842	42,736	8,440	18,252	2022-03-21 17:03
203,834	54,035	59,303	73,442	1,211	1,255	19954,389	20292,907	33,086	12,857	7,698	-8,811	42,510	8,417	18,252	2022-03-21 17:04
204,334	54,156	59,284	73,590	1,210	1,254	19884,782	20519,385	32,503	13,954	6,639	-8,879	42,797	8,446	18,158	2022-03-21 17:04
204,834	54,275	59,375	73,642	1,212	1,254	19564,961	20461,092	71,938	14,673	5,752	-8,710	42,659	8,432	18,345	2022-03-21 17:05
205,334	54,218	59,379	73,751	1,210	1,254	19772,500	20609,408	33,505	14,049	6,260	-8,791	42,454	8,412	18,158	2022-03-21 17:05
205,834	54,136	59,376	73,679	1,212	1,253	19921,101	20498,713	26,970	13,679	6,643	-8,768	42,923	8,458	18,158	2022-03-21 17:06
206,333	54,345	59,392	73,843	1,211	1,253	19755,973	20711,259	25,791	13,332	6,845	-8,803	42,550	8,421	18,158	2022-03-21 17:06
206,833	54,308	59,519	73,797	1,212	1,254	19954,478	20470,521	37,245	13,782	6,590	-8,837	42,433	8,410	17,540	2022-03-21 17:07
207,333	54,273	59,492	73,934	1,208	1,254	19828,610	20706,366	45,838	14,234	6,186	-8,735	42,984	8,464	17,970	2022-03-21 17:07
207,833	54,333	59,544	73,842	1,205	1,254	19869,461	20502,083	56,921	14,610	5,459	-8,844	42,938	8,459	17,845	2022-03-21 17:08
208,333	54,236	59,539	73,867	1,205	1,254	19968,818	20545,881	41,200	13,801	6,267	-8,782	42,236	8,390	17,845	2022-03-21 17:08
208,833	54,243	59,508	73,985	1,205	1,253	19987,329	20748,388	42,997	13,449	6,772	-8,844	42,692	8,435	17,845	2022-03-21 17:09
209,333	54,225	59,535	74,107	1,205	1,254	20126,648	20892,787	42,292	14,815	5,773	-8,786	42,757	8,442	17,752	2022-03-21 17:09
209,833	54,282	59,589	74,321	1,207	1,254	20281,502	21123,312	57,415	15,207	5,260	-8,774	42,105	8,377	17,752	2022-03-21 17:10
210,333	54,248	59,624	74,304	1,205	1,254	20291,035	21051,896	169,906	15,657	4,820	-8,795	42,704	8,436	17,658	2022-03-21 17:10
210,834	54,187	59,582	74,375	1,206	1,254	20382,299	21215,137	109,251	14,664	5,470	-8,783	42,788	8,445	17,658	2022-03-21 17:11
211,334	54,192	59,583	74,422	1,206	1,253	20477,450	21265,613	94,579	15,266	4,994	-8,784	43,024	8,468	17,578	2022-03-21 17:11
211,834	54,169	59,621	74,551	1,207	1,254	20756,095	21407,319	73,008	14,911	5,201	-8,827	42,473	8,414	17,564	2022-03-21 17:12
212,334	54,182	59,637	74,633	1,206	1,254	20769,564	21506,400	59,513	14,638	5,566	-8,768	42,145	8,381	17,564	2022-03-21 17:12
212,834	54,174	59,648	74,468	1,207	1,254	20698,436	21248,519	67,147	14,256	5,892	-8,837	42,822	8,448	17,470	2022-03-21 17:13
213,333	54,098	59,608	74,799	1,208	1,254	20916,040	21780,235	43,108	13,489	6,622	-8,857	42,768	8,443	17,470	2022-03-21 17:13
213,833	54,076	59,638	74,876	1,209	1,253	21116,234	21842,446	34,301	13,267	7,186	-8,758	42,940	8,460	17,347	2022-03-21 17:14
214,333	54,050	59,604	74,940	1,209	1,253	21152,649	21976,708	42,658	13,413	6,936	-8,838	42,534	8,420	17,348	2022-03-21 17:14
214,833	54,064	59,621	74,725	1,207	1,252	21180,385	21632,997	30,069	13,082	7,397	-8,832	42,635	8,430	17,348	2022-03-21 17:15
215,333	54,072	59,584	74,718	1,209	1,253	20973,033	21694,289	45,847	13,931	6,528	-8,893	43,002	8,466	17,347	2022-03-21 17:15
215,833	54,060	59,572	74,441	1,209	1,253	21000,734	21309,225	39,634	14,079	6,273	-8,834	42,709	8,437	17,254	2022-03-21 17:16

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
216,333	0,212	0,747	1,066	-0,436	0,010	0,223	0,676	129,430	28,060	23,664	22,728	20,881	20,891	20,881	20,759	69,089
216,833	0,210	0,724	1,068	-0,439	0,015	0,234	0,672	129,305	27,824	23,593	22,667	20,821	20,828	20,811	20,695	69,071
217,334	0,250	0,761	1,066	-0,438	0,037	0,197	0,674	129,359	28,048	23,686	22,766	20,911	20,912	20,900	20,778	69,098
217,834	0,253	0,812	1,063	-0,441	-0,005	0,165	0,673	129,363	28,000	23,640	22,728	20,868	20,870	20,853	20,739	69,058
218,334	0,222	0,799	1,068	-0,434	0,029	0,178	0,672	129,526	28,175	23,723	22,785	20,924	20,927	20,912	20,794	69,077
218,834	0,239	0,812	1,067	-0,439	0,024	0,171	0,672	129,567	28,084	23,697	22,767	20,902	20,903	20,898	20,770	69,246
219,334	0,223	0,780	1,064	-0,442	0,024	0,196	0,672	129,645	28,263	23,712	22,772	20,905	20,903	20,897	20,773	69,129
219,833	0,221	0,775	1,065	-0,441	0,035	0,191	0,670	129,738	28,267	23,750	22,803	20,928	20,930	20,912	20,798	69,043
220,333	0,226	0,769	1,066	-0,444	-0,016	0,204	0,670	129,704	28,109	23,726	22,788	20,907	20,902	20,888	20,772	69,065
220,833	0,217	0,753	1,060	-0,443	0,010	0,221	0,669	129,751	27,984	23,755	22,834	20,959	20,974	20,947	20,834	69,209
221,333	0,214	0,730	1,064	-0,439	0,044	0,231	0,668	129,541	27,834	23,662	22,767	20,890	20,895	20,879	20,759	69,276
221,833	0,220	0,785	1,062	-0,437	0,015	0,179	0,668	129,592	27,826	23,680	22,792	20,916	20,923	20,898	20,785	69,127
222,333	0,229	0,791	1,068	-0,437	0,010	0,183	0,667	129,700	27,863	23,710	22,836	20,946	20,958	20,935	20,820	69,131
222,833	0,226	0,784	1,061	-0,440	0,008	0,192	0,667	129,755	27,805	23,638	22,770	20,887	20,903	20,869	20,759	69,140
223,333	0,213	0,747	1,075	-0,443	0,051	0,223	0,665	129,734	27,727	23,621	22,759	20,890	20,895	20,858	20,756	69,216
223,833	0,215	0,751	1,069	-0,441	0,043	0,222	0,666	129,587	28,001	23,656	22,791	20,911	20,926	20,898	20,782	69,166
224,334	0,219	0,726	1,063	-0,442	0,009	0,240	0,665	129,448	28,022	23,696	22,833	20,951	20,956	20,924	20,819	69,251
224,834	0,214	0,724	1,068	-0,444	0,016	0,240	0,665	129,315	28,118	23,742	22,873	20,987	20,990	20,955	20,844	69,101
225,334	0,217	0,729	1,068	-0,439	0,024	0,227	0,663	129,285	28,077	23,712	22,840	20,951	20,965	20,927	20,813	69,037
225,834	0,222	0,774	1,063	-0,439	0,019	0,187	0,659	129,294	27,970	23,685	22,808	20,919	20,933	20,884	20,781	69,062
226,334	0,218	0,784	1,063	-0,439	0,036	0,192	0,662	129,264	27,980	23,645	22,768	20,877	20,887	20,836	20,737	69,138
226,833	0,222	0,768	1,064	-0,437	0,020	0,201	0,662	129,394	28,113	23,758	22,902	20,995	21,016	20,962	20,860	69,104
227,333	0,219	0,772	1,066	-0,438	0,015	0,202	0,660	129,273	27,887	23,656	22,792	20,903	20,915	20,861	20,768	69,078
227,833	0,216	0,757	1,061	-0,440	0,011	0,217	0,660	129,304	27,966	23,741	22,901	21,021	21,028	20,974	20,878	69,008
228,333	0,218	0,737	1,068	-0,436	-0,021	0,231	0,660	129,165	27,906	23,686	22,852	20,983	20,992	20,940	20,842	69,030
228,833	0,223	0,734	1,070	-0,440	0,002	0,227	0,659	128,960	27,846	23,611	22,767	20,901	20,911	20,854	20,757	68,954
229,333	0,218	0,770	1,070	-0,440	-0,031	0,190	0,658	129,040	27,714	23,675	22,867	21,004	21,015	20,951	20,857	68,965
229,833	0,226	0,795	1,066	-0,439	-0,017	0,182	0,657	129,054	27,903	23,639	22,813	20,948	20,957	20,898	20,807	68,944
230,333	0,237	0,791	1,063	-0,441	-0,018	0,182	0,657	129,260	28,113	23,753	22,936	21,065	21,081	21,011	20,920	69,062

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
216,333	54,053	59,550	74,524	1,207	1,254	20796,512	21470,261	29,397	13,390	6,695	-8,721	42,805	8,446	17,254	2022-03-21 17:16
216,833	54,006	59,509	74,654	1,208	1,248	20859,125	21610,568	27,549	13,075	7,017	-8,778	42,949	8,461	17,067	2022-03-21 17:17
217,334	53,968	59,406	74,635	1,209	1,242	20959,627	21637,109	315,639	14,232	5,903	-8,760	42,666	8,433	17,067	2022-03-21 17:17
217,834	54,002	59,433	74,537	1,208	1,243	20842,499	21468,813	119,618	15,319	4,957	-8,810	42,663	8,432	17,067	2022-03-21 17:18
218,334	53,985	59,430	74,743	1,207	1,242	20872,906	21753,447	62,942	14,991	5,347	-8,689	42,446	8,411	16,973	2022-03-21 17:18
218,834	53,986	59,474	74,687	1,207	1,243	21105,856	21627,441	91,478	15,181	5,143	-8,787	42,619	8,428	16,973	2022-03-21 17:19
219,334	53,972	59,460	74,578	1,206	1,243	20960,249	21492,733	49,076	14,598	5,876	-8,834	42,335	8,400	16,973	2022-03-21 17:19
219,833	53,959	59,415	74,558	1,207	1,242	20872,068	21512,331	48,200	14,849	5,720	-8,820	42,229	8,389	16,848	2022-03-21 17:20
220,333	53,913	59,380	74,828	1,208	1,242	20985,220	21940,443	67,877	14,142	6,127	-8,870	42,372	8,404	16,848	2022-03-21 17:20
220,833	53,912	59,414	74,825	1,207	1,242	21166,698	21896,938	45,843	13,461	6,617	-8,867	42,343	8,401	16,754	2022-03-21 17:21
221,333	53,875	59,425	74,899	1,206	1,243	21291,064	21993,871	35,553	13,290	6,927	-8,781	42,684	8,434	16,754	2022-03-21 17:21
221,833	53,876	59,387	74,656	1,207	1,242	21099,465	21698,180	54,903	15,126	5,383	-8,746	42,466	8,413	16,754	2022-03-21 17:22
222,333	53,845	59,379	74,727	1,207	1,242	21151,765	21804,871	100,717	14,703	5,499	-8,745	42,398	8,406	16,660	2022-03-21 17:22
222,833	53,839	59,354	74,906	1,207	1,242	21170,439	22098,444	57,087	14,618	5,774	-8,804	42,343	8,401	16,660	2022-03-21 17:23
223,333	53,825	59,376	74,875	1,207	1,242	21301,613	22024,716	32,921	13,512	6,699	-8,862	42,892	8,455	16,567	2022-03-21 17:23
223,833	53,818	59,362	74,958	1,206	1,242	21215,801	22161,733	40,059	13,780	6,662	-8,816	43,002	8,466	16,567	2022-03-21 17:24
224,334	53,797	59,375	74,790	1,206	1,243	21365,830	21909,006	52,233	13,165	7,207	-8,849	42,562	8,422	16,567	2022-03-21 17:24
224,834	53,809	59,350	74,638	1,207	1,243	21157,556	21731,291	32,376	13,211	7,189	-8,879	42,672	8,433	16,478	2022-03-21 17:25
225,334	53,784	59,338	74,483	1,206	1,252	21093,716	21695,230	60,767	13,539	6,816	-8,785	42,766	8,443	16,348	2022-03-21 17:25
225,834	53,758	59,351	74,761	1,207	1,253	21168,418	22093,435	44,617	14,381	5,613	-8,773	42,304	8,397	16,348	2022-03-21 17:26
226,334	53,749	59,358	74,578	1,206	1,254	21277,372	21828,722	40,727	13,983	5,761	-8,780	42,227	8,389	16,348	2022-03-21 17:26
226,833	53,784	59,373	74,576	1,206	1,254	21178,201	21807,041	69,970	13,934	6,017	-8,748	42,746	8,441	16,348	2022-03-21 17:27
227,333	53,780	59,355	74,530	1,207	1,254	21170,338	21763,928	45,761	14,078	6,051	-8,766	42,803	8,446	16,161	2022-03-21 17:27
227,833	53,761	59,355	74,594	1,206	1,254	21074,670	21861,642	36,530	13,648	6,498	-8,803	42,660	8,432	16,255	2022-03-21 17:28
228,333	53,831	59,345	74,527	1,205	1,255	20994,370	21787,320	38,113	13,295	6,919	-8,726	42,874	8,453	16,255	2022-03-21 17:28
228,833	53,803	59,395	74,383	1,206	1,254	20953,108	21492,191	68,989	13,572	6,816	-8,794	42,709	8,437	16,161	2022-03-21 17:29
229,333	53,780	59,319	74,568	1,206	1,254	20996,708	21868,800	45,029	14,563	5,700	-8,803	42,717	8,438	16,067	2022-03-21 17:29
229,833	53,768	59,322	74,617	1,206	1,254	20978,598	21942,222	41,567	14,485	5,457	-8,771	42,836	8,449	16,067	2022-03-21 17:30
230,333	53,893	59,376	74,601	1,207	1,254	20978,590	21835,368	78,555	14,630	5,453	-8,829	42,356	8,402	15,973	2022-03-21 17:30

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
230,833	0,231	0,791	1,069	-0,436	0,000	0,179	0,656	129,146	27,945	23,597	22,769	20,907	20,922	20,851	20,766	68,968
231,334	0,249	0,806	1,073	-0,440	-0,008	0,176	0,656	129,360	27,883	23,701	22,880	21,023	21,039	20,969	20,878	69,001
231,834	0,234	0,783	1,066	-0,438	0,026	0,189	0,654	129,442	27,970	23,751	22,935	21,071	21,093	21,012	20,929	69,183
232,334	0,225	0,776	1,066	-0,439	-0,003	0,202	0,654	129,320	27,941	23,604	22,782	20,921	20,937	20,860	20,773	69,282
232,834	0,214	0,732	1,071	-0,440	0,011	0,240	0,654	129,107	27,983	23,640	22,818	20,947	20,963	20,878	20,801	69,165
233,334	0,232	0,722	1,066	-0,436	0,029	0,235	0,654	129,116	28,033	23,682	22,854	20,988	21,007	20,923	20,840	69,186
233,833	0,224	0,737	1,071	-0,440	0,035	0,224	0,652	129,039	27,699	23,608	22,798	20,949	20,965	20,880	20,798	69,156
234,333	0,213	0,738	1,066	-0,439	0,041	0,228	0,652	129,034	27,798	23,659	22,867	21,021	21,030	20,948	20,863	69,106
234,833	0,220	0,717	1,066	-0,444	-0,007	0,256	0,651	128,833	27,785	23,637	22,857	21,011	21,031	20,924	20,858	69,061
235,333	0,216	0,690	1,069	-0,443	-0,010	0,264	0,651	128,632	27,743	23,621	22,830	20,998	21,013	20,921	20,844	69,106
235,833	0,215	0,700	1,064	-0,437	-0,005	0,254	0,651	128,411	27,795	23,643	22,859	21,040	21,045	20,946	20,874	69,028
236,333	0,216	0,738	1,071	-0,440	0,012	0,219	0,649	128,389	27,832	23,703	22,923	21,098	21,106	21,005	20,936	68,882
236,833	0,214	0,774	1,062	-0,440	0,026	0,202	0,649	128,395	27,714	23,667	22,915	21,086	21,096	20,996	20,924	68,887
237,333	0,224	0,769	1,066	-0,433	0,042	0,197	0,649	128,326	27,749	23,575	22,800	20,985	20,997	20,895	20,823	68,730
237,834	0,213	0,773	1,069	-0,434	0,017	0,198	0,648	128,430	27,724	23,613	22,836	21,021	21,020	20,928	20,850	68,771
238,334	0,214	0,791	1,063	-0,433	-0,011	0,184	0,648	128,574	27,983	23,678	22,893	21,066	21,082	20,977	20,904	68,966
238,834	0,221	0,754	1,066	-0,439	-0,004	0,217	0,648	128,246	27,629	23,540	22,778	20,959	20,972	20,864	20,791	68,820
239,334	0,220	0,751	1,062	-0,438	-0,024	0,211	0,645	128,236	27,770	23,536	22,766	20,938	20,954	20,844	20,775	68,815
239,834	0,220	0,771	1,066	-0,440	-0,008	0,192	0,645	128,177	27,735	23,502	22,716	20,891	20,902	20,797	20,724	68,750
240,333	0,239	0,806	1,062	-0,440	-0,008	0,175	0,645	128,435	27,958	23,635	22,854	21,015	21,029	20,909	20,844	68,673
240,833	0,225	0,778	1,065	-0,438	-0,015	0,198	0,644	128,370	28,145	23,648	22,848	21,003	21,022	20,897	20,832	68,911
241,333	0,218	0,747	1,063	-0,438	0,012	0,224	0,643	128,413	27,991	23,648	22,856	21,013	21,027	20,908	20,837	68,762
241,833	0,222	0,743	1,068	-0,435	0,014	0,225	0,643	128,341	28,046	23,632	22,838	20,986	21,008	20,882	20,809	68,875
242,333	0,221	0,712	1,064	-0,438	-0,030	0,254	0,642	128,063	27,678	23,506	22,717	20,874	20,888	20,761	20,699	68,824
242,833	0,225	0,708	1,070	-0,438	0,019	0,247	0,641	127,899	27,559	23,536	22,767	20,931	20,948	20,826	20,756	68,825
243,333	0,221	0,740	1,071	-0,442	0,017	0,226	0,641	127,971	27,837	23,645	22,870	21,038	21,054	20,924	20,863	68,706
243,833	0,238	0,751	1,067	-0,434	0,018	0,211	0,641	127,846	28,092	23,541	22,746	20,898	20,914	20,772	20,714	68,910
244,333	0,236	0,765	1,070	-0,438	-0,035	0,206	0,641	127,811	27,917	23,566	22,786	20,925	20,940	20,812	20,750	68,941
244,834	0,228	0,760	1,067	-0,434	0,068	0,207	0,637	127,873	27,882	23,647	22,862	21,017	21,039	20,898	20,842	68,780

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
230,833	53,993	59,466	74,477	1,207	1,254	20719,583	21529,766	125,417	14,677	5,372	-8,722	42,474	8,414	15,973	2022-03-21 17:31
231,334	53,959	59,463	74,631	1,205	1,254	20777,414	21754,460	84,483	14,849	5,285	-8,807	43,047	8,470	15,973	2022-03-21 17:31
231,834	53,924	59,460	74,839	1,207	1,254	21115,105	22060,616	107,148	14,743	5,668	-8,767	42,822	8,448	15,848	2022-03-21 17:32
232,334	53,945	59,544	74,834	1,205	1,254	21180,804	21929,209	56,866	14,360	6,054	-8,774	42,476	8,414	15,848	2022-03-21 17:32
232,834	53,912	59,498	74,776	1,206	1,254	21085,712	21908,358	36,361	13,051	7,215	-8,800	42,894	8,455	15,848	2022-03-21 17:33
233,334	53,916	59,513	74,781	1,206	1,255	21109,843	21908,645	130,188	13,483	7,058	-8,725	42,772	8,443	15,848	2022-03-21 17:33
233,833	53,862	59,472	74,746	1,206	1,253	21148,945	21892,831	39,888	13,374	6,719	-8,804	43,156	8,481	15,755	2022-03-21 17:34
234,333	53,873	59,452	74,908	1,205	1,255	21040,910	22178,408	37,923	13,099	6,847	-8,786	42,427	8,409	15,755	2022-03-21 17:34
234,833	53,879	59,432	74,798	1,206	1,253	20982,856	22028,891	57,153	12,195	7,669	-8,883	42,936	8,459	15,661	2022-03-21 17:35
235,333	53,912	59,454	74,671	1,205	1,254	20991,760	21829,017	44,991	12,489	7,934	-8,865	42,836	8,449	15,661	2022-03-21 17:35
235,833	53,884	59,447	74,389	1,206	1,254	20936,231	21433,356	38,280	12,785	7,634	-8,743	42,796	8,446	15,661	2022-03-21 17:36
236,333	53,888	59,381	74,444	1,207	1,254	20736,517	21608,273	40,987	13,851	6,561	-8,804	42,766	8,443	15,567	2022-03-21 17:36
236,833	53,884	59,380	74,283	1,205	1,254	20727,186	21373,018	34,933	14,199	6,045	-8,807	42,326	8,399	15,567	2022-03-21 17:37
237,333	53,852	59,337	74,266	1,205	1,254	20556,365	21412,094	73,344	14,642	5,922	-8,667	42,558	8,422	15,567	2022-03-21 17:37
237,834	53,853	59,291	74,581	1,205	1,253	20599,155	21916,583	31,751	14,326	5,945	-8,678	42,516	8,418	15,473	2022-03-21 17:38
238,334	53,849	59,369	74,373	1,204	1,253	20866,291	21508,400	37,785	14,824	5,534	-8,664	42,640	8,430	15,473	2022-03-21 17:38
238,834	53,824	59,335	74,431	1,205	1,254	20720,147	21650,435	48,195	13,466	6,518	-8,771	42,641	8,430	15,608	2022-03-21 17:39
239,334	53,800	59,295	74,449	1,206	1,253	20760,993	21723,615	40,352	13,717	6,319	-8,754	42,042	8,371	15,346	2022-03-21 17:39
239,834	53,774	59,295	74,264	1,205	1,253	20692,825	21447,182	69,627	14,172	5,756	-8,798	42,732	8,439	15,345	2022-03-21 17:40
240,333	53,811	59,249	74,217	1,205	1,253	20532,933	21457,995	66,440	14,666	5,240	-8,803	42,695	8,436	15,252	2022-03-21 17:40
240,833	53,746	59,289	74,400	1,206	1,253	20958,438	21651,843	57,320	14,146	5,937	-8,756	42,896	8,455	15,252	2022-03-21 17:41
241,333	53,744	59,264	74,441	1,206	1,253	20758,553	21759,363	47,098	13,462	6,723	-8,753	42,489	8,415	15,252	2022-03-21 17:41
241,833	53,751	59,281	74,499	1,205	1,254	20883,143	21826,550	62,525	13,785	6,765	-8,701	42,675	8,434	15,158	2022-03-21 17:42
242,333	53,718	59,287	74,489	1,205	1,254	20871,696	21797,571	51,992	12,855	7,627	-8,768	42,701	8,436	15,065	2022-03-21 17:42
242,833	53,700	59,254	74,154	1,206	1,254	20906,295	21364,481	78,286	13,200	7,399	-8,765	42,469	8,413	15,065	2022-03-21 17:43
243,333	53,700	59,206	74,497	1,206	1,253	20742,893	21921,963	54,187	13,684	6,782	-8,838	42,662	8,432	15,065	2022-03-21 17:43
243,833	53,689	59,230	74,644	1,206	1,253	21040,597	22099,044	170,594	14,161	6,336	-8,679	42,727	8,439	15,246	2022-03-21 17:44
244,333	53,674	59,262	74,603	1,207	1,254	21129,533	22003,135	59,209	13,885	6,178	-8,769	43,302	8,495	14,971	2022-03-21 17:44
244,834	53,699	59,235	74,356	1,207	1,254	20865,798	21686,128	88,102	13,821	6,209	-8,685	42,909	8,457	14,159	2022-03-21 17:45



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
245,334	0,219	0,746	1,069	-0,439	-0,029	0,223	0,643	127,859	27,996	23,698	22,914	21,066	21,082	20,948	20,884	68,780
245,834	0,215	0,736	1,064	-0,431	-0,008	0,225	0,644	127,670	27,936	23,626	22,839	20,995	21,012	20,858	20,807	68,795
246,334	0,218	0,766	1,063	-0,433	0,003	0,205	0,637	127,728	27,982	23,684	22,904	21,051	21,075	20,924	20,871	68,702
246,834	0,219	0,760	1,069	-0,437	0,027	0,211	0,637	127,669	27,800	23,592	22,821	20,970	20,990	20,836	20,790	68,584
247,333	0,223	0,752	1,071	-0,437	-0,033	0,220	0,636	127,540	27,805	23,526	22,747	20,904	20,911	20,768	20,716	68,625
247,833	0,220	0,737	1,065	-0,434	-0,016	0,225	0,635	127,511	27,846	23,610	22,838	20,995	21,010	20,861	20,809	68,691
248,333	0,219	0,744	1,065	-0,432	0,024	0,222	0,635	127,479	27,915	23,597	22,819	20,982	20,996	20,838	20,790	68,687
248,833	0,222	0,761	1,067	-0,432	0,026	0,206	0,634	127,525	27,942	23,647	22,863	21,017	21,044	20,882	20,836	68,589
249,333	0,228	0,786	1,071	-0,430	0,027	0,185	0,633	127,371	27,716	23,482	22,696	20,868	20,883	20,724	20,677	68,566
249,833	0,219	0,782	1,066	-0,431	0,013	0,193	0,633	127,667	27,822	23,664	22,886	21,063	21,079	20,919	20,867	68,609
250,333	0,213	0,748	1,067	-0,433	0,014	0,222	0,632	127,525	27,907	23,604	22,828	21,004	21,025	20,855	20,809	68,593
250,833	0,225	0,763	1,066	-0,438	0,030	0,198	0,632	127,559	27,800	23,657	22,893	21,078	21,090	20,921	20,880	68,580
251,334	0,219	0,769	1,062	-0,433	0,006	0,206	0,630	127,593	27,878	23,634	22,856	21,039	21,050	20,885	20,846	68,586
251,834	0,214	0,752	1,068	-0,436	-0,008	0,222	0,630	127,541	27,806	23,585	22,831	21,015	21,025	20,857	20,816	68,582
252,334	0,210	0,722	1,063	-0,431	0,023	0,244	0,630	127,393	27,834	23,583	22,816	20,994	21,013	20,841	20,803	68,657
252,834	0,210	0,720	1,070	-0,434	-0,004	0,236	0,629	127,302	27,816	23,584	22,825	21,003	21,022	20,846	20,809	68,466
253,334	0,211	0,735	1,066	-0,433	0,029	0,234	0,628	127,224	28,000	23,643	22,863	21,040	21,059	20,870	20,843	68,540
253,833	0,210	0,711	1,063	-0,430	0,042	0,250	0,629	127,054	27,814	23,586	22,804	20,978	21,003	20,819	20,788	68,495
254,333	0,211	0,721	1,062	-0,435	0,017	0,240	0,627	126,915	27,911	23,575	22,803	20,982	20,991	20,801	20,780	68,503
254,833	0,214	0,758	1,068	-0,432	0,034	0,203	0,627	127,096	28,025	23,649	22,865	21,043	21,059	20,871	20,841	68,469
255,333	0,213	0,764	1,065	-0,431	0,002	0,210	0,627	127,202	28,066	23,709	22,929	21,102	21,123	20,932	20,902	68,397
255,833	0,210	0,733	1,062	-0,432	-0,012	0,234	0,626	127,041	27,912	23,698	22,919	21,096	21,115	20,921	20,896	68,398
256,333	0,211	0,725	1,067	-0,431	0,032	0,232	0,625	126,842	27,810	23,592	22,825	21,009	21,022	20,828	20,801	68,267
256,833	0,215	0,751	1,063	-0,436	0,017	0,217	0,625	126,780	27,786	23,647	22,881	21,073	21,101	20,897	20,876	68,322
257,333	0,220	0,753	1,063	-0,432	0,041	0,218	0,624	126,782	27,847	23,579	22,814	21,016	21,030	20,832	20,807	68,249
257,833	0,223	0,746	1,072	-0,431	0,025	0,215	0,624	126,762	27,768	23,601	22,824	21,027	21,049	20,845	20,821	68,298
258,334	0,214	0,757	1,066	-0,430	-0,015	0,212	0,622	126,802	27,671	23,629	22,868	21,081	21,101	20,888	20,870	68,327
258,834	0,219	0,774	1,068	-0,433	0,010	0,194	0,622	126,767	27,648	23,585	22,834	21,047	21,070	20,869	20,845	68,232
259,334	0,219	0,768	1,062	-0,431	0,022	0,211	0,621	126,811	27,733	23,598	22,856	21,083	21,095	20,892	20,867	68,297

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
245,334	53,673	59,230	74,511	1,207	1,253	20906,037	21907,523	54,303	13,236	6,683	-8,781	42,763	8,442	15,532	2022-03-21 17:45
245,834	53,628	59,195	74,251	1,208	1,254	20999,750	21591,007	44,207	13,411	6,742	-8,610	42,825	8,448	15,301	2022-03-21 17:46
246,334	53,636	59,164	74,163	1,207	1,253	20844,936	21492,595	63,097	14,189	6,137	-8,670	42,598	8,426	14,752	2022-03-21 17:46
246,834	53,613	59,125	74,059	1,209	1,252	20742,955	21385,305	57,745	14,226	6,322	-8,738	42,679	8,434	14,752	2022-03-21 17:47
247,333	53,599	59,097	74,366	1,208	1,253	20804,472	21886,677	78,359	13,668	6,610	-8,750	43,044	8,470	14,752	2022-03-21 17:47
247,833	53,615	59,130	74,250	1,206	1,253	20851,185	21668,600	46,553	13,957	6,745	-8,682	42,398	8,406	14,659	2022-03-21 17:48
248,333	53,592	59,148	74,215	1,208	1,253	20900,765	21587,525	48,441	13,622	6,650	-8,646	42,467	8,413	14,658	2022-03-21 17:48
248,833	53,537	59,083	74,206	1,207	1,253	20831,184	21675,201	75,597	14,372	6,183	-8,649	42,975	8,463	14,565	2022-03-21 17:49
249,333	53,515	59,045	74,163	1,206	1,253	20811,125	21670,965	55,256	14,907	5,550	-8,594	42,715	8,437	14,471	2022-03-21 17:49
249,833	53,526	59,046	74,307	1,207	1,253	20864,730	21876,225	47,300	14,495	5,777	-8,623	42,723	8,438	14,471	2022-03-21 17:50
250,333	53,520	59,071	74,183	1,207	1,253	20863,217	21657,544	34,926	13,273	6,659	-8,667	42,480	8,414	14,471	2022-03-21 17:50
250,833	53,503	59,033	74,328	1,208	1,253	20873,734	21918,237	96,467	14,056	5,952	-8,764	42,841	8,450	14,471	2022-03-21 17:51
251,334	53,510	59,057	74,261	1,207	1,253	20868,375	21800,064	38,954	13,788	6,189	-8,654	42,812	8,447	14,346	2022-03-21 17:51
251,834	53,464	59,041	74,316	1,207	1,254	20926,543	21911,239	33,674	13,524	6,660	-8,713	42,725	8,439	14,346	2022-03-21 17:52
252,334	53,463	59,036	74,105	1,205	1,253	20995,616	21595,439	25,790	13,043	7,313	-8,627	42,427	8,409	14,346	2022-03-21 17:52
252,834	53,455	58,985	74,181	1,207	1,253	20779,652	21781,778	28,044	13,460	7,082	-8,675	42,786	8,445	14,346	2022-03-21 17:53
253,334	53,484	58,990	74,108	1,208	1,253	20846,655	21676,131	30,314	13,314	7,030	-8,657	42,700	8,436	14,253	2022-03-21 17:53
253,833	53,433	58,980	74,241	1,207	1,253	20851,006	21882,599	25,349	12,896	7,504	-8,610	42,950	8,461	14,253	2022-03-21 17:54
254,333	53,417	58,972	74,081	1,205	1,253	20840,271	21657,970	33,004	13,223	7,214	-8,694	42,338	8,400	14,159	2022-03-21 17:54
254,833	53,387	58,942	73,998	1,206	1,252	20852,178	21566,272	39,563	14,357	6,086	-8,637	42,397	8,406	14,159	2022-03-21 17:55
255,333	53,417	58,934	73,911	1,206	1,253	20712,523	21468,317	28,143	13,692	6,308	-8,624	42,634	8,429	14,159	2022-03-21 17:55
255,833	53,398	58,912	73,811	1,206	1,253	20738,819	21351,998	26,802	13,026	7,031	-8,650	42,489	8,415	14,159	2022-03-21 17:56
256,333	53,333	58,862	73,752	1,207	1,254	20660,283	21354,370	32,072	13,061	6,971	-8,612	42,606	8,427	14,066	2022-03-21 17:56
256,833	53,319	58,835	73,803	1,205	1,253	20723,141	21458,656	57,629	13,646	6,511	-8,724	42,617	8,428	14,066	2022-03-21 17:57
257,333	53,343	58,828	73,718	1,205	1,253	20589,904	21350,585	53,045	13,791	6,549	-8,649	42,660	8,432	13,971	2022-03-21 17:57
257,833	53,298	58,823	73,853	1,206	1,253	20734,587	21543,016	68,067	14,164	6,458	-8,624	42,648	8,431	13,972	2022-03-21 17:58
258,334	53,283	58,824	73,920	1,204	1,254	20775,970	21649,701	35,428	14,021	6,372	-8,602	42,374	8,404	13,846	2022-03-21 17:58
258,834	53,264	58,790	73,872	1,205	1,253	20685,097	21615,711	75,097	14,915	5,825	-8,658	42,701	8,436	13,846	2022-03-21 17:59
259,334	53,239	58,782	73,890	1,205	1,253	20799,878	21664,790	37,249	13,969	6,321	-8,622	42,768	8,443	13,753	2022-03-21 17:59

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
259,834	0,212	0,743	1,067	-0,434	-0,018	0,223	0,620	126,873	27,714	23,596	22,855	21,083	21,092	20,888	20,867	68,236
260,334	0,215	0,737	1,064	-0,431	0,036	0,227	0,620	126,804	27,648	23,568	22,815	21,052	21,075	20,846	20,837	68,265
260,833	0,215	0,730	1,066	-0,428	0,013	0,237	0,620	126,744	27,679	23,601	22,851	21,090	21,103	20,889	20,873	68,215
261,333	0,212	0,720	1,073	-0,434	0,023	0,244	0,619	126,651	27,688	23,558	22,804	21,038	21,053	20,831	20,821	68,330
261,833	0,211	0,714	1,070	-0,434	0,029	0,249	0,619	126,508	27,549	23,542	22,794	21,035	21,051	20,837	20,821	68,186
262,333	0,215	0,715	1,066	-0,432	0,023	0,243	0,617	126,338	27,618	23,502	22,764	20,992	21,021	20,792	20,786	68,039
262,833	0,236	0,723	1,072	-0,435	0,006	0,241	0,617	126,314	27,631	23,599	22,860	21,098	21,123	20,900	20,887	68,080
263,333	0,231	0,720	1,065	-0,431	0,004	0,239	0,617	126,198	27,439	23,511	22,771	21,023	21,048	20,823	20,811	68,072
263,833	0,235	0,741	1,067	-0,432	0,028	0,217	0,616	126,210	27,415	23,529	22,819	21,071	21,098	20,869	20,856	68,077
264,333	0,224	0,751	1,066	-0,430	0,011	0,222	0,616	126,144	27,683	23,557	22,824	21,077	21,107	20,868	20,861	68,046
264,833	0,215	0,731	1,063	-0,432	0,025	0,235	0,615	126,131	27,658	23,551	22,819	21,078	21,099	20,860	20,860	68,056
265,334	0,216	0,710	1,071	-0,426	0,011	0,254	0,614	125,918	27,640	23,456	22,728	20,975	20,997	20,763	20,759	67,964
265,834	0,212	0,705	1,066	-0,428	0,021	0,256	0,614	125,803	27,611	23,435	22,698	20,956	20,983	20,744	20,739	67,822
266,334	0,212	0,722	1,071	-0,429	0,019	0,238	0,613	125,940	27,747	23,540	22,810	21,061	21,084	20,847	20,845	67,787
266,834	0,212	0,748	1,068	-0,426	0,024	0,219	0,612	125,910	27,878	23,573	22,837	21,100	21,119	20,882	20,872	67,785
267,334	0,221	0,755	1,067	-0,427	0,029	0,210	0,612	125,819	27,709	23,497	22,748	21,008	21,031	20,784	20,789	67,776
267,833	0,222	0,758	1,062	-0,428	0,020	0,211	0,611	125,885	27,876	23,587	22,841	21,096	21,119	20,876	20,873	67,857
268,333	0,213	0,721	1,065	-0,426	-0,010	0,247	0,611	125,782	27,776	23,492	22,746	21,010	21,028	20,767	20,778	67,828
268,833	0,215	0,729	1,071	-0,426	-0,019	0,228	0,611	125,815	27,809	23,526	22,773	21,027	21,045	20,793	20,796	67,774
269,333	0,219	0,740	1,063	-0,428	0,009	0,232	0,610	125,672	27,744	23,506	22,770	21,022	21,037	20,791	20,796	67,793
269,833	0,223	0,726	1,069	-0,432	-0,005	0,238	0,609	125,669	28,011	23,569	22,813	21,055	21,075	20,816	20,829	67,806
270,333	0,248	0,733	1,067	-0,432	0,023	0,224	0,609	125,692	28,055	23,570	22,789	21,048	21,063	20,809	20,814	67,775
270,833	0,223	0,748	1,068	-0,427	0,017	0,218	0,608	125,738	28,056	23,571	22,803	21,052	21,075	20,807	20,819	67,773
271,333	0,220	0,730	1,064	-0,426	-0,018	0,245	0,608	125,645	27,988	23,595	22,823	21,079	21,089	20,838	20,841	67,689
271,834	0,214	0,713	1,066	-0,429	0,044	0,244	0,606	125,501	27,895	23,566	22,800	21,064	21,089	20,829	20,829	67,646
272,334	0,213	0,726	1,063	-0,430	0,024	0,240	0,606	125,345	27,675	23,487	22,730	20,996	21,025	20,756	20,768	67,538
272,834	0,220	0,696	1,063	-0,428	0,006	0,266	0,604	125,215	27,822	23,526	22,775	21,039	21,067	20,804	20,809	67,659
273,334	0,217	0,701	1,060	-0,426	-0,001	0,255	0,605	125,095	27,757	23,499	22,742	21,005	21,036	20,763	20,774	67,697
273,834	0,216	0,721	1,069	-0,432	0,042	0,237	0,604	125,077	27,739	23,541	22,798	21,075	21,095	20,824	20,838	67,569

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
259,834	53,258	58,763	73,897	1,206	1,253	20708,336	21694,497	40,381	13,749	6,684	-8,673	42,798	8,446	13,753	2022-03-21 18:00
260,334	53,220	58,786	73,806	1,204	1,253	20765,084	21533,485	44,923	13,716	6,815	-8,611	42,630	8,429	13,753	2022-03-21 18:00
260,833	53,211	58,712	73,924	1,206	1,253	20739,316	21808,346	39,301	12,945	7,122	-8,555	42,316	8,398	13,753	2022-03-21 18:01
261,333	53,246	58,769	73,999	1,204	1,253	20828,668	21830,034	31,779	12,755	7,334	-8,689	42,855	8,451	13,659	2022-03-21 18:01
261,833	53,197	58,771	73,601	1,204	1,252	20695,564	21248,319	31,166	12,800	7,471	-8,678	43,063	8,472	13,659	2022-03-21 18:02
262,333	53,209	58,683	73,789	1,205	1,253	20484,018	21661,858	58,311	12,984	7,288	-8,636	42,615	8,428	13,565	2022-03-21 18:02
262,833	53,170	58,680	73,608	1,206	1,253	20616,082	21400,829	80,977	12,762	7,220	-8,699	42,923	8,458	13,565	2022-03-21 18:03
263,333	53,148	58,646	73,815	1,204	1,253	20608,004	21751,693	61,538	12,791	7,182	-8,622	42,888	8,455	13,471	2022-03-21 18:03
263,833	53,136	58,654	73,514	1,205	1,254	20640,294	21313,890	124,733	13,775	6,516	-8,639	42,494	8,416	13,471	2022-03-21 18:04
264,333	53,129	58,619	73,624	1,206	1,253	20621,714	21507,841	49,683	13,570	6,652	-8,610	42,773	8,443	13,471	2022-03-21 18:04
264,833	53,093	58,595	73,674	1,206	1,253	20695,700	21611,807	43,064	13,374	7,063	-8,649	42,551	8,421	13,349	2022-03-21 18:05
265,334	53,109	58,592	73,246	1,204	1,254	20502,325	21018,761	35,189	12,684	7,627	-8,527	42,736	8,440	13,349	2022-03-21 18:05
265,834	53,100	58,540	73,310	1,206	1,252	20350,968	21164,608	30,899	12,743	7,681	-8,558	42,658	8,432	13,349	2022-03-21 18:06
266,334	53,077	58,504	73,408	1,205	1,253	20324,979	21364,572	34,422	13,459	7,130	-8,583	42,763	8,442	13,256	2022-03-21 18:06
266,834	53,071	58,491	73,265	1,207	1,252	20360,381	21170,467	37,190	14,044	6,564	-8,526	42,670	8,433	13,255	2022-03-21 18:07
267,334	53,061	58,485	73,373	1,205	1,253	20330,311	21347,728	57,053	14,130	6,285	-8,538	42,537	8,420	13,256	2022-03-21 18:07
267,833	53,028	58,492	73,352	1,205	1,253	20483,468	21300,830	52,435	13,811	6,327	-8,555	42,409	8,407	13,162	2022-03-21 18:08
268,333	53,029	58,486	73,311	1,205	1,252	20442,740	21244,952	32,157	12,347	7,411	-8,529	42,764	8,442	13,162	2022-03-21 18:08
268,833	52,993	58,462	73,414	1,205	1,253	20428,389	21430,533	45,375	13,432	6,830	-8,518	42,775	8,443	13,162	2022-03-21 18:09
269,333	53,011	58,447	73,445	1,205	1,253	20419,461	21497,483	43,902	13,071	6,967	-8,554	42,120	8,379	13,069	2022-03-21 18:09
269,833	52,996	58,462	73,446	1,206	1,252	20478,209	21474,691	60,422	13,010	7,131	-8,645	42,840	8,450	13,068	2022-03-21 18:10
270,333	52,958	58,449	73,317	1,204	1,253	20458,336	21312,760	93,557	13,423	6,720	-8,642	42,624	8,429	12,974	2022-03-21 18:10
270,833	52,947	58,406	73,319	1,205	1,253	20490,995	21376,597	43,984	13,502	6,541	-8,534	42,730	8,439	12,974	2022-03-21 18:11
271,333	52,945	58,377	73,345	1,206	1,252	20391,098	21441,373	49,230	12,462	7,362	-8,529	42,462	8,412	12,974	2022-03-21 18:11
271,834	52,910	58,373	73,033	1,206	1,252	20384,234	21002,993	35,852	13,208	7,311	-8,573	42,657	8,432	12,849	2022-03-21 18:12
272,334	52,882	58,290	73,253	1,206	1,253	20263,670	21455,606	34,657	13,097	7,206	-8,610	42,428	8,409	12,981	2022-03-21 18:12
272,834	52,860	58,319	73,451	1,206	1,252	20460,140	21670,992	35,927	12,360	7,975	-8,550	42,550	8,421	12,590	2022-03-21 18:13
273,334	52,880	58,330	73,214	1,208	1,252	20517,100	21325,447	46,017	12,838	7,655	-8,510	42,400	8,406	12,755	2022-03-21 18:13
273,834	52,840	58,287	73,226	1,207	1,252	20381,754	21406,020	38,566	13,272	7,115	-8,639	42,568	8,423	12,661	2022-03-21 18:14

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
274,333	0,212	0,735	1,065	-0,426	0,003	0,231	0,605	125,090	27,796	23,464	22,722	20,995	21,011	20,738	20,752	67,595
274,833	0,217	0,745	1,071	-0,426	-0,013	0,223	0,602	125,113	27,951	23,495	22,740	21,017	21,026	20,754	20,765	67,638
275,333	0,218	0,706	1,072	-0,432	-0,025	0,258	0,604	124,992	28,011	23,564	22,797	21,063	21,069	20,796	20,810	67,525
275,833	0,227	0,704	1,071	-0,426	-0,001	0,248	0,603	124,872	28,001	23,550	22,770	21,031	21,041	20,764	20,781	67,529
276,333	0,221	0,750	1,070	-0,426	0,048	0,214	0,602	124,961	28,291	23,620	22,822	21,077	21,090	20,810	20,832	67,512
276,833	0,216	0,755	1,072	-0,422	0,024	0,215	0,601	124,911	28,169	23,557	22,770	21,016	21,036	20,745	20,767	67,375
277,333	0,211	0,743	1,069	-0,427	0,020	0,223	0,601	124,967	28,205	23,615	22,820	21,070	21,079	20,785	20,808	67,354
277,833	0,210	0,741	1,070	-0,424	0,009	0,223	0,601	125,024	28,037	23,603	22,817	21,051	21,071	20,783	20,800	67,495
278,333	0,215	0,744	1,071	-0,422	0,019	0,225	0,600	125,015	27,935	23,553	22,777	21,032	21,026	20,741	20,765	67,376
278,834	0,222	0,736	1,069	-0,426	-0,008	0,234	0,600	124,934	28,069	23,555	22,775	21,018	21,025	20,727	20,755	67,412
279,334	0,216	0,709	1,064	-0,428	0,003	0,253	0,598	124,900	28,120	23,558	22,760	20,996	21,009	20,716	20,736	67,287
279,834	0,214	0,723	1,066	-0,423	0,022	0,236	0,598	124,824	28,241	23,597	22,788	21,020	21,029	20,733	20,755	67,475
280,334	0,222	0,747	1,067	-0,425	0,029	0,214	0,597	124,809	28,252	23,582	22,782	20,981	21,006	20,705	20,728	67,365
280,834	0,216	0,763	1,062	-0,425	0,022	0,212	0,597	124,838	28,256	23,615	22,828	21,044	21,047	20,760	20,778	67,350
281,333	0,225	0,727	1,066	-0,421	0,041	0,235	0,595	124,949	28,039	23,584	22,806	21,022	21,031	20,733	20,754	67,434
281,833	0,222	0,748	1,064	-0,425	0,035	0,214	0,595	124,999	28,236	23,610	22,805	21,017	21,019	20,724	20,747	67,536
282,333	0,250	0,785	1,069	-0,422	0,020	0,184	0,595	125,112	28,152	23,587	22,785	20,991	20,992	20,697	20,716	67,535
282,833	0,258	0,775	1,067	-0,426	0,011	0,198	0,593	125,275	28,228	23,632	22,838	21,046	21,049	20,750	20,767	67,466
283,333	0,237	0,770	1,068	-0,425	0,009	0,205	0,593	125,325	28,126	23,604	22,818	21,021	21,026	20,727	20,748	67,676
283,833	0,217	0,740	1,073	-0,432	0,030	0,230	0,592	125,281	28,041	23,562	22,796	21,007	21,008	20,702	20,728	67,688
284,333	0,211	0,702	1,069	-0,425	0,028	0,266	0,592	125,219	28,080	23,597	22,821	21,042	21,034	20,732	20,751	67,734
284,833	0,209	0,683	1,071	-0,430	0,032	0,272	0,592	124,988	27,927	23,560	22,788	21,006	21,003	20,700	20,723	67,835
285,334	0,210	0,695	1,065	-0,425	0,046	0,257	0,590	124,860	28,034	23,609	22,839	21,041	21,044	20,739	20,759	67,716
285,834	0,212	0,706	1,069	-0,428	0,035	0,260	0,590	124,761	28,014	23,624	22,860	21,066	21,069	20,756	20,782	67,580
286,334	0,211	0,699	1,062	-0,431	0,010	0,256	0,589	124,735	28,049	23,602	22,829	21,035	21,019	20,721	20,742	67,713
286,834	0,212	0,736	1,067	-0,428	0,046	0,223	0,585	124,701	28,217	23,632	22,863	21,053	21,050	20,742	20,762	67,644
287,333	0,220	0,766	1,069	-0,424	0,008	0,197	0,588	124,683	28,146	23,553	22,780	20,961	20,958	20,644	20,668	67,540
287,833	0,234	0,775	1,069	-0,426	0,019	0,201	0,587	124,825	28,281	23,663	22,882	21,072	21,058	20,750	20,770	67,597
288,333	0,220	0,750	1,070	-0,427	0,026	0,220	0,587	124,867	28,226	23,660	22,866	21,048	21,043	20,728	20,750	67,718

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
274,333	52,806	58,276	73,151	1,206	1,252	20445,255	21308,152	26,035	13,269	6,916	-8,514	42,474	8,414	12,756	2022-03-21 18:14
274,833	52,802	58,253	73,371	1,206	1,252	20519,839	21657,445	39,040	13,327	6,688	-8,519	42,977	8,463	12,755	2022-03-21 18:15
275,333	52,796	58,248	73,158	1,207	1,252	20384,937	21359,644	58,575	12,130	7,740	-8,637	42,863	8,452	12,661	2022-03-21 18:15
275,833	52,800	58,230	73,028	1,205	1,252	20354,806	21197,625	54,643	12,770	7,431	-8,522	43,042	8,470	12,756	2022-03-21 18:16
276,333	52,835	58,229	73,008	1,205	1,252	20281,532	21175,593	68,151	13,772	6,408	-8,521	42,871	8,453	12,568	2022-03-21 18:16
276,833	52,867	58,235	73,015	1,206	1,252	20056,716	21166,278	41,258	13,821	6,453	-8,440	42,905	8,456	12,568	2022-03-21 18:17
277,333	52,888	58,204	72,989	1,206	1,250	20010,531	21153,740	29,403	13,637	6,685	-8,539	42,627	8,429	12,568	2022-03-21 18:17
277,833	52,835	58,272	72,933	1,205	1,252	20265,392	21001,954	29,095	13,726	6,703	-8,481	42,492	8,415	12,474	2022-03-21 18:18
278,333	52,788	58,196	73,020	1,205	1,251	20164,422	21226,799	46,496	13,628	6,764	-8,442	43,121	8,478	12,568	2022-03-21 18:18
278,834	52,804	58,209	72,722	1,205	1,252	20182,892	20784,732	58,487	13,333	7,009	-8,511	42,833	8,449	12,473	2022-03-21 18:19
279,334	52,900	58,178	72,916	1,206	1,251	19890,360	21102,367	47,361	12,737	7,582	-8,568	42,881	8,454	12,349	2022-03-21 18:19
279,834	52,990	58,296	73,061	1,205	1,252	20014,871	21145,205	33,256	13,044	7,067	-8,453	42,597	8,426	12,473	2022-03-21 18:20
280,334	52,937	58,280	72,642	1,206	1,252	19947,459	20567,493	48,910	13,730	6,429	-8,509	42,700	8,436	12,256	2022-03-21 18:20
280,834	52,903	58,245	73,129	1,205	1,251	19970,088	21311,981	40,969	13,647	6,371	-8,510	42,573	8,424	12,256	2022-03-21 18:21
281,333	52,994	58,283	72,930	1,206	1,251	19972,552	20970,796	121,267	13,304	7,037	-8,424	42,734	8,439	12,162	2022-03-21 18:21
281,833	53,150	58,378	73,024	1,206	1,251	19893,840	20963,179	46,749	13,789	6,433	-8,492	42,860	8,452	12,162	2022-03-21 18:22
282,333	53,220	58,469	72,917	1,205	1,252	19778,070	20688,260	186,687	14,651	5,520	-8,443	42,721	8,438	12,162	2022-03-21 18:22
282,833	53,214	58,484	73,147	1,205	1,251	19689,096	20980,768	83,497	13,984	5,932	-8,515	42,580	8,424	12,044	2022-03-21 18:23
283,333	53,031	58,486	73,301	1,205	1,252	20235,836	21214,960	108,000	13,998	6,149	-8,504	42,623	8,428	12,068	2022-03-21 18:23
283,833	53,050	58,443	73,180	1,206	1,252	20237,949	21105,099	38,277	13,544	6,900	-8,637	43,119	8,477	11,974	2022-03-21 18:24
284,333	53,109	58,475	73,327	1,205	1,251	20211,183	21264,791	27,397	12,206	7,978	-8,505	42,677	8,434	11,974	2022-03-21 18:24
284,833	53,155	58,549	73,453	1,205	1,252	20279,951	21340,944	25,961	12,157	8,158	-8,601	42,601	8,426	11,974	2022-03-21 18:25
285,334	53,073	58,517	72,991	1,205	1,250	20232,463	20706,277	28,728	12,729	7,721	-8,500	42,574	8,424	11,849	2022-03-21 18:25
285,834	53,077	58,433	73,077	1,205	1,252	20040,520	20971,122	33,931	12,532	7,806	-8,559	42,803	8,446	11,849	2022-03-21 18:26
286,334	53,095	58,468	73,238	1,205	1,251	20197,542	21144,379	31,491	12,840	7,677	-8,612	42,484	8,415	11,849	2022-03-21 18:26
286,834	53,099	58,479	73,112	1,204	1,251	20085,531	20952,405	33,663	13,713	6,701	-8,557	42,969	8,463	11,756	2022-03-21 18:27
287,333	53,067	58,439	73,037	1,205	1,251	19995,059	20899,274	47,515	14,170	5,899	-8,472	42,773	8,443	11,756	2022-03-21 18:27
287,833	53,043	58,433	73,240	1,205	1,251	20108,467	21198,138	61,773	13,722	6,024	-8,526	42,684	8,434	11,662	2022-03-21 18:28
288,333	53,018	58,450	73,379	1,204	1,251	20298,815	21364,499	44,330	13,366	6,605	-8,538	42,989	8,465	11,662	2022-03-21 18:28

PE22\_cat IV\_run 1\_220321\_EN.DAT

Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
288,833	0,213	0,719	1,069	-0,426	0,032	0,249	0,586	124,802	28,052	23,596	22,816	20,988	20,991	20,667	20,692	67,663
289,333	0,213	0,716	1,065	-0,428	0,032	0,245	0,585	124,817	27,936	23,618	22,853	21,025	21,033	20,713	20,734	67,568
289,833	0,214	0,724	1,065	-0,422	0,005	0,233	0,585	124,841	28,175	23,628	22,873	21,037	21,035	20,714	20,736	67,628
290,333	0,214	0,751	1,069	-0,424	0,019	0,214	0,585	124,757	28,214	23,633	22,864	21,024	21,023	20,699	20,725	67,640
290,834	0,215	0,743	1,067	-0,427	-0,001	0,229	0,584	124,621	28,147	23,589	22,824	20,983	20,981	20,656	20,679	67,665
291,334	0,211	0,726	1,064	-0,423	0,018	0,239	0,583	124,581	28,265	23,657	22,896	21,049	21,036	20,715	20,741	67,618
291,834	0,213	0,708	1,064	-0,429	0,016	0,253	0,582	124,487	28,181	23,634	22,854	21,006	21,007	20,679	20,706	67,670
292,334	0,213	0,730	1,066	-0,430	-0,010	0,227	0,582	124,528	28,213	23,663	22,880	21,038	21,033	20,703	20,729	67,716
292,834	0,220	0,748	1,067	-0,428	0,023	0,217	0,581	124,535	28,198	23,657	22,890	21,033	21,026	20,696	20,725	67,630
293,333	0,249	0,751	1,069	-0,426	0,048	0,218	0,580	124,451	28,125	23,612	22,840	20,990	20,984	20,652	20,674	67,432
293,833	0,265	0,738	1,061	-0,422	0,005	0,232	0,580	124,629	28,153	23,676	22,907	21,052	21,043	20,704	20,736	67,704
294,333	0,227	0,714	1,064	-0,426	-0,006	0,257	0,579	124,565	28,172	23,674	22,896	21,060	21,051	20,712	20,744	67,643
294,833	0,212	0,680	1,069	-0,427	0,040	0,270	0,579	124,515	28,106	23,643	22,893	21,050	21,033	20,698	20,726	67,561
295,333	0,223	0,726	1,072	-0,423	0,030	0,231	0,579	124,462	28,071	23,598	22,834	20,996	20,976	20,648	20,673	67,475
295,833	0,216	0,736	1,067	-0,425	0,026	0,227	0,578	124,466	28,156	23,659	22,898	21,061	21,047	20,707	20,735	67,556
296,333	0,218	0,750	1,070	-0,424	0,009	0,216	0,577	124,388	28,150	23,572	22,805	20,958	20,941	20,592	20,627	67,542
296,833	0,253	0,769	1,065	-0,429	-0,012	0,204	0,577	124,480	28,170	23,654	22,879	21,045	21,022	20,677	20,711	67,483
297,333	0,225	0,751	1,069	-0,425	0,028	0,216	0,576	124,543	28,105	23,651	22,875	21,042	21,032	20,683	20,714	67,619
297,834	0,219	0,755	1,067	-0,424	-0,009	0,213	0,576	124,507	28,244	23,666	22,887	21,059	21,045	20,691	20,725	67,563
298,334	0,219	0,737	1,061	-0,420	0,007	0,228	0,574	124,432	28,251	23,669	22,888	21,061	21,042	20,687	20,722	67,538
298,834	0,219	0,746	1,069	-0,429	0,007	0,219	0,574	124,397	28,139	23,614	22,840	21,012	20,992	20,629	20,671	67,614
299,334	0,224	0,752	1,063	-0,420	-0,017	0,216	0,573	124,574	28,304	23,687	22,910	21,070	21,051	20,691	20,730	67,566
299,834	0,265	0,774	1,067	-0,425	0,019	0,195	0,572	124,655	28,332	23,671	22,894	21,047	21,024	20,667	20,706	67,572
300,333	0,245	0,762	1,069	-0,424	-0,025	0,207	0,571	124,763	28,298	23,680	22,888	21,054	21,024	20,676	20,709	67,556
300,833	0,246	0,757	1,063	-0,430	0,015	0,212	0,572	124,667	28,150	23,614	22,829	20,989	20,965	20,603	20,645	67,577
301,333	0,226	0,745	1,055	-0,426	0,024	0,227	0,571	124,733	28,198	23,660	22,886	21,047	21,023	20,668	20,700	67,731
301,833	0,219	0,717	1,065	-0,427	-0,022	0,251	0,571	124,609	28,135	23,660	22,886	21,041	21,009	20,656	20,698	67,680
302,333	0,223	0,708	1,068	-0,427	-0,003	0,250	0,570	124,426	28,210	23,656	22,890	21,033	21,017	20,653	20,693	67,615
302,833	0,215	0,717	1,067	-0,423	0,048	0,243	0,569	124,429	28,194	23,655	22,896	21,050	21,018	20,661	20,698	67,690

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
288,833	53,002	58,440	73,231	1,204	1,252	20245,053	21185,866	34,926	12,643	7,460	-8,515	42,827	8,449	11,568	2022-03-21 18:29
289,333	52,966	58,398	73,173	1,204	1,252	20154,794	21167,732	39,204	12,910	7,355	-8,568	42,578	8,424	11,568	2022-03-21 18:29
289,833	52,940	58,364	73,234	1,204	1,252	20271,781	21294,666	41,369	13,428	6,989	-8,448	42,246	8,391	11,568	2022-03-21 18:30
290,333	52,956	58,397	73,287	1,203	1,251	20256,082	21316,767	42,531	13,992	6,424	-8,483	42,869	8,453	11,568	2022-03-21 18:30
290,834	52,966	58,411	73,252	1,203	1,251	20280,877	21242,745	34,586	13,377	6,871	-8,540	42,788	8,445	11,473	2022-03-21 18:31
291,334	52,944	58,380	73,025	1,204	1,251	20262,487	20961,878	31,294	13,215	7,168	-8,460	42,691	8,435	11,345	2022-03-21 18:31
291,834	52,999	58,398	73,178	1,204	1,252	20247,215	21164,697	34,758	12,795	7,584	-8,571	42,494	8,416	11,345	2022-03-21 18:32
292,334	52,990	58,428	73,305	1,204	1,251	20338,380	21293,930	38,433	13,664	6,812	-8,603	42,601	8,426	11,345	2022-03-21 18:32
292,834	52,959	58,419	72,933	1,204	1,251	20248,818	20772,752	47,453	13,652	6,516	-8,565	42,596	8,426	11,252	2022-03-21 18:33
293,333	52,910	58,321	73,230	1,204	1,250	20043,666	21330,909	89,883	13,345	6,537	-8,517	42,787	8,445	11,252	2022-03-21 18:33
293,833	52,925	58,350	73,211	1,204	1,251	20397,581	21278,291	201,051	13,121	6,971	-8,442	42,474	8,414	11,252	2022-03-21 18:34
294,333	52,919	58,374	73,242	1,203	1,250	20316,839	21267,638	43,426	12,295	7,697	-8,512	42,524	8,419	11,158	2022-03-21 18:34
294,833	52,879	58,339	72,917	1,203	1,252	20250,867	20879,591	27,184	12,239	8,104	-8,545	42,574	8,424	11,158	2022-03-21 18:35
295,333	52,886	58,292	73,107	1,203	1,251	20121,206	21211,825	86,921	13,676	6,922	-8,459	42,795	8,445	11,158	2022-03-21 18:35
295,833	52,875	58,309	72,985	1,203	1,251	20249,668	21012,290	38,616	13,403	6,811	-8,494	42,766	8,443	11,064	2022-03-21 18:36
296,333	52,876	58,303	72,989	1,204	1,252	20241,988	21031,981	69,903	13,849	6,490	-8,470	42,501	8,416	10,970	2022-03-21 18:36
296,833	52,820	58,286	72,939	1,202	1,252	20203,684	20983,342	104,434	14,038	6,129	-8,577	42,434	8,410	11,064	2022-03-21 18:37
297,333	52,802	58,267	73,171	1,204	1,252	20461,411	21353,655	53,290	13,784	6,489	-8,501	42,509	8,417	10,970	2022-03-21 18:37
297,834	52,822	58,290	72,903	1,203	1,252	20337,367	20928,410	47,451	13,783	6,404	-8,488	42,618	8,428	10,970	2022-03-21 18:38
298,334	52,818	58,263	73,076	1,202	1,252	20285,943	21214,962	57,255	13,354	6,827	-8,403	42,439	8,410	10,845	2022-03-21 18:38
298,834	52,812	58,288	72,978	1,203	1,251	20412,221	21030,184	39,292	13,520	6,558	-8,570	42,580	8,424	10,845	2022-03-21 18:39
299,334	52,776	58,250	73,039	1,203	1,252	20400,350	21179,729	91,051	13,806	6,466	-8,404	42,623	8,428	10,752	2022-03-21 18:39
299,834	52,759	58,258	72,941	1,202	1,252	20409,693	21032,161	115,581	14,451	5,844	-8,505	42,602	8,426	10,678	2022-03-21 18:40
300,333	52,735	58,234	73,061	1,203	1,252	20453,957	21239,839	124,972	13,871	6,219	-8,485	42,698	8,436	10,658	2022-03-21 18:40
300,833	52,721	58,247	73,252	1,203	1,252	20497,528	21503,948	91,047	13,943	6,360	-8,606	42,526	8,419	10,658	2022-03-21 18:41
301,333	52,706	58,261	73,353	1,202	1,252	20715,904	21615,861	59,936	13,432	6,801	-8,518	42,329	8,399	10,658	2022-03-21 18:41
301,833	52,703	58,270	73,077	1,202	1,252	20649,487	21214,654	52,782	12,812	7,518	-8,533	42,799	8,446	10,658	2022-03-21 18:42
302,333	52,677	58,213	73,366	1,201	1,252	20575,838	21707,510	60,095	12,928	7,506	-8,530	42,897	8,455	10,564	2022-03-21 18:42
302,833	52,665	58,237	73,246	1,202	1,251	20715,924	21489,173	37,364	13,165	7,289	-8,466	42,505	8,417	10,564	2022-03-21 18:43



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
303,333	0,219	0,737	1,066	-0,428	0,001	0,224	0,569	124,363	28,250	23,681	22,896	21,046	21,027	20,666	20,702	67,564
303,833	0,227	0,748	1,066	-0,421	-0,005	0,218	0,568	124,341	28,183	23,669	22,887	21,053	21,022	20,658	20,693	67,589
304,334	0,221	0,740	1,066	-0,427	0,046	0,229	0,567	124,407	28,210	23,667	22,889	21,043	21,016	20,655	20,689	67,579
304,834	0,219	0,735	1,067	-0,421	0,039	0,228	0,566	124,387	28,058	23,651	22,882	21,046	21,015	20,641	20,685	67,545
305,334	0,222	0,718	1,067	-0,422	0,033	0,251	0,566	124,288	28,061	23,627	22,856	21,023	20,988	20,624	20,661	67,617
305,834	0,214	0,683	1,065	-0,424	0,020	0,270	0,566	124,166	28,062	23,634	22,861	21,031	20,993	20,636	20,667	67,506
306,334	0,218	0,713	1,064	-0,421	-0,013	0,244	0,565	124,064	27,876	23,591	22,834	21,012	20,979	20,604	20,651	67,465
306,833	0,224	0,750	1,065	-0,420	0,009	0,210	0,564	124,161	27,981	23,584	22,831	21,011	20,980	20,610	20,647	67,513
307,333	0,224	0,788	1,062	-0,424	0,026	0,184	0,564	124,300	28,140	23,615	22,848	21,019	20,996	20,622	20,658	67,603
307,833	0,233	0,792	1,063	-0,421	0,043	0,185	0,563	124,343	28,027	23,558	22,798	20,965	20,941	20,568	20,606	67,533
308,333	0,218	0,762	1,064	-0,421	0,039	0,209	0,562	124,337	28,159	23,628	22,871	21,031	21,002	20,629	20,669	67,553
308,833	0,220	0,750	1,069	-0,424	0,037	0,219	0,561	124,372	28,059	23,611	22,857	21,022	21,000	20,624	20,660	67,627
309,333	0,235	0,746	1,067	-0,423	0,021	0,217	0,561	124,367	28,141	23,619	22,868	21,027	20,996	20,620	20,658	67,570
309,833	0,242	0,779	1,066	-0,419	0,011	0,191	0,560	124,413	28,004	23,591	22,846	21,015	20,988	20,622	20,652	67,684
310,333	0,239	0,771	1,067	-0,424	0,046	0,205	0,560	124,431	28,017	23,552	22,800	20,993	20,961	20,585	20,621	67,712
310,833	0,234	0,767	1,066	-0,425	0,005	0,195	0,558	124,573	28,170	23,585	22,830	21,006	20,984	20,610	20,643	67,788
311,334	0,270	0,788	1,067	-0,424	0,027	0,185	0,558	124,672	28,272	23,608	22,842	21,019	20,998	20,614	20,650	67,822
311,834	0,221	0,773	1,064	-0,424	0,037	0,200	0,557	124,737	28,183	23,609	22,835	21,022	20,985	20,611	20,646	67,768
312,334	0,219	0,756	1,063	-0,425	0,012	0,212	0,556	124,750	28,258	23,593	22,836	21,000	20,974	20,599	20,635	67,865
312,834	0,214	0,749	1,072	-0,421	0,037	0,228	0,556	124,733	28,198	23,577	22,820	21,010	20,971	20,593	20,631	67,839
313,334	0,210	0,686	1,064	-0,426	0,015	0,277	0,555	124,600	28,115	23,581	22,834	21,012	20,989	20,615	20,645	67,878
313,833	0,211	0,669	1,068	-0,427	0,001	0,282	0,555	124,322	28,042	23,537	22,765	20,948	20,934	20,542	20,584	67,928
314,333	0,211	0,716	1,065	-0,424	0,025	0,240	0,555	124,284	28,233	23,588	22,818	20,991	20,959	20,580	20,619	68,017
314,833	0,211	0,736	1,066	-0,422	0,005	0,226	0,553	124,240	28,147	23,604	22,836	21,023	20,996	20,603	20,639	67,898
315,333	0,215	0,758	1,067	-0,423	0,028	0,210	0,554	124,184	28,105	23,568	22,800	20,972	20,946	20,553	20,593	67,929
315,833	0,226	0,760	1,061	-0,427	0,008	0,208	0,552	124,234	28,106	23,585	22,830	21,010	20,974	20,581	20,627	68,001
316,333	0,213	0,727	1,070	-0,419	0,016	0,237	0,552	124,229	28,141	23,597	22,845	21,019	20,985	20,593	20,631	67,887
316,833	0,220	0,737	1,068	-0,425	0,025	0,223	0,552	124,296	28,157	23,591	22,829	21,012	20,978	20,590	20,621	67,956
317,333	0,215	0,740	1,064	-0,423	-0,019	0,233	0,550	124,253	28,200	23,593	22,830	21,011	20,982	20,588	20,624	67,856

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
303,333	52,724	58,226	73,151	1,201	1,252	20445,037	21385,431	53,159	13,637	6,725	-8,552	42,602	8,426	10,470	2022-03-21 18:43
303,833	52,724	58,241	73,328	1,201	1,252	20480,805	21622,560	65,967	13,667	6,548	-8,420	42,488	8,415	10,470	2022-03-21 18:44
304,334	52,750	58,243	73,290	1,202	1,252	20438,545	21559,791	45,658	13,294	6,874	-8,546	42,909	8,457	10,470	2022-03-21 18:44
304,834	52,774	58,250	73,374	1,203	1,252	20373,920	21664,226	43,032	13,422	6,847	-8,412	42,649	8,431	10,346	2022-03-21 18:45
305,334	52,767	58,240	73,232	1,203	1,252	20488,202	21475,389	41,489	12,377	7,542	-8,440	42,766	8,443	10,346	2022-03-21 18:45
305,834	52,827	58,247	73,192	1,201	1,252	20222,523	21402,801	41,086	11,899	8,088	-8,482	42,542	8,420	10,346	2022-03-21 18:46
306,334	52,900	58,283	72,945	1,203	1,251	20083,547	20987,268	43,401	12,833	7,326	-8,415	42,396	8,406	10,253	2022-03-21 18:46
306,833	52,861	58,253	73,149	1,202	1,252	20201,091	21333,320	107,124	14,230	6,290	-8,406	42,758	8,442	10,159	2022-03-21 18:47
307,333	52,914	58,335	73,099	1,203	1,252	20254,279	21157,447	67,628	14,981	5,530	-8,483	42,360	8,402	10,159	2022-03-21 18:47
307,833	52,889	58,308	73,031	1,203	1,252	20193,361	21090,317	101,868	14,810	5,547	-8,425	42,376	8,404	10,159	2022-03-21 18:48
308,333	52,884	58,325	73,087	1,201	1,251	20199,145	21135,121	51,108	14,040	6,272	-8,423	42,766	8,443	10,065	2022-03-21 18:48
308,833	52,848	58,340	73,143	1,201	1,252	20355,731	21209,451	62,757	13,634	6,572	-8,472	42,844	8,450	10,065	2022-03-21 18:49
309,333	52,862	58,321	72,865	1,201	1,252	20249,355	20831,517	135,080	13,649	6,503	-8,451	42,703	8,436	10,065	2022-03-21 18:49
309,833	52,932	58,354	72,880	1,201	1,251	20323,908	20798,449	100,660	14,362	5,742	-8,377	42,572	8,423	9,971	2022-03-21 18:50
310,333	52,910	58,402	73,040	1,200	1,252	20376,286	20967,158	117,375	14,050	6,140	-8,484	42,961	8,462	9,971	2022-03-21 18:50
310,833	52,927	58,430	73,045	1,201	1,252	20470,739	20935,366	103,600	14,580	5,845	-8,499	42,750	8,441	9,846	2022-03-21 18:51
311,334	52,935	58,453	72,868	1,203	1,253	20532,166	20665,932	104,386	14,259	5,551	-8,470	42,212	8,388	9,846	2022-03-21 18:51
311,834	52,940	58,415	72,944	1,201	1,253	20417,778	20830,364	57,876	13,967	5,995	-8,490	42,553	8,422	9,753	2022-03-21 18:52
312,334	52,996	58,477	72,805	1,202	1,252	20492,739	20532,465	56,086	13,764	6,364	-8,497	42,305	8,397	9,753	2022-03-21 18:52
312,834	52,997	58,465	73,133	1,202	1,252	20456,165	21014,856	30,057	13,290	6,846	-8,427	42,907	8,456	9,753	2022-03-21 18:53
313,334	52,981	58,528	73,025	1,201	1,252	20511,357	20764,167	26,204	11,874	8,319	-8,514	42,652	8,431	9,658	2022-03-21 18:53
313,833	52,956	58,487	73,316	1,201	1,253	20627,142	21256,306	33,419	11,820	8,452	-8,544	42,412	8,408	9,658	2022-03-21 18:54
314,333	52,927	58,515	73,063	1,201	1,253	20784,754	20853,704	32,829	13,336	7,192	-8,472	42,526	8,419	9,659	2022-03-21 18:54
314,833	52,913	58,461	73,058	1,203	1,253	20663,428	20921,614	33,927	13,725	6,778	-8,434	42,659	8,432	9,565	2022-03-21 18:55
315,333	52,892	58,470	73,047	1,200	1,252	20699,771	20889,475	29,733	13,969	6,313	-8,450	42,759	8,442	9,659	2022-03-21 18:55
315,833	52,896	58,500	73,131	1,200	1,254	20786,531	20985,144	39,121	13,877	6,245	-8,537	42,348	8,401	9,470	2022-03-21 18:56
316,333	52,873	58,478	73,004	1,199	1,253	20643,827	20825,674	38,818	12,858	7,108	-8,380	42,959	8,462	9,470	2022-03-21 18:56
316,833	52,876	58,467	73,050	1,200	1,253	20746,556	20901,681	37,361	13,476	6,682	-8,491	42,455	8,412	9,470	2022-03-21 18:57
317,333	52,878	58,439	72,874	1,202	1,253	20641,139	20695,653	33,665	13,013	7,003	-8,470	42,683	8,434	9,348	2022-03-21 18:57

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
317,833	0,220	0,712	1,066	-0,424	0,003	0,248	0,550	124,093	28,139	23,541	22,769	20,944	20,922	20,526	20,560	67,833
318,334	0,215	0,725	1,068	-0,425	0,034	0,240	0,553	124,074	28,124	23,596	22,829	21,002	20,982	20,581	20,618	67,939
318,834	0,214	0,718	1,068	-0,425	-0,022	0,242	0,549	124,047	28,116	23,605	22,841	21,021	20,990	20,598	20,628	67,878
319,334	0,219	0,738	1,065	-0,422	0,018	0,226	0,548	123,940	28,115	23,609	22,837	21,016	20,980	20,582	20,622	67,842
319,834	0,216	0,753	1,068	-0,420	-0,034	0,216	0,548	123,897	28,048	23,592	22,827	21,011	20,980	20,575	20,616	67,699
320,334	0,211	0,747	1,068	-0,422	0,012	0,225	0,547	123,876	28,112	23,581	22,818	20,998	20,966	20,567	20,603	67,826
320,833	0,211	0,725	1,067	-0,424	-0,015	0,235	0,547	123,838	28,079	23,581	22,825	21,001	20,973	20,568	20,606	67,814
321,333	0,217	0,730	1,068	-0,421	0,011	0,233	0,545	123,798	27,996	23,570	22,815	20,996	20,959	20,554	20,602	67,631
321,833	0,217	0,743	1,066	-0,419	0,023	0,217	0,547	123,757	27,993	23,562	22,808	20,977	20,945	20,545	20,586	67,585
322,333	0,243	0,764	1,070	-0,421	-0,010	0,206	0,547	123,732	28,090	23,569	22,825	20,992	20,961	20,556	20,592	67,714
322,833	0,230	0,746	1,060	-0,422	0,019	0,222	0,545	123,718	27,979	23,511	22,766	20,929	20,895	20,497	20,530	67,668
323,333	0,226	0,764	1,071	-0,422	0,023	0,203	0,544	123,876	27,986	23,579	22,834	21,001	20,982	20,570	20,608	67,590
323,833	0,216	0,766	1,068	-0,420	0,047	0,201	0,543	123,883	28,080	23,582	22,852	21,015	20,985	20,581	20,616	67,602
324,333	0,241	0,795	1,066	-0,419	0,012	0,170	0,542	123,918	28,085	23,583	22,843	21,009	20,974	20,568	20,605	67,706
324,834	0,335	0,823	1,069	-0,421	0,035	0,161	0,540	124,057	28,010	23,531	22,790	20,958	20,925	20,523	20,559	67,631
325,334	0,253	0,786	1,072	-0,423	-0,009	0,193	0,540	124,113	27,962	23,557	22,819	21,002	20,966	20,550	20,587	67,674
325,834	0,240	0,749	1,065	-0,420	0,028	0,222	0,539	124,154	28,075	23,579	22,831	21,007	20,971	20,564	20,602	67,726
326,334	0,227	0,736	1,061	-0,418	0,043	0,227	0,539	124,194	28,028	23,583	22,842	21,022	20,982	20,569	20,611	67,765
326,834	0,219	0,741	1,067	-0,422	0,016	0,221	0,539	124,121	27,979	23,577	22,846	21,024	20,985	20,574	20,612	67,913
327,333	0,221	0,753	1,066	-0,423	0,037	0,207	0,538	124,088	28,004	23,583	22,836	21,028	20,985	20,563	20,607	67,911
327,833	0,225	0,794	1,065	-0,421	0,029	0,178	0,537	124,227	28,063	23,547	22,808	21,000	20,952	20,536	20,577	67,935
328,333	0,226	0,800	1,068	-0,426	0,038	0,178	0,536	124,316	28,166	23,584	22,819	21,005	20,968	20,554	20,589	68,030
328,833	0,222	0,761	1,065	-0,422	-0,323	0,220	0,536	124,367	28,095	23,573	22,832	21,006	20,966	20,545	20,591	67,982
329,333	0,216	0,716	1,071	-0,425	0,000	0,245	0,536	124,272	28,189	23,597	22,847	21,020	20,975	20,553	20,600	67,927
329,833	0,220	0,729	1,060	-0,425	-0,022	0,229	0,534	124,231	28,225	23,590	22,832	20,998	20,961	20,537	20,581	68,023
330,333	0,225	0,739	1,068	-0,427	0,024	0,228	0,533	124,210	28,187	23,608	22,847	21,003	20,958	20,539	20,585	68,122
330,833	0,231	0,762	1,065	-0,422	0,001	0,204	0,533	124,176	28,186	23,583	22,828	21,000	20,952	20,526	20,570	67,982
331,333	0,224	0,760	1,065	-0,425	0,037	0,212	0,532	124,226	28,182	23,576	22,819	20,996	20,947	20,532	20,571	68,108
331,834	0,224	0,740	1,068	-0,422	0,008	0,224	0,532	124,215	28,083	23,579	22,828	21,011	20,953	20,541	20,582	68,105

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
317,833	52,869	58,428	73,093	1,201	1,253	20611,535	21024,519	42,900	12,908	7,432	-8,478	42,631	8,429	9,348	2022-03-21 18:58
318,334	52,871	58,443	72,947	1,200	1,252	20738,145	20785,339	38,955	13,328	7,196	-8,490	42,725	8,438	9,095	2022-03-21 18:58
318,834	52,926	58,463	72,966	1,200	1,252	20579,607	20783,613	49,476	13,323	7,250	-8,509	42,719	8,438	9,255	2022-03-21 18:59
319,334	52,895	58,471	72,862	1,200	1,253	20568,111	20633,130	62,793	13,815	6,784	-8,435	42,848	8,451	9,255	2022-03-21 18:59
319,834	52,957	58,435	72,732	1,201	1,253	20298,515	20496,799	34,083	13,964	6,471	-8,408	42,598	8,426	9,255	2022-03-21 19:00
320,334	52,923	58,476	72,992	1,200	1,254	20502,806	20822,533	30,308	13,503	6,741	-8,443	42,619	8,428	9,161	2022-03-21 19:00
320,833	52,962	58,491	72,759	1,201	1,253	20449,067	20460,716	30,895	13,265	7,050	-8,488	42,505	8,417	9,161	2022-03-21 19:01
321,333	52,980	58,435	72,625	1,200	1,253	20160,915	20348,016	39,881	13,226	6,990	-8,422	42,988	8,464	8,858	2022-03-21 19:01
321,833	52,971	58,438	72,651	1,201	1,254	20128,824	20388,727	37,271	13,459	6,500	-8,377	42,569	8,423	9,161	2022-03-21 19:02
322,333	53,092	58,472	72,835	1,199	1,253	20102,728	20592,896	124,834	13,761	6,194	-8,425	42,910	8,457	9,068	2022-03-21 19:02
322,833	53,147	58,562	72,840	1,211	1,253	20164,983	20476,430	80,924	13,512	6,666	-8,442	42,617	8,428	8,973	2022-03-21 19:03
323,333	53,083	58,433	72,778	1,230	1,253	20450,857	20567,547	54,661	14,327	6,105	-8,434	42,824	8,448	8,973	2022-03-21 19:03
323,833	53,143	58,418	73,025	1,230	1,253	20392,677	20947,366	40,530	14,403	6,040	-8,403	42,888	8,455	8,973	2022-03-21 19:04
324,333	53,092	58,449	73,021	1,229	1,252	20589,025	20882,092	141,569	15,385	5,111	-8,379	42,793	8,445	8,848	2022-03-21 19:04
324,834	53,217	58,457	73,120	1,230	1,253	20332,427	21017,126	187,162	15,528	4,831	-8,425	42,839	8,450	8,755	2022-03-21 19:05
325,334	53,285	58,525	72,806	1,231	1,253	20313,525	20477,862	151,747	14,494	5,795	-8,464	43,095	8,475	8,755	2022-03-21 19:05
325,834	53,311	58,551	73,321	1,231	1,253	20340,719	21170,884	89,196	13,460	6,660	-8,402	42,690	8,435	8,661	2022-03-21 19:06
326,334	53,343	58,603	73,310	1,230	1,253	20343,186	21080,161	62,543	13,419	6,822	-8,363	42,242	8,391	8,661	2022-03-21 19:06
326,834	53,307	58,646	73,394	1,230	1,253	20604,792	21141,904	46,584	13,397	6,641	-8,437	42,679	8,434	8,661	2022-03-21 19:07
327,333	53,428	58,688	73,569	1,230	1,253	20427,551	21334,228	50,357	13,661	6,203	-8,460	42,421	8,408	8,568	2022-03-21 19:07
327,833	53,247	58,687	73,651	1,230	1,254	20716,043	21472,723	71,967	14,694	5,349	-8,420	42,720	8,438	8,568	2022-03-21 19:08
328,333	53,224	58,649	73,527	1,230	1,254	20880,872	21345,945	65,867	14,983	5,338	-8,527	42,911	8,457	8,473	2022-03-21 19:08
328,833	53,260	58,657	73,427	1,230	1,254	20765,988	21192,466	50,434	13,397	6,606	-8,440	42,687	8,435	8,473	2022-03-21 19:09
329,333	53,269	58,645	73,546	1,229	1,255	20660,122	21387,159	38,538	12,929	7,361	-8,507	42,865	8,452	8,473	2022-03-21 19:09
329,833	53,326	58,684	73,703	1,230	1,254	20733,003	21541,769	68,151	13,744	6,881	-8,497	42,586	8,425	8,349	2022-03-21 19:10
330,333	53,298	58,729	73,219	1,231	1,254	20916,910	20787,386	52,691	13,447	6,847	-8,538	42,812	8,447	8,256	2022-03-21 19:10
330,833	53,327	58,662	73,640	1,231	1,253	20676,083	21477,831	92,936	14,455	6,107	-8,447	42,715	8,438	8,256	2022-03-21 19:11
331,333	53,317	58,756	73,561	1,230	1,254	20861,816	21238,944	64,612	13,856	6,348	-8,496	42,586	8,425	8,256	2022-03-21 19:11
331,834	53,300	58,740	73,703	1,230	1,254	20882,782	21471,466	45,585	13,306	6,735	-8,447	42,721	8,438	8,256	2022-03-21 19:12

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
332,334	0,234	0,749	1,071	-0,422	0,012	0,212	0,532	124,214	28,079	23,546	22,797	20,971	20,918	20,492	20,543	68,095
332,834	0,220	0,754	1,071	-0,422	0,030	0,217	0,531	124,154	28,034	23,545	22,799	20,973	20,921	20,498	20,541	68,055
333,334	0,236	0,755	1,071	-0,425	0,001	0,208	0,531	124,172	27,944	23,485	22,739	20,917	20,876	20,449	20,494	68,112
333,834	0,256	0,775	1,070	-0,422	0,021	0,195	0,530	124,306	28,013	23,510	22,773	20,957	20,913	20,476	20,526	68,181
334,333	0,253	0,774	1,070	-0,420	0,026	0,197	0,529	124,339	28,069	23,504	22,747	20,947	20,902	20,479	20,514	68,153
334,833	0,294	0,764	1,067	-0,423	-0,005	0,204	0,528	124,374	27,985	23,475	22,724	20,904	20,864	20,431	20,482	68,100
335,333	0,260	0,766	1,064	-0,422	-0,006	0,203	0,528	124,402	27,916	23,473	22,720	20,912	20,867	20,435	20,481	68,311
335,833	0,230	0,780	1,058	-0,422	0,009	0,194	0,527	124,487	28,070	23,544	22,792	20,983	20,937	20,502	20,549	68,280
336,333	0,238	0,757	1,072	-0,424	0,005	0,216	0,527	124,424	28,101	23,546	22,773	20,966	20,913	20,479	20,528	68,334
336,833	0,218	0,733	1,059	-0,427	0,032	0,234	0,527	124,359	28,059	23,575	22,811	21,013	20,953	20,515	20,565	68,282
337,333	0,222	0,713	1,068	-0,426	0,024	0,248	0,524	124,162	27,997	23,519	22,754	20,949	20,892	20,456	20,507	68,266
337,833	0,219	0,720	1,066	-0,422	0,060	0,239	0,527	124,212	28,046	23,561	22,808	20,993	20,946	20,507	20,555	68,332
338,334	0,213	0,711	1,061	-0,425	0,014	0,254	0,523	124,036	27,973	23,521	22,763	20,960	20,908	20,464	20,516	68,319
338,834	0,211	0,707	1,065	-0,429	0,000	0,251	0,523	123,942	28,008	23,520	22,762	20,953	20,900	20,467	20,510	68,320
339,334	0,217	0,727	1,068	-0,419	0,017	0,228	0,523	123,819	28,038	23,487	22,739	20,915	20,863	20,428	20,475	68,315
339,834	0,222	0,769	1,063	-0,424	0,042	0,197	0,522	123,955	28,036	23,563	22,806	20,998	20,944	20,493	20,551	68,289
340,334	0,225	0,780	1,069	-0,424	0,017	0,191	0,521	124,086	28,110	23,585	22,837	21,025	20,971	20,527	20,577	68,232
340,833	0,241	0,775	1,068	-0,421	-0,022	0,197	0,521	124,090	28,097	23,560	22,805	21,000	20,949	20,502	20,555	68,230
341,333	0,227	0,773	1,067	-0,420	-0,003	0,204	0,521	124,077	28,016	23,493	22,750	20,943	20,893	20,451	20,497	68,333
341,833	0,217	0,745	1,065	-0,424	0,005	0,223	0,520	123,964	27,965	23,460	22,723	20,923	20,863	20,414	20,467	68,329
342,333	0,231	0,742	1,067	-0,423	0,012	0,222	0,520	123,964	28,000	23,470	22,721	20,926	20,873	20,431	20,476	68,407
342,833	0,225	0,745	1,063	-0,429	0,016	0,225	0,519	123,932	28,047	23,464	22,718	20,913	20,856	20,411	20,464	68,266
343,333	0,217	0,736	1,064	-0,422	-0,008	0,230	0,518	123,851	27,990	23,461	22,703	20,905	20,847	20,390	20,442	68,407
343,833	0,223	0,745	1,064	-0,423	0,021	0,223	0,518	123,976	28,166	23,548	22,781	20,987	20,923	20,472	20,524	68,465
344,333	0,221	0,730	1,061	-0,422	-0,006	0,240	0,516	123,939	28,165	23,555	22,796	20,993	20,937	20,481	20,533	68,465
344,833	0,222	0,685	1,065	-0,428	0,036	0,273	0,516	123,709	28,068	23,534	22,778	20,970	20,918	20,466	20,514	68,431
345,334	0,212	0,668	1,066	-0,426	0,002	0,289	0,516	123,575	28,047	23,550	22,793	20,993	20,933	20,482	20,533	68,451
345,834	0,214	0,685	1,065	-0,425	0,040	0,265	0,515	123,420	28,064	23,545	22,761	20,978	20,927	20,476	20,522	68,577
346,334	0,216	0,720	1,063	-0,424	-0,008	0,241	0,515	123,376	28,100	23,540	22,796	20,990	20,939	20,486	20,534	68,377

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
332,334	53,353	58,731	73,583	1,231	1,253	20805,845	21298,566	57,148	13,885	6,362	-8,438	42,882	8,454	8,335	2022-03-21 19:12
332,834	53,364	58,725	73,676	1,232	1,253	20746,118	21436,468	41,228	13,248	6,509	-8,450	42,801	8,446	8,162	2022-03-21 19:13
333,334	53,389	58,752	73,708	1,231	1,254	20787,266	21460,738	123,061	14,050	6,253	-8,509	42,804	8,446	8,162	2022-03-21 19:13
333,834	53,441	58,839	73,689	1,232	1,255	20810,831	21313,185	160,885	14,515	5,858	-8,445	42,794	8,445	8,245	2022-03-21 19:14
334,333	53,447	58,824	73,705	1,231	1,254	20750,759	21353,406	113,958	14,492	5,912	-8,407	43,004	8,466	8,068	2022-03-21 19:14
334,833	53,468	58,839	73,693	1,230	1,254	20637,836	21313,375	336,143	14,202	6,113	-8,465	42,690	8,435	7,974	2022-03-21 19:15
335,333	53,497	58,865	73,754	1,231	1,254	20899,018	21352,307	116,555	14,113	6,078	-8,441	42,753	8,441	7,974	2022-03-21 19:15
335,833	53,488	58,894	73,890	1,230	1,254	20859,900	21509,196	95,941	14,554	5,829	-8,441	42,059	8,372	7,974	2022-03-21 19:16
336,333	53,505	58,892	73,939	1,232	1,254	20941,279	21581,951	81,304	13,846	6,494	-8,478	42,482	8,414	8,068	2022-03-21 19:16
336,833	53,539	58,941	73,834	1,230	1,254	20797,123	21359,350	40,841	13,022	7,031	-8,532	42,711	8,437	7,849	2022-03-21 19:17
337,333	53,577	58,907	73,725	1,231	1,253	20723,056	21245,794	63,122	12,631	7,434	-8,512	42,929	8,459	7,756	2022-03-21 19:17
337,833	53,604	58,979	73,766	1,232	1,254	20802,771	21210,771	37,859	12,884	7,179	-8,439	42,572	8,423	7,974	2022-03-21 19:18
338,334	53,681	58,970	73,809	1,231	1,254	20660,929	21280,518	37,281	12,421	7,632	-8,497	42,466	8,413	7,756	2022-03-21 19:18
338,834	53,837	59,073	73,805	1,232	1,253	20459,391	21117,631	27,709	12,818	7,532	-8,581	42,737	8,440	7,661	2022-03-21 19:19
339,334	53,826	59,134	73,693	1,232	1,253	20464,105	20866,357	55,387	13,708	6,844	-8,387	42,559	8,422	7,661	2022-03-21 19:19
339,834	53,817	59,093	73,594	1,232	1,254	20433,368	20792,934	64,868	14,360	5,919	-8,475	42,512	8,417	7,576	2022-03-21 19:20
340,334	53,807	59,080	73,665	1,232	1,253	20371,486	20910,671	75,710	14,457	5,717	-8,475	42,917	8,457	7,568	2022-03-21 19:20
340,833	53,831	59,101	73,760	1,232	1,254	20333,249	21021,852	117,863	14,518	5,919	-8,422	42,728	8,439	7,473	2022-03-21 19:21
341,333	53,746	59,091	73,834	1,232	1,254	20607,271	21142,353	46,759	14,094	6,112	-8,394	42,725	8,439	7,568	2022-03-21 19:21
341,833	53,727	59,045	73,873	1,232	1,253	20618,398	21258,996	55,511	13,645	6,689	-8,478	42,531	8,419	7,473	2022-03-21 19:22
342,333	53,969	59,123	73,717	1,231	1,251	20376,055	20881,859	83,994	13,950	6,659	-8,462	42,920	8,458	7,473	2022-03-21 19:22
342,833	53,922	59,147	73,824	1,233	1,242	20266,444	20845,469	62,176	13,436	6,739	-8,571	42,738	8,440	7,346	2022-03-21 19:23
343,333	53,936	59,143	74,063	1,232	1,242	20437,654	21197,402	40,986	13,608	6,891	-8,444	42,641	8,430	7,473	2022-03-21 19:23
343,833	54,010	59,194	74,012	1,232	1,241	20405,394	21033,886	54,800	13,604	6,678	-8,469	42,569	8,423	7,346	2022-03-21 19:24
344,333	53,971	59,253	73,951	1,232	1,241	20469,036	20868,374	58,272	12,758	7,211	-8,440	42,403	8,407	7,253	2022-03-21 19:24
344,833	53,834	59,143	74,021	1,232	1,242	20611,093	21132,523	50,149	11,690	8,197	-8,564	42,578	8,424	7,253	2022-03-21 19:25
345,334	53,919	59,131	73,942	1,232	1,241	20520,219	21027,860	32,967	11,239	8,657	-8,521	42,869	8,453	7,253	2022-03-21 19:25
345,834	54,012	59,219	73,973	1,232	1,241	20569,535	20951,034	42,775	12,536	7,951	-8,503	42,387	8,405	7,159	2022-03-21 19:26
346,334	54,003	59,206	73,697	1,232	1,242	20298,302	20591,044	45,989	13,107	7,235	-8,472	42,613	8,427	7,253	2022-03-21 19:26

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
346,834	0,216	0,742	1,069	-0,419	0,042	0,217	0,515	123,380	28,082	23,518	22,757	20,978	20,914	20,456	20,507	68,259
347,334	0,213	0,761	1,065	-0,423	-0,002	0,203	0,513	123,442	28,125	23,540	22,769	20,975	20,919	20,460	20,515	68,298
347,833	0,219	0,764	1,064	-0,420	0,052	0,212	0,514	123,521	28,014	23,550	22,779	20,993	20,939	20,483	20,528	68,333
348,333	0,214	0,716	1,064	-0,421	-0,006	0,255	0,512	123,390	27,990	23,554	22,799	21,004	20,948	20,501	20,544	68,372
348,833	0,221	0,706	1,062	-0,421	-0,020	0,251	0,510	123,342	27,941	23,525	22,783	20,989	20,932	20,478	20,530	68,371
349,333	0,226	0,702	1,069	-0,420	0,035	0,259	0,512	123,387	28,054	23,621	22,879	21,096	21,039	20,573	20,631	68,244
349,833	0,222	0,708	1,069	-0,422	0,016	0,249	0,510	123,316	28,103	23,649	22,905	21,128	21,061	20,606	20,658	68,236
350,333	0,230	0,711	1,062	-0,419	0,028	0,248	0,509	123,130	28,037	23,553	22,805	21,035	20,974	20,505	20,565	68,321
350,833	0,227	0,728	1,067	-0,420	0,013	0,234	0,508	123,190	28,033	23,576	22,813	21,054	20,980	20,522	20,579	68,363
351,333	0,262	0,747	1,065	-0,419	0,015	0,214	0,508	123,158	28,101	23,540	22,787	21,020	20,955	20,485	20,543	68,337
351,833	0,250	0,770	1,063	-0,418	0,013	0,200	0,507	123,270	28,031	23,543	22,769	21,012	20,955	20,482	20,540	68,331
352,334	0,240	0,756	1,064	-0,421	0,033	0,209	0,507	123,375	28,183	23,591	22,828	21,054	20,991	20,521	20,580	68,425
352,834	0,265	0,765	1,057	-0,418	0,048	0,207	0,506	123,279	28,082	23,544	22,784	21,016	20,947	20,476	20,540	68,488
353,334	0,233	0,757	1,066	-0,424	0,008	0,217	0,506	123,222	28,031	23,501	22,751	20,980	20,914	20,435	20,504	68,537
353,834	0,222	0,718	1,064	-0,422	-0,031	0,246	0,505	123,212	28,034	23,503	22,754	20,987	20,920	20,446	20,507	68,410
354,333	0,217	0,707	1,063	-0,423	0,015	0,251	0,505	123,217	27,993	23,517	22,779	21,008	20,946	20,469	20,534	68,524
354,833	0,222	0,712	1,068	-0,421	0,004	0,249	0,505	123,141	28,022	23,448	22,692	20,919	20,866	20,387	20,445	68,644
355,333	0,225	0,717	1,064	-0,419	-0,002	0,246	0,503	123,137	28,093	23,511	22,762	20,995	20,932	20,453	20,512	68,662
355,833	0,232	0,726	1,062	-0,425	0,005	0,234	0,504	123,186	28,083	23,514	22,763	20,989	20,923	20,452	20,511	68,694
356,333	0,234	0,763	1,071	-0,415	0,010	0,200	0,502	123,252	28,170	23,524	22,771	20,989	20,928	20,455	20,513	68,623
356,833	0,232	0,765	1,060	-0,420	0,026	0,208	0,502	123,353	28,158	23,562	22,809	21,030	20,964	20,488	20,544	68,589
357,333	0,224	0,739	1,065	-0,421	0,018	0,226	0,499	123,257	28,043	23,501	22,747	20,962	20,907	20,430	20,487	68,701
357,833	0,214	0,736	1,074	-0,424	-0,008	0,230	0,501	123,135	27,923	23,454	22,691	20,932	20,859	20,384	20,443	68,576
358,333	0,212	0,721	1,062	-0,422	-0,012	0,243	0,500	123,224	27,977	23,450	22,703	20,943	20,874	20,401	20,461	68,702
358,834	0,216	0,729	1,069	-0,421	0,039	0,237	0,499	123,231	27,907	23,417	22,660	20,900	20,837	20,356	20,418	68,787
359,334	0,213	0,704	1,068	-0,420	0,019	0,256	0,498	123,073	27,807	23,398	22,653	20,900	20,827	20,356	20,411	68,683
359,834	0,215	0,700	1,067	-0,424	0,006	0,259	0,498	123,073	27,803	23,430	22,688	20,925	20,857	20,379	20,446	68,751
360,334	0,222	0,711	1,073	-0,419	0,004	0,241	0,497	122,981	27,924	23,503	22,746	20,991	20,928	20,446	20,506	68,738
360,834	0,218	0,758	1,071	-0,417	0,001	0,211	0,496	123,069	28,043	23,485	22,732	20,987	20,923	20,434	20,496	68,727

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
346,834	54,074	59,183	73,612	1,231	1,241	20011,532	20478,207	41,292	13,796	6,515	-8,389	42,658	8,432	7,066	2022-03-21 19:27
347,334	54,091	59,176	73,793	1,232	1,241	20052,796	20754,089	33,797	14,335	6,097	-8,458	42,653	8,431	7,065	2022-03-21 19:27
347,833	54,151	59,255	73,696	1,231	1,241	20007,657	20493,895	53,625	13,838	6,370	-8,403	42,456	8,412	7,159	2022-03-21 19:28
348,333	54,178	59,255	73,747	1,232	1,241	20037,893	20566,016	36,501	12,592	7,661	-8,413	42,524	8,419	6,971	2022-03-21 19:28
348,833	54,141	59,308	73,530	1,232	1,241	20089,990	20180,539	68,665	12,944	7,531	-8,426	42,654	8,432	6,971	2022-03-21 19:29
349,333	54,106	59,207	73,628	1,232	1,241	19967,630	20477,603	65,937	12,336	7,757	-8,404	42,691	8,435	6,847	2022-03-21 19:29
349,833	54,259	59,244	73,579	1,232	1,241	19739,058	20344,502	67,415	12,620	7,473	-8,447	42,665	8,433	6,846	2022-03-21 19:30
350,333	54,311	59,316	73,762	1,233	1,242	19789,904	20524,511	91,963	12,429	7,429	-8,385	42,810	8,447	6,753	2022-03-21 19:30
350,833	54,305	59,419	73,496	1,233	1,252	19862,877	20162,655	76,499	13,167	7,008	-8,396	42,857	8,451	6,753	2022-03-21 19:31
351,333	54,321	59,446	73,602	1,233	1,253	19810,158	20281,865	265,369	14,002	6,412	-8,388	42,309	8,397	6,753	2022-03-21 19:31
351,833	54,348	59,434	73,819	1,232	1,252	19743,632	20605,171	140,935	14,369	6,007	-8,363	42,347	8,401	6,659	2022-03-21 19:32
352,334	54,347	59,475	73,686	1,232	1,253	19870,100	20359,972	130,492	13,911	6,269	-8,420	42,707	8,437	6,659	2022-03-21 19:32
352,834	54,296	59,456	73,818	1,232	1,253	20038,760	20587,680	108,980	13,828	6,198	-8,367	42,088	8,375	6,566	2022-03-21 19:33
353,334	54,306	59,515	73,752	1,232	1,253	20099,184	20401,491	68,366	13,711	6,525	-8,489	42,882	8,454	6,566	2022-03-21 19:33
353,834	54,315	59,451	73,738	1,232	1,253	19893,912	20477,038	61,840	12,849	7,381	-8,441	43,028	8,468	6,566	2022-03-21 19:34
354,333	54,392	59,518	73,963	1,232	1,253	19955,609	20695,377	45,230	12,787	7,519	-8,467	42,672	8,433	6,565	2022-03-21 19:34
354,833	54,428	59,567	73,966	1,231	1,253	20055,572	20633,440	52,256	12,772	7,463	-8,427	42,446	8,411	6,659	2022-03-21 19:35
355,333	54,591	59,649	74,016	1,233	1,253	19873,673	20581,752	75,005	12,871	7,365	-8,376	42,516	8,418	6,471	2022-03-21 19:35
355,833	54,391	59,683	74,003	1,232	1,252	20199,937	20508,117	64,566	13,211	7,018	-8,493	42,498	8,416	6,347	2022-03-21 19:36
356,333	54,356	59,585	73,769	1,231	1,253	20133,254	20327,090	112,140	14,480	5,989	-8,301	42,901	8,456	6,347	2022-03-21 19:36
356,833	54,496	59,574	74,044	1,232	1,252	19888,809	20723,597	71,493	14,137	6,242	-8,409	42,460	8,412	6,347	2022-03-21 19:37
357,333	54,427	59,663	73,893	1,231	1,253	20141,282	20392,155	43,482	13,184	6,792	-8,415	42,474	8,414	6,176	2022-03-21 19:37
357,833	54,417	59,590	73,987	1,232	1,253	19997,093	20628,143	34,750	13,085	6,912	-8,480	43,098	8,475	6,254	2022-03-21 19:38
358,333	54,588	59,646	74,113	1,232	1,253	19927,525	20735,624	32,822	12,921	7,293	-8,445	42,342	8,401	6,254	2022-03-21 19:38
358,834	54,535	59,752	73,999	1,233	1,253	20131,756	20419,363	44,758	13,324	7,121	-8,427	42,595	8,426	6,252	2022-03-21 19:39
359,334	54,555	59,695	73,927	1,233	1,252	19968,355	20379,434	35,589	12,636	7,673	-8,401	42,654	8,431	6,066	2022-03-21 19:39
359,834	54,650	59,752	73,924	1,233	1,253	19914,899	20307,431	42,219	12,318	7,756	-8,475	43,048	8,470	6,066	2022-03-21 19:40
360,334	54,590	59,764	73,999	1,232	1,253	19965,004	20402,067	54,069	13,007	7,218	-8,389	42,983	8,464	6,066	2022-03-21 19:40
360,834	54,593	59,747	73,956	1,232	1,253	19958,961	20367,355	46,252	13,862	6,315	-8,349	42,968	8,462	6,018	2022-03-21 19:41



## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measure- ment time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
361,333	0,214	0,740	1,070	-0,418	0,042	0,224	0,495	123,084	28,031	23,504	22,752	20,987	20,920	20,442	20,501	68,766
361,833	0,226	0,755	1,064	-0,417	-0,001	0,211	0,494	123,135	27,986	23,470	22,727	20,968	20,909	20,426	20,487	68,821
362,333	0,241	0,755	1,065	-0,421	0,015	0,216	0,494	123,062	27,982	23,392	22,643	20,899	20,828	20,347	20,411	68,876
362,833	0,223	0,734	1,070	-0,416	0,009	0,227	0,494	123,180	27,974	23,443	22,699	20,947	20,871	20,395	20,455	68,815
363,333	0,234	0,751	1,067	-0,420	0,044	0,219	0,493	123,238	27,953	23,448	22,708	20,958	20,885	20,405	20,461	68,884
363,833	0,221	0,734	1,071	-0,417	0,009	0,233	0,493	123,191	28,034	23,472	22,733	20,971	20,892	20,409	20,475	68,951
364,333	0,219	0,758	1,511	-0,420	0,018	0,206	0,492	123,238	28,159	22,492	22,143	20,964	20,883	20,401	20,462	68,950
364,833	0,236	0,755	1,986	-0,418	0,021	0,216	0,497	123,182	27,935	22,273	21,931	20,886	20,799	20,343	20,394	68,955
365,333	0,260	0,768	1,987	-0,420	-0,002	0,191	0,498	123,332	28,024	22,272	21,938	20,926	20,826	20,375	20,432	69,016

## PE22\_cat IV\_run 1\_220321\_EN.DAT

## Category: IV run 1

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measure- ment time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
361,333	54,594	59,756	74,208	1,232	1,253	20013,132	20707,664	42,872	13,534	6,726	-8,360	42,593	8,425	5,972	2022-03-21 19:41
361,833	54,596	59,754	74,121	1,232	1,254	20079,681	20596,761	124,976	13,935	6,321	-8,350	42,327	8,399	5,972	2022-03-21 19:42
362,333	54,740	59,811	74,118	1,232	1,254	19961,776	20517,827	71,108	13,646	6,469	-8,414	42,584	8,425	5,847	2022-03-21 19:42
362,833	54,687	59,852	74,187	1,234	1,253	19968,366	20545,298	58,754	13,452	6,808	-8,314	42,915	8,457	5,847	2022-03-21 19:43
363,333	54,722	59,859	74,188	1,233	1,253	20003,070	20534,370	73,818	13,581	6,572	-8,401	42,664	8,432	5,847	2022-03-21 19:43
363,833	54,681	59,873	74,316	1,234	1,253	20169,712	20701,436	54,207	13,240	6,988	-8,343	42,565	8,423	5,754	2022-03-21 19:44
364,333	54,682	59,900	74,293	1,233	1,254	20158,531	20634,320	60,810	14,507	6,172	-8,402	77,614	11,374	5,754	2022-03-21 19:44
364,833	54,786	59,877	74,347	1,233	1,254	20013,147	20743,201	100,485	13,651	6,492	-8,365	79,537	11,514	6,659	2022-03-21 19:45
365,333	54,885	59,981	74,488	1,234	1,253	19982,363	20785,511	185,878	14,548	5,722	-8,395	79,576	11,516	6,066	2022-03-21 19:45

## PE22\_cat IV\_run 2\_220322\_EN.DAT

Category: IV run 2

Configuration file: C:\Data Collection\Configuration\EPA pellematic\_220321.KONF

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	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
0,334	0,268	0,812	1,072	-0,317	-0,028	0,180	0,828	98,953	25,985	20,652	20,617	19,947	19,912	19,988	20,105	63,102
0,834	0,223	0,785	1,061	-0,315	0,025	0,199	0,820	99,441	26,261	20,751	20,704	20,047	20,014	20,083	20,206	63,194
1,334	0,233	0,725	1,066	-0,315	-0,010	0,261	0,819	99,486	26,296	20,693	20,639	20,010	19,959	20,029	20,150	63,183
1,834	0,211	0,697	1,060	-0,317	0,014	0,260	0,819	99,551	26,194	20,665	20,607	19,987	19,935	20,018	20,137	63,224
2,334	0,216	0,768	1,066	-0,317	0,015	0,194	0,819	99,795	26,429	20,729	20,682	20,060	20,018	20,093	20,214	63,169
2,833	0,327	0,833	1,067	-0,320	0,026	0,156	0,818	99,990	26,405	20,734	20,676	20,065	20,024	20,100	20,223	63,146
3,358	0,219	0,807	1,074	-0,314	0,018	0,184	0,817	100,085	26,409	20,730	20,664	20,077	20,030	20,099	20,226	63,193
3,833	0,226	0,793	1,072	-0,312	0,004	0,186	0,816	100,173	26,479	20,721	20,657	20,066	20,021	20,098	20,226	63,334
4,396	0,252	0,823	1,072	-0,313	0,040	0,154	0,815	100,337	26,659	20,720	20,647	20,063	20,027	20,102	20,225	63,220
4,875	0,294	0,848	1,069	-0,312	0,000	0,152	0,816	100,492	26,534	20,706	20,645	20,074	20,021	20,111	20,231	63,218
5,436	0,219	0,786	1,068	-0,322	-0,010	0,210	0,816	100,731	26,651	20,694	20,630	20,079	20,025	20,096	20,226	63,288
5,834	0,211	0,756	1,063	-0,321	0,007	0,220	0,814	101,116	26,684	20,734	20,653	20,101	20,062	20,140	20,268	63,302
6,334	0,217	0,766	1,068	-0,322	-0,011	0,210	0,813	101,320	26,620	20,603	20,535	19,990	19,946	20,023	20,150	63,351
6,834	0,236	0,792	1,064	-0,319	0,029	0,184	0,813	101,641	26,788	20,708	20,626	20,095	20,053	20,128	20,256	63,441
7,334	0,218	0,774	1,066	-0,319	0,036	0,210	0,811	101,725	26,714	20,692	20,619	20,090	20,046	20,128	20,254	63,489
7,834	0,213	0,750	1,073	-0,325	0,004	0,229	0,810	101,725	26,766	20,645	20,559	20,039	20,001	20,078	20,209	63,408
8,333	0,213	0,748	1,072	-0,321	-0,020	0,227	0,810	101,896	26,927	20,697	20,618	20,103	20,068	20,143	20,274	63,557
8,833	0,227	0,761	1,066	-0,324	0,009	0,210	0,809	101,960	26,867	20,551	20,471	19,964	19,927	20,008	20,139	63,591
9,333	0,241	0,789	1,064	-0,320	0,008	0,191	0,809	102,386	26,935	20,681	20,597	20,106	20,066	20,143	20,273	63,503
9,833	0,213	0,748	1,070	-0,323	0,030	0,242	0,808	102,258	26,739	20,576	20,478	20,000	19,962	20,040	20,173	63,619
10,333	0,211	0,698	1,057	-0,325	-0,006	0,272	0,808	102,332	26,879	20,677	20,586	20,122	20,066	20,151	20,289	63,693
10,833	0,219	0,693	1,067	-0,325	0,011	0,276	0,807	102,311	26,859	20,658	20,563	20,104	20,063	20,147	20,279	63,702
11,333	0,213	0,710	1,066	-0,322	0,002	0,253	0,808	102,370	26,805	20,651	20,555	20,115	20,073	20,146	20,281	63,687
11,833	0,212	0,721	1,065	-0,323	-0,002	0,245	0,805	102,402	26,813	20,649	20,548	20,113	20,068	20,149	20,283	63,501
12,334	0,211	0,741	1,067	-0,327	0,026	0,229	0,807	102,502	26,895	20,647	20,545	20,113	20,074	20,159	20,291	63,437
12,834	0,212	0,754	1,059	-0,324	-0,017	0,222	0,805	102,578	26,902	20,626	20,523	20,108	20,067	20,145	20,279	63,399

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
0,334	48,476	53,880	69,008	8,041	7,648	134682,452	134017,233	58,802	14,501	5,413	-6,340	42,940	8,460	26,476	2022-03-22 11:36
0,834	48,358	53,879	69,052	1,214	1,202	20682,021	20907,883	92,465	14,272	5,959	-6,306	42,546	8,421	26,257	2022-03-22 11:37
1,334	48,278	53,834	69,106	1,215	1,202	20796,189	21041,160	38,416	12,170	7,839	-6,309	42,946	8,460	26,070	2022-03-22 11:37
1,834	48,358	53,831	69,012	1,213	1,202	20705,856	20923,142	28,207	12,835	7,796	-6,347	42,320	8,398	26,164	2022-03-22 11:38
2,334	48,390	53,872	69,004	1,214	1,202	20611,844	20852,652	70,592	15,064	5,816	-6,340	42,780	8,444	26,163	2022-03-22 11:38
2,833	48,436	53,888	68,968	1,216	1,202	20550,741	20770,155	137,226	15,703	4,688	-6,402	43,081	8,474	26,070	2022-03-22 11:39
3,358	48,446	53,899	69,199	1,214	1,202	20570,363	21079,143	48,081	15,008	5,530	-6,272	42,985	8,464	26,070	2022-03-22 11:39
3,833	48,412	53,955	69,205	1,214	1,201	20809,741	20996,635	145,927	15,183	5,584	-6,246	43,137	8,479	25,976	2022-03-22 11:40
4,396	48,440	53,927	68,971	1,215	1,202	20627,855	20729,153	169,015	15,906	4,618	-6,252	42,956	8,461	25,885	2022-03-22 11:40
4,875	48,485	53,937	69,260	1,214	1,202	20542,838	21112,222	92,098	15,887	4,559	-6,246	42,989	8,465	25,976	2022-03-22 11:41
5,436	48,470	54,003	69,320	1,215	1,203	20677,389	21119,572	37,304	14,093	6,300	-6,437	42,729	8,439	25,976	2022-03-22 11:41
5,834	48,469	53,983	69,237	1,214	1,201	20677,154	21003,028	29,100	13,912	6,594	-6,425	42,515	8,418	25,851	2022-03-22 11:42
6,334	48,437	54,004	69,263	1,213	1,202	20788,351	21020,023	56,421	14,120	6,287	-6,430	42,646	8,431	25,757	2022-03-22 11:42
6,834	48,322	53,968	69,498	1,214	1,202	21083,592	21391,041	69,139	14,995	5,522	-6,374	42,794	8,445	25,758	2022-03-22 11:43
7,334	48,333	53,927	69,501	1,214	1,202	21129,232	21459,363	32,646	13,445	6,295	-6,386	42,568	8,423	25,757	2022-03-22 11:43
7,834	48,499	53,991	69,456	1,215	1,202	20801,876	21300,948	36,579	13,209	6,856	-6,490	42,896	8,455	25,570	2022-03-22 11:44
8,333	48,503	54,070	69,532	1,215	1,203	21001,143	21314,394	34,821	13,654	6,795	-6,424	42,680	8,434	25,570	2022-03-22 11:44
8,833	48,408	54,077	69,578	1,214	1,202	21169,532	21354,380	138,125	14,747	6,291	-6,472	42,904	8,456	25,570	2022-03-22 11:45
9,333	48,397	54,014	69,592	1,215	1,202	21076,055	21466,876	53,194	14,764	5,734	-6,403	42,599	8,426	25,570	2022-03-22 11:45
9,833	48,400	54,046	69,778	1,213	1,201	21210,126	21666,145	32,580	12,818	7,257	-6,470	42,369	8,403	25,476	2022-03-22 11:46
10,333	48,392	54,067	69,778	1,214	1,202	21339,198	21641,375	31,717	12,516	8,146	-6,497	42,209	8,387	25,476	2022-03-22 11:46
10,833	48,442	54,091	69,767	1,215	1,202	21305,283	21596,443	50,222	12,324	8,280	-6,510	42,876	8,453	25,353	2022-03-22 11:47
11,333	48,438	54,120	69,659	1,212	1,202	21224,291	21402,049	33,128	13,233	7,581	-6,432	42,832	8,449	25,476	2022-03-22 11:47
11,833	48,369	54,060	69,451	1,214	1,202	21107,601	21199,132	35,170	13,315	7,357	-6,456	42,817	8,448	25,200	2022-03-22 11:48
12,334	48,338	53,984	69,311	1,213	1,202	21038,676	21120,618	28,112	13,585	6,876	-6,548	42,681	8,434	25,353	2022-03-22 11:48
12,834	48,321	53,925	69,331	1,212	1,202	20984,420	21228,910	32,642	13,620	6,647	-6,484	42,149	8,381	25,260	2022-03-22 11:49

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
13,334	0,212	0,756	1,068	-0,326	0,037	0,220	0,804	102,637	26,883	20,607	20,499	20,098	20,050	20,133	20,264	63,280
13,834	0,227	0,773	1,067	-0,323	-0,031	0,196	0,804	102,817	26,987	20,642	20,524	20,127	20,077	20,161	20,299	63,430
14,334	0,243	0,814	1,065	-0,329	0,026	0,173	0,802	102,788	26,986	20,641	20,519	20,134	20,091	20,172	20,306	63,481
14,833	0,217	0,763	1,064	-0,321	0,030	0,222	0,802	102,835	26,978	20,632	20,525	20,134	20,092	20,173	20,310	63,478
15,333	0,229	0,738	1,067	-0,326	0,010	0,236	0,801	102,862	26,887	20,632	20,511	20,120	20,082	20,167	20,304	63,530
15,833	0,231	0,723	1,063	-0,325	-0,021	0,251	0,801	102,909	26,973	20,628	20,516	20,132	20,086	20,175	20,308	63,550
16,333	0,219	0,732	1,071	-0,327	-0,017	0,231	0,800	103,060	27,040	20,640	20,515	20,136	20,099	20,177	20,314	63,377
16,833	0,213	0,750	1,066	-0,326	0,016	0,232	0,800	103,046	26,928	20,630	20,509	20,139	20,092	20,176	20,310	63,427
17,333	0,211	0,706	1,064	-0,326	0,046	0,265	0,800	102,979	26,864	20,613	20,489	20,120	20,081	20,164	20,298	63,459
17,833	0,211	0,708	1,067	-0,323	0,023	0,257	0,799	102,960	26,962	20,602	20,475	20,120	20,070	20,160	20,295	63,513
18,333	0,213	0,761	1,069	-0,325	0,030	0,209	0,798	103,036	26,882	20,625	20,500	20,139	20,097	20,190	20,319	63,384
18,834	0,214	0,752	1,068	-0,321	-0,010	0,231	0,797	102,946	26,939	20,605	20,479	20,130	20,078	20,171	20,307	63,439
19,334	0,216	0,748	1,068	-0,324	0,002	0,219	0,796	102,980	26,895	20,609	20,471	20,137	20,090	20,175	20,315	63,443
19,834	0,221	0,756	1,068	-0,327	0,011	0,215	0,796	103,088	26,980	20,606	20,475	20,149	20,108	20,187	20,326	63,417
20,334	0,218	0,763	1,066	-0,327	-0,007	0,217	0,796	103,107	27,055	20,563	20,437	20,106	20,068	20,146	20,287	63,337
20,834	0,213	0,730	1,067	-0,324	0,022	0,250	0,795	103,055	26,916	20,526	20,393	20,066	20,035	20,106	20,251	63,333
21,334	0,212	0,700	1,068	-0,326	-0,018	0,263	0,795	102,882	26,769	20,486	20,345	20,026	19,985	20,070	20,210	63,359
21,833	0,217	0,739	1,064	-0,320	0,009	0,232	0,794	103,058	26,925	20,538	20,406	20,082	20,048	20,123	20,270	63,294
22,333	0,213	0,739	1,063	-0,326	0,034	0,228	0,793	103,093	26,929	20,571	20,436	20,130	20,087	20,166	20,309	63,261
22,833	0,266	0,786	1,065	-0,323	-0,007	0,194	0,793	103,171	27,071	20,551	20,408	20,100	20,056	20,138	20,286	63,339
23,333	0,224	0,769	1,064	-0,323	0,017	0,214	0,792	103,243	27,084	20,554	20,424	20,133	20,082	20,166	20,308	63,359
23,833	0,215	0,760	1,061	-0,325	0,018	0,217	0,791	103,192	26,990	20,551	20,415	20,107	20,070	20,150	20,299	63,415
24,333	0,217	0,758	1,069	-0,328	-0,006	0,216	0,790	103,262	26,917	20,588	20,447	20,152	20,106	20,189	20,338	63,397
24,833	0,219	0,736	1,067	-0,326	0,022	0,243	0,790	103,258	26,887	20,578	20,428	20,145	20,095	20,189	20,329	63,287
25,333	0,212	0,720	1,065	-0,322	0,051	0,251	0,789	103,246	26,923	20,564	20,419	20,138	20,089	20,181	20,322	63,397
25,834	0,210	0,721	1,064	-0,326	-0,024	0,249	0,788	103,267	27,024	20,581	20,429	20,145	20,114	20,192	20,339	63,374
26,334	0,210	0,727	1,058	-0,330	0,008	0,241	0,788	103,354	27,014	20,582	20,436	20,150	20,118	20,193	20,339	63,379
26,834	0,224	0,754	1,063	-0,322	-0,010	0,214	0,787	103,339	27,124	20,602	20,448	20,178	20,133	20,220	20,363	63,326
27,334	0,219	0,759	1,062	-0,328	0,010	0,225	0,788	103,280	27,047	20,532	20,378	20,102	20,063	20,148	20,292	63,361

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
13,334	48,382	53,919	69,226	1,214	1,203	20766,458	21102,280	42,278	13,718	6,612	-6,513	42,754	8,441	25,260	2022-03-22 11:49
13,834	48,394	53,960	69,293	1,206	1,202	20834,854	21129,378	109,280	14,877	5,879	-6,462	42,753	8,441	25,260	2022-03-22 11:50
14,334	48,444	53,996	69,338	1,209	1,202	20880,315	21132,037	55,146	14,886	5,202	-6,581	42,435	8,410	25,072	2022-03-22 11:50
14,833	48,524	54,020	69,367	1,210	1,202	20779,691	21136,776	32,315	13,178	6,671	-6,427	42,713	8,437	25,072	2022-03-22 11:51
15,333	48,476	54,120	69,323	1,210	1,201	20925,309	20932,592	87,392	13,172	7,093	-6,511	42,581	8,424	25,072	2022-03-22 11:51
15,833	48,397	54,090	69,159	1,203	1,202	20940,122	20758,358	110,800	13,018	7,538	-6,504	42,160	8,383	25,072	2022-03-22 11:52
16,333	48,385	53,980	69,062	1,209	1,202	20816,527	20772,373	41,953	13,870	6,941	-6,547	43,134	8,479	24,979	2022-03-22 11:52
16,833	48,407	53,999	69,170	1,209	1,202	20859,981	20904,867	30,886	13,493	6,965	-6,514	42,590	8,425	24,978	2022-03-22 11:53
17,333	48,359	54,009	69,210	1,207	1,202	20935,414	20939,461	35,656	12,625	7,941	-6,529	42,538	8,420	24,978	2022-03-22 11:53
17,833	48,342	53,970	69,092	1,205	1,202	20996,767	20837,103	28,699	12,873	7,704	-6,464	42,909	8,457	24,853	2022-03-22 11:54
18,333	48,451	53,984	69,200	1,207	1,201	20697,443	20946,799	42,452	14,718	6,259	-6,493	42,693	8,435	24,853	2022-03-22 11:54
18,834	48,632	54,120	69,188	1,210	1,202	20571,338	20756,269	34,315	13,103	6,941	-6,419	42,688	8,435	24,853	2022-03-22 11:55
19,334	48,450	54,116	69,121	1,210	1,202	20837,659	20668,023	51,572	13,962	6,585	-6,472	42,621	8,428	24,853	2022-03-22 11:55
19,834	48,308	53,973	69,080	1,209	1,202	20991,204	20810,625	45,197	13,898	6,440	-6,532	42,566	8,423	24,760	2022-03-22 11:56
20,334	48,261	53,908	69,039	1,204	1,202	20853,175	20844,791	50,668	13,739	6,514	-6,548	42,597	8,426	24,760	2022-03-22 11:56
20,834	48,498	53,956	69,065	1,209	1,202	20604,033	20813,358	36,814	12,754	7,501	-6,482	42,705	8,437	24,666	2022-03-22 11:57
21,334	48,478	54,033	68,887	1,207	1,202	20632,596	20461,329	29,984	12,846	7,890	-6,512	42,575	8,424	24,666	2022-03-22 11:57
21,833	48,321	53,951	69,024	1,205	1,202	20728,897	20768,698	39,275	13,718	6,958	-6,395	42,498	8,416	24,572	2022-03-22 11:58
22,333	48,317	53,912	69,005	1,211	1,202	20790,126	20792,251	40,918	13,636	6,855	-6,510	42,603	8,426	24,572	2022-03-22 11:58
22,833	48,502	53,984	69,024	1,206	1,202	20544,153	20716,165	171,135	14,883	5,834	-6,459	42,539	8,420	24,572	2022-03-22 11:59
23,333	48,500	54,047	69,128	1,209	1,202	20634,760	20769,416	56,495	14,139	6,414	-6,463	42,164	8,383	24,478	2022-03-22 11:59
23,833	48,405	54,038	69,239	1,206	1,202	20796,689	20938,074	37,436	13,944	6,502	-6,502	42,569	8,423	24,312	2022-03-22 12:00
24,333	48,356	54,008	68,985	1,206	1,201	20841,233	20617,235	47,808	14,124	6,479	-6,565	42,843	8,450	24,354	2022-03-22 12:00
24,833	48,371	53,915	69,129	1,211	1,202	20745,845	20955,301	39,774	12,957	7,285	-6,513	42,714	8,437	24,354	2022-03-22 12:01
25,333	48,360	53,966	68,986	1,208	1,202	20865,499	20697,555	31,708	12,978	7,515	-6,444	42,427	8,409	24,260	2022-03-22 12:01
25,834	48,408	53,955	69,209	1,201	1,202	20648,324	21015,898	27,693	12,881	7,485	-6,528	42,623	8,428	24,260	2022-03-22 12:02
26,334	48,500	54,003	69,016	1,210	1,202	20670,851	20683,738	27,943	13,213	7,233	-6,606	42,121	8,379	24,260	2022-03-22 12:02
26,834	48,503	54,031	69,164	1,207	1,201	20557,206	20836,494	83,509	14,233	6,407	-6,447	42,416	8,408	24,260	2022-03-22 12:03
27,334	48,397	54,007	69,141	1,209	1,202	20787,296	20848,465	40,365	13,740	6,762	-6,559	42,503	8,417	24,166	2022-03-22 12:03

PE22\_cat IV\_run 2\_220322\_EN.DAT

Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
27,834	0,213	0,735	1,059	-0,331	0,024	0,237	0,787	103,298	27,045	20,571	20,423	20,147	20,114	20,201	20,343	63,354
28,334	0,219	0,751	1,058	-0,327	0,029	0,225	0,787	103,351	27,025	20,591	20,432	20,169	20,120	20,214	20,352	63,319
28,833	0,219	0,752	1,068	-0,327	0,037	0,219	0,789	103,333	27,038	20,583	20,420	20,164	20,118	20,203	20,352	63,245
29,333	0,215	0,734	1,058	-0,329	0,010	0,246	0,785	103,279	26,952	20,522	20,369	20,109	20,070	20,152	20,301	63,355
29,833	0,216	0,733	1,064	-0,322	-0,028	0,238	0,788	103,315	26,980	20,577	20,416	20,174	20,121	20,211	20,359	63,332
30,333	0,218	0,730	1,070	-0,326	-0,010	0,240	0,782	103,314	26,890	20,542	20,374	20,135	20,096	20,184	20,328	63,316
30,833	0,235	0,753	1,072	-0,322	0,041	0,218	0,782	103,279	26,929	20,525	20,363	20,128	20,086	20,173	20,318	63,327
31,333	0,221	0,743	1,067	-0,329	0,028	0,233	0,784	103,260	26,871	20,495	20,324	20,091	20,048	20,141	20,284	63,295
31,833	0,222	0,740	1,062	-0,329	0,032	0,235	0,782	103,246	26,860	20,409	20,240	20,008	19,971	20,053	20,207	63,332
32,334	0,218	0,733	1,065	-0,324	0,023	0,240	0,782	103,346	27,032	20,541	20,380	20,151	20,103	20,194	20,342	63,319
32,834	0,218	0,728	1,063	-0,324	-0,021	0,244	0,780	103,173	27,004	20,490	20,321	20,117	20,061	20,160	20,302	63,339
33,334	0,255	0,727	1,064	-0,324	0,061	0,242	0,780	103,180	26,993	20,538	20,370	20,157	20,118	20,207	20,350	63,456
33,834	0,227	0,725	1,062	-0,323	0,028	0,249	0,780	103,180	27,001	20,515	20,351	20,143	20,084	20,181	20,327	63,293
34,334	0,218	0,728	1,066	-0,325	0,013	0,242	0,779	103,262	27,016	20,566	20,391	20,180	20,137	20,232	20,375	63,312
34,834	0,212	0,758	1,057	-0,325	0,030	0,211	0,778	103,241	27,034	20,545	20,372	20,167	20,124	20,209	20,356	63,294
35,333	0,225	0,786	1,065	-0,325	-0,031	0,198	0,778	103,182	27,008	20,484	20,307	20,111	20,066	20,151	20,298	63,208
35,833	0,214	0,767	1,067	-0,322	0,034	0,209	0,778	103,244	27,119	20,552	20,382	20,179	20,131	20,225	20,372	63,278
36,333	0,218	0,769	1,062	-0,324	0,025	0,206	0,775	103,255	27,018	20,479	20,323	20,115	20,075	20,165	20,308	63,231
36,833	0,213	0,761	1,068	-0,329	0,017	0,223	0,774	103,369	26,991	20,535	20,366	20,168	20,115	20,217	20,358	63,280
37,333	0,234	0,732	1,055	-0,320	0,017	0,240	0,774	103,284	26,997	20,507	20,344	20,139	20,099	20,188	20,331	63,295
37,833	0,215	0,714	1,061	-0,328	0,023	0,259	0,773	103,284	27,053	20,550	20,376	20,176	20,143	20,219	20,371	63,241
38,333	0,229	0,730	1,061	-0,321	0,020	0,230	0,773	103,395	27,216	20,560	20,385	20,187	20,142	20,235	20,381	63,221
38,833	0,239	0,778	1,062	-0,324	0,005	0,196	0,772	103,435	27,142	20,507	20,338	20,136	20,095	20,187	20,333	63,277
39,334	0,231	0,777	1,063	-0,326	-0,032	0,211	0,775	103,549	27,260	20,622	20,455	20,256	20,206	20,298	20,450	63,262
39,834	0,216	0,729	1,066	-0,322	0,020	0,246	0,774	103,409	27,080	20,556	20,369	20,185	20,140	20,234	20,383	63,325
40,334	0,218	0,724	1,063	-0,323	0,016	0,250	0,772	103,249	26,944	20,492	20,303	20,128	20,081	20,162	20,321	63,415
40,834	0,216	0,723	1,063	-0,324	0,043	0,242	0,771	103,273	27,033	20,470	20,296	20,114	20,077	20,167	20,317	63,387
41,334	0,214	0,733	1,064	-0,324	0,014	0,239	0,770	103,356	27,101	20,574	20,383	20,222	20,170	20,260	20,410	63,535
41,834	0,217	0,725	1,062	-0,329	0,010	0,251	0,771	103,234	27,014	20,547	20,362	20,190	20,144	20,238	20,383	63,397

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
27,834	48,349	53,966	69,082	1,205	1,201	20772,890	20814,512	37,513	13,552	7,124	-6,618	42,167	8,383	24,166	2022-03-22 12:04
28,334	48,323	53,928	68,957	1,209	1,202	20818,027	20708,063	85,303	13,804	6,738	-6,533	42,161	8,383	24,231	2022-03-22 12:04
28,833	48,377	53,890	69,109	1,211	1,202	20687,220	20975,768	47,466	14,178	6,582	-6,545	42,587	8,425	24,166	2022-03-22 12:05
29,333	48,394	53,959	69,088	1,201	1,202	20636,831	20846,566	31,738	12,811	7,368	-6,583	42,346	8,401	24,019	2022-03-22 12:05
29,833	48,447	53,954	69,101	1,207	1,202	20635,172	20876,294	50,502	13,630	7,134	-6,446	42,398	8,406	23,979	2022-03-22 12:06
30,333	48,535	54,021	69,154	1,203	1,201	20413,628	20841,493	39,778	13,358	7,192	-6,510	42,626	8,429	23,854	2022-03-22 12:06
30,833	48,490	54,063	69,002	1,210	1,201	20624,024	20570,409	60,758	13,966	6,555	-6,438	43,136	8,479	23,979	2022-03-22 12:07
31,333	48,402	53,975	69,168	1,205	1,202	20614,081	20933,879	41,558	13,173	6,996	-6,590	42,572	8,423	23,979	2022-03-22 12:07
31,833	48,323	53,946	69,118	1,210	1,201	20859,096	20880,864	41,429	13,166	7,044	-6,583	42,412	8,408	23,854	2022-03-22 12:08
32,334	48,330	53,913	69,077	1,210	1,202	20832,698	20895,586	69,866	13,118	7,191	-6,476	42,668	8,433	23,666	2022-03-22 12:08
32,834	48,399	53,938	69,319	1,207	1,201	20707,431	21182,812	60,047	13,197	7,327	-6,489	42,670	8,433	23,666	2022-03-22 12:09
33,334	48,408	54,031	69,139	1,204	1,202	20817,362	20809,161	213,444	13,603	7,264	-6,480	42,301	8,397	23,760	2022-03-22 12:09
33,834	48,435	53,969	69,104	1,211	1,201	20663,236	20840,317	55,969	13,006	7,463	-6,462	42,651	8,431	23,666	2022-03-22 12:10
34,334	48,467	54,009	69,083	1,203	1,201	20518,194	20752,156	39,978	13,248	7,252	-6,502	42,662	8,432	23,666	2022-03-22 12:10
34,834	48,411	53,977	68,904	1,211	1,202	20698,407	20564,285	32,653	14,432	6,343	-6,504	42,021	8,369	23,573	2022-03-22 12:11
35,333	48,380	53,944	68,929	1,204	1,202	20508,819	20640,936	58,126	14,716	5,929	-6,492	42,798	8,446	23,573	2022-03-22 12:11
35,833	48,362	53,921	69,015	1,205	1,202	20640,661	20800,746	31,884	14,124	6,266	-6,441	43,160	8,481	23,572	2022-03-22 12:12
36,333	48,422	53,926	68,914	1,209	1,202	20572,085	20652,171	41,194	14,252	6,178	-6,479	42,424	8,409	23,351	2022-03-22 12:12
36,833	48,471	53,990	68,978	1,210	1,202	20585,038	20647,487	34,061	13,534	6,695	-6,577	42,856	8,451	23,351	2022-03-22 12:13
37,333	48,478	54,006	68,870	1,206	1,203	20524,084	20493,923	69,678	13,348	7,207	-6,403	42,168	8,383	23,351	2022-03-22 12:13
37,833	48,464	54,005	68,784	1,204	1,202	20435,243	20358,885	35,651	12,642	7,760	-6,554	42,567	8,423	23,351	2022-03-22 12:14
38,333	48,419	53,983	68,990	1,209	1,202	20561,289	20677,633	118,343	13,754	6,910	-6,412	42,665	8,433	23,351	2022-03-22 12:14
38,833	48,392	53,966	68,951	1,204	1,202	20582,403	20647,409	85,173	14,317	5,892	-6,486	42,712	8,437	23,247	2022-03-22 12:15
39,334	48,372	53,936	69,157	1,209	1,202	20682,639	20971,607	54,878	13,855	6,325	-6,513	42,902	8,456	23,709	2022-03-22 12:15
39,834	48,415	53,963	69,197	1,210	1,202	20731,346	20989,525	38,433	13,054	7,389	-6,441	42,676	8,434	23,257	2022-03-22 12:16
40,334	48,444	54,031	69,152	1,203	1,202	20679,790	20833,972	63,245	13,209	7,506	-6,468	42,583	8,424	23,351	2022-03-22 12:16
40,834	48,487	54,036	69,270	1,209	1,202	20688,056	20996,376	38,413	13,471	7,266	-6,479	42,292	8,396	23,163	2022-03-22 12:17
41,334	48,465	54,102	69,301	1,209	1,202	20919,020	20940,623	37,585	13,430	7,169	-6,475	42,351	8,402	23,164	2022-03-22 12:17
41,834	48,361	54,070	68,970	1,208	1,202	20868,575	20534,704	41,779	12,958	7,518	-6,585	42,334	8,400	23,070	2022-03-22 12:18



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
42,333	0,212	0,705	1,066	-0,326	-0,020	0,268	0,771	103,256	26,999	20,547	20,370	20,196	20,160	20,248	20,400	63,232
42,833	0,212	0,697	1,061	-0,328	-0,019	0,269	0,768	103,056	26,840	20,458	20,265	20,113	20,070	20,159	20,308	63,298
43,333	0,214	0,689	1,061	-0,327	0,020	0,275	0,769	103,138	26,930	20,545	20,354	20,208	20,167	20,253	20,403	63,250
43,833	0,215	0,705	1,058	-0,328	0,005	0,255	0,767	103,008	26,819	20,461	20,275	20,130	20,098	20,178	20,326	63,257
44,333	0,255	0,755	1,060	-0,320	-0,028	0,207	0,766	103,082	27,027	20,548	20,373	20,232	20,185	20,269	20,429	63,186
44,833	0,268	0,806	1,061	-0,324	0,045	0,177	0,765	103,144	27,012	20,534	20,348	20,212	20,174	20,254	20,409	63,157
45,333	0,264	0,823	1,066	-0,323	0,025	0,165	0,764	103,232	26,960	20,531	20,344	20,224	20,172	20,270	20,415	63,068
45,833	0,228	0,767	1,062	-0,325	0,008	0,225	0,764	103,218	26,841	20,526	20,337	20,214	20,171	20,260	20,411	63,241
46,334	0,213	0,688	1,059	-0,329	-0,006	0,280	0,763	103,024	26,914	20,540	20,353	20,226	20,180	20,268	20,420	63,297
46,834	0,214	0,714	1,065	-0,320	-0,007	0,246	0,763	103,002	26,867	20,448	20,259	20,137	20,091	20,184	20,329	63,334
47,334	0,251	0,768	1,067	-0,320	-0,015	0,205	0,763	103,102	26,947	20,502	20,316	20,190	20,152	20,238	20,388	63,256
47,834	0,237	0,787	1,063	-0,321	0,014	0,197	0,761	103,312	27,024	20,585	20,399	20,281	20,238	20,325	20,470	63,349
48,334	0,219	0,779	1,063	-0,325	0,008	0,197	0,761	103,185	26,879	20,453	20,265	20,148	20,110	20,190	20,341	63,312
48,833	0,216	0,774	1,064	-0,322	0,040	0,203	0,761	103,260	26,899	20,529	20,348	20,220	20,178	20,269	20,412	63,304
49,333	0,213	0,769	1,064	-0,325	0,001	0,214	0,762	103,254	26,961	20,499	20,313	20,201	20,159	20,242	20,390	63,456
49,833	0,211	0,755	1,064	-0,325	0,008	0,222	0,758	103,245	26,911	20,462	20,273	20,155	20,120	20,201	20,349	63,387
50,333	0,210	0,734	1,064	-0,328	-0,004	0,240	0,768	103,333	26,889	20,516	20,340	20,225	20,184	20,265	20,414	63,362
50,833	0,212	0,745	1,060	-0,328	0,045	0,228	0,757	103,273	26,839	20,501	20,313	20,200	20,166	20,243	20,391	63,338
51,333	0,211	0,733	1,061	-0,322	0,027	0,234	0,758	103,257	26,780	20,558	20,377	20,274	20,230	20,306	20,456	63,320
51,833	0,236	0,771	1,061	-0,325	-0,005	0,207	0,757	103,202	26,782	20,481	20,281	20,175	20,136	20,218	20,367	63,389
52,333	0,216	0,764	1,063	-0,325	0,008	0,220	0,760	103,269	26,845	20,530	20,332	20,233	20,214	20,275	20,426	63,368
52,834	0,214	0,732	1,060	-0,322	0,012	0,241	0,756	103,112	26,708	20,446	20,254	20,155	20,117	20,202	20,345	63,400
53,334	0,213	0,710	1,066	-0,326	0,023	0,263	0,754	103,071	26,823	20,533	20,351	20,251	20,222	20,308	20,443	63,399
53,834	0,213	0,714	1,064	-0,327	0,004	0,251	0,754	103,064	26,782	20,524	20,331	20,235	20,193	20,284	20,422	63,377
54,334	0,211	0,722	1,070	-0,320	0,025	0,248	0,756	102,984	26,612	20,461	20,292	20,186	20,153	20,231	20,375	63,347
54,834	0,220	0,760	1,061	-0,322	0,010	0,210	0,753	103,102	26,776	20,485	20,310	20,209	20,180	20,257	20,399	63,334
55,334	0,224	0,754	1,056	-0,322	0,011	0,225	0,753	103,081	26,704	20,528	20,351	20,256	20,221	20,304	20,440	63,417
55,833	0,257	0,735	1,056	-0,323	0,038	0,232	0,753	103,006	26,749	20,523	20,340	20,244	20,215	20,291	20,435	63,379
56,333	0,339	0,780	1,059	-0,321	0,015	0,193	0,750	103,049	26,821	20,507	20,323	20,230	20,197	20,275	20,420	63,275

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
42,333	48,332	53,946	68,980	1,208	1,202	20670,262	20707,771	32,134	12,418	8,050	-6,513	42,836	8,449	23,070	2022-03-22 12:18
42,833	48,318	53,955	68,892	1,203	1,202	20705,770	20583,012	35,414	12,460	8,066	-6,566	42,226	8,389	22,976	2022-03-22 12:19
43,333	48,449	53,906	68,854	1,209	1,202	20556,133	20602,784	42,673	12,197	8,251	-6,542	42,076	8,374	23,070	2022-03-22 12:19
43,833	48,549	53,982	68,810	1,210	1,202	20435,367	20421,935	39,103	12,575	7,664	-6,552	42,220	8,389	22,976	2022-03-22 12:20
44,333	48,435	54,010	68,959	1,205	1,201	20416,029	20580,689	149,304	14,279	6,225	-6,390	42,401	8,406	22,851	2022-03-22 12:20
44,833	48,353	53,927	68,688	1,209	1,202	20564,124	20337,849	245,698	15,221	5,298	-6,482	42,214	8,388	22,757	2022-03-22 12:21
45,333	48,326	53,861	68,911	1,206	1,201	20415,602	20726,573	229,855	15,720	4,943	-6,468	42,775	8,443	22,757	2022-03-22 12:21
45,833	48,366	53,890	69,027	1,209	1,202	20650,330	20853,674	48,061	13,572	6,751	-6,498	42,556	8,422	22,757	2022-03-22 12:22
46,334	48,441	53,976	69,098	1,209	1,201	20636,016	20822,454	35,224	11,974	8,396	-6,587	42,219	8,388	22,757	2022-03-22 12:22
46,834	48,525	54,035	68,922	1,200	1,202	20419,293	20507,821	45,874	13,572	7,384	-6,407	42,676	8,434	22,663	2022-03-22 12:23
47,334	48,502	54,022	69,162	1,209	1,201	20492,176	20848,133	142,870	14,689	6,152	-6,409	42,761	8,442	22,570	2022-03-22 12:23
47,834	48,423	54,042	69,118	1,210	1,202	20744,327	20762,567	84,109	14,610	5,920	-6,427	42,661	8,432	22,570	2022-03-22 12:24
48,334	48,395	53,976	69,032	1,208	1,202	20699,149	20745,614	48,582	14,599	5,924	-6,507	42,471	8,413	22,570	2022-03-22 12:24
48,833	48,562	54,025	69,241	1,204	1,201	20395,356	20951,732	41,955	14,266	6,086	-6,443	42,595	8,426	22,570	2022-03-22 12:25
49,333	48,411	54,049	69,277	1,209	1,201	20891,100	20972,777	32,732	13,761	6,420	-6,504	42,455	8,412	22,851	2022-03-22 12:25
49,833	48,329	53,970	69,209	1,205	1,202	20848,640	20992,696	29,798	13,830	6,650	-6,503	42,396	8,406	22,495	2022-03-22 12:26
50,333	48,284	53,949	69,075	1,208	1,202	20915,163	20842,235	27,705	13,275	7,203	-6,556	42,755	8,441	23,257	2022-03-22 12:26
50,833	48,335	53,896	69,151	1,210	1,203	20850,170	21028,787	31,573	13,663	6,845	-6,557	42,508	8,417	22,258	2022-03-22 12:27
51,333	48,432	53,957	69,313	1,206	1,202	20629,187	21149,587	38,255	13,340	7,009	-6,441	42,179	8,384	22,351	2022-03-22 12:27
51,833	48,441	54,009	69,201	1,208	1,202	20734,851	20924,375	49,097	14,559	6,206	-6,491	42,380	8,404	22,258	2022-03-22 12:28
52,333	48,423	54,011	69,266	1,206	1,202	20699,397	21019,430	49,250	13,908	6,585	-6,490	42,738	8,440	22,258	2022-03-22 12:28
52,834	48,423	54,004	69,182	1,207	1,202	20772,601	20904,424	46,396	13,248	7,244	-6,448	42,514	8,418	22,351	2022-03-22 12:29
53,334	48,425	53,987	69,274	1,207	1,202	20751,658	21061,226	29,041	12,420	7,891	-6,512	42,969	8,463	22,092	2022-03-22 12:29
53,834	48,426	54,023	69,298	1,205	1,202	20700,506	21045,704	37,939	13,349	7,521	-6,531	42,532	8,419	22,258	2022-03-22 12:30
54,334	48,417	54,025	69,143	1,206	1,202	20678,432	20834,448	31,435	13,100	7,440	-6,400	42,764	8,442	22,164	2022-03-22 12:30
54,834	48,405	53,966	69,147	1,206	1,202	20683,344	20917,844	66,597	14,343	6,296	-6,442	42,538	8,420	22,070	2022-03-22 12:31
55,334	48,371	53,987	69,225	1,206	1,202	20843,107	20996,741	51,575	13,589	6,742	-6,435	42,322	8,399	22,071	2022-03-22 12:31
55,833	48,367	53,954	69,194	1,207	1,202	20811,236	21005,427	157,106	13,346	6,963	-6,452	42,339	8,400	22,070	2022-03-22 12:32
56,333	48,396	53,971	68,954	1,209	1,202	20655,385	20643,363	242,235	14,692	5,799	-6,414	42,305	8,397	21,976	2022-03-22 12:32

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
56,833	0,281	0,779	1,065	-0,324	0,030	0,207	0,751	103,101	26,728	20,478	20,287	20,198	20,164	20,246	20,386	63,314
57,333	0,241	0,755	1,063	-0,327	0,022	0,219	0,750	103,106	26,977	20,546	20,356	20,267	20,234	20,313	20,457	63,243
57,833	0,274	0,755	1,064	-0,321	-0,024	0,217	0,748	103,141	26,894	20,550	20,364	20,269	20,243	20,318	20,461	63,307
58,333	0,282	0,784	1,063	-0,324	-0,006	0,192	0,749	103,196	26,989	20,520	20,342	20,251	20,223	20,297	20,438	63,249
58,833	0,234	0,771	1,063	-0,322	0,014	0,212	0,748	103,274	27,112	20,582	20,394	20,311	20,284	20,355	20,497	63,424
59,333	0,229	0,769	1,060	-0,322	0,029	0,210	0,747	103,240	27,030	20,533	20,347	20,267	20,231	20,317	20,450	63,426
59,834	0,220	0,758	1,064	-0,324	0,043	0,223	0,747	103,090	26,987	20,462	20,270	20,211	20,177	20,245	20,386	63,509
60,334	0,217	0,761	1,066	-0,327	0,015	0,211	0,746	103,207	27,103	20,511	20,321	20,253	20,228	20,300	20,438	63,498
60,834	0,220	0,751	1,070	-0,328	0,036	0,232	0,745	103,308	27,069	20,555	20,361	20,304	20,280	20,344	20,483	63,357
61,334	0,217	0,702	1,054	-0,328	0,019	0,268	0,745	103,078	26,821	20,456	20,271	20,208	20,178	20,245	20,387	63,347
61,834	0,214	0,714	1,060	-0,324	0,009	0,250	0,744	103,137	26,872	20,493	20,297	20,233	20,213	20,275	20,415	63,393
62,334	0,219	0,731	1,061	-0,320	0,024	0,240	0,744	103,042	26,918	20,527	20,338	20,261	20,239	20,311	20,450	63,461
62,833	0,231	0,756	1,063	-0,323	0,040	0,217	0,744	103,100	26,813	20,470	20,291	20,235	20,196	20,266	20,405	63,517
63,333	0,251	0,744	1,061	-0,323	0,017	0,233	0,742	103,082	26,738	20,462	20,271	20,212	20,188	20,242	20,390	63,367
63,833	0,240	0,721	1,061	-0,320	0,018	0,251	0,742	103,063	26,823	20,512	20,322	20,265	20,240	20,300	20,439	63,303
64,333	0,216	0,719	1,064	-0,323	0,047	0,250	0,743	103,043	26,947	20,506	20,321	20,264	20,241	20,299	20,442	63,330
64,833	0,214	0,739	1,067	-0,326	-0,004	0,234	0,741	103,043	26,937	20,501	20,317	20,265	20,248	20,299	20,442	63,315
65,333	0,221	0,744	1,057	-0,321	0,036	0,225	0,740	103,089	26,892	20,555	20,355	20,311	20,291	20,352	20,490	63,166
65,833	0,223	0,752	1,066	-0,322	0,008	0,224	0,740	103,011	26,898	20,522	20,336	20,289	20,278	20,324	20,467	63,099
66,334	0,216	0,762	1,065	-0,322	-0,007	0,212	0,740	103,020	26,912	20,540	20,364	20,313	20,302	20,354	20,490	63,249
66,834	0,214	0,761	1,065	-0,325	0,020	0,219	0,739	102,996	26,815	20,527	20,331	20,295	20,277	20,330	20,469	63,229
67,334	0,217	0,740	1,059	-0,325	0,031	0,238	0,738	102,925	26,823	20,502	20,320	20,273	20,255	20,314	20,449	63,163
67,834	0,226	0,730	1,064	-0,321	0,031	0,241	0,738	102,906	26,965	20,547	20,365	20,309	20,301	20,350	20,488	63,202
68,334	0,225	0,723	1,061	-0,322	-0,001	0,246	0,737	102,874	26,822	20,505	20,318	20,270	20,252	20,311	20,447	63,242
68,834	0,214	0,722	1,058	-0,320	0,017	0,246	0,736	102,883	26,738	20,503	20,322	20,283	20,264	20,312	20,446	63,306
69,333	0,233	0,755	1,063	-0,322	0,020	0,213	0,736	102,933	26,792	20,482	20,296	20,248	20,231	20,279	20,420	63,192
69,833	0,240	0,783	1,061	-0,323	0,019	0,198	0,734	102,954	26,819	20,509	20,321	20,282	20,268	20,317	20,451	63,288
70,333	0,218	0,753	1,060	-0,322	0,033	0,230	0,735	102,915	26,877	20,521	20,335	20,293	20,282	20,331	20,462	63,280
70,833	0,214	0,721	1,064	-0,322	0,029	0,252	0,734	102,800	26,807	20,501	20,313	20,269	20,257	20,300	20,432	63,264

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
56,833	48,394	53,953	68,989	1,207	1,202	20682,626	20714,251	235,882	14,033	6,204	-6,482	42,777	8,444	21,870	2022-03-22 12:33
57,333	48,381	53,936	69,198	1,207	1,202	20603,912	21031,341	102,979	14,108	6,581	-6,533	42,382	8,405	21,851	2022-03-22 12:33
57,833	48,450	53,995	68,973	1,206	1,202	20586,065	20638,060	187,972	13,968	6,505	-6,415	42,656	8,432	21,758	2022-03-22 12:34
58,333	48,471	53,969	69,134	1,209	1,202	20514,022	20895,126	279,819	15,141	5,775	-6,485	42,683	8,434	21,758	2022-03-22 12:34
58,833	48,484	54,045	69,108	1,207	1,202	20720,065	20754,031	49,205	13,985	6,357	-6,444	42,507	8,417	21,664	2022-03-22 12:35
59,333	48,458	54,041	69,353	1,206	1,202	20730,302	21104,335	63,770	14,310	6,285	-6,447	42,444	8,411	21,664	2022-03-22 12:35
59,834	48,412	54,046	69,320	1,207	1,202	20933,263	21043,885	71,635	13,827	6,681	-6,488	42,823	8,448	21,664	2022-03-22 12:36
60,334	48,339	54,004	69,253	1,208	1,202	21027,637	21006,981	47,755	14,344	6,318	-6,546	42,568	8,423	21,570	2022-03-22 12:36
60,834	48,342	53,969	69,227	1,208	1,202	20827,867	21019,729	58,558	13,418	6,967	-6,564	42,547	8,421	21,570	2022-03-22 12:37
61,334	48,362	53,929	69,155	1,209	1,202	20815,533	20979,333	41,618	12,140	8,034	-6,559	41,890	8,356	21,570	2022-03-22 12:37
61,834	48,423	53,970	69,290	1,208	1,202	20763,816	21100,822	36,336	13,010	7,502	-6,479	42,337	8,400	21,476	2022-03-22 12:38
62,334	48,490	54,047	69,333	1,207	1,202	20752,153	21066,959	71,886	13,326	7,193	-6,406	42,693	8,435	21,476	2022-03-22 12:38
62,833	48,504	54,082	69,202	1,204	1,202	20764,018	20825,092	51,518	13,883	6,512	-6,465	42,233	8,390	21,476	2022-03-22 12:39
63,333	48,422	54,047	69,051	1,207	1,202	20714,335	20666,058	205,743	13,577	6,980	-6,466	42,193	8,386	21,354	2022-03-22 12:39
63,833	48,336	53,957	69,131	1,207	1,202	20744,791	20904,361	61,388	12,935	7,532	-6,398	42,752	8,441	21,354	2022-03-22 12:40
64,333	48,314	53,925	69,195	1,207	1,202	20827,183	21042,637	39,970	13,043	7,510	-6,460	42,662	8,432	21,570	2022-03-22 12:40
64,833	48,402	53,974	68,985	1,207	1,202	20677,661	20687,528	42,198	13,578	7,017	-6,512	42,580	8,424	21,260	2022-03-22 12:41
65,333	48,438	53,971	68,749	1,208	1,202	20430,662	20352,664	61,616	13,927	6,746	-6,417	42,381	8,404	21,166	2022-03-22 12:41
65,833	48,449	53,902	68,941	1,207	1,202	20313,297	20714,150	55,551	13,904	6,724	-6,440	42,656	8,432	21,260	2022-03-22 12:42
66,334	48,408	53,943	68,935	1,209	1,201	20604,555	20646,171	48,154	14,424	6,374	-6,449	42,472	8,414	21,248	2022-03-22 12:42
66,834	48,373	53,916	68,897	1,208	1,202	20619,352	20634,017	37,225	13,878	6,578	-6,506	42,815	8,447	21,166	2022-03-22 12:43
67,334	48,396	53,902	68,868	1,206	1,202	20452,585	20621,637	37,001	13,143	7,147	-6,498	41,869	8,354	21,073	2022-03-22 12:43
67,834	48,393	53,907	68,986	1,208	1,202	20556,969	20768,838	81,194	13,061	7,234	-6,416	42,860	8,452	21,073	2022-03-22 12:44
68,334	48,434	53,915	69,093	1,207	1,202	20532,896	20910,325	56,454	12,939	7,382	-6,441	42,266	8,393	21,073	2022-03-22 12:44
68,834	48,522	53,991	68,958	1,207	1,202	20498,040	20611,781	44,727	13,015	7,368	-6,397	42,099	8,376	20,979	2022-03-22 12:45
69,333	48,512	54,024	69,030	1,207	1,202	20352,289	20680,656	174,637	14,412	6,397	-6,442	42,201	8,387	20,979	2022-03-22 12:45
69,833	48,420	54,018	69,058	1,209	1,202	20647,991	20720,614	166,906	14,679	5,951	-6,463	42,239	8,390	20,854	2022-03-22 12:46
70,333	48,362	53,921	69,033	1,207	1,202	20684,583	20815,489	38,336	13,650	6,893	-6,435	42,174	8,384	20,979	2022-03-22 12:46
70,833	48,338	53,929	68,924	1,207	1,201	20693,003	20642,870	35,521	13,054	7,553	-6,441	42,501	8,416	20,854	2022-03-22 12:47

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
71,333	0,210	0,710	1,062	-0,328	0,025	0,261	0,733	102,754	26,814	20,508	20,325	20,282	20,262	20,310	20,444	63,123
71,833	0,211	0,721	1,065	-0,329	0,006	0,240	0,733	102,783	26,788	20,525	20,345	20,293	20,287	20,326	20,465	63,070
72,333	0,220	0,772	1,057	-0,322	0,017	0,203	0,730	102,754	26,835	20,496	20,307	20,266	20,255	20,300	20,434	63,199
72,833	0,221	0,775	1,066	-0,321	0,033	0,206	0,732	102,830	26,877	20,538	20,354	20,304	20,299	20,347	20,476	63,219
73,334	0,211	0,748	1,062	-0,321	0,005	0,227	0,732	102,795	26,828	20,479	20,295	20,257	20,245	20,293	20,422	63,224
73,834	0,212	0,739	1,061	-0,322	0,023	0,239	0,731	102,858	26,981	20,554	20,365	20,325	20,319	20,360	20,490	63,271
74,334	0,211	0,729	1,063	-0,320	-0,010	0,242	0,730	102,769	26,844	20,505	20,320	20,289	20,271	20,317	20,449	63,248
74,834	0,217	0,737	1,072	-0,323	-0,010	0,234	0,728	102,851	26,852	20,557	20,372	20,336	20,326	20,366	20,499	63,148
75,334	0,216	0,723	1,063	-0,321	0,017	0,250	0,728	102,732	26,934	20,515	20,328	20,298	20,291	20,336	20,463	63,147
75,834	0,217	0,704	1,061	-0,320	0,015	0,264	0,728	102,691	26,925	20,536	20,354	20,321	20,309	20,357	20,484	63,189
76,333	0,213	0,692	1,064	-0,323	0,016	0,275	0,727	102,660	26,797	20,502	20,318	20,284	20,275	20,329	20,450	63,111
76,833	0,217	0,698	1,061	-0,323	0,058	0,267	0,726	102,667	26,760	20,538	20,363	20,318	20,314	20,363	20,483	63,115
77,333	0,240	0,724	1,059	-0,318	0,042	0,240	0,725	102,659	26,817	20,529	20,341	20,321	20,307	20,352	20,476	63,065
77,833	0,220	0,762	1,059	-0,319	0,003	0,213	0,724	102,656	26,922	20,554	20,365	20,333	20,335	20,370	20,496	62,938
78,333	0,215	0,740	1,058	-0,322	0,028	0,242	0,725	102,546	26,858	20,530	20,347	20,308	20,303	20,345	20,475	63,095
78,833	0,237	0,724	1,061	-0,322	-0,014	0,246	0,724	102,579	26,860	20,579	20,391	20,358	20,367	20,398	20,523	62,971
79,333	0,230	0,731	1,060	-0,319	0,016	0,235	0,723	102,536	26,749	20,561	20,373	20,344	20,345	20,391	20,507	63,097
79,833	0,223	0,759	1,057	-0,321	0,042	0,215	0,723	102,311	26,669	20,574	20,385	20,368	20,359	20,397	20,519	62,971
80,334	0,304	0,776	1,062	-0,317	0,042	0,195	0,723	102,036	26,617	20,550	20,360	20,327	20,317	20,369	20,490	62,945
80,834	0,430	0,793	1,057	-0,317	0,018	0,189	0,722	101,945	26,626	20,544	20,365	20,335	20,329	20,369	20,493	62,920
81,334	0,285	0,762	1,054	-0,320	0,039	0,216	0,721	101,892	26,624	20,568	20,379	20,356	20,349	20,391	20,509	63,000
81,834	0,246	0,754	1,059	-0,319	0,039	0,231	0,721	101,762	26,516	20,523	20,339	20,305	20,311	20,349	20,465	62,936
82,334	0,218	0,702	1,058	-0,319	0,025	0,266	0,720	101,598	26,452	20,555	20,373	20,347	20,348	20,381	20,500	63,007
82,833	0,228	0,724	1,060	-0,315	0,033	0,239	0,719	101,457	26,396	20,486	20,307	20,273	20,278	20,316	20,433	63,004
83,333	0,245	0,760	1,057	-0,316	0,037	0,217	0,723	101,413	26,580	20,548	20,359	20,335	20,341	20,375	20,493	62,947
83,833	0,320	0,761	1,066	-0,319	0,031	0,214	0,718	101,566	26,733	20,450	20,269	20,229	20,221	20,275	20,389	62,889
84,333	0,315	0,761	1,051	-0,325	-0,022	0,217	0,717	101,853	26,901	20,558	20,380	20,341	20,352	20,398	20,508	62,910
84,833	0,277	0,752	1,062	-0,321	-0,002	0,225	0,717	101,955	26,839	20,531	20,341	20,320	20,309	20,356	20,474	62,909
85,333	0,222	0,712	1,061	-0,321	0,021	0,263	0,716	101,965	26,814	20,525	20,337	20,315	20,308	20,365	20,469	62,878

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
71,333	48,339	53,904	68,779	1,208	1,202	20513,047	20492,798	28,531	12,766	7,842	-6,568	42,700	8,436	20,760	2022-03-22 12:47
71,833	48,387	53,868	68,772	1,207	1,202	20359,252	20542,074	38,355	13,758	7,214	-6,572	42,707	8,437	20,854	2022-03-22 12:48
72,333	48,432	53,916	68,870	1,207	1,202	20474,334	20597,603	59,080	14,612	6,079	-6,449	41,941	8,361	20,573	2022-03-22 12:48
72,833	48,475	53,975	68,876	1,208	1,202	20449,909	20535,741	40,121	14,215	6,176	-6,414	42,514	8,418	20,651	2022-03-22 12:49
73,334	48,523	54,002	68,965	1,207	1,202	20381,448	20622,103	29,645	13,513	6,816	-6,426	42,395	8,406	20,854	2022-03-22 12:49
73,834	48,422	54,001	68,967	1,207	1,202	20586,331	20615,026	31,540	13,229	7,177	-6,432	42,723	8,438	20,760	2022-03-22 12:50
74,334	48,361	53,939	69,010	1,208	1,202	20650,828	20761,043	30,956	13,178	7,275	-6,407	42,792	8,445	20,573	2022-03-22 12:50
74,834	48,349	53,919	68,931	1,208	1,202	20526,779	20681,818	51,507	13,449	7,026	-6,467	43,005	8,466	20,478	2022-03-22 12:51
75,334	48,393	53,916	68,763	1,206	1,202	20443,328	20451,877	47,491	12,855	7,514	-6,428	42,257	8,392	20,354	2022-03-22 12:51
75,834	48,499	53,954	68,699	1,208	1,202	20382,841	20312,151	58,793	12,524	7,927	-6,395	42,430	8,409	20,540	2022-03-22 12:52
76,333	48,504	53,972	68,734	1,208	1,201	20270,186	20330,530	33,374	12,372	8,242	-6,465	42,736	8,440	20,354	2022-03-22 12:52
76,833	48,385	53,933	68,856	1,208	1,201	20429,837	20549,331	67,642	12,666	8,003	-6,461	42,559	8,422	20,354	2022-03-22 12:53
77,333	48,292	53,874	68,589	1,206	1,203	20472,538	20284,610	102,356	13,495	7,213	-6,364	42,452	8,411	20,261	2022-03-22 12:53
77,833	48,372	53,805	68,741	1,207	1,201	20196,275	20566,157	42,729	14,378	6,384	-6,388	42,354	8,402	20,261	2022-03-22 12:54
78,333	48,411	53,862	68,689	1,207	1,202	20364,148	20426,282	36,411	12,988	7,269	-6,440	42,022	8,369	20,261	2022-03-22 12:54
78,833	48,565	53,903	68,711	1,208	1,201	19987,987	20385,780	58,914	13,198	7,378	-6,438	42,401	8,406	20,354	2022-03-22 12:55
79,333	48,539	54,041	68,591	1,203	1,201	20116,616	20034,563	55,388	13,578	7,041	-6,375	42,162	8,383	20,167	2022-03-22 12:55
79,833	48,318	53,901	68,511	1,209	1,202	20345,631	20121,486	39,520	13,788	6,443	-6,424	42,400	8,406	20,167	2022-03-22 12:56
80,334	48,299	53,786	68,649	1,209	1,201	20346,530	20467,412	219,424	14,219	5,850	-6,332	42,479	8,414	20,167	2022-03-22 12:56
80,834	48,317	53,809	68,617	1,209	1,202	20280,820	20399,068	247,391	14,472	5,675	-6,342	42,240	8,390	20,167	2022-03-22 12:57
81,334	48,414	53,835	68,536	1,207	1,202	20219,018	20247,349	266,487	13,781	6,474	-6,392	41,908	8,357	20,073	2022-03-22 12:57
81,834	48,413	53,865	68,581	1,207	1,202	20132,073	20273,466	105,730	13,385	6,932	-6,388	42,648	8,431	19,979	2022-03-22 12:58
82,334	48,423	53,857	68,682	1,207	1,201	20221,027	20412,914	51,511	12,461	7,993	-6,389	42,394	8,406	19,979	2022-03-22 12:58
82,833	48,404	53,881	68,670	1,207	1,201	20248,437	20358,786	86,971	13,700	7,171	-6,295	42,195	8,386	19,854	2022-03-22 12:59
83,333	48,412	53,883	68,503	1,207	1,202	20149,503	20138,164	122,713	14,154	6,508	-6,329	42,221	8,389	20,573	2022-03-22 12:59
83,833	48,421	53,820	68,518	1,207	1,202	20064,675	20244,199	636,175	14,292	6,413	-6,372	42,653	8,431	19,854	2022-03-22 13:00
84,333	48,404	53,834	68,653	1,208	1,201	20132,553	20400,533	226,680	14,120	6,505	-6,491	41,723	8,339	19,761	2022-03-22 13:00
84,833	48,374	53,804	68,555	1,207	1,202	20154,208	20315,885	169,637	13,704	6,761	-6,420	42,435	8,410	19,854	2022-03-22 13:01
85,333	48,410	53,825	68,582	1,205	1,201	20024,027	20315,206	46,808	12,305	7,878	-6,411	42,512	8,417	19,761	2022-03-22 13:01

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
85,833	0,218	0,687	1,060	-0,322	0,023	0,279	0,767	102,022	26,849	20,529	20,343	20,313	20,318	20,365	20,476	62,958
86,333	0,298	0,711	1,051	-0,320	0,009	0,251	0,788	102,098	26,887	20,520	20,330	20,315	20,319	20,363	20,469	63,011
86,834	0,265	0,742	1,064	-0,318	-0,013	0,230	0,838	102,013	26,761	20,488	20,306	20,282	20,283	20,335	20,442	63,013
87,334	0,217	0,740	1,059	-0,318	-0,007	0,226	0,838	102,250	26,912	20,517	20,327	20,312	20,308	20,362	20,469	63,020
87,834	0,226	0,765	1,055	-0,321	0,000	0,212	0,837	102,376	26,980	20,521	20,328	20,314	20,312	20,365	20,470	62,960
88,334	0,302	0,768	1,065	-0,319	0,011	0,210	0,836	102,596	27,071	20,555	20,364	20,339	20,353	20,397	20,503	62,959
88,834	0,319	0,771	1,058	-0,321	0,016	0,204	0,836	102,635	27,052	20,523	20,339	20,312	20,323	20,369	20,477	62,960
89,334	0,250	0,757	1,062	-0,322	0,002	0,227	0,836	102,585	27,033	20,535	20,348	20,329	20,336	20,383	20,489	63,029
89,833	0,239	0,712	1,061	-0,324	0,032	0,262	0,834	102,486	27,093	20,556	20,367	20,351	20,357	20,395	20,510	63,126
90,333	0,220	0,685	1,054	-0,319	0,024	0,279	0,834	102,450	26,942	20,546	20,355	20,338	20,346	20,398	20,502	63,278
90,833	0,237	0,719	1,062	-0,321	0,011	0,240	0,833	102,500	26,948	20,557	20,375	20,351	20,376	20,418	20,520	63,237
91,333	0,274	0,767	1,052	-0,318	-0,008	0,213	0,833	102,557	26,943	20,525	20,334	20,314	20,329	20,380	20,480	63,042
91,833	0,249	0,759	1,067	-0,323	0,039	0,216	0,832	102,448	26,853	20,497	20,304	20,293	20,296	20,353	20,456	63,101
92,333	0,219	0,753	1,063	-0,321	-0,008	0,222	0,832	102,537	26,974	20,565	20,380	20,372	20,375	20,438	20,531	63,136
92,833	0,215	0,740	1,065	-0,324	0,029	0,234	0,832	102,497	26,888	20,546	20,348	20,343	20,354	20,414	20,505	63,205
93,333	0,224	0,724	1,064	-0,320	0,009	0,248	0,830	102,484	26,756	20,538	20,356	20,350	20,358	20,408	20,506	63,140
93,834	0,241	0,741	1,059	-0,319	0,026	0,225	0,830	102,593	26,906	20,536	20,354	20,342	20,350	20,399	20,499	63,062
94,334	0,216	0,753	1,054	-0,319	-0,007	0,225	0,829	102,623	26,959	20,560	20,356	20,355	20,358	20,412	20,509	63,111
94,834	0,215	0,757	1,059	-0,317	-0,006	0,211	0,828	102,765	26,953	20,582	20,381	20,373	20,383	20,439	20,539	63,188
95,334	0,240	0,784	1,053	-0,316	0,025	0,199	0,828	102,776	26,903	20,520	20,331	20,316	20,330	20,384	20,483	63,237
95,834	0,312	0,777	1,057	-0,319	0,051	0,208	0,827	102,852	26,961	20,587	20,395	20,388	20,402	20,443	20,550	63,203
96,334	0,222	0,738	1,057	-0,319	0,019	0,239	0,827	102,789	26,848	20,592	20,405	20,389	20,400	20,458	20,554	63,125
96,833	0,213	0,726	1,061	-0,322	0,026	0,240	0,827	102,771	26,895	20,589	20,404	20,394	20,400	20,455	20,550	63,268
97,333	0,220	0,740	1,059	-0,317	0,023	0,234	0,826	102,666	26,831	20,547	20,366	20,355	20,354	20,416	20,509	63,303
97,833	0,237	0,726	1,052	-0,323	-0,007	0,243	0,825	102,663	26,930	20,591	20,405	20,392	20,408	20,450	20,550	63,338
98,333	0,244	0,755	1,063	-0,323	-0,013	0,219	0,824	102,728	26,903	20,567	20,377	20,368	20,376	20,438	20,529	63,227
98,833	0,218	0,744	1,060	-0,321	-0,009	0,230	0,824	102,700	26,851	20,551	20,367	20,359	20,364	20,426	20,513	63,263
99,333	0,217	0,762	1,061	-0,325	0,008	0,210	0,823	102,704	26,854	20,586	20,396	20,387	20,401	20,455	20,547	63,164
99,833	0,217	0,755	1,065	-0,324	-0,008	0,224	0,822	102,707	26,866	20,582	20,390	20,388	20,401	20,459	20,542	63,335

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
85,833	48,471	53,846	68,655	1,207	1,201	20090,927	20380,344	41,878	11,918	8,384	-6,444	42,421	8,408	22,851	2022-03-22 13:02
86,333	48,484	53,908	68,644	1,205	1,201	20109,454	20287,480	431,526	13,124	7,517	-6,404	42,033	8,370	26,841	2022-03-22 13:02
86,834	48,510	53,911	68,722	1,206	1,201	20095,594	20394,182	66,046	13,779	6,911	-6,355	42,332	8,400	27,350	2022-03-22 13:03
87,334	48,473	53,941	68,562	1,207	1,201	20166,206	20129,387	45,576	13,861	6,787	-6,368	42,351	8,401	27,257	2022-03-22 13:03
87,834	48,378	53,879	68,620	1,208	1,201	20230,815	20292,646	95,540	14,108	6,353	-6,411	41,991	8,366	27,350	2022-03-22 13:04
88,334	48,323	53,821	68,649	1,207	1,201	20298,535	20415,410	474,865	14,129	6,310	-6,375	42,598	8,426	27,257	2022-03-22 13:04
88,834	48,311	53,783	68,712	1,203	1,201	20246,736	20552,291	467,552	14,644	6,134	-6,418	42,350	8,401	27,256	2022-03-22 13:05
89,334	48,458	53,848	68,740	1,207	1,200	20204,550	20490,616	205,047	13,596	6,797	-6,435	42,615	8,428	27,256	2022-03-22 13:05
89,833	48,559	53,956	68,940	1,206	1,201	20181,378	20628,475	66,814	12,507	7,864	-6,486	42,339	8,400	26,975	2022-03-22 13:06
90,333	48,422	54,009	69,033	1,210	1,200	20643,394	20667,476	67,111	12,387	8,367	-6,386	42,276	8,394	27,091	2022-03-22 13:06
90,833	48,401	53,963	68,765	1,205	1,200	20529,726	20363,577	183,483	13,493	7,200	-6,421	42,382	8,405	27,069	2022-03-22 13:07
91,333	48,422	53,856	68,767	1,209	1,201	20303,578	20527,765	132,054	14,101	6,388	-6,363	42,359	8,402	27,069	2022-03-22 13:07
91,833	48,427	53,905	68,896	1,207	1,201	20336,828	20631,884	88,187	13,851	6,477	-6,462	42,747	8,441	26,975	2022-03-22 13:08
92,333	48,375	53,914	68,871	1,209	1,201	20501,281	20589,294	41,617	13,632	6,674	-6,423	42,610	8,427	26,975	2022-03-22 13:08
92,833	48,379	53,908	68,913	1,205	1,200	20520,397	20635,500	42,587	13,341	7,032	-6,484	42,741	8,440	26,975	2022-03-22 13:09
93,333	48,373	53,915	68,618	1,207	1,200	20476,557	20231,552	110,859	12,890	7,426	-6,395	42,454	8,412	26,850	2022-03-22 13:09
93,834	48,439	53,894	68,776	1,204	1,200	20223,028	20473,430	58,989	13,872	6,756	-6,371	42,469	8,413	26,850	2022-03-22 13:10
94,334	48,463	53,916	68,923	1,208	1,200	20316,541	20633,944	45,639	13,676	6,746	-6,389	42,091	8,376	26,756	2022-03-22 13:10
94,834	48,468	53,934	68,983	1,210	1,200	20463,566	20695,781	42,699	14,522	6,327	-6,345	42,176	8,384	26,756	2022-03-22 13:11
95,334	48,478	53,974	68,868	1,207	1,199	20464,634	20470,991	120,532	14,712	5,972	-6,325	42,104	8,377	26,756	2022-03-22 13:11
95,834	48,439	53,960	68,965	1,203	1,200	20397,189	20641,738	180,330	14,342	6,234	-6,384	42,264	8,393	26,663	2022-03-22 13:12
96,334	48,345	53,925	68,975	1,211	1,199	20554,542	20680,620	37,689	13,286	7,175	-6,381	42,396	8,406	26,662	2022-03-22 13:12
96,833	48,298	53,893	69,162	1,202	1,200	20676,401	21002,012	32,219	13,366	7,186	-6,448	42,432	8,409	26,662	2022-03-22 13:13
97,333	48,384	53,891	69,156	1,210	1,199	20731,691	20976,892	65,719	13,730	7,032	-6,343	42,310	8,397	26,662	2022-03-22 13:13
97,833	48,530	53,998	68,885	1,205	1,199	20495,062	20451,942	110,271	13,206	7,301	-6,453	42,401	8,406	26,569	2022-03-22 13:14
98,333	48,518	54,027	68,945	1,206	1,199	20370,645	20502,840	136,411	14,071	6,579	-6,469	42,562	8,422	26,475	2022-03-22 13:14
98,833	48,427	53,991	69,086	1,209	1,199	20601,108	20737,203	31,880	13,324	6,897	-6,413	42,384	8,405	26,475	2022-03-22 13:15
99,333	48,345	53,917	68,995	1,209	1,199	20576,072	20714,141	45,057	14,157	6,306	-6,495	42,263	8,393	26,475	2022-03-22 13:15
99,833	48,325	53,864	69,352	1,205	1,199	20766,742	21294,153	31,473	13,355	6,713	-6,477	42,524	8,419	26,350	2022-03-22 13:16



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
100,334	0,221	0,727	1,065	-0,317	0,044	0,245	0,822	102,638	26,819	20,585	20,384	20,376	20,385	20,454	20,535	63,475
100,834	0,217	0,725	1,058	-0,326	0,010	0,247	0,822	102,674	26,884	20,617	20,423	20,418	20,421	20,488	20,571	63,447
101,334	0,216	0,731	1,059	-0,322	0,037	0,240	0,820	102,753	26,873	20,607	20,429	20,412	20,428	20,484	20,570	63,267
101,834	0,214	0,730	1,059	-0,323	-0,020	0,242	0,820	102,727	26,963	20,560	20,385	20,366	20,378	20,446	20,527	63,204
102,334	0,219	0,729	1,060	-0,321	0,008	0,240	0,819	102,783	26,962	20,607	20,428	20,407	20,426	20,492	20,569	63,289
102,834	0,219	0,726	1,067	-0,321	0,024	0,251	0,819	102,721	26,814	20,579	20,394	20,376	20,400	20,457	20,543	63,209
103,333	0,233	0,740	1,073	-0,322	0,031	0,227	0,818	102,777	26,781	20,590	20,409	20,399	20,410	20,476	20,552	63,219
103,833	0,320	0,762	1,065	-0,318	-0,015	0,208	0,818	102,850	26,799	20,626	20,448	20,438	20,458	20,520	20,600	63,258
104,333	0,278	0,782	1,064	-0,325	0,021	0,200	0,817	102,854	26,651	20,590	20,406	20,398	20,413	20,474	20,558	63,198
104,833	0,231	0,760	1,069	-0,322	-0,001	0,223	0,816	102,840	26,522	20,636	20,443	20,450	20,461	20,522	20,606	63,228
105,333	0,220	0,738	1,066	-0,323	0,000	0,232	0,816	102,815	26,481	20,585	20,397	20,401	20,423	20,487	20,564	63,296
105,833	0,231	0,766	1,060	-0,321	0,009	0,208	0,815	102,838	26,846	20,581	20,389	20,383	20,412	20,473	20,552	63,199
106,333	0,236	0,767	1,064	-0,321	-0,030	0,207	0,815	102,871	26,818	20,629	20,444	20,441	20,468	20,527	20,606	63,282
106,833	0,231	0,775	1,066	-0,318	0,030	0,202	0,814	102,876	26,261	20,580	20,395	20,393	20,406	20,474	20,550	63,302
107,334	0,303	0,800	1,061	-0,315	-0,010	0,178	0,813	102,927	26,154	20,585	20,393	20,397	20,416	20,471	20,551	63,240
107,834	0,274	0,791	1,069	-0,320	0,042	0,201	0,813	102,917	26,236	20,599	20,408	20,402	20,421	20,481	20,563	63,345
108,334	0,268	0,747	1,063	-0,322	0,027	0,232	0,809	102,931	26,254	20,601	20,400	20,395	20,426	20,483	20,559	63,440
108,834	0,277	0,741	1,065	-0,329	0,006	0,229	0,811	102,925	26,212	20,565	20,379	20,383	20,414	20,470	20,538	63,465
109,334	0,253	0,746	1,059	-0,324	0,022	0,234	0,811	103,009	26,290	20,596	20,418	20,411	20,433	20,498	20,569	63,563
109,834	0,222	0,709	1,063	-0,322	0,027	0,259	0,811	102,912	26,137	20,643	20,463	20,452	20,478	20,541	20,610	63,566
110,333	0,223	0,697	1,062	-0,323	-0,014	0,277	0,808	102,821	26,138	20,631	20,450	20,440	20,468	20,532	20,604	63,380
110,833	0,217	0,676	1,061	-0,326	0,014	0,282	0,809	102,749	26,171	20,645	20,465	20,459	20,480	20,542	20,613	63,480
111,333	0,236	0,720	1,058	-0,323	0,033	0,237	0,808	102,784	26,231	20,634	20,462	20,438	20,475	20,537	20,609	63,435
111,833	0,238	0,749	1,056	-0,323	0,033	0,223	0,808	102,765	26,119	20,614	20,426	20,416	20,443	20,514	20,578	63,402
112,333	0,226	0,754	1,067	-0,327	0,005	0,221	0,808	102,747	26,232	20,592	20,401	20,405	20,425	20,486	20,560	63,278
112,833	0,220	0,747	1,068	-0,321	0,039	0,234	0,807	102,780	26,137	20,604	20,410	20,406	20,439	20,506	20,572	63,224
113,333	0,230	0,719	1,064	-0,323	0,011	0,250	0,807	102,762	26,112	20,641	20,448	20,446	20,478	20,537	20,609	63,206
113,833	0,229	0,731	1,062	-0,322	0,019	0,239	0,805	102,715	26,103	20,596	20,410	20,413	20,439	20,503	20,570	63,143
114,334	0,238	0,731	1,068	-0,319	0,040	0,238	0,805	102,763	26,180	20,648	20,460	20,460	20,485	20,559	20,621	63,267

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
100,334	48,343	53,967	69,315	1,208	1,199	20992,475	21096,197	103,283	12,932	7,343	-6,345	42,637	8,430	26,350	2022-03-22 13:16
100,834	48,541	54,004	69,144	1,204	1,199	20611,806	20810,350	42,171	13,127	7,422	-6,529	42,242	8,391	26,350	2022-03-22 13:17
101,334	48,486	54,070	68,869	1,208	1,199	20500,844	20332,717	41,108	13,541	7,194	-6,446	42,262	8,393	26,257	2022-03-22 13:17
101,834	48,413	53,951	68,991	1,209	1,199	20533,036	20666,742	40,516	13,320	7,265	-6,450	42,415	8,408	26,257	2022-03-22 13:18
102,334	48,329	53,914	69,001	1,209	1,199	20773,155	20731,990	55,278	13,605	7,200	-6,422	42,277	8,394	26,163	2022-03-22 13:18
102,834	48,305	53,868	68,929	1,205	1,198	20620,884	20683,088	50,313	12,907	7,539	-6,420	42,769	8,443	26,163	2022-03-22 13:19
103,333	48,407	53,906	69,102	1,208	1,198	20550,649	20872,348	135,162	14,051	6,796	-6,444	42,704	8,436	26,069	2022-03-22 13:19
103,833	48,440	53,979	69,048	1,204	1,198	20498,319	20697,305	460,424	14,401	6,241	-6,357	42,869	8,453	26,069	2022-03-22 13:20
104,333	48,463	53,948	68,872	1,208	1,198	20446,132	20497,860	81,226	14,434	5,996	-6,503	42,634	8,430	26,069	2022-03-22 13:20
104,833	48,485	53,938	69,070	1,206	1,198	20424,108	20788,021	55,883	13,556	6,679	-6,435	42,780	8,444	25,975	2022-03-22 13:21
105,333	48,421	53,995	69,126	1,210	1,197	20677,277	20767,390	61,099	13,563	6,969	-6,462	42,919	8,458	25,975	2022-03-22 13:21
105,833	48,417	53,941	68,944	1,210	1,198	20543,769	20607,836	107,440	14,364	6,255	-6,426	42,608	8,427	25,976	2022-03-22 13:22
106,333	48,442	53,941	69,185	1,203	1,198	20513,111	20933,801	101,579	14,228	6,196	-6,421	42,673	8,433	25,976	2022-03-22 13:22
106,833	48,409	53,988	68,954	1,208	1,198	20669,102	20553,917	85,056	14,148	6,068	-6,358	42,552	8,421	25,850	2022-03-22 13:23
107,334	48,442	53,914	69,264	1,210	1,199	20561,673	21091,484	286,070	15,375	5,336	-6,301	42,834	8,449	25,757	2022-03-22 13:23
107,834	48,426	54,000	69,257	1,208	1,198	20700,786	20949,842	189,593	14,386	6,041	-6,397	42,510	8,417	25,757	2022-03-22 13:24
108,334	48,342	53,954	69,315	1,205	1,197	20896,378	21082,067	167,674	13,598	6,947	-6,450	42,757	8,442	25,757	2022-03-22 13:24
108,834	48,405	53,988	69,514	1,203	1,198	20802,723	21320,101	213,086	13,922	6,874	-6,577	42,517	8,418	25,715	2022-03-22 13:25
109,334	48,619	54,100	69,439	1,209	1,197	20755,121	21050,779	89,090	13,397	7,030	-6,485	42,294	8,396	25,663	2022-03-22 13:25
109,834	48,502	54,163	69,215	1,206	1,198	20865,098	20664,137	56,918	12,756	7,759	-6,449	42,497	8,416	25,569	2022-03-22 13:26
110,333	48,410	54,031	69,336	1,210	1,197	20814,146	21001,273	56,614	11,936	8,303	-6,461	42,465	8,413	25,322	2022-03-22 13:26
110,833	48,289	53,994	69,463	1,209	1,197	21092,943	21232,041	45,557	12,096	8,474	-6,524	42,569	8,423	25,569	2022-03-22 13:27
111,333	48,247	53,937	69,133	1,205	1,197	21028,550	20848,298	138,814	13,679	7,120	-6,456	42,502	8,416	25,475	2022-03-22 13:27
111,833	48,387	53,908	69,197	1,205	1,197	20787,409	20984,594	65,598	13,525	6,697	-6,462	42,352	8,402	25,475	2022-03-22 13:28
112,333	48,418	53,967	68,908	1,208	1,198	20618,699	20507,570	54,283	13,643	6,622	-6,530	42,728	8,439	25,476	2022-03-22 13:28
112,833	48,411	53,937	69,013	1,205	1,198	20498,720	20701,138	51,759	13,284	7,019	-6,410	42,674	8,433	25,353	2022-03-22 13:29
113,333	48,366	53,914	68,738	1,208	1,197	20592,793	20337,080	84,358	13,144	7,500	-6,462	42,564	8,423	25,475	2022-03-22 13:29
113,833	48,424	53,869	69,005	1,205	1,197	20368,261	20771,718	117,990	13,580	7,177	-6,443	42,218	8,388	25,262	2022-03-22 13:30
114,334	48,407	53,961	69,032	1,207	1,197	20595,270	20681,126	119,436	13,469	7,154	-6,373	42,639	8,430	25,259	2022-03-22 13:30

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
114,834	0,239	0,722	1,067	-0,321	-0,006	0,254	0,803	102,664	26,057	20,636	20,451	20,450	20,485	20,538	20,607	63,180
115,334	0,255	0,727	1,050	-0,324	0,017	0,243	0,804	102,625	26,193	20,616	20,437	20,440	20,465	20,537	20,598	63,201
115,834	0,297	0,753	1,063	-0,321	-0,008	0,214	0,802	102,692	26,340	20,620	20,428	20,426	20,454	20,522	20,589	63,237
116,334	0,266	0,774	1,067	-0,322	0,014	0,202	0,802	102,768	26,496	20,644	20,451	20,460	20,487	20,546	20,618	63,243
116,833	0,227	0,774	1,065	-0,324	0,009	0,200	0,802	102,734	26,513	20,600	20,413	20,419	20,445	20,507	20,575	63,166
117,333	0,243	0,788	1,061	-0,322	0,027	0,197	0,801	102,719	26,372	20,591	20,400	20,407	20,436	20,505	20,564	63,206
117,833	0,242	0,750	1,059	-0,326	0,011	0,231	0,800	102,768	26,217	20,653	20,458	20,467	20,499	20,562	20,630	63,326
118,333	0,229	0,710	1,061	-0,324	-0,004	0,263	0,800	102,691	26,109	20,636	20,451	20,462	20,491	20,562	20,620	63,261
118,833	0,245	0,709	1,062	-0,317	0,000	0,249	0,800	102,726	26,142	20,648	20,459	20,481	20,502	20,573	20,628	63,264
119,333	0,281	0,750	1,068	-0,317	0,018	0,222	0,798	102,793	26,282	20,654	20,473	20,473	20,510	20,578	20,637	63,311
119,833	0,358	0,773	1,063	-0,323	-0,006	0,201	0,798	102,828	26,628	20,646	20,465	20,472	20,496	20,576	20,626	63,238
120,333	0,291	0,772	1,058	-0,322	0,031	0,214	0,796	102,910	26,525	20,641	20,459	20,466	20,494	20,571	20,621	63,185
120,834	0,255	0,737	1,058	-0,323	0,044	0,236	0,796	102,894	26,399	20,632	20,443	20,453	20,477	20,560	20,608	63,307
121,334	0,265	0,739	1,062	-0,329	-0,025	0,233	0,796	102,929	26,583	20,615	20,421	20,427	20,464	20,545	20,590	63,342
121,834	0,329	0,746	1,061	-0,321	0,010	0,223	0,795	102,961	26,690	20,601	20,410	20,418	20,452	20,530	20,574	63,284
122,334	0,376	0,766	1,057	-0,323	0,037	0,213	0,795	102,984	26,717	20,650	20,454	20,471	20,499	20,579	20,627	63,225
122,834	0,277	0,730	1,059	-0,322	0,038	0,247	0,794	102,965	26,633	20,629	20,435	20,454	20,484	20,558	20,608	63,281
123,334	0,234	0,710	1,063	-0,319	0,006	0,254	0,793	102,896	26,231	20,595	20,406	20,426	20,450	20,523	20,573	63,299
123,833	0,283	0,722	1,062	-0,323	-0,021	0,248	0,793	102,957	26,142	20,606	20,425	20,439	20,463	20,541	20,588	63,217
124,333	0,266	0,711	1,065	-0,323	0,031	0,257	0,792	102,903	26,025	20,634	20,454	20,469	20,495	20,571	20,620	63,333
124,833	0,294	0,713	1,059	-0,324	0,004	0,255	0,792	102,924	26,088	20,674	20,482	20,479	20,510	20,590	20,638	63,308
125,333	0,293	0,732	1,060	-0,320	0,024	0,240	0,792	102,903	26,009	20,651	20,458	20,450	20,487	20,562	20,606	63,316
125,833	0,301	0,740	1,053	-0,321	0,023	0,224	0,791	102,852	26,156	20,612	20,419	20,407	20,451	20,523	20,572	63,328
126,333	0,327	0,771	1,053	-0,320	-0,011	0,206	0,790	102,892	26,198	21,111	20,454	20,401	20,423	20,498	20,561	63,212
126,833	0,236	0,769	1,055	-0,316	-0,046	0,211	0,790	102,904	26,372	21,481	21,133	20,479	20,478	20,575	20,634	63,291
127,333	0,262	0,743	1,063	-0,323	0,017	0,236	0,790	102,813	26,362	21,609	21,034	20,446	20,448	20,559	20,606	63,293
127,834	0,297	0,714	1,060	-0,322	0,030	0,254	0,789	102,756	26,222	21,719	21,106	20,495	20,485	20,595	20,643	63,153
128,334	0,229	0,717	1,056	-0,321	0,012	0,254	0,788	102,721	26,244	21,757	21,133	20,458	20,464	20,576	20,623	63,261
128,834	0,212	0,674	1,059	-0,322	0,038	0,293	0,788	102,627	26,251	21,355	21,170	20,454	20,462	20,568	20,617	63,147

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
114,834	48,401	53,915	68,862	1,207	1,196	20493,376	20493,327	88,496	12,870	7,625	-6,421	42,694	8,435	25,259	2022-03-22 13:31
115,334	48,436	53,896	68,983	1,208	1,196	20481,759	20685,258	117,118	13,286	7,297	-6,475	41,658	8,332	25,259	2022-03-22 13:31
115,834	48,420	53,927	68,979	1,208	1,196	20565,231	20633,476	192,656	14,139	6,409	-6,415	42,548	8,421	25,072	2022-03-22 13:32
116,334	48,419	53,932	68,928	1,207	1,196	20554,246	20564,752	130,634	14,176	6,061	-6,434	42,876	8,453	25,072	2022-03-22 13:32
116,833	48,423	53,922	68,787	1,205	1,197	20410,680	20397,107	75,322	14,218	6,000	-6,478	42,794	8,445	25,165	2022-03-22 13:33
117,333	48,418	53,906	69,142	1,205	1,196	20467,202	20894,753	152,227	14,520	5,903	-6,434	42,790	8,445	24,978	2022-03-22 13:33
117,833	48,393	53,952	69,131	1,208	1,196	20721,411	20812,329	140,553	13,361	6,919	-6,515	42,444	8,411	24,978	2022-03-22 13:34
118,333	48,505	53,927	69,013	1,206	1,196	20440,794	20679,095	108,552	12,648	7,883	-6,483	42,609	8,427	24,978	2022-03-22 13:34
118,833	48,536	54,010	69,064	1,208	1,196	20437,855	20631,720	158,777	13,250	7,478	-6,341	42,432	8,409	24,978	2022-03-22 13:35
119,333	48,425	54,000	69,076	1,208	1,196	20659,799	20668,317	297,929	13,784	6,670	-6,342	42,832	8,449	24,853	2022-03-22 13:35
119,833	48,368	53,908	68,983	1,204	1,196	20573,362	20667,703	339,799	14,766	6,045	-6,452	42,214	8,388	24,853	2022-03-22 13:36
120,333	48,318	53,846	69,165	1,211	1,195	20673,143	20988,420	308,341	14,029	6,427	-6,443	42,218	8,388	24,759	2022-03-22 13:36
120,834	48,346	53,868	69,146	1,210	1,195	20789,758	20936,650	104,955	13,452	7,094	-6,457	42,139	8,380	24,759	2022-03-22 13:37
121,334	48,454	53,902	69,062	1,206	1,196	20629,339	20790,153	189,359	13,617	6,983	-6,575	42,692	8,435	24,759	2022-03-22 13:37
121,834	48,527	53,988	69,003	1,203	1,197	20387,476	20600,494	361,773	13,888	6,694	-6,413	42,510	8,417	24,665	2022-03-22 13:38
122,334	48,430	53,983	69,083	1,209	1,197	20537,851	20719,762	424,019	13,929	6,387	-6,454	42,525	8,419	24,665	2022-03-22 13:38
122,834	48,292	53,895	69,206	1,210	1,197	20830,534	21006,748	112,014	13,050	7,423	-6,440	42,679	8,434	24,572	2022-03-22 13:39
123,334	48,376	53,901	68,907	1,203	1,197	20620,853	20581,955	94,712	12,737	7,633	-6,379	42,922	8,458	24,572	2022-03-22 13:39
123,833	48,443	53,895	69,232	1,210	1,197	20531,957	21036,060	270,627	12,935	7,437	-6,461	42,590	8,425	24,572	2022-03-22 13:40
124,333	48,496	53,983	69,120	1,210	1,196	20626,810	20747,595	180,202	12,637	7,721	-6,452	42,664	8,432	24,572	2022-03-22 13:40
124,833	48,487	53,992	69,204	1,210	1,196	20592,116	20845,728	425,767	12,858	7,640	-6,483	42,442	8,411	24,478	2022-03-22 13:41
125,333	48,433	53,975	69,126	1,207	1,195	20627,705	20753,858	246,593	13,314	7,191	-6,406	42,247	8,391	24,478	2022-03-22 13:41
125,833	48,312	53,941	69,079	1,200	1,194	20692,872	20722,894	417,423	14,160	6,723	-6,427	42,081	8,375	24,353	2022-03-22 13:42
126,333	48,371	53,845	69,210	1,210	1,194	20620,551	21039,328	186,345	14,595	6,184	-6,392	42,155	8,382	24,353	2022-03-22 13:42
126,833	48,530	53,949	69,201	1,208	1,194	20487,361	20874,711	75,679	14,421	6,343	-6,319	42,332	8,400	24,353	2022-03-22 13:43
127,333	48,422	53,987	68,953	1,207	1,195	20622,339	20498,170	169,430	13,354	7,081	-6,451	42,716	8,438	24,572	2022-03-22 13:43
127,834	48,400	53,869	68,974	1,209	1,194	20481,335	20681,594	255,179	12,890	7,635	-6,435	42,042	8,371	24,353	2022-03-22 13:44
128,334	48,391	53,868	68,999	1,205	1,194	20587,323	20713,718	43,651	12,831	7,606	-6,411	42,382	8,405	24,260	2022-03-22 13:44
128,834	48,348	53,860	68,989	1,208	1,194	20527,429	20707,891	30,795	11,316	8,797	-6,445	42,453	8,412	24,166	2022-03-22 13:45

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
129,334	0,220	0,687	1,056	-0,322	0,005	0,269	0,785	102,432	26,273	21,084	21,166	20,419	20,424	20,524	20,575	63,117
129,834	0,235	0,693	1,068	-0,324	0,034	0,276	0,787	102,065	25,883	21,042	21,235	20,458	20,463	20,574	20,617	63,073
130,334	0,235	0,715	1,062	-0,317	-0,002	0,249	0,786	101,707	26,029	21,531	21,265	20,456	20,455	20,567	20,604	63,093
130,833	0,229	0,724	1,066	-0,318	0,021	0,245	0,785	101,487	26,005	21,849	21,302	20,448	20,465	20,563	20,615	63,035
131,333	0,245	0,749	1,064	-0,315	-0,008	0,219	0,785	101,405	25,911	22,067	21,382	20,519	20,528	20,631	20,666	62,846
131,833	0,243	0,763	1,060	-0,321	0,017	0,212	0,785	101,203	25,752	22,103	21,402	20,512	20,515	20,623	20,658	62,780
132,333	0,396	0,775	1,064	-0,314	0,019	0,202	0,784	100,927	25,766	22,095	21,381	20,472	20,472	20,580	20,617	62,796
132,833	0,240	0,761	1,064	-0,316	0,013	0,217	0,784	100,792	25,556	22,096	21,378	20,487	20,485	20,603	20,633	62,724
133,333	0,227	0,758	1,063	-0,315	-0,026	0,217	0,782	100,705	25,687	22,118	21,400	20,495	20,496	20,604	20,636	62,710
133,833	0,231	0,765	1,067	-0,307	0,008	0,209	0,782	100,599	25,708	22,129	21,416	20,487	20,493	20,600	20,626	62,771
134,334	0,260	0,775	1,066	-0,314	0,031	0,203	0,782	100,544	25,593	22,168	21,456	20,509	20,517	20,625	20,653	62,753
134,834	0,291	0,795	1,067	-0,313	0,017	0,179	0,782	100,493	25,696	22,183	21,457	20,506	20,516	20,633	20,645	62,633
135,334	0,562	0,829	1,058	-0,310	0,005	0,154	0,781	100,419	25,837	22,238	21,503	20,532	20,531	20,649	20,664	62,700
135,834	0,344	0,810	1,060	-0,311	-0,008	0,178	0,780	100,362	26,053	22,276	21,510	20,509	20,516	20,631	20,640	62,706
136,334	0,336	0,773	1,053	-0,309	0,009	0,210	0,779	100,711	26,367	22,364	21,562	20,534	20,534	20,655	20,665	62,770
136,834	0,282	0,763	1,059	-0,314	0,031	0,211	0,779	101,036	26,264	22,400	21,601	20,550	20,553	20,668	20,677	62,774
137,333	0,269	0,792	1,060	-0,316	-0,007	0,187	0,777	101,336	26,171	22,409	21,609	20,528	20,538	20,662	20,664	62,826
137,833	0,236	0,792	1,059	-0,315	0,037	0,188	0,777	101,519	26,158	22,388	21,584	20,501	20,494	20,622	20,624	62,958
138,333	0,304	0,803	1,057	-0,316	0,030	0,179	0,776	101,681	26,167	22,498	21,686	20,592	20,589	20,709	20,713	62,916
138,833	0,304	0,788	1,056	-0,311	-0,004	0,198	0,776	101,815	26,094	22,491	21,708	20,601	20,592	20,714	20,716	63,124
139,333	0,288	0,763	1,061	-0,318	0,029	0,220	0,774	101,840	26,086	22,491	21,698	20,584	20,574	20,689	20,692	63,247
139,833	0,242	0,730	1,059	-0,320	0,007	0,247	0,775	101,898	26,011	22,509	21,718	20,589	20,585	20,708	20,705	63,354
140,333	0,233	0,711	1,058	-0,323	0,036	0,251	0,772	101,927	26,449	22,550	21,732	20,575	20,565	20,693	20,690	63,382
140,833	0,233	0,739	1,050	-0,321	-0,014	0,233	0,772	101,956	26,606	22,598	21,762	20,576	20,578	20,697	20,693	63,279
141,334	0,231	0,730	1,056	-0,320	0,044	0,238	0,774	102,047	26,289	22,569	21,735	20,548	20,551	20,673	20,660	63,296
141,834	0,239	0,760	1,055	-0,321	0,002	0,214	0,773	102,166	26,299	22,584	21,754	20,548	20,551	20,674	20,662	63,325
142,334	0,227	0,748	1,062	-0,320	0,025	0,233	0,772	102,272	26,108	22,577	21,759	20,559	20,555	20,683	20,670	63,327
142,834	0,220	0,726	1,056	-0,326	0,000	0,245	0,770	102,454	26,137	22,602	21,784	20,577	20,574	20,695	20,685	63,365
143,334	0,216	0,721	1,062	-0,320	0,011	0,249	0,767	102,413	26,087	22,592	21,788	20,574	20,571	20,700	20,680	63,377

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
129,334	48,354	53,815	68,952	1,207	1,194	20470,904	20719,593	59,829	12,620	8,070	-6,443	42,351	8,401	24,166	2022-03-22 13:45
129,834	48,404	53,831	68,806	1,209	1,193	20362,003	20484,285	63,552	12,023	8,265	-6,473	43,040	8,470	24,260	2022-03-22 13:46
130,334	48,456	53,849	68,715	1,206	1,194	20272,547	20338,927	145,664	13,037	7,479	-6,343	42,163	8,383	24,072	2022-03-22 13:46
130,833	48,461	53,884	68,472	1,201	1,194	20105,578	19965,285	51,013	13,092	7,349	-6,366	42,252	8,392	24,072	2022-03-22 13:47
131,333	48,436	53,812	68,493	1,208	1,193	19994,180	20082,744	167,510	14,178	6,557	-6,305	42,386	8,405	24,000	2022-03-22 13:47
131,833	48,399	53,757	68,388	1,208	1,194	19949,573	20019,573	168,036	14,050	6,374	-6,414	42,484	8,415	23,978	2022-03-22 13:48
132,333	48,340	53,718	68,294	1,208	1,196	20062,395	19977,591	476,822	14,589	6,048	-6,286	42,852	8,451	24,072	2022-03-22 13:48
132,833	48,390	53,714	68,208	1,206	1,198	19862,889	19912,890	65,737	14,032	6,519	-6,322	42,446	8,411	23,963	2022-03-22 13:49
133,333	48,415	53,737	68,291	1,203	1,199	19751,080	20003,901	59,715	14,019	6,512	-6,290	42,444	8,411	23,978	2022-03-22 13:49
133,833	48,363	53,752	68,325	1,207	1,199	19968,446	20023,025	44,808	14,176	6,274	-6,145	42,650	8,431	23,853	2022-03-22 13:50
134,334	48,403	53,724	68,269	1,207	1,200	19898,658	20001,022	229,214	14,359	6,079	-6,280	42,630	8,429	23,853	2022-03-22 13:50
134,834	48,504	53,744	68,074	1,207	1,199	19582,644	19694,859	343,346	15,230	5,357	-6,264	42,276	8,394	23,853	2022-03-22 13:51
135,334	48,546	53,803	68,313	1,206	1,198	19600,722	19931,938	919,749	15,825	4,634	-6,192	42,483	8,415	23,853	2022-03-22 13:51
135,834	48,425	53,802	68,361	1,206	1,198	19780,001	19995,281	167,722	14,869	5,326	-6,227	42,268	8,393	23,666	2022-03-22 13:52
136,334	48,350	53,747	68,409	1,206	1,198	19970,055	20133,489	308,005	13,966	6,286	-6,188	42,404	8,407	23,666	2022-03-22 13:52
136,834	48,340	53,727	68,461	1,206	1,198	20000,261	20237,854	86,161	14,001	6,317	-6,283	42,689	8,435	23,666	2022-03-22 13:53
137,333	48,394	53,746	68,593	1,206	1,198	19999,679	20393,879	317,494	15,018	5,619	-6,312	42,871	8,453	23,572	2022-03-22 13:53
137,833	48,458	53,832	68,561	1,208	1,199	20116,131	20239,237	76,448	15,019	5,649	-6,295	42,256	8,392	23,572	2022-03-22 13:54
138,333	48,508	53,848	68,642	1,206	1,198	19959,749	20322,881	294,120	15,266	5,376	-6,314	42,107	8,377	23,572	2022-03-22 13:54
138,833	48,487	53,912	69,026	1,207	1,197	20301,156	20741,875	269,147	14,514	5,946	-6,229	42,311	8,398	23,478	2022-03-22 13:55
139,333	48,550	53,959	69,010	1,207	1,197	20381,704	20653,111	172,437	13,837	6,604	-6,350	42,424	8,409	23,351	2022-03-22 13:55
139,833	48,446	54,004	69,267	1,206	1,198	20653,091	20959,778	93,873	13,111	7,421	-6,402	42,311	8,398	23,565	2022-03-22 13:56
140,333	48,293	53,953	69,111	1,206	1,198	20905,754	20814,151	106,100	13,148	7,522	-6,470	42,387	8,405	23,257	2022-03-22 13:56
140,833	48,343	53,862	69,151	1,208	1,197	20721,993	20979,588	72,683	13,215	6,991	-6,421	41,936	8,360	23,257	2022-03-22 13:57
141,334	48,368	53,872	69,141	1,209	1,197	20731,941	20950,077	68,779	12,980	7,130	-6,403	42,314	8,398	23,257	2022-03-22 13:57
141,834	48,421	53,913	69,044	1,208	1,196	20676,185	20742,826	78,752	13,808	6,429	-6,414	42,526	8,419	23,478	2022-03-22 13:58
142,334	48,434	53,925	69,062	1,209	1,196	20683,338	20749,876	115,651	13,398	6,980	-6,410	42,207	8,387	23,163	2022-03-22 13:58
142,834	48,414	53,963	69,230	1,205	1,195	20697,877	20916,130	40,101	13,181	7,363	-6,513	42,115	8,378	23,077	2022-03-22 13:59
143,334	48,349	53,937	69,205	1,206	1,195	20817,589	20909,184	47,586	13,020	7,462	-6,390	42,656	8,432	22,976	2022-03-22 13:59

PE22\_cat IV\_run 2\_220322\_EN.DAT

Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
143,834	0,224	0,732	1,060	-0,319	0,012	0,235	0,771	102,473	26,201	22,614	21,792	20,572	20,564	20,691	20,674	63,336
144,333	0,232	0,776	1,062	-0,319	-0,001	0,197	0,767	102,580	26,256	22,635	21,814	20,569	20,559	20,699	20,675	63,456
144,833	0,230	0,773	1,065	-0,322	0,006	0,213	0,767	102,663	26,413	22,697	21,862	20,604	20,603	20,733	20,712	63,483
145,333	0,220	0,741	1,063	-0,320	-0,019	0,235	0,767	102,570	26,102	22,651	21,834	20,566	20,568	20,698	20,676	63,472
145,833	0,213	0,727	1,061	-0,324	-0,007	0,244	0,768	102,591	26,139	22,667	21,852	20,588	20,587	20,718	20,689	63,453
146,333	0,221	0,732	1,058	-0,321	0,029	0,236	0,766	102,687	26,470	22,710	21,873	20,597	20,591	20,725	20,688	63,373
146,833	0,218	0,723	1,066	-0,320	0,029	0,245	0,764	102,748	26,248	22,735	21,902	20,614	20,619	20,742	20,714	63,415
147,333	0,233	0,763	1,058	-0,320	0,018	0,207	0,769	102,841	26,191	22,750	21,933	20,630	20,630	20,779	20,728	63,472
147,833	0,260	0,758	1,060	-0,322	0,031	0,220	0,765	102,745	26,150	22,703	21,883	20,584	20,575	20,706	20,673	63,354
148,334	0,251	0,768	1,064	-0,322	-0,026	0,208	0,766	102,895	26,210	22,719	21,921	20,581	20,579	20,713	20,673	63,338
148,834	0,236	0,759	1,058	-0,319	0,008	0,220	0,765	102,998	26,167	22,724	21,969	20,599	20,603	20,736	20,694	63,391
149,334	0,227	0,723	1,063	-0,319	0,040	0,252	0,762	102,751	26,138	22,733	21,974	20,605	20,603	20,739	20,695	63,421
149,834	0,246	0,744	1,064	-0,321	0,018	0,219	0,760	102,916	26,086	22,786	22,035	20,671	20,657	20,803	20,751	63,362
150,334	0,257	0,776	1,065	-0,321	-0,039	0,209	0,761	102,977	25,998	22,737	22,010	20,634	20,629	20,773	20,719	63,322
150,833	0,238	0,756	1,057	-0,322	-0,008	0,221	0,762	103,031	25,907	22,710	21,989	20,613	20,610	20,746	20,695	63,465
151,333	0,224	0,728	1,058	-0,322	-0,019	0,244	0,760	102,981	26,250	22,804	22,052	20,663	20,663	20,799	20,746	63,485
151,833	0,234	0,744	1,057	-0,322	0,026	0,224	0,762	102,882	26,409	22,774	22,010	20,595	20,594	20,739	20,676	63,377
152,333	0,231	0,756	1,061	-0,321	-0,036	0,218	0,759	103,088	26,399	22,842	22,093	20,669	20,668	20,809	20,747	63,474
152,833	0,238	0,763	1,057	-0,321	0,039	0,213	0,759	103,106	26,347	22,807	22,038	20,609	20,617	20,758	20,693	63,530
153,333	0,256	0,767	1,060	-0,323	0,036	0,211	0,755	103,469	26,717	22,910	22,138	20,684	20,676	20,827	20,758	63,601
153,833	0,276	0,768	1,058	-0,328	0,025	0,214	0,755	103,628	26,424	22,786	22,020	20,567	20,560	20,701	20,636	63,513
154,333	0,230	0,741	1,063	-0,329	0,031	0,228	0,755	103,897	26,506	22,903	22,138	20,673	20,681	20,814	20,749	63,615
154,834	0,239	0,750	1,069	-0,320	0,021	0,225	0,754	103,941	26,388	22,905	22,150	20,682	20,682	20,824	20,754	63,727
155,334	0,222	0,719	1,061	-0,325	0,016	0,261	0,754	103,763	26,269	22,858	22,109	20,643	20,643	20,785	20,711	63,792
155,834	0,214	0,682	1,060	-0,324	-0,012	0,282	0,754	103,854	26,473	22,900	22,135	20,665	20,655	20,798	20,727	63,809
156,334	0,216	0,690	1,058	-0,327	0,003	0,269	0,752	103,785	26,523	22,892	22,131	20,637	20,639	20,781	20,705	63,960
156,834	0,223	0,705	1,055	-0,325	0,053	0,261	0,753	103,783	26,443	22,932	22,176	20,671	20,669	20,809	20,734	63,776
157,334	0,215	0,701	1,065	-0,324	0,007	0,266	0,752	103,870	26,527	22,958	22,213	20,706	20,698	20,839	20,762	63,727
157,833	0,241	0,713	1,055	-0,328	0,026	0,252	0,750	103,892	26,485	22,919	22,186	20,663	20,656	20,801	20,715	63,729

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
143,834	48,436	53,916	69,353	1,207	1,195	20657,358	21144,782	61,072	13,598	7,054	-6,380	42,299	8,396	23,257	2022-03-22 14:00
144,333	48,497	53,995	69,285	1,207	1,195	20741,223	20943,964	99,549	14,868	5,919	-6,389	42,483	8,415	22,976	2022-03-22 14:00
144,833	48,502	54,024	69,327	1,206	1,195	20757,953	20956,414	56,878	13,958	6,394	-6,449	42,415	8,408	22,976	2022-03-22 14:01
145,333	48,446	54,033	69,374	1,207	1,195	20835,977	21007,269	42,437	13,371	7,045	-6,398	42,792	8,445	22,976	2022-03-22 14:01
145,833	48,417	53,970	69,168	1,210	1,194	20892,129	20799,063	34,722	13,042	7,307	-6,485	42,085	8,375	22,976	2022-03-22 14:02
146,333	48,408	53,948	69,257	1,208	1,194	20767,123	20945,944	64,757	13,296	7,088	-6,429	42,269	8,393	22,851	2022-03-22 14:02
146,833	48,404	53,939	69,355	1,209	1,194	20844,524	21096,554	38,597	12,809	7,338	-6,390	42,714	8,437	22,757	2022-03-22 14:03
147,333	48,409	53,954	69,267	1,208	1,194	20896,941	20951,947	116,448	14,216	6,200	-6,400	42,401	8,406	22,909	2022-03-22 14:03
147,833	48,429	53,966	69,151	1,208	1,193	20708,030	20773,993	147,022	13,701	6,610	-6,441	42,684	8,434	22,851	2022-03-22 14:04
148,334	48,434	53,929	69,134	1,204	1,194	20616,160	20818,352	146,277	14,583	6,237	-6,445	42,403	8,407	22,570	2022-03-22 14:04
148,834	48,358	53,958	69,318	1,207	1,197	20845,248	21077,177	71,849	13,892	6,604	-6,381	42,775	8,443	22,851	2022-03-22 14:05
149,334	48,328	53,953	69,161	1,203	1,197	20850,119	20864,691	63,420	12,897	7,554	-6,387	42,843	8,450	22,569	2022-03-22 14:05
149,834	48,417	53,907	69,122	1,209	1,198	20761,079	20888,606	191,260	14,348	6,559	-6,428	42,427	8,409	22,476	2022-03-22 14:06
150,334	48,500	53,951	69,288	1,209	1,196	20582,248	21032,423	157,776	14,197	6,270	-6,428	42,582	8,424	22,660	2022-03-22 14:06
150,833	48,487	54,036	69,335	1,206	1,197	20745,891	20993,654	76,452	13,840	6,644	-6,432	42,175	8,384	22,570	2022-03-22 14:07
151,333	48,431	54,020	69,325	1,209	1,196	20901,294	20986,669	48,585	12,798	7,326	-6,435	42,427	8,409	22,351	2022-03-22 14:07
151,833	48,446	54,001	69,185	1,204	1,196	20648,342	20818,743	71,857	13,516	6,713	-6,438	41,782	8,345	22,757	2022-03-22 14:08
152,333	48,449	54,003	69,417	1,206	1,196	20816,382	21128,432	64,597	13,681	6,539	-6,424	42,637	8,430	22,351	2022-03-22 14:08
152,833	48,428	54,005	69,472	1,208	1,196	20960,404	21205,419	131,013	14,099	6,389	-6,426	41,983	8,365	22,475	2022-03-22 14:09
153,333	48,402	54,025	69,483	1,205	1,196	21043,607	21182,268	163,611	14,149	6,326	-6,452	42,185	8,385	22,132	2022-03-22 14:09
153,833	48,344	53,976	69,446	1,208	1,195	21040,468	21194,111	193,358	14,143	6,433	-6,560	42,426	8,409	22,164	2022-03-22 14:10
154,333	48,341	53,971	69,732	1,207	1,195	21169,097	21596,057	76,763	13,933	6,846	-6,574	42,426	8,409	22,164	2022-03-22 14:10
154,834	48,328	54,006	69,870	1,206	1,195	21325,445	21729,835	94,044	13,965	6,762	-6,407	42,639	8,430	22,164	2022-03-22 14:11
155,334	48,410	54,058	69,818	1,207	1,195	21323,382	21586,655	44,253	12,477	7,836	-6,498	42,354	8,402	22,070	2022-03-22 14:11
155,834	48,496	54,090	69,857	1,207	1,194	21230,046	21582,335	36,919	12,118	8,449	-6,482	42,166	8,383	22,070	2022-03-22 14:12
156,334	48,546	54,187	69,953	1,207	1,193	21366,969	21565,114	49,551	12,707	8,080	-6,547	42,520	8,418	22,164	2022-03-22 14:12
156,834	48,463	54,174	69,640	1,207	1,193	21231,526	21150,588	51,815	12,596	7,836	-6,502	42,252	8,392	21,976	2022-03-22 14:13
157,334	48,409	54,081	69,760	1,208	1,196	21254,717	21492,214	37,347	12,108	7,973	-6,474	42,437	8,410	21,976	2022-03-22 14:13
157,833	48,336	54,059	69,648	1,208	1,195	21354,647	21361,225	79,794	12,857	7,554	-6,553	42,192	8,386	21,851	2022-03-22 14:14



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
158,333	0,217	0,726	1,060	-0,329	0,021	0,244	0,750	103,953	26,480	22,977	22,232	20,706	20,706	20,852	20,765	63,716
158,833	0,218	0,731	1,056	-0,325	0,003	0,246	0,750	103,953	26,401	22,907	22,170	20,640	20,640	20,786	20,696	63,673
159,333	0,223	0,709	1,063	-0,325	0,042	0,255	0,749	103,937	26,341	22,888	22,154	20,615	20,612	20,752	20,666	63,636
159,833	0,222	0,713	1,066	-0,330	-0,006	0,259	0,749	103,918	26,362	22,896	22,174	20,618	20,616	20,769	20,670	63,584
160,333	0,219	0,713	1,065	-0,328	-0,019	0,252	0,748	104,196	26,414	22,974	22,257	20,698	20,707	20,852	20,755	63,499
160,833	0,220	0,714	1,063	-0,326	0,016	0,259	0,747	104,137	26,443	22,934	22,220	20,650	20,655	20,805	20,704	63,566
161,333	0,216	0,706	1,059	-0,326	0,020	0,255	0,747	104,264	26,642	23,003	22,273	20,708	20,694	20,845	20,747	63,611
161,834	0,226	0,727	1,062	-0,327	0,033	0,246	0,745	104,218	26,603	22,964	22,237	20,650	20,653	20,797	20,692	63,623
162,334	0,226	0,715	1,065	-0,327	0,015	0,251	0,745	104,317	26,730	23,026	22,279	20,692	20,692	20,843	20,732	63,614
162,834	0,227	0,739	1,059	-0,328	-0,022	0,234	0,745	104,533	26,533	23,018	22,293	20,701	20,703	20,850	20,741	63,666
163,334	0,219	0,735	1,062	-0,328	-0,005	0,237	0,745	104,531	26,829	23,065	22,344	20,716	20,722	20,871	20,762	63,734
163,834	0,216	0,732	1,065	-0,328	0,039	0,237	0,744	104,445	26,618	23,025	22,308	20,678	20,684	20,829	20,719	63,631
164,334	0,236	0,744	1,054	-0,329	-0,006	0,233	0,743	104,553	26,834	23,024	22,305	20,653	20,654	20,807	20,688	63,588
164,833	0,219	0,703	1,065	-0,329	-0,023	0,271	0,742	104,632	26,872	23,112	22,388	20,733	20,736	20,883	20,767	63,645
165,333	0,217	0,694	1,056	-0,328	0,038	0,272	0,742	104,517	26,837	23,102	22,375	20,719	20,717	20,867	20,747	63,627
165,833	0,217	0,697	1,061	-0,327	0,022	0,264	0,741	104,545	26,882	23,125	22,414	20,748	20,756	20,900	20,773	63,555
166,333	0,223	0,724	1,061	-0,331	0,017	0,245	0,740	104,467	26,908	23,140	22,427	20,749	20,750	20,898	20,778	63,597
166,833	0,221	0,713	1,063	-0,328	0,040	0,259	0,740	104,519	26,686	23,080	22,383	20,710	20,724	20,861	20,736	63,519
167,333	0,219	0,699	1,066	-0,328	0,030	0,269	0,739	104,473	26,502	23,041	22,362	20,695	20,699	20,841	20,716	63,574
167,833	0,216	0,682	1,063	-0,330	0,028	0,283	0,739	104,406	26,396	23,089	22,414	20,751	20,761	20,910	20,778	63,539
168,334	0,216	0,683	1,063	-0,324	0,015	0,277	0,738	104,213	26,207	22,966	22,303	20,659	20,663	20,812	20,682	63,429
168,834	0,220	0,708	1,061	-0,320	0,000	0,258	0,738	104,170	26,535	23,050	22,384	20,722	20,729	20,887	20,745	63,315
169,334	0,220	0,726	1,066	-0,327	0,010	0,244	0,737	104,165	26,451	23,061	22,402	20,719	20,732	20,880	20,743	63,359
169,834	0,217	0,719	1,064	-0,323	0,019	0,253	0,737	104,031	26,227	23,006	22,363	20,702	20,702	20,847	20,713	63,307
170,334	0,225	0,716	1,060	-0,328	0,024	0,252	0,736	104,007	26,225	23,065	22,428	20,769	20,770	20,923	20,778	63,184
170,834	0,223	0,712	1,061	-0,322	0,009	0,255	0,735	103,818	26,173	23,005	22,377	20,716	20,714	20,876	20,728	63,156
171,333	0,220	0,706	1,058	-0,323	0,006	0,259	0,736	103,517	26,089	22,990	22,377	20,710	20,720	20,872	20,727	63,135
171,833	0,220	0,726	1,060	-0,325	0,043	0,245	0,734	103,545	26,207	23,034	22,408	20,773	20,769	20,915	20,775	63,103
172,333	0,217	0,727	1,065	-0,322	0,051	0,243	0,734	103,394	26,056	22,978	22,372	20,736	20,738	20,890	20,742	63,112

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
158,333	48,292	54,022	69,683	1,203	1,195	21312,956	21456,206	48,808	13,170	7,332	-6,577	42,683	8,434	21,976	2022-03-22 14:14
158,833	48,375	53,988	69,643	1,209	1,195	21245,128	21453,021	40,524	12,981	7,372	-6,494	42,055	8,372	21,851	2022-03-22 14:15
159,333	48,453	54,053	69,565	1,205	1,195	21011,260	21250,771	79,801	13,026	7,653	-6,496	42,538	8,420	21,758	2022-03-22 14:15
159,833	48,440	54,066	69,431	1,208	1,195	21018,689	21052,258	58,136	12,649	7,756	-6,591	42,602	8,426	21,851	2022-03-22 14:16
160,333	48,452	54,028	69,566	1,208	1,196	20877,457	21295,880	52,831	13,086	7,565	-6,551	42,609	8,427	21,664	2022-03-22 14:16
160,833	48,440	54,038	69,596	1,209	1,196	21006,255	21329,144	46,177	12,705	7,784	-6,514	42,512	8,417	21,664	2022-03-22 14:17
161,333	48,400	54,034	69,540	1,205	1,197	21050,514	21277,914	45,143	13,130	7,652	-6,517	42,651	8,431	21,664	2022-03-22 14:17
161,834	48,395	54,041	69,519	1,207	1,197	21106,129	21239,108	72,649	13,309	7,377	-6,531	42,514	8,418	21,570	2022-03-22 14:18
162,334	48,403	54,015	69,657	1,207	1,197	21098,069	21464,282	63,835	13,120	7,524	-6,533	42,599	8,426	21,570	2022-03-22 14:18
162,834	48,429	54,044	69,711	1,206	1,197	21111,403	21501,582	63,334	13,543	7,026	-6,553	42,175	8,384	21,476	2022-03-22 14:19
163,334	48,443	54,108	69,485	1,206	1,197	21179,614	21093,671	48,346	13,232	7,100	-6,561	41,913	8,358	21,476	2022-03-22 14:19
163,834	48,474	54,087	69,463	1,203	1,196	20945,790	21084,490	43,197	13,054	7,119	-6,558	42,289	8,395	21,476	2022-03-22 14:20
164,334	48,491	54,089	69,561	1,206	1,197	20908,327	21225,097	72,662	13,327	7,004	-6,588	42,089	8,375	21,476	2022-03-22 14:20
164,833	48,408	54,128	69,655	1,206	1,198	21100,026	21320,630	46,890	12,170	8,138	-6,584	42,558	8,422	21,353	2022-03-22 14:21
165,333	48,268	54,034	69,493	1,208	1,198	21304,545	21227,668	50,089	12,422	8,154	-6,567	41,976	8,364	21,353	2022-03-22 14:21
165,833	48,392	53,974	69,540	1,206	1,199	21010,446	21386,545	42,291	12,597	7,931	-6,540	42,314	8,398	21,260	2022-03-22 14:22
166,333	48,428	54,082	69,389	1,207	1,199	21027,937	21033,985	59,173	13,260	7,361	-6,625	42,220	8,389	21,260	2022-03-22 14:22
166,833	48,425	54,038	69,445	1,209	1,199	20967,510	21166,031	50,256	12,693	7,768	-6,570	42,550	8,421	21,166	2022-03-22 14:23
167,333	48,447	54,065	69,455	1,208	1,199	20994,205	21144,293	45,975	12,417	8,080	-6,551	42,767	8,443	21,166	2022-03-22 14:23
167,833	48,426	54,045	69,382	1,207	1,197	20947,530	21049,481	44,549	12,065	8,491	-6,601	42,505	8,417	21,166	2022-03-22 14:24
168,334	48,413	54,053	69,132	1,207	1,198	20815,056	20705,771	44,802	12,245	8,302	-6,483	42,274	8,394	21,073	2022-03-22 14:24
168,834	48,401	53,946	69,280	1,210	1,198	20722,070	21051,167	60,391	12,950	7,734	-6,401	42,662	8,432	21,166	2022-03-22 14:25
169,334	48,526	53,981	68,987	1,204	1,198	20516,916	20611,697	49,158	13,312	7,315	-6,539	42,904	8,456	21,073	2022-03-22 14:25
169,834	48,475	54,037	69,013	1,205	1,199	20532,214	20573,304	43,204	12,899	7,595	-6,461	42,516	8,418	21,072	2022-03-22 14:26
170,334	48,303	53,944	68,894	1,208	1,198	20654,421	20530,556	71,639	12,923	7,555	-6,553	42,280	8,394	21,073	2022-03-22 14:26
170,834	48,301	53,822	68,954	1,206	1,198	20575,901	20780,557	50,848	12,730	7,636	-6,434	42,390	8,405	20,760	2022-03-22 14:27
171,333	48,398	53,860	68,834	1,208	1,199	20448,037	20571,868	52,007	12,458	7,773	-6,468	42,151	8,382	20,979	2022-03-22 14:27
171,833	48,540	53,928	68,763	1,203	1,198	20121,434	20372,844	49,248	13,116	7,361	-6,500	42,692	8,435	20,854	2022-03-22 14:28
172,333	48,457	53,974	68,711	1,205	1,199	20275,528	20246,139	43,214	13,336	7,291	-6,432	42,355	8,402	20,853	2022-03-22 14:28

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
172,833	0,218	0,728	1,059	-0,327	0,037	0,244	0,734	103,324	26,194	23,009	22,421	20,774	20,784	20,927	20,780	63,006
173,333	0,219	0,723	1,060	-0,325	0,049	0,249	0,733	103,265	26,259	23,034	22,428	20,787	20,795	20,932	20,790	62,962
173,833	0,218	0,727	1,072	-0,318	0,039	0,239	0,732	103,235	26,266	23,038	22,432	20,792	20,789	20,939	20,791	62,896
174,333	0,221	0,744	1,065	-0,321	0,007	0,235	0,732	103,155	26,162	23,025	22,431	20,791	20,798	20,938	20,790	62,943
174,833	0,219	0,724	1,065	-0,318	0,032	0,241	0,731	103,060	26,082	23,017	22,429	20,790	20,796	20,943	20,792	62,956
175,334	0,228	0,746	1,066	-0,324	0,040	0,226	0,731	103,102	26,235	23,044	22,436	20,801	20,814	20,954	20,804	63,022
175,834	0,225	0,736	1,066	-0,319	0,005	0,243	0,730	103,050	26,228	23,043	22,437	20,808	20,811	20,958	20,801	62,977
176,334	0,230	0,715	1,060	-0,318	0,041	0,251	0,729	102,913	26,515	23,065	22,443	20,805	20,806	20,947	20,794	62,985
176,834	0,239	0,732	1,069	-0,318	-0,010	0,240	0,729	102,765	26,150	23,045	22,445	20,811	20,816	20,957	20,801	62,999
177,334	0,221	0,737	1,062	-0,323	0,006	0,231	0,729	102,869	26,315	23,056	22,457	20,818	20,826	20,963	20,807	62,928
177,834	0,220	0,738	1,063	-0,323	0,006	0,232	0,728	102,881	26,180	23,047	22,451	20,824	20,823	20,964	20,801	63,029
178,333	0,222	0,745	1,064	-0,319	0,030	0,229	0,728	102,797	26,246	23,044	22,459	20,823	20,825	20,969	20,806	62,925
178,833	0,226	0,738	1,065	-0,318	0,015	0,234	0,726	102,823	26,377	23,064	22,455	20,835	20,833	20,972	20,807	62,946
179,333	0,227	0,747	1,069	-0,322	0,024	0,228	0,725	102,796	26,289	23,024	22,428	20,791	20,790	20,922	20,765	62,920
179,833	0,223	0,729	1,064	-0,318	0,033	0,243	0,724	102,731	25,991	22,991	22,416	20,786	20,792	20,918	20,760	62,973
180,333	0,219	0,742	1,064	-0,320	-0,023	0,225	0,725	102,745	25,965	22,975	22,417	20,786	20,811	20,935	20,769	62,982
180,833	0,240	0,784	1,070	-0,316	-0,005	0,193	0,724	102,850	25,955	22,985	22,439	20,823	20,836	20,958	20,794	62,978
181,333	0,248	0,781	1,057	-0,322	0,047	0,203	0,725	102,897	26,014	22,961	22,400	20,802	20,805	20,932	20,767	62,960
181,833	0,228	0,738	1,068	-0,322	0,025	0,240	0,725	102,890	25,930	22,992	22,436	20,831	20,842	20,986	20,805	63,057
182,334	0,223	0,713	1,061	-0,322	0,019	0,261	0,721	102,713	26,317	22,981	22,390	20,792	20,787	20,924	20,756	62,958
182,834	0,223	0,684	1,061	-0,326	-0,019	0,281	0,721	102,700	26,255	23,032	22,456	20,846	20,853	20,983	20,807	63,112
183,334	0,223	0,687	1,062	-0,319	0,029	0,276	0,721	102,648	26,121	23,022	22,448	20,837	20,845	20,979	20,804	63,208
183,834	0,227	0,692	1,065	-0,327	-0,008	0,272	0,720	102,560	26,213	22,977	22,413	20,797	20,802	20,940	20,762	63,069
184,334	0,220	0,694	1,063	-0,321	0,015	0,276	0,720	102,456	26,387	23,017	22,440	20,820	20,829	20,962	20,783	63,013
184,833	0,222	0,682	1,063	-0,323	0,042	0,274	0,721	102,419	26,590	23,068	22,487	20,850	20,859	20,984	20,809	62,967
185,333	0,224	0,730	1,061	-0,325	0,036	0,242	0,720	102,411	26,641	23,081	22,479	20,840	20,853	20,970	20,793	62,904
185,833	0,225	0,730	1,062	-0,322	0,026	0,237	0,718	102,401	26,440	23,082	22,503	20,854	20,865	20,993	20,807	62,865
186,333	0,221	0,734	1,058	-0,314	0,021	0,234	0,718	102,449	26,340	23,068	22,124	20,855	20,883	21,003	20,808	62,912
186,833	0,237	0,773	1,057	-0,314	0,029	0,201	0,717	102,476	26,396	23,051	-6687,613	20,848	20,880	20,974	20,794	62,828

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
172,833	48,340	53,862	68,679	1,209	1,198	20360,692	20350,905	47,710	13,212	7,317	-6,531	42,490	8,415	20,853	2022-03-22 14:29
173,333	48,307	53,819	68,489	1,205	1,198	20277,849	20146,378	55,985	13,169	7,465	-6,494	42,608	8,427	20,854	2022-03-22 14:29
173,833	48,449	53,789	68,560	1,208	1,199	20046,977	20294,793	52,420	13,713	7,155	-6,369	42,886	8,454	20,760	2022-03-22 14:30
174,333	48,495	53,892	68,582	1,208	1,199	20052,490	20181,815	58,362	13,580	7,046	-6,413	42,610	8,427	20,666	2022-03-22 14:30
174,833	48,458	53,892	68,599	1,207	1,198	20102,405	20203,053	53,274	13,355	7,243	-6,363	42,771	8,443	20,666	2022-03-22 14:31
175,334	48,428	53,879	68,664	1,207	1,199	20228,238	20311,632	71,868	13,789	6,773	-6,473	42,662	8,432	20,666	2022-03-22 14:31
175,834	48,426	53,885	68,515	1,205	1,199	20140,665	20103,982	54,531	13,086	7,282	-6,390	42,328	8,399	20,572	2022-03-22 14:32
176,334	48,389	53,866	68,654	1,207	1,199	20242,096	20322,704	108,536	13,089	7,532	-6,356	42,514	8,418	20,572	2022-03-22 14:32
176,834	48,304	53,847	68,699	1,206	1,199	20350,022	20412,637	85,214	13,332	7,194	-6,366	42,941	8,460	20,572	2022-03-22 14:33
177,334	48,350	53,772	68,619	1,210	1,200	20255,635	20417,563	54,363	13,584	6,922	-6,466	42,276	8,394	20,572	2022-03-22 14:33
177,834	48,470	53,855	68,614	1,204	1,199	20132,717	20280,370	53,640	13,110	6,962	-6,464	42,472	8,413	20,478	2022-03-22 14:34
178,333	48,515	53,907	68,462	1,206	1,199	19961,587	20006,552	56,595	13,402	6,878	-6,387	42,516	8,418	20,478	2022-03-22 14:34
178,833	48,440	53,893	68,527	1,204	1,199	20058,728	20107,331	82,279	13,614	7,033	-6,352	42,596	8,426	20,354	2022-03-22 14:35
179,333	48,302	53,799	68,678	1,209	1,199	20302,051	20449,453	58,558	13,616	6,842	-6,436	42,818	8,448	20,261	2022-03-22 14:35
179,833	48,453	53,798	68,598	1,204	1,199	20076,940	20344,159	51,387	13,138	7,292	-6,354	42,403	8,407	20,260	2022-03-22 14:36
180,333	48,496	53,912	68,625	1,207	1,199	20086,388	20216,859	53,672	13,997	6,742	-6,397	42,478	8,414	20,354	2022-03-22 14:36
180,833	48,441	53,886	68,625	1,210	1,199	20206,601	20253,071	125,895	14,853	5,793	-6,322	42,902	8,456	20,167	2022-03-22 14:37
181,333	48,357	53,833	68,763	1,207	1,199	20250,613	20527,751	103,433	14,372	6,101	-6,438	42,308	8,397	20,261	2022-03-22 14:37
181,833	48,315	53,831	68,635	1,202	1,199	20353,312	20350,718	86,871	13,311	7,195	-6,439	42,739	8,440	20,167	2022-03-22 14:38
182,334	48,413	53,808	68,873	1,208	1,199	20187,574	20712,873	50,461	12,735	7,820	-6,431	42,498	8,416	20,073	2022-03-22 14:38
182,834	48,522	53,945	68,902	1,209	1,199	20260,565	20553,850	68,285	12,180	8,432	-6,511	42,066	8,373	20,073	2022-03-22 14:39
183,334	48,498	54,026	68,705	1,203	1,200	20331,662	20181,752	60,066	12,216	8,291	-6,389	42,526	8,419	19,979	2022-03-22 14:39
183,834	48,400	53,919	68,635	1,210	1,199	20382,543	20220,893	60,201	12,105	8,148	-6,538	42,596	8,426	19,979	2022-03-22 14:40
184,334	48,350	53,885	68,674	1,201	1,200	20236,915	20343,626	50,420	11,900	8,278	-6,425	42,751	8,441	19,979	2022-03-22 14:40
184,833	48,300	53,813	68,518	1,210	1,199	20392,545	20216,129	65,602	12,270	8,224	-6,464	42,670	8,433	20,073	2022-03-22 14:41
185,333	48,411	53,770	68,513	1,205	1,199	20064,725	20266,340	59,509	13,218	7,260	-6,495	42,424	8,409	19,854	2022-03-22 14:41
185,833	48,413	53,794	68,544	1,206	1,199	20014,663	20269,971	79,034	13,537	7,114	-6,436	42,500	8,416	19,854	2022-03-22 14:42
186,333	48,383	53,837	68,413	1,207	1,199	20142,533	20029,687	57,966	13,589	7,022	-6,283	42,420	8,408	19,854	2022-03-22 14:42
186,833	48,349	53,775	68,379	1,206	1,200	20054,736	20081,195	121,702	14,731	6,024	-6,288	42,359	8,402	19,760	2022-03-22 14:43

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
187,333	0,250	0,781	1,050	-0,318	0,040	0,203	0,716	102,559	26,516	23,081	33,287	20,871	20,909	20,998	20,814	62,788
187,833	0,239	0,763	1,059	-0,316	-0,027	0,215	0,715	102,571	26,522	23,096	21,931	20,876	20,904	21,009	20,818	62,956
188,333	0,250	0,783	1,062	-0,317	0,022	0,187	0,714	102,506	26,401	23,090	22,233	20,885	20,890	21,011	20,821	62,959
188,834	0,251	0,795	1,061	-0,319	0,008	0,196	0,713	102,465	26,214	23,018	22,243	20,827	20,836	20,959	20,767	63,004
189,334	0,222	0,736	1,065	-0,319	0,013	0,241	0,713	102,402	26,122	22,970	22,242	20,796	20,799	20,922	20,733	63,005
189,834	0,221	0,732	1,069	-0,321	0,037	0,237	0,713	102,356	26,355	23,059	22,351	20,873	20,872	21,005	20,803	63,017
190,334	0,217	0,722	1,060	-0,319	0,051	0,253	0,712	102,345	26,137	23,009	22,325	20,843	20,841	20,967	20,771	63,079
190,834	0,220	0,713	1,052	-0,321	0,029	0,253	0,712	102,446	26,312	23,056	22,394	20,874	20,893	21,013	20,809	63,054
191,334	0,232	0,725	1,069	-0,321	0,039	0,242	0,712	102,326	25,978	22,919	22,267	20,757	20,765	20,879	20,682	63,112
191,833	0,222	0,735	1,062	-0,319	0,006	0,238	0,709	102,359	25,981	22,988	22,361	20,853	20,862	20,976	20,778	63,113
192,333	0,223	0,735	1,063	-0,320	0,003	0,237	0,709	102,337	26,224	22,989	22,360	20,841	20,844	20,961	20,759	63,232
192,833	0,231	0,747	1,063	-0,323	0,029	0,221	0,710	102,390	26,105	23,019	22,388	20,871	20,874	20,988	20,787	63,144
193,333	0,247	0,774	1,059	-0,315	0,014	0,200	0,709	102,350	26,081	22,979	22,365	20,845	20,846	20,968	20,766	63,072
193,833	0,238	0,774	1,061	-0,319	0,004	0,209	0,708	102,414	26,170	23,025	22,414	20,893	20,899	21,021	20,809	63,119
194,333	0,244	0,754	1,058	-0,319	0,020	0,225	0,707	102,497	26,282	23,043	22,426	20,885	20,900	21,007	20,809	63,217
194,833	0,232	0,721	1,067	-0,318	0,015	0,248	0,706	102,482	26,155	23,026	22,433	20,893	20,903	21,019	20,810	63,237
195,333	0,242	0,756	1,068	-0,319	0,051	0,210	0,707	102,471	25,880	22,933	22,358	20,831	20,838	20,953	20,747	63,293
195,834	0,278	0,764	1,059	-0,318	-0,002	0,217	0,706	102,570	26,109	22,982	22,389	20,858	20,866	20,977	20,770	63,192
196,334	0,271	0,750	1,061	-0,320	0,037	0,230	0,706	102,539	25,971	22,973	22,386	20,864	20,873	20,985	20,777	63,315
196,834	0,245	0,729	1,061	-0,318	0,012	0,242	0,705	102,562	26,101	23,027	22,431	20,926	20,926	21,045	20,832	63,366
197,334	0,233	0,733	1,062	-0,319	0,023	0,234	0,704	102,464	26,051	22,955	22,364	20,847	20,853	20,968	20,751	63,317
197,834	0,250	0,757	1,066	-0,318	0,037	0,209	0,704	102,534	26,189	23,036	22,435	20,924	20,926	21,038	20,826	63,163
198,334	0,277	0,791	1,060	-0,320	-0,012	0,190	0,703	102,549	26,369	22,984	22,375	20,855	20,856	20,974	20,755	63,373
198,833	0,258	0,771	1,065	-0,319	-0,005	0,213	0,701	102,592	26,210	23,021	22,412	20,898	20,895	21,007	20,793	63,387
199,333	0,222	0,740	1,069	-0,317	0,037	0,232	0,701	102,563	26,124	22,960	22,360	20,851	20,844	20,956	20,744	63,341
199,833	0,224	0,743	1,068	-0,319	0,020	0,233	0,699	102,629	26,360	23,041	22,426	20,920	20,918	21,024	20,802	63,334
200,333	0,245	0,731	1,065	-0,324	0,004	0,241	0,701	102,496	26,114	22,962	22,355	20,849	20,859	20,968	20,745	63,297
200,833	0,224	0,724	1,061	-0,325	-0,001	0,251	0,700	102,527	26,066	22,996	22,409	20,917	20,910	21,023	20,805	63,292
201,333	0,230	0,719	1,063	-0,322	-0,023	0,250	0,699	102,423	26,052	22,983	22,388	20,907	20,907	21,013	20,792	63,356

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
187,333	48,449	53,774	68,436	1,206	1,199	19853,770	20157,650	148,543	14,465	6,085	-6,358	41,795	8,346	19,754	2022-03-22 14:43
187,833	48,470	53,863	68,636	1,209	1,200	20123,278	20317,543	105,110	14,156	6,454	-6,317	42,114	8,378	19,666	2022-03-22 14:44
188,333	48,479	53,879	68,558	1,210	1,199	20116,185	20173,957	134,153	15,181	5,611	-6,333	42,703	8,436	19,666	2022-03-22 14:44
188,834	48,492	53,943	68,607	1,205	1,200	20091,432	20164,641	80,504	14,417	5,874	-6,379	42,570	8,423	19,573	2022-03-22 14:45
189,334	48,446	53,918	68,607	1,203	1,200	20124,917	20201,381	46,489	13,219	7,216	-6,387	42,397	8,406	19,573	2022-03-22 14:45
189,834	48,324	53,848	68,709	1,211	1,200	20431,468	20439,473	74,780	13,514	7,116	-6,417	43,011	8,467	19,573	2022-03-22 14:46
190,334	48,314	53,837	68,776	1,202	1,200	20381,347	20552,106	43,290	12,786	7,577	-6,376	42,111	8,378	19,478	2022-03-22 14:46
190,834	48,351	53,829	68,763	1,205	1,200	20346,369	20543,670	52,852	12,631	7,603	-6,427	42,390	8,405	19,478	2022-03-22 14:47
191,334	48,471	53,893	68,772	1,209	1,200	20329,080	20469,584	101,576	13,005	7,268	-6,411	42,888	8,455	19,478	2022-03-22 14:47
191,833	48,541	53,962	68,821	1,208	1,200	20212,810	20443,884	51,400	13,423	7,132	-6,379	42,362	8,403	19,251	2022-03-22 14:48
192,333	48,469	54,025	68,924	1,205	1,200	20438,204	20496,281	73,161	13,593	7,105	-6,407	42,532	8,419	19,345	2022-03-22 14:48
192,833	48,384	53,957	68,778	1,204	1,200	20420,082	20390,771	94,045	14,067	6,644	-6,468	42,656	8,432	19,345	2022-03-22 14:49
193,333	48,363	53,878	68,707	1,204	1,200	20348,759	20396,219	148,512	14,726	6,006	-6,300	42,125	8,379	19,251	2022-03-22 14:49
193,833	48,345	53,840	68,998	1,205	1,200	20454,736	20850,631	95,553	14,103	6,283	-6,380	42,227	8,389	19,157	2022-03-22 14:50
194,333	48,362	53,874	68,950	1,208	1,200	20610,102	20737,116	139,463	13,799	6,742	-6,373	42,451	8,411	19,158	2022-03-22 14:50
194,833	48,493	53,960	68,987	1,208	1,200	20459,387	20674,442	61,876	13,031	7,442	-6,366	42,594	8,426	19,158	2022-03-22 14:51
195,333	48,560	54,021	68,927	1,203	1,201	20356,732	20514,977	131,844	14,387	6,306	-6,377	43,013	8,467	19,157	2022-03-22 14:51
195,834	48,430	53,991	68,999	1,209	1,200	20504,009	20646,300	235,410	13,827	6,498	-6,358	42,419	8,408	19,158	2022-03-22 14:52
196,334	48,415	53,967	69,114	1,203	1,200	20580,143	20842,502	102,521	13,391	6,891	-6,400	42,288	8,395	19,092	2022-03-22 14:52
196,834	48,384	53,969	69,205	1,209	1,200	20802,148	20954,621	136,907	13,046	7,256	-6,370	42,301	8,397	18,970	2022-03-22 14:53
197,334	48,422	53,957	68,887	1,208	1,200	20659,053	20539,147	84,400	13,412	7,027	-6,377	42,506	8,417	19,064	2022-03-22 14:53
197,834	48,449	53,948	69,238	1,208	1,201	20419,461	21045,200	150,658	13,918	6,284	-6,361	42,269	8,393	19,064	2022-03-22 14:54
198,334	48,417	53,983	69,121	1,208	1,200	20749,896	20824,845	235,429	14,626	5,687	-6,390	42,340	8,400	18,845	2022-03-22 14:54
198,833	48,369	53,971	69,145	1,207	1,200	20816,611	20875,018	87,733	13,867	6,387	-6,379	42,548	8,421	18,845	2022-03-22 14:55
199,333	48,492	53,982	68,947	1,203	1,202	20525,706	20610,880	61,252	13,719	6,959	-6,341	42,636	8,430	18,751	2022-03-22 14:55
199,833	48,557	54,086	69,027	1,209	1,201	20512,444	20559,516	71,394	13,545	6,991	-6,378	42,784	8,444	18,470	2022-03-22 14:56
200,333	48,444	54,050	68,972	1,204	1,201	20538,103	20536,352	117,883	13,261	7,242	-6,480	42,622	8,428	18,658	2022-03-22 14:56
200,833	48,300	53,966	69,107	1,209	1,201	20811,825	20846,863	50,503	13,027	7,521	-6,507	42,468	8,413	18,751	2022-03-22 14:57
201,333	48,246	53,887	69,192	1,206	1,201	20931,777	21069,864	69,296	13,046	7,491	-6,440	42,445	8,411	18,658	2022-03-22 14:57

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
201,833	0,238	0,723	1,064	-0,320	0,001	0,240	0,699	102,520	26,370	23,047	22,448	20,960	20,951	21,064	20,839	63,300
202,334	0,259	0,768	1,064	-0,314	0,047	0,202	0,699	102,641	26,361	23,016	22,396	20,910	20,905	21,009	20,790	63,386
202,834	0,256	0,778	1,061	-0,319	-0,007	0,200	0,697	102,706	26,516	23,080	22,465	20,959	20,959	21,070	20,845	63,375
203,334	0,239	0,776	1,064	-0,317	0,012	0,210	0,696	102,498	26,338	22,973	22,355	20,862	20,862	20,966	20,742	63,342
203,834	0,231	0,757	1,063	-0,322	0,003	0,215	0,696	102,520	26,157	22,982	22,365	20,879	20,885	20,980	20,761	63,384
204,334	0,259	0,765	1,059	-0,315	-0,001	0,212	0,695	102,642	26,523	23,092	22,469	20,981	20,976	21,070	20,850	63,382
204,834	0,236	0,746	1,066	-0,323	-0,008	0,230	0,694	102,753	26,553	23,108	22,478	20,984	20,981	21,070	20,849	63,478
205,333	0,276	0,756	1,058	-0,322	-0,009	0,218	0,694	102,734	26,368	23,033	22,405	20,919	20,919	21,004	20,782	63,497
205,833	0,260	0,748	1,059	-0,321	0,033	0,229	0,694	102,888	26,198	23,066	22,460	20,977	20,982	21,077	20,848	63,435
206,333	0,236	0,736	1,056	-0,326	0,004	0,234	0,692	102,834	26,314	23,036	22,426	20,946	20,940	21,041	20,805	63,363
206,833	0,255	0,748	1,067	-0,320	0,033	0,226	0,692	102,824	26,249	23,045	22,446	20,958	20,960	21,058	20,821	63,324
207,333	0,250	0,742	1,069	-0,320	0,007	0,232	0,691	102,773	26,083	23,022	22,433	20,956	20,960	21,046	20,818	63,396
207,833	0,233	0,750	1,056	-0,323	-0,005	0,226	0,690	102,805	26,180	23,055	22,473	20,991	21,002	21,084	20,851	63,352
208,333	0,232	0,745	1,065	-0,320	0,003	0,228	0,690	102,852	26,426	23,084	22,479	21,009	20,998	21,101	20,859	63,458
208,833	0,223	0,739	1,065	-0,317	0,017	0,228	0,689	102,828	26,320	23,071	22,468	21,005	20,996	21,083	20,852	63,419
209,334	0,218	0,765	1,066	-0,319	-0,023	0,212	0,689	102,742	26,258	23,017	22,409	20,940	20,939	21,023	20,793	63,416
209,834	0,222	0,772	1,060	-0,322	0,028	0,211	0,689	102,802	26,273	23,048	22,460	20,985	20,990	21,078	20,842	63,397
210,334	0,215	0,729	1,064	-0,321	0,012	0,244	0,688	102,852	26,440	23,073	22,469	21,002	20,999	21,089	20,850	63,418
210,834	0,216	0,701	1,063	-0,319	-0,016	0,266	0,687	102,755	26,427	23,054	22,437	20,970	20,973	21,057	20,819	63,372
211,334	0,218	0,728	1,069	-0,324	0,008	0,235	0,686	102,934	26,504	23,101	22,485	21,016	21,019	21,104	20,863	63,384
211,834	0,225	0,752	1,064	-0,322	0,015	0,218	0,685	102,826	26,427	23,052	22,426	20,952	20,958	21,049	20,801	63,432
212,333	0,264	0,789	1,065	-0,316	0,021	0,189	0,685	102,938	26,436	23,097	22,482	21,018	21,011	21,105	20,861	63,398
212,833	0,273	0,781	1,060	-0,315	0,010	0,201	0,685	102,823	26,405	23,053	22,431	20,976	20,973	21,046	20,809	63,462
213,333	0,251	0,757	1,062	-0,318	0,019	0,221	0,684	102,991	26,551	23,112	22,488	21,011	21,014	21,099	20,855	63,501
213,833	0,239	0,752	1,064	-0,319	0,024	0,226	0,684	102,845	26,327	23,047	22,436	20,968	20,966	21,056	20,805	63,574
214,333	0,232	0,747	1,060	-0,321	-0,027	0,225	0,680	102,919	26,436	23,097	22,486	21,014	21,009	21,089	20,846	63,512
214,833	0,279	0,782	1,059	-0,319	-0,005	0,189	0,682	102,970	26,675	23,051	22,419	20,930	20,927	21,008	20,763	63,476
215,333	0,302	0,800	1,065	-0,318	0,003	0,184	0,681	103,050	26,704	23,109	22,480	20,990	20,980	21,065	20,814	63,530
215,833	0,267	0,787	1,061	-0,321	-0,003	0,191	0,680	103,102	26,554	23,118	22,491	21,005	20,996	21,078	20,831	63,549

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
201,833	48,422	53,912	68,927	1,209	1,201	20666,317	20671,266	126,130	13,517	7,204	-6,401	43,003	8,466	18,658	2022-03-22 14:58
202,334	48,527	54,028	69,117	1,205	1,202	20566,211	20781,235	168,636	14,597	6,066	-6,283	42,276	8,394	18,658	2022-03-22 14:58
202,834	48,391	54,018	69,207	1,209	1,201	20803,421	20915,650	153,632	14,381	5,995	-6,379	42,430	8,409	18,564	2022-03-22 14:59
203,334	48,336	53,975	69,047	1,203	1,202	20743,825	20763,377	77,887	13,972	6,301	-6,350	42,793	8,445	18,470	2022-03-22 14:59
203,834	48,364	53,959	69,117	1,209	1,202	20865,568	20884,383	94,876	14,041	6,454	-6,431	42,439	8,410	18,470	2022-03-22 15:00
204,334	48,480	54,004	69,252	1,210	1,201	20708,713	20997,872	157,635	13,873	6,375	-6,291	42,329	8,399	18,346	2022-03-22 15:00
204,834	48,507	54,094	69,268	1,202	1,202	20670,829	20912,672	79,615	13,262	6,913	-6,461	42,677	8,434	18,346	2022-03-22 15:01
205,333	48,451	54,082	69,276	1,208	1,202	20869,687	20930,507	296,660	14,018	6,530	-6,450	42,366	8,403	18,470	2022-03-22 15:01
205,833	48,456	54,064	69,117	1,203	1,202	20694,955	20731,455	119,033	13,701	6,868	-6,425	41,988	8,365	18,346	2022-03-22 15:02
206,333	48,374	54,024	69,113	1,211	1,201	20841,879	20776,728	127,343	13,717	7,019	-6,514	42,101	8,377	18,252	2022-03-22 15:02
206,833	48,325	53,961	69,082	1,205	1,202	20764,063	20830,107	98,736	13,822	6,791	-6,398	42,576	8,424	18,252	2022-03-22 15:03
207,333	48,357	53,940	69,302	1,204	1,202	20799,540	21169,500	154,031	13,694	6,950	-6,398	42,752	8,441	18,237	2022-03-22 15:03
207,833	48,433	54,008	69,205	1,210	1,202	20729,062	20935,509	83,121	13,781	6,784	-6,458	42,273	8,394	18,151	2022-03-22 15:04
208,333	48,511	54,052	69,189	1,204	1,202	20677,311	20853,138	60,974	13,682	6,845	-6,408	42,675	8,434	18,065	2022-03-22 15:04
208,833	48,470	54,075	69,137	1,208	1,202	20735,050	20752,570	71,198	13,823	6,831	-6,340	42,473	8,414	18,065	2022-03-22 15:05
209,334	48,358	54,016	69,238	1,207	1,202	20868,713	20967,292	42,957	13,988	6,351	-6,387	42,871	8,453	18,064	2022-03-22 15:05
209,834	48,323	53,946	69,195	1,208	1,201	20922,424	20992,178	49,158	14,103	6,337	-6,441	42,158	8,382	18,065	2022-03-22 15:06
210,334	48,431	54,024	69,137	1,203	1,202	20713,287	20823,711	37,517	13,056	7,331	-6,420	42,684	8,434	18,158	2022-03-22 15:06
210,834	48,494	54,016	69,132	1,206	1,202	20610,957	20827,585	44,918	12,415	7,978	-6,386	42,593	8,425	17,846	2022-03-22 15:07
211,334	48,498	54,059	69,166	1,208	1,202	20661,219	20821,824	50,588	13,556	7,036	-6,472	42,551	8,421	17,851	2022-03-22 15:07
211,834	48,438	54,049	69,186	1,205	1,203	20750,476	20870,280	94,923	13,845	6,549	-6,440	42,649	8,431	17,658	2022-03-22 15:08
212,333	48,396	54,029	69,199	1,207	1,202	20800,054	20902,913	182,859	14,786	5,661	-6,328	42,685	8,435	17,752	2022-03-22 15:08
212,833	48,379	54,039	69,208	1,204	1,202	20853,185	20905,160	215,861	14,353	6,029	-6,307	42,523	8,419	17,752	2022-03-22 15:09
213,333	48,364	53,988	69,466	1,210	1,202	21034,397	21329,715	112,393	13,860	6,627	-6,367	42,455	8,412	17,658	2022-03-22 15:09
213,833	48,404	54,061	69,377	1,207	1,202	21028,040	21106,753	87,920	13,744	6,773	-6,386	42,531	8,419	17,564	2022-03-22 15:10
214,333	48,417	54,075	69,282	1,201	1,202	20820,651	20946,530	80,261	13,800	6,739	-6,420	42,276	8,394	17,658	2022-03-22 15:10
214,833	48,409	54,047	69,398	1,207	1,203	20896,030	21165,691	262,873	15,238	5,655	-6,388	42,567	8,423	17,752	2022-03-22 15:11
215,333	48,404	54,046	69,377	1,208	1,202	20984,106	21130,855	212,466	14,624	5,513	-6,353	42,837	8,450	17,565	2022-03-22 15:11
215,833	48,431	54,064	69,477	1,209	1,203	20986,638	21246,784	168,853	14,541	5,743	-6,414	42,333	8,400	17,470	2022-03-22 15:12



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
216,334	0,283	0,774	1,062	-0,321	0,022	0,211	0,681	103,116	26,324	23,061	22,446	20,969	20,968	21,045	20,794	63,621
216,834	0,234	0,741	1,060	-0,321	-0,029	0,232	0,679	103,160	26,209	23,100	22,506	21,045	21,033	21,120	20,863	63,702
217,334	0,248	0,733	1,065	-0,323	0,033	0,245	0,678	103,181	26,040	23,062	22,473	21,033	21,028	21,108	20,850	63,827
217,834	0,221	0,706	1,062	-0,321	0,020	0,258	0,678	103,090	26,201	22,992	22,403	20,945	20,935	21,021	20,762	63,684
218,334	0,226	0,714	1,069	-0,318	0,031	0,257	0,680	103,129	26,273	23,058	22,462	21,005	21,006	21,075	20,819	63,715
218,833	0,235	0,717	1,065	-0,321	0,025	0,248	0,676	103,121	26,317	23,081	22,475	21,025	21,019	21,095	20,840	63,614
219,333	0,258	0,727	1,066	-0,321	0,015	0,249	0,676	103,007	26,229	23,055	22,463	21,009	21,005	21,079	20,823	63,629
219,833	0,228	0,718	1,059	-0,323	0,047	0,245	0,676	103,154	26,431	23,133	22,525	21,082	21,066	21,141	20,885	63,575
220,333	0,230	0,743	1,065	-0,320	0,028	0,227	0,670	103,103	26,161	23,051	22,448	21,016	20,998	21,081	20,820	63,527
220,833	0,239	0,739	1,058	-0,316	-0,008	0,236	0,675	103,004	26,160	23,059	22,461	21,024	21,024	21,098	20,837	63,457
221,333	0,247	0,735	1,069	-0,321	0,011	0,242	0,674	103,044	26,043	23,043	22,454	21,029	21,027	21,097	20,832	63,492
221,833	0,259	0,738	1,063	-0,318	0,028	0,229	0,673	103,115	26,237	23,040	22,451	21,015	20,994	21,084	20,817	63,566
222,333	0,238	0,764	1,071	-0,318	0,039	0,209	0,672	103,302	26,257	23,108	22,486	21,081	21,075	21,147	20,880	63,380
222,834	0,223	0,766	1,068	-0,319	0,029	0,206	0,674	103,211	26,470	23,086	22,472	21,034	21,027	21,104	20,836	63,365
223,334	0,246	0,768	1,065	-0,319	0,031	0,217	0,672	103,142	26,240	23,073	22,457	21,026	21,020	21,099	20,827	63,434
223,834	0,252	0,735	1,064	-0,318	0,023	0,238	0,670	103,146	26,179	23,039	22,442	21,036	21,023	21,101	20,825	63,448
224,334	0,234	0,729	1,065	-0,319	0,003	0,244	0,669	103,154	26,338	23,114	22,500	21,083	21,078	21,153	20,882	63,559
224,834	0,265	0,724	1,061	-0,318	0,034	0,246	0,668	103,023	26,139	23,021	22,415	21,001	20,997	21,077	20,800	63,513
225,334	0,256	0,718	1,064	-0,323	0,017	0,255	0,669	103,053	26,334	23,111	22,501	21,088	21,079	21,152	20,880	63,477
225,833	0,232	0,707	1,058	-0,323	0,005	0,259	0,669	103,060	26,477	23,127	22,509	21,086	21,074	21,148	20,880	63,448
226,333	0,243	0,721	1,057	-0,319	0,003	0,245	0,666	102,991	26,512	23,146	22,517	21,098	21,086	21,155	20,883	63,363
226,833	0,251	0,734	1,064	-0,321	0,021	0,239	0,667	103,074	26,369	23,086	22,466	21,040	21,029	21,099	20,829	63,351
227,333	0,227	0,716	1,065	-0,320	0,039	0,259	0,667	103,187	26,329	23,142	22,523	21,113	21,099	21,171	20,894	63,403
227,833	0,239	0,708	1,071	-0,324	-0,003	0,258	0,666	103,139	26,366	23,146	22,530	21,118	21,115	21,182	20,902	63,404
228,333	0,236	0,721	1,059	-0,321	0,029	0,247	0,665	103,133	26,601	23,161	22,534	21,122	21,114	21,177	20,904	63,426
228,833	0,229	0,736	1,060	-0,318	0,032	0,229	0,667	102,974	26,655	23,140	22,496	21,060	21,059	21,126	20,849	63,202
229,333	0,239	0,749	1,067	-0,319	0,012	0,227	0,663	103,112	26,600	23,184	22,555	21,123	21,122	21,173	20,906	63,185
229,834	0,236	0,726	1,066	-0,317	0,023	0,248	0,663	103,108	26,650	23,197	22,573	21,129	21,124	21,182	20,909	63,150
230,334	0,227	0,697	1,068	-0,319	0,048	0,272	0,663	102,972	26,473	23,132	22,513	21,074	21,064	21,127	20,850	63,196

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
216,334	48,455	54,122	69,481	1,209	1,202	21053,442	21167,187	171,161	13,805	6,338	-6,429	42,590	8,425	17,564	2022-03-22 15:12
216,834	48,505	54,159	69,695	1,205	1,203	21026,351	21415,528	82,371	13,389	6,947	-6,412	42,715	8,437	17,348	2022-03-22 15:13
217,334	48,430	54,214	69,528	1,206	1,202	21325,260	21104,018	76,008	12,944	7,350	-6,457	42,236	8,390	17,348	2022-03-22 15:13
217,834	48,410	54,128	69,592	1,204	1,202	21121,052	21306,874	54,193	12,649	7,735	-6,425	42,644	8,431	17,348	2022-03-22 15:14
218,334	48,415	54,118	69,636	1,206	1,203	21185,516	21392,666	52,939	12,432	7,707	-6,358	42,688	8,435	17,845	2022-03-22 15:14
218,833	48,396	54,113	69,490	1,212	1,202	21191,481	21191,207	114,518	13,107	7,437	-6,424	42,553	8,422	17,254	2022-03-22 15:15
219,333	48,400	54,093	69,449	1,204	1,202	21052,834	21158,931	107,046	12,820	7,485	-6,420	42,564	8,423	17,254	2022-03-22 15:15
219,833	48,343	54,060	69,329	1,207	1,202	21125,017	21032,601	74,453	13,502	7,345	-6,459	42,382	8,405	17,161	2022-03-22 15:16
220,333	48,375	54,037	69,390	1,205	1,202	20975,867	21154,624	86,989	13,867	6,817	-6,401	42,893	8,455	17,161	2022-03-22 15:16
220,833	48,492	54,044	69,226	1,210	1,202	20795,097	20914,131	113,513	13,389	7,089	-6,312	42,393	8,406	17,161	2022-03-22 15:17
221,333	48,538	54,086	69,442	1,208	1,202	20742,823	21163,527	111,562	13,345	7,255	-6,426	43,061	8,472	17,067	2022-03-22 15:17
221,833	48,388	54,120	69,188	1,209	1,202	21076,891	20756,795	91,492	13,848	6,857	-6,355	42,368	8,403	16,973	2022-03-22 15:18
222,333	48,322	54,020	69,181	1,200	1,202	20760,496	20895,653	88,344	14,130	6,258	-6,351	42,996	8,465	16,973	2022-03-22 15:18
222,834	48,363	53,939	69,168	1,211	1,202	20872,438	20982,649	57,530	14,234	6,165	-6,380	42,911	8,457	16,973	2022-03-22 15:19
223,334	48,472	54,004	69,269	1,205	1,202	20716,080	21036,277	101,824	13,646	6,521	-6,372	42,449	8,411	16,991	2022-03-22 15:19
223,834	48,499	54,093	69,337	1,210	1,202	20774,594	21004,264	115,146	13,205	7,145	-6,360	42,533	8,419	16,986	2022-03-22 15:20
224,334	48,474	54,114	69,443	1,200	1,202	20787,330	21124,906	73,316	12,955	7,331	-6,377	42,814	8,447	16,848	2022-03-22 15:20
224,834	48,410	54,073	69,223	1,210	1,202	20998,269	20878,650	202,077	12,960	7,371	-6,356	42,486	8,415	16,661	2022-03-22 15:21
225,334	48,429	54,034	69,294	1,203	1,202	20798,483	21031,710	126,829	12,907	7,643	-6,452	42,058	8,372	16,755	2022-03-22 15:21
225,833	48,376	54,047	69,185	1,209	1,202	20931,753	20863,391	97,888	12,928	7,760	-6,459	42,607	8,427	16,972	2022-03-22 15:22
226,333	48,375	53,980	69,097	1,205	1,203	20738,208	20842,965	143,887	13,503	7,344	-6,372	42,492	8,415	16,661	2022-03-22 15:22
226,833	48,349	53,986	69,219	1,207	1,202	20791,413	20994,727	94,964	13,461	7,155	-6,426	42,610	8,427	16,754	2022-03-22 15:23
227,333	48,372	53,989	69,330	1,206	1,203	20813,672	21154,637	71,382	12,743	7,765	-6,397	42,601	8,426	16,755	2022-03-22 15:23
227,833	48,437	54,017	69,185	1,211	1,203	20814,232	20908,611	118,102	12,956	7,741	-6,473	42,940	8,460	16,661	2022-03-22 15:24
228,333	48,491	54,056	69,002	1,205	1,202	20671,357	20596,916	66,322	13,211	7,408	-6,422	42,488	8,415	16,567	2022-03-22 15:24
228,833	48,489	54,024	68,861	1,205	1,203	20364,926	20454,905	85,052	13,833	6,884	-6,355	42,586	8,425	16,752	2022-03-22 15:25
229,333	48,412	53,962	68,874	1,212	1,202	20563,416	20549,438	85,794	13,524	6,804	-6,381	42,637	8,430	16,473	2022-03-22 15:25
229,834	48,505	53,974	68,886	1,206	1,203	20282,668	20555,352	89,765	12,999	7,449	-6,338	42,806	8,446	16,348	2022-03-22 15:26
230,334	48,405	53,997	68,918	1,206	1,202	20495,648	20559,835	68,288	12,338	8,167	-6,374	42,763	8,442	16,567	2022-03-22 15:26

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
230,834	0,224	0,689	1,067	-0,316	-0,008	0,272	0,661	102,913	26,315	23,159	22,564	21,125	21,129	21,190	20,907	63,238
231,334	0,234	0,705	1,063	-0,321	0,036	0,259	0,661	102,962	26,480	23,166	22,561	21,127	21,122	21,193	20,910	63,157
231,834	0,282	0,713	1,070	-0,315	0,003	0,255	0,660	102,764	26,416	23,115	22,498	21,075	21,072	21,141	20,854	63,115
232,334	0,267	0,734	1,063	-0,318	-0,018	0,231	0,661	102,860	26,364	23,156	22,558	21,143	21,124	21,188	20,911	63,091
232,833	0,251	0,764	1,063	-0,320	0,002	0,209	0,660	102,846	26,314	23,128	22,532	21,117	21,107	21,170	20,888	63,126
233,333	0,256	0,753	1,066	-0,322	0,041	0,223	0,659	102,866	26,228	23,124	22,535	21,123	21,120	21,179	20,897	62,971
233,833	0,265	0,743	1,064	-0,317	0,005	0,236	0,659	102,855	26,233	23,121	22,529	21,133	21,121	21,184	20,896	63,023
234,333	0,244	0,723	1,065	-0,320	0,029	0,248	0,658	102,782	26,134	23,065	22,479	21,081	21,077	21,132	20,852	63,029
234,833	0,238	0,724	1,064	-0,315	0,006	0,244	0,656	102,716	26,128	23,052	22,475	21,074	21,068	21,133	20,848	63,046
235,333	0,265	0,744	1,065	-0,317	-0,003	0,225	0,657	102,785	26,187	23,120	22,533	21,139	21,135	21,196	20,914	63,050
235,833	0,279	0,752	1,055	-0,315	0,011	0,225	0,656	102,788	26,539	23,138	22,540	21,147	21,144	21,194	20,911	63,093
236,334	0,241	0,737	1,061	-0,320	-0,007	0,241	0,655	102,815	26,556	23,167	22,549	21,149	21,138	21,195	20,908	63,214
236,834	0,231	0,710	1,064	-0,317	0,046	0,261	0,656	102,696	26,228	23,126	22,528	21,141	21,136	21,190	20,907	63,136
237,334	0,253	0,725	1,064	-0,319	0,020	0,236	0,654	102,705	26,449	23,085	22,482	21,085	21,090	21,132	20,853	63,139
237,834	0,275	0,761	1,059	-0,321	0,036	0,212	0,654	102,785	26,294	23,114	22,507	21,129	21,122	21,181	20,888	63,104
238,334	0,307	0,784	1,060	-0,317	0,028	0,191	0,652	102,889	26,355	23,094	22,496	21,127	21,121	21,163	20,878	63,119
238,834	0,263	0,790	1,061	-0,319	0,030	0,195	0,652	102,963	26,283	23,073	22,473	21,110	21,107	21,157	20,863	63,129
239,333	0,246	0,759	1,060	-0,318	0,025	0,218	0,651	103,019	26,232	23,104	22,521	21,151	21,154	21,199	20,912	63,175
239,833	0,247	0,727	1,064	-0,321	0,021	0,252	0,651	103,030	26,321	23,126	22,534	21,175	21,165	21,211	20,926	63,237
240,333	0,224	0,695	1,063	-0,318	0,016	0,271	0,652	102,963	26,340	23,111	22,523	21,156	21,157	21,196	20,912	63,326
240,833	0,217	0,706	1,062	-0,324	-0,005	0,257	0,651	102,907	26,406	23,138	22,541	21,174	21,171	21,211	20,925	63,377
241,333	0,233	0,718	1,063	-0,318	0,021	0,253	0,649	102,874	26,415	23,148	22,543	21,177	21,177	21,223	20,934	63,297
241,833	0,231	0,696	1,058	-0,321	-0,025	0,270	0,648	102,697	26,381	23,056	22,436	21,076	21,078	21,114	20,825	63,310
242,333	0,218	0,705	1,058	-0,320	0,006	0,263	0,648	102,727	26,345	23,116	22,504	21,150	21,148	21,181	20,895	63,208
242,833	0,233	0,710	1,057	-0,316	0,016	0,257	0,648	102,791	26,350	23,122	22,533	21,165	21,162	21,201	20,910	63,227
243,334	0,246	0,736	1,062	-0,320	-0,007	0,226	0,647	102,802	26,540	23,101	22,495	21,130	21,115	21,153	20,869	63,101
243,834	0,303	0,774	1,067	-0,321	0,010	0,203	0,646	102,954	26,620	23,174	22,554	21,182	21,182	21,219	20,923	63,128
244,334	0,393	0,764	1,059	-0,318	0,005	0,218	0,645	102,861	26,449	23,076	22,451	21,069	21,071	21,102	20,814	63,017
244,834	0,346	0,729	1,055	-0,316	0,017	0,245	0,645	102,772	26,699	23,161	22,522	21,147	21,132	21,170	20,879	63,054

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
230,834	48,285	53,939	68,969	1,200	1,201	20619,212	20696,340	58,899	12,117	8,173	-6,327	42,686	8,435	16,349	2022-03-22 15:27
231,334	48,321	53,870	68,847	1,208	1,202	20583,097	20638,049	77,204	12,466	7,764	-6,422	42,579	8,424	16,255	2022-03-22 15:27
231,834	48,381	53,890	68,856	1,205	1,202	20401,859	20616,152	219,579	12,860	7,655	-6,297	42,637	8,430	16,255	2022-03-22 15:28
232,334	48,411	53,921	68,819	1,208	1,202	20369,135	20532,718	147,157	13,813	6,943	-6,355	42,419	8,408	16,255	2022-03-22 15:28
232,833	48,408	53,891	68,796	1,208	1,202	20413,343	20539,272	168,036	14,357	6,274	-6,398	42,401	8,406	16,161	2022-03-22 15:29
233,333	48,397	53,892	68,590	1,208	1,202	20225,220	20251,645	174,063	13,717	6,682	-6,441	42,707	8,437	16,161	2022-03-22 15:29
233,833	48,385	53,883	68,688	1,202	1,202	20216,559	20400,807	172,322	13,435	7,065	-6,339	42,619	8,428	16,161	2022-03-22 15:30
234,333	48,385	53,863	68,631	1,210	1,202	20350,815	20353,201	98,113	13,161	7,435	-6,401	42,542	8,420	16,161	2022-03-22 15:30
234,833	48,454	53,900	68,678	1,201	1,202	20127,615	20360,864	106,721	13,270	7,311	-6,305	42,757	8,442	15,973	2022-03-22 15:31
235,333	48,460	53,916	68,790	1,205	1,202	20192,312	20501,837	204,934	13,922	6,764	-6,347	42,819	8,448	16,068	2022-03-22 15:31
235,833	48,481	53,963	68,883	1,210	1,202	20310,800	20565,209	179,692	13,820	6,740	-6,307	42,257	8,392	15,973	2022-03-22 15:32
236,334	48,497	53,975	68,874	1,204	1,202	20349,776	20527,348	106,168	13,200	7,235	-6,394	42,379	8,404	15,848	2022-03-22 15:32
236,834	48,386	53,976	68,824	1,209	1,202	20474,872	20453,831	71,047	12,529	7,831	-6,332	42,504	8,417	15,973	2022-03-22 15:33
237,334	48,393	53,909	68,787	1,204	1,202	20399,904	20501,542	208,338	13,421	7,086	-6,379	42,688	8,435	15,848	2022-03-22 15:33
237,834	48,403	53,919	68,768	1,207	1,202	20383,135	20468,208	213,098	14,147	6,369	-6,426	42,263	8,393	15,848	2022-03-22 15:34
238,334	48,400	53,903	68,855	1,209	1,203	20433,007	20615,217	196,333	14,850	5,738	-6,330	42,351	8,401	15,755	2022-03-22 15:34
238,834	48,386	53,918	68,890	1,209	1,202	20479,552	20635,308	124,648	14,468	5,861	-6,374	42,442	8,410	15,755	2022-03-22 15:35
239,333	48,381	53,912	68,905	1,208	1,203	20524,605	20669,426	135,219	13,863	6,537	-6,367	41,996	8,366	15,661	2022-03-22 15:35
239,833	48,368	53,934	68,965	1,201	1,204	20507,387	20735,205	96,003	12,531	7,557	-6,412	42,533	8,420	15,661	2022-03-22 15:36
240,333	48,415	53,971	69,187	1,205	1,203	20644,470	20975,324	65,499	12,461	8,138	-6,359	42,541	8,420	15,848	2022-03-22 15:36
240,833	48,497	54,037	69,060	1,206	1,202	20605,850	20702,540	46,054	12,974	7,706	-6,477	42,181	8,385	15,661	2022-03-22 15:37
241,333	48,526	54,056	69,116	1,209	1,203	20507,692	20762,803	110,222	12,887	7,595	-6,359	42,544	8,421	15,567	2022-03-22 15:37
241,833	48,421	54,012	68,970	1,209	1,202	20670,966	20610,256	54,849	12,320	8,091	-6,427	42,400	8,406	15,473	2022-03-22 15:38
242,333	48,345	53,933	68,952	1,206	1,203	20584,816	20709,121	55,212	12,691	7,887	-6,400	42,476	8,414	15,473	2022-03-22 15:38
242,833	48,290	53,918	68,900	1,205	1,203	20669,477	20654,247	107,402	12,936	7,707	-6,314	42,288	8,395	15,473	2022-03-22 15:39
243,334	48,378	53,865	68,812	1,205	1,202	20374,269	20587,274	139,495	14,135	6,777	-6,395	42,115	8,378	15,346	2022-03-22 15:39
243,834	48,420	53,894	68,739	1,208	1,202	20414,613	20452,156	179,000	14,375	6,100	-6,413	42,664	8,432	15,346	2022-03-22 15:40
244,334	48,415	53,913	68,702	1,207	1,202	20250,022	20370,903	663,059	13,943	6,531	-6,365	42,538	8,420	15,346	2022-03-22 15:40
244,834	48,409	53,896	68,796	1,207	1,202	20299,344	20521,003	230,452	13,061	7,363	-6,329	42,063	8,373	15,346	2022-03-22 15:41

PE22\_cat IV\_run 2\_220322\_EN.DAT

Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
245,334	0,318	0,718	1,062	-0,318	-0,018	0,246	0,644	102,685	26,741	23,166	22,528	21,137	21,127	21,154	20,873	63,173
245,834	0,316	0,740	1,062	-0,318	0,017	0,232	0,643	102,643	26,550	23,121	22,483	21,087	21,075	21,119	20,825	63,102
246,333	0,302	0,718	1,060	-0,318	0,027	0,252	0,643	102,723	26,447	23,212	22,592	21,209	21,203	21,234	20,944	63,047
246,833	0,303	0,749	1,055	-0,318	0,023	0,222	0,643	102,862	26,605	23,220	22,611	21,216	21,207	21,246	20,952	63,108
247,333	0,275	0,731	1,061	-0,321	0,041	0,242	0,642	102,823	26,474	23,189	22,591	21,212	21,200	21,241	20,943	63,137
247,833	0,230	0,705	1,059	-0,318	0,025	0,266	0,641	102,753	26,408	23,084	22,495	21,115	21,119	21,148	20,852	63,140
248,333	0,249	0,696	1,064	-0,321	0,060	0,267	0,641	102,781	26,474	23,162	22,562	21,186	21,182	21,214	20,919	63,222
248,833	0,244	0,718	1,062	-0,321	0,020	0,247	0,640	102,794	26,358	23,157	22,560	21,190	21,188	21,221	20,918	63,036
249,333	0,279	0,743	1,065	-0,316	-0,005	0,232	0,640	102,656	26,334	23,065	22,470	21,095	21,089	21,136	20,829	63,180
249,833	0,239	0,729	1,066	-0,317	0,053	0,240	0,639	102,701	26,371	23,124	22,527	21,150	21,139	21,180	20,880	63,179
250,334	0,229	0,726	1,068	-0,320	-0,007	0,246	0,638	102,560	26,531	23,146	22,536	21,160	21,161	21,195	20,890	63,062
250,834	0,238	0,730	1,060	-0,316	0,000	0,241	0,637	102,595	26,553	23,149	22,532	21,152	21,153	21,180	20,878	63,066
251,334	0,250	0,748	1,065	-0,318	0,045	0,221	0,636	102,709	26,359	23,197	22,592	21,227	21,223	21,248	20,953	63,013
251,834	0,250	0,746	1,057	-0,316	0,029	0,229	0,636	102,673	26,487	23,149	22,531	21,162	21,166	21,194	20,892	62,996
252,334	0,237	0,751	1,054	-0,319	0,019	0,227	0,636	102,647	26,552	23,167	22,564	21,189	21,180	21,212	20,913	63,090
252,833	0,234	0,717	1,063	-0,314	-0,013	0,262	0,635	102,519	26,249	23,061	22,453	21,100	21,104	21,125	20,823	63,132
253,333	0,226	0,703	1,067	-0,326	0,001	0,259	0,635	102,517	26,174	23,087	22,503	21,158	21,161	21,186	20,884	63,099
253,833	0,242	0,709	1,063	-0,320	-0,012	0,258	0,634	102,516	26,288	23,146	22,550	21,229	21,215	21,248	20,942	63,022
254,333	0,235	0,720	1,067	-0,326	0,046	0,248	0,633	102,500	26,359	23,139	22,550	21,224	21,210	21,235	20,932	63,101
254,833	0,235	0,718	1,063	-0,318	0,030	0,255	0,633	102,389	26,303	23,110	22,514	21,187	21,179	21,200	20,902	63,030
255,333	0,231	0,707	1,061	-0,321	0,019	0,259	0,632	102,303	26,208	23,038	22,459	21,121	21,119	21,137	20,839	63,034
255,833	0,229	0,744	1,066	-0,315	0,029	0,218	0,632	102,403	26,114	23,018	22,454	21,122	21,119	21,142	20,842	63,119
256,333	0,257	0,762	1,061	-0,310	0,028	0,216	0,631	102,429	26,345	23,143	22,560	21,231	21,229	21,246	20,948	63,130
256,834	0,247	0,732	1,062	-0,315	-0,012	0,245	0,630	102,244	26,450	23,105	22,516	21,180	21,173	21,192	20,891	63,145
257,334	0,271	0,751	1,062	-0,319	0,011	0,217	0,630	102,448	26,531	23,131	22,526	21,206	21,185	21,212	20,904	63,105
257,834	0,242	0,748	1,055	-0,316	0,002	0,235	0,629	102,411	26,450	23,121	22,505	21,175	21,180	21,190	20,891	62,986
258,334	0,225	0,708	1,060	-0,318	0,006	0,256	0,628	102,423	26,570	23,147	22,532	21,204	21,194	21,216	20,910	63,083
258,834	0,226	0,719	1,063	-0,316	0,015	0,257	0,628	102,276	26,321	23,045	22,443	21,131	21,125	21,138	20,835	63,153
259,334	0,223	0,692	1,063	-0,315	0,032	0,271	0,627	102,301	26,324	23,084	22,492	21,183	21,172	21,186	20,887	63,161

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
245,334	48,385	53,912	68,857	1,204	1,202	20445,144	20584,268	243,634	13,049	7,386	-6,355	42,460	8,412	15,252	2022-03-22 15:41
245,834	48,444	53,902	68,743	1,207	1,203	20320,758	20463,450	205,772	13,286	6,955	-6,364	42,621	8,428	15,158	2022-03-22 15:42
246,333	48,526	53,931	68,784	1,207	1,202	20125,015	20460,532	215,009	12,787	7,547	-6,356	42,501	8,416	15,158	2022-03-22 15:42
246,833	48,515	53,958	68,825	1,205	1,202	20197,044	20490,673	324,364	13,937	6,669	-6,359	42,238	8,390	15,158	2022-03-22 15:43
247,333	48,443	53,950	68,664	1,209	1,201	20406,773	20257,432	143,102	13,133	7,247	-6,413	42,619	8,428	15,065	2022-03-22 15:43
247,833	48,450	53,934	69,061	1,204	1,202	20309,930	20839,707	64,348	12,167	7,979	-6,367	42,356	8,402	15,065	2022-03-22 15:44
248,333	48,335	53,926	68,785	1,206	1,202	20625,283	20470,428	129,297	12,392	8,013	-6,422	42,569	8,423	14,971	2022-03-22 15:44
248,833	48,322	53,841	68,795	1,207	1,202	20401,048	20609,971	142,571	13,217	7,424	-6,413	42,597	8,426	14,971	2022-03-22 15:45
249,333	48,393	53,872	68,958	1,207	1,202	20494,254	20791,715	238,544	13,579	6,973	-6,321	42,633	8,429	14,971	2022-03-22 15:45
249,833	48,379	53,943	68,737	1,204	1,202	20469,826	20384,372	59,320	13,609	7,208	-6,334	42,378	8,404	14,846	2022-03-22 15:46
250,334	48,410	53,868	68,693	1,209	1,202	20342,692	20432,856	92,090	13,149	7,375	-6,406	42,849	8,451	14,846	2022-03-22 15:46
250,834	48,429	53,890	68,712	1,203	1,203	20228,397	20438,235	73,594	13,391	7,232	-6,327	42,373	8,404	14,808	2022-03-22 15:47
251,334	48,388	53,883	68,682	1,209	1,203	20312,424	20402,356	162,948	13,975	6,645	-6,364	42,487	8,415	14,752	2022-03-22 15:47
251,834	48,394	53,867	68,694	1,210	1,203	20293,372	20443,466	81,550	13,591	6,856	-6,315	42,671	8,433	14,753	2022-03-22 15:48
252,334	48,443	53,902	68,792	1,201	1,203	20212,557	20527,536	93,700	13,611	6,798	-6,372	42,286	8,395	14,753	2022-03-22 15:48
252,833	48,459	53,945	68,679	1,210	1,203	20392,886	20316,900	78,555	12,538	7,846	-6,277	42,605	8,427	14,658	2022-03-22 15:49
253,333	48,531	53,967	68,584	1,205	1,202	20164,198	20144,510	62,237	12,833	7,765	-6,519	42,649	8,431	14,659	2022-03-22 15:49
253,833	48,483	53,957	68,529	1,206	1,203	20131,592	20087,578	90,348	12,612	7,750	-6,401	42,692	8,435	14,565	2022-03-22 15:50
254,333	48,342	53,891	68,766	1,204	1,203	20419,605	20509,929	74,715	12,858	7,446	-6,525	42,821	8,448	14,565	2022-03-22 15:50
254,833	48,274	53,880	68,577	1,207	1,203	20456,272	20260,475	121,032	12,755	7,646	-6,360	42,208	8,387	14,565	2022-03-22 15:51
255,333	48,496	53,852	68,645	1,207	1,202	20153,510	20389,188	72,305	12,662	7,776	-6,413	42,299	8,396	14,471	2022-03-22 15:51
255,833	48,529	53,992	68,707	1,202	1,202	20142,248	20273,224	72,804	13,859	6,537	-6,295	42,477	8,414	14,471	2022-03-22 15:52
256,333	48,420	54,004	68,763	1,210	1,202	20441,581	20333,011	111,740	13,869	6,487	-6,204	42,476	8,414	14,346	2022-03-22 15:52
256,834	48,434	53,928	68,759	1,205	1,202	20364,399	20434,979	150,096	13,049	7,353	-6,298	42,453	8,412	14,346	2022-03-22 15:53
257,334	48,426	53,970	68,527	1,208	1,203	20359,429	20065,968	193,698	14,364	6,507	-6,377	42,515	8,418	14,346	2022-03-22 15:53
257,834	48,423	53,905	68,589	1,204	1,202	20139,288	20233,512	94,274	13,350	7,037	-6,313	42,300	8,396	14,346	2022-03-22 15:54
258,334	48,392	53,911	68,817	1,205	1,202	20342,109	20544,430	62,899	12,819	7,684	-6,351	42,675	8,434	14,253	2022-03-22 15:54
258,834	48,316	53,901	68,875	1,207	1,202	20569,240	20637,438	59,155	12,668	7,706	-6,316	42,775	8,443	14,253	2022-03-22 15:55
259,334	48,330	53,888	68,619	1,203	1,203	20500,351	20307,701	81,194	12,500	8,130	-6,292	42,994	8,465	14,159	2022-03-22 15:55

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
259,833	0,234	0,715	1,058	-0,315	0,039	0,246	0,627	102,360	26,307	23,109	22,520	21,215	21,203	21,225	20,921	63,056
260,333	0,273	0,749	1,065	-0,321	0,018	0,219	0,626	102,494	26,250	23,122	22,538	21,242	21,236	21,246	20,949	63,130
260,833	0,307	0,785	1,066	-0,315	0,024	0,196	0,625	102,588	26,460	23,148	22,560	21,248	21,252	21,261	20,956	63,104
261,333	0,265	0,749	1,055	-0,317	0,028	0,228	0,625	102,508	26,528	23,167	22,565	21,261	21,241	21,261	20,960	63,099
261,833	0,325	0,758	1,061	-0,317	-0,020	0,217	0,624	102,462	26,574	23,135	22,520	21,206	21,208	21,204	20,906	63,178
262,333	0,257	0,749	1,061	-0,318	0,007	0,228	0,624	102,318	26,329	23,014	22,399	21,098	21,088	21,098	20,795	63,174
262,833	0,234	0,724	1,057	-0,317	0,044	0,253	0,623	102,369	26,546	23,158	22,547	21,240	21,238	21,246	20,942	63,340
263,333	0,227	0,689	1,053	-0,318	0,021	0,277	0,622	102,327	26,440	23,147	22,533	21,236	21,235	21,245	20,935	63,285
263,834	0,235	0,685	1,064	-0,319	0,024	0,279	0,622	102,337	26,343	23,106	22,497	21,207	21,200	21,213	20,906	63,144
264,334	0,224	0,685	1,062	-0,321	0,042	0,279	0,621	102,339	26,413	23,102	22,497	21,203	21,194	21,213	20,900	63,136
264,834	0,243	0,700	1,062	-0,321	0,005	0,260	0,621	102,265	26,843	23,163	22,534	21,213	21,209	21,218	20,910	63,106
265,334	0,236	0,733	1,066	-0,318	-0,011	0,237	0,620	102,263	26,968	23,222	22,580	21,242	21,241	21,248	20,942	63,030
265,834	0,222	0,734	1,060	-0,321	0,013	0,238	0,620	102,355	27,122	23,245	22,591	21,244	21,235	21,245	20,942	62,999
266,334	0,230	0,750	1,066	-0,321	0,052	0,218	0,619	102,419	27,053	23,197	22,541	21,185	21,180	21,182	20,884	62,920
266,833	0,255	0,760	1,066	-0,318	0,018	0,216	0,619	102,416	27,017	23,219	22,607	21,250	21,237	21,239	20,944	62,979
267,333	0,238	0,748	1,066	-0,321	-0,006	0,233	0,618	102,347	27,104	23,234	22,616	21,265	21,256	21,248	20,960	63,058
267,833	0,242	0,720	1,060	-0,316	0,033	0,253	0,617	102,229	26,991	23,178	22,566	21,217	21,213	21,204	20,918	63,002
268,333	0,237	0,707	1,057	-0,318	0,012	0,262	0,616	102,194	26,981	23,187	22,597	21,258	21,245	21,241	20,957	62,989
268,833	0,218	0,681	1,065	-0,322	0,016	0,280	0,616	102,177	26,969	23,173	22,597	21,272	21,253	21,245	20,967	63,010
269,333	0,223	0,710	1,059	-0,317	0,017	0,252	0,616	102,117	26,856	23,057	22,485	21,169	21,150	21,135	20,866	62,879
269,833	0,229	0,729	1,056	-0,319	0,002	0,241	0,614	102,220	26,920	23,070	22,508	21,207	21,195	21,163	20,906	62,962
270,334	0,234	0,728	1,059	-0,316	0,029	0,245	0,614	102,173	26,861	23,036	22,482	21,185	21,177	21,143	20,888	62,967
270,834	0,250	0,713	1,057	-0,317	0,014	0,258	0,614	102,204	26,933	23,075	22,520	21,231	21,217	21,177	20,933	62,929
271,334	0,260	0,703	1,057	-0,319	0,019	0,263	0,613	102,082	26,864	23,071	22,520	21,239	21,222	21,183	20,941	62,939
271,834	0,230	0,704	1,068	-0,322	0,031	0,263	0,613	101,976	26,766	22,965	22,423	21,156	21,149	21,099	20,860	62,876
272,334	0,227	0,721	1,062	-0,322	0,004	0,247	0,612	101,927	26,776	22,876	22,342	21,095	21,085	21,024	20,797	62,911
272,834	0,220	0,712	1,060	-0,321	0,023	0,254	0,612	101,978	26,806	22,901	22,379	21,132	21,129	21,066	20,836	62,901
273,333	0,247	0,745	1,055	-0,317	0,012	0,225	0,610	102,036	26,851	22,942	22,434	21,216	21,186	21,119	20,907	62,891
273,833	0,300	0,768	1,057	-0,318	0,004	0,207	0,611	102,111	26,650	22,931	22,418	21,232	21,216	21,144	20,929	62,850

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
259,833	48,555	53,879	68,783	1,211	1,202	20161,273	20539,604	113,487	13,412	7,387	-6,300	42,324	8,399	14,159	2022-03-22 15:56
260,333	48,536	54,046	68,600	1,206	1,202	20208,141	20055,830	160,974	13,636	6,576	-6,422	42,417	8,408	14,066	2022-03-22 15:56
260,833	48,391	53,944	68,723	1,206	1,203	20377,648	20377,987	219,195	14,628	5,866	-6,294	42,546	8,421	14,066	2022-03-22 15:57
261,333	48,290	53,867	68,828	1,207	1,202	20540,004	20621,356	222,764	13,426	6,839	-6,349	41,966	8,363	13,971	2022-03-22 15:57
261,833	48,284	53,836	68,888	1,205	1,202	20623,140	20731,777	254,687	13,985	6,497	-6,347	42,337	8,400	13,971	2022-03-22 15:58
262,333	48,482	53,898	69,016	1,208	1,202	20380,418	20837,998	91,532	13,347	6,834	-6,363	42,526	8,419	13,971	2022-03-22 15:58
262,833	48,544	54,100	68,869	1,204	1,202	20466,720	20352,551	66,807	12,537	7,589	-6,341	42,317	8,398	13,846	2022-03-22 15:59
263,333	48,473	54,054	68,785	1,205	1,203	20503,411	20304,470	95,022	12,190	8,306	-6,369	42,015	8,368	13,847	2022-03-22 15:59
263,834	48,409	53,983	68,849	1,212	1,201	20509,748	20470,553	89,926	12,173	8,384	-6,379	42,325	8,399	13,846	2022-03-22 16:00
264,334	48,382	53,953	68,670	1,205	1,203	20425,235	20287,866	56,792	12,108	8,382	-6,429	42,568	8,423	13,847	2022-03-22 16:00
264,834	48,335	53,869	68,750	1,206	1,203	20469,257	20519,537	180,494	12,886	7,800	-6,420	42,461	8,412	13,753	2022-03-22 16:01
265,334	48,504	53,928	68,607	1,206	1,203	20116,196	20236,472	77,080	13,566	7,103	-6,351	42,654	8,431	13,753	2022-03-22 16:01
265,834	48,377	53,917	68,444	1,210	1,203	20324,394	20030,202	48,680	13,291	7,148	-6,425	42,393	8,406	13,659	2022-03-22 16:02
266,334	48,293	53,845	68,519	1,205	1,203	20241,878	20231,039	91,177	14,190	6,540	-6,421	42,791	8,445	13,659	2022-03-22 16:02
266,833	48,326	53,787	68,727	1,204	1,203	20268,034	20597,131	138,073	13,839	6,487	-6,370	42,455	8,412	13,659	2022-03-22 16:03
267,333	48,376	53,863	68,682	1,205	1,202	20316,714	20425,274	110,009	13,427	6,985	-6,420	42,747	8,441	13,565	2022-03-22 16:03
267,833	48,421	53,897	68,568	1,210	1,202	20267,708	20219,066	127,429	12,854	7,587	-6,319	42,129	8,379	13,565	2022-03-22 16:04
268,333	48,467	53,887	68,562	1,202	1,202	20055,488	20226,281	51,536	12,483	7,861	-6,367	42,233	8,390	13,471	2022-03-22 16:04
268,833	48,436	53,919	68,452	1,204	1,202	20157,721	20024,601	44,373	11,894	8,412	-6,447	42,764	8,442	13,471	2022-03-22 16:05
269,333	48,417	53,882	68,504	1,206	1,202	20038,325	20148,232	69,950	12,990	7,557	-6,349	42,567	8,423	13,471	2022-03-22 16:05
269,833	48,395	53,879	68,605	1,204	1,202	20137,928	20288,489	87,070	13,174	7,216	-6,378	42,124	8,379	13,349	2022-03-22 16:06
270,334	48,337	53,845	68,535	1,208	1,203	20294,386	20251,195	86,070	13,003	7,365	-6,311	42,057	8,372	13,349	2022-03-22 16:06
270,834	48,363	53,826	68,593	1,209	1,202	20227,902	20342,851	171,922	12,709	7,727	-6,345	42,204	8,387	13,471	2022-03-22 16:07
271,334	48,458	53,896	68,462	1,204	1,202	20033,447	20065,780	116,851	12,680	7,898	-6,375	42,315	8,398	13,255	2022-03-22 16:07
271,834	48,491	53,883	68,385	1,206	1,202	19930,269	19984,589	75,496	12,714	7,895	-6,436	42,833	8,449	13,349	2022-03-22 16:08
272,334	48,501	53,889	68,423	1,204	1,202	19920,975	20026,277	71,896	13,279	7,411	-6,437	42,549	8,421	13,255	2022-03-22 16:08
272,834	48,417	53,911	68,517	1,210	1,201	20136,874	20112,073	53,051	12,996	7,621	-6,411	42,580	8,424	13,255	2022-03-22 16:09
273,333	48,414	53,879	68,408	1,207	1,202	20068,732	20011,391	139,492	13,841	6,740	-6,342	42,199	8,386	13,068	2022-03-22 16:09
273,833	48,404	53,873	68,362	1,204	1,202	19982,838	19959,676	284,559	14,434	6,207	-6,365	42,276	8,394	13,192	2022-03-22 16:10



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
274,333	0,269	0,766	1,062	-0,315	0,029	0,215	0,609	102,111	26,705	22,890	22,383	21,203	21,193	21,115	20,902	62,841
274,833	0,252	0,745	1,066	-0,317	0,029	0,230	0,609	101,999	26,538	22,818	22,322	21,145	21,135	21,045	20,844	62,892
275,333	0,222	0,732	1,063	-0,317	0,049	0,238	0,609	102,092	26,580	22,835	22,331	21,146	21,143	21,049	20,851	62,976
275,833	0,219	0,739	1,058	-0,319	0,041	0,236	0,608	101,960	26,636	22,850	22,324	21,147	21,150	21,041	20,850	62,957
276,333	0,214	0,721	1,058	-0,321	0,022	0,250	0,608	102,044	26,586	22,883	22,348	21,182	21,176	21,064	20,875	63,036
276,833	0,219	0,710	1,056	-0,318	-0,003	0,253	0,607	102,093	26,724	22,919	22,372	21,203	21,194	21,079	20,896	63,006
277,334	0,223	0,725	1,065	-0,318	0,050	0,250	0,606	102,041	26,667	22,849	22,294	21,122	21,119	21,003	20,819	63,032
277,834	0,225	0,709	1,060	-0,315	0,024	0,258	0,606	102,069	26,446	22,775	22,221	21,036	21,050	20,918	20,740	63,013
278,334	0,234	0,737	1,058	-0,316	0,020	0,226	0,605	102,297	26,496	22,893	22,353	21,179	21,173	21,042	20,867	63,062
278,834	0,254	0,773	1,066	-0,311	-0,003	0,205	0,604	102,281	26,447	22,838	22,300	21,124	21,127	20,980	20,815	63,135
279,334	0,240	0,758	1,071	-0,317	0,008	0,220	0,604	102,240	26,424	22,780	22,233	21,049	21,048	20,906	20,743	63,122
279,834	0,226	0,747	1,065	-0,317	0,035	0,231	0,604	102,248	26,525	22,852	22,297	21,115	21,119	20,964	20,802	63,153
280,333	0,222	0,738	1,062	-0,320	0,028	0,233	0,603	102,294	26,517	22,924	22,363	21,186	21,187	21,037	20,870	63,014
280,833	0,219	0,733	1,063	-0,320	0,026	0,240	0,603	102,235	26,256	22,840	22,282	21,104	21,106	20,950	20,789	63,046
281,333	0,224	0,736	1,072	-0,318	0,020	0,236	0,601	102,298	26,446	22,906	22,345	21,165	21,170	21,013	20,851	63,101
281,833	0,233	0,716	1,068	-0,319	0,020	0,252	0,601	102,246	26,285	22,819	22,258	21,081	21,084	20,930	20,768	63,085
282,333	0,256	0,743	1,066	-0,315	0,009	0,228	0,600	102,391	26,436	22,893	22,337	21,156	21,156	20,997	20,840	63,122
282,833	0,307	0,772	1,058	-0,320	-0,005	0,196	0,600	102,349	26,624	22,845	22,278	21,083	21,090	20,920	20,763	63,148
283,333	0,346	0,786	1,060	-0,319	0,009	0,196	0,598	102,394	26,618	22,900	22,316	21,111	21,123	20,958	20,797	63,119
283,833	0,286	0,764	1,060	-0,317	0,025	0,218	0,598	102,405	26,506	22,837	22,270	21,055	21,058	20,891	20,739	63,152
284,334	0,229	0,735	1,064	-0,321	0,027	0,236	0,597	102,589	26,620	22,975	22,392	21,175	21,190	21,025	20,863	63,209
284,834	0,228	0,732	1,061	-0,320	0,015	0,244	0,596	102,387	26,337	22,781	22,207	20,994	21,004	20,837	20,680	63,173
285,334	0,222	0,714	1,063	-0,321	0,009	0,257	0,596	102,426	26,235	22,861	22,308	21,091	21,102	20,935	20,778	63,237
285,834	0,222	0,676	1,068	-0,320	0,024	0,287	0,597	102,401	26,236	22,891	22,339	21,131	21,131	20,978	20,809	63,294
286,334	0,232	0,713	1,059	-0,316	0,032	0,244	0,595	102,342	26,280	22,797	22,241	21,015	21,025	20,858	20,695	63,222
286,833	0,227	0,748	1,064	-0,316	0,037	0,233	0,595	102,386	26,298	22,855	22,302	21,074	21,083	20,908	20,751	63,280
287,333	0,219	0,717	1,065	-0,316	0,042	0,252	0,594	102,383	26,214	22,834	22,266	21,047	21,058	20,881	20,728	63,240
287,833	0,225	0,722	1,069	-0,320	0,034	0,247	0,593	102,290	26,291	22,814	22,241	21,025	21,028	20,857	20,703	63,181
288,333	0,244	0,725	1,056	-0,316	0,025	0,244	0,593	102,293	26,104	22,841	22,291	21,079	21,089	20,917	20,758	63,324

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
274,333	48,373	53,841	68,419	1,205	1,202	20031,364	20087,215	146,548	13,991	6,455	-6,310	42,236	8,390	13,068	2022-03-22 16:10
274,833	48,357	53,845	68,560	1,204	1,203	20108,967	20286,070	91,873	13,363	6,903	-6,349	42,575	8,424	13,068	2022-03-22 16:11
275,333	48,347	53,869	68,539	1,207	1,202	20286,429	20218,866	53,255	13,305	7,141	-6,331	42,434	8,410	13,068	2022-03-22 16:11
275,833	48,375	53,865	68,662	1,211	1,203	20287,371	20402,781	47,997	13,352	7,075	-6,385	42,673	8,433	12,974	2022-03-22 16:12
276,333	48,408	53,916	68,691	1,203	1,203	20207,073	20368,251	36,619	12,811	7,515	-6,415	42,452	8,412	12,974	2022-03-22 16:12
276,833	48,399	53,910	68,599	1,206	1,202	20240,398	20235,375	63,997	12,912	7,589	-6,355	42,645	8,431	12,974	2022-03-22 16:13
277,334	48,433	53,889	68,656	1,209	1,203	20280,084	20357,963	56,479	12,665	7,500	-6,351	42,784	8,444	12,849	2022-03-22 16:13
277,834	48,454	53,936	68,644	1,206	1,202	20172,917	20266,710	61,241	12,868	7,726	-6,298	42,266	8,393	12,849	2022-03-22 16:14
278,334	48,434	53,928	68,604	1,205	1,202	20247,559	20213,585	117,999	14,111	6,789	-6,310	42,649	8,431	12,755	2022-03-22 16:14
278,834	48,416	53,955	68,752	1,203	1,202	20339,139	20389,398	145,385	14,492	6,162	-6,224	42,506	8,417	12,755	2022-03-22 16:15
279,334	48,422	53,963	68,865	1,207	1,202	20387,056	20533,338	95,570	13,798	6,608	-6,349	42,979	8,464	12,756	2022-03-22 16:15
279,834	48,450	53,987	68,644	1,204	1,202	20331,011	20190,006	55,533	13,584	6,934	-6,333	42,572	8,423	12,661	2022-03-22 16:16
280,333	48,460	53,969	68,663	1,203	1,202	20115,485	20242,034	60,418	13,691	7,001	-6,400	42,495	8,416	12,661	2022-03-22 16:16
280,833	48,398	53,917	68,730	1,208	1,202	20330,307	20404,919	45,729	13,290	7,209	-6,391	42,984	8,464	12,756	2022-03-22 16:17
281,333	48,355	53,922	68,708	1,204	1,202	20390,560	20372,409	76,410	13,448	7,085	-6,359	42,984	8,464	12,568	2022-03-22 16:17
281,833	48,329	53,899	68,772	1,208	1,202	20470,531	20497,930	84,881	12,900	7,570	-6,382	42,352	8,402	12,568	2022-03-22 16:18
282,333	48,378	53,900	68,819	1,203	1,202	20377,675	20556,950	146,525	13,650	6,837	-6,300	42,650	8,431	12,473	2022-03-22 16:18
282,833	48,381	53,938	68,868	1,207	1,202	20470,957	20574,087	381,013	14,688	5,888	-6,394	42,169	8,383	12,473	2022-03-22 16:19
283,333	48,395	53,937	68,825	1,210	1,201	20471,825	20500,972	208,264	14,304	5,881	-6,389	42,291	8,396	12,349	2022-03-22 16:19
283,833	48,444	53,931	68,838	1,205	1,202	20362,523	20534,533	183,086	13,891	6,534	-6,346	42,057	8,372	12,349	2022-03-22 16:20
284,334	48,435	53,993	68,843	1,206	1,201	20464,649	20441,274	86,084	13,354	7,094	-6,425	42,915	8,457	12,256	2022-03-22 16:20
284,834	48,441	53,947	68,892	1,204	1,202	20374,753	20588,203	63,213	12,960	7,329	-6,397	42,545	8,421	12,162	2022-03-22 16:21
285,334	48,444	53,995	69,057	1,208	1,201	20531,444	20737,698	46,195	12,473	7,710	-6,425	42,627	8,429	12,256	2022-03-22 16:21
285,834	48,460	54,038	68,971	1,203	1,201	20500,244	20563,118	62,585	11,563	8,608	-6,404	42,850	8,451	12,256	2022-03-22 16:22
286,334	48,482	54,024	68,964	1,209	1,202	20460,992	20575,720	84,173	13,403	7,310	-6,323	42,437	8,410	12,162	2022-03-22 16:22
286,833	48,433	54,032	69,025	1,206	1,202	20565,618	20658,844	78,163	13,447	6,981	-6,314	42,437	8,410	12,162	2022-03-22 16:23
287,333	48,365	53,998	68,912	1,209	1,201	20659,004	20536,278	46,645	13,022	7,549	-6,326	42,676	8,434	12,069	2022-03-22 16:23
287,833	48,364	53,939	68,978	1,208	1,203	20559,700	20731,235	79,436	13,144	7,412	-6,409	42,898	8,456	12,069	2022-03-22 16:24
288,333	48,356	53,964	69,102	1,202	1,201	20673,315	20842,843	209,454	13,381	7,323	-6,319	42,207	8,387	12,069	2022-03-22 16:24

PE22\_cat IV\_run 2\_220322\_EN.DAT

Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
288,833	0,285	0,714	1,063	-0,318	0,000	0,260	0,592	102,349	26,101	22,836	22,299	21,076	21,086	20,916	20,760	63,211
289,333	0,244	0,708	1,064	-0,318	0,016	0,249	0,592	102,357	26,234	22,855	22,295	21,077	21,086	20,917	20,756	63,191
289,833	0,240	0,758	1,065	-0,319	0,035	0,212	0,591	102,400	26,348	22,864	22,304	21,085	21,090	20,915	20,759	63,241
290,333	0,258	0,774	1,060	-0,316	0,016	0,202	0,590	102,402	26,318	22,819	22,255	21,021	21,040	20,860	20,706	63,153
290,834	0,304	0,779	1,065	-0,319	-0,031	0,207	0,590	102,426	26,367	22,884	22,321	21,081	21,096	20,914	20,760	63,184
291,334	0,242	0,736	1,057	-0,320	0,048	0,240	0,589	102,353	26,567	22,951	22,364	21,123	21,137	20,949	20,799	63,145
291,834	0,218	0,702	1,070	-0,323	0,023	0,266	0,588	102,315	26,504	22,912	22,338	21,080	21,102	20,914	20,759	63,128
292,334	0,218	0,696	1,069	-0,317	0,018	0,269	0,588	102,357	26,367	22,970	22,400	21,143	21,160	20,979	20,820	63,211
292,834	0,217	0,708	1,069	-0,319	0,025	0,256	0,587	102,269	26,660	23,003	22,429	21,136	21,154	20,973	20,823	63,148
293,334	0,220	0,717	1,062	-0,321	0,012	0,250	0,587	102,138	26,674	22,965	22,372	21,083	21,090	20,907	20,755	63,093
293,833	0,238	0,739	1,058	-0,315	0,022	0,226	0,586	102,225	26,543	22,972	22,379	21,089	21,097	20,914	20,759	63,084
294,333	0,261	0,762	1,057	-0,316	0,020	0,216	0,585	102,252	26,553	22,961	22,364	21,066	21,086	20,907	20,749	63,091
294,833	0,236	0,735	1,052	-0,319	-0,008	0,246	0,584	102,309	26,708	23,035	22,434	21,120	21,143	20,961	20,808	63,085
295,333	0,232	0,701	1,059	-0,321	0,023	0,265	0,584	102,182	26,615	23,004	22,400	21,091	21,109	20,929	20,769	63,176
295,833	0,240	0,703	1,062	-0,320	0,024	0,263	0,584	102,182	26,615	23,024	22,416	21,103	21,120	20,937	20,786	63,055
296,333	0,226	0,706	1,062	-0,319	0,037	0,259	0,583	102,202	26,398	22,957	22,355	21,049	21,069	20,883	20,731	63,043
296,833	0,251	0,727	1,061	-0,316	-0,004	0,242	0,582	102,324	26,434	23,013	22,423	21,110	21,124	20,940	20,787	63,080
297,333	0,236	0,720	1,063	-0,321	0,005	0,247	0,581	102,348	26,448	23,027	22,434	21,133	21,151	20,973	20,809	63,125
297,834	0,246	0,750	1,064	-0,316	0,036	0,222	0,582	102,269	26,472	23,000	22,417	21,116	21,130	20,941	20,789	62,908
298,334	0,244	0,759	1,059	-0,314	0,012	0,219	0,580	102,320	26,408	22,955	22,348	21,052	21,077	20,886	20,732	62,913
298,834	0,250	0,760	1,063	-0,319	0,000	0,215	0,580	102,303	26,261	22,945	22,362	21,081	21,092	20,909	20,751	62,966
299,334	0,280	0,752	1,067	-0,316	0,005	0,225	0,579	102,322	26,354	22,996	22,417	21,137	21,149	20,961	20,807	62,856
299,834	0,249	0,749	1,068	-0,319	0,030	0,221	0,578	102,348	26,264	22,996	22,424	21,132	21,157	20,965	20,809	63,067
300,333	0,280	0,753	1,064	-0,322	0,054	0,228	0,578	102,435	26,355	22,993	22,415	21,122	21,145	20,954	20,797	63,173
300,833	0,227	0,706	1,059	-0,318	0,029	0,264	0,577	102,272	26,231	22,890	22,320	21,024	21,038	20,854	20,695	63,213
301,333	0,232	0,704	1,062	-0,319	0,025	0,264	0,577	102,250	26,343	22,927	22,344	21,053	21,079	20,883	20,725	63,265
301,833	0,262	0,696	1,061	-0,320	0,025	0,269	0,576	102,283	26,333	22,971	22,390	21,107	21,118	20,926	20,768	63,127
302,333	0,245	0,711	1,063	-0,317	0,007	0,246	0,576	102,188	26,417	22,916	22,321	21,037	21,053	20,863	20,703	63,118
302,833	0,277	0,746	1,063	-0,318	0,053	0,227	0,576	102,175	26,452	22,960	22,360	21,080	21,088	20,906	20,742	63,114

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
288,833	48,338	53,953	68,822	1,210	1,201	20670,660	20476,141	158,442	12,706	7,802	-6,360	42,656	8,432	12,069	2022-03-22 16:25
289,333	48,447	53,959	68,937	1,204	1,201	20397,131	20623,476	87,145	13,406	7,475	-6,359	42,514	8,418	11,974	2022-03-22 16:25
289,833	48,543	53,991	68,839	1,204	1,201	20320,238	20446,233	117,099	14,260	6,366	-6,371	42,724	8,438	11,974	2022-03-22 16:26
290,333	48,554	54,063	68,753	1,209	1,202	20268,081	20236,761	181,303	14,449	6,062	-6,319	42,292	8,396	11,849	2022-03-22 16:26
290,834	48,416	54,005	68,922	1,203	1,201	20413,273	20539,786	183,213	14,099	6,197	-6,372	42,394	8,406	11,849	2022-03-22 16:27
291,334	48,233	53,913	68,947	1,207	1,201	20681,018	20693,266	67,465	12,991	7,193	-6,396	42,171	8,384	11,756	2022-03-22 16:27
291,834	48,314	53,829	68,795	1,211	1,201	20604,347	20599,506	44,706	12,228	7,987	-6,462	42,936	8,459	11,756	2022-03-22 16:28
292,334	48,410	53,906	68,871	1,202	1,201	20442,477	20597,906	45,211	12,303	8,084	-6,344	42,684	8,434	11,756	2022-03-22 16:28
292,834	48,418	53,952	68,826	1,205	1,201	20387,825	20476,915	47,981	12,950	7,673	-6,385	42,928	8,459	11,662	2022-03-22 16:29
293,334	48,434	53,922	68,748	1,209	1,201	20356,301	20414,132	62,910	13,022	7,491	-6,422	42,533	8,419	11,662	2022-03-22 16:29
293,833	48,439	53,954	68,701	1,205	1,201	20275,231	20296,248	112,906	13,566	6,790	-6,303	42,187	8,385	11,568	2022-03-22 16:30
294,333	48,403	53,922	68,752	1,208	1,201	20379,574	20423,901	141,275	13,718	6,479	-6,321	42,118	8,378	11,568	2022-03-22 16:30
294,833	48,381	53,933	68,801	1,206	1,201	20371,511	20469,342	84,854	12,963	7,384	-6,381	41,975	8,364	11,473	2022-03-22 16:31
295,333	48,364	53,928	68,753	1,203	1,201	20459,315	20415,351	120,846	12,653	7,951	-6,418	42,450	8,411	11,474	2022-03-22 16:31
295,833	48,452	53,903	68,708	1,206	1,201	20234,746	20376,413	77,137	12,450	7,891	-6,391	42,494	8,416	11,473	2022-03-22 16:32
296,333	48,525	53,966	68,640	1,210	1,201	20167,865	20201,004	68,857	12,791	7,770	-6,386	42,354	8,402	11,474	2022-03-22 16:32
296,833	48,498	53,987	68,765	1,207	1,201	20208,884	20349,097	162,128	13,334	7,274	-6,324	42,533	8,419	11,345	2022-03-22 16:33
297,333	48,326	53,962	68,694	1,204	1,201	20468,231	20275,130	90,933	13,372	7,413	-6,413	42,688	8,435	11,252	2022-03-22 16:33
297,834	48,328	53,841	68,406	1,207	1,201	20222,368	20054,636	131,683	14,170	6,652	-6,324	42,595	8,426	11,345	2022-03-22 16:34
298,334	48,374	53,819	68,732	1,207	1,202	20162,565	20540,769	112,503	14,149	6,569	-6,286	42,583	8,425	11,252	2022-03-22 16:34
298,834	48,393	53,886	68,441	1,207	1,202	20209,078	20048,349	97,411	14,190	6,457	-6,385	42,451	8,411	11,252	2022-03-22 16:35
299,334	48,422	53,856	68,524	1,205	1,201	19981,991	20192,968	226,685	13,747	6,741	-6,321	42,894	8,455	11,158	2022-03-22 16:35
299,834	48,438	53,890	69,020	1,205	1,201	20250,895	20838,115	99,653	13,619	6,642	-6,377	42,689	8,435	11,158	2022-03-22 16:36
300,333	48,414	53,982	68,850	1,210	1,201	20518,481	20470,746	158,385	13,264	6,846	-6,444	42,605	8,427	11,065	2022-03-22 16:36
300,833	48,483	53,987	68,931	1,204	1,202	20367,520	20589,718	68,367	12,329	7,916	-6,370	41,984	8,365	11,065	2022-03-22 16:37
301,333	48,507	54,045	68,871	1,206	1,202	20435,718	20431,606	93,094	12,496	7,934	-6,386	42,567	8,423	11,064	2022-03-22 16:37
301,833	48,479	54,001	68,765	1,209	1,202	20341,388	20338,273	136,014	12,276	8,081	-6,391	42,347	8,401	11,064	2022-03-22 16:38
302,333	48,381	53,978	68,745	1,204	1,202	20374,281	20342,171	109,039	13,064	7,381	-6,347	42,466	8,413	10,970	2022-03-22 16:38
302,833	48,283	53,895	69,026	1,207	1,202	20565,781	20840,541	225,512	13,595	6,824	-6,360	42,507	8,417	10,970	2022-03-22 16:39

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
303,333	0,314	0,736	1,060	-0,317	0,019	0,240	0,574	102,206	26,447	22,998	22,411	21,122	21,143	20,943	20,789	63,184
303,833	0,265	0,725	1,063	-0,320	0,057	0,245	0,574	102,175	26,365	22,941	22,351	21,065	21,086	20,895	20,734	63,028
304,334	0,232	0,705	1,064	-0,318	0,022	0,266	0,573	102,055	26,145	22,866	22,276	21,005	21,022	20,822	20,672	63,037
304,834	0,253	0,729	1,060	-0,322	-0,014	0,229	0,573	102,271	26,254	22,949	22,359	21,093	21,098	20,915	20,750	63,073
305,334	0,248	0,746	1,066	-0,318	0,010	0,239	0,572	102,293	26,214	22,963	22,390	21,130	21,137	20,946	20,786	63,170
305,834	0,234	0,718	1,065	-0,319	-0,011	0,249	0,571	102,188	26,120	22,919	22,333	21,073	21,099	20,896	20,740	63,013
306,334	0,237	0,741	1,070	-0,319	-0,011	0,226	0,571	102,224	26,233	22,920	22,358	21,076	21,097	20,906	20,746	63,022
306,834	0,247	0,752	1,069	-0,320	0,009	0,225	0,571	102,289	26,289	22,915	22,337	21,067	21,082	20,883	20,729	63,053
307,333	0,246	0,744	1,064	-0,321	0,015	0,234	0,570	102,332	26,259	22,966	22,383	21,127	21,141	20,941	20,788	63,017
307,833	0,237	0,717	1,063	-0,321	0,012	0,255	0,570	102,389	26,096	22,931	22,361	21,107	21,128	20,939	20,771	63,030
308,333	0,235	0,720	1,061	-0,321	0,043	0,247	0,569	102,218	26,197	22,894	22,320	21,057	21,081	20,879	20,724	63,162
308,833	0,227	0,695	1,059	-0,321	0,025	0,276	0,569	102,187	26,114	22,900	22,343	21,090	21,095	20,906	20,744	63,193
309,333	0,226	0,676	1,066	-0,320	0,044	0,289	0,568	102,230	26,321	22,967	22,393	21,121	21,140	20,943	20,783	63,068
309,833	0,226	0,680	1,065	-0,319	0,009	0,279	0,567	102,140	26,264	22,919	22,343	21,082	21,092	20,895	20,738	63,056
310,333	0,225	0,685	1,065	-0,317	0,038	0,278	0,566	102,070	26,263	22,930	22,359	21,092	21,102	20,906	20,747	63,023
310,833	0,226	0,691	1,065	-0,321	0,028	0,269	0,566	102,080	26,365	22,940	22,352	21,087	21,096	20,906	20,744	62,991
311,334	0,228	0,723	1,055	-0,318	0,017	0,247	0,566	102,015	26,509	22,930	22,329	21,048	21,066	20,872	20,709	62,904
311,834	0,227	0,704	1,062	-0,316	0,007	0,266	0,565	101,975	26,228	22,918	22,331	21,061	21,070	20,879	20,720	62,831
312,334	0,231	0,717	1,062	-0,313	0,016	0,248	0,565	101,894	26,243	22,881	22,297	21,026	21,040	20,849	20,687	62,767
312,834	0,231	0,714	1,061	-0,317	-0,004	0,257	0,564	101,875	26,342	22,901	22,308	21,033	21,051	20,864	20,689	62,722
313,334	0,230	0,702	1,055	-0,318	0,014	0,267	0,563	101,744	26,346	22,908	22,316	21,035	21,044	20,864	20,690	62,854
313,834	0,224	0,688	1,063	-0,314	-0,004	0,280	0,562	101,709	26,057	22,876	22,286	21,026	21,032	20,848	20,675	62,757
314,333	0,218	0,689	1,062	-0,316	0,044	0,271	0,562	101,855	26,251	22,982	22,381	21,138	21,155	20,958	20,785	62,800
314,833	0,217	0,696	1,059	-0,313	-0,017	0,273	0,561	101,664	26,404	22,993	22,393	21,145	21,158	20,967	20,791	62,754
315,333	0,226	0,686	1,063	-0,316	0,037	0,276	0,561	101,526	26,351	22,912	22,312	21,058	21,060	20,881	20,703	62,728
315,833	0,232	0,713	1,066	-0,314	0,039	0,252	0,561	101,626	26,363	22,978	22,377	21,123	21,131	20,955	20,769	62,656
316,333	0,235	0,733	1,067	-0,316	0,020	0,233	0,560	101,617	26,407	22,965	22,359	21,108	21,121	20,941	20,755	62,498
316,833	0,251	0,745	1,070	-0,312	-0,011	0,230	0,560	101,514	26,329	22,915	22,298	21,051	21,068	20,877	20,694	62,623
317,333	0,238	0,722	1,065	-0,315	0,008	0,249	0,558	101,522	26,498	22,983	22,370	21,117	21,114	20,934	20,754	62,671

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
303,333	48,319	53,883	68,773	1,203	1,201	20548,524	20493,830	260,009	13,335	7,214	-6,345	42,075	8,374	10,845	2022-03-22 16:39
303,833	48,413	53,891	68,653	1,209	1,202	20297,010	20330,332	149,232	13,432	7,361	-6,407	42,604	8,427	10,845	2022-03-22 16:40
304,334	48,499	53,954	68,804	1,204	1,201	20098,548	20437,906	67,028	12,479	7,972	-6,354	42,503	8,417	10,752	2022-03-22 16:40
304,834	48,444	53,956	68,783	1,206	1,201	20265,613	20416,570	240,997	14,270	6,881	-6,435	42,107	8,377	10,752	2022-03-22 16:41
305,334	48,395	53,953	68,860	1,203	1,201	20416,061	20521,487	77,255	12,935	7,181	-6,367	42,489	8,415	10,752	2022-03-22 16:41
305,834	48,377	53,918	68,600	1,206	1,201	20278,384	20219,932	114,826	13,203	7,482	-6,380	42,509	8,417	10,676	2022-03-22 16:42
306,334	48,409	53,891	68,765	1,210	1,202	20310,345	20489,411	106,639	13,970	6,793	-6,386	42,988	8,464	10,658	2022-03-22 16:42
306,834	48,404	53,894	68,787	1,206	1,201	20286,402	20504,871	133,598	13,627	6,742	-6,398	42,981	8,464	10,658	2022-03-22 16:43
307,333	48,379	53,911	68,582	1,202	1,201	20209,988	20192,852	92,986	13,345	7,013	-6,416	42,715	8,437	10,658	2022-03-22 16:43
307,833	48,401	53,877	68,797	1,209	1,201	20321,060	20544,153	68,123	12,720	7,644	-6,414	42,535	8,420	10,565	2022-03-22 16:44
308,333	48,408	53,952	68,952	1,205	1,201	20418,787	20655,229	79,463	12,929	7,396	-6,418	42,253	8,392	10,564	2022-03-22 16:44
308,833	48,432	53,937	68,839	1,201	1,201	20358,377	20521,313	77,736	11,747	8,284	-6,427	42,302	8,397	10,565	2022-03-22 16:45
309,333	48,457	53,911	68,645	1,209	1,201	20294,865	20286,527	57,795	11,522	8,671	-6,406	42,707	8,437	10,470	2022-03-22 16:45
309,833	48,520	53,923	68,593	1,205	1,201	20110,469	20191,733	62,321	12,177	8,371	-6,379	42,586	8,425	10,346	2022-03-22 16:46
310,333	48,465	53,974	68,565	1,206	1,202	20159,522	20094,352	65,603	12,219	8,342	-6,336	42,763	8,442	10,346	2022-03-22 16:46
310,833	48,426	53,902	68,586	1,205	1,201	20163,964	20216,012	70,394	12,305	8,055	-6,411	42,818	8,448	10,346	2022-03-22 16:47
311,334	48,400	53,867	68,456	1,206	1,202	20085,424	20093,467	81,277	13,165	7,409	-6,365	41,964	8,363	10,346	2022-03-22 16:47
311,834	48,373	53,828	68,416	1,209	1,202	20083,583	20092,794	63,828	12,448	7,986	-6,326	42,425	8,409	10,253	2022-03-22 16:48
312,334	48,364	53,760	68,229	1,207	1,202	19960,991	19929,264	92,587	13,165	7,428	-6,262	42,593	8,425	10,253	2022-03-22 16:48
312,834	48,346	53,733	68,433	1,207	1,202	19929,394	20248,199	72,298	12,836	7,716	-6,335	42,391	8,405	10,253	2022-03-22 16:49
313,334	48,416	53,792	68,419	1,203	1,201	19955,677	20137,397	89,070	12,643	8,014	-6,354	42,236	8,390	10,159	2022-03-22 16:49
313,834	48,443	53,786	68,328	1,206	1,200	19833,522	20006,333	58,561	12,175	8,387	-6,283	42,405	8,407	10,141	2022-03-22 16:50
314,333	48,499	53,813	68,338	1,209	1,201	19859,871	19993,097	49,832	12,602	8,139	-6,322	42,516	8,418	10,065	2022-03-22 16:50
314,833	48,496	53,843	68,259	1,203	1,200	19697,288	19833,662	45,273	12,188	8,192	-6,270	42,020	8,369	10,065	2022-03-22 16:51
315,333	48,417	53,813	68,152	1,207	1,200	19839,868	19726,366	64,086	12,067	8,283	-6,325	42,719	8,438	10,065	2022-03-22 16:51
315,833	48,363	53,765	68,080	1,204	1,200	19769,231	19693,894	90,566	13,109	7,553	-6,272	42,256	8,392	10,065	2022-03-22 16:52
316,333	48,340	53,700	68,095	1,208	1,200	19652,225	19805,880	102,113	13,676	6,982	-6,322	42,892	8,455	9,971	2022-03-22 16:52
316,833	48,454	53,697	68,167	1,202	1,200	19569,500	19911,255	111,405	13,415	6,885	-6,237	42,734	8,439	9,971	2022-03-22 16:53
317,333	48,449	53,778	68,235	1,209	1,201	19756,057	19899,091	93,611	12,702	7,474	-6,292	42,561	8,422	9,846	2022-03-22 16:53

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
317,833	0,260	0,745	1,065	-0,311	0,020	0,221	0,558	101,625	26,507	23,027	22,405	21,138	21,144	20,960	20,779	62,697
318,334	0,349	0,777	1,058	-0,314	0,029	0,200	0,557	101,690	26,523	23,042	22,418	21,140	21,160	20,984	20,791	62,546
318,834	0,478	0,788	1,062	-0,314	-0,023	0,196	0,556	101,669	26,422	23,010	22,396	21,125	21,140	20,960	20,769	62,603
319,334	0,290	0,731	1,064	-0,318	0,029	0,241	0,556	101,732	26,502	23,029	22,403	21,129	21,158	20,971	20,784	62,695
319,834	0,290	0,744	1,064	-0,317	0,022	0,224	0,555	101,799	26,503	23,021	22,407	21,127	21,148	20,960	20,770	62,777
320,334	0,251	0,783	1,065	-0,311	0,032	0,192	0,555	101,815	26,546	23,013	22,388	21,107	21,117	20,948	20,748	62,812
320,833	0,299	0,782	1,058	-0,313	-0,016	0,205	0,554	101,832	26,540	23,000	22,376	21,097	21,113	20,931	20,740	62,922
321,333	0,291	0,743	1,057	-0,317	0,017	0,233	0,554	101,888	26,486	22,973	22,349	21,060	21,079	20,893	20,704	62,969
321,833	0,241	0,733	1,060	-0,319	-0,020	0,239	0,554	101,983	26,501	23,040	22,413	21,130	21,145	20,966	20,771	63,003
322,333	0,252	0,720	1,059	-0,315	-0,015	0,253	0,552	101,999	26,282	22,993	22,379	21,101	21,119	20,930	20,739	62,936
322,833	0,226	0,715	1,063	-0,317	0,002	0,247	0,551	101,879	26,157	22,891	22,290	21,016	21,031	20,854	20,656	63,047
323,333	0,259	0,756	1,070	-0,315	0,016	0,211	0,550	101,998	26,187	23,012	22,419	21,160	21,175	20,990	20,794	63,148
323,833	0,240	0,787	1,072	-0,315	0,000	0,191	0,549	102,067	26,241	23,011	22,417	21,151	21,172	20,987	20,790	63,117
324,333	0,312	0,776	1,064	-0,311	0,000	0,209	0,549	102,083	26,457	22,975	22,374	21,085	21,104	20,923	20,730	63,150
324,834	0,330	0,760	1,062	-0,316	0,003	0,218	0,548	102,235	26,771	23,054	22,442	21,136	21,155	20,977	20,777	63,192
325,334	0,314	0,751	1,055	-0,319	0,038	0,218	0,547	102,450	26,735	23,051	22,421	21,111	21,130	20,948	20,751	63,190
325,834	0,344	0,777	1,064	-0,320	0,030	0,203	0,547	102,678	26,803	23,104	22,455	21,145	21,159	20,972	20,781	63,342
326,334	0,301	0,733	1,069	-0,321	-0,009	0,242	0,547	102,700	26,564	23,088	22,453	21,154	21,177	20,995	20,793	63,400
326,834	0,265	0,713	1,057	-0,320	0,022	0,259	0,546	102,642	26,470	22,986	22,366	21,065	21,080	20,900	20,701	63,558
327,334	0,240	0,702	1,060	-0,322	0,006	0,264	0,545	102,676	26,301	23,018	22,417	21,136	21,152	20,970	20,771	63,608
327,833	0,233	0,698	1,059	-0,321	0,040	0,270	0,545	102,677	26,310	22,895	22,287	20,996	21,017	20,829	20,639	63,570
328,333	0,252	0,696	1,056	-0,319	0,035	0,268	0,544	102,845	26,646	23,025	22,400	21,107	21,134	20,933	20,747	63,637
328,833	0,234	0,713	1,059	-0,324	0,027	0,253	0,544	102,909	26,597	23,004	22,381	21,083	21,099	20,904	20,720	63,439
329,333	0,253	0,713	1,065	-0,320	0,009	0,260	0,542	103,020	26,638	23,041	22,429	21,137	21,154	20,965	20,767	63,571
329,833	0,229	0,687	1,060	-0,323	0,040	0,277	0,542	103,176	26,680	23,075	22,448	21,164	21,181	21,001	20,799	63,638
330,333	0,222	0,695	1,059	-0,326	0,023	0,266	0,542	103,301	26,666	23,026	22,398	21,117	21,126	20,939	20,745	63,656
330,833	0,232	0,731	1,050	-0,323	-0,014	0,235	0,540	103,423	26,753	23,089	22,462	21,180	21,184	21,001	20,805	63,553
331,333	0,272	0,746	1,059	-0,318	-0,035	0,226	0,540	103,302	26,696	23,037	22,399	21,112	21,128	20,940	20,744	63,424
331,834	0,285	0,761	1,063	-0,327	0,033	0,216	0,540	103,346	26,734	23,064	22,428	21,137	21,153	20,963	20,768	63,361

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
317,833	48,502	53,786	68,053	1,209	1,200	19707,942	19630,583	211,511	13,888	6,617	-6,216	42,592	8,425	9,846	2022-03-22 16:54
318,334	48,441	53,787	68,087	1,203	1,200	19495,829	19669,829	554,261	14,613	5,989	-6,271	42,603	8,426	9,753	2022-03-22 16:54
318,834	48,341	53,718	68,201	1,208	1,200	19788,565	19916,809	672,163	14,648	5,882	-6,287	42,409	8,407	9,753	2022-03-22 16:55
319,334	48,360	53,706	68,250	1,203	1,200	19815,517	20009,592	238,455	12,867	7,228	-6,370	42,478	8,414	9,753	2022-03-22 16:55
319,834	48,517	53,784	68,372	1,207	1,200	19776,914	20066,683	162,721	13,943	6,730	-6,345	42,460	8,412	9,659	2022-03-22 16:56
320,334	48,612	53,914	68,458	1,201	1,200	19594,675	19998,562	180,249	14,984	5,769	-6,227	42,511	8,417	9,659	2022-03-22 16:56
320,833	48,437	53,945	68,582	1,206	1,200	20066,111	20130,726	274,378	14,235	6,144	-6,263	41,883	8,355	9,565	2022-03-22 16:57
321,333	48,354	53,849	68,699	1,207	1,201	20267,309	20438,649	206,155	13,520	7,002	-6,350	42,217	8,388	9,565	2022-03-22 16:57
321,833	48,301	53,829	68,628	1,208	1,201	20404,687	20365,745	93,725	13,398	7,182	-6,382	42,384	8,405	9,565	2022-03-22 16:58
322,333	48,402	53,807	68,604	1,203	1,200	20077,749	20362,048	101,771	12,905	7,581	-6,299	42,371	8,403	9,470	2022-03-22 16:58
322,833	48,496	53,898	68,751	1,206	1,200	20158,927	20429,042	61,773	13,037	7,405	-6,334	42,627	8,429	9,348	2022-03-22 16:59
323,333	48,521	53,957	68,841	1,206	1,201	20262,669	20490,918	215,579	14,049	6,342	-6,304	42,689	8,435	9,348	2022-03-22 16:59
323,833	48,471	53,994	68,769	1,206	1,201	20291,290	20338,184	97,272	14,702	5,728	-6,307	42,960	8,462	9,348	2022-03-22 17:00
324,333	48,393	53,922	68,908	1,203	1,201	20396,234	20631,470	499,318	13,909	6,261	-6,230	42,222	8,389	9,255	2022-03-22 17:00
324,834	48,331	53,926	68,906	1,208	1,201	20614,025	20618,792	218,371	13,876	6,532	-6,326	42,719	8,438	9,255	2022-03-22 17:01
325,334	48,372	53,866	68,995	1,206	1,200	20526,747	20818,810	150,590	13,773	6,529	-6,382	42,133	8,380	9,161	2022-03-22 17:01
325,834	48,402	53,965	69,198	1,207	1,200	20705,972	20947,583	366,784	14,099	6,094	-6,393	42,229	8,389	9,161	2022-03-22 17:02
326,334	48,426	54,009	69,349	1,208	1,200	20782,926	21095,636	229,727	12,853	7,263	-6,423	42,407	8,407	9,161	2022-03-22 17:02
326,834	48,492	54,048	69,426	1,206	1,200	20878,347	21155,986	127,337	12,712	7,758	-6,406	42,428	8,409	9,068	2022-03-22 17:03
327,334	48,544	54,164	69,359	1,204	1,199	20828,981	20889,092	140,283	12,629	7,925	-6,441	42,164	8,383	9,068	2022-03-22 17:03
327,833	48,419	54,118	69,543	1,207	1,200	21005,545	21220,142	73,233	12,615	8,091	-6,423	42,230	8,389	9,068	2022-03-22 17:04
328,333	48,296	54,050	69,437	1,206	1,200	21252,110	21165,236	131,355	12,580	8,044	-6,372	41,840	8,351	8,973	2022-03-22 17:04
328,833	48,404	53,993	69,344	1,207	1,201	20842,266	21128,618	77,348	13,114	7,584	-6,475	42,109	8,377	8,973	2022-03-22 17:05
329,333	48,488	54,076	69,503	1,201	1,200	20805,065	21226,966	95,513	12,762	7,803	-6,409	42,482	8,414	8,849	2022-03-22 17:05
329,833	48,447	54,095	69,562	1,207	1,201	21063,351	21285,830	72,982	12,370	8,298	-6,451	42,384	8,405	8,849	2022-03-22 17:06
330,333	48,488	54,121	69,396	1,205	1,200	20987,593	21010,799	59,972	12,495	7,976	-6,516	42,324	8,399	8,849	2022-03-22 17:06
330,833	48,463	54,120	69,332	1,205	1,201	20882,917	20933,387	87,742	13,340	7,049	-6,458	42,201	8,387	8,755	2022-03-22 17:07
331,333	48,330	54,069	69,107	1,205	1,200	20885,710	20682,450	193,417	13,640	6,780	-6,357	42,328	8,399	8,755	2022-03-22 17:07
331,834	48,309	53,948	69,379	1,207	1,201	20861,971	21237,179	84,881	13,967	6,492	-6,538	42,644	8,431	8,737	2022-03-22 17:08



## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
332,334	0,223	0,714	1,051	-0,323	-0,012	0,260	0,540	103,492	26,689	23,077	22,444	21,155	21,170	20,988	20,786	63,491
332,834	0,218	0,685	1,056	-0,321	0,004	0,283	0,539	103,468	26,644	23,056	22,435	21,165	21,172	20,976	20,787	63,504
333,334	0,220	0,667	1,054	-0,324	0,027	0,293	0,539	103,424	26,512	23,041	22,408	21,141	21,163	20,969	20,771	63,474
333,834	0,224	0,682	1,049	-0,320	0,005	0,280	0,538	103,264	26,514	23,004	22,383	21,114	21,121	20,925	20,740	63,481
334,333	0,235	0,682	1,062	-0,323	0,052	0,278	0,540	103,309	26,495	23,031	22,415	21,156	21,166	20,963	20,782	63,431
334,833	0,252	0,706	1,063	-0,320	0,008	0,255	0,537	103,435	26,464	23,013	22,403	21,143	21,150	20,963	20,767	63,433
335,333	0,257	0,721	1,060	-0,324	0,029	0,253	0,538	103,381	26,586	23,015	22,388	21,126	21,138	20,950	20,756	63,449
335,833	0,233	0,706	1,059	-0,323	0,028	0,261	0,541	103,485	26,653	23,026	22,408	21,128	21,140	20,940	20,753	63,391
336,333	0,229	0,696	1,052	-0,322	0,000	0,277	0,535	103,460	26,598	23,052	22,422	21,153	21,163	20,980	20,779	63,367
336,833	0,220	0,674	1,058	-0,326	0,015	0,286	0,534	103,365	26,440	23,004	22,367	21,118	21,130	20,929	20,742	63,346
337,333	0,219	0,676	1,059	-0,325	0,008	0,287	0,534	103,452	26,503	23,000	22,385	21,136	21,143	20,946	20,763	63,175
337,833	0,214	0,670	1,062	-0,321	0,029	0,292	0,532	103,404	26,328	22,911	22,290	21,059	21,056	20,871	20,678	63,218
338,334	0,216	0,682	1,055	-0,321	0,025	0,276	0,532	103,555	26,495	23,028	22,414	21,161	21,163	20,980	20,783	63,127
338,834	0,220	0,726	1,057	-0,326	0,010	0,233	0,532	103,697	26,512	23,030	22,409	21,162	21,180	20,966	20,785	63,193
339,334	0,230	0,773	1,061	-0,325	0,031	0,205	0,530	103,728	26,649	22,998	22,363	21,105	21,115	20,915	20,731	63,175
339,834	0,217	0,741	1,061	-0,326	0,004	0,244	0,530	103,620	26,674	23,030	22,396	21,136	21,145	20,926	20,759	63,153
340,334	0,216	0,686	1,059	-0,320	0,020	0,278	0,530	103,380	26,670	23,004	22,359	21,096	21,106	20,898	20,718	63,182
340,834	0,219	0,710	1,062	-0,324	-0,043	0,253	0,529	103,559	26,496	23,032	22,400	21,146	21,153	20,947	20,761	63,139
341,333	0,217	0,713	1,067	-0,329	0,038	0,259	0,529	103,582	26,461	23,024	22,389	21,143	21,156	20,953	20,761	63,113
341,833	0,219	0,691	1,061	-0,323	0,015	0,277	0,528	103,562	26,681	23,033	22,394	21,135	21,142	20,933	20,752	63,212
342,333	0,222	0,708	1,058	-0,323	0,031	0,253	0,528	103,610	26,905	23,059	22,407	21,123	21,129	20,934	20,741	63,121
342,833	0,217	0,732	1,060	-0,323	0,007	0,236	0,527	103,662	26,682	23,069	22,420	21,145	21,165	20,953	20,770	63,150
343,333	0,225	0,725	1,066	-0,319	-0,030	0,250	0,525	103,620	26,722	23,049	22,397	21,114	21,120	20,912	20,736	63,106
343,833	0,217	0,696	1,054	-0,326	0,039	0,270	0,524	103,563	26,702	23,090	22,439	21,163	21,166	20,965	20,786	63,243
344,333	0,218	0,704	1,054	-0,323	0,023	0,262	0,524	103,641	26,443	23,012	22,383	21,121	21,122	20,926	20,738	63,168
344,833	0,220	0,701	1,056	-0,323	0,034	0,267	0,524	103,727	26,647	23,042	22,395	21,128	21,152	20,931	20,755	63,154
345,334	0,224	0,696	1,058	-0,324	0,034	0,270	0,523	103,643	26,469	22,992	22,360	21,107	21,106	20,896	20,721	63,183
345,834	0,221	0,695	1,057	-0,325	0,018	0,269	0,523	103,486	26,358	22,946	22,322	21,078	21,088	20,869	20,689	63,267
346,334	0,223	0,699	1,060	-0,326	0,047	0,266	0,523	103,578	26,552	23,015	22,385	21,128	21,137	20,930	20,746	63,109

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
332,334	48,391	53,994	69,372	1,206	1,200	20910,278	21154,843	45,222	12,334	7,813	-6,456	41,750	8,342	8,755	2022-03-22 17:08
332,834	48,491	54,070	69,188	1,206	1,200	20792,679	20798,442	53,591	11,838	8,484	-6,426	42,646	8,431	8,661	2022-03-22 17:09
333,334	48,536	54,101	69,325	1,209	1,200	20735,968	20942,974	50,914	11,673	8,795	-6,476	41,947	8,361	8,661	2022-03-22 17:09
333,834	48,419	54,105	69,215	1,205	1,200	20848,871	20790,500	92,397	12,171	8,389	-6,400	41,990	8,366	8,480	2022-03-22 17:10
334,333	48,355	54,030	69,279	1,206	1,201	20888,204	20983,541	96,134	12,232	8,355	-6,458	42,569	8,423	9,161	2022-03-22 17:10
334,833	48,334	53,989	69,360	1,207	1,200	20938,172	21137,385	182,752	12,952	7,662	-6,395	43,066	8,472	8,568	2022-03-22 17:11
335,333	48,437	54,020	69,206	1,205	1,200	20774,719	20887,367	104,339	12,904	7,592	-6,470	42,625	8,429	8,973	2022-03-22 17:11
335,833	48,519	54,048	69,149	1,207	1,200	20621,117	20773,524	85,028	12,904	7,828	-6,463	42,444	8,411	8,351	2022-03-22 17:12
336,333	48,488	54,076	69,105	1,206	1,200	20605,905	20674,972	56,818	12,113	8,305	-6,442	42,138	8,380	8,349	2022-03-22 17:12
336,833	48,427	54,037	68,926	1,206	1,200	20673,245	20477,522	56,549	11,996	8,571	-6,518	42,426	8,409	8,349	2022-03-22 17:13
337,333	48,312	53,941	69,036	1,203	1,200	20538,531	20756,422	44,851	11,827	8,618	-6,496	42,441	8,410	8,349	2022-03-22 17:13
337,833	48,323	53,901	68,952	1,207	1,200	20643,473	20702,167	37,841	11,662	8,746	-6,420	42,192	8,386	8,256	2022-03-22 17:14
338,334	48,393	53,900	68,931	1,207	1,199	20420,903	20665,410	47,451	12,278	8,270	-6,416	42,011	8,368	8,256	2022-03-22 17:14
338,834	48,513	53,954	68,879	1,204	1,199	20297,809	20518,125	52,039	13,504	6,990	-6,522	42,432	8,410	8,162	2022-03-22 17:15
339,334	48,496	53,992	68,899	1,208	1,199	20366,058	20492,496	65,108	14,149	6,154	-6,501	42,517	8,418	8,162	2022-03-22 17:15
339,834	48,479	53,958	68,799	1,208	1,199	20365,411	20403,967	39,517	12,822	7,309	-6,527	42,258	8,392	8,162	2022-03-22 17:16
340,334	48,438	53,964	69,037	1,202	1,200	20360,433	20733,932	45,197	12,174	8,350	-6,397	42,195	8,386	8,068	2022-03-22 17:16
340,834	48,318	53,936	68,885	1,209	1,200	20578,484	20555,545	51,990	13,063	7,580	-6,470	42,391	8,405	8,068	2022-03-22 17:17
341,333	48,450	53,881	69,007	1,208	1,201	20348,180	20822,274	45,382	12,838	7,783	-6,589	42,353	8,402	7,974	2022-03-22 17:17
341,833	48,366	53,922	68,881	1,205	1,199	20549,428	20556,473	48,184	12,094	8,313	-6,466	42,463	8,413	7,974	2022-03-22 17:18
342,333	48,353	53,886	68,869	1,204	1,200	20429,819	20607,707	52,848	13,238	7,582	-6,465	42,318	8,398	7,974	2022-03-22 17:18
342,833	48,406	53,906	68,840	1,202	1,199	20362,321	20529,304	46,512	13,513	7,066	-6,455	42,306	8,397	7,849	2022-03-22 17:19
343,333	48,556	53,915	68,936	1,208	1,199	20191,726	20640,524	44,307	12,907	7,494	-6,390	42,617	8,428	7,756	2022-03-22 17:19
343,833	48,568	54,037	68,905	1,207	1,200	20339,574	20447,698	43,699	12,337	8,103	-6,514	42,139	8,380	7,756	2022-03-22 17:20
344,333	48,423	53,957	68,831	1,207	1,200	20445,061	20456,451	55,780	12,645	7,862	-6,469	42,122	8,379	7,756	2022-03-22 17:20
344,833	48,359	53,921	68,911	1,205	1,200	20474,611	20618,029	62,200	12,333	8,022	-6,459	41,706	8,337	7,756	2022-03-22 17:21
345,334	48,330	53,863	69,084	1,209	1,199	20623,646	20926,111	60,711	12,365	8,085	-6,479	42,336	8,400	7,661	2022-03-22 17:21
345,834	48,386	53,902	68,843	1,208	1,199	20653,038	20542,678	51,594	12,224	8,058	-6,500	42,485	8,415	7,661	2022-03-22 17:22
346,334	48,424	53,907	68,797	1,201	1,200	20264,058	20474,856	57,092	12,478	7,981	-6,517	42,257	8,392	7,661	2022-03-22 17:22

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
346,834	0,216	0,702	1,067	-0,323	0,035	0,268	0,522	103,668	26,612	23,043	22,411	21,156	21,154	20,947	20,774	63,125
347,334	0,221	0,721	1,063	-0,323	-0,010	0,238	0,521	103,613	26,524	22,974	22,321	21,068	21,073	20,856	20,685	63,191
347,834	0,230	0,756	1,061	-0,320	-0,017	0,219	0,520	103,823	26,498	23,006	22,379	21,126	21,129	20,911	20,740	63,204
348,333	0,233	0,743	1,063	-0,321	0,057	0,232	0,519	104,006	26,651	23,047	22,403	21,155	21,165	20,941	20,773	63,128
348,833	0,220	0,731	1,060	-0,324	-0,033	0,243	0,519	103,945	26,505	23,008	22,371	21,127	21,140	20,907	20,743	63,145
349,333	0,216	0,722	1,057	-0,324	0,049	0,250	0,518	103,813	26,488	22,989	22,359	21,125	21,133	20,914	20,743	63,205
349,833	0,223	0,721	1,066	-0,323	-0,019	0,248	0,518	103,955	26,612	22,991	22,342	21,111	21,115	20,885	20,724	63,215
350,333	0,219	0,709	1,049	-0,325	0,034	0,260	0,517	103,842	26,580	23,007	22,373	21,138	21,143	20,918	20,755	63,302
350,833	0,216	0,687	1,060	-0,324	-0,010	0,282	0,517	103,851	26,568	22,987	22,346	21,110	21,115	20,891	20,726	63,381
351,333	0,220	0,681	1,056	-0,323	0,032	0,275	0,515	103,956	26,656	23,032	22,389	21,146	21,163	20,932	20,762	63,281
351,833	0,232	0,740	1,061	-0,324	-0,013	0,229	0,516	103,885	26,508	22,967	22,327	21,089	21,092	20,871	20,709	63,279
352,334	0,243	0,741	1,062	-0,321	0,043	0,232	0,515	104,003	26,712	23,028	22,380	21,150	21,161	20,928	20,766	63,374
352,834	0,232	0,732	1,059	-0,325	0,028	0,242	0,513	104,063	26,668	22,984	22,341	21,111	21,121	20,891	20,729	63,374
353,334	0,234	0,720	1,060	-0,328	0,014	0,251	0,513	104,144	26,729	22,973	22,327	21,091	21,095	20,868	20,709	63,331
353,834	0,224	0,716	1,062	-0,326	0,016	0,254	0,513	104,186	26,514	22,943	22,290	21,067	21,078	20,837	20,684	63,517
354,334	0,236	0,720	1,061	-0,328	0,034	0,247	0,515	104,175	26,480	22,966	22,325	21,112	21,114	20,878	20,724	63,425
354,833	0,227	0,727	1,058	-0,326	0,044	0,244	0,512	103,978	26,579	22,938	22,300	21,062	21,065	20,834	20,677	63,386
355,333	0,221	0,731	1,064	-0,327	-0,003	0,237	0,510	104,072	26,770	23,007	22,349	21,117	21,117	20,888	20,732	63,522
355,833	0,227	0,735	1,060	-0,325	0,046	0,245	0,510	103,978	26,642	23,003	22,348	21,117	21,113	20,884	20,726	63,469
356,333	0,215	0,694	1,067	-0,327	0,003	0,274	0,510	104,040	26,611	22,988	22,335	21,102	21,108	20,868	20,715	63,461
356,833	0,213	0,691	1,064	-0,328	0,029	0,272	0,509	104,010	26,424	22,956	22,321	21,094	21,099	20,859	20,705	63,474
357,333	0,215	0,691	1,057	-0,326	0,030	0,270	0,508	104,153	26,503	22,991	22,355	21,133	21,140	20,896	20,743	63,466
357,833	0,213	0,693	1,058	-0,330	0,011	0,279	0,508	104,042	26,491	22,931	22,290	21,077	21,067	20,842	20,683	63,430
358,333	0,215	0,671	1,063	-0,326	0,034	0,288	0,507	104,222	26,652	23,024	22,385	21,163	21,163	20,926	20,777	63,496
358,834	0,231	0,692	1,067	-0,323	0,034	0,272	0,506	104,296	26,725	23,012	22,378	21,161	21,168	20,916	20,770	63,355
359,334	0,221	0,687	1,058	-0,321	0,031	0,274	0,507	104,224	26,704	23,021	22,369	21,149	21,158	20,906	20,759	63,282
359,834	0,213	0,702	1,060	-0,326	0,021	0,263	0,505	103,939	26,569	22,968	22,329	21,107	21,112	20,865	20,718	63,342
360,334	0,214	0,709	1,064	-0,327	-0,010	0,259	0,505	104,055	26,625	22,997	22,356	21,135	21,140	20,887	20,749	63,285
360,834	0,220	0,720	1,066	-0,326	0,025	0,251	0,504	103,990	26,864	23,042	22,396	21,163	21,168	20,919	20,774	63,234

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m³/h	m³/h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
346,834	48,401	53,897	69,007	1,206	1,199	20395,750	20768,432	41,364	12,350	8,041	-6,466	42,545	8,421	7,568	2022-03-22 17:23
347,334	48,425	53,906	68,918	1,209	1,199	20500,944	20638,946	61,824	13,653	7,151	-6,460	42,506	8,417	7,568	2022-03-22 17:23
347,834	48,454	53,945	68,953	1,207	1,200	20440,062	20651,055	107,691	14,079	6,583	-6,410	42,079	8,374	7,568	2022-03-22 17:24
348,333	48,448	53,927	68,905	1,209	1,200	20377,715	20595,263	68,616	13,607	6,946	-6,420	42,487	8,415	7,473	2022-03-22 17:24
348,833	48,422	53,926	68,908	1,209	1,200	20438,280	20601,852	46,981	13,318	7,287	-6,472	42,165	8,383	7,346	2022-03-22 17:25
349,333	48,387	53,915	69,043	1,206	1,200	20525,159	20801,375	38,533	12,993	7,486	-6,483	42,235	8,390	7,346	2022-03-22 17:25
349,833	48,442	53,922	69,081	1,205	1,200	20451,619	20851,116	68,713	12,904	7,451	-6,468	42,867	8,452	7,346	2022-03-22 17:26
350,333	48,609	54,021	69,076	1,205	1,199	20327,774	20696,177	43,292	12,395	7,809	-6,497	41,979	8,365	7,293	2022-03-22 17:26
350,833	48,512	54,090	69,064	1,205	1,199	20571,797	20583,325	40,014	11,835	8,467	-6,479	42,481	8,414	7,260	2022-03-22 17:27
351,333	48,436	54,036	69,071	1,202	1,200	20493,812	20675,083	61,991	12,325	8,239	-6,464	42,443	8,411	7,253	2022-03-22 17:27
351,833	48,376	53,928	69,206	1,210	1,200	20705,935	21013,971	72,423	13,700	6,884	-6,476	42,386	8,405	7,159	2022-03-22 17:28
352,334	48,234	53,921	69,338	1,204	1,200	20934,888	21204,474	111,224	13,454	6,953	-6,410	42,307	8,397	7,159	2022-03-22 17:28
352,834	48,382	53,933	69,141	1,208	1,200	20802,998	20921,068	66,602	12,927	7,248	-6,498	42,579	8,424	7,065	2022-03-22 17:29
353,334	48,526	53,980	69,290	1,208	1,200	20536,142	21052,592	78,603	12,745	7,536	-6,553	42,226	8,389	7,066	2022-03-22 17:29
353,834	48,505	54,098	69,256	1,206	1,201	20786,417	20862,120	71,631	12,843	7,622	-6,514	42,504	8,417	6,971	2022-03-22 17:30
354,334	48,373	54,051	69,102	1,209	1,200	20901,259	20705,596	98,381	13,271	7,402	-6,556	42,511	8,417	6,971	2022-03-22 17:30
354,833	48,356	53,953	69,380	1,206	1,200	20817,203	21224,182	75,658	13,188	7,315	-6,511	42,157	8,382	7,066	2022-03-22 17:31
355,333	48,342	53,992	69,428	1,206	1,200	21035,952	21237,473	51,505	13,516	7,112	-6,548	42,872	8,453	6,971	2022-03-22 17:31
355,833	48,484	54,009	69,213	1,205	1,200	20738,825	20906,567	53,381	12,958	7,356	-6,504	42,535	8,420	6,846	2022-03-22 17:32
356,333	48,532	54,058	69,490	1,207	1,201	20690,927	21238,552	38,566	12,329	8,206	-6,534	42,995	8,465	6,846	2022-03-22 17:32
356,833	48,409	54,081	69,190	1,208	1,200	20903,950	20786,643	35,657	12,450	8,159	-6,556	42,410	8,407	6,753	2022-03-22 17:33
357,333	48,359	53,976	69,401	1,208	1,200	20957,339	21219,938	41,784	12,679	8,112	-6,526	42,245	8,391	6,659	2022-03-22 17:33
357,833	48,357	53,983	69,371	1,206	1,200	20873,939	21175,592	33,890	12,057	8,370	-6,597	42,166	8,383	6,753	2022-03-22 17:34
358,333	48,482	54,064	69,209	1,205	1,200	20774,091	20835,387	45,209	11,913	8,632	-6,526	42,562	8,422	6,659	2022-03-22 17:34
358,834	48,517	54,053	69,125	1,206	1,200	20548,708	20737,022	65,748	12,187	8,170	-6,458	42,663	8,432	6,471	2022-03-22 17:35
359,334	48,411	54,001	69,184	1,206	1,200	20599,421	20889,451	49,773	12,131	8,226	-6,430	42,388	8,405	6,659	2022-03-22 17:35
359,834	48,326	53,979	69,209	1,200	1,201	20701,359	20962,519	34,245	12,474	7,894	-6,520	42,357	8,402	6,566	2022-03-22 17:36
360,334	48,409	53,933	68,984	1,208	1,200	20643,933	20706,081	38,921	12,589	7,775	-6,545	42,185	8,385	6,566	2022-03-22 17:36
360,834	48,511	53,968	68,846	1,207	1,200	20414,816	20468,430	61,815	12,997	7,516	-6,525	42,758	8,442	6,471	2022-03-22 17:37

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	301	302	304	305	306	308	317	1311	1313	1314	1315	1316	1317	1318	1101	1103
Measurement time	CO chimney	CO2 chimney	Pdyn	Pstat	Static pressure chimney	O2 chimney	Scale	Flue gas temp	Flue gas at pitot	filter temp 1	filter temp 2	gas meter temp 1	gas meter temp 2	gasmeter tempambient	Ambient temperature	T4 outlet load side
Minutes	VDC	VDC	VDC	VDC	VDC	VDC	VDC	°C	°C	°C	°C	°C	°C	°C	°C	°C
361,334	0,216	0,714	1,065	-0,326	0,037	0,254	0,502	103,941	26,769	22,945	22,293	21,054	21,064	20,806	20,664	63,193
361,833	0,214	0,712	1,069	-0,325	0,011	0,257	0,503	104,043	26,508	22,988	22,349	21,125	21,122	20,871	20,732	63,189
362,333	0,216	0,721	1,064	-0,327	-0,018	0,249	0,502	104,153	26,602	23,017	22,394	21,164	21,165	20,911	20,773	63,257
362,833	0,214	0,709	1,060	-0,323	0,027	0,264	0,502	103,931	26,626	22,934	22,282	21,060	21,062	20,817	20,670	63,146
363,333	0,218	0,682	1,060	-0,325	0,022	0,280	0,501	103,906	26,661	22,988	22,348	21,122	21,129	20,875	20,729	63,249
363,833	0,217	0,696	1,065	-0,325	0,018	0,266	0,500	103,874	26,435	22,929	22,288	21,076	21,075	20,828	20,680	63,221
364,333	0,218	0,688	1,051	-0,330	-0,021	0,284	0,500	103,896	26,627	23,000	22,357	21,143	21,147	20,893	20,749	63,125
364,833	0,217	0,667	1,060	-0,320	-0,024	0,294	0,500	103,773	26,630	22,998	22,347	21,129	21,134	20,876	20,738	63,201
365,333	0,218	0,698	1,062	-0,323	0,015	0,258	0,499	103,876	26,870	23,051	22,386	21,167	21,157	20,908	20,764	63,120
365,834	0,232	0,739	1,060	-0,321	0,037	0,231	0,498	103,988	26,865	23,050	22,402	21,160	21,156	20,899	20,761	63,149
366,334	0,231	0,716	1,051	-0,327	-0,021	0,260	0,497	103,826	26,640	22,147	21,763	21,104	21,102	20,856	20,713	63,094
366,834	0,216	0,671	1,056	-0,327	0,021	0,294	0,497	103,753	26,528	22,077	21,698	21,162	21,156	20,906	20,763	63,166

## PE22\_cat IV\_run 2\_220322\_EN.DAT

## Category: IV run 2

	1104	1105	1106	130	230	101	102	1	2	3	6	7	8	11	
Measurement time	T3 inlet load side	T2 inlet boiler	T1 outlet boiler	Flow load side	Flow boiler side	Heat output load side	Heat output boiler	CO chimney	CO2 chimney	O2 chimney	Pstat	Pdyn	Tunnel velocity	Scale	Time
Minutes	°C	°C	°C	m <sup>3</sup> /h	m <sup>3</sup> /h	W	W	ppm	%	%	Pa	Pa	m/s	kg	Clock
361,334	48,515	54,020	68,723	1,207	1,201	20350,496	20235,112	40,694	13,006	7,609	-6,515	42,956	8,461	6,471	2022-03-22 17:37
361,833	48,386	53,960	68,923	1,205	1,201	20486,799	20596,908	41,268	12,819	7,707	-6,506	42,811	8,447	6,471	2022-03-22 17:38
362,333	48,316	53,908	68,864	1,208	1,201	20729,553	20593,234	43,468	13,228	7,463	-6,541	42,515	8,418	6,347	2022-03-22 17:38
362,833	48,438	53,870	68,960	1,206	1,200	20380,797	20761,161	35,145	12,516	7,925	-6,467	42,420	8,408	6,347	2022-03-22 17:39
363,333	48,522	53,956	68,893	1,209	1,201	20456,893	20560,782	66,098	12,164	8,407	-6,493	42,435	8,410	6,254	2022-03-22 17:39
363,833	48,479	53,987	68,716	1,207	1,201	20435,364	20273,298	44,702	12,743	7,970	-6,503	42,346	8,401	6,254	2022-03-22 17:40
364,333	48,369	53,941	68,988	1,202	1,201	20373,770	20710,616	51,587	11,853	8,512	-6,595	42,218	8,388	6,254	2022-03-22 17:40
364,833	48,309	53,861	68,883	1,206	1,200	20628,193	20666,121	44,042	11,732	8,825	-6,409	42,152	8,382	6,254	2022-03-22 17:41
365,333	48,401	53,865	68,740	1,206	1,201	20385,075	20475,570	56,443	13,028	7,727	-6,467	42,744	8,440	6,160	2022-03-22 17:41
365,834	48,485	53,890	68,658	1,205	1,201	20298,162	20331,635	81,887	13,671	6,933	-6,428	42,520	8,418	6,160	2022-03-22 17:42
366,334	48,494	53,939	68,780	1,209	1,200	20266,111	20419,817	51,734	12,363	7,811	-6,539	42,129	8,379	6,066	2022-03-22 17:42
366,834	48,450	53,974	68,830	1,204	1,201	20354,613	20447,982	37,994	11,531	8,833	-6,539	42,294	8,396	6,066	2022-03-22 17:43

Appendix 18

**Manuals**

Please read carefully prior  
to installing and servicing.

SAVE THESE INSTRUCTIONS

# Operating Manual

Pellet heating with auger  
delivery or vacuum suction  
system for the end-user  
**AutoPellet®**

**PES 20, 22, 32, 56**

FA\_V3.10

AutoPellet TOUCH

USA





Title: Operating Manual AutoPellet® **PES 20, 22, 32, 56**

Article number:

Version valid from: **04/2022**

Approved: **Maine Energy Systems**

## **Author & Manufacturer**

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Pour la version française de ce manuel, veuillez visiter notre site Web à  
[Maineenergysystems.com](http://Maineenergysystems.com).

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For warranty inquiries please send an email to [warranty@maineenergysystems.com](mailto:warranty@maineenergysystems.com) including the system's address in the subject line.

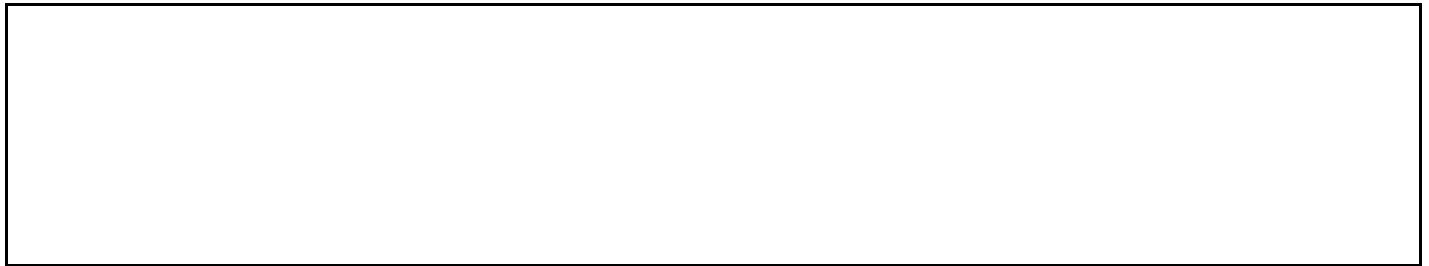
# 1 Dear Customer

**Maine Energy Systems** specializes in wood pellet heating.

Our company enjoys an exclusive license from ÖkoFEN to manufacture products here in North America. We represent expertise, innovation and quality.

We are delighted that you have decided to purchase our product.

- This instruction manual is intended to help you operate the product safely, properly and economically.
- Please read this instruction manual completely and take note of the safety warnings.
- Keep all documentation supplied with this unit in a safe place for future reference.
- Installation and first startup must be carried out by a qualified installer certified by Maine Energy Systems.
- The installation must comply with the requirements of the Authority having jurisdiction over the installation.
- Please contact your authorized dealer if you have any questions.



We place great importance on the development of new products. Our R&D department continues to question accepted solutions and works continually on new improvements. That is how we maintain our technological lead. We have already received several awards for our products in Austria and abroad. Our products fulfil European and USA requirements regarding quality, efficiency and emissions.



**Note: This manual refers to both PES20 and PES22 systems. The only difference between the PES20 and PES22 is that the PES22 has additional turbulators to increase efficiency.**

## 2 Use only for the purpose intended

The pellet boiler is designed to heat water for central or other indirect heating systems and hot water supply for buildings. It is not permissible to use the pellet boiler for any other purpose. Reasonable foreseeable inadvertent uses for the pellet boiler are not known.

The boiler fulfills the requirements of UL 2523-18 and CSA B366.1-11 (R2020).

## 3 Types of safety warning sign

The warning signs use the following symbols and texts.

### Types of safety warning sign

1. Risk of injury
2. Consequences of risk
3. Avoiding risk



#### 1. Risk of injury:

Danger - indicates a situation that could lead to death or life-threatening injury.



Warning - indicates a situation that could lead life-threatening or serious injury.



Caution - indicates a situation that could lead to injury.



Note - indicates a situation that could lead to property damage.



#### 2. Consequences of risk

Effects and consequences resulting from incorrect operation.

#### 3. Avoiding risk

Observing safety instructions ensures that the heating system is operated safely

## 4 Warnings and safety instructions

Observing safety instructions ensures that the heating system is operated safely.

### 4.1 Basic safety instructions

- Never get yourself into danger; give your own safety top priority.
- Keep children away from the central heating room and storage room.
- Observe all safety warnings on the boiler and in this user manual.
- Observe all instructions relating to maintenance, servicing and cleaning.
- The pellet heating system may only be installed and commissioned by an installer that is trained and remains currently authorized by Maine Energy Systems.
- Never make any changes to the heating system or flue gas system. All maintenance, cleaning and changes should only be done by trained professionals.
- Never close or remove safety valves.

### 4.2 Warning signs



#### DANGER

##### Risk of poisoning

Make sure that the pellet boiler is supplied with sufficient combustion air.

The openings in the combustion air inlet must never be partially or completely closed.

Ventilation systems, central vacuum cleaning systems, extractor fans, air conditioning systems, flue gas blowers, dryers, fuel storage ventilation fans or similar equipment must never be allowed to draw air from the boiler room and cause a drop in pressure.

The boiler must be connected tight to the chimney using a flue gas tube.

Clean the chimney and the flue gas tube at regular intervals.

The boiler room and pellet storage room must be sufficiently supplied with air and ventilated.

Before entering the storage room it must be ventilated with sufficient air and the heating system switched off.



#### DANGER

##### Risk of electric shock

Always disconnect / de-energize the power supply before working on the boiler.



#### DANGER

##### Risk of explosion

DO NOT BURN GARBAGE, GASOLINE, NAPHTHA, ENGINE OIL, OR OTHER INAPPROPRIATE MATERIALS. DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

Switch off the heating system before filling the storage room.

**DANGER****Risk of fire**

Do not store any flammable materials in the boiler room.  
Do not hang out any washing in the boiler room.  
Do not operate with fuel loading or ash removal doors open.

**WARNING****Risk of burns**

Do not touch the flue gas connector or flue gas pipe.  
Do not reach into the ash chamber.  
Do not clean the boiler until it has been allowed to cool down.

**CAUTION****HOT SURFACES**

Keep children away.  
Do not touch during operation.  
Do not operate if maximum draft as listed on boiler nameplate is exceeded.  
Doing so can allow non-controlled combustion.

**CAUTION****Risk of cut injuries due to sharp edges.**

Use gloves for performing all work on the boiler.

**NOTICE****Damage to property**

The pellet boiler is suitable only for pellets which comply with PFI premium or EnPlus -A1 pellets specifications.  
The use of any other fuel voids your warranty and can cause damage to the pellet boiler and chimney.

**NOTICE****Damage to property**

Do not use the heating system if it, or any of its components, come into contact with water.  
If water damage occurs, check the heating system and replace damaged parts.

**WARNING**

All cover plates, enclosures, and guards must be maintained in place at all times, except during maintenance and servicing.



## 4.3 What to do in an emergency



### DANGER

**Risk to life**

Never get yourself into danger; give your own safety top priority.

**What to do in the event of a fire**

- Switch off the heating system.
- Call your local fire department and / or 911.
- Use approved fire extinguishers (fire protection class ABC).

**What to do if you smell smoke**

- Switch off the heating system.
- Close the doors leading to living areas.
- Ventilate the boiler room.

## 5 Prerequisites for installing a pellet boiler

You must fulfill the following conditions before operating a fully automatic pellet boiler.

### 5.1 Guidelines and standards for installing a pellet boiler

Overview of standards and guidelines applying to the installation of a pellet boiler.

Check whether you need to obtain planning permission or approval from the authorities for installing a new heating system or changing your existing system. Legislation in your country must be observed.

Flue gas system	EN 13384-1	Legislation in your country must be observed.
Building and fire prevention regulations		Legislation in your country must be observed.
Type of installation	FC 42x	Fireplace with a flue gas fan for connection to an air exhaust system. The combustion air line from air shaft and the connecting piece to the chimney are part of the fireplace.
	FC 52x	Fireplace with a flue gas for connection to a chimney. The combustion air line from outside and the connecting piece to the chimney are part of the fireplace.
Sound insulation	DIN 4109	Please note the building-unique demands on sound insulation.

### 5.2 Installation room

The installation room of the boiler is not necessarily a boiler room. Observe the applicable national and regional regulations.

#### 1. Safety warnings for the installation room

## DANGER

**Risk of fire**  
 Do not store flammable materials or liquids in the vicinity of the pellet boiler.  
 Do not permit unauthorized persons to enter the boiler room - Keep children away.  
 Do not operate with fuel loading or ash removal doors open.

#### 2. Ventilation of the installation room

The installation room must have air inlet and outlet openings for ventilation, even if there is a direct connection to the burner for combustion air.

This is to keep the combustion zone at a neutral pressure.

#### 3. Admission of combustion air, the pellet boiler requires combustion air. The combustion air can be supplied by:

- a. Relying upon the boiler room air as supplied by the air inlet and outlet openings for ventilation in the installation room.
- b. Independently of the room air via a separate air intake line with a direct connection to the outdoor atmosphere.  
 The air intake line must not follow the sewage pipe. The diameter of the air intake line must be at least 4 inches. If the air line is greater than 12 feet in length, or if it has more than 270 degrees of turns, then it should be increased in size to 5 inch.

Never operate the pellet boiler if the air intake openings are partially or completely closed.

Contaminated combustion air can cause damage to the pellet boiler. Never store or use cleaning detergents containing chlorine, nitrobenzene or halogen in the room where the heating system is installed, if combustion air is drawn directly from the room. Be particularly cautious around swimming pools and

chemicals.

Do not hang out washing in the boiler room.

Prevent dust from collecting at the combustion air intake to the pellet boiler.

#### 4. System damage due to frost and humidity

The temperature in the installation room must not drop below 38°F and must not exceed +86°F. The relative humidity in the installation room must not exceed 70%.

#### 5. Danger for animals

Prevent pets and other small animals getting into the installation room. Install grilles over all openings.

#### 6. Flooding

In the event of a flooding risk, switch off the pellet boiler and disconnect it from the main power supply before water enters the boiler room. All components that come into contact with water must be replaced before the pellet boiler is put into operation again.

## 5.3 Flue gas system

The flue gas system consists of a chimney and a flue gas tube. The flue gas tube connects the pellet heating system to the chimney. The chimney leads the flue gas from the pellet heating system out into the open.

#### 1. Design of the chimney

The dimensions and design of the chimney is very important. The chimney must be able to ensure sufficient draft to safely draw away the flue gas regardless of the status of the boiler. Low flue gas temperatures can cause sooting and moisture damage on chimneys that are not insulated. For this reason **moisture-resistant chimneys** (stainless steel or ceramic) should be used. An existing chimney that is not damp-resistant needs to be renovated before use. Follow guidelines below:

Boiler size		AutoPellet
Flue gas tube diameter (at boiler)	inch/mm	6/160
Flue gas temp. / rated power	° F	266 - 320
Flue gas temp. / partial load	° F	194 - 248
Min. draft - full load/part load	in/wc	- 0.04 / - 0.02

Chimney size	Min. Height
6in x 6in	17ft
7in x 7in	16ft
8in x 8in	16ft
6in round	19ft
7in round	17ft


## NOTICE

Person(s) operating a hydronic heater is/are responsible for operation in a manner that does not create a public or private nuisance condition. The manufacturer's distance and stack height recommendations and the requirements in any applicable laws or other requirements may not always be adequate to prevent nuisance conditions due to terrain or other factors.

Recommended and UL-103HT approved chimney materials are:

- a. Selkirk sure temp
- b. Supervent (JSC)
- c. Security chimneys (secure temp ASHT)

Use flue gas pipe from chimney to boiler as required by your local code.

	<b>CAUTION</b>
<b>Unregulated combustion</b> Please observe that combustion air openings and flue pipes are not reduced in size or closed. Make end user aware of these guidelines and their potential danger. Clean the chimney and the flue gas tube at regular intervals. Check if the draft inducer is clean and in a good condition.	

## 2. Flue gas temperature

The flue gas temperatures are approximately the same for all AutoPellet covered in this manual.

The dewpoint of flue gas with wood pellets (max. 10% water content) is approx. 120°F.

It is possible to increase the flue gas temperature to prevent condensation inside the chimney and avoid damage due to damp. Only authorised installers may increase the flue gas temperature.

### Note:

The increase in flue gas temperature results in reduced efficiency and thus increases fuel consumption.

## 3. Negative pressure of the chimney

The boiler must be connected to a chimney or a vertical venting system that is capable of handling and producing a negative breeching pressure of  $-0.4$  "WC. Use a draft gauge to verify the indicated draft value, adjust barometric damper as required. Drill a small hole in the connection pipe at about 2in/ 50mm from the boiler flue outlet and use this hole as your measuring point.

### Chimney draft

The suction effect of the chimney draft must extend all the way to the boiler flue pipe connection. The maximum flow rate that can be drawn through the chimney limits the maximum performance of the chimney connection. The boiler performance must be reduced if the chimney does not possess the necessary cross-section. This may only be performed by authorised personnel.

## 4. Cleaning

Clean the flue gas tube and chimney regularly. Solid fuel burning appliances need to be cleaned frequently because soot, creosote, and ash may accumulate. The hotter the fire, the less creosote is deposited. Cleaning intervals can vary in warm periods due to this and become more frequent.



## DANGER

### Risk of chimney fire

Creosote-formation and need for removal: Low flue gas temperature can cause creosote. Creosote can condense in a relatively cool chimney. As a result, creosote residue accumulates on the flue lining. If ignited, this creosote will create an extremely hot fire. The chimney and the chimney connector should be inspected at least twice monthly during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

## NOTICE

### Oxidation of chimney

Do not use metal brushes to clean chimneys made of stainless steel.  
Your state and local regulations must be observed.

## 5.4 Safety systems

The following safety measures are the prerequisite for safe operation of your system.

### Emergency stop switch

Every heating system must be able to be switched off with an Emergency Stop switch. The Emergency Stop switch location is determined by your local code requirement. It should remove all electrical power from the boiler.



### Safety valve / Over Pressure Relief Valve

This valve opens when the pressure inside the heating system increases to max. 43.5 PSI. For North America, a 30 PSI Relief Valve is supplied with each boiler. This valve must not be locked out or plugged and must be within 3 feet of the boiler, with no valves between the relief valve and boiler.



### Low Water Detection

The "Low Water Detection" device is connected to the Emergency Stop of the boiler. Should a low water condition be detected, the boiler stops firing immediately. This device must be of the manual reset variety.



### Safety temperature sensor

The pellet boiler is equipped with a safety temperature sensor. This is located on the pellet boiler. If the boiler temperature exceeds 230° F, then the heating system switches off.



### Expansion tank

All heating systems must be equipped with an expansion tank. The overall size of the heating system volume will dictate the required expansion tank size.



## NOTICE

### Initial start-up

The initial start-up of each MESys boiler must be performed by an authorized installer.

## 5.5 Installation with an existing boiler

MESys boilers are not to be connected to a chimney flue serving another appliance. However, when all State and local codes allow for the sharing of chimney flues, MESys boilers and another appliance burning pellets or a different fuel can be operated simultaneously while connected to a single existing chimney or flue gas system providing the following conditions are met:

- All state and local codes permit the specific installation.
- All appliances are installed in accordance with the manufacturer's installation specifications or if lacking manufacturers specifications, the appliance in question is installed in a manner commonly recognized as safe and correct for the application and circumstances.
- The chimney or flue gas system must be able to handle the combustion products of either appliance and both appliances when operated simultaneously.

## NOTICE

### Avoid clearance issues that can make servicing difficult:

Be sure to follow suggested clearances when installing this boiler with an existing boiler to be sure that service and cleaning can be performed adequately.



## CAUTION

**Avoid code violations:**

When connecting to or with an existing boiler, contact the authority having jurisdiction to be sure the type of installation planned is allowed.

Document the type of boiler that the Pellematic is connected to or with.

Pellet boiler: Make and Model number:

\_\_\_\_\_

Existing boiler: Make and Model number:

\_\_\_\_\_



## DANGER

**Possible escape of flue gas:**

Do not connect this unit to a chimney flue serving another appliance unless multiple appliances into a single flue is authorized by all authorities having jurisdiction.

## 6 Fuel

Wood pellets are natural wood (dried sawdust or waste from machining) that has been formed into pellets under high pressure. They have a very low moisture content and very high calorific value. The manufacture of wood pellets is regulated by European standard EN ISO 17225-2.

Fuel Property	PFI Premium
<b>Normative Information - Mandatory</b>	
Bulk Density, lb./cubic foot	40.0 - 46.0
Diameter, inches	0.230 - 0.285
Diameter mm	5.84 - 7.25
Pellet Durability Index	≥ 96.5
Fines, % (at the mill gate)	≤ 0.50
Inorganic Ash, %	≤ 1.0
Length, % greater than 1.50 inches	≤ 1.0
Moisture, %	≤ 8.0
Chloride, ppm	≤ 300
Heating Value	NA
<b>Informative Only - Not Mandatory</b>	
Ash Fusion	NA



### WARNING

Never use pellets that contain treated wood, colored paper products, cardboard, solvents, plastic trash or garbage.

Never burn trash, plastics, gasoline, solvents, naphtha, household garbage, material treated with petroleum products such as particleboard, railroad ties and pressure treated wood leaves, paper products, cardboard.

### 6.1 Specification for high quality pellets as per EN ISO 17225-2, class A1 and by PFI standards in North America

Calorific value	≥ 4,6 kWh/kg or ≥ 16,5 MJ/kg
Loose density	min. 600 kg/m <sup>3</sup>
Water content	max. 10% Specification for high quality pellets as per EN ISO 17225-2, class A1
Ash content	max. 0.7%
Length	max. 40 mm
Diameter	6 mm
Fine material	max. 1%
Contents	100% natural wood



## NOTICE

The heating system is suitable only for pellets of natural wood that comply with standard EN ISO 17225-2 class A1 with a diameter of 6 mm. Using non-pelletised fuels or pellets that are not manufactured from natural wood will lead to the warranty becoming void and will cause damage to the pellet boiler and the chimney.

Use only quality pellets that are DINplus or ENplus or PFI premium Certified.



## WARNING

**Never use pellets that contain treated wood, colored paper products, cardboard, solvents, plastic, trash or garbage**

Never burn trash, plastics, gasoline, solvents, naphtha, household garbage, material treated with petroleum products such as particleboard, railroad ties and pressure treated wood, leaves, paper products, cardboard.

## 6.2 Distance to flammable materials

Observe the country-specific regulations, Local Regulations or NFPA.

## 6.3 Storing the pellets

1. Pellets are to be stored in a place where they are kept dry all year.
2. Install a back-ventilated partition to prevent pellets from contacting damp walls, or use a fabric tank.
3. Refer to our planning hints for pellet storage rooms and warning signs.
4. Legislation in your country must be observed regarding building specifications for storage rooms.
5. ÖkoFEN also offers FleXILO fabric tanks for storing pellets.

## 6.4 Measures for the ventilation of storage rooms

To avoid any kind of danger through possible degassing of the pellets, make sure you obey the following guidelines:

- The storage room has to be insulated towards the living area.
- The storage room has to be ventilated to the outdoors.

For further information please consult your expert adviser.

## 7 Product description

The description of the product is intended to provide an overview of the components that make up an ÖkoFEN pellet heating system, the parts of the pellet boiler and advice on where you can find more information.

The ÖkoFEN concept features different sizes of design and type for each component. These are compatible and designed to match.

### The ÖkoFEN pellet heating system consists of 3 components

1	Pellematic pellet boiler
2	Conveyor system
3	Storage system - storage room or fabric tank

### 7.1 The pellet boiler

The pellet boiler is equipped with an automatic cleaning system, an ash box with ash compression system and an integrated return water temperature control. The installed programmable logic controller system enables fully automatic operation and highest efficiency. We offer an optional automatic de-ashing system for the highest level of cleanliness and comfort.

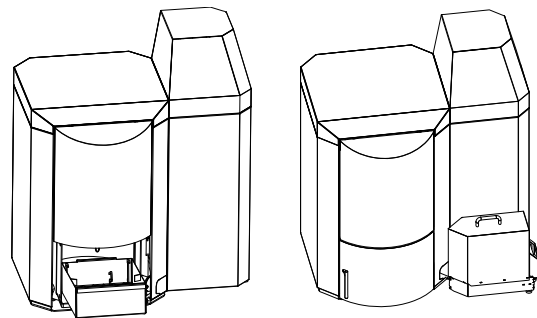
#### Pellematic types and power ratings

We offer the Pellet boiler with the following power ratings:  
Suction-feed systems: 68,300; 109,500 and 191,000 BTU/hr

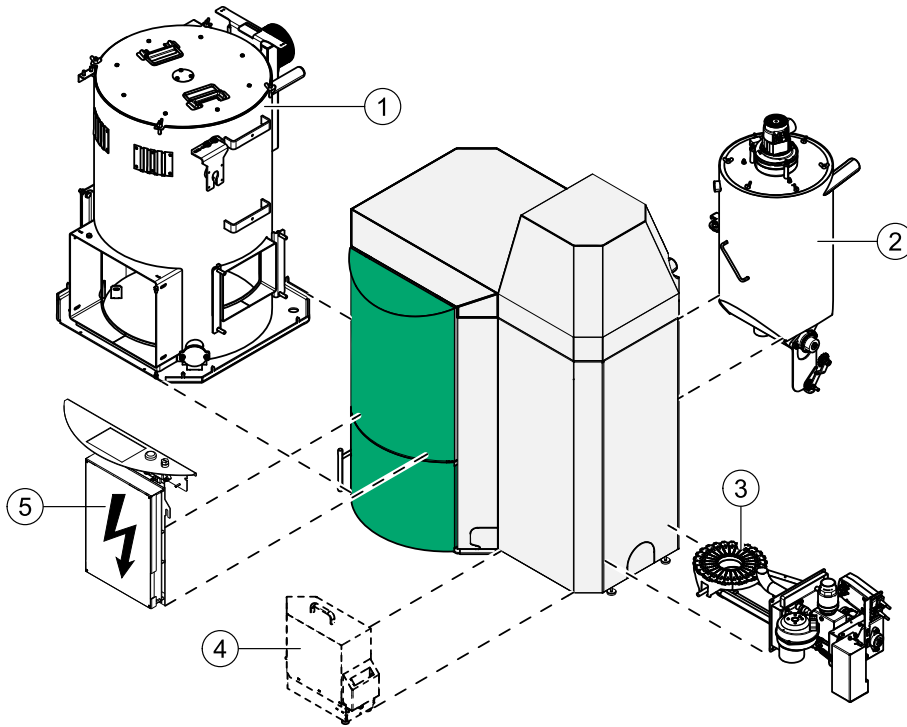
All sizes / outputs of the Autopellet boiler are available with external automatic ash compression system.

#### Note:

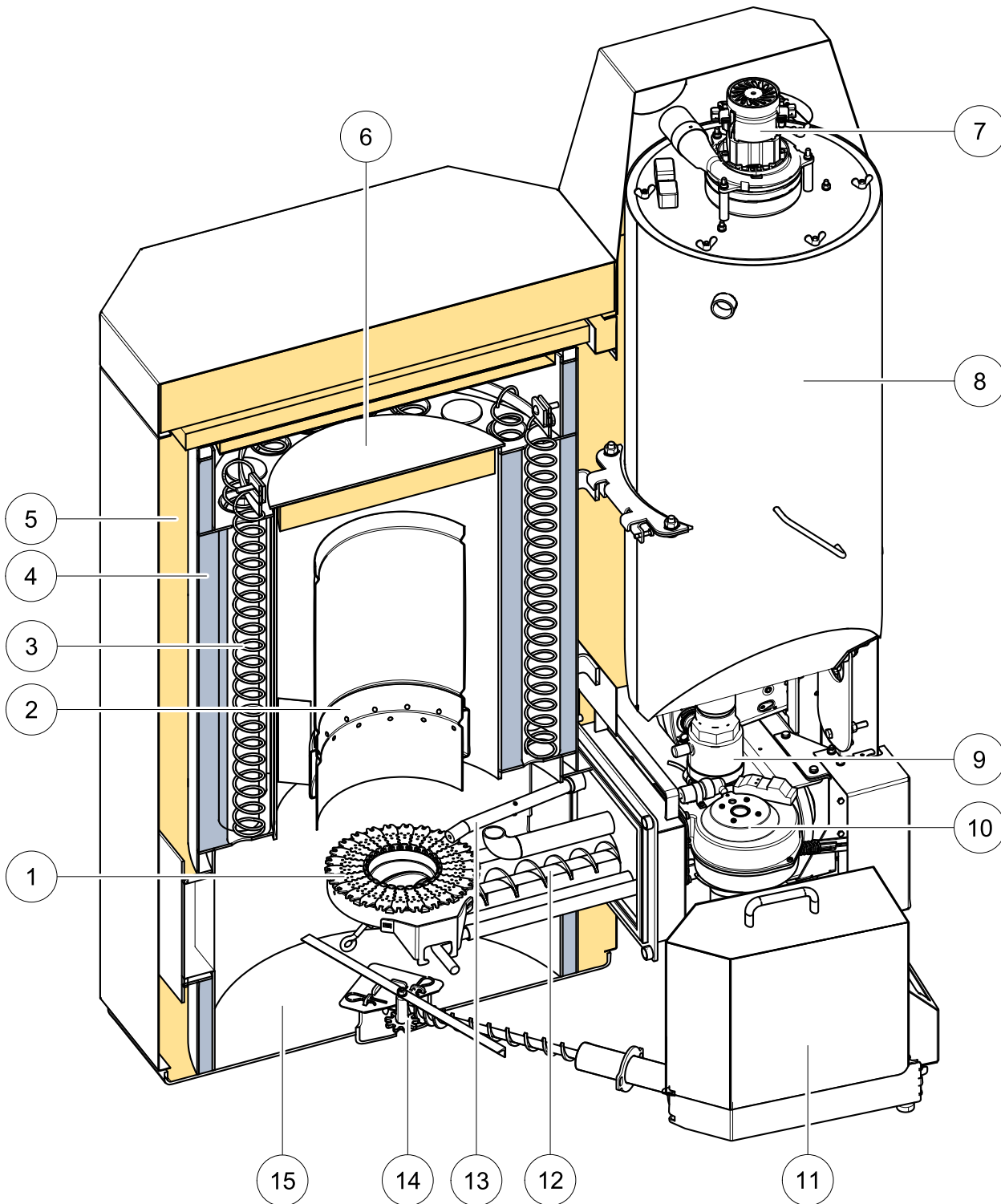
Refer to the data plate for the power rating of your Pellematic. The data plate is located on the rear side of the Pellematic. Here you will find the type designation, manufacturer's serial number and year of build.



### Key components of the Pellematic



1	Boiler (heat exchanger)
2	Vac Hopper / Day tank
3	Burner
4	External automatic ash compression system
5	Boiler controller



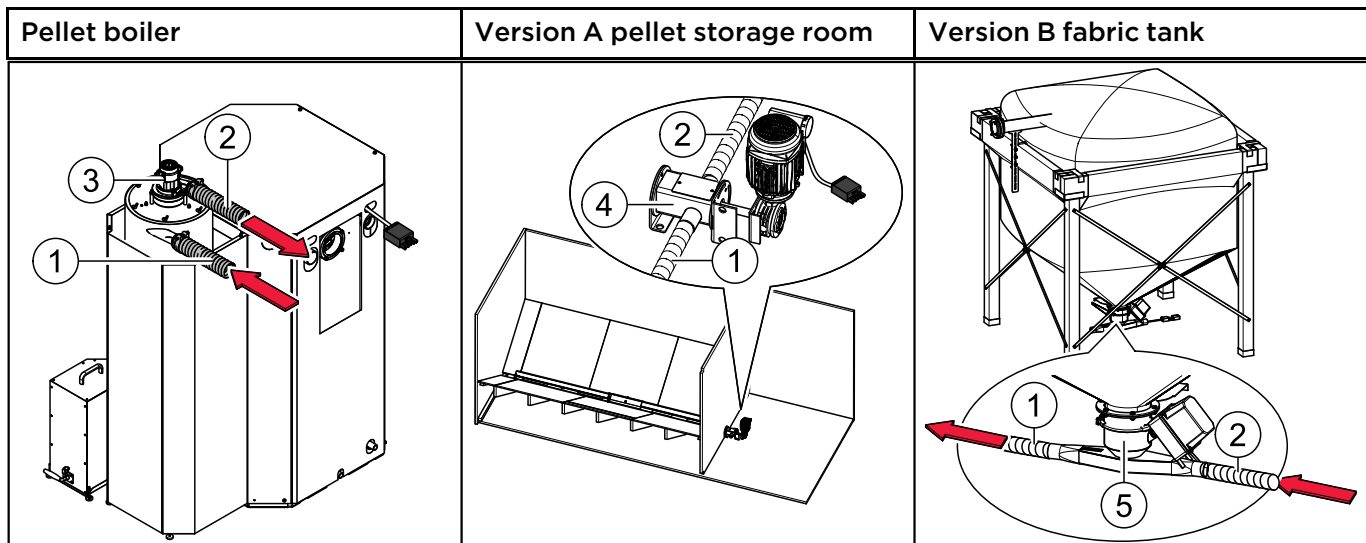
1	Burner plate	9	Fire protection - ball valve
2	Flame tube	10	Burner fan
3	Heat exchanger	11	External ash box
4	Boiler water	12	Burner auger
5	Boiler insulation	13	Electronic ignition
6	Combustion chamber cover	14	De-ashing system
7	Suction turbine	15	Ash chamber / Fire chamber
8	Vac hopper / Day tank		

## 7.2 Pellet suction system

The pellet suction system consists of the pellet line, air line and a suction fan. The suction fan in the hopper conveys pellets in the pellet line from the storage room or fabric tank to the hopper.

### Key components of pellet suction system

1	Pellet line	Line from the storage room auger or fabric tank to the hopper.
2	Air line	Line from the suction fan to the storage room auger or fabric tank.
3	Suction fan	Located above the hopper behind the Pellet boiler burner housing.
4	T-piece	Located at front end of the storage room auger, outside the storage room.
5	Suction flap	Located underneath the fabric tank.

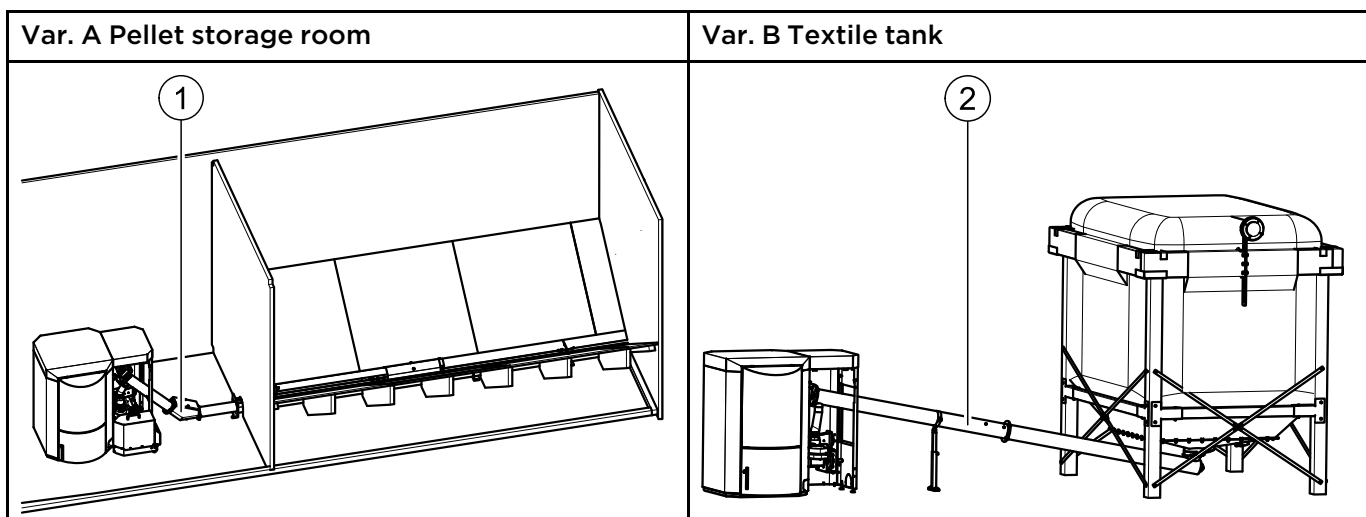


## 7.3 Auger delivery system

The auger system consists of: Delivery system motor, dropshaft, up leading auger with joint or extraction auger with extraction unit. The delivery system motor powers the auger system and transports pellets from the tank room or textile tank to the burner plate.

### Key components of the auger system

1	Up leading auger	Delivery auger with motor unit and joint (Connection of delivery auger and pellet boiler)
2	Extraction auger	Delivery auger with auger, emergency gate, supporting leg and handcuffs; (Connection of textile tank and pellet boiler)



## 7.4 Storage systems

There are two methods for storing pellets: in a storage room with an auger feed system (version A) or in a FleXILO fabric tank (version B). FleXILO fabric tanks can be located inside the central heating room, storage room or protected from wet and sun outside.

### NOTICE

#### Damage to property and loss of warranty

The combination of an ÖkoFEN pellet boiler with a storage and conveyor system from another manufacturer is not permissible.

#### 7.4.1 Pellet storage room

The auger extraction system is part of the ÖkoFEN pellet heating system. The sloping base is to be provided by the customer. Information and important notes on setting up storage rooms can be found in the ÖkoFEN planning documents and on [www.oekofen.com](http://www.oekofen.com). Information on installing the auger extraction system is included in the auger system installation manual. Refer to the instructions on how to make a sloping base.

#### 7.4.2 Flexilo fabric tank

The whole fabric tank system is included in the scope of supply. ÖkoFEN offers various sizes and types. The fabric tank supplied may vary from the example shown above.

Please refer to the installation instructions supplied for the fabric tank. Note also the instructions on setting up and filling.

## 8 Operating the Pellematic

The pellet heating system is an automatic heating system. All pellet feed system and combustion system sequences are regulated automatically using an electronic boiler controller and heating controller.

### 8.1 Operating the heating system

#### NOTICE

Damage caused do to incorrect operation or incorrect settings.

Only trained operators may use the heating system. Make sure no unauthorised persons enter the central heating room. Keep children away from the central heating room and storage room.



#### DANGER

**Fire risk**

Keep the ash removal door closed while the boiler is in operation.

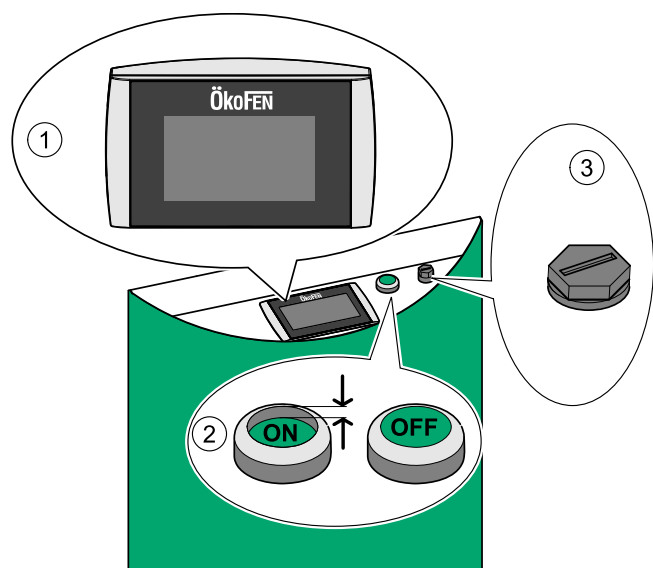
#### NOTICE

**Standby mode boiler controller**

Don't set the main switch of the boiler controller outside of the heating period to Off, because no buffer battery is used.

## 8.2 Description of the control panel

The control panel is located underneath the flap above the door of the boiler.



1	User control unit	Operates the boiler controller and the heating controller.
2	Main switch	Switches off the heating system (both poles) including the power supply to the control panel.
3	Safety temperature sensor	Switches the heating system off, if the boiler temperature reaches 230 °F. The heating controller remains active.

## 8.3 Setting language, date and time at Pelletronic Touch

**Setting the language** (The factory setting for the language is German)



Mittwoch, 10. Dezember 2014 10:44:15

Außentemperatur 31,6 °F  
Temperatur WW1 166,6 °F  
Kesseltemperatur PE1 72,9 °F  
Kesselstatus PE1 Aus



MESYS  
MAINE ENERGY SYSTEMS

Messwerte Betriebsart Schornstein

### Hauptmenü

10:44:02

Heizkreis 1 Heizkreis 2 Warmw Solar


PES Allgemein Firmware Code



### Allgemeines

Schornstein Favoriten Wertauswahl Länderel

Störung Info ModBUS E-Mail



### Länder-Einstellungen

Sprache Einheit

Deutsch Imperial

Datum Uhrzeit

10.12.2014 10:45:02



### Länder-E

Spra  
D  
Dat  
15.

Deutsch  
English  
français  
Nederlands  
italiano  
español  
čeština



### Local Settings

Language Unit

English Imperial

Date Time

Dec 10, 2014 10:46:23 AM

### Setting the date



### Setting the time

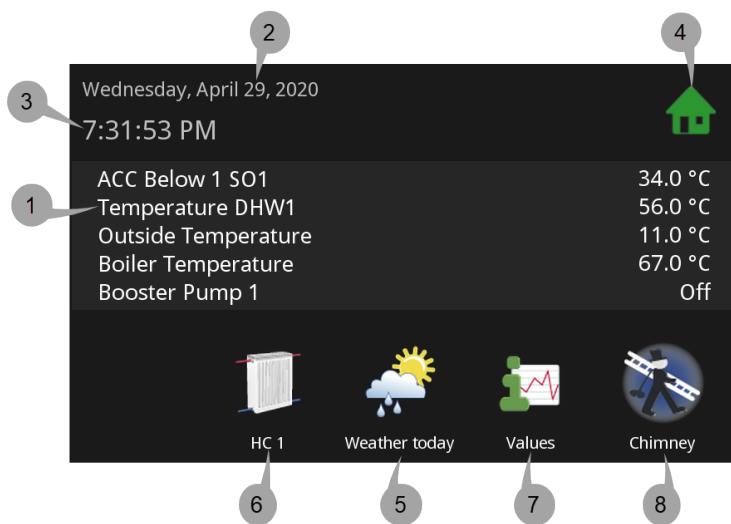


## 8.4 Operating Device with Touch screen

The Touch operating device is mounted on the control board of Pellematic. The color display is surrounded by a foil design with logo. With finger pressure you make settings on the Touch operating device.

## 8.5 Opening window

The touch panel is dark during in standby mode. As soon as you touch the surface of the touch, light turns on and displays the opening window.



- 1 Measuring values (adjustable)
- 2 Date
- 3 Hour
- 4 The icon house takes to the main menu
- 5 Weather + display current weather (only when weather function is active)

**Note:**

If there is a malfunction, the corresponding fault message is displayed at this point instead of the weather icon

- 6 Favorite 1 (adjustable)
- 7 Favorite 2 (adjustable)
- 8 Favorite 3 (adjustable)

## 8.6 User controls and their function

### 1. Navigation-icons

Icon-  
view

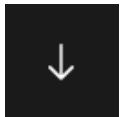
If you touch an icon, the icon turns green. The green shows that you are currently on this icon. You get to the enabled menu item .



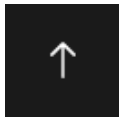
The yellow house enters you directly to the main menu.



The horizontal arrow leads you one step back.



With the blue down arrow you get to additional lines of information on this item. (Down - scroll down).



With the blue up arrow you get to additional lines of information on this item. (Top of page - scroll up)

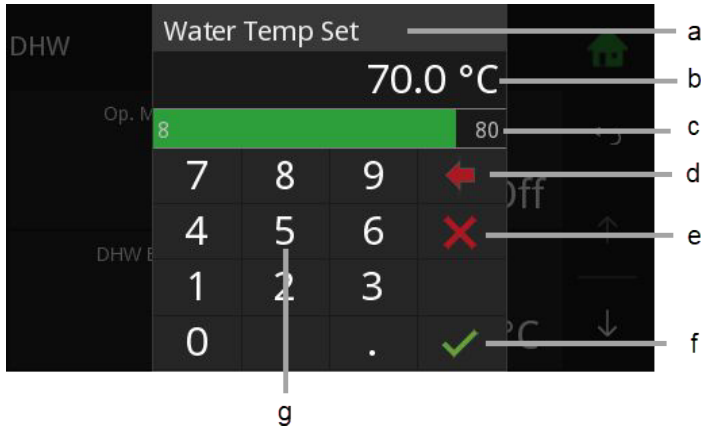


You get to the respective menu item.



You get to the settings of the parameter. You come either to a numeric keypad, a time / date block or the text selection.

2. Numeric keyboard



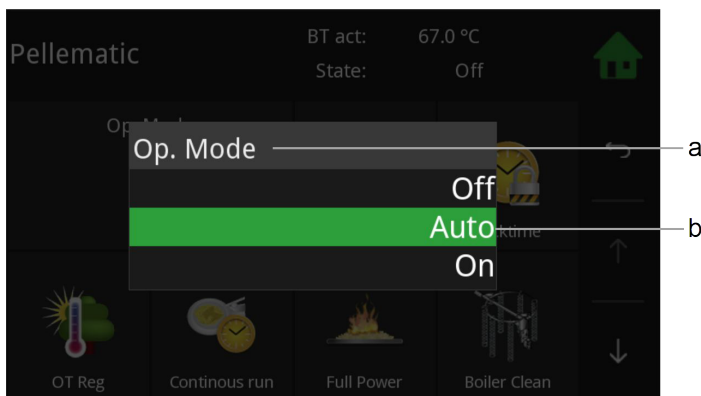
- a. Name of parameter
- b. Value of parameter with unit
- c. Min/max value - Values outside this range are not accepted.
- d. Delete input of numbers - per contact you delete one place.
- e. Cancel - You return to the menu item. Input of a new value was not accepted. The original value is.
- f. Help function - inactive
- g. Confirm
- h. Numeric keyboard - used to enter values within the min - max range.

3. Time and date block



- a. Adjustable time or date
- b. Cancel
- c. Help function - inactive
- d. Confirm

4. Text selection



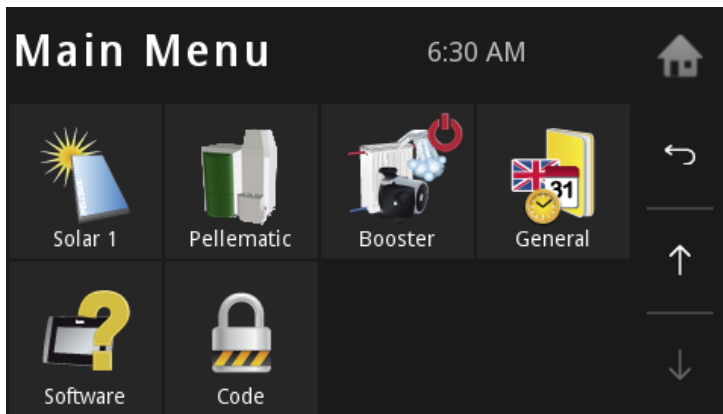
- a. Name of parameter
  - b. Status texts  
The number of status texts depends of the parameter.
- Choose a status text. The setup menu closes automatically and the chosen status text is displayed in the menu.

**Note:**

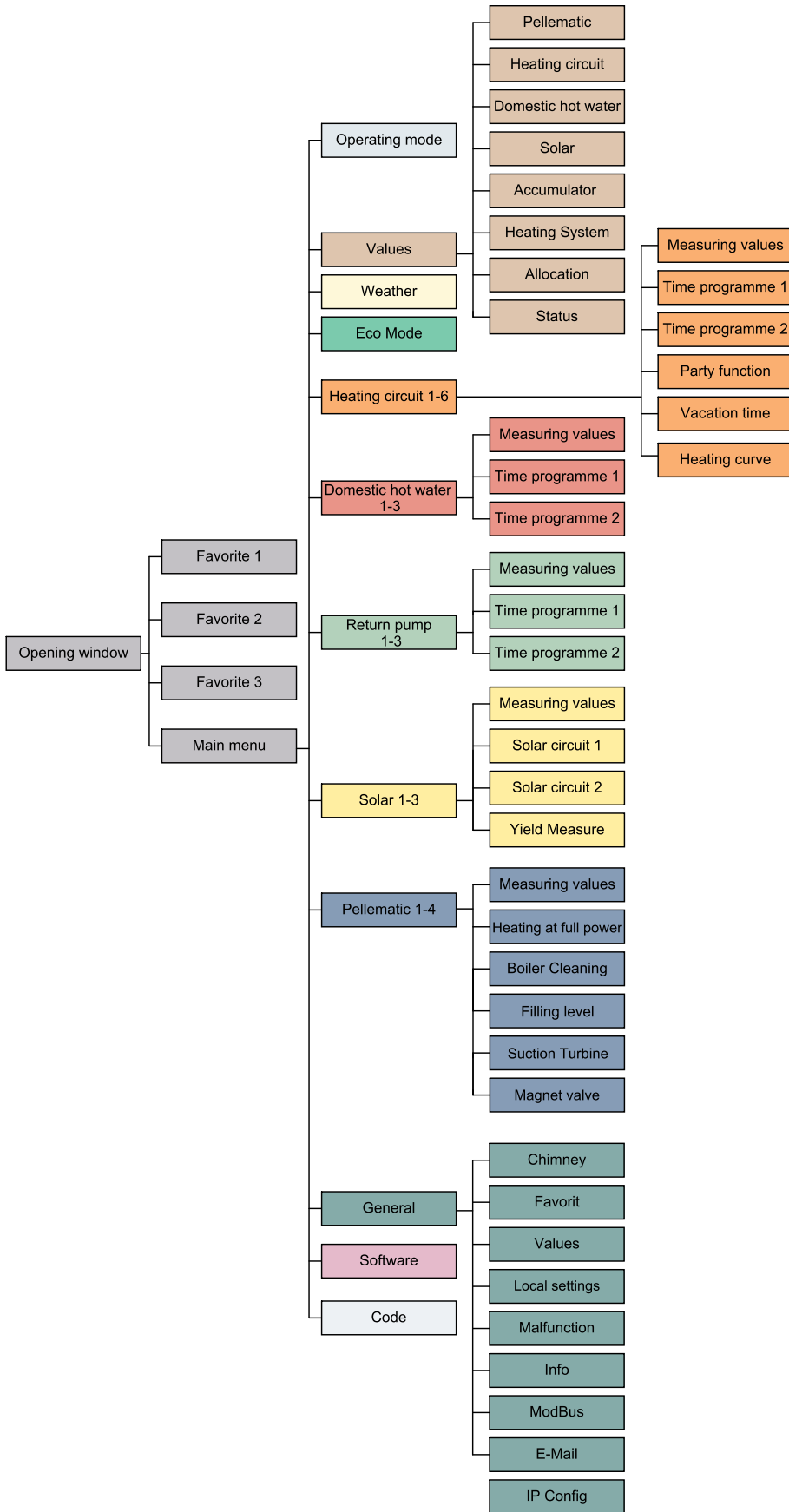
Although a scroll down menu is open, the navigation icons, menu items and parameters behind are active and by touching them it takes you directly there.

## 8.7 Main Menu

In the Main menu you see all submenus. By finger pressure on an icon you reach the respective submenu.



Menu navigation of Pelletronic Touch

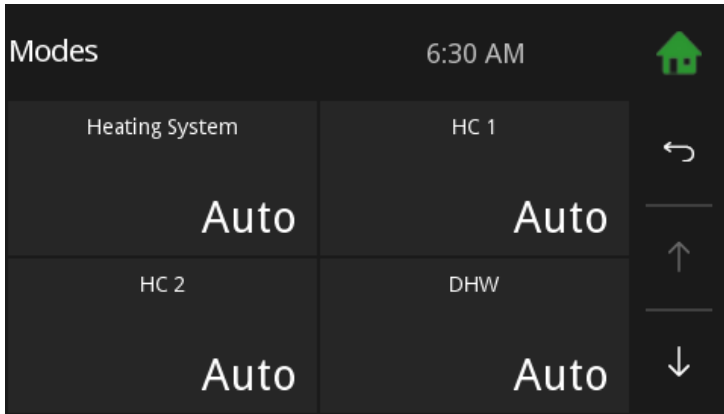


# 9 Mode

In the menu item Mode you can see the mode of your heating system and the mode of the heating circuits, domestic hot water and solar.



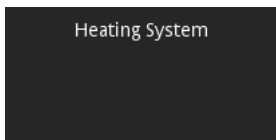
The menu item **Mode** is in the Main menu.



Overview of the operating modes

- Heating Plant
- Heating system 1-6 .
- Domestic hot water 1-3
- Solar 1-3

Choose the operating modes and make settings.



- Off** The adjusted operating mode of the heating circuits and DHW is inactive.  
The frost protection function is active.
- Auto** The adjusted operating mode of the heating circuits and DHW is active.  
The frost protection function is active.
- DHW** The adjusted operating mode of the DHW is active.  
The adjusted operating mode of the heating circuits is active.  
The frost protection function is active.

**The operating mode heating circuits, domestic hot water and solar are described in the respective chapters.**

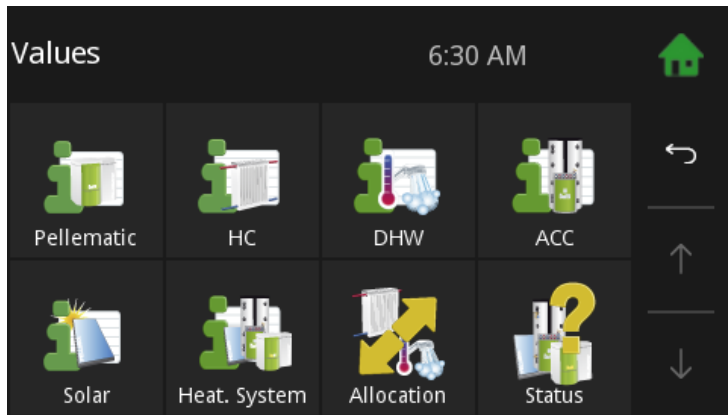


# 10 Measuring Values

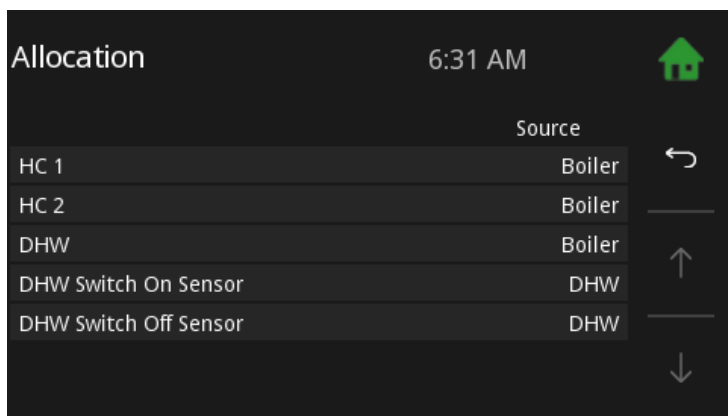
In the menu item of Measuring Values you see all actual and set values of your heating system.



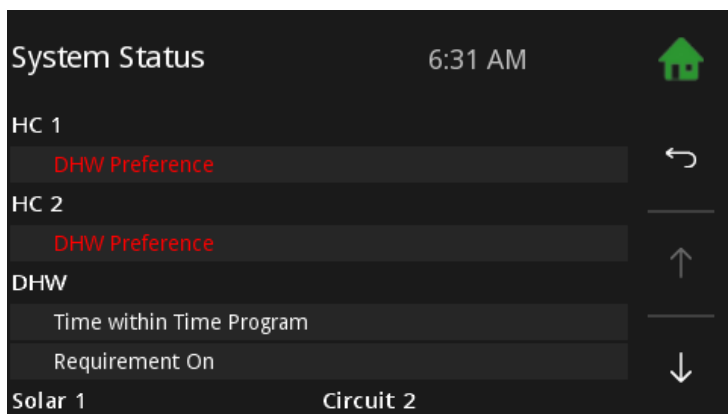
The menu item **Measuring Values** is in the Main menu.



- Pellematic
- Heating circuit
- Domestic hot water
- Solar
- Accumulator
- Return pump
- Heating Plant

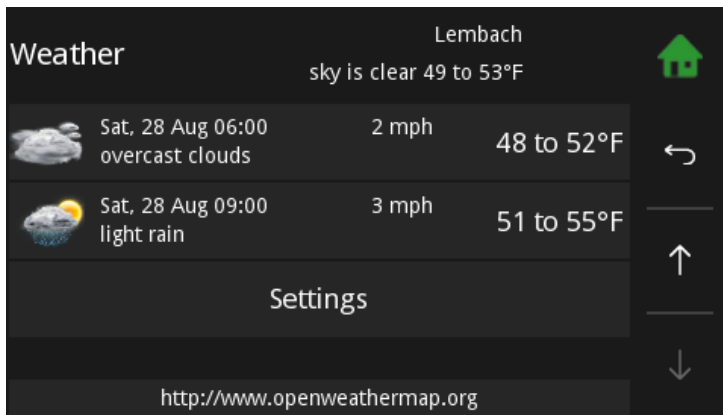



In the menu item **Allocation** you see which heating circuits are allocated to the boiler or to the accumulators.

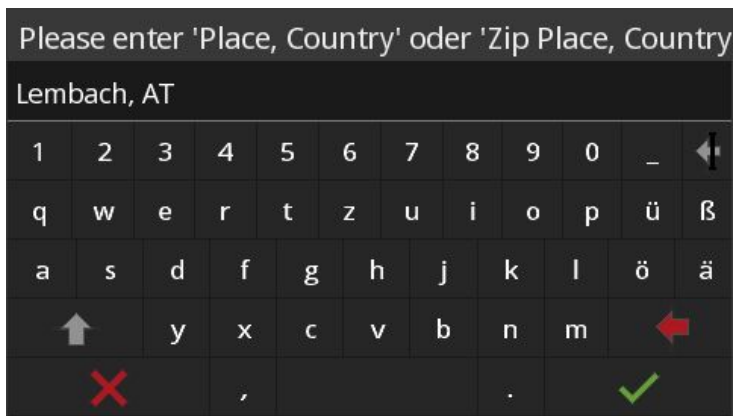


In the menu item **Status** you always have an overview about the whole heating system.

# 11 Weather



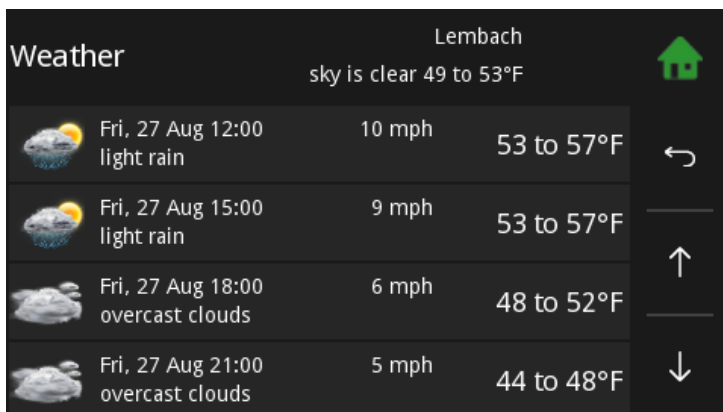
Choose **Settings** (  ), to enter your location.



Enter location and country. If the specified location is not found, enter a larger, nearby place.

Search with the following details:

- Postal code, location, country
- Postal code, country
- Location, country



Afterwards, weather data for the next 3 days are downloaded. An icon for the current weather is displayed on the opening window.

**Note:**

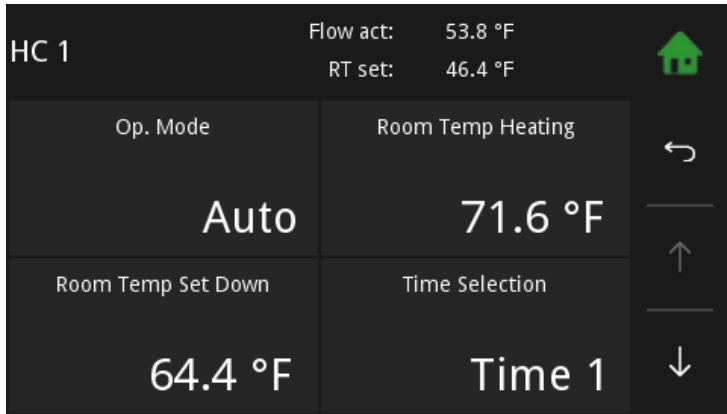
This feature requires an internet connection.

# 12 Heating Circuit

**Heating Circuit** encloses all for heating relevant parameters and settings. It can occur up to 6 menu items **Heating Circuit**.

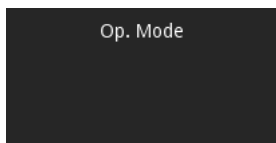


**Heating Circuit** is in the Main menu



Heating circuits settings has following menu items:

- Mode
- Room Temp Heating
- Room Temp Set back
- Time Allocation
- Values
- Time 1
- Time 2
- Party
- Vacation
- Heatingcurve



**Off** Only the frost protection function is active.

**Auto** The Furnace starts in the heating times according to the Set room temperature.

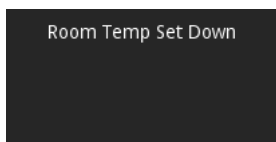
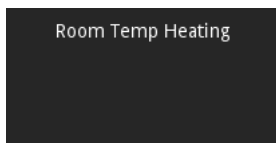
**Heating** The Furnace heats constantly according to the Set room temperature.

**Set back** The Furnace heats constantly according to the Set back room temperature.

The operating mode of the heating circuits can only be changed if the plant operating mode is set to AUTO.

The adjusted heating limits and maximum flow temperatures are used in all operating modes.

Choose your room temperature (Temperature within the heating times).



Choose Room Temp Set back (= Minimum temperature beyond the heating times).

## 12.1 Measuring values Heating circuit



Measuring values HC is in the Main menu.

Values		7:36 PM	
↳ HC		0 / 5	
Outside Temperature	11.0 °C		
Boiler Temperature	67.0 °C	70.0 °C	
Burner Contact	On		
HC1 Flow Temperature	45.0 °C	8.0 °C	
HC1 Room Temp	21.3 °C	8.0 °C	
HC1 Pump	Off		
HC1 Mixer	Off		

You see all to the Heating circuit corresponding measuring values:

- Actual value
- Set value
- Inputs (sensors)
- Outputs (pumps, mixer and motors)

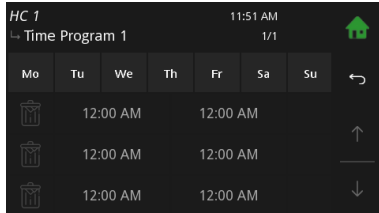
<b>Outside Temperature</b>	actual Outside Temperature
<b>Boiler Temp</b>	actual Boiler Temperature
<b>Booster</b>	Status (Booster On/Off)
<b>Flow Temp</b>	display of the flow temperature
<b>Room Temp</b>	display of the room temperature
<b>Pump</b>	Status (Pump On/Off)
<b>Mixer</b>	Status (Mixer On/Off)

## 12.2 Time programme Heating circuit

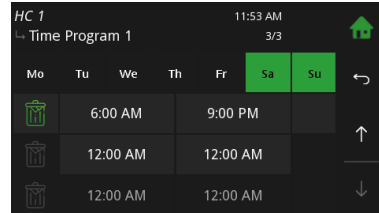
In the heating circuit time programme you fix the heating times.



**Time 1 (=Time programme 1)** and **Time 2** are in the menu Heating circuit.

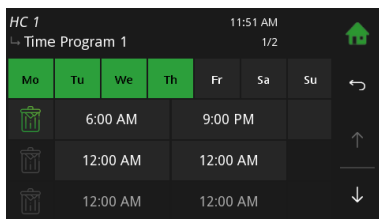


**1** Select Time programme 1

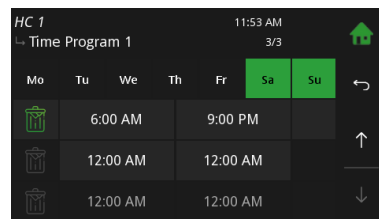


**6** Mo-Fr were assigned heating times

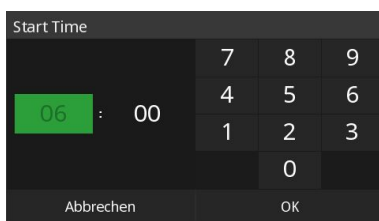
With you get to the remaining days Sa-Su.



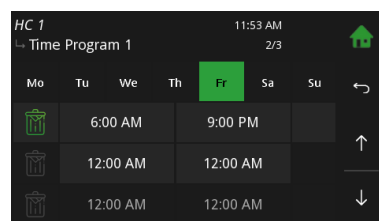
**2** Select the heating days. The activated days are deposited in green.



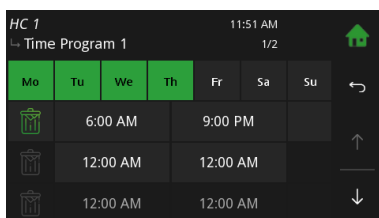
**7** Sa-Su were assigned to heating times.



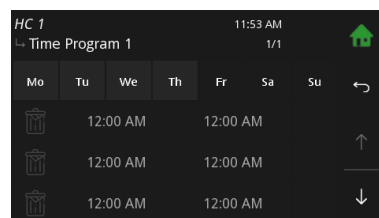
**3** Enter the heating times for these heating days (Mo-Th).



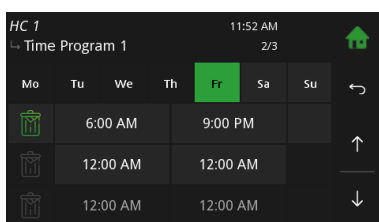
**8** With and you switch between the heating blocks. You can deactivate heating days in the heating block and activate in another.



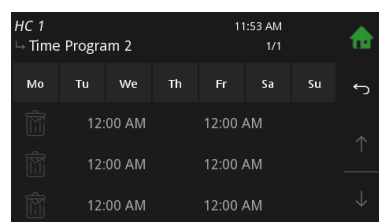
**4** The heating times for Mo-Th are assigned. With you assign to days heating times further.



**9** With you set all the heating times in the line and below to 0.



**5** Friday was activated. Heating times were assigned.



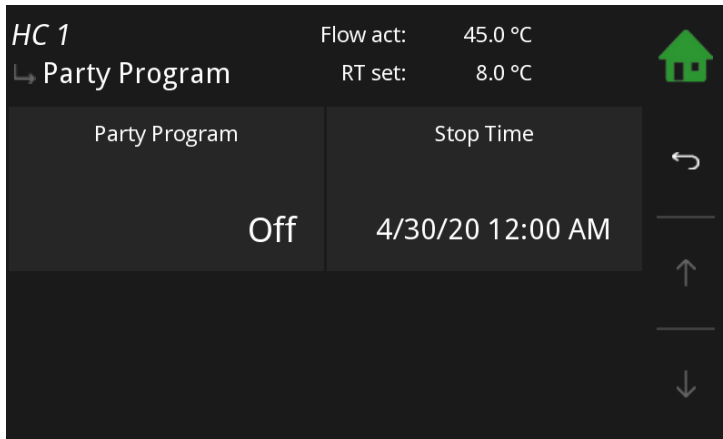
**10** Go back with . Choose Time 2. For every heating circuit there are 2 time programmes. You can programme 2 time programmes. In the menu item **Time Allocation** you can activate time 1 or time 2.

## 12.3 Party

The party function extends the heating time once, without changing the heating times.



**Party** is in the Main menu.



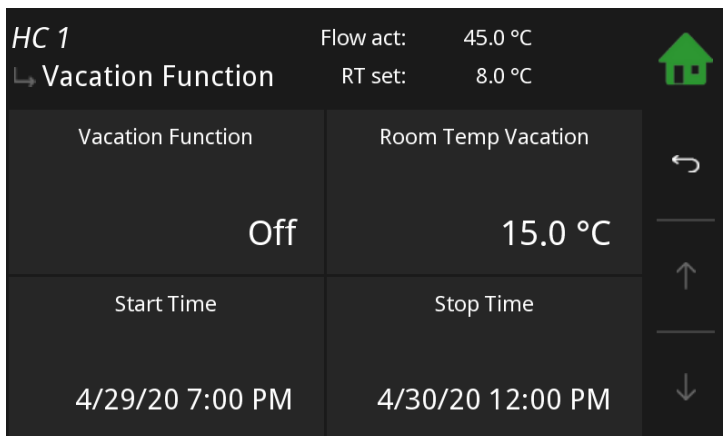
The party function is basically inactive. Enter the time until the room temperature heating should be heated. Activate the Party function. The heating time is extended up to the indicated time. Then the party function deactivates itself automatically.

## 12.4 Vacation

The holiday programme cancels the heating times and heats for the entered period on the set temperature level.



**Vacation** is in the Main menu.



Enter the room temperature on which in your absence the building should be heated. Enter the departure (start time) and return (finish date) and activate the vacation programme.

**Note:**

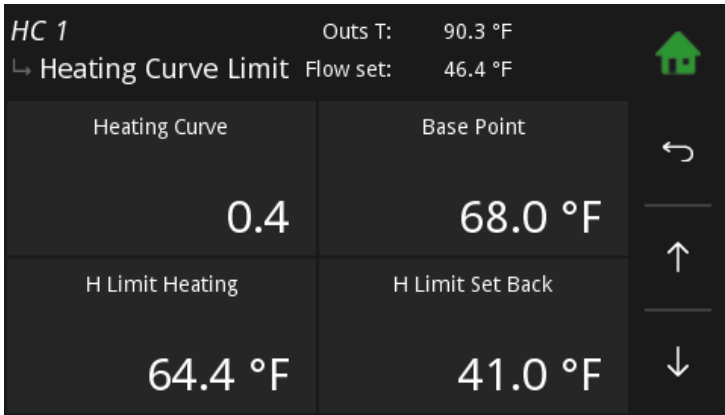
To return in an already tempered building, you must enter the day before the return as the finish date.

## 12.5 Heating curve and Heating limits

By starting up the first time, the authorised technical adviser adjusts the heating curve, the base point and the heating limits on the building situation and the hydraulics. If the Set room temperature is not reached or exceeded, adjust the heat curve with the flow temperatures according to outside temperatures.



Heating curve is in the menu Heating circuit.



### Heating curve 0.0 - 4.0

The heating curve describes the combination between outdoor temperature and the associated flow temperature for a heating circuit.

**Base point** adjustable from 68 - 113°F

With the change of base point, you provide a parallel shift of the heating curve.

### H limit heating

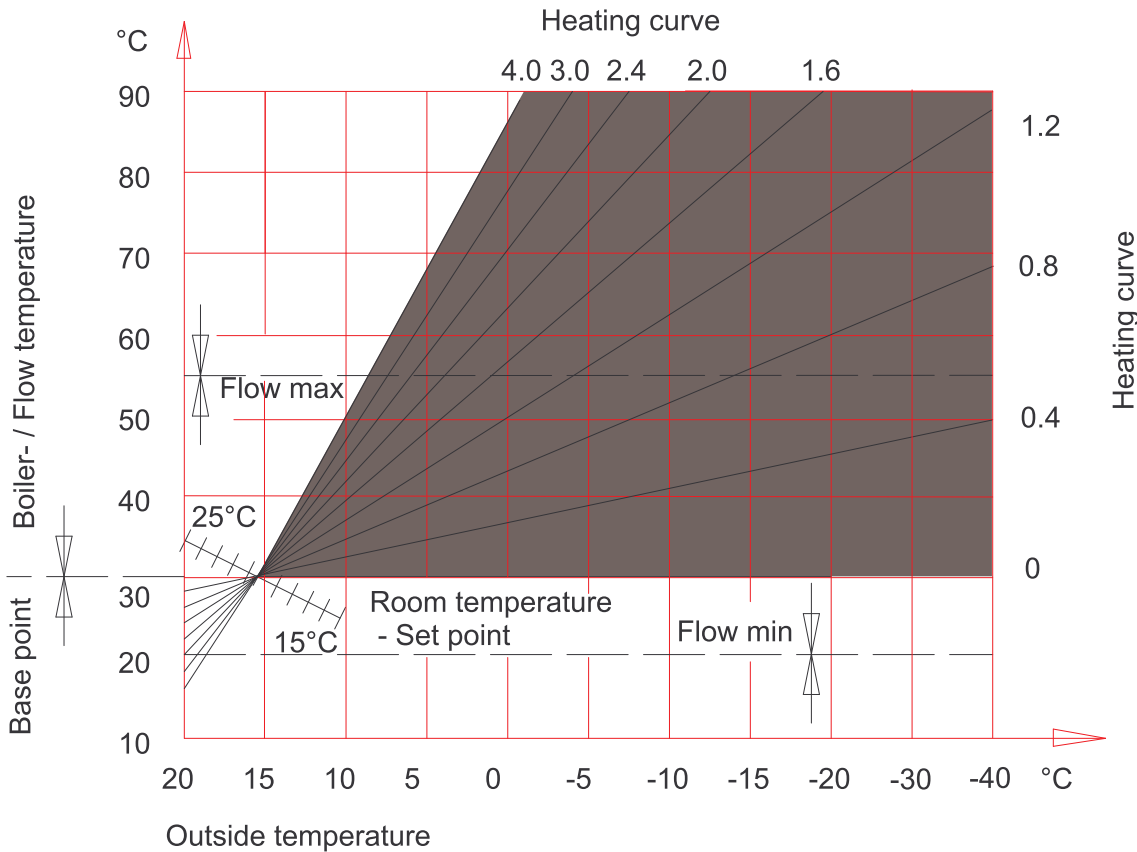
If the average outside temperature is higher than the set temperature, the heating circuit switches off in the heating mode.

### H limit set temperature

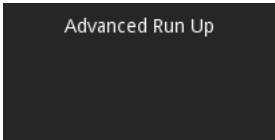
If the average outside temperature is higher than the set temperature, the heating circuit switches off in the Set back mode.

### Adjustment of heating curve and the base point to the building

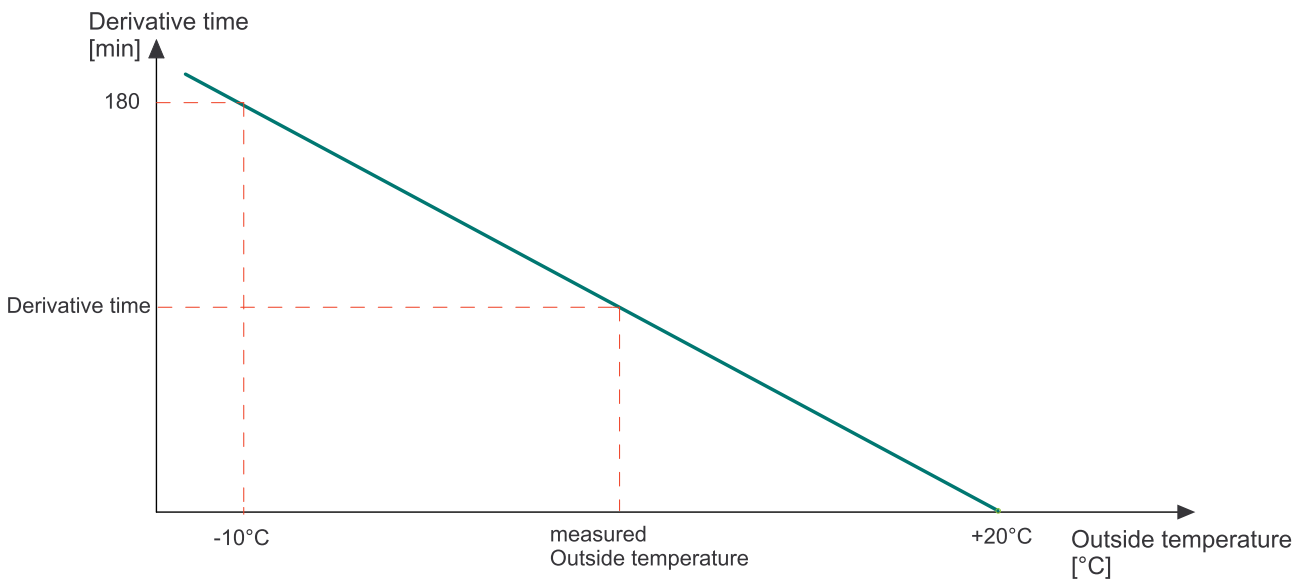
Because of the building's thermal inertia, it is recommended to perform no more than one adjustment step per day.



Daytime outside temp	Room temperature	
	too warm	too cold
+5 to +15°C	Decrease heating curving value by 0,2	Increase heating curving value by 0.2
	Decrease base point value by 5°	Increase base point value by 5°
-20 to +5°C	Decrease heating curve value by 0.2	Increase heating curve value by 0.2



The advanced run up indicates how long the system has to heat before the start of the heating time, to reach the adjusted **roomtemp heating**.



**Room thermostat influence**

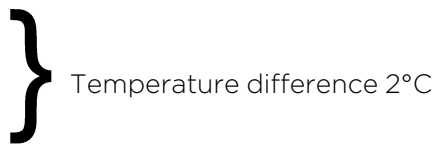
If the measured room temperature deviates from the set room temperature, the heating controller corrects the flow temperature with the Room thermostat influence. The Room thermostat influence indicates how much the flow temperature is raised or lowered so that the Set room temperature is reached.

**Example:**

Room temperature desired value = 20°C

Room temperature actual value = 18°C

Room sensor influence = 3

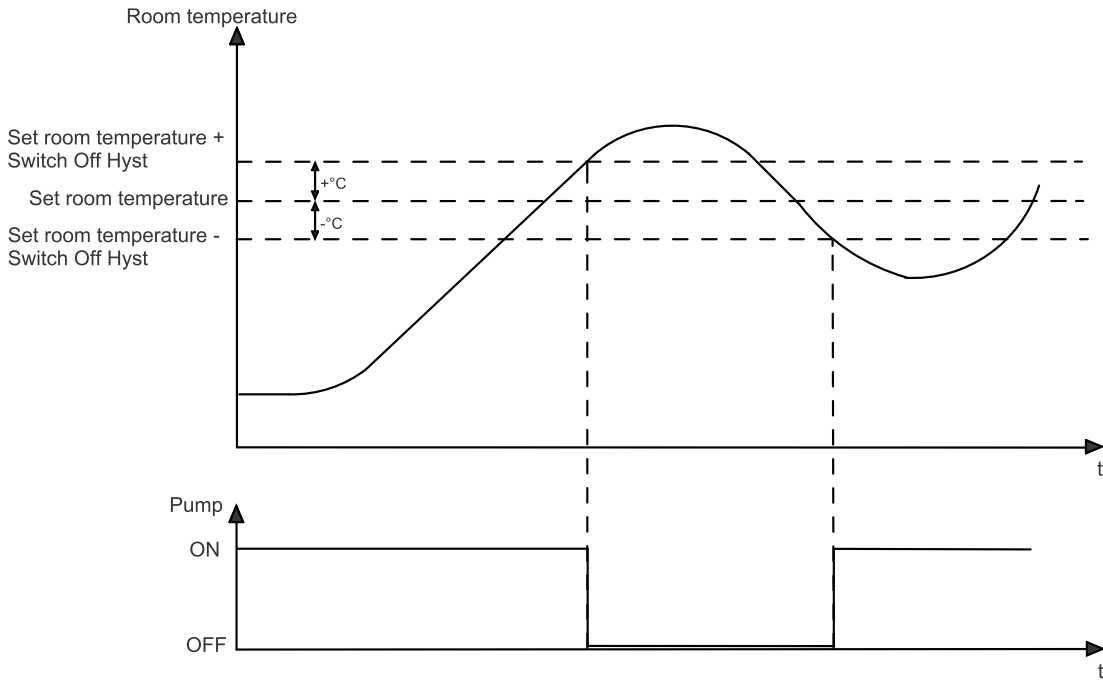


Room sensor influence	*	Temperature difference	=	Advanced run up rise/reduction
3	*	2	=	6°C



### Room temperature hysteresis

The Room temperature hysteresis prevents the cycling (On Off On Off...) of the heating circuit pump: If the Set room temperature + room temperature hysteresis is reached, the associated pump stops. If the Set room temperature is - 1°C, the pump switches on again.

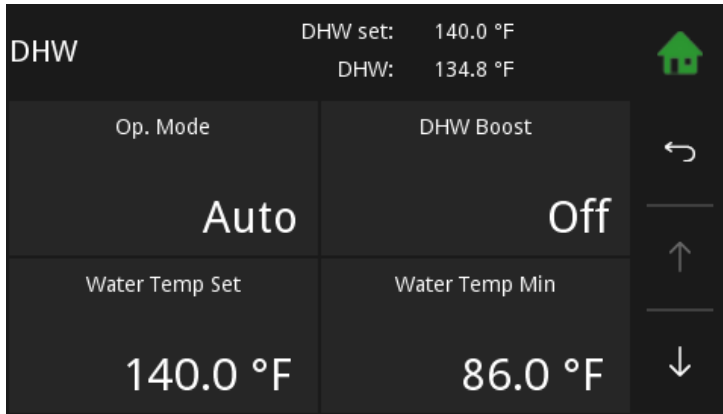


# 13 Domestic hot water

The menu Item **Domestic hot water** contains up to 3 submenu items. Domestic hot water includes all, for the preparation of hot water, relevant parameters and settings.



**Domestic hot water** is in the main menu.



DHW settings has following menu items:

- Mode
- DHW Boost
- Water Temp Set
- Water Temp Min
- Time programme
- Values
- Time 1
- Time 2

Op. Mode

**OFF** Set water temperature is reduced to 46 °F for frost protection.

**Auto** The installation heats the water within the time programme to the **desired hot water temperature**. Outside the time programme the installation heats to **Watertemp min**

**On** The system heats up the domestic hot water continuously on the Water temp set.

You can change the mode domestic hot water only when the **Operation mode** is on **AUTO**.

Heats the hot water once on the Water temp set.

DHW Boost

Water Temp Set

Set the water temperature.

Water Temp Min

Set the minimum water temperature. The water temperature never falls below this value, unless the domestic hot water mode is on **OFF**.

Time Selection

Activate **Time 1** (= Time programme 1) and **Time 2**.



You are able to see a list of all measuring values that are involved in the menu domestic hot water.



In the DHW time programme you set the times of the hot-water processing. The DHW time programme works the same way like the heating circuit time programme. See chapter [12.2 Time programme Heating circuit, page 38](#)

## 13.1 Measuring values Domestic hot water



**Measuring values DHW** is in the Main menu.

Values		7:38 PM		0 / 5	
↳ DHW					
Outside Temperature	11.0 °C				
Boiler Temperature	67.0 °C	70.0 °C			
Burner Contact	On				
DHW1 Temperature	56.0 °C	60.0 °C			
DHW1 Pump	On				
ACC1 TPO	72.0 °C	8.0 °C			
ACC1 TPM	65.0 °C	8.0 °C			

You see all the Heating circuit corresponding measuring values:

- Actual value
- Set value
- Inputs (sensors)
- Outputs (pumps, mixer and motors)

## 13.2 Time programme DHW

In the DHW time programme you set the times for the hot-water processing.



**Time 1 (=Time programme 1)** and **Time 2** are in the menu **Domestic hot water**.

DHW 1		7:38 PM		1 / 1		
↳ Time Program 1						
Mo	Tu	We	Th	Fr	Sa	Su
	6:00 AM		9:00 PM			
	12:00 AM		12:00 AM			
	12:00 AM		12:00 AM			

The domestic hot water time programme works the same way like the heating circuit time programme.

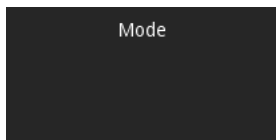
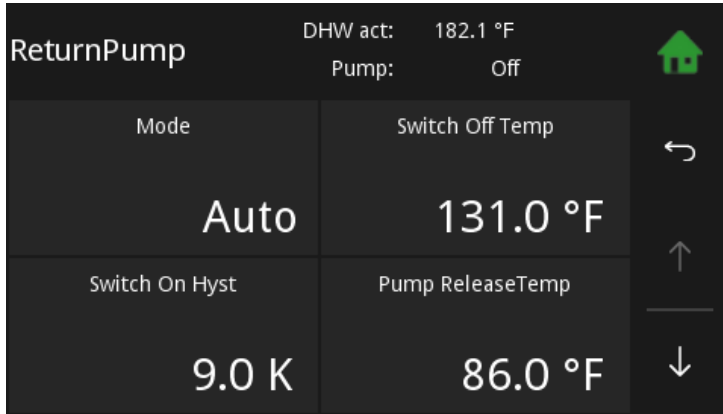
# 14 DHW Return pump



**DHW Return pump** is in the Main Menu.

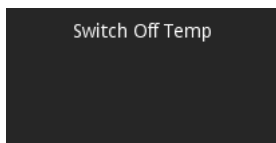
The Return pump enables the immediate DHW tap of the water taps. DHW Return pump has following menu items:

- Mode
- Switch off temperature
- Switch on hysteresis
- Time allocation
- Values
- Time 1
- Time 2

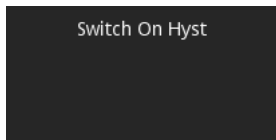


**Off** DHW Return pump inactive

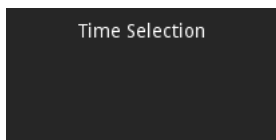
**Auto** Temperature regulation within the time programme



If the return temperature sensor of the DHW Return pump reaches the **Switch off temperature**, the pump switches off.



If the return temperature falls below the switch off temperature – the DHW Return pump switches on again!



Choose the time programme 1 or 2.

You see all the DHW pump corresponding measuring values.



Set the run times of the Return pump. The return pump – time programme works the same way like the heating circuit time programme.

**Note:**

A **Return Pump** and a **booster** rule out each other.

## 14.1 Measuring values DHW Return pump



Measuring values DHW Return pump is in menu DHW Return pump.

Values		12:04 PM			
ReturnPump		0 / 5			
Outside Temperature	6.9 °C			↶	
Boiler Temperature	26.3 °C	8.0 °C			
Burner Contact	Off			↑	
Existing Boiler	61.0 °C			—	
Switching Valve	On			↓	
SHHT-1#58EFD0#	50.5 %	25.5 °C			
SHEM-3#DC4F22764744#	0.0 W	0.0 W			

You see all the Heating circuit corresponding measuring values:

- Actual value
- Set value
- Inputs (sensors)
- Outputs (pumps, mixer und motors)

## 14.2 Time programme DHW return pump

In the Time Programme DHW Return Pump you set the times for the hot water in the water purchasers.



Time 1 (=Time programme 1) and Time 2 are in the menu DHW return pump.

ReturnPump		12:04 PM					
Time Program 1		1/1					
Mo	Tu	We	Th	Fr	Sa	Su	
🗑️	6:00 AM		9:00 PM				↶
🗑️	12:00 AM		12:00 AM				↑
🗑️	12:00 AM		12:00 AM				↓

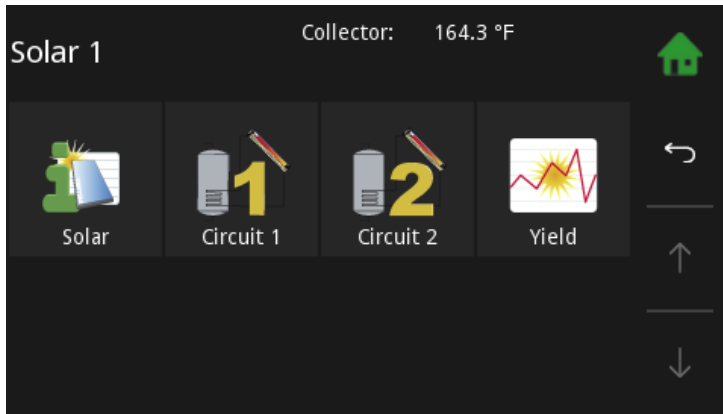
The DHW return pump time programme works the same way like the heating circuit time programme.

# 15 Solar

Solar includes all relevant parameters and settings for the solar thermal system. You can control up to 6 solar circuits.



**Solar** is in the Main menu.



Solar has following menu items:

- Measuring values Solar
- Solar circuit 1-2
- Solar energy- yield

## 15.1 Measuring values Solar



**Measuring values Solar** is in the menu Solar.



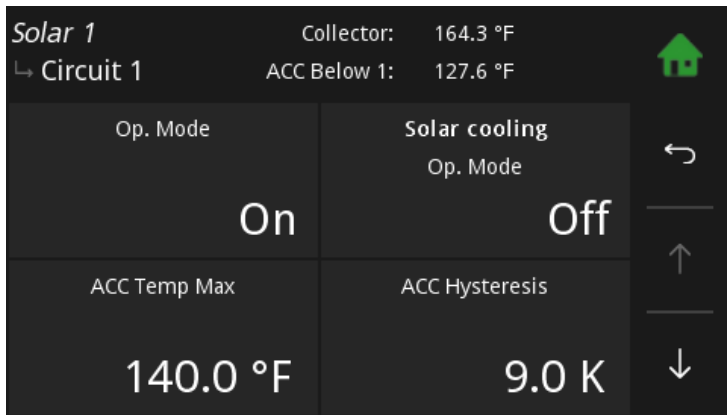
It displays all measuring values of Solar:

- Actual values
- Set values
- Inputs (sensors)
- Outputs (pumps, mixer and motors)

## 15.2 Solar circuit

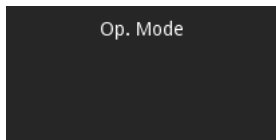


Solar circuit 1 and 2 are in menu Solar.



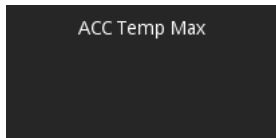
Solar circuit has following menu items:

- Operation Mode
- ACC Temp Max
- ACC Hysteresis
- Collector Hyst On
- Collector Hyst Off

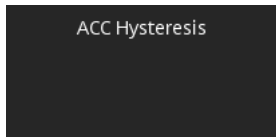


**Off:** No charge

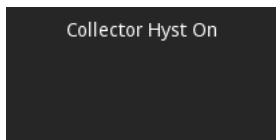
**On:** Charge as long as **Collector temperature + hysteresis** is lower than the temperature of the **Adj ACC sensor below** or the **ACC temp max**



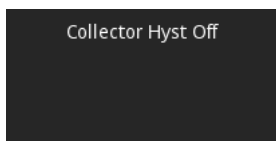
If the temperature in the ACC is higher than the ACC temp Max, the solar pump switches off. The limit sensor measures the temperature in the ACC.



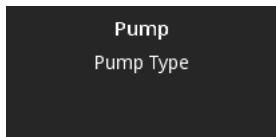
The solar circuit pump is switched off due to the ACC temp Max is reached. The temperature must fall under ACC temp Max minus hysteresis, then the solar circuit pump switches on again. The hysteresis prevents a solar pump cycling (On Off On Off).



If the temperature difference between the collector sensor and TPU, ACC lower sensor is higher than the Coll Hyst A, the solar pump switches On.



If the temperature difference between the collector sensor and TPU, ACC lower sensor is lower than the Coll Hyst A, the solar pump switches Off.



The menu **Pumptype** contains the following modes:

**Asynchronous:** Asynchronous pump – direct output 230VAC on/off

**Async.Regulated:** Asynchronous pump – pulsed output 230VAC

**Heating Efficient:** PWM1 - PWM signal inverted

**Solar Efficient:** PWM2 - PWM direct signal

**Note:**

When using a A-class pump as **Accumulator pump** the pump cannot be regulated from Solar circuit 2.

NOTICE

Material damage by false selection of pump!

## 15.3 Yield - Solar Energy

This function measures the yield of the solar thermal system and displays current energy and logs previous days.

For the function solar energy it is necessary to install:

- Pulse volume meter (must be connected to **24 VOLT** and **Z\_IN**)
- Flow temperature sensor
- Return temperature sensor



**Yield - Solar Energy** is in the menu Solar.

Solar 1		Collector:	164.3 °F
↳ Yield Measure			
Current			0.0 kW
Yield - Day			0.0 kWh
Yield - Day Before			0.0 kWh
Yield Since	1/1/12		0.0 kWh
Flow Rate			0.00 l/min
Flow Temperature			155.3 °F
Return Temperature			132.1 °F

Yield measuring of solar energy has following menu items:

- Actual  
Display of the current solar energy, refreshes every 60 sec.
- Yield - Day  
Display of todays solar energy since 00:00.
- Yield - Day before  
Display of yesterdays solar energy.
- Yield since  
Display of the solar energy since the last set date.
- Flow rate  
Display of the current flow rate, refreshes every 60 sec.
- Flow temperature  
Display of the current flow temperature
- Return temperature  
Display of the current return temperature

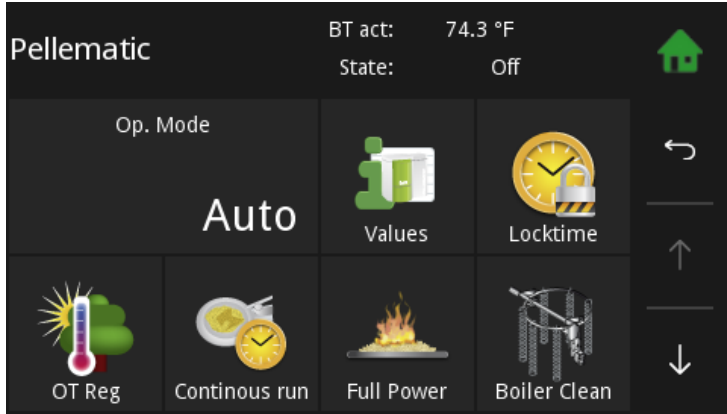


# 16 Pellematic

Pellematic includes all the relevant parameters and settings for the control of the pellet boiler. There are up to 4 Pellematic boilers possible.



**Pellematic** is in the Main menu.



## 16.1 Measuring values



**Measuring values** is in the menu Pellematic.

Values		7:27 AM	
Pellematic		1 / 5	
Outside Temperature	90.3 °F		
Boiler Temperature	74.3 °F	46.4 °F	
Burner Contact	Off		
Existing Boiler	141.8 °F		
Switching Valve	On		
SHHT-1#F3AD7E#	32.0 °F		
ACC1 TPO	124.9 °F	46.4 °F	

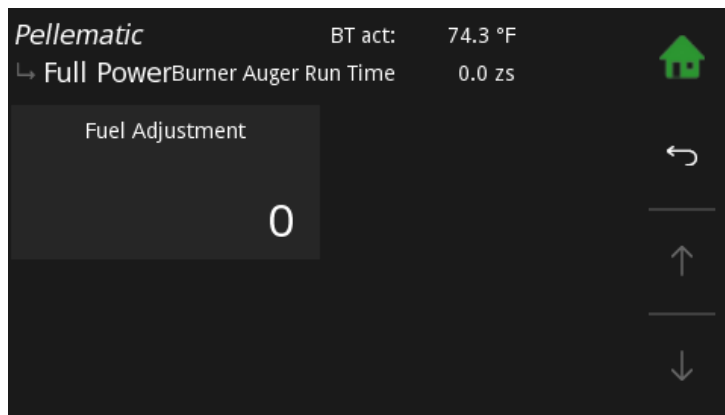
It displays all measuring values of Pellematic:

- Actual values
- Set values
- Inputs (sensors)
- Outputs (pumps, mixer and motors)

## 16.2 Full Power



**Full Power** is in the menu Pellematic

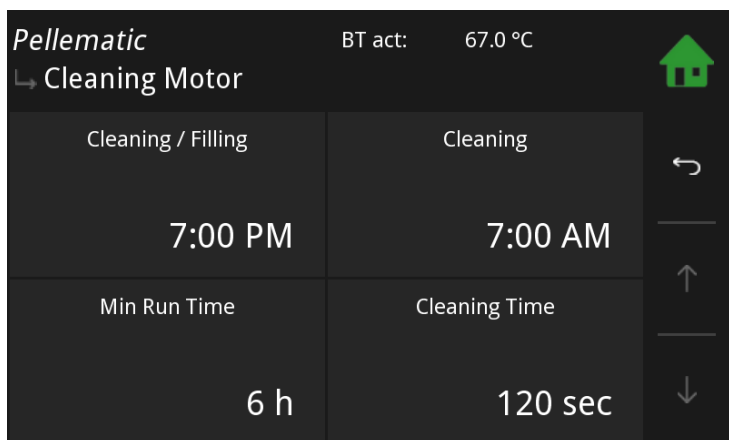


In the menu item Full Power can you adjust the fuel feed.

### Fuel Adjustment:

The burner auger run time is calculated automatically by the PLC depending on the rated power and the boiler setpoint temperature. The burner motor is controlled accordingly. You can reduce or increase the value calculated by the PLC 10 steps up or down.

## 16.3 Boiler cleaning



### Cleaning / Filling

The value to be set is the time (full hour) at which the boiler cleaning sequence is performed. On vacuum systems the hopper is also filled at the same time, regardless of whether it is empty or not.

### Cleaning

You can set in **Cleaning/Filling** a second cleaning sequence. The value to be set is the time (full hour) at which the additional boiler cleaning sequence is performed. Example: 20h = additional boiler cleaning sequence performed at 20:00. On vacuum systems the hopper is also filled at the same time, regardless of whether it is empty or not.

Default value -1h: It is not performed a second cleaning sequence.

### Min Run Time

Min Run Time of the boiler until next cleaning sequence. Value adjustable.

### Cleaning Time

Duration of the boiler cleaning sequence in seconds. Value adjustable.

## 16.4 Level detection system



**Weight system** (Menu is only displayed when the function Network is activated in the menu General.



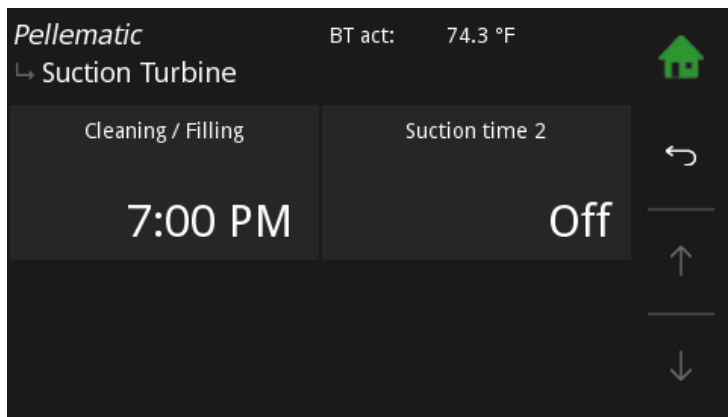
Threshold

The threshold value, **Minimum weight** for a warning message, is adjustable. The warning message appears on the operating device and will be terminated when filling level rises above the adjusted Minimum weight.

**Note:**

Only displayed if mode is set on **Textile tank**

## 16.5 Suction turbine



Cleaning / Filling

Set a Time (full hours), at which the hopper gets refilled, regardless how full it is at this time.

At the same time the purification of the boiler will take place.

Suction time 2

**On** When this menu point is activated, a field appears for specifying the 2nd daily suction time.

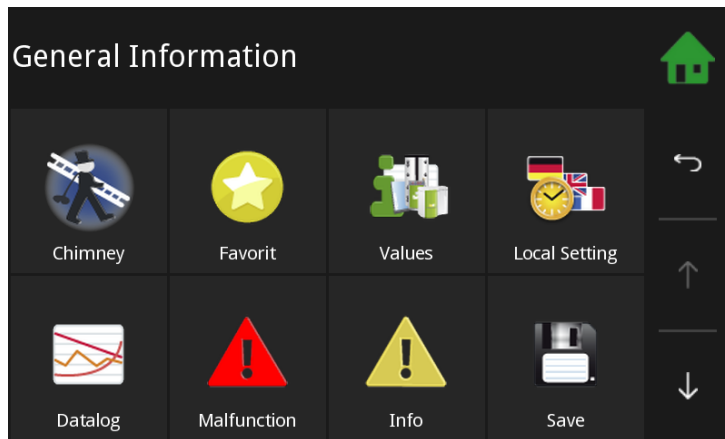
**Off** No 2nd suction time

# 17 General

General includes the complete heating control related settings and individual operating options for the customer.



**General** is in the Main menu.



The menu **General** includes:

- Chimney
- Favorit
- Values
- Local setting
- Datalog
- Malfunction
- Info
- Save
- Load
- ModBUS
- E-Mail
- IP Config
- Settings

## 17.1 Chimney

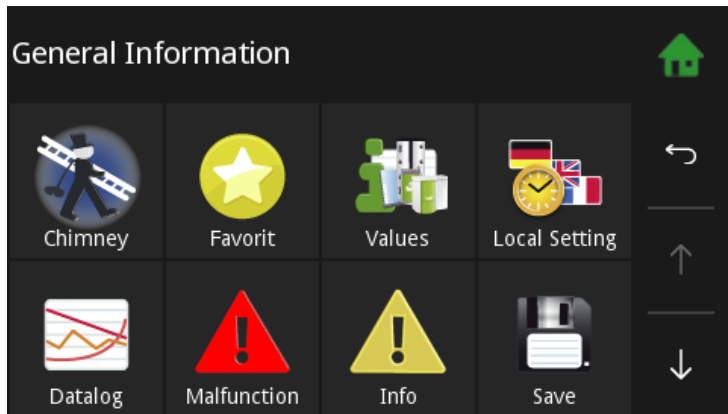
The function chimney is only for chimney draughts and authorized service technicians. It is used for the measurement of exhaust gas.

### Note:

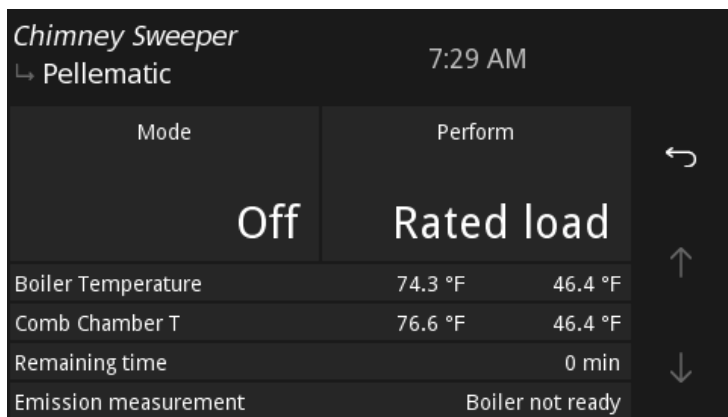
The Chimney Sweep function is inactive without the Pelletronic Heating Controller.



The menu item **Chimney** is situated in the menu General.



Please choose the function **Chimney**.

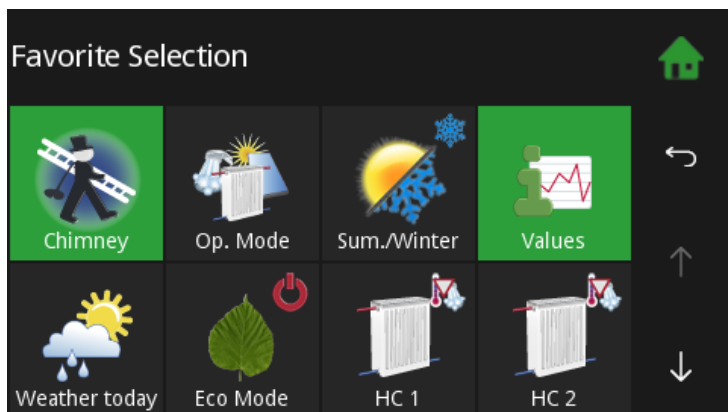


- The Furnace temperature is set to 140 °F for a total runtime of 30 minutes.
- You also can see actual Furnace temperature and the rest of the time limit.
- After the expiry of the time limit the function chimney ends. time of expiry the operation Chimney sweeper ends.
- The button Cancel ends the function Chimney.

## 17.2 Favorite



**Favorite** is in the menu General.



With this function you can display most commonly used menus in the start menu. This enables you a direct access. Select the menu item that should be displayed as a favorite 1 in the Start menu.

The selected item is green and the icon is displayed in the Start menu and is active.





## 17.3 Local Settings

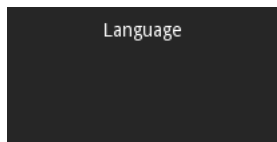


**Local Settings** is in the menu General.

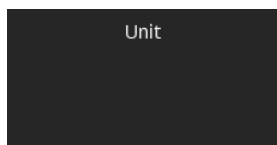


Local Settings has following menu items:

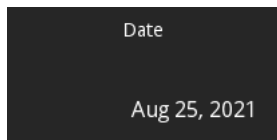
- Language
- Unit
- Date
- Time



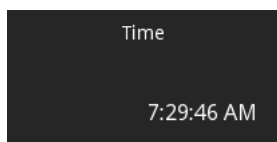
Choose between the languages German, English UK, English U.S. French, Spanish, Italian, Dutch, Danish and Russian.



You can choose between isometric and imperialist number system.



Set the current date.

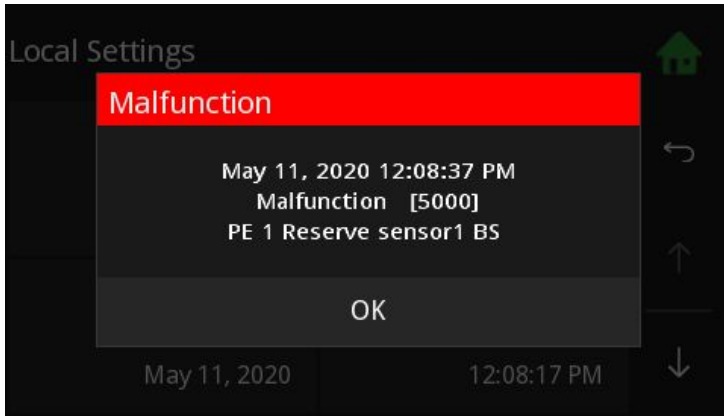


Set the current time.

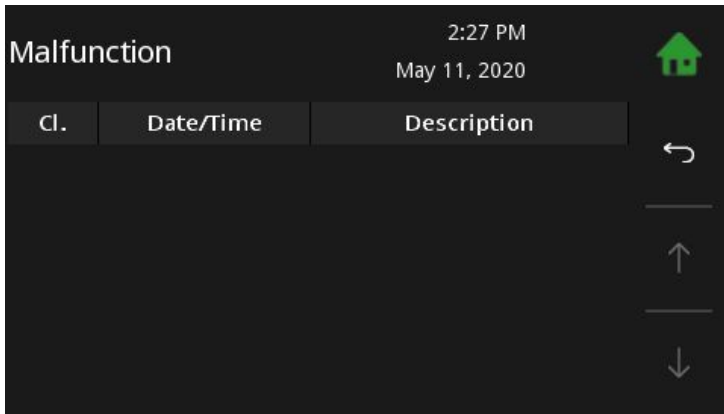
## 17.4 Malfunction



**Malfunction** is in the menu General.



Fault messages can be overlaid on all menu items and appear immediately if a fault occurs. Every fault message appears with the date, time and name on the display. It remains until it is acknowledged.



The menu remains the fault incident reports, as long as they are corrected up.

### 17.4.1 Malfunction report

This is a list of all malfunction reports on the display.

Code	Display	Input / Output		Affected element	Solution table
1001	HC1 Flow BC	X4 or X5		Heating controller	13.1a
1002	DHW1 OnSensor BC	X6			
1003	Outside Sensor BC	X2			
1004	Boiler Sensor BC	X3			
1008	TPO1 BC	X7			
1009	TPM1 BC	X8			
1010	Collektor1 BC	X15		Heating controller	13.2a
1011	TPU1 BC	X9 or X10		Heating controller	13.1a
1012	Flow Energy1 BS	X16			
1013	Return Energy1 BS	X17			
1014	ExistBoiler1 BS	X13			
1017	Cascade OnSensor BC	X3 or X7			
1018	Cascade OffSensor BC	X3 or X8			
1019	Circulation Return1 BC	X14			

Code	Display	Input / Output		Affected element	Solution table
1020	DHW1 Off Sensor BC	X6 or X7, X8, X9			
2001	HC1 Flow SC	X4 or X5		Heating controller	13.1b
2002	DHW1 OnSensor SC	X6			
2003	Outside Sensor SC	X2			
2004	Boiler Sensor SC	X3			
2008	TPO1 SC	X7			
2009	TPM1 SC	X8			
2010	Collektor1 SC	X15			
2011	TPU1 SC	X9 or X10		Heating controller	13.1b
2012	Flow Energy1 SC	X16			
2013	Return Energy 1 SC	X17			
2014	ExistBoiler1 SC	X13			
2017	Cascade OnSensor SC	X3 or X7			
2018	Sonde arrêt cascade CC	X3 or X8			
2019	Circulation Return1 SC	X14			
2020	DHW1 Off Sensor SC	X6 or X7, X8, X9			
3001	HC1 Flow	X4 or X5		Heating controller	13.1c
3002	DHW1 OnSensor	X6			
3003	Outside Sensor	X2			
3004	Boiler Sensor	X3			
3008	TPO1	X7			
3009	TPM1	X8			
3010	Collektor1	X11			
3011	TPU1	X9 or X10		Heating controller	13.1c
3012	Flow Energy1	X16			
3013	Return Energy1	X17			
3014	ExistBoiler1	X13			
3017	Cascade OnSensor	X3 or X7			
3018	Cascade OffSensor	X3 or X8			
3019	Circulation Return1	X14			
3020	DHW1 Off Sensor	X6 or X7, X8, X9			
4005	BUS HCR 1	X1A or X1B		BUS-Network RS485	13.3
4006	BUS PE 1	X1A or X1B			
4007	BUS Remote 1	X1A or X1B			
4015	BUS Remote Touch 1	X1A or X1B			
4016	BUS Master	X1A or X1B			
4021	BUS Radio Remote 1	X1A or X1B			
5000	PE1 Reserve sensor1 BS	R1		Boiler Controller	13.1a
5001	PE1 Reserve sensor1 SC	R1		Boiler Controller	13.1b
5002	PE1 Reserve sensor2 BS	R2		Boiler Controller	13.1a

Code	Display	Input / Output		Affected element	Solution table
5003	PE1 Reserve sensor2 SC	R2		Boiler Controller	13.1b
5004	PE1 Outside sensor BS	AF		Boiler Controller	13.1a
5005	PE1 Outside sensor SC	AF		Boiler Controller	13.1b
5006	PE1 Boiler sensor BS	KF		Boiler Controller	13.1a
5007	PE1 Boiler sensor SC	KF		Boiler Controller	13.1b
5008	PE1 Fluegas sensor BS	RGF		Boiler Controller	13.4
5009	PE1 Fluegas sensor SC	RGF			
5010	PE1 Combustion sensor BS	FRT			
5011	PE1 Combustion sensorSC	FRT			
5012	PE1 Underpressure box BS	UP		Boiler Controller	13.5
5013	PE1 Underpressure box SC	UP			
5014	PE1 Analog input1 BS	AE1		Boiler Controller	13.6
5015	PE1 Analog input1 SC	AE1			
5016	PE1 Analog input2 BS	AE2			
5017	PE1 Analog input2 SC	AE2			
5018	PE1 Motor turbine	VAK		Boiler Controller	13.7
5019	PE1 Ignition	ZUEND		Boiler Controller	13.8
5020	PE1 Motor ashbox	AV		Boiler Controller	13.9
5021	PE1 Motor res 1	RES1		Boiler Controller	13.10
5022	PE1 Magnetic valve	MA		Boiler Controller	13.8
5023	PE1 Motor cleaning	RM			
5024	PE1 Flue gas fan	SZ		Boiler Controller	13.9
5025	PE1 Cirkulationspump	UW			
5026	PE1 Motor ext auger1	RA		Boiler Controller	13.11
5027	PE1 Motor ext auger2	ZW		Boiler Controller	13.9
5028	PE1 Motor between	RES1		Boiler Controller	13.12
5029	PE1 Motor boiler auger	ES		Boiler Controller	13.9
5030	PE1 Combustion Fan	LUFT			
5032	PE1 Emergency stop	NOT		Boiler Controller	13.13
5033	PE1 Max temp sensor	STB			
5034	PE1 Ignition fault	generic		Boiler Controller	13.14
5036	PE1 Low flame temp				
5038	PE1 Firedamper open	BSK 1 2		Boiler Controller	13.15
5039	PE1 Firedamper closed	BSK 3 4			
5040	PE1 Firedamper end switch	BSK 1 2 3 4			

Code	Display	Input / Output		Affected element	Solution table
5041	PE1 Low underpressure	UP, SZ, LUFT		Boiler Controller	13.5
5042	PE1 Low underpressure	UP, SZ, LUFT			
5043	PE1 Vacuum system	KAPZW, RA		Boiler Controller	13.16
5044	PE1 Ashbox full	ESAV, AV		Boiler Controller	13.17
5045	PE1 Ball lock	DE1		Boiler Controller	13.18
5047	PE1 Burner Motor	ES		Boiler Controller	13.19
5048	PE1 Burner gas open-circuit	RGF		Boiler Controller	13.4
5049	PE1 Burner gas short-circuit				
5052	PE1 Container cover open	AK		Boiler Controller	13.20
5053	PE1 ash warning	ESAV, AV		Boiler Controller	13.17
5054	PE1 pellets warning	AE1		Boiler Controller	13.21
5055	Error Output VAK	VAK		Boiler Controller	13.22
5056	Error Output ZUEND	ZUEND		Boiler Controller	13.23
5057	Error Output AV	AV		Boiler Controller	13.24
5058	Error Output RES2	RES2		Boiler Controller	13.25
5059	Error Output MA	MA		Boiler Controller	13.26
5060	Error Output RA	RA		Boiler Controller	13.27
5061	Error Output SM	SM		Boiler Controller	13.28
5062	Error Output SZ	SZ		Boiler Controller	13.29
5063	Error Output UW	UW		Boiler Controller	13.30
5064	Error Output LUFT	LUFT		Boiler Controller	13.31
5065	Error Output RA1	RA1		Boiler Controller	13.32
5066	Error Output RES1	RES1		Boiler Controller	13.33
5067	Error Output ZW	ZW		Boiler Controller	13.34
5068	Error Output ES	ES		Boiler Controller	13.35

### 13.1a Sensors KTY2K - Heating controller + Boiler Controller (Fault 1001 to 1020 and 5000 to 5007) - Sensor break

Type of fault	Sensor break		
Code:	1001	HC1 Flow BC	X4
	1002	DHW1 OnSensor BC	X6
	1003	Outside Sensor BC	X2
	1004	Boiler Sensor BC	X3
	1008	TPO1 BC	X7
	1009	TPM1 BC	X8
	1011	TPU1 BC	X9
	1012	Flow Energy1 BS	X16
	1013	Return Energy1 BS	X17
	1014	ExistBoiler1 BS	X13
	1017	Cascade OnSensor BC	X3
	1018	Cascade OffSensor BC	X3
	1019	Circulation Return1 BC	X14
	1020	DHW1 Off Sensor BC	X6
	5000	PE1 Reserve sensor1 BS	R1
	5002	PE1 Reserve sensor2 BS	R2
	5004	PE1 Outside sensor BS	AF
5006	PE1 Boiler sensor BS	KF	
Description:	Measuring circuit of KTY sensor is open		
Cause and Remedy:	sensor not connected	▶	connect sensor, check plug
	sensor defect	▶	measure sensor (approx. 2kΩ at 77 °F) replace if required
	sensor cable defect	▶	replace sensor
	sensor temperature too high	▶	sensor temperature above measuring range (>230 °F)

### 13.1b Sensors KTY2K - Heating controller + Boiler Controller (Fault 2001 to 2020 and 5000 bis 5007) - short circuit

Type of fault	Short circuit		
Code :	2001	HC1 Flow SC	X4
	2002	DHW1 OnSensor SC	X6
	2003	Outside Sensor SC	X2
	2004	Boiler Sensor SC	X3
	2008	TPO1 SC	X7
	2009	TPM1 SC	X8
	2011	TPU1 SC	X9
	2012	Flow Energy1 SC	X16
	2013	Return Energy 1 SC	X17
	2014	ExistBoiler1 SC	X13
	2017	Cascade OnSensor SC	X3
	2018	Sonde arrêt cascade CC	X3
	2019	Circulation Return1 SC	X14
	2020	WW1 Aus Fühler KS	X6
	5001	PE1 Reserve sensor1 SC	R1
	5003	PE1 Reserve sensor2 SC	R2
	5005	PE1 Outside sensor SC	AF
5007	PE1 Boiler sensor SC	KF	
Description:	Measuring circuit of KTY sensor is shorted out		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 2k $\Omega$ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (< 14 °F)

**13.1c Sensors KTY2K - Heating controller + Boiler Controller (Fault 3001 to 3020) - other faults**

Type of fault	Other faults		
Code:	3001	HC1 Flow	X4
	3002	DHW1 OnSensor	X6
	3003	Outside Sensor	X2
	3004	Boiler Sensor	X3
	3008	TPO1	X7
	3009	TPM1	X8
	3011	TPU1	X9
	3012	Flow Energy1	X16
	3013	Return Energy1	X17
	3014	ExistBoiler1	X13
	3017	Cascade OnSensor	X3
	3018	Cascade OffSensor	X3
	3019	Circulation Return1	X14
	3020	DHW1 Off Sensor	X6
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 2kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor input defect	▶	Replace Boiler controller

**13.2 Kollektor sensor (Fault 1010, 2010, 3010)**

Display:	<b>[1010] Kollektor BC</b>		
Description:	Collector sensor fracture, measuring circuit of collector sensor (X15) is open		
Cause and Remedy:	Sensor not connected	▶	Check and correct wiring
	Sensor defect	▶	Measure sensor (approx. 1,1kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
Display:	<b>[2010] Kollektor SC</b>		
Description:	Measuring circuit of collector sensor (X15) is shorted out		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 1,1kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
Display:	<b>[3010] Kollektor</b>		
Description:	Other fault at input X15		
Cause and Remedy:	Sensor defect	▶	Replace sensor
	Sensor cable defect	▶	Replace sensor
	Input on heating controller defect	▶	Replace input on heating controller



**13.3 Bus (Fault 4005, 4006, 4007, 4015, 4016)**

Display:	<b>[4005] BUS HCR</b>		
Description:	Time-Out of BUS-connection from touch operating device to heating controller		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	No power supply available	▶	Connect heating controller to BUS
	Fuse in heating controller defect	▶	Replace fuse
Display:	<b>[4006] BUS PE</b>		
Description:	Time-Out of BUS-connection from touch operating device to boiler controller		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	No power supply available	▶	Connect heating controller to power supply (X21)
	Fuse in heating F2 defect	▶	Replace fuse F2
Display:	<b>[4007] BUS Remote</b>		
Description:	Time-Out of BUS-connection of remote control		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	Remote controll defect	▶	Replace remote controll
Display:	<b>[4015] BUS Remote Touch</b>		
Description:	Time-Out of BUS-Connection from remote controll to Touch operating device		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	Wrong softwareversion	▶	Check version of software
Display:	<b>[4016] BUS Master</b>		
Description:	Missing BUS connection to master-operating device		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection

**13.4 Combustion chamber sensor (Fault 5010, 5011, 5048, 5049)**

Display:	<b>[5010] PE Combustion sensor BS</b>		
Description:	Combustion chamber sensor fracture, measuring circuit from combustion chamber sensor is open - Input FRT		
Cause and Remedy:	Sensor not connected	▶	Connect sensor at input
	Sensor defect	▶	Measure sensor (approx. 5 mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too high	▶	Sensor temperature above measuring range (2012 °F)
Display:	<b>[5011] PE Combustion sensor SC</b>		
Description:	Combustion chamber sensor short circuit, measuring circuit from combustion chamber sensor short circuit - Input FRT		

Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 5 mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (14 °F)
	Sensor polarity reversed	▶	Change sensor connection + and -
Display:	<b>[5048] PE Burner gas open-circuit</b> (only SMART without combustion chamber sensor)		
Description:	Burner gas sensor fracture, measuring circuit of Burner gas sensor is open - Output RGF		
Cause and Remedy:	Sensor not connected	▶	Connect sensor at input
	Sensor cable defect	▶	Replace sensor
	Sensor defect	▶	Measure sensor (NiCrNi) replace if required
	Sensor temperature too high	▶	Sensor temperature above measuring range (2012 °F)
Display:	<b>[5049] PE Burner gas short-circuit</b> (only SMART without combustion chamber sensor)		
Description:	Burner gas sensor short circuit, measuring circuit of Burner gas sensor short circuit - Output RGF		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 5mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (14 °F)
	Sensor polarity reversed	▶	Change sensor connection + and -

### 13.5 Underpressure box (Fault 5012, 5013, 5041, 5042)

Display:	<b>[5012] PE Underpressure box BS</b>		
Description:	Negative draft input open, measuring circuit from negative draft measurement open - Input UP		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	No signal	▶	Replace underpressure box
	Combustion chamber leak	▶	Check total closure of boiler door

Display:	<b>[5013] PE Underpressure box SC</b>		
Description:	Negative draft input short-circuit, measuring circuit from negative draft measurement is shorted out - Input UP		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Signal too high	▶	Signal above 10V
Display:	<b>[5041] [5042] PE Low underpressure</b>		
Description:	Negative draft pressure in boiler is not achieved [5041] or is too high [5042] - Exit LUFT (SMART + Condens) / Output SZ (PE+PEK)		
Cause and Remedy:	Negative draft tube disconnected	▶	Connect up negative draft tube
	Negative draft does not change	▶	Check negative draft tube for leaks. Check flue gas tube for blockage.
	Negative draft pressure too low	▶	Close boiler door, check tube to negative draft sensor, check whether boiler flue gas outlet is clear, check whether condensation heat exchanger is clear. Make sure flue gas fan is running.
	Negative draft pressure too high	▶	Check induced draft blower

### 13.6 Analog input (Fault 5014, 5015, 5016, 5017)

Display:	<b>[5014] / [5016] PE Analog input 1/2 BS</b>		
Description:	Analog input 1/ 2 sensor fracture, measuring circuit of Analog input sensor open - Output AE1 / AE2		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Level detection system activated (valid for AE2)	▶	Check settings
Display:	<b>[5015] / [5017] PE Analog input 1 /2 SC</b>		
Description:	Analog input 1 / 2 sensor short circuit, measuring circuit of Analog input sensor is shorted out - Input AE1/AE2		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Signal too high	▶	Signal above 10V

**13.7 Motor turbine (Fault 5018)**

Display:	<b>[5018] PE Motor Turbine</b>		
Description:	Vaccuum turbine not running (Exit VAK)		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor
	Fuse F1, suction circuit board defective	▶	Replace fuse

**13.8 Output 230V (Fault 5019, 5022, 5023)**

Display:	<b>[5019] PE Ignition [5022] PE Magnetic valve [5023] PE Motor cleaning</b>		
Description:	No function of output ZUEND (Ignition)/MA (Magnetic valve)/ RM (Motor cleaning)		
Cause and Remedy:	Output unplugged	▶	Connect plug, check cable wiring
	Current value above the maximal Limit	▶	Check limits
	Current value under the minimal Limit	▶	Check limits

**13.9 Output 230V-2 (Fault 5020, 5024, 5025, 5027, 5029, 5030)**

Display:	<b>[5020] PE Motor ashbox (Output AV) [5024] PE Flue gas fan (Output SZ) [5025] PE Cirkulationspump (Output UW) [5027] PE Motor ext auger2 (Output RES2) [5029] PE Motor boiler auger (Output ES) [5030] PE Combustion Fan (Output LUFT)</b>		
Description:	No function of the respective motor/pump/fan		
Cause and Remedy:	Motor/pump/fan unplugged	▶	Connect plug, check cable wiring
	Motor/pump/fan defect	▶	Replace motor/pump/fan

**13.10 Zwischenbehälter leer - Motor res 1 (Fault 5021)**

Display:	<b>[5021] PE Hopper empty / Motor RES1 (for 36-56 kW, Pellematic Condens or PEB)</b>		
Description:	No function of PE motor res 1		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor
	No pellets available	▶	Refill storage-Room / supply tank

**13.11 Motor extraction auger 1 - RA (Fault 5026)**

Display:	<b>[5026] Motor ext auger1</b>		
Description:	Storage room auger 1 motor defect - Output RA		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	motor is jammed	▶	Remove pellets and dust from auger and make sure auger rotates freely
	Motor defect	▶	Replace motor
	Thermic contact triggered	▶	Let motor cool down
	Motor not running	▶	Check thermic contact

**13.12 Hopper motor (Fault 5028)**

Display:	<b>[5028] Hopper motor</b>		
Description:	Hopper suction fan fault. Output RES1.		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor

**13.13 Emergency OFF/ Safety temperature (Fault 5032, 5033)**

Display:	<b>[5032] Emergency OFF - NOT AUS</b>		
Description:	Emergency OFF has been actuated - Input NOT-AUS		
Cause and Remedy:	Emergency OFF unplugged	▶	Connect up Emergency OFF and check cable connections
	Emergency OFF button has been pressed	▶	Reset Emergency OFF switch
	Emergency OFF defect	▶	Replace Emergency OFF switch
Display:	<b>[5033] Safety temperature - STB</b>		
Description:	Safety temperature limiter has tripped - Input STB		
Cause and Remedy:	Safety temperature limiter unplugged	▶	Connect up safety temperature limiter and check cable connections
	Safety temperature limiter has tripped	▶	Let boiler cool down and reset safety temperature limiter
	Safety temperature limiter defect	▶	Replace safety temperature limiter
	A 230V Output is defect	▶	Check 230V Outputs

**13.14 Temperature Combustion chamber sensor/Flue gas sensor (Fault 5034, 5036)**

Display:	<b>[5034] PE Ignition fault / Pellets available?</b>		
Description:	Minimum temperature Combustion chamber sensor/Flue gas sensor not reached during the ignition phase		
Cause and Remedy:	No pellets available	▶	Fill up with pellets
	Ignition electrode defect	▶	Check ignition electrode (approx. 200Ω) replace if required
	Ignition nozzle blocked	▶	Clean burner plate and ignition tube

	Not enough draught	▶	Check ventilation flap, funktion radial fan, draught free
	Flue gas sensor or flamm-roomtemperature-sensor soiled	▶	Check Flue gas sensor or flammroom-temperature-sensor
Display:	<b>[5036] PE Flame supervision fault</b>		
Description:	Flame supervision fault, minimum flue gas temperature not reached during heating up at full power - Input FRT		
Cause and Remedy:	No pellets available	▶	Fill up with pellets

**13.15 Flame return gate BSK (5038, 5039, 5040)**

Display:	<b>[5038] PE Flame return gate open</b>		
Description:	Flame return gate open fault (BSK - 1 2)		
Cause and Remedy:	Flame return gate unplugged	▶	Connect up flame return gate and check cable connections
	Flame return gate does not reach OPEN limit switch	▶	Check ball valve to see if it is jammed
	No signal although open	▶	Check cables and flame return gate
	STB on the burner has triggered	▶	Surface temperature of the burner is too high
Display:	<b>[5039] PE Flame return gate closed</b>		
Description:	Flame return gate open fault		
Cause and Remedy:	Flame return gate unplugged	▶	Connect up flame return gate and check cable connections
	Flame return gate does not reach CLOSE limit switch	▶	Check whether ball valve is jammed, check ball valve throughway to see if foreign objects are preventing it from closing
	No signal although closed	▶	Check cables and flame return gate
	STB on the burner has triggered	▶	Surface temperature of the burner is too high. The boiler switches to fault mode.
Display:	<b>[5040] PE Flame return gate limit switch</b>		
Description:	Both flame return gate limit switches (BSK 1-2 and BSK 3-4) are closed at the same time		
Cause and Remedy:	Both limit switches activated	▶	Check flame return gate, check cables, check connectors

**13.16 Suction system (Fault 5043)**

Display:	<b>Suction system</b>		
Description:	Hopper cannot be filled up even after 3 suction cycles		
Cause and Remedy:	Storage room empty	▶	Fill up with pellets
	Extraction system is blocked	▶	Clear extraction system

	Extraction system not conveying pellets	▶	Pellet bridge - destroy bridge and make sure material flows properly
	Suction fan unplugged	▶	Connect up suction fan
	Storage room auger motor unplugged	▶	Connect up storage room motor

### 13.17 Ashbox full (Fault 5044) - Ash Warning (Fault 5053)

Display:	<b>[5044] PE Ashbox full</b>		
Description:	Moter doesn't reach the normal speed after 3 attempts.		
Display:	<b>[5053] PE Ash Warning</b>		
Description:	Ash-box nearly full		
Cause and Remedy:	Ash-box full	▶	Clear ash-box
	Ash-box not completely closed	▶	Close ash-box
	End-switch defect	▶	Replace end-switch

### 13.18 Ball lock (Smart and Condens only - Fault 5045)

Display:	<b>[5045] PE Ball lock - Smart and Condens only</b>		
Description:	No pellets detected from capacitive sensor (KAP RA)		
Cause and Remedy:	Pellet reserves depleted	▶	Refill storage-Room / supply tank
	Capacitive sensor RA defect	▶	Replace Capacitive sensor RA

### 13.19 Burner Motor / Ash box full (SMART and Condens only - Fault 5047)

Display:	<b>[5047] Burner Motor /Ash box full - SMART only</b>		
Description:	The alarm text is displayed after the motor has made 3 unsuccessful attempts to reach the normal speed of the external de-ashing system.		
Cause and Remedy:	Ash box is full	▶	Empty ash box
	Rotation of burner auger or ash auger is blocked	▶	Ensure rotation of auger

### 13.20 Container cover open (PEB only - Fault 5052)

Display:	<b>[5052] PE Container cover open</b>		
Description:	Container cover open (PEB only) - Input AK		
Cause and Remedy:	Cover open	▶	Close cover
	End-switch defect	▶	Replace end-switch

### 13.21 Pellets Warning (Fault 5054)

Display:	<b>[5054] PE 1 Pellets Warning</b>		
Description:	Measured pellets capacity (AE2) is below the threshold		
Cause and Remedy:	Pellets nearly empty or empty	▶	Fill up with pellets

---

	Sensor unpugged (AE2)	▶	Connect plug
	Parameter set incorrectly	▶	Check settings in menu Level detection system (protected access)



**13.22 Error Output VAK (Fault 5055)**

4005

Display:	<b>[5055] Error Output VAK</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.23 Error Output ZUEND (Fault 5056)**

Display:	<b>[5056] Error Output ZUEND</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	VCheck cable connection / Replace Boiler Controller

**13.24 Error Output AV (Fault 5057)**

Display:	<b>[5057] Error Output AV</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.25 Error Output RES2 (Fault 5058)**

Display:	<b>[5058] Error Output RES2</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.26 Error Output MA (Fault 5059)**

Display:	<b>[5059] Error Output MA</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.27 Error Output RA (Fault 5060)**

Display:	<b>[5060] Error Output RA</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.28 Error Output SM (Fault 5061)**

Display:	<b>[5061] Error Output SM</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.29 Error Output SZ (Fault 5062)**

Display:	<b>[5062] Error Output SZ</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.30 Error Output UW (Fault 5063)**

Display:	<b>[5063] Error Output UW</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.31 Error Output LUFT (Fault 5064)**

Display:	<b>[5064] Error Output LUFT</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.32 Error Output RA1 (Fault 5065)**

Display:	<b>[5065] Error Output RA1</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.33 Error Output RES1 (Fault 5066)**

Display:	<b>[5066] Error Output RES1</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.34 Error Output ZW (Fault 5067)**

Display:	<b>[5067] Error Output ZW</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.35 Error Output ES (Fault 5068)**

Display:	<b>[5068] Error Output ES</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**17.5 Information**

**Information** is in the menu General.

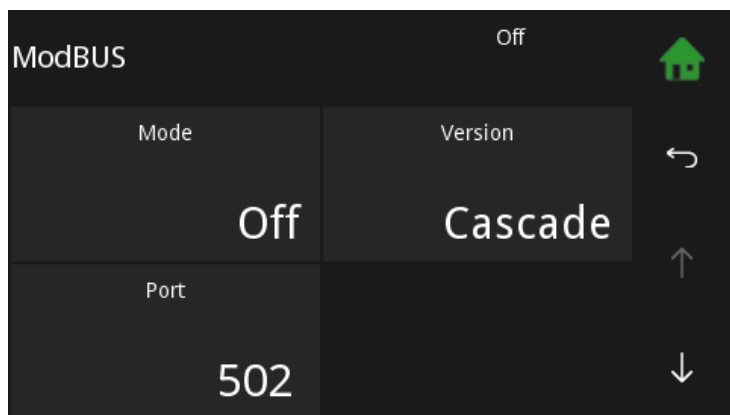
Kl.	Zeit	St.	Beschreibung
⊖	06.06.17 03:45	Ⓢ	External Error [4022]
⊖	06.06.17 03:44	Ⓢ	External Error [4022]
⊖	06.06.17 03:43	Ⓢ	External Error [4022]
⊖	31.05.17 21:41	Ⓢ	BUS HCR 1 [4005]

In the menu item information are all faults listed chronologically.

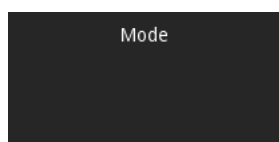
The fault texts have 3 status

- C.....COME - when the fault occurs
- Q.....QUIT - when the fault has been rectified
- G.....GONE - when the fault has been reset by pressing ENTER

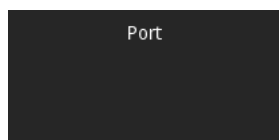
## 17.6 ModBUS



**Note:**  
The Modbus registers may be set not less than two hours in cyclic operation, otherwise the life span of the operating device can decrease.

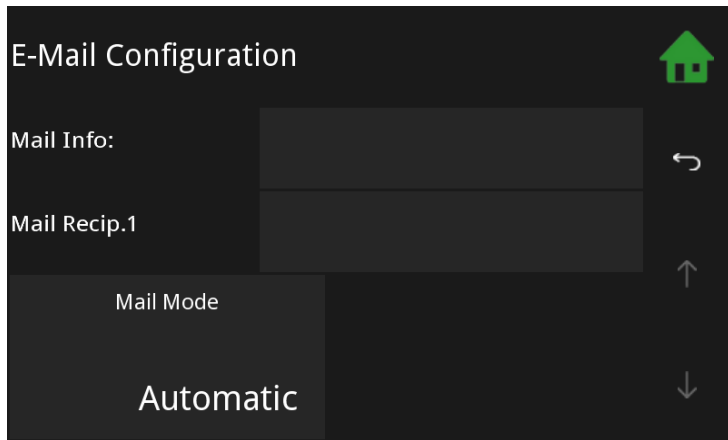


**Off**  
**TCP Server**



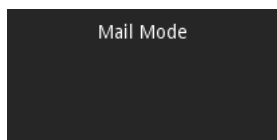
Defaultport for ModBUS is 502.

## 17.7 E-Mail

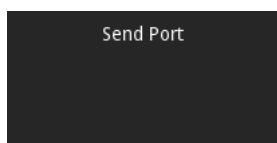


Delivery of disturbance-emails is done through an Maine Energy system server.

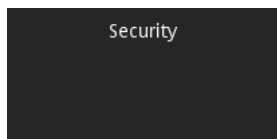
Only the recipient address needs to be configured.



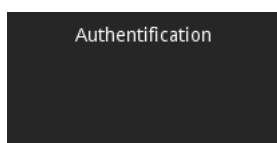
To ensure maximal flexibility, E-mail settings can set individually.



Port used for sending email (depends on provider).



Select encryption mode (specified by provider).




Authentication as specified by provider.

## 17.8 IP Config



**IP Config** is the menu General. (The menu item IP Config is only displayed if it has been activated by a qualified person)

*Network Configuration* 


↳ Not connected.




IP:	10	.	1	.	1	.	1	↩
NM:	255	.	255	.	255	.	0	↑
GW:	1	.	0	.	0	.	0	
D1:	1	.	2	.	3	.	4	↓

After calling up the menu, a connection check is made.

If this is successful, "Connected to LAN and Internet" is displayed.

*Network Configuration*

↳ Not connected. 

IP:	10	.	1	.	1	.	1	
NM:	255	.	255	.	255	.	0	
GW:	1	.	0	.	0	.	0	
D1:	1	.	2	.	3	.	4	

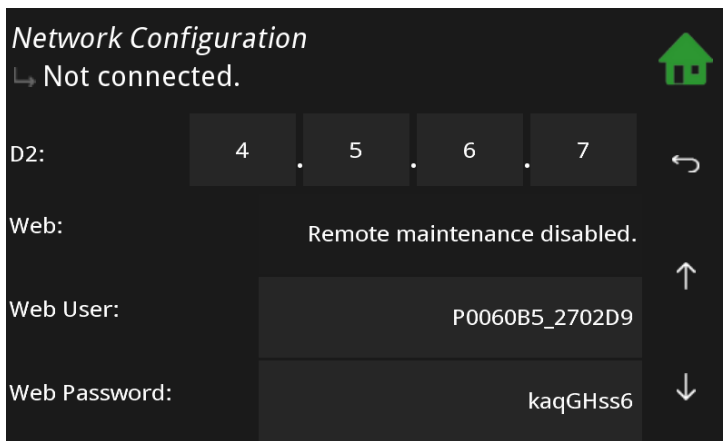
Insert the **IP (Address)**, **NM (Netmask)** and **GW (Gateway)**, D1 (in most cases similar to GW) and **D2 (optional)**.

**IP:** IP address in the local network

**NM:** Networkmask is required in the local network.

**GW:** The gateway enables the touch operating device the access to the internet.

**D1, D2:** Server, which provide routing information



The screenshot shows a 'Network Configuration' screen with a dark background. At the top left, it says 'Network Configuration' and '↳ Not connected.' with a green house icon. Below are four rows of configuration fields:

- D2:** A numeric keypad with buttons for 4, 5, 6, and 7, followed by a right arrow icon.
- Web:** A text field containing 'Remote maintenance disabled.' with an up arrow icon.
- Web User:** A text field containing 'P0060B5\_2702D9' with an up arrow icon.
- Web Password:** A text field containing 'kaqGHss6' with a down arrow icon.

Set **DHCP On** or **Off** depending on your network.

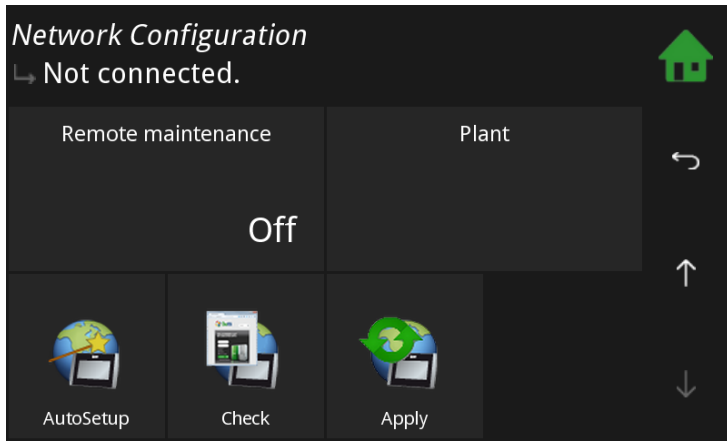
Enter the **Port** (Default **80**).

**Web:** IP address in local network

**Web User:** Networkmask is required in local network

**Web Password:** The gateway enables the touch operating device the access to the internet.





Activate optionally the **Ping** function.

## NOTICE

To prevent the modem from switching into standby mode, a ping command is executed every 10 minutes.

**You get the data from your network technician.**

### Configuration

This menu item is only active when a compatible USB wireless adapter is connected. (not every wireless stick works with the Touch operating device)  
By default, this item is hidden and located in LAN mode.  
If the wireless mode is enabled, a password box appears.

### DHCP

Dynamic address assignment on the local network (should be disabled if possible).

### WiFi

If a WLAN stick is recognized and supported, an Additional LAN & WLAN button appears.

### Password

Password of router.

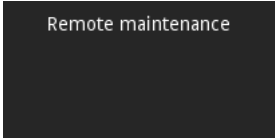
### Port

0

Address extension with which the touch remote control is accessible.  
In principle, you can make your own choice, certain ports are associated with special services, e.g. 25 Mail, 80 Web and so on.

### Ping

The ping prevents the internet connection from being closed by the router.  
Therefore a query to the Maine Energy Systems server is started at certain time intervals.  
So the router detects that the connection is still active.


 Remote maintenance
**Automatic**

This will attempt to automatically set up the router using the UPNP protocol port forwarding. If this service is disabled on the router or doesn't work properly, it is canceled accompanied by an appropriate error message. As this function is time-consuming (may take a few minutes), it is running in the background. Whatever the UPNP

If available, the Touch operating device registers on the Maine Energy Systems remote control server with its current external IP Address. In case of change of address by the external provider, this is detected and sent to the server Maine Energy Systems.

**Manual**

In this mode, the port forwarding must be set manually. (for lack of UPNP)

The port of the touch panel must correspond to the external shared port. The touch then registers with the external IP address and port on Ök-oFEN remote maintenance server. In case of change of address by the external provider, this is detected and sent to the Maine Energy Systems server.

**Static**

In this mode, no connection data is transferred to the Maine Energy Systems server and the online service of Maine Energy Systems can not be used. But the remote control of the Touch operating device remains active and can be used as before via port forwarding, DynDns, fixed external IP, LAN and so on.

**Remote maintenance access**

This function determines the network settings automatically. For this the DHCP mode is activated and the required settings are set automatically. Afterwards DHCP is deactivated. Because of this, the IP address of the control unit can change.

The settings are set as follows:

- DHCP Off
- Ping On
- Port 8080
- Remote maintenance: Automatic

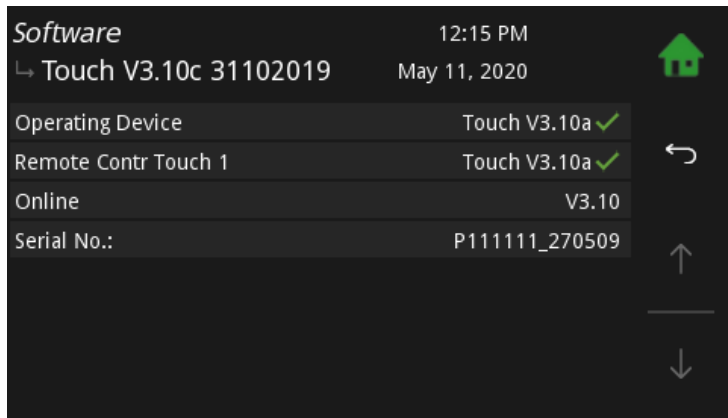


Back to the menu **General**.

# 18 Software



**Software** is in the Main menu.



**Software** shows you the name of the current software.

# 19 Emptying the ash pan

## CAUTION

Risk of burns  
Do not touch the boiler vessel. Use gloves.

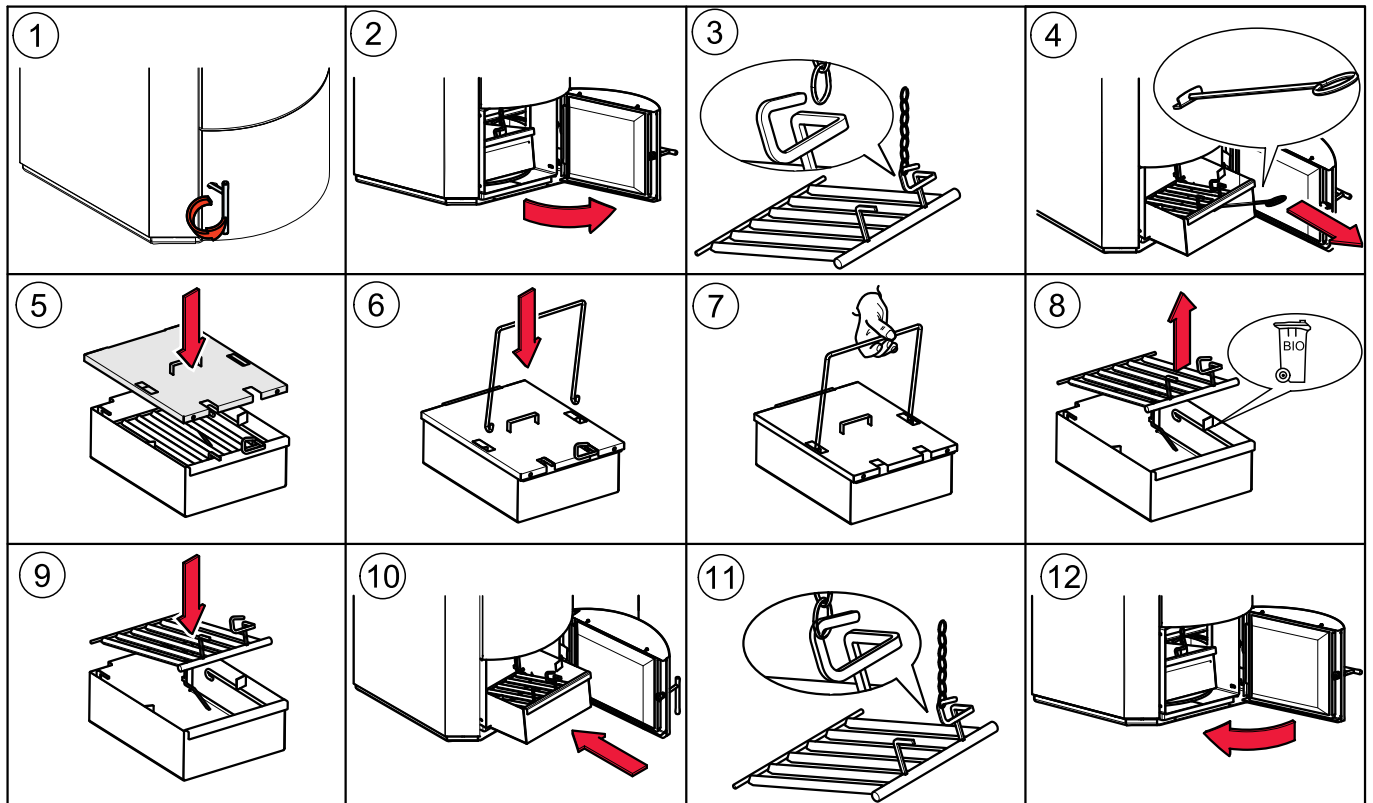
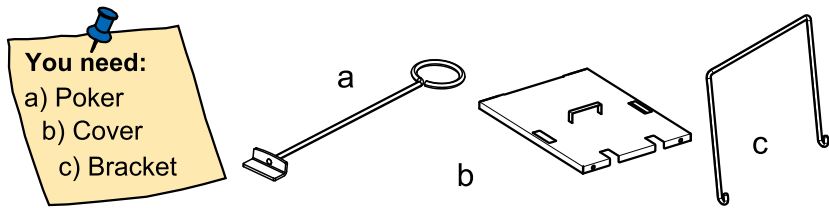
## DANGER

Risk of fire  
Bring out the ash pan immediatly.  
Do not dispose ash until it has completely cooled down.  
Empty ash only into a not flammable steel container.  
Do not use ash container to store waste or other material.  
Do not empty ash onto flammable floors or materials.

### Emptying the ash pan

**Note:**

Check the level of the ash pan and empty it at regularly intervals (at least every 2 weeks). No warning is displayed indicating that ash pan needs to be emptied when it is full (unlike external ash box)



\* No riddle grate for systems with burner plate cleaning system.

## 20 Emptying the ash box

**Only on boilers with external ash box.** We also offer an optional automatic external ash box. This compresses the ash and reduces the frequency at which it needs to be emptied. It enables the ash to be disposed off without creating dust. Installation is performed by the service technician when the pellet boiler is installed. An external ash box can also be retrofitted.

### NOTICE

#### Damage to property

Empty the ash box before a longer off-time of the boiler. Otherwise the auger and the opening mechanism can be blocked through firmly bonded ash.



### DANGER

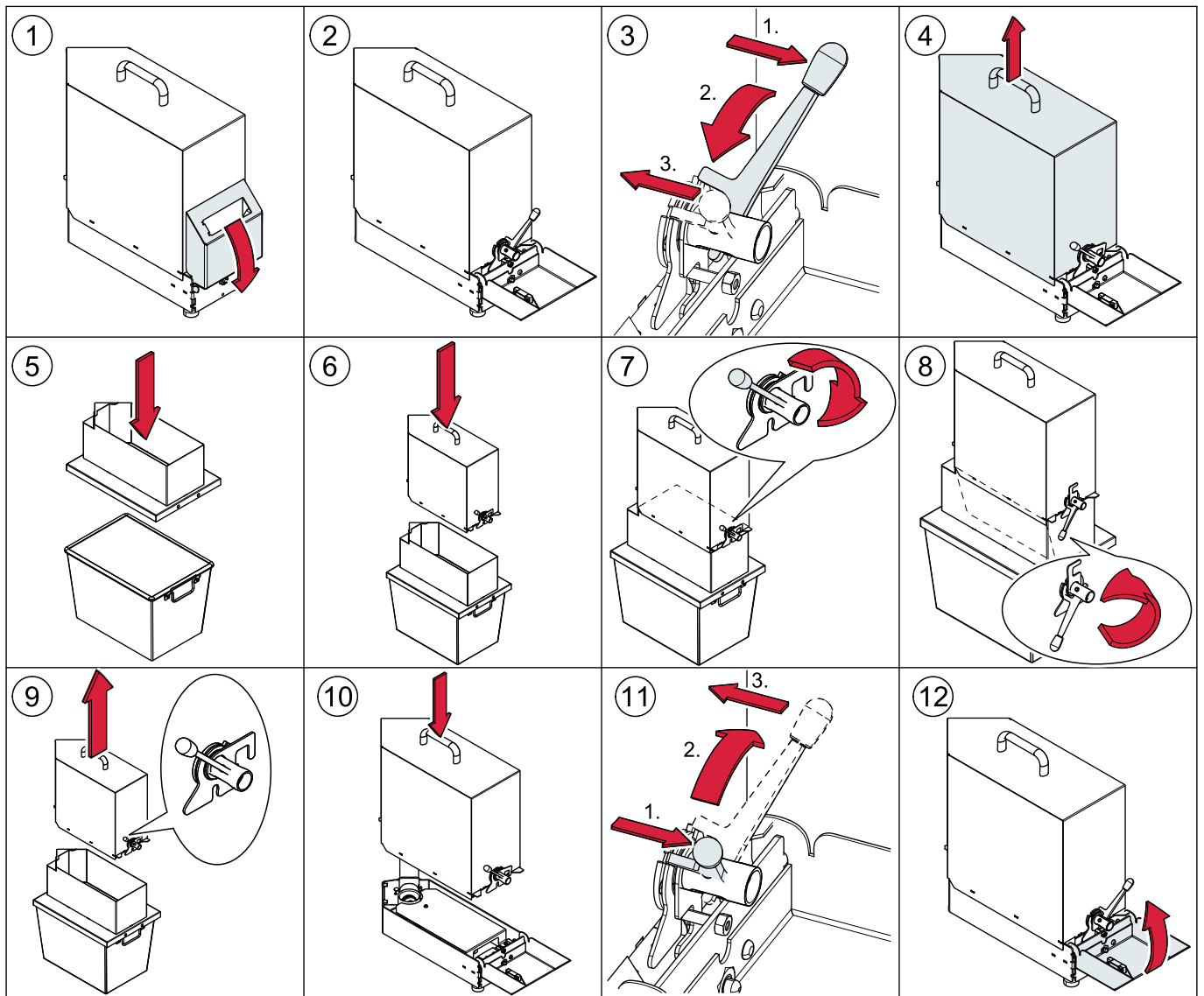
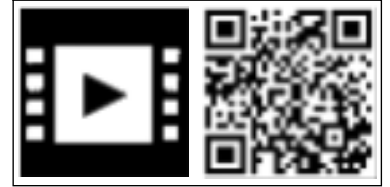
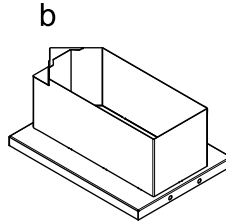
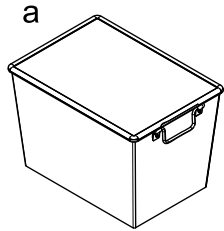
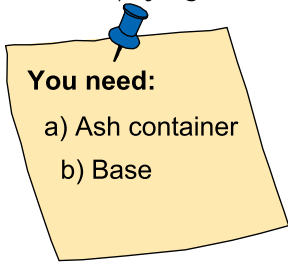
#### Risk of fire

Bring out the ash box immediately.  
Do not dispose ash until it has completely cooled down.  
Empty ash only into a not flammable steel container.  
Do not use the ash container to store waste or other material.  
Do not empty ash onto flammable floors or materials.

Emptying the ash box

**Note:**

When the ashbox is full then **Ash!!!** appears on the display with the alarm text **Ash box full**. After emptying and restarting the ash box the alarm text disappears automatically.



# 21 Maintenance and servicing

Regular checks of the pellet heating system are a prerequisite for reliable, efficient and environment-friendly operation.

## NOTICE

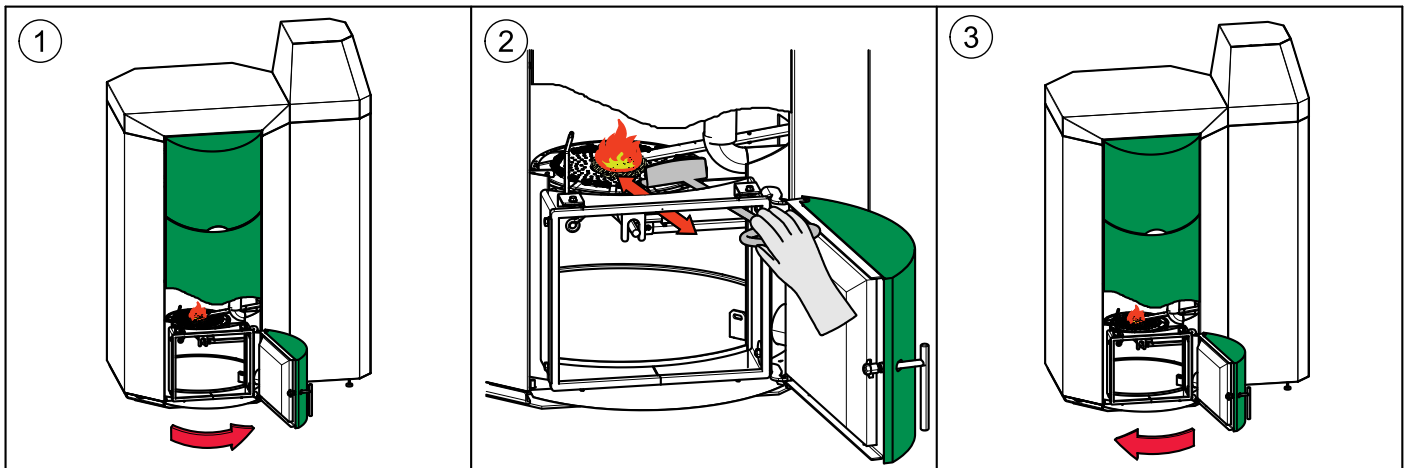
This wood heating appliance needs periodic inspection and repair for proper operation. It is against federal law to operate this wood heating appliance in a manner inconsistent with operating instructions in the manual.

## NOTICE

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

## 21.1 Maintenance

The maintenance, boiler cleaning and cleaning of flue gas connection it is necessary at least once a year. For PE(S) 36-56 it is necessary in any case at least every 2000 operating hours. Pellets which produces tendentially more slagging (ash melting point  $<2372$  °F) and pellets with higher bulk density ( $> 650$ kg) leads to additional cleaning of the burner plate at regular intervals.



## 21.2 Cleaning the boiler every year

### NOTICE

The pellet boiler is equipped with an automatic cleaning system that cleans the heat exchanger every day. In addition, you need to clean the boiler manually once a year before the start of the heating season.

### NOTICE

Cleaning of the pellet boiler has to be performed from a authorized service technician at least every third year.



### WARNING

#### Risk of burns

Do not clean the boiler until it has been allowed to cool down.

Switch off the heating system at least 6 hours before opening the boiler.

Switch off the main switch before starting any maintenance work on the system.



### CAUTION

Risk of cut injuries due to sharp edges

Use gloves.

#### Note:

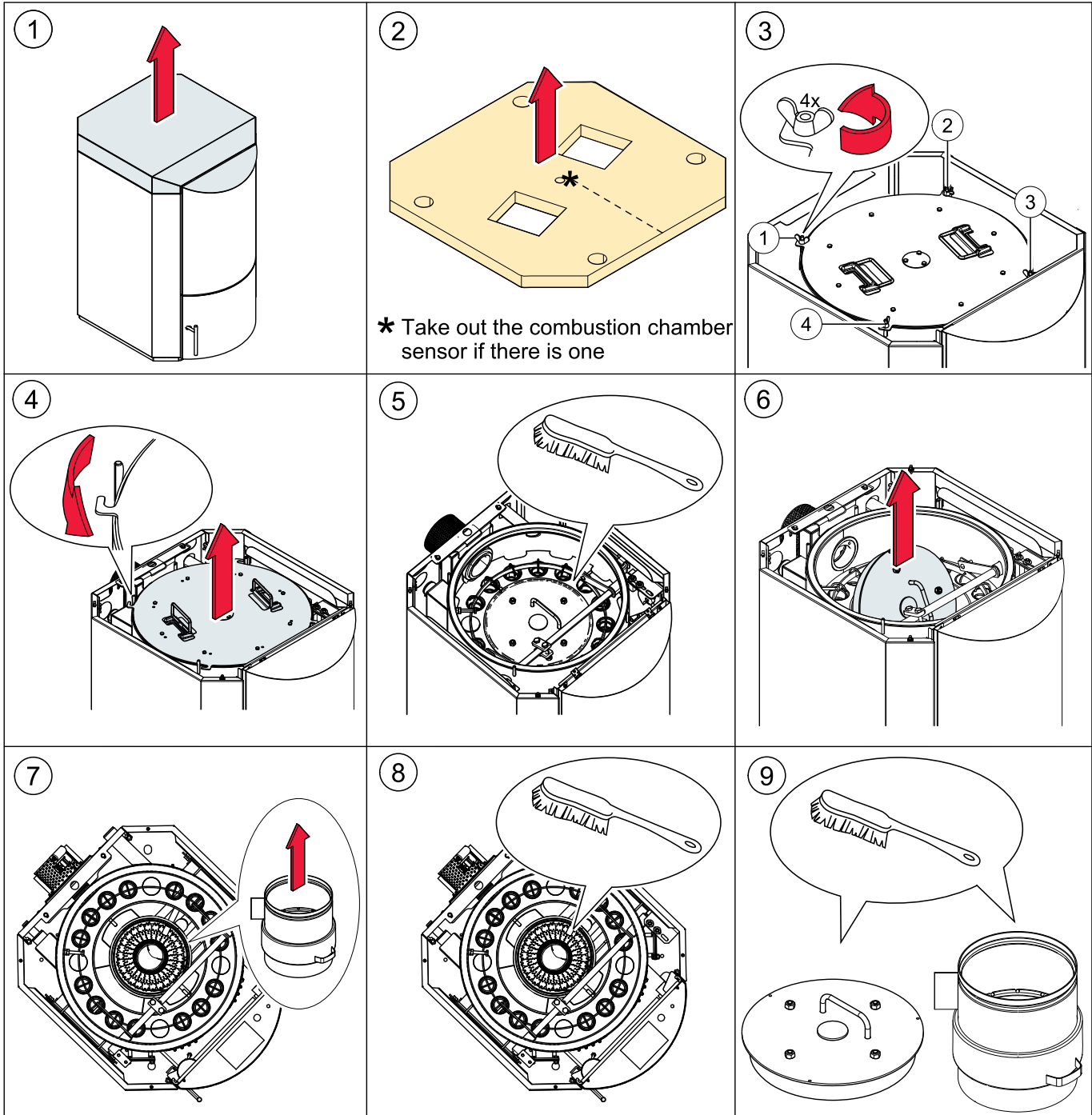
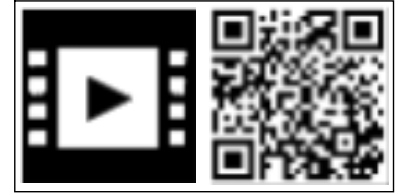
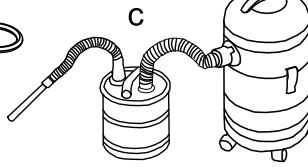
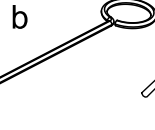
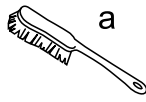
Check first of all, if all seals are in a good condition and the doors closes tightly.



### Procedure for cleaning the boiler

#### You need:

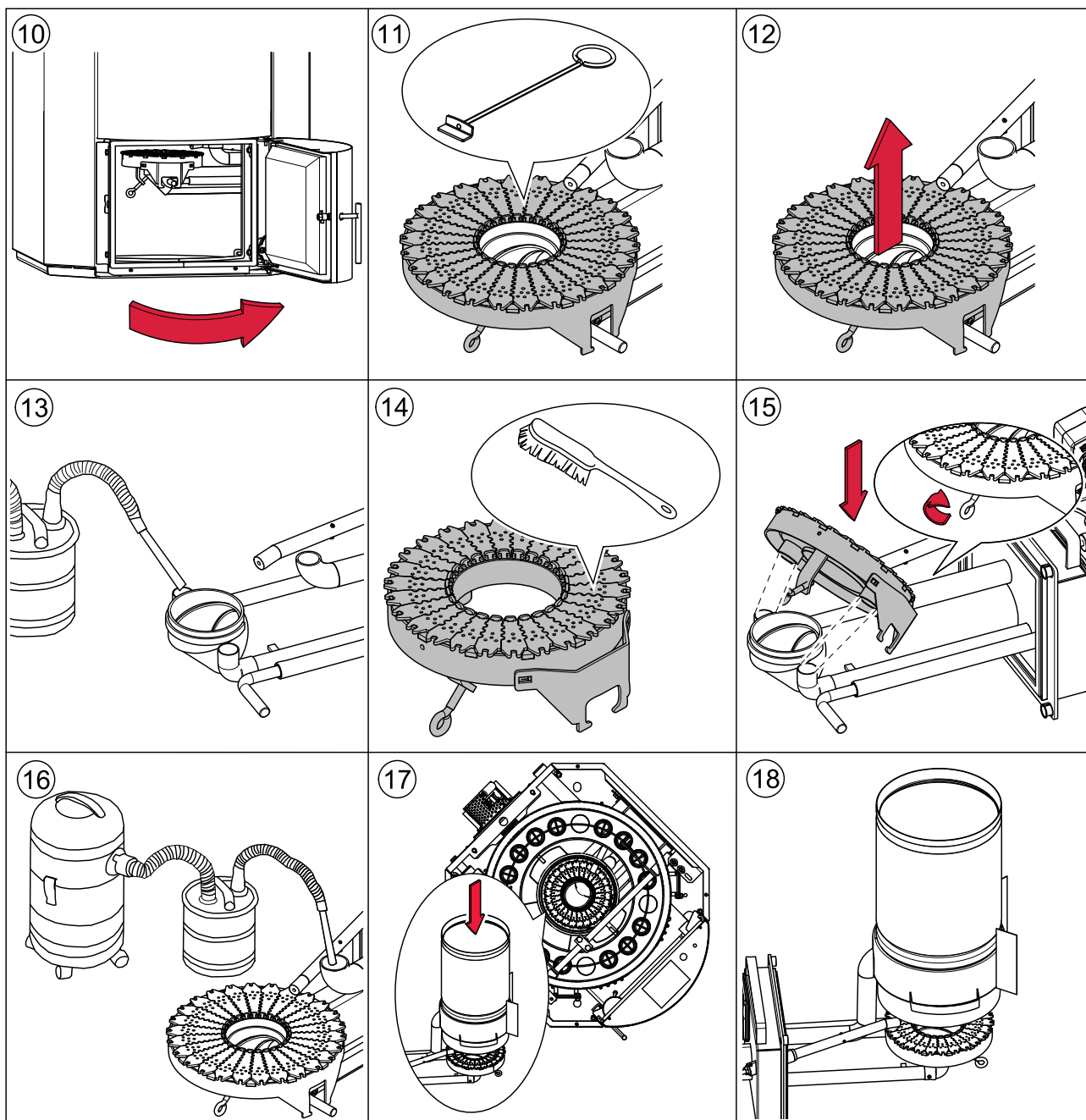
- a) Brush
- b) Poker
- c) Vacuum cleaner with ash filter



## NOTICE

Reduction in boiler performance and damage to pellet boiler due to blockages in the air inlet  
Clean the air intakes, the burner plate and the flame tube.

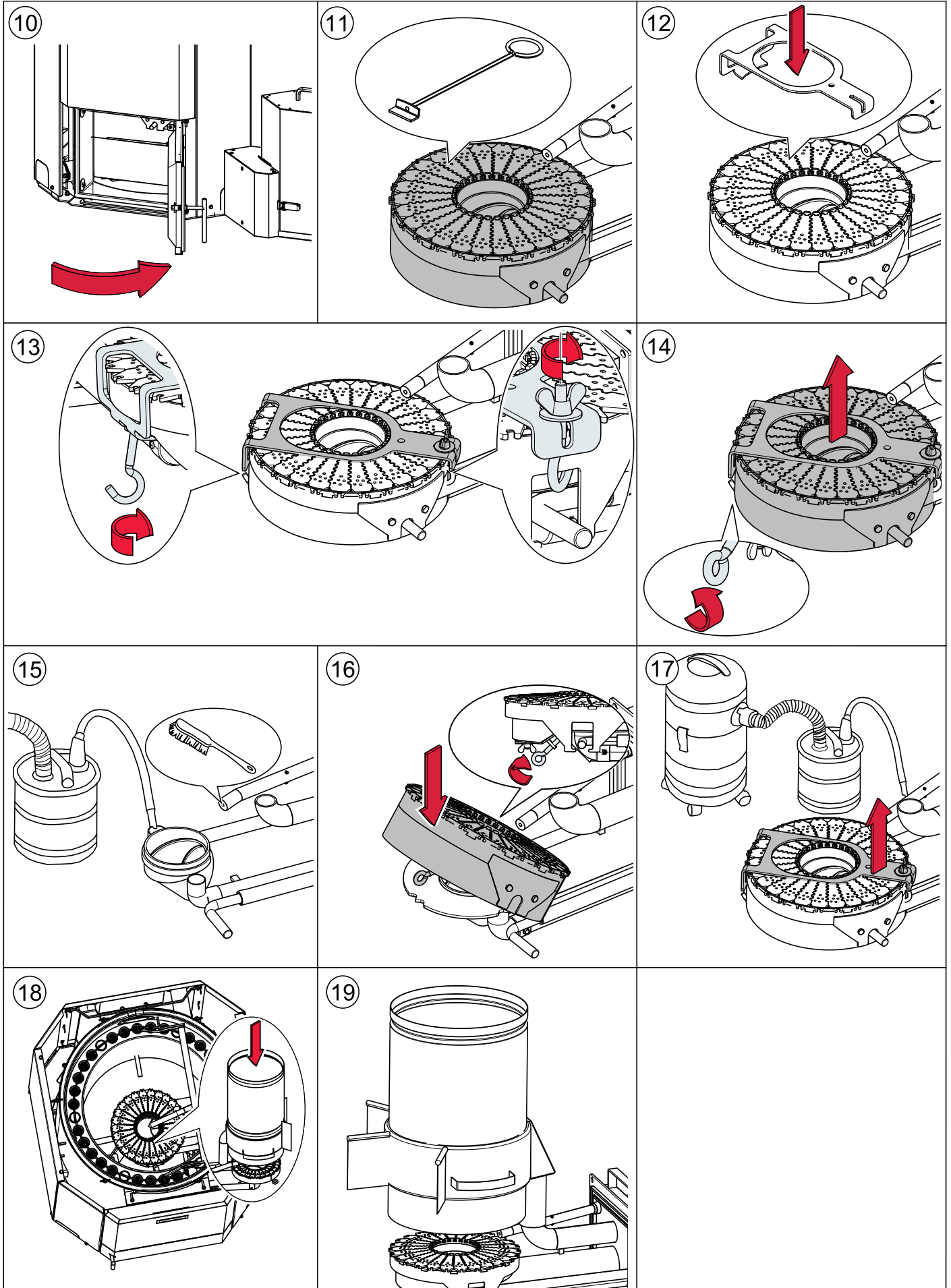
PE(S)(K)(B) 10- 32



**Note:**

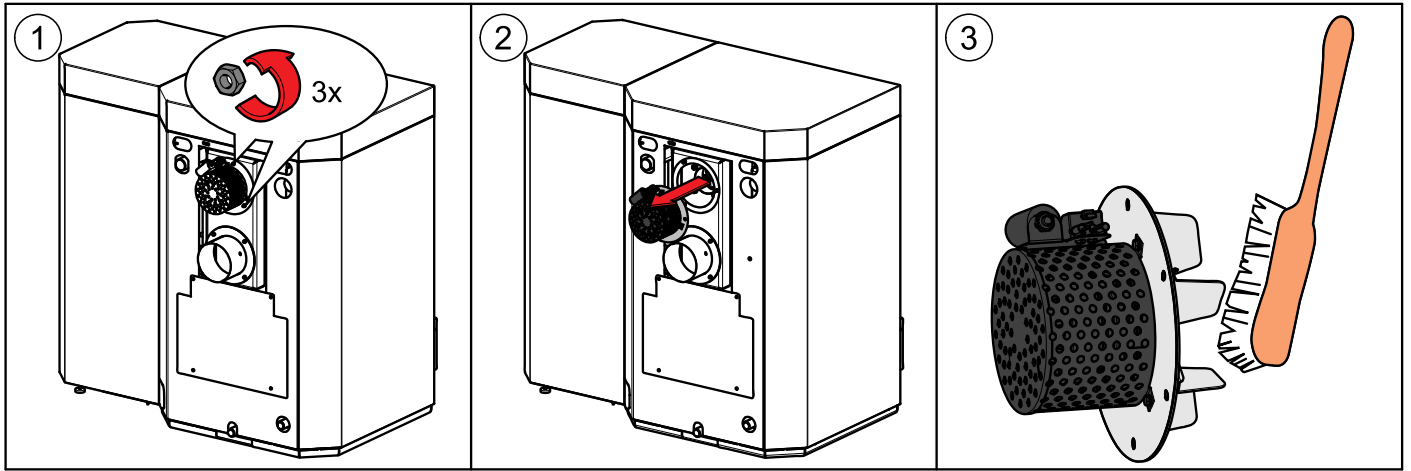
The individual parts of the multi segmented brazier may not be in raised position!

PE(S)(K)(B) 36 - 56



**Note:**

The individual parts of the multi segmented brazier may not be in raised position!

**Cleaning the Induced draft blower:**

## 21.3 Maintenance intervals

We recommend taking out a maintenance contract with your service technician.

## 21.4 Repairs



Only authorised specialists may carry out repair work on this system. Use original spare parts only. Not using original spare parts will cause the warranty to become void.

## 21.5 Checking the boiler room and storage room

Checking the pellet heating system regularly prevents malfunctions and unexpected failure of the heating system.

### Boiler room

Make sure that no flammable materials are stored in the boiler room.

Make sure that no washing is hanging in the boiler room.

Check the display on the control panel for malfunction messages.

Check the flue gas tube and chimney. Clean it regularly.

Maintenance clearances as given in Installation Manual must be observed at all times.

Do not store fuel or any other materials within these clearances.

### Storage room



## DANGER

### Risk of suffocation

Ventilate the pellet storage room sufficiently before entering.

Switch off the heating system before entering.

Check the level of pellets in the textile tank and order more pellets in good time.



## 22 Data for 20KW model, including emissions



### MESys

Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type:</b> Pellematic20	<b>S/N:</b> XUT xx	<b>CATALOG No.:</b> PES20
<b>Date of manuf.:</b> 02/2018	<b>Rated heat power:</b> 68,300BTU/hr	
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5		
<b>Manufactured By:</b> MESys LLC, Bethel, Maine	<b>FUEL:</b> WOOD PELLETS	
U.S. ENVIRONMENTAL PROTECTION AGENCY certified to comply with the 2020 particulate emissions standard using wood pellets.		
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.		
<b>Particulate Emissions,</b> 0.028 lb./million btu - 0.227 grams/hr. <b>CO emissions,</b> 0.019 grams/min. <b>Annual Efficiency, (HHV)</b> 74.3%		
<b>Water Capacity:</b> 15.0 Gallons	<b>Operating Temp:</b> 194 °F	
<b>Max Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC		
<b>Chimney</b>	Approved factory built stainless steel or tile-lined masonry	
<b>MAX DRAFT: 0.11 inches WC MIN DRAFT: 0.04 inches WC</b>		
<b>Diameter:</b> 6 INCH	<b>Electrical Rating:</b> 220 V, 60 Hz, 14 A, 1760 W	
<b>FLOORING:</b> COMBUSTIBLE FLOORS CAN BE USED WITH A NON-COMBUSTIBLE SHIELD. MINIMUM CLEARANCES ARE 18IN/457MM IN THE FRONT AND 8IN / 203MM ON EACH SIDE.		
<b>PARTS</b>	<b>Fan Flue Gas:</b> E1001A	<b>Controller Display:</b> E1330
<b>Motor Ash Box:</b> E1302	<b>Motor Flame Return Protection:</b> E1413A	
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA	
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205	
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV	
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1	
<b>Motor Auger Screw:</b> FKAEM 150 / FKAE-S	<b>Fan Burner:</b> E1005S	

## 12.9 Data for 22KW model



**MESys**  
Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type: Pellematic22</b>	
<b>S/N:</b> XUT01753	<b>CATALOG No.:</b> PES22
<b>Date of manuf.:</b> 02/2022	<b>Rated heat power:</b> 68,300 BTU/hr
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5	
<b>Manufactured By:</b> MESys LLC, Bethel, Maine	<b>FUEL:</b> WOOD PELLETS
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY:</b> Certified to comply with the 2020 particulate emissions standard using wood pellets.	
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.	
Particulate emissions, 0.053lb./million btu - 0.439grams/hr. CO emissions, 0.017grams/minute. Annual efficiency (HHV) 82.0%	
<b>Water Capacity:</b> 15 Gallons	<b>Operating Temp:</b> 194 °F
<b>Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC	
<b>Chimney</b> Approved factory built stainless steel or tile-lined masonry	
<b>max DRAFT: 0.11 inches WC - min DRAFT: 0.04 inches WC</b>	
<b>Diameter:</b> 6 INCH	
<b>Electrical Rating:</b> 220 V, 60 Hz, 14 Amp, 1760 Watts	
<b>FLOORING:</b> Combustible floors can be used with a non-combustible shield. Minimum clearances are 18in/457mm in the front and 8in/203mm on each side.	
<b>PARTS</b>	<b>Fan, Flue Gas:</b> E1001A <b>Controller Display/Screen:</b> E1330
<b>Motor Flame Return Protection:</b> E1413A	<b>Motor Ash Box:</b> E1302
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1
<b>Fan Burner:</b> E1005S	<b>Motor Auger Screw:</b> FKAEM 150 /FKAE-S

## 23 Data for 32KW model, including emissions



### MESys

Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type:</b> Pellematic32	<b>S/N:</b> XUT xx	<b>CATALOG No.:</b> PES32
<b>Date of manuf.:</b> 02/2018	<b>Rated heat power:</b> 109,000 BTU/hr	
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5		
<b>Manufactured By:</b> MESys LLC, Bethel, Maine		<b>FUEL:</b> WOOD PELLETS
U.S. ENVIRONMENTAL PROTECTION AGENCY certified to comply with the 2020 particulate emissions standard using wood pellets.		
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.		
<b>Particulate Emissions,</b> 0.021 lb./million btu - 0.319 grams/hr. <b>CO emissions,</b> 0.025 grams/min. <b>Annual Efficiency,</b> (HHV) 76.5%		
<b>Water Capacity:</b> 23.6 Gallons	<b>Operating Temp:</b> 194 °F	
<b>Max Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC		
<b>Chimney</b>	Approved factory built stainless steel or tile-lined masonry	
<b>MAX DRAFT:</b> 0.11 inches WC <b>MIN DRAFT:</b> 0.04 inches WC		
<b>Diameter:</b> 6 INCH	<b>Electrical Rating:</b> 220 V, 60 Hz, 14 A, 1760 W	
<b>FLOORING:</b> COMBUSTIBLE FLOORS CAN BE USED WITH A NON-COMBUSTIBLE SHIELD. MINIMUM CLEARANCES ARE 18IN/457MM IN THE FRONT AND 8IN / 203MM ON EACH SIDE.		
<b>PARTS</b>	<b>Fan Flue Gas:</b> E1001A	<b>Controller Display:</b> E1330
<b>Motor Ash Box:</b> E1302	<b>Motor Flame Return Protection:</b> E1413A	
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA	
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205	
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV	
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1	
<b>Motor Auger Screw:</b> FKAEM 150 / FKAE-S	<b>Fan Burner:</b> E1005S	



## 24 Data for 56KW model, including emissions



### MESys

Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type: Pellematic56</b>	
<b>S/N:</b> XUT01553	<b>CATALOG No.:</b> PES56
<b>Date of manuf.:</b> 09/2020	<b>Rated heat power:</b> 191,000 BTU/hr
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5	
<b>Manufactured By:</b> MESys LLC, Bethel, Maine	<b>FUEL:</b> WOOD PELLETS
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY:</b> Certified to comply with the 2020 particulate emissions standard using wood pellets.	
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.	
Particulate emissions, 0.06lb./million btu - 0.952grams/hr. CO emissions, 0.052grams/minute. Annual efficiency (HHV) 81.9%	
<b>Water Capacity:</b> 30.6 Gallons	<b>Operating Temp:</b> 194 °F
<b>Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC	
<b>Chimney</b> Approved factory built stainless steel or tile-lined masonry	
<b>max DRAFT: 0.11 inches WC</b> <b>min DRAFT: 0.04 inches WC</b>	
<b>Diameter:</b> 7 INCH	
<b>Electrical Rating:</b> 220 V, 60 Hz, 14 Amp, 1760 Watts	
<b>FLOORING:</b> Combustible floors can be used with a non-combustible shield. Minimum clearances are 18in/457mm in the front and 8in/203mm on each side.	
<b>PARTS</b>	<b>Fan, Flue Gas:</b> E1249A
<b>Controller Display/Screen:</b> E1330	
<b>Motor Flame Return Protection:</b> E1413A	<b>Motor Ash Box:</b> E1302
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> E1197
<b>Motor Burner Plate Cleaning:</b> E1204	<b>Suction Turbine:</b> E1205
<b>Motor Burner Screw:</b> E1306	<b>Low Water Cut Off:</b> Safgard 550SV
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1
<b>Fan Burner:</b> E1005S	<b>Motor Auger Screw:</b> FKAEM 150 /FKAE-S

## 25 General information

As require by the United States Department of Environmental Protection the following information is given for the:

AutoPellet Pellematic PES 10-56 wood pellet fired central heating boiler. Manufactured by Maine Energy Systems, of 8 Airport Road, Bethel, Maine, 04217

- The Pellematic has a thermal output levels from **3 kW** or **10,000** btu/h to 191,000 btu/h and complies with EPA 2020 requirements.
- This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.
- Complete installation information is found in the Installation Manual.
- Although operational information is elsewhere in this manual, there are specific concerns for correct operation that can directly affect the emissions profile of this equipment. It is therefore necessary that we mention these important points.
- Fuel loading and selection. Your Pellematic is equipped with completely automatic fuel loading. Thus, other than selecting the correct fuel, there are no loading instructions as such. Fuel selection is straight forward.  
Only PFI Premium 100% wood pellets should be used in your boiler.
- Among the materials that are specifically prohibited to be burned in your Pellematic are: trash, plastics, gasoline, rubber, naphtha, household garbage, material treated with petroleum products such as particleboard, railroad ties, and pressure treated wood.  
Burning these materials may result in release of toxic fumes or render the boiler ineffective and cause smoke.
- Your Pellematic pellet fired boiler is completely automatic ignition as well as the loading as before mentioned.  
There are therefore no starting procedures to be followed. The boiler correctly starts itself when required by building load.
- There are no user adjustments required for the air controls on your Pellematic.
- It is important to have your Pellematic boiler serviced by a trained professional who is aware of the importance to ensure that there are no inlet air restrictions in or around your boiler's combustion blower. And that the air passages within your boiler are free of debris, (creosote, ash, etc.)  
The flue pipe and chimney are also clean and free of debris / restrictions.  
And that the combustion chamber door seal is airtight when the door is closed and secured.
- Ash removal is also completely automatic on your Pellematic boiler. Ashes should be placed in a metal container with a tight-fitting lid.  
The closed container of ashes should be placed on a noncombustible floor or on the ground, away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.  
When cooled ashes can be disposed of on your lawn, garden or local transfer station.
- Your Pellematic is not a catalytic type burner.
- A person or persons responsible for the operation of a hydronic heater must comply with all applicable laws or other requirements, such as State laws or regulations as well as local ordinances.
- A person or persons operating a hydronic heater should be aware that they are responsible for operation in such a manner that does not create a public or private nuisance condition.  
The Manufacturer's distance and stack height recommendations and the requirements in any applicable laws or other requirements may not always be adequate to prevent nuisance conditions due to terrain or other factors.
- Your Pellematic should be installed with a minimum stack height of 16 feet.  
Providing correct draft as given in the Installation manual.
- Draft is the force which moves air from the appliance up through the chimney.

The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance and may damage the catalytic combustor. Inadequate draft may cause backpuffing into the room and 'plugging' of the chimney. Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints. An uncontrollable burn or excessive temperature indicates excessive draft.

- **The efficiency of your 20KW Pellematic boiler running at full power is >80%.**
- **The efficiency of your 22KW Pellematic boiler running at full power is >82%.**
- **The efficiency of your 32KW Pellematic boiler running at full power is >83%.**
- **The efficiency of your 56KW Pellematic boiler running at full power is >86%.**
- This is the result of a laboratory test and was measured using the HHV of the fuel used.
- You should never operate a combustion appliance of any type in your home without there being a properly installed smoke and CO detector.  
Your local fire department usually has good advice on placement of these detectors and how many your home may need for complete coverage.

## RESIDENTIAL LIMITED WARRANTY

**What this Warranty Covers & Who it Applies to:** The limited warranty provided by **Maine Energy Systems LLC** (“MESys”) applies only to MESys brand boilers, furnaces, wood pellet burners and accessories (“Product”) sold to you, the first user and purchaser provided that the Product was purchased: (1) for your normal, household (non-commercial) use, and has only been used for normal household purposes; (2) new at retail (not a display, “as is”, or previously returned model) and not for resale, or commercial use; and (3) within the United States. Products installed in a building other than a one or two family residential dwelling are not covered, under this Warranty unless individual Boilers are installed for each dwelling unit. Please return your registration card; while not necessary to establish warranty coverage, it allows MESys to be able to notify you in the unlikely event of a safety issue.

**How Long this Limited Warranty Lasts:** This Limited Warranty has three time frames, depending on the particular Product component involved.

(1) MESys warrants that the burner, ignition, electric and electronic parts, flame tube and burner plate, chains, bearings, chain pinions, and all other moving components of the Product are free from defects in materials and workmanship for a period of *two (2) years from the date of initial operation or 6,000 operating hours, whichever comes first*, provided they are installed and properly maintained by a qualified heating contractor and the other conditions of this warranty are met, and

(2) *In addition*, all other parts including the boiler vessel, or heat exchanger in furnaces, are warranted to be free from defects in materials and workmanship for a period of *five (5) years from the date of initial operation or 15,000 operating hours, whichever comes first* provided it is installed and properly maintained by a qualified heating contractor and the other conditions of this warranty are met; and

(3) *In addition* thereafter, MESys warrants that the boiler vessel is free from defects in materials and workmanship on a prorated basis follows, provided it is installed and properly maintained by a qualified heating contractor and the other conditions of this warranty are met:

*For the next five (5) years (years 6 through 10) or a maximum of 30,000 operating hours, whichever comes first*, the boiler vessel is warranted for 75% of the then retail parts cost; and thereafter

*For the next ten (10) years (years 11 through 20) or a maximum of 60,000 operating hours, whichever comes first*, the boiler vessel is warranted for 50% of the then retail parts cost.

*For the next ten (10) years (years 21 through 30) or a maximum of 90,000 operating hours, whichever comes first*, the boiler vessel is warranted for 25% of the then retail parts cost, which may be used to replace the boiler vessel, or used as a credit toward a new boiler system, at MESys’ discretion.

Labor is not covered under this limited warranty. During the pro-rated warranty period, the customer is responsible for payment of the remaining portion of the then retail cost.

The warranty period begins to run upon the date of initial operation, and shall not be extended for any reason whatsoever. This limited warranty does not cover labor and shipping costs, non-MESYS components, serviceable items or normal maintenance, nor the other items and events excluded below.

**Terms of Limited Warranty:** MESys will provide replacement parts for any component that proves to be defective in materials or workmanship (excludes labor charges) within the periods set forth above, or replace it with the most comparable model available from MESys at the time of the replacement, provided that the purchaser pays for the other portion of the prorated charge set forth above if applicable. The proportionate charge is based on the current list price of the boiler vessel involved in the warranty claim (or the nearest comparable MESys model). The foregoing timelines begin to run upon the date of initial operation, and shall not be stalled, tolled, extended, or suspended, for any reason whatsoever.

**Repair/Replace as Your Exclusive Remedy:** During this limited warranty period, MESys or one of its authorized service providers will provide replacement parts for your Product or replace it with the most comparable model then available from MESys at the time of the replacement (subject to certain limitations stated herein,) if your Product proves to have been manufactured with a defect in materials or workmanship. All removed parts and components shall become the property of MESys at its sole option. All replaced and/or repaired parts shall assume the status of the original part for purposes of this

warranty and this warranty shall not be extended by the replacement of such parts. MESys's sole obligation hereunder is to provide replacements for defective Product to a MESys-authorized service provider during normal business hours. For safety and property damage concerns, MESys highly recommends that you do not attempt to repair the Product yourself, or use an un-authorized servicer; MESys will have no responsibility or liability for repairs or work performed by a non-authorized servicer. If you choose to have someone other than an authorized service provider work on your Product, THIS WARRANTY WILL AUTOMATICALLY BECOME NULL AND VOID. Authorized service providers are those persons or companies that have been specially trained for customer service and technical ability (note that they are independent entities and are *not* agents, partners, affiliates or representatives of MESys).

**Warranty Exclusions:** The warranty coverage described herein excludes all defects or damage that are not the direct fault of MESys, including without limitation, any one or more of the following: (a) use of the Product in anything other than its normal, customary and intended manner (including without limitation, any form of commercial use or use that is not for personal, family or household purposes); (b) any party's willful misconduct, negligence, misuse, abuse, accidents, improper operation, failure to maintain, improper or negligent installation, tampering, failure to follow operating instructions, mishandling, unauthorized service (including self-performed "fixing" or exploration of the appliance's internal workings); (c) adjustment, alteration or modification of any kind; (d) a failure to comply with applicable state, local, city, or county electrical, plumbing and/or building codes, regulations and laws, including failure to install the product in strict conformity with local fire and building codes and regulations; (e) ordinary wear and tear; (f) any external, elemental and/or environmental forces and factors, including without limitation, lightning strikes, voltage spikes, flues that do not meet specified standards, fire, floods, rain, windstorm, floods, fires, mud slides, freezing, excessive moisture or extended exposure to humidity, power surges, building structural failures and acts of God; (g) any damage or failure resulting from contaminated air, including but not limited to sheetrock particles or other dirt or dust, introduced into the Boiler; (h) damage or failure resulting from hard water scale build-up on the heat exchanger waterways; (i) use with insufficient water or operation with water or fuel additives that cause deposits or corrosion; and (j) use with oxygen permeable tubing or other components. In no event shall MESys have any liability or responsibility whatsoever for damage to surrounding property and other structures or objects around the Product. Also excluded from this warranty are scratches, nicks, minor dents, and cosmetic damages on external surfaces and exposed parts; Products on which the serial numbers have been altered, defaced, or removed; service visits to teach you how to use the Product, or visits where there is nothing wrong with the Product; correction of installation problems (you are solely responsible for any structure and setting for the Product, including all chimneys, flues, electrical, plumbing or other connecting facilities, for proper foundation/flooring, and for any alterations); and resetting of breakers or fuses.

**TO THE EXTENT ALLOWED BY LAW, THIS WARRANTY SETS OUT YOUR EXCLUSIVE REMEDIES WITH RESPECT TO PRODUCT, WHETHER THE CLAIM ARISES IN CONTRACT OR TORT (INCLUDING STRICT LIABILITY, OR NEGLIGENCE) OR OTHERWISE. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED. ANY WARRANTY IMPLIED BY LAW, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, SHALL BE EFFECTIVE ONLY FOR THE PERIOD THAT THIS EXPRESS LIMITED WARRANTY IS EFFECTIVE OR THE IMPLIED WARRANTY PERIOD, WHICHEVER IS LESS. IN NO EVENT WILL MESYS BE LIABLE FOR CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, "BUSINESS LOSS", AND/OR PUNITIVE DAMAGES, LOSSES, OR EXPENSES, INCLUDING WITHOUT LIMITATION TIME AWAY FROM WORK, HOTELS AND/OR RESTAURANT MEALS, EXPENSES IN EXCESS OF DIRECT DAMAGES DEFINITELY CAUSED EXCLUSIVELY BY MESYS, OR OTHERWISE ARISING. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.**

The customer is responsible for the costs of:

- Components which have been replaced but found not to have been defective;
- Faulty installation;
- Normal maintenance; and
- Equipment used contrary to the installation manual.

The required information that must be furnished to MESYS for a claim under this Limited Warranty includes:

- Model number and serial number of the Product;
- Date the Product was installed and placed in operation, the location, the name of the installer;
- Date the Product component failure was reported; and

- Description of condition that prompted the report.

No attempt to alter, modify or amend this warranty shall be effective unless authorized in writing by an officer of MESYS.

**To Obtain Warranty Service, Please Contact**

**Maine Energy Systems, LLC ("MESys")**

8 Airport Road, P.O. Box 547, Bethel, Maine 04217

Tel: 207.824. 6749 Fax: 207.824.4816

[info@maineenergysystems.com](mailto:info@maineenergysystems.com)

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Subject to modifications

Please read carefully prior  
to installing and servicing.

SAVE THESE INSTRUCTIONS

# Installation Manual

Pellet heating with vacuum  
suction system, type

**AutoPellet®**  
**PES 20, 22, & 32**

FA\_V3.10

AutoPelletTOUCH

USA



Title: Installation Manual AutoPellet® **PES 20, 22, & 32**

Article number: PE 199 USA 3.0

Version valid from: **04/2022**

Approved: **Maine Energy Systems**

## **Author & Manufacturer**

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# 1 Dear Customer

**Maine Energy Systems** specializes in wood pellet heating.

Our company enjoys an exclusive license from ÖkoFEN to manufacture products here in North America. We represent expertise, innovation and quality.

We are delighted that you have decided to purchase our product.

- This instruction manual is intended to help you operate the product safely, properly and economically.
- Please read this instruction manual completely and take note of the safety warnings.
- Keep all documentation supplied with this unit in a safe place for future reference.
- Installation and first startup must be carried out by a qualified installer certified by Maine Energy Systems.
- The installation must comply with the requirements of the Authority having jurisdiction over the installation.
- Please contact your authorized dealer if you have any questions.



We place great importance on the development of new products. Our R&D department continues to question accepted solutions and works continually on new improvements. That is how we maintain our technological lead. We have already received several awards for our products in Austria and abroad. Our products fulfil European and USA requirements regarding quality, efficiency and emissions.



**Note: This manual refers to both PES20 and PES22 systems. The only difference between the PES20 and PES22 is that the PES22 has additional turbulators to increase efficiency.**

## 2 Use only for the purpose intended

The pellet boiler is designed to heat water for central or other indirect heating systems and hot water supply for buildings. It is not permissible to use the pellet boiler for any other purpose. Reasonable foreseeable inadvertent uses for the pellet boiler are not known.

The boiler fulfils the requirements of UL **2523-18** and CSA B366.1-2011.

### 3 Types of safety warning sign

The warning signs use the following symbols and text.

#### Types of safety warning sign

1. Risk of injury
2. Consequences of risk
3. Avoiding risk



#### 1. Risk of injury:

Danger - indicates a situation that could lead to death or life-threatening injury.



Warning - indicates a situation that could lead life-threatening or serious injury.



Caution - indicates a situation that could lead to injury.



Note - indicates a situation that could lead to property damage.



#### 2. Consequences of risk

Effects and consequences resulting from incorrect operation.

#### 3. Avoiding risk

Observing safety instructions ensures that the heating system is operated safely.



## 4 Warnings and safety instructions

Observing safety instructions ensures that the heating system is operated safely.

### 4.1 Basic safety instructions

- Never get yourself into danger; give your own safety top priority.
- Keep children away from the central heating room and storage room.
- Observe all safety warnings on the boiler and in this user manual.
- Observe all instructions relating to maintenance, servicing and cleaning.
- The pellet heating system may only be installed and commissioned by an installer that is trained and remains currently authorized by Maine Energy Systems.
- Never make any changes to the heating system or flue gas system. All maintenance, cleaning and changes should only be done by trained professionals.
- Never close or remove safety valves.

### 4.2 Warning signs



#### DANGER

##### Risk of poisoning

Make sure that the pellet boiler is supplied with sufficient combustion air.

The openings in the combustion air inlet must never be partially or completely closed.

Ventilation systems, central vacuum cleaning systems, extractor fans, air conditioning systems, flue gas blowers, dryers, fuel storage ventilation fans or similar equipment must never be allowed to draw air from the boiler room and cause a drop in pressure.

The boiler must be connected tight to the chimney using a flue gas tube.

Clean the chimney and the flue gas tube at regular intervals.

The boiler room and pellet storage room must be sufficiently supplied with air and ventilated.

Before entering the storage room it must be ventilated with sufficient air and the heating system switched off.



#### DANGER

##### Risk of electric shock

Always disconnect / de-energize the power supply before working on the boiler.



#### DANGER

##### Risk of explosion

DO NOT BURN GARBAGE, GASOLINE, NAPHTHA, ENGINE OIL, OR OTHER INAPPROPRIATE MATERIALS. DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

Switch off the heating system before filling the storage room.



## DANGER

### Risk of fire

Do not store any flammable materials in the boiler room.  
Do not hang out any washing in the boiler room.  
Do not operate with fuel loading or ash removal doors open.



## WARNING

### Risk of burns

Do not touch the flue gas connector or flue gas pipe.  
Do not reach into the ash chamber.  
Do not clean the boiler until it has been allowed to cool down.



## CAUTION

### HOT SURFACES

Keep children away.  
Do not touch during operation.  
Do not operate if maximum draft as listed on boiler nameplate is exceeded.  
Doing so can allow non-controlled combustion.



## CAUTION

### Risk of cut injuries due to sharp edges.

Use gloves for performing all work on the boiler.

## NOTICE

### Damage to property

The pellet boiler is suitable only for pellets which comply with PFI premium or EnPlus -A1 pellets specifications.  
The use of any other fuel voids your warranty and can cause damage to the pellet boiler and chimney.

## NOTICE

### Damage to property

Do not use the heating system if it, or any of its components, come into contact with water.  
If water damage occurs, check the heating system and replace damaged parts.



## WARNING

All cover plates, enclosures, and guards must be maintained in place at all times, except during maintenance and servicing.

## 4.3 What to do in an emergency



### DANGER

**Risk to life**

Never get yourself into danger; give your own safety top priority.

**What to do in the event of a fire**

- Switch off the heating system.
- Call your local fire department and / or 911.
- Use approved fire extinguishers (fire protection class ABC).

**What to do if you smell smoke**

- Switch off the heating system.
- Close the doors leading to living areas.
- Ventilate the boiler room.

## 5 Prerequisites for installing a pellet boiler

The following must be fulfilled before the installation and operation of a fully automatic pellet boiler.

### 5.1 Guidelines and standards for installing a pellet boiler


Overview of standards and guidelines applying to the installation of a pellet boiler.

Check whether you need to obtain planning permission or approval from the authorities for installing a new heating system or changing your existing system. Legislation in your country must be observed.

### 5.2 Installation room

The installation room of the boiler is not necessarily a boiler room. Observe the applicable national and regional regulations.

#### 1. Safety warnings for the installation room

	DANGER
<p><b>Risk of fire</b>            Do not store flammable materials or liquids in the vicinity of the pellet boiler.            Do not permit unauthorized persons to enter the boiler room - Keep children away.            Do not operate with fuel loading or ash removal doors open.</p>	

#### 2. Ventilation of the installation room

The installation room must have air inlet and outlet openings for ventilation, even if there is a direct connection to the burner for combustion air.

This is to keep the combustion zone at a neutral pressure.

#### 3. Admission of combustion air, the pellet boiler requires combustion air. The combustion air can be supplied by:

- a. Relying upon the boiler room air as supplied by the air inlet and outlet openings for ventilation in the installation room.
- b. Independently of the room air via a separate air intake line with a direct connection to the outdoor atmosphere.  
 The air intake line must not follow the sewage pipe. The diameter of the air intake line must be at least 4 inches. If the air line is greater than 12 feet in length, or if it has more than 270 degrees of turns, then it should be increased in size to 5 inch.

Never operate the pellet boiler if the air intake openings are partially or completely closed.

Contaminated combustion air can cause damage to the pellet boiler. Never store or use cleaning detergents containing chlorine, nitrobenzene or halogen in the room where the heating system is installed, if combustion air is drawn directly from the room. Be particularly cautious around swimming pools and chemicals.

Do not hang out washing in the boiler room.

Prevent dust from collecting at the combustion air intake to the pellet boiler.

#### 4. System damage due to frost and humidity

The temperature in the installation room must not drop below 38°F and must not exceed +86°F. The relative humidity in the installation room must not exceed 70%.

#### 5. Danger for animals

Prevent pets and other small animals getting into the installation room. Install grilles over all openings.

#### 6. Flooding

In the event of a flooding risk, switch off the pellet boiler and disconnect it from the main power supply

before water enters the boiler room. All components that come into contact with water must be replaced before the pellet boiler is put into operation again.

## 5.3 Flue gas system

The flue gas system consists of a chimney and a flue gas tube. The flue gas tube connects the pellet heating system to the chimney. The chimney leads the flue gas from the pellet heating system out into the open.

### 1. Design of the chimney

The dimensions and design of the chimney is very important. The chimney must be able to ensure sufficient draft to safely draw away the flue gas regardless of the status of the boiler. Low flue gas temperatures can cause sooting and moisture damage on chimneys that are not insulated. For this reason **moisture-resistant chimneys** (stainless steel or ceramic) should be used. An existing chimney that is not damp-resistant needs to be renovated before use. Follow guidelines below:

Boiler size		AutoPellet
Flue gas tube diameter (at boiler)	inch/mm	6/160
Flue gas temp. / rated power	° F	266 - 320
Flue gas temp. / partial load	° F	194 - 248
Min. draft - full load/part load	in/wc	- 0.04 / - 0.02

Chimney size	Min. Height
6in x 6in	17ft
7in x 7in	16ft
8in x 8in	16ft
6in round	19ft
7in round	17ft

## NOTICE

Person(s) operating a hydronic heater is/are responsible for operation in a manner that does not create a public or private nuisance condition. The manufacturer's distance and stack height recommendations and the requirements in any applicable laws or other requirements may not always be adequate to prevent nuisance conditions due to terrain or other factors.

Recommended and UL-103HT approved chimney materials are:

- Selkirk sure temp
- Supervent (JSC)
- Security chimneys (secure temp ASHT)

Use flue gas pipe from chimney to boiler as required by your local code.



## CAUTION

### Unregulated combustion

Please observe that combustion air openings and flue pipes are not reduced in size or closed. Make end user aware of these guidelines and their potential danger.

Clean the chimney and the flue gas tube at regular intervals.

Check if the draft inducer is clean and in a good condition.

## 2. Flue gas temperature

The flue gas temperatures are approximately the same for all AutoPellet covered in this manual.

The dewpoint of flue gas with wood pellets (max. 10% water content) is approx. 120°F.

It is possible to increase the flue gas temperature to prevent condensation inside the chimney and avoid damage due to damp. Only authorised installers may increase the flue gas temperature.

### Note:

The increase in flue gas temperature results in reduced efficiency and thus increases fuel consumption.

## 3. Negative pressure of the chimney

The boiler must be connected to a chimney or a vertical venting system that is capable of handling and producing a negative breeching pressure of  $-0.4$  "WC. Use a draft gauge to verify the indicated draft value, adjust barometric damper as required. Drill a small hole in the connection pipe at about 2in/ 50mm from the boiler flue outlet and use this hole as your measuring point.

### Chimney draft

The suction effect of the chimney draft must extend all the way to the boiler flue pipe connection. The maximum flow rate that can be drawn through the chimney limits the maximum performance of the chimney connection. The boiler performance must be reduced if the chimney does not possess the necessary cross-section. This may only be performed by authorised personnel.

## 4. Cleaning

Clean the flue gas tube and chimney regularly. Solid fuel burning appliances need to be cleaned frequently because soot, creosote, and ash may accumulate. The hotter the fire, the less creosote is deposited. Cleaning intervals can vary in warm periods due to this and become more frequent.



## DANGER

### Risk of chimney fire

Creosote-formation and need for removal: Low flue gas temperature can cause creosote. Creosote can condense in a relatively cool chimney. As a result, creosote residue accumulates on the flue lining. If ignited, this creosote will create an extremely hot fire. The chimney and the chimney connector should be inspected at least twice monthly during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

## NOTICE

### **Oxidation of chimney**

Do not use metal brushes to clean chimneys made of stainless steel.

Your state and local regulations must be observed.

## 5.4 Safety systems

The following safety measures are the prerequisite for safe operation of your system.

### Emergency stop switch

Every heating system must be able to be switched off with an Emergency Stop switch. The Emergency Stop switch location is determined by your local code requirement. It should remove all electrical power from the boiler.



### Safety valve / Over Pressure Relief Valve

This valve opens when the pressure inside the heating system increases to max. 43.5 PSI. For North America, a 30 PSI Relief Valve is supplied with each boiler. This valve must not be locked out or plugged and must be within 3 feet of the boiler, with no valves between the relief valve and boiler.



### Low Water Detection

The "Low Water Detection" device is connected to the Emergency Stop of the boiler. Should a low water condition be detected, the boiler stops firing immediately. This device must be of the manual reset variety.



### Safety temperature sensor

The pellet boiler is equipped with a safety temperature sensor. This is located on the pellet boiler. If the boiler temperature exceeds 230° F, then the heating system switches off.



### Expansion tank

All heating systems must be equipped with an expansion tank. The overall size of the heating system volume will dictate the required expansion tank size.



## NOTICE

### Initial start-up

The initial start-up of each MESys boiler must be performed by an authorized installer.

## 5.5 Installation with an existing boiler

MESys boilers are not to be connected to a chimney flue serving another appliance. However, when all State and local codes allow for the sharing of chimney flues, MESys boilers and another appliance burning pellets or a different fuel can be operated simultaneously while connected to a single existing chimney or flue gas system providing the following conditions are met:

- All state and local codes permit the specific installation.
- All appliances are installed in accordance with the manufacturer's installation specifications or if lacking manufacturers specifications, the appliance in question is installed in a manner commonly recognized as safe and correct for the application and circumstances.
- The chimney or flue gas system must be able to handle the combustion products of either appliance and both appliances when operated simultaneously.

## NOTICE

### Avoid clearance issues that can make servicing difficult:

Be sure to follow suggested clearances when installing this boiler with an existing boiler to be sure that service and cleaning can be performed adequately.





## CAUTION

**Avoid code violations:**

When connecting to or with an existing boiler, contact the authority having jurisdiction to be sure the type of installation planned is allowed.

Document the type of boiler that the Pellematic is connected to or with.

Pellet boiler: Make and Model number:

\_\_\_\_\_

Existing boiler: Make and Model number:

\_\_\_\_\_



## DANGER

**Possible escape of flue gas:**

Do not connect this unit to a chimney flue serving another appliance unless multiple appliances into a single flue is authorized by all authorities having jurisdiction.

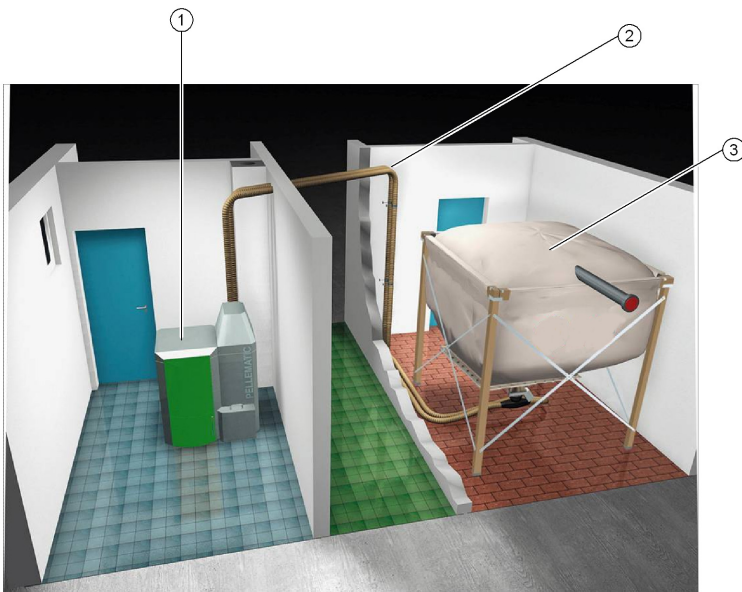
## 6 Product description

The description of the product is intended to provide an overview of the components that make up a pellet heating system, the parts of the pellet boiler and advice on where you can find more information.

### The pellet heating system consists of 3 components

1	Pellet boiler
2	Conveyor system
3	Storage system - textile tank

### Pellet boiler with textile tank



The concept features different sizes of design and type for each component. These are compatible and designed to match.

## 6.1 The pellet boiler

The pellet boiler is equipped with an automatic cleaning system, an ash box with ash compression system and an integrated return water temperature control. The installed programmable logic controller system enables fully automatic operation and highest efficiency. We offer an optional automatic de-ashing system for the highest level of cleanliness and comfort.

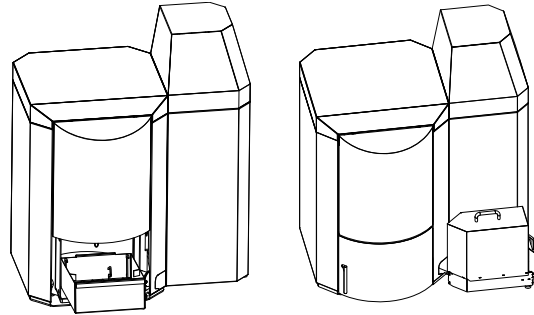
### Pellematic types and power ratings

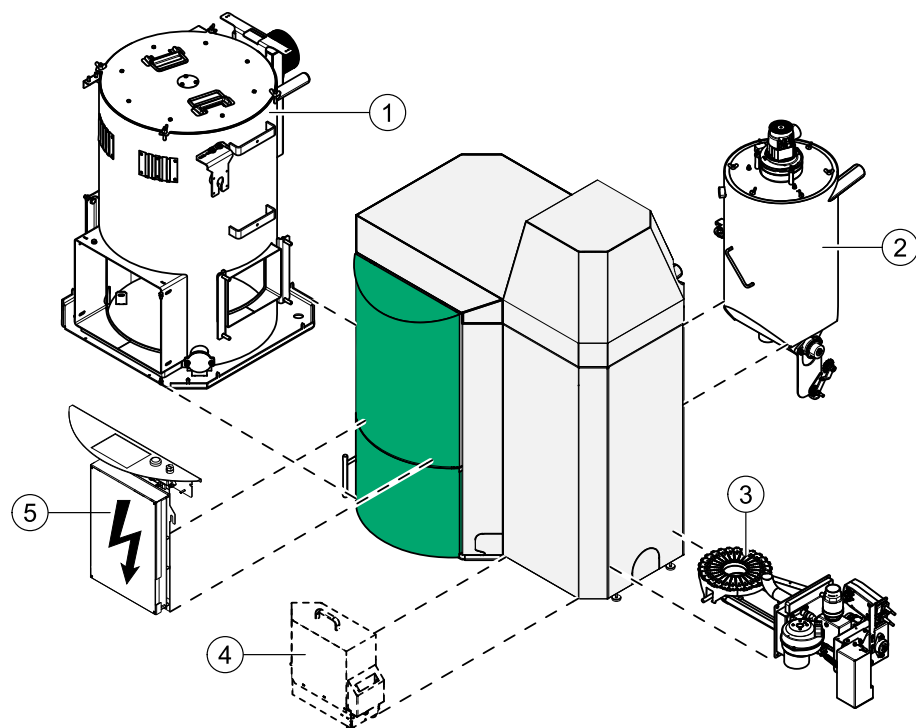
We offer the Pellet boiler with the following power ratings:  
Suction-feed systems: 68,300; 109,500 and 191,000 BTU/hr

All sizes / outputs of the Autopellet boiler are available with external automatic ash compression system.

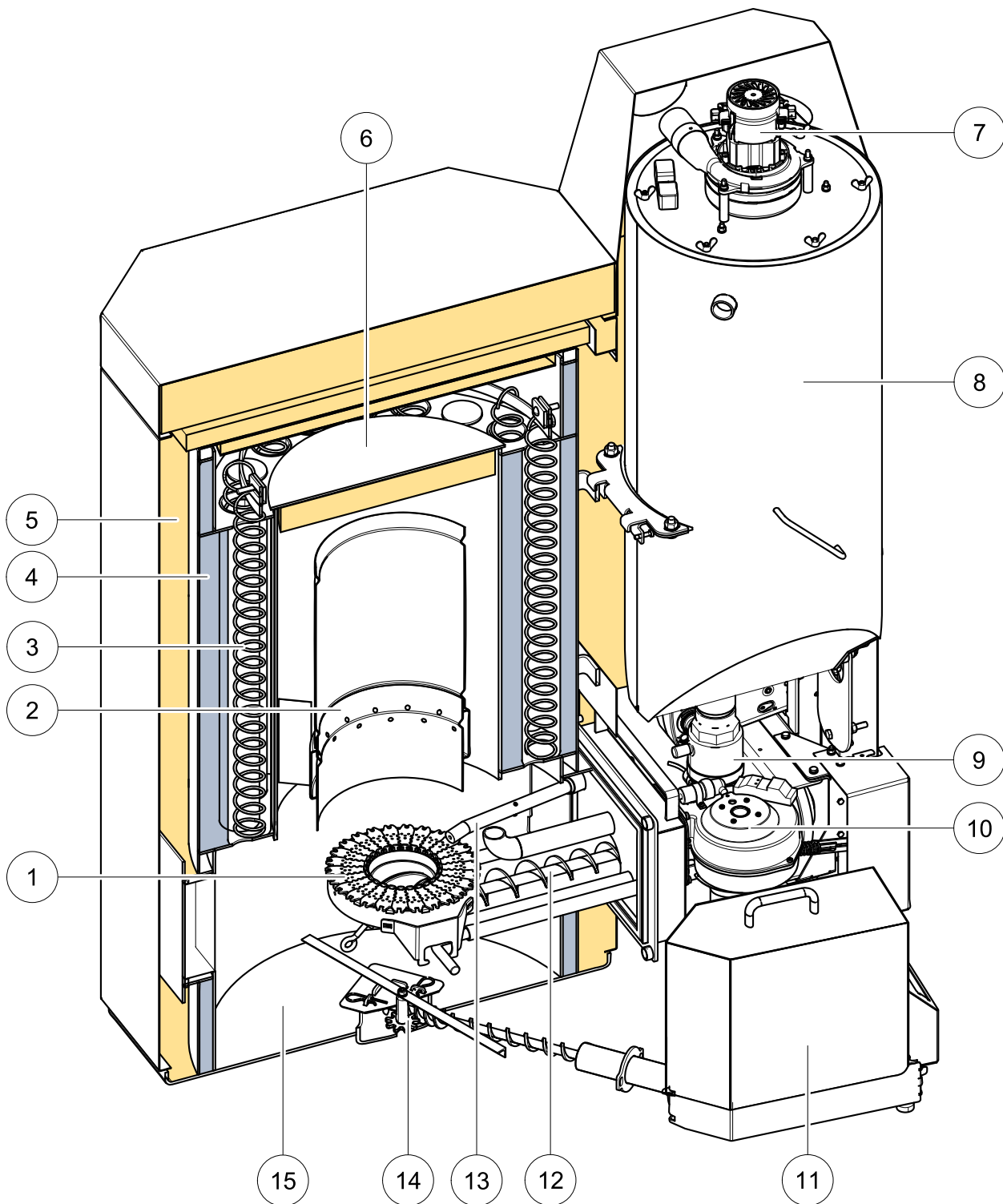
#### Note:

Refer to the data plate for the power rating of your Pellematic. The data plate is located on the rear side of the Pellematic. Here you will find the type designation, manufacturer's serial number and year of build.



**Key components of the Pellematic**

1	Boiler (heat exchanger)
2	Vac Hopper / Day tank
3	Burner
4	External automatic ash compression system
5	Boiler controller



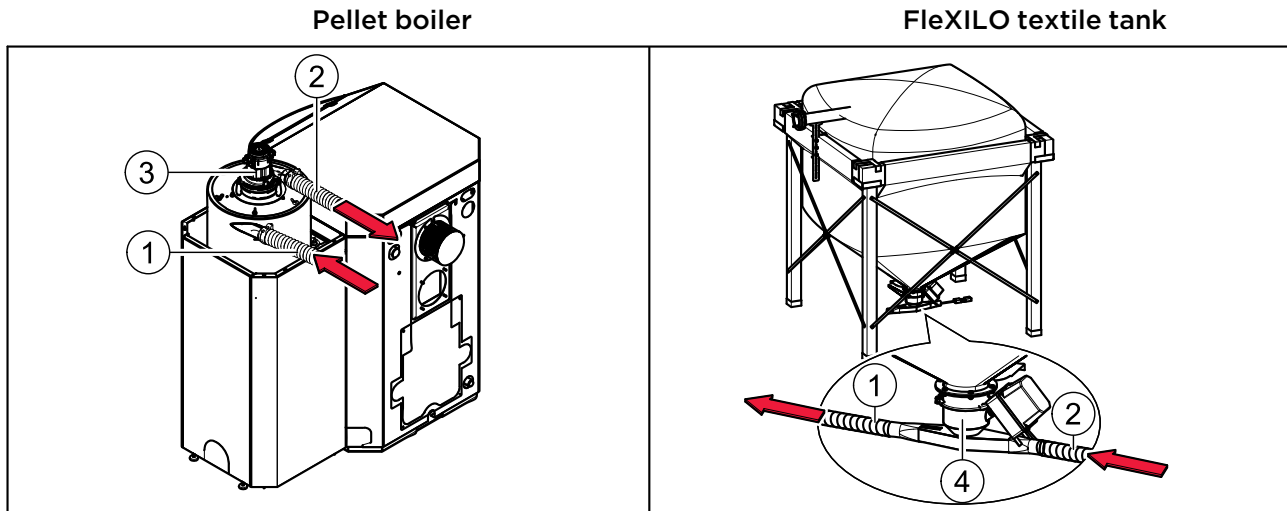
1	Burner plate	9	Fire protection - ball valve
2	Flame tube	10	Burner fan
3	Heat exchanger	11	External ash box
4	Boiler water	12	Burner auger
5	Boiler insulation	13	Electronic ignition
6	Combustion chamber cover	14	De-ashing system cover
7	Suction turbine	15	Ash chamber / Fire chamber
8	Vac hopper / Day tank		

## 6.2 Pellet suction system

The pellet suction system consists of a pellet line, an air line and a suction turbine. The suction turbine in the hopper conveys pellets in the pellet line from the storage room or textile tank to the hopper.

### Key components of pellet suction system

1	Pellet hose	Hose from textile tank to the hopper.
2	Air hose	Hosee from the suction turbine to the textile tank.
3	Suction turbine	Located above the hopper underneath the AutoPellet burner casing.
4	Suction switch	Located underneath the textile tank.



### 6.2.1 Assembly of the vacuum system

The pellet hose and the air hose are flexible spiral hoses made out of plastic. A copper braid avoids the static loading of the spiral hose.

#### To avoid damage to the spiral hose, you must observe the following assembly guidelines:

- Bending radius** The hose should be led as briefly as possible and with a few curves as necessarily. Bending radius may never be smaller than **12inch**.
- Upward gradients** Max difference in height = **236inch**  
**Note:** A difference in height of up to 118inch can be overcome at one time. Larger differences in height must be interrupted with a 4 foot horizontal run of the pellet hose.
- Impact protection** The spiral hose can be mounted up to 236inch exactly straight. In such cases however, it is very important to create a slight "S" in the pellet piping before a sharp curve to slow down the pellets to prevent hose damage.
- Installation in the soil and openings:** When installing pellet lines underground remember! The pellet lines are not designed for direct burial and require protection from being crushed or chewed by varmints. Protective piping should be minimum 4 inch and sealed at each end. There should be no bends greater than 15 degrees in the underground sections of the pellet hose.
- Tightness** To avoid problems with your pellet lines, it is important to have all hose connections secured completely air tight with hose clamps.
- Static neutralization** The hoses are provided with a copper braid, those the hose keeps antistatic. In order to ensure the function of the anti-statics, those copper braid must be attached at each end to the existing grounding become.
- Fire protection** At a wall break-through to the heating room must be installed a fire protection seal in the pellet- and the air hose.

**Crossing**

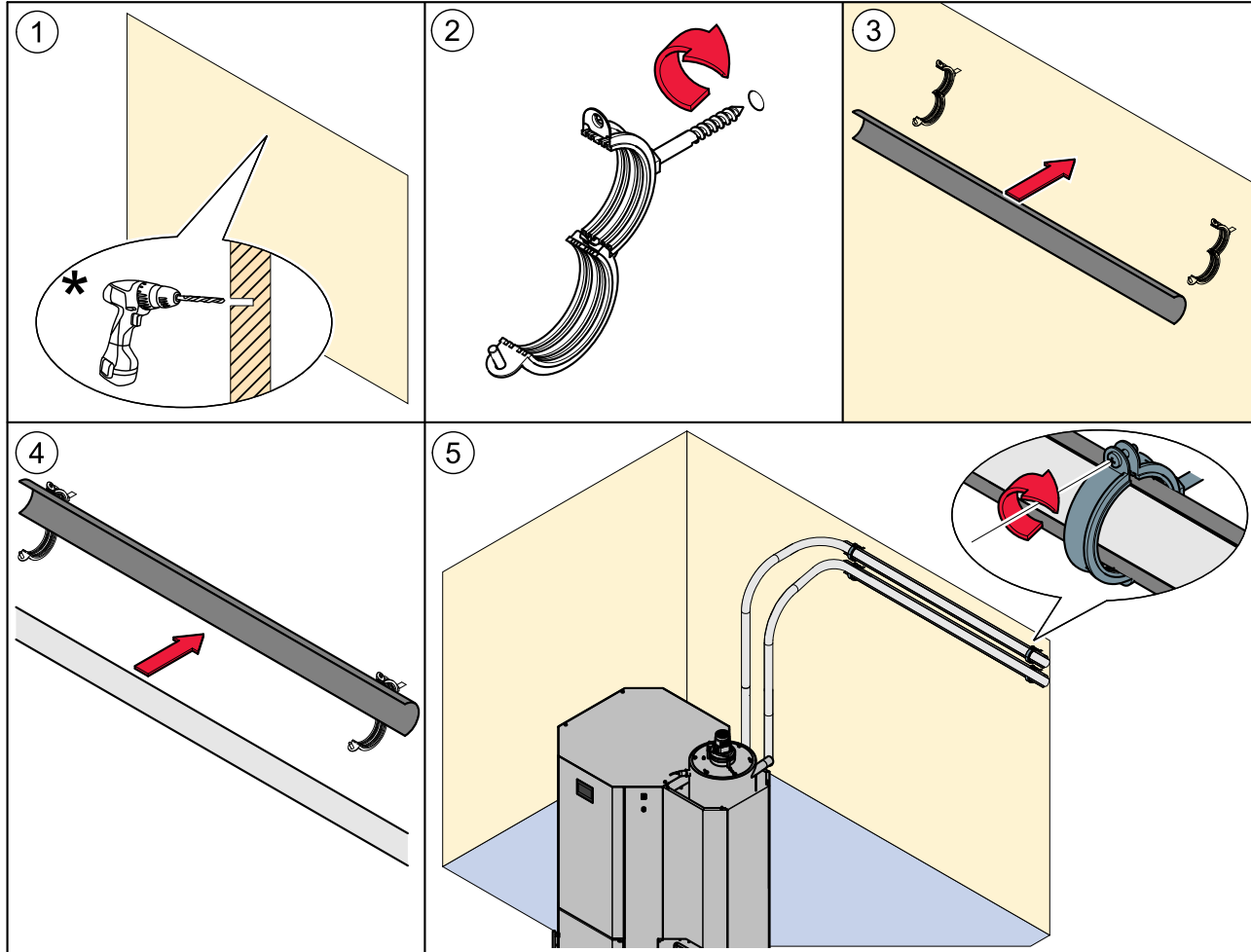
The pellet hose and the air hose should cross each other as few times as possible.

**Length of the spiral hose**

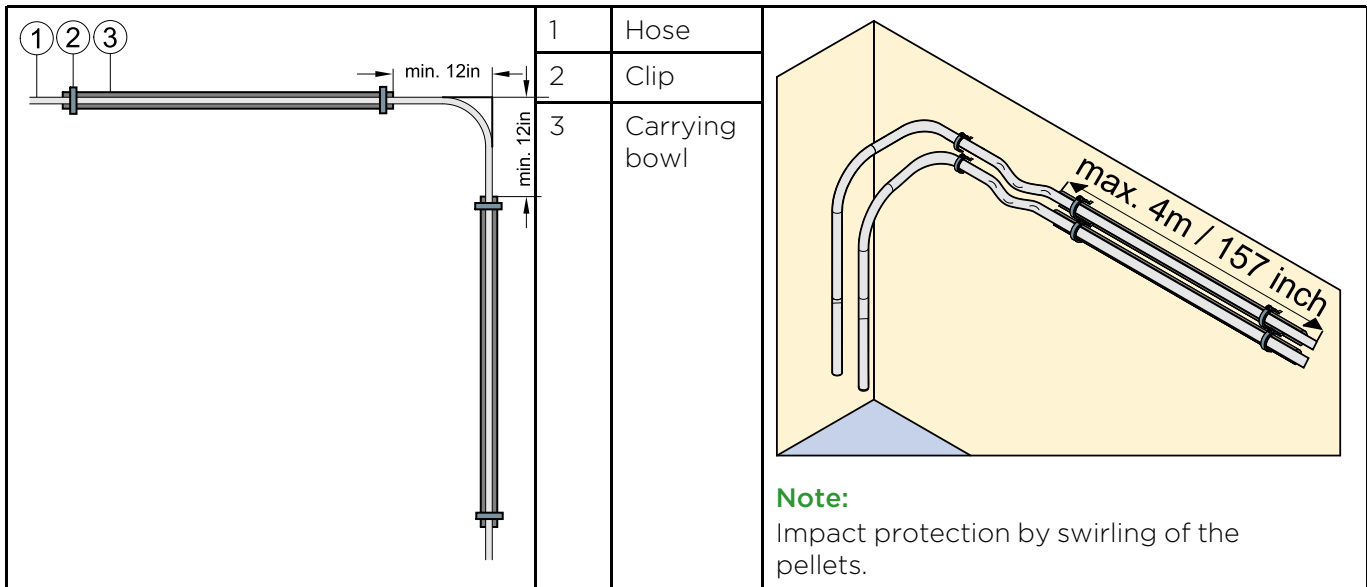
The maximum total length of the spiral hose is 130 feet.  
The maximum for pellet hose and air hose are each 60 feet.

**Assembly**

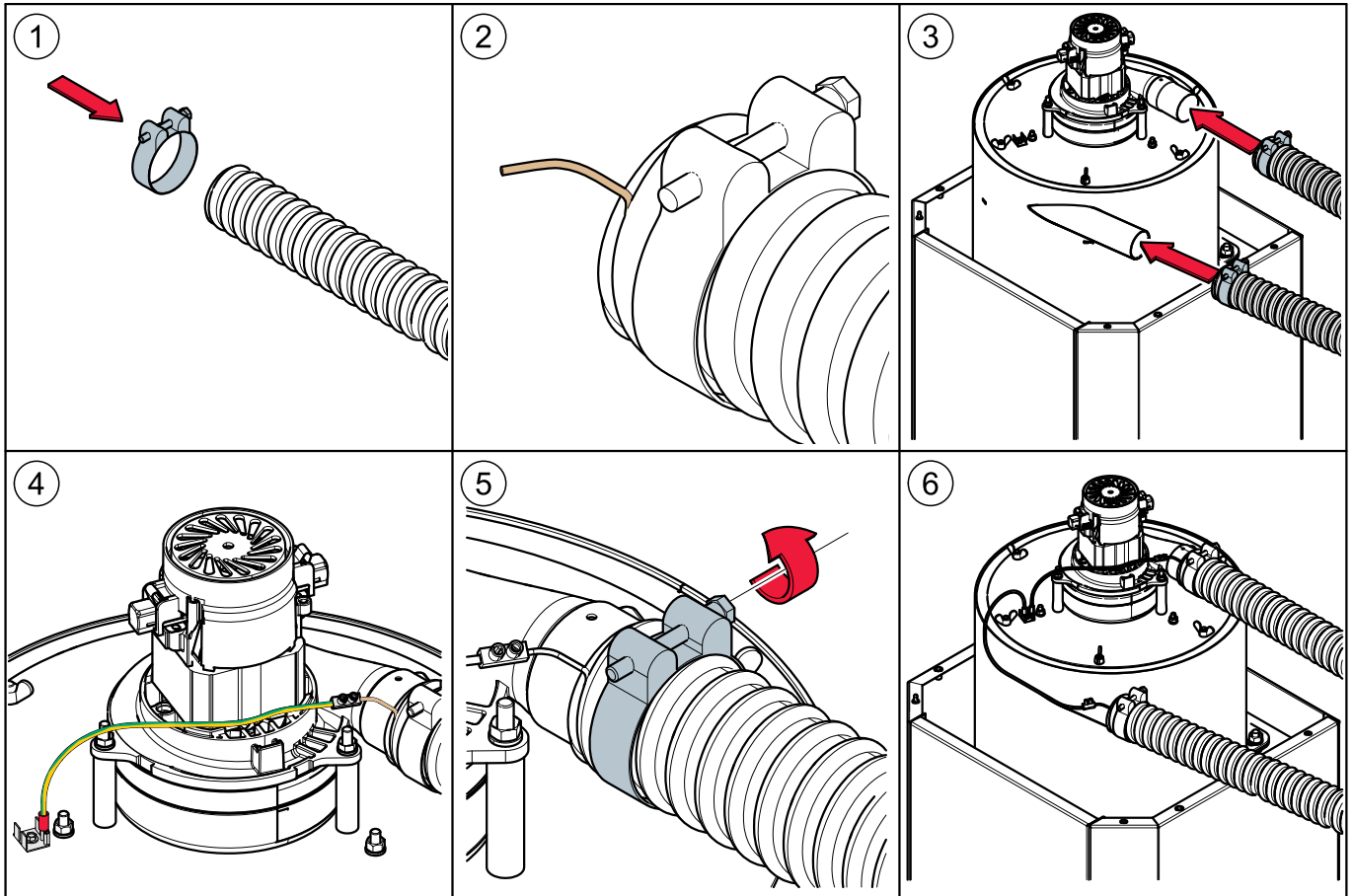
Use securing clips and carrying bowls.



\*Pay attention to the defined distances!



### Connection of the pellet and air hose to the suction turbine



## 6.3 Storage systems

There are two methods for storing pellets: in a storage room with an auger feed system (version A) or in a FlexILO fabric tank (version B). FlexILO fabric tanks can be located inside the central heating room, storage room or protected from wet and sun outside.

### NOTICE

#### Damage to property and loss of warranty

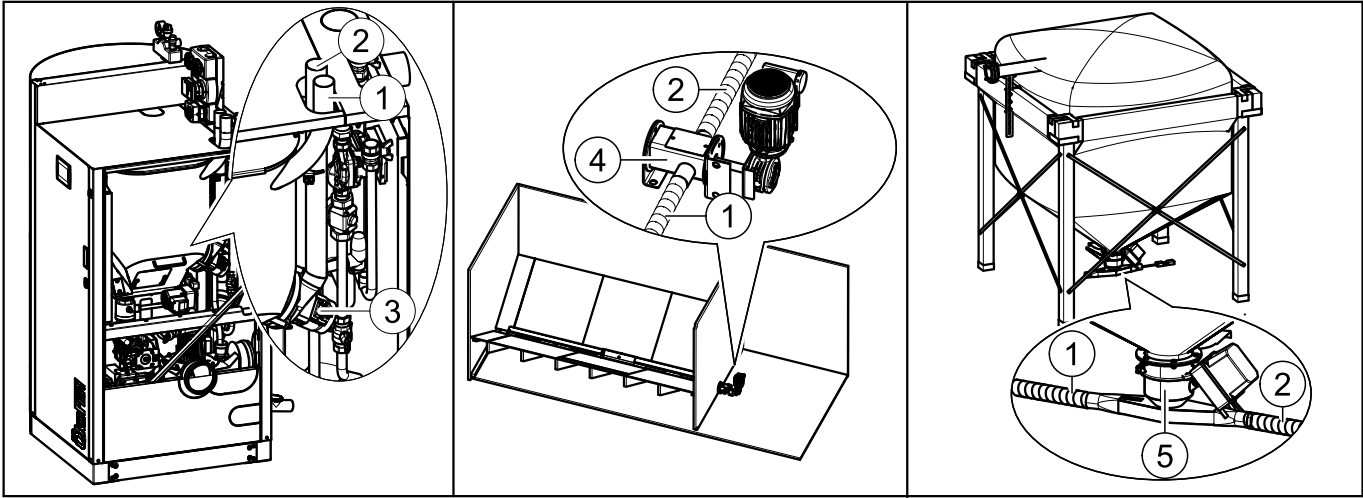
The use of an MESys boiler with a storage or conveyor system from another manufacturer is not permissible and will result in voiding your warranty along with undependable operation.



### 6.3.1 Flexilo fabric tank

The whole fabric tank system is included in the scope of supply. MESys offers various sizes and types. The fabric tank supplied may vary from the example shown below.

Please refer to the installation instructions supplied for the fabric tank. Note also the instructions on setting up and filling.



## NOTICE

### DAMAGE TO PROPERTY

Fans should not be used to ventilate the storage room or boiler room. The use of passive ventilation is required, or the use of a sophisticated system that balances outside and inside pressure in the boiler

# 7 Bringing the pellet boiler into the boiler room

This section describes the prerequisites as well as the working sequence required.

1. Transport
2. Notes on bringing the unit into the building
3. Casing parts
4. Dismantling the casing parts

## 7.1 Transport

We supply the pellet boiler on a pallet. The pellet boiler is ready to be connected. The control unit for the boiler controller and the operating device is integrated into the control panel.

If it is not possible to bring the boiler into the building at ground level, then you can remove the casing, the burner, the hopper and the boiler controller. This will reduce the weight of the unit and make it easier to carry.

### NOTICE

**Contamination and corrosion**

Make sure that the pellet boiler is located under a roof if it needs to be stored outside before it is transported/ brought into the building. It is also necessary to transport the boiler in a closed in truck or trailer. Boilers transported otherwise will lose their warranty.

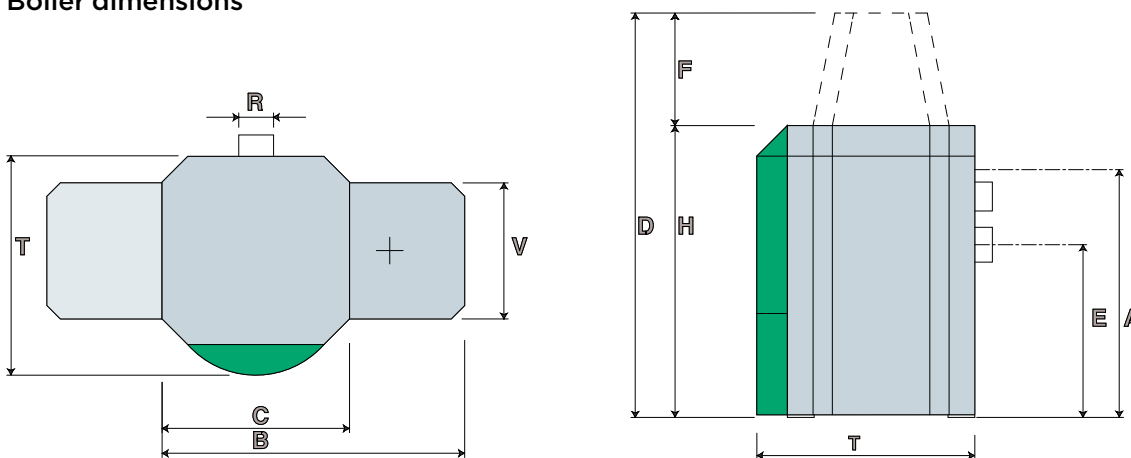
## 7.2 Notes on bringing the unit into the building

Before bringing the unit into the building, check the dimensions of all doors to ensure that the boiler has sufficient clearance and can be set up properly.

**Minimum door width - max. unit dimension**

PE, PES	20	27,5 inch
PE, PES	32	29,75 inch
PES	56	31,2 inch

**Boiler dimensions**



<b>Boiler size</b>		<b>PE(S) 12</b>	<b>PE(S) 15</b>	<b>PE(S) 20</b>	<b>PE(S) 25</b>	<b>PE(S) 32</b>	<b>PE(S) 36</b>	<b>PE(S) 48</b>	<b>PE(S) 56</b>
<b>B</b> - Overall width of pellet boiler	inch	44 1/2	44 1/2	44 1/2	46 3/4	46 3/4	51	51	51
<b>C</b> - Width of boiler casing	inch	27 1/2	27 1/2	27 1/2	29 3/4	29 3/4	34	34	34
<b>H</b> - Height of boiler casing	inch	43	43	43	51	51	61	61	61
<b>D</b> - Height of pellet suction system	inch	55	55	55	63	63	73	73	73
<b>F</b> - Height of suction filling unit	inch	12	12	12	12	12	12	12	12
<b>T</b> - Depth of boiler casing	inch	32	32	32	34 1/4	34 1/4	39	39	39
<b>V</b> - Depth of burner casing	inch	20	20	20	20	20	20	20	20
<b>E</b> - Flue gas tube connection height	inch	25 1/2	25 1/2	25 1/2	33 1/4	33 1/4	41	41	41
<b>A</b> - Height of supply/return	inch	35 3/4	35 3/4	35 3/4	43 3/4	43 3/4	52	52	52
<b>R</b> - Diameter of flue gas tube	inch	5 or 6	5 or 6	5 or 6	6	6	7	7	7

**Approximate boiler Weight**

Boiler size		PE(S) 12	PE(S) 15	PE(S) 20	PE(S) 25	PE(S) 32	PE(S) 36	PE(S) 48	PE(S) 56
Weight of boiler packaged on pallet with wooden frame	Lb	858	858	858	1003	1003	1430	1430	1430
Weight of boiler with casing, hopper and burner	Lb	533	542	551	696	705	1327	1336	1344
Weight of boiler without casing, hopper and burner	Lb	529	529	529	664	664	930	930	930

**Minimum clearances suggested for proper cleaning and maintenance**

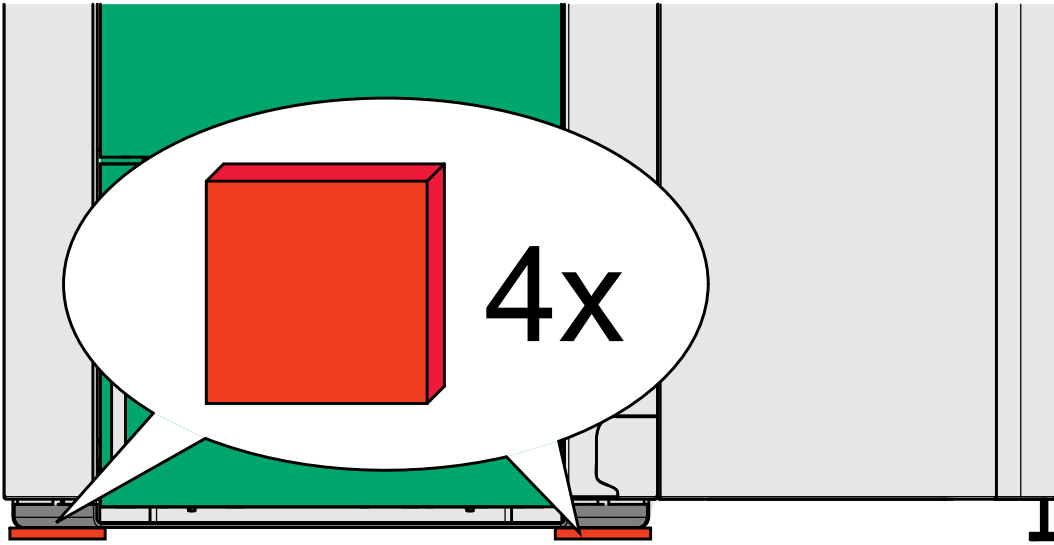
**Note:**

To install the heating system properly and ensure economical operation, you need to make sure that minimum clearance dimensions indicated below are observed when setting up the boiler. **In addition, make sure that all code requirements at the installation location are complied with relating to the minimum clearances.**

<b>a</b>	Minimum clearance to the edge of removable top cover of the boiler. For flue pipe clearance, refer to applicable codes.	inch	18
<b>b</b>	Min. clearance of side of boiler	inch	3
<b>c</b>	Min. clearance of front of boiler	inch	28
<b>d</b>	Min. clearance to housing - burner side.	inch	12
<b>e</b>	Min. ceiling height And the distance from ceiling to top of boiler must be enough to remove all covers.	inch	73

**Note:**  
Place the boiler according to the minimum clearances to the flue pipe connection point as defined in NFPA 31, or if NFPA is not recognized, then the code pertinent to the installation location. Make sure that you also comply with local legal regulations. For clearances required for floor protection, see following page.

### Placement of rubber plates



## NOTICE

### Loss of warranty!

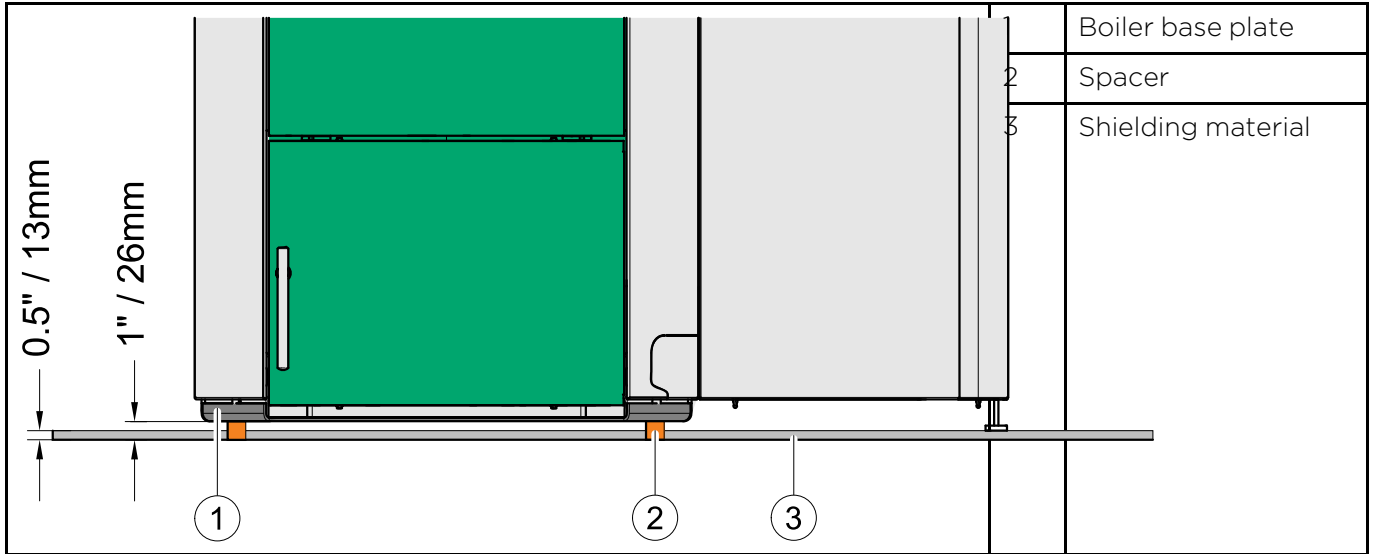
The boiler must be placed on the supplied rubber plates.

Failure to do this may allow corrosion and will void the warranty of the boiler vessel.

### 7.3 Flooring

The boiler room floor must be flat and level and must be able to support boiler gross weight. The floor must comply with the requirements of NFPA 31.

Generally the boiler should be placed on non-combustible floors. However, a shielding material can be placed underneath the boiler and the chimney connector in the case of a combustible floor like shown on the following drawing.



The spacer must be able to support the weight of the boiler and has to be non combustible. The shielding material must be equivalent to a 1/2in / 13mm micro board with a K-value of 0.49 (W/m K) (R-value of 1.02 Km2/W) or greater. For more information contact Maine Energy Systems.

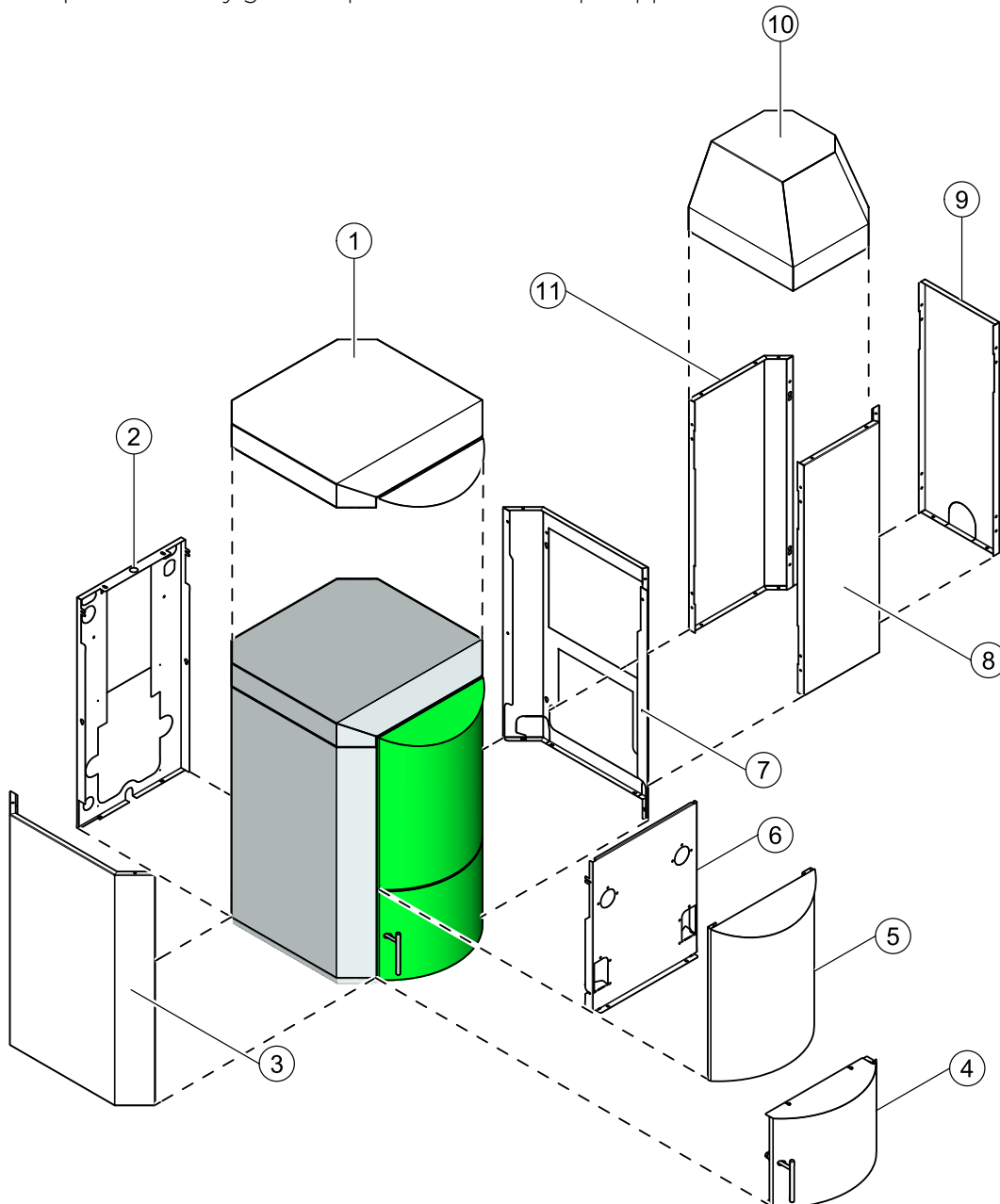
## DANGER

**Risk of fire:**  
The non-combustible flooring needs to extend out to the clearances shown on the chart below.

	<b>Minimum clearances of shielding material required for floor protection</b>		
	Min. clearance of the shielding material from the boiler back - Note also the local restrictions in your area (a)	inch	17
	Min. clearance of the shielding material from the boilers left side panel (b)	inch	8
	Min. clearance of the shielding material from the boilers front panel (c)	inch	27
Min. clearance of the shielding material from the boilers right side panel (d)	inch	12	

## 7.4 Casing parts

The boiler is protected by a casing on all sides. The casing parts prevent contact with hot, moving and live components. They give the pellet boilers a unique appearance.



1	Boiler casing cover	7	Boiler side panel with opening
2	Boiler rear panel	8	Burner side panel (same as 11)
3	Boiler side panel without opening	9	Burner lug without opening
4	Boiler door panel (semi-circle)	10	Burner cover suction system
5	Boiler front panel (semi-circle)	11	Burner side panel (same as 8)
6	Boiler front panel (straight)		

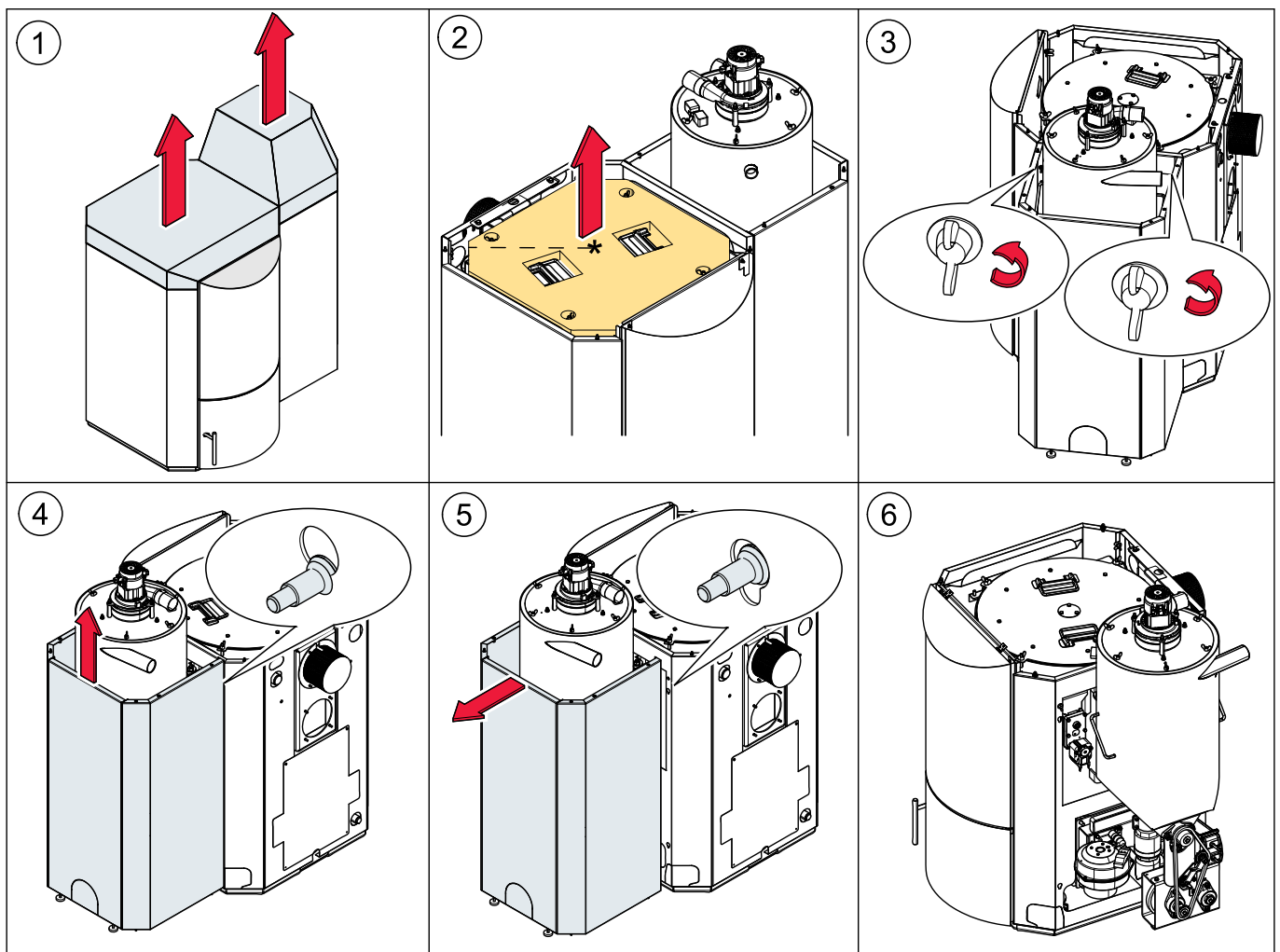
## 7.5 Removing the casing, the hopper and the burner

Dismantle the pellet boiler as far as necessary if site conditions require, so that the unit can be brought safely into the building.

The complete dismantling of all components described here is divided into the following sections:

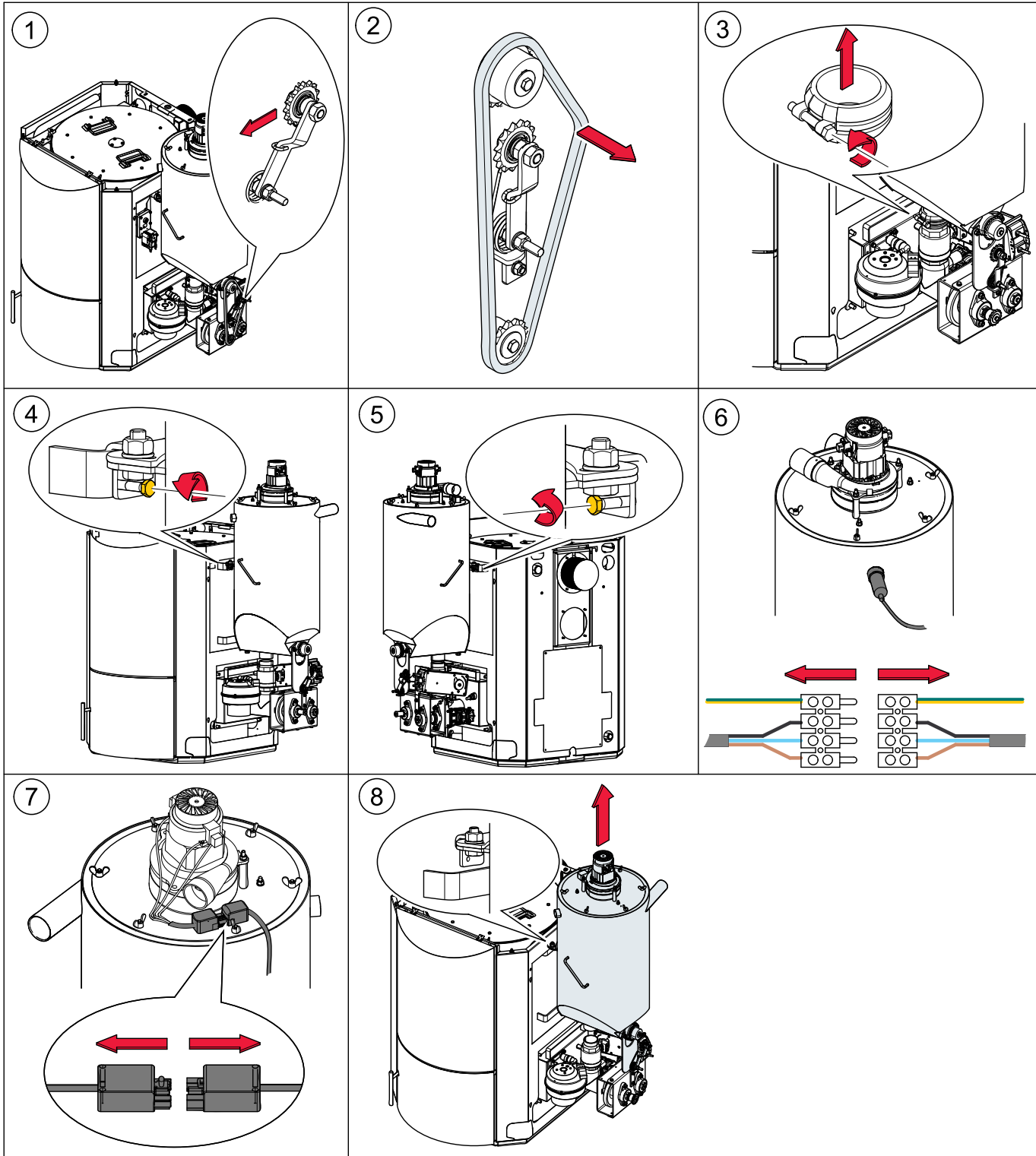
1. Dismantling the burner casing
2. Dismantling the hopper
3. Dismantling the burner
4. Dismantling the boiler door
5. Dismantling the boiler casing

### 7.5.1 Dismantling the burner casing

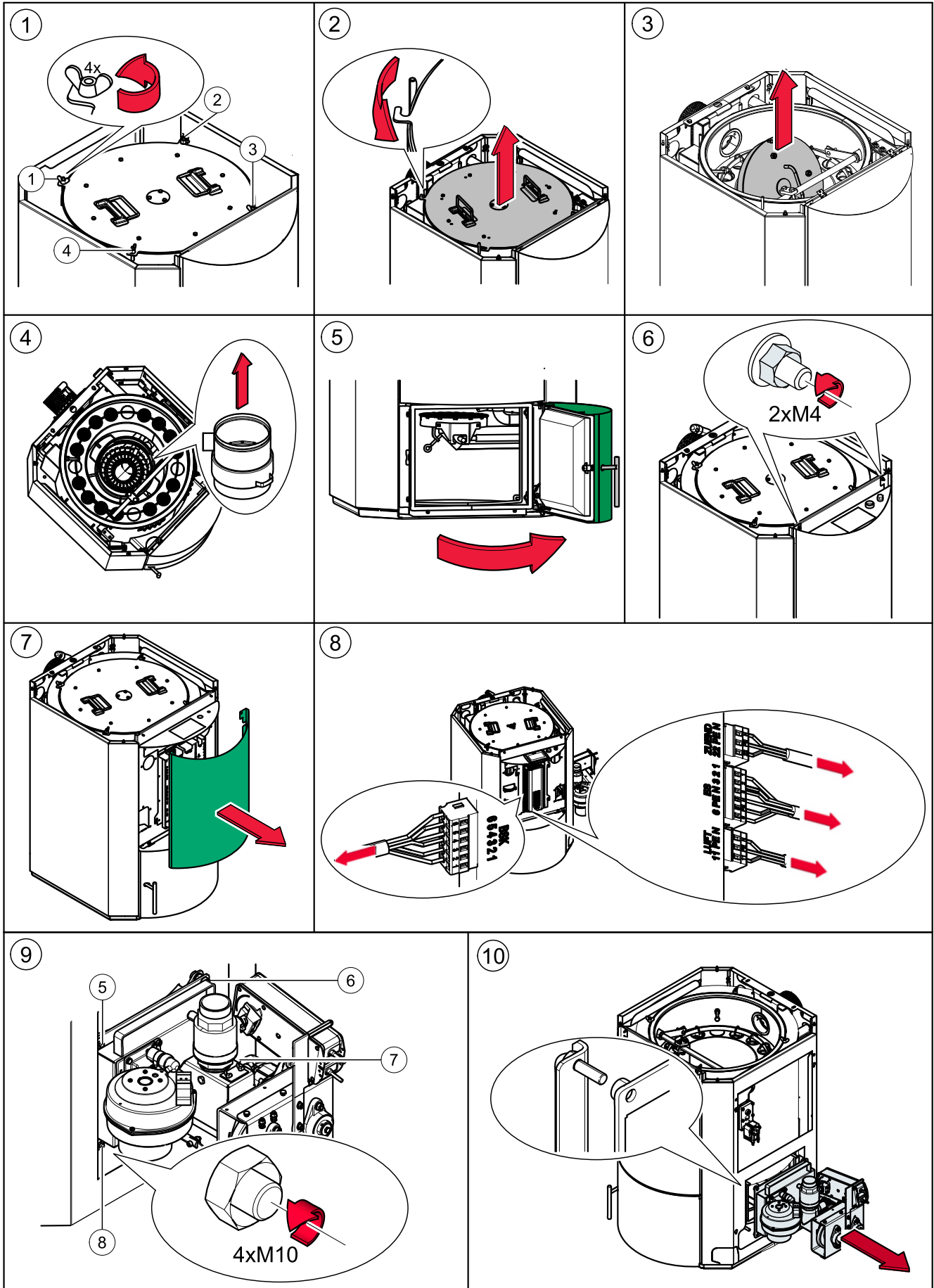




## 7.5.2 Dismantling the hopper



7.5.3 Dismantling the burner





## DANGER

### Risk of electric shock

Behind the boiler front panel is the energized control unit. Disconnect main power before removing the front panel.

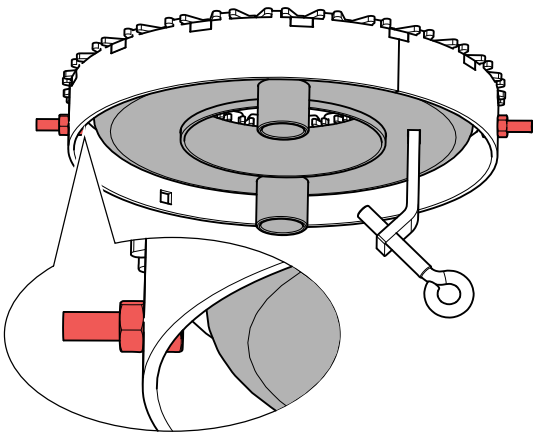
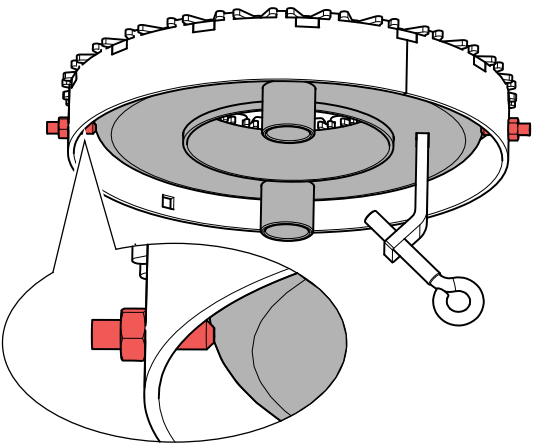
## NOTICE

### Damage of property

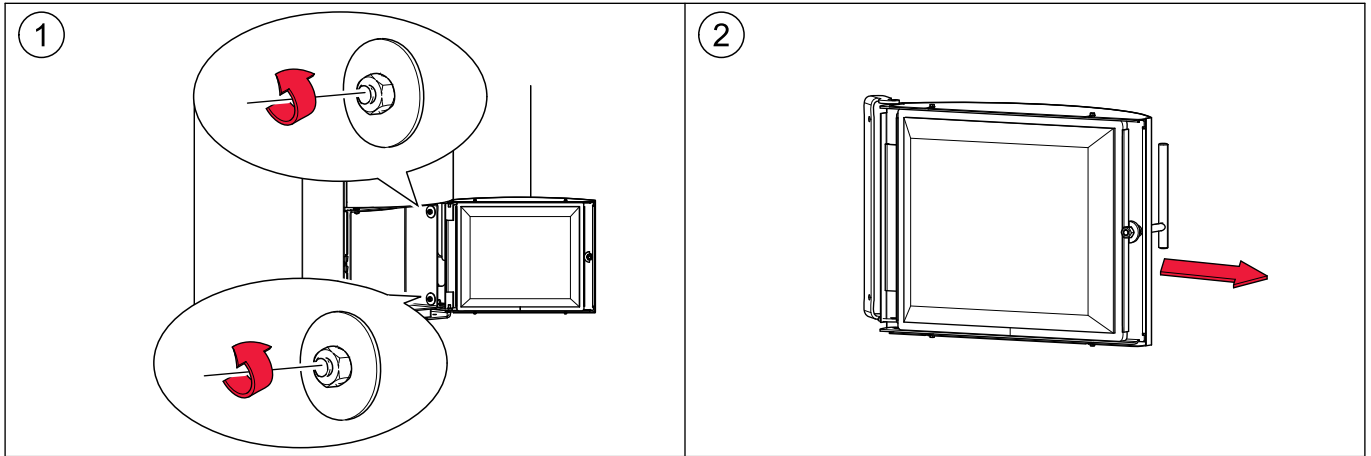
Remove/disconnect all of the electric cables that connect the burner assembly to the controller (at the controller end) before removing the burner.

### Multi segmented burner plate

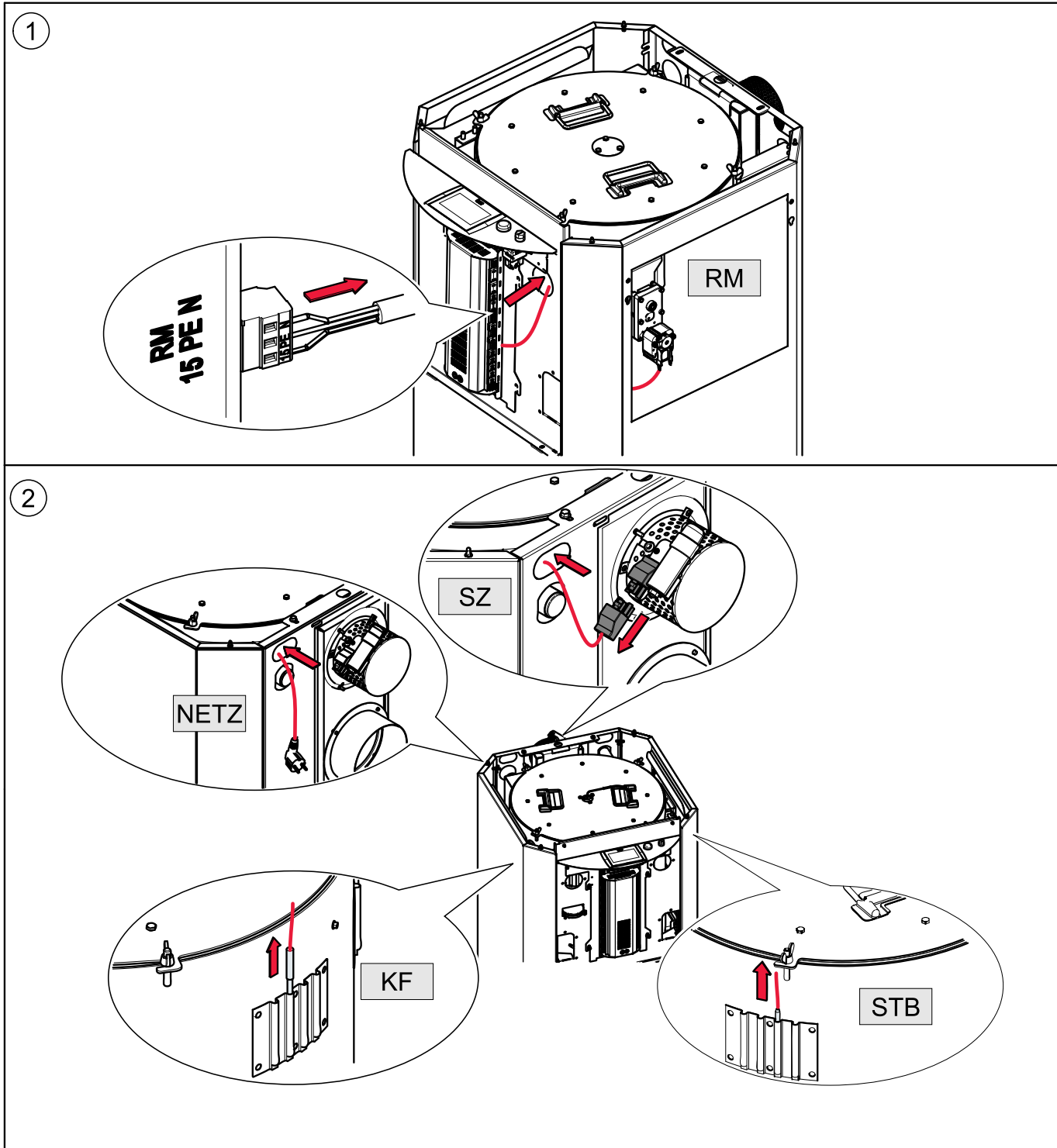
There are 2 mounting variations:

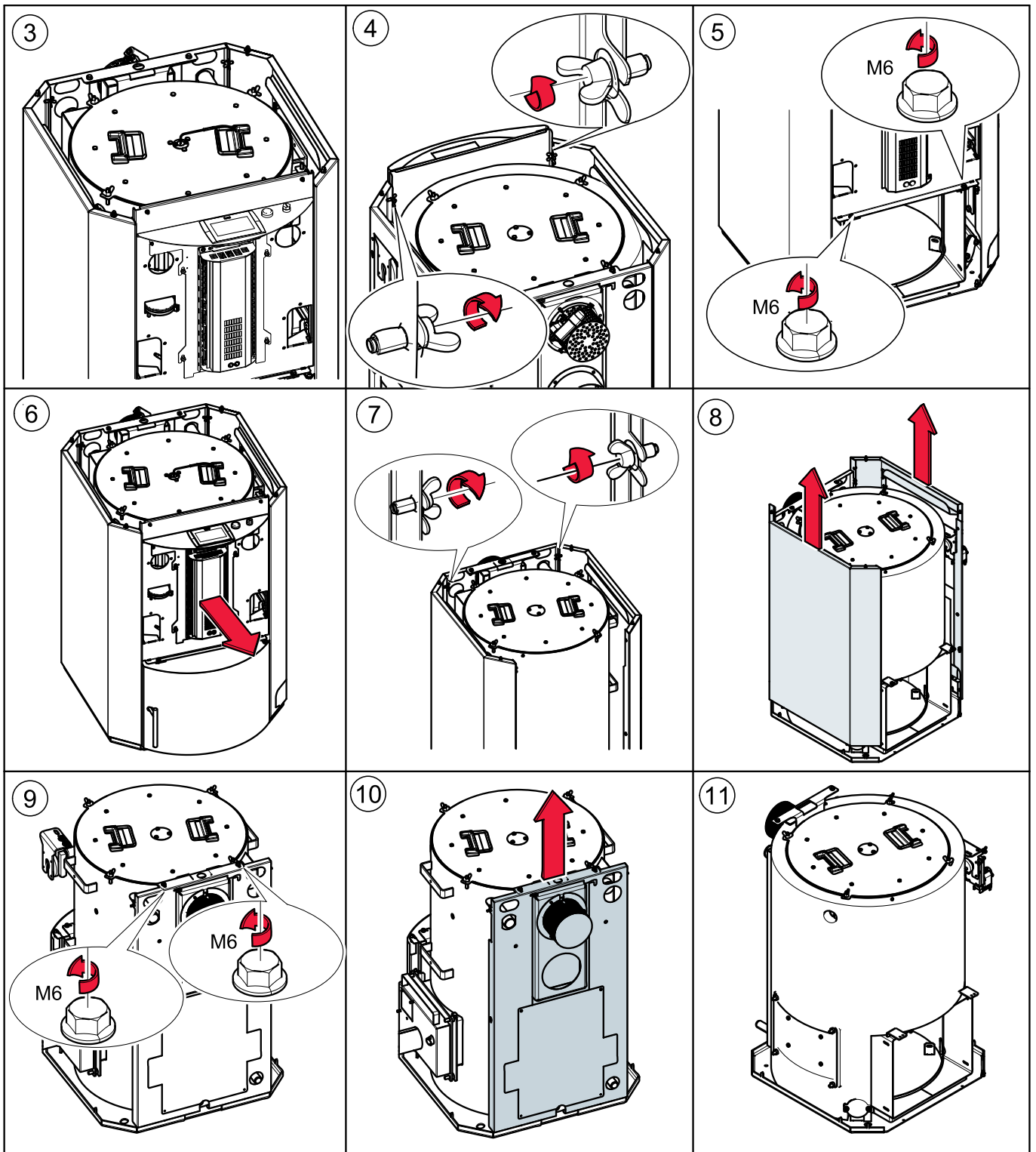
With burner plate cleaning system: Bolts loosened	Without Burner plate cleaning system: Bolts tightened
	
<h2 style="text-align: center;">NOTICE</h2> <p><b>Damage to property</b> The <b>safety screws</b> for rotating the Multi segmented burner plate must be loosened/removed when exchanging the Multi segmented burner plate.</p>	<h2 style="text-align: center;">NOTICE</h2> <p><b>Damage to property</b> The <b>safety screws</b> for rotating the Multi segmented burner plate may not be loosened/removed when mounting.</p>

### 7.5.4 Dismantling the boiler door



## 7.5.5 Dismantling the boiler casing





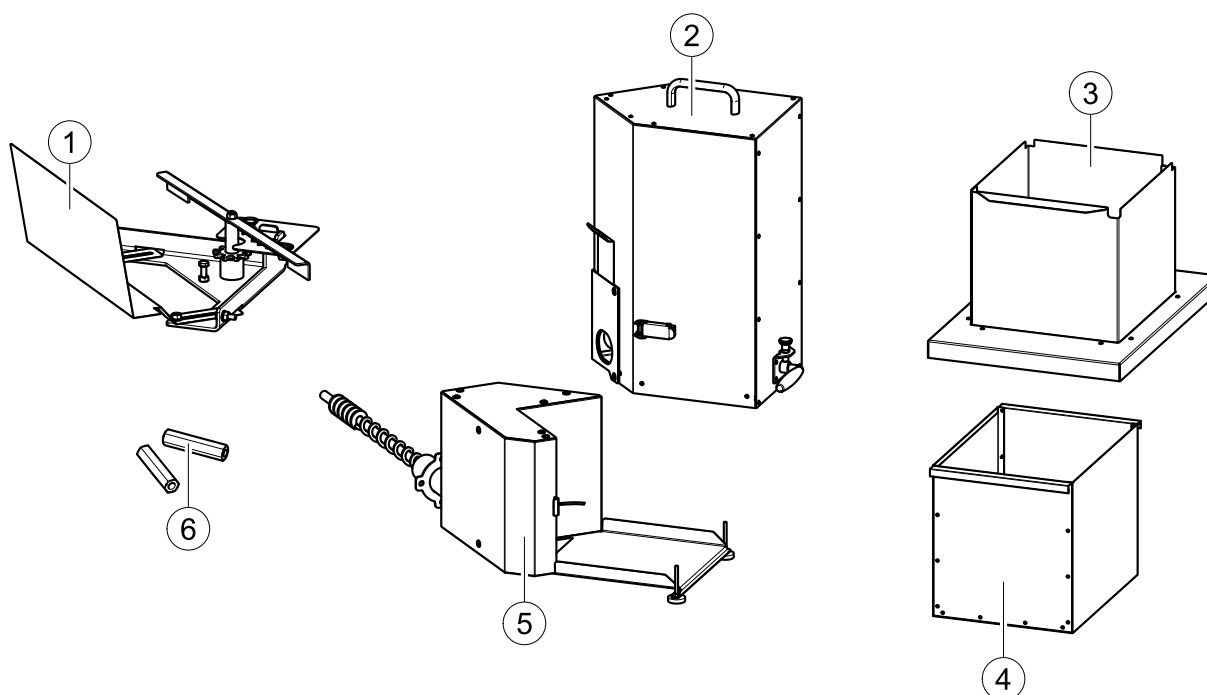
## 8 External de-ashing / automatic ash compaction system

We offer an automatic external de-ashing system.

1. Description of de-ashing system
2. How the de-ashing system works
3. Installing the de-ashing system
4. Emptying the de-ashing system

### 8.1 Description of de-ashing system

The de-ashing system compresses the ash and conveys it from the ash chamber into the ash box. The ash box enables the ash to be easily disposed off without creating dust.



1	Turnstile with agitator, door plate and mounting bolts	5	Ash container
2	Ash box with single-hand lever	6	Sub-assembly with extractor auger and cable
3	Mounting frame	7	Extended nuts to secure the sub-assembly
4	Cable duct with mounting bolts	8	1 pack of bio-bags

#### Note:

All components for the de-ashing system are packaged in a separate box which is shipped together with the boiler. Open the box and check that all parts are available before starting work.

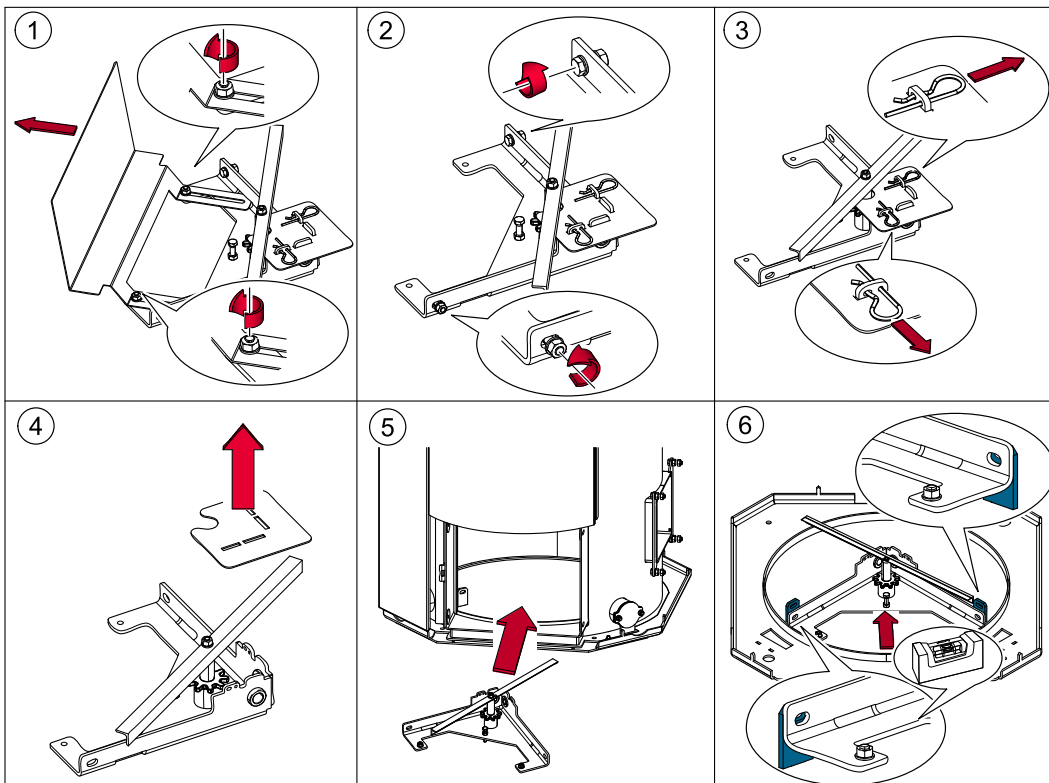
## 8.2 Installing the de-ashing system

We recommend installing the de-ashing system after the boiler has been brought in, but before the boiler casing is fitted. The de-ashing system has to be installed before the burner casing is assembled.

Installation of the de-ashing system is divided into the following steps:

1. Bringing in and installing the de-ashing system on the base plate
2. Installing the de-ashing auger, fitting the sub-assembly and mounting the door plate
3. Installing the burner side casing with cut-out and electrical connection
4. Assembling the pellet boiler and activating the ash box

### 8.2.1 Bringing in and installing de-ashing system on the base plate

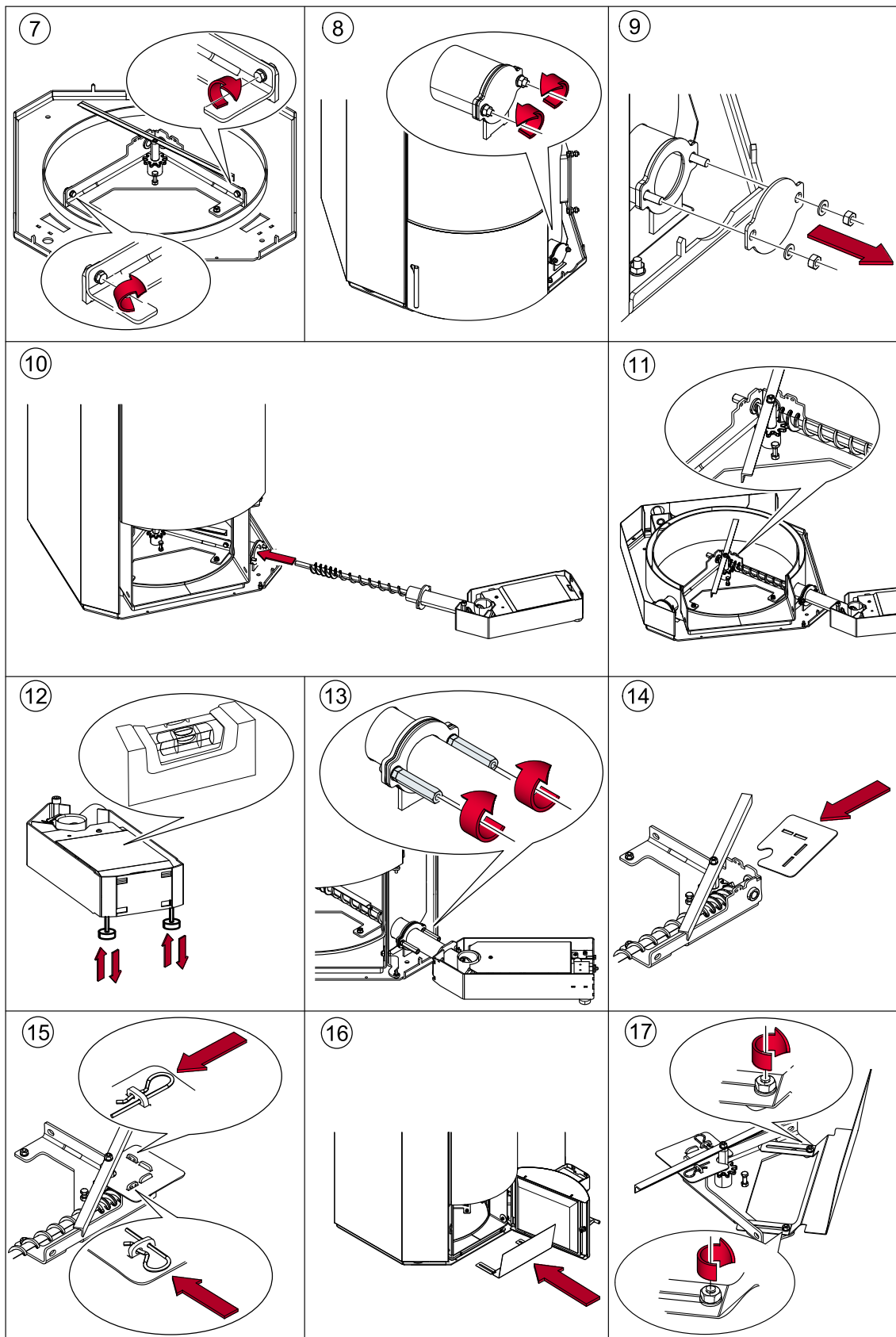


**Note:**

5: Replace the screw with the base in a horizontal position.

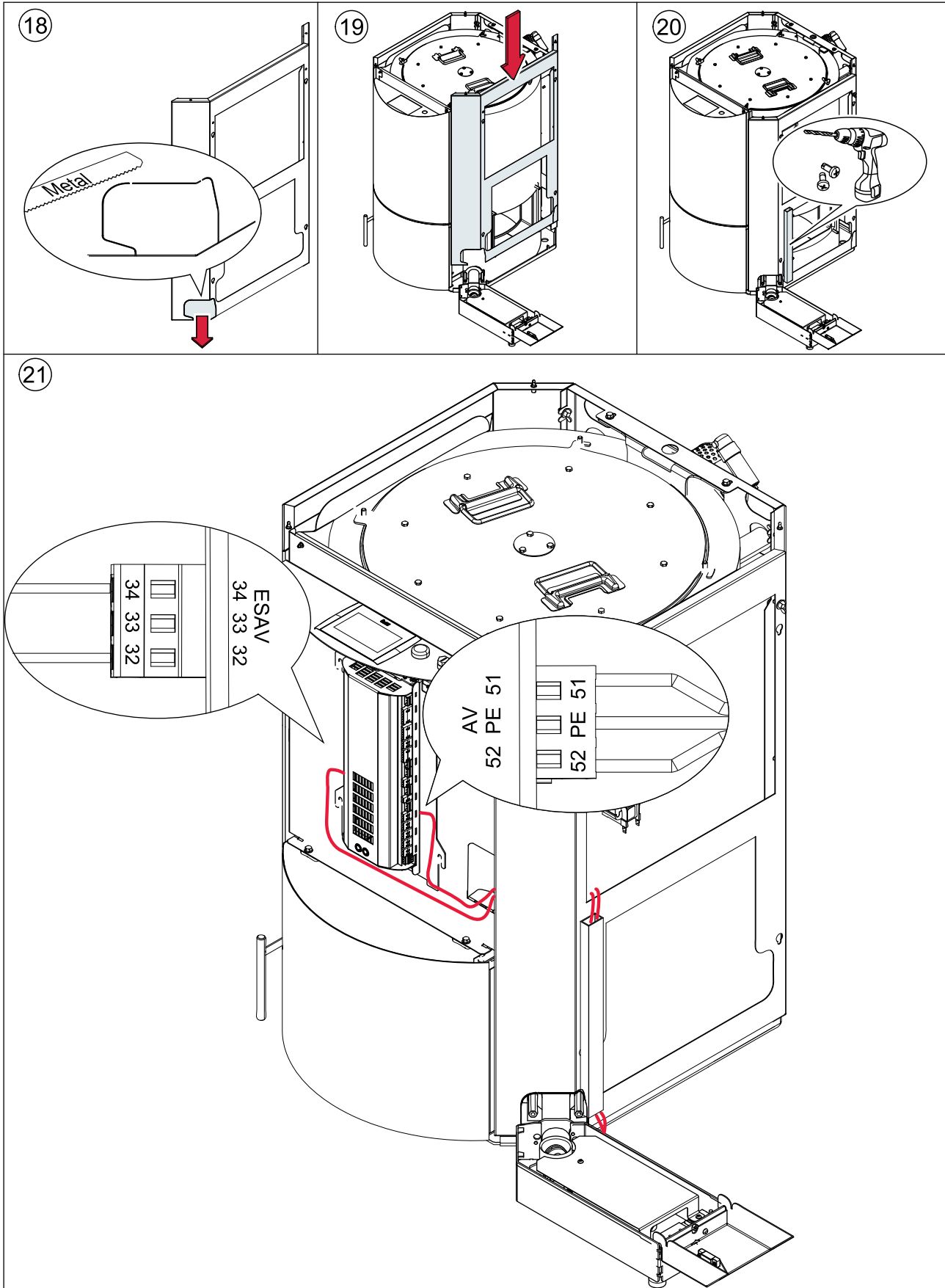


## 8.2.2 Installing the ash auger, fitting the sub-assembly and mounting the door plate

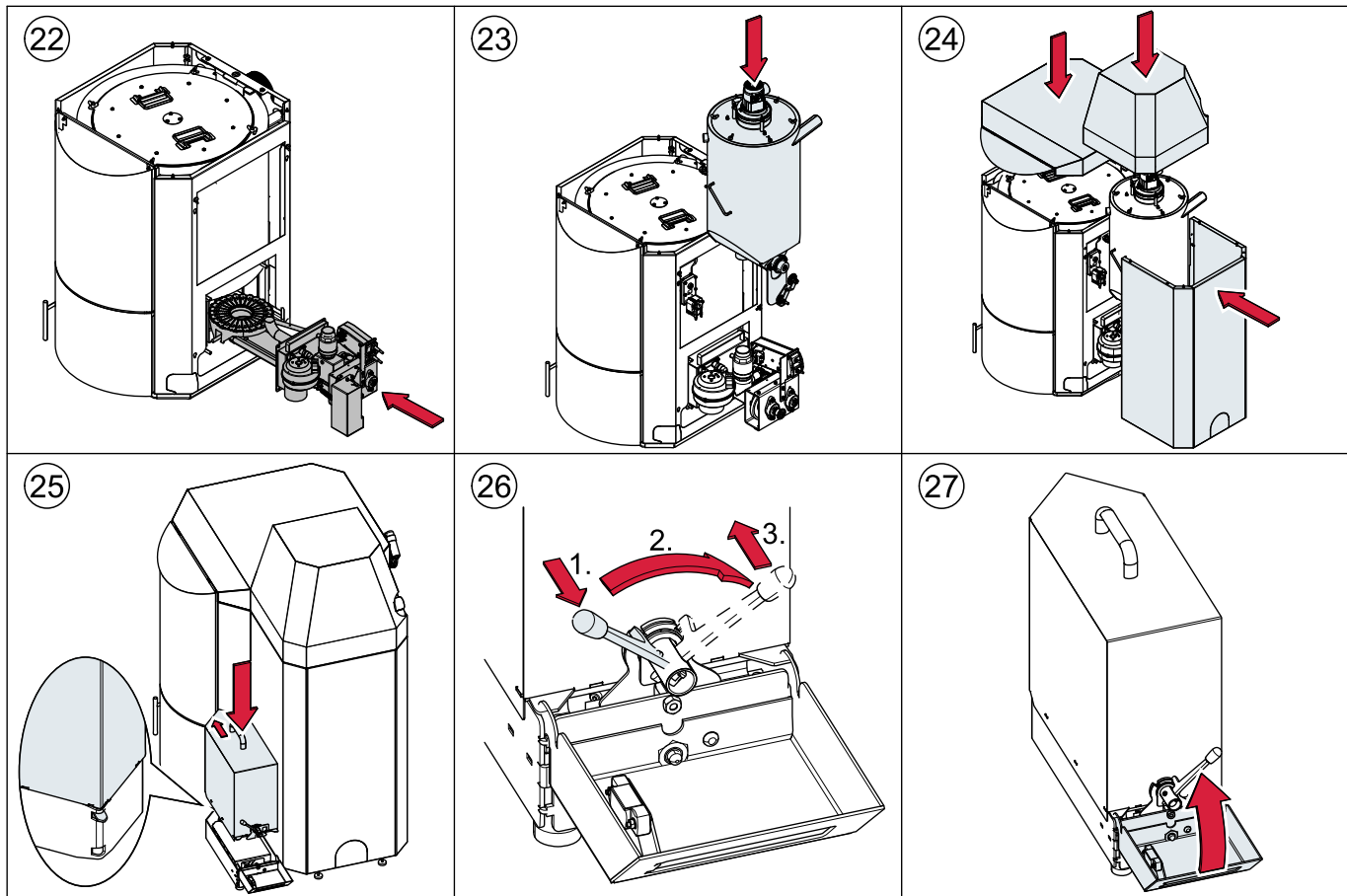
**Note:**

Do not tighten the screws firmly (picture 7). Tighten the screws firmly only after working step in picture 11. The ash auger engage with the gear must be so that the agitator moves freely.

### 8.2.3 Installing the burner side casing with cut-out and electrical connection



### 8.2.4 Assembling the pellet boiler and activating the ash box



**Note:**  
Refer to the section on bringing the pellet boiler into the boiler room for detailed instructions on assembling the hopper, burner and casing components.

#### Activating the ash box

1. Switch the boiler ON
2. In the menu Pellematic, after entering the code, you can activate the function **Ashbox**.
3. Set up the number from **Off** to **On**
4. Ash box is now active

# 9 Connecting up the hydronics

The hydronic connections are located on the rear side of the boiler.

## DANGER

**Risk of explosion**  
 The boiler can only be connected and operated after the hydronic system is complete, with all safeties and purged of air.

## NOTICE

**Water damage, damage to pellet boiler**  
 The hydronic system can only be installed by an experienced heating professional. Check the entire installation for leaks before firing the boiler.

**1. Return water temperature control**

The device to increase the return temperature is already integrated into the boiler. You do not need to make any adjustments to this.

**2. Hydronic schematics**

If you have questions about piping a heating system, refer to the our hydronic schematics when connecting the boiler.

Our hydronic schematics are available from your sales partner or from our website.

**3. Connections**

The connections between the pellet boiler and the hydronic system must be disconnectable.

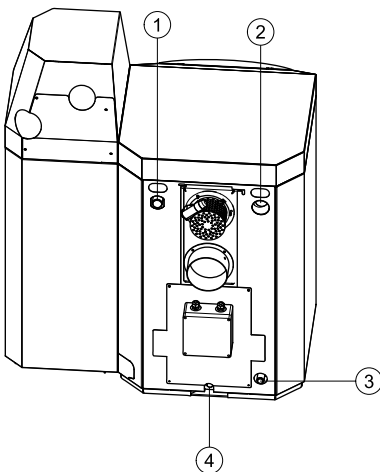
**4. Drain connection**

When you install the pellet boiler, remove the plug from the drain connection (4) and fit a 1/2" diameter shut-off valve.

**5. Thermometer connection**

Installing a thermometer at location (3) (submersion sleeve 3.94 in long) enables you to measure the temperature of the return water after the return water temperature control.

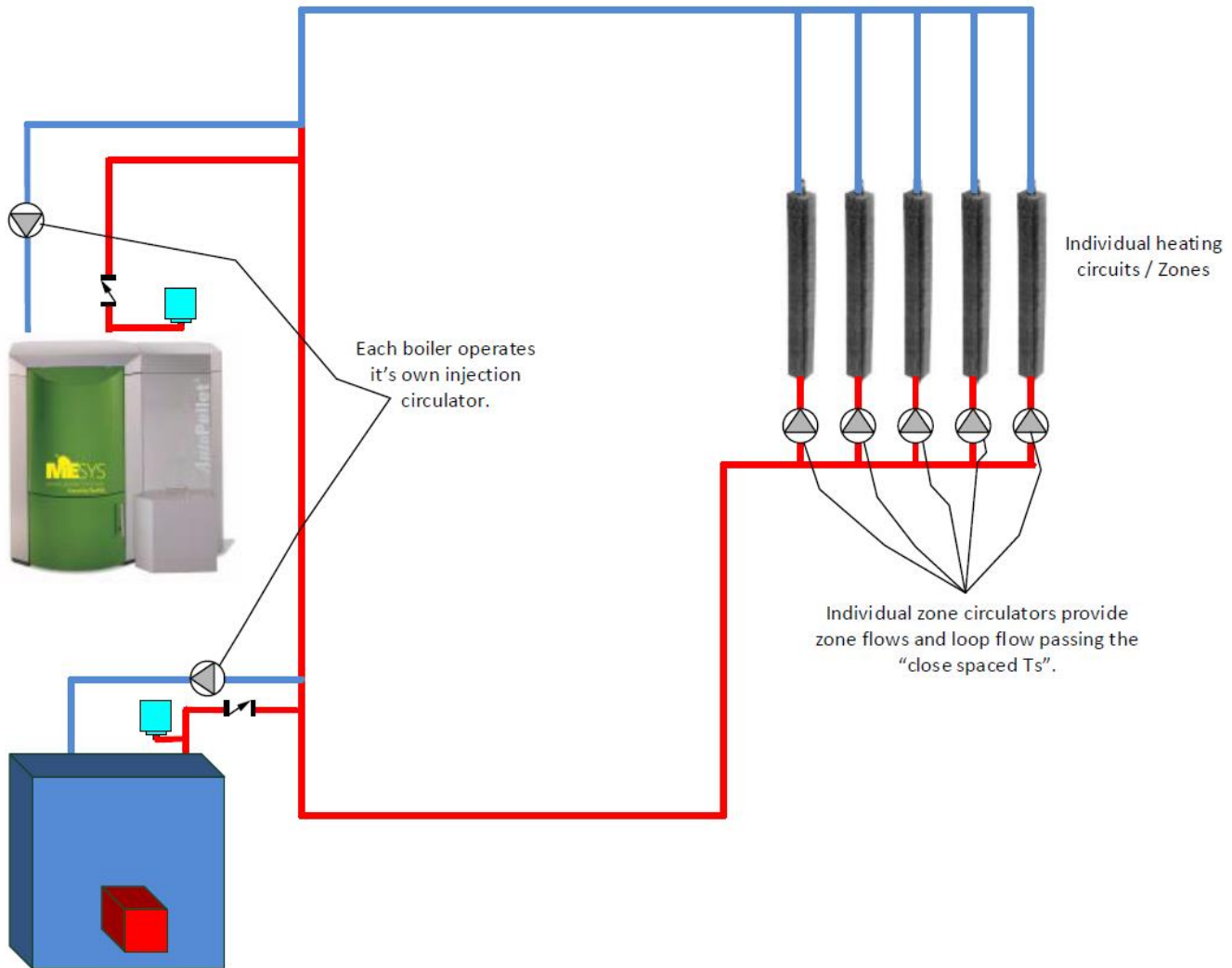
Whether this is installed or not, after setting up the pellet boiler you need to remove the cap and fit a 1/2" diameter closure plug at location (3).



1	Flow out	3	Thermometer connection
2	Flow return	4	Drain connection

## 9.1 Hydronic connecting diagrams

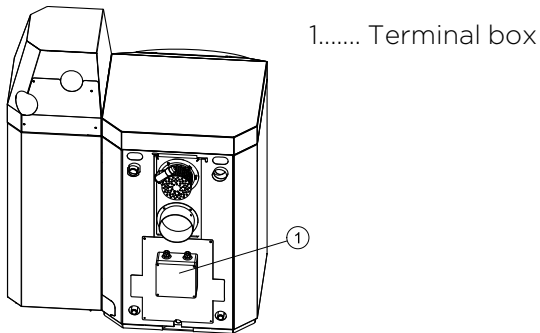
**AutoPellet and existing gas or oil fired boiler**, modified "primary - secondary" allows heat to come from either source without external changes.



# 10 Connecting to the power supply

## 10.1 Terminal box

The terminal box serves as the connection point for the power supply, low water cut off, circulator pump, cold start contacts, bus connection, power vent, and outdoor sensor if used. There is also a low power 220 volt connection point.



### 10.1.1 Wiring diagram - terminal box

The wiring diagrams for the terminal box provide detailed technical information for professionals and are packed within the terminal box along with other helpful schematics for interconnecting the boiler with circulator controls.



## DANGER

### Risk of electric shock

Only an authorised installer may connect the pellet boiler to the power supply.  
Always disconnect / de-energize the power supply before working on the boiler.

### General information for the electrician

- USA and Canada 208 to 240 VAC, single phase, 60 Hz, 15 amp dedicated circuit. To operate the boiler during prolonged power failures, the heating system, including controls and circulators, must be connected to a generator which produces clean, true 60 cycle power. Minimum suggested generator size, 2500W.
- **Lightening protection:** As there is no possible complete protection against lightening, we suggest installing a voltage spike suppression system for the building where the boiler is located or in the same panel as the boiler is powered from.
- **Electrical connection:**  
USA and Canada 208 to 240 VAC, single phase, 60 Hz, 15 amp dedicated circuit.

Wiring Plan	
Terminal #	Specification of Terminal #
1	Hot Wire L1 - Power Supply 220VAC
2	Hot Wire L2 - Power Supply 220VAC
3	Neutral Wire
PE	Ground here AND on Stud Welded to Terminal box
4	Hot Wire - Boiler Contact / Cold Start Contact
5	Hot Wire - Boiler Contact / Cold Start Contact
6	Hot Wire - Domestic Hot Water Pump
7	Neutral Wire - Domestic Hot Water Pump
PE	Ground Wire - Domestic Hot Water Pump
8	Hot Wire - Boiler Controlled Pump
9	Neutral Wire - Boiler Controlled Pump
PE	Ground Wire Boiler Controlled Pump
10	Hot Wire / Power Supply Out - Low Water Cutoff
11	Hot Wire / Power Return - Low Water Cutoff
12	Neutral - Low Water Cutoff
PE	Ground Wire - Low Water Cutoff
13	Hot Wire L1 - Convenience Power Output 120 to Neutral - (240 to Terminal 14)
14	Hot Wire L2 - Convenience Power Output 120 to Neutral - (240 to Terminal 13)
PE	Ground Wire - Convenience Power Output
15	Hot Wire - Power Vent Safety Circuit
16	Hot Wire - Power Vent Safety Circuit
PE	Ground Wire - Power Vent Safety Circuit
17	Hot Wire - Power Vent Motor Supply 120 VAC
18	Neutral Wire - Power Vent Motor Supply 120 VAC
PE	Ground Wire - Power Vent Motor Supply 120 VAC
19	Hot Wire - Pellet Auger Delivery Motor Temperature Safety Loop
20	Hot Wire - Pellet Auger Delivery Motor Temperature Safety Loop
21	Hot Wire - Pellet Auger Delivery Motor Power Supply L1
PE	Ground Wire - Pellet Auger Delivery Motor
22	Hot Wire - Pellet Auger Delivery Motor Power Supply L2
23	Hot Wire (24VDC) - Pellet Level Detection System
24	Hot Wire (24VDC) - Pellet Level Detection System
25	Hot Wire (24VDC) - Pellet Level Detection System
26	Hot Wire (24VDC) - Outdoor Sensor
27	Hot Wire (24VDC) - Outdoor Sensor
28	R1 - Cascade Header Sensor or Accum Upper Sensor
29	R1 - Cascade Header Sensor or Accum Upper Sensor
30	R2 - Accum Middle Sensor ONLY with R1 as Upper Sensor
31	R2 - Accum Middle Sensor ONLY with R1 as Upper Sensor
24V.	24V
Gnd.	Gnd.
A	A
B	B
Shield	Shield - Connect one end ONLY

## 10.2 Plugs on the boiler control unit

The designation of the plugs must correspond with the labeling of plug-in positions.

Designation	Number	Voltage	Name of the sensor, motor or pump
X1A	3 2 GND 1	24 Volt	Operating display
X1B	3 2 GND 1	24 Volt	Heating controller
X2	5 4	24 Volt	Power supply for 24V BUS-connections
R1	46 45	24 Volt	Heating circuit sensor, AC sensor or room sensor
R2	44 43	24 Volt	DHW sensor or AC sensor
AF	42 41	24 Volt	Not used
KF	8 9	24 Volt	Boiler sensor
UP	2 3 4	24 Volt	Negative draft measuring
AE2	5 6 7	24 Volt	Not used
AK	10 8	24 Volt	Disabling contact for existing boilers, optional stirling engine
FRT	12 13	24 Volt	Combustion chamber sensor
RGF	14 15	24 Volt	Not used
PWM SZ	16 17	24 Volt	PWM for a speed controlled A-Class Pump
Analog IN	18 19	24 Volt	external malfunction
BR1	7 8	24 Volt	Burner contact for extern controller (optional)
PWM UW	11 12	24 Volt	PWM for speed controlled high-efficiency pump
ESAV	32 33 34	24 Volt	End switch ash box
DE 1	37 36 35	24 Volt	Signaling Switch for position of the Ball lock
DE 2	40 39 38	24 Volt	Not used
KAPZW	26 25 24	24 Volt	Capacitive sensor - hopper
KAPRA	5 4 3	24 Volt	Capacitive sensor - burner
BSK	6 5 4 3 2 1	24 Volt	Flame return gate
X21	PE L N	230 Volt	Power supply
VAK	56 PE 55	230 Volt	Vacuum turbine
ZUEND	N PE 22	230 Volt	Ignition
AV	52 PE 51	230 Volt	De-ashing motor
RES 2	54 PE 53	230 Volt	Pump Optimize Stratification
MA	48 PE 47	230 Volt	not used
RM	15 PE N	230 Volt	Magnetic valve and motor cleaning device
SM	19 20	230 Volt	Relay fault signal
SZ	17 PE N	230 Volt	Flue gas fan
UW	13 PE N	230 Volt	not used
STB	17 PE 19	230 Volt	Safety temperature sensor
NOT	41 43	230 Volt	Emergency stop heating
RA	N PE 14 15 16	230 Volt	Fuel transport system
RES1	50 PE 49	230 Volt	Motor hopper



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ZW	N PE 26 25 24	230 Volt	Not used
ES	1 2 3 N PE 6	230 Volt	Burner motor
LUFT	N PE 11	230 Volt	not used

## 10.3 Cable routing

Reroute cables after dismantling the casing or other system components.



### DANGER

#### Risk of electric shock

Switch off the system before performing work on the boiler.

Note the following points to ensure the cables are routed securely:

Cables must not be routed:

- over moving parts
- over hot parts
- over sharp edges

Cables must be:

- routed in the cable ducts provided
- through cable leadthroughs
- tied together
- secured with cable ties at the points provided
- Power cables must be routed in the right-hand duct and sensor cables must be routed in the left-hand duct.



### DANGER

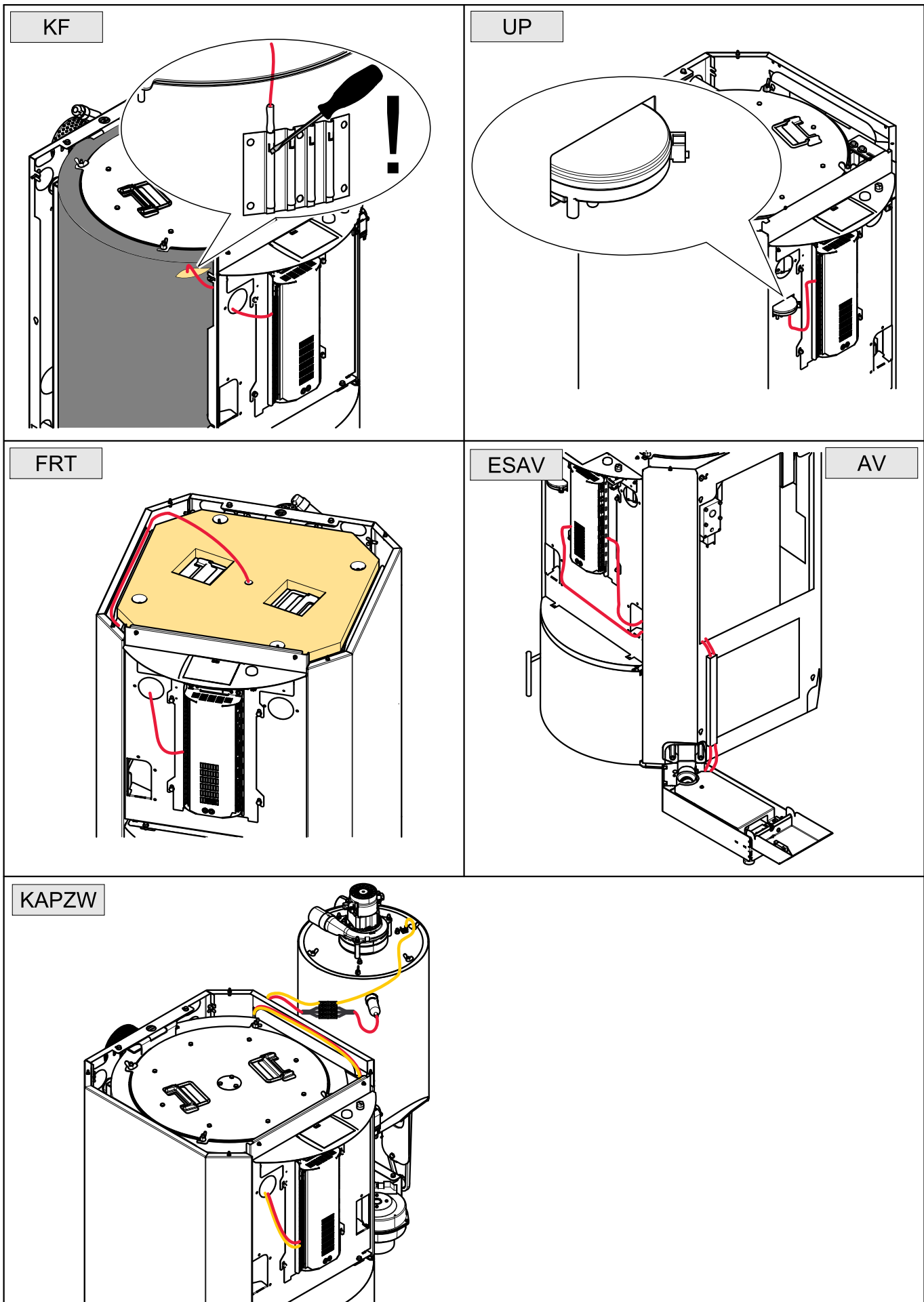
#### Risk of electric shock

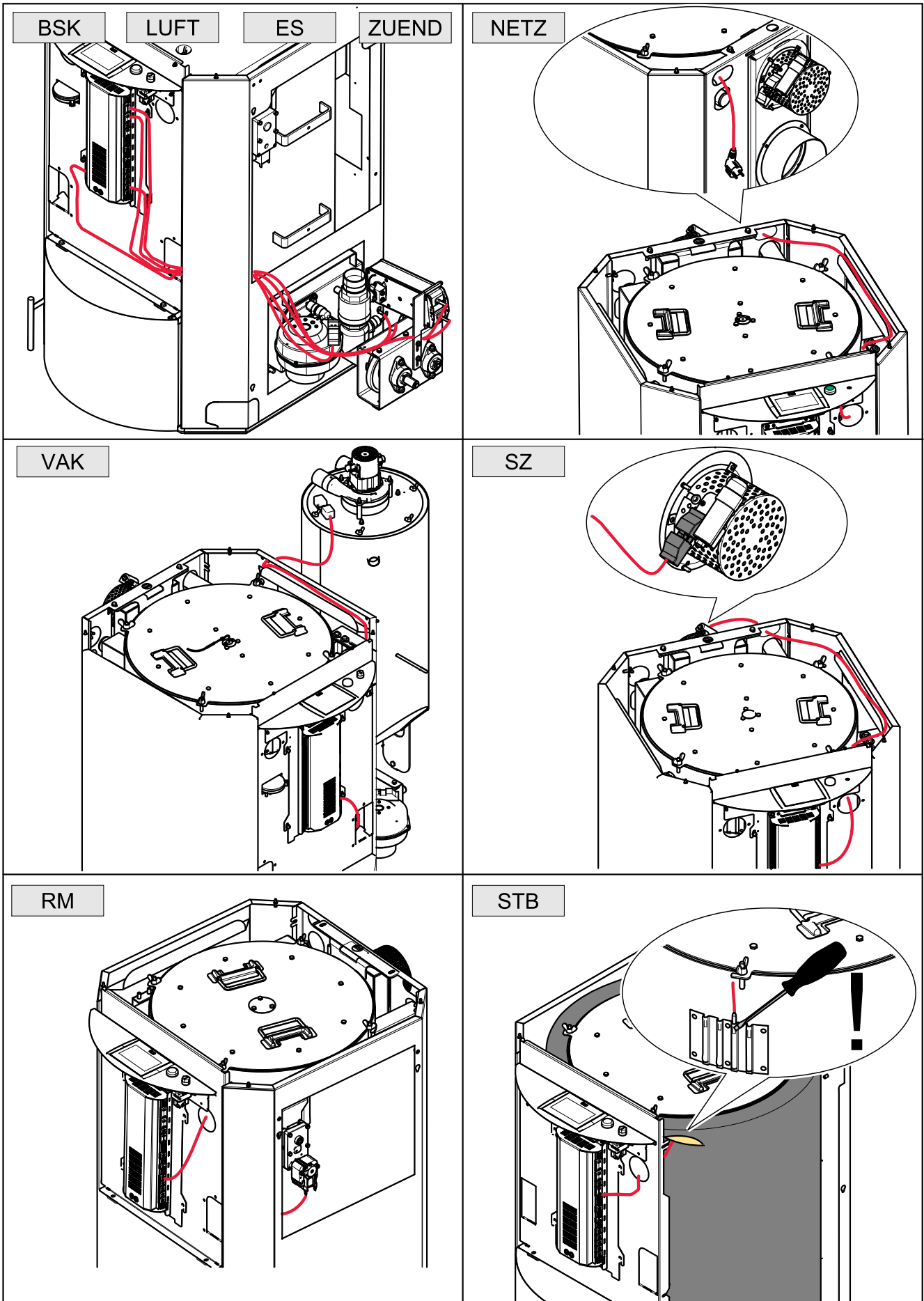
Check cables for damage..  
Replace any cables that are damaged.

### NOTICE

#### Damage to the boiler controller

Before fitting the casing components, make sure that the cable plug connector codes match the socket codes.





## 10.4 Wiring diagrams

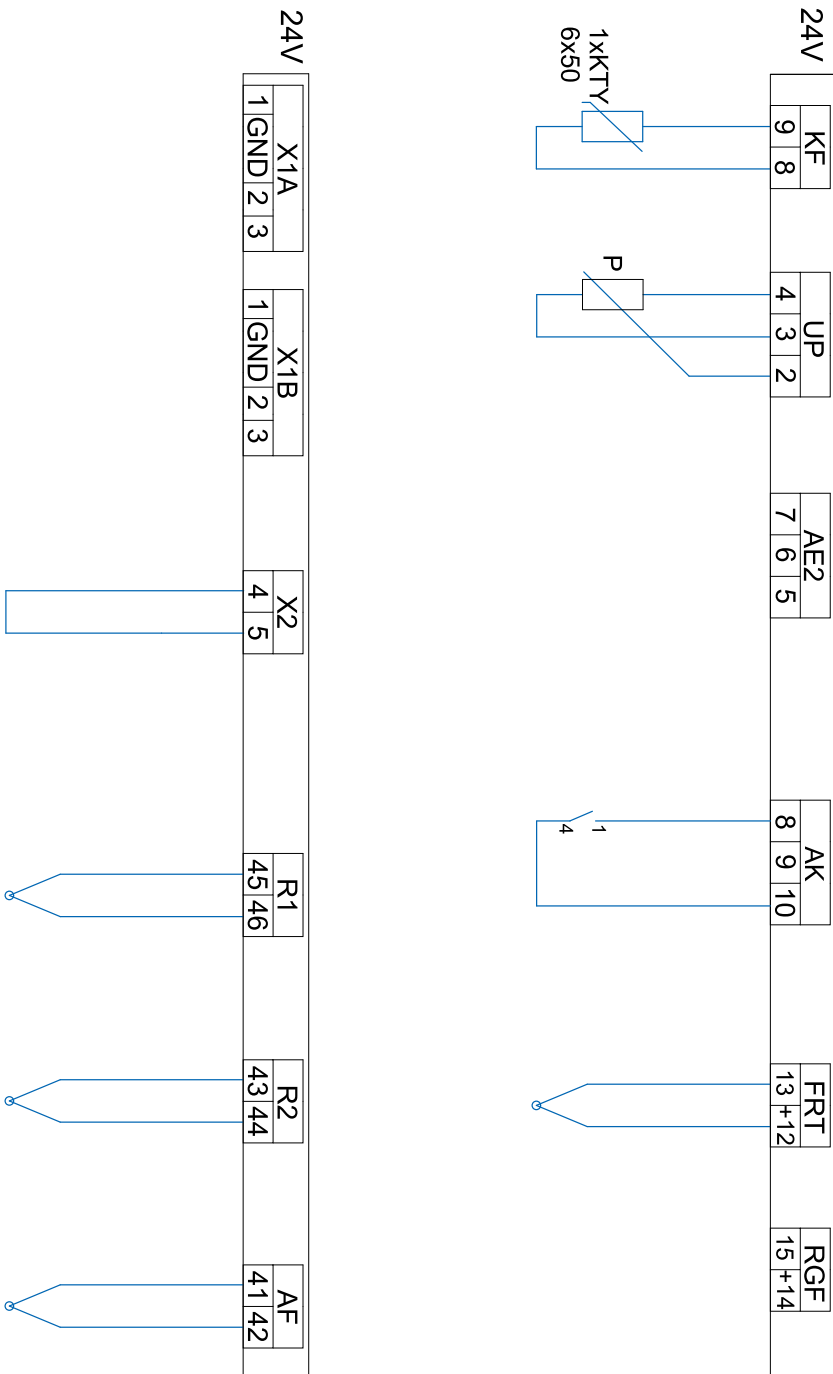
The wiring diagrams for the boiler control unit provide detailed technical information for technicians.



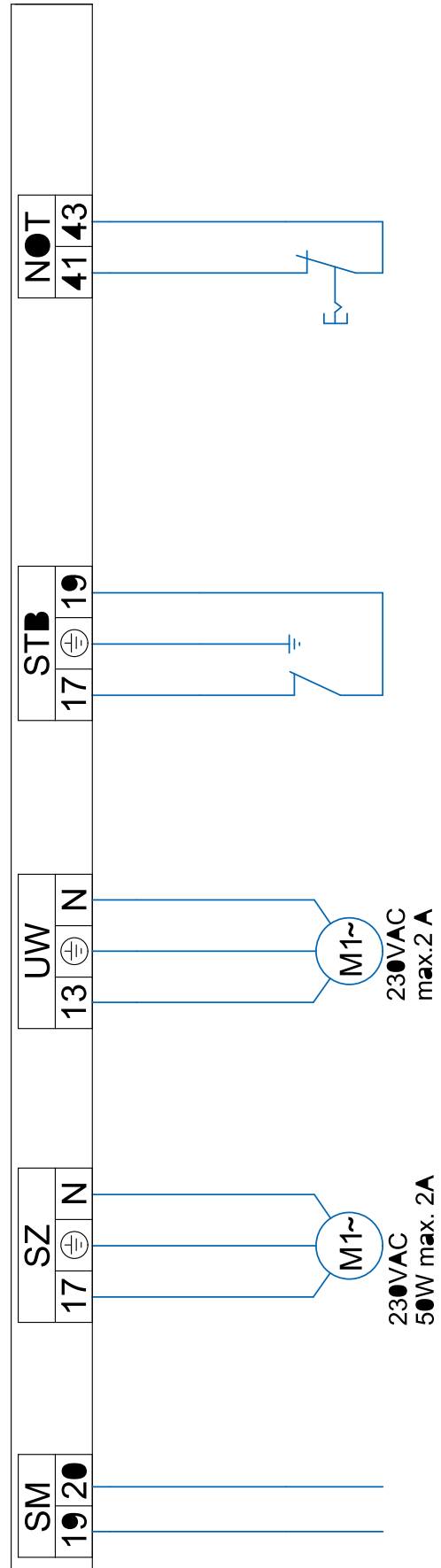
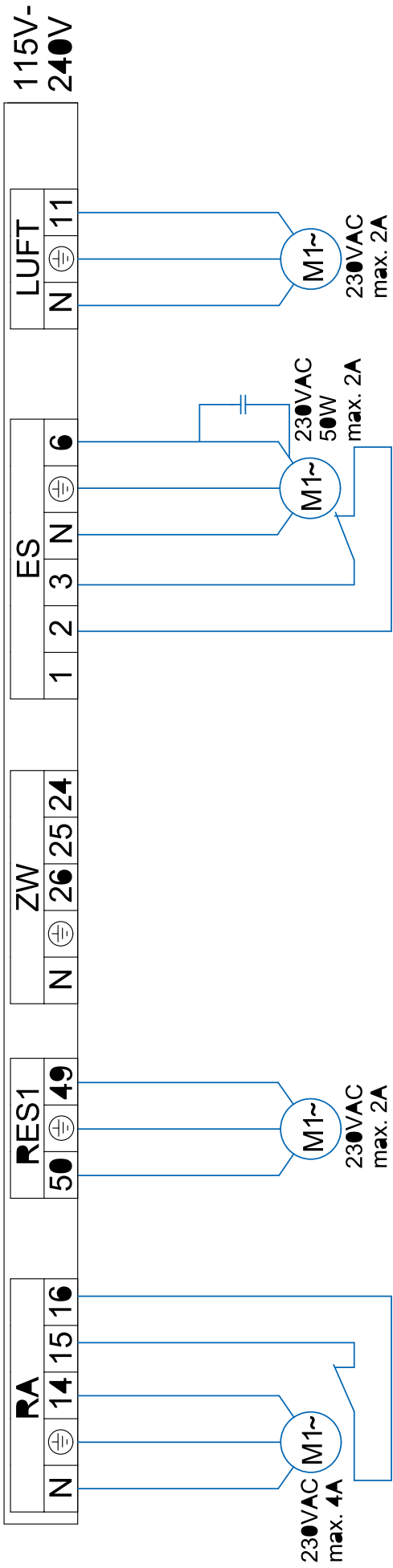
### DANGER

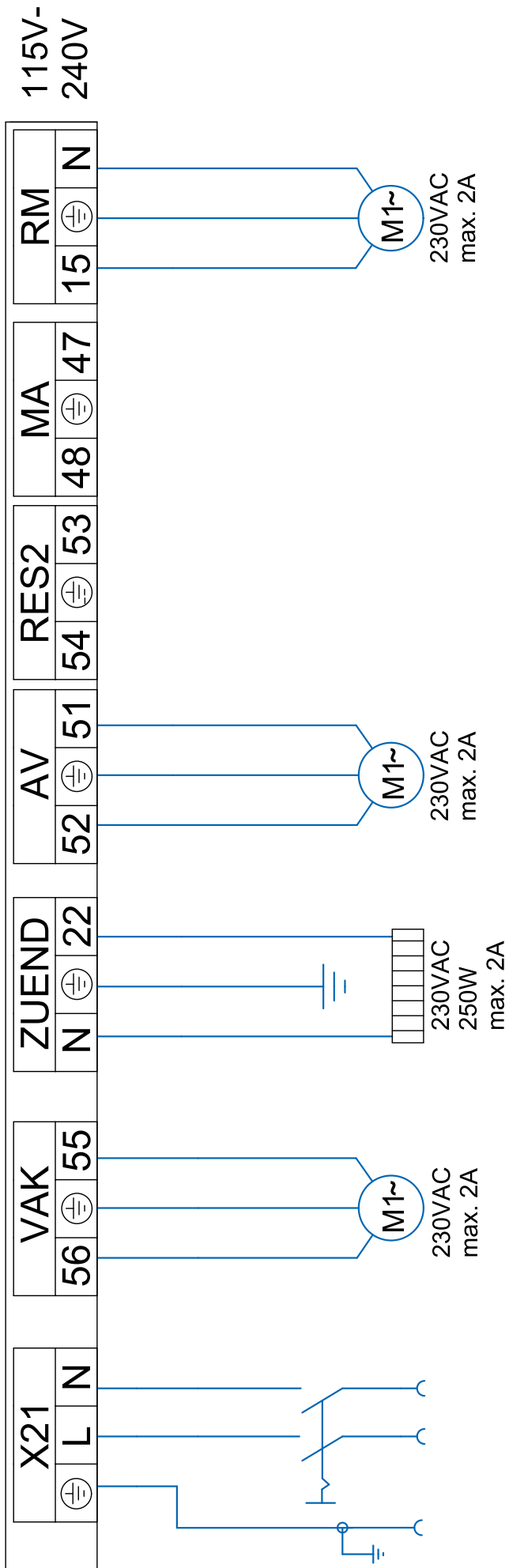
#### Electric shock

Only an authorised service technician may connect the pellet boiler to the power supply.  
Isolate the entire heating system from the power supply before starting work on the pellet boiler.

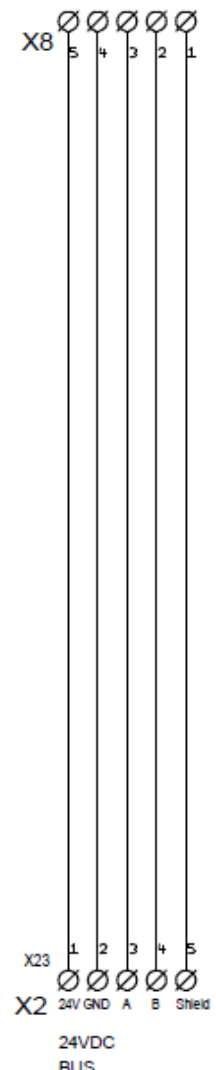
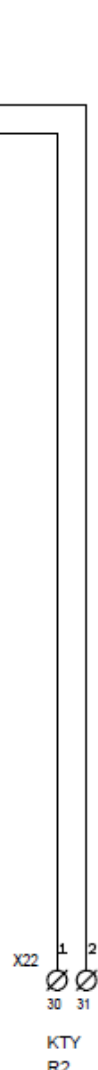
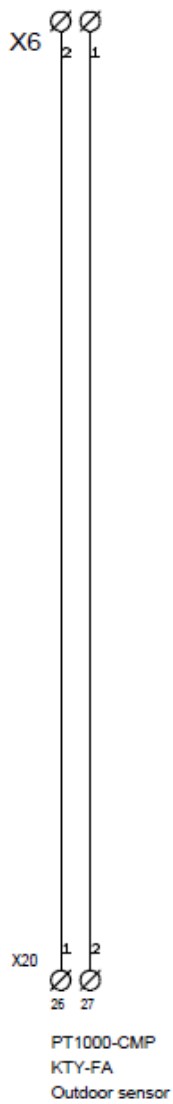
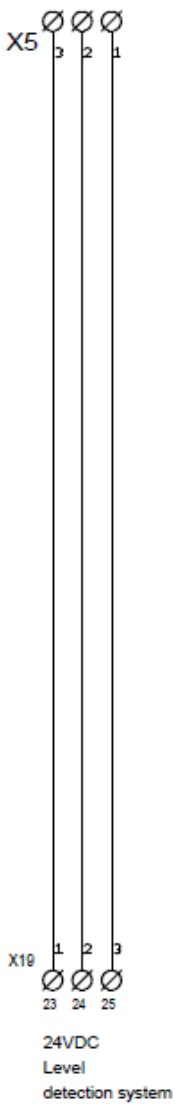
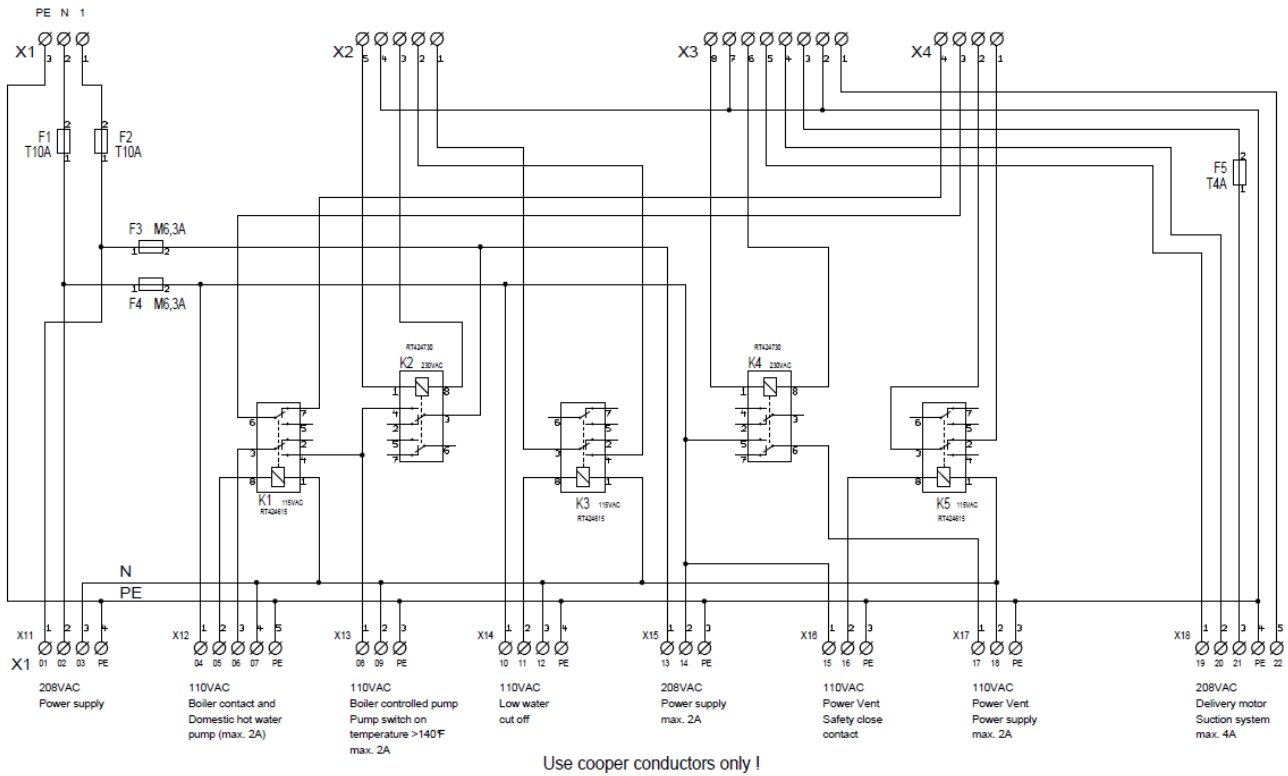












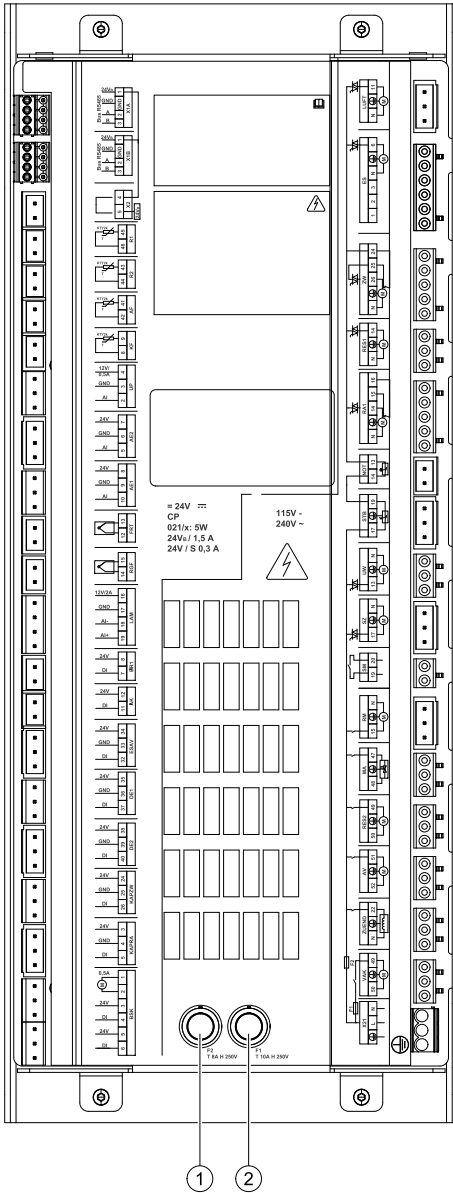
## 10.5 Fuses - boiler controller

The control unit is protected against short circuits and excessive current consumption by fuses which are in the control panel (under the front boiler panel). There are also fuses in the terminal box at the rear of the boiler. At the rear panel, there are 4 fuses. Two 6.3 amp for outputs there, and two 10 amp also for the main controller.

### NOTICE

#### Damage of property

Should it become necessary to replace a fuse, it is critically important to replace the fuse only with a fuse having the same exact ratings.



1	F1: Fuse T10A
2	F2: Fuse T8A

## 10.6 Operating the AutoPellet

The operation of the system is described in the **manual for the End User**.

# 11 Starting up for the first time

After verifying all installation work has been correctly completed and pellet fuel has been delivered, it is time to commission the boiler.

## NOTICE

### Air tight property of combustion chamber

To ensure correct combustion and overall operation, all fittings to the combustion chamber must be correctly assembled to be completely air-tight.

### Note:

The unit must be started up for the first time by an authorized MESys service technician.

Before starting up the pellet boiler, the following settings must be made in the sequence specified below:

1. Output test - test all motors
2. Settings in heating controller (if installed)
3. Start the pellet boiler

Use the checklist enclosed to document the start-up procedure.

# 12 Appendix

## 12.1 Checklist for checking the heating system

The checklist is intended to help authorized specialists perform and document a comprehensive check on the heating system.

Name and adress of the customer		Heating device	
Name:		Type of boiler:	
Street:		Rated power:	
Place:		Year of build:	
Name and adress of installer		Manufacturer`s serial number:	
Name:		Type of heating controller:	
Street:		Type of accumulator:	
Place:		Solar device:	

### NOTICE

#### Damage to property

Use the checklist to check the heating system before starting up for the first time.

CHECKLIST		Yes	Comment
<b>Textile tank</b>			
Textile tank	Are the struts mounted?		
	Are all stayers straightened vertical?		
Delivery unit	Is the slot for the emergency gate valve closed with an adhesive tape?		
Filling coupling	Are the filling couplings correctly installed?		
	Are the plugs at the filling couplings?		
	Are the safety labels placed? (Caution - Switch off the heating system before entering)		
	Are the couplings correctly grounded?		
Aeration	Is the storage room / building properly ventilated with minimum 27 square inches to the outside?		
Caution label	Is the caution label "Wood pellets storage room" placed on the door to the storage room?		
Fire protective collar	Are fire protection collars mounted in the storage room?		
<b>Boiler</b>			
Burner plate	Is the position of the burner plate correct? Has the locking screw of the burner plate been tightened?		
Flame tube	Has the locking device of the concrete flame tube been removed? Is the position of the stainless steel flame tube centred and upright?		
Sensors	Check the position and fixing of the sensors. After the start of the boiler, check if the values of the sensors are in a realistic range.		

Washer nozzle	Is the washer nozzle positioned upright? (The connecting pipe must be positioned horizontally)		
Boiler cover	Check that the cover of the flue gas collector chamber is properly fitted, leak-tight and fastened down.		
Flue gas pipe connection	Is the flue gas pipe made of stainless steel? Is the flue gas pipe leak-tight? Does the flue gas pipe have a gradient? No movable parts? No damper?		
Combustion chamber door	Check that the combustion chamber door closes correctly.		
Drain	Is the connection pipe tight?		
Aeration/boiler room	Exists the required aeration opening?		
Nameplate	Is the nameplate placed on the boiler?		
Chimney system	A common chimney for two different fuels is allowed if all codes and regulations allow it.		
<b>Electric installation and regulation</b>			
Power supply	Check the electrical connection.		
	Check the dimensions of the fuses.		
Settings-Boiler control unit	Are the settings of the boiler control unit according to the installation manual?		
Settings-Heating controller	Set the parameters, the heating circuit program and domestic hot water program.		
<b>Hydraulic Connection</b>			
Circuit pumps	Check the switch on temperature.		
Boiler connection	Is the pellet boiler correctly connected?		
	Is the hydraulic system deaerated?		
	Is the system filled up with water? Check the pressure.		
<b>Safety systems</b>			
Fire protection - ball valve - Belimo - Flame Return Gate	Check the function of the limit switch: Fuel feed of burner may only start when the fire protection valve is fully open. Disconnect the plug DE1 from the boiler controller. Start an intake process. After 2 minutes without intake, the error message Pellets??? will appear on the display. Re-connect plug DE1 to the boiler controller.		
Safety temperature sensor	Check the position and fixing of the safety temperature sensor.		
Negativ draft measuring cell	Check that the negative draft hoses P1 and P2 are correctly connected to the cell and to the air inlet line. Check the function of the negative draft measurement.		
Safety valve	Is the outlet of the safety valve connected to the drain?		
Emergency stop switch	Exists an emergency stop switch?		
Fire extinguisher	Exists a fire extinguisher?		

Instruction			
Heating-up	Explanation of functions, malfunctions and maintenance to the customer.		
Heating controller	Explanation of the heating controller.		
Operating manual	Explanation of the operating regulations to the customer.		
Maintenance contract	Explanation of maintenance and control activities, notice to the legal regulations.		

## 12.2 Appendix G of CAN/CSA-B365-M91

Functioning of safety and operating controls

This Annex is not a mandatory part of this Standard, but is written in mandatory language to accommodate its adaption by anyone wishing to do so.

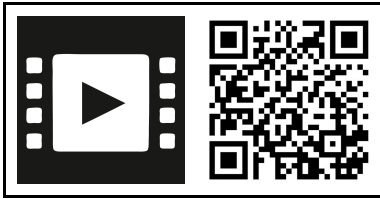
The safety and operating controls shall function within the limits specified by the manufacturer for the type of equipment. The following test shall be performed:

1. Check the operation of the automatic fuel\_feeding interrupt device at each entrance to the floor space within which the fuel-feeding device is installed.
2. Check that when the low water level control on steam and hot water boilers is operated to indicate a low water level, the automatic fuel-feed is interrupted.
3. Check that when the excessive pressure control on steam and hot water boilers is operated as in an excessive pressure situation, the automatic fuel-feed is interrupted.
4. Check that when the excessive water temperature control on steam and hot water boilers is operated to indicate excessive water temperature, the automatic fuel-feed is interrupted and, if appropriate, that one or more zone control valves open.
5. Check that if the temperature exceeds 200°F in a furnace supply plenum on hot air furnaces, the automatic fuel-feed is interrupted.
6. Check that if there is a failure of the fan providing combustion air, the automatic fuel-feed is interrupted.
7. Check that if there is a failure of the combustion air supply control mechanism to remain fully open, the automatic fuel-feed is interrupted.
8. Check that when the hot water circulating pump manual disconnect switch is opened, the automatic fuel-feed is interrupted.
9. Check that if there is a shutdown or failure of the mechanical flue-gas exhauster, the automatic fuel-feed is interrupted.
10. Check that if there is a failure in the flue gas flow, the automatic fuel-feed is interrupted, or the combustion air supply is shut off in manually fuelled appliances.
11. Check for the proper operation of the minimum fire maintenance controls and system or, if applicable, of the automatic ignition system.
12. Check for the proper operation of the controls used for normal automatic fuel-feeding.
13. Check the operation of any other controls supplied on the appliance by the manufacturer, or required by the authority having jurisdiction.

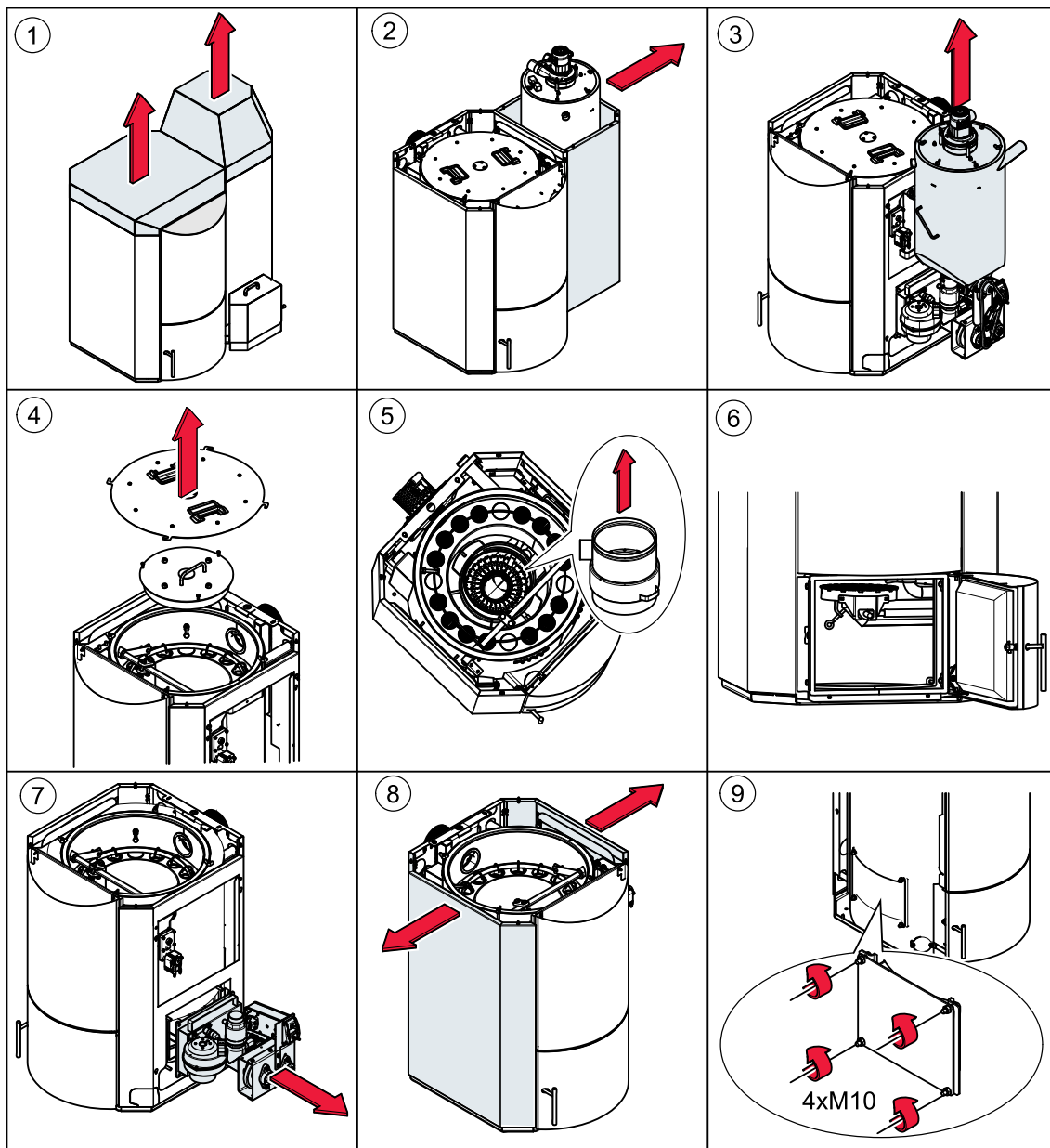
## 12.3 Modifying the burner

The pellet boiler is configured symmetrically. If required, you can remove the burner from the right-hand side (as shipped) and reinstall it on the left.

1. Dismantle the casing, hopper, combustion chamber lid, flame tube, burner and burner plug.
2. Modify the burner on the left.
3. Modify the cleaning system motor and off-set disc.
4. Change the direction of rotation of the cleaning motor.
5. Modify and re-assemble the cleaning system.
6. Route cables through cutouts to the boiler controller and connect up the plug.

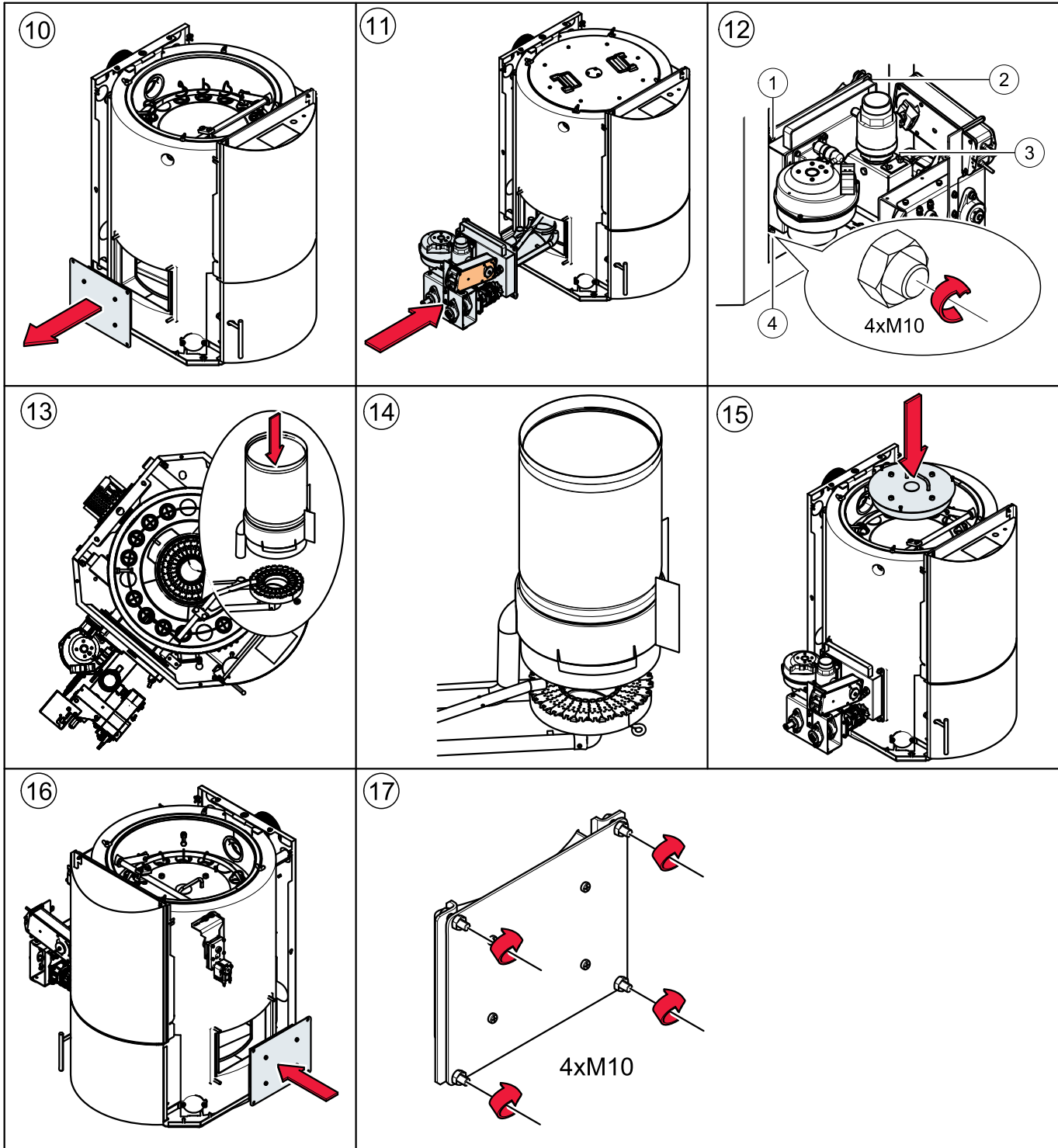


### 12.3.1 Dismantling the casing, hopper, combustion chamber lid, flame tube, and burner



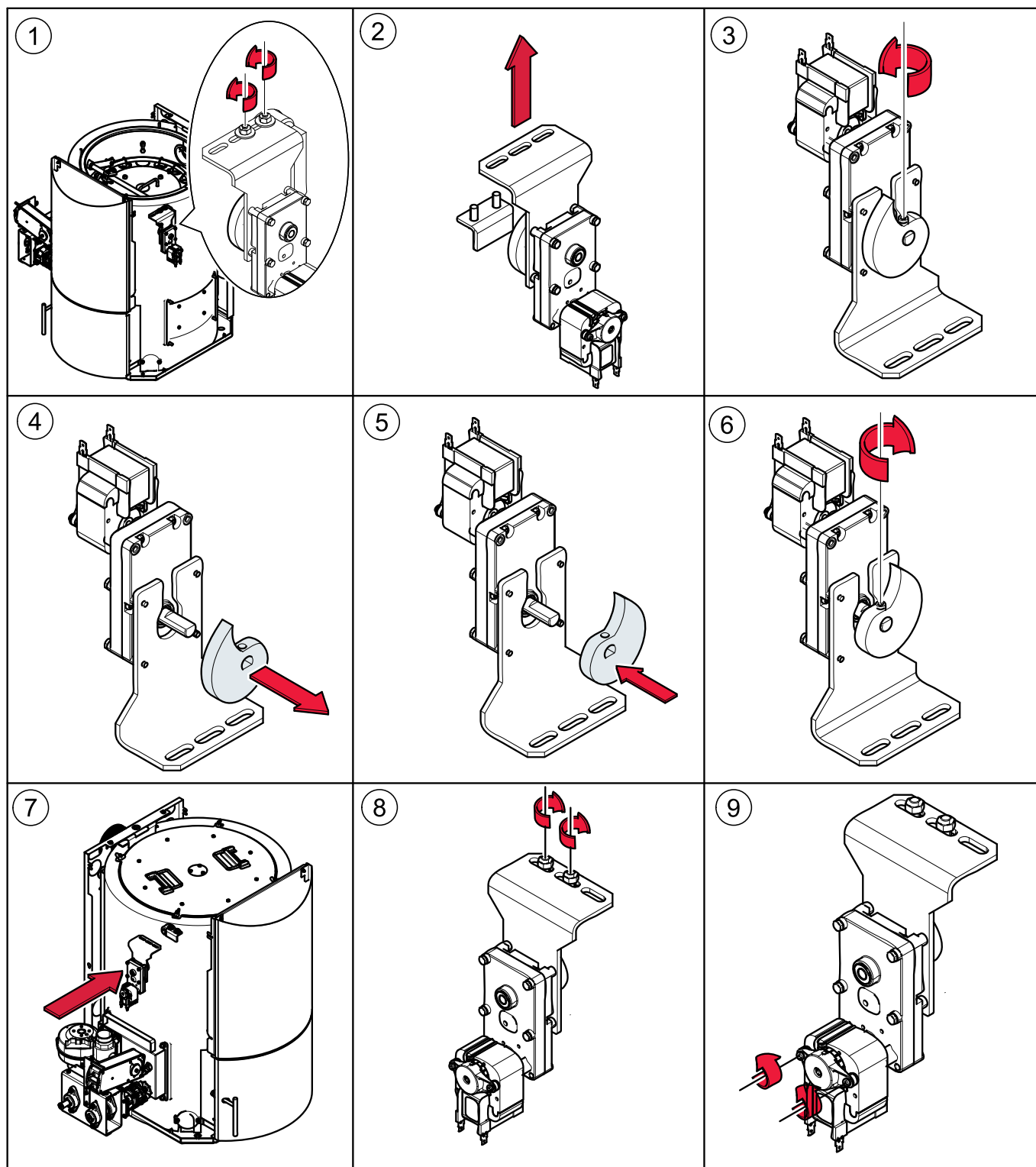


## 12.3.2 Modify the burner on the left

**Note:**

Do not tighten too firm, otherwise the dummy cover could become leaky.

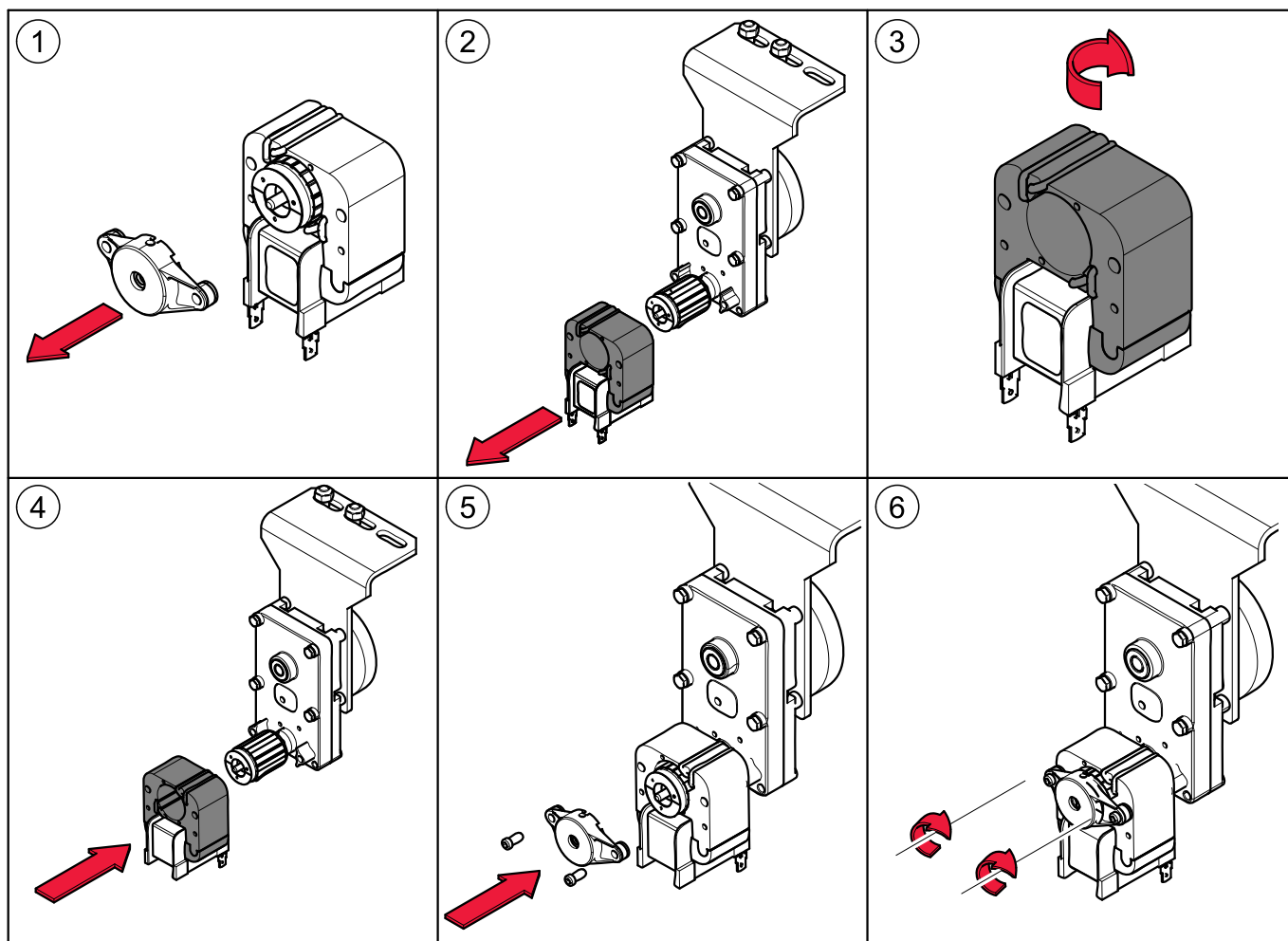
### 12.3.3 Modifying the cleaning system motor and off-set disc



**Note:**

Figure 6: **Glue and tighten** the hex-socket nut to secure the off-set disc.

### 12.3.4 Changing the direction of rotation of the cleaning motor



### 12.3.5 Modifying and re-assembling the cleaning system

#### Setting up the cleaning system:

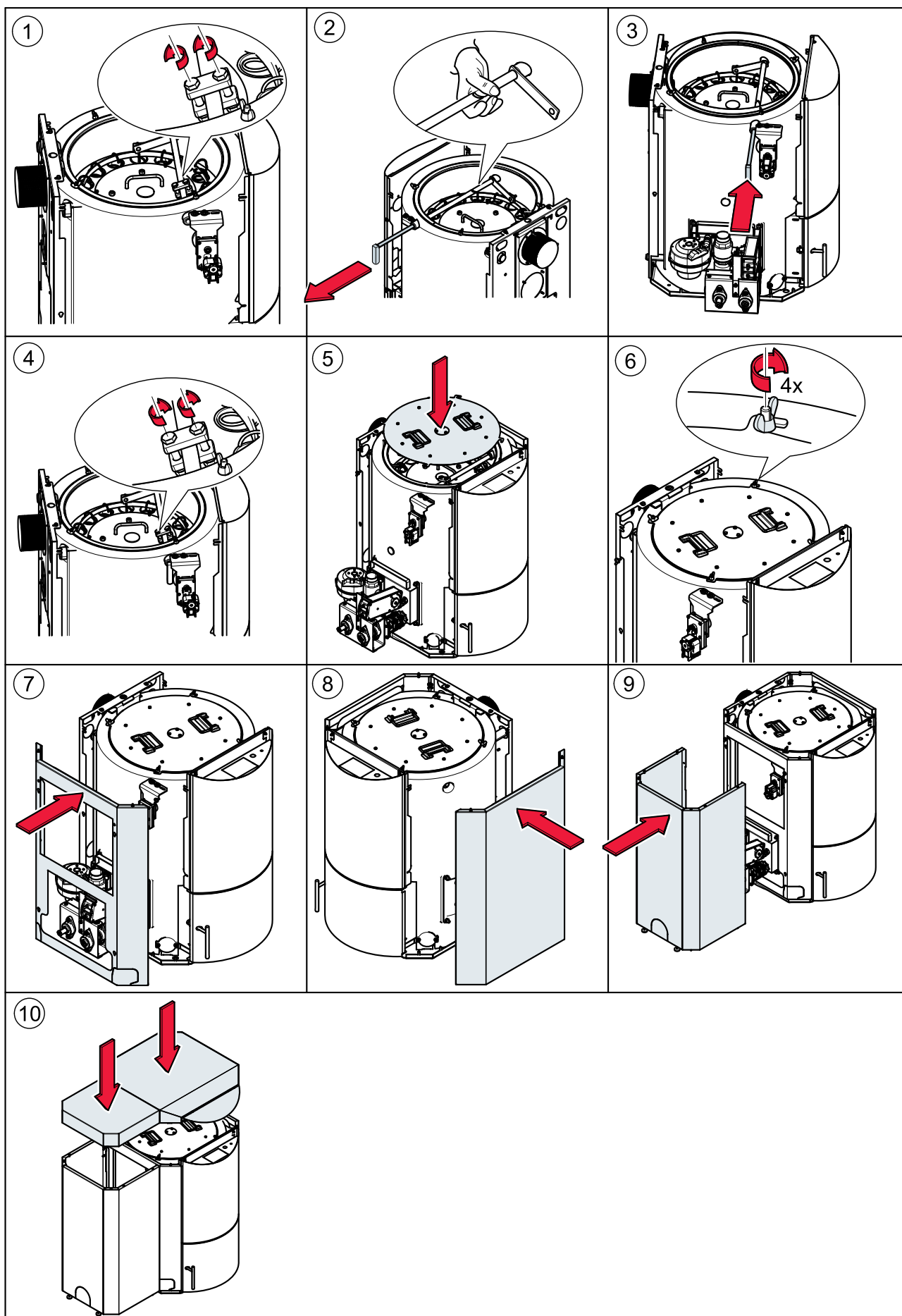
- Switch on the pellet boiler.
- Select "Output test" of the boiler controller for the **boiler cleaning motor**.
- Push the lever mechanism of the cleaning system against the cleaning shaft.
- Press the clip on the cleaning shaft against the off-set disc and switch on the cleaning motor.
- As soon as the off-set disc causes the clip to spring back, switch off the motor and tighten the shaft clamp as tight as possible.
- Use a lock nut to secure the shaft mounting.

#### Fine adjustment:

- If the cleaning system does not lift high enough: loosen the mounting angle, push forward in the slots and tighten again.
- If the cleaning system stops at the limit bolt: loosen the mounting angle, push back in the slots and tighten again.

#### Note:


The motor mounting must not be able to move and the motor must rotate easily.



## 12.4 Malfunctions

### 12.4.1 Malfunctions - what to do

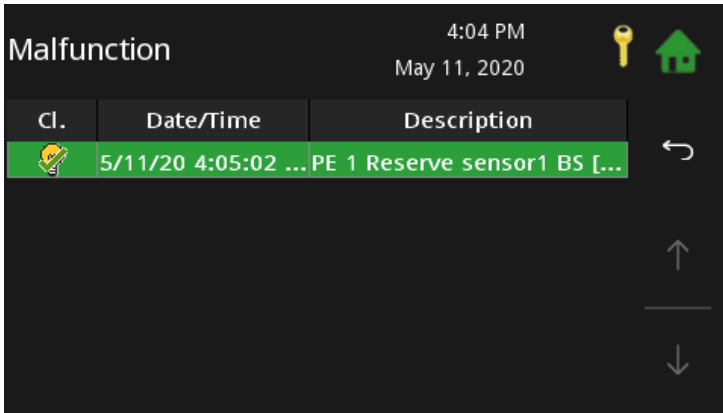
Follow the sequence described for handling malfunctions.

- The heating system switches off automatically if a malfunction occurs.
- The control unit display shows a malfunction alarm text.
- You have to rectify the cause of the malfunction.
- After rectifying the malfunction, you have to reset the fault text by pressing  before starting the heating system again.

### 12.4.2 Fault texts

The fault text displayed on the screen provides information on the type, time and status of the malfunction as well as help for troubleshooting.

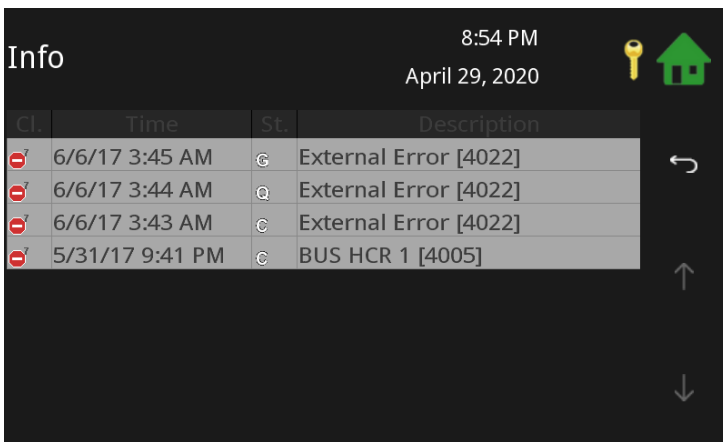
The menu item **malfunction** saves errors as long as they are not solved. The chronological order of the errors helps to find the reason of the malfunction.



#### There are 3 different statuses of Malfunction messages

1. **C** - New fault: when the fault occurs
2. **G** - Rectified fault: when the fault has been rectified
3. **Q** - Reset fault: when the fault has been reset by pressing

In the menu point **information**, all malfunctions are listed chronologically.



### 12.4.3 Malfunction report

This is a list of all malfunction reports on the display.

Code	Display	Input / Output		Affected element	Solution table
1001	HC1 Flow BC	X4 or X5		Heating controller	13.1a
1002	DHW1 OnSensor BC	X6			
1003	Outside Sensor BC	X2			
1004	Boiler Sensor BC	X3			
1008	TPO1 BC	X7			
1009	TPM1 BC	X8		Heating controller	13.2a
1010	Collektor1 BC	X15			

Code	Display	Input / Output		Affected element	Solution table
1011	TPU1 BC	X9 or X10		Heating controller	13.1a
1012	Flow Energy1 BS	X16			
1013	Return Energy1 BS	X17			
1014	ExistBoiler1 BS	X13			
1017	Cascade OnSensor BC	X3 or X7			
1018	Cascade OffSensor BC	X3 or X8			
1019	Circulation Return1 BC	X14			
1020	DHW1 Off Sensor BC	X6 or X7, X8, X9			
2001	HC1 Flow SC	X4 or X5		Heating controller	13.1b
2002	DHW1 OnSensor SC	X6			
2003	Outside Sensor SC	X2			
2004	Boiler Sensor SC	X3			
2008	TPO1 SC	X7			
2009	TPM1 SC	X8			
2010	Collektor1 SC	X15		Heating controller	13.2b
2011	TPU1 SC	X9 or X10		Heating controller	13.1b
2012	Flow Energy1 SC	X16			
2013	Return Energy 1 SC	X17			
2014	ExistBoiler1 SC	X13			
2017	Cascade OnSensor SC	X3 or X7			
2018	Sonde arrêt cascade CC	X3 or X8			
2019	Circulation Return1 SC	X14			
2020	DHW1 Off Sensor SC	X6 or X7, X8, X9			
3001	HC1 Flow	X4 or X5		Heating controller	13.1c
3002	DHW1 OnSensor	X6			
3003	Outside Sensor	X2			
3004	Boiler Sensor	X3			
3008	TPO1	X7			
3009	TPM1	X8			
3010	Collektor1	X11		Heating controller	13.2c
3011	TPU1	X9 or X10		Heating controller	13.1c
3012	Flow Energy1	X16			
3013	Return Energy1	X17			
3014	ExistBoiler1	X13			
3017	Cascade OnSensor	X3 or X7			
3018	Cascade OffSensor	X3 or X8			
3019	Circulation Return1	X14			
3020	DHW1 Off Sensor	X6 or X7, X8, X9			
4005	BUS HCR 1	X1A or X1B		BUS-Network RS485	13.3
4006	BUS PE 1	X1A or X1B			

Code	Display	Input / Output		Affected element	Solution table
4007	BUS Remote 1	X1A or X1B			
4015	BUS Remote Touch 1	X1A or X1B			
4016	BUS Master	X1A or X1B			
4021	BUS Radio Remote 1	X1A or X1B			
5000	PE1 Reserve sensor1 BS	R1		Boiler Controller	13.1a
5001	PE1 Reserve sensor1 SC	R1		Boiler Controller	13.1b
5002	PE1 Reserve sensor2 BS	R2		Boiler Controller	13.1a
5003	PE1 Reserve sensor2 SC	R2		Boiler Controller	13.1b
5004	PE1 Outside sensor BS	AF		Boiler Controller	13.1a
5005	PE1 Outside sensor SC	AF		Boiler Controller	13.1b
5006	PE1 Boiler sensor BS	KF		Boiler Controller	13.1a
5007	PE1 Boiler sensor SC	KF		Boiler Controller	13.1b
5008	PE1 Fluegas sensor BS	RGF			
5009	PE1 Fluegas sensor SC	RGF			
5010	PE1 Combustion sensor BS	FRT		Boiler Controller	13.4
5011	PE1 Combustion sensor SC	FRT			
5012	PE1 Underpressure box BS	UP			
5013	PE1 Underpressure box SC	UP		Boiler Controller	13.5
5014	PE1 Analog input1 BS	AE1			
5015	PE1 Analog input1 SC	AE1			
5016	PE1 Analog input2 BS	AE2		Boiler Controller	13.6
5017	PE1 Analog input2 SC	AE2			
5018	PE1 Motor turbine	VAK		Boiler Controller	13.7
5019	PE1 Ignition	ZUEND		Boiler Controller	13.8
5020	PE1 Motor ashbox	AV		Boiler Controller	13.9
5021	PE1 Motor res 1	RES1		Boiler Controller	13.10
5022	PE1 Magnetic valve	MA			
5023	PE1 Motor cleaning	RM		Boiler Controller	13.8
5024	PE1 Flue gas fan	SZ			
5025	PE1 Cirkulationspump	UW		Boiler Controller	13.9
5026	PE1 Motor ext auger1	RA		Boiler Controller	13.11
5027	PE1 Motor ext auger2	ZW		Boiler Controller	13.9
5028	PE1 Motor between	RES1		Boiler Controller	13.12
5029	PE1 Motor boiler auger	ES			
5030	PE1 Combustion Fan	LUFT		Boiler Controller	13.9
5032	PE1 Emergency stop	NOT		Boiler Controller	13.13



Code	Display	Input / Output		Affected element	Solution table
5033	PE1 Max temp sensor	STB			
5034	PE1 Ignition fault	generic		Boiler Controller	13.14
5036	PE1 Low flame temp				
5038	PE1 Firedamper open	BSK 1 2		Boiler Controller	13.15
5039	PE1 Firedamper closed	BSK 3 4			
5040	PE1 Firedamper end switch	BSK 1 2 3 4			
5041	PE1 Low underpressure	UP, SZ, LUFT		Boiler Controller	13.5
5042	PE1 Low underpressure	UP, SZ, LUFT			
5043	PE1 Vacuum system	KAPZW, RA		Boiler Controller	13.16
5044	PE1 Ashbox full	ESAV, AV		Boiler Controller	13.17
5045	PE1 Ball lock	DE1		Boiler Controller	13.18
5047	PE1 Burner Motor	ES		Boiler Controller	13.19
5048	PE1 Burner gas open-circuit	RGF		Boiler Controller	13.4
5049	PE1 Burner gas short-circuit				
5052	PE1 Container cover open	AK		Boiler Controller	13.20
5053	PE1 ash warning	ESAV, AV		Boiler Controller	13.17
5054	PE1 pellets warning	AE1		Boiler Controller	13.21
5055	Error Output VAK	VAK		Boiler Controller	13.22
5056	Error Output ZUEND	ZUEND		Boiler Controller	13.23
5057	Error Output AV	AV		Boiler Controller	13.24
5058	Error Output RES2	RES2		Boiler Controller	13.25
5059	Error Output MA	MA		Boiler Controller	13.26
5060	Error Output RA	RA		Boiler Controller	13.27
5061	Error Output SM	SM		Boiler Controller	13.28
5062	Error Output SZ	SZ		Boiler Controller	13.29
5063	Error Output UW	UW		Boiler Controller	13.30
5064	Error Output LUFT	LUFT		Boiler Controller	13.31
5065	Error Output RA1	RA1		Boiler Controller	13.32
5066	Error Output RES1	RES1		Boiler Controller	13.33
5067	Error Output ZW	ZW		Boiler Controller	13.34
5068	Error Output ES	ES		Boiler Controller	13.35

### 13.1a Sensors KTY2K - Heating controller + Boiler Controller (Fault 1001 to 1020 and 5000 to 5007) - Sensor break

Type of fault	Sensor break		
Code:	1001	HC1 Flow BC	X4
	1002	DHW1 OnSensor BC	X6
	1003	Outside Sensor BC	X2
	1004	Boiler Sensor BC	X3
	1008	TPO1 BC	X7
	1009	TPM1 BC	X8
	1011	TPU1 BC	X9
	1012	Flow Energy1 BS	X16
	1013	Return Energy1 BS	X17
	1014	ExistBoiler1 BS	X13
	1017	Cascade OnSensor BC	X3
	1018	Cascade OffSensor BC	X3
	1019	Circulation Return1 BC	X14
	1020	DHW1 Off Sensor BC	X6
	5000	PE1 Reserve sensor1 BS	R1
	5002	PE1 Reserve sensor2 BS	R2
	5004	PE1 Outside sensor BS	AF
5006	PE1 Boiler sensor BS	KF	
Description:	Measuring circuit of KTY sensor is open		
Cause and Remedy:	sensor not connected	▶	connect sensor, check plug
	sensor defect	▶	measure sensor (approx. 2kΩ at 77 °F) replace if required
	sensor cable defect	▶	replace sensor
	sensor temperature too high	▶	sensor temperature above measuring range (>230 °F)

### 13.1b Sensors KTY2K - Heating controller + Boiler Controller (Fault 2001 to 2020 and 5000 bis 5007) - short circuit

Type of fault	Short circuit		
Code :	2001	HC1 Flow SC	X4
	2002	DHW1 OnSensor SC	X6
	2003	Outside Sensor SC	X2
	2004	Boiler Sensor SC	X3
	2008	TPO1 SC	X7
	2009	TPM1 SC	X8
	2011	TPU1 SC	X9
	2012	Flow Energy1 SC	X16
	2013	Return Energy 1 SC	X17
	2014	ExistBoiler1 SC	X13
	2017	Cascade OnSensor SC	X3
	2018	Sonde arrêt cascade CC	X3
	2019	Circulation Return1 SC	X14
	2020	WW1 Aus Fühler KS	X6
	5001	PE1 Reserve sensor1 SC	R1
	5003	PE1 Reserve sensor2 SC	R2
	5005	PE1 Outside sensor SC	AF
5007	PE1 Boiler sensor SC	KF	
Description:	Measuring circuit of KTY sensor is shorted out		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 2k $\Omega$ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (< 14 °F)

**13.1c Sensors KTY2K - Heating controller + Boiler Controller (Fault 3001 to 3020) - other faults**

Type of fault	Other faults		
Code:	3001	HC1 Flow	X4
	3002	DHW1 OnSensor	X6
	3003	Outside Sensor	X2
	3004	Boiler Sensor	X3
	3008	TPO1	X7
	3009	TPM1	X8
	3011	TPU1	X9
	3012	Flow Energy1	X16
	3013	Return Energy1	X17
	3014	ExistBoiler1	X13
	3017	Cascade OnSensor	X3
	3018	Cascade OffSensor	X3
	3019	Circulation Return1	X14
	3020	DHW1 Off Sensor	X6
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 2kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor input defect	▶	Replace Boiler controller

**13.2 Kollektor sensor (Fault 1010, 2010, 3010)**

Display:	<b>[1010] Kollektor BC</b>		
Description:	Collector sensor fracture, measuring circuit of collector sensor (X15) is open		
Cause and Remedy:	Sensor not connected	▶	Check and correct wiring
	Sensor defect	▶	Measure sensor (approx. 1,1kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
Display:	<b>[2010] Kollektor SC</b>		
Description:	Measuring circuit of collector sensor (X15) is shorted out		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 1,1kΩ at 77 °F), replace if required
	Sensor cable defect	▶	Replace sensor
Display:	<b>[3010] Kollektor</b>		
Description:	Other fault at input X15		
Cause and Remedy:	Sensor defect	▶	Replace sensor
	Sensor cable defect	▶	Replace sensor
	Input on heating controller defect	▶	Replace input on heating controller

**13.3 Bus (Fault 4005, 4006, 4007, 4015, 4016)**

Display:	<b>[4005] BUS HCR</b>		
Description:	Time-Out of BUS-connection from touch operating device to heating controller		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	No power supply available	▶	Connect heating controller to BUS
	Fuse in heating controller defect	▶	Replace fuse
Display:	<b>[4006] BUS PE</b>		
Description:	Time-Out of BUS-connection from touch operating device to boiler controller		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	No power supply available	▶	Connect heating controller to power supply (X21)
	Fuse in heating F2 defect	▶	Replace fuse F2
Display:	<b>[4007] BUS Remote</b>		
Description:	Time-Out of BUS-connection of remote control		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	Remote controll defect	▶	Replace remote controll
Display:	<b>[4015] BUS Remote Touch</b>		
Description:	Time-Out of BUS-Connection from remote controll to Touch operating device		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection
	Wrong softwareversion	▶	Check version of software
Display:	<b>[4016] BUS Master</b>		
Description:	Missing BUS connection to master-operating device		
Cause and Remedy:	Wrong cable connection	▶	Check cable connection

**13.4 Combustion chamber sensor (Fault 5010, 5011, 5048, 5049)**

Display:	<b>[5010] PE Combustion sensor BS</b>		
Description:	Combustion chamber sensor fracture, measuring circuit from combustion chamber sensor is open - Input FRT		
Cause and Remedy:	Sensor not connected	▶	Connect sensor at input
	Sensor defect	▶	Measure sensor (approx. 5 mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too high	▶	Sensor temperature above measuring range (2012 °F)
Display:	<b>[5011] PE Combustion sensor SC</b>		
Description:	Combustion chamber sensor short circuit, measuring circuit from combustion chamber sensor short circuit - Input FRT		

Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 5 mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (14 °F)
	Sensor polarity reversed	▶	Change sensor connection + and -
Display:	<b>[5048] PE Burner gas open-circuit</b> (only SMART without combustion chamber sensor)		
Description:	Burner gas sensor fracture, measuring circuit of Burner gas sensor is open - Output RGF		
Cause and Remedy:	Sensor not connected	▶	Connect sensor at input
	Sensor cable defect	▶	Replace sensor
	Sensor defect	▶	Measure sensor (NiCrNi) replace if required
	Sensor temperature too high	▶	Sensor temperature above measuring range (2012 °F)
Display:	<b>[5049] PE Burner gas short-circuit</b> (only SMART without combustion chamber sensor)		
Description:	Burner gas sensor short circuit, measuring circuit of Burner gas sensor short circuit - Output RGF		
Cause and Remedy:	Sensor defect	▶	Measure sensor (approx. 5mV at 257 °F) replace if required
	Sensor cable defect	▶	Replace sensor
	Sensor temperature too low	▶	Sensor temperature below measuring range (14 °F)
	Sensor polarity reversed	▶	Change sensor connection + and -

### 13.5 Underpressure box (Fault 5012, 5013, 5041, 5042)

Display:	<b>[5012] PE Underpressure box BS</b>		
Description:	Negative draft input open, measuring circuit from negative draft measurement open - Input UP		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	No signal	▶	Replace underpressure box
	Combustion chamber leak	▶	Check total closure of boiler door

Display:	<b>[5013] PE Underpressure box SC</b>		
Description:	Negative draft input short-circuit, measuring circuit from negative draft measurement is shorted out - Input UP		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Signal too high	▶	Signal above 10V
Display:	<b>[5041] [5042] PE Low underpressure</b>		
Description:	Negative draft pressure in boiler is not achieved [5041] or is too high [5042] - Exit LUFT (SMART + Condens) / Output SZ (PE+PEK)		
Cause and Remedy:	Negative draft tube disconnected	▶	Connect up negative draft tube
	Negative draft does not change	▶	Check negative draft tube for leaks. Check flue gas tube for blockage.
	Negative draft pressure too low	▶	Close boiler door, check tube to negative draft sensor, check whether boiler flue gas outlet is clear, check whether condensation heat exchanger is clear. Make sure flue gas fan is running.
	Negative draft pressure too high	▶	Check induced draft blower

### 13.6 Analog input (Fault 5014, 5015, 5016, 5017)

Display:	<b>[5014] / [5016] PE Analog input 1/2 BS</b>		
Description:	Analog input 1/ 2 sensor fracture, measuring circuit of Analog input sensor open - Output AE1 / AE2		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Level detection system activated (valid for AE2)	▶	Check settings
Display:	<b>[5015] / [5017] PE Analog input 1 /2 SC</b>		
Description:	Analog input 1 / 2 sensor short circuit, measuring circuit of Analog input sensor is shorted out - Input AE1/AE2		
Cause and Remedy:	Signal incorrect	▶	Check poarity and signal (0-10V)
	Signal cable defect	▶	Replace sensor
	Signal too high	▶	Signal above 10V

**13.7 Motor turbine (Fault 5018)**

Display:	<b>[5018] PE Motor Turbine</b>		
Description:	Vaccuum turbine not running (Exit VAK)		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor
	Fuse F1, suction circuit board defective	▶	Replace fuse

**13.8 Output 230V (Fault 5019, 5022, 5023)**

Display:	<b>[5019] PE Ignition [5022] PE Magnetic valve [5023] PE Motor cleaning</b>		
Description:	No function of output ZUEND (Ignition)/MA (Magnetic valve)/ RM (Motor cleaning)		
Cause and Remedy:	Output unplugged	▶	Connect plug, check cable wiring
	Current value above the maximal Limit	▶	Check limits
	Current value under the minimal Limit	▶	Check limits

**13.9 Output 230V-2 (Fault 5020, 5024, 5025, 5027, 5029, 5030)**

Display:	<b>[5020] PE Motor ashbox (Output AV) [5024] PE Flue gas fan (Output SZ) [5025] PE Cirkulationspump (Output UW) [5027] PE Motor ext auger2 (Output RES2) [5029] PE Motor boiler auger (Output ES) [5030] PE Combustion Fan (Output LUFT)</b>		
Description:	No function of the respective motor/pump/fan		
Cause and Remedy:	Motor/pump/fan unplugged	▶	Connect plug, check cable wiring
	Motor/pump/fan defect	▶	Replace motor/pump/fan

**13.10 Zwischenbehälter leer - Motor res 1 (Fault 5021)**

Display:	<b>[5021] PE Hopper empty / Motor RES1 (for 36-56 kW, Pellematic Condens or PEB)</b>		
Description:	No function of PE motor res 1		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor
	No pellets available	▶	Refill storage-Room / supply tank



**13.11 Motor extraction auger 1 - RA (Fault 5026)**

Display:	<b>[5026] Motor ext auger1</b>		
Description:	Storage room auger 1 motor defect - Output RA		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	motor is jammed	▶	Remove pellets and dust from auger and make sure auger rotates freely
	Motor defect	▶	Replace motor
	Thermic contact triggered	▶	Let motor cool down
	Motor not running	▶	Check thermic contact

**13.12 Hopper motor (Fault 5028)**

Display:	<b>[5028] Hopper motor</b>		
Description:	Hopper suction fan fault. Output RES1.		
Cause and Remedy:	Motor unplugged	▶	Plug in motor, check cable connections
	Motor defect	▶	Replace motor

**13.13 Emergency OFF/ Safety temperature (Fault 5032, 5033)**

Display:	<b>[5032] Emergency OFF - NOT AUS</b>		
Description:	Emergency OFF has been actuated - Input NOT-AUS		
Cause and Remedy:	Emergency OFF unplugged	▶	Connect up Emergency OFF and check cable connections
	Emergency OFF button has been pressed	▶	Reset Emergency OFF switch
	Emergency OFF defect	▶	Replace Emergency OFF switch
Display:	<b>[5033] Safety temperature - STB</b>		
Description:	Safety temperature limiter has tripped - Input STB		
Cause and Remedy:	Safety temperature limiter unplugged	▶	Connect up safety temperature limiter and check cable connections
	Safety temperature limiter has tripped	▶	Let boiler cool down and reset safety temperature limiter
	Safety temperature limiter defect	▶	Replace safety temperature limiter
	A 230V Output is defect	▶	Check 230V Outputs

**13.14 Temperature Combustion chamber sensor/Flue gas sensor (Fault 5034, 5036)**

Display:	<b>[5034] PE Ignition fault / Pellets available?</b>		
Description:	Minimum temperature Combustion chamber sensor/Flue gas sensor not reached during the ignition phase		
Cause and Remedy:	No pellets available	▶	Fill up with pellets
	Ignition electrode defect	▶	Check ignition electrode (approx. 200Ω) replace if required
	Ignition nozzle blocked	▶	Clean burner plate and ignition tube

	Not enough draught	▶	Check ventilation flap, funktion radial fan, draught free
	Flue gas sensor or flamm-roomtemperature-sensor soiled	▶	Check Flue gas sensor or flammroom-temperature-sensor
Display:	<b>[5036] PE Flame supervision fault</b>		
Description:	Flame supervision fault, minimum flue gas temperature not reached during heating up at full power - Input FRT		
Cause and Remedy:	No pellets available	▶	Fill up with pellets

### 13.15 Flame return gate BSK (5038, 5039, 5040)

Display:	<b>[5038] PE Flame return gate open</b>		
Description:	Flame return gate open fault (BSK - 1 2)		
Cause and Remedy:	Flame return gate unplugged	▶	Connect up flame return gate and check cable connections
	Flame return gate does not reach OPEN limit switch	▶	Check ball valve to see if it is jammed
	No signal although open	▶	Check cables and flame return gate
	STB on the burner has triggered	▶	Surface temperature of the burner is too high
Display:	<b>[5039] PE Flame return gate closed</b>		
Description:	Flame return gate open fault		
Cause and Remedy:	Flame return gate unplugged	▶	Connect up flame return gate and check cable connections
	Flame return gate does not reach CLOSE limit switch	▶	Check whether ball valve is jammed, check ball valve throughway to see if foreign objects are preventing it from closing
	No signal although closed	▶	Check cables and flame return gate
	STB on the burner has triggered	▶	Surface temperature of the burner is too high. The boiler switches to fault mode.
Display:	<b>[5040] PE Flame return gate limit switch</b>		
Description:	Both flame return gate limit switches (BSK 1-2 and BSK 3-4) are closed at the same time		
Cause and Remedy:	Both limit switches activated	▶	Check flame return gate, check cables, check connectors

### 13.16 Suction system (Fault 5043)

Display:	<b>Suction system</b>		
Description:	Hopper cannot be filled up even after 3 suction cycles		
Cause and Remedy:	Storage room empty	▶	Fill up with pellets
	Extraction system is blocked	▶	Clear extraction system

	Extraction system not conveying pellets	▶	Pellet bridge - destroy bridge and make sure material flows properly
	Suction fan unplugged	▶	Connect up suction fan
	Storage room auger motor unplugged	▶	Connect up storage room motor

### 13.17 Ashbox full (Fault 5044) - Ash Warning (Fault 5053)

Display:	<b>[5044] PE Ashbox full</b>		
Description:	Moter doesn't reach the normal speed after 3 attempts.		
Display:	<b>[5053] PE Ash Warning</b>		
Description:	Ash-box nearly full		
Cause and Remedy:	Ash-box full	▶	Clear ash-box
	Ash-box not completely closed	▶	Close ash-box
	End-switch defect	▶	Replace end-switch

### 13.18 Ball lock (Smart and Condens only - Fault 5045)

Display:	<b>[5045] PE Ball lock - Smart and Condens only</b>		
Description:	No pellets detected from capacitive sensor (KAP RA)		
Cause and Remedy:	Pellet reserves depleted	▶	Refill storage-Room / supply tank
	Capacitive sensor RA defect	▶	Replace Capacitive sensor RA

### 13.19 Burner Motor / Ash box full (SMART and Condens only - Fault 5047)

Display:	<b>[5047] Burner Motor /Ash box full - SMART only</b>		
Description:	The alarm text is displayed after the motor has made 3 unsuccessful attempts to reach the normal speed of the external de-ashing system.		
Cause and Remedy:	Ash box is full	▶	Empty ash box
	Rotation of burner auger or ash auger is blocked	▶	Ensure rotation of auger

### 13.20 Container cover open (PEB only - Fault 5052)

Display:	<b>[5052] PE Container cover open</b>		
Description:	Container cover open (PEB only) - Input AK		
Cause and Remedy:	Cover open	▶	Close cover
	End-switch defect	▶	Replace end-switch

### 13.21 Pellets Warning (Fault 5054)

Display:	<b>[5054] PE 1 Pellets Warning</b>		
Description:	Measured pellets capacity (AE2) is below the threshold		
Cause and Remedy:	Pellets nearly empty or empty	▶	Fill up with pellets

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	Sensor unpugged (AE2)	▶	Connect plug
	Parameter set incorrectly	▶	Check settings in menu Level detection system (protected access)

**13.22 Error Output VAK (Fault 5055)**

4005

Display:	<b>[5055] Error Output VAK</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.23 Error Output ZUEND (Fault 5056)**

Display:	<b>[5056] Error Output ZUEND</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	VCheck cable connection / Replace Boiler Controller

**13.24 Error Output AV (Fault 5057)**

Display:	<b>[5057] Error Output AV</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.25 Error Output RES2 (Fault 5058)**

Display:	<b>[5058] Error Output RES2</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.26 Error Output MA (Fault 5059)**

Display:	<b>[5059] Error Output MA</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.27 Error Output RA (Fault 5060)**

Display:	<b>[5060] Error Output RA</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.28 Error Output SM (Fault 5061)**

Display:	<b>[5061] Error Output SM</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.29 Error Output SZ (Fault 5062)**

Display:	<b>[5062] Error Output SZ</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.30 Error Output UW (Fault 5063)**

Display:	<b>[5063] Error Output UW</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.31 Error Output LUFT (Fault 5064)**

Display:	<b>[5064] Error Output LUFT</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.32 Error Output RA1 (Fault 5065)**

Display:	<b>[5065] Error Output RA1</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.33 Error Output RES1 (Fault 5066)**

Display:	<b>[5066] Error Output RES1</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.34 Error Output ZW (Fault 5067)**

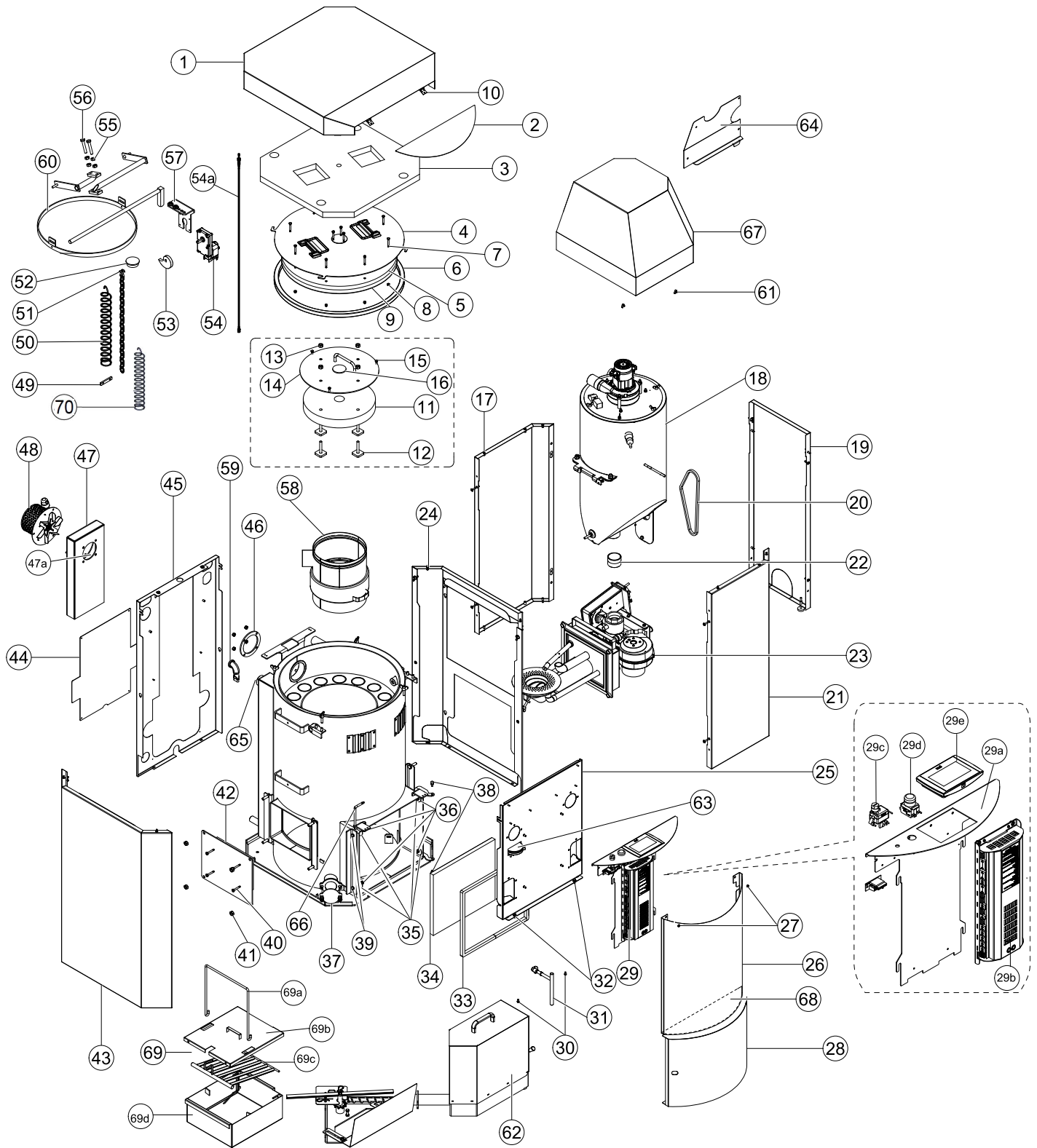
Display:	<b>[5067] Error Output ZW</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

**13.35 Error Output ES (Fault 5068)**

Display:	<b>[5068] Error Output ES</b>		
Cause and Remedy:	Output defect, incorrect wiring	▶	Check cable connection / Replace Boiler Controller

# 12.5 Parts list

## 12.5.1 Pellematic PES 10 - 20

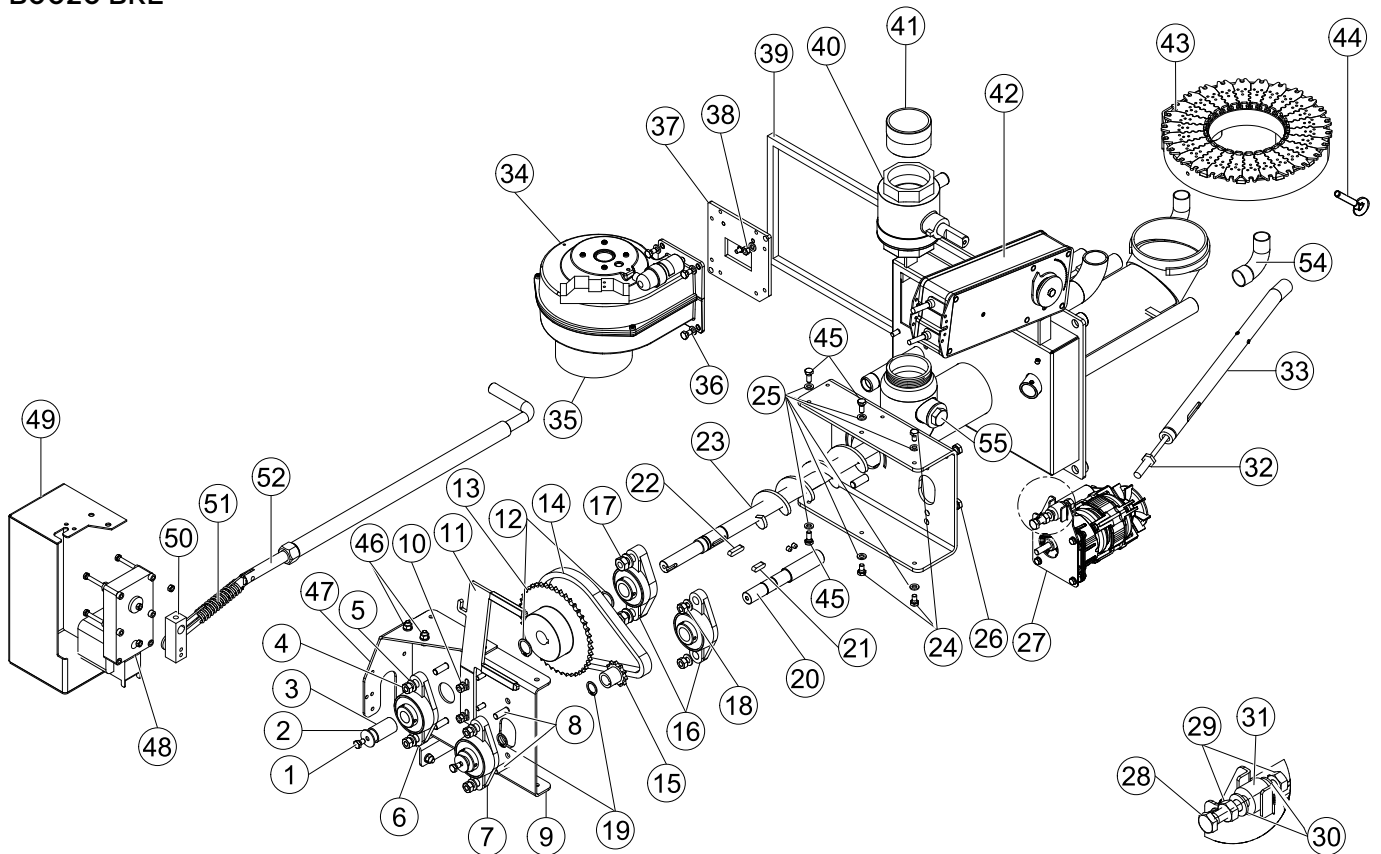




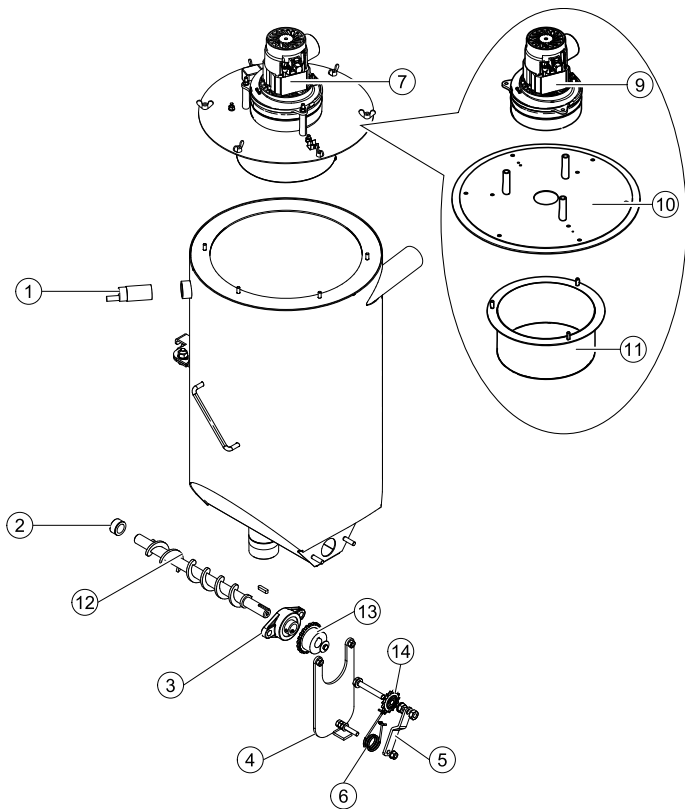
1	PE114	25	PE118	48	E1001A
2	PE119	26	PE120 (B, G, R)	49	PE143
2	PE119B	27	121159	50	PE129
2	PE119G	28	PE121 (B, G, R)	51	121049 / 121126
2	PE119R	29	E1412	52	PE103
3	PE200	29a	PE564	53	PE142
4	PE156	29b	E1411	54	E1054R / E1054L
5	PE289	29c	E1073	54a	E1186
6	PE215	29d	E1238	55	121169
7	121259	29e	E1330	56	121168
8	121347	30	auf Anfrage - on request - sur demande	57	PE281
9	PE429 / 121037/ 121082	31	PE191	58	B103
10	PE131	32	121378	58a	PE277S
11-16	PE243	33	PE160	59	PE133
11	PE212	34	PE176	60	PE475
12	PE174	35	auf Anfrage - on request - sur demande	61	121380
13	121373	36	121039	62	PEASCHRE / PEASCHLI
14	auf Anfrage - on request - sur demande	37	PE416 / PE413	63	24155 / 24157 / 121198 / 24315
15	121034	38	121410	64	PE 467 / 121327
16	PE264-1	39	121042	65	PE 192
17	121381	40	121379	66	24169
18	041876	41	121083 / 121029	67	PE260
19	PE185	42	PE188	68	PE419
20	121109 / 121255	43	PE115	69	PE330
21	PE123	44	PE117-1	69a	PE135
22	121123	45	PE117-2	69b	PE139
23	B0020 / B0020BR	46	PE209	69c	PE136
24	PE116	47	PE258	69d	PE134

70 Only applies to PES22: Additional turbulators

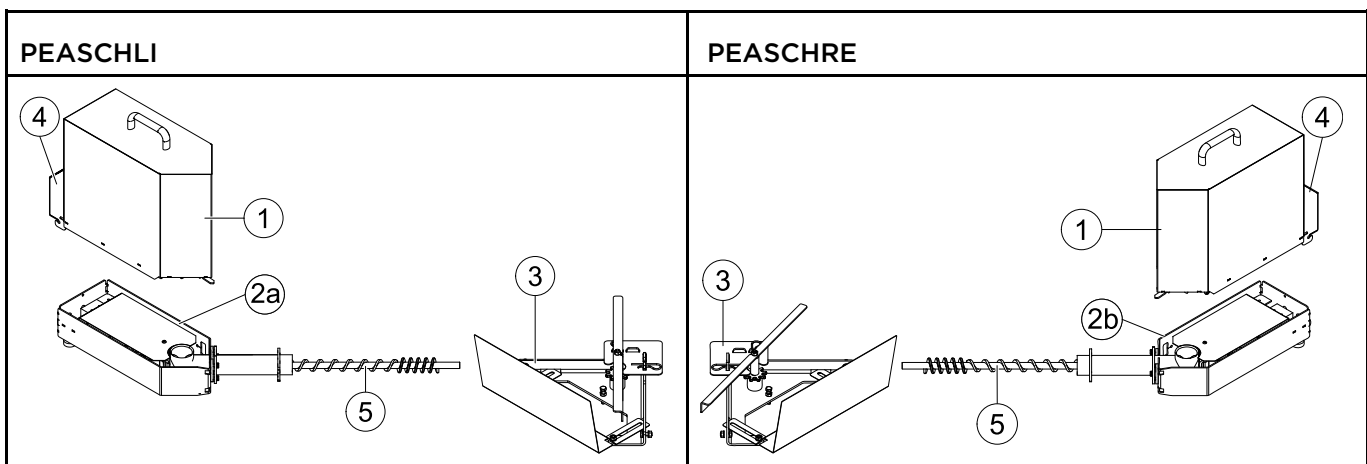
## BO020 BRE



1	121041	19	121196	37	B147
2	121058	20	B172	38	121082
3	B150	21	121197	39	B152
4	121039	22	121023	40	B144
5	121038	23	B130	41	B132
6	121011	24	121041	42	E1413E
7	121195	25	121037	43	B225/B101
8	121051	26	121079	44	121284
9	B179	27	E1030 / E1002-1	45	121034 / 121082
10	121082 / 121037	28	121166	46	121034 / 121037 / 121082
11	B129P	29	121039	47	B181
12	121075	30	121038	48	E1204 / E1304
13	121193	31	B113	49	B182
14	121194	32	E1004	50	B183
15	121192	33	B105	51	B184
16	121010	34	E1005	52	B196
17	121083 / 121029	35	B202	53	B202
18	121039 / 121038	36	121041	54	B133

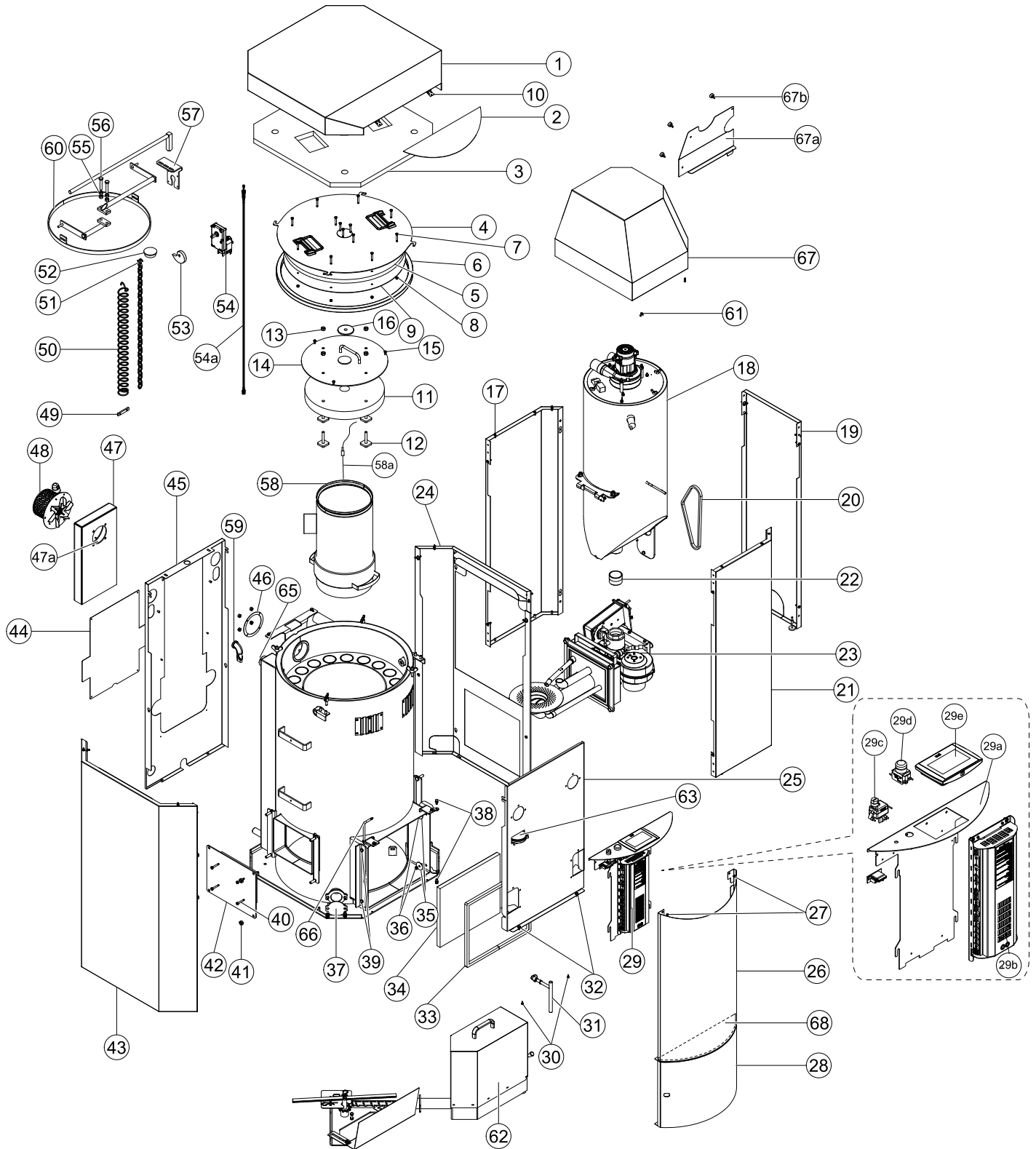


1	E1138	6	121122	12	SZB
2	121114	7	E1368	13	121250
3	121010	9	E1205	14	121253
4	O41070	10	O41869		
5	O41071	11	O41868		

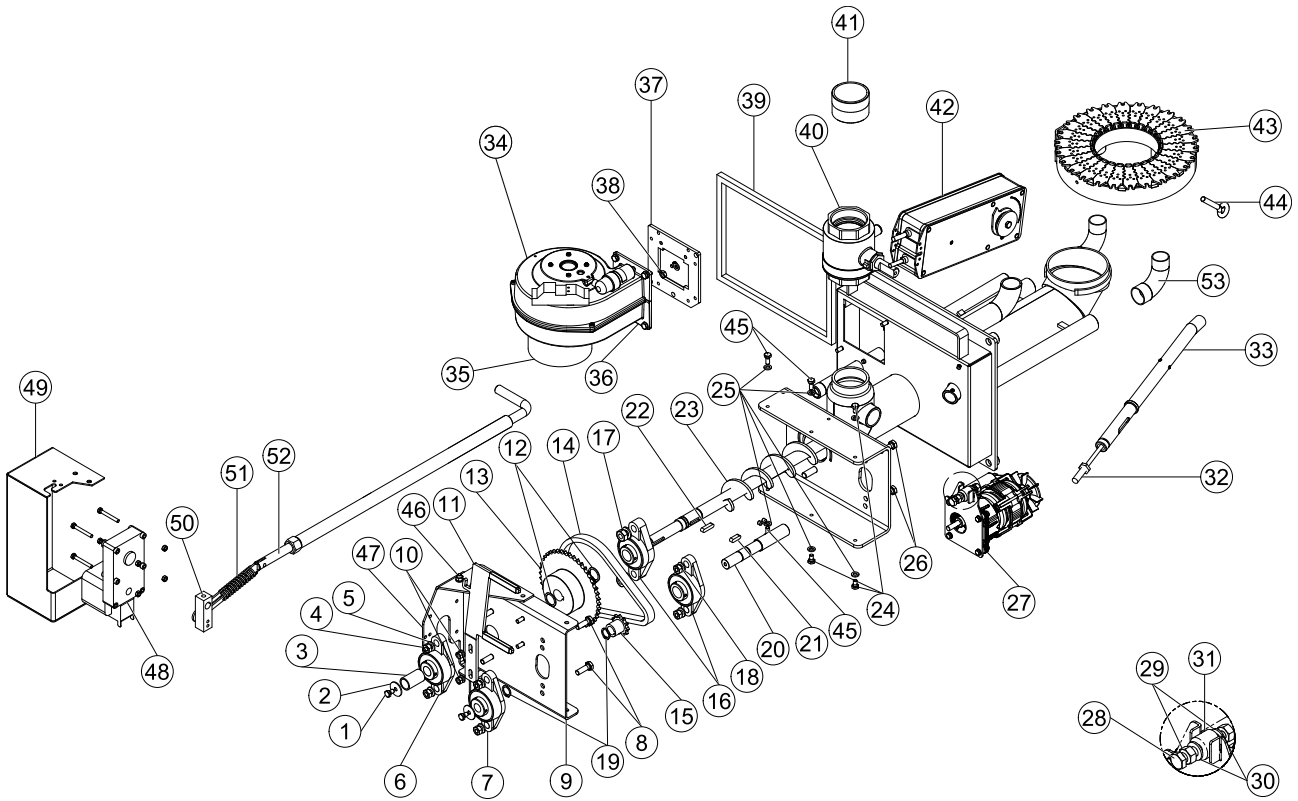


1	PE442	2b	PE439	4	PE453
2a	PE440	3	PE373	5	PE462

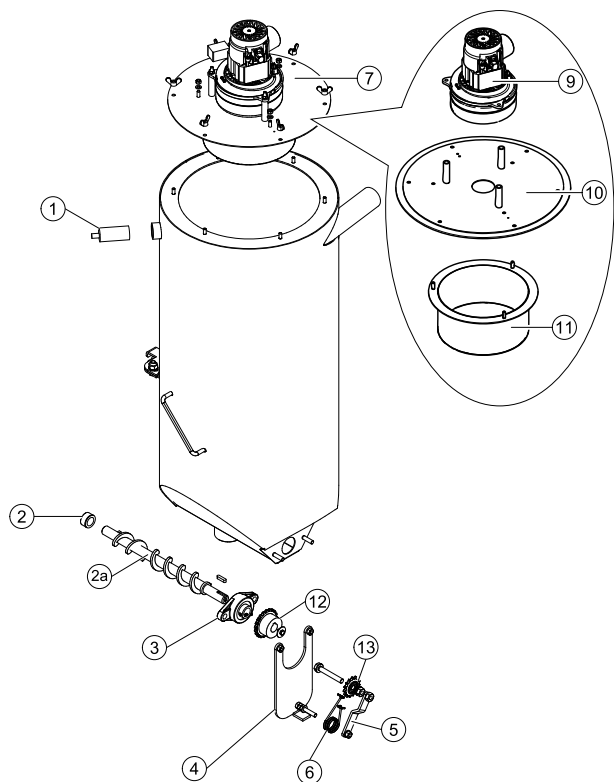
### 12.5.2 Pellematic PES 25 - 32



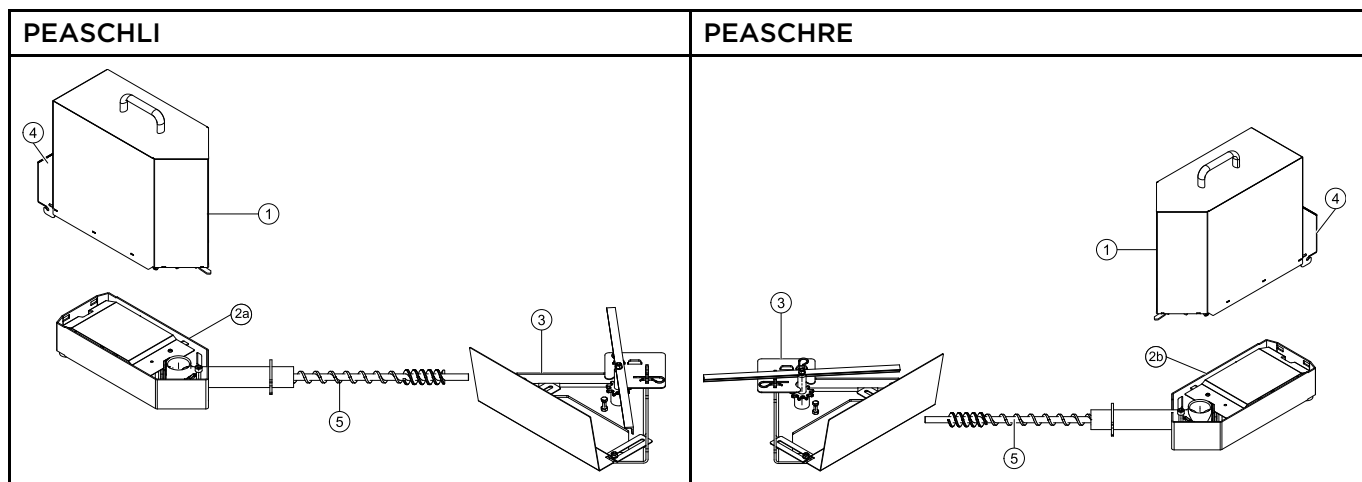
1	PE166	25	PE181	43	PE171
2	PE119	26	PE173	44	PE117-1
2	PE119B	26	PE173B	45	PE182-1
2	PE119G	26	PE173G	46	PE209
2	PE119R	26	PE173R	47	PE406
3	PE205	27	121159	48	E1001A
4	PE157	28	PE121	49	PE143
5	PE290	28	PE121B	50	PE130
6	PE2151	28	PE121G	51	121050 / 121126
7	121259	28	PE121R	52	PE103
8	121347	29	E1412	53	PE142
9	PE430 / 121082 / 121037	29a	PE564	54	E1054R / E1054L
10	PE131	29b	E1411	54a	E1186
11-16	PE244	29c	E1073	55	121169
11	PE213	29d	E1238	56	121168
12	PE174	29e	E1330	57	PE281
13	121373	30	auf Anfrage - on request - sur demande	58	B104
14	PE244-1	31	PE191	58a	PE277S
15	121034	32	121378	59	PE207
16	PE264-1	33	PE160	60	PE476
17	121381	34	PE176	61	121380
18	041886	35	sur demande	62	PEASCHRE / PEASCHLI
19	PE186	36	121039	63	24155 / 24157 / 121198 / 24315
20	121109	37	PE416 / PE413	65	PE192
20	121255	38	121410	66	24169
21	PE183	39	121042	67	PE260
22	121123	40	121379	67a	PE467
23	B0030/B0030BR	41	121083 / 121029	67b	121327
24	PE172	42	PE188	68	PE419



<b>B0030</b>					
1	121041	19	121196	37	B148
2	121058	20	B172	38	121082
3	B150	21	121197	39	B152
4	121039	22	121023	40	B144
5	121038	23	B131	41	B132
6	121011	24	121041	42	E1413E
7	121195	25	121037	43	B226E
8	121051	26	121079	44	121284
9	B179	27	E1030 / E1002-1	45	121034 / 121082
10	121082 / 121037	28	121166	46	121034 / 121037 / 121082
11	B129P	29	121039	47	B181
12	121075	30	121038	48	E1204 / E 1304
13	121193	31	B113	49	B182
14	121194	32	E1004	50	B183
15	121192	33	B105	51	B184
16	121010	34	E1005	52	B197
17	121083 / 121029	35	B202	53	B133
18	121039 / 121038	36	121041		



<b>O41886</b>					
1	E1138	5	O41071	11	O41868
2	121114	6	121122	12	121250
2a	SZB	7	E1368	13	121253
3	121010	9	E1205		
4	O41070	10	O41869		



1	PE442	2b	PE439	4	PE453
2a	PE440	3	PE373	5	PE462

## 12.6 Technical data

<b>Boiler - Type</b>		<b>PE(S) 12</b>	<b>PE(S) 15</b>	<b>PE(S) 20</b>	<b>PE(S) 25</b>	<b>PE(S) 32</b>	<b>PES 36</b>	<b>PES 48</b>	<b>PES 56</b>
Boiler-rated power	BTU/hr	41,000	51,000	68,300	85,300	109,500	123,000	164,000	191,000
	kW	12	15	20	25	32	36	48	56
Boiler-partial load	BTU/hr	11.601	17.061	20.473	27.297	34.121	37.534	51.182	58.006
	kW	3,4	5	6	8	10	11	15	17
<b>Measurements</b>									
Width - total (B)	<b>Inch</b>	44 1/2	44 1/2	44 1/2	46 3/4	46 3/4	51	51	51
	<b>mm</b>	1.130	1.130	1.130	1.186	1.186	1.297	1.297	1.297
Width - boiler (C)	<b>Inch</b>	27 1/2	27 1/2	27 1/2	29 3/4	29 3/4	34	34	34
	<b>mm</b>	700	700	700	756	756	862	862	862
Height - boiler (H)	<b>Inch</b>	43	43	43	51	51	61	61	61
	<b>mm</b>	1.100	1.100	1.100	1.300	1.300	1.555	1.555	1.555
Height - vacuum system execution (D)	<b>Inch</b>	55	55	55	63	63	73	73	73
	<b>mm</b>	1.400	1.400	1.400	1.600	1.600	1.855	1.855	1.855
Height - filling unit (F)	<b>Inch</b>	12	12	12	12	12	12	12	12
	<b>mm</b>	300	300	300	300	300	300	300	300
Depth - boiler (T)	<b>Inch</b>	32	32	32	34 1/4	34 1/4	39	39	39
	<b>mm</b>	814	814	814	870	870	990	990	990
Depth - burner casing (V)	<b>Inch</b>	20	20	20	20	20	20	20	20
	<b>mm</b>	508	508	508	508	508	508	508	508
Flow/return - dimensions	<b>Inch</b>	1	1	1	5/4	5/4	2	2	2
Flow/return - height of connection (A)	<b>Inch</b>	35 3/4	35 3/4	35 3/4	43 3/4	43 3/4	52	52	52
	<b>mm</b>	905	905	905	1.110	1.110	1.320	1.320	1.320
Flue size - diameter	<b>Inch</b>	5	5	5	6	6	7	7	7
	<b>mm</b>	130	130	130	150	150	180	180	180
Flue - height of connection (E)	<b>Inch</b>	25 1/2	25 1/2	25 1/2	33 1/4	33 1/4	41	41	41
	<b>mm</b>	645	645	645	844	844	1.040	1.040	1.040
Overall Weight	<b>Lb</b>	631	631	631	756	756	1.120	1.120	1.120
	<b>kg</b>	286	286	286	343	343	508	508	508
Boiler Body Weight	<b>Lb</b>	529	529	529	664	664	930	930	930
	<b>kg</b>	240	240	240	301	301	422	422	422
Efficiency rated power	<b>%</b>	85,4	85,6	85,5	84,9	84,5	85,3	85,4	85,9
Efficiency partial power	<b>%</b>	85,1	84,3	84,2	84,2	84,3	84,1	84,1	84,1
Water capacity	<b>Gal</b>	15,0	15,0	15,0	23,6	23,6	30,6	30,6	30,6
	<b>l</b>	66,0	66,0	66,0	104,0	104,0	135,0	135,0	135,0
<b>Flue gas area</b>									



<b>Boiler - Type</b>		<b>PE(S) 12</b>	<b>PE(S) 15</b>	<b>PE(S) 20</b>	<b>PE(S) 25</b>	<b>PE(S) 32</b>	<b>PES 36</b>	<b>PES 48</b>	<b>PES 56</b>
Fire vault temperature	°F	1652 - 2012							
	°C	900 - 1100							
Fire vault pressure	<b>Inch WC</b>	-0.14							
	<b>mbar</b>	-35							
Flue gas temperature rated power (Flue gas temperature can be adjusted)	°F	320							
	°C	160							
Flue gas temperature partial load (Flue gas temperature can be adjusted)	°F	212							
	°C	100							
Flue gas inertia current rated power	<b>Lb/hr</b>	49,60	62,17	82,89	99,43	115,96	149,25	198,85	231,92
	<b>kg/h</b>	22,50	28,20	37,60	45,10	52,60	67,70	90,20	105,20
Flue gas inertia current partial load	<b>Lb/hr</b>	14,11	20,72	24,91	29,76	35,71	45,64	62,17	70,33
	<b>kg/h</b>	6,40	9,40	11,30	13,50	16,20	20,70	28,20	31,90
Flue gas volume rated power	<b>Cft/hr</b>	918	1.232	1.642	1.971	2.627	2.956	3.941	4.598
	<b>m³/h</b>	26	35	47	56	74	84	112	130
Flue gas volume partial load at flue gas temperature	<b>Cft/hr</b>	240	353	424	509	607	777	1.059	1.204
	<b>m³/h</b>	7	10	12	14	17	22	30	34
Chimney diameter	according to chimney calculation								
Chimney construction	steel or ceramic lined, withstand humidity								
Electrical connection	<b>USA and Canada</b>	208 to 240 VAC, single phase, 60 Hz, 15 amp dedicated circuit.							
<b>Water area</b>									
Water resistance at 10K	<b>In WC</b>	38,22	60,22	88,32	114,02	150,95	15,62	20,84	24,29
	<b>mbar</b>	95,20	150,00	220,00	284,00	376,00	38,90	51,90	60,50
Water resistance at 20K	<b>In WC</b>	9,72	15,26	22,08	28,91	38,14	4,18	5,58	6,50
	<b>mbar</b>	24,20	38,00	55,00	72,00	95,00	10,40	13,90	16,20
Boiler temperature	°F	149 - 194							
	°C	65 - 90							
Boiler input temperature minimum	°F	131							
	°C	55							
Operating pressure maximum	<b>psi</b>	43.5							
	<b>bar</b>	3							
Test pressure	<b>psi</b>	67							

Boiler - Type		PE(S) 12	PE(S) 15	PE(S) 20	PE(S) 25	PE(S) 32	PES 36	PES 48	PES 56
	bar	4,60							
Flue gas volume rated power at flue gas temperature	Cft/hr	1.010,0	1.327,8	1.772,8	2.231,9	2.874,6	3.217,2	4.262,5	4.944,1
	m <sup>3</sup> /h	28,6	37,6	50,2	63,2	81,4	91,1	120,7	140,0
Flue gas volume partial load at flue gas temperature	Cft/hr	243,7	384,9	459,1	614,5	769,9	847,6	1.165,4	1.313,7
	m <sup>3</sup> /h	6,9	10,9	13,0	17,4	21,8	24,0	33,0	37,2
Fuel	USA	According to PFI Premium Standards or EnPlus -A1 pellets							
	Europe	According to EN14961-2 Standards (A1 Class)							
Colorific value	BTU/lbs	> 7.200							
	MJ/kg	>16,5							
Bulk density	Lb/cft	> 40,00							
	kg/m <sup>3</sup>	>600							
Water content	Mass%	<10							
Ash content	Mass%	<1							
Lenght	Inch	11/4 - 11/2							
	mm	3,15 - 40							
Diameter	Inch	1/4 - 5/16							
	mm	6,00 - 8,00							
Fine material	Mass%	<0.5							
	Mass%	<1%							
Ash melting point	°F	> 2.200							
	°C	> 1.200							
Contents	USA	untreated wood							
	Europe	stemwood or chemically untreated wood							
<b>Components</b>									
Internal ash pan volume	Gal	5,68			6,81		-		
	lb	25			30		-		
External ash box volume	Gal	4,54					5,675		
	lb	20					25		
Main Drive	W	40							
Drive Motor	W	250/370							
Suction Turbine	W	1200							
Combustion Air Blower	W	83							
Suction Fan Blower	W	32							
Electrical Ignition	W	250							

Boiler - Type		PE(S) 12	PE(S) 15	PE(S) 20	PE(S) 25	PE(S) 32	PES 36	PES 48	PES 56
Cleaning Motor	<b>W</b>	40							
Motor External Ash Box	<b>W</b>	40							
Fire protection motor	<b>W</b>	5							

The data are values of the test measurement and can vary from locally measured values









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**Note:**






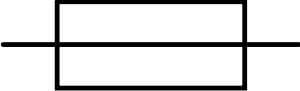
Test reports are available

## 12.7 Pellet boiler cautionary markings







### Labeling 60x30

 <p>BEFORE OPENING TURN OFF THE MAIN SWITCH</p>	<p>TO START THE SYSTEM PRESS THE GREEN ON/OFF BUTTON</p>	<p>THE CONTAINER CAN BE TAKEN DOWN ONLY BY LOOSENING THE YELLOW LOCKING SCREW</p> 
<p> <b>CAUTION</b></p> <p>DO NOT ALTER THIS EQUIPMENT IN ANY WAY LOSS OF WARRANTY</p>	<p> <b>CAUTION</b></p> <p>POWER SOURCE NOT CONTROLLED BY SUCTION TURBINES MAIN DISCONNECT</p>	<p> <b>CAUTION</b></p> <p>POWER ORIGINATED FROM A SOURCE OF POWER OTHER THAN THIS MOTOR</p>
<p> <b>CAUTION</b></p> <p>DO NOT REMOVE THE SNAP RING! LOSS OF WARRANTY</p>	<p> <b>CAUTION</b></p> <p>FOR USE WITH WOOD PELLET FUEL ONLY LOSS OF WARRANTY</p>	<p> <b>CAUTION</b></p> <p>VACUUM SUCTION SYSTEMS: REMOVE THE PROTECTIVE CAP FROM THE BALL VALVE</p>

Labeling 99x34

<p> <b>DANGER</b></p> <p>TO AVOID INJURY FROM MOVING PARTS, SHUT OFF THE MAIN CONTROLLER BEFORE REMOVING THIS COVER</p>	<p><b>CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA</b></p>
<p> <b>DANGER</b></p> <p><b>KEEP VIEWING AND ASH REMOVAL DOORS TIGHTLY CLOSED DURING OPERATION!</b></p>	<p> <b>CAUTION</b></p> <p>DO NOT CONNECT THIS UNIT TO A CHIMNEY FUEL SERVING ANOTHER APPLIANCE. <b>SEE LOCAL RESTRICTIONS!</b></p>
<p> <b>CAUTION</b></p> <p>INSTALL AND USE ONLY IN ACCORDANCE WITH INSTALLATION- AND OPERATING INSTRUCTIONS! REFER TO OWNERS MANUAL</p>	<p><b>FORWARD</b></p> <p><b>WATER QUALITY ACC. TO VDI 2035 STANDARD</b> (THE MEDIUM HAS TO BE FREE FROM AIR AND MUD)</p>
<p> <b>DANGER</b></p> <p><b>MOVING PARTS CAUSE INJURY! DO NOT OPERATE WITH REMOVED COVERING!</b></p>	<p><b>RETURN</b></p> <p><b>WATER QUALITY ACC. TO VDI 2035 STANDARD</b> (THE MEDIUM HAS TO BE FREE FROM AIR AND MUD)</p>
<p>COPPER CONDUCTORS ONLY!</p>	<p><b>FUSE</b></p>  <p><b>T 10A</b></p>
<p>REFER TO OWNERS MANUAL</p>	

Labeling 105x74

<p><b>IN THE CASE OF A “RUN-AWAY” FIRE:</b></p> <ul style="list-style-type: none"> <li>• NEVER PUT YOUR SELF AT RISK OF FATAL INJURY. YOUR SAFETY MUST ALWAYS TAKE HIGHEST PRIORITY!</li> <li>• SWITCH OFF THE HEATING SYSTEM</li> <li>• EXIT THE BUILDING AND CALL YOUR SERVICE CONTRACTOR AND LOCAL FIRE DEPARTMENT</li> </ul>	<div style="background-color: yellow; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p style="text-align: center;"><b>HOT SURFACES</b></p> <ul style="list-style-type: none"> <li>• DO NOT TOUCH DURING OPERATION!</li> <li>• KEEP CHILDREN AWAY</li> <li>• KEEP CLOTHING AND COMBUSTIBLE MATERIALS AWAY FROM MARKED CLEARANCES.</li> <li>• MAXIMUM DRAFT MARKED ON NAMEPLATE</li> </ul>
<div style="background-color: yellow; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p>IN THE CASE OF A CONNECTING BOILER CONTACT A SERVICE TECHNICIAN FOR COMPLIANCE INFORMATION BEFORE CONNECTING! MAY BE CONNECTED TO AN EXISTING BOILER SYSTEM</p> <p>THE FOLLOWING UNIT IS APPROVED FOR CONNECTING WITH THE AUTOPELLET SYSTEM:</p> <p>MODEL NUMBER CONNECTED UNIT: _____ ITEM NUMBER CONNECTED UNIT: _____</p>	<div style="background-color: orange; padding: 5px; text-align: center;">  <b>WARNING</b> </div> <p style="text-align: center;">RISK OF FIRE!</p> <ul style="list-style-type: none"> <li>• DO NOT OPERATE WHILE FLUE DRAFT EXCEEDS -.11 INCHES WC!</li> <li>• DO NOT OPERATE WITH DOORS OPEN!</li> <li>• DO NOT STORE FUEL OR OTHER COMBUSTIBLE MATERIAL WITHIN MARKED INSTALLATION CLEARANCES!</li> <li>• INSPECT AND CLEAN FLUE AND CHIMNEY REGULARLY!</li> <li>• DO NOT USE CHEMICALS TO START UNIT FIRING</li> <li>• DO NOT BURN GARBAGE, GASOLINE, FUEL OILS OR OTHER FLAMMABLE LIQUIDS OR MATERIALS</li> </ul>
<div style="background-color: red; padding: 5px; text-align: center;">  <b>DANGER</b> </div> <p style="text-align: center;">HOT SURFACES AND MOVING PARTS MAY CAUSE INJURY!</p> <p style="text-align: center;">RISK OF FIRE OR EXPLOSION – DO NOT BURN GARBAGE, GASOLINE, FUEL OILS, DRAIN OIL OR OTHER FLAMMABLE LIQUIDS OR MATERIALS</p>	<div style="background-color: yellow; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p>UNSAFE TO ADJUST FLUE DRAFT HIGHER THAN .11 INCHES WATER COLUMN</p> <ul style="list-style-type: none"> <li>• MIN DRAFT @ LOW FIRE -.02 INCHES WC</li> <li>• MIN DRAFT @ HIGH FIRE -.04 INCHES WC</li> <li>• MAX DRAFT -.11 INCHES WC</li> </ul>
<div style="background-color: yellow; padding: 5px; text-align: center;">  <b>CAUTION</b> </div> <p>THE HEAT EXCHANGER, FLUE PIPE AND CHIMNEY MUST BE CLEANED REGURARLY TO REMOVE ACCUMULATED CREOSOTE AND ASH, ENSURE THAT THE HEAT EXCHANGER, FLUE PIPE, AND CHIMNEY ARE CLEANED AT THE END OF THE HEATING SEASON TO MINIMIZE CORROSION DURING THE SUMMER MONTHS, THE APPLIANCE FLUE PIPE AND CHIMNEY MUST BE IN GOOD CONDITION. THESE INSTRUCTIONS ALSO APPLY TO A DRAFT INDUCER IF USED.</p>	<p style="text-align: center;">LOSS OF ELECTRICAL POWER</p> <p style="text-align: center;"><b>NO DANGER</b> PELLET BOILER COOLS DOWN AUTOMATICALLY</p> <hr/> <p style="text-align: center;"><b>INSPECT AND CLEAN EXHAUST VENTING SYSTEM FREQUENTLY</b></p>

## 12.8 Data for 20KW model, including emissions



# MESys

Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type:</b> Pellematic20	<b>S/N:</b> XUT xx	<b>CATALOG No.:</b> PES20
<b>Date of manuf.:</b> 02/2018	<b>Rated heat power:</b> 68,300BTU/hr	
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5		
<b>Manufactured By:</b> MESys LLC, Bethel, Maine	<b>FUEL:</b> WOOD PELLETS	
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> certified to comply with the 2020 particulate emissions standard using wood pellets.		
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.		
<b>Particulate Emissions</b> , 0.028 lb./million btu - 0.227 grams/hr. <b>CO emissions</b> , 0.019 grams/min. <b>Annual Efficiency</b> , (HHV) 74.3%		
<b>Water Capacity:</b> 15.0 Gallons	<b>Operating Temp:</b> 194 °F	
<b>Max Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC		
<b>Chimney</b>	Approved factory built stainless steel or tile-lined masonry	
<b>MAX DRAFT: 0.11 inches WC MIN DRAFT: 0.04 inches WC</b>		
<b>Diameter:</b> 6 INCH	<b>Electrical Rating:</b> 220 V, 60 Hz, 14 A, 1760 W	
<b>FLOORING:</b> COMBUSTIBLE FLOORS CAN BE USED WITH A NON-COMBUSTIBLE SHIELD. MINIMUM CLEARANCES ARE 18IN/457MM IN THE FRONT AND 8IN / 203MM ON EACH SIDE.		
<b>PARTS</b>	<b>Fan Flue Gas:</b> E1001A	<b>Controller Display:</b> E1330
<b>Motor Ash Box:</b> E1302	<b>Motor Flame Return Protection:</b> E1413A	
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA	
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205	
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV	
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1	
<b>Motor Auger Screw:</b> FKAEM 150 / FKAE-S	<b>Fan Burner:</b> E1005S	

## 12.9 Data for 22KW model



Report No. 0444PB004S

**MESys**

Maine Energy Systems, LLC  
 8 Airport Road, Bethel, Maine 04217  
 Voice: 207.824.6749 Fax: 207.824.4816

<b>Type: Pellematic22</b>	
<b>S/N:</b> XUT01753	<b>CATALOG No.:</b> PES22
<b>Date of manuf.:</b> 02/2022	<b>Rated heat power:</b> 68,300 BTU/hr
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5	
<b>Manufactured By:</b> MESys LLC, Bethel, Maine	<b>FUEL:</b> WOOD PELLETS
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY:</b> Certified to comply with the 2020 particulate emissions standard using wood pellets.	
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.	
Particulate emissions, 0.053lb./million btu - 0.439grams/hr. CO emissions, 0.017grams/minute. Annual efficiency (HHV) 82.0%	
<b>Water Capacity:</b> 15 Gallons	<b>Operating Temp:</b> 194 °F
<b>Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC	
<b>Chimney</b> Approved factory built stainless steel or tile-lined masonry	
<b>max DRAFT: 0.11 inches WC - min DRAFT: 0.04 inches WC</b>	
<b>Diameter:</b> 6 INCH	
<b>Electrical Rating:</b> 220 V, 60 Hz, 14 Amp, 1760 Watts	
<b>FLOORING:</b> Combustible floors can be used with a non-combustible shield. Minimum clearances are 18in/457mm in the front and 8in/203mm on each side.	
<b>PARTS</b>	<b>Fan, Flue Gas:</b> E1001A <b>Controller Display/Screen:</b> E1330
<b>Motor Flame Return Protection:</b> E1413A	<b>Motor Ash Box:</b> E1302
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1
<b>Fan Burner:</b> E1005S	<b>Motor Auger Screw:</b> FKAEM 150 /FKAE-S



## 12.10 Data for 32KW model, including emissions



# MESys

Maine Energy Systems, LLC  
8 Airport Road, Bethel, Maine 04217  
Voice: 207.824.6749 Fax: 207.824.4816

Report No. 0444PB004S

<b>Type:</b> Pellematic32	<b>S/N:</b> XUT xx	<b>CATALOG No.:</b> PES32
<b>Date of manuf.:</b> 02/2018	<b>Rated heat power:</b> 109,000 BTU/hr	
<b>Tested to:</b> UL 2523-2013. CSA B366.1-2011 EN303-5		
<b>Manufactured By:</b> MESys LLC, Bethel, Maine		<b>FUEL:</b> WOOD PELLETS
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> certified to comply with the 2020 particulate emissions standard using wood pellets.		
This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owners manual.		
<b>Particulate Emissions,</b> 0.021 lb./million btu - 0.319 grams/hr. <b>CO emissions,</b> 0.025 grams/min. <b>Annual Efficiency,</b> (HHV) 76.5%		
<b>Water Capacity:</b> 23.6 Gallons	<b>Operating Temp:</b> 194 °F	
<b>Max Operating Pressure:</b> 3 BAR / 43.5 PSI / 1204 inches WC		
<b>Chimney</b>	Approved factory built stainless steel or tile-lined masonry	
<b>MAX DRAFT: 0.11 inches WC MIN DRAFT: 0.04 inches WC</b>		
<b>Diameter:</b> 6 INCH	<b>Electrical Rating:</b> 220 V, 60 Hz, 14 A, 1760 W	
<b>FLOORING:</b> COMBUSTIBLE FLOORS CAN BE USED WITH A NON-COMBUSTIBLE SHIELD. MINIMUM CLEARANCES ARE 18IN/457MM IN THE FRONT AND 8IN / 203MM ON EACH SIDE.		
<b>PARTS</b>	<b>Fan Flue Gas:</b> E1001A	<b>Controller Display:</b> E1330
<b>Motor Ash Box:</b> E1302	<b>Motor Flame Return Protection:</b> E1413A	
<b>Motor Cleaning Device:</b> E1054	<b>Motor Hopper:</b> NA	
<b>Motor Burner Plate Cleaning:</b> NA	<b>Suction Turbine:</b> E1205	
<b>Motor Burner Screw:</b> E1030	<b>Low Water Cut Off:</b> Safgard 550SV	
<b>Controller Board:</b> E1412	<b>Pressure-Relief Valve:</b> Watts Co335M1	
<b>Motor Auger Screw:</b> FKAEM 150 / FKA-E-S	<b>Fan Burner:</b> E1005S	

## 25 General information

As require by the United States Department of Environmental Protection the following information is given for the:

AutoPellet Pellematic PES 10-56 wood pellet fired central heating boiler. Manufactured by Maine Energy Systems, of 8 Airport Road, Bethel, Maine, 04217

- The Pellematic has a thermal output levels from **3 kW** or **10,000** btu/h to 191,000 btu/h and complies with EPA 2020 requirements.
- This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.
- Complete installation information is found in the Installation Manual.
- Although operational information is elsewhere in this manual, there are specific concerns for correct operation that can directly affect the emissions profile of this equipment. It is therefore necessary that we mention these important points.
- Fuel loading and selection. Your Pellematic is equipped with completely automatic fuel loading. Thus, other than selecting the correct fuel, there are no loading instructions as such. Fuel selection is straight forward.  
Only PFI Premium 100% wood pellets should be used in your boiler.
- Among the materials that are specifically prohibited to be burned in your Pellematic are: trash, plastics, gasoline, rubber, naphtha, household garbage, material treated with petroleum products such as particleboard, railroad ties, and pressure treated wood.  
Burning these materials may result in release of toxic fumes or render the boiler ineffective and cause smoke.
- Your Pellematic pellet fired boiler is completely automatic ignition as well as the loading as before mentioned.  
There are therefore no starting procedures to be followed. The boiler correctly starts itself when required by building load.
- There are no user adjustments required for the air controls on your Pellematic.
- It is important to have your Pellematic boiler serviced by a trained professional who is aware of the importance to ensure that there are no inlet air restrictions in or around your boiler's combustion blower. And that the air passages within your boiler are free of debris, (creosote, ash, etc.)  
The flue pipe and chimney are also clean and free of debris / restrictions.  
And that the combustion chamber door seal is airtight when the door is closed and secured.
- Ash removal is also completely automatic on your Pellematic boiler. Ashes should be placed in a metal container with a tight-fitting lid.  
The closed container of ashes should be placed on a noncombustible floor or on the ground, away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.  
When cooled ashes can be disposed of on your lawn, garden or local transfer station.
- Your Pellematic is not a catalytic type burner.
- A person or persons responsible for the operation of a hydronic heater must comply with all applicable laws or other requirements, such as State laws or regulations as well as local ordinances.
- A person or persons operating a hydronic heater should be aware that they are responsible for operation in such a manner that does not create a public or private nuisance condition.  
The Manufacturer's distance and stack height recommendations and the requirements in any applicable laws or other requirements may not always be adequate to prevent nuisance conditions due to terrain or other factors.
- Your Pellematic should be installed with a minimum stack height of 16 feet.  
Providing correct draft as given in the Installation manual.
- Draft is the force which moves air from the appliance up through the chimney.

The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance and may damage the catalytic combustor. Inadequate draft may cause backpuffing into the room and 'plugging' of the chimney. Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints. An uncontrollable burn or excessive temperature indicates excessive draft.

- **The efficiency of your 20KW Pellematic boiler running at full power is >80%.**
- **The efficiency of your 22KW Pellematic boiler running at full power is >82%.**
- **The efficiency of your 32KW Pellematic boiler running at full power is >83%.**
- **The efficiency of your 56KW Pellematic boiler running at full power is >86%.**
- This is the result of a laboratory test and was measured using the HHV of the fuel used.
- You should never operate a combustion appliance of any type in your home without there being a properly installed smoke and CO detector.  
Your local fire department usually has good advice on placement of these detectors and how many your home may need for complete coverage.





## Author & Manufacturer

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