DATA SHEET FOR DUST / OPACITY MONITORING SYSTEM

Job no. : 25PBEB32501/1

No.	Description		Units	Value		
1	**GENERAL :**					
2	Tag number			TK20HNA10 CQ004 -B01		
3	Service			BOILER K20 CEMS - OPACITY		
4	Line Number	Line dimension		K20HNA10BR010	2500x1700	
5	Analyzer Shelter Cabinet Nbr.			TK20CFF11		
6	P.E.F.S. dwg. number			24LT7P-01-EO-004		
7	Critical to			CEMS - AES		
8	**INSTRUMENT :**					
9	Instrument Type			IN LINE / IN-SITU		
10	Process connection			Flange		
11	Measuring principle			Scaterred Light - QAL 1		
12	Instrument Location	Control Unit Locatio		FG Duct	Container	
13	Control Unit Model			V.T.A.		
14	Accuracy	Respons Time		< 1,5%	V.T.A.	
15	Power supply	from		230Vac 50Hz	UPS	
16	Isolated I/O	HART		YES	Option	
17	List of Output signals			4-20mA; 2x DO		
18	Instrument range Min / Max		mg/m³	0	15	
19	Measured range 1 Min / Max		mg/m³	0	12,5	
20	Measured range 2 Min / Max		mg/m³			
21	Electrical connection	Cable gland		Terminal	Metric	
22	Cross sensitivity of component			V.T.A.		
23						
24	AMS type	AMS Location		V.T.A.	Container	
25	Calibration	Purging		Automatic	V.T.A.	
26						
27	**INSTRUMENT ACESSORIES:**					
28	Instrument Accessories Type			V.T.A.		
29	Purge Air Fan	Power supply		V.T.A.		
30	Purge Air Hose	Purge Hose Material		V.T.A.		
31	Weld-on Tube Type	Weld-on Tube Mat.		V.T.A.		
32	Display Unit			YES		
33						
34	**PROCESS CONDITIONS:**					
35	Medium / phase			Flue Gas	Gas/Vapor	
36	**Mech. impurities, Erosion, Corrosion**					
37	Measured - Dust / Opacity / Soot Nt			Dust Concentration		
38	Measured gas	Fuel type		Flue Gas / NG+H2		
39						
40	Particle concentration		Unit	**Min**	**Norm**	**Max**
41	Components					
42	Particle size					
43	NH3					
44	Toxic due to					
45	Operating conditions			**Min**	**Nor**	**Max**
46	Flow		Nm³/h	42100	158000	158800
47	Pressure		kPa-g	-5	5	10
48	Temperature		°C	84	98	110
49	Flow velosity					
50	Water in medium			17 - 22 Vol.%		
51	Water dew point			70 - 79 °C		
52	Acid dew point					
53						
54	**PURCHASE DATA:**					
55	Manufacturer					
56	Model type					
57	Serial number					
58	Model Order Code 1-st part					
59	Model Order Code 2-nd part					

No.	Description		Units	Value	
60	**GENERAL :**				
61	Area / Unit			KOTELNA T700/ KOTEL K20	
62	Location / Analyzer House			FIELD /	
63	Flammable atm. / Zone			Safe Area	
64					
65	Ambient temperature		°C		
66	Tech. Location				
67	**STACK / DUCT SPECIFICATION:**				
68	Stack/Duct Orientation			HORIZONTAL	
69	Stack/Duct Profile Type			SQARE HxW 2490x1690	
70	Stack/Duct Material	Internal Lining Mat.		C.S.	
71	External Diameter	Internal Diameter		2500x1700	2490x1690
72	Stack Wall Thickness	Insulation Thickness		5 mm	HOLD
73	Double wall stack	Space between wall		NO	
74	Process Connection Type			Adjustment Flange ID 89mm	
75	Process Connection Material			C.S.	
76	Platform elevation	Hook-up elevation		+5,0m	+6,5m
77	Type of filter upstream			NO	
78	Plant type			NG+H2 GAS BOILER	
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89	**ACCESSORIES :**				
90	Protective Device			YES	
91	Test Filters				
92	Weather Protective Covers			YES	
93	Calibration/Validate Tube			V.T.A.	
94	Local power supply Unit			YES	
95	Connection Cables			V.T.A.	
96					
97	**SPECIAL REQUIREMENTS :**				
98	AMS requirements				
99	AMS Connection			RS	
100	QAL certificate / requirements			QAL 1 / Calibration	
101	Competent authority			YES	
102	Environmental requirements			EN 15267	
103	Explosion prot. certificate			NO	
104	Special req. for service				
105					
106	**NON-VENDOR RELATED INFO:**				
107	Winterizing / Heating			V.T.A.	
108	Tracing temperature		°C	V.T.A.	
109	Grid position / Elevation		/m	/ +6,5m	
110	Design code				
111	SAP number				
112	UV3 number				
113	**REMARKS:**				
114	V.T.A. - Vendor To Advice				
115					
116					
117					
118					

Eng. by: V.JAROŠ	Req. no. 24LT7P-00-IQ-132	Checked by / Date /	REV. 0A
Principal: ORLEN Unipetrol RPA s.r.o. ČR	Doc. number 24LT7P-01-IS-133	1 / 1	Date: 08.06.2026
Consignee: ORLEN Projekt Česká republika s.r.o			