

# ÖKOFEN – PELLEMATIC- PBV2000

## TECHNICAL DATAS – SCREW CONVEYOR TRANSPORT SYSTEM

Technical Datas Boiler							
Designation		PE08	PE 10	PE 15	PE 20	PE 25	PE 30
rated power	<b>kW</b>	8	10	15	20	25	31
partial load	<b>kW</b>	2,4	2,6	5	6	8	10
boiler efficiency rated power	<b>%</b>	90,5	91,6	92,6	93,5	92,9	92,3
boiler efficiency partial load	<b>%</b>	89,3	90,0	90,0	90,1	89,2	88,2
<b>Water area</b>							
capacity of water	<b>l</b>	39	66	66	66	104	104
water supply diameter	<b>Zoll</b>	1	1	1	1	5/4	5/4
water supply diameter	<b>DN</b>	25	25	25	25	32	32
water resistance at 10 K	<b>mBar</b>	45,7	5,6	8,8	12	5	8
water resistance at 20 K	<b>mBar</b>	11,8	1,5	2,25	3	1	2
boiler temperature	<b>°C</b>	65-90	65-90	65-90	65-90	65-90	65-90
boiler input temperature minimum	<b>°C</b>	55	55	55	55	55	55
operating pressure maximum	<b>Bar</b>	3,5	3,5	3,5	3,5	3,5	3,5
test pressure	<b>Bar</b>	4,6	4,6	4,6	4,6	4,6	4,6
<b>Flue gas area</b>							
fire vault temperature	<b>°C</b>	900-1100					
fire vault pressure	<b>mBar</b>	-0,01	-0,01	-0,01	-0,01	-0,01	-0,01
need of draught rated power	<b>mBar</b>	0,08	0,08	0,08	0,08	0,08	0,08
need of draught partial load	<b>mBar</b>	0,01	0,03	0,03	0,03	0,03	0,03
Suction draught necessary		ja	ja	ja	ja	ja	ja
flue gas temperature rated power	<b>°C</b>	120/ 140*	120/ 140*	160	160	160	160
*flue gas temperature can be changed							
flue gas temperature partial load	<b>°C</b>	80/ 100*	80/ 100*	100	100	100	100
*flue gas temperature can be changed							
flue gas inertia current rated power	<b>kg/h</b>	23,5	22	33	44	55	66
flue gas inertia current partial load	<b>kg/h</b>	9,4	7,5	11,3	15	18,3	22
flue gas volume rated power	<b>m³/h</b>	18,1	17	25,5	34	42,5	51
flue gas volume partial load	<b>m³/h</b>	7,3	6	9	12	14	17
smoke tube diameter ( on the boiler)	<b>mm</b>	130	130	130	150	160	160
chimney diameter	<b>mm</b>	according to chimney calculation					
chimney construction		withstand humidity					
<b>Fuel</b>		<b>pellets made of 100% natural wood according to ÖNorm M7135</b>					
calorific value	<b>MJ/kg</b>	17,6					
apparent specific weight	<b>kg/m³</b>	>650					
water content	<b>Gew.%</b>	8-10					
ash parts	<b>Gew.%</b>	<0,5					
length	<b>mm</b>	5-30					
diameter	<b>mm</b>	5-6					
finest content	<b>Gew.%</b>	<10					

<b>Technical Datas boiler</b>							
<b>Designation</b>		<b>PE08</b>	<b>PE 10</b>	<b>PE 15</b>	<b>PE 20</b>	<b>PE 25</b>	<b>PE 30</b>
weight - boiler	<b>kg</b>	210	242	246	250	316	320
ash							
ash pan - volume	<b>l</b>	22	25	25	25	30	30
<b>Electrical components</b>							
connection		230 VAC, 50Hz, 6A					
main drive	<b>W</b>	40	40	40	40	40	40
drive motor	<b>W</b>	40	90	90	90	90	90
combustion air blower	<b>W</b>	90	83	83	83	83	83
suction fan blower	<b>W</b>	32	32	32	32	32	32
electrical ignition	<b>W</b>	250	250	250	250	250	250
cleaning motor	<b>W</b>	40	40	40	40	40	40
flame return gate	<b>W</b>	8	8	8	8	8	8
<b>Emission according to test report</b>		<b>WB 4)</b>	<b>WB 1)</b>	<b>*)</b>	<b>WB 2)</b>	<b>*)</b>	<b>WB 3)</b>
O <sub>2</sub> -contents rated power	<b>Vol. %</b>	10,1	7,5	7,7	7,8	7,2	6,6
O <sub>2</sub> -contents partial load	<b>Vol. %</b>	13,2	11,9	12,4	13	13,2	13,5
<b>Reference 10% O<sub>2</sub> dry (EN303-5)</b>							
CO rated power	<b>mg/m<sup>3</sup></b>	108	34	81	128	74	19
CO partial load	<b>mg/m<sup>3</sup></b>	570	542	437	336	411	488
OGC rated power	<b>mg/m<sup>3</sup></b>	10	2	2,5	4	3	3
OGC partial load	<b>mg/m<sup>3</sup></b>	27	3	3	4	3	3
dust rated power	<b>mg/m<sup>3</sup></b>	19	18	18	18	15	12
<b>Reference 13% O<sub>2</sub> dry (Wieselburg)</b>							
CO rated power	<b>mg/m<sup>3</sup></b>	79	25	59	93	54	14
CO partial load	<b>mg/m<sup>3</sup></b>	415	394	319	245	300	356
OGC rated power	<b>mg/m<sup>3</sup></b>	8	1	2	3	2,5	2
OGC partial load	<b>mg/m<sup>3</sup></b>	20	2	2,5	3	2,5	2
dust rated power	<b>mg/m<sup>3</sup></b>	14	12	15	17	9	9
<b>Accord. to § 15a BVG Österreich</b>							
CO rated power	<b>mg/MJ</b>	52	16	39	61	35	9
CO partial load	<b>mg/MJ</b>	275	257	208	160	196	232
NO <sub>x</sub> rated power	<b>mg/MJ</b>	66	60	74	88	72	55
NO <sub>x</sub> partial load	<b>mg/MJ</b>	59	-	-	-	-	-
HC rated power	<b>mg/MJ</b>	5	1	2	3	2	1
HC partial load	<b>mg/MJ</b>	14	2	2	2	2	1
dust rated power	<b>mg/MJ</b>	9	8	8	8	7	6

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\*) Intermeditate sizes accord. to ÖNORM EN303-5 Pkt.5.1.3.1.- values middled  
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