

## **ECOPAL S**

# AIR HEATERS FIRED WITH STRAW AND OTHER BIOMASS

Based on the straw-fired boilers type EKOPAL RM the company METALERG has developed the design of the range of air heaters, in which you can heat air to 120 °C. The straw burning system in these heaters is the same as in EKOPAL RM boilers, i.e. the countercurrent system. The range of air heaters includes 6 sizes of heaters with power from 100 kW to 1000 kW, adapted to all kinds of bales of straw, starting from the smallest cubes with dimensions of 80x40x40 cm through the round bales with a diameter of 120-180 cm, up to high density cuboids with dimensions of 250x120x80 cm.

density cuboids with dimensions of 250x120x80 cm. The air heater type EKOPAL S can be characterized as "2 in 1" system, since it contains a boiler and tube type heat exchanger. The water was replaced in the heater

with high-temperature fluid. Heat is transferred to the liquid, and then using the tube type exchanger, built-in the heater, it is transferred to the air.

#### Advantages:

- 100% replacement of the previous expensive fuel (oil, gas, coal or coal dust)
- easy adjustment of air temperature and its small drop between charging operations
- · easy and comfortable operation
- permanent maintenance through the heat carrier
- No need to drain the fluid after the heating season
- possibility to adapt the heater to water heating after drying season

#### THE INVESTMENT RETURNS USUALLY AFTER 1-2 SEASONS OF CORN DRYING

### **ECOPAL S CATALOUGE**

Parameter	Unit	EKOPAL S-100	EKOPAL S-300	EKOPAL 5-400	EKOPAL S-700	EKOPAL S-1000
Output:	kW	100	300	400	700	1000
Max. air temperature	°C	120*				
Boiler dimensions						
- height		2600	3500	3800	4210	4510
- width		1480	2200	2360	2800	3430
- depth		2370	3000	3360	3400	3550
Combustion chamber dimensions mm						
- height		1000	1350	1550	1885	1990
- width		900	1300	1500	1900	2800
- depth		1145	1300	1550	1560	1560
Own weight	kg	2800	9000	9500	11000	16000
Fluid quantity		~1000	~2200	~2600	~4000	~5200
Heater efficiency	%	to 85				
Single straw charge	pcs	4 cubes 40x45x80cm	1 round bale Ø125x120cm	1 round bale Ø125- 150x150 cm	1 round bale Ø125- 180x150 cm or 2 bales 180x80x120 cm	2 round bales Ø125- 130x150 cm or 2 bales 250x120x80 cm
Straw consumption @ max. output	kg/j	32	96	128	224	320

<sup>\*</sup>optional increase in temperature to 140⊠C

