BONO FT STEAM-MATIC





BONO ENERGIA

Bono Energia S.p.A. Via Resistenza 12 20068 Peschiera Borromeo (Mi) Italy

Phone +39 | 02 55302848 www.bono.it



FT STEAM-MATIC

BONO STEAM MATIC FT is a fire tube steam boiler, 2 passes dry back type, in horizontal design, fully packaged and complete with all the necessary control and safety devices.

Manufacturing and certification are made according to European Directive 97/23/CE (PED). Upon request, other design codes and certifications can be applied (ASME, SELO etc.).

FT boilers are available from 1.000 kg/h to 6.000 kg/h, with a desing pressure of 12 bar (maximum operating pressure 10 bar). Other design pressure configurations are available on request. Efficiency levels range from 88% up to 93%.



COMPETITIVE ADVANTAGES

The advantages of STEAM MATIC FT boilers are the following:

- > The two pass design allows easy access to all internal parts reducing downtime for inspection, maintenance and cleaning.
- > The heating surface and the fire tubes are designed to obtain a high turbulence in the gaseous mass, ensuring high thermal efficiency.
- > Thanks to the large furnace, with ample diameter, the combustion occurs with low NOx emissions.
- > The control system is specifically designed for easy and automatic operation.













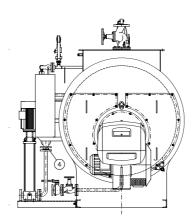
ACCESSORIES

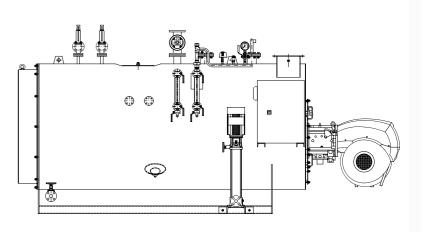
ECONOMIZER

Finned tubes bank heat exchanger, in carbon steel, installed on the flue gas outlet, for the feed water pre-heating. Pneumatic valve installed before the feed water inlet connection, controlled by a digital regulator on the basis of the signal of a level transmitter, for the modulation of the feed water flow, in order to keep the economizer always flushed.

PACKAGE FOR 72h

- > Conductivity sensor for TDS control.
- > Conductivity regulator for TDS control, installed on control panel.
- > Pneumatic valve for bottom blow-down, controlled by timer.
- > Pneumatic valve for surface blow-down, controlled by a TDS regulator.
- > Low level probes and switches self-monitoring and fail safe, instead of standard ones.
- > Sample cooler in stainless steel.
- > Control panel with additional features for above instruments management.
- > Burner in version FS2 instead of FS1.
- > Dedicated device for feed water pump stop in case of maximum level control overtaking.





CHARACTERISTICS	Unit	FT 100	FT 150	FT 200	FT 300	FT 400	FT 500	FT 600
Steam production	kg/h	1000	1500	2000	3000	4000	5000	6000
Design pressure	bar	12	12	12	12	12	12	12
Efficiency	%	88 ± 1	88 ± 1	88 ± 1	88 ± 1	88 ± 1	88 ± 1	88 ± 1
Efficiency with ECO	%	92 ± 1	92 ± 1	92 ± 1	92 ± 1	92 ± 1	92 ± 1	92 ± 1
Water content at level	Liters	1070	1250	1450	2050	2800	3850	6000
Water content flooded	Liters	1450	1600	1800	2650	3600	4750	7350
Length	mm	3900	4300	4500	4900	5500	6100	6600
Height	mm	1950	2300	2300	2500	2600	2800	2900
Width	mm	1850	2000	2000	2150	2200	2300	2500
Stack connection	mm	235x700	290x800	290x800	290x980	360x1114	360x11 14	360x1200
Empty weight	kg	2500	2900	3400	4350	6000	8000	10500