

H₂
Ready



Evosteam

Industrial 3-pass steam boiler

ICI

POWERING EVOLUTION

TOP CATEGORY EFFICIENCY

EVOSTEAM is a three-pass steam boiler designed to offer high efficiency and adaptability to advanced industrial needs. Available in 13 models with a capacities from 1,500 to 10,000 kg/h, it is ideal for high-performance thermal systems. It optimises combustion and, in combination with low-emission burners, reduces the environmental impact. Its heat exchanger guarantees high energy yield and it is compatible with traditional fuels and sustainable solutions. It is highly configurable, with optional accessories and safety systems that allow unattended operation for up to 24 or 72 hours..

Nominal power

1020 ÷ 6826 kW

Design pressure

12 ÷ 15 bar

Efficiency

91 %



Fruit of experience, shaped by expertise

- Optimised firebox for use with low NOx burners
- Heat exchanger designed for high thermal efficiency
- Compatible with traditional fuels (natural gas, LPG, diesel, naphtha)
- Compatibility with sustainable fuels (biogas, biomethane, biodiesel, syngas)
- H2 Ready: operation with hydrogen mixtures up to 100%
- Wide range of accessories for a high level of configurability
- GSS electronic control system for monitoring and intelligent management
- GSS24 and GSS72 safety systems for unmanned operation

Certifications



A SAVING IN THREE PUFFS OF SMOKE

A three-pass boiler offers various advantages, above all in terms of efficiency and energy yield:

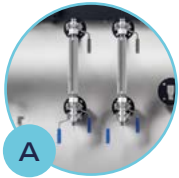
- Better heat exchange
- Greater energy efficiency
- Reduced polluting emissions
- Durability and reliability
- Greater savings in consumption



TECHNICAL DATA

Evosteam	Steam production	Useful power		Thermal capacity		Total H ₂ O capacity	Level capacity	Pressure drops on the flue gas side	Burner head length
		12 bar	15 bar	12 bar	15 bar				
	kg/h	kW	kW	kW	kW	lt	lt	mbar	
1500	1500	1020	1024	1121	1125	5400	3400	4,4	540-590
1700	1700	1156	1160	1271	1275	5400	3400	5,6	540-590
2000	2000	1360	1365	1495	1500	5400	3400	7,7	540-590
2500	2500	1701	1706	1869	1875	6800	4650	5,2	540-590
3000	3000	2041	2048	2243	2250	6800	4650	7,2	540-590
3500	3500	2381	2389	2616	2625	9400	6935	6,9	540-590
4000	4000	2721	2730	2990	3000	9400	6935	8,9	540-590
5000	5000	3401	3413	3738	3750	13350	10980	9,6	540-590
6000	6000	4081	4095	4485	4500	13350	10980	13,4	540-590
7000	7000	4762	4778	5233	5250	16600	13200	12,7	540-590
8000	8000	5442	5460	5980	6000	16600	13200	16,3	540-590
9000	9000	6122	6143	6728	6751	20450	17150	13,3	540-590
10000	10000	6802	6826	7475	7501	20450	17150	16	540-590

OPTIONAL ACCESSORIES



ADDITIONAL LEVEL INDICATOR

Additional level indicator for increased operational safety



GSS 24 PLUS - GSS 72 L/H

Safety and control kit with PLC allowing operator exemption for up to 24/72 hours



ADDITIONAL FEED PUMP

Second feed pump ensuring continuity in case of failure or maintenance



AUTOMATIC STEAM OUTLET

Device for automatic opening/closing of steam extraction from boiler to system



AUTOMATIC SLUDGE REMOVAL DRAIN

Timed sludge discharge from generator bottom for efficiency and durability (included in GSS72 kit)



NEOX B

Low-emission burner in gas or dual gas

STANDARD ACCESSORIES

1. Safety valves
2. Level indicators
3. Electrical panel
4. Water feed pump
5. Pressure switch and pressure gauge unit
6. Level adjustment probes



DIMENSIONS

Evosteam	H	L	P	Total weight		Total capacity
				12 bar	15 bar	
	mm	mm	mm	kg		l
1500	3470	2881	4312	7000	8100	5400
1700	3470	2881	4312	7000	8100	5400
2000	3470	2881	4312	7000	8100	5400
2500	3600	3164	4580	8300	9550	6800
3000	3600	3164	4580	8300	9550	6800
3500	3840	3209	5165	10500	12100	9400
4000	3840	3209	5165	10500	12100	9400



BURNER

Burner, available
as/diesel version



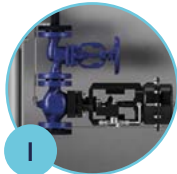
MODULATING FEEDING

Continuous boiler water level
control with flow modulation to
optimize consumption



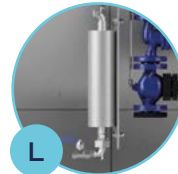
ENERGY SAVERS

Exchangers recovering heat
from flue gases, increasing
efficiency by up to 5%



TDS SALINITY CONTROL

Automatic system for
measuring and controlling
boiler water salinity (included in
GSS72 kit)



SAMPLE CHILLER

Device for immediate cooling
of water samples for analysis
(included in GSS72 kit)



LADDER AND HANDRAIL

Accessories for safe access and
use of the walkway



Evosteam	H	L	P	Total weight		Total capacity
				12 bar	15 bar	
	mm	mm	mm	kg		l
5000	4316	3310	5735	12850	14800	13350
6000	4316	3310	5735	12850	14800	13350
7000	4510	3760	6478	15000	17250	16600
8000	4510	3760	6478	15000	17250	16600
9000	4709	4058	6717	20000	23000	20450
10000	4709	4058	6717	20000	23000	20450

MAINTENANCE BECOMES A BREEZE!

Thanks to the double door, inspecting the boiler body is now quicker and straightforward. The boiler can be accessed easily without needing to remove the burner - a task that would otherwise be time-consuming. This greatly enhances maintenance efficiency, reducing both downtime and overall costs.



SYSTEM COMPONENTS

Components and accessories for the construction and completion of thermal power stations for steam generation. These are designed and built on SKID to facilitate installation.



ADD
Feed water treatment for steam boilers



VRC-V
Horizontal or vertical condensate collection tank



BDV
Blowdown vessel



VEX
Steam accumulator



DEG
Atmospheric deaerator



DEG/P
Pressurised deaerator

WHAT MAKES EVOSTEAM UNIQUE?

- 1 Environmental compliance:**
Reduced NOx emissions and the possibility of using ecofuel for greater sustainability.
- 2 Adaptability to production needs:**
A wide range of models and customisable configurations to meet every need.
- 3 Greater safety and operational continuity:**
Unmanned operation for up to 72 hours with the GSS24 and GSS72 systems.
- 4 Ready for a new energy future:**
Compatibility with hydrogen mixtures up to 100%, favouring energy transition.
- 5 Certified reliability:**
Product compliant with the main international standards, guaranteeing quality and safety.
- 6 Reduced operating costs:**
Greater efficiency and lower consumption thanks to optimised combustion and the high-performance heat exchanger.
- 7 Synoptic:**
Advanced control and remote management via real time monitoring, parameter optimisation and interconnection with the thermal power station. Includes a PLC developed by ICI (optional) and remote management via a web page with synoptic for displaying operating data.





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