



GSX STEAM BOILER



Comprehensive security system, designed and built to ensure the overall operation safety of steam generators, in line with the new CE directive concerning the conduction without supervisor for 72 continuous hours. Supplied system, (EC certificate by Notified Body as a whole in accordance with the European Directive 97/23/EC), consists of an equipment series electrically and hydraulically assembled and tested at our establishment, and more specifically:

- auto controlled security level;
- pressure security unit;
- salinity control unit (tds);
- automatic sludge removal unit;
- high level safety probe;
- boiler control panel.

High quality standards

The unit is made with materials and procedures in compliance with the regulations in force, together with the procedures laid down in the Corporate Quality System in relation to checks on acceptance of materials, during production and final tests; in particular, the following are carried out:

- sheet metal ultrasound check;
- statistical radiographic check on welds;
- hydraulic test under pressure;
- safety valve calibration check;
- steam generator functionality check.



LOW POWER, HIGH PERFORMANCE

The GSX is a three pass, wetback steam boiler. It is a compact single block unit, featuring excellent efficiency and advanced technical solutions, designed and built to ensure maximum reliability and durability, considering the industrial use for which it is mainly intended. The construction features high water volume and high energy content,

a characteristic that allows you to make variable steam withdrawals with uneven loads. The vapour quality is very high thanks to special technical measures adopted to prevent trailing of water droplets at steam collection.

The combustion chamber, completely designed and built internally, was created so as to obtain very

low volumetric thermal loads to meet the most stringent European standards in terms of harmful emissions into the atmosphere (NOx).

The flue gas channels were designed and sized to ensure a high coefficient of heat exchange, in order to achieve high combustion efficiency.



BENEFITS



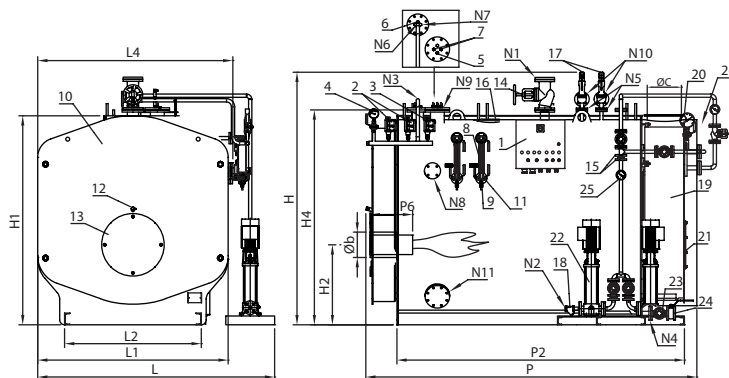
- **High performance and low NOx emissions starting from minimum capacity**
Starting from the low power available (350kg/h), the GSX steam generator ensures optimal environmental efficiency.
 - **High efficiency and large heat exchange surfaces**
Very high energy efficiency thanks to the large heat exchange surfaces that ensure maximum efficiency values in all operating conditions.
 - **Low thermal load**
Low NOx emissions in accordance with the most stringent national and international regulations, through the use of a very low volumetric thermal load of the combustion chamber featuring a specially designed structure for the best combination with burners with low emissions of pollutants.
 - **High water content**
Maximum operating flexibility with varying loads thanks to the high water content.
 - **Rear smoke box**
totally fully integrated in the boiler and completely insulated to minimize heat losses and surface temperature, in order to increase efficiency and user's safety. The economizer can be integrated inside.
 - **Reliability and durability over time**
Maximum reliability and durability guaranteed by the specific design with low surface thermal loads.
 - **Constant supply of steam quantity**
The generator meets every need, even at peak demand time, thanks to the generously sized steam chamber.
 - **Efficiency at all costs**
Integrated solutions for performance improvement thanks to flue gas recovery systems specially designed and integrated within the generator structure.
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MODELS AND POWER

GSX

Steam production
350 ÷ 5000 kg/h

Design pressure
12 bar - 15 bar



MODEL	H	H1	H4	L	L2	P	P2	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8	N9	N10	N11
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in
GSX 350	2190	1720	1780	1850	1100	2104	1504	280-330	180	250	32	1"1/4	16	1"	32	25	1/2"	1/2"	50	100	40	125
GSX 500	2190	1720	1780	1850	1100	2104	1504	280-330	225	250	32	1"1/4	16	1"	32	25	1/2"	1/2"	50	100	40	125
GSX 650	2190	1720	1780	1850	1100	2604	2004	320-370	225	300	40	1"1/4	16	1"	32	25	1/2"	1/2"	50	100	40	125
GSX 850	2520	2050	2110	2180	1300	2658	2008	320-370	280	300	40	1"1/4	16	1"	32	25	1/2"	1/2"	50	100	40	125
GSX 1100	2520	2050	2110	2180	1400	3158	2508	350-400	280	350	50	1"1/4	16	1"	32	25	1/2"	1/2"	50	125	40	125
GSX 1500	2610	2140	2200	2280	1400	3258	2508	350-400	280	350	50	1"1/4	16	1"	32	25	1/2"	1/2"	50	125	40	125
GSX 2000	2610	2140	2200	2280	1400	3758	3008	370-420	320	400	65	1"1/4	16	1"	32	25	1/2"	1/2"	50	125	40	125
GSX 2500	2680	2328	2388	2458	1500	3808	3008	420-470	360	450	80	1"1/4	16	-	32	25	1/2"	1/2"	50	125	40	125
GSX 3000	2680	2328	2388	2458	1500	4308	3508	420-470	360	450	80	1"1/4	16	-	32	32	1/2"	1/2"	50	125	50	150
GSX 3500	2680	2478	2538	2648	1600	4408	3508	480-530	360	500	80	1"1/4	16	-	32	32	1/2"	1/2"	50	150	50	150
GSX 4000	2680	2478	2538	2648	1600	4908	4008	480-530	400	550	100	1"1/4	16	-	32	32	1/2"	1/2"	50	150	50	150
GSX 5000	2680	2650	2710	2820	1800	4908	4008	480-530	400	600	125	1"1/4	16	-	32	32	1/2"	1/2"	50	150	50	150

MODEL	min-max work pressure		Effective capacity	Flow thermal	100% Efficiency (ref C.O.P.)	Steam production	Volume level H ₂ O	Total volume H ₂ O	Fuel gas pressure drop	Fuel consumption			Total weight
	mod 12 bar	mod 15 bar								Gas	Diesel fuel	Nafta	
	bar	bar											
GSX 350	8-11,5	12-14	238	265	90	350	1150	1500	4,1	27,1	22,3	23,5	2550
GSX 500	8-11,5	12-14	341	379	90	500	1150	1500	4,7	38,8	31,9	33,6	2550
GSX 650	8-11,5	12-14	443	492	90	650	1500	1950	5,7	50,4	41,5	43,6	3315
GSX 850	8-11,5	12-14	579	644	90	850	2500	3250	5,0	65,9	54,3	57,1	5525
GSX 1100	8-11,5	12-14	750	833	90	1100	2953	3946	6,0	85,3	70,2	73,8	5700
GSX 1500	8-11,5	12-14	1022	1136	90	1500	3326	4234	7,0	116,3	95,8	100,7	6350
GSX 2000	8-11,5	12-14	1363	1514	90	2000	3840	4860	9,1	155,0	127,7	134,2	7450
GSX 2500	8-11,5	12-14	1703	1893	90	2500	4460	5800	9,0	193,8	159,6	167,8	8120
GSX 3000	8-11,5	12-14	2044	2271	90	3000	5070	6600	10,2	232,5	191,5	201,4	9240
GSX 3500	8-11,5	12-14	2385	2650	90	3500	6800	8000	9,8	271,3	223,4	234,9	13150
GSX 4000	8-11,5	12-14	2726	3028	90	4000	7290	9800	11,2	310,1	255,3	268,5	13550
GSX 5000	8-11,5	12-14	3407	3786	90	5000	8840	11500	11,1	387,6	319,2	335,6	14950



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