

SIXEN (version recommended for export)

HIGH PRESSURE AND REVERSE FLAME STEAM BOILERS

Design pressure 12 or 15 bar



Main features

SIXEN smoke tubes steam boiler is package with automatic operation, complete with all accessories needed for rapid commissioning. Manufactured with quality steel according to regulations in force and is welded with automatic submerged arc methods.

Some of the product's main features are related below:

- P265GH UNI EN 10028/2 and P275NH UNI EN 10028/3 quality steel boiler body welded and tested with methods approved and labeled CE in accordance with the PED 97 /23/EC directive
- horizontal wetback combustion chamber with flame reversal, supported and guided by a perforated stub to ensure wet back design; has a corrugated surface beginning with SIXEN 5000 models
- flat tube plates with plasma drilled holes; front plate flanged towards the combustion chamber, with butt welding rather than angle throughout an angle, for models beginning with SIXEN 4000
- plate containment with flanged PN 16 or PN 40 EN 1092-1 connections for equipment operation; equipped with manhole and headhole, lifting eye bolt.
- P235GH UNI EN 10216/2 smoke tubes welded to tube plates, equipped with helical turbulators single steel sheet front door, thermally insulated refractive materials with high aluminum content, mounted on adjustable hinges, easily opened by handwheel bolts without the need to remove the burner; equipped with light indicator for combustion control
- steel sheet posterior smoke box can be removed using equipped bolts in order to clean the smoke pipes; provided with cleaning door and chimney connection
- support built from carbon steel sections able to support the entire unit.
- embossed metal sheet upper walkway for accessories service, parts located above the boiler
- high density, mineral wool mattress, adequate thickness thermal insulation, with corrugated stainless steel protective sheet mounted on a rectangular frame
- water pipe inspection openings side containing a flanged hatch (no. 2 inspections beginning with SIXEN 2500 model)
- suitability for liquid or gaseous fuels, for a steam production from 3500 to 5000 kg/h
- Supplied accessories needed for automatic operation with mechanical and hydraulic assembly for all equipment and certifications, also in compliance with the PED 97 /23/ EC Directive
- Electrical wiring converging to a single Boiler House control panel, having silicone insulated wires inserted in PVC protective pockets all subjected to final functionality test

Standard equipment:

- steam accessory group contains:
 - steam stop valve
 - 2 spring safety valves
 - 2 level indicators with direct reflection
 - 2 shut-off valve groups and drain indicator
- monitoring instrumentation curve, containing:
 - large dial 3 way test valve manometer
 - limit pressure gage
 - manual reset safety pressure gage
 - regulating pressure gage
- feed water pump mounted on boiler support containing:
 - **2 vertical multistage centrifugal pumps suitable for 120°C water**
 - **3 shut-off valves, powered at flow start**
 - **2 pump suction filters**
 - **3 non return valves**
- purging unit containing:
 - purge shut-off valve at flow start
 - male connection quick exhaust valve with manual lever
- automatic conductivity probe level regulator containing:
 - pump start up probe
 - pump shut-off probe
 - 1° alarm and burner block probe for low level
 - 2° alarm and burner block probe for low level
- boiler electric command panel, IP 55 400V/3 +N/ 50Hz electrical protection, composed of:
 - main switch
 - pump/main switch (off-manual-automatic)
 - burner switch
 - level regulation relay
 - low level 1° alarm relay with manual reset
 - low level 2° alarm relay with manual reset
 - high pressure light and alarm reset button
 - low level 1° pressure light and alarm reset button
 - low level 2° pressure light and alarm reset button
 - alarm siren

Central components:

- ECXV vertical economizer
- VRC condensate collection vessel
- DEG atmospheric deaerator
- DEG/P pressurized atmospheric deaerator
- ADD power delivery water treatment unit
- BDV purge collection tank

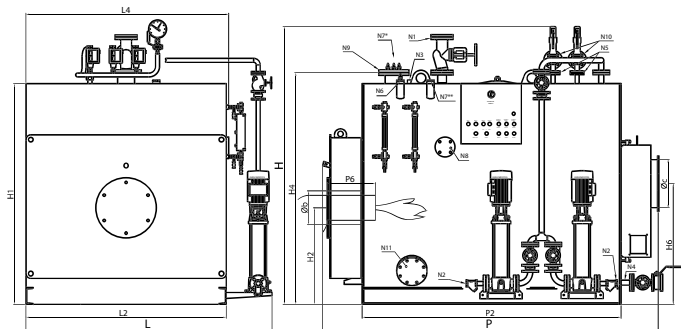
For each product always indicate the code at the time of the order.
For higher or lower pressures see our commercial department.
SIXEN model with superheater available upon request

Available accessories	Code
Series SIXEN generators automatic blow down system	See accessories section
salinity control unit (TDS pneumatic)	17090037
salinity control unit (TDS electrical)	17090035
salinity control unit (TDS electrical light)	17090051
Sample cooler	38040100
modulating level regulatory system	See accessories section
High level security kit	90060010
Auto diagnostic high level security kit	90060040
Auto diagnostic low level security kit	90060050
GSS72/1 (BX350-2000) global security system	86900067
GSS72/2 (BX2500-5000)+GX global security system	86900068

INDUSTRIAL RANGE

STEAM

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Legend:

- N1 Steam press
- N2 Feed water connection
- N3 Equipment connection (350÷2000 models)
- N4 Boiler drain
- N5 Safety valve connection
- N6 Second safety level probe
- N7 Maximum level connection (mod. 1000÷2000)
- N8 TDS control probe connection
- N9 Probe barrel
- N10 Safety valve drain
- N11 Lower inspection door

Characteristics	Code product	Nominal Power kW	Flow Thermal kW	100% efficiency (ref. C.O.P.) %	Steam production* kg/h	Design pressure bar	Min-max work pressure bar	Volume level H ₂ O lt	Total volume H ₂ O lt	Flue gas pressure drop mbar	Fuel consumption			Total weight kg
											Gas Nm ³ /h	Diesel fuel kg/h	Nafta kg/h	
SIXEN 350 exp	86240354	238	265	90,00	350	12	8-11,5	590	810	5	27,1	22,3	23,5	1500
SIXEN 500 exp	86240504	341	379	90,00	500	12	8-11,5	670	920	6,5	38,8	31,9	33,6	1620
SIXEN 650 exp	86240654	443	492	90,00	650	12	8-11,5	900	1120	5	50,4	41,5	43,6	2000
SIXEN 800 exp	86240804	545	606	90,00	800	12	8-11,5	950	1250	5	62,0	51,1	53,7	2120
SIXEN 1000 exp	86241004	681	757	90,00	1000	12	8-11,5	1280	1830	7	77,5	63,8	67,1	2720
SIXEN 1350 exp	86241354	920	1022	90,00	1350	12	8-11,5	1475	2190	6,5	104,6	86,2	90,6	3250
SIXEN 1700 exp	86241704	1158	1287	90,00	1700	12	8-11,5	2000	2640	9,5	131,8	108,5	114,1	3700
SIXEN 2000 exp	86242004	1363	1514	90,00	2000	12	8-11,5	2300	3050	10	155,0	127,7	134,2	4250
SIXEN 2500 exp	86242504	1703	1893	90,00	2500	12	8-11,5	2490	3380	6,5	193,8	159,6	167,8	5000
SIXEN 3000 exp	86243004	2044	2271	90,00	3000	12	8-11,5	2825	4020	9	232,5	191,5	201,4	5650
SIXEN 3500 exp	86243504	2385	2650	90,00	3500	12	8-11,5	3600	5000	9	271,3	223,4	234,9	6950
SIXEN 4000 exp	86244004	2726	3028	90,00	4000	12	8-11,5	4800	6950	10	310,0	255,3	268,5	8550
SIXEN 5000 exp	86245004	3407	3786	90,00	5000	12	8-11,5	5200	7400	11	387,6	319,2	335,6	9600

Dimensions	H	H1	H2	H4	H6	L	L2	L4	P	P2	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8	N9	N10	N11
Model	mm	mm	mm	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
SIXEN 350	1810	1340	585	1470	800	1510	1180	1230	1840	1260	280-330	180	250	32	25	16	1"	32	25	1/2"	1/2"	50	100	40	125
SIXEN 500	1810	1340	585	1470	800	1510	1180	1230	2090	1510	280-330	225	250	32	25	16	1"	32	25	1/2"	1/2"	50	100	40	125
SIXEN 650	1930	1460	630	1560	800	1630	1300	1350	2130	1520	320-370	225	300	40	25	16	1"	32	25	1/2"	1/2"	50	100	40	125
SIXEN 800	1930	1460	630	1560	800	1630	1300	1350	2350	1740	320-370	280	300	40	25	16	1"	32	25	1/2"	1/2"	50	100	40	125
SIXEN 1000	2140	1670	660	1840	800	1840	1510	1560	2350	1740	350-400	280	350	50	25	16	1"	32	25	1/2"	1/2"	50	125	40	125
SIXEN 1350	2140	1670	660	1840	800	1840	1510	1560	2760	2150	350-400	280	350	50	25	16	1"	32	25	1/2"	1/2"	50	125	40	125
SIXEN 1700	2300	1830	800	1945	1000	1990	1660	1710	2790	2150	370-420	280	400**	65	32	16	1"	32	25	1/2"	1/2"	50	125	40	125
SIXEN 2000	2300	1830	800	1945	1000	1990	1660	1710	3150	2510	370-420	320	400**	65	40	16	1"	32	25	1/2"	1/2"	50	125	40	125
SIXEN 2500	2460	1990	1080	2060	1080	2170	1840	1880	3200	2510	420-470	360	450**	80	40	16	-	32	25	1/2"	1/2"	50	125	40	125
SIXEN 3000	2530	1990	1080	2060	1080	2210	1840	1880	3700	3010	420-470	360	450**	80	40	16	-	32	32	1/2"	1/2"	50	125	50	150
SIXEN 3500	2720	2180	895	2340	1225	2350	1980	2020	3770	3010	480-530	360	500**	80	50	16	-	32	40	1/2"	1/2"	50	150	50	150
SIXEN 4000	2840	2300	915	2460	1250	2470	2100	2140	4280	3500	480-530	400	550**	100	50	16	-	32	32	1/2"	1/2"	50	150	50	150
SIXEN 5000	2960	2420	1000	2580	1350	2590	2220	2260	4530	3750	480-530	400	600**	125	50	16	-	32	32	1/2"	1/2"	50	150	50	150

Characteristics	Code product	Design pressure	Min-max work pressure
Model		bar	bar
SIXEN 350 exp - 15 bar	86250354	15	12 - 14
SIXEN 500 exp - 15 bar	86250504	15	12 - 14
SIXEN 650 exp - 15 bar	86250654	15	12 - 14
SIXEN 800 exp - 15 bar	86250804	15	12 - 14
SIXEN 1000 exp - 15 bar	86251004	15	12 - 14
SIXEN 1350 exp - 15 bar	86251354	15	12 - 14
SIXEN 1700 exp - 15 bar	86251704	15	12 - 14
SIXEN 2000 exp - 15 bar	86252004	15	12 - 14
SIXEN 2500 exp - 15 bar	86252504	15	12 - 14
SIXEN 3000 exp - 15 bar	86253004	15	12 - 14
SIXEN 3500 exp - 15 bar	86253504	15	12 - 14
SIXEN 4000 exp - 15 bar	86254004	15	12 - 14
SIXEN 5000 exp - 15 bar	86255004	15	12 - 14

* production with at least 80°C water
 ** Flanged chimney connection
 Data regarding Design pressure 12 bar