

 **Efficiency: 90%**

 **Design Pressure: 12 bar (Up to 25 bar - On Request)**

 **Heat Output: 238 – 3,407 KW**



Steam boiler three pass reverse flame wet back fire tube boiler complying with PED 23/97/EC Directive , suitable for liquid and gaseous fuels , steam production range from 350 up to 5,000 kg/h , available with design pressure 12 or 15 bar , complete with regulation and safety ancillaries for automatic operation SIXEN fire tube steam boiler is packaged for automatic operation, complete with all ancillaries needed for rapid commissioning . It is built with tested 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 2/10028 and P275NH UNI EN 3/110028 quality steel boiler body welded and tested with methods approved and labeled CE in accordance with PED 23/97 EC Directive
- Horizontal wet back combustion chamber with flame reversal , supported and guided by a perforated stub to ensure its full wet back; has a corrugated surface up to SIXEN 5000
- Flat tube plates with plasma drilled holes ; front plate towards the combustion chamber with butt welding rather than a T-butt weld , for models beginning with SIXEN 4000
- Boiler shel with flanged PN 16 or PN 40 EN 1-1092 connections for equipment operation ; equipped with manhole and hole and lifting eye bolt.
- P235GH UNI EN 2/10216 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 hand wheel bolts without the need to remove the burner ; equipped with light indicator combustion control
- Steel sheet rear 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 ancillaries service and 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
- Inspections openings side containing a flanged hand hole (no. 2 inspections beginning with SIXEN 2500 model)
- Suitability for liquid or gaseous fuels , for a steam production from 350 to 5,000 kg/h
- Supplied ancillaries needed for automatic operation mechanical and electrical wiring hydraulic assembly for all equipment and certifications , also in compliance with PED 23/97/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
 - curve 2 spring safety valves
 - 2 level indication with direct reflection



- 2 shut-off valve groups and drain indicator
- Monitoring instrumentation curve , containing :
 - Large dial 3 way test valve manometer
 - Limit pressure gauge
 - Manual reset safety pressure gauge
- 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 probe
 - Pump shut-off probe
 - first alarm and burner shut off probe for low level
 - second alarm and burner shut off 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) + Pump I selector
 - Burner switch
 - Level regulation relay
 - Low level first & second relay with manual reset
 - High pressure light and alarm reset button
 - Low level first and second pressure light and alarm reset button

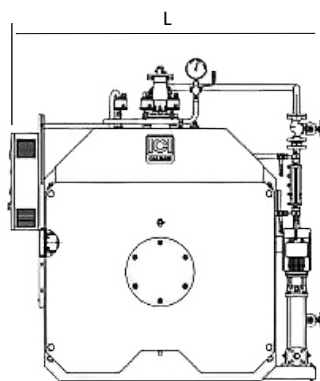
TECHNICAL DATA

Model	Steam Production	Maximum output	Maximum input	Efficiency	Working Pressure*	Feed Water Temperature	Gas Pressure Drop
	Kg/h	Kw	Kw	%	bar	°c	mbar
SIXEN 350 N	350	238	265	89.8	12	80	4
SIXEN 500 N	500	341	379	90.0	12	80	6.5
SIXEN 650 N	650	443	492	90.0	12	80	4
SIXEN 800 N	800	545	606	89.9	12	80	5
SIXEN 1000 N	1,000	681	757	90.0	12	80	7
SIXEN 1300 N	1,300	886	984	90.0	12	80	6.5
SIXEN 1700 N	1,700	1,158	1,287	90.0	12	80	9.5
SIXEN 2000 N	2,000	1,363	1,514	90.0	12	80	10
SIXEN 2500 N	2,500	1,703	1,893	90.0	12	80	6.5
SIXEN 3000 N	3,000	2,044	2,271	90.0	12	80	8
SIXEN 3500 N	3,500	2,385	2,650	90.0	12	80	8
SIXEN 4000 N	4,000	2,726	3,028	90.0	12	80	10
SIXEN 5000 N	5,000	3,407	3,786	90.0	12	80	11

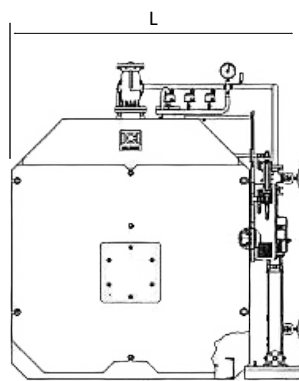
*Upon request is possible to have higher working pressure up to 25 bar

DIMENSION & WEIGHT

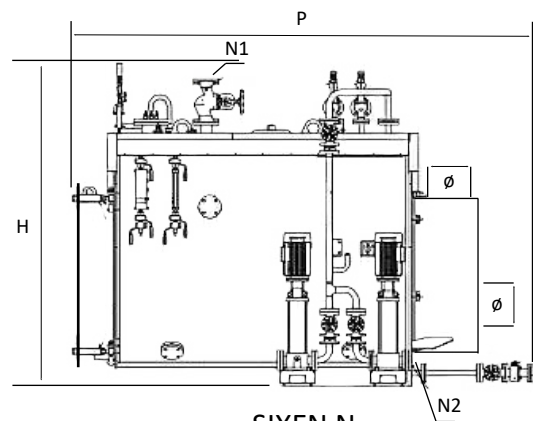
Model	Steam Outlet (N1)	Water Inlet (N2)	Chimney Diameter (ø)	Length (P)	Width (L)	Height (H)	Level Control Water Content	Total Water Content	Weight (Empty)
	DN/in	DN/in	mm	mm	mm	mm	lt	lt	Kg
SIXEN 350 N	32	32	230	2,689	1,842	1,813	670	915	1,660
SIXEN 500 N	32	32	230	2,689	1,842	1,813	670	915	1,660
SIXEN 650 N	40	32	285	2,947	1,944	1,933	970	1,230	2,200
SIXEN 800 N	40	32	285	2,947	1,944	1,933	970	1,230	2,200
SIXEN 1000 N	50	32	330	3,197	2,154	2,213	1,280	1,810	2,780
SIXEN 1300 N	50	32	330	3,505	2,152	2,197	1,500	2,150	3,080
SIXEN 1700 N	65	32	380	3,507	2,283	2,347	1,850	2,470	4,260
SIXEN 2000 N	65	32	380	3,967	2,016	2,347	2,100	2,840	4,660
SIXEN 2500 N	80	32	430	4,027	2,179	2,524	2,550	3,350	5,500
SIXEN 3000 N	80	32	430	4,466	2,179	2,524	3,020	3,970	5,700
SIXEN 3500 N	80	32	480	4,611	2,481	2,724	3,600	5,000	7,500
SIXEN 4000 N	100	32	530	5,162	2,690	2,844	4,800	6,950	9,200
SIXEN 5000 N	125	32	590	5,628	2,751	2,964	5,200	7,400	10,200



SIXEN N 350 - 1700



SIXEN N 2000 - 5000



SIXEN N