INDUSTRIAL RANGE
HOT WATER

TNX EN (8000-20000)
HOT WATER BOILER
Design pressure 6 bar
Heat output from 8 to 20 MW

Standard equipment:
- pressure monitoring instrumentation, containing:
  - large dial 3 way test valve manometer
- temperature monitoring instrumentation, containing:
  - 0-120°C large scale thermometer
  - INAIL approved regulating thermostat (100°C)
  - high temperature, INAIL approved (100°C) manual reset safety thermostat
  - PT1000 thermocouple
- boiler drain unit containing:
  - purge shut-off valve at flow start
  - male connection quick exhaust valve with manual lever
- boiler electric command panel, IP 55 electrical protection, composed of:
  - main switch
  - burner switch
  - condensate pump interrupt
- electronic thermostatic control with flow temperature display (on-off command and second stage burner)
  - high pressure light and alarm reset button
  - high temperature light and alarm reset button
  - alarm reset button
  - alarm siren

The generators for abroad will be equipped with:
- high pressure pressure gage with manual reset
- the regulatory thermostat is not supplied

Main features

Three pass, wetback, boiler suitable for liquid or gaseous fuel pressurized combustion, intended for heating systems or with power ranging between 8000 and 20000 kW and work temperatures between 60 and 100 °C.

Designed for 110°C maximum temperature (available for 10 bar designed pressure) In compliance with EN 303 European norm and has a CE label according to 2009/142/CE Gas Directive.

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 approved methods
  horizontal, single pass flame combustion chamber, with possible corrugated section.
- wetback combustion, supported and connected to a tube of 500 mm diameter with manhole facility.
- Tube plates with drilled holes and then subsequently re-bored for smoke tube welded and expanded; the tube plate front the reverse chamber is completely flanged towards the combustion chamber, with butt welds rather than T-Butt welds.
- plate containment with flanged PN 16 or PN 40 EN 1092-1 connections for equipment operation; equipped with man-hole, and head-hole, and lifting eye bolts.
- P235GH UNI EN 10216/2 smoke ducts, thickness 3.2mm, expanded and welded into the tube sheet, without helical turbolators
- P235GH UNI EN 10216/2 smoke tubes welded to tube plates, without turbolators
- front smoke box made from steel sheet, thermally insulated with refractory materials with a high aluminum content, equipped with two flat separated doors, lined in ceramic fiber and rotating on a double-jointed hinges; complete with refractory cone and drilled plate for burner insertion
- rear smoke box made from steel sheet, thermally insulated with refractory materials with a high aluminum content equipped with two flat separated doors, equipped with cleaning hatch, chimney connection, buffer for access to the combustion chamber, light flame with guillotine closing
- support built form 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, 80 mm thickness thermal insulation, with round embossed aluminum case.
- Accessories equipment needed for automatic operation with mechanical and hydraulic assembly for all equipment.
- Electrical wiring converging to a single centralized control panel, having silicone insulated wires inserted in PVC protective sheaths all subjected to final functionality test

For each product always indicate the code at the time of the order.

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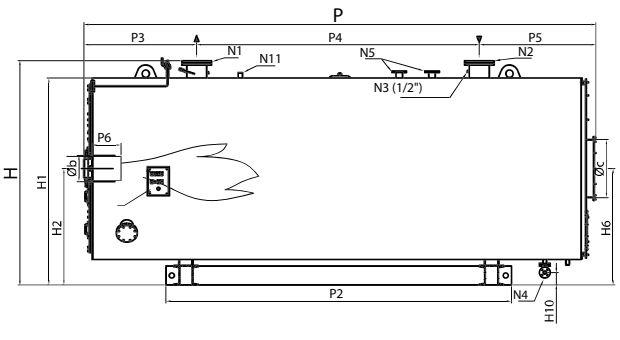

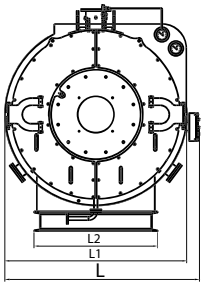

Legend:

N1 Boiler flow
N2 Boiler return
N3 Equipment connections
N4 System load/drain connection
N5 Safety valve connections
N6 Regulating and safety thermostat connections
N7 Security pressure gage connection (not supplied)
N8 Control cover
N11 Minimum level probe connection (not supplied)

Characteristics	Code product	Effective capacity	Flow Thermal	100% efficiency (ref. C.O.P.)	Hydraulic pressure drop	Total volume H_2O	Flue gas pressure drop	Fuel consumption			Total weight
								Gas	Diesel fuel	Nafta	
Model		kW	kW	%	mbar	lt	mbar	Nm3/h	kg/h	kg/h	kg
TNX EN 8000	83478000	8000	8791	91	161	14950	15,0	900,0	741,2	779,4	15.400
TNX EN 9000	83479000	9000	9836	91,5	98	16200	20,0	1007,0	829,3	872,1	16.300
TNX EN 10000	83481000	10000	10965	91,2	121	16200	23,0	1122,6	924,5	972,2	16.300
TNX EN 11000	83481100	11000	11957	92	79	20200	15,5	1224,2	1008,1	1060,1	24.940
TNX EN 12000	83481200	12000	13086	91,7	94	20200	18,0	1339,8	1103,3	1160,2	24.940
TNX EN 13000	83481300	13000	14100	92,2	111	21800	21,0	1443,6	1188,8	1250,1	25.400
TNX EN 14000	83481400	14000	15217	92	128	21800	24,0	1558,0	1283,0	1349,2	25.400
TNX EN 15000	83481500	15000	16287	92,1	147	23800	24,0	1667,5	1373,2	1444,0	28.050
TNX EN 16000	83481600	16000	17410	91,9	168	23800	27,0	1782,5	1467,9	1543,6	28.050
TNX EN 17000	83481700	17000	18299	92,9	111	33000	20,5	1873,5	1542,8	1622,4	37.500
TNX EN 18000	83481800	18000	19417	92,7	124	33000	22,0	1988,0	1637,2	1721,6	37.500
TNX EN 19000	83481900	19000	20386	93,2	139	35100	25,0	2087,1	1718,8	1807,4	40.000
TNX EN 20000	83482000	20000	21505	93	154	35100	28,0	2201,8	1813,2	1906,7	40.000

Dimensions	H	H1	H2	H6	H10	L	L1	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N8	N11	N7
Model	mm	mm	mm	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
TNX EN 8000	3050	2850	1600	1600	171	2700	2490	1700	7035	4750	1548	3885	1602	600-700	500	800	250	250	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 9000	3050	2850	1600	1600	171	2700	2490	1700	7535	5250	1548	4385	1602	600-700	500	800	300	300	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 10000	3050	2850	1600	1600	171	2700	2490	1700	7535	5250	1548	4385	1602	600-700	500	800	300	300	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 11000	3400	3200	1730	2450	105	3140	2940	2000	7735	5400	1800	4135	1800	650-800	580	900	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 12000	3400	3200	1730	2450	105	3140	2940	2000	7735	5400	1800	4135	1800	650-800	580	900	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 13000	3400	3200	1730	2450	105	3140	2940	2000	8235	5900	1800	4635	1800	650-800	580	900	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 14000	3400	3200	1730	2450	105	3140	2940	2000	8235	5900	1800	4635	1800	650-800	580	900	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 15000	3500	3276	1764	2530	128	3265	3065	2000	8183	5900	1673	4670	1840	650-800	580	1000	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 16000	3500	3276	1764	2530	128	3265	3065	2000	8183	5900	1673	4670	1840	650-800	580	1000	350	350	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 17000	3960	3700	1975	2840	200	3650	3450	2250	8820	6500	1706	5144	1970	600-700	740	1100	400	400	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 18000	3960	3700	1975	2840	200	3650	3450	2250	8820	6500	1706	5144	1970	600-700	740	1100	400	400	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 19000	3960	3700	1975	2840	200	3650	3450	2250	9320	7000	1706	5644	1970	600-700	740	1100	400	400	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"
TNX EN 20000	3960	3700	1975	2840	200	3650	3450	2250	9320	7000	1706	5644	1970	600-700	740	1100	400	400	16	1/2"-3/4"	40	80	1/2"	3/4"	1/2"	1/2"

For higher pressures see our commercial department.