TNOX (2500-6000)

HEAT WATER BOILER

Nominal pressure 6 bar

Useful power from 2.5 to 6 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
- purging unit containing:
  - drain valve x 2
  - 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 boilers for export will be equipped with:
- high pressure pressure gage with manual reset
- the regulatory thermostat is not supplied

Main features

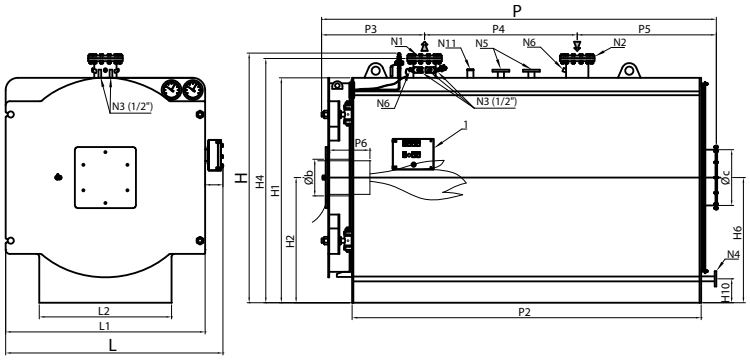
Three pass, wet back boiler, suitable for liquid or gaseous fuel pressurized combustion, intended for heating systems with duties ranging between 2500 and 6000 kW and temperatures higher than 100 °C.

Designed for 110°C maximum temperature (available for 10 bar design 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.
- 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.
- insulated steel sheet posterior smoke box equipped with an easily opened door can be removed using equipped bolts using brass bolts in order to clean the smoke tubes; provided with cleaning door and chimney connection
- 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.

INDUSTRIAL RANGE
HOT WATER
TNOX



Legend:
N1 Boiler flow
N2 Boiler return
N3 Equipment connections
N4 System load/drain connection
N5 Safety valve connections
N6 Bulb sheath
N8 Control cover
N11 Minimum level probe connection

Characteristics	Code product	Nominal Power	Flow Thermal	100% efficiency (ref. C.O.P.)	Fluid pressure drop	Total volume H_2O	Fumes pressure drop	Fuel consumption			Total weight
								Gas	Diesel fuel	Nafta	
Model		kW	kW	%	mbar	lt	mbar	Nm3/h	kg/h	kg/h	kg
TNOX 2500	83472510	2500	2688	93,0	38	4496	9,1	275,2	226,7	238,4	6300
TNOX 3000	83473010	3000	3226	93,0	55	5000	12,5	330,2	272,0	286,0	6950
TNOX 3500	83473510	3500	3763	93,0	75	6441	10,7	385,2	317,3	333,6	8200
TNOX 4000	83474010	4100	4409	93,0	42	7335	11,5	451,4	371,8	390,9	8970
TNOX 5000	83475010	5000	5376	93,0	63	9088	10,0	550,4	453,2	476,6	11280
TNOX 6000	83476010	6000	6452	93,0	91	10066	11,0	660,6	544,0	572,1	12160

Dimensions	H	H1	H2	H4	H6	H10	L	L1	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N8	N11
Model	mm	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
TNOX 2500	2460	2210	1230	2400	1230	125	2135	1960	1300	3872	3430	1005	1500	1367	300-400	400	550	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX 3000	2460	2210	1230	2400	1230	125	2135	1960	1300	4372	3930	1005	2000	1367	300-400	400	550	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX 3500	2700	2420	1335	2610	1335	125	2345	2170	1400	4372	3930	1006	2000	1367	300-400	450	600	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX 4000	2700	2420	1335	2615	1335	125	2345	2170	1400	4872	4430	1255	2200	1417	300-400	450	600	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"
TNOX 5000	2820	2570	1410	2765	1410	125	2495	2320	1600	5382	4930	1257	2700	1425	300-400	450	700	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"
TNOX 6000	2820	2570	1410	2765	1410	125	2495	2320	1600	5882	5430	1257	3200	1425	300-400	450	700	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"

For higher pressures see our commercial department.

TNOX EN (7000-17000)

HEAT WATER BOILER

Nominal pressure 6 bar

Useful power from 7 to 17 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 7000 and 17000 kW and work temperatures between 60 and 100 °C.

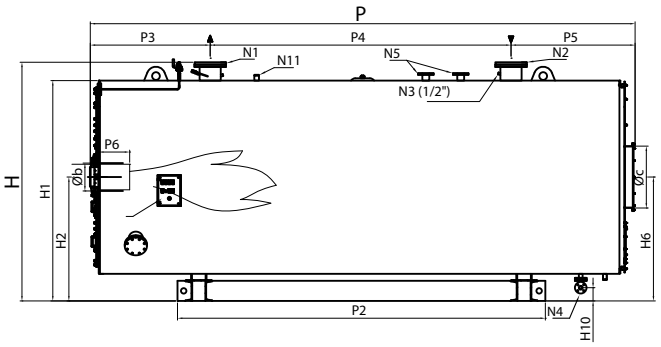
Designed for 110°C maximum temperature (available for 10 bar designed pressure) In compliance with EN 303 European norm and has a CE label according to 2009/142/CE Gas Directive.

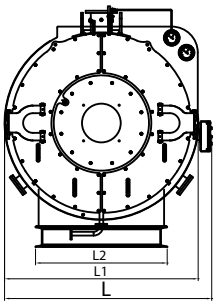
Some of the product's main features are related below:

- 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
- 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.
- equipped with accessories needed for automatic operation with mechanical and hydraulic assembly of 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.

INDUSTRIAL RANGE
HOT WATER
TNOX EN





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 deliveryed)
- N8 Control cover
- N11 Minimum level probe connection (not supplied)

Characteristics	Code product	Nominal Power	Flow Thermal	100% efficiency (ref. C.O.P.)	Fluid pressure drop	Total volume H_2O	Fumes pressure drop	Fuel consumption			Total weight
								Gas	Diesel fuel	Nafta	
Model		kW	kW	%	mbar	lt	mbar	Nm3/h	kg/h	kg/h	kg
TNOX EN 7000	83477010	7000	7519	93,1	123	14950	12,0	770	634	667	15.400
TNOX EN 8000	83478010	8000	8602	93	78	16200	15,0	881	725	763	16.300
TNOX EN 9000	83479010	9000	9677	93	53	20200	10,0	991	816	858	24.940
TNOX EN 10000	83481010	10000	10753	93	66	21800	12,0	1101	907	953	25.400
TNOX EN 11000	83479510	11000	11853	92,8	79	21800	15,0	1214	999	1051	25.400
TNOX EN 12000	83481210	12000	12931	92,8	94	23800	15,5	1324	1090	1146	28.050
TNOX EN 13000	83481310	13000	13859	93,8	168	23800	20,2	1746	1438	1512	28.050
TNOX EN 14000	83481410	14000	15005	93,3	75	33000	14,0	1536	1265	1330	37.500
TNOX EN 15000	83481510	15000	16112	93,1	86	33000	16,0	1650	1358	1428	37.500
TNOX EN 16000	83481610	16000	17112	93,5	98	35100	18,0	1752	1443	1517	40.000
TNOX EN 17000	83481710	17000	18201	93,4	111	35100	20,0	1863	1535	1614	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
TNOX EN 7000	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"
TNOX EN 8000	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"
TNOX EN 9000	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"
TNOX EN 10000	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"
TNOX EN 11000	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"
TNOX EN 12000	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"
TNOX EN 13000	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"
TNOX EN 14000	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"
TNOX EN 15000	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"
TNOX EN 16000	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"
TNOX EN 17000	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.

TNOX.e (2500-6000)

HEAT GENERATOR

Nominal pressure 6 bar

Useful power from 2.5 to 6 MW

EFFICIENCY
★ ★ ★

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
- purging unit containing:
  - drain valve x 2
  - 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 boilers for export will be equipped with:
- high pressure pressure gage with manual reset
- the regulatory thermostat is not supplied

Main features

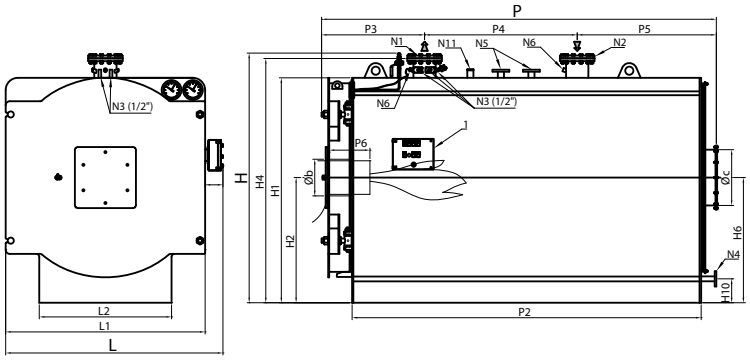
Three pass, wet back boiler, suitable for liquid or gaseous fuel pressurized combustion, intended for heating systems with duties ranging between 2500 and 6000 kW and temperatures higher than 100 °C.
It also features heat exchange acceleration elements to ensure highest possible efficiency of it's category.

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, endowed with special turbulence inductors designed and dimensioned in order to ensure stated efficiency achievement.
- 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.
- insulated steel sheet posterior smoke box equipped with an easily opened door can be removed using equipped bolts using brass bolts in order to clean the smoke pipes; provided with cleaning door and chimney connection
- 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.

INDUSTRIAL RANGE
HOT WATER
TNOX.e



Legend:
N1 Boiler flow
N2 Boiler return
N3 Equipment connections
N4 System load/drain connection
N5 Safety valve connections
N6 Bulb sheath
N8 Control cover
N11 Minimum level probe connection

Characteristics	Code product	Nominal Power	Flow Thermal	100% efficiency (ref. C.O.P.)	Fluid pressure drop	Total volume H_2O	Fumes pressure drop	Fuel consumption			Total weight
								Gas	Diesel fuel	Nafta	
Model		kW	kW	%	mbar	lt	mbar	Nm3/h	kg/h	kg/h	kg
TNOX.e 2500	83472511	2500	2626	95,2	38	4.496	12,0	268,81	221,37	232,78	6.300
TNOX.e 3000	83473011	3000	3151	95,2	55	5.746	14,0	322,62	265,69	279,38	6.950
TNOX.e 3500	83473511	3500	3676	95,2	75	6.441	13,0	376,43	310,00	325,98	8.200
TNOX.e 4000	83474011	4100	4307	95,2	42	7.335	15,0	440,95	363,14	381,86	8.970
TNOX.e 5000	83475011	5000	5252	95,2	63	9.088	14,0	537,74	442,84	465,67	11.280
TNOX.e 6000	83476011	6000	6303	95,2	91	10.066	16,0	645,24	531,37	558,76	12.160

Dimensions	H	H1	H2	H4	H6	H10	L	L1	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N8	N11
Model	mm	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
TNOX.e 2500	2460	2210	1230	2400	1230	125	2135	1960	1300	3872	3430	1005	1500	1367	300-400	400	550	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX.e 3000	2460	2210	1230	2400	1230	125	2135	1960	1300	4372	3930	1005	2000	1367	300-400	400	550	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX.e 3500	2700	2420	1335	2610	1335	125	2345	2170	1400	4372	3930	1006	2000	1367	300-400	450	600	200	200	16	1/2"-3/4"	40	50	1/2"	3/4"	1/2"
TNOX.e 4000	2700	2420	1335	2615	1335	125	2345	2170	1400	4872	4430	1255	2200	1417	300-400	450	600	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"
TNOX.e 5000	2820	2570	1410	2765	1410	125	2495	2320	1600	5382	4930	1257	2700	1425	300-400	450	700	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"
TNOX.e 6000	2820	2570	1410	2765	1410	125	2495	2320	1600	5882	5430	1257	3200	1425	300-400	450	700	250	250	16	1/2"-3/4"	40	65	1/2"	3/4"	1/2"

For higher pressures see our commercial department.

TNOX.e EN (7000-17000)

HEAT GENERATOR

Nominal pressure 6 bar

Useful power from 7 to 17 MW

EFFICIENCY
★ ★ ★

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

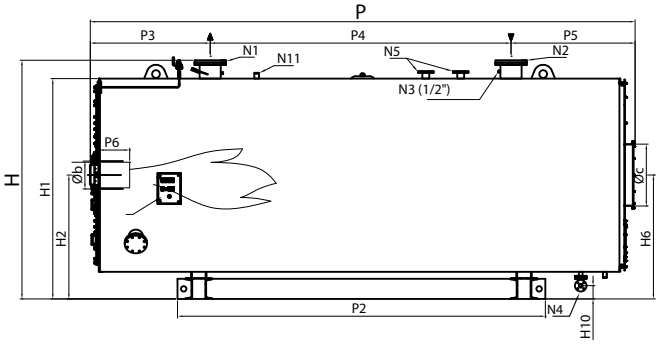
Three pass, wetback, boiler suitable for liquid or gaseous fuel pressurized combustion, intended for heating systems or with power ranging between 7000 and 17000 kW and work temperatures between 60 and 100 °C.

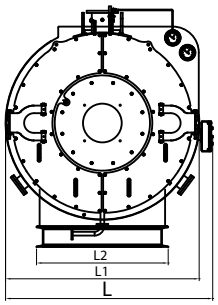
Designed for 110°C maximum temperature (available for 10 bar designed pressure) In compliance with EN 303 European norm and has a CE label according to 2009/142/CE Gas Directive.

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
- 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.

INDUSTRIAL RANGE
HOT WATER
TNOX.e EN





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	Nominal Power	Flow Thermal	100% efficiency (ref. C.O.P.)	Fluid pressure drop	Total volume H_2O	Fumes pressure drop	Fuel consumption			Total weight
								Gas	Diesel fuel	Nafta	
Model		kW	kW	%	mbar	lt	mbar	Nm3/h	kg/h	kg/h	kg
TNOX.e EN 7000	83477011	7000	7353	95,2	123	14950	15,0	753	620	652	15.400
TNOX.e EN 8000	83478011	8000	8403	95,2	78	16200	19,0	860	709	745	16.300
TNOX.e EN 9000	83479011	9000	9454	95,2	53	20200	14,0	968	797	838	24.940
TNOX.e EN 10000	83481011	10000	10504	95,2	66	21800	16,0	1075	886	931	25.400
TNOX.e EN 11000	83479511	11000	11555	95,2	79	21800	19,5	1183	974	1024	25.400
TNOX.e EN 12000	83481211	12000	12605	95,2	94	23800	19,5	1290	1063	1118	28.050
TNOX.e EN 13000	83481311	13000	13655	95,2	168	23800	22,0	1721	1417	1490	28.050
TNOX.e EN 14000	83481411	14000	14706	95,2	75	33000	18,0	1506	1240	1304	37.500
TNOX.e EN 15000	83481511	15000	15756	95,2	86	33000	20,0	1613	1328	1397	37.500
TNOX.e EN 16000	83481611	16000	16807	95,2	98	35100	23,0	1721	1417	1490	40.000
TNOX.e EN 17000	83481711	17000	17857	95,2	111	35100	25,0	1828	1506	1583	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
TNOX.e EN 7000	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"
TNOX.e EN 8000	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"
TNOX.e EN 9000	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"
TNOX.e EN 10000	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"
TNOX.e EN 11000	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"
TNOX.e EN 12000	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"
TNOX.e EN 13000	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"
TNOX.e EN 14000	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"
TNOX.e EN 15000	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"
TNOX.e EN 16000	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"
TNOX.e EN 17000	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"

TNOX BT COND

3 PASS WET BACK BOILER WITH CONDENSING COIL

Nominal pressure 6 bar

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
- drain unit comprised of:
  - drain valve x 2
  - 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

- **condensation coil-heat generator connection kit composed of:**
- flanged connection duct
- expansion joint

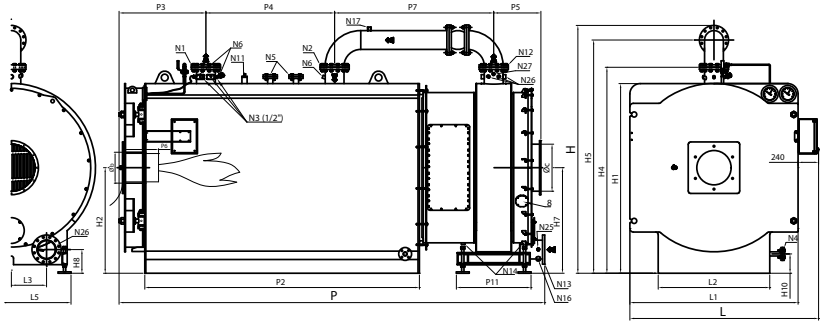
Main features

Steel heat generator with 3 smoke ways, wetback, with integrated condensing unit serial connected to the generator, suitable for gaseous fuel pressurized combustion, intended for large heating systems with power ranging between 3500 and 7000 kW and operating temperatures between 40 and 100 °C.
Designed for a security maximum temperature of 110°C. 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 welded to tube plates, possibly fitted with helical turbulators, manufactured with a double tube and differentiated contact with non-condensing feature (minimum temperature return 35 °C)
- condensing heat recovery unit to integrated in the rear part of the generator with thermal exchange sections consisting in AISI 316 Ti stainless steel plates, printed with patented shape, allowing the formation and drainage of condensate
- Hydraulic manifold for series connection between condenser and generator, complete with expansion joint
- 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
- posterior smoke chamber made from sheet AISI 316 Ti stainless steel, can be dismantled using the bolts; equipped with condensate drain coupling and exhaust connection
- 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, adequate 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.

INDUSTRIAL RANGE
HOT WATER
TNOX BT COND



Legend:

N1 Boiler flow
N2 Boiler return
N3 Equipment connections
N4 System load/drain connection
N5 Safety valve connections
N6 Bulb sheath
N8 Control cover
N11 Minimum level probe connection
N12 Condenser delivery
N13 Condenser return
N14 Condenser condensate drains
N16 Condensator drain
N17 Vent connection
N27 Delivery temperature control
N28 Return temperature control

Characteristics	Code product	Effective capacity		Flow Thermal	Efficiency 100% (ref. C.O.P)		Efficiency at 30% Temp. Delivery/Return 50°/30°C	Fumes pressure drop	Pressure drop fluid	Total volume H_2O	Total weight
		Temp. Medium 70°C	Temp. Delivery/Return 50°/30°C		Temp. Medium 70°C	Temp. Delivery/Return 50°/30°C					
		kW	kW	kW	%	%	%	mbar	mbar	lt	kg
TNOX 3000 BT COND	83463010	2743	3000	2791	98,3	107,5	98,5	13	46	5106	7588
TNOX 3500 BT COND	83463510	3200	3500	3256	98,3	107,5	98,5	16,0	63	6356	8238
TNOX 4100 BT COND	83464110	3749	4100	3814	98,3	107,5	98,5	12	86	7271	9860
TNOX 4800 BT COND	83464810	4389	4800	4465	98,3	107,5	98,5	13	49	8165	10630
TNOX 6000 BT COND	83466000	5487	6000	5581	98,3	107,5	98,5	13,0	76	9984	13600
TNOX 7000 BT COND	83467000	6401	7000	6512	98,3	107,5	98,5	14,0	103	10962	14480

Dimensions	H	H1	H2	H4	H5	H7	H8	H10	L	L1	L2	L3	L5	P	P2	P3	P4	P5	P6	P7	P11	Øb	Øc	N1/N2	N1	N2	N3	N4	N5	N6	N8	N11	N12	N13	N14	N16	N17	N25	N26	N27
Model	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	PN	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	in	in	DN/in	in	in	in
TNOX 3000 BT COND	2888	2210	1230	2400	2718	1230	276	225	2200	1960	1300	410	1390	4915	3200	1012	1500	550	300-400	1853	1100	400	550	16	200	200	1/2"-3/4"	40	50	1/2"	3/4"	1/2"	200	200	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"
TNOX 3500 BT COND	2888	2210	1230	2400	2718	1230	276	225	2200	1960	1300	410	1390	5645	3930	1012	2000	550	300-400	2083	1100	400	550	16	200	200	1/2"-3/4"	40	50	1/2"	3/4"	1/2"	200	200	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"
TNOX 4100 BT COND	3098	2420	1335	2610	2928	1335	284	225	2410	2170	1400	452	1480	5412	3700	1012	2000	548	300-400	1852	1100	450	600	16	200	200	1/2"-3/4"	40	50	1/2"	3/4"	1/2"	200	200	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"
TNOX 4800 BT COND	3284	2420	1335	2615	3082	1335	284	225	2410	2170	1400	452	1480	5912	4200	1262	2200	548	300-400	1902	1100	450	600	16	250	250	1/2"-3/4"	40	65	1/2"	3/4"	1/2"	250	250	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"
TNOX 6000 BT COND	3360	2570	1410	2765	3159	1410	308	277	2560	2320	1600	733	2080	6412	4700	1264	2700	548	300-400	1900	1100	450	700	16	250	250	1/2"-3/4"	40	65	1/2"	3/4"	1/2"	250	250	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"
TNOX 7000 BT COND	3360	2570	1410	2765	3159	1410	308	277	2560	2320	1600	733	2080	6912	5200	1264	3200	548	300-400	1900	1100	450	700	16	250	250	1/2"-3/4"	40	65	1/2"	3/4"	1/2"	250	250	1"	1"	1"	1/2"	1/2"-1"1/4	1/2"