GLOBAL

Hot Water Boiler
High Pressure Hot Water Boiler

GLOBAL standard version

Twin-furnace GLOBAL-LUX

Capacity range: 1 to 38 MW

The design and technology of the GLOBAL boilers is the result of Danstoker's almost 75 years of experience as an internationally recognized boiler-maker.

The GLOBAL fire-tube boilers are of the 3-pass wet-back design, suitable for back-pressure combustion of oil and/or gas or biogas. Available in 4 design pressure ratings (4, 6, 10, 16 bar(g)), however, design pressure up to 32 bar(g) is also possible.

The GLOBAL boiler is available in single and twin-furnace designs. Compliant with the EN regulations, single furnace oil-fired boilers up to 13.3 MW and gas-fired boilers up to 17.3 MW. Capacities above these boiler ratings are available in twin-furnace version.

The furnace is generously sized, thus featuring low furnace loads and temperatures in order to achieve optimal combustion characteristics and minimize NOx emission.

The unique insulations principles applied minimize the overall heat loss from the boiler surface, thereby achieving an optimal gross thermal efficiency.

For further reduction of the radiation loss, the boiler may be provided with extra cover doors.

Due to the low flue gas resistance and the low pressure loss, the electricity consumption of blowers and pumps is kept at a minimum.

The GLOBAL design features the following benefits:

- High total efficiency and performance
- Outstanding insulation principles
- Low furnace load and temperatures
- Low flue gas resistance
- Optimized for combustion of gas and/or oil
- Easy access to flue gas and water sides
- Sturdy construction
- Cladding and saddles without heat bridges
- Service platform insulated from boiler body

LUX version

- Extra cover doors
- Extra insulated hatches and man hole covers

Options

- Extended width of platforms
- Ladders, galleries, etc.
- Valves and controls, automatic blow-down
- Burners and control panels
- Economisers, pumps, tanks
- Water treatment

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08-10

GLOBAL No.1-13

Low Temperature Hot Water Boiler
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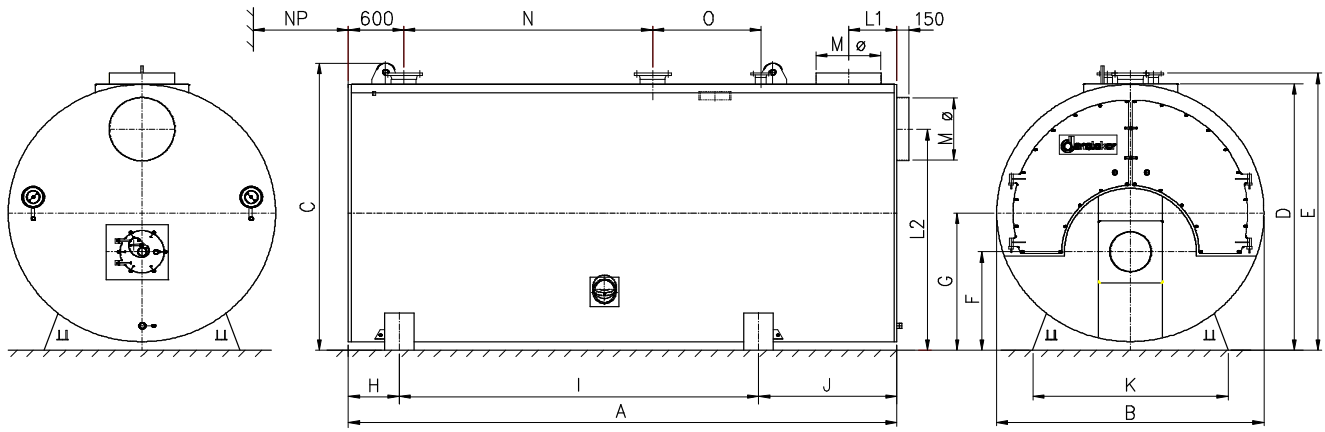

For exact measures: Please consult the Arrangement drawing

	Nr.	1	2	3	4	5	6	7	8	9	10	11	12	13
Heat Output	**kW**	1000	1250	1500	2000	2500	3000	3500	4250	5000	6000	7500	8500	10000
A	mm	3200	3350	3500	3900	4075	4350	4500	4850	5150	5450	5750	5950	6700
A og H (16 bar-g boilers)	mm	+350	+350	+350	+350	+350	+400	+400	+400	+400	+450	+450	+450	+450
B	mm	1690	1840	1840	1970	2040	2200	2290	2370	2480	2660	2830	2900	2980
C	mm	2020	2170	2170	2300	2370	2530	2630	2710	2820	3000	3170	3240	3320
D	mm	1805	1960	1960	2095	2165	2330	2400	2490	2595	2760	2940	3010	3095
E	mm	1920	2070	2070	2200	2270	2430	2520	2600	2710	2890	3060	3130	3210
F	mm	680	735	735	775	800	862	895	935	964	1030	1081	1113	1140
G	mm	945	1020	1020	1085	1120	1200	1245	1285	1340	1430	1515	1550	1590
H	mm	550	550	550	550	550	550	550	550	550	600	600	600	600
I	mm	1500	1650	1800	2200	2375	2575	2700	3050	3350	3500	3700	3800	4550
J	mm	1150	1150	1150	1150	1150	1225	1250	1250	1250	1350	1450	1550	1550
K	mm	1235	1345	1345	1440	1490	1610	1675	1730	1810	1940	2065	2120	2160
L1	mm	385	385	385	385	385	385	450	450	450	450	520	520	520
L2	mm	1520	1645	1645	1750	1795	1930	2020	2075	2160	2315	2460	2505	2560
Mø (inside diameter)	mm	250	300	300	350	400	450	450	500	550	600	650	700	750
N	mm	750	900	1050	1450	1625	1625	1600	1950	2100	2400	2600	2700	3450
NP	mm	1900	2030	2200	2580	2750	2930	3050	3400	3700	3900	4100	4200	4950
O	mm	875	875	875	875	875	1075	1075	1075	1175	1175	1175	1175	1175
Length furnace excl. VK	mm	2350	2500	2650	3050	3225	3425	3550	3900	4200	4450	4650	4750	5500
Lengts furnace incl. VK	mm	2725	2875	3025	3425	3600	3800	3950	4300	4600	4850	5150	5350	6100
Diameter furnace	mm	660	760	760	830	900	960	1022	1080	1130	1208	1310	1360	1410
Flue gas resistance (⊠)	mbar	5,0	4,5	6,0	6,5	7,0	7,5	8,0	8,0	8,0	8,0	10,0	11,0	12,5
Flue gas temp.. (⊠)	ºC	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240	205/240
Pressuredrop waterside @ Δt 30 C	mbar	35	25	30	25	35	50	35	50	25	30	50	25	35
Water content	m^3	2,71	3,35	3,55	4,71	5,2	6,8	7,45	8,55	10,2	12,6	14,9	15,1	19,0
Flue gas volume	m^3	2,0	2,5	2,6	3,3	4,0	4,6	5,6	6,9	7,7	9,3	11,5	12,3	15,5
Weight 4,0 bar-g	ton	3,1	3,8	3,9	4,7	5,2	6,3	7,0	8,5	9,0	10,9	13,2	14,0	16,6
Weight 6,0 bar-g	ton	3,2	3,9	4,0	4,8	5,4	6,6	7,6	8,7	9,8	11,8	13,7	15,2	18,1
Weight 10,0 bar-g	ton	3,8	4,5	4,7	5,6	6,3	7,7	8,9	10,2	11,5	13,8	16,1	18,9	21,2
Weight 16,0 bar-g	ton	4,6	5,6	5,9	6,9	7,8	9,8	11,1	12,8	13,9	16,9	19,4	20,8	27,0

(⊠) @ N-gas / gasolie $O_{2\ tør}$ = 2,1%, t: 75/60 ºC / 130/100 ºC, The manufacture reserves the right to make alterations. 06-09-10

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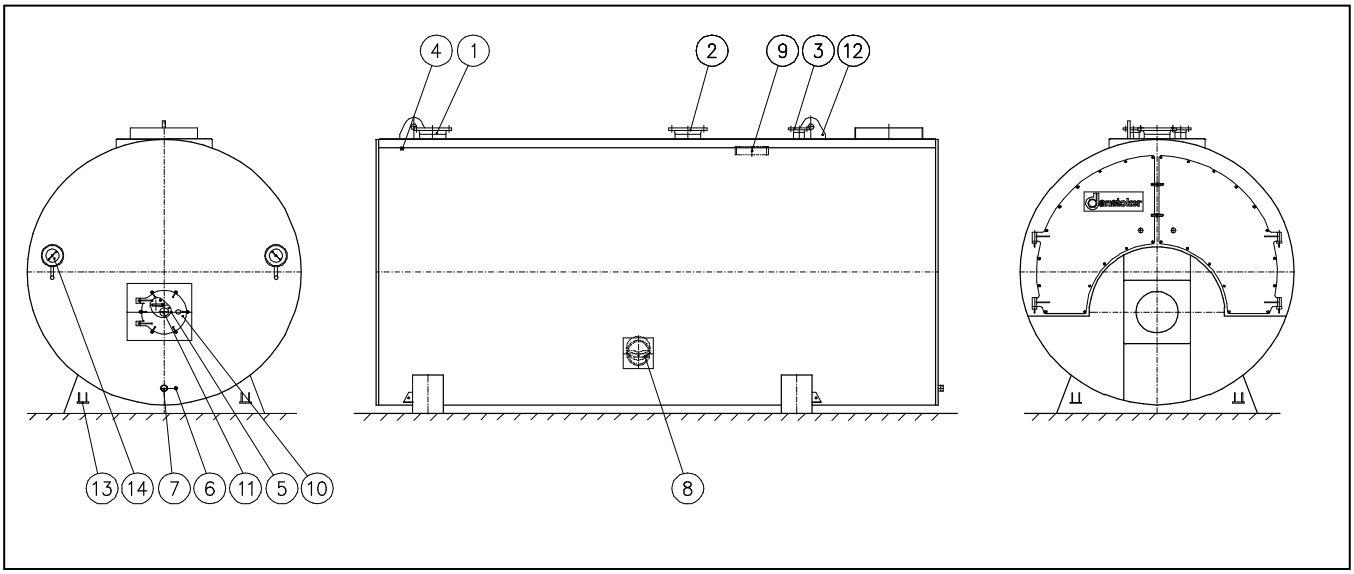


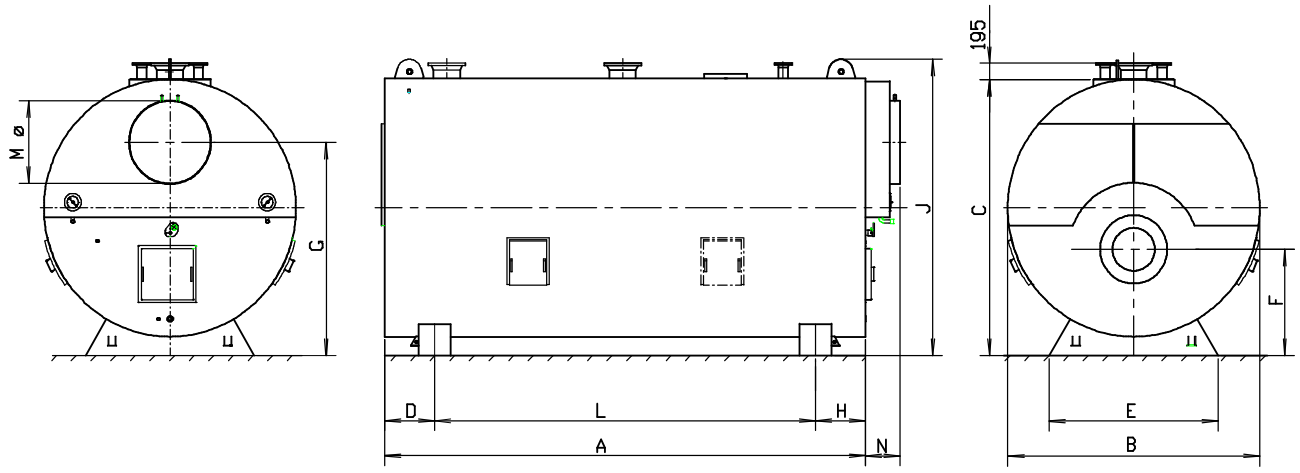
		Nr.	1	2	3	4	5	6	7	8	9	10	11	12	13
	Heat Output	kW	1000	1250	1500	2000	2500	3000	3500	4250	5000	6000	7500	8500	10000
Pos	**Branch**														
1	Flow	DN	80	100	100	125	125	125	150	150	200	200	200	250	250
2	Return	DN	80	100	100	125	125	125	150	150	200	200	200	250	250
3	Safety valve **4,0 Bar-g**	DN	2 x 32	2 x 40	2 x 40	2 x 50	2 x 65	2 x 65	2 x 65	2 x 80	2 x 80	2 x 80	2 x 100	2 x 100	2 x 125
3	Safety valve **6,0 Bar-g**	DN	2 x 32	2 x 32	2 x 40	2 x 40	2 x 50	2 x 50	2 x 65	2 x 65	2 x 65	2 x 80	2 x 80	2 x 100	2 x 100
3	Safety valve **10,0 Bar-g**	DN	2 x 25	2 x 25	2 x 32	2 x 32	2 x 40	2 x 40	2 x 50	2 x 50	2 x 50	2 x 65	2 x 65	2 x 65	2 x 85
3	Safety valve **16,0 Bar-g**	DN	2 x 25	2 x 25	2 x 25	2 x 32	2 x 32	2 x 32	2 x 40	2 x 40	2 x 40	2 x 50	2 x 50	2 x 65	2 x 65
4	Measuring 4 x	RG	3/4”	3/4”	¾”	¾”	3/4”	3/4”	¾”	3/4”	¾”	3/4”	3/4”	3/4”	3/4”
5	Measuring	RG	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”
6	Standstill shunt	RG	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”
7	Drain	RG	2”	2”	2”	2”	2”	2”	2”	2”	2”	2”	2”	2”	2”

Pos		**Pos**	
8	Head hole 220 x 320 mm	**12**	Lifting Eyes (2 pcs.)
9	Man hole 320 x 420 mm	**13**	Handling Brackets
10	Access door (Inspection)	**14**	Cleaning Covers
11	Inspection hole		

The manufacture reserves the right to make alterations.

GLOBAL No. 14 to18

Low Temperature Hot Water Boiler
High Temperature Hot Water Boiler



For correct measures: Please consult the Arrangement Drawing

	No.	14	15	16	17	18
Max. heat output at 60/80°C	**kW**	12.000	13.500	15.000	17.500	20.000
Max. heat output at 90/110°C	**kW**	12.000	12.500	14.500	17.500	20.000
A	mm	6130	6830	7130	7330	7530
A & H (@ 16 bar-g boilers)	mm	+600	+600	+600	+600	+600
B	mm	3310	3410	3410	3810	3910
C	mm	3505	3655	3655	4035	4135
D	mm	615	615	615	615	615
E	mm	2166	2200	2200	2580	2580
F	mm	1285	1390	1390	1490	1540
G	mm	2620	2820	2820	3035	3100
H	mm	615	615	615	615	615
J	mm	3750	3900	3900	4280	4380
L	mm	4900	5600	5900	6100	6300
M (inside diameter)	mm	950	1000	1100	1150	1200
N	mm	485	485	485	485	485
Water content	m^3	23,6	27,1	28,4	39,3	41,2
Diameter of furnace	mm	1550	1630	1630	1730	1850
Length furnace	mm	5223	5904	6204	6300	6500
Flue gas volume	m^3	16,6	20,3	21,4	26,8	30,4
Flue gas temperature*	°C	195	210	210	205	195
Flue gas resistance*	mbar	11	10	12	13	13
Weight 4.0 bar-g	ton	20,1	21,9	22,8	27,7	30,3
Weight 6.0 bar-g	ton	21,8	24,2	25,2	31,8	35,0
Weight 10 & 16.0 bar-g	Please contact Danstoker					

* at natural gas, $O_{2\ dry}$: 2.1%,

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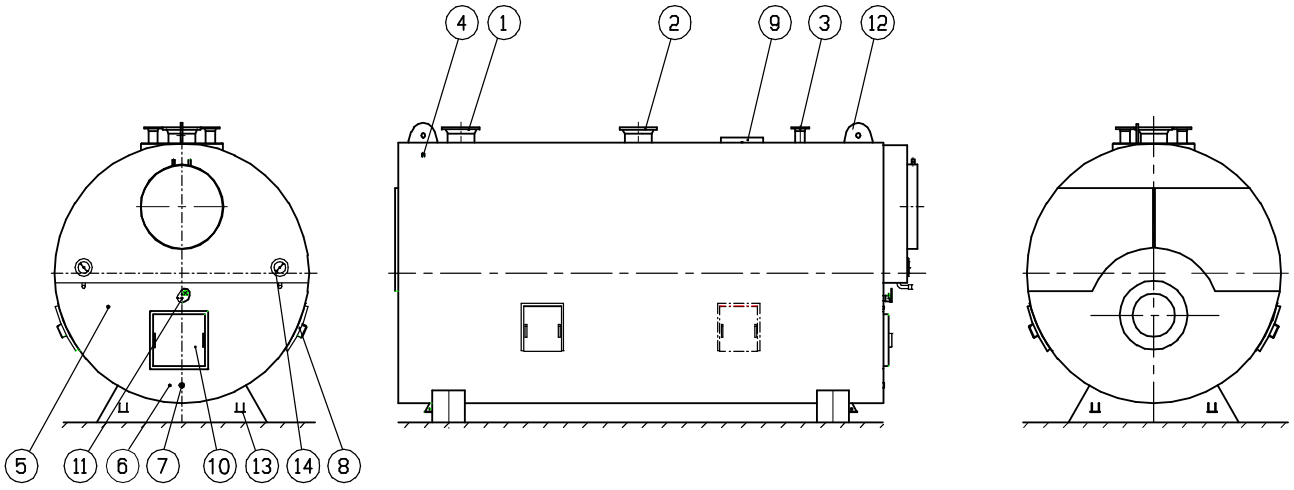

		No.	14	15	16	17	18
	Max.heat output at 60/80°C	**kW**	12.000	13.500	15.000	17.500	20.000
	Max.heat output at 90/110°C	kW	12.000	12.500	14.500	17.500	20.000
Pos	**Branch Connections**						
1	Flow	DN	350	400	400	500	500
2	Return	DN	350	400	400	500	500
3	Safety valves 4,0 bar-g	DN	2 x 125	2 x 150	2 x 150	2 x 150	3 x 150
3	Safety valves 6,0 bar-g	DN	2 x 100	2 x 100	2 x 125	2 x 125	2 x 150
3	Safety valves 10,0 bar-g	DN	2 x 65	2 x 80	2 x 80	2 x 80	3 x 80
3	Safety valves 16,0 bar-g	DN	2 x 50	2 x 65	2 x 65	2 x 65	2 x 65
4	Measuring	RG	4 x ¾	4 x ¾	4 x ¾	4 x ¾	4 x ¾
5	Measuring	RG	½	½	½	½	½
6	Standstill shunt	RG	¾	¾	¾	¾	¾
7	Drain	RG	2	2	2	2	2

Pos		Pos	
8	Man hole 320 x 420 mm (2 pcs.)	**12**	Lifting eyes (2 pcs.)
9	Man hole 320 x 420 mm (1 pc.)	**13**	Handling brackets
10	Access door (inspection)	**14**	Cleaning cover
11	Inspection hole		

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