OSBY PARCA pannor för proffs
Enertech Group

Osby Parca Opex-Å

Steam boiler for oil or gas, 150–2000 kW

The Professional's Choice Since 1935

MADE IN SWEDEN
Respected Worldwide

Many options!

From 210 to 2800 kg of steam per hour, with high or low pressure

Compact and reliable steam boiler

Opex-Å is a compact steam boiler supplied in low pressure versions, six sizes 1(50–1000 kW), and high pressure versions, nine sizes (150–2000 kW). The boiler consists of a horizontal pressure vessel insulated with mineral wool. The system is protected by a painted AluZinc sheet steel cover.

Opex-Å is fired with either oil or gas. Combustion takes place in the centre of the combustion chamber. The fully water cooled rear wall returns fumes along the combustion chamber exterior walls, after which the fumes enter the flue gas tubes.

The combustion chamber and the flue gas tubes are accessible through the opening of the burner hatch on the boiler's short side. The design provides a compact and high efficiency boiler for oil and gas firing. The high efficiency leads to a safe total combustion of the fuel, this is an important factor with respect to environmental considerations.

The boilers are supplied with a factory fitted control system, burner and fittings.



Delivery Description

High & Low Pressure Boilers

High pressure boilers are available in 9 sizes (150–2000 kW). Design pressure for these is 10 or 16 bar. Low pressure boilers are available in 6 sizes (150–1000 kW). Design pressure for these is 1 bar. Sheet steel, tubing and tie rod materials are made of P 265 GH and P 235 GH materials. Insulation uses 100 mm mineral wool mats covered with 1 mm steel plate. Rust protection treatment is carried out before insulating.

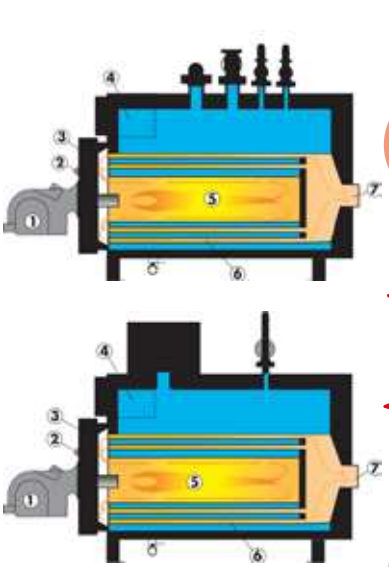
Scope of Supply

The boilers are delivered with fitted control system, mounted burner and fixtures. Each unit is tested before being dispatched from the manufacturing plant. Right hung front hatch is standard. Firing tools are included. When ordering, specify on what side the hatch shall be hung (right or left), chosen burner type (if not bought from Osby Parca) and desired output.

Control System Cabinet

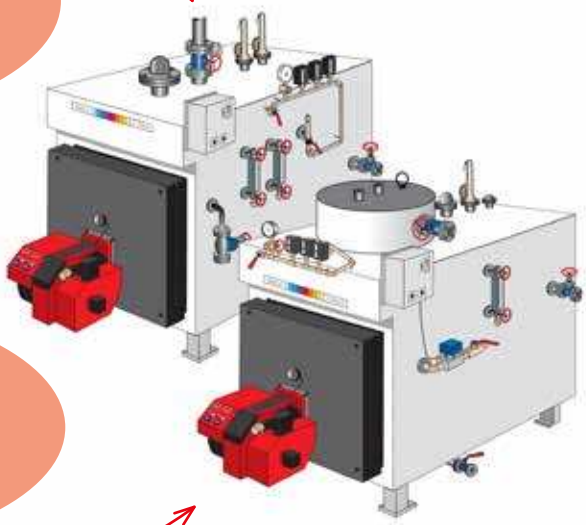
The control system cabinet is fitted to one of the boiler's long sides, protection class IP 54. The following equipment is installed in the cabinet:

- Mains switch
- Fuses
- Contactor relays
- Automatic circ. breaker
- Level control relay with boiler dryout protection, low level, pump start & stop
- Circuit breaker, burner
- Relays, plinths, markings, wiring
- Electric scheme for control cabinet and external connections



High pressure boiler

Pressure: 10 alt. 16 bar
Temp.: 185°C alt. 204°C



Low pressure boiler

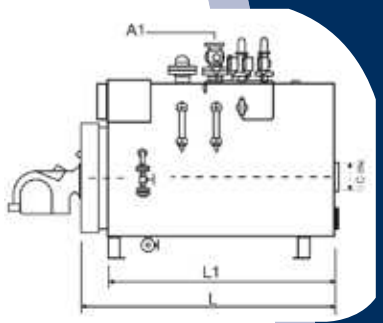
Pressure: 1 bar
Temp.: 120°C

1. Burner
2. Inspection glass
3. Insulated front hatch
4. Control cabinet
5. Firetube
6. Tubes
7. Flue gas connection

High Pressure Version – Data

Technical Data

Model	Output	Gas r.	Steam	Flue p.	Tubes	S. vol.	W. vol.	F. area	F. vol.
	kW	Δp Pa	kg/h	C	Qnt.	m³	m³	m²	m³
H150	150	100	210	150	19	100	400	4.7	0.14
H250	250	210	350	175	21	180	600	6.8	0.22
H350	350	370	500	200	23	245	715	8.5	0.29
H500	500	550	700	225	27	325	995	10.9	0.38
H750	750	700	1050	275	37	500	1600	17.5	0.60
H1000	1000	900	1400	316	45	676	2645	22.6	0.82
H1250	1250	800	1750	350*	44	815	2830	26.0	1.07
H1600	1600	850	2240	450*	52	1300	3700	34.0	1.51
H2000	2000	850	2800	450*	64	1400	3900	49.1	1.87

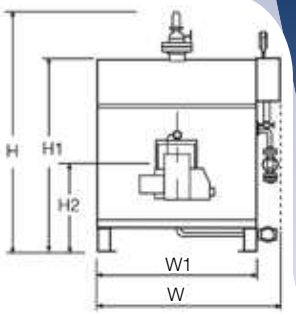


Abbreviations: Gas r.=gas resistance; Flue p.=flue pipes; S. vol.=steam volume; W. vol=water volume; F. area.=firing area; F. vol.=fireplace volume.

Unit. no. explanation: a="5"=10 bar, a="6"=16 bar; b="0=Oil burner, b="6"= Gas burner.

Dimensions and weights

Model	Dimensions in mm								10 bar			16 bar		
	W	L	H	W1	L1	H1	H2	Foundation	N.w.	B.w.	A1	N.w.	B.w.	A1
H150	1420	1436	1745	1090	1210	1340	665	1400 x 1200	910	1310	32	1110	1510	25
H250	1490	1785	1815	1160	1560	1410	685	1800 x 1300	1130	1730	40	1330	1930	32
H350	1550	1981	1875	1220	1756	1470	702	1800 x 1300	1690	2405	50	1990	2705	40
H500	1650	2195	1975	1320	1970	1570	740	2200 x 1400	2000	2995	65	2290	3255	50
H750	1820	2565	2145	1490	2340	1740	810	2600 x 1600	2750	4350	65	3050	4650	65
H1000	1940	2810	2265	1610	2585	1860	855	2900 x 1700	3550	6195	80	3950	6595	65
H1250	2234	2580	2594	1904	2340	2154	982	2600 x 2000	4330	6950	80	4700	7330	65
H1600	2474	2840	2834	2144	2600	2394	1072	2900 x 2200	5600	9300	80	6300	10000	65
H2000	2474	3100	2834	2144	2866	2394	1072	3200 x 2200	6300	10200	80	6900	10800	65



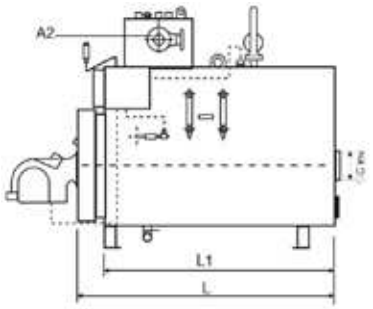
Abbreviations: N.w.=net weight in kg; B.w.=brut weight in kg; A1=DN of steam valve, A1 on drawing.

Unit. no. explanations: b="0"=Oil burner; b="6"=Gas burner.

Low Pressure Version – Data

Technical Data

Model	Output	Gas r.	Steam	Flue p.	Tubes	S. vol.	W. vol.	F. area	F. vol.
	kW	Δp Pa	kg/h	C	Qnt.	m³	m³	m²	m³
L150	150	100	210	151	19	120	400	4.7	0.14
L250	250	210	350	175	21	200	600	6.8	0.22
L350	350	370	500	200	23	285	715	8.5	0.29
L500	500	550	700	225	27	400	995	10.9	0.38
L750	750	700	1050	275	37	600	1600	17.5	0.60
L1000	1000	900	1400	316	45	755	2645	22.6	0.82

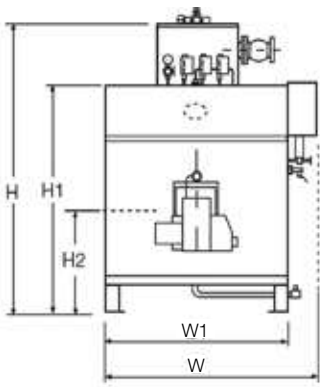


Abbreviations: Gas r.=gas resistance; Flue p.=flue pipes; S. vol.=steam volume; W. vol=water volume; F. area.=firing area; F. vol.=fireplace volume.

Unit. no. explanation: a="5"=10 bar, a="6"=16 bar; b="0=Oil burner, b="6"= Gas burner.

Dimensions and weights

Model	Dimensions in mm								1 bar		
	W	L	H	W1	L1	H1	H2	Foundation	N.w.	B.w.	A2
L150	1330	1435	1610	1090	1210	1340	665	1400 x 1200	880	1280	50
L250	1400	1785	1680	1160	1560	1410	685	1800 x 1300	1170	1770	65
L350	1460	1981	1740	1220	1756	1470	702	1800 x 1300	1380	2095	65
L500	1560	2195	2010	1320	1970	1570	740	2200 x 1400	1900	2895	80
L750	1730	2565	2180	1490	2340	1740	810	2600 x 1600	2390	3990	100
L1000	1850	2810	2295	1810	2585	1860	855	2900 x 1700	2850	5495	125

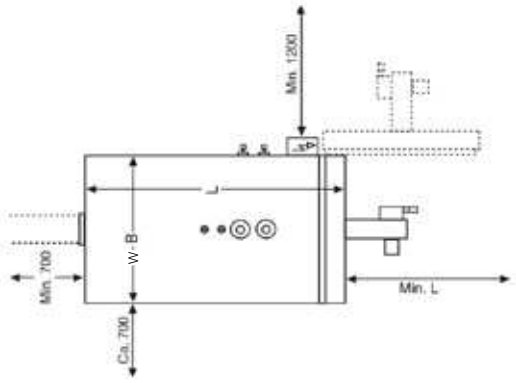


Abbreviations: N.w.=net weight in kg; B.w.=brut weight in kg; A1=DN of steam valve, A1 on drawing.

Unit. no. explanations: b="0"=Oil burner; b="6"=Gas burner.

Boiler Room Layout Example

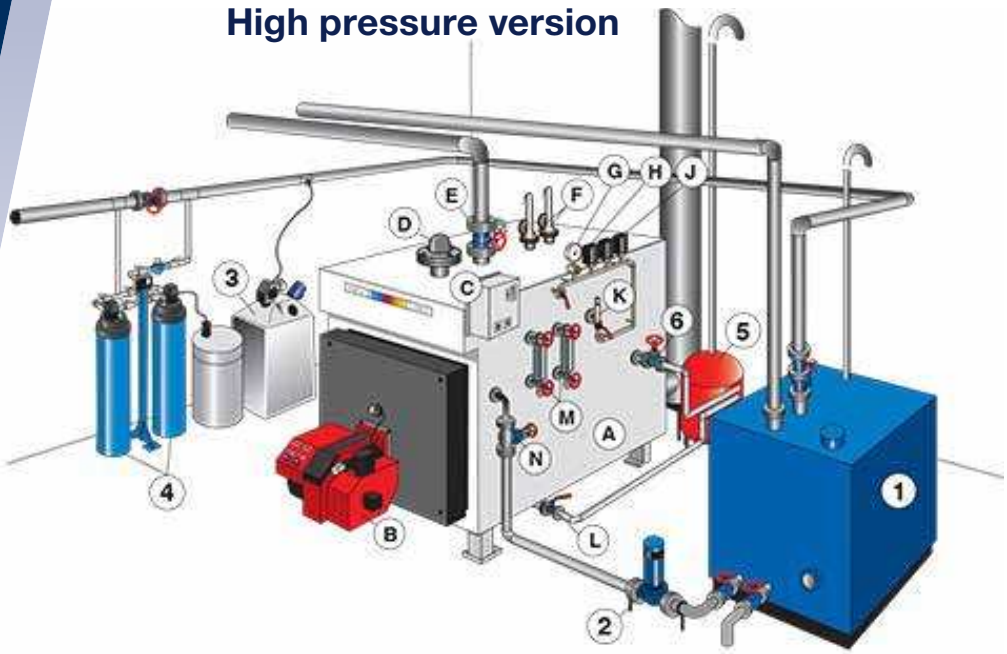
Space requirements



Water quality

When working with steam boilers, water quality is especially important, partly because impure water gives impure steam, but also because impure water corrodes the pipes and the pressure vessel, therefore water treatment equipment has to be applied for the warranty to be valid. Using analysis data or water samples, we can provide a suggestion for suitable equipment for water treatment.

High pressure version

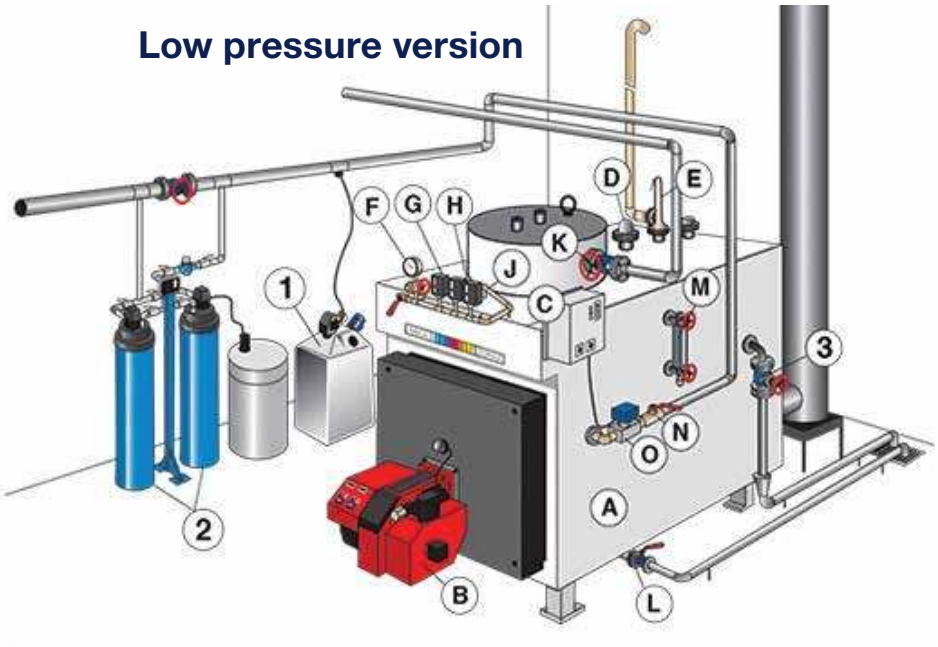


A. High pressure boiler
B. Burner
C. Control system cabinet
D. Level sensor
E. Steam regulation valve
F. Safety valves
G. Pressure gauge
H. Pressure switch with manual reset
J. Operation pressure switch
K. Water pocket pipe
L. Bottom blowing valve
M. Water level indicator
N. Feed water valve

Options :

1. Feed water tank
2. Feed water pump
3. Dosing system
4. Water softener
5. Pressure release tank
6. Desalination

Low pressure version



A. Low pressure steam boiler
B. Burner
C. Control system cabinet
D. Level sensor
E. Safety valve
F. Pressure gauge
G. Pressure swich with manual reset
H. Operation pressure switch
J. Water pocket pipe
K. Steam regulation valve
L. Bottom blow valve
M. Water level indicator
N. Feed water valve
O. Solenoid valve feed water

Options:

1. Dosing system
2. Water softener
3. Desalination

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