SZS Oil and Gas Fuel Steam Boiler Product Range Offerings

Rated Steam Pressure (MPa)	1.25	1.25	1.6	1.6	2.5	2.5	3.82
Nominal steam temperature/°C	Saturation	250	Saturation	350	Saturation	400	450
Rated Steam Capacity [t/h]							
4					✔		
6					✔		
8					✔		
10	✔	✔	✔	✔	✔		
15	✔	✔	✔	✔	✔		
20	✔	✔	✔	✔	✔	✔	✔
25	✔	✔	✔	✔	✔	✔	✔
30	✔	✔	✔	✔	✔	✔	✔
35	✔	✔	✔	✔	✔	✔	✔
40	✔	✔	✔	✔	✔	✔	✔

Other capacities and pressures can be supplied on demand

SZS Oil and Gas Fuel Hot Water Boiler Product Range Offerings

Nominal water outlet pressure (gauge pressure) MPa	1.0	1.25	1.0	1.25	1.25	1.6
Nominal water outlet temperature / water inlet temperature / °C 95/70	95/70	95/70	115/70	115/70	130/70	150/90
Nominal thermal power MW						
7.0	▷	▷	▷	▶		
10.5		▷	▷	▶	▷	
14.0		▷		▶	▷	
17.5		▷		▶	▷	
21		▷		▷	▶	▷
29		▷		▷	▶	▷
46		▷		▷	▷	▶

Description:

1. Products labeled with ▶ are primary recommendations. Users with special requirements can select corre-sponding products labeled with ▷ .
2. Steam boiler designed efficiency range, depending on configuration of energy saving device, is: 91-99%.
3. Hot water boiler designed efficiency range, depending on configuration of energy saving device, is: 92-95%.
4. Steam boilers are all configured with energy saving devices that come in 3 models: B-type (basic model), E-type (economic model), and S-type (strong model) boiler energy saving devices. Corresponding flue gas temperatures are 150°C, 90°C, and 55°C respectively.
5. There are two possibilities regarding the hot water boiler energy saving device. No boiler energy saving device, which has a corresponding flue gas temperature of150°C, and configuration with a boiler energy saving device, which has a corresponding flue gas temperature of 100°C.
6. Boiler designed fuel includes: natural gas, town gas, liquefied petroleum gas, biogas, coke oven gas, mine gas, light oil, and heavy oil.
7. SZS series boiler body is designed for dual use of fuel oil and gas, fuel oil, or fuel gas as the three kinds of fuel. The customer should specify the designed fuel when ordering to facilitate selection of appropriate burners and other auxiliary equipment.

Typical SZS Series Steam Boiler Technical Parameters Table

Model	SZS4-2.5-YQ	SZS6-2.5-YQ	SZS8-2.5-YQ	SZS10-1.6-YQ	SZS15-1.6-YQ	SZS20-1.6-YQ	SZS25-1.6-YQ
Project							
Nominal steam volume t/h	4	6	8	10	15	20	25
Nominal steam pressure MPa	2.5	2.5	2.5	1.6	1.6	1.6	1.6
Nominal steam temperature °C	226	226	226	204	204	204	204
Feed water temperature °C	20/105	20/105	20/105	105	105	105	105
Boiler designed thermal efficiency %	100.3	100.7	100.9	101	101.1	101.2	101.2
Applicable fuel	Natural gas/light oil						
Means of combustion	Forced ventilation, micro positive pressure combustion						
Flue gas temperature °C	55	55	55	55	55	55	55
Fuel consumption (natural gas) Nm^3/h	263/303	394/454	524/605	652	977	1302	1626
Gas supply pressure (natural gas) mbar	10-30	10-30	10-30	10-30	30-50	30-50	30-50
Fuel oil consumption kg/h	222/256	332/383	442/510	550	824	1097	1371
Uses power source V/Hz				380/50			
Equipment total power kW	24.5/26	26.5/28.7	41/45	37.5/41.5	56.5/60.5	78/82	106.5/114
Largest component transport weight t	18.5	20.5	23	24.5	28.5	32	40
Largest component transport dimensions m	6x2.6 x3.0	6.4x2.8 x3.1	6.8x3.0 x3.2	7.2x3.1 x3.3	8x3.3 x3.5	8.7x3.5 x3.7	9.4x3.7 x3.8
Installation max external dimensions m	8x4.1 x3.9	8.5x4.4 x4	9x4.7 x4.1	9.4x4.8 x4.2	10.3x5.3 x4.4	11.2x5.7 x4.6	11.9x6 x4.7
Appropriate sea level elevation m				≤800			
Main steam valve diameter mm	DN100	DN100	DN100	DN150	DN150	DN200	DN200
Safety valve diameter mm	2xDN50	2xDN50	2xDN80	2xDN80	2xDN80	2xDN100	2xDN100
Feed water pipe diameter mm	DN40	DN40	DN50	DN50	DN80	DN80	DN80
Waste water pipe diameter mm	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50
Stack diameter mm	Φ500	Φ600	Φ700	Φ800	Φ800	Φ1000	Φ1000

Description:

1. Boiler uses natural gas and light oil as its main designed fuels, while the use of town gas, liquefied petroleum gas, biogas, coke oven gas, and mine gas is also appropriate. When the designed fuel is heavy oil, the designed boiler will be correspondingly bigger.
2. Standard calculation of fuel consumption is based on a natural gas lower heat value 36,006 KJ/Nm3 and a light oil lower heat value of 42,705 kJ/kg.
3. The efficiency of the steam boiler in the table is calculated with a B-type steam boiler energy saving device. Using an E-type or S-type energy saving device will further increase boiler efficiency.
4. Equipment total power shown in the table corresponds to fuel being natural gas/light oil，inclusive of blower and oil pump (light oil) electronic equipment power.
5. We believe in continuous improvement of our products, and data for new generation products may differ. Parameters shown in the table are for reference only.

Typical SZS Series Steam Boiler Technical Parameters Table

Model	SZS30-1.6-YQ	SZS35-1.6-YQ	SZS45-1.6-YQ	SZS20-2.5/400-YQ	SZS25-2.5/400-YQ	SZS30-2.5/400-YQ	SZS35-3.82/450-YQ	SZS45-3.82/450-YQ
Project								
Nominal steam volume t/h	30	35	45	20	25	30	35	45
Nominal steam pressure MPa	1.6	1.6	1.6	2.5	2.5	2.5	3.82	3.82
Nominal steam temperature °C	204	204	204	400	400	400	450	450
Feed water temperature °C	105	105	105	105	105	105	105	105
Boiler designed thermal efficiency %	101.2	101.3	101.3	101.2	101.2	101.2	101.3	101.3
Applicable fuel	Natural gas/light oil							
Means of combustion	Forced ventilation, micro positive pressure combustion							
Flue gas temperature °C	55	55	55	55	55	55	55	55
Fuel consumption (natural gas) Nm^3/h	1951	2276	2924	1547	1933	2318	2796	3593
Gas supply pressure (natural gas) mbar	50-200	50-200	50-200	30-50	30-50	50-200	50-200	50-200
Fuel oil consumption kg/h	1644	1920	2466	1304	1630	1955	2357	3029
Uses power source V/Hz					380/50			
Equipment total power kW	137/148	137/140	189/192	127/131	131.5/139	167/170	222/225	266/269
Largest component transport weight t	24	28.5	35	40	49	26.5	35.5	46
Largest component transport dimensions m	10.1x3.5 x3.5	11x3.5 x3.5	12.2x3.8 x3.8	9.2x3.5 x3.7	9.9x3.7 x3.8	10.6x3.5 x3.5	11x3.5 x3.5	12.2x3.8 x3.8
Installation max external dimensions m	12.3x6.3 x5.2	13.2x6.6 x5.3	14.5x7 x5.7	11.7x5.7 x4.9	12.4x6 x5	12.8x6.3 x5.2	13.2x6.6 x5.3	14.5x7 x5.7
Appropriate sea level elevation m					≤800			
Main steam valve diameter mm	DN200	DN250	DN250	DN150	DN150	DN200	DN150	DN200
Safety valve diameter mm	2xDN125	2xDN150	2xDN150	2xDN80	1xDN80 +1xDN100	1xDN80 +1xDN100	2xDN80	1xDN80 +1xDN100
Feed water pipe diameter mm	DN80	DN100	DN100	DN80	DN80	DN80	DN100	DN100
Waste water pipe diameter mm	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50
Stack diameter mm	Φ1100	Φ1200	Φ1400	Φ1000	Φ1000	Φ1000	Φ1200	Φ1400

Description:

1. Boiler uses natural gas and light oil as its main designed fuels, while the use of town gas, liquefied petroleum gas, biogas, coke oven gas, and mine gas is also appropriate. When the designed fuel is heavy oil, the designed boiler will be correspondingly bigger.
2. Standard calculation of fuel consumption is based on a natural gas lower heat value 36,006 KJ/Nm3 and a light oil lower heat value of 42,705 kJ/kg.
3. The efficiency of the steam boiler in the table is calculated with a B-type steam boiler energy saving device. Using an E-type or S-type energy saving device will further increase boiler efficiency.
4. Equipment total power shown in the table corresponds to fuel being natural gas/light oil，inclusive of blower and oil pump (light oil) electronic equipment power.
5. We believe in continuous improvement of our products, and data for new generation products may differ. Parameters shown in the table are for reference only.

Typical SZS Series Hot Water Boiler Technical Parameters Table

Model	QXS7-1.25/115/70-YQ	QXS10.5-1.25/115/70-YQ	QXS14-1.25/115/70-YQ	QXS17.5-1.25/115/70-YQ	QXS21-1.25/130/70-YQ	QXS29-1.25/130/70-YQ	QXS46-1.6/150/70-YQ
Project							
Nominal thermal power MW	7	10.5	14	17.5	21	29	46
Nominal steam pressure MPa	1.25	1.25	1.25	1.25	1.25	1.25	1.6
Nominal water outlet temperature °C	115	115	115	115	130	130	150
Nominal water inlet temperature °C	70	70	70	70	70	70	90
Boiler designed thermal efficiency %	94.6	94.7	94.8	94.8	94.8	94.9	95
Applicable fuel	Natural gas/light oil						
Means of combustion	Forced ventilation, micro positive pressure combustion						
Flue gas temperature °C	100	100	100	100	100	100	100
Fuel consumption (natural gas) Nm^3/h	740	1108	1477	1845	2214	3055	4841
Gas supply pressure (natural gas) mbar	10-30	30-50	30-50	30-50	50-200	50-200	50-200
Fuel oil consumption kg/h	623	935	1246	1555	1867	2576	4082
Uses power source V/Hz	380/50						
Equipment total power kW	23/27	46/51	56/60	76/83.5	91/102	134/137	202/209.5
Largest component transport weight t	25.2	28.1	32	40	35	46	9
Largest component transport dimensions m	7.2x3.1 x3.3	8x3.3 x3.5	8.7x3.5 x3.7	9.4x3.7 x3.8	9.8x3.5 x3.5	10.8x3.5 x3.5	11.5x1.3 x1.8
Installation max external dimensions m	9.4x3.1 x5.2	10.3x3.3 x5.4	11.2x3.5 x5.6	11.9x3.7 x5.7	12.3x4.2 x6.3	13.3x4.5 x6.5	14.1x5.5 x6.9
Circulating water volume t/h	133	200	266	333	299	413	650
Appropriate sea level elevation m	≤800						
Outlet/inlet water pipe diameter mm	DN200	DN200	DN250	DN250	DN250	DN300	DN350
Safety valve diameter mm	2xDN80	2xDN100	2xDN100	2xDN125	2xDN125	2xDN150	2xDN100 ＋1xDN80
Waste water pipe diameter mm	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50	DN40/50
Stack diameter mm	Φ800	Φ800	Φ1000	Φ1000	Φ1100	Φ1400	Φ1700

Description:

1. Boiler uses natural gas and light oil as its main designed fuels, while the use of town gas, liquefied petroleum gas, biogas, coke oven gas, and mine gas is also appropriate. When the designed fuel is heavy oil, the designed boiler will be correspondingly bigger.
2. Standard calculation of fuel consumption is based on a natural gas lower heat value 36,006 KJ/Nm3 and a light oil lower heat value of 42,705 kJ/kg.
3. Hot water boiler efficiency in the table is calculated without the boiler energy saving device. Adding the energy saving device would further increase boiler efficiency.
4. Equipment total power shown in the table corresponds to fuel being natural gas/light oil，inclusive of blower and oil pump (light oil) electronic equipment power.
5. We believe in continuous improvement of our products, and data for new generation products may differ. Parameters shown in the table are for reference only.