

8MW Watertube Steam Boiler Datasheet.xlsx

Model	John Thompson SDGL8
Capacity	8MW
Type	D type Watertube
Burner	Weishaupt: WM-G50/2-A-ZM NR
Burner Turn Down	8:1
Steam Flow Rate – Evaporation from & At 100°C	12763 kg/hr
Steam Flow Rate – Evaporation at 10 barg from feed at 85°C	11882 kg/hr
Fuel Consumption – (approx.)	
Natural Gas @ 100% Firing Rate*	33840 MJ/hr
Principle Design Standards	ASME I
Design Temperature	250°C
Steam Temperature	184 °C
Design Pressure	1750 kPag
Test Pressure	2635 kPag
Operating Pressure	1000 kPag
Heating Surface Boiler Radiant	41.9 m ²
Heating Surface Boiler Total Convective	331.1 m ²
Heating Surface Economiser	192.2 m ²
Main Steam Outlet	200NB ANSI 300
Feedwater Inlet	50NB ANSI 300
Safety Valve	50NB ANSI 300 x 2
Blowdown Valve Bottom Drum	40NB ANSI 300
Stack Flue Diameter	650 mm
Overall Height	3850 flange faces
Overall Width	3390(with Platform)
Overall Length	7940 (with Platform)
Fitted Weight incl. trim(dry) approx.	15840kg
Flooded Weight approx.	22900kg
Steam Dryness	98.5%
Boiler Efficiency (GCV/NCV) – Economiser*	85.1 / 94.4
Boiler Efficiency (GCV/NCV) Economiser Bypass	79.2 / 87.8
Expected Stack Outlet Temperature*	< 130
NOx Level@3%O2	<150mg/Nm ³
CO Level	<50ppm