

10MW Watertube Steam Boiler Datasheet.xlsx

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| Model | John Thompson SDGL10 |
| Capacity | 10MW |
| Type | D type Watertube |
| Burner | Weishaupt: WKmono 80/1-A-ZM NR or WKmono 80/2-A-ZM-3LN |
| Burner Turn Down | 8:1 |
| Steam Flow Rate – Evaporation from & At 100°C | 15954 kg/hr |
| Steam Flow Rate – Evaporation at 10 barg from feed at 85°C | 14853 kg/hr |
| Fuel Consumption – (approx.) | |
| Natural Gas @ 100% Firing Rate* | 42260 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 | 50 m ² |
| Heating Surface Boiler Total Convective | 411 m ² |
| Heating Surface Economiser | 192 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 | 750 mm |
| Overall Height | 3850 flange faces |
| Overall Width | 3890(with Platform) |
| Overall Length | 8040 (with Platform) |
| Fitted Weight incl. trim(dry) approx. | 19000kg |
| Flooded Weight approx. | 25500kg |
| Steam Dryness | 98.5% |
| Boiler Efficiency (GCV/NCV) – Economiser* | 85.2 / 94.2 |
| Boiler Efficiency (GCV/NCV) Economiser Bypass | 80.3 / 89.1 |
| Expected Stack Outlet Temperature* | < 130 |
| NOx Level@3%O₂ | <150mg/Nm ³ |
| CO Level | <50ppm |