# 5.8 mmbtu Containerised Zone II DNV 2.7-2 Steam Generator




## Description

Centurion Power & Equipment has an extensive fleet of steam generators providing outputs up to 5.8 mmbtu in Rigsafe, Zone II and DNV 2.7-2 standards. Our steam generators are an ideal solution for standby or replacement of customers own boiler for onshore and offshore use. They can also support well test, refinery and decommissioning application. The steam generators can be coupled to the Centurion Power & Equipment heat exchanger to give a complete heating solution.

The units are enclosed in purpose-built containers that house the control system, water and fuel tanks allowing economic transportation with a one lift strategy. A remote emergency shutdown facility is available ensuring instant safe shutdown should methane, propane and $H_2S$ gas or a similar hazard be detected or encountered. The recent addition of equipment to allow compliance with the DNV 2.7-2 standard ensures a high degree of safety in operation.

## Key Features

- Boiler designed to ASME or BS boiler vessel codes
- Three-pass, wet-back design boiler with low external temperatures
- Containers built to DNV 2.7-1 lifting standard
- Zone II Hazardous Area certified
- DNV 2.7-2 certified
- High ambient capability
- Rig communication hook up facility
- Gas detection system
- Fire detection and suppression system
- Fully automated fire damper louver system
- Compact self-contained design - size of a 20ft shipping container
- Water, condensate returns and fuel storage tanks mounted within the container
- Hydrocarbon detection on steam returns system
- Dual water pump (duty and stand-by)
- Internal spark arrestor
- Remote emergency shutdown facility – electrical or pneumatic
- Steam package ships with a certified steam hose and fittings package
- External operation capability
- Experienced offshore service technician(s) for operational and maintenance assistance

## Technical Specifications

| Performance | |
|---|---|
| Saturated steam flow | 2,720 kg/hr |
| Capacity | 5.8 mmbtu |
| Working pressure | 150 PSIG, 10.34 barg |
| Max steam temperature | 186°C |
| Fuel tank capacity | 1,035 litres |
| Water tank capacity | 1,035 litres |
| Fuel consumption | 193.4 litres/hr |
| Full load running – no returns | 5.3 hrs |
| Water consumption | 2,720 kgs per hour |
| Water quality | Potable Water (Minimum) |
| Build specification | BS 2790 & ASME 1 |
| Power supply | 400 Volts 50 / 60 HZ |
| Electrical Main Circuit Breaker | 32 amps |
| Start-up power requirement | 30 amps |
| Power Supply Connection | 4 pin 3Ph 440 V |
| Steam Outlet Connection | 1 x 2” Hammer Union Fig 206 |
| Returns Line Connection | 1 x 2” Hammer Union Fig 206 |
| Water Supply Connection | 1 x ¾” Crows Foot |

| Lifting Specifications, Weights, and Dimensions | |
|---|---|
| Lifting specifications | DNV 2.7-1 / EN12079 |
| Length | 6,058 mm |
| Width | 2,438 mm |
| Height | 2,896 mm |
| Weight (kg dry) | 14,200 kg |
| Weight (kg operating) | 17,000 kg |

| Safety Features | |
|---|---|
| Emergency fuel cut off | External Emergency Stop |
| Low water alarm | Anti-slip flooring |
| Low water cut off | Rig ESD connection |
| Gas detection | Fire suppression |
| Condensate Returns | Rig coms connection |
| Hydrocarbons detection | Portable fire extinguisher |
| Multi tone alarm system | Container colling fan |

| Options | |
|---|---|
| Dual fuel capability | Low ambient pack |
| Remote fuelling pack | Steam hard pipe |
| Insulated pipework | |

Note: The above referred specifications are our minimum standard and for guidance purposes only. For steam generator specific information applicable to comply with region specific standards, please consult your local Centurion Power & Equipment representative.

Technical drawings available on request: P&ID, GA.

For more information on Steam Generators, please contact your local Centurion Power & Equipment representative or email us at CPEUK@centuriongroup.co.uk.

