

3. PLANT PERFORMANCE SPECIFICATION

3.1 PERFORMANCE

- Inert gas capacity at 400 mm WG and 25°C
at the deck water seal outlet : 2,850 m³/h

NOTE : According to common standard ISO 1217, capacity margin will be ± 4%. To confirm the guaranteed value, a Pitot tube that complies with BS 1042 – 2.1 will be used for capacity measurements.

- Pipeline pressure drop between the fresh air intake and non-return valve on deck shall not exceed 350 mmWG. (Yard responsibility)
- Temperature difference between the inert gas scrubber outlet and seawater scrubber inlet of design capacity : 12 °C
- Turn Down Ratio : 4 : 1

3.2 INERT GAS COMPOSITION

- O₂ content % by vol. (Man. adjustable). : 2-4
- CO₂ content % by vol. : 12-14
- SO₂ content max. ppm by vol. : 50¹⁾
- N₂ : Balance
- Relative humidity at scrubber's outlet : 100%
- Soot content (Bacharach) : 0

¹⁾ NOTE : SO₂ content will depend on SO₂ content in the applied fuel.

4. UTILITIES

4.1 FUEL OIL

- Quality : Marine Diesel Oil
- Consumption at design cap. and at 3.5% O₂ : 211 kg/h

4.2 COOLING WATER

- Quality : Filtered seawater
- Consumption – Scrubber : 171 m³/h
- Pressure at scrubber's inlet : 2.0 barg
- Inlet temperature max. : 32 °C.
- Consumption deck seal : 6 m³/hr.
- Pressure at deck seal inlet : 0.5 barg

4.3 ELECTRICITY

- Blower motor (approx.) : 440V, 60 Hz,
3 Ph, 45 kW
Rated : 65 kW
- Fuel oil pump motor : 440V, 60 Hz,
0.75 kW
- Supply system for control panel : 220V, 60 Hz,
1 Ph, 1kW
- Emerg. supply for alarm panel : 220V 60 Hz

4.4 INSTRUMENT AIR

- Quality : Dry, clean and oilfree
- Dewpoint : +5°C
- Supply pressure : 7 barg
- Consumption for pneumatic valves mainly at start and stop : 70 l/min.
(approx.)

4.5 AMBIENT AIR

- For combustion
- For gas freeing
- Sufficient ventilation for burner area is required Ventilation temp. max. : 40°C