WSD50 30K
30,000m³ LNG Carrier

**DATASHEET**

**Design highlights**

- Latest Dual Fuel Engine technology:
  - reduces emissions in LNG operation: SOx (100%), CO₂ (20%), NOx (80%)
  - compliant with MARPOL Tier III in gas mode
- Vessel is fueled by natural BOG and forced vaporizing
- LNG Carrier with possibility to perform LNG bunkering operations (STS)
- Elevated LNG manifold - optional
- Over 40 years experience in merchant market and leading experts in LNG
- Core competence of Gas Handling Systems within Wärtsilä Ship Design Team

**SPECIFICATION IN BRIEF**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length over all</td>
<td>170.00 m</td>
</tr>
<tr>
<td>Draught, design</td>
<td>7.50 m</td>
</tr>
<tr>
<td>Draught, maximum</td>
<td>8.00 m</td>
</tr>
<tr>
<td>Deadweight, des</td>
<td>15,000 t</td>
</tr>
<tr>
<td>Service speed</td>
<td>16.0 knots</td>
</tr>
<tr>
<td>Operation area</td>
<td>“Worldwide”</td>
</tr>
</tbody>
</table>

**M/E fuel consumption**

- @10% MCR, 15% SM
- Gas mode - LNG cons 25.1 t/day
- Diesel mode - MDO cons 28.6 t/day
**TECHNICAL SPECIFICATION**

**MAIN DIMENSIONS**
- Length over all: 170.00 m
- Length PP: 164.00 m
- Breadth moulded: 29.50 m
- Depth moulded, to upper deck: 15.40 m
- Draught, design: 7.70 m
- Draught, max: 8.00 m
- Deadweight, des draught: 15,000 t

**SPEED & ENDURANCE**
- Design speed (Td): 16.0 kts
- Endurance, service speed (LNG): 6,750 nm
- Endurance, service speed (MDO): 11,000 nm

Optional el. power boost for higher speed or smaller main engine for reach 16.0 kn occasionally

**CAPACITIES**
- LNG (incl. 250m³ fuel): 30,000 m³
- (blister type C: 2 x 11000m³, 1 x 8000m³, 4.0 bar)
- MDO: 1,080 m³
- BW: 7,700 m³
- FW: 260 m³

**CARGO EQUIPMENT**
- Deepwell pumps 6x400m³/h
- Cargo heating/vapourising equipment
- Nitrogen Generator Unit Unit 1500Nm³/h
- Oil of Gas Management options:
  - Gas Combustion Unit
  - DF boiler or
  - Reliquefaction unit
- Fuel gas handling system
- Set of STS transfer equipment incl. LNG flexible hoses, Yokohama fenders, emergency release coupling etc. for STS operations – optional;

**FUEL CONSUMPTION**
- (-service speed, design draft, 15% SM)
  - Fuel consumption, (-/S/G), LNG: 26.1 t/d
  - Fuel consumption, (-/S), MDO: 28.6 t/d
  - Fuel consumption, (+/S/G), LNG: 26.9 t/d
  - Fuel consumption, (+/S), MDO: 31.3 t/d

**ACCOMMODATION**
- 20 persons in single cabin, 2 service crew in two double cabin.
- All cabins to be air-conditioned.

**PROPULSION / MACHINERY**
- 4-stroke Wärtsilä Dual Fuel Main Engine
  - 1 x 8,015 kW 7L46DF
- 4-stroke Wärtsilä Generating sets
  - 2 x 1,065 kW 8L20DF
  - Battery pack 1 x 400 kWh (option)
- Shaft Generator (PTO) 1,000 kW
- 1 CP Propeller, dia: 6.00 m
- 1 Reduction gear with output for PTO/PTI
- 1 x Emergency diesel generator 150kW
- 1 x Bow thruster 1500 kW

**CLASSIFICATION**
- DNVGL (equivalent IACS) +1A Tanker for liquefied gas, Ship type 2G (-163°C, 0.50 t/m³, 4.0 barg), EG, Gas fueled.

Recommended additional notations: ICE class up to 1A, Gas bunker, RP-1(20%) with PTH ab 1000kWe, NAUT-OC, BWM-T, CLEAN, TMON, BilS

---

wartsila.com/shipdesign  shipdesign@wartsila.com

WÄRTSILÄ® is a registered trademark. Copyright © 2017 Wärtsilä Corporation. Specifications are subject to change without prior notice.

WSD ID: 5413