

WSD50 30K

30,000m³ LNG Carrier

DATASHEET



Design highlights

- Latest Dual Fuel Engine technology:
 - reduces emissions in LNG operation: SO_x (100%), CO₂ (20%), NO_x (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

Length over all	170.00 m
Draught, design	7.50 m
Draught, maximum	8.00 m
Deadweight, des	15,000 t
Service speed	16.0 knots
Operation area	"Worldwide"
M/E fuel consumption (@Td, Service speed, 90% MCR, 15% SM)	
Gas mode - LNG cons	25.1 t/day
Diesel mode - MDO cons	28.6 t/day

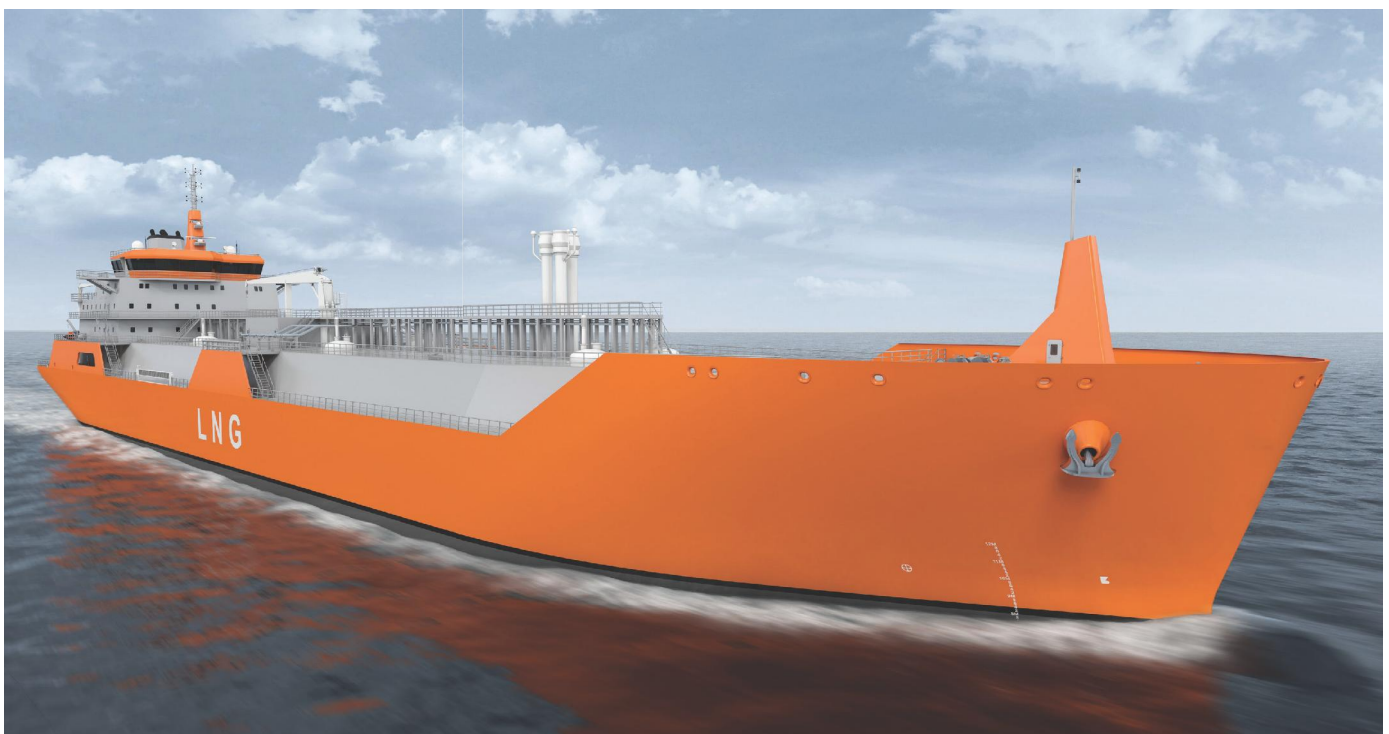
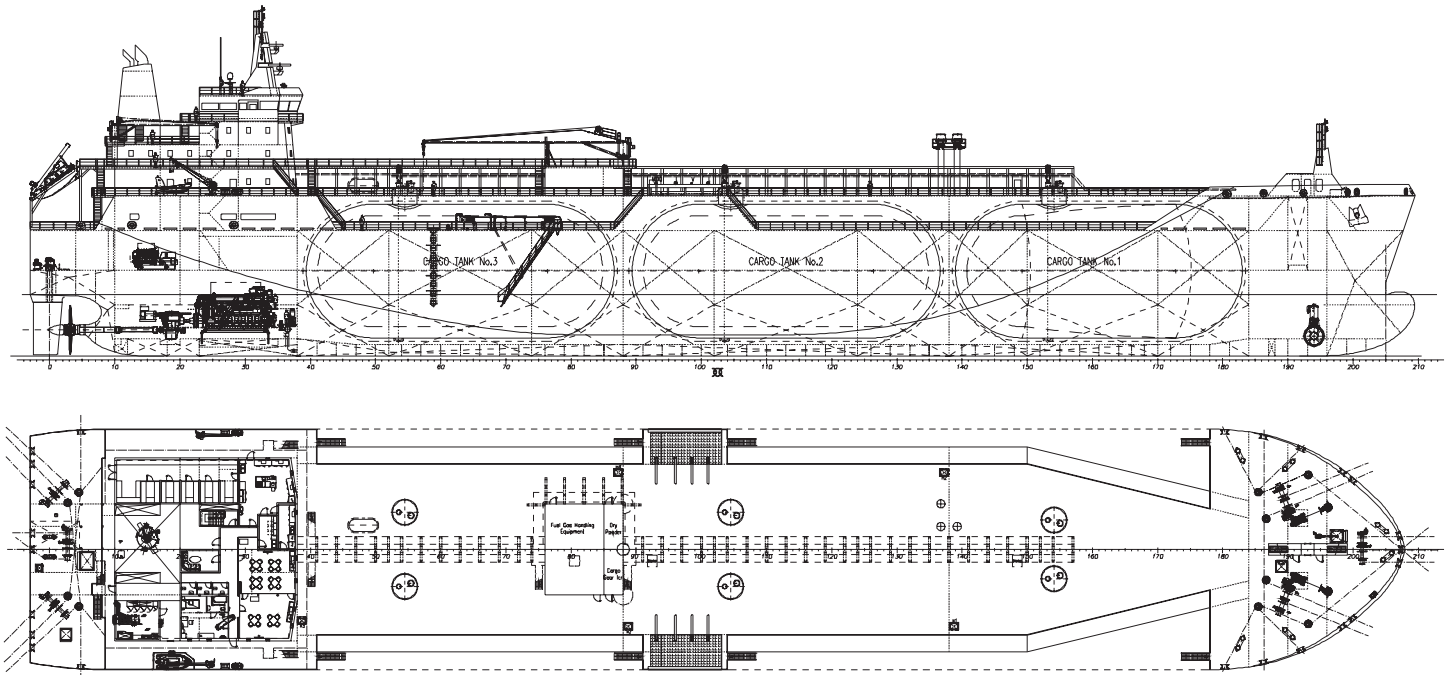


Fig.1 Detailed elevation drawings



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
(Td, @90%MCR, 15%SM, 500kW PTO)	
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. 250m ³ fuel)	30,000 m ³
(bilobe type C, 2 x 11000m ³ , 1 x 8000m ³ , 4.0bar)	
MDO	1,080 m ³
BW	7,700 m ³
FW	260 m ³

CARGO EQUIPMENT

- Deepwell pumps 6x400m³/h
- Cargo heating/vaporising equipment
- Nitrogen Generator Unit Unit 1500 Nm³/h
- Boil of Gas Management options:
 - Gas Combustion Unit or
 - 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	25.1 t/d
Fuel consumption, (-S/G), MDO	28.6 t/d
Fuel consumption, (+S/G), LNG	26.9 t/d
Fuel consumption, (+S/G), 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 6L20DF
- 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 (or equivalent IACS) +1A Tanker for liquefied gas, Ship type 2G (-163°C, 0.50 t/m³, 4.0 barg), E0, 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, BIS