

50,000 DWT DUAL-FUEL OIL / CHEMICAL TANKER

ICE has designed a robust and economical tanker for transport of crude oil, oil products and IMO Type 2 & 3 chemicals, with six cargo separations. Extensive model testing in ICE's own ITTC-recognised towing tank combined with Computational Fluid Dynamics (CFD) analysis has resulted in a highly efficient hull form.

The 50,000 dwt tanker has a double-hull structure meeting international requirements for the prevention of marine pollution. The vessel has been developed in accordance with the relevant HCSR and IMO regulations.

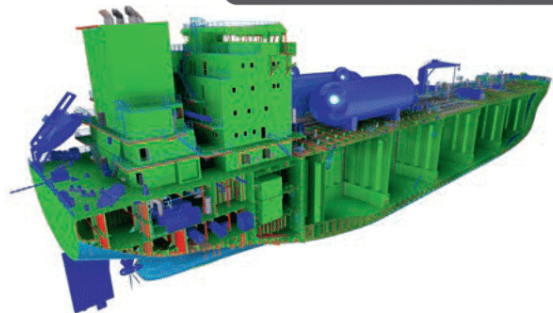


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Features:

- LNG powered propulsion (optional Marine Diesel Oil)
- Optimised fuel saving, achieved by a very efficient hull form, a large diameter fixed pitch propeller and optimised propeller speed
- Dual Fuel Tier III low consumption engine, including SCR (Selective catalytic reduction) and Exhaust Gas Boiler
- Reduced light ship weight through extensive Global Finite Element (FEM) analyses
- Maximum cargo volume and deadweight - carriage of a full cargo with specific gravity up to 1.025 t/cbm
- Reduced noise and vibration conditions for crew
- Navigation world-wide as well as in ECA waters.

AVEVA 3D Model
ready for fabrication design



Principal Dimensions

Length o.a.	183.50 m
Length p.p.	176.00 m
Breadth mld.	32.20 m
Depth mld.	19.10 m
Draught, design	11.00 m
Draught, summer	13.10 m
Deadweight, summer draught	50,400 t

Capacities

Cargo Tanks	56,387 cbm
Slop Tanks	1,500 cbm
Marine Diesel Oil	1,532 cbm
Lub. Oil	155 cbm
Fresh Water	575 cbm
Ballast Water	22,500 cbm
LNG Fuel Gas	2 x 1,400 cbm

Accommodation

Accommodation	31 persons
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Ballast System

Ballast Pumps	2 x 800 cbm/h at 30 mwc
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Ballast Stripping Ejector	1 x 80-85 cbm/h at 18.5 mwc
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BWT Unit compliant with the latest MARPOL V and USCG rules.

Cargo System

Cargo Pumps.....	12 x 600 cbm/h at 125 mLC, specific gravity 0.8 t/cbm submerged type
Discharge Rate.....	3,600 cbm/h
Slop Pumps	2 x 200 cbm/h at 125 mLC, specific gravity 0.8 t/cbm, viscosity 1.0 cSt, submerged type
Cargo Residue Pump	1 x 100 cbm/h at 125 mLC, specific gravity 0.8 t/cbm, viscosity 1.0 cSt, submerged type

Speed

Service Speed	14.50 knots
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Machinery

Main Engine: WARTSILA 6X52DF (with SCR) 8,940 kW x105 RPM @MCR, Tier III

Aux. Generator sets	3 x 1,050 kW
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Emergency generator	1 x 250 kW
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Aux. boiler	1 x 19 t/h
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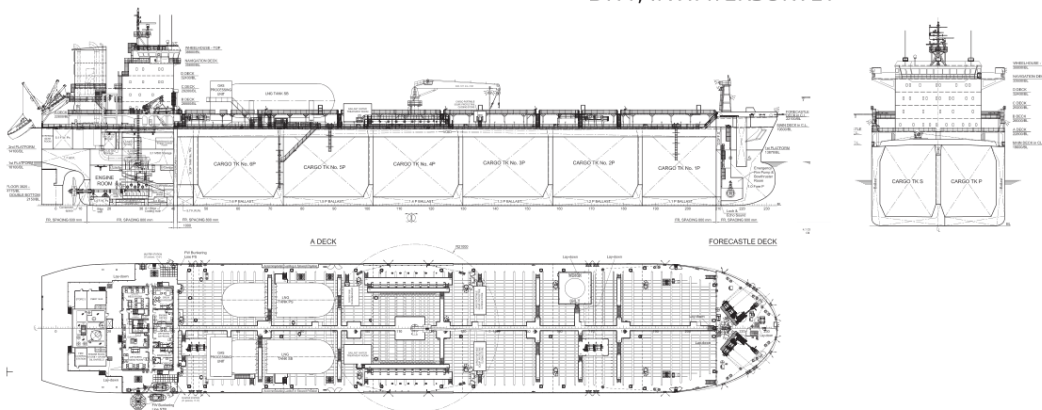
Exhaust boiler	1 x 2.0 t/h
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Propeller	1 FPP dia. 6.9m, four blades
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Tunnel thruster	one (1) electrically driven fixed pitch
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Class - Bureau Veritas (BV)

I  HULL Oil / Chemical Tanker, ESP, Type II & III, GAS-PREPARED (S, P, ME-DF, AE, B), flash point > 60°C, CSR, CPS (WBT), Unrestricted navigation, VeriSTAR-HULL, BWT, INWATERSURVEY



International Contract Engineering Limited, 19-21 Circular Road, Douglas, Isle of Man, IM1 1AF British Isles
Tel: +44 (0)1624 623 190 | Fax: +44 (0)1624 628 297 | www.icedesign.info

ENGINEERING CERTAINTY

With a 50-year track record and an annual capacity of 700,000 professional engineering man-hours, the International Contract Engineering (ICE) Group is Europe's largest independent ship design consultancy. We provide high-calibre multi-discipline design services to yards and owners in the commercial shipping, defence and offshore energy industries, ranging from conceptual studies and Class drawings to detail design and production information. We cover a full range of naval architecture and marine engineering disciplines such as hydrodynamics, structural, mechanical, piping, electrical, instrumentation, outfit and HVAC. Our experience includes gas carriers, passenger vessels, navy and coast guard ships, chemical tankers, drill ships, FSO/FPSOs and a range of other vessels. We also have available proprietary designs that can be adapted to clients' requirements.

With our head office in the Isle of Man and our main engineering facilities in Romania, we provide high quality design and engineering at very competitive prices.