

50,000 DWT 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. Segregated fuel tanks for navigation world-wide as well as in ECA waters are included.



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The vessel has been developed in accordance with the relevant HCSR and IMO regulations. She is a single screw motor tanker with low speed engine and high propulsion efficiency and has 12 cargo tanks, each equipped with submerged cargo pumps, plus 2 slop tanks and 1 retention tank. The ship will be fitted with a Tier III main engine, including EGR (exhaust gas recirculation), EGCS (exhaust gas cleaning system) and SCR (Selective catalytic reduction).

A Global Finite Element (FEA) analysis has been developed by ICE in accordance with the new IACS harmonised Common Structural Rules (CSR), enabling fast completion of the remaining design process to suit specific owner and yard requirements.

All cargo tanks and slop tanks are of double-hull structure and have sufficient strength to permit the carriage of a full cargo with specific gravity up to 1.025 t/cbm.



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
Heavy Fuel Oil	1,544 cbm
Marine Diesel Oil	105 cbm
Lub. Oil	155 cbm
Fresh Water	575 cbm
Ballast Water	56,387 cbm

Accommodation

Accommodation31 persons

Ballast System

Ballast Pumps2 x 800 cbm/h at 30 mwc sea, water pressure head at s.g.1,025 t/cbm

Ballast Stripping Ejector 1 x 80-85 cbm/h at 18.5 mwc

BWT Unit compliant with the latest MARPOL V and USCG rules.

Cargo System

Cargo Pumps..... 12 x 600 cbm/h at 125 mLC, s.g., 0.8 t/cm submerged type

Discharge Rate.....3,600 cbm/h

Slop Pumps2 x 200 cbm/h at 125 mLC, s.g., 0.8 t/cbm, viscosity 1.0 cSt, submerged type

Cargo Residue Pump 1 x 100 cbm/h at 125 mLC, s.g., 0.8 t/cbm, viscosity 1.0 cSt, submerged type

Washingtwo fixed machines / each cargo tank

Speed

Service Speed 14.50 knots

Cruising Range..... 10,000 Nm

Machinery

Main EngineMAN B&W 6S50ME-C9.5 Tier III 9,481 kW x 104 RPM @ MCR

Aux. Generator sets3 x 1,050 kW

Emergency generator 1 x 250 kW

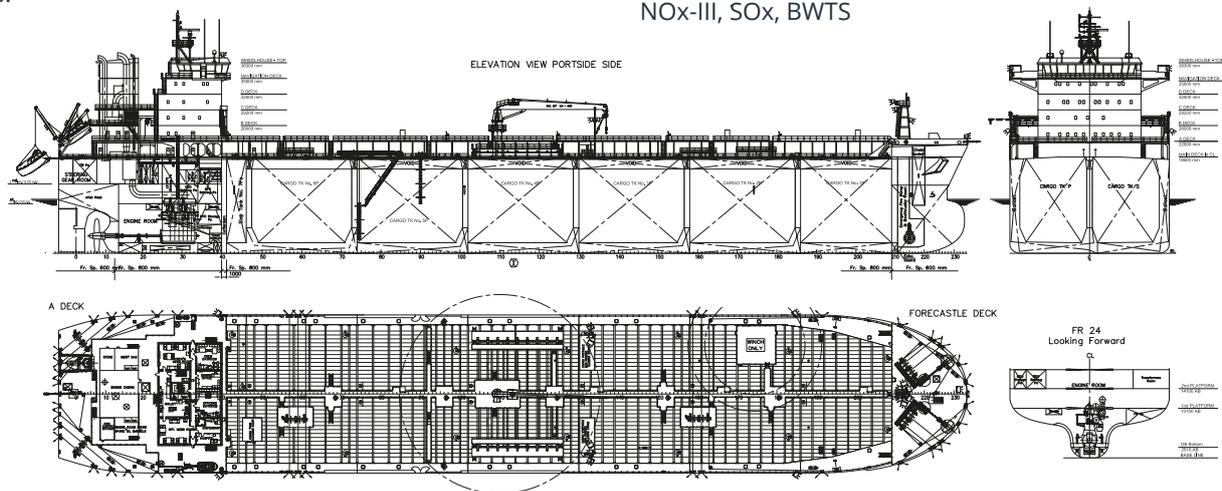
Aux. boiler 1 x 19 t/h

Exhaust boiler 1 x 2.0 t/h

Propeller 1FPP dia. 6.9m, four blades

Class - NKK

NS* (CSR, T / CT II&III, PSPC-WBT)(ESP)(IWS)(PSCM), MNS*, NOx-III, SOx, BWTS



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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.