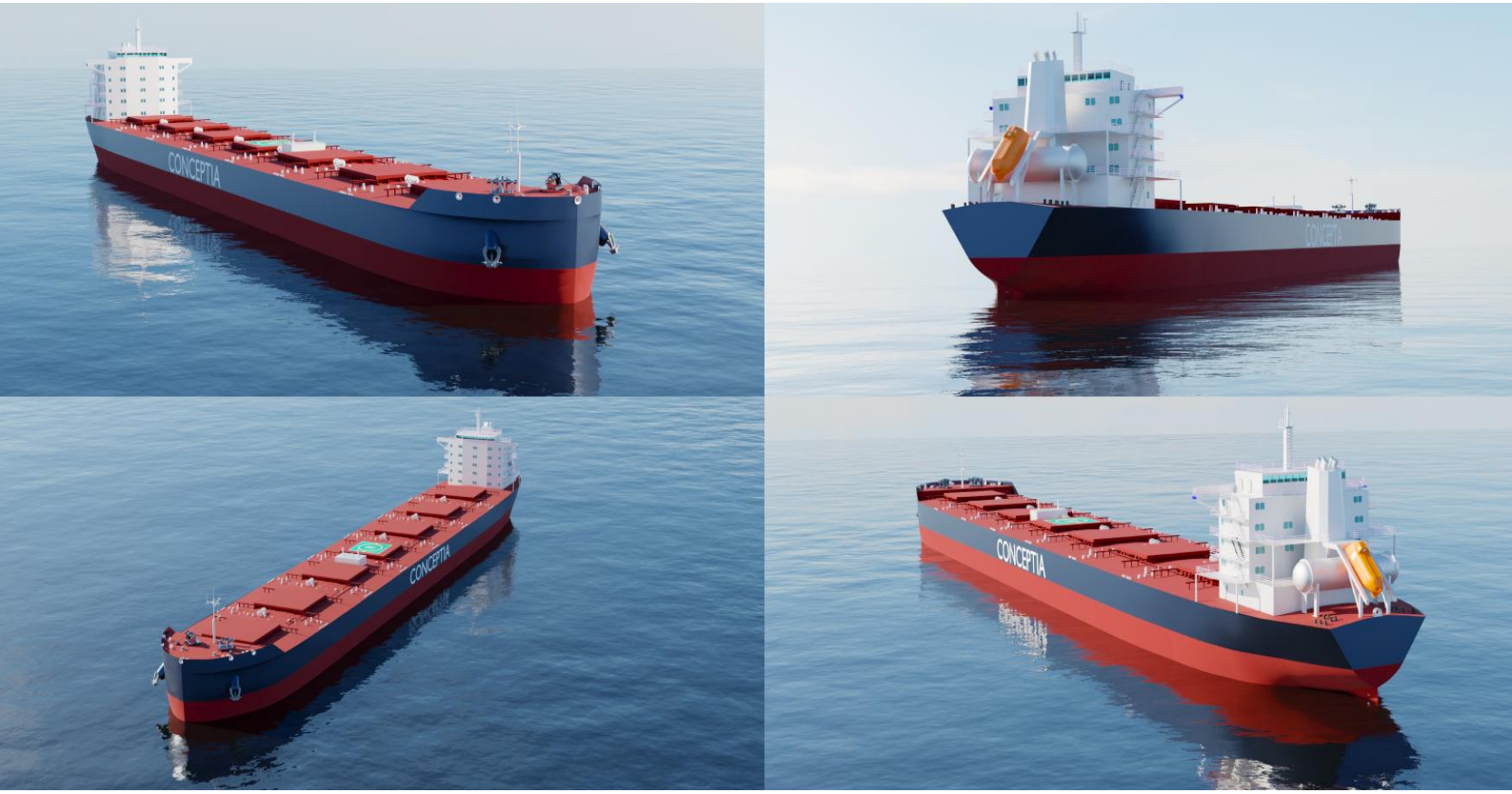
KAMSARMAX VESSEL



The design of a Kamsarmax bulk carrier has been carried out for a customer. The structural design conforms to the Common Structural Rules of IACS. The ship can carry different types of bulk cargoes amounting to 81,360 Tons and includes Ore, Coal, Grains etc.

The ship systems support all the functional aspects of the vessel and includes power generation and distribution. The Engine used is a dual fuel MAN B&W 5S65ME-C8TII. The Fresh Air Intake System (FAIS) is deployed and is useful in improving the efficiency of the engine.

Please write to info@conceptia.in for more information.

CONCEPTIA MARINE

81360 DWT KAMSARMAX BULK CARRIER

MAIN DESCRIPTION

The Vessel is designed as ocean-going Kamsarmax size vessel with single fixed pitch screw driven by a slow speed main engine. The vessel operates at a service speed of 12 knots, carrying dry cargo including bulk cargoes, such as coal, iron ore, grains, etc. The main design objectives are economy of operation, safety and environmental protection. Maximisation of deadweight and fuel and energy efficiency optimization has resulted in an ideal design for this vessel.

THE VESSEL HAS THE FOLLOWING FEATURES:

- Vertical bow with forecastle.
- The cargo area has seven (7) cargo holds and is gearless.
- All accommodation including navigation bridge and propulsion machinery is located aft.
- Space for methanol bullet tanks is earmarked at the aft of superstructure.
- A fan room is provided next amidships for cargo hold ventilation.
- Superstructure block is shaped aerodynamically to reduce wind resistance.
- Double hulled fuel tank to avoid spillage when external hull is damaged.
- Energy efficient propeller (improved fuel efficiency, and reduced fluctuation pressure which causes noise & vibration) along with Propeller Boss Cap Fin.
- Complies with NOx Tier III emission control regulations (3.4 g/kWh) within designated emission control area.
- Hull form is shaped for optimal wave resistance.
- Fresh Air Intake System (FAIS)

CLASS

SUL, BULK CARRIER, CSR, ESP, IWS, Load Comp (4), CMF(Cy-c-l), IY, SYJ, IBS, TCM, PMS-CBM, BWT, EP, CyS-II Or other equivalent class.

MAIN PARTICULARS

Length overall	:	229.00 m
Length between perpendiculars	:	225.35 m
Depth (moulded)	:	20.15 m
Draft	:	14.50 m
Complement	:	26 persons
Gross tonnage	:	Abt. 42200
Deadweight	:	81360 metric tonnes
Service speed	:	12 knots
Fuel Consumption	:	ME Fuel consumption at CSR is abt. 25.70 t/day (Tier II)

CARGO CAPACITY

Cargo hold (grain, including hatch coamings)	:	Abt. 99400 m^3
Fuel oil	:	Abt. 2750 m^3
Fresh water tanks	:	Abt. 250 m^3
Ballast water tanks	:	Abt. 22900 m^3
Sewage	:	Abt. 30 m^3
Sludge tank	:	Abt. 30 m^3

MACHINERY

Main engine	:	MAN B&W 5S65 ME-C8 T-II CSR 8865 kw x 78 rpm
Generating set	:	3 x 630KW x 900 r/min
Shaft Generator	:	1 x 630 KW
Emergency Generator	:	1 x 120KW x 1800 r/min
Composite Boiler	:	Oil fired section abt.1500 kg/h Exh. Gas section abt. 980 kg/h
Purifier	:	Heavy fuel oil Abt.2500 l/h (380 cst/50°C) x 2
Lubricating oil purifier	:	abt. 2000 l/h (SAE30) x 2
Ballast water treatment	:	1x 2800 M3/H (IMO USCG approved type (standard D-2) pressure loss)
Fresh water generator	:	Abt. 20 t/d (Vacuum distilling, plate type using M/E jacket cooling)
Oily bilge separator	:	5 m3/h, 15 ppm (IMO approved type, auto discharge type with pump)
Sewage treatment plant	:	26P, biological chemistry type
Combined windlass& Mooring Winch	:	Synthetic fibre rope drum 200 kN (17.3 t) x 15m/min
Hatch cover	:	Sliding type, no.1: 13.0 m X 15.0 m Sliding type no. 2,3,5,6,7: 15.2 m X 17.7 m Sliding type no.4: 15.2 m X 16.0 m