



Artist's impression of the 300,000 cbft freezer



Artist's impression of a high seas transshipment

300,000 cubic feet handy-size reefer

The Newbuilding, Operations and Technical departments teamed up with Hans Mol from GreenSea Chartering (the shipping pool established by Green Reefers and Seatrade Group) to deliver an optimum design in the range of 300,000 cubic feet.

The design has a length of 114.90 m length over all with a maximum intake of frozen and cooled products. Same includes cooling and ventilation for the transportation and transshipment of frozen fish, transportation of citrus fruits and potatoes.

The vessel has four cargo holds divided by two tween decks with a hatch cover arrangement on the main deck and tween decks enabling flexible loading / discharge ensuring short port operation times. Between the cargo holds 1-2 and 3-4, four sets of derricks are located, together covering all cargo hatches and most deck areas.

The fix pitch propeller has an optimum diameter in combination with optimised hull lines ensuring the best possible efficiency and lowest possible fuel consumption. The shaft of the propeller is mounted directly to the main engine.

For optimum manoeuvring a spade type rudder is installed, operated by a cylinder type steering gear and a tunnel type bow thruster installed in the fore ship. The manoeuvring configuration and equipment are designed for low speeds and transshipment operations.

A heat recovery system from the main engine/ auxiliary engines cooling water systems and main engine exhaust system will be installed.

The propulsion main engine is a two-stroke, five-cylinder line engine, air started, turbocharged and equipped with an air cooler.

Engine data	
Make	MAN B&W (or alternative make)
Type	5S35ME-B9.5-TII (or equal) with high efficiency turbocharger type
Specified MCR (SMCR)	3,325 kW
Engine speed	127 rpm
No. of cylinders	5
Cylinder bore	350 mm

Main dimensions:

Length over all	114.90 m (approx.)
Breadth moulded	18.00 m
Depth to freeboard deck	10.30 m
Draught summer	7.50 m
Design draft	6.30 m
Deadweight at summer draught	8,140 tons (approx.)
Deadweight at design draft	6,000 tons (approx.)

The design is currently undergoing hull lines optimisation by means of CFD. On 16 and 17 November 2015, a model test will be carried out in the tank towing centre of MARIN (Maritime Research Institute Netherlands) in Wageningen, The Netherlands. The delivery of the first 300,000 cubic feet reefer is scheduled in the fourth quarter of 2017.

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