



FUTURE WAY & WAY FORWARD

DESIGN OPTIMIZED FOR LOW ENERGY CONSUMPTION AND REDUCED EMISSIONS

6,500 CEU DF PCC for Wallenius Marine

Low CapEX as well as a low OpEX has been the keywords throughout the design of this vessel. She is a simple and uncompromising workhorse for ballast free transport of cars.

The hull and propulsion system are highly optimized for low energy consumption, however a large contributor to the low consumption is the high payload intake at a low draught. This has been achieved by a light structural design and good stability - giving no need for use of water ballast and thus reducing the DWT requirement. The internal ramp layout is the heart of the vessel as all decks, from main deck and up, are served by a single fixed ramp. This does not only give a fast loading / unloading with reduced port time, but also a very simple and low cost ramp system.

The two vessels are built at Yantai CIMC Raffles Offshore Limited Shipyard, China for Wallenius Lines AB.

MAIN PARTICULARS

Length o.a.	199.95 m
Length p.p.	195.40 m
Breadth, moulded	37.00 m
Depth moulded (Upper deck)	34.55 m
Depth moulded (Freeboard deck)	13.40 m
Design draught, moulded	8.35 m
Summer/EEDI draught, moulded	9.50 m

DEADWEIGHT

Deadweight at design draught	12,600 t
Deadweight at scantling draught	18,600 t

CAPACITY

Cargo:

Car deck area	54,900 m ²
Car capacity	6,500 units

Tank:

Type-C LNG	1 x 2,300 m ³
MGO	1,000 m ³
Fresh water	230 m ³
Ballast water	6,000 m ³

Complement:

No. of crew	22 pers
Maintenance crew	4 pers

MACHINERY & EQUIPMENT

Machinery:

Main engine	1 x B&W 6S60 ME-C10.5 GI tier III
SMCR	12,400 x 99.0 rpm
CSR (85% SMCR)	10,540 x 93.8 rpm
Generator set	2 x 1,710 kWe
Generator set	1 x 950 kWe
Emergency generator	1 x 350 kWe

Equipment:

Shaft generator	1 x 1,500 kWe
Shore connection	350 A
Bow thruster	1 x 1,500 kWe

RORO COMPONENTS

Decks:

No. of car decks	12
No. of liftable car decks	1

Stern ramp:

Width of drive way at narrowest part	9.00 m
Permissible normal load	100 t



SPEED & CONSUMPTION

Speed:

Service speed at design draught at CSR	19.0 kn
ECO speed at design draught at 40 % SMCR	15.0 kn

Endurance:

Endurance below are given at specified speed, design draught, Tier III, gas mode, LHV 50,000 kJ/kg, ISO conditions, incl. S/G load and 15% SM.

Cruising range at 15.0 kn	17,000 nm
Cruising range at 19.0 kn	11,000 nm

Fuel consumption:

Consumptions below are given at specified speed, design draught, Tier III, incl 15% SM, BFO and ISO conditions, excl. tol.

	No shaft generator	700 kWe shaft generator
FO consumption at 15.0 kn	19.9 t/day	22.5 t/day
FO consumption at 18.0 kn	33.3 t/day	36.4 t/day
Gas consumption at 15.0 kn	16.2 t/day	18.4 t/day
Gas consumption at 18.0 kn	27.5 t/day	30.5 t/day

MISCELLANEOUS

Flag	Sweden
Classification	DNV

✘ 1A, CAR carrier BIS BWM(T) E0
Gas fuelled LNG LCS NAUT(AW) Shore power
TMON(oil lubricated) ER(SCR, TIER III)

EEDI	Phase III
Gross tonnage	62,700

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