

# M/V DON CARLOS



The PCTC (Pure Car Truck Carrier) m/v DON CARLOS has a capacity of 7,194 cars or a combination of 3,700 cars and 600 trucks. DON CARLOS is a sister ship to DON QUIJOTE and DON PASQUALE. The ship is built to the highest class of Lloyd's Register of Shipping with the following designations: +100 A1 Vehicle Car-

rier, movable decks, deck No. 4, 6 and 8 strengthened for Roll on Roll off cargo + LMC, UMS and IWS. DON CARLOS was built in 1997 at Daewoo Heavy Industry in Korea and elongated by 28 metres in 2006 by Hyundai Vinashin Shipyard in Vietnam resulting in a 20 percent increase of car capacity.

## TECHNICAL SPECIFICATIONS

Length over all	227.90 m	Number of car decks	13 (of which 3 are hoistable)
Beam, moulded	32.26 m	Capacity deck area	63,106 m <sup>2</sup>
Air draft	47.92 m	Capacity of car units*	7,194
Height to upperdeck	33.48 m	Capacity of cars/trucks	3,700/600
Draft, design/max	9.5/11.02 m	Engine	KHIC MAN B&W 8S 60MC 14716kW
Deadweight at maximum draft	28,142 MT	Complement	30
Gross Tonnage	67,141 GT	Built	1997, Daewoo Heavy Industry Ltd, Okpo, Korea
Net Tonnage	28,379 NT	Elongated	Oct 2006 at Hyundai Vinashin Shipyard, Vietnam
Stern ramp width	7.00 m	Call sign	9V9243
Stern ramp height	5.00 m	IMO Number	9122655
Stern ramp capacity	125 t	Flag	Singapore
		Owner	Wallenius Lines, Singapore
		Operator	Eukor

\* RT 43 units (one RT43 unit = 7.40 m<sup>2</sup>)

### Deck and Ramp system

Heavy cargo units are loaded on the strengthened 4th, 6th and 8th decks. Deck No. 5, 7, 9 are divided into liftable sections allowing a variable cargo mix. These deck sections are hoisted and lowered by means of mobile lift-cars.

The 6th deck is the main deck and the normal entrance deck. The forward part of the deck is strengthened with Sandwich Plate System technique to enable loading of very heavy units over the full deck.

The two loading ramps are located on the starboard side. The stern quarter ramp is arranged at a 27 degree angle to the center line to enable loading/discharging of long vehicles. The side ramp located amidships is arranged at a 90 degree angle to the centre line.

### Anchoring/Winches

The deck machinery consists of two anchor winches and six mooring winches on forecastle and six mooring winches on the poop deck. There is a provision crane on upper deck with a capacity of five tons for bringing supplies and spare parts.

### Cargo Ventilation

Fans are distributed along the vessel on upper deck providing good ventilation during loading/discharging. In the main holds the air volume can be changed at least 20 times per hour.

### Machinery

The main engine is a KHIC B&W, type 8S60MC marine diesel with constant pressure supercharging and a maximum output of 20,000 BHP at 101.3 RPM. The engine is directly reversible and attached to a fixed propeller with remote control from the bridge or engine control room.

For the electrical power supply there are two Wärtsilä diesel engines, type 4R32, each attached to a 3 x 440 V, 60 Hz, 1,400 kW AC-generator installed in a separate room and a shaft generator with a capacity of 950 kW.

Power to the second bow thruster that was installed during the elongation is delivered by a Volvo Penta Genset D34 MS, 3 x 440 V, 60 Hz, 728 kW AC-generator installed in a separate room next to the funnel on deck 14.

There is an emergency diesel generator with a capacity of 165 kW.

The engine room meets the requirements for Unattended Machinery Space (UMS).

### Navigational Equipment/Bridge

The Bridge is totally enclosed and air-conditioned and is designed for Pilot/Co-pilot system.

The Navigation System is delivered by Furuno and is fully integrated with double ECDIS and ARPA.

To determine the vessel's position there are two DGPS-navigators. The radio station has been fitted with satellite communication (B/F+C), V-Sat, GSM, HF/MF and VHF.

The vessel is equipped with a highly effective Schilling "Mono-Vec" rudder to assist in controlling the lateral movements of the stern. The lateral control of the bow is controlled by two bow thrusters of 1,500 kW and 700 kW with a combined thrust of 34 tonnes.

### Interior

All accommodation areas are located on upper deck and bridge deck, far away from the engine room and have the same high quality and mainly the same design as the company's other PCTC vessels. The ship also has a mess room, TV-room/ library, gymnasium, outdoor swimming pool and a sauna.

There is a cabin with its own entrance from the bridge deck mainly used for the Suez Canal Crew. Tallymen have their own office on the entrance deck (deck 6).

### Safety arrangements

For fire extinguishing, the cargo holds, engine room and interior have a permanent installed water fire post system and portable fire extinguishers. Cargo holds and engine room are also equipped with a fixed CO<sub>2</sub> fire-extinction system. In addition a hyper mist fire-extinction system is installed in engine room.

The vessel has a free-falling life boat capable of carrying 30 persons and a rescue-boat. In addition to this there are four life rafts with a carrying capacity of 16 persons each. Each crew member has his/her own survival-suit.