

# M/V TITUS



The PCTC (Pure Car Truck Carrier) M/S TITUS has a capacity of 5,846 cars or a combination of 2,959 cars and 485 trucks. Titus is a sister ship to DON JUAN and TURANDOT. The ship is built to the highest class of

Lloyd's Register of Shipping with the following designations: +100 A1 Vehicle Carrier, movable decks, deck No. 4, 6 and 8 strengthened for Roll on Roll off cargo + LMC, UMS and IWS.

## TECHNICAL SPECIFICATIONS

Length over all	199.10 m	Capacity of car units*	5,846
Beam, moulded	32.26 m	Capacity of cars/trucks	2,959/485
Air draft	47.40 m	Engine	KHIC MAN B&W 8S 60MC 14.7 MW
Height to upperdeck	32.98 m	Basic complement	15
Draft, design/max	9.5/11.02 m	Built	1994, Daewoo Heavy Industry Ltd, Okpo, Korea
Deadweight at maximum draft	22,862 MT	Call sign	SGAK
Gross Tonnage	55,598 GT	IMO Number	9070448
Net Tonnage	23,033 NT	Flag	Swedish
Stern ramp width	7.00 m	Owner	Wallenius Lines AB, Sweden
Stern ramp height	5.00 m	Operator	Wallenius Wilhelmsen Logistics
Stern ramp capacity	105 t		
Number of car decks	13 (of which 3 are hoistable)		
Capacity deck area	52,433 m <sup>2</sup>		

\* RT 43 units (one RT43 unit = 7.38975 m<sup>2</sup>)

### Deck and Ramp system

Heavy units are loaded on the strengthened 4th, 6th and 8th decks. Deck No. 5, 7, 9 are divided into hoistable sections. These sections are hoisted/lowered by means of mobile lift-cars.

The 6th deck is the normal entrance deck, but the 7th may also be used for the outside midships ramp if the height of the quay requires it.

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 midship ramp is arranged at a 90 degree angle to the centre line.

### Anchoring/Winches

The deck machinery consists of two combined anchor/mooring winches and six conventional mooring winches, two of which are placed on the forecastle and four on the poop deck. There is a crane on upper deck with a capacity of five tons for bringing supplies and spare parts.

### Cargo Ventilation

Fans evenly distributed throughout the vessel on upper deck creates good ventilation during loading/discharging. In the main holds air is changed at least 25 times an hour and even up to 50 times an hour in the smaller holds.

### Machinery

The main engine is an 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 an 3 x 440V, 60 Hz, 1,400 kW AC-generator installed in a separate room and a shaft generator with a capacity of 950 kW. There is an emergency diesel generator with a capacity of 150 kW. The machinery meets the requirements for Unattended Machinery Space (UMS).

### Navigational Equipment/Bridge

The Bridge is totally enclosed and air-conditioned. The equipment fullfills the requirement for "Sole Look Out" at sea and it is also designed for Pilot/Co-pilot system of working in high traffic areas.

The Navigation System is mainly integrated by means of an INC installation. INC is of the Finnish ASPO "ANTS" (Automated Navigation and Track keeping System) type.

The radar equipment has anti-collision computers (AR-PAS) with free selection of picture, synthetical chart picture etc.

The vessel has an ASPO/Wallenius electronic sea chart-system (EC) which gives a range of options to steer the vessel, including among others an automatic one.

To calculate the vessel's position there are two DGPS-navigators and when in coastal waters, there is a "fixed radar target" positioning system.

The radio equipment is delivered by Standard Radio of Sweden and the radio station has been fitted with satellite communication (B+C), Maritex, GSM etc and is fulfilling the Global Maritime Distress and Safety Systems rules (GMDSS).

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 – like in earlier vessels – controlled by a 1,500 kW bowthruster by about 23.5 tons thrust.

### 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 for the Canal staff and service personnel. Tally-men have their own office on the entrance deck (deck 6).

### Security arrangements

For fire extinguishing, the cargo holds, engine room and interior have a permanent installed water extinguishing system and portable fire extinguishers. Cargo holds and engine room also have CO<sub>2</sub>-equipment of "total flooding type".

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