



MAERSK TACOMA: Oil/chemical tanker

Shipbuilder: ...**Sungdong Shipbuilding & Marine Engineering Co., Ltd.**
 Vessel's name: **Maersk Tacoma**
 Hull No: **S3075**
 Owner/Operator: **Maersk Tankers A/S**
 Country: **Denmark**
 Designer: **Sungdong Shipbuilding & Marine Engineering Co., Ltd.**
 Country: **Republic of Korea**
 Model test establishment used: **KRISO**
 Flag: **Singapore**
 IMO number: **9708617**
 Total number of sister ships already completed **1**
 Total number of sister ships still on order: **2**

MAERSK TACOMA is the first vessel in a series of four MR product oil/chemical tankers, built by Sungdong Shipbuilding & Marine Engineering for Maersk Tankers A/S. The vessel features a double sided skin and has a flush deck, bulbous bow, transom stern, open water type stern frame, semi-balanced rudder and single propeller driven by a slow speed diesel engine.

The main engine MCR of MAN 6G50ME-B9.3 Tier II is de-rated to 7,317kW at 88.6rpm for economy fuel oil consumption. The speed of the vessel at design draught (11m) is 15.1knots at 85% of MCR(6,219kW) with 15% sea margin based on a well optimised hull form and propeller design which had been analysed by CFD. Electric power is generated from three diesel generators driven by alternators with 800kW output and steam is generated by two auxiliary boilers of water tube type with a capacity of 18,000kg/h and composite boiler with oil fired section 1,200kg/h and exhaust gas section.

The vessel has six pairs of cargo oil tanks, two slop tanks, fore and aft peak tanks, segregated water ballast tanks, fuel oil tanks and fresh water tanks. Cargo tanks are divided by plane type transverse and longitudinal bulkheads. Cargo handling is performed by three cargo oil pump of 600m³/h, driven by steam turbine. Water ballast is handled by two ballast pumps, driven by steam turbine and electric motor. This vessel has one ballast water treatment system of the indirect electrolysis type which is environmentally friendly.

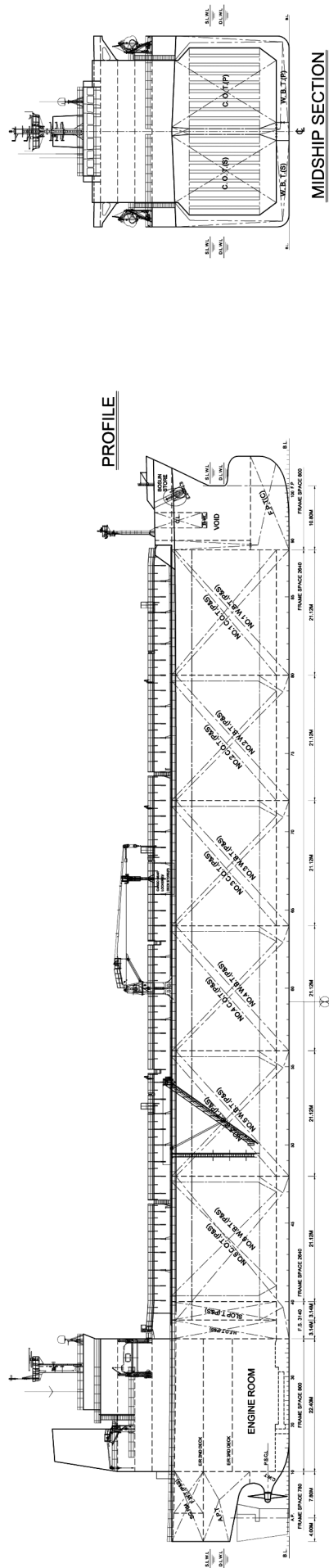
The vessel is fully compliant with the latest environmental guidelines on issues such as fuel oil protection, the inventory of hazardous materials for ship recycling, performance standards for protective coatings (PSPC) and IMO Tier II NOx requirements. The vessel also has a marine gas oil tank to satisfy emission requirements in Sulphur Emission Control

Areas (SECAs). Additionally, the vessel is fully compliant with the IBC code for carrying chemical cargoes and the number of applicable chemical cargoes is about 500.

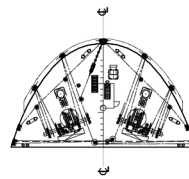
TECHNICAL PARTICULARS

Length oa: 183m
 Length bp: 174m
 Breadth moulded: 32.2m
 Depth moulded
 To main deck: 19.1m
 Width of double skin
 Side: 2m
 Bottom: 2.15m
 Draught
 Scantling: 13.3m
 Design: 11m
 Gross: 29,445gt
 Deadweight
 Design: 37,905dwt
 Scantling: 49,828dwt
 Speed, service (-- %MCR output): ... 15 knots at 85% of MCR
 Cargo capacity (m³)
 Liquid volume: 54,085m³
 Bunkers (m³)
 Heavy oil: 1,255m³
 Diesel oil: (Marine gas oil: 292m³)
 Water ballast (m³): 22,296m³
 Daily fuel consumption (tonnes/day)
 Main engine only: 23.7tonnes
 Classification society and notations: LR/ "+100A1, Double Hull Oil and Chemical Tanker, Ship Type 2, CSR, ESP, ShipRight (CM, ACS(B)), *IWS, LI, SPM4, ECO (BWT, IHM, GW, OW, P), XLMC, IGS, UMS, ETA" with the descriptive notes "ShipRight (BWMP(S,T), SERS, VECS, SCM)", COW(LR)
 % high-tensile steel used in construction: 37
 Main engine(s)
 Design: MAN B&W
 Model: 6G50ME-B9.3 Tier II
 Manufacturer: STX HI
 Number: 1 set
 Type of fuel (eg, HFO or MDO): HFO, MDO, MGO
 Output of each engine: 7,317kW x 88.6rpm
 Propeller(s)
 Material: Ni-Al-Br
 Designer/Manufacturer: Sungdong Shipbuilding & Marine Engineering Co., Ltd. / SILLA
 Number: 1 set

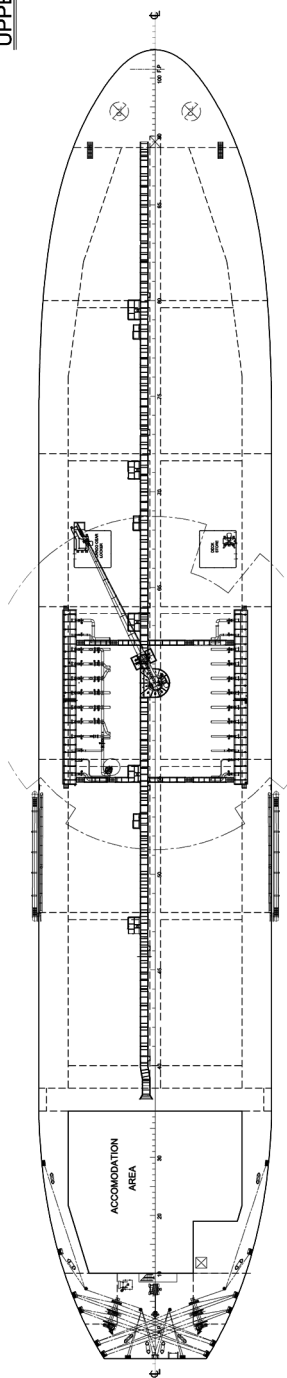
Fixed/Controllable pitch: FPP, keyless, aerofoil
 Diameter: 6.7m
 Speed: 88.6rpm
 Diesel-driven alternators
 Number: 3 sets
 Engine make/type: STX ENGINE / 6L 23/30H-MK2
 Type of fuel (eg, HFO or MDO): HFO, MDO, MGO
 Output/speed of each set: 852kW / 720rpm
 Alternator make/type: HYUNDAI / HFC7 506-10P
 Output/speed of each set: 1,000kW / 720rpm
 Boilers
 Number: 2 sets
 Type: Auxiliary, Composite
 Make: Kangrim Heavy Industries
 Output, each boiler: Auxiliary-18,000kg/hr, Composite(Oil fired/ exh. Gas) - 1,200/500kg/hr
 Cargo cranes/cargo gear
 Number: 1 set
 Make: DMC
 Type: Electric/hydraulic. Driven
 Performance: 10tonnes x 23m
 Other cranes
 Number: 2 sets
 Make: DMC
 Type: Electric/hydraulic. Driven
 Tasks: Engine part handling (Stb'd only), Provision handling
 Performance: ... Port(2tonnes), Stb'd(3.2tonnes)
 Mooring equipment
 Number: Windlass 2 sets, Mooring winch 7 sets
 Make: Flutek-Kawasaki
 Type (electric/hydraulic/steam): Electric /hydraulic. Type
 Special lifesaving equipment (eg MOB, free-fall lifeboats)
 Number of each and capacity: 3 sets
 Type: Weather tight steel door
 Cargo tanks
 Number: 6 pairs + 1 pair slop tanks
 Cargo pumps
 Number: 14ea
 Type: Submerged, centrifugal (hydraulic motor driven)
 Make: Framo
 Stainless steel: AIS316
 Capacity (each): Cargo tank (600m³ x 125mLC), Slop tank(300m³ x 125mLC)
 Cargo control system
 Make: Framo
 Type: Framo Cargo Pumping System
 Ballast control system
 Make: Emerson
 Type: Electro-hydraulic type
 Water ballast treatment system
 Make: Samsung Heavy Industries
 Capacity: 2,000m³h x 1 set
 Complement
 Officers: 6
 Crew: 25
 Fire detection system
 Make: Consilium
 Type: Addressable
 Fire extinguishing systems
 Cargo holds: - Make/Type: NK, Fixed Deck Foam System
 Engine room: - Make/Type: NK, High Expansion Foam System
 Radars
 Number: S-BAND Radar 1ea, X-BAND Radar 1ea
 Make: JRC
 Model(s): JMR-9272-S(S-BAND Radar), JMR-9225-6X(X-BAND Radar)
 Integrated bridge system: No
 Waste disposal plant
 Incinerator
 Make: Hyundai Marine Machinery Co., Ltd.
 Model: MAXI NG100SL WS
 Sewage plant
 Make: Jonghap Machinery Co., Ltd.
 Model: JMC - BIO - AEROB -35N(A)
 Contract date: August 2013
 Launch/float-out date: February 2015
 Delivery date: April 2015



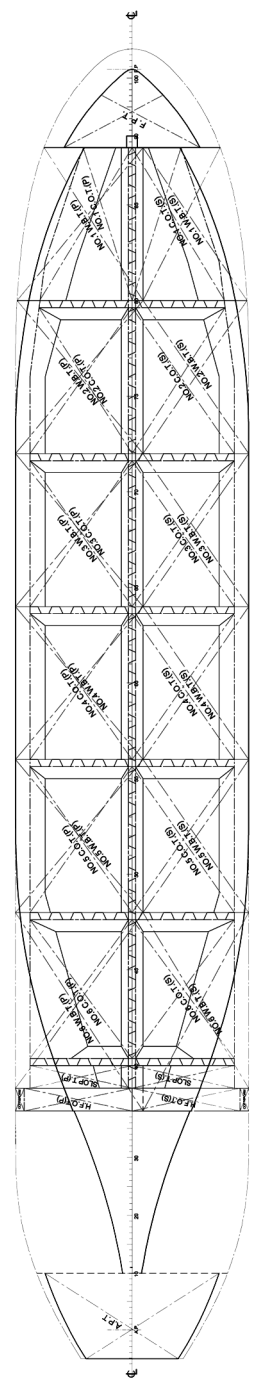
MIDSHIP SECTION



F'CLE DECK



UPPER DECK



TANK TOP