

BRIEF DESCRIPTION FOR SOLI – 01

The vessel is a single screw, double hull vessel, which is capable to carry the cargo a large range of liquid cargoes IMO II type, petroleum products and vegetable oils. The hull is designed with bulbous bow, raked stem and transom stern and withstands cargoes of specific gravity 1.54 t/m³ at 80 C. The service area is unrestricted. The construction also enables both asymmetric and alternate loading conditions for cargo tanks. Cargo area is divided to 14 + 2 cargo tanks by means of oil-tight corrugated transverse bulkheads and longitudinal bulkhead in CL. Designation of full segregation gives the vessel high flexibility. Cargo tanks are surrounded by -L- type ballast tanks at sides and fore. Aft cofferdam of the cargo area is designed as ballast pump room. Fore structure is constituted by fore peak tank, bow thruster room (also contains emergency fire pump), paint room and two chain lockers. Engine room designation gives favorable operation, economy, reliability and flexibility. Accommodation is divided into 3 decks and wheelhouse deck. The superstructure is located above engine room. The four bladed controllable pitch propeller is driven by a two stroke, slow speed diesel engine. The vessel is equipped with three main diesel generator sets and one emergency diesel generator. The vessel is fitted with one bow thruster and one spade type rudder. The vessel shall fulfill International standards as ISO and quality standards of IACS is followed for the equipment and during construction of the vessel. The vessel is built according to rules corresponding to worldwide trade. Additionally classification rules that the vessel complies with authorities and regulations are mentioned below, where applicable and valid at contract date: Class rules BV 2004. Rules and regulations of the National Flag Authorities of Registration Country. International convention for the Safety of Life at Sea, SOLAS edition 2001 + amendments 2001 & 2002. International convention of Load Line 1966 (with revised protocol of 1988). International convention on Tonnage Measurements 1969. International convention for Preventing Collision at sea 1971 with 1981 and 1993 amendments. International convention for the Prevention of Pollution from ships 1973 together with protocol of 1978 - MARPOL 73/78, including proposed amendments and Unified Interpretation of the Provisions of Annex I, II, IV and V IMO 1983, Annex VI 1997. International communication and Radio conference Regulation 1973 and 1982 and Amendments to implement the Global Maritime Distress and Safety System – GMDSS. IMO Resolutions as applicable to this size and type of vessel. USCG's regulations for vapor return control system CFR 46 Part 39. Rules and Regulations, including Tonnage measurement, governing navigation in Panama Canal and in Suez Canal..Exxon minimum criteria.



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Vessel's full class society shall be as follows:

BV I ✳ HULL ✳ MACHINERY, CHEMICAL TANKER / OIL TANKER, ESP UNRESTRICTED NAVIGATION, SYS-IBS, ✳ AUT-UMS, CLEAN, MON-SHAFT, ICE CLASS 1A, VCS, IGS

Locations of cargo tanks are determined according to IBC code type II ships requirements. All cargo tanks and cargo/slop tank are integral gravity tank type. All cargo tanks and cargo/slop tank are segregated from accommodation, service and machinery spaces and from drinking water and stores for human consumption by means of the ballast pump room and fore cofferdam.

All cargo tanks and cargo/slop tank have separate pumping and piping systems which should not pass through other cargo tanks and separate tank venting systems. Each cargo tank is connected to the main tank cleaning line, main nitrogen line by means of the flexible hoses to prevent mixing of substances. The poop deck and forecastle deck level are above the hazardous area height. Poop deck aft construction does not contain any openings due to stern line. The drive unit is an hydraulic power unit located on main deck, behind the superstructure front. The power unit consists of 4 pcs 300 kW capacity electric motor. Heating medium is hot water. Framo Deck Heating system is applied in order to heating of cargo. Only Slop tanks are arranged with single loop stainless steel 316L heating coils. Cargo heating is sufficient for keeping the worst cargo (HFO) at 66°C and 5°C /day heating up.. The cargo tank outlets are fitted with manually operated globe valves, blind flange and connection for emergency operations in enclosed catwalk.

A cargo heaters, having a capacity of 5000 kW sufficient for keeping the worst cargo at 66°C and 5°C /day heating up, to be fitted in heat exchanger room with two circulation pumps, expansion tank and accessories. The position of the fixed machines on deck are determined to minimize the shaded area. Two pcs tank cleaning heater capacity each 2500 kW to be installed in heat exchanger room.

For propulsion purpose and for the vessel in-line, two stroke, slow speed, non-reversible with turbo charger MAN 8S35MC-VBS, 5920 kW at 173 rpm type main engine to be installed. The engine also equipped for unmanned engine room. The outputs of the main engine are transmitted directly to a variable pitch propeller. Shaft generator is to be connected with step-up gear to the main engine forward via coupling. The Main Engine complies with IMO Rules for NO_x emission. The rudder blade is double plated all welded, streamlined and balanced of spade type. The rudder area is in accordance with the acceptable turning diameter. Drain plug of stainless steel is fitted at bottom.

““SOLI HULL NO : 01” SPECIFICATIONS

Type of Vessel :	IMO-II Oil/Chem. Tanker
Builder :	Soli Shipyard / Turkey
Loa :	149.95 m
Lpp :	143.60 m
Breadth :	23.20 m
Depth :	13.05 m
Draught Design/Scantling :	9.20 m / 9.75 m
DWT :	19.990 @ Scnt.Draught
Main Engine :	MAN B&W 8S35MC-C, 5920 kW
Consumption :	abt 22.5 t/day @ 90%MCR
Cruising Range :	abt 10800nm
Variable Pitch Propeller :	173 rpm of 4250 mm
Generator Sets :	3 x 750 kWe
Shaft Generator :	1200 kW
Bow Thruster :	Hyd. Driven, FPP
Service Speed :	14 knots @ 90% MCR
Total Cargo Volume :	22224 cbm
Slop Tank Volume :	739.6 cbm
Max. Specific Gravity :	1.54 t/cbm
Thermal-Oil Boilers :	2 x 3000 kW
Exh.Gast Boiler :	700 kW
F.W. Generator :	15 t/day
Ballast Pumps :	Hyd.Driven, 2x500 cbm/h
Cargo Equipment :	Fully Segregated Cargo&Slop Tanks,14+2 Hydraulic deepwell pumps
Max. Discharge Capacity :	Up to 2100 cbm/h
Cargo Heating System :	Deck Heat exchangers for Cargo tanks, Heating Colis for slop tanks.
Complement :	17 persons
Expected Delivery Date :	October'07

