



50.40M Multipurpose Platform Supply Vessel

The main performance parameters of the vessel

General Description

The vessel shall be able to fulfil the general demands of the offshore industry as carriage of liquid bulk and dry bulk cargoes in tanks and pipes and other general cargo on open deck and towing.

The vessel shall be built for international trade, except for service in the Arctic or Antarctic climate zones, US inland waters and similar areas with special restrictions and requirements.

The vessel shall be designed and built with special attention for personnel safety and also protection of the environment.

The Vessel will have integrated propulsion and maneuvering control system and be electric motor driven. The propulsion system comprises two (2) azimuth L-Drives, each driven by two DC motors. And two (2) tunnel bow thrusters are installed in the fore part of the vessel.

The vessel's machinery and all equipment shall be suitable for operation under tropical climatic conditions.

Main dimensions

	Approx.
Length Overall	50.40 m
Length P.P.	m
Beam Moulded	12.20 m
Depth from Main deck	5.00 m
Design Draft	3.60 m
Max. Draft	4.20 m
Dead Weight (@max. draft)	Abt. 1000 mt

Performance

Trial speed at 80% MCR load on each of the azimuth drive shafts and at Max. draught, clean hull and with Sea state 0 - 1 to be approx. 10.5 knots.

Bollard pull: 30t.

Class and Regulations

BV I HULL, MACH Offshore Supply Vessel/Tug, Unrestricted Navigation AUT-UMS, DYNAPOS-AM/AT-R, Fire-Fighting Ship E/ Water Spray

HULL

Steel Construction in General

The hull will be all welded steel, transversely framed throughout. The hull is to have a round bilge construction. All stiffeners in the hull are to be bulb flats or flat bar stiffeners.

The shell will extend up to the focsle deck to enclose a superstructure.

This space will be framed transversely and longitudinally, and constructed watertight. Superstructure and deckhouse stiffeners shall be angles or flat bars.

Hull Materials

All structural steel material shall be BV Grade "A", mild steel, unless otherwise stated.

EQUIPMENT FOR CARGO

Dry Bulk System

4 off Tanks for dry bulk to be installed. Working pressure 5.6 bar.

Dry bulk tanks to be free-standing and of circular type with sloped bottom. 1 off Fresh water cooled air compressor unit, capacity approx. 12.5 m3/min @ 6 bar. 1 off Air dryer with automatic drain trap, capacity approx. 800 m3/h. 1 off Mucking eductor with hose for tank cleaning.

Two segregated loading/unloading systems to be installed with monitoring from cargo control system.

Two segregated loading/unloading systems to be installed with monitoring from cargo control system.

Deck Crane for Cargo

1 off Work / provision / rescue boat crane of electrical-hydraulic operated with capacity of approx. SWL 2.0t at 6.0m outreach.

MACHINERY MAIN COMPONENTS

Diesel Generator Sets

2 off Main diesel generator sets, rated 1000ekW@1800rpm, 480V/60Hz 1 off Auxiliary diesel generator set, rated 520ekW@1800rpm, 480V/60Hz 1 off Emerg. diesel generator sets, rated 70ekW@1800rpm, 480V/60Hz

Propulsion Plant

2 off Azimuth L-drive with high performance nozzle, rated 843kW@1040rpm Electrical Motor for Propulsion

2 off High torque DC motor with 6 pulse DC drive unit, rated 843kw@1040rpm, horizontal GE 752 type, water-air cooled, each L-drive unit to be driven by two motors.

Towing Winch

1 off single drum hydraulic towing winch, duty pull 30t@5m/min at second layer.

Brake holding: ~100t@second layer.

Drum capacity: 500m@dia.42mm

Bow thruster:

2 off DC motor driven bow side thruster, rated power of 843kW @ 1040rpm

Dynamic positioning:

The Vessel to be fitted with BV DYNAPOS-AM/AT R system including:

2 off Processor 2 off Display unit

2 off Main Control System

2 off Anemometer

2 off Vertical Reference Sensor (VRS)

2 off DGPS

3 off Gyrocompass

1 off Fan Beam 2 off UPS

2 off Event Printer

1 off Independent Joystick System

1 off Portable Joystick Panel

Anchoring and Mooring Equipment

Anchor and mooring equipments including mooring lines according to Class.

1 off Combined windlass / mooring winch, duty pull 3.7t @ 10m/min with chain stoper

2 off Spek anchor, weight 1290 kg each

2 off Bollards aft, DN250 mm

2 off Bollards fore, DN250 mm

2 off Bollards midship, DN250 mm

Capacity

	Approx.	Remark
Fuel oil (98% Full, Permanent)	353.5 m ³	
Fuel oil (98% Full, in combined LIQ.MUD TK)	563.9 m ³	
Fuel oil day (98% Full)	17.10 m ³	
Fresh Water (100% Full, cargo and domestic)	173.9 m ³	
Ballast Water (100% Full)	295.8 m ³	
Drill Water (100% Full)	266.9 m ³	
Liquid Mud Tanks (100% Full)	214.7 m ³	
Dry Bulk Tanks	100 m ³	
Sewage	9.1 m ³	
Deck Cargo Capacity	mt	@1m ABV MNDK
Cargo Deck Area	26.4 m x 9.4 m	5 ton/m ²

Liquid Mud System

Two liquid mud pumps shall be provided and two separate discharge systems to be designed with cross connection. Blowdown from dry bulk system will be supplied.

High level alarm sensor inside mud tanks connected to cargo control system.

Mud agitator will be installed for each mud tank.

System is designed for a fluid with a 2.5t/m³ specific gravity maximum.



50.40M Multipurpose Platform Supply Vessel

» The drawings of the vessel

