

2011/ DP1 AHTS, FiFi-1



Bollard Pull 53-66 tonnes

Brake Horsepower 4826-5147 BHP

Clear Deck Space 275-330 m²

Winch Line Pull 150 tonnes

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General Information

Built:	2011
Flag:	TBD
Call Sign:	TBD
IMO No.:	TBD
Classification:	DNV-GL +1A Fire fighter(I) Offshore service vessel(Anchor handling, Towing)

Dimensions

Length, overall:	57.50 metres
Length, BP:	50.50 metres
Breadth, moulded:	14.00 metres
Depth, main deck:	6.00 metres
Design draft:	4.55 metres
Maximum draft midship:	5.10 metres
GT:	1329
NT:	484

Capacities

Deadweight (maximum):	1543.53 tonnes
Clear Deck Area:	30m x 11m = 330 m2
Deck Strength:	General deck - 5 t/m2 Aft AH deck - 19 mm steel plate
Deck Cargo:	500 tonnes
Fuel:	566.286 m3 (dedicated)
Potable Water:	400.746 m3
Ballast Water:	371.866 m3
Brine / DMA / Glycol / Liquid Mud:	147.264 m3 or 5200 ft3 (2 tanks dual-use Brine/Mud/DMA)
Liquid Mud:	184.432 m3 or 6513 ft3 (4 dedicated tanks)
Dry Bulk:	331.696 m3 or 11713 ft3 (including 2 dual-use tanks)
	135 m3 or 4750 ft3 in 2 x 2 tank independent systems. Cement density max 2.35 t/m3 and fineness 4,000 Blaine.

Machinery

Main Engines:	2 x 1920 kW = 3840 kW (5147 BHP) Yanmar 6EY26
Propulsion:	2 x CPP propellers in Kort nozzles 2 x Electric-hydraulic steering gear
Bow Thrusters:	1 x 500 kW (670 BHP) producing 7.9 tonnes (77.5 kN) thrust
Stern Thrusters:	1 x 500 kW (670 BHP) producing 7.9 tonnes (77.5 kN) thrust
Shaft Generators:	2 x 1250 kVA, 440 V, 60 Hz
Auxiliary Generators:	1 x 320 kW Caterpillar 3406 C with spark arrestor
Emergency Generators:	1 x 315 kW Caterpillar 3406 C with spark arrestor

Towing and Anchor Handling

Bollard Pull:	61.86 MT continuous 76.5 MT maximum
Main Winch:	1 x MacGregor-Plimsoll double drum, low pressure winch
Load Capacity:	Towing / A/H drums 1st layer 150 tonnes at 7.2 m/min 100 tonnes at 10.8 m/min 50 tonnes at 22 m/min
Brake Capacity:	250 tonnes (static) on towing drum 1st layer 250 tonnes (static) on AH drum 1st layer
Tow Drum Wire Capacity:	1200 m x 64 mm (2.5 inch) diameter
Work Drum Capacity:	1200 m x 64 mm (2.5 inch) diameter
Chain Gypsy Cable Lifter:	1 x 76 mm (3 inch) diameter chain
Stern Roller:	1 x 2 m diameter x 4 m width, SWL 250 tonnes
Tow Pins / Guide Pins:	1 x set hydraulic Karmoy, remotely controlled
Wire Chain Stopper:	1 x retractable Karmoy, SWL 250 tonnes, controlled from wheelhouse (32 - 76 mm chain)

Deck Machinery

Tuggers:	2 x 10 tonnes MacGregor-Plimsoll
Capstans:	8 x tonnes x 15 m/min MacGregor-Plimsoll ; Drum - 10 tonnes x 10 m/min
Windlass:	1440 kg high holding power anchor, 412.5 m x 30 mm dia U3 chain
Bow Mooring:	1 x mooring drum capacity 220 m x 38 mm synthetic rope
Crane Capacity:	SWL 1500 kg @ 8 m radius, make: Helia, model: HM25-8F

Electronics

Main Radar:	1 x Furuno X-band, 21 inch colour LCD, ARPA
Auxiliary Radar:	1 x Furuno S-band, 21 inch colour LCD, ARPA
Auto Pilot:	1 x Tokyo Keiki PR-6000-e
Gyro Compass:	1 x Tokyo Keiki TG-8000 with 4 repeaters
Magnetic Compass:	1 x Tokyo Keiki SR-165
Echo Sounder:	1 x Furuno FE-700
DGPS :	GPS: 1 x Furuno DG-150
Communications:	G.M.D.S.S. (Global Maritime Distress & Safety System) Area A3 2 x VHF 2 x Inmarsat C 3 x VHF (portable) 1 x Navtex 1 x MF/HF Furuno 3 x VHF (portable) McMurdo
Weather Fax:	Furuno FAX 408
Satellite Communication:	FBB: Sailor 500
AIS:	Furuno FA 150

Discharge Pumps

Fuel Oil:	1 x 100 m ³ /hr - 7.0 bar
Dirty Oil:	1 x 10 m ³ /hr - 2.0 bar
Potable Water:	1 x 150 m ³ /hr - 7.0 bar
Drill Water:	1 x 150 m ³ /hr - 7.0 bar
Liquid Mud:	1 x 75 m ³ /hr - 18 bar
Brine / Mud:	1 x 75 m ³ /hr - 18 bar
Dry Bulk:	2 x 78 m ³ /hr - 5.6 bar, 80 psi
Hose Connections :	Fuel - 4" Camlock Potable Water - 4" Camlock Drill Water - 4" Camlock Liquid Mud - 5" Camlock Dry Bulk - 4" Camlock

Performance

Speed / Fuel Consumption:	Maximum speed 13.5 knots free running at 100% MCR - approximate fuel consumption 19 m ³ per day Economical speed 10 knots - approximate fuel consumption 10.5 m ³ per day Idle at sea - approximate fuel consumption 2.3 m ³ per day Idle in port - approximate fuel consumption 0.8 m ³ per day
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Dynamic Positioning

Type:	Joystick, suitable for upgrading to DP 1
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External Fire Fighting

Capacity:	2 x 1200 m ³ /hr = 2400 m ³ /hr
Monitors:	2 x 1200 m ³ /hr mounted on wheelhouse top, remotely controlled from wheelhouse
Throw Length:	120 m
Throw Height:	50 m at 70 m distance

Standby Rescue Equipment

1. 1 x Vanguard VG 6.0 FRW, 15 persons, SOLAS approved FRB with inboard diesel waterjet propulsion.
2. Rescue Zones on both Port and Starboard side, main deck, with scrambling net and personnel transfer swing ropes.

Anti-Pollution

Dispersant Tank:	9.190 m ³
Spray Booms:	4 x spray nozzles (2 at each side), outreach: 12 m

Accommodation

Berths:

4 x 1 berths

4 x 2 berths

2 x 4 berths

20 berths in Total

1 x combined messroom/recreation room

1 x galley

1 x hospital (2 berths)

All living space fully air-conditioned, design 45 deg C / 70% RH outside, 25 deg C / 50% RH inside

Environmental Features

1. Real time main engine fuel consumption monitoring, ensuring maximum fuel efficiency and emissions reduction.
2. Coffin 5 ppm oily water separator, effluent quality exceeds the 15 ppm current legislation requirements.
3. 1 x Omnipure sewage plant, complies with latest 2010 IMO Resolution MEPC 159(55).
4. Cargo load / discharge stations with saveall to inboard tank.
5. Low residue design bulk tanks.
6. Mud tanks with dedicated recirculation pumps.
7. Macerator fitted in galley. Provision for recycling of waste.

Miscellaneous

1. Design complies to latest rules and regulations from SOLAS 1974, and IMO 469 (XII) "Guidelines for the design and construction of offshore supply vessel".
2. Bulk systems remotely controlled from wheelhouse.
3. Fitted with 3 halogen searchlights (1 fwd, 2 aft), each 2000W, on wheelhouse top and electrically operated from inside wheelhouse, 8 x 1000W floodlights for cargo deck.
4. Deck power supplies:
 - 4 x 250A, 440V, 3 phase
 - 1 x 63A, 440V, 3 phase
 - 1 x 32A, 220V, single phase
5. Wood sheathed main deck for aft area, which is steel plated for anchor handling. Supplied with anchor grapnel.
6. Welding / cutting equipment and lathe in workshop.
7. Fresh water ultra violet sterilizer.
8. CO2 fire extinguishing system fitted in the engine room / paint locker / hydraulic pump room / emergency generator room. Independent CO2 system for Galley.
9. Fire detection system fitted to the accommodation, engine room and throughout the vessel.
10. Statutory liferafts, life-jackets, pyrotechnics.
11. Removable crash rail sections on main deck (PS & SB) to facilitate R.O.V. operation.