



## SHIP PARTICULARS

### *5,150 BHP Anchor Handling Tug / Supply Vessel*



#### **PRINCIPAL PARTICULAR**

Length Overall	: 60.50	M
Length Waterline	: 58.17	M
Breadth Moulded	: 14.60	M
Depth Moulded	: 5.50	M
Draft (max)	: 4.75	M
Built	: 2012	
GRT	: 1459/438	
Class	: Bureau Veritas (BV) & BKI	
Notation	: I + Hull1(E) Mach, Supply Vessel, Tug, Special Service –Anchoring Handling Vessel, Fire– Fighting Ship 1-water Spraying, Unrestricted Navigation, DPS-1	
Flag	: Indonesian	
Call Sign	:	
IMO No.	:	

#### **CARGO CAPACITIES**

Deadweight	: 1.375 mt 4.5m draft
Deck cargo	: 600 mt
Deck Strength	: 7.0 mt/m <sup>2</sup>
Clear Deck Area	: 350 m <sup>2</sup>
Fuel Oil	: 520 m <sup>3</sup>
Fresh Water	: 260 m <sup>3</sup>
Ballast / Drill Water	: 390 m <sup>3</sup>
Freezer / Chiller	: 10 m <sup>3</sup> / 10 m <sup>3</sup>
Liquid Mud	: 130 m <sup>3</sup>
Cement Tank (Dry Bulk)	: 187m <sup>3</sup> (4 x 1650 ft <sup>3</sup> )
Base Oil	: 130 m <sup>3</sup>
Foam / Detergent	: 13 m <sup>3</sup> / 13 m <sup>3</sup>

#### **PUMPS**

Fuel Oil Cargo	: 2 x 100 m <sup>3</sup> /hr @ 90 m/head; Desmi
Fresh Water Cargo	: 1 x 150 m <sup>3</sup> /hr @ 50 m/head; Desmi
Ballast Water/ Drill Water	: 1 x 150 m <sup>3</sup> /hr @ 50 m/head; Desmi
Bulk Cement	: 2 x 13m <sup>3</sup> /min @80Psi (5.6 bar) Airman SWS75S
Liquid Mud	: 2 x 75 m <sup>3</sup> / hr @90m head (SG 17ppg); Desmi

#### **PROPULSION SYSTEM**

Main Engine	: 2 x 1,920 kW (5,150 hp) @ 1,600 rpm Caterpillar 3516 B
Main Generator	: 2 x Caterpillar C18, each 450kWe, 415V/3ph/50Hz
Shaft Alternator	: 2 x Leroy Somer each 900kWe 415V/3ph/50Hz
E. Generator	: 1 x CAT, 65kWe, 415V/3ph/50Hz
Bow Thruster	: 2 x 515 kW electric-driven Kawasaki 8T
Rudders	: 2 x High performance streamline type
Propulsion	: 2 x CPP type with Kort Nozzle ; Berg
Steering Gear	: 2 x 4.0 tm / 35 deg rudder angle; RIQ

#### **DECK EQUIPMENT**

Towing/AH Winch	: 1x electro-hydraulic double drum AHTW ; Mentrade
Tugger Winch	: 2 x 10 mt @15m/min electro- hydraulic HUW; Mentrade drum capacity: 220m(L)x22 m (dia) SWR
Towing Pin	: 2x electro-hydraulic retractable type – SWL 200mt
Shark Jaws	: 1 x electro-hydraulic karmfork – SWL 300mt
Anchor Windlass	: Electro Hydraulic, 2 Cable Lifter, 2 Wrapping Drum
Deck Crane	: Electro-hydraulic, 5.9mt @ 4m/2.2mt @12m
Stern Roller	: 5.0m (L)x1.50m (dia); SWL 250mt
Bow Anchor	: 2 x 1350 KG HHP Anchors
Capstan	: 2 x 5 mt @15m/min electro- hydraulic HVC; Mentrade head size 400mm (dia)
Rope Reel	: 56 mm DIA x 1000 Wire Rope
Drum	: 2
Anchor Chains	: 440m(L) x36mm (dia) Grade U2 (each side)
Bow Anchors	: 2 x 1305 kg HHP anchor
Warping Drum	: 400 mm (dia) x 450 mm
Gypsies	: 36mm, chains, rate pull 10 mt



Lower Drum Cap	: @ 9 m/min : 1000 m (L) x 56 mm SWR
Upper Drum Cap	: 1000 m (L) x 56 mm SWR
Line Pull	: 150 mt @6.0m/min 1st layer 102 mt @8.8m/min 1st layer 78 mt @11.5m/min 1st layer
Brake Holding	: 200 mt static @1st layer
Remote control from after control stand in wheelhouse	
Anchor Windlass	: 1 x electro-hydraulic HAW; Mentrade

#### **PERFORMANCE**

Max Speed	: 12 Knots
Economical Speed	: 10 knots
Bollard Pull	: 65 T

#### **RADIO & NAVIGATION EQUIPMENT**

GMDSS	: Furuno RC-1800f (Area 3) comprising
SSB	: Furuno FS – 2570 with built in DSC
Inmarsat C	: Furuno Felcom – 15
VHF Radio	: Furuno FM-8500 with built-in DSC
Navtex Receiver	: 1 x Furuno NX 700B
SART	: 2 x McMurdo S4 (9 GHz)
EPIRB	: 1 x McMurdo Model E5
Portable Marine	: 3 x McMurdo R2 (25 Khz)
VHF Radio (IS)	
Marine Radar	: Furuno 1942 MK2
X -Band APRA Radar	: Furuno FAR 2117
Echo Sounder (Color)	: 1 x Furuno FE-700
DGPS	: 1 x Furuno GP-150
Gyrocompass	: 1 x Robertson GC-80
AIS	: Furuno FA150
Autopilot	: 1 x Simrad / Norway AP50+
SART	: 2 x McMurdo Model S4, 9HZ
Speed Log	: Furuno DS-80
DP	: Marine Technologies Bridge Mate DP 1 : Positioning Reference – 2 x DGPS
Joystick	: MT Bridge Mate JX

Vessel also fitted with PA Talkback System and Self Powered Telephones

#### **FIRE FIGHTING EQUIPMENT & LIFE SAVING**

##### ***External***

FiFi Sytem	: Class 1 with water curtain all round
Fire Pumps	: 2 x 1550 m3/hr @ 130 m head : driven by front PTO of M/E

Monitors - (water / foam)	: 1 x 300 – 1200 m3/h
- (water)	: 1 x 1200 m3/h Throw length 120 m
Oil Dispersant System	: 1 set c/w 2 spray booms 6 m, Wilhemsen

##### ***Internal***

Emergency Fire Pump	: 1 x 35 m3/h at 50 m head
BA Recharging Comp	: 1 x 75 lts/ min @ 200 bar Coltri MCH16 E-TS
CO2 System	: In Engine Room
Fire Detection & Alarm System	: In Acc. Common Area / Passageways & Engine Room

#### **ACCOMMODATION**

Berth	: 2 x 1 berth Cabins = 2 4 x 2 berth Cabins = 8 8 x 4 berth Cabins = <u>32</u>
Total	42
Hospital	: 1 x 1 Berth Cabin
All cabins fully air-conditioned & c/w attached washroom	

#### **MISCELLANEOUS**

Seach Lights	: 3 x 2000 W
Flood Lights	: 5 x 1000 W
Liferafts	: 4 x 20 & 2 x 25 men SOLAS approved type
Rescue Boat	: 1 x 6 men c/w outboard motor 25 hp
Oily Water Separator	: 1 x 1 m3/h
Water Maker	: 1 x 10 m3/day Reverse Osmosis
Sewage Treatment Plant	: 1 x 42 men/day



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