

**GENERAL INFO**

<b>Basic Function</b>	Harbour duties, berthing, towing, firefighting and assisting pollution control
<b>Design</b>	Macduff Ship Design Ltd.

**CLASSIFICATION**

<b>Class Society</b>	Bureau Veritas (BV)
<b>Class Notation</b>	BV $\boxtimes$ HULL • Mach. Tug, Unrestricted navigation • AUT-UMS • AVM-DPS, Cleanship, Fire, Manovr
<b>Bollard Pull</b>	48 TBP
<b>Speed</b>	12 Knots

**DIMENSIONS**

<b>Length Over All (LOA)</b>	25m
<b>Breadth (B)</b>	10.5m
<b>Depth (D)</b>	4.75m
<b>Draught (Max)</b>	3.65m

**TANK CAPACITIES**

<b>Fuel</b>	86 234 litres
<b>Fresh Water</b>	48 344 litres
<b>Foam</b>	7 634 litres
<b>Grey Water</b>	5 227 litres
<b>Black Water</b>	5 169 litres
<b>Lub Oil</b>	2 475 litres
<b>Dirty Oil</b>	2 475 litres
<b>Hydraulic Oil</b>	4 889 litres
<b>Propeller Oil</b>	2 637 litres

**ACCOMMODATION & NAVIGATION**

<b>Accommodation</b>	2 x Officer Cabin, 1 x 8 Person crew cabin, 1 x 6 Person crew cabin WC & Shower unit.
<b>HVAC Units</b>	41 °C/ %70 rH, with one central A/C including cabins, mess room and galley, forced ventilation to comply with the extreme climate conditions. The wheelhouse addition with separate A/C unit.
<b>Search Light</b>	2x 1000 W electric remote
<b>Navigation &amp; Communication Equipment</b>	1 x Radar 1 x ECDIS 1 x Echo sounder 1 x Speed Log 1 x AIS 1 x GPS Receiver 1 x S-VDR 1 x Magnetic Compass 1 x Autopilot 1 x Gyrocompass 1 x BNWAS 2 x VHF 1 x MF/HF 1 x Navtex Receiver 4 x GMDSS VHF 1 x EPIRB 1 x SART 1 x Wind Sensor 1 x CCTV 1 x Handheld GPS 1 x VSP Telephone 1 x GPS Compass 1 x Satellite Log



	1 x Weather Fax 1 x Talkback system 1 x PA & GA System 1 x ALDIS LAMP
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FIRE & SAFETY	
<b>External Fi-Fi System &amp; Water Spring</b>	2 x Remote operated water, foam monitor
<b>Fixed Fire Fighting</b>	Fixed High Pressure CO2 Fire Extinguishing System
<b>Automatic Sprinkler System</b>	For ECR, Workshop FWD Store & Accommodation
<b>Fire &amp; Smoke Detection Systems</b>	For E/R, Accommodation and all compartment monitored from wheelhouse & call (alarm) points at several locations' c/w general alarm system from the central alarm panel
<b>Safety Equipment</b>	2 x 25-person inflatable liferaft
<b>Rescue Boat</b>	MED and BV TAC certificated, 4m GRP Rescue Boat, 6 Persons capacity, 25 HP outboard engine

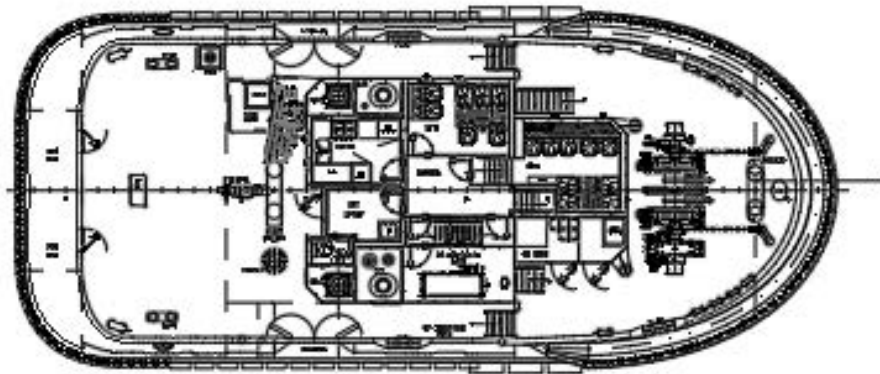
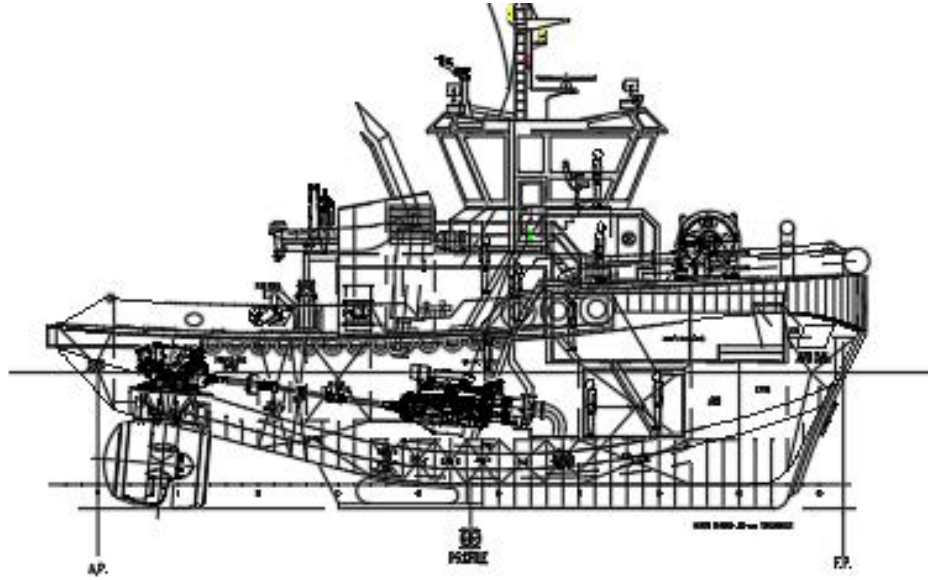
DECK MACHINERY	
<b>TOWING WINCH &amp; WINDLASS</b>	1 x Hydraulic driven, locally (deck) and remote (bridge) controlled. 100kN @ 34m/min. Rope Capacity 110 m for 88mm dia rope . MBL 1300 kN. Double Drum
<b>TOWING HOOK</b>	1 x 65 tons SWL, quick release disk type
<b>ANCHORS &amp; CHAIN</b>	2x HHP, Pool type, 16mm Q3 Chain Cable
<b>Capstan</b>	1 x Hydraulic driven, locally (deck) controlled , 50 kN @ 15 m/min .
<b>DECK CRANE</b>	Hydraulic operated, 3500kg@4m , Outreach 12m
<b>FENDERS</b>	W TYPE, RUBBER, 400x250 & Tire Fenders

MACHINERY	
<b>MAIN ENGINE</b>	2 x 1529kW @ 1800 rpm
<b>Shafting &amp; Propeller</b>	2x 1529 kW , Fix Pitch , 2200mm dia propeller
<b>Generator</b>	2 x 195 ekW , 440 V , 60 Hz
<b>Harbour Generator</b>	1 x 88 ekW , 440 V , 60 Hz
<b>Air Compressor &amp; Air Bottle</b>	1 x 1.5 kW 10 bar Air Compressor , 1 x 18 m <sup>3</sup> /h dryer , 1 x 100 lt air receiver
<b>Fi-Fi Pump</b>	Fire pump Capacity 2 x 1100 m <sup>3</sup> /h , Water/Foam Monitor 2 x 450/300 m <sup>3</sup> /h , Integrated control System , External Water Spray System
<b>Oily Water Separator</b>	1 x 0.5 m <sup>3</sup> /h and 15 ppm.
<b>Sewage Treatment System</b>	1 x for 16 persons
<b>Bilge &amp; Fire &amp; GS Pump</b>	2 x 25 m <sup>3</sup> /h @ 4 bar
<b>Fuel Transfer Pump</b>	1 x 10 m <sup>3</sup> /h @ 2 bar
<b>Waste Oil Pump</b>	1 x 3.5 m <sup>3</sup> /h @ 2 bar
<b>Sewage Transfer Pump</b>	1 x 6.9 m <sup>3</sup> /h @ 2 bar
<b>Oily Bilge Pump</b>	1 x 3.5 m <sup>3</sup> /h @ 2 bar
<b>ASD SW Cooling Pump</b>	2 x 38 m <sup>3</sup> /h @ 2 bar
<b>Aux Cooler SW Cooling Pump</b>	2 x 55 m <sup>3</sup> /h @ 2 bar
<b>Emg. Fire Pump</b>	1 x 25 m <sup>3</sup> /h @ 2.5 bar
<b>Lub Oil Pump</b>	1 x 2 m <sup>3</sup> /h @ 2 bar
<b>Portable Fire Pump</b>	1 x 2 m <sup>3</sup> /h @ 3 bar
<b>ASD Cooling FW Pump</b>	2 x 25 m <sup>3</sup> /h @ 2 bar
<b>Aux Cooler FW Cooling Pump</b>	2 x 38 m <sup>3</sup> /h @ 2 bar
<b>Generator SW Cooling Pump</b>	2 x 40 m <sup>3</sup> /h @ 2 bar
<b>FW Hydrophore Set</b>	1 x 6 kW-100Lt
<b>LT Coolers</b>	4 x
<b>LT Aux Coolers</b>	2 x
<b>Fuel Purifier</b>	1 x 1000 l/h

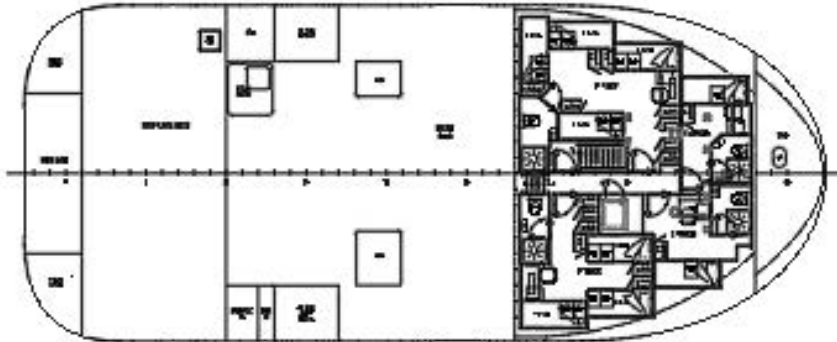


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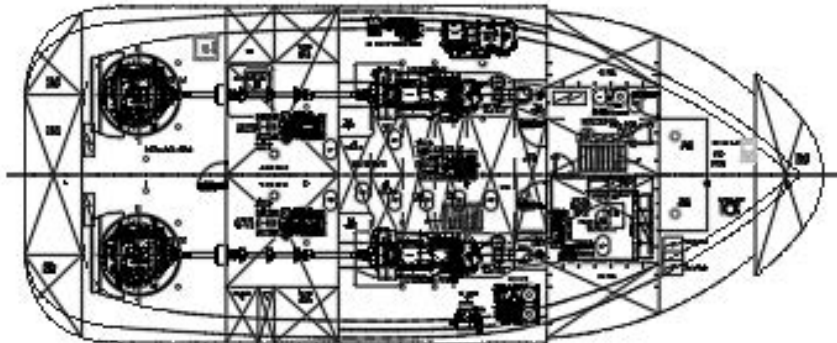
# 25m 48TBP FIFI TUGBOAT



MAIN AND FIRE-SIDE DECKS



ACCOMMODATION DECK



BELOW DECK