

**65M OFFSHORE SUPPORT TUG**

**VORTEX REVOLUTION**

**8,160 BHP | 110 TBP**



**SPECIFICATIONS:**

**ANCHOR HANDLING & SUPPLY TUG, FIFI 1, DP-1**

**GENERAL:**

Vessel Type: Anchor Handling Tug Supply Vessel DP1  
 Built: 2009  
 Flag: Liberia  
 Port of Registry: Monrovia  
 Classification: Lloyd's Register  
 Class Notation: ✱A1, Towing Vessel, AH/Offshore Support Vessel, (E), ✱AMS, DPS-1, FFV-1

**DIMENSIONS:**

Length Overall: 65.60 m  
 Beam (Moulded): 16.00 m  
 Designed Draft: 5.50 m  
 Scantling Draft: 5.80 m  
 GRT: 2147.00 T  
 NRT: 644.00 T  
 Deadweight: 2067.21 T  
 Deck Strength: 5.50 T/m<sup>2</sup>  
 Clear Deck Space: 450.00 m<sup>2</sup>

**CAPACITIES:**

Fuel Oil: 674.30 m<sup>3</sup>  
 Fresh Water: 416.80 m<sup>3</sup>  
 Drill Water: 406.40 m<sup>3</sup>  
 Dry Bulk: 233.20 m<sup>3</sup>  
 Liquid Mud/  
 Brine Water Tank: 322.50 m<sup>3</sup>  
 Hydraulic Oil: 7.40 m<sup>3</sup>  
 Foam: 14.70 m<sup>3</sup>  
 Dispersant: 14.70 m<sup>3</sup>  
 Lube Oil Storage: 12.80 m<sup>3</sup>  
 Dirty Oil: 7.80 m<sup>3</sup>  
 Sewage Holding: 12.70 m<sup>3</sup>  
 Bilge: 7.40 m<sup>3</sup>  
 Brine /DW/WB: 149.40 m<sup>3</sup>

**MACHINERY:**

Main Engines: 2 x 4,080 BHP @750 RPM c/w reduction gearbox  
 Propulsion: 2 x CPP, 3.5 m Dia. @ 4-bladed  
 Bow Thruster: 1 x 10 Tons CPP, 440V / 3Ph / 60Hz  
 Stern Thruster: 1 x 10 Tons CPP, 440V / 3Ph / 60Hz  
 Retractable Thruster: 1 x 1.6 m Dia. FPP (1000BHP Diesel Engine @ 1800 RPM)  
 Steering Gear: 2 x Independent Electro Hyd. System  
 Main Generators: 2 x 450 kW @ 440V/3Ph/60Hz  
 Emergency/Harbor Generators: 1 x 140 kW @ 440V/3Ph/60Hz  
 Shaft Alternators: 2 x 1450 kW @ 440V/3Ph/60Hz

**DYNAMIC POSITIONING SYSTEM: DP1**

DP-1 System: 1 set  
 Maker: GE Power Conversion

**PERFORMANCE:**

Bollard Pull: 110 T  
 Speed(max): 12 Kts

**65M OFFSHORE SUPPORT TUG****VORTEX REVOLUTION****8,160 BHP | 110 TBP****ANCHOR HANDLING & TOWING:**

Anchor Windlass and Mooring Winch:	Electro-hydraulic System, Windlass with 10 Tons Duty Pull @ 13 m/min, Mooring drum with 11 Tons pull @ 11.5 m/min
Anchor Handling and Towing Winch:	Double drum, Waterfall type @ electro-hydraulic system, Drum capacity of 2 x 1500 m x 64 mm Dia Wire, 300 Tons brake holding and 250 Tons pull force @ 8.5 m/min
Storage Reel Winch:	1 x 1800 m x 64 mm Dia. Wire
Shark Jaw:	1 set x 300 Tons @ Electro Hyd. System
Towing Pins:	1 set x 160 Tons @ Electro Hyd. System
Stern Roller:	4.80 m(L) x 2.00 m Dia.
Tugger Winch:	2 x 10 Tons @ Electro Hyd. System
Capstan:	2 x 9 Tons @ Electro Hyd. System
Provision Crane:	1 x 5 Tons (SWL) @ 15 m outreach (telescopic crane)
Reefer Point:	4 x 16 A, 415V/3Ph/50Hz 4 x 32 A, 230V/1Ph/50Hz
Anchor Type:	Stockless Bower Anchors
Anchor Capacity:	2 x 2280 kg
Anchor Chains:	825 m (TOTAL)

**NAVIGATION/ COMMUNICATION:**

GMDSS Radio A3:	1 complete set
GPS Navigator:	1 unit
DGPS:	2 units
Gyro Compass c/w:	2 units Gyro Compass
Autopilot:	1 unit Autopilot
Magnetic Compass:	1 set
Radar (ARPA):	2 units
Echo Sounder:	1 unit
Speed Log:	1 unit
Anemometer:	2 units
Navtex Receiver:	1 unit
AIS:	1 unit
SART:	1 set
EPIRB:	1 unit (406MHz)
SSAS:	1 set
Satellite Communication:	1 set
Satellite Data Transmission:	1 set x Inmarsat System
Interior Communication System:	1 set
PA System:	1 set
Sound Reception System:	1 set
Search Light:	2 units
Fleet Broadband:	1 set

**ACCOMODATION:**

**Total:**  
38 Berths, Fully Air-Conditioned

2 x 1 berth cabins = 2  
4 x 2 berth cabins = 8  
7 x 4 berth cabins = 28

Hospital 1 x 1 Man bunk  
1 x Treatment Table

**DISCHARGE RATES:**

Fuel Oil (Cargo):	1 x 150 m <sup>3</sup> / hr @ 90 m head
Fresh Water (Cargo):	1 x 150 m <sup>3</sup> / hr @ 90 m head
Drill Water (Cargo):	1 x 150 m <sup>3</sup> / hr @ 90 m head
Liquid Mud (Cargo):	2 x 100 m <sup>3</sup> / hr @ 90 m head
Brine (Cargo):	1 x 100 m <sup>3</sup> / hr @ 90 m head

**FIREFIGHTING - FIFI CLASS 1:**

FiFi System:	FFV 1
Fire Pumps Capacity:	2 x 1600 m <sup>3</sup> /hr
Fire Monitor Capacity:	1 x 1200 m <sup>3</sup> /hr water c/w 300 m <sup>3</sup> /hr foam; 1 x 1200m <sup>3</sup> /hr water
Oil Dispersant System:	2 x 6 m Dispersant Boom

1 x Fixed Fire-extinguishing System (CO2) to Machinery Space Cat. A,  
1 x Fixed Local Application System (Water Mist) to Machinery Space Cat.A,  
1 x Fire Detection & Alarm System  
1 x Deck Foam in accordance with IMO SOLAS/ FFS Code & Flag State requirements

**SAFETY EQUIPMENT:**

Liferafts:	6 x 20 men
Rescue Boat:	1 x 6 men semi rigid type c/w pivoting davit

Vessel's Life Saving Equipment are in accordance with SOLAS / LSA Code & Flag State requirements

**MISCELLANEOUS:**

Bulk Tank Compressor:	2 x 1368 m <sup>3</sup> / hr @ 5.6bar
Bulk Tank Dryer:	1 x 1800 m <sup>3</sup> / hr @ 5.6bar
Oily Water Separator:	1 x 1 m <sup>3</sup> / hr
Sewage Treatment Plant:	1 x 4.66 m <sup>3</sup> / day (38 men)
Liquid Mud Agitator:	2 x 2.5m dia. impeller; 16.5 kW/35rpm EACH
Hydraulic Power-Pack:	1 x 100ℓ / min c/w 55.0 kW Motor, 440V / 3Ph / 60Hz @1770 rpm 1 x 300ℓ (Reservoir Tank)