



## 70 M FUJIAN MAWEI PLATFORM SUPPLY VESSEL

#### **Vessel Characteristics**

Length, Overall:	229.7 ft	70 m			
Beam:	55.1 ft	16.8 m			
Depth:	24.6 ft	7.5 m			
Maximum Draft:	20.7 ft	6.3 m			
Light Draft:	10.8 ft	3.3 m			
Minimum Height:	85 ft	25.9 m			
Freeboard:	3.9 ft	1.2 m			
Displacement:	4,940 lt	5,020 mt			
Deadweight:	2,940 lt	2,980 mt			
Clear Deck Space:	135 x 46 ft	41 x 14 m			
Clear Deck Area:	6,170 ft <sup>2</sup>	570 m <sup>2</sup>			
Deck Strength AFT:	1,020 lb/ft²	5 t/m²			
Class Notations:	ABS: +A1, (E), Offshore Support Vessel, FFV-1, +AMS, +DPS-2, UWILD				

#### **Capacities**

Deck Cargo:	1,280 lt	1,300 t
Fuel Oil:	327,000 gal	1,240 m <sup>3</sup>
Potable Water:	41,100 gal	160 m <sup>3</sup>
Fresh Water:	65,100 gal	250 m³
Drill/Ballast Water:	169,000 gal	640 m³
Bulk Tanks (4 tanks):	6,800 ft³	190 m³
Liquid Mud (2.5 SG*): *Max Structural Specific Gravity	3,760 bbl	600 m <sup>3</sup>
Oil Dispersant:	5,660 gal	21.4 m <sup>3</sup>
Fire Fighting Foam:	5,660 gal	21.4 m <sup>3</sup>

## **TIDEWATER**

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## Further specifications



### **Machinery**

Main Engines (2):		Ni	igata 6L28HX				
Total HP:			4,930				
Z-Drives:			Yes				
Propellers (2):		FPP NI	IGATA ZP-41A				
Kort Nozzles:	2						
Primary Generators (3):	800 kw	800 kw 410 v 50 h					
Driven by:	Cummins KTA38-D(MI)						
Secondary Generators (1):	330 kw	330 kw 410 v 50 hz					
Driven by:		Cummins KTA19					
Emergency Generators (1):	80 kw	410 v	50 hz				
Driven by:	Cummins 6BT5.9(M)						
Bow Thruster (2):	Brunvoll FU63-LTC-1550 TT CPP						
Driven by:	1x61	1x610kW; 1x575kW Electric Motors					
Total Thrust:		19.8 st	18 mt				

### **Deck Equipment**

Anchors (2):	4067 lbs Stockless Bower HHP
Anchor Chain:	460 m of 46 mm chain per side
Windlass:	Electro-Hydraulic (13t @ 18m/min)
Crane (1):	2.2 t @ 12.2 m
Capstans (2):	10 t Electro-Hydraulic
Tugger (1):	10 t ELECTRO-HYDRAULIC

#### **Accommodations**

No. of Berths:	26
Cabins:	4x1-man, 5x2-man & 3x4-man
Certified to Carry:	26
Galley seating:	26
Hospital:	Yes

### Registration

Flag: VANUATU	Home Port: PORT VILA
Hull Number: 6188	<b>IMO N<sup>o</sup>:</b> 9539638
Year Built: 2009	Call Sign: YJVU2
Builder:	FUJIAN MAWEI
Tonnage (ITC):	2369 GT 710 NT

#### **Performance\***

Fuel Consumption Vs Speed							
Maximum:	20 m³/day (220 gph) @ 13 knots						
Cruising:	16 m³,	16 m³/day (180 gph) @ 11.5 knots					
Economical:	12.3 m	12.3 m³/day (130 gph) @ 10 knots					
Standby:	1.6 r	m³/day (18.1 gph) @ 0 knots					
Range @ 10 Knots:	25,400 nm						
Transfer Rates							
Fuel Oil:	880 gpm @ 300 ft	200 m³/h @ 90 m					
Fresh Water:	660 gpm @ 280 ft	150 m³/h @ 85 m					
Drill/Ballast Water:	880 gpm @ 260 ft	200 m³/h @ 80 m					
Bulk:	28 cfm @ 220 ft	47.5 m³/h @ 66 m					
Liquid Mud:	330 gpm @ 300 ft	75 m³/h @ 90 m					

### **Nav/Comms Equipment**

Radar(s):	2
Depth Sounder:	1
Gyro Compass:	2
Wind Speed Indicators:	2
Doppler Log:	1
Radio:	2 x VHF
Sat Com:	1XINMARSAT-C

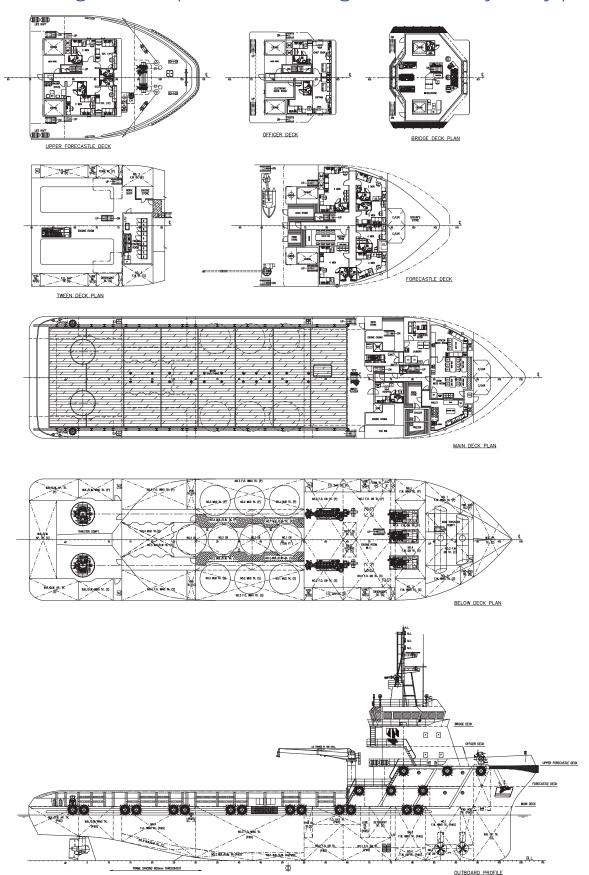
### **Special Equipment**

Firefighting:	FiFi-1
Dynamic Positioning:	DP-2
Ref. Systems:	2 x MRU; 2 x DGPS 1 x Laser-based
Water Maker:	5T/DAY
Mud Circulation System:	Yes
Rescue Zone:	Yes
Rescue Boat:	Solas Approved
Reefer Sockets:	2x 220V 32A; 1x 415V 63A; 5x 415V 32A
Misc:	MSD - 30 Persons

<sup>\*</sup>Approximate values assuming Ideal Conditions

## General Arrangement (Current configuration may vary.)





## Capacity Table



Tank Table														
Tank	Contents	Volume m <sup>3</sup>	Base Oil	Fuel Oil	Dry Bulk	DW/WB	Potable Water	Fresh Water	Brine	Liquid Mud	Methanol	Lube Oil	Foam	Oil Disp.
WB FP Tk C	DW/WB	151.6				151.6								
No. 1 WB/DW Tk P	DW/WB	31.2				31.2								
No. 1 WB/DW Tk S	DW/WB	31.2				31.2								
No. 2 WB/DW Tk P	DW/WB	31.4				31.4								
No. 2 WB/DW Tk S	DW/WB	31.4				31.4								
No. 3 WB/DW Tk C	DW/WB	51.0				51.0								
WB/DW Wing Tk P	DW/WB	42.9				42.9								
WB/DW Wing Tk S	DW/WB	42.9				42.9								
WB/DW AP Tk P	DW/WB	47.8				47.8								
WB/DW AP Tk S	DW/WB	47.8				47.8								
WB/DW AP Tk C	DW/WB	130.3				130.3								
No.1 FW Wing Tk P	Ships FW	77.9					77.9							
No.1 FW Wing Tk S	Ships FW	77.9					77.9							
No. 2 FW DB Tk C	FW	58.0						58.0						
No.3 FW Wing Tk P	FW	56.9						56.9						
No.3 FW Wing Tk S	FW	56.9						56.9						
No. 4 FW DB Tk P	FW	37.3						37.3						
No. 4 FW DB Tk S	FW	37.3						37.3						
FO Day Tk P	FO	29.1		29.1				0110						
FO Day Tk S	FO	29.1		29.1										
No. 1 FO DB Tk P	FO	89.2		89.2										
No. 1 FO DB Tk S	FO	88.3		88.3										
No. 2 FO DB Tk P	FO	97.1		97.1										
No. 2 FO DB Tk S	FO	97.1		97.1										
	FO	228.3		228.3										
No. 3 FO Wing Tk P	FO													
No. 3 FO Wing Tk S		228.3		228.3										
No. 4 FO Wing Tk P	FO	205.6		205.6										
No. 4 FO Wing Tk S	FO	205.6		205.6										
No. 1 Mud Tk P	LM	76.7								76.7				
No. 1 Mud Tk S	LM	76.7								76.7				
No. 2 Mud Tk P	LM	76.7								76.7				
No. 2 Mud Tk S	LM	76.7								76.7				
No. 3 Mud Tk P	LM	74.2								74.2				
No. 3 Mud Tk S	LM	74.2								74.2				
No. 4 Mud Tk C	LM	142.4								142.4				
Lube Oil (P)	LO	9.0										9.0		
Lube Oil (S)	LO	9.0										9.0		
Foam Tk	Foam	21.4											21.4	
Detergent Tk	Dispersant	21.4												21.4
No. 1 CEM Tk C	Dry Bulk	48.1			48.1									
No. 2 CEM Tk C	Dry Bulk	48.1			48.1									
No. 3 CEM Tk C	Dry Bulk	48.1			48.1									
No. 4 CEM Tk C	Dry Bulk	48.1			48.1									
		lume [m³]		1,297.5	144.4	639.4	155.8	246.3	0.0	597.5	0.0	18.0	21.4	21.4
Spec Sh	eet Total Vo	lume [m³]	0.0	1,239.3	144.4	639.4	155.8	246.3	0.0	597.5	0.0	18.0	21.4	21.4

 $<sup>{}^{\</sup>star}$ Capacities shown are for lead vessel. Actual capacities may vary slightly.

<sup>\*</sup>Capacities shown in RED are excluded from the total volume.

 $<sup>^{\</sup>star}$ Capacities shown in **BLUE** are included in another Tank's Capacity.

 $<sup>^{\</sup>star}$ Capacities shown in GREEN are counted for multiple Tank Capacities.

### DP Capability Plot





## DP Capability Plot

**VMW618** 

(Cb = 0.69)

Case number Case description Thrusters active Rudders active

All thrusters enabled, 1kt of current

T1-T4

StatCap v. 2.9.0 Version Input file reference Foot\_2479\_RevB.scp Last modified 2013-11-26 13.49

Length overall 70.0 m Length between perpendiculars 61.6 m Breadth 16.8 m Draught 6.3 m Displacement 4600.0 t

Longitudinal radius of inertia (= 0.25 \* Lpp) Pos. of origin ahead of Lpp/2 (Xo) 0.0 m Wind load coefficients Calculated (Blendermann) Current load coefficients Calculated (Strip-theory)

15 4 m

Wav e-drift load coefficients Database (Scaled by Breadth/Length)

Tidal current direction offset Wave direction offset 0.0 deg JONSWAP (gamma = 3.30) Wave spectrum type

Wind spectrum type

Current - wav e-drift interaction 1.0 \* STD of thrust demand Load dynamics allowance Additional surge force 0.0 tf Additional sway force 0.0 tf

Additional yawing moment 0.0 tf.m Additional force direction Fixed Density of salt water 1026.0 kg/m<sup>3</sup> Density of air 1.226 kg/m³ (15 °C)

Power limitations Thrust loss calculation

F-[tf] Max [%] Pe [kW] Rudder # Thruster Y [m] F+[tf] 1 TUNNEL 24.0 0.0 9.1 -9.1 100 610 2 TUNNEL 21.0 0.0 8.6 -8.6 100 575 3 AZIMUTH -18.5 100 1700 -28.3 3.5 30.0 4 AZIMUTH 30.0 -3.5 -18.5 1700

