



FSES 5150 ANCHOR HANDLING TOWING SUPPLY VESSEL

Vessel Characteristics

Length, Overall:	194.6 ft	59.3 m
Beam:	49.2 ft	15 m
Depth:	20 ft	6.1 m
Maximum Draft:	16.4 ft	5 m
Minimum Height:	77.8 ft	23.7 m
Freeboard:	3.6 ft	1.1 m
Displacement:	2,840 lt	2,880 mt
Deadweight:	1,330 lt	1,350 mt
Clear Deck Space:	90 x 41 ft	27 x 12 m
Clear Deck Area:	3,660 ft ²	340 m ²
Deck Strength AFT:	1,540 lb/ft²	7.5 t/m²
Class Notations:	ABS: +A1, (E), Towing Vesse	el, OSV, FFV-1, +AMS, +DPS-1

Capacities

Deck Cargo:	490 lt	500 t
Fuel Oil:	134,000 gal	510 m ³
Potable Water:	22,600 gal	85.7 m ³
Fresh Water:	71,800 gal	270 m ³
Drill/Ballast Water:	105,000 gal	400 m ³
Bulk Tanks (4 tanks):	6,600 ft³	190 m³
Liquid Mud (2.5 SG*): *Max Structural Specific Gravity	2,390 bbl	380 m ³
Oil Dispersant:	3,520 gal	13.3 m ³
Fire Fighting Foam:	3,520 gal	13.3 m ³

TIDEWATER

Find out more

ns Po

Pg.2 Further Specifications Pg.4 General Arrangement Pg.5 Capacity Table
Pg.6 DP Capability Plot

tdw.com

Further specifications



Machinery

Main Engines (2):		(CAT 3516B-HD			
Total HP:	5,150					
Propellers (2):	KH680 4 Blade Cf					
Gears (2):		Reintjes LA	AF 873L 7.526:1			
Kort Nozzles:			2			
Rudders (2):		High Performan	nce Streamline			
Primary Generators (2):	350 kw	410 v	50 hz			
Driven by:			CAT C18			
Secondary Generators (2):	800 kw	410 v	50 hz			
Driven by:			Main Engines			
Emergency Generators (1):	65 kw	410 v	50 hz			
Driven by:		С	AT 2438/1500			
Bow Thruster (2):		Kawasak	i KT-72B3 CPP			
Driven by:		515 kW	Electric Motor			
Total Thrust:	17.3 st					

Performance*

Fuel Consumption Vs Speed						
Maximum:	18 m³/day (200 gph) @ 13.5 kno					
Cruising:	12.7 m³/day (140 gph) @ 3					
Economical:	10.4	m³/day (110 gph) @ 8 knots				
Standby:	2.2 m³/day (24.2 gph) @ 0 kr					
Range @ 10 Knots:	9					
Bollard Pull	73.4 st	66.6 mt				
Transfer Rates						
Fuel Oil:	660 gpm @ 250 ft	150 m³/h @ 75 m				
Fresh Water:	550 gpm @ 250 ft	120 m³/h @ 75 m				
Drill/Ballast Water:	440 gpm @ 250 ft	100 m³/h @ 75 m				
Bulk:	28 cfm @ 190 ft	47.5 m³/h @ 57 m				
Liquid Mud:	310 gpm @ 280 ft	70 m³/h @ 85 m				

Tow/Anchor Handling

Winch:	Plimsoll (6m/min)
Model:	Electro-Hydraulic w/200tBrake
Line Pull:	150 mt
Tow/AH Wire:	1000 m / 1000 m of 56 mm
Pennant Reels (1):	1000 m of 56 mm
Shark Jaw:	PLIMSOLL 200 MT
Tow Pins:	PLIMSOLL 200 MT (1 SET)
Stern Roller:	4.4M X 1.6M; 200 mt SWL

Nav/Comms Equipment

Radar(s):	2
Depth Sounder:	1
Gyro Compass:	2
Wind Seeed Indicators:	2
Doppler Log:	1
Radio:	2 x VHF; 1 x SSB
Sat Com:	1 X INMARSAT-C

Accommodations

No. of Berths:	42
Cabins:	4x1-man, 3x2-man & 8x4-man
Certified to Carry:	42
Galley seating:	30
Hospital:	Yes

Deck Equipment

Anchors (2):	2877 lbs HHP Stockless
Anchor Chain:	220 m of 36 mm chain per side
Windlass:	Plimsoll (6.1T@10m/min)
Crane (1):	3 t @ 9.1 m
Capstans (2):	5 t Plimsoll (15m/min)
Tugger (2):	10 t PLIMSOLL (15M/MIN)

Further specifications



Registration

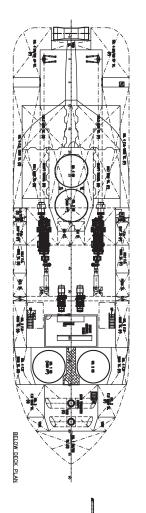
Flag: VANUATU	Home Port: PORT VILA				
Hull Number: 52	IMO N^o: 958218				
Year Built: 2010	Call Sign: YJVV6				
Builder:	FUJIAN SOUTHEAST SHIPYARD				
Tonnage (ITC):	1678 GT 503 NT				

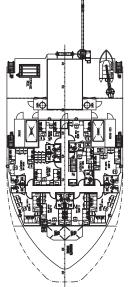
Special Equipment

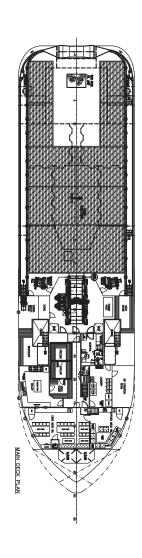
Fire Fighting:	FiFi-1
Dynamic Positioning:	DP-1
Ref. Systems:	1 x MRU; 2 x DGPS
Water Maker:	5T/DAY
Mud Circulation System:	Yes
Rescue Zone:	Yes
Rescue Boat:	6 Man SOLAS Approved
Reefer Sockets:	2 x 415V 63A; 2 x 220V 32A
Misc:	MSD - 50 PERSONS

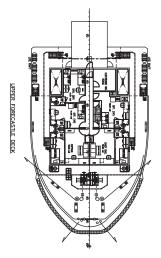
General Arrangement (Current configuration may vary.)

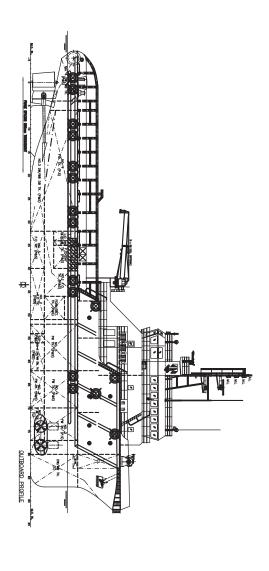


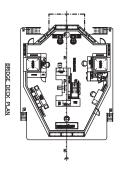












Capacity Table



Tank Table														
Tank	Contonto	Volume	Base	Fuel	Dry	DW/WB	Potable	Fresh	Duine	Liquid	Methanol	Lube	Foam	Oil
Iank	Contents	m ³	Oil	Oil	Bulk	DW/WB	Water	Water	Brine	Mud	wethanoi	Oil	roam	Disp.
No 1 Tank (C)	DW/WB	137.5				137.5								
No 2 Tank DB (P)	DW/WB	58.8				58.8								
No 2 Tank DB (S)	DW/WB	56.6				56.6								
No 3 Tank DB (P)	DW/WB	40.4				40.4								
No 3 Tank DB (S)	DW/WB	40.4				40.4								
No 4 Tank (P)	DW/WB	31.4				31.4								
No 4 Tank (S)	DW/WB	31.4				31.4								
No 1 Tank (C)	FW	55.3						55.3						
No 2 Wing (P)	Ships FW	42.8					42.8							
No 2 Wing (S)	Ships FW	42.8					42.8							
No 3 Tank DB (P)	FW	18.7						18.7						
No 3 Tank DB (S)	FW	18.7						18.7						
No 4 Wing (P)	FW	40.8						40.8						
No 4 Wing (S)	FW	40.8						40.8						
No 5 Wing (P)	FW	47.8						47.8						
No 5 Wing (S)	FW	49.7						49.7						
Day Tank (P)	FO	15.9		15.9										
Day Tank (S)	FO	15.9		15.9										
No 1 Wing (P)	FO	33.8		33.8										
No 1 Wing (S)	FO	36.3		36.3										
No 2 DB Tk (P)	FO	66.5		66.5										
No 2 DB Tk (S)	FO	66.5		66.5										
No 3 DB Tk (P)	FO	33.0		33.0										
No 3 DB Tk (S)	FO	33.0		33.0										
No 4 Wing (P)	FO	119.6		119.6										
No 4 Wing (S)	FO	119.6		119.6										
Cem Tk 1	Dry Bulk	46.7			46.7									
Cem Tk 2	Dry Bulk	46.7			46.7									
Cem Tk 3	Dry Bulk	46.7			46.7									
Cem Tk 4	Dry Bulk	46.7			46.7									
No 1 Tank (P)	LM	81.4								81.4				
No 1 Tank (S)	LM	81.4								81.4				
No 2 Tank (P)	LM	108.7								108.7				
No 2 Tank (S)	LM	108.7								108.7				
Foam Tank (P)	Foam	13.3											13.3	
Detergent Tk (S)	Dispersant	13.3												13.3
Lube Oil (S)	LO	6.4										6.4		
	Total Vo	lume [m³]	0.0	539.9	186.9	396.4	85.7	271.6	0.0	380.2	0.0	6.4	13.3	13.3
Spec SI	neet Total Vo		0.0	508.2	186.9	396.4	85.7	271.6	0.0	380.2	0.0	6.4	13.3	13.3

^{*}Capacities shown are for lead vessel. Actual capacities may vary slightly.

^{*}Capacities shown in RED are excluded from the total volume.

^{*}Capacities shown in **BLUE** are included in another Tank's Capacity.

^{*}Capacities shown in GREEN are counted for multiple Tank Capacities.

DP Capability Plot





DP Capability Plot

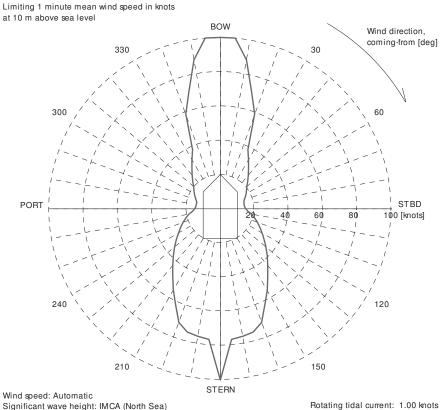
FUJIAN DN59M-83

Thrusters active Rudders active VARIABLE WIND AND WAVES

Input file reference : 59372_B.scp : 2011-05-30 12.43 (v. 2.8.0) Last modified Length overall 59.3 m Length between perpendiculars 52.2 m Breadth 14.9 m Draught 4.9 m Displacement 2755.0 t (Cb = 0.70)Longitudinal radius of inertia (= 0.25 * Lpp) 13.1 m Pos. of origin ahead of Lpp/2 (Xo) 0.0 mCalculated (Blendermann) Wind load coefficients Calculated (Strip-theory) Current load coefficients Database (Scaled by Breadth/Length) Wave-drift load coefficients Tidal current direction offset 0.0 deg 0.0 deg Wave direction offset JONSWAP (gamma = 3.30) Wave spectrum type Wind spectrum type NPD Current - wave-drift interaction 1.0 * STD of thrust demand Load dynamics allowance Additional surge force 0.0 tf 0.0 tf Additional sway force Additional yawing moment 0.0 tf.m Additional force direction Fixed 1026.0 kg/m³ Density of salt water 1.226 kg/m³ (15 °C) Density of air Power limitations OFF

Thrust loss calculation : ON V (--1 V (--1 E (40 E (40 M--- (0/1 D- (144) D---1-1

#	Inruster	x [m]	Y [m]	F+ [tt]	F- [tt]	Max [%]	Pe [KW] Rudder	
1	TUNNEL	20.7	0.0	6.0	-6.0	100	390	
2	PROP_AS	-26.0	-3.3	33.9	-23.8	100	1920 BECKER	
3	PROP_AS	-26.0	3.3	33.9	-23.8	100	1920 BECKER	



Case number Case description

: All Thrusters

T1-T3

: R1-R2

Significant wave height: IMCA (North Sea) Mean zero up-crossing period: IMCA (North Sea)

Rotating wind induced current: 0.000*Uwi knots