<table>
<thead>
<tr>
<th>Vessel Characteristics</th>
<th>Length, Overall</th>
<th>Beam</th>
<th>Depth</th>
<th>Maximum Draft</th>
<th>Minimum Height</th>
<th>Freeboard</th>
<th>Displacement</th>
<th>Deadweight</th>
<th>Clear Deck Space</th>
<th>Clear Deck Area</th>
<th>Deck Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>194.3 ft</td>
<td>49 ft</td>
<td>20 ft</td>
<td>16.3 ft</td>
<td>77.8 ft</td>
<td>3.7 ft</td>
<td>2,840 lt</td>
<td>1,310 lt</td>
<td>90 x 41 ft</td>
<td>3,660 ft²</td>
<td>1,540 lb/ft²</td>
</tr>
<tr>
<td></td>
<td>59.3 m</td>
<td>15 m</td>
<td>6.1 m</td>
<td>5 m</td>
<td>23.7 m</td>
<td>1.1 m</td>
<td>2,880 mt</td>
<td>1,330 mt</td>
<td>27.4 x 12.4 m</td>
<td>340 m²</td>
<td>7.5 t/m²</td>
</tr>
</tbody>
</table>

Class Notations:
ABS: +A1, (E), Towing Vessel, OSV, FFV-1, +AMS, +DPS-1
### Deck Cargo: 490 ft 500 t
### Fuel Oil: 131,000 gal 500 m³
### Potable Water: 22,600 gal 85.6 m³
### Fresh Water: 72,600 gal 270 m³
### Drill/Ballast Water: 106,000 gal 400 m³
### Bulk Tanks (4 tanks): 6,600 ft³ 190 m³
### Liquid Mud (21 lbs/gal): 2,380 bbl 380 m³
### Oil Dispersant: 3,520 gal 13.3 m³
### Fire Fighting Foam: 3,520 gal 13.3 m³

### Main Engines (2):
- **CAT 3516B-HD**
- **Total HP:** 5,150

### Propellers (2):
- **KH680 4 Blade CPP**

### Kort Nozzles:
- **2**

### Primary Generators (4):
- **350 kw**
- **410 v**
- **50 hz**
- **Driven by:** CAT C18

### Emergency Generators (1):
- **65 kw**
- **410 v**
- **50 hz**
- **Driven by:** CAT C4.4

### Bow Thruster (2):
- **Kawasaki KT-52B3 CPP**
- **Driven by:** 395kW Electric Motor

### Total Thrust:
- **13.2 st**
- **12 mt**

### Winch:
- **Plimsoll (6m/min)**

### Model:
- **Electro-Hydraulic w/200t Brake**

### Line Pull:
- **150 mt**

### Tow Wire:
- **1000 m of 56 mm**

### Work Wire:
- **1000 m of 56 mm**

### Pennant Reels (1):
- **1000 m of 56 mm**

### Shark Jaw:
- **Plimsoll 200 MT KARM FORK**

### Tow Pins:
- **Plimsoll 200 MT (1 set)**

### Stern Roller:
- **4.4m x 1.6m; 200 mt SWL**

### Anchors (2):
- **2891 lbs HHP STOCKLESS**

### Anchor Chain:
- **220 m of 36 mm chain per side**

### Capstans (2):
- **5 t Plimsoll (15min)**

### Tugger (2):
- **10 t Plimsoll (15min)**

### Radar(s):
- **2**

### Depth Sounder:
- **1**

### Gyro Compass:
- **2**

### Doppler Log:
- **1**

### Radio:
- **2 x VHF; 1 x SSB**

### Sat Com:
- **1 x Inmarsat-C**

### No of Berths:
- **42**

### 1-man cabins:
- **4**

### 2-man cabins:
- **3**

### 4-man cabins:
- **8**

### Certified to Carry:
- **42**

### Galley seating:
- **30**

### Hospital:
- **Yes**

### Firefighting:
- **FiFi-1**

### Dynamic Positioning:
- **DP-1 CLASSED**

### Ref. Systems:
- **1 x MRU; 2 x DGPS**

### Water Maker:
- **5T/Day**

### Mud Circulation System:
- **Yes**

### Rescue Boat:
- **6 man SOLAS Approved**

### Flag:
- **VANUATU**

### IMO No.:
- **9578464**

### Year Built:
- **2010**

### Builder:
- **FUJIAN SOUTHEAST SHIPYARD**

### Call Sign:
- **YJQH2**

### Tonnage (ITC):
- **1678 GT**
- **503 NT**

**NOTICE:** The data contained herein is provided for convenience of reference to allow users to determine the suitability of the Company’s equipment. The data may vary from the current condition of equipment which can only be determined by physical inspection. Company has exercised due diligence to insure that the data contained herein is reasonably accurate. However, Company does not warrant the accuracy or completeness of the data. In no event shall Company be liable for any damages whatsoever arising out of the use or inability to use the data contained herein.
NOTICE: The data contained herein is provided for convenience of reference to allow users to determine the suitability of the Company’s equipment. The data may vary from the current condition of equipment which can only be determined by physical inspection. Company has exercised due diligence to insure that the data contained herein is reasonably accurate. However, Company does not warrant the accuracy or completeness of the data. In no event shall Company be liable for any damages whatsoever arising out of the use or inability to use the data contained herein.
### Tank Table

<table>
<thead>
<tr>
<th>Tank</th>
<th>Contents</th>
<th>Volume m³</th>
<th>Base Oil</th>
<th>Fuel Oil</th>
<th>Dry Bulk</th>
<th>DW/WB</th>
<th>Potable Water</th>
<th>Fresh Water</th>
<th>Brine</th>
<th>Liquid Mud</th>
<th>Methanol</th>
<th>Lube Oil</th>
<th>Foam</th>
<th>Oil Disp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No 1 Tank (C)</td>
<td>DW/WB</td>
<td>137.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Tank DB (P)</td>
<td>DW/WB</td>
<td>58.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Tank DB (S)</td>
<td>DW/WB</td>
<td>56.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 Tank DB (P)</td>
<td>DW/WB</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 Tank DB (S)</td>
<td>DW/WB</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Tank (P)</td>
<td>DW/WB</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Tank (S)</td>
<td>DW/WB</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 1 Tank (C)</td>
<td>FW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Wing (P)</td>
<td>Ships FW</td>
<td>42.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Wing (S)</td>
<td>Ships FW</td>
<td>42.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 Tank DB (P)</td>
<td>FW</td>
<td>18.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 Tank DB (S)</td>
<td>FW</td>
<td>18.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Wing (P)</td>
<td>FW</td>
<td>40.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Wing (S)</td>
<td>FW</td>
<td>40.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 5 Wing (P)</td>
<td>FW</td>
<td>47.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 5 Wing (S)</td>
<td>FW</td>
<td>49.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day Tank (P)</td>
<td>FO</td>
<td>15.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day Tank (S)</td>
<td>FO</td>
<td>15.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 1 Wing (P)</td>
<td>FO</td>
<td>33.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 1 Wing (S)</td>
<td>FO</td>
<td>36.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 DB Tk (P)</td>
<td>FO</td>
<td>66.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 DB Tk (S)</td>
<td>FO</td>
<td>66.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 DB Tk (P)</td>
<td>FO</td>
<td>33.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 3 DB Tk (S)</td>
<td>FO</td>
<td>33.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Wing (P)</td>
<td>FO</td>
<td>119.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 4 Wing (S)</td>
<td>FO</td>
<td>119.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cem Tk 1</td>
<td>Dry Bulk</td>
<td>46.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cem Tk 2</td>
<td>Dry Bulk</td>
<td>46.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cem Tk 3</td>
<td>Dry Bulk</td>
<td>46.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cem Tk 4</td>
<td>Dry Bulk</td>
<td>46.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 1 Tank (P)</td>
<td>LM</td>
<td>81.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 1 Tank (S)</td>
<td>LM</td>
<td>81.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Tank (P)</td>
<td>LM</td>
<td>108.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No 2 Tank (S)</td>
<td>LM</td>
<td>108.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foam Tank (P)</td>
<td>Foam</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detergent Tk (S)</td>
<td>Dispersant</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lube Oil (S)</td>
<td>LO</td>
<td>6.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Volume [m³]</strong></td>
<td></td>
<td>0.0</td>
<td>539.9</td>
<td>186.9</td>
<td>396.4</td>
<td>85.7</td>
<td>271.6</td>
<td>0.0</td>
<td>380.2</td>
<td>0.0</td>
<td>6.4</td>
<td>13.3</td>
<td>13.3</td>
<td></td>
</tr>
</tbody>
</table>

*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.

NOTICE: The data contained herein is provided for convenience of reference to allow users to determine the suitability of the Company’s equipment. The data may vary from the current condition of equipment which can only be determined by physical inspection. Company has exercised due diligence to insure that the data contained herein is reasonably accurate. However, Company does not warrant the accuracy or completeness of the data. In no event shall Company be liable for any damages whatsoever arising out of the use or inability to use the data contained herein.
DP Capability Plot

FUJIAN DN59M-83

Input file reference: 59372_B.scp
Last modified: 2011-05-30 12.43 (v. 2.8.0)

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: 13.1 m (= 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)
Wave-drift load coefficients: Database (Scaled by Breadth/Length)

Tidal current direction offset: 0.0 deg
Wave direction offset: 0.0 deg
Wave spectrum type: JONSWAP (gamma = 3.30)
Wind spectrum type: NPD
Current - wave-drift interaction: OFF
Load dynamics allowance: 1.0 * STD of thrust demand
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/m³
Density of air: 1.226 kg/m³ (15 °C)

Power limitations: OFF
Thrust loss calculation: ON

# Thruster  X [m]  Y [m]  F+ [tf]  F- [tf]  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

VARIABLE WIND AND WAVES
Limiting 1 minute mean wind speed in knots at 10 m above sea level

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

NOTICE: The data contained herein is provided for convenience of reference to allow users to determine the suitability of the Company’s equipment. The data may vary from the current condition of equipment which can only be determined by physical inspection. Company has exercised due diligence to insure that the data contained herein is reasonably accurate. However, Company does not warrant the accuracy or completeness of the data. In no event shall Company be liable for any damages whatsoever arising out of the use or inability to use the data contained herein.