Heavy Lift and Pipe Laying Vessel

Sapura 3000

Main Particulars

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Overall Length :</td>
<td>151.2 m</td>
</tr>
<tr>
<td>Length Between Perpendiculars :</td>
<td>144.2 m</td>
</tr>
<tr>
<td>Breadth Molded :</td>
<td>37.8 m</td>
</tr>
<tr>
<td>Depth to Wire Deck, Molded :</td>
<td>15.0 m</td>
</tr>
<tr>
<td>Depth to Freeboard Deck, Molded :</td>
<td>9.1 m</td>
</tr>
<tr>
<td>Draft, Maximum Loaded :</td>
<td>6.5 m</td>
</tr>
<tr>
<td>Classification :</td>
<td>A1 (Q) AMS DPS-2</td>
</tr>
<tr>
<td>Flag :</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Helideck : Suitable for Sikorsky S92</td>
<td></td>
</tr>
<tr>
<td>Accommodation Capacity :</td>
<td>320</td>
</tr>
<tr>
<td>Transit Speed :</td>
<td>8 - 9 knots</td>
</tr>
<tr>
<td>Deck Load Capacity, Work Deck :</td>
<td>10 MT/sq.m</td>
</tr>
<tr>
<td>Free Deck Area :</td>
<td>2000 sq m</td>
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Accommodation

All cabins have integrated toilet facilities equipped with vacuum system.

10 x 1 - person cabin
45 x 2 - person cabins
55 x 4 - person cabins

Fully air-conditioned accommodation equipped with offices for clients, recreation rooms, gymnasium, video rooms, helicopter arrival/departure room, prayer room etc.

Power Generation

Main Diesel Generators : 6 x 4000 kW
Emergency Diesel Generators : 1 x 1000 kW

Propulsion & Dynamic Positioning

Non-retractable Azimuth Thrusters (Stern) : 2 x 2400 kW
Retractable Azimuth Thrusters : 5 x 2400 kW
Kongsberg SEP22 CLASS II system

Auxiliary Equipment

- Water makers : 2 x 60T/day capacity
- Sewage treatment system Suitable for full complement
- Oily water separator

Safety Equipment

- Lifeboat : 4 x 85 persons capacity
- Life raft : 2 x 150 persons capacity
- Sprinkler system in accommodation and machinery spaces
- Water mist system in engine room
- CO2 fire fighting system
- Foam system for heli-deck

Telecommunication Equipment

VSAT (Dual Antenna) with 1 Mbps Data Link
GMSS ST2
IMARSAT Fleet

Heavy Lift Capability

Heavy Lift Mast Crane
Capacity, Main Hoist (25° over stem) : 3000 T at 27 m radius
Capacity, Main Hoist Revolving : 2200 T at 31 m radius
Capacity, Auxiliary Hoist : 800 T at 59 m radius
Capacity, Whip Hoist : 200 T at 91 m radius

- Whip hoist is suitable for 2000 m of hook travel in single part reeving
- Whip hoist and auxiliary hoist can be reeved to achieve subsea lifting capability of approx 300 T for 1000 m hook travel or approx. 700 T for 500 m of hook travel

Anti-heeling System For Crane Operations

- Dedicated Pumps : 1 x 1500 cum/hr
- 3 x 1200 cum/hr

Subsea Structure Installation

- Using main crane
- Using A&R winch via A-frame over port or starboard side

Pipe Lay Capability

Pipe Size : 6" to 60" diameter plus concrete coating
No. of Work Stations :
- 9 stations in total
- 6 off welding stations + 1 off NDT/repair station + 1 off station for corrosion coating/blasting + 1 off field joint coating

Center-Lay Firing Line S-Lay System Consisting of:

- Pipe handling cranes on the work deck
- Pipe storage on work deck
- Endo conveyor line to the beveling station on work deck
- Beveling station with transverse conveyor and transfer vehicle on work deck
- Pipe elevator loader and elevator for transport of the pipe to the freeboard deck through pipe loading hatch
- Endo conveyor line for transport to the ready rack transverse chain conveyor on the freeboard deck
- Transverse chain conveyor to transfer vehicles on freeboard deck
- Line up station with seam rollers on freeboard deck
- Pipe support rollers in firing line on freeboard deck
- 3 of tensioners and A&R winch
- Movable work station in firing line
- Stinger & stinger handling system
- Transfer vehicle for transport of rejected joints to the kick out endo conveyor line on freeboard deck and subsequent removal through kick out hatch by pipe handling crane (starboard)

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Tensioners : 3 x 80 MT

A&R Winch

Line Pull, Max : 360 MT Wire capacity
3000 m of 109 mm wire

Pipe Davits : 5 x 50 MT capacity (Can be installed on port or starboard side)

Stinger

Total Length : 87° deg
Equipped with load cells, underwater cameras.
Stinger handling tackle capable of adjustment of the stinger from survival condition to the minimum over bend radius. Handling system is equipped with backup tackle
Stinger can be installed/removed using main crane
1 each on port side & 1 each on starboard side
Capacity - 40 ST at 29 m radius
Maximum outreach of 45m
Both cranes certified for man riding Equipped with anti-collision system

Optional Operations

J-Lay System

- System is installed on starboard side when required
- Designed for rapid installation and removal with main crane
- Using 360 MT A&R winch
- Pipe size up to 20" diameter
- Double joint installation
- Installation of SCRAs and flowlines

- Units of Work Class Remotely Operated Vehicles (WRDVs)
- Vehicle Technical Specification (Depth Rating 3000m)
- Hydraulic System (1 x 150 Shaft HP Electric Motor)
- Manipulators (5-function Schilling Riggmaster)
- Tether Management System (TMS)

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