CASE REPORT OFFSHORE

Oleg Stashnov - Heavy Lift Vessel

Contractor: IHC Merwede
Owner: Seaway Heavy Lifting

OUTSIDE 35°C
HUMIDITY 90%

22°C Inside

PROVIDED BY HEINEN & HOPMAN

HEATING  VENTILATION  AIR CONDITIONING  REFRIGERATION
DESCRIPTION OF THE PROJECT

This is a state-of-the-art crane vessel available to all of SHL clients worldwide. A unique feature of this vessel is the innovative hull shape, which enables her to achieve a transit speed of 14 knots. Together with exceptional working characteristics for a monohull design, this system results in extraordinary efficiency. Lift heights of 100 m for the 5,000mt main hook and 132m for the 800mt auxiliary hook enable the vessel to undertake an impressive range of projects, from dual hook upending of large jackets to heavy deck installations. The installed DP3 system also enables the vessel to be deployed in the installation of large and heavy subsea structures, TLP/Spar foundations and topsides.

KEY FEATURES

- Length: 183.0 m
- Breadth: 47.0 m
- Draught: 13.84 m
- Weight: 48000t
- Design Life: 25 years
- Maximum ambient Design Temperature: 44°C / 90%RH
- Minimum ambient Design Temperature: -15°C
- Fully revolving crane: 5000t
- POB max. 395

CHALLENGES

Being a well-known and experienced offshore HVAC supplier, Heinen & Hopman was previously already selected to take part in the FEED and basic design in partnership with the design company and ship-owner. The purpose of the project was to achieve the highest focus on:

1. Quality
2. Functionality
3. Comfort

SOLUTIONS

Heinen & Hopman participated in the FEED and EPC of the HVAC systems for the entire vessel, including the crane. For the accommodation we installed a high-pressure single-duct air-conditioning systems with reheating capabilities. For the technical spaces we installed a mechanical ventilation system and local cooling systems. In the crane cooling systems and mechanical ventilation systems for all technical spaces were needed.
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**SCOPE OF WORK**
- Consultancy
- Design & Engineering
- Project management
- Custom built production
- Installation & Implementation
- Supervision
- Commissioning
- Service & Maintenance

**SCOPE OF SUPPLY**

**Accommodation, Hull & Crane**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Air intake systems for HVAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Handling Units</td>
<td>7x</td>
<td>Total air volume approx. 110,000 m³/h</td>
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<tr>
<td>Fan coil units</td>
<td>9x</td>
<td></td>
</tr>
<tr>
<td>Refrigeration equipment</td>
<td>3x</td>
<td>Total cooling capacity approx. 3,500 kW</td>
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<tr>
<td>Centrifugal fans</td>
<td></td>
<td></td>
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<tr>
<td>Axial fans</td>
<td>80x</td>
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<td>Air filters</td>
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<tr>
<td>Duct heating &amp; cooling Coils</td>
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<tr>
<td>Dampers</td>
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<tr>
<td>Sound attenuators</td>
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<tr>
<td>Supply &amp; extract ornaments</td>
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<tr>
<td>Heaters</td>
<td></td>
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<tr>
<td>Self-contained units</td>
<td>1x</td>
<td>Air-cooled</td>
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<tr>
<td>Package units</td>
<td>13x</td>
<td></td>
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<tr>
<td>HVAC control systems</td>
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<tr>
<td>HVAC instrumentation</td>
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Heinen & Hopman encourages a more sustainable world. By providing eco-friendly solutions and services we offer our clients the option of reducing energy consumption and thus CO2 emissions. Visit greenmanifest.info for more information.