All change in the heavy lift market

After a difficult period, the heavy lift industry is making changes and diversifying. PES finds out how one such company is meeting the challenge head on. All the know-how and expertise is already in place for what looks like the beginning of a heavy lift revival.

HANSA HEAVY LIFT, which specialises in heavy lift, super heavy lift and project cargo, is stepping up its involvement in the offshore industry with a strong focus on transportation and installation (T&I) in the subsea oil and gas market, as well as the offshore wind farm sector.

Wholly owned by the investment company Oaktree, the shipping line manages a fleet of 17 vessels and operates a dynamic positioning class 3 (DP3) construction vessel, which is ideally suited for offshore installation projects.

With the heavy lift industry in a state of flux and still recovering from a period of overcapacity, HANSA HEAVY LIFT sees much potential for the future in the offshore T&I market.

The carrier notes there was a steep drop in investment in the project and heavy lift market in 2016, and very little activity going forward for new projects.

As a result, many players in the heavy lift industry are changing their tactic and seeking out new opportunities.

“We do see some improvements becoming visible toward the end of 2017 and the beginning of 2018 for the project and heavy lift market,” said Max Harmstorf, Director Business Development, HANSA HEAVY LIFT.

“Though, many of these projects are still subject to finance or final approval, and weak commodity prices mean some investors and decision makers are still feeling cautious and uncertain, so we will have to wait and see.”

However, HANSA HEAVY LIFT believes there is more certainty within the decommissioning market, which is poised to grow over the next few years, as well as the market for renewables.

The offshore windfarm sector remains the heavy lift specialist’s biggest market. Infrastructure developments, including floating units, are also important drivers of the demand for heavy lift vessels, in various regions globally.

“We believe the demand for highly specialised heavy-lift vessels like our P2-1400 class will grow,” added Harmstorf. “Also, we think that offshore construction vessels equipped with a dynamic positioning system are the ideal vessel type to complete our fleet, in response to ongoing market trends.”

Harmstorf added that company is able to meet the changing demands thanks to the carrier’s young fleet – one of the youngest in the market - and in-house team of engineers and naval architects, without having to resort to third parties.

“This helps increase efficiencies while keeping costs down, helping us outgrow the market as it separates us a little from commodity transportation. With this combination, we can offer the best customised solutions to optimised costs for our customers in this highly valuable market,” he said.
“This will underpin our overall strategy for further growth in the offshore market as we look to overcome the ongoing market challenges and take advantage of the current opportunities.”

One recent installation project was a BioWave energy unit HANS HEAVY LIFT both delivered and installed, to help with the construction of a new wave power plant in Australia.

The company delivered the BioPower Systems (BPS) pilot unit and retrieval rig weighing a total of 698 metric tonnes, picking up the components in Vũng Tàu, Vietnam, and transporting them to Portland, Australia.

Once at the Port of Portland, the retrieval rig was discharged from HHL Fremantle to the water, and the vessel proceeded to the site off Port Fairy to carry out installation work for the wave energy plant.

The ship’s two cranes, capable of lifting a combined 1,400 metric tonnes, were used to lower the unit onto the seabed where it will convert wave energy into electricity.

Ensuring a safe and accurate placing of the unit, divers monitors the installation process.

“This was a very delicate operation which required exceptional seamanship and engineering expertise,” explained Jens Grever, Head of Engineering Asia Pacific, HANS HEAVY LIFT.

“To protect the Australian environment, a rigorous process of pollution control was carried out, to ensure all equipment, including shackles, grommets, crane hooks/
blocks, and heave-compensators were treated with environmentally safe lubrication.”

The BioWave device, which was inspired by marine plants, is a 26m tall oscillating structure designed to sway back-and-forth beneath the ocean swell through an arc of up to 40 degrees.

This oscillating motion activates opposing hydraulic cylinders, pumping hydraulic fluid to a hydraulic motor, which spins a 250kW generator to produce electricity.

The engineers used remote controlled hydraulic shackles for underwater unhooking as well as heave-compensators to reduce dynamic forces on the cranes.

“The positioning of the ship was crucial to ensure accurate heading alignment. The unit had to be lowered through the splash zone at an angle of 15 degrees to reduce dynamic slamming effects before lowering it to the seabed,” added Jens Grever.

“Our in-house engineering expertise and state-of-the-art equipment mean we are ideally placed to support offshore customers with this type of sophisticated installation.”

HANSA HEAVY LIFT’s integrated project management and in-house engineering teams work very closely together with their clients to find the best solution, every time.

All projects, irrespective of location, are handled with the highest degree of safety, environmental protection and quality management, said Harmstorf.

“As a result, we are one of only nine shipping companies in the world to be recognised with a DNV GL Excellence - Five Stars Award for the high quality of our management systems.

“This gives our customers the confidence for the quality of safe marine operations that we deliver.”

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