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ShipBuilding

i n d u s t r y

AEOLUS

MILESTONE FOR GERMAN YARDS

Top in Complex Specials?

SEA EUROPE'S GOVERT HAMERS

De Hoop's FSIV 2000

VERSATILE SPEED KEEPER

DSR

DSR CORP
DSR WIRE CORP



Image courtesy of TTS NMF

TTS NMF GIVE VAN OORD'S AEOLUS A LIFT

Full Circle

TTS NMF HAS DELIVERED A HEAVY-LIFT OFFSHORE CRANE (HLOC) FOR VAN OORD'S AEOLUS OFFSHORE wind turbine installation vessel. The leg encircling crane (LEC) provides sufficient safe lifting capacity for Aeolus to fulfill its role as offshore wind farms are located increasingly further away from shore in deeper waters and consist of ever larger components.

Sales Manager Offshore at TTS NMF Marc-Laurence Mühlenbeck says that his company is committed to a renewable future. To that end they are only too pleased to be involved in a project they feel will help make this reality via the development of the offshore wind energy sector.

Customised Solutions

"We welcome the chance to create reliable, safe and innovative solutions for this industry," he says. "The changing situation within offshore wind – greater distances and larger parts – presents a number of logistical challenges. Amongst these is the need for specialised vessels and with these comes the need for HLOCs."

He says a market analysis of projects currently underway

or planned suggests that an offshore wind turbine installation vessel requires a HLOC with a capacity to lift at least 800t. TTS NMF delivered just such a crane last year.

Van Oord's Aeolus offshore wind vessel required a LEC type crane with a lifting capacity above this, at 900t @ 30m outreach. Even at full outreach of 80m, the crane can lift 240t. TTS NMF delivered the crane with high speed capability for hoisting, luffing and slewing in each load step. Like all TTS NMF cranes, this one has an unlimited slewing range of 360° and is outfitted with a roller slewing bearing. Read more about Aeolus on pg 14.

Easy-to-Maintain

To facilitate simple maintenance, TTS NMF's design ensures simple access to the main hoisting components for service procedures and repairs. And, to extend the operational lifetime of the crane, there are larger drums with fewer layers, resulting in thicker, shorter ropes. A protection cover has been provided to shelter winches from the harsh environmental

conditions that are going to be an inevitable feature of Aeolus' operations. In order to increase operational efficiency the crane is additionally equipped with a remote maintenance system.

Clearing the Leg

The wire luffed crane is equipped with a 105m long jib designed as a lattice structure. Due to the large boom size TTS NMF have integrated a park assistance system that helps the operator in finding the resting position of the boom.

TTS NMF are applying these design principles to other LEC projects, for both columnar and triangular lattice structured jack-up legs and crane capacities up to 1,600t SWL.

Outstanding CV

Mr Mühlenbeck says the Hamburg company has the CV necessary for such a project. "Long-standing experience, a thorough

understanding of the technical issues involved and detailed knowledge gained through the execution of 29 SWL 400-1,000t heavy-lift cranes makes us a reliable partner in the heavy cargo lifting sectors."

He says that safety is always a priority in the company's crane designs. The Aeolus crane features an anti-collision system developed in-house by TTS NMF, which helps to avoid collisions between the crane and fixed structures on board the vessel. The fixed structure coordinates are stored prior to operations, and the booms rotation angle and height is then measured in relation to these structures. Further safety control comes courtesy of a memory storage position and a load swing control.

Flexible Imagination

TTS NMF has recently secured a further contract for the delivery of a 200t

LEC, to Keppel Singmarine in Singapore, as well as for a 50t pedestal offshore crane for the yard of Nakilat-Keppel Offshore & Marine in Qatar. The LEC is based on the same principles as the Aeolus crane and will be capable of encircling a 4m diameter columnar jack-up leg.

Mr Mühlenbeck said the contracts were the result of the company's approach. "TTS NMF recognises the importance of flexibility and imagination in today's changing technical and economic environment. We're looking forward to delivering more high-quality cranes that will fulfill the needs of the offshore wind and oil & gas industries."

[i. www.ttsgroup.com](http://www.ttsgroup.com)

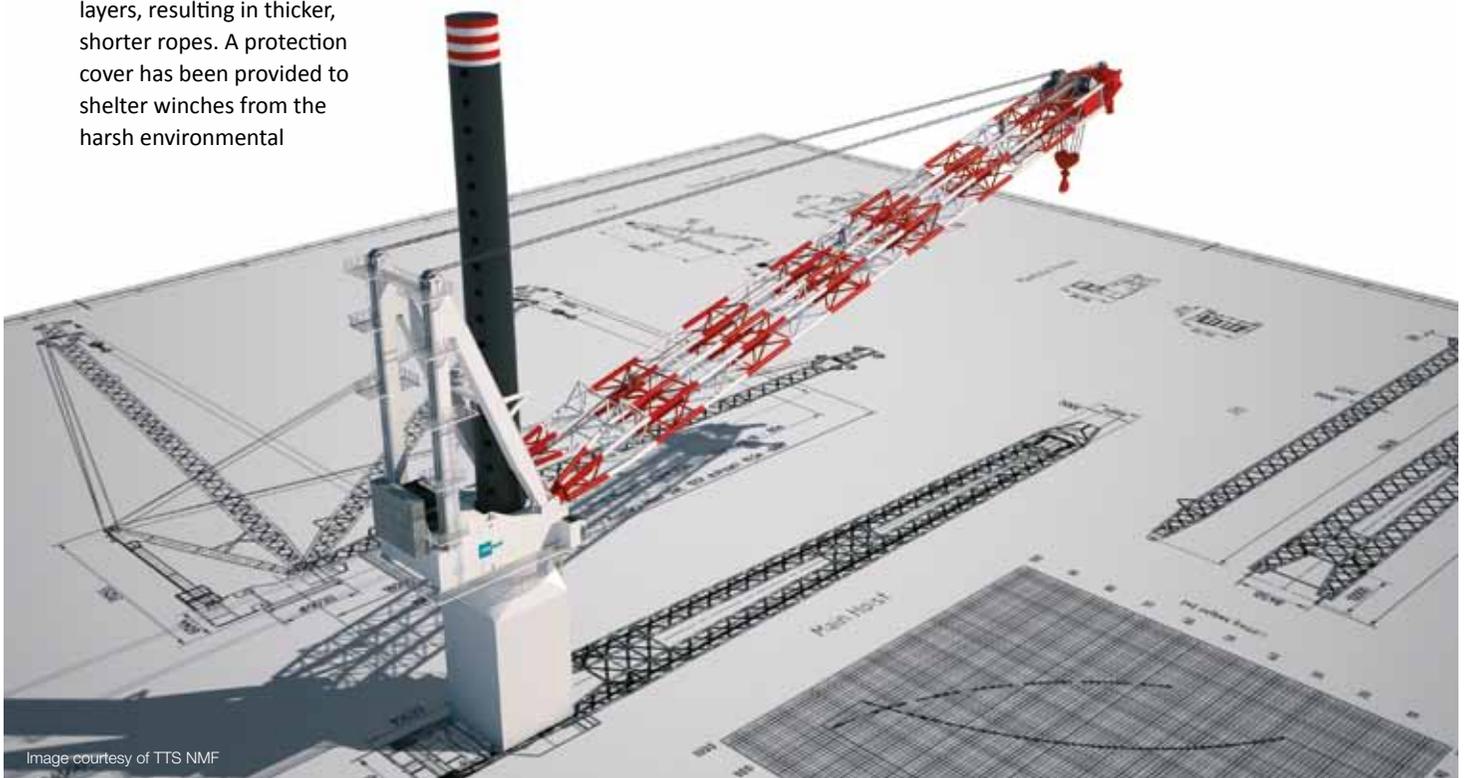


Image courtesy of TTS NMF