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Leading liftboat operator enters offshore wind support market



All Coast has undertaken the development of a new liftboat, which will be the first Jones Act Compliant vessel built for the purpose of U.S. wind-farm installation and support activities (WTIV). (Courtesy: A. K. Suda)

All Coast, LLC, the most experienced company in liftboat management and operations in North America, has entered the U.S. Offshore wind-farm market.

All Coast operates the most versatile and largest liftboat fleet in North America. Having won numerous safety awards, its vessels have a reputation of being the most well maintained and safely operated vessels in North America.

Given its success in the offshore oil and gas industry, All Coast has decided to parlay that experience into the support of the offshore wind industry. They have undertaken the development of a new liftboat, which will be the first Jones Act Compliant vessel built for the purpose of U.S. wind-farm installation and support activities (WTIV). The liftboat will be capable of installing the offshore

foundations and wind turbines, as well as providing necessary maintenance in years to come.

All Coast has partnered with Semco, LLC, the Southeast Louisiana-based shipyard. Semco has many years of experience in building liftboats that have been used around the world, including some of the largest liftboats ever built in the U.S. The yard also has the honor of having built the only lift-

boat in the U.S. that has been used for offshore wind farm installation and support. As a yard with the reputation of being on the forefront of large liftboat construction, Semco has been chosen to deliver the vessel to be used in the offshore wind farm jobs, on time, and within budget.

“We have never found a challenging project we didn’t like. Semco has built its reputation on leading the way,” said Semco’s Allen Moore.

The foundation of a good vessel is great design and engineering, which is why All Coast has also partnered with A.K. Suda, Inc., Naval Architects and Marine Engineers, to design this liftboat. Suda is one of the most accomplished designers of liftboats in the world. Suda has designed many first-of-a-kind vessels including the first USCG approved liftboat, the first truss leg liftboat, and the three largest liftboats in the world, to name a few.

“We are honored, though not surprised, to have the best in the business ask us to join the team,” said A.K. Suda’s principal, Ajay Suda. “Our designs are by far the most efficient and cost effective.”

“The vessel has to be special-purpose, and efficiently designed, built, and operated to have any success in this business,” said John Powers of All Coast. “Barges on legs don’t make WTIVs.”

The noted liftboat is based on the Suda model JG6000P. Its design has been optimized by Suda to work within the restrictions presented at different staging ports in the U.S.

“Siemens Gamesa is confident in the development of offshore wind, and the U.S. is a focus market for us as we expand outside of developed markets in Europe. A U.S.-flagged installation and maintenance vessel helps to establish a sustainable offshore industry in our country,” said Jason Folsom, head of sales, Offshore Americas, Siemens Gamesa Renewable Energy. ↘

Source: A.K. Suda

For more information,
go to www.aksuda.com

Altitec and Nordex team up for South African end of warranty inspections

Blade inspection and maintenance specialist Altitec has completed end of warranty (EOW) blade inspections at the Amakhala Wind Farm in South African’s Eastern Cape. The inspections were undertaken in partnership with Nordex Energy South Africa (RF) (PTY) Ltd.

Under the terms of the contract, Altitec carried out EOW inspections on 54 turbines, each with a height of 91 meters. Inspection work began on the first turbine blades in December 2016 and was completed this summer.

“We know turbine blades that are regularly inspected and maintained to a high standard remain cost-efficient,” said Anne Henschel, managing director of Nordex Energy South Africa. “By partnering with Altitec to deliver MWS services, our clients can be assured that their turbines will perform at optimal levels for as long as possible, reducing costs and improving overall wind farm performance in the process.”

EOW inspections and maintenance are essential to the successful long-term operation and financial returns of wind farms such as that at Amakhala. With the end of the warranty period, responsibility for assessing turbines moves from the original manufacturer to the project owner. By carrying out maintenance at this point, Nordex is helping to avoid any project downtime or financial losses later in the wind farm’s life cycle.

As a trusted and experienced international partner, Altitec employed its considerable experience in the field at the Amakhala site, helping the manufacturer to fulfill its warranty obligations.

Altitec also benefits from the range of technological equipment and expertise at its disposal. Use of the Actsafe powered rope ascender, for instance, boosts the efficiency of Altitec’s technicians, allowing them to carry out up to 35 percent more work when compared with traditional rope access techniques.

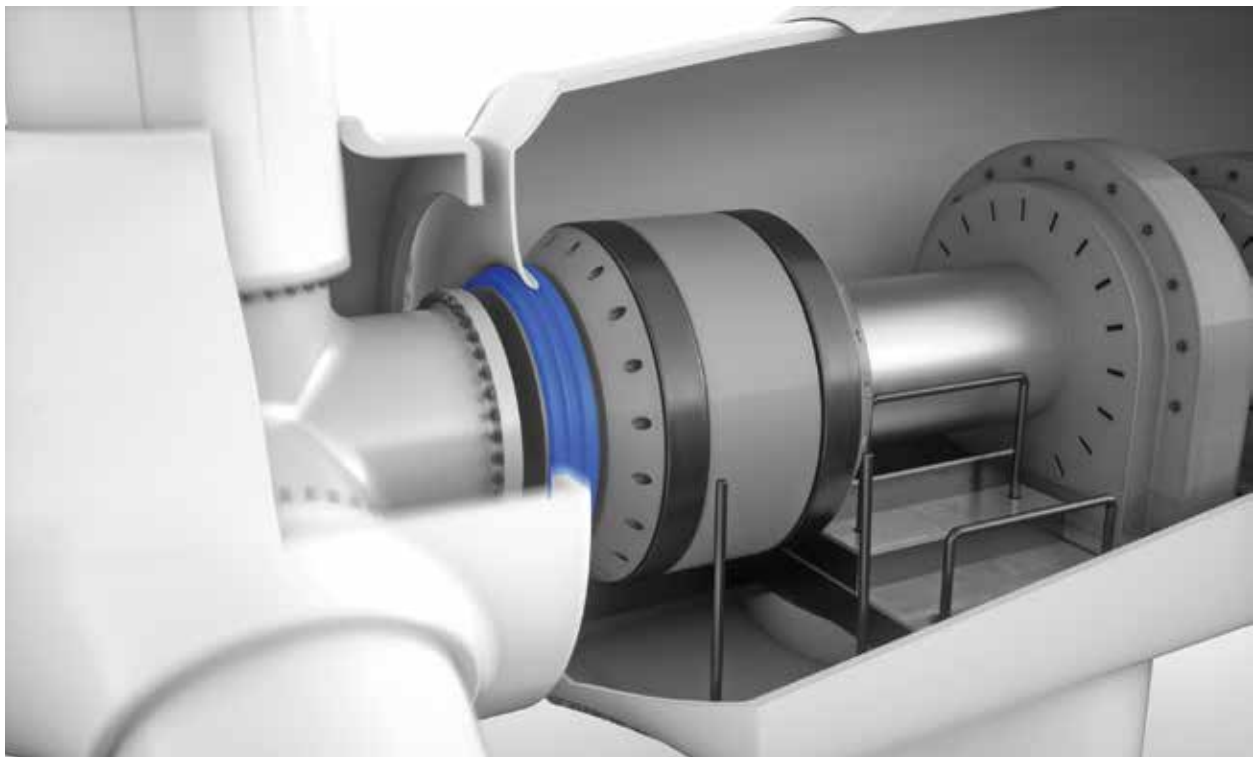
“EOW inspections are not only necessary, but a great opportunity for turbine manufacturers to add value and optimize performance into the future. We were delighted to continue developing our global footprint by carrying out this work at Amakhala on behalf of Nordex,” said Tom Dyffort, managing director, Altitec Group.

“Carrying out blade inspections and maintenance on 54 turbines is a significant undertaking, but the skills and experience of our technicians allowed us to complete this work as quickly as possible, while adhering to the high standards Altitec’s customers have come to expect.” ↘

Source: Altitec Group

For more information,
go to www.altitec.co.uk

New radial shaft seal ring designed to battle shaft runout



Qualified even for higher loads: The new Merkel Radiamatic sealing rings are always secure against the shaft, even in the event of a strong shaft impact. (Courtesy: Freudenberg Sealing Technologies)

The global expansion of wind-power facilities is proceeding unabated. Based on figures from Global Wind Energy Council, nearly 487 GW of output from wind energy were in place at the end of 2016. At the start of the decade, the installed output wasn't even half that amount. It is not just the number of facilities that has risen sharply — output has climbed as well, especially for wind turbines offshore. But the longer rotor blades they require lead to higher loads on the main bearing and the shaft. The results are more extensive deformation of these machine elements and greater shaft runout, also known as eccentricity.

That's why Freudenberg Sealing Technologies is developing new seals for current and future wind-power facilities. The new generation of radial shaft seal rings has the capacity to follow relatively severe deformations

of main bearings and shafts, basically by providing stronger compensating movements. They have also been especially adapted to grease-lubricated systems and thus clear the way for wind turbine manufacturers to use new designs, such as externally rotating main bearings.

The most important task of the Merkel Radiamatic radial shaft seal ring is to seal the main bearing of wind turbines. This means holding the lubricant within the main bearing and keeping dirt particles and moisture out of the interior of the machine elements needing protection. The tried-and-tested Merkel Radiamatic seals in use today consist of a fabric-reinforced carrier, a diaphragm, and a wedge-shaped seal lip. With the help of a worm spring resembling the tension spring of a desk lamp, the seal lip is maintained under tension. This ensures the continued

contact of the seal lip on the shaft.

For the new generation of radial shaft seal rings, Freudenberg Sealing Technologies' engineers have developed an innovative, robustly configured seal lip design. Together with the carrier, a lean, elongated seal lip creates a V-form. A curved steel band strengthens the seal lip and carrier. In this way, the seal lip acts as a pressure spring. It "presses" onto the shaft on its own, without needing to be fixed by a worm spring. Even at relatively strong shaft runout, the seal lip securely abuts the shaft. In this way, it can fulfill its sealing function even at significantly higher loads on the bearing and the shaft. The steel band is also an integral component of the seal. So in the entire system, the new radial shaft seal ring is just one component that simplifies installation.

Another focus of the developers at Freudenberg Sealing Technologies is

the reduction of friction to achieve greater wind-turbine efficiency. The long and narrow shape of the new seal lip leads it to abut the shaft with just the width of a hair, even at two-to-three times the usual shaft runout today. Very little friction occurs as a result.

It also acts as a wiper for grease, which is the most common lubricant. With every rotation of the main shaft, it conveys the lubricating grease back into the interior, contributing to still more reduction of frictional losses.

“The goal of this development is to bring the tribological system of the shaft, lubricating grease, and seal into harmony,” said Dr. Kristian Müller-Niehuus, development manager at the Lead Center Heavy Industries at Freudenberg Sealing Technologies.

Since the seal lip of the new radial shaft seal ring from Freudenberg Sealing Technologies lies against the shaft on its own, it is also possible to vary the seal’s direction of force at will. Its spring action can act outwardly as well as inwardly. That gives the developers of wind-power facilities and their components new design freedom.

“We had extraordinarily good results in the test bay,” Müller-Niehuus said. “That’s why we are taking the next step and testing the new generation of radial shaft seal rings with our customers, the manufacturers of wind-power facilities, and their components.”

With the innovation, which is suited for all bearing and shaft diameters, Freudenberg Sealing Technologies will make reliable, robust sealing concepts possible to meet future requirements in wind power facilities. ↘

Source: Freudenberg Sealing Technologies

For more information, go to www.fst.com

VeriSafe™ designed to minimize electrical hazards

Panduit Corp., an industry leader in control panel, wire harness, and heavy-duty cable management solutions for more than 60 years, announced the North American release of its VeriSafe™ — Absence of Voltage Tester. VeriSafe is designed to minimize risk to electrical hazards by verifying the absence of voltage before equipment is accessed, making it easier for qualified electrical workers to determine an electrically safe environment in a fraction of the time compared to hand-held portable test instruments. Before performing de-energized work on electrical equipment, NFPA 70E requires that workers verify equipment is in an electrically safe state. One of the steps in the process of verifying that the equipment is an electrically safe state involves a test for absence of voltage. VeriSafe ensures the entire process of verifying absence of voltage is performed in the proper sequence — every time, every test.

The fail-safe and reliable process performed by VeriSafe tests the tester itself, verifies installation, checks for voltage, verifies installation, and retests the tester; all automatically performed in sequence with no risk of exposure to electrical hazards at the push of a button.

“We understand that our customers are committed to protecting their workers while meeting safety regulations,” said Bob Krisel, vice president of OEM, Panduit. “This new tool allows them to effectively meet their objectives. This highly anticipated new product offering has the capability to transform the way our customers in the manufacturing industries conduct verification testing for industrial enclosures.” ↘

Source: Panduit

For more information, go to www.panduit.com



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