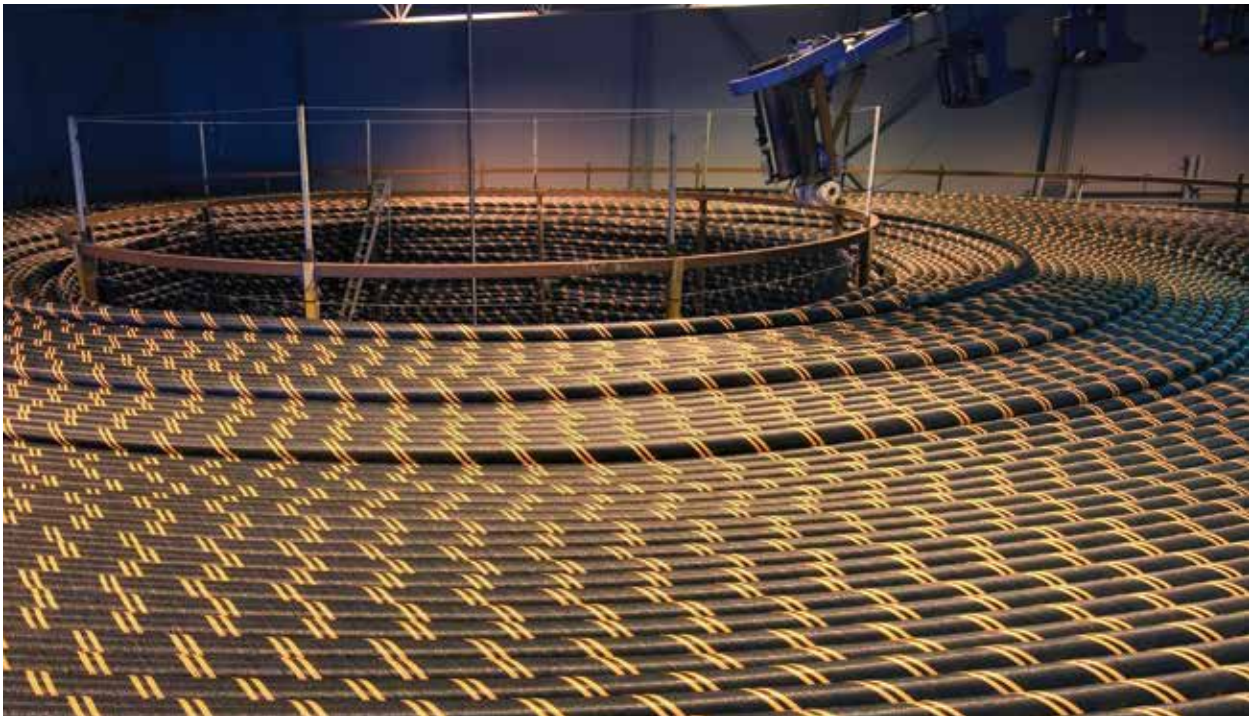
ABB wins $55 million submarine AC power cable contract in the United Kingdom

High-voltage power cables to stretch more than 30 kilometers to connec 400 MW Dudgeon Offshore Wind Farm with UK national grid

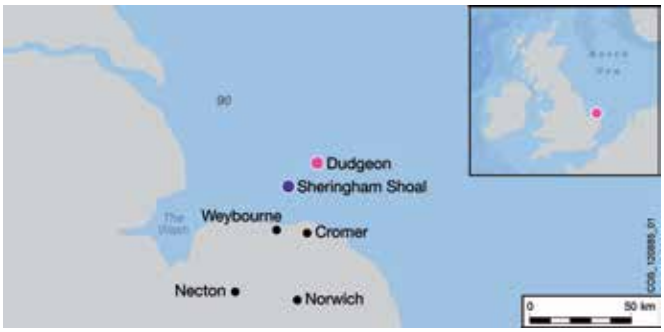


ABB, a leading power and automation technology group, has won an order worth around $55 million to supply a submarine AC (alternating current) power cable system for a new wind farm, located off the coast of Norfolk. The underwater cables will feed the electricity generated by the 400 MW Dudgeon Offshore Wind Farm into the UK national grid. The order was received from Dudgeon Offshore Wind Limited, a company owned by Statoil and Statkraft.

The Dudgeon Offshore Wind Farm will be capable of producing enough electricity to power more than 400,000 UK homes annually. The turbines will be located in waters 18-25 meters deep on a 55-square-kilometer site situated 32 kilometers (km) off the coast of the seaside town of Cromer in north Norfolk. With an installed capacity of about 400 MW, the wind farm will produce enough 'green' energy to displace emissions of carbon dioxide by up to 19 million tonnes over its 25-year lifetime.

Electricity generated by the wind farm will be brought to shore via a seabed cable at Weybourne Hope, some 5 km west of the coastal town of Sheringham. From there, an underground cable will be laid to carry the electricity to Necton, where a purpose-built substation will enable it to be transmitted into the national grid.

Offshore wind is a growing renewable energy resource, with Europe accounting for around 70 percent of new offshore wind generation capacity. Transporting electricity from offshore wind farms to the shore and then integrating it into the grid for supply to consumers are key elements," said Claudio Facchin, Head of ABB's Power Systems division.



"This is a key focus area for ABB as we strive to balance the growing need for electricity while minimizing environmental impact. Our technological strengths, vast portfolio and rich experience in this area position us well to execute this project and we are delighted to have this opportunity."

ABB will design and supply two 132-kilovolt (kV) three-core AC submarine cables, each 42 km in length, running from the wind farm's offshore substation to Weybourne Hope, where they will connect to the onshore cables. The submarine cables will be manufactured at ABB's high-voltage cable factory in Karlskrona, Sweden, and delivery will commence in 2016.

"The submarine export cable connection is a long-lead item and placing this contract represents a major milestone in the development of the Dudgeon project," said Bjørn Ivar Bergemo, Asset Manager of the Dudgeon Offshore Wind Farm. "These cables will be some of the longest offshore cables ordered so far for a UK offshore wind project, and we look forward to working with ABB."

HEADLINES

EEW SPC and Bladt Industries to supply foundations for Cape Wind

The German company EEW Special Pipe Constructions GmbH and the Danish company Bladt

Industries A/S recently signed the contract to supply the foundations for the first offshore wind farm in the United States.

The two companies—both market leaders within their fields of business—have manufactured foundations for offshore wind farms all across Europe. Bladt Industries and EEW SPC have fabricated well over a thousand foundations each, among which 500 foundations were manufactured through collaborative efforts. Many have been for Siemens 3.6 MW turbines.

Upon completion, Cape Wind will have a installed capacity of 468 MW. The monopiles and transition pieces will be manufactured and shipped to Cape Wind's staging port. Production will begin in January 2015. The monopiles will be produced at EEW's facilities in Rostock, Germany and the transition pieces at Bladt Industries' facilities in Aalborg, Denmark.

Report: Global turbine tower market to keep growing

With wind power technology gaining popularity and institutional support globally, the wind turbine towers market is expected to increase from $12.1 billion in 2013 to $19.3 billion by 2020, at a compound annual growth rate (CAGR) of 6.9 percent, according to a report from research and consulting firm GlobalData.

According to the report, China had the largest amount of wind turbine towers installed in 2013, reaching a massive market share of 47.4 percent. This was followed by the U.S., India, and Canada, with respective shares of 7.5, 6.5, and 5.8 percent.

"The growth of the wind turbine towers market is directly related to that of the wind energy industry, which is heavily influenced by favorable government policy, rising environmental concerns, increasing demand for power, and the uncertain supply and prices of energy from conventional sources," GlobalData alternative energy analyst Harshavardhan Reddy Nagatham said.

In fact, the global wind power cumulative capacity is expected to more than double over the forecast period, jumping from 322.5 GW in 2013 to 688 GW by 2020.

However, the lack of sufficient grid infrastructure around the world could impede further wind energy growth in the medium term.

"The existing grid infrastructure is very poor and urgent modifications need to be made in order to accommodate the specific characteristics of wind power," Nagatham said. "Its upgrade also requires a substantial amount of investment in terms of financial resources and time."

The shortage of skilled workforces in the global renewable energy industry is also a major barrier, which could potentially lead to project delays and poor-quality services across the wind sector, according to GlobalData.

Helukabel continues international growth with three new affiliates

Helukabel, one of the world's leading cable manufacturers, has further expanded its global reach by adding local branches in three strategic markets. During 2013 Q3, new affiliates were launched in the United Kingdom and the Middle East, and in the beginning of 2013 Q4, Helukabel Indonesia became the 23rd affiliate to join the global network.

"The addition of local affiliates in the United Kingdom and Indonesia, and the Middle East region will allow our customers in the U.S. and Canada to have a seamless network for supplying cable orders that are bound for these international markets," said Helukabel USA President Markus Dannheim and Alex Kanouni, vice president of sales and marketing of Helukabel Canada, jointly.

Helukabel UK, with central offices located in Liverpool, will be responsible for customers in England, Scotland, Wales and Northern Ireland from an approx. 5000 sq. ft. facility. With its central location and motorway network, Helukabel UK will offer fast service times to industrial manufacturing applications. With over 15 years experience, Helukabel UK cable specialists will be able to offer cable solutions to applications from the most demanding industries.

Helukabel Middle East will cover the United Arab Emirates, Saudi Arabia, Qatar, Oman, Bahrain, Kuwait, Yemen, Egypt, Iraq, Libya, Jordan, Lebanon, Syria, and Pakistan from its UAE base of operations. In Indonesia, Helukabel will provide cable and wire solutions from its facility in the capital city of Jakarta. With 6,000 sq. ft. of warehousing space and additional support from Helukabel Singapore, the diverse manufacturers and customers in this resource-rich, highly-populated country (4th in the world) will benefit from JIT services and support.

Whitmore announces acquisition of Fluid Defense Systems

The Whitmore Manufacturing Company recently announced today the acquisition of Fluid Defense Systems, LLC., a manufacturer of fully integrated lubricant storage and handling solutions for industry.

Since 2001, Fluid Defense has grown to become the recognized standard in lubricant handling and contamination control for industries ranging from food and beverage

production to industrial manufacturing, power generation, and mining. The OilSafe® lubrication management system provides a customizable, intuitive fluid identification environment designed to improve lubricant cleanliness and avoid cross-contamination.

"We are very excited about this acquisition, which enables us to offer a far broader portfolio of best-in-class products to the fast growing reliability market. Fluid Defense has an outstanding reputation for producing intuitive systems that create immediate value for their customers. The synergy between the OilSafe® system and our Air Sentry® branded products is tremendous. We now offer a more compelling product line that provides us with a great platform to build on organically and through future acquisitions," said Scott Dunbar, Vice President of Filtration and Protective Coatings at Whitmore.

Report: Increased renewables investment drives blades market

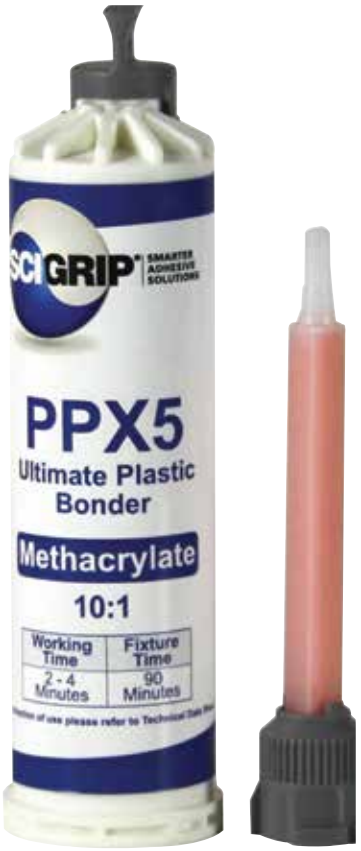
The market for wind turbine rotor blades is projected to witness growth driven by increased government funding of renewable power projects, growing energy consumption especially among developing nations, escalating costs of fossil fuel based energy, rising concerns over greenhouse gas emissions, and the resulting need for sustainable alternate sources of energy. A large number of government-drafted support programs and funding schemes are expected to drive market penetration of wind power technology in the coming years.

In a new trend report titled "Wind Turbine Rotor Blades," Global Industry Analysts Inc., provides cursory insights into rotor blades, including applications, future prospects, and corporate initiatives of key companies worldwide. The report also provides global and Asia-Pacific market estimates and projections for Wind Turbine Rotor Blades in US dollars for years 2012 through 2017. Also covered are companies such as Acciona SA, Blade Dynamics Ltd., DeWind Company, General Electric Company, LM Wind Power Group, Modular Wind Energy, Nordex SE, Siemens Energy Inc., Tecsis Wind, and Vestas Wind Systems A/S, among others.

For more details about this trend report, please visit www.strategyr.com/TrendReport.asp?code=146081.

SCIGRIP PPX5 acrylic adhesive delivers bonding power for polyolefins

Giving assembly engineers an alternative bonding technology for joining low surface energy thermoplastics such as polypropylene or polyethylene, global adhesives supplier SCIGRIP has developed its PPX5 acrylic-based adhesive that effectively bonds polyolefin substrates with little to no surface preparation or primers required.



"The PPX5 adhesive was specifically developed for high-performance bonding of these popular thermoplastic polyolefins," explained Karen Brock Amoah, North American sales & marketing director. "PPX-5 delivers superior bonding properties without the use of solvents or volatile compounds, while requiring minimal surface preparation. In addition, it produces a bond with excellent resistance to water and humid environments, and cures at room temperature."

While polypropylene and polyethylene plastics are used extensively because of their low cost and durability, they are difficult to bond because their surface properties repel most adhesives. The introduction of the PPX5 acrylic adhesive provides an alternative bonding technology to mechanical assembly or solvent welding.

PPX5 structural adhesive is a two-part acrylic-based plastic bonder designed for application at a 10:1 adhesive/activator mix ratio by volume, with working time of between two to four minutes, and fixture time of about 90 minutes. The off-white mixed adhesive is resistant to most industrial solvents.

The PPX5 can be used to bond dissimilar plastic substrates (polypropylene, polyethylene, polycarbonate, and PMMA); metals (carbon steel, stainless steel and aluminum); or fiber-reinforced plastics with a minimum of surface preparation to reduce labor costs and production cycle times.

Adhesion properties of the PPX5 adhesive includes a shear strength of 500 - 870 psi (for thermoplastics); and 500 - 940 psi (for polyethylene to metals), measured at 75°F/24°C.

The PPX5 adhesive is available in convenient dual-component 50 ml cartridges.

For more information, visit www.scigrip.com.