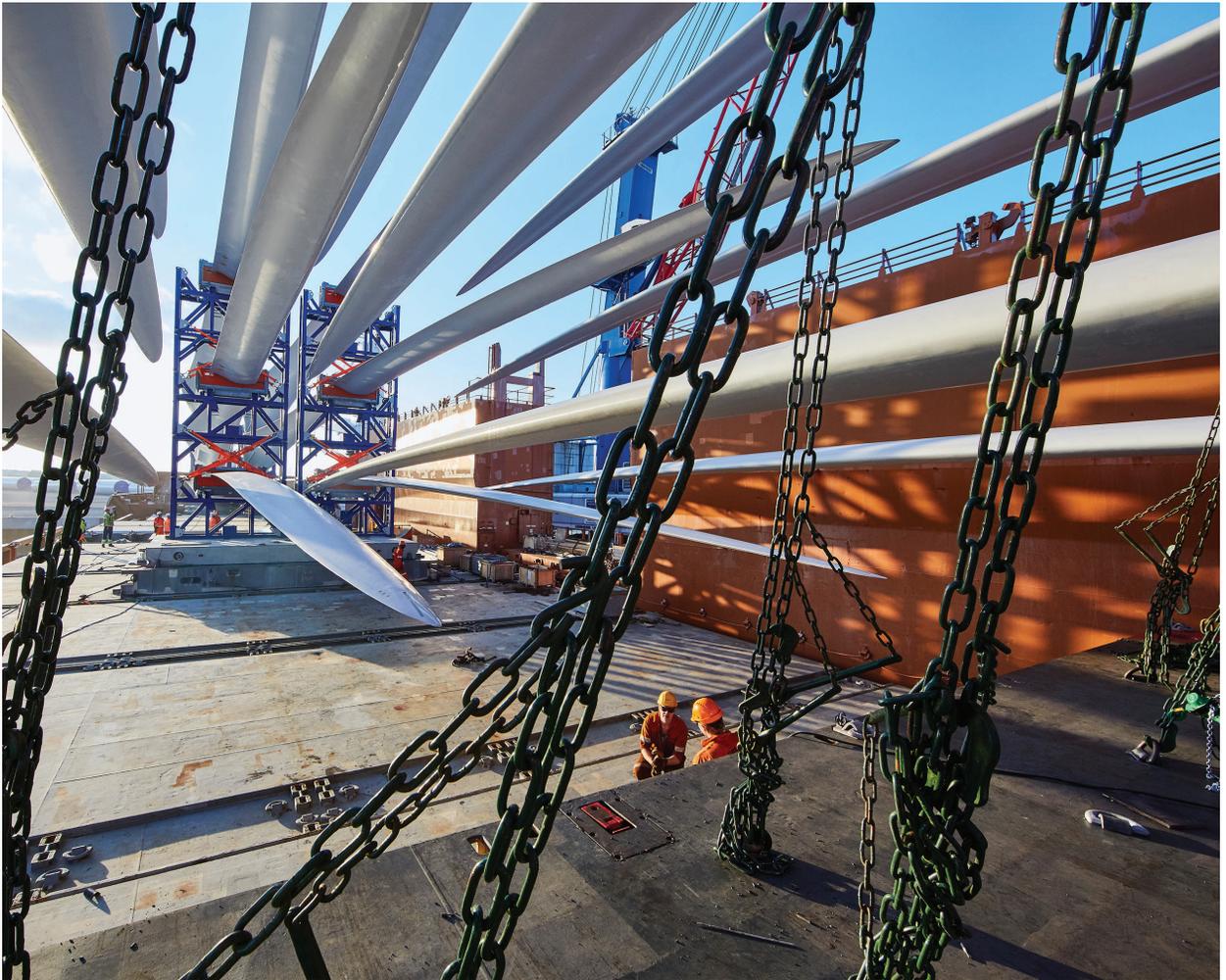


# MANUFACTURING

Production • Fabrication • Components • Supply Chain • Materials • Tooling • Machinery

## GE Completes Acquisition of LM Wind Power



LM Wind Power has had a long-standing partnership with GE that has included the installation of the first offshore wind farm in the U.S. (Courtesy: GE)

GE, the world's leading digital industrial company, recently announced it completed the acquisition of LM Wind Power, a Denmark-based technology developer and manufacturer of rotor blades to the wind industry. The completion of the transaction follows regulatory approval in the European Union, the United States, China, and Brazil.

GE reached an agreement with the London-based private equity firm Doughty Hanson in October 2016 to purchase the company for \$1.65 billion. The transaction in-sources wind-turbine blade design and manufacturing for GE's renewable energy business, improving its ability

to increase energy output and create value for onshore and offshore wind customers. The deal will be accretive to GE earnings in 2018.

"The completion of the LM Wind Power acquisition provides us with the operational efficiencies necessary to support the growth of our wind-turbine business, which is the fastest growing segment of power generation," said Jérôme Péresse, president and CEO of GE Renewable Energy. "With LM's technology and blade engineering, we are now able to improve the overall performance of our wind turbines, lowering the cost of electricity, and

increasing the value for our customers. Together, we are set to capitalize on the expansion of renewable energy and be a growth engine for GE.”

“LM Wind Power has had a long-standing partnership with GE that has yielded many innovations and commercial successes, including the installation of the first-ever offshore wind farm in the United States,” said Marc de Jong, CEO of LM Wind Power. “We see many digital and advanced manufacturing technology capabilities that will help accelerate our technology development and increase our customer reach.”

LM Wind Power will be run as an individual operating unit within GE Renewable Energy, providing blades for both GE’s onshore and offshore wind-business units. LM Wind Power also will continue to supply blades to the rest of the wind industry, having established protocols and safeguards to protect customers’ confidential data.

With this deal, GE continues to deepen its capabilities and ambitions in renewable energy. In the past year, GE has delivered the first offshore wind farm in the U.S., won its first offshore project in China, launched its onshore digital wind farm and digital hydro plant, and developed hybrid projects in wind-solar and hydro-wind.

GE’s goal is to deliver renewable energy projects locally that maximize electricity output while reducing the cost of electricity, bringing affordable, sustainable energy to the world and more value for its customers. ↘

Source: GE

For more information, go to [www.gerenewableenergy.com](http://www.gerenewableenergy.com)



Senvion 6.2M152 turbines like these will be manufactured for the TWBII offshore wind farm. (Courtesy: Senvion)

## Senvion to Proceed with 203 MW Trianel Borkum II

Senvion, a leading global manufacturer of wind turbines, has announced the contract for the Trianel Windpark Borkum II has been concluded and is now effective.

The notice to proceed was confirmed at the end of April with Trianel Windkraftwerk Borkum II GmbH & Co KG (TWBII).

The conditional contract for the turbine delivery and service for the TWBII offshore project was signed in September 2016. With the contract completion achieved, the project now can enter the next phase of development.

The TWBII offshore wind farm will consist of 32 Senvion 6.2M152 turbines with a power upgrade, and will be installed in a water depth of 25 to 35 meters. The wind farm will produce about 800 million kWh of electricity every year, enough to supply about 210,000 households annually.

The wind farm is planned to be installed 45 kilometers north of the island of Borkum in the German North Sea. It will be close to the alpha ventus wind farm, which started operations in 2009 and is equipped with six 5M 126 Senvion offshore turbines. The installa-

tion of the turbine components is planned for spring 2019.

“We are very pleased with the completion of this contract and the confidence the Trianel project-consortium has shown in our turbines,” said Jürgen Geissing, CEO of Senvion. “We look forward to a successful partnership together. It is particularly significant that Senvion has been awarded one of the last offshore projects under the current German feed-in tariff regime. This confirms our solid position in the offshore market and proves that our product developments and innovations continue to set standards in the cost-effective generation of offshore wind energy.”

“A half year after contract signing, I am very pleased that we could successfully start the realization phase together with Senvion,” said Klaus Horstick, commercial director of TWB II. “From spring 2018 onwards, the Trianel Windpark Borkum II will be installed in the North Sea and will expand the municipal offshore engagement.” ↘

Source: Senvion

For more information, go to [www.senvion.com](http://www.senvion.com)

## WEG to Manufacture Wind Turbines in India

WEG S.A. plans to manufacture wind turbines at its Hosur plant in India, marking the company's entry into the Indian wind market. The company intends to upgrade its large electric motors and generator factory in Tamil Nadu, near Bangalore, to also manufacture 2.1 MW wind turbines.

WEG India's factory has 35,000 square meters of built area and about 490 employees.

"The modular design of our manufacturing complex allows us to expand the company with reasonably low investments, in this case limited to certain devices and tools specifically used in the manufacture of wind turbines," said Swapnil Kaushik, managing director of WEG India.

With capacity to absorb production of up to 250 MW per year, as well as to produce the nacelles, generators, and hubs, the Indian unit will be able to supply the first turbines in 2018. Meanwhile, the company will begin the commercial activities to capture supply contracts and also development of local suppliers.

According to João Paulo Gualberto da Silva, WEG's global wind turbine managing director, India presents attractive conditions for the Company.

"In addition to being the world's fourth largest wind-power generation market, the country offers an excellent supply chain for wind turbines and very competitive production costs," he said.

WEG's entry into the Indian wind market was announced at Windergy, a national wind energy fair in New Delhi. ↴

Source: WEG

For more information, go to [www.weg.net](http://www.weg.net)



WEG India will supply the first turbines in 2018. (Courtesy: WEG)



Prysmian is the largest manufacturer of cable and accessories in the U.K. (Courtesy: Prysmian)

## Prysmian To Add Offshore Cable Capabilities to U.K. Factory

Prysmian Group, a world leader in the energy and telecom cable systems industry, will manufacture 33 kV and 66 kV submarine cable cores used for the inter-array cable connections in offshore wind farms at its U.K. production facility in Wrexham.

The new product line will enable the linking and collecting of power produced by offshore wind turbines before onward transmission to the onshore grid.

Prysmian is the largest manufacturer of cable and accessories in the U.K. Recently celebrating 100 years of history, it operates multiple factories and provides extensive cable installation and test services to the highest voltage levels across England, Scotland, Wales, Northern Ireland, and beyond. Its high voltage facility in Wrexham is the only factory in the U.K. capable of manufacturing these submarine cable cores.

"Our Wrexham factory has been manufacturing the highest quality cables for decades, and we are delighted to be directing this depth of experience and know-how to products that will further grow the business, sustain and create local jobs, and provide U.K. manufactured cables for the next generation of U.K. and European offshore wind farms," said Llyr Roberts, CEO of Prysmian U.K.

In the U.K., Prysmian already has an established and strong presence serving the offshore wind-energy sector. Alongside a dedicated submarine operations and engineering office in Chelmsford, Prysmian operates an offshore logistics and services base in Middlesbrough, which serves as a center of excellence offering maintenance, repair, and cable storage services for all offshore cabling.

It is also in Middlesbrough where the Prysmian cable laying vessel, Cable Enterprise, is based. The site is home to an extensive range of cable burial and protection equipment, underpinning the EPCI capability of Prysmian to execute submarine cable projects. ↴

Source: Prysmian Group

For more information, go to [www.prysmiangroup.com](http://www.prysmiangroup.com)

## Stratix 2500 Lightly Managed Switch Addresses Evolving Networking Needs

Manufacturers that use unmanaged network switches but struggle with downtime or security concerns now have an alternative to using managed switches. The Allen-Bradley Stratix 2500 lightly managed switch from Rockwell Automation provides the security, resiliency, segmentation, and bandwidth-optimization benefits of a managed switch without the need for extensive configuration.

“Unmanaged switches deliver the network connectivity required for less complex industrial applications, but they can’t provide diagnostics, manage traffic, or enhance security,” said Divya Venkataraman, global product manager for Rockwell Automation. “Manufacturers need a more robust switch when issues like packet storms are bringing down their network, or if they want to protect against growing security threats. This is where a lightly managed option like the Stratix 2500 switch delivers exceptional value.”

When installed out of the box, the Stratix 2500 industrial Ethernet switch can prioritize critical industrial network traffic. It also can be configured for application-specific needs. Manufacturers can use this flexibility to future-proof their operations by deploying the switch out of the box and scaling it up to a lightly managed switch as their needs evolve.

As a lightly managed switch, the Stratix 2500 switch far exceeds the capabilities of an unmanaged switch by monitoring and optimizing traffic flow and providing diagnostic information to help minimize downtime. It also can support up to 64 VLANs for logical segmentation, which helps reduce total cost of ownership. In addition, port security allows users to disable ports or control end-device connectivity based on the media access control address.

The Stratix 2500 lightly managed switch uses embedded Cisco technology

and is part of the Rockwell Automation Integrated Architecture system. This helps ease network configuration, management, and support while optimizing integration with the enterprise network.

“With embedded Cisco technology, the Stratix 2500 switch delivers the security and monitoring capabilities required by IT professionals

while exposing an easy-to-use web interface for operations professionals,” said Samuel Pasquier, director of product management, IoT Platforms, Cisco. ↵

*Source: Rockwell Automation*

For more information, go to [www.rockwellautomation.com](http://www.rockwellautomation.com)



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