

# MANUFACTURING

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

## First-Ever UK Built Offshore Turbine Blades Arrive



The first six 80-meter-long blades for the 258 MW Burbo Bank Extension project recently arrived at the MHI Vestas Offshore Wind pre-assembly facility in Belfast, Northern Ireland. The blades for the V164-8.0 MW turbines — which were designed, tested, and manufactured at the MHI Vestas blade factory on the Isle of Wight — will be the first locally built blades installed at a UK offshore wind-power plant.

The MHI Vestas factory on the Isle of Wight is where the unique skills and processes were developed that are necessary to produce blades on a large scale.

“It’s a significant milestone for the industry to see the world’s largest blades in serial production arriving in Belfast ready for installation,” said CEO Jens Tommerup. “This marks the first time locally manufactured major components for offshore wind turbines are being used in the UK.”

Blades designed, tested, and manufactured on the Isle of Wight arrive at MHI Vestas’ pre-assembly facility in Belfast ready for installation at Dong Energy’s Burbo Bank Extension project.

“Through investment and collaboration with our partners in the Solent region, we have created jobs, increased training opportunities, and stimulated growth throughout the entire supply chain,” Tommerup said. “We believe that our efforts reflect the stimulation and growth that the UK has targeted with the continued investment in offshore wind power.”

“By building a strong, competitive UK supply chain, we are creating jobs, attracting investment, and providing the certainty and confidence businesses need,” said UK Energy Secretary Greg Clark. “We are committed to our world-leading offshore wind industry, and now we have the first-ever offshore wind-turbine blades built in the UK by MHI Vestas.”

“Belfast Harbour is delighted to welcome MHI Vestas and to have the privilege of handling the world’s largest blades in serial production,” said Joe O’Neill, Belfast Harbour’s commercial director. “In 2013, we completed the development of a 200,000 m2 offshore wind terminal, the first bespoke

facility of its kind in the UK in order to facilitate this style of operation. Supporting the growth of the renewable energy sector is something we are proud to be a part of and look forward to working with MHI Vestas to ensure the successful completion of the Burbo Bank Extension project.”

Work at the pre-assembly site started in April, and since then the first towers have been fully assembled, tested, and pre-commissioned, ready for offshore installation. ↴

Source MHI Vestas

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

## Nordex Secures 243 MW Order for U.S. Wind Farm

The Nordex Group has secured a new, 243 MW wind-turbine order for the United States. The manufacturer has completed an agreement to supply 81 AW125/3000 turbines to a wind farm in Texas.

The turbines are designed for IEC-2, medium-wind sites. Each turbine will be equipped with a 125-meter rotor and installed on an 87.5-meter tubular steel tower. Installation is expected to begin in early 2017.

This latest deal continues the strong growth of the AW3000 platform in Texas. Other recent orders for AW3000 turbines in the state include the 300 MW Green Pastures wind complex owned by Capital Dynamics, the 165 MW Cameron wind farm owned by IKEA, and the 93 MW San Roman wind farm owned by Acciona.

The U.S. is one of the most important wind markets in the world.

The outlook for U.S. wind energy was strengthened by the long-term extension of the federal Production Tax Credit (PTC) in late 2015. With this policy in place, market observers expect wind installations in the U.S. to grow by more than 10,000 MW per year.

Nordex sees great potential in the United States due to the group’s extended product portfolio that now includes turbines from Acciona Windpower. U.S. customers are particularly enthusiastic about the AW3000 and Delta generation products. To date, Nordex Group has installed a total of 2,380 MW of wind turbines in the U.S.

The Group has installed more than 18 GW of wind energy in more than 25 markets. In 2015 Nordex and Acciona Windpower generated combined revenues of 3.4 billion euros. The company employs a workforce



An AW 125/3000 turbine.

of about 5,000. The manufacturing group owns factories in Germany, Spain, Brazil, and the U.S., and in the near future will operate one in India. The product range focuses on onshore turbines in the 1.5 to 3 MW class, which are designed for the market requirements in developed and emerging countries. ↴

Source Nordex SE

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

## Siemens Gets Follow-Up Onshore Project in Australia

Siemens has been awarded a contract to supply, install, and commission 32 wind turbines, each with a capacity of 3.2 MW and a rotor diameter of 113 meters, for the Hornsdale Stage 2 onshore wind farm in South Australia.

Stage 2 is an addition to the Hornsdale Stage 1 wind-farm project, for which Siemens signed a contract in August 2015. The customer for both wind-power plants is Neoen Australia, a business of the French company, Neoen.

With a capacity of 100 MW, Hornsdale Stage 2 will be a major contribution to the Australian Capital Territory’s (ACT) target of 100 percent renewable energy by 2020. Installation of the wind turbines is scheduled to begin in December, with the start of operations expected by June 2017. Siemens will then be responsible for service and maintenance of the wind turbines within the framework of a long-term service agreement.

The direct drive units will add a capacity of 100 MW to the Hornsdale wind-power plant near the South Australian town of Jamestown.

“We are delighted that Neoen entrusted Siemens to also supply the second stage of the Hornsdale wind project with our proven direct drive wind turbines,” said Thomas Richterich, CEO Onshore at the Siemens Wind Power and Renewables Division. “Hornsdale Stage 2 is a good example of collaborative customer



partnership combined with the best technology for the benefit of society, the economy, and the environment.”

The wind-power plant will be installed near the South Australian town of Jamestown, about 124 miles north of Adelaide and will achieve a record low price of 77 Australian dollars per MWh — around 5.2 euro cents per kWh. The Hornsdale wind farm Stage 1 was signed at a fixed price of 6.1 euro cents per kWh in 2015. The enabling factors for the low energy price are excellent wind resources, important synergies with the first stage of the Hornsdale wind farm as well as optimal finance and equity structures. Once operational, Hornsdale Stage 2 will contribute to the achievement of carbon-neutral targets by selling the generated power to the Australian Capital Territory (ACT Government).

“Hornsdale Stage 2 is another great example of the global strength of France and Germany working together

The direct drive units will add a capacity of 100 MW to the Hornsdale wind-power plant near the South Australian town of Jamestown.

to provide clean energy for 70,000 Australian homes and new employment, training, and investment opportunities in South Australia and the ACT,” said Xavier Barbaro, Neoen’s global CEO. “With almost 40 percent of the country’s clean energy produced by wind farms, Australia’s renewable energy footprint is increasing in size and global relevance — making it a great place to invest and do business.” The CO2 emissions saved by the Hornsdale wind farm upon completion will be equivalent to taking either 290,000 cars off the road or planting 1.9 million trees. ↵

*Source Siemens*

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