



## Wikingen wind farm – clean energy for thousands

350 MW Iberdrola windfarm provides 20% of local power.

After unveiling plans in 2014 to install 70 turbines off the North German coast in the Baltic Sea, Iberdrola reached a new milestone in its history when it connected its impressive 350 MW Wikingen windfarm to the German power grid in late December 2017. At full nominal capacity, they are supplying clean energy to over 350,000 households (20% of total local power consumption).

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# Wikinger wind farm

## – clean energy for thousands

Hempel was closely involved in this pan-European project, firstly by designing optimal paint schemes for all structures and secondly, by providing its advisory services wherever required. To build the wind farm, 280 piles measuring 131 feet in length and weighing 150 tons each were built in European shipyards and driven into the sea-bed off the German island of Rügen to hold the foundations. 70 foundation jackets each weighing 620 tons serve as the base for the largest turbines ever to be made by German manufacturer Adwen, with a 222-tonne nacelle, a 442-foot diameter rotor with 254-foot blades, and towers measuring 246 feet. Naturally, the chosen scheme for these enormous towers was designed to provide optimal protection in CX Marine conditions and comprises a 3-layer coating of Hempadur Avantguard® 770, Hempadur 47300 and Hemptthane HS 55610, on both inner and outer surfaces.

A key infrastructure in the project is the ‘Andalucía’ offshore sub-station, built in Spain, coated by Hempel, and transported to its final destination in Germany. Again, the backbone of the paint system is a 60-micron coating of Hempel’s patented Avantguard, our versatile activated-zinc primer that ensures long-term protection in severely corrosive environments, as well as the two-component Hempadur 47300 mid-coat epoxy, designed to produce a hard and tough coating with good resistance to seawater and abrasion at temperatures above -10°C.

Finally, the towers have a 60-micron topcoat of Hemptthane HS 55610 on both inner and outer surfaces, tinted to Iberdrola’s required colour scheme to ensure they maintain the same level of visibility for shipping and that they complement their surroundings with minimal maintenance over many years.

The Wikinger windfarm is another example of Hempel’s significant position in developing and supplying protective coatings for the offshore market.

Discover Avantguard at [www.hempel.com/Avantguard](http://www.hempel.com/Avantguard)



### Triple Activation with patented Avantguard® technology



In order to achieve full zinc utilisation, we combine zinc, our proprietary activator and hollow glass spheres. Avantguard is also the only zinc-rich primer to use all three methods of corrosion protection:

#### Barrier effect | Inhibitor effect | Galvanic effect

Triple Activation with patented Avantguard technology provides superior protection, durability and sustainability compared to standard zinc-rich primers. So you save on application and maintenance costs, while your assets last longer.

#### Hempel A/S

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