



hempel.com



Advanced protection and lower costs for offshore windfarm substations

Located in Saint-Nazaire, France, Chantiers de l'Atlantique is one of the largest shipyards in the world. Over the years, the yard has developed specialist skills and expertise in the design, integration, testing and turnkey delivery of cruise ships, military ships and electrical substations for offshore windfarms.

At a glance		
Customer		Chantiers de l'Atlantique, one of the world's largest suppliers of cruise ships, military ships and electrical substations for offshore windfarms
Sub-contr (Italy)	actor	Rosetti Marino, a leading contractor of offshore and onshore energy plants, ships and superyachts
Project		Windfarm substations, France
Coating s	ystem	Primer: Avantguard 750 Intermediate: Hempadur Mastic 45880 Topcoat: Hempathane HS 55610
Area		45,000 m ²

The challenge

In 2019, Chantiers de l'Atlantique was commissioned to design, construct and install three substations for windfarms off the coast of France. Offshore energy assets are exposed to some of the most corrosive conditions on our planet. Maintaining these assets can be costly, especially in hard-to-access locations or facilities that require shutdown during repair work.

Chantiers de l'Atlantique's customer wanted an advanced anti-corrosive system that would protect the substations in the harsh offshore conditions and reduce maintenance requirements over the long-term. For Chantiers de l'Atlantique, it was important that the system delivered these benefits with the least amount of paint – as higher volume solid reduces capital costs, time and emissions during application.

The solution

We supplied a three-coat system based on our Avantguard 750 primer that meets all of the requirements.

Our Avantguard primers are challenging the standard for corrosion protection in highly corrosive environments. Unlike traditional zinc-rich coatings, they utilise three methods of corrosion protection: the barrier, inhibitor and galvanic effects. This means they can provide the same or better corrosion protection with fewer coats or at thinner dry film thicknesses, which reduces paint consumption. The also dry significantly faster than any other primers in their class.

In addition, our three-coat system included Hempadur Mastic 45880, a high-solids epoxy, and Hempathane HS 55610, a glossy polyurethane topcoat that retains its gloss and colour in severely corrosive atmospheric conditions.

The jackets for the substations were built in Italy by the subcontractor Rosetti Marino and we coordinated with the two yards to ensure a smooth and timely delivery. We also provided comprehensive onsite technical service to both yards to make sure the coatings were applied efficiently and accurately, with the least possible time, waste and costs.

The three substations will be installed from summer 2021 to 2023. Our coatings will protect them against the harsh offshore conditions for the long term.



The Hempel Group Head Office

Hempel A/S, Lundtoftegaardsvej 91, 2800 Kgs, Lyngby, Denmark Tel: +45 4593 3800 Email: hempel@hempel.com hempel.com