



## Avantguard 750 reduces project costs for Chantiers de l'Atlantique

Chantiers de l'Atlantique is a world-leading supplier of highly complex ships and offshore installations. When the company was asked to supply three substations for a new windfarm off the French coast, it had very specific requirements. Chantiers de l'Atlantique needed a coating system that would provide optimum protection in the harsh offshore conditions using the least amount of paint possible.

Our solution was a three-coat system based on our award-winning Avantguard 750 primer. Using unique activated zinc technology, Avantguard coatings deliver the same or better corrosion protection as equivalent zinc-rich coatings, but with less coats or lower dry film thicknesses. As a result, less paint is required, which lowers capital investment, reduces emissions during application and shortens drying times.

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# 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.

The coating system was based on our Avantguard 750 primer. Unlike traditional zinc-rich coatings, Avantguard primers utilise three methods of corrosion protection: the barrier, inhibitor and galvanic effects. This means they can provide the same or better protection with fewer coats or at thinner dry film thicknesses, which reduces paint consumption. They also dry significantly faster than any other primers in their class.

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-contractor (Italy)	Rosetti Marino, a leading contractor of offshore and onshore energy plants, ships and superyachts
Sub-contractor (France)	Muehlhan Wind, a key provider of installation, operation and maintenance services to the wind sector
Project	Windfarm substations, France
Coating system	Primer: Avantguard 750 Intermediate: Hempadur Mastic 45880 Topcoat: Hemplathane HS 55610
Area	45,000 m <sup>2</sup>

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

The jackets for the substations were constructed by Rosetti Marino, while Muehlhan built the topsides. We coordinated with the yards to ensure smooth and timely delivery at all sites. Importantly, our Services team also worked closely with both Chantiers de l'Atlantique and their subcontractors throughout the project to make sure that all coatings were applied correctly, with the least possible time, waste and costs. This not only helped increase efficiency during application but will ensure that the coatings perform as required for their entire service lives, with minimal maintenance.

## 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

Our Product, Sales and Service teams worked closely with Chantiers de l'Atlantique to put together the ideal solution for the project, combining both advanced coatings and comprehensive technical service. The final solution met all project requirements.

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.



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