



Fast-drying Avantguard® 860 reduces project time for offshore substations

When a leading engineering, procurement and construction (EPC) company was asked to construct **two substations for a new wind farm in the China Sea**, it had no idea how important a **quick-drying coating system** would be. The COVID-19 pandemic broke out at the start of the project, paralysing business across the globe. As a result, when the project restarted, the EPC had to **work fast to get it back on track**.

Due to the **highly corrosive offshore environment**, we specified a **three-coat system based on our Avantguard 860 activated zinc primer**. Our Avantguard coatings deliver **superior anti-corrosion protection** compared to other zinc-rich epoxy primers. They are also significantly easier to apply, even in **high humidity** - an important consideration for the project, as the coatings were applied in Singapore where humidity is high all year round.

Another key benefit of Avantguard primers - they have the **shortest recoating interval of any zinc-rich primer** and **dry up to four times faster** than the best-performing inorganic zinc coating. This meant the application team could **increase productivity, helping get the project back on schedule**.

[Let's talk protective coatings for your project](#)

THE CHALLENGE

The customer had **two very specific requirements** for the coating system used on its substations. A **fingerprint test report had to be delivered with every batch** and the **zinc content of the primer had to be 85 per cent or higher**. In addition, the EPC faced another challenge. The coatings would be applied in **Singapore, where humidity is high all year round**. Even with de-humidifiers running in the workshop, the best the application team could achieve was a **humidity level of around 75 per cent**, so the coatings had to be **easy to apply in humid conditions**.

THE SOLUTION

Having worked with the EPC for **more than 15 years**, it was important for us to come up with a solution that addressed all key challenges. Our **three-coat system was based on Avantguard 860**, a high-performance primer from our award-winning Avantguard range with **86 per cent zinc**.

Based on **activated zinc technology**, our Avantguard zinc epoxy primers utilise three methods of corrosion protection; the **barrier, inhibitor and galvanic effects**. As a result, Avantguard coatings can provide **better corrosion protection than other zinc-rich coatings**. This helps **extend coating lifetime and reduce maintenance**. Avantguard primers also **dry significantly faster** than other zinc-rich coatings and remain **easy to apply, even in high humidity and at different temperatures**.

Avantguard 860 can be applied in **relative humidity levels up to 95 per cent**. This meant the application team could apply the coatings in Singapore, **without any compromise on application efficiency or quality**, and we are confident that the system will **protect the substations for at least 25 years**, despite the tough offshore conditions.

And what about the fingerprint test report? Our factories regularly perform fingerprint tests on coating batches for quality assurance purposes. It was therefore no problem to **deliver a fingerprint test report for every batch** used in the project.



At a glance

CUSTOMER	
Leading EPC Company	
PROJECT	
Substation for Offshore Wind Farm	

ASSET	
Offshore substation	
LOCATION	
China	

COATING SYSTEM	
Hempadur Avantguard 860	
Hempaprime Multi 500	
Hemphthane TS 55610	