



HAIZEA BILBAO

Protecting XXL monopiles for one of the world's largest offshore wind farms: East Anglia 3

Offshore wind foundations are growing rapidly in size and complexity, with monopiles reaching **unprecedented dimensions**. These XXL structures must withstand extreme marine conditions while being protected efficiently at scale.

This trend is reflected in **East Anglia 3**, an offshore wind farm located 69 km off the Suffolk coast in the UK. Hempel contributed to the protection of **50 monopiles**.

Ensuring **long-term durability** in such demanding environments requires **tailored coating solutions** and **close collaboration** to address the challenges of scale, application, and performance.

Alejandro Sanz Galiana
Surface Treatment
Engineering Coordinator

The main challenge has been the **immense size of the structures**. Our **long-standing collaboration with Hempel** and the performance of **Hempaprime Strength 530** with its **glass flake technology** have been key to the success of this project.

THE CHALLENGE

Protecting offshore wind monopiles of this scale presents significant operational and technical challenges throughout the fabrication process.

Their **large dimensions** create complexity in handling, surface preparation, and coating application, while the **extensive coated surface area** demands consistent quality across every structure. At the same time, these foundations must withstand **highly aggressive offshore environments** for decades, requiring exceptional coating performance and **long-term durability**. Meeting these requirements while maintaining production efficiency and demanding project timelines adds further pressure to the fabrication and application process.

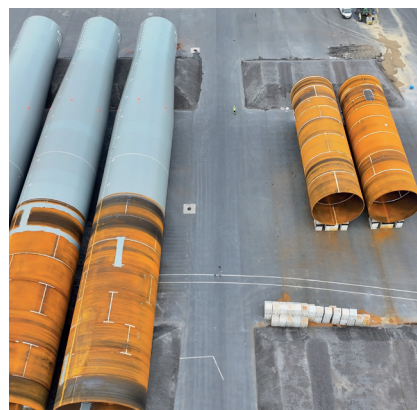
THE SOLUTION

To support the protection of 50 monopiles for the East Anglia 3 project, Hempel delivered a coating solution tailored to the project's technical and operational requirements.

The selected system, **Hempaprime Strength 530**, was chosen for its ability to provide **high corrosion protection** in aggressive offshore environments while enabling **efficient application** across large steel structures.

Its **glass flake reinforced epoxy technology** delivers enhanced barrier protection and **long-term durability** in critical exposure areas, including the **splash zone** and submerged sections of the monopiles.

Close collaboration between **Hempel and Haizea Bilbao** also helped ensure smooth implementation, consistent quality, and reliable execution across the full production scope.



At a glance

CUSTOMER _____
 HAIZEA BILBAO,
 wind tower manufacturer

ASSET _____
 50 monopiles XXL

COATING SYSTEM _____
 Hempaprime Strength 530

PROJECT NAME _____
 East Anglia 3

LOCATION _____
 North Sea, UK

APPLICATION DATE _____
 2024 - 2025