

CORROSERVE

INTERNAL AND EXTERNAL CORROSION PROTECTION OF 30-METRE NORTH SEA CAISSON



The Challenge

A 36" diameter caisson and its associated pipework required a robust corrosion protection system ahead of installation on a North Sea platform. With previous coatings applied to similar structures having suffered premature failure, long-term protection in the demanding offshore environment was a key requirement.

Measuring approximately 30 metres in length and weighing around 27 tonnes, the scale of the structure also presented a significant application challenge, with both the internal and external surfaces requiring protection.

Corroserve was selected for the project based on its proven track record in pipe lining and the protection of offshore assets.

The Solution

The caisson was transported to Corroserve's Leeds facility, where a specialist multi-product Corrocoat coating system was specified and applied.

The scope of work included:

- Full internal and external abrasive blast cleaning to ISO 8501-1 Sa 2½
- Application of **Polyglass VEF** internally to a thickness of 1,500 microns using specially developed internal pipe spraying equipment
- Application of **ZF Primer** to the external surfaces
- Application of **Plasmet Zipe E**, a single-coat epoxy glass flake coating

- Final application of **Corrothane AP-1** to provide a colour-retentive, weatherproof gloss finish

The complete system was designed to provide robust, long-term protection against corrosion in the arduous North Sea environment.

The Results

- Successful internal and external protection of the complete 30-metre caisson and associated pipework
- Long-term corrosion protection for demanding offshore service
- Project completed within the client's stringent delivery requirements
- Consistent, durable finish across the structure
- Successful project delivery led to **several repeat contracts from the same customer**

Key Benefits

- Complete internal and external corrosion protection
- Specialist coating system tailored to different operating environments
- Protection of a large-scale **27-tonne offshore asset**
- Reduced risk of premature coating failure
- Proven solution that generated repeat business