



Case Study: 003

Polyglass VEF and Corrocoat BioFoul Protect Offshore Caissons

The Industry:

Oil & Gas

The Challenge:

Corrocoat products were selected by a fabricator of structural steelwork and pipe work, to provide full corrosion protection for eight 1.25m diameter caissons, each unit being 10 metres long.

The caissons were fabricated in Aberdeen and were to be lined at Corrocoat's facility in Leeds, prior to before being transported to South Africa. They would then be welded together, prior to corrosion protection of the field welds. Thanks to its outstanding track record for this type of work, the client selected Corrocoat's Polyglass VEF for both the internal and external corrosion protection, with Corrocoat Biofoul being used externally to reduce marine fouling in service. The client was also looking for a solution which offered continuity of supply and a high quality solution for the site work required in South Africa.

The Solution:

- The caissons were first grit blasted internally and externally to ISO 8501-1 cleanliness standard SA 2 ½ in accordance with Corrocoat's standard procedures.
- The internal surfaces were lined with Polyglass VEF at 1,500 microns followed by a coat of Biofoul at 350 microns. This high performance composite lining combination offers high resistance to aggressive service conditions and a design life in seawater of over 25 years.
- The external surfaces were also protected with Polyglass VEF at 1500 microns. In both the internal and external cases, after grit blasting the field joint area were masked off and left uncoated to prevent heat damage to the lining during welding.

- Finally, the externals of the caissons were given a topcoat of Corrocoat Biofoul at 350 microns to provide long-term non-toxic anti-fouling protection in this arduous marine environment.

Due to the extensive worldwide coverage offered by Corrocoat, after delivery Corrocoat's South African operation were able to mobilize to site to fully protect the internal and external field joints after welding.

Results & Benefits

A spokesman said: "We identified the Corrocoat proposal as being the best solution and this has proved to be true. By using a sister company in South Africa and the same materials applied by Corrocoat's trained applicators, we were given a single-source guarantee. The same high quality factory standards we enjoyed in the UK were maintained in South Africa."

Credentials

As one of the world's leading names in anti-corrosion technology, Corrocoat have a proven 40 year track record of providing cost effective long-term corrosion protection to the international oil and gas industry. Offering professional high quality service, both in house and on site, Corrocoat is justifiably proud of the many caissons, pipes and manifolds protected, many of which remain in service after more than 20 years.