



Case study: Corrosion Protection for Water Vessel

Removing existing lining, surface preparation & Corrosion protection.

Client

Engineering Industry, UK.

Application date

September 2020.

Scope of work

Client requested surface preparation and corrosion protection of a 6.5m long x 1.9m diameter produced water vessel. The 2mm thick lining had multiple failures, mainly around the nozzles and bottom 3rd of the shell.

Products

Polyglass VEF, Plasmet ZF
Top coat: Corrothane AP1

Substrate

Carbon Steel.

Coating system

- Abrasive blast to ISO 8501-1 SA 2½.
- Prime prepared internal surface using Polyglass PPA primer to a minimum surface profile of 50 microns.

- Applied multi-axal glass fabric to the bottom 3rd of the vessel and any nozzles requiring additional protection. The matting was wetted with L600 laminating resin and rolled in to place to remove any trapped air and aid adhesion.

- Applied polyglass VEF to achieve minimum DFT of 1250 microns.

- Abrasive blast to external surfaces with new abrasive in accordance with ISO 8501 - to Sa2 surface finish profile of 50 microns.

- Two coats of Plasmet ZF and a single top coat of Corrothane AP1.

Coating credentials

Polyglass VEF was selected as it is excellent in immersed environments. Has very good resistance to solvents, acids and de-mineralised water and Excellent flexibility, undercutting resistance and sliding abrasion.