



Southern Waters Sludge Holding Tanks suffer from excessive corrosion due nature of the liquor held, environment, location in some cases and the H₂S gas that sits in pockets above the held liquor.



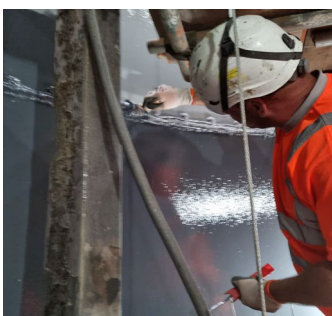
Working closely with Resimac, MKE Engineering were asked to provide a corrosion protective system for the Sludge Holding Tank No 2 at Newhaven. This bespoke durable solvent free system comprises of an epoxy coating with cold cured corrosion resistant metal rebuilding materials.

The tank was scaffolded in three lifts to achieve full access from the floor to roof sections. All the tank walls were abrasive blasted to achieve a Sa2.5 level of surface cleanliness with a circa 50-micron angular profile. It is this cleaning and preparation of the parent material that is key to the warranty of the coating. All dust and debris were removed before the coating applications commenced. The Holed sections of the tank were prepared, and plate bonded utilising 5mm blasted steel plates and Resimetal 302 as the bonding agent. Areas at the tank – roof interface were also addressed in the same way.



The tank was coated with light grey Resichem 50I CRXL to an average thickness of 350 microns. An extra coat was applied to all vulnerable areas in a contrasting colour of 50I CRXL and was applied once the first coat is stable enough to accept another layer.

Once the first coat of the 50I CRXL was cured sufficiently to accept a further layer, the final coat was applied at the same average thickness as the first coat at an average 350 microns.



SUMMARY

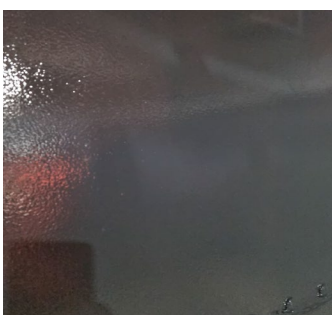
This Resimac corrosion protective system was installed by our trained and approved contractors. This application was carried out in full compliance with the Resimac Technical Datasheets, Application Guide lines and Method Statement. This complicated system is robust and integral to achieve the corrosion protection for the material design life of 10-15 years.

Areas that were plated will resist the corrosive effects of the process and will remain robust. Jointed areas of the tank from the point of manufacture were built with a mastic material sealing the joints. These joints were difficult to inspect the integrity. However, the extra coating that was applied to these areas will add longevity to these jointed locations.

The wall – roof interface had suffered severe corrosive attack and places were installed to aid the integrity of these areas. These works undertaken by all personal were completed safely and in full compliance with the local laws and regulatory standards.

REPORT COMPILED BY:

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