

Project Case Study

Project

Poly-Tech CIP/Holding Tanks Surface Protection

Adelaide Desalination Plant



Project Summary

Substrate

Concrete Tanks

Surface Preparation

High Pressure Wash
Abrasive Blasting
Diamond Grinding
Moisture Barrier

System

Sikafloor 156
Sikadur 33
Sikaguard 63N

Project Description

A multi-national consortium, AdelaideAqua, won the bid to design, build, operate and maintain the Adelaide desalination plant for 20 years on behalf of SA Water. The plant, which will have the capacity to provide Adelaide with half its annual potable water was constructed to an extremely tight schedule with the aim of being fully functional by December 2012.

Poly-Tech - Complete Acid Protection's expertise in delivering solutions for urban storm water management was a key factor in why we were awarded the contracts for concrete coatings.

Desalination plant infrastructure (often holding tanks) is regularly attacked by corrosive chemicals and hypersaline process waters. The protection of steel and concrete tanks is critical in these environments to protect assets from rapid degradation.

The above overflow concrete holding tanks were treated with our specialised Complete Acid Protection System:

Preparation – Based on the abrasive blasting to provide a key similar to 40-60 grit sandpaper and to wet blast and remove contaminates and waste water prior to the application.

- > Application of roller applied Sikafloor 156 primer
- > Application of two scratch coats of Sikadur 33 to fill and fair minor defects and bug holes that are within the parameters of the specification.
- > Application of three coats of Sikaguard 63N to provide an approximate DFT of 600 microns
- > Fibreglass lining – Required to rectify surface cracks should they be evident post abrasive blasting and be greater than 0.1mm
- > Application of one layer of 225gm CSM wet out with Sikafloor 156 resin to be applied after the Sikadur 33 prior to the application.

Poly-Tech Industrial Services have a long history in the preparation and application of specialised coatings for concrete storage tanks and other major plant items.

Call us today to talk about your next water management project.

The concrete protection & restoration specialists
South Australia, Tasmania, Victoria & Northern Territory