

Epoxy Putty Case Study

Gas Plant Seawater Storage Tank Repair

The floor of a seawater storage tank undergoes repair after gaps appeared between rubber matting, leaving the concrete coating below exposed



Gaps had appeared in the rubber matting, exposing the concrete lining of the tank to seawater



AB Original was pushed into each gap before being smoothed off with water and a hand tool



Once cured, AB formed a waterproof material sealing every gap and protecting the concrete lining beneath



Fibreglass sheets were layered over the matting and coated with epoxy resin to create a new reinforced floor surface

Defect

The metal tank stored seawater for use in cooling processes at the gas processing plant. The tank interior was concrete coated and lined with rubber matting to protect the metalwork from corrosion.

Problems with the tank led to it being drained. The floor matting was found to have loosened, lifted and broken apart in places, leaving exposed concrete.

Before the tank could go back into service, all gaps in the matting needed to be sealed to reduce the risk of seawater passing through the concrete and corroding the metal frame.

Solution

Sylmasta AB Original Epoxy Putty was kneaded by hand and forced into the gaps between the rubber sheeting whilst soft. It was then smoothed off with water and a hand tool and left to harden.

Once cured, AB Original formed a waterproof material offering high chemical and corrosion resistance, permanently filling every gap and protecting the concrete from seawater exposure.

To finish the repair, fibreglass sheets were layered over the matting and coated with an epoxy resin to create a new reinforced floor surface.

Result

From the application of AB Original through to the full cure of the epoxy coated fibreglass sheets, the repair was completed in two days.

The plant could put the tank back into operation knowing the metalwork was now better protected by a combination of concrete, AB Original, rubber matting and an epoxy composite repair.