Belzona® Seals inside tank the steel shell to the concrete floor

ID: 8030

Industry: Oil & Gas Customer Location: Romania
Application: TCC-Tanks and Chemical Containment Application Date: April 2018

Areas

Substrate: Carbon steel, Concrete

Products: * Belzona 1321 (Ceramic S-Metal),

* Belzona 4111 (Magma Quartz),

Problem

Between the concrete floor and the steel shell there was a gap of up to 6 mm that had to be sealed to stop the tank from leaking.









Photograph Descriptions

- * 1. Initial view of the gap between the tank shell and the concrete bottom. ,
- * 2. Surface preparation in progress.,
- * 3. NBR rubber cord forced into the gap,
- * 4. The finished application with Belzona 4111 applied on the left picture and the Belzona 1321 coating on the right picture.,

Application Situation

A steel tank with a concrete floor with D=13 m, h=12 m, V=1500 m3 used to store a mix of salt water and oil.

Application Method

In order to carry out the repair, the existing gap had to be enlarged, the contaminated concrete was removed, and the steel wall was cleaned and sandblasted, followed by degreasing the surface. In the existing gap a NBR rubber cord was inserted by force, and Belzona 4111 Magma Quartz was used to close the gap to the shell and restore the concrete thickness. The surface restored with Belzona 4111 Magma Quartz and the surrounding area on the steel shell where coated with a two coat system of Belzona 1321 Ceramic S-Metal, in order to provide corrosion protection.

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

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Repair • Protect • Improve

Belzona Facts

The technical solution was agreed together with the client, that wanted a solution to fill the gap between the tank steel shell and the concrete bottom, using Belzona products since he trusted the products, the application team and also didn't had too much time for sealing the tank inside. The application took place over a period of 5 days with a team of 4 people. The alternative solution was to replace the bottom of the tank with a steel one. After one year the customer is very happy with the Belzona solution.