

# Belzona Repairs Concrete Well Base

ID: 9317

Industry: Water / Wastewater  
Application: FPA-Floor Problem Areas  
Substrate: Concrete  
Products: Belzona 4111 (Magma-Quartz), Belzona 4911 (Magma TX Conditioner), Belzona 5821

Customer Location: Portugal  
Application Date: 2023

## Problem

The concrete base was suffering from chemical attack caused by the waste in the process fluid. The bottom of the well was so severely damaged that the two pumps at housed there were in danger of detaching from their anchor points.



The damaged concrete area



Applying Belzona 4111 (Magma Quartz) and Belzona 5821



The finished application

## Application Situation

The customers main concern in this application was related to the time to carry out the work. The repair had to be done in 4 days and it was crucial that the downtime didn't exceed this period. Other companies provided alternative solutions for the repair, but some needed more downtime and others offered no chemical resistance.

## Application Method

For surface preparation, we used high pressure water cleaning and an electric hammer to break the old concrete. The surface was then cleaned, and all debris removed. A water vacuum cleaner was used to remove the remaining water trapped in holes. All areas to be repaired were blown with compressed air in order to remove as much water as possible and ensure that the surface was dry. It was not expected to find such large holes at the bottom. As a solution, the holes were filled with gravel in conjunction with Belzona 4911 (Magma TX Conditioner). This was done to ensure the stability of the bottom after curing. After this, Belzona 4911 (Magma TX Conditioner) was applied on the rest of the substrate, followed by Belzona 4111 (Magma-Quartz) at about 1,5 cm thickness.

Belzona 5821 was then used on the second day to line the well and offer protection from chemical attack, erosion and immersed conditions. The maintenance team first installed the screws for the base of the pumps, then Belzona 5821 was applied. The application of Belzona 5821 was done by brush on the periphery of the well and around the screws. After that, the application was done with a spatula to guarantee a greater thickness in a single application.

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

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

Belzona products are  
manufactured under an ISO  
9000 Registered Quality  
Management System.

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## Belzona Facts

The repair is performing well, and the customer is very satisfied. As a result, we have already quoted for a bigger repair.

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