

# External corrosion to pipe required a long term solution

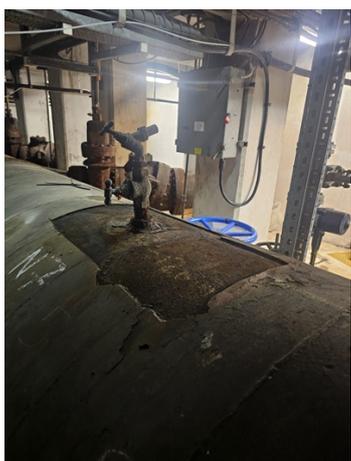
ID: 9869

Industry: Water / Wastewater  
Application: VPF-Valves, Pipes and Fittings  
Substrate: Stainless-steel  
Products: Belzona 1111 (Super Metal)

Customer Location: Preston  
Application Date: July 2025

## Problem

The high lift pumping station (HLPS) Delivery Water Main was situated within a culvert. Over time, a section of this main has thinned due to external corrosion. Originally, the wall thickness was believed to be 12mm, but the area at nozzle had reduced to approximately 7mm



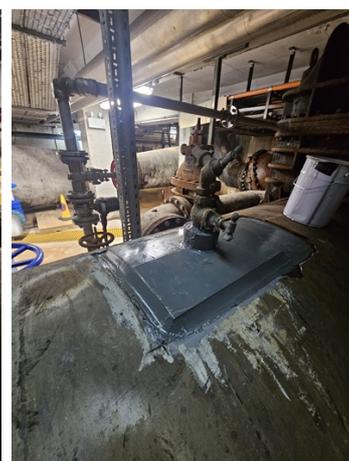
Pipe at nozzle was suffering from external corrosion



Cold applied plate bonding was selected as the long-term protection solution



The pre-fabricated plate was fitted around the nozzle and loaded with Belzona 1111



Belzona 1111 was filleted, presenting a smooth finish and completing the long term protection solution

## Application Situation

To prevent a through-wall defect, customer requested that the distributor propose a cold-bond solution to address the external corrosion, protect the pipe, and extend the asset's lifespan.

## Application Method

The area was prepared using grinders and specialist surface preparation 110v powered tools.

Once the substrate was at an acceptable level, a prefabricated, rolled and blasted plate was dry fitted to the area, ensuring no adjustments were required.

Next, Belzona 1111 was applied directly to both the substrate and plate(s) using a stiff brush first to eliminate air entrapment. The plate(s) were then loaded with Belzona® 1111 in a manner to allow all material to evenly spread across the plate and substrate during bonding.

When all excess material had protruded from all 4 sides, Belzona 1111 product was filleted off the plate, leaving a smooth finish.

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

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## Belzona Facts

Plate bonding using Belzona 1111 restored integrity to the pipe and offered a long term solution to the external corrosion issue that the customer was facing

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