

Belzona Repairs and Protects Circulating Water Pipelines

ID: 9170

Industry: Power

Customer Location: Daqing, Heilongjiang

Application: VPF-Valves, Pipes and Fittings

Application Date: August 2023

Substrate: Carbon steel

Products: Belzona 1111 (Super Metal), Belzona 5811 (Immersion Grade)

Problem

The circulating water pipeline has not been replaced in over 30 years since the factory was built and leakage problems often occurred due to corrosion. The customer's initial measure was to use wooden wedges to seal the leakage points and then weld steel plates around them. However, this approach could not address the fundamental problem.



Before Repair



Use Belzona 1111 to repair pipe leakage



DFT test after applying two coats of Belzona 5811



Application completed

Application Situation

Circulating water pipeline. Diameter: 2040 mm, Length: 307 m, Temperature: Normal temperature, Pressure: 3bar, Medium: Water.

Application Method

First, grit blast the pipeline and use Belzona 1111 to repair pipe leaks. The wooden wedges at the original leakage points are then sawed off and bonded with steel plates. There were more than 200 leakage points. Finally, apply two coats of Belzona 5811, with an average thickness of about 600µm.

Belzona Facts

If the client chose to replace the entire line, it would incur significant costs due to the need for a larger diameter, and the replacement process would also involve civil engineering, causing excessive damage. Additionally, the project lacks sufficient operating space, leading to extended downtime. Consequently, Belzona was chosen to comprehensively address the pipeline's corrosion issue from within, while also improving its corrosion resistance. This approach significantly reduces the overall project cost and offers substantial advantages in minimising downtime.

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

ISO 9001:2015

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FS 695214

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9000 Registered Quality

EMS 695213

Management System.

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