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 occured 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 choosed 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.

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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