Slurry Line Leak Repair - Cold-Applied Composite Solution at Cement Plant

ID: 10007

Industry: Mining & Quarrying Customer Location: Bowmanville Application: VPF-Valves, Pipes and Fittings Application Date: September 2025

Substrate: Carbon steel

Products: Belzona 1161 (Super UW-Metal), Belzona 1984, Belzona SuperWrap II

Problem

A rubber-lined slurry pipe inside a cement plant has developed an approx 1-inch diameter hole that has penetrated through the wall, resulting in an active leak of abrasive slurry.

Welding was not an option due to the presence of internal rubber lining.

Pipe was part of a critical production line, requiring a fast, strong, and reliable repair to avoid extended downtime.



A hole in a pipe before the application.



The surface has been prepared Rebuild with Belzona 1161 with Strengthening the repair with for the application



9341 mesh



Super Wrap II with Belzona 1984

Application Situation

An approximately 1-inch leak was detected on a rubber-lined slurry line in a cement plant. Welding was not possible due to the internal rubber lining.

To avoid costly shutdown and replacement, we offered a cold-applied solution using Belzona 1161 with 9341 mesh to seal and rebuild the defect, followed by SuperWrap II with 1984 resin for long-term reinforcement.

This approach enabled a fast, in-situ repair with significant cost and time savings — the line was back in service within a day.

Application Method

Surface Preparation:

Leaking pipe surface roughened with the power tool to SSPC-SP10 standard, Surface cleaned and roughened to ensure high adhesion

Leak Sealing & Build-Up:

Belzona 1161 applied over leak zone, 9341 mesh embedded within 1161 to arrest leak and rebuild wall thickness. Cured and profiled as a foundation for the wrap system

Structural Wrapping:

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

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

www.helzona.com

SuperWrap II system applied using 1984 resin with 9381 carbon fibre wrap and 9382 consolidation film. Applied in multiple layers to meet the thickness and strength required.

Belzona Facts

Alternatives: Welded patch or pipe replacement (not feasible due to rubber lining)

Why Belzona?

- Cold-applied no fire risk
- Compliant with pipe wrap standards
- Fast-curing, durable under abrasive and pressurized flow

Cost Savings: Avoided full pipe replacement, crane hire, and hot work permits

Time Savings: Repair completed on-site within a day

