

# Ball mill walls repaired with Belzona

ID: 9870

Industry: Mining & Quarrying  
Application: SHM-Solids Handling Machinery

Customer Location: Peterborough  
Application Date: April 2025

Substrate: Carbon steel  
Products: Belzona 1121 (Super XL-Metal), Belzona 1511 (Super HT-Metal)

## Problem

On removing the large wear plates inside a large Ball Mill, the internal surfaces of parts of the ball mill were showing severe wear, where the constant grinding had lead to dust getting through the gaps of the wear plates and eroding the actual surface of the ball mill walls and end faces



Showing large area of wear, once the wear plates have been removed



Showing depth of wear against Applications Team Straight edge



Same area as Photo 1, but now filled and ready for installation of wear plates



Same area as Photo 2, showing repair

## Application Situation

The only alternative to Belzona would have been welding/hot works or even replacement of the whole section. This was not possible and Belzona had been used for the exact same application in the past, making it a "go-to" solution for the quarry's Engineering team

## Application Method

The wear plates were removed by others

2 x Belzona Area Sales engineers attended site to support the application by contractors, trusted by the client.

The Area Sales Engineers explained the mixing and application process and both were done under the supervision of the Belzona staff

The target application areas were Grit Blasted to SA2.5 at 75 microns.

The Belzona 1511 was mixed to spec and was wetted out to the target areas using short bristled brushes

Belzona 1511 was applied using applicators to bring the work substrate back to the required profile.

A final application of Belzona 1121 was carried out and made ready for the installation of the new wear plates

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.

[www.belzona.com](http://www.belzona.com)

  
**BELZONA**  
Repair • Protect • Improve

## Belzona Facts

The high temperatures within the working Ball Mill required paste grade materials to cope with temperatures. The ease of use of the Belzona materials, along with the durability and operational spec's made Belzona the No1 choice for the solution in this case

---

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.

[www.belzona.com](http://www.belzona.com)

