

# BELZONA PROTECTS PIPE ELBOWS FROM ABRASION

ID: 1280

Industry: *Mining & Quarrying*

Customer Location: *Copper and Gold Mining Operator, Bulgaria*

Application: *SHM-Solids Handling Machinery*

Application Date: *March - June 2009*

Substrate: *Steel*

Products: *\* Belzona® 1811 (Ceramic Carbide)Belzona® 1812 (Ceramic Carbide FP),*

## Problem

*Severe abrasion damage on inside surfaces of the pipe elbows.*



## Photograph Descriptions

\* Abrasion damage clearly viewable after blasting  
Application of internal protective coating  
External bonding of metal doubler plates  
Finished protected pipe elbow ,

## Application Situation

6 and 4 inch (150 mm and 100 mm) diameter back-fill pipe elbows with different curves (11, 45 and 60 degree).

## Application Method

Application was carried out in accordance with Belzona Know-How System Leaflet SHM-8. Belzona® 1811/1812 have been used to protect elbows from further abrasion attacks. Application was either internal coating (for 6 inch diameter) with Belzona® 1812 or external bonding of metal doubler plates (for 4 inch diameter) with Belzona® 1811.

## Belzona Facts

Previously customer had to replace non-protected elbows every three-five days or to use expensive but unsuccessful welding. Pipe elbows have been and continue to be protected with Belzona, increasing the working live to more than a month. As a result the customer saved money on replacement costs.

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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