

# Belzona 1812 Applied Inside Small-Diameter Pipes

ID: 7926

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

Customer Location: Finland  
Application Date: 2018

Substrate: Steel  
Products: \* Belzona 1812 (Ceramic Carbide FP) ,

## Problem

Hard abrasion from rock and mineral dust wore out long pipes with small orifice-diameters which led to a long downtime. Repairs and new installations were often required.



## Photograph Descriptions

- \* 1. The pipe to be repaired ,
- \* 2. The application of Belzona 1812 underway ,
- \* 3. Application complete before dressing back ,

## Application Situation

Mineral mine piping system.

## Application Method

To be able to apply Belzona 1812 inside a 2-meter long and 100mm diameter pipe bend, the contractor used a similar punch-tool as they use when applying a rubber surface into pipes. The punch-tool was pulled through the pipe with a wire and Belzona 1812 was pressed onto the sides of the pipe. Using different sizes, a sufficient thickness has been achieved. The application was completed in accordance with a modified version of Belzona Know-How System Leaflet SHM-08.

## Belzona Facts

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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Due to the small orifice and length of the pipes, Belzona 1812 surface is much more long lasting than the original structure of the pipe. The customer is very satisfied with longer maintenance intervals. The customer had already been using Belzona Ceramic Carbides in chutes and larger pipes with good results. Belzona contractor suggested to test a new method to apply the same protection to their small diameter pipes. This method makes it possible to repair long pipes with small diameter, eliminating the need for welding repairs or replacement of the pipes. Normally, such small diameter pipes are replaced or weld repaired. The costs can be high due to downtime and safety precautions (as a result of hot work). With this Belzona application, the lifetime of the pipes can be significantly improved. Minimised downtime means that this application will have a great potential in multiple industries.

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