

# BELZONA SUCCEEDS WHERE NOBLE METALS FAIL

ID: 5978

Industry: General Industry

Application: SHM-Solids Handling Machinery

Customer Location: Manufacturer, Varese, Italy

Application Date: November 2015

Substrate: Carbon Steel

Products: \* Belzona 1811 (Ceramic Carbide) ,  
\* Belzona 4151 (Magma-Quartz Resin) ,

## Problem

Severe dry abrasion from ferrite powder was wearing mixer wheel despite being constructed from expensive noble metal alloy. Belzona consultant recommended lining a carbon steel wheel with Belzona.



## Photograph Descriptions

- \* Carbon steel wheel after grit blasting ,
- \* One of the templates used for the application ,
- \* Application in progress ,
- \* Completed application ,

## Application Situation

Ferrite wheel mixer

## Application Method

The application was carried out in accordance with a modified version of Belzona Know-How System Leaflet SHM-13. Prefabricated custom made templates were used to carry out the application of Belzona 1811 at a thickness of approximately 10mm on all surfaces of the wheel. Belzona 4151 was then applied to provide a glossy finish.

## Belzona Facts

Belzona was able to solve a substantial problem of dry abrasion in the presence of strong concentrations of chlorides. In fact, using a carbon steel wheel coated with Belzona 1811 quadrupled component's life to 4000 hours. The original noble metal alloy wheels lasted 1000 hours in service.

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.

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

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