

# BELZONA REPAIRS JACK HAMMER BASE IN PRIMARY CRUSHER

ID: 5559

Industry: *Mining & Quarrying*

Customer Location: *Mine, Carajás, Brazil*

Application:

Application Date: *July 2007*

Substrate: *Metallic base/Concrete base*

Products: *\* Belzona 4111 (Magma-Quartz) ,  
\* Belzona 4151 (Magma-Quartz Resin) ,  
\* Belzona 4911 (Magma TX Conditioner) ,*

## Problem

*After reconstructing the bolts, a product with excellent resistance to mechanical wear, vibration and high adherence to metallic and concrete substrates was required, to guarantee installation of the bolts at the concrete base.*



## Photograph Descriptions

- \* Concrete base with the cut bolts ,
- \* Conditioning of the concrete base with Belzona 4911 ,
- \* Application of Belzona 4111 and Belzona 4151 at the installation of the bolts in the holes ,
- \* Repair of the base, completed ,

## Application Situation

The bolts at the base of the jack hammer suffered from shear stress resulting in loosening of the base and possible fall from the equipment inside the hopper of the primary crusher.

## Application Method

Some holes were made with a diamond-tipped bit to a depth of 1,250 mm to install new bolts. The concrete base and the open holes were cleaned with soap and water to eliminate any residual oil or grease. The area was adequately dried and cleaned. Later Belzona 4911 was applied at the base of the concrete as well as in the open holes. The base was leveled with Belzona 4111, leaving an opening of 0.5 cm between the block and the base. After grit blasting the metal to a near white finish, the surface was cleaned and conditioned, the base of the jackhammer and the bolts were installed over the base. Belzona 4111 and Belzona 4151 were applied in the housing of the bolt and were injected between the concrete base and the other metallic base of the jack hammer.

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

ISO 9001:2015

Belzona products are

FS 695214

manufactured under an ISO

ISO 14001:2015

9000 Registered Quality

EMS 695213

Management System.

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

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Repair • Protect • Improve

## Belzona Facts

The repair with Belzona allowed the equipment to return to service without needing demolition of the existing concrete base; which would have caused a longer downtime and greater repair cost.

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