

BELZONA REINFORCES EXCAVATOR BEARING SEATS

CUSTOMER

Open cast mine, Poland

APPLICATION DATE

December 2003

APPLICATION SITUATION

Rotary turntable bearing of one of their bucket wheel excavators used in the open cast strip mine (brown coal)

PROBLEM

The steel plates of the bearing showed fretting and fatigue cracking under the 12 meter diameter turntable bearing.

PRODUCTS

Belzona® 1111 (Super Metal)
Belzona® 5811 (Immersion Grade)

SUBSTRATE

Carbon Steel

APPLICATION METHOD

Application was carried out using a modified version of Belzona Know-How System Leaflet GSS-9. 250kg of Belzona® 1111 was applied to bond the steel plates onto the casing of the turn table. The product was applied on the casing as well as on the steel plate. 220ltrs of Belzona® 5811 was injected between the first and the second stringer plate.

BELZONA FACTS

By using Belzona and moulding processes to create the shim, 100% support of the bearing was achieved and consequently stresses reduced. The use of Belzona® 5811 allowed for ease of access and reduced labour costs for the customer. There have been six excavators repaired in a similar manner see also Know How In Action Volume IX, Number 2, and more repaired following the success of this.

PICTURES

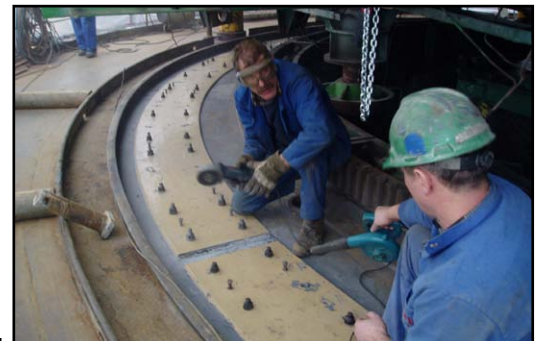
1. Excavator profile
2. Bonding the plates with Belzona® 1111
3. Preparation for injection
4. Injection of Belzona® 5811; In the diagram, Belzona® 1111 is shown in blue and Belzona® 5811 in beige.



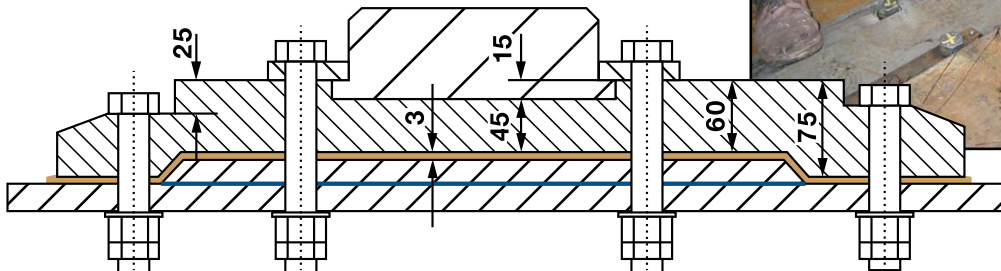
1.



2.



3.



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



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