

BELZONA REINFORCES EXCAVATOR BEARING SEATS

ID: 1906

Industry: Mining & Quarrying

Customer Location: Open cast mine, Poland

Application: GSS-Gaskets, Seals and Shims

Application Date: December 2003

Substrate: Carbon Steel

Products: * Belzona® 1111 (Super Metal) Belzona® 5811 (Immersion Grade),

Problem

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



Photograph Descriptions

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

Application Situation

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

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.

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.

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