

# BELZONA REBUILDS MOUNTING SURFACE OF BALL MILL JOURNAL

ID: 2961

Industry: General Industry

Customer Location: Cement Plant, Bulgaria

Application: GSS-Gaskets, Seals and Shims

Application Date: November, 2011

Substrate: Steel

Products: \* Belzona 1321 (Ceramic S-Metal) Belzona 1812 (Ceramic Carbide FP) ,

## Problem

Ingress of lime particles and water caused severe wear between feed screw insert and ball mill journal. The diameter is 1500mm and length 200mm.



## Photograph Descriptions

- \* Sealing the inner joint ,
- \* Sealing the outer border with metal ring. Injection ports were drilled in the ring ,
- \* Rebuilding of the mounting surface by injection of Belzona® 1321 ,
- \* Completed application with Belzona® 1812 applied at the frontal interface between ball mill journal and screw insert ,

## Application Situation

Ball Mill for grinding lime used in cement production

## Application Method

Application was carried out in accordance with Belzona Know-How Leaflet GSS-9. Belzona 1321 was injected into annular gap between new screw insert and ball mill journal. After that Belzona 1812 was applied at the frontal interface between insert and journal to prevent further abrasion from lime particles.

## Belzona Facts

Previous repairs by welding and machining of the mounting surface were not successful due to problems with machining and centralising the insert. As a consequence the significant movement and vibration caused the mounting surface to wear quickly and the ingress of the ground lime particles further increased abrasion. The Belzona solution allowed the mounting surface to be rebuilt with zero deviation using the new screw insert as former after its alignment in the journal. The heavy movement and vibration was

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ISO 9001:2015

FS 695214

ISO 14001:2015

EMS 695213

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