# **Belzona Provides Erosion Protection on Exhaust Fan**

ID: 7929

Industry: Mining & Quarrying Customer Location: Romania
Application: FBC-Fans, Blowers and Compressors Application Date: August 2017

Substrate: Carbon manganese steel S355J2G3

Products: \* Belzona 1812 (Ceramic Carbide FP) ,

\* Belzona 1321 (Ceramic S-Metal),

#### **Problem**

The dry air (70C) carrying Al, Si, MgO, CaO dust erodes the vanes of the fan blades, removing 2.5-3 mm fo thickness from the metal.









# **Photograph Descriptions**

- \* 1. The eroded fan .
- \* 2. The fan after surface preparation,
- \* 3. The leading faces of the fan blades rebuilt with Belzona 1812,
- \* 4. The leading faces of the fan blades coated with Belzona 1321,

### **Application Situation**

Eroded fan blades at a cement plant.

## **Application Method**

After proper surface preparation, the application was carried out in accordance with a modified version of Belzona Know-How System Leaflet FBC-1 and FBC-2. Belzona 1812 was used to fill in eroded areas. Belzona 1321 was used for corrosion-erosion protection on the leading faces of the fan blades. Application of Belzona 1321 on top of the Belzona 1812 gave a smoother finish, which will prevent the dust sticking to the blades surface.

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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# **Belzona Facts**

Use of Belzona products prevents costly replacement of the fan. Belzona 1321 is a sacrificial layer that could be locally repaired, ensuring that the blades will not deteriorate to the stage the fan needs to be replaced. First inspection of the fan following this repair is scheduled for April 2019.