

BELZONA PROVIDES EROSION PROTECTION ON EXHAUST FAN

ID: 7929



PROBLEM

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

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.

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.

INDUSTRY

Mining & Quarrying

LOCATION

Romania

APPLICATION DATE

August 2017

PRODUCTS

Belzona 1812 (Ceramic Carbide FP)
Belzona 1321 (Ceramic S-Metal)

SUBSTRATE

Carbon manganese steel S355J2G3

PHOTOS

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

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