

BELZONA LEADING EDGE APPLICATION ON A WIND TURBINE

ID: 7626



PROBLEM

An LEP coating was needed. Different LEP coatings had been used on several of the farms in the area. Some had performance issues and others were logistically very difficult to apply. The maintenance manager had great success with Belzona in his prior position and wanted to try the Belzona 1341 LEP coating after meeting with the local representative and seeing a presentation on the Belzona LEP coating option.

APPLICATION SITUATION

This Wind Farm has used different Leading Edge Protection (LEP) coatings. The maintenance manager was familiar with Belzona from a prior position at a coal power plant. He had seen that Belzona worked very well in that industry before.

APPLICATION METHOD

The application was carried out in accordance with a modified version of Belzona Know-How System Leaflet FBC-1. The blades were coated on the turbine at the operation site. The pitting and loss of surface on the leading edge was resurfaced in with a filler product and rebuilt to dimensions. The outlined Leading Edge gel coated surface area was sanded down with a mechanical sander with 80 grit sandpaper and cleaned down with a rag and non-residual solvent cleaner. One coat of Belzona 1341 was applied by roller to an average mil thickness of 10-12 mils.

BELZONA FACTS

The customer has different coatings on the leading edge of their blades with various performance and application problems. The customer has measured varying energy efficiency outputs from different coated turbines. The customer liked the ease of the application of Belzona 1341 and the smooth finish. They will measure performance and energy efficiency of the turbine coated to see if they switch to Belzona across the board.

INDUSTRY

Power

LOCATION

Wind Farm, Iowa, USA

APPLICATION DATE

October 2017

PRODUCTS

Belzona 1341 (Supermetalgilde) Blue

SUBSTRATE

Gel coat/Fiberglass

PHOTOS

1. Contractors set up in the cable elevator at the turbine tip.
2. Surface preparation, LEP outline, and the coating ready to fill pitting and then coated
3. All of the LEP area now coated and protected with Belzona 1341.
4. Blade ready to be back in service with Belzona 1341 Blue.

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

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