

BELZONA PROTECTS A LEADING EDGE OF A WIND TURBINE BLADE

ID: 8769



PROBLEM

Leading Edge Erosion (LEE). The effects of raindrops, sand and hail chewed-up the leading edge on the rotating blades. If not repaired, LEE can leave the blades unbalanced, affecting the shaft and gearbox resulting in energy loss.

APPLICATION SITUATION

Leading edge of a wind turbine blade.

APPLICATION METHOD

The application was carried out in accordance with the Belzona System Leaflet FBC-16 and Belzona 5721 "Instructions For Use". First the surface was rebuilt using Belzona 1221. 2911 conditioner was applied to the coating area to have optimum adhesion. Then the surface was overcoated with one coat of Belzona 5721 - LEP coating.

BELZONA FACTS

Belzona 5721 is a high performance, UV stable and solvent-free coating. Several tests had been conducted using alternative solutions, including a tape and different epoxy coatings. The alternative systems failed within 18 months while the Belzona system was still going strong and looking brand new. Additionally, due to questionable weather, the ability to stage an application left a very narrow window. The contractor needed a product that was easy to mix and apply along with a quick cure cycle while suspended by wire rope in a staging basket. The customer feels the repair with Belzona 5721 will last 5-8 years. Substantial maintenance costs have been saved!

INDUSTRY

Power

LOCATION

Wind Farm, TX

APPLICATION DATE

2021

PRODUCTS

Belzona 1221
Belzona 2911
Belzona 5721

SUBSTRATE

Glass Reinforced Plastic

PHOTOS

1. Gel coat removed.
2. The blade fully prepped.
3. Finished application with Belzona 5721 in white.

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

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

www.belzona.com

