

Wind Turbine Blades

ID: 9436

Industry: Power
Application: FBC-Fans, Blowers and Compressors

Customer Location: Denmark
Application Date: September 2023

Substrate: GFRP
Products: Belzona 5711, Belzona 5721

Problem

Due to natural wear and weathering, 14 onshore wind turbines were exhibiting damaged leading edges. The turbines were outside of the Manufacturer's warranty period.



Damaged leading edge



Wind turbine in need of repair and protection



Application of Belzona 5711 and Belzona 5721 completed

Application Situation

Previously, the Customer had used pre-formed shells that were bonded onto the substrate, but the process was time-consuming and expensive. Therefore, the Customer was seeking an alternative solution which would ensure optimal operation for many years to come.

Application Method

Surface preparation was carried out, followed by the direct application of 90 kg (198.4 lbs) of Belzona 5711 from self-mixing cartridges onto the blade. The repair area was contoured using a piece of Belzona mixing board. Once cured, a visual inspection was conducted to ensure the application's readiness for overcoating with 144 kg (317.5 lbs) of Belzona 5721. Using a short-bristled brush, this system was then applied to the leading edge and left to cure. The application was carried out in accordance with Belzona System Leaflet FBC -16.

Belzona Facts

The Customer chose Belzona 5711 and Belzona 5721 on the basis of our test results, ease of application, high-quality finishes, and after stress testing the product itself. The unique selling point was that it is a quick and durable solution which offers a short downtime period.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

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