BELZONA PROTECTS LEADING EDGE OF WIND TURBINE BLADES

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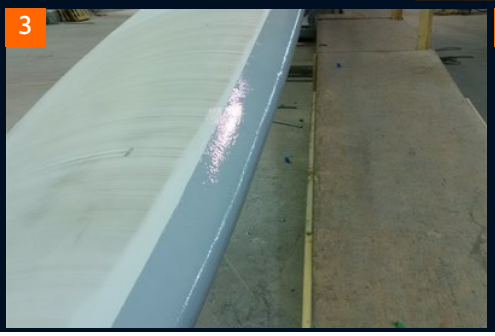

PROBLEM

Erosion had started on the leading edge of the blades compromising the performance/energy output and probable life expectancy of the wind turbines. If not properly dealt with, the problem could propagate into a very serious issue in the upcoming years. The Customer had used a different LEP coating in the past and was not happy with the performance and difficulty of application.

APPLICATION SITUATION

After some years in service the leading edge on the blades of the wind turbines were showing deterioration from rain/environmental erosion. As a preventive step, the asset owner wanted to apply an LEP (Leading Edge Protection) coating on the blades over the summer. The number of blades was near to 100.

APPLICATION METHOD

The application was carried out in accordance with a modified version of Belzona Know-How System Leaflet FBC-1. The blades were brought down and coated on the ground in a large shop area as they were going to do general maintenance on them. 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 12 mils.

BELZONA FACTS

The Customer decided to try Belzona after seeing some information on Wind Power applications on Belzona's online portals and after a presentation on Belzona solutions for the Wind Power industry given by the local Belzona Distributor. They had been using an alternative coating but were not happy with performance and application difficulty. Belzona offered an easy application process saving the customer labor and time. Belzona also offered them durability and performance that would be save them money in the long run. Another plus was the fact that Belzona personnel supported them on site giving the customer piece of mind and confidence in the application process.

INDUSTRY

Power

LOCATION

Québec, Canada

APPLICATION DATE

Summer 2017

PRODUCTS

Belzona 1341 (Supermetalglide)

SUBSTRATE

Fiberglass coated by a protective gel coat

PHOTOS

1. Belzona personnel arriving on site to support the application.

2. Belzona 1341 being applied by roller in the outlined and prepared LEP area.

3. & 4. LEP coating complete with Belzona 1341