

# Leading Edge Repair and Protection for Wind Turbine Blades



Leading edge damage is recognised as the single largest problem for the Wind Power industry. Evidence has proven that damage to the leading edge can lower AEP (Annual Energy Production) of a wind turbine, with energy losses estimated up to 20% if the erosion damage is severe

## Edging ahead:

Studies show that a new set of blades can cost the equivalent of 20–25% of the original price of the wind turbine, whilst a minor blade repair will cost just 10% of a replacement blade. Versus fillers, binders and tapes, Belzona reconstructive materials and protective coatings can provide a superior solution.

### Belzona 5711

Belzona 5711 is a high performance, easy to apply system specially designed for the repair of erosion and impact damage on the leading edges of wind turbines.

### Belzona 5721

Belzona 5721 is specifically designed for the rigours of leading edge protection (LEP). This innovative system strikes the balance between flexibility and toughness, capable of withstanding severely erosive environments.

## Belzona *In Action:*

### Blade Repair and Protection Procedure

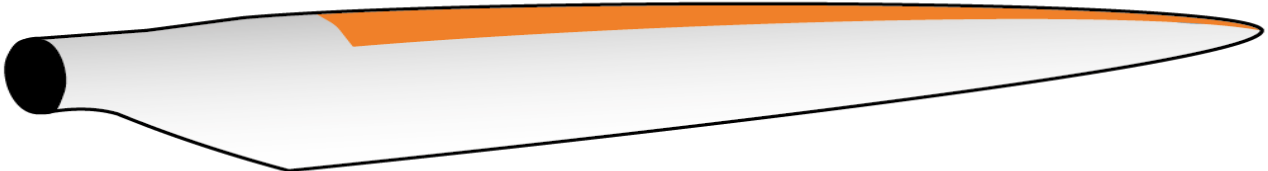


#### REPAIR



**Belzona 5711** can be used to rebuild pitted sections of the blade prior to application of Belzona 5721. Belzona 5711 is rapid curing and can be overcoated in 45 minutes, and is fully cured within 65 minutes at 20°C/68°F.

#### PROTECT



**Belzona 5721** complements in-situ maintenance thanks to its simple one coat application and full service can be restored in as little as 5 hours at 20°C/68°F . This LEP coating is available in white and grey (RAL 7035).



#### Easy To Apply

Ideal for in-situ repair using rope access, without need for specialist tools.



#### High Erosion Resistance

Together, Belzona 5711 and Belzona 5721 can repair damage and offer long lasting protection against rain erosion and impact damage.



#### Wide Application Temperature Window

Single product, suitable for use between 5-40 °C / 41-104 °F, and up to 85% RH.



#### Safe to Use

Low hazard and solvent-free.



#### Fast Return To Service

The Belzona 5711 and Belzona 5721 system will be fully cured in as little as 6 hours at 20°C/68°F.



#### UV Stable

Outstanding UV resistance which ensures long-term protection against the elements.

