Cooling tower fan blades repaired and protected

ID: 9922

Industry: Heating, Ventilation & Air Conditioning Customer Location: Doncaster

Application: FBC-Fans, Blowers and Compressors Application Date: September 2021

Substrate: GFRP

Products: Belzona 5721, Belzona 5811 (Immersion Grade)

Problem

A cooling tower with 4×9 mø cells, each with 9×4.5 m blades was to be refurbished, the main part of the works was to replace the blades.

This was mainly due to wear and expected erosion leading to failure of the blades

Our client stepped in to offer a solution to keep the existing blades and coat them to protect the client's assets









1. Training taking place

2. Blades awaiting preparation

3. Finished blades awaiting dispatch to site

 Closer detail of finished LEP and full body protection coating

Application Situation

 $36 \times 4.5 \text{m} \times 750 \text{mm}$ blades were to be protected using Belzona's recently released protection coating, specifically designed for Leading Edge Protection. This was the Belzona 5721

Application Method

Training was given from the Distributor technical team to the contractors at their works

The blades were sanded to provide a key then 2 x coats of 5811 were applied to the total surfaces of the fan blades.

After curing, the 5811 was again abraded along on the leading edge, appx 80mm either side of the blade's leading edge to the length of the blade

2 coats of 5721 was then applied to complete the protective application

Belzona Facts

The cost to replace the blades could have been between 5 and 25 times that of the cost of the Belzona materials used.

This application has also paved the way for the Contractor to offer the same service on many other sites.

