

Challenge

Issue

Damaged cooling tower fan blades. Required an application of an erosion resistant, low co-efficient of friction coating to reduce dust buildup and prevent moisture ingress.

Goal

Avoid complete replacement of the fan blade sets every 4 years (€7.8K).

Root Cause

Cracking of the fan blades resulted in moisture penetration of the structural integrity, leading to imbalance.



Damaged fan blades

Solution

Preparation

- Pressure wash all surfaces
- Light surface sweep blast

Application

- Smoothly prime and patch with **ARC 858** and fiberglass cloth*
- Apply 2 coats of **ARC S2** at 10-15 mils (250-375 µm) per coat

**Fiber glass cloth serves as reinforcing mesh for coating*



Use fiberglass mesh as reinforcement

Results

Client Reported

- 8+ years of run time at report date

Cost Savings

■ 2 blade sets 8 years:	€15.6K
■ ARC material and labor:	- € 2.8K
Total 8-year savings:	€12.8K



Completed ARC 858 and ARC S2 with reinforcement