

Split Case Fan Pump

Pulp & Paper — Paper Machine ARC 890, 858 and 855 Coatings Case Study 005

Challenge

Goal

Rescue a 20-year-old split case pump running far off BEP and achieve a cost avoidance of \$225K for a new pump.

Root Cause

Sulfuric acid added to pulp increased internal corrosion in a pump that was already worn.

Solution

Preparation

- Pressure wash and decontaminate surfaces
- Grit blast to Sa 2.5 with 3 mil (75 μm) profile

Application

- Rebuild cut-water using wire mesh and ARC 890
- 2. Use ARC 858 to coat and fill pits and gouges
- 3. Apply 2 coats of ARC 855 in alternative colors over repaired and uncoated metal

Results

Repair Time

All repair work completed and pump returned to service in 2 weeks.

Client Reported

CAPEX avoidance: \$225,000

Estimated Repair Life: 5+ years



Disassembled pump prior to installation



Split case fan pump, coated with ARC 855, ARC 858 and ARC 890

\$=USD



Damaged cutwater rebuilt with ARC 890 and topcoated with ARC 855