

## Challenge

### Issue

Plant forced to consider purchase of new stock pump with \$50K cost and 4 week lead time. Downtime associated with replacement had estimated cost of \$300K.

### Goals

- Avoid purchasing new pump replacement
- Prevent 4-week downtime

### Root Cause

Existing stock pump irreparably damaged by the impellor when bearing threw its race and impellor impacted casing.

## Solution

### Preparation

Damaged used pump located at cost of \$20K

- Steam clean at 100 bar (1400 psi)
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

### Application

- Mask sealing surfaces before coating
- Rebuild corroded and pitted sections with **ARC 858**
- Apply 3 coats of **ARC S2** ~DFT: 60 mils (1.5 mm)

## Results

### Client Reports

Pump has been operating without any issues for over 30 months.

### Client Reported Cost Avoidance

New pump	\$ 55K
4 week downtime	\$300K

**ARC repair including used pump \$ 39K**

**Total savings \$336K**

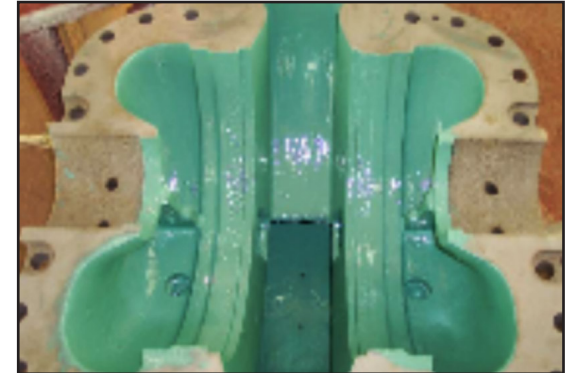
\$=USD



Salvaged stock pump



Surface prepared



Rebuilt salvaged pump