

Challenge

Issue

Performance loss after <12 months reduced influent flow. Option was to install additional pump to achieve flow demand.

Goals

- Return pump performance to required flow levels
- Reduce waste level & concrete corrosion rate

Root Cause

Corrosion exfoliation and scale build-up in pump was reducing flow and performance.



Eroded and corroded pump

Solution

Preparation

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

Application

- Apply **ARC 858** to fare smooth pitted surfaces and rebuild worn areas to tolerances
- Apply 2 coats of **ARC 855** to internals for corrosion/erosion resistance
- Apply 1 coat of **ARC 855** externally for corrosion resistance



ARC coated surface after proper surface preparation

Results

Client Reported

- Reduced scaling and corrosion exfoliation returning pump to required flow
- ARC coating and upgrade cost 35% less than new pump purchase
- Avoidance of new pump purchase \$25,000
- ARC repair:** -\$16,250

Client Reported Savings: \$ 8,750

\$=USD



Pumps ready for delivery