

Challenge

Goals

- Restore performance efficiency
- Reduce spare parts costs
- Increase MBTR

Root Cause

Drainage pump volute and impellor eroded and corroded by pumping sand, water, and acidic run off.

Solution

Preparation

- Abrasive blast to Sa 2.5 with 3 mil (75 µm) angular profile

Application

1. Apply **ARC 858** to replace metal loss and repair large damage
2. Topcoat with **ARC 855**, the ceramic reinforcement to provide erosion/abrasion resistance and enhanced flow efficiency

Results

Subsequent Inspection

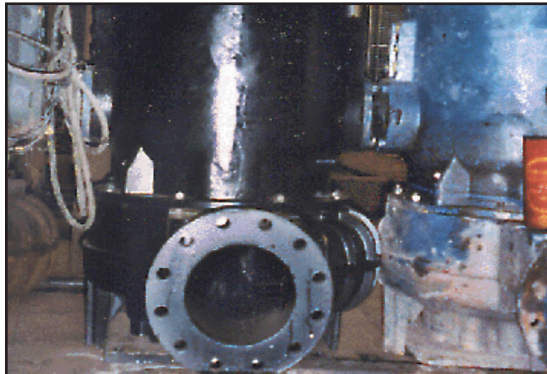
Client reports that ARC coated impellers last twice as long as new impellers.

Follow-up Actions

Client ordered 170 impellers to be coated with **ARC 858** and **ARC 855**.

Client Estimated Savings

Total savings of per year: \$705,000



Submersible pumps subjected to adverse conditions



Corroded impeller from submersible pump



Coated impeller awaiting installation in submersible pump

\$=USD