



# Rebuilding and protection of casing and back plate of Brine pump



POWER ENGINEERING CORPORATION

## Challenge:

- Unprotected pump casings had a service life of <6 months.
- High levels of  $\text{FeO}^2$  in brine was causing contamination of membrane process.

## Solution:

### Preparation

- Worn casings thoroughly decontaminated using steam cleaning with fresh water.
- Surfaces grit blasted to Sa2 ½ with 75+  $\mu$  profile

### Application

- ARC 858 used to fare corroded surfaces smooth and back to tolerance range.
- ARC 855 applied in two coats to provide corrosion resistance

## Results:

- Since pump coating program has been instituted the life of a pump has been extended from less than 6 months to more than 1.25 years.
- Brine production has been maintained with no further contamination due to trace  $\text{FeO}^2$



Pump **before** applying ARC coating system



Pump **after** applying ARC coating system

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