

## Challenge

### Goals

- Provide an alternative to rubber lining
- Perform an in situ repair of significantly corroded large diameter cooling water pipes

### Root Cause

Due to failure of the existing rubber lining, the large diameter cooling water pipes were corroding and in danger of rupture.



Significant corrosion in area of failed rubber lining

## Solution

### Preparation

1. Remove old rubber lining
2. Remove contaminants using water based cleaners
3. Grit blast to Sa 2.5 with 3 mil (75 µm) profile

### Application

- Apply **ARC 858** to all pitting and deeply corroded areas
- Apply 2 coats of **ARC 855** ceramic coating at DFT of 38 mils (900 µm) to existing piping and replacement sections



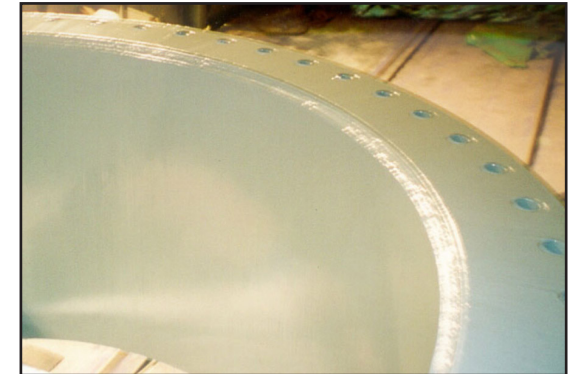
Rubber lining removal before cleaning

## Results

Client reported that the ARC Solution succeeded in providing an effective in situ coating solution that restored integrity to the cooling channels.

### Improved Performance

Subsequent inspections confirm superior performance compared to previous coating selection.



New stub-pipes grit-blasted coated with ARC 855, ARC 900 microns (35 mils)