

Challenge

Issue

Corroded piping in cooling system required cleaning and repainting every 6 months, resulting in increased maintenance cost.

Goal

Extend the coating life from 6 to 36 months and avoid costs of recoating.

Root Cause

Previous coating selected not resistant to corrosion and failed semi-annually, resulting in pitting corrosion.



Original piping after 6 months

Solution

Preparation

- UHPW blast surfaces to remove old coating
- Grit blast to Sa 2.5 with 4 mil (100 µm) angular profile

Application

1. Apply **ARC 858** to weld seams and pits
2. Apply 2 coats of **ARC S2** with total ~DFT: 30 mils (750 µm)



Cooling water pipes coated with ARC S2

Results

Client Reported

ARC coating performing after 10 years (20X previous coating life)

Previous coating system

10 year annualized recoat costs: \$80K

ARC coating cost

10 year annualized costs: \$ 6K

Total Cost Savings \$74K

\$=USD



Completed piping system after 10 years