

Challenge

Issue

The plant installed vibrators to discharge the bottom ash but still experienced between 15-20% hang-up and downtime.

Goal

Avoid \$375K (per bin) CAPEX for new 316 SS bins and reduce hang-up.

Root Cause

Failure of a PU liner in 2 years resulted in pitting and corrosion, which increased friction and caused sludge hang up in bottom ash dewatering bins.



Ash dewatering bins

Solution

Preparation

- UHPW blast surfaces to remove urethane and reduce chloride levels
- Replace identified plate
- Grit blast to Sa 2.5 with 3 mil (75 µm) profile

Application

1. Apply **ARC 858** to weld seams and pitting
2. Apply 3 coats of **ARC 855** for anti-corrosion and hang-up reduction ~DFT: 60 mils (1.5 mm)



Blistering of the existing urethane liner

Results

Client Reports

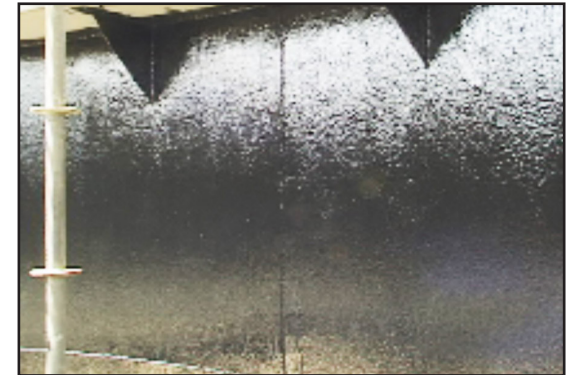
- Ash hang-up reduced to < 3%
- Pitting corrosion halted in all bins (4)

Cost Savings

- **ARC turnkey application including replacement plates** -**\$110,000/bin**
- Run time: 10+ years vs previous 2 years

Total Cost Savings: \$1,060,000
 Based FY 2000 costs

\$=USD



ARC 855 completed coating