

Challenge

Issue

Highly corrosive environment from flotation reagents was affecting moly process tank structure and wall thickness to a critical stage.

Goal

- Find a method to extend service life of new replacement tank for uninterrupted operation

Root Cause

Chemicals related to molybdenum flotation process (reagents) added to high temperature fluid (60°C - 140°F) also affected by dissimilar metals. Tank had not been previously lined.



Tank in operation in highly corrosive environment

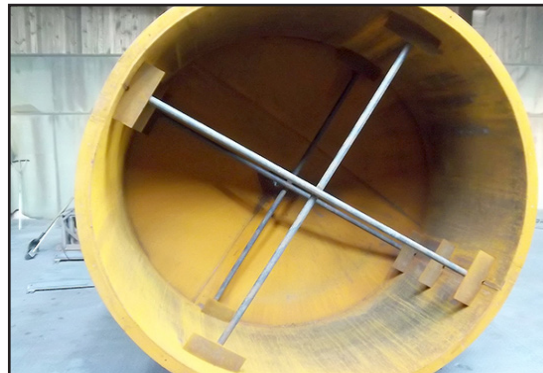
Solution

Preparation

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

Application

- Apply two alternating color coats of **ARC SD4i** to all internal surfaces @ total DFT of 20 mil (500 µm)
- External protection with high % solids urethane paint



Tank bottom half ready for surface preparation

Results

Client Reported

- Total cost of ARC coating only: **\$ 5,200**
- New tank installed in Sept. 2011
- To date, the tank has no corrosion issues
- Expected functional life of tank: well over 8 years

\$=USD



Tank bottom half after application of 2 coats of ARC SD4i