

## Challenge

### Issue

Previously applied coal tar coatings failed prematurely at 2 years resulting in unanticipated floor corrosion. Corrosion protection of 6 years required for maintenance cycle.

### Goals

- Reduce pitting corrosion
- Extend maintenance cycle to 6 years

### Root Cause

Thickener solution, containing sulfates, chlorides, and abrasive slurry, attacks unprotected steel.



Slurry thickener at a major South American mine

## Solution

### Preparation

- Grit blast remove old coal tar epoxy
- Grit blast to Sa 2.5 with 3 mil (75 µm) profile

### Application

1. Apply **ARC S2** stripe coat to weld seams
2. Apply 2 coats of **ARC S2** @ 15-20 mils (375-500 µm)/coat



Alternating colors of ARC S2

## Results

### Client Reported

- ARC coating providing >6 years service life (3X of coal tar solution)
- Elimination of 2 thickener clean outs provide additional savings

### Annualized Coating Solution

- Previous coal tar (material and labor): \$12K
- **ARC repair (materials and labor): \$ 6K**

Cost savings per year: \$ 6K  
 Savings over 6 years: \$18K

\$=USD



ARC S2 still in excellent condition