

Challenge

Issue

The existing green liquor clarifier had sprung several leaks and severe pitting corrosion had affected the tanks primarily at their weld zones.

Goals

The leaks in the clarifier need to be sealed and the tanks need to be preserved for continued use.

Root Cause

Severe caustic corrosion.

Solution

Preparation

Areas where the leaks had occurred were replaced with fresh steel. All surfaces were HP water washed and then were grit blasted to Sa 2.5 with a 75 – 125 µm (3 – 5 mil) angular profile.

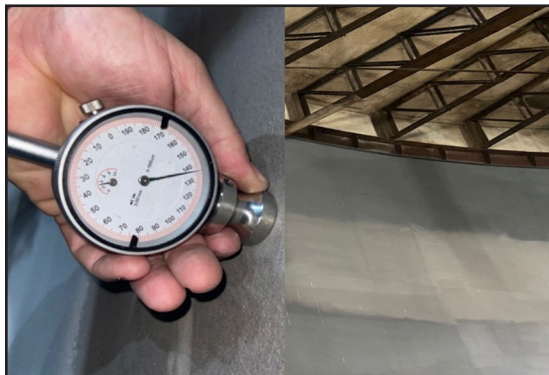
Application

Chesterton® ARC 858 Abrasion Resistant Rebuilding and Faring Composite was applied as a stripe coat to all weld zones. ARC S5 Coating was then spray-applied in two coats of 375 – 500 µm/coat for a total DFT of 0.750 – 1 mm.

Results

Client Reported

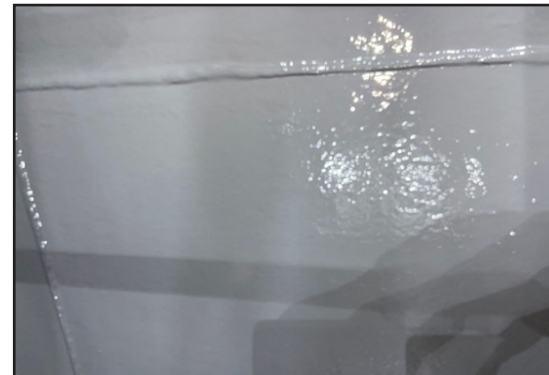
The tank was lined in 2023 after a two-year evaluation. Based on prior testing and an evaluation after the first year, the tank inspection cycle has been extended from once every 3 years to once every 5 years.



Blasted wall. Verifying cleanliness and profile prior to coating.



Stripe coating weld seams and spraying first coat of ARC S5 Coating.



Final DFT of 0.75 – 1mm.