

Challenge

Issue

Rubber-lined valves were clogging every 3-4 months, requiring frequent shutdowns to clean out system. Where rubber liner failed, valve body was heavily eroded and required weld repair.

Goals

- Increase valve operational run time
- Reduce associated maintenance and operational costs

Root Cause

Highly abrasive slurry erodes valve liner, resulting in sheet delamination and eventual restriction or plugging of flow.



Rubber-lined valve body suffering from rubber delamination

Solution

Preparation

- Cut out failed rubber liner; patch weld valve body; decontaminate to remove residual chlorides
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

Application

1. Apply **ARC MX1** @ 240-375 mils (6-9 mm) as a monolithic liner to match with inlet and outlet piping



Properly prepared valve body

Results

Client Reported

- Valve life has been extended from 3-4 months to >1 year
- Plant production is no longer disrupted by plugged valves



Completed valve body ready for service