

Challenge

Issue

Slurry loss, due to abrasive wear on OD of header pipes, caused loss of efficiency in desulfurization absorber. Pipe replacement carried high maintenance cost.

Goals

- Improve abrasion resistance to OD of pipe by a factor of 2X
- Improve absorber efficiency by retaining slurry in system

Root Cause

Limestone slurry abrades OD of glass reinforced plastic pipe in atomization zone.



Worn section of spray header pipes

Solution

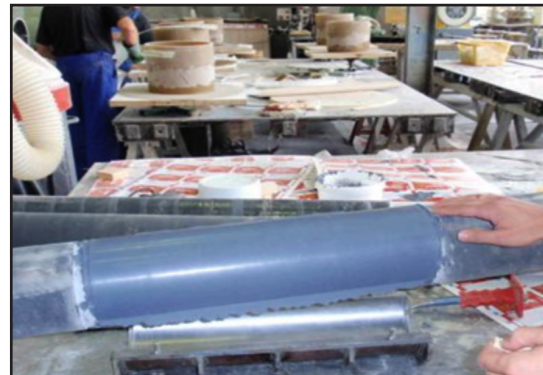
Preparation

Fabricated two-part molds to clamp on OD of pipe with set gap clearance. Abrade pipe by grit blasting.

Application

1. Apply mold release to ID of mold
2. Apply ARC 855 as primer to pipe OD
3. Apply ARC BX2* to OD of pipe and ID of molds
4. Mold was clamped into place
5. Excess product extruded and removed

*ARC BX2 is the "Bulk" package size of ARC 897



ARC coatings being applied

Results

Client Reported

The manufacturer of this type of absorber has recognized the superior protection that ARC provides to the piping, and has specified ARC for several additional projects.

- Previously unlined pipes wore out in less than 1 year
- ARC lined pipes lasting 5+ years and only require patching to build up worn areas at a cost of <€15K



Installed service