

Grinding Mill – Trunion Bearing Liner

Chemical Processing — Process Equipment **ARC BX1* Coating** Case Study 053

Challenge

Issue

Service life of 316 stainless liners in grinding mill less than 6 months.

Goals

- Double the service life of liners.
- Substantially reduce associated annual maintenance costs of >\$95K

Root Cause

Aggressive erosion caused by entrained grit and corrosion from wastewater degrades metallurgy.

Mill and work area

Solution

Preparation

- Pressure wash and decontaminate surfaces
- Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

Application

- 1. Apply ARC BX1* surfaces at ½" (12,8 mm) thickness
- 2. Force over with hot air after application
- 3. Cure time under 5 hours

^{*}ARC BX1 is the "Bulk" package size of ARC 890



Prepared surfaces

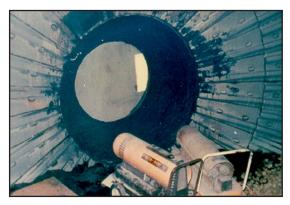
Results

Inspection at 23 Months

ARC lined surfaces extended maintenance cycle from <6 months to >12 months

Previous annual maintenance: \$95K Total applied ARC solution: -\$25K \$70K Net savings:

\$=USD



ARC coated surfaces being force cured in under 5 hours