SAG Mill Discharge - Trunion Liner

Mining/Mineral & Ore Processing — Beneficiation ARC BX1* Coating Case Study 051

Challenge

Goal

 Provide an emergency temporary repair to bridge the 6-week lead time to get a new steel liner by repairing the existing one with an ARC coating in order to meet production goals

Root Cause

Worn rubber boot seal allowed abrasive mill media and ore into liner housing, wearing away ID of housing.

Solution

Preparation

 Abrasive blast clean to Sa 2.5 with 3 mil (75 µm) angular profile

Application

 Screed apply ARC BX1* to ID of liner at DFT of 3" (76 mm) to form an abrasion resistant surface

*ARC BX1 is the "Bulk" package size of ARC 890

Results

After ARC Application Review

- Mill back in service within 72 hours of application
- Mill ran for an additional 14 weeks (20 weeks in total) before new liner was installed

Benefits

- Client reported 6 weeks downtime avoidance
- ARC performance allowed scheduled shutdown



Severity of wear on ID of trunion housing



Applying ARC BX1*



Installed housing