Belzona 4111 Refurbishes the Ball Mill Ends

ID: 9454

Industry: Mining & Quarrying Customer Location: Washington Application: SHM-Solids Handling Machinery Application Date: December 2018

Substrate: Cast Iron

Products: Belzona 4111 (Magma-Quartz), Belzona 4911 (Magma TX Conditioner)

Problem

The ball mill ends had heavy wear and erosion.



Showing the damage to the surface.



Backer rods inserted into the showing the target profile height.



Applying Belzona 4911 wear plate mounting holes and Conditioner in the background, complete. and applying Belzona 4111 using a guide to achieve the proper profile.



Belzona 4111 application

Application Situation

The ball mill ends had heavy wear and erosion under the wear plates. Welding was not an option as it would cause immense heat stress and would require many hours of labor welding, and then need to be transported to a large enough mill to turn it down to the desired profile. By using Belzona 4111, the application was completed within one day, was allowed to cure overnight, and was shipped to the customer the following day for installation.

Application Method

The surface was grit blasted and solvent washed. The Belzona 4111 was applied by trowel and hand, pushing it firmly into the uneven surface, and checked for the proper finish using an aluminum straight edge.

Belzona Facts

This application saved at least a week or more of time, and was well under half the cost of welding. Replacement was not an option as this was from an older ball mill, and parts for this are not available. The Belzona solution allowed for a very fast application and turn around for this project with minimal expense.

