



Devcon® Wear Guard™ Fine Load Helps Prolong Service Life of Copper Transfer Pipe

Problem:

At a copper mine, transfer pipes carry slurry of copper ore to the froth flotation machine. The transfer pipes began to suffer wear due to the highly abrasive nature of the copper ore slurry. The inner lining of the transfer pipes was severely worn, and without an effective repair solution, the equipment required frequent and costly pipe replacement in order to maintain routine operations. By replacing the corroded transfer pipes on a regular basis, this copper plant faced higher maintenance cost and equipment downtime.



Copper mine

Solution:

Devcon Wear Guard Fine Load was selected to repair the transfer pipes due to its proven performance in these challenging environments.

- To ensure adhesion to the substrate, the transfer pipe was cleaned and abraded until white metal was exposed.
- Devcon Wear Guard Fine Load was applied to the internal surface of the pipe elbow by personnel in only a few easy-to-follow application steps.
- The coated surface was then smoothed with Acetone to ensure a smooth surface within the pipe.



Copper ore feedstock



Corroded transfer pipe



Application of Devcon Wear Guard Fine Load to transfer pipe



Project Outcome:

Extend Equipment Service Life

With the capabilities of Devcon Wear Guard Fine Load, the main challenges facing this copper plant were effectively resolved. By applying Devcon industrial strength epoxy coating to the inside of the transfer pipes, corrosion and wear was eliminated despite exposure to the highly abrasive slurry.

Lower Maintenance Time

Lengthy maintenance can reduce productivity at a manufacturing plant. This copper plant wanted to increase productivity and lower frequent equipment replacement. With Devcon Wear Guard Fine Load, their goals were achieved. Frequent maintenance repairs were eliminated, and only minor recoating was required at subsequent or planned maintenance intervals.

Easy to Apply

By replacing the transfer pipes every maintenance cycle, the equipment had to be taken offline and reinstalled, requiring the procurement of outside personnel to get the job done. With Devcon Wear Guard Fine Load, the equipment was repaired in-situ and could be easily applied by plant personnel.



Fully repaired transfer pipe

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