



Devcon Wear Guard® Fine Load™ Combats Steel Slag Abrasive Wear

Problem:

Drains and chutes at the steel plant are responsible for transferring waste byproduct of smelting, known as slag, to the waste disposal area. This equipment undergoes harsh operating conditions, resulting in abrasive wear and damage.

The abrasive and viscous steel slag had caused wear to the bottom half of discharge chutes, drain surfaces, and inlets. Being that both the drain and chute are fixed equipment, the client was looking for a repair solution that could be installed in-situ, to avoid a complex replacement installation.



Steel manufacturing plant

Solution:

Devcon Wear Guard Fine Load was selected as a high performing industrial strength epoxy capable of long-term durability.

- In order to complete installation of Devcon Wear Guard Fine Load, both the drain and chute were emptied of remaining steel slag.
- Metal areas of both equipment pieces were abraded using an abrasive disc pad, to ensure adhesion between the substrate and Devcon Wear Guard Fine Load.
- The industrial strength epoxy coating was then mixed and applied to the equipment via spatula.
- Devcon Wear Guard Fine Load was easily applied to the vertical surface components of the drain inlets and chute duct.



Damaged drain face



Drain face coated with Devcon Wear Guard Fine Load



Project Outcome:

Repair Equipment In-Situ

This steel plant was looking for a repair solution which could be easily applied to avoid a potentially complex, lengthy and costly replacement of equipment. Devcon Wear Guard Fine Load fit all installation requirements, allowing plant maintenance personnel to apply the coating to equipment in-situ. The ease of application with Devcon Wear Guard Fine Load provided this steel plant with significant savings on maintenance repairs.



Damaged chute

Eliminate Excessive Downtime

In repairing two separate pieces of equipment with intricate compositions, equipment downtime was a significant concern for the client. With other repair solutions, such as welding and replacing damaged steel plates, repairs can take days if not weeks. Devcon Wear Guard Fine Load was able to ease client concerns, by keeping repair time under the required maintenance period of one week.



Chute coated with Devcon Wear Guard Fine Load

Highly Durable Solution

Devcon industrial strength epoxy coatings deliver on just that: Industrial strength. With Devcon Wear Guard Fine Load, the drain and chute linings were protected from the extreme environment of slag handling and disposal providing long-term protection to the processing equipment.

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