The CRODON® Chronicles

Helpful Tips for Using CRODON® Wear Plates

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Welcome!


Mining haul truck used in Wyoming

Welcome to The CRODON® Chronicles, a new program to keep our customers up to date on new developments and best practices for using CRODON® Wear Plate.

In this edition we will cover recent testing confirming how CRODON® improves material flow while resisting abrasion, critical fabrication recommendations, and activities and events the CRODON® team will be part of in the near future.

Top Edge Entry to Chutes & Hoppers


Fabricated chute used in Canada

At the top edge where bulk material first enters a chute or hopper, edges must be fitted tightly with no gaps to prevent material from filtering under the wear liner. If an open edge is left at the top entry, material can move the wear liner out of position, and can even push bolted studs through the shell.

Where a seam is unavoidable, three options are available:

1. The best option is to "fish scale" or overlap Edge Plated CRODON® Wear Plate in the area.

2. An acceptable alternative is to use a different material (AR steel, stainless steel or chromium carbide plate) at the top end entry "fish scaling" it over the leading edge of the CRODON® Wear Plate.

3. The final option is to weld the top edge securely to the frame and cover the weld with chromium carbide hardfacing. Use a 0.035" diameter hardfacing wire or ¼" flux cored hardfacing rod with a heat sink to prevent overheating.

Detailed installation instructions covering this and other topics are available on our website at www.crodonwearplate.com. Whatever method is chosen, make sure base steel edges are protected from wear and sealed from infiltration of bulk material to the back side of CRODON® Wear Plate.

Upcoming Events

Come see us at Coal Prep 2006 this May in Lexington, KY at Booth #319.

Give us a call or send us an email if you need free passes to the exhibit hall.

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Cleveland, OH 44105

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Telescoping coal discharge chute

Chute manufacturing

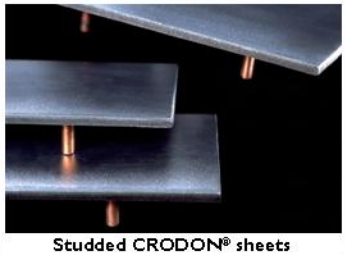
Where Does CRODON® Wear Plate Excel?

CRODON® Wear Plate is the best material for environments combining the need for improved material flow with resistance to abrasion, heat, or corrosive attack. Recent research conducted by Jenike & Johanson demonstrated CRODON® Wear Plate has outstanding material flow characteristics and excellent resistance to abrasive wear. Testing showed that CRODON® achieved target flow in chutes at an angle approximately 30% less than chromium carbide. In hoppers, CRODON® is comparable to stainless steel and UHMW but with much better resistance to abrasion.

In a recent inspection at a major coal burning power plant, CRODON® Wear Plate in chutes with flowing material showed no wear or even polishing after 9 months of continuous use. Skirt boards showed no measurable wear after a year of service. Plugging by wet crushed coal was eliminated.

The CRODON® wear surface resists most common corrosive materials including water and sulfur, tolerates heat to 750°F, is lighter weight & easier to handle compared to other abrasion resistant surfaces, and its monolithic surface resists erosive wear from very fine abrasive particles like fly ash.

Dr. John Carson, president of Jenike & Johanson, Inc. said in his findings, "CRODON® Wear Plate was found to be a super tough wear liner that stands up well to abrasive coal particles. Furthermore, CRODON® is non-reactive to water, oils and most other liquids. Therefore, its wear resistance is not compromised as is the case with most steels and steel alloys."



Studded CRODON® sheets