

THE CRODON CHRONICLES

Helpful Tips for Using CRODON® Wear Plate

www.crodonwearplate.com

Volume 1V

Granule Grate Lifecycle More Than Tripled



CRODON pipe used to move roofing shingle mat.

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CRODON Wear Plate is an excellent choice for transition points & wear skirt liners in conveyor systems.

CRODON® Wear Plate

Tough. And Slick.



A GAF-ELK roofing plant in Myerstown, PA used the unique CRODON wear surface in a new way. They used it to extend the life of grates installed in the top entry where roofing granules are emptied into the silo. The grates catch “tramp” material and act as a

barrier to prevent personnel from falling into the silo. If left unprotected, the grates lasted only a few weeks. When protected with Urethane, the granule flow was blocked off. When protected with carbide overlay, they lasted an average of 2 months. By contrast, the CRODON protected grates are lasting better than a year.

Roger Randolph, maintenance supervisor over this application, said, “This really makes our job much easier. We can count on the CRODON grates working much longer without choking off the material flow. It’s another great application for our plant.”



CRODON at Ontario Power

An engineering services company needed a solution in Canada at Ontario Power. They had been using ceramic tile in a diverter gate and were having to regularly perform warranty maintenance when the tiles broke loose and fell out. Trying to find an alternative, they built one of the diverter gates out of 3/8” CRODON Plus. They soon realized they weren’t being called for maintenance of the CRODON diverter. The assembly has been in service for 3 years and is estimated to have handled between 2.5 - 3 million tons of coal and is still in good shape. Of course, the CRODON diverter gate has had excellent flow reliability.

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Seams Between the Sheets

In wear performance, there is a significant difference in how vertical versus horizontal seams affect wear. In general, vertical (in the direction of flow) seams, especially if they are in a flat area and arranged in an offset design, have little to no impact on wear life. Sheets can be easily joined by fillet welds to span an area greater than the standard sheet size would permit by itself. This allows the fabricator to essentially supply wider sheets to meet the customer's needs.

Horizontal (perpendicular to the direction of flow) seams, however should be

carefully managed during installation. It is essential that the top edge of each sheet is not exposed to direct contact with moving material. When the edge is exposed, the base steel becomes the point of wear, rather than the durable CRODON wear surface. At a minimum sheets should be fully flush with each other. However, the preferred method is to install the upper sheet so that its trailing edge is slightly higher than the sheet below it. An easy way to accomplish this is to install a thin (1/16") spacer behind the bottom edge of each sheet. This "kicks"

the bottom edge higher than the downstream sheet, protecting the top edge from direct exposure to wear and erosion.

Keep in mind that plasma cutting is accurate to +/- 1/16". This is sufficient for most chute and hopper applications. When precise fitting is required, edges may be ground smooth. Laser or water jet cutting can also be used to create very clean and accurate edges.



Multiple CRODON sections cut and welded for liner in limestone hopper.

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