

Contact Castolin Wear Specialists for a site inspection and potential maintenance cost improvements! United States (800) 558-8524 Canada (800) 361-9439

CastoChrome[®] Engineered Wear Parts & Liners







Increased Reliability

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Improved Sustainability

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Casto<u>lin Eu</u>tectic® Eutectic Castolin

Casto<u>lin Eu</u>tectic[®] Eutectic Castolin

Wear Management Solutions

Modular Wear Plates, Blocks and Custom Parts

CastoChrome®



Performance Mindset with Castolin Eutectic!

Critical industrial equipment is subject to extreme wear, with planned and unplanned shutdowns increasing your maintenance and operational costs. Areas that are difficult to access, such as those at a high elevation, pose an even greater risk to employee safety and your bottom line. In this type of environment, superior wear-resistant materials are vital to covering wear-prone areas and serve as a way for companies to improve performance and reduce costs.

> Mean time between failures (MTBF) • Maintenance man-hours (MMH)

> > mproved Operational Efficier

Minimized unplanned shutdow

fficient Maintenance Strateg

 Mean downtime (MDT) Cost per ton mined (CPTM)

As a strong global player in wear management and performance, Eutectic Castolin is committed to delivering "the optimum solution" to improve your operational and maintenance KPIs, such as:

Global Presence & Local Outreach

Our North American Service Centers provide a local presence, though our expertise spans the globe. With international teams that pool resources to solve difficult industrial wear problems in a cost-effective way.

Pioneering Industrial Sustainability



Your bottom-line matters to us!

Our wear experts are dedicated to helping you realize the lowest cost-per-ton possible using our wear management solutions.

From mobile and fixed equipment to complete backfill piping systems, our global teams offer field and benchmark performance testing and mine-specific baseline analysis to determine your total cost of ownership.

Schedule a service call with one of our industry specialists today!

For over 100 years, Castolin Eutectic has been at the forefront of supplying the market with value-added surface protection products and solutions. Castolin Eutectic strives to improve the existing life cycle of plant assets to provide the optimum operational performance against the effects of high-wear abrasion, high-impact, gouging, and other wear-related maintenance failures.



Pioneering Industrial Sustainability









Castolin Eutectic wear management specialists have technically advanced solutions that redefine equipment life cycles across service centers, regardless of the wear mechanism.

CastoChrome®

CastoChrome® products are Castolin Eutectic's registered trademark of laminated and cast-wear parts.

With its metallurgical bond and composite structure, CastoChrome parts offer a complete made-to-perform grade, with exceptional impact and abrasion-resistant wear liners that are guickly and safely installed. CastoChrome laminated wear parts come with a ductile, tough, and weldable grade backing plate, which makes it a fail-safe lining system.

Depending on the industry and application requirements, CastoChrome products can be used for a new build or retrofitting an existing fixed or mobile plant equipment.

CastoChrome cast and laminated wear parts are engineered to improve the performance of fixed and mobile plant assets.

CastoChrome® Product Overview

Our CastoChrome line is available in various grades to combat your unique wear challenges, from high chromium to tungsten carbides or ceramic infused in chrome-white iron. Contact our wear experts to discuss the best solution for your application.

CastoChrome[®] 700+

Go-to grade for all standard HCWI parts

- CrMo alloy containing primary carbides
- Nominal hardness of 700+ BHN (HRC63+)

CastoChrome[®] Plus

- Made-to-order superior alloy-enriched grade
- Enhanced performance
- Proprietary process tungsten carbide (WC) fusion Hardness: >HV950 (HRA85)

CastoChrome® Ultimate

- Made-to-order ultimate grade CastoChrome[®]
- Best-in-class performance for engineered parts
- Proprietary process of tungsten carbide (WC) brazing
- Hardness: >HV1500 (HRA90)

CastoChrome® Tuff

- Excellent choice for high impact and severe abrasion
- Laminated CrMo impact alloy with ceramic inserts
- Weldable parts

CastoChrome[®] Ceram

Proprietary ceramic composite solution for all applications, including ball mill feeder liners, loaf liners, hammers, blow and wear bars.



Ore Trapping Systems

1. CastoChrome[®] - Rock Box Liners



- CastoChrome 700+ alloy (700+ BHN)
- Offering superior wear performance for areas subject to ore wash-out and premature failure
- · Ideal for chutes, bins, hoppers and transfer points
- Creates a dead bead effect with ore-to-ore wear
- Wear trapping design providing longer wear life
- Quick installation with custom base plate

2. CastoChrome[®] TPLs (Transfer Point Ledges) (Engineered CastoChrome Solution)

• Laminated and cast options available in custom lengths • Standard 2" (50 mm) width and a total thickness of 50 mm · Creates a dead-bed effect optimizing ore flow and prolonging the life cycle of the fixed plant

- equipment
- · Made-to-fit size designed for chutes, bins, hoppers, and transfer points (maximum ore-on-ore effect)
- Eliminates wear to the asset structure
- Cost-effective solution with quick installation



Engineered Composite Solutions

CastoChrome Engineered composite liners offer next-gen lining solutions for tough and abrasive applications, extending the service life of any assets. The proprietary modular design combines superior abrasion resistance with high toughness and impact tolerance.

1. CastoChrome[®] Ceram - Blowbars



2. CastoChrome® Ceram - Loaf Liners







Mechanical Locking Systems

1. CastoChrome[®] - Wear Runners

(Mechanically Locking Made-to-Install Liners)

Designed to outlast traditional cast steel liners. Wear runners are supplied up to 3" CWI thickness with 725+ BHN wear performance.



- Material Deflection—Engineered profile designed to deflect the feed material based on the muck flow
- Sustainability—Reusable base plate with higher liner performance
- Preventative Maintenance—Wear indicator for scheduled liner change-outs
- Wear Performance Made-to-perform runner thickness ensuring cost-effective installation
- Liner Installation—Mechanical locking system to help reduce the man hours allocated for liner installation and change-outs.
- Mine Safety—Wall adapter for safe and effective installation compared to conventional weld-on or bolt-on wear liners. Optimized wear runner weight and wall adapter

3. CastoChrome[®] Tuff - Composite Liners









Application Specific Custom Wear Liners

1. CastoChrome[®] - Transfer Chute

Crushing circuits utilize transfer chutes frequently to redirect the material flow. Unfortunately, these circuit areas pose significant pain points due to various wear characteristics, including high impact, abrasion, and concentrated wear. CastoChrome, known for being a problem solver, allows us to significantly increase the asset's life and reduce frequent wear liner changeouts with the ability to withstand both high abrasion and impact.



. CastoChrome[®] - Measuring Box Discharge



Optimum liner performance supports consistent and efficient material flow

- Maximized uptime and reduced costly liner maintenance
- Custom liner retrofits and upgrades offering high-performing chutes
- Increased maintenance safety

Discharge Liners

Application Specific Custom Wear Liners (cont)

3. CastoChrome[®] - Apron Feeder

CastoChrome liners are an excellent choice to increase the performance of primary and secondary apron/belt feeder wear components. Our lining solutions are designed to enhance and retrofit:

- Side and back walls
- Loadout and discharge zones
- Lips and rails (loaf liners)

Our wear experts offer engineered transition design for the highest wear zones, incorporating CastoChrome Ceram technology where material crushes between the pans and liners.



• Bottom transfer points • Surge bins

Bottom Transfer Liner

Application Specific Custom Wear Liners (cont)

4. CastoChrome[®] - Sag Mill Feed Chute

When sustaining a grinding mill, plant operations typically focus on the mill itself rather than its related components. As a critical part of the grinding process, when overlooked, the feed chute can cause costly downtime for plant operations. Castolin Eutectic's sustainable wear management solutions for chutes will increase production uptime while improving performance and efficiency.











5. CastoChrome[®] - Rockbox Chute

Castolin Eutectic has a wide range of standard and engineered CastoChrome chute liners tailored to chute requirements. Combining the optimum lining solution with the plant-specific chute design is critical to overall system efficiency.

CastoChrome liners can be used in:

- Crusher feed / discharge chutes
- Conveyor transfer chutes
- Mill feed / discharge chutes



Pioneering Industrial Sustainability