



# Mining

Wear management solutions  
for the **mining** industry



*Pioneering Industrial Sustainability*

[www.castolin.com](http://www.castolin.com)   [www.eutectic.com](http://www.eutectic.com)



## Mine Performance Mindset with Eutectic Castolin!

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



- Mean time between failures (MTBF)
- Maintenance man-hours (MMH)
- Mean downtime (MDT)
- Cost per ton mined (CPTM)



## Competitive Advantage Pioneering Industrial Sustainability

We have a wide range of optimized solutions to protect your assets and to markedly extend the life of your mining equipment, such as loader bucket walls, quarrying trucks, stacker reclaimer buckets, conveyor systems, chutes and hoppers and side liner “cheek plates”.

### Our Expertise

- Turnkey Solutions
- Wear Assessment & Material Specification
- Proprietary Formulations for Optimized Performance
- Flexibility & Speed of Response
- High Level of Expertise & Continuous Innovation

## 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.

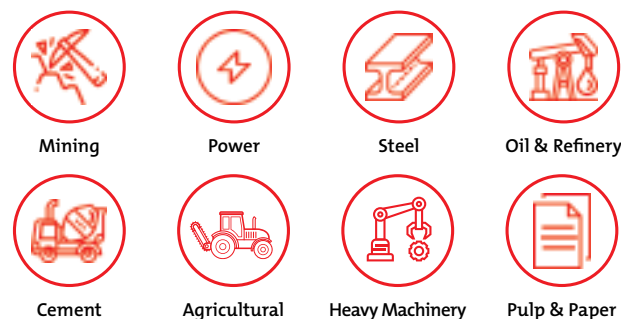
From mobile and fixed equipment to complete backfill piping systems, we offer field performance testing to examine your total cost of ownership. Our team of experts provides mine specific baseline and benchmark performance analysis.

[Schedule a service call](#) with one of our industry specialists today.



## Global Presence & Local Outreach

Our [North American Service Centers](#) offer you a local presence, while our expertise extends globally. Our global [key industry](#) teams pool resources to solve difficult industrial wear problems while implementing the most cost effective solutions.



### PASTE BACKFILL RETICULATION SYSTEM

**Problem:** Paste backfill pipes are subjected to extreme wear from slurry abrasion. Replacement costs are high in underground mining operations. Existing systems deliver less than 1M tons of paste backfill before replacement.

**Solution:** Eutectic Castolin's installed [CastoTube](#) system has already delivered 6.5M tons of backfill paste, with only one scheduled pipe rotation.

**Results:** CastoTube system is expected to reach up to 10M tons, reducing maintenance costs and increasing operational performance.



### SKIP LINERS

**Problem:** Reliable ore surface transport and skip performance are vital to the lowest cost-per-mined volume. Using standard grade liners such as AR450 and AR500 causes poor reliability and frequent liner change-outs.

**Solution:** Eutectic Castolin's [CDP](#) DuraMax (abrasion) and TuffMax (impact) liner series is proven to extend skip life.

**Results:** CDP Max series extends skip life, lowers operating costs, increases bottom line performance.



### LASER CLADDED SPINDLE BEARING

**Problem:** Bearing is subjected to high axial and radial loads during operation. Remanufacturing is costly and time consuming. Typical chroming solution is not performing well under field conditions.

**Solution:** [LaserClad](#) with high impact resistant alloy. Minimal distortion and low dilution process. Metallurgical bond.

**Results:** Fast turnaround of a securely bonded deposit with maximum impact resistance.



### Wear Liners - CDP® Overlay Plates

Eutectic Castolin's CastoDur Diamond Plate (CDP) Series of mining weld overlay plate is designed for the toughest of mining operations. Superior performance is achieved through ultra-tough, carbide-rich alloy chemistry.

The optimal mix of Tungsten, Chromium and Complex multi-carbide alloys make our plate better able to withstand heavy impact, severe abrasion and extreme sliding wear in both dry and slurry applications.

Our TuffMax, DuraMax, ProMax and OptiMax are built-to-outperform the competition, improving equipment performance, longevity and increasing your bottom line.

When material flow becomes your maintenance problem, our smooth and chromium-carbide-rich CDP SlickMax liners provide superior wear performance with minimized hang-up characteristics.

*Designed to suit your project-specific lining requirements.*

### Wear Liners - CDP® Laser Plates

CDP Laser is a smart choice when equipment weight becomes your target KPI. Our laser plate offers superior abrasion, erosion and corrosion protection with its ultra-hard tungsten carbide matrix formula. No compromise on the wear performance – live up to your maintenance standards with Eutectic Castolin's proprietary CDP laser plates.

### Wear Liners & Parts - CastoChrome®

CastoChrome is Eutectic Castolin's 700BHN+ (63+ HRC) Chrome White Iron (CWI) laminated modular wear plates, blocks and custom parts. Scheduled or unscheduled, any downtime in mining operations dramatically increases maintenance costs and production loss. CastoChrome offers proven, made-to-install, exceptionally impact and abrasion resistant wear liners with easy attachment systems. Find out what CastoChrome can do for your maintenance challenges.

#### Typical Applications:

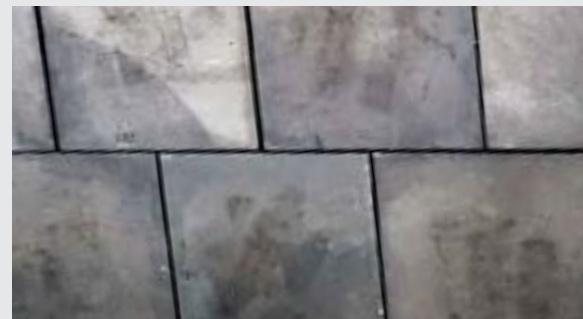
- Dipper and Rope Shovel Liners
- Primary and Secondary Crushers
- Receiving and Discharge Hoppers
- Mine Skips & Loading Pockets
- Feed, Load-out and Discharge Chutes
- Apron Feeders and Skirt Liners



CDP Plates



CDP Laser



CastoChrome

### LaserClad™

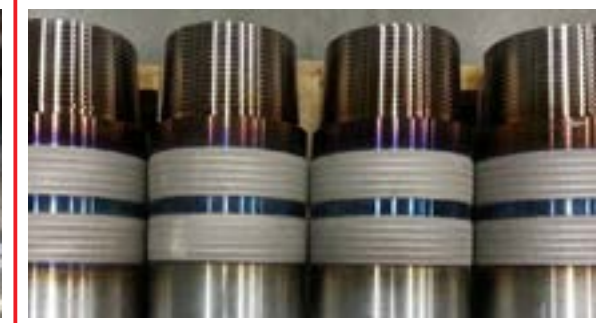
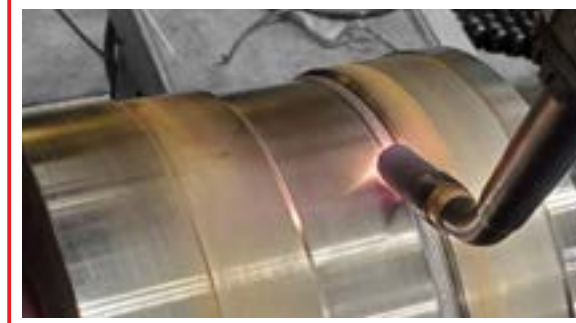
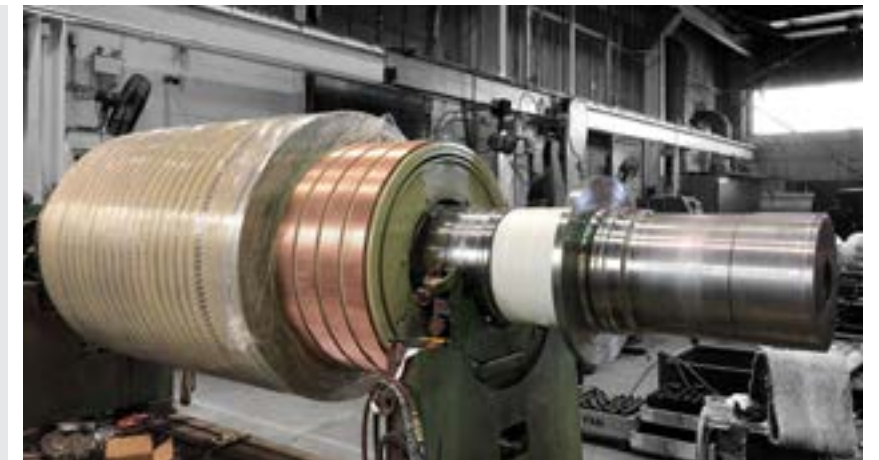
#### Repair of Heavy Duty Machinery Components

LaserClad is a weld overlay process which uses a high powered laser beam to form a melt pool on a metallic substrate. Metal powder or wire filler is fed into the melt pool forming a metallurgical bond with the substrate. The melt pool size is monitored using closed loop control, which reduces laser power as heat is built up in the part. The cladding head is mounted to a robot or CNC machine programmed to accurately follow the surface of the component being clad.

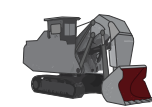
Our ISO 9001 certified manufacturing facility provides an exclusive selection of high quality nickel, cobalt, stainless steel, Hastelloy®, Inconel®, and iron-based powders and wires, as well as carbide mixes.

#### Typical Applications:

- Suspension Housings
- Dipper & Bucket Cylinders
- Gear Axles & Splitter Boxes
- Pivot Shafts & Bearing Journals
- Guide Panels & Conveying Wear Parts
- Slurry Pump Parts
- Fan Housings and Blades
- Dimensional Restoration
- Direct Chrome Replacement



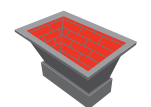
### Our Specialized Wear Systems for Mining



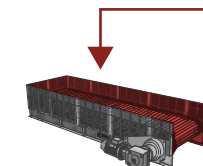
Rope Shovel  
Bucket Liner Systems



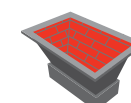
Mine Dump Truck  
Floor & Edge Liners



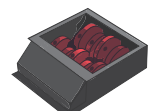
Receiving Hopper  
Wall Liners



Apron Feeder  
Skirting & Floor Liners



Ore Transfer Bin  
Floor & Wall Liners



Secondary Crusher  
Crusher Liners

## MeCaTeC® Mining Grade - Engineered Composites for Asset Reliability and Sustainment

Compounds to Protect, Repair, Rebuild, and Bond: From rapid repair to abrasion-erosion-corrosion resistance, [MeCaTeC](#) offers exceptional surface protection lining options to minimize downtime and production losses in the Mining Industry. Our polymer solutions eliminate the need for costly in-situ labor, and hot-work procedures. Castolin Eutectic team will help you to overcome the constant challenge of shutdown repairs at a fraction of cost.

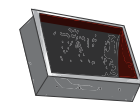
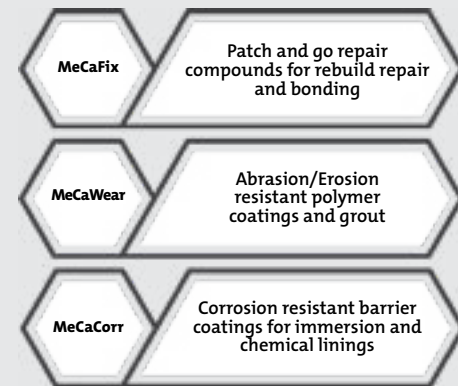
### Typical Applications:

- Chute rebuilding and tile replacement
- Damaged rubber lining repair
- Worn elbow and cyclone cones
- Conveying parts and systems
- Bag houses, and mine fans
- Storage and processing tanks
- Grinding mill lining
- Pump casing repair



**MeCaBack™ Next-Gen Solution for Crusher Equipment Maintenance:** This innovative line of crusher backing compounds is specifically designed to reinforce the liner, fill voids, reduce vibration and eliminate friction in rock crushing heavy machinery. It is easily applied between both gyratory and cone crusher liners and the crusher body part.

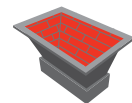
- Gyratory crushers & components
- Lock bushings
- Cone & stone crushers
- Grinding mill liners
- Backing plates



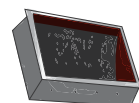
Ore Transfer Chute Modular Liners



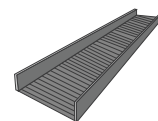
Primary Crusher Crusher Liners



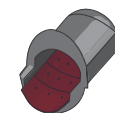
Discharge Chute Floor & Wall Liners



Ore Transfer Chute Modular Liners



Conveyor Transfer Chutes Skirt Liners



Sag Mill Feed & Discharge Liners

## Wear Pipes

**CastoTube®:** Eutectic Castolin offers engineered weld-cladded piping solutions designed to optimize service life and performance of demanding mine backfill applications. CastoTube is proven to outlast mild and alloyed steel, hardened and HDPE pipes.

CastoTube® weld cladded casings

Ultimate wear resistance in slurry transportation

- Complete Turnkey Mine Backfill Casings
- Performance & Benchmark Analysis
- Material Selection & Evaluation
- Field Performance Analysis
- New Installation & Retrofits
- Ease-of-installation

**MeCaPipe™:** MeCaPipe is Eutectic Castolin's answer to extreme abrasion for mine backfill distribution systems. A ceramic composite lined pipe designed to combat extreme erosion, MeCaPipe reduces slurry wear even under chemical exposure. It outperforms traditional piping systems, minimizing costly change-outs, lowering overall maintenance costs, and increasing plant-wide reliability. MeCaPipe can be easily repaired or relined to further extend service life.

### Typical Applications:

- Process Slurry and Tailings Transport Pipes
- Hydraulic Cemented Backfill or Paste Backfill Distribution Systems
- Lateral Backfill Pipe
- Concrete Slick Pipeline Systems
- De-watering and Wastewater Conveyance

## Engineered Pipe Coupling Systems:

Our piping systems are engineered to meet your hydraulic design requirements.



PIPE-FLANGE



VICTAULIC-JOINT



WELD-ON-COUPLING



QUICK-CONNECT



PIPE-THREAD

- Joint connection types will vary based on engineering specifications and backfill application.
- Casing sizes are selected to ensure the finished internal diameter meets the required hydraulic diameter.
- Pipe hardware available upon request (custom elbows, fittings, offshoot lateral pipe components).

*Pioneering  
Industrial Sustainability*



**Your resource for protection, repair and joining solutions**

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