



# MINING AND CRUSHING WEAR SOLUTIONS

100% Canadian-Made, High-Performance Castings for the Mining Industry



**PROVEN PERFORMANCE**  
IN CRUSHING AND GRINDING EQUIPMENT



**CUSTOM-ENGINEERED**  
FOR DEMANDING MINING ENVIRONMENTS



**UP TO 7X LONGER**  
SERVICE LIFE

**90+ YEARS OF INDUSTRY PROVEN SUCCESS IN THE FIELD**

[PENTICTONFOUNDRY.COM](http://PENTICTONFOUNDRY.COM)

# THE CANADIAN MANUFACTURING ADVANTAGE

From our 120,000-square-foot facility in Penticton, British Columbia, Canada, Penticton Foundry engineers and produces high performance, custom-engineered castings and parts for mining and crushing companies throughout North America.

As a full-service foundry, we control every stage of the engineering and manufacturing process. Our high chrome white iron wear components dramatically extend service life, reducing downtime and operational costs.



## KEY BENEFITS FOR MINING OPERATIONS

- **Reduced downtime** – up to 7x longer wear life means fewer shutdowns and less maintenance
- **Improved abrasion resistance** – high chrome white iron alloys provide superior wear resistance
- **Lower cost per ton** – fewer replacements reduce maintenance labour and production losses
- **Reliable performance** – consistent metallurgy ensures predictable wear characteristics
- **Improved safety** – reduced maintenance frequency lowers exposure to equipment hazards

MATERIAL	GOUGING WEAR RESISTANCE	IMPACT STRENGTH	TYPICAL APPLICATIONS
High Chrome White Iron (ASTM A532 Class II & III)	● ● ● ● ●	● ● ● ● ○	Pump parts, gyratory and chute liners, grizzly bars, loaf liners, cyclones, Vertimill liners
Chromium Carbide Overlay (CCO)	● ● ● ● ○	● ● ○ ○ ○	Coal processing, tailings piping (straight spools)
Ni-Hard (ASTM A532 Class I)	● ● ● ● ○	● ● ● ○ ○	Cement mixing and pumping
Ceramic	● ● ● ○ ○	● ○ ○ ○ ○	Conveyor components, cyclones for the proper media, high temperature applications
Rubber	● ○ ○ ○ ○	N/A	Rubber/metal ball mill liners, piping (straight spools) and cyclones for the proper media
Mild Steel	● ○ ○ ○ ○	● ● ● ● ●	Structural components

## THE MADE IN CANADA ADVANTAGE

- ✓ Manufactured in Canada – designed and produced to meet the toughest industry standards
- ✓ Supporting Canadian industries – supplying top mining and crushing companies
- ✓ Built for harsh environments – engineered for extreme wear and abrasive mining conditions
- ✓ Reliable lead times – improves planning and reduces risk for the customer



## MINING & CRUSHING WEAR SOLUTIONS

Penticton Foundry manufactures high chrome white iron wear components engineered for severe abrasion and impact conditions in mining environments.

### Our castings help operations:

- Extend liner service life
- Reduce shutdown frequency
- Lower total maintenance costs
- Improve equipment reliability



## Products Include



- Gyratory crusher liners
- Cone crusher liners
- Apron feeder liners
- Chute and grizzly liners
- Transfer chute liners
- Trunnion liners
- Cyclone components
- Surge bin and mill liners

CUSTOM-ENGINEERED WEAR SOLUTIONS ARE AVAILABLE FOR DEMANDING APPLICATIONS.

Selecting the correct liner material is critical for **maximizing wear life and maintaining grinding efficiency.**

MILL LINER APPLICATION	RECOMMENDED MATERIALS	KEY ADVANTAGE
Gyratory Crusher Liners	Tough 25 chrome white iron, manganese steel, alloy steel	Manganese steel - impact at top of crusher. Chrome iron resists gouging abrasion in lower zones
Apron Feed Liners	Granite 25 chrome white iron, 15-3 chrome white iron, manganese steel	Chrome white iron resists severe sliding abrasion and impact. Manganese steel is for extreme impact only
SAG / Trojan Horse Liners	20-1 chrome white iron, Granite 25 chrome white iron, AR plate	Chrome iron significantly outlasts AR plate
Trunnion Liners	Bi-metal liners, chrome white iron, ceramic-rubber	Combines structural strength with wear resistance
Surge Bin Liners	Granite 25 chrome white iron, AR plate	Excellent abrasion resistance in high-throughput areas. Chrome iron significantly outlasts AR plate

## COST SAVINGS THROUGH RECYCLING

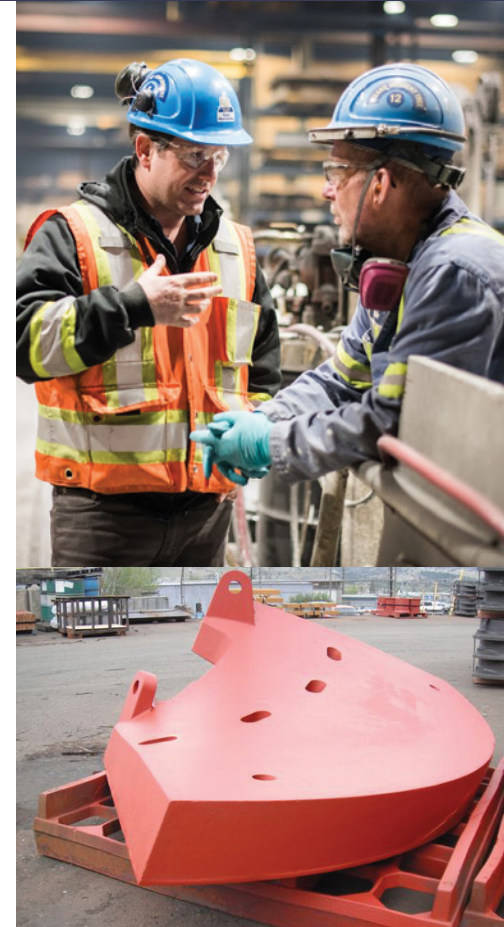


- ✓ We buy back high chrome white iron from mines at market rates
- ✓ Supports the circular economy
- ✓ Strengthens supply chain resilience
- ✓ Can result in pricing stability in some cases



# SUCCESS STORIES

PROVEN PERFORMANCE IN MINING OPERATIONS



**6X  
LONGER  
WEAR LIFE**

### CHUTE LINER – CANADIAN MINE

- Outperformed AR400 steel plate
- Replacement cycle extended to 3–3.5 years
- Material: Granite 25 high chrome white iron

**7X  
LONGER  
SERVICE  
LIFE**

### RUBBER VS CHROME WHITE IRON

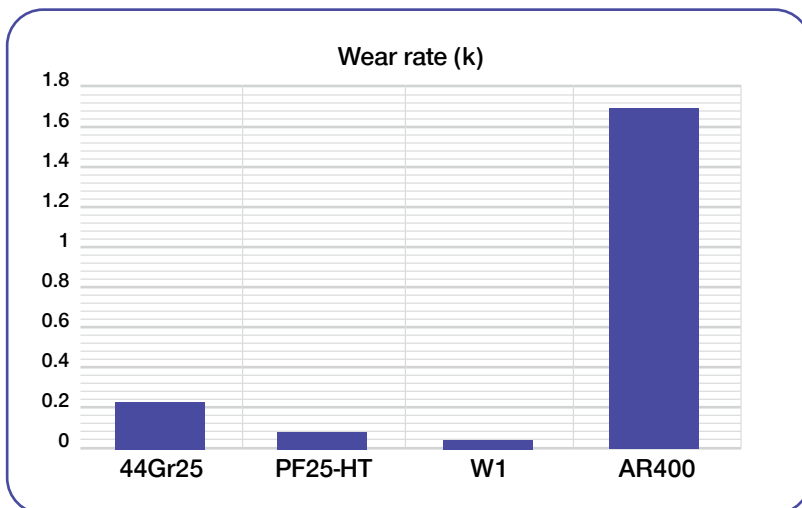
- Chrome white iron liners outlasted rubber liners
- Reduced shutdown frequency
- Lower maintenance labour costs

**NEAR-  
NEW  
AFTER 10  
MONTHS**

### APRON FEED LINER PERFORMANCE

- Liners in near-new condition after 10 months
- Led to additional feeder installations
- Improved safety and wear resistance

## AN EXPERIMENT COMPARING 3 HIGH CHROME WHITE IRON ALLOYS, ASTM A532 TO AR400 PLATE



*Note: GR25 and PF25 are both ASTM A532 Class III Type A alloys, and W1 is ASTM A532 Class II Type D.*

The wear results comparing high chrome white iron (HCWI) to AR400 show that the **HCWI samples have an improved wear resistance** to AR400 samples - the lower the number in the wear rate column, the better.



### CONTACT US

Improve wear life and reduce downtime in your mining operation. Speak with our engineering team about selecting the right wear solution.

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