

# HIGH-QUALITY AFTERMARKET REPLACEMENT WEAR PARTS FROM FEED THROUGH TO STOCKPILE









# **ABOUT US**

Mining Wear Parts (MWP), is an Australian owned and operated manufacturer and supplier of high-quality aftermarket parts and components for the mining, quarrying, and recycling industries. Recently acquired by Mineral Resources Ltd (ASX:MIN), MWP proudly have one of the largest stock holdings of parts and components to suit most makes and models of crushers currently in operation in the Australian market.

In addition to this large product offering, MWP also stock aftermarket parts for slurry pumps and have an extensive range of cast blocks, billets, chocky blocks and bars to continue expanding on our vision to become the leading aftermarket parts supplier globally.

Although we have the inventory and expertise of a multinational company, Mining Wear Parts remains agile and responsive enough to provide customers with the necessary time and attention. This ensures customized solutions, transparency, and support at every stage of our customers' relationship with us, from initial inquiry to repeat orders.



# **ENGINEERING**

Our engineering team is equipped with the latest technology, and possess the necessary skills, to perform scanning, reverse engineering, life prediction, and suggest liner enhancements to achieve the desired results of our customers, including prolonged lifespan, better throughput, or product shape.

Our engineering team is continuously working on innovative designs and materials to improve products and maximize our aftermarket parts' value.

We follow the Six Sigma methodology in design engineering to provide a consistent and practical approach to maximize the life and usability of our aftermarket parts. We continue to improve our processes to help customers realise cost effective solutions that extend life through clever design and thorough quality inspections.

# QUALITY CONTROL

We believe in built-in quality rather than only product quality, and we employ the Six Sigma methodology to achieve it. Quality control is embedded in our process resulting in a reliable and accurate final product.

Our suppliers also follow the same philosophy that is continuously monitored by our quality engineers. We believe in capturing 'Customer Voice' for continual improvement in quality.

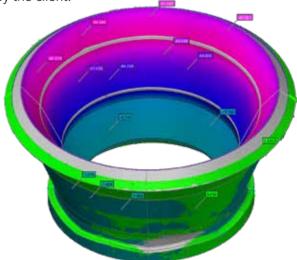
# WEAR PART OPTIMISATION

We work with customers to understand and improve known industry issues such as premature failure, excessive wear, or inaccurate measurements that aren't maximizing throughput or the product shape as desired. Whether by improving materials, measurements or casting techniques at the beginning of life, we can make improvements to prevent known issues that result in these unwanted and costly interruptions.

# CRUSHER LINER OPTIMISATION

Our liner optimisation offerings are available for all customers. We work with your worn profiles to understand the wear profile, material suitability, and general life capabilities. This information provides an understanding of the liner and subsequent crushers' overall performance.

This information helps us to further develop your crusher liners to significantly reduce the guesswork and time to trial products, meaning a guicker arrival at the savings, life, or material output that's desired by the client.





# **MANGANESE**

Our aftermarket manganese products are built and proven to optimise your crushers' performance. We can provide standard OEM profiles in our range of manganese grades or design cavities to suit your needs.

Our manganese products are subject to the highest quality checks and come fully warranted for peace of mind. Liners are painted specific colours and have cast identification numbers to indicate the materials used. With on-going customer support throughout the life of each component, we are a strong partner for customers in industrial settings.

With a huge range of parts to suit most makes and models, including but not limited to;

- Terex
- Jaques
- Pegson
- Cedarapids
- **Finlay**
- Metso
- Sandvik
- Raptor

- **Patriot**
- Kue Ken
- Minyu
- Trio
- Symons
- Nordberg
- Lokomo
- Goodwin

- **Telsmith**
- KPI-JCI
- Striker
- Hazemag
- Kodiak
- Kawasaki
- Allis Chalmers
- Vickers



# MANGANESE GRADES

Manganese is used in crusher wear parts as it improves life by hardening as it works. When selecting manganese liners, the liner percentage indicates the amount of manganese used in the casting. Our quality cast aftermarket liners come in 14%, 18% and 22% manganese.

Our customers rely on our crusher specialists to suggest the right parts for their equipment to help optimise crusher performance, output, or material shape and size.

#### **STANDARD 14%**

Standard grade manganese steel provides a low-cost option for sites that have low wear rates or don't have to crush continuously.

#### **HIGH PERFORMANCE 18%**

A high-performance grade of manganese delivers customers the perfect balance between cost and performance.

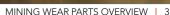
# **ULTIMATE PERFORMANCE 22%**

A high-grade 22% manganese provides the ultimate performance in high wear applications. Modified manganese material grades are available for customers that require extra toughness.

# SAFETY LIFTING

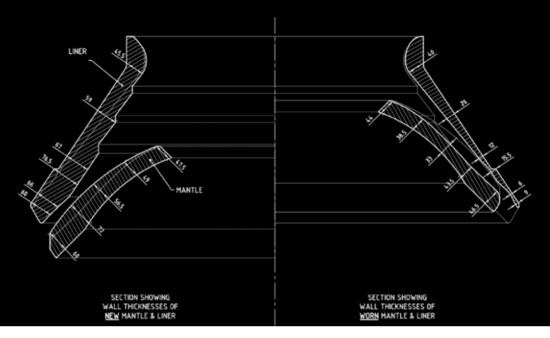
Our aftermarket manganese crusher liners are made to suit the Mangasafe™ range of cone and jaw crusher lifting tools. These lifting devices were developed as a safe alternative to traditional weld-on lifting lugs.

Mangasafe™ lifting products can be arranged with your order. We place a high priority on safety solutions to ensure customers and our people operate in safe environments.



# LINER OPTIMISATION

To optimize the performance of each application and machine, we tailor our approach to suit the specific profile. By utilizing a combination of 3D scanning equipment, custom software, worn and new liners, and engaging with the operator, we can quickly develop a liner or a set that can significantly enhance lifespan by 20% to 200%. This in turn will lead to better efficiencies and savings overall.



# CASE STUDY C125 LINER REDESIGN

#### **CUSTOMER**

Northern Star Resources Limited (Northern Star), is an Australian gold producer with Tier-1 world class projects located in highly prospective regions of Australia and North America. Northern Star's Jundee operation in Western Australia, uses a conventional carbon in leach (CIL) plant circuit, starting with a single toggle overhead eccentric swing jaw crusher.

#### **CHALLENGE**

The customer looking for improvements to extend the life of both the fixed and swing liners on the primary C125 Norberg jaw crusher. The current 2-piece configuration was causing the liners to move beyond what is necessary, resulting in premature wear on the middle wedges.

# **SOLUTION**

Using customer data and industry experience, our in-house engineering team redesigned the jaw crusher assembly from a 2-piece to a 1-piece configuration. This new configuration restricted the movement that was responsible for wear on the middle wedges. In addition to the redesign, Mining Wear Parts also upgraded the material of the liners to heavy-duty ceramic metallic inserts (CMI) to maximise usable wear life, reducing operating costs associated with early changeouts.

# **FURTHER INNOVATION**

With the success of the C125 improvements, the customer has asked that MWP continue to provide quality aftermarket parts for their C125 crusher and HP6. This includes further assistance with liner developments for the HP6

#### **SOLUTION RESULTS**

The design change and material improvements provided by MWP resulted in a 71% increase on the life of the fixed and swing jaws of the customer's C125 primary crusher. These improvements resulted in an additional five weeks of usable wear life, an increase from 7 weeks to 12 weeks.





# **BACKING COMPOUND**

We offer a full range of backing compounds to cover rapid set or delayed setting, temperature variation to locking bushes into position. We maintain a large stock holding to support customers globally.

# MEGAPOXY STANDARD HICB

For everyday use. Rapid set time, minimal shrinkage, high impact crusher backing

# MEGAPOXY ACCELERATOR

Reduces cure time for less down time of the crusher

#### MEGAPOXY EASYPOUR

Low viscosity designed to fill the cavity faster

#### MEGAPOXY 57

Designed for hot climates. With low viscosity it will fill the cavity faster so it is full before it begins to harden

#### BUSHLOCK

Used to lock bushes into position

# **CRITICAL CRUSHER PARTS**

All our aftermarket components adhere to strict quality checks and manufacturing standards to ensure consistency to continue supporting customers by providing reliable aftermarket parts that optimize performance.

Our range of critical components are designed to simplify installation, without compromising on the quality or fit, to get equipment up and running quicker. Our engineering teams can redesign and improve component materials to ensure life targets are achieved in high wearing, abrasive, or high impact applications.

To support customers nationally, we carry a large range of stock in both Perth and Brisbane warehouses. All our products come completely warranted.

- Heads
- Bowls
- Mainframes
- Countershafts
- Adjustment rings
- Top shells
- Main shafts

- Swing stocks
- Socket
- Eccentric
- Fly wheel
- Toggles and seats
- Spider bush





# **GRAVEL AND SLURRY PUMPS AND PARTS**

Our high-performance aftermarket pumps and parts use the latest wear materials such as urethane, rubber, high chrome white iron, and ceramics. These materials are used to deliver solutions that are suited to the harshest pumping environments. Depending on the fluids that pass through the pump, Mining Wear Parts can supply the following sizes and materials:

Metal Pumps from 1.2" x 1" to 18" x 16"

Gravel Pumps from 6" x 4" to 36" x 36"

Rubber from 1.5" x 1" to 20" x 18"

With a comprehensive range of high-quality, heavy-duty aftermarket slurry pumps and parts, Mining Wear Parts hold stock to suit all major makes and models in the market.

Our knowledge is complemented with our unyielding commitment to quality and reliability, giving our customers consistent pump performance and reducing operating costs by maximising production.



# **IMPACT CRUSHER PARTS (VSI/HSI)**

High impact and wear is common in impactors, particularly with the hard rock quarries in Australia. At these sites, machines need to perform optimally to achieve the final product size and shape. We regularly work with customers to reduce the costs of running these machines while helping deliver the product shape, size and volume required. The right settings, paired with our high-quality and reliable aftermarket parts, can help you achieve the outcomes required. If a tailored solution is required, we have impact crusher specialists available to assess the current output and final product of your equipment and provide a tailored solution to achieve your goals.

We have large stock holdings of aftermarket parts to suit the more common machines such as Hazemag, Terex-Canica, Striker and Metso, with additional in-house support to tailor solutions to suit older makes and models still in operation. Our regular stock includes high-quality aftermarket parts for your rotors such as high wearing tips and bars and complete aftermarket rotor replacements.

- Blow bar
- Breaker plates
- Liner plates
- Tip sets
- Distributor plates
- Wear plates
- Anvils and shoes
- Trial plate
- Feed tube
- Eye rings



# **BRONZE**

We engineer our bronze components according to the exact specifications and requirements of our customers, utilizing the highest quality grades of materials. We aim to ensure the performance and lifespan of the components match or surpass the expectations of our customers. During the manufacturing process, lead is evenly dispersed through the casting to ensure consistent lubricity which increases the life of our bronze castings.

With a continued investment in stocking crusher bronze for many of the leading brands, we're reducing downtime to support customers' operations.

- Inner bush
- Outer bush
- Eccentric bush
- Countershaft bush
- Step washer
- Hydroset bush
- Socket liner

# TRANSPORT CARE

All bushes are professionally packaged in strong timber crates to protect each part. Bushes that might suffer from transport damage are all fitted with shock and tilting sensors to ensure the part arrives at your site in perfect condition.

# **BI-METAL WEAR BLOCKS AND BUTTONS**

Our bi-metal wear blocks and buttons are a combination of high chrome white iron that is bonded to a mild steel backing plate. The white iron working surface has a hardness of 700 Brinell (nom.) that provides the ultimate abrasion resistance. The mild steel is easily weldable with limited preparation and acts as a support for the white iron, assisting with impact and abrasion in the most extreme applications.

Our wear range provide a simple and cost effective solution to protect against wear in both mobile and fixed assets.

Typical applications include but are not limited to; buckets (excavator, loader, dragline, face shovel), crusher spider arm guards, feed and discharge chutes, feeder grizzly bars, shredder and grinding mills, sugar cane knife edges, adaptor & attachment protection, and dredging equipment.

- Wear buttons/donuts •
- Boomerangs
- Chocky bars
- Wafer strips
- Rock box liners
- Wear bars
- Wear plates
- Shredder/grinder tips
- Skid bars
- Knife edges
- Grizzly bars
- Micro-ledge
- **Billets**
- Liners

# CERAMIC METALLIC (CM) INSERTS

We provide ceramic metallic inserts for a range of high abrasive wear applications to provide customers with increased equipment availability, reduced operational costs and unexpected change outs. CM inserts provide an enhanced high wear zone to increase and maximise usable wear life.

Our specialist teams can tailor products to suit customers' specifications. Our CM inserts are available in 20mm, 40mm, 60mm, and 80mm depths.

#### **APPLICATIONS**

- Jaw crusher wear parts
- Cone crusher wear parts
- Horizontal shaft impactor
- Blow bars and impactors
- Horizontal shaft impactor liners
- Hammermill hammers
- Hammermill breaker blocks









MININGWEARPARTS.COM.AU info@miningwearparts.com.au | 1300 898 159

