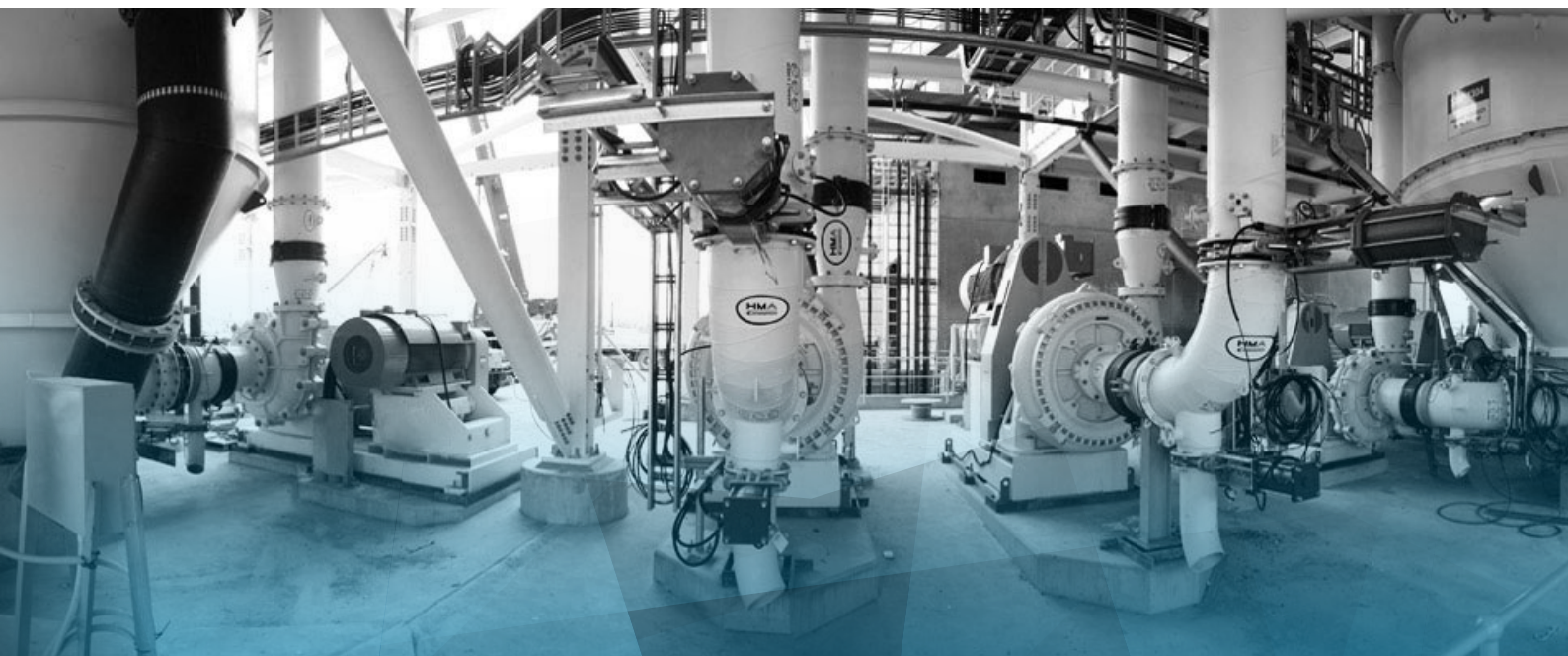


# HMA

**WEAR SOLUTIONS**



**SINCE 1966**

# Introduction



HMA Wear Solutions is committed to working closely with their clients to produce the most cost effective outcome in solving costly wear issues.

- **Experience**, over 35 years' designing cost effective solutions.
- **Reputation** for delivering successful outcomes.
- **Quality** systems applied to all products and manufacturing.
- **Range** of products for different applications including ceramics, polyurethane, rubber and metals.
- **Development**, continually looking for the latest products
- **Complete** design, manufacture and installation ability.
- **Strategically** positioned offices and workshops.

Alumina  
Silicon Carbide  
Monolithic Cylinders  
27% Chrome  
Rubber

Basalt  
PSZ  
Alumax  
Polyurethane  
HDPE

- Piping Systems
- Cyclones
- Chutes – design & manufacture
- Magnetic Separators
- Belt Magnets
- Flotation
- Metal Detectors
- Condition Monitoring – Pipescan, Cyclones, Magnetic Separators and more
- Installation and Maintenance

- **MINING & MINERALS**
- **CEMENT & QUARRY**
- **POWER GENERATION**
- **PROCESS INDUSTRY**
- **PULP & PAPER**
- **WASTE & WATER**
- **PHARMACEUTICAL, FOOD & BEVERAGE**





## WEAR RESISTANT TECHNOLOGIES

With over 35 years' experience solving wear problems within varying processes using a vast range of materials, design philosophies and manufacturing techniques, we can supply a cost effective solution that delivers on reliability and return on investment.



## SITE SERVICES

With an ever increasing demand, our site services are continually expanding. We now offer tiling, condition monitoring and installation of our products.



## PROCESS EQUIPMENT

Supported by process engineers and a team of industry experts we have process equipment for separation, detection, and recovery.



# Wear Resistant Technologies

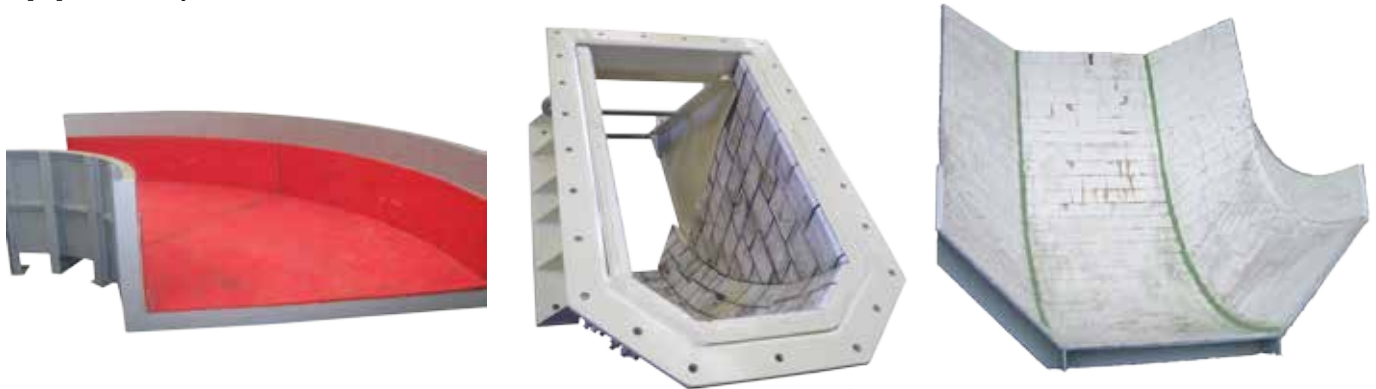
## Wear Resistant Lined Pipe

Piping connects some of your most important and expensive process equipment, and with a lined piping system specifically designed for your operation, you will keep them operating at optimal performance. HMA Wear Solutions offers a range of lining materials including basalt, alumina, Weartech, polyurethane and rubber as well as complete design, supply and in some instances installation via our Site Services division.



## Sumps, Chutes & Gates

With the movement of materials you will have wear. To reduce the expensive change out of your sumps, chutes and bins we have wear resistant lining materials that will prolong the life of this vital equipment. The main industry linings are basalt, alumina, rubber and polyurethane, we can offer these plus others, through design and manufacture of new equipment or by on site installation via our Site Services division.



## Specialised Lining Systems

In many applications, solving the wear problem requires more than the standard wear lining, which is why we have a wide range of lining systems that while having higher initial costs, delivers substantial savings over its life cycle, and therefore justifies its use. Specialised products like Alumax, Aerotech, SiTech, PSZ, ZTA and ARZ, to name a few. Our experience gives us the unique ability to apply the most cost effective product to solve your wear problems.

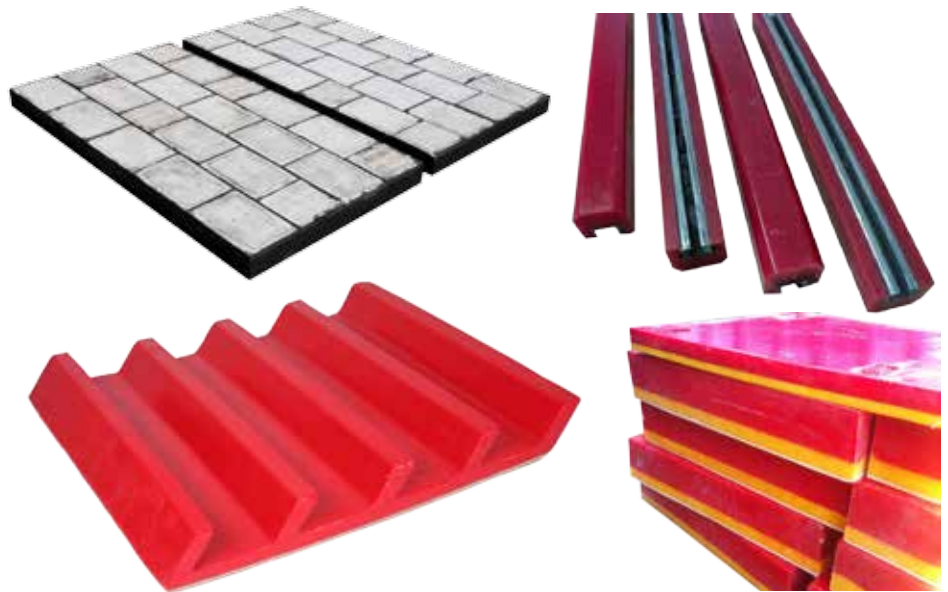




# Wear Resistant Technologies

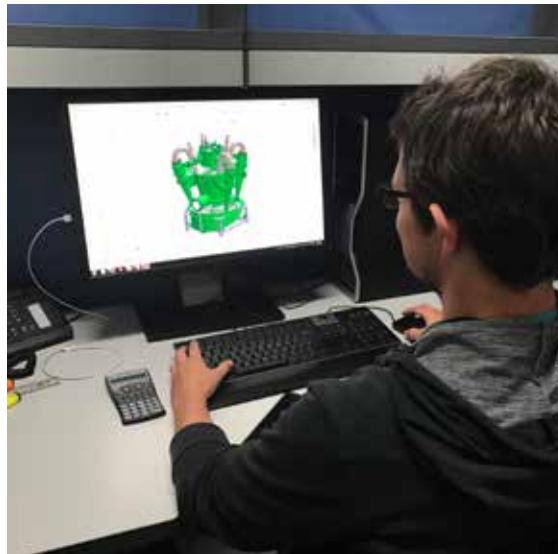
## Impact Panels

When impact is a problem and the standard fixing method of epoxy adhesive is not sufficient, then using "Impact Panels" is a cost effective solution. This method allows you to have the lining material prefixed to a panel that can be mechanically fixed into the chute by way of bolts or tracks. It will minimise your down time as it is a quick process to change out the worn area and get your plant running.



## Engineering

With over 35 years' experience solving wear problems in a wide range of industries, we can solve your wear problems to give you higher plant reliability and less downtime. HMA Wear Solutions can partner with our clients to successfully achieve their desired outcomes through engineered solutions and take a project from initial concept through to completion.



## Ancillary Products

Complementing our range of equipment and services is the ancillary products, like our Greenbank Couplings, WrapTech repair bandages, WearTech trowelable ceramic, alumina & basalt tiles, adhesives and specialised gaskets.



# Process Equipment

## Cyclones

Cyclones are an extremely fast and efficient way of separating materials based on density and size. HMA Wear Solutions specialises in the design and manufacture of superior ceramic lined equipment. Utilising our unique manufacturing equipment and processes ensures that our product exceeds industry expectations. The GTech range of Dense Medium (GTD) and Classification (GTC) Cyclones is the accumulation of such experience, offering superior cyclone performance throughout its operating life with process guarantees to support this.



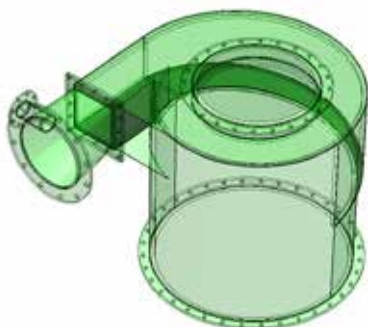
The advantages of the GTech range of cyclones include:

- Ongoing Technical Support
- Optimal Ceramic Selection
- Superior Lining Design
- High Separation Efficiency
- Reduced Operating Costs
- Engineered Tiles and Monolithics



HMA Wear Solutions supplies cyclone components in a range of abrasion resistant materials such as Alumina Tiles, Alumax Monolithics, SiTech and 27% Chrome. We can also offer Aerotech, a ceramic bonding that provides a more consistent and predictable operating life where tramp is present.

HMA Wear Solutions can provide you with your complete cyclone solution.



## Eriez

The world authority in advanced technology for magnetic, vibratory and inspection systems. We also specialise in flotation and separation systems.

The product range includes;

### • Suspended Magnetic Separators

Safely and automatically remove damaging tramp iron from heavy product flows such as coal, rock, iron ore, minerals and wood chip being conveyed on belts, vibratory feeders or chutes. Available in both permanent and electro models.

### • Eriez Flotation Column

Eriez Flotation Columns are ideal for efficient high volume recovery of fine coal (0.3 mm) particles. State of the art column flotation design, using a variety of air sparging techniques. High-capacity columns with low operating and maintenance costs.



### • Wet Drum Separators

Eriez offer a wide range of wet drum magnetic separators for a variety of separation and direct recovery applications. Recover magnetite or ferrosilicon in heavy media operations or concentrate magnetic ores. Varying magnetic strengths and pole configurations to suit most applications is available.

### • Metal Detectors

Eriez have a comprehensive range of metal detectors available for industrial, aggregate and mining applications.





# Site Services

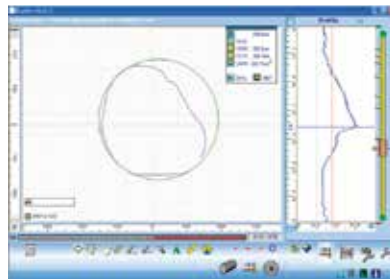
## Site Maintenance and Installation

- Safe and effective work crews available for installation and maintenance work
- Specialised in the installation of our equipment
- Ability to undertake projects from conception through to commissioning



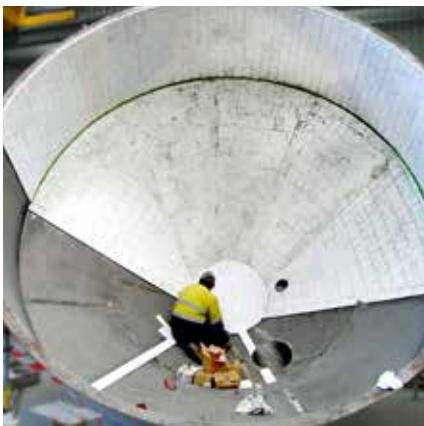
## Pipe Scan Inspection

- Maximise pipe life through condition monitoring inspections.
- Developed as a measuring tool for internal monitoring of lined pipework.
- Ability for visual and or light line measurements
- Used to determine wear patterns and nominate effective life and maintenance practices.
- Allows preventative maintenance planning accuracy.
- Decreases breakdowns while maximising pipe life opportunities.
- Specialised in-house service providers



## Industrial Tiling

- Specialised crews and equipment for maximising client tiling opportunities
- Ability to recommend improvements
- Multiple work crews available for large scope activities and support
- Ability to utilise in-house trades support when required for extensive repairs



## Cyclone Condition Monitoring

- Internal inspection and measuring of cyclone components
- Detailed reporting with tonnages and wear life predictions
- Allows preventative maintenance planning accuracy
- Ability to provide installation and maintenance support for cyclones
- Safe and effective work crews available for installations on large and small projects

## Magnetic Separation Inspections

- Regular and or one-off audits to inspect condition, set up and overall performance
- Recommendations and maintenance strategy options available for increased productivity of magnetite recovery systems
- Specialised in-house service providers

## Chute & Wear Liner Inspection

- Detailed reports generated from inspections
- General chute condition prioritised to assist in preventative maintenance schedule
- Optional in-house maintenance support capability





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**HMA GROUP**

**MATERIALS HANDLING**

**WEAR SOLUTIONS**

**FLOW & INDUSTRIAL**

**INSTRUMENTATION**

**POWER GENERATION**

**GEOTECHNICAL**

**AUSTRALIA - NEW ZEALAND - INDONESIA - SOUTH AFRICA**

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