



# INDUSTRIAL LININGS



## LEADING THE WAY

IN ASSET INTEGRITY MANAGEMENT & INDUSTRIAL SOLUTIONS

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SOUTH AFRICA

ZAMBIA

DEMOCRATIC REPUBLIC OF CONGO

MADAGASCAR

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SAUDI ARABIA



At DGC AFRICA, we provide high-quality asset integrity management and industrial solutions across the African continent. With over 50 years of experience in Africa and 115 years as part of the Dickinson Group of Companies, we serve industries such as mining, metals smelting, mineral processing, oil and gas, and power generation.

**OUR FOCUS ON INNOVATION,  
SAFETY, AND EFFICIENCY  
HAS ESTABLISHED US AS A TRUSTED PARTNER  
IN THE INDUSTRY,  
COMMITTED TO SUPPORTING SUSTAINABLE  
GROWTH AND OPERATIONAL  
EXCELLENCE FOR OUR CLIENTS.**



# OUR INDUSTRIAL LININGS OFFERING

At DGC AFRICA, we specialize in providing top-tier Industrial Linings for the mining, metals smelting, mineral processing, and refining industries worldwide. Our solutions offer robust protection against corrosion, chemicals, and wear, ensuring your assets remain in optimal condition. We aim to minimize downtime and maintenance costs by adhering to stringent specifications, high-quality standards, and thorough inspections.

Our products, all ISO 9001 certified, have been proven effective in various challenging environments across multiple industries, including mining, agriculture, chemical, petrochemical, pulp & paper, food & beverage, construction, marine, wastewater, and power generation. By leveraging our resources and global partnerships, we deliver cost-effective solutions tailored to meet your specific needs, regardless of project size or complexity.



# WELD OVERLAY, WEAR & ABRASION PROTECTION SOLUTIONS



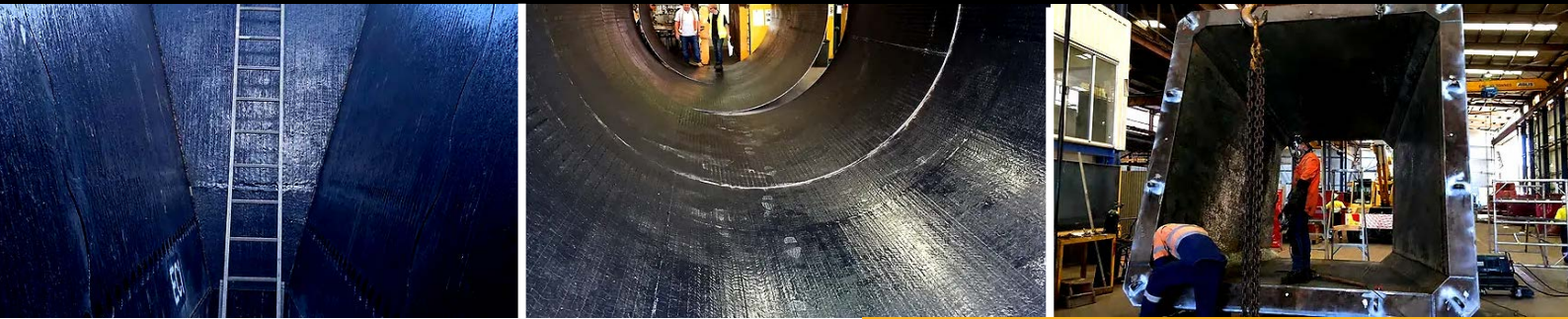
DGC AFRICA has teamed up with **Enduraclad International (ECI)** to enhance machinery durability and efficiency with our Weld Overlay and Abrasion Protection solutions. These services are tailored to meet the demands of the mining, construction, and manufacturing industries, ensuring your equipment performs optimally under harsh conditions.

Our offerings include advanced abrasion-resistant weld overlays, bi-metallic wear castings, tungsten hard-facing, customizable steel plates, and cutting-edge titanium carbide wear liners.

This strategic partnership is committed to minimizing downtime, reducing operational costs, and extending the lifespan of critical equipment, thereby ensuring more cost-effective productivity and operational efficiency in your industrial operations.

## PRODUCT RANGE

**WELD OVERLAY** / **CASTINGS** / **TUNGSTEN HARD FACING** / **QUENCHED & TEMPERED STEEL**  
**TITANIUM CARBIDE** / **STUD WELDING**



### WELD OVERLAY

DGC AFRICA specializes in **Weld Overlay Solutions** that significantly enhance the durability and performance of industrial equipment operating under harsh conditions. These overlays are meticulously engineered to combat the severe abrasion, impact, and erosion typically encountered in industries such as mining.

Adhering to stringent safety standards, these solutions are recognized for their exceptional wear resistance and are tailored to meet the specific demands of heavy-duty machinery, ensuring extended equipment life and reliability in demanding operational environments.

#### KEY FEATURES

##### SUPERIOR WEAR RESISTANCE

Provides enhanced protection against abrasion and impact, crucial for the longevity of machinery exposed to severe wear.

##### CUSTOMIZABLE SOLUTIONS

Specifically engineered to address unique industrial challenges, ensuring optimal performance and fit for specific machinery applications.

#### BENEFITS

##### EXTENDED EQUIPMENT LIFE

Significantly increases the lifespan of critical machinery, reducing downtime and maintenance costs.

##### SAFETY AND COMPLIANCE

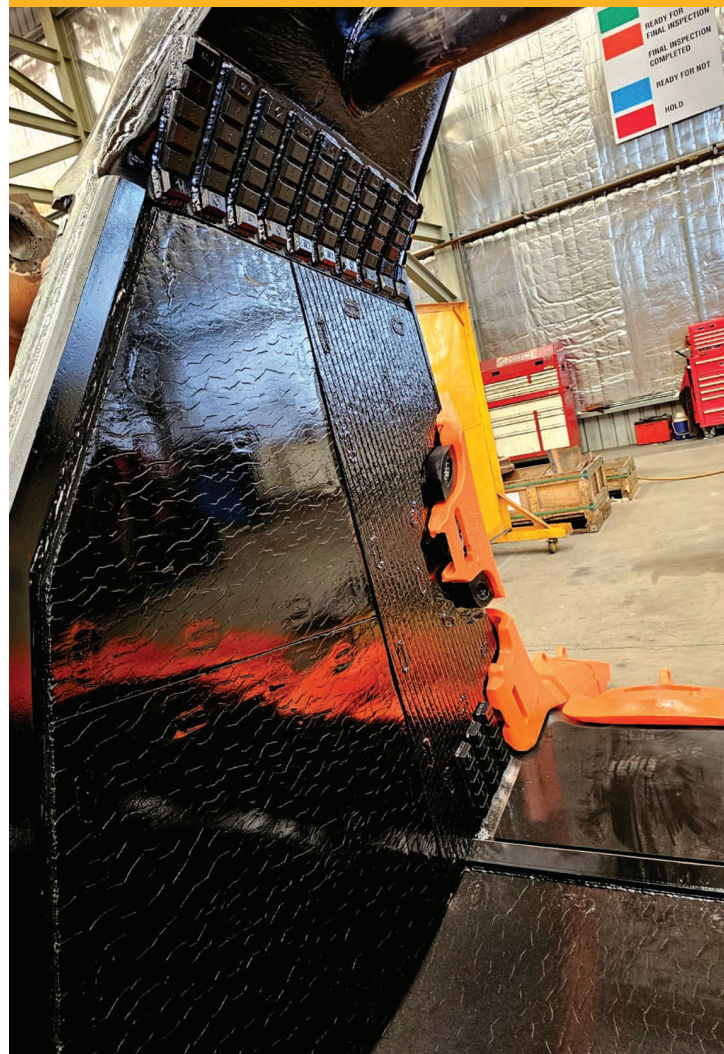
Meets high safety standards, ensuring reliable and safe operations in rigorous conditions.

#### APPLICATIONS

##### HEAVY INDUSTRY MACHINERY

Particularly effective for components such as crushers, mills, and conveyors that are subject to intense wear and tear.

**THESE CHARACTERISTICS UNDERScore DGC AFRICA'S COMMITMENT TO PROVIDING ROBUST & DURABLE SOLUTIONS FOR INDUSTRIES REQUIRING ADVANCED PROTECTION AGAINST WEAR & ABRASION.**



## CASTINGS

DGC AFRICA provides a comprehensive array of castings and bi-metallic wear-resistant products tailored for severe material handling applications. These products, crafted from high-quality materials such as NiCr4-600 and CrMo 15 3 white irons, are renowned for their exceptional durability and resistance to wear. The casting process utilizes the latest technologies in pouring and heat treatment, ensuring that each product offers optimal performance in challenging industrial environments. From wear buttons and blocks to custom-fit billets and skirt liners, these castings serve critical roles in mining and other heavy industries, enhancing equipment longevity and operational efficiency.



### KEY FEATURES

#### DIVERSE MATERIALS

Options include NiHard, White Iron, and Chrome Moly, among others.

#### ADVANCED MANUFACTURING

Utilizes cutting-edge casting and heat treatment technologies.

### BENEFITS

#### SUPERIOR DURABILITY

Designed to withstand severe abrasion and impact.

#### COST-EFFECTIVE

Provides a durable and economical alternative to OEM parts.

### APPLICATIONS

#### INDUSTRIAL & MINING

Ideal for heavy-duty applications requiring robust wear protection.

THIS RANGE OF CAST PRODUCTS

**ENSURES THAT  
BUSINESSES CAN  
MAINTAIN HIGH  
PRODUCTIVITY  
AND LOWER MAINTENANCE  
COSTS, REINFORCING  
DGC AFRICA'S COMMITMENT  
TO DELIVERING SOLUTIONS  
THAT MEET THE DEMANDS OF  
RIGOROUS INDUSTRIAL ACTIVITIES.**



## TUNGSTEN HARDFACING

DGC AFRICA's tungsten hardfacing solutions, such as EnduraCoat™ and CTC-X®, are engineered to significantly enhance the lifespan of equipment in environments prone to extreme wear. These solutions utilize a unique welding process that embeds tungsten chips into a base metal, providing a wear resistance that far exceeds traditional overlays. Tungsten hardfacing is designed to tackle the toughest abrasion and impact conditions, making it suitable for a variety of industrial applications.

### KEY FEATURES

#### UNMATCHED HARDNESS

Offers supreme hardness and wear resistance.

#### VERSATILE APPLICATION

Suitable for high-impact and high-abrasion areas.

### BENEFITS

#### EXTENDED EQUIPMENT LIFE

Increases the durability and operational lifespan of machinery.

#### REDUCTION IN DOWNTIME

Decreases the need for frequent maintenance and repairs.

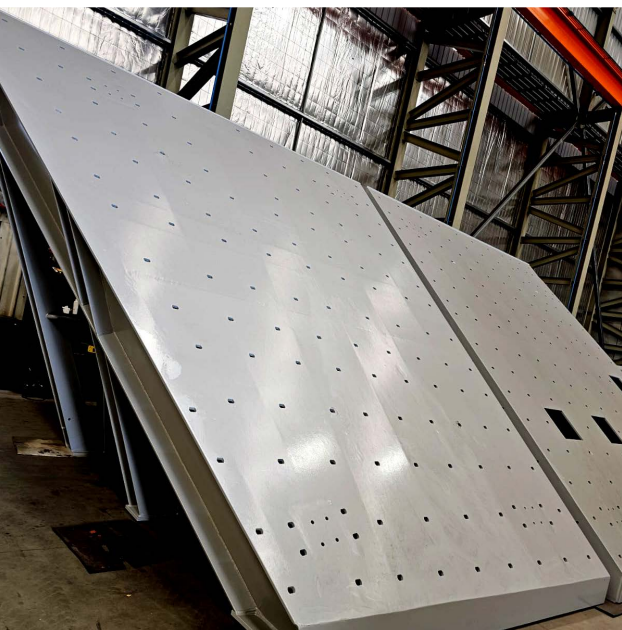
### APPLICATIONS

#### HEAVY INDUSTRY

Ideal for drilling tools, wear plates, and cutting edges in sectors like mining and construction.

TUNGSTEN HARDFACING STANDS OUT AS AN ESSENTIAL SOLUTION FOR INDUSTRIES REQUIRING THE HIGHEST LEVEL OF DURABILITY & PERFORMANCE, ENSURING EQUIPMENT REMAINS PRODUCTIVE UNDER THE MOST CHALLENGING CONDITIONS.





## QUENCHED & TEMPERED STEEL

DGC AFRICA offers a diverse range of Quenched and Tempered steel plates, known for their high strength and durability. Utilizing advanced profile cutting technology, we can shape steel plates from 1mm to 200mm thick to meet various industrial needs.

This steel is notable for its excellent toughness, weldability, and formability, making it ideal for demanding applications like demolition tools, earthmoving buckets, and structural components.

### KEY FEATURES

#### HIGH STRENGTH

Grades like 700 provide exceptional yield strength, greatly surpassing that of standard carbon steel.

#### VERSATILITY IN PROCESSING

Can be easily cut, welded, and formed using standard practices.

### BENEFITS

#### ENHANCED DURABILITY

Offers extended life expectancy in high-impact and abrasive conditions.

#### IMPROVED PERFORMANCE

Ensures structural integrity under severe usage scenarios.

### APPLICATIONS

#### HEAVY MACHINERY

Ideal for components such as rippers, lifting tines, and wear liner plates.

#### STRUCTURAL APPLICATIONS

Suitable for high-stress structural elements in construction and civil engineering.

THIS STEEL RANGE IS CRUCIAL  
**FOR SECTORS THAT REQUIRE  
ROBUST MATERIALS**  
TO WITHSTAND TOUGH OPERATING CONDITIONS,  
**ENSURING RELIABILITY**  
AND LONGEVITY IN HEAVY-DUTY APPLICATIONS.

## TITANIUM CARBIDE

TiC™ Titanium Carbide wear liners from DGC AFRICA combine Tic inserts with a high tensile strength natural rubber matrix and steel backing plates. The Tic inserts are integrated using a hot vulcanization process for superior bond strength, ensuring the inserts remain embedded throughout the liner's lifespan, providing consistent protection against wear and impact. These liners are specifically designed for maximum resistance to abrasion and impact, making them ideal for handling bulk materials in applications involving hard rock and iron ore.

### KEY FEATURES

#### STRONG BONDING

Vulcanization exceeds the tensile strength of the rubber matrix.

#### DURABILITY

Ensures long-lasting wear and impact resistance.

### BENEFITS

#### CONSISTENT PROTECTION

Maintains performance across the liner's lifespan.

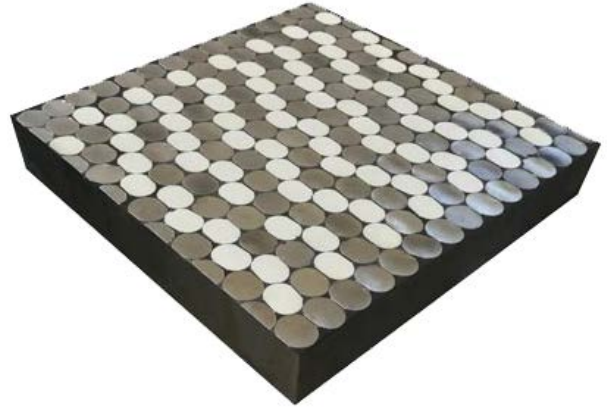
#### EASE OF INSTALLATION

Modular design and steel backing offer straightforward replacement.

### APPLICATIONS

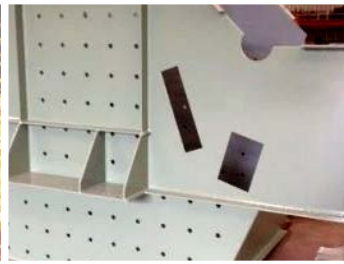
#### BULK MATERIAL HANDLING

Particularly effective in iron ore and hard rock environments.



**THIS SOLUTION IS TAILORED  
TO ENHANCE THE DURABILITY  
AND EFFECTIVENESS  
OF EQUIPMENT USED IN DEMANDING  
MATERIAL HANDLING APPLICATIONS.**





## STUD WELDING

DGC AFRICA offers an advanced Stud Welding Service featuring three state-of-the-art machines capable of handling stud sizes from M6 to M24. This service ensures precision and reliability by producing digital readouts to confirm each stud is fired to meet international quality standards. The applications of this service are broad, ranging from mild steels to overlay plates and ceramic liners, making it versatile for various industrial needs.

### KEY FEATURES

#### ADVANCED TECHNOLOGY

Ensures accurate stud placement and adherence to strict standards.

#### VERSATILITY

Capable of applying studs to a wide range of materials.

### BENEFITS

#### RAPID SERVICE

Quick turnaround times for projects.

#### ECONOMICAL

Cost-effective solution for industrial fastening needs.

### APPLICATIONS

#### BROAD MATERIAL COMPATIBILITY

Suitable for everything from mild steels to bimetallic and ceramic components, enhancing the structural integrity of assemblies in diverse settings.

THIS SERVICE IS CRUCIAL FOR  
PROJECTS REQUIRING ROBUST  
**AND PRECISE**  
FASTENING SOLUTIONS  
IN CONSTRUCTION, MANUFACTURING,  
AND BEYOND.

# CERAMIC COMPOSITE - WEAR, CORROSION & CHEMICAL PROTECTION SOLUTIONS



Our **Ceramic Composite Materials** are designed to revolutionize industrial processes, offering unparalleled performance in harsh environments. By combining the strength and resilience of ceramics with the flexibility of other materials, these composites offer exceptional durability and efficiency, ensuring prolonged service life in challenging industrial settings.

## APPLICATIONS IN INDUSTRIAL PLANTS

Ceramic composite materials find extensive applications across various sectors within industrial plants, including:

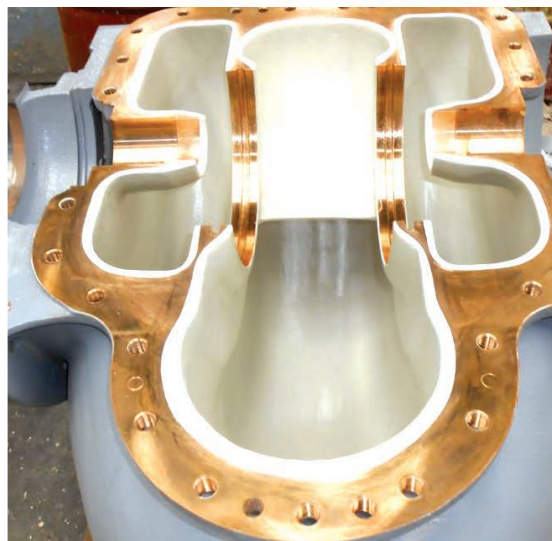
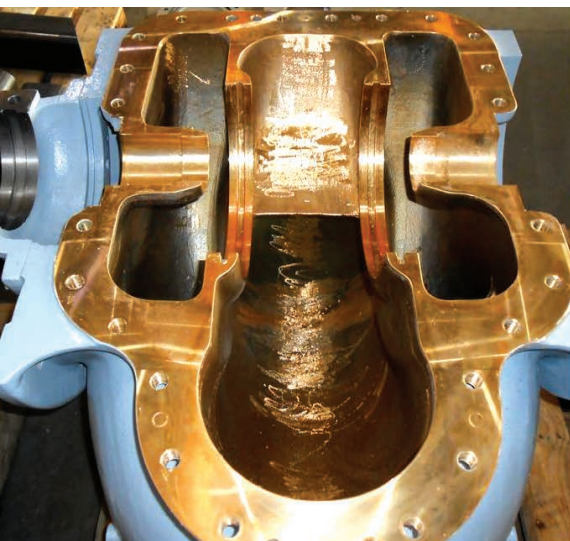
**PIPELINES & DUCTS:** Replace conventional materials to enhance corrosion resistance and reduce maintenance costs.

**HEAT EXCHANGERS:** Optimize heat transfer efficiency, leading to improved performance and energy savings.

**WEAR-RESISTANT COMPONENTS:** Increase the lifespan of critical machinery components subjected to abrasive wear.

## OTHER APPLICATIONS

- Pump Cases
- Pipe Bends
- Pump & Valves
- Wear Plates
- Slurry Systems
- Mixing Vessels
- Magnetic Separators
- Severe Cavitation
- High Wear & Erosion
- Sliding Abrasion
- Storage tanks
- Secondary Containment
- Heat Exchangers
- Mechanical Impact
- Scored Hydraulic rams
- Storage tanks
- Secondary Containment
- Heat Exchangers
- Mechanical Impact
- Tank Roofs
- Sealing of leaks
- Girth Welds
- Hydro-Cyclones
- Engine Blocks
- Hydraulic Pistons
- Rebuild metal Surfaces
- Repair Damage Shafts
- Turbo Separators
- Pneumatic Conveyors
- Surface Levelling
- Wall-loss repairs
- Flanges
- Structural repairs
- Exhausters
- Metal Joints



## KEY ADVANTAGES



### EXTREME DURABILITY

Exceptional resistance to wear, corrosion, and temperatures up to 200° Celsius



### LIGHT-WEIGHT DESIGN

Provides a lightweight alternative to traditional materials.



### CHEMICAL RESISTANCE

Inherently resistant to corrosive chemicals.

# BENEFITS OUR INDUSTRIAL LININGS CAN OFFER

## ENHANCED ASSET PROTECTION

Our industrial linings offer robust protection against corrosion, chemicals, and wear, ensuring your assets remain in optimal condition for longer periods.

## REDUCED DOWNTIME AND MAINTENANCE COSTS

Our solutions reduce downtime and maintenance costs by minimizing corrosion and deterioration, allowing for uninterrupted operations and significant cost savings.

## HIGH-QUALITY STANDARDS

All our products are ISO 9001 certified and adhere to stringent specifications and high-quality standards, guaranteeing exceptional performance in various challenging environments.

## PROVEN EFFECTIVENESS

Our linings have demonstrated success in diverse industries such as mining, agriculture, chemical, petrochemical, pulp & paper, food & beverage, construction, marine, wastewater, and power generation.

## CUSTOMIZED SOLUTIONS

We leverage our extensive resources and global partnerships to deliver cost-effective, tailored solutions that meet the specific needs of your projects, regardless of size or complexity.

## COMPREHENSIVE RANGE

From corrosion protection to abrasion-resistant solutions, our extensive range ensures all your industrial lining needs are covered, enhancing the durability and efficiency of your operations.

## EXPERT INSPECTIONS

We provide thorough inspections to ensure the integrity and performance of our linings, maintaining the highest standards of workmanship and reliability.





## WHY CHOOSE DGC AFRICA?

Choosing **DGC AFRICA** means gaining a partner with a comprehensive range of tailored wear and abrasion protection solutions. We leverage our extensive experience to deliver high-quality, innovative solutions that meet the specific needs of industries such as mining and metals smelting in sub-Saharan Africa. Our collaborative approach ensures we work closely with our clients throughout every project stage, adapting our solutions to meet your unique challenges and expectations.

**EXPLORE OUR EXTENSIVE PRODUCT RANGE  
AND DISCOVER HOW OUR TAILORED SOLUTIONS  
CAN MEET YOUR SPECIFIC INDUSTRIAL NEEDS.  
CONNECT WITH US TODAY TO ENHANCE THE RESILIENCE AND  
PRODUCTIVITY OF YOUR OPERATIONS.**





# OUR OFFICES

**CONTACT US** to learn how DGC can help transform your operations and deliver sustainable competitive advantage.

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**OVER A CENTURY OF SERVICE. A FUTURE BUILT ON ENGINEERED RESILIENCE.**



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