



Bulk Materials Handling Systems in Stockyards & Ports



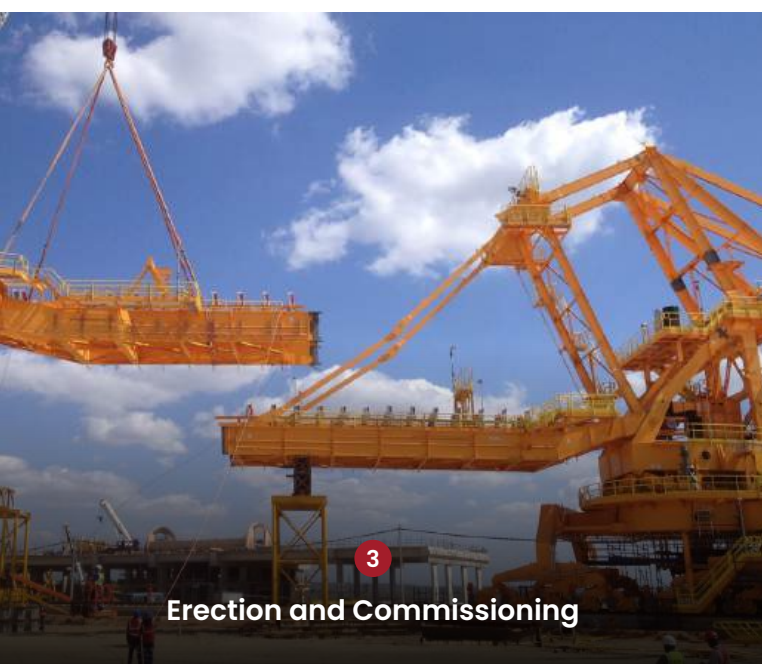
Engineering and Planning



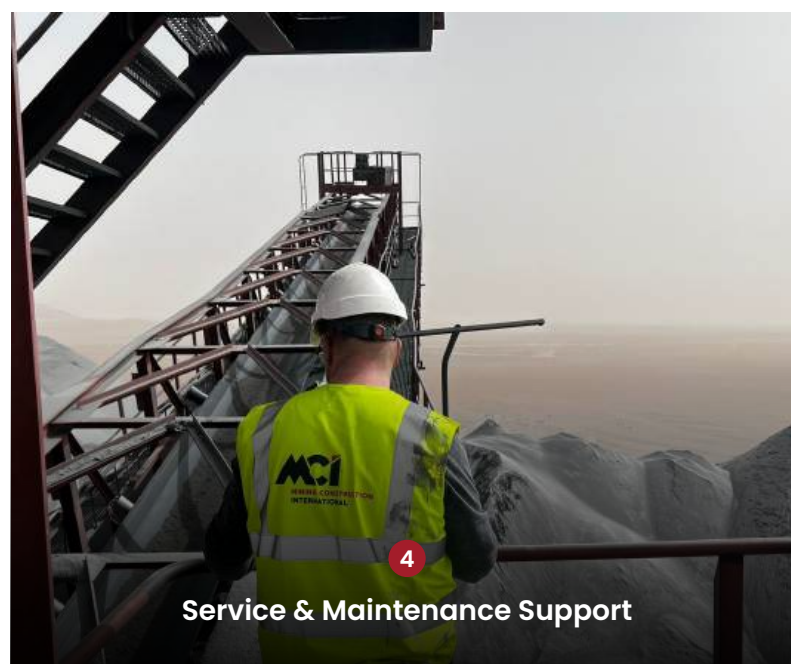
Fabrication & Inspection



YOUR
ALL-IN-ONE
SOLUTION



Erection and Commissioning



Service & Maintenance Support

Leading the Way in Bulk Materials Handling

MCI's expertise in bulk materials handling in **stockyards & port terminals equipment** is unmatched. Wherever bulk materials are managed, MCI is there. In addition to serving the mining industry, we excel in downstream operations such as power plants, ports, and terminals, tailoring our approach to each unique application.

We support reclamation, stockyard storing, sizing, homogenization, and transportation processes. Our comprehensive services for **turn-key projects, new equipment, or upgrades and modernizations** include consulting, systems design, engineering, procurement, erection, and support. MCI's advanced materials handling and automation technologies optimize your assets. We design and manufacture the complete range of conveyor components for new systems or as replacement parts.

Our goal is to make you more successful through long-term cooperation and partnerships. Your success comes from efficient process design, innovative engineering, and a dedication to reliability. The MCI brand has always stood for productivity and quality. Through our well-developed MCI organization, we provide global **spear and wear parts** logistics and local **services** to keep your continuous materials handling processes running smoothly.

Advanced Turn-Key Solutions

When it comes to realizing ambitious projects, MCI is the trusted name. With vast experience, we address all client needs with unmatched competence and reliability. Rely on us to equip you with everything – from sophisticated equipment to spare parts – to maximize your operations.

We are your all-in-one solution: everything from a single source!

Industries We Serve:

- Stockyard and Material Handling
- Port Handling
- Fertilizers
- Oil and Gas
- Cement Industry
- Open-pit Mining
- Metallurgy
- Power Plants

Stockyard Handling Systems:

- Bucket Wheel Boom Reclaimer
- Stacker Systems
- Drum Type Reclaimer
- Portal Type Reclaimer
- Bridge Type Reclaimer
- Bucket Wheel Boom Stacker-Reclaimer
- Circular Stacker/Reclaimer

Transportation Systems:

- In-Plant Conveyors
- Pipe Conveyors
- Terminal Conveyors
- Special Conveyors



Materials Handling Systems

MCI provides comprehensive systems and services for bulk materials handling, ensuring seamless operations from start to finish. Our expertise includes feasibility studies, conceptual plant layouts, design, engineering, and the complete execution of systems to handle materials such as coal, ore, bauxite, and more. We offer a wide range of equipment tailored to various applications, including:

- Conveying
- Stacking
- Reclaiming
- Blending of bulk materials
- Loading bulk materials into ships
- Unloading bulk materials from ships
- Crushing, sizing, and feeding of bulk materials



Seamless Integration for Continuous Operations

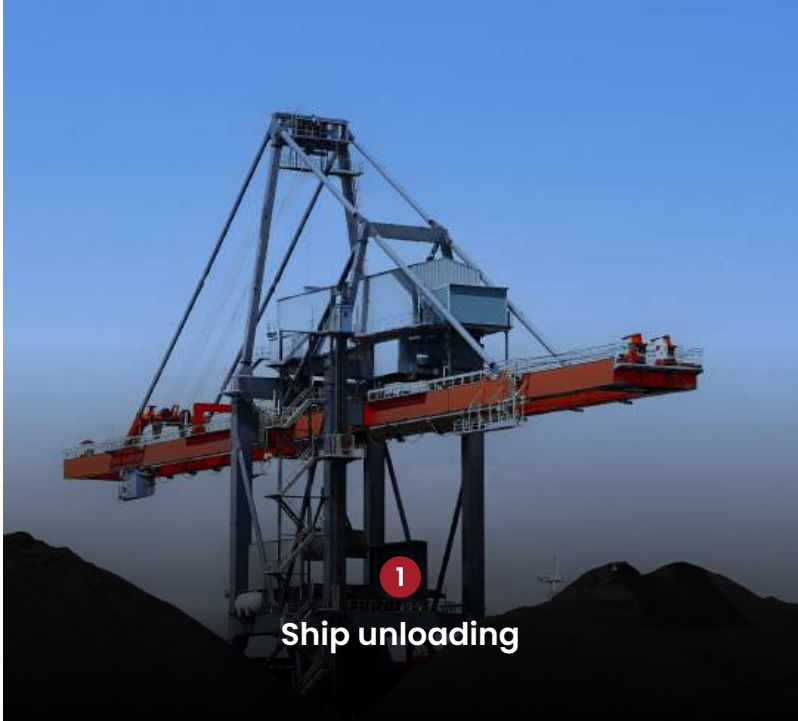
Our solutions support the continuous transfer of materials across various fields, offering flexibility as individual machines or complete turnkey installations. Whether you need a single machine or a full system, MCI ensures efficient and reliable performance.

Tailored Solutions for Diverse Applications

Our systems and machines are designed for classical applications in stockyard facilities at mines, export and import ports, and stockyards of power stations, steel works, and processing plants. We understand the specific needs of downstream consumers and provide systems capable of reaching output rates of more than 10,000 tonnes per hour.

Empowering Your Operations with Efficiency and Reliability

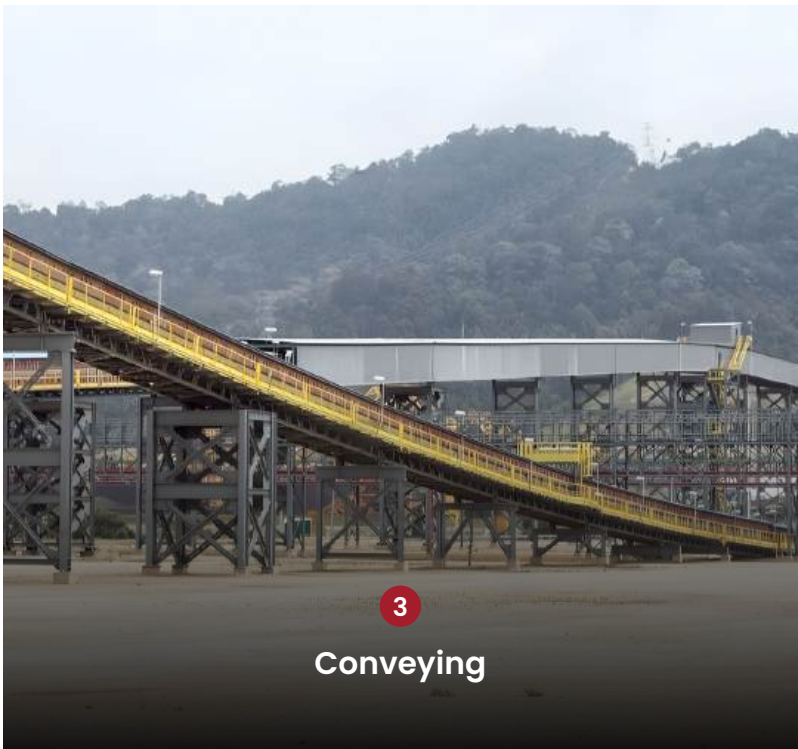
MCI is dedicated to enhancing your operational efficiency and reliability. Our advanced materials handling systems are engineered to meet the highest standards, ensuring your success in every project.



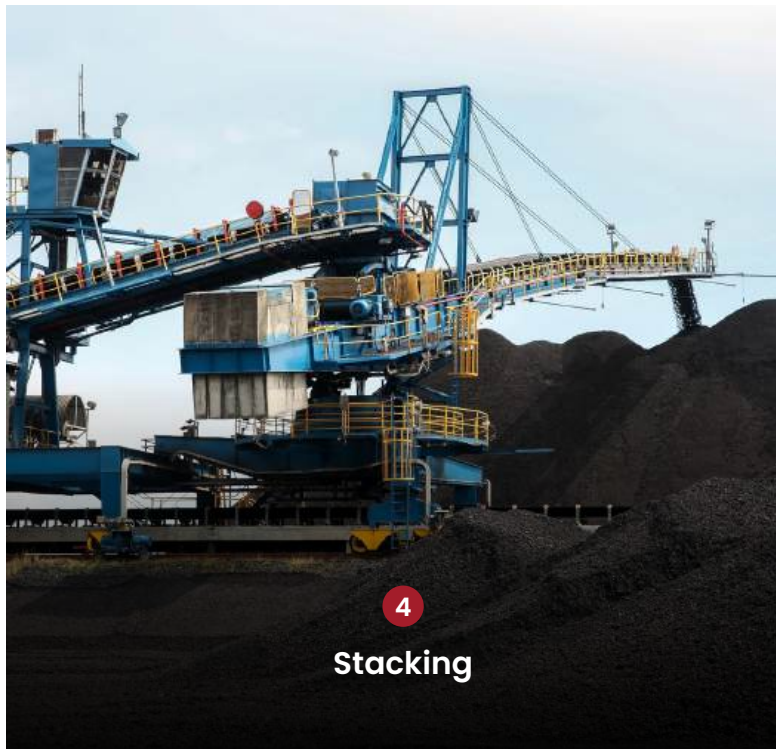
1
Ship unloading



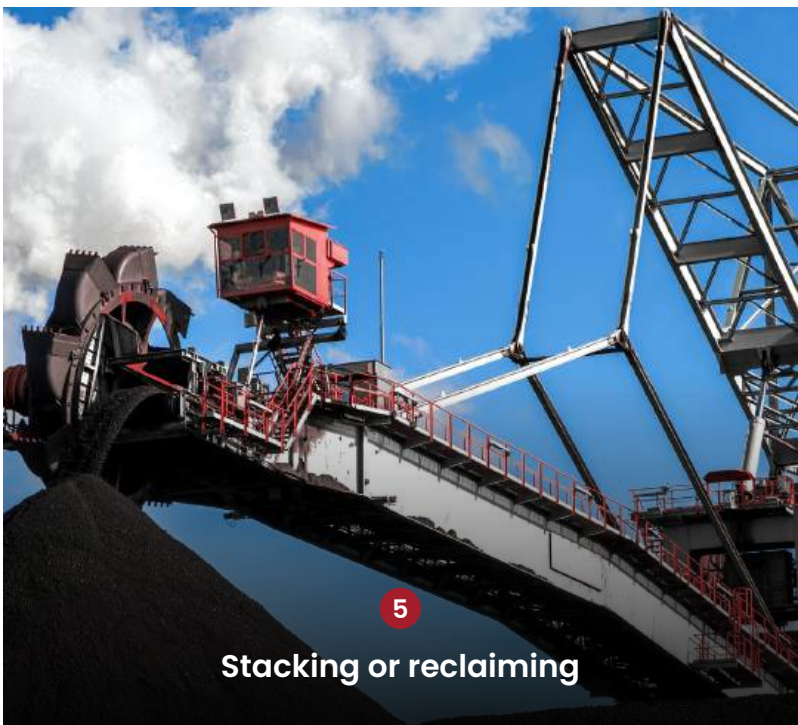
2
Reclaiming



3
Conveying



4
Stacking



5
Stacking or reclaiming



6
Wagon loading



Complete Handling Systems for Stockyards

Stockyards play a crucial role in materials handling, acting as central hubs for material buffering, reserve storage, and blending between incoming and outgoing materials. Whether designed in circular or longitudinal layouts with integrated feed conveyors, stackers, and reclaimers, stockyards are essential for managing quantity and quality fluctuations. With the right system, these fluctuations can be effectively balanced.

Tailored Solutions for Diverse Stockyard Needs

Every stockyard operation has unique priorities and requirements. It's vital to consider various factors before selecting the type and size of your system: required throughput, material characteristics, needed homogenizing effect, open or roofed storage, and potential future upgrades.

Customized Equipment for Optimal Performance

MCI offers a complete range of products, ensuring customized solutions for each customer's specific needs. Our equipment lineup includes:

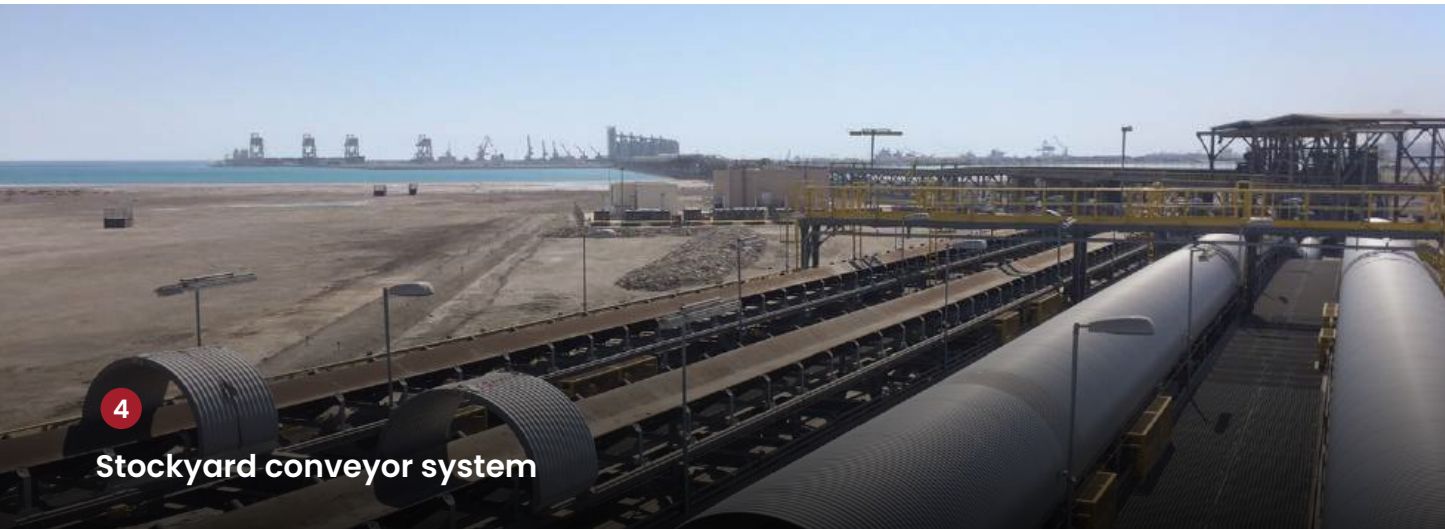
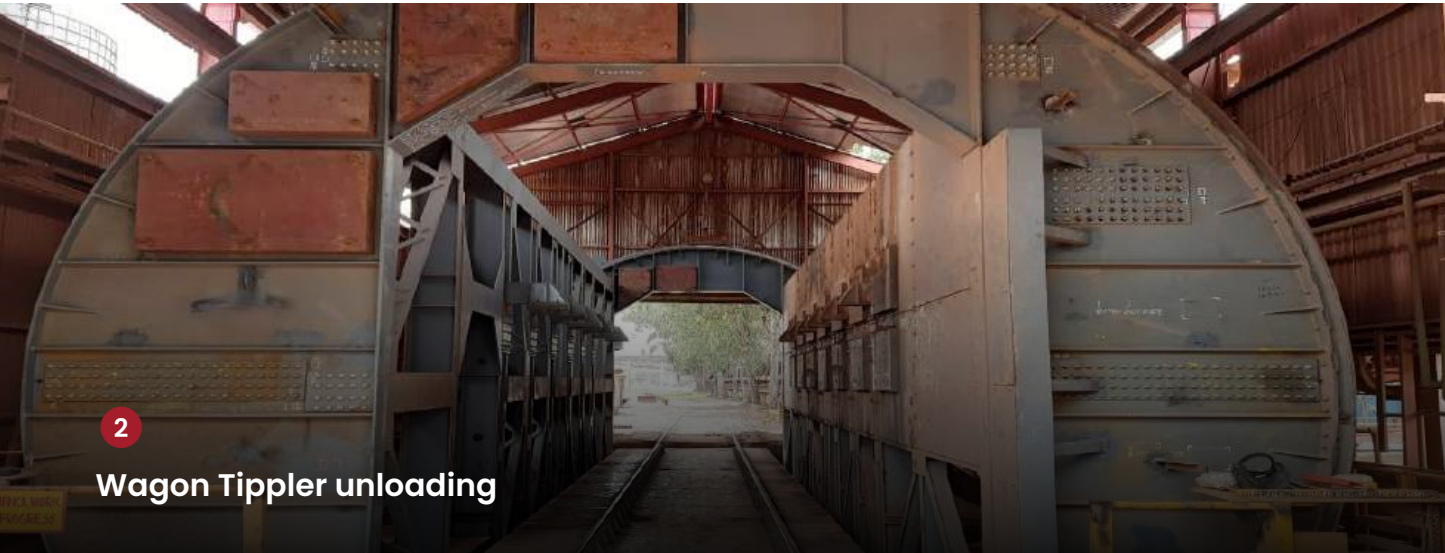
- **Reclaiming Technology:** Bucket wheel boom type, bucket wheel bridge type, scraper type, and drum type units.
- **Stacking Technology:** Chevron, Windrow, and Cone Shell stacking methods.
- **Combined Stacking/Reclaiming Technology:** Bucket wheel and circular units.
- **Conveying Technology:** Including transfer stations.
- **Auxiliary Equipment:** Hoppers, feeders, and crushers.

Environmentally Friendly Covered Storage Solutions

For environments requiring full enclosure of stockpiles and handling activities, MCI provides covered storage solutions. These can be configured in longitudinal/rectangular shapes or circular layouts with dome-type structures.

Innovative and Reliable Materials Handling

MCI's complete handling systems ensure efficient, reliable, and environmentally conscious operations. Trust us to deliver advanced solutions that meet your stockyard needs, today and in the future.





Stockyard System **Equipment Types**

RECLAIMERS: Efficient Reclamation

MCI reclaimers are expertly designed to reclaim bulk materials from stockpiles at mines, ports, steel plants, and power stations quickly, efficiently, and orderly. Available in several main types—including bucket wheel boom-type, bucket wheel bridge-type, scraper-type, and drum-type reclaimers—and in many configurations and sizes, our reclaimers provide tailored solutions. The choice of design depends on factors such as the size and shape of the stockpile, the type of material, the required reclaiming rate, and the need for blending or homogenization.

STACKERS: Orderly and Efficient Stockpiling

MCI stackers effectively stockpile bulk materials in an efficient and orderly manner. Whether stationary or traveling, mounted on rails or crawlers, our stackers come in fixed, luffable, or luffable-and-sleuable boom designs, with capacities ranging from 150 to 10,000 tonnes per hour. The design choice depends on the stacking method, the size of the stockpile, the type of material, the required throughput, and the need for mobility. Tripper cars or systems for transferring material from the yard conveyor to the stacker are integral parts of our solutions.

STACKER/RECLAIMERS: Versatile Solutions:

MCI stacker/reclaimers come in two main types: bucket-wheel models for alternate stacking and reclaiming, and circular units that typically stack and reclaim alternately but can be designed for simultaneous operation. Our compact and economical bucket-wheel models, usually supplied with tripper cars, are perfect for longitudinal stockyards with varying demands for stacking and reclaiming capacity. Our standard circular units, which create a ring-shaped stockpile and are often housed in a covered dome for environmental reasons, continuously stack at one end of the ring while reclaiming material from the other end.

WAGON/TRUCK LOADING: Automated Loading Processes

MCI reclaimers are expertly designed to reclaim bulk materials from stockpiles at mines, ports, steel plants, and power stations quickly, efficiently, and orderly. Available in several main types—including bucket wheel boom-type, bucket wheel bridge-type, scraper-type, and drum-type reclaimers—and in many configurations and sizes, our reclaimers provide tailored solutions. The choice of design depends on factors such as the size and shape of the stockpile, the type of material material, the required reclaiming rate, and the need for blending or homogenization.



1

Boom Type Bucket Wheel Reclaimer



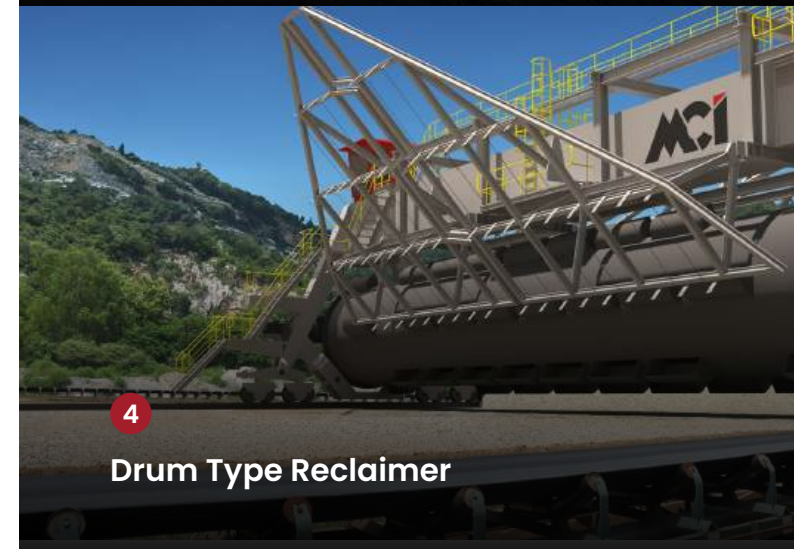
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Bridge Type Reclaimer



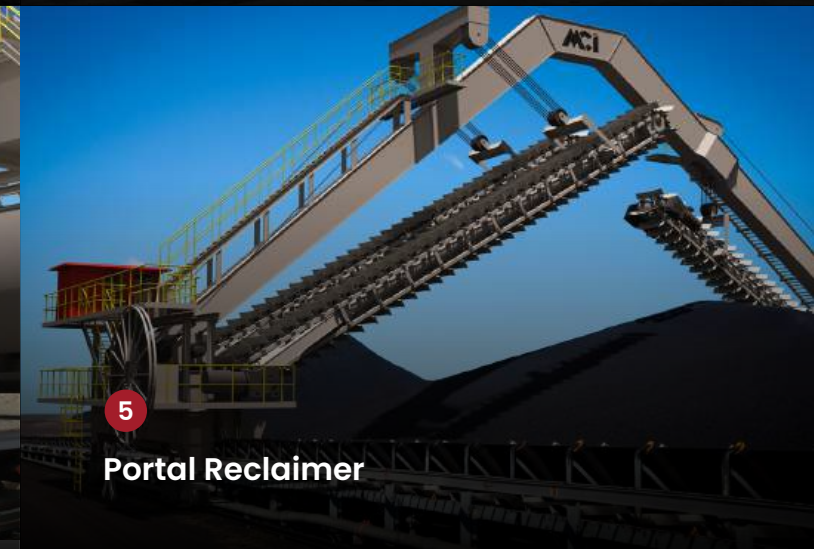
3

Bucket Wheel Stacker Reclaimer



4

Drum Type Reclaimer



5

Portal Reclaimer



6

Stacker luffable and sleuable

Complete Handling Systems for Ports: Delivering Precision and Performance for Every Bulk Material Movement

Around the world, sea and coastal vessels are constantly loading and unloading bulk materials. To keep global trade flowing, efficient handling at both export and import terminals is essential. MCI brings decades of experience in ensuring seamless material flow—from loading at the terminal to unloading at the destination and everything in between.

With MCI’s reliable shiploading and unloading systems, you can count on smooth operations. Our versatile shiploaders are designed to meet all capacities and needs, featuring telescopic, traveling, luffing, slewing, and radial functions. For high-density bulk material unloading at rapid flow rates, MCI offers robust grab-type unloaders, available in gantry or level luffing designs.

For intermediate storage in ports, MCI provides complete stockyard systems, including stackers, reclaimers, and combined stacker/reclaimers.

All our equipment offers flexibility—ranging from manual operation to fully automated, centralized control systems—ensuring the right solution for your specific port requirements.



1 Overview Iron Ore Stockpile Port



2 Conveying material to port



3 Shiploading into vessels



4 Unloading at port of destination



Port Handling System **Equipment Types**

SHIPLOADERS: Unmatched Efficiency in Ship Loading

MCI linear, radial gantry and quadrant bridge-type shiploaders are designed with proven, eco-friendly features and come in a wide range of sizes to service vessels from 5,000 to 250,000 dwt. Our philosophy emphasizes minimal disruption to port operations during installation. Our advanced process for off-site construction, assembly, testing, commissioning, and heavy-load transportation ensures the installation of fully operational shiploaders with capacities up to 12,000 tonnes per hour in just a few days. The range includes shiploaders with traveling, telescopic functions, luffing, and/or slewing capabilities, installed on longitudinal jetties, or radial shiploaders with a fixed pivot point.

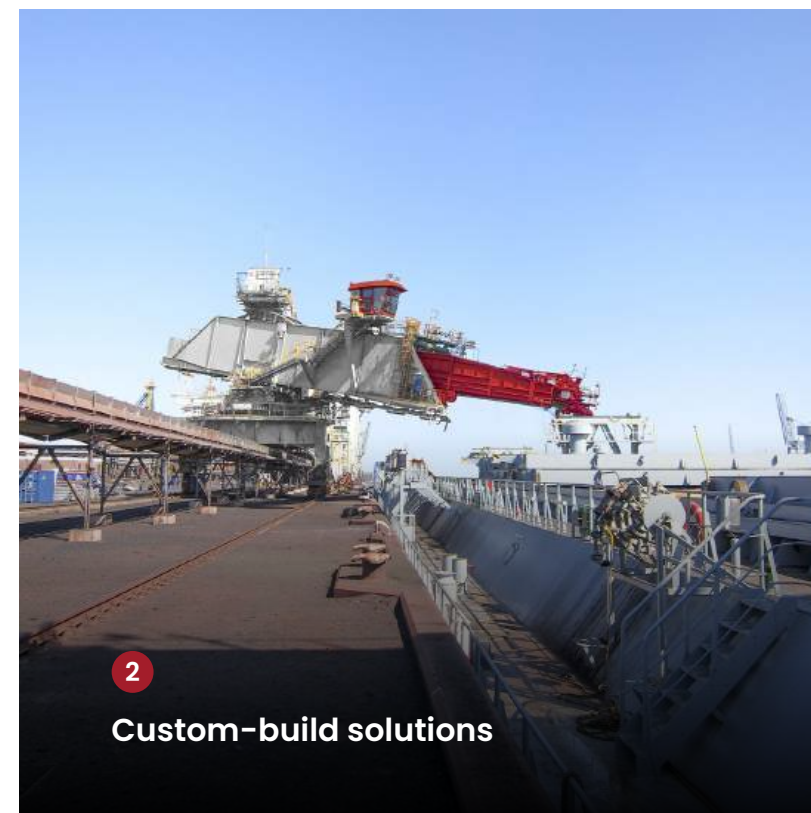


1

High Capacity Shiploading

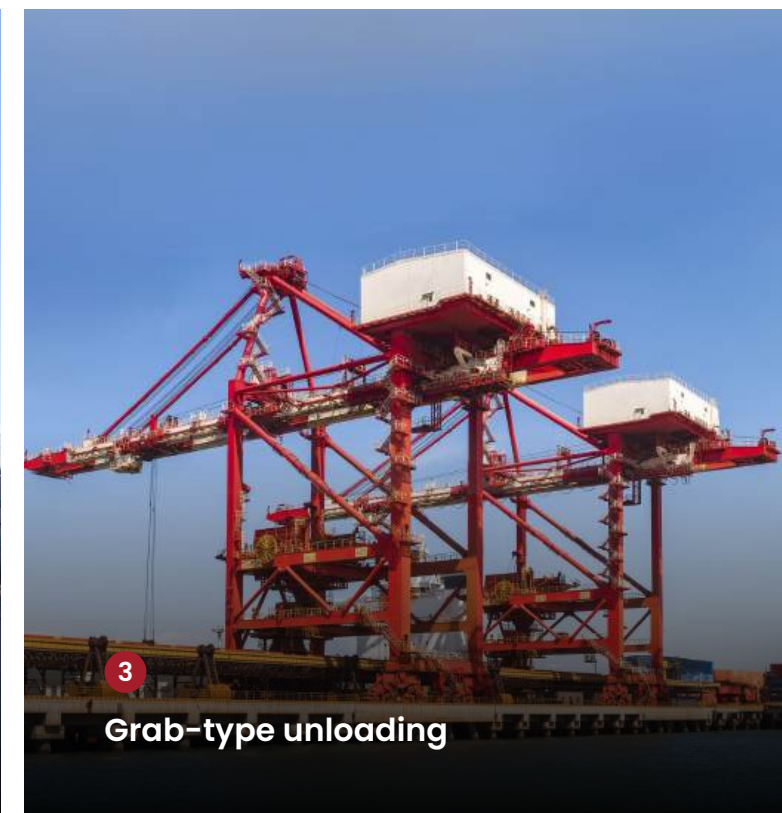
SHIP UNLOADERS: Superior Flexibility and Performance

MCI ship unloaders of the linear gantry and level-luffing types are constructed in proven designs and a wide range of sizes to service vessels from 5,000 to 250,000 dwt. Focusing on grab technology, they offer efficient, rational solutions to demands for quayside flexibility and are the perfect rigs for unloading materials with different bulk densities. As with continuous ship unloaders, they can be constructed, assembled, tested and commissioned off-site if necessary, then shipped to site and installed with minimal disruption to port activities.



2

Custom-build solutions

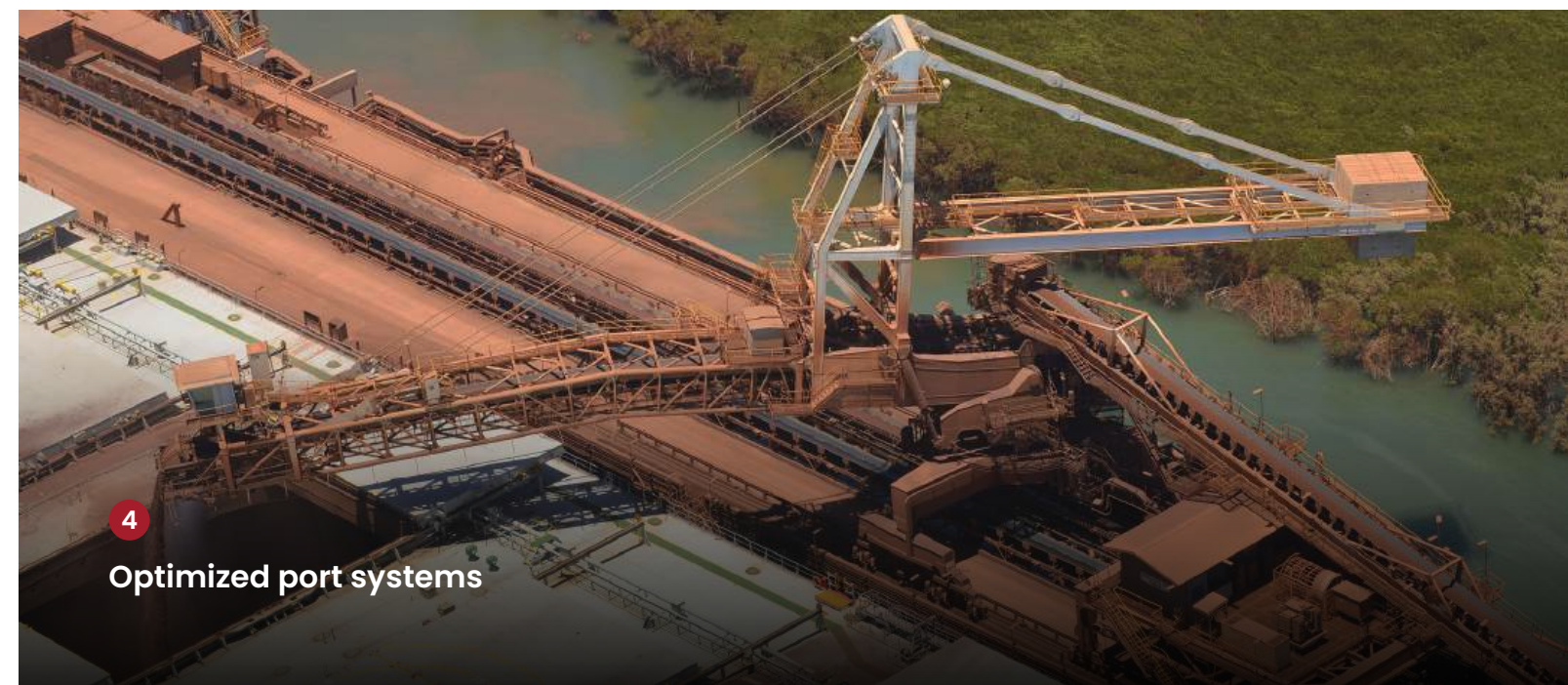


3

Grab-type unloading

AUXILLIARY EQUIPMENT: for Optimal Bulk Material Handling

MCI's product portfolio of standard equipment for bulk materials handling applications covers the series of belt conveyors and the series of belt feeders, both having fixed and mobile units. With a wide range of standard modules and components these devices can be tailored exactly to meet the needs of the application. The advantages of the mobile equipment make them ideal and cost-effective in conveying and stockpiling materials.



4

Optimized port systems



Transportation Systems

Comprehensive Conveyor Solutions by MCI

MCI has a highly skilled projects division specializing in the design, manufacture, installation and commissioning of conveyor systems for a full range of applications. We also upgrade and modernize systems and supply a comprehensive range of quality components and spare parts.

Stockyard Conveyors: Precision and Performance

MCI's in-plant conveyor systems are crafted to handle capacities ranging from 100 to 7,000 tonnes per hour, serving industries such as quarrying, construction, chemicals, food processing, and power generation. Our designs strike the perfect balance between space, capacity, and cost, incorporating ground-level systems, elevated modules, walk-through structures, and both open and closed gantries. These systems are fully customizable, with options that include belt feeders, high-angle conveyors, and totally enclosed conveyors, ensuring that every aspect of your in-plant material handling is optimized for peak performance.

Pipe Conveyors: Secure and Environmentally Compliant Transport

MCI's Pipe Conveyors provide the perfect solution for transporting sensitive materials that require protection from environmental factors. These fully enclosed systems are ideal for moving granulates or raw materials, ensuring that your materials remain secure from external contamination while also meeting strict environmental regulations. By enclosing the materials, Pipe Conveyors prevent spillage and reduce dust emissions, making them an excellent choice for operations where safety and environmental responsibility are paramount.

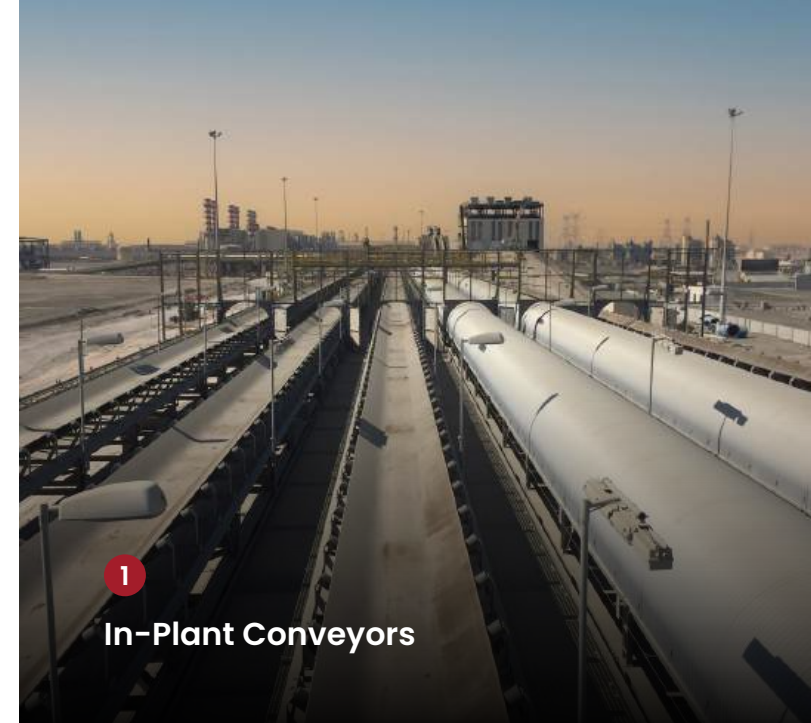
Special Conveyors: Engineered for Complexity

For applications that require unique solutions, MCI's special conveyor systems are the answer. Our offerings include regenerative conveyors, belt feeders, high-angle conveyors, and compact vertical-lift conveyors, all designed to overcome significant elevation changes and complex operational challenges. These specialized systems are engineered with precision to meet the demands of your most intricate material handling needs.

Portable Conveyors: Unmatched Mobility and Flexibility

In today's fast-paced industrial environment, the ability to adapt quickly is essential for maintaining efficiency. MCI's portable conveyors are designed to offer unmatched flexibility for your material handling or construction needs. Easily transportable and hitchable to a truck, these conveyors are ideal for temporary sites or projects where material flow must be redirected frequently. This mobility keeps your operations agile, allowing you to swiftly respond to changing demands and maintain productivity.

With MCI's advanced conveyor systems, you get more than just equipment—you gain a dedicated partner in optimizing your material handling. Our solutions, from in-plant conveyors to portable options, ensure your operations stay efficient, flexible, and resilient. Trust MCI to deliver the technology and support that propel your success.



1

In-Plant Conveyors



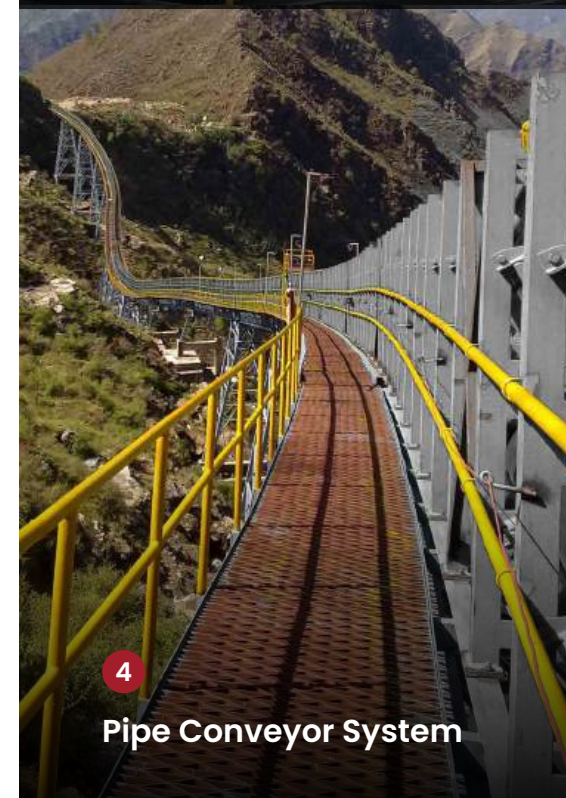
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Portable Conveyor System



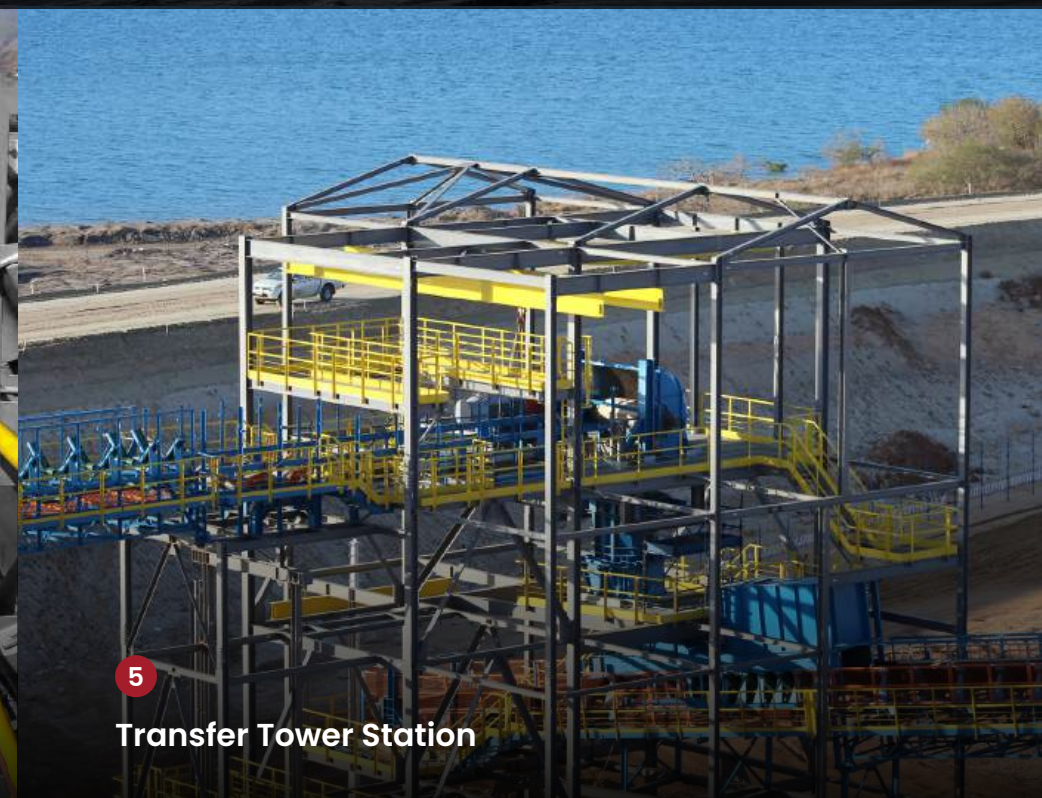
3

Stockyard Conveyor



4

Pipe Conveyor System



5

Transfer Tower Station



After Market Solutions: Ensuring Optimal Performance and Reliability

→ WE'RE THE MISSING LINK IN YOUR CHAIN.

At MCI, we understand that maintaining the optimal performance of your equipment is critical to the success of your operations. That's why we offer comprehensive after-market solutions that encompass a full range of high-quality spare parts, components, and services tailored to keep your systems running smoothly and efficiently.

→ STRATEGIC SPARE PARTS MANAGEMENT

To ensure continuous operation and minimize downtime, having access to the right spare and wear parts is essential. MCI is your trusted partner in providing a wide range of strategic spare parts for opencast mining and port facilities. Our offerings include parts for Bucket Wheel Excavators, Stackers, Reclaimers, Conveyors, Crushers, Ship-loaders, and Ship-unloaders. We provide customer-friendly service support, ensuring short delivery times and supplying both electrical and mechanical parts of the highest European quality.

→ SPARE & WEAR PARTS SOLUTIONS

Our spare parts management concepts are designed to be customer-friendly and optimized for efficiency. We offer strategic recommendations for spare parts storage, ensuring that you are always equipped with the most essential components. From slew bearings, gearboxes, and pulleys to conveyor belts, belt-cleaners, e-motors, and automation systems, MCI provides a vendor-independent spare part service that meets the diverse needs of your operations. Our products, including rollers, pulleys, and loading points, are specifically designed for modern handling needs and can be seamlessly integrated into both new and existing systems, ensuring your equipment remains reliable and efficient.

→ REVERSED ENGINEERING & DIGITALIZATION MCI

combines reverse engineering with digitalization to enhance your equipment's longevity and efficiency. We supply spare and wear parts across all OEM brands, and when data is lacking, we can reverse engineer components to match your exact needs. This approach ensures that even older systems remain operational, efficient, and up-to-date with the latest technological standards.

→ SYSTEM SAFETY AND RELIABILITY MCI

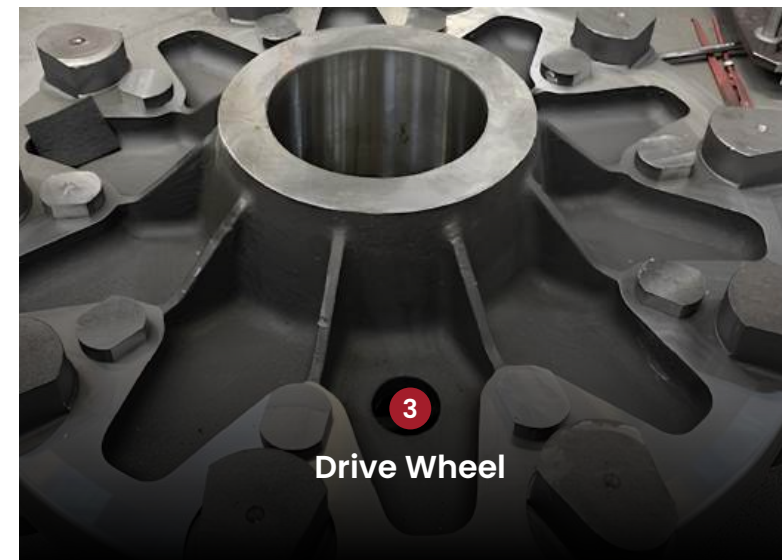
goes beyond parts supply by enhancing the reliability and safety of your systems. We address issues like material spillage, belt damage, and dust emissions with expertly designed solutions such as advanced belt cleaners and dust suppression systems, ensuring smooth and safe material transfer.



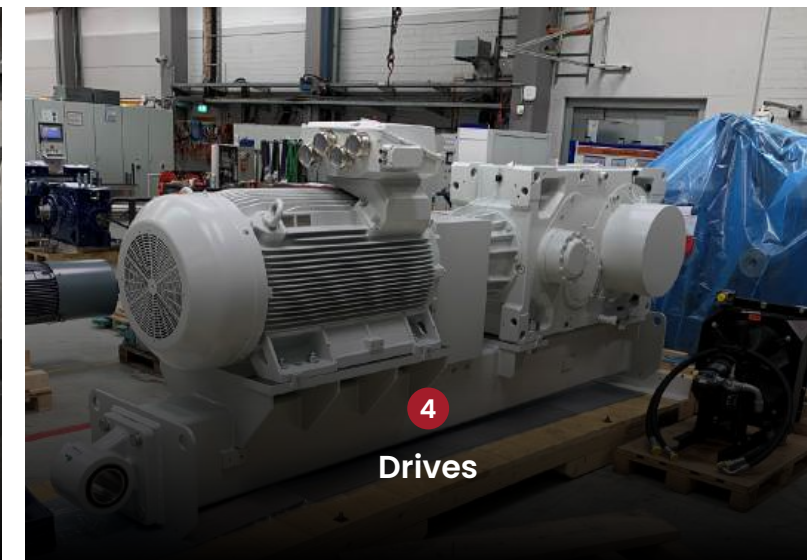
Boogies



Bucket Wheels



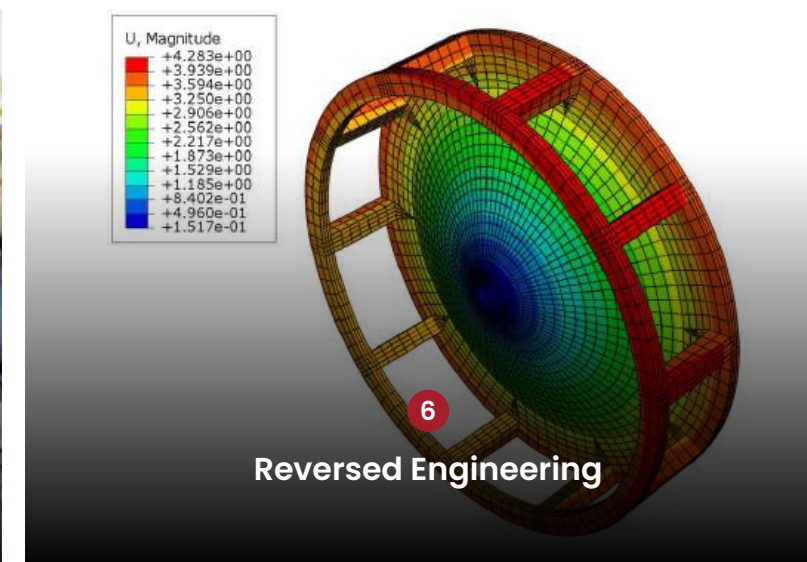
Drive Wheel



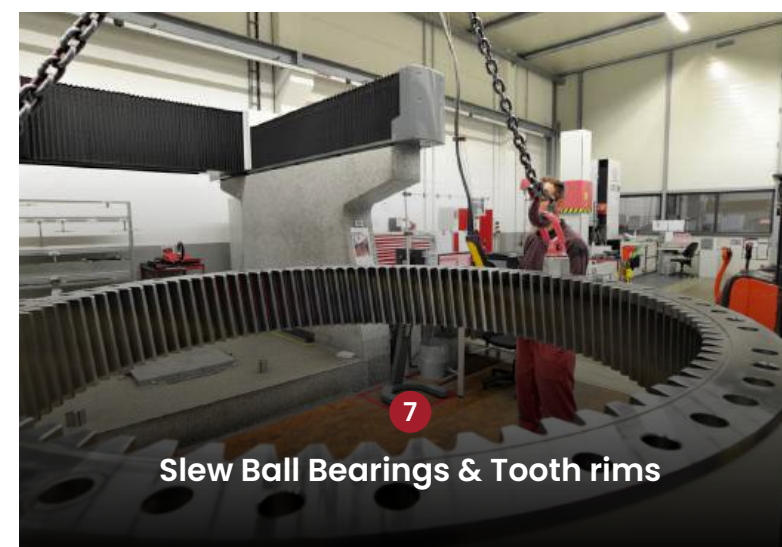
Drives



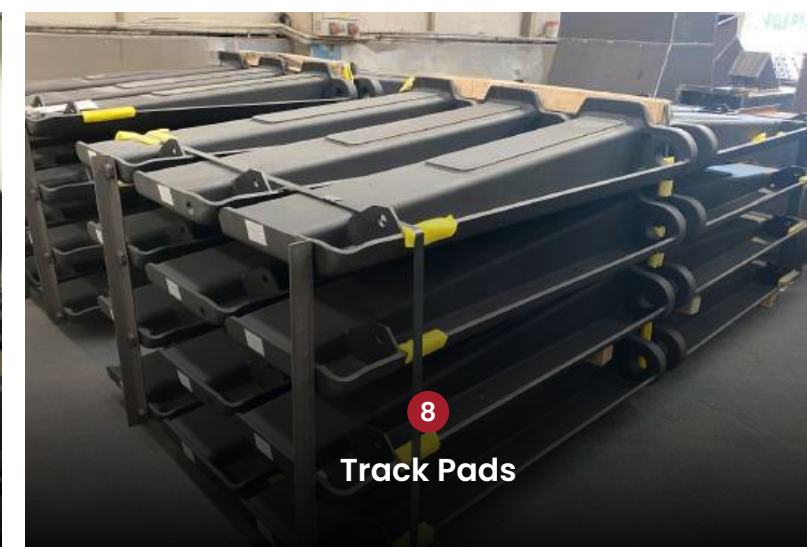
Instant after market support



Reversed Engineering



Slew Ball Bearings & Tooth rims



Track Pads

Life cycle services: For maximum equipment availability

MCI's lifecycle services are designed with two key goals in mind: maximizing the availability and productivity of your equipment and plants throughout their intended lifespans, and extending those lifespans through strategic preventative maintenance and timely modernization investments. Our expert team offers regular inspections, condition monitoring, and maintenance, ensuring your operations run smoothly. Additionally, we provide essential spare parts and support for major replacements, overhauls, and refurbishments, keeping your equipment in peak condition.

WARRANTY When you partner with MCI, you know that we will stand behind our products, with a dedication that goes beyond a standard guarantee.

MAINTENANCE MCI offers scheduled inspections or complete maintenance contracts. We also provide complete maintenance management systems utilizing electronic on-line condition monitoring systems. The maintenance management systems can discover irregularities and consequently minimize costs resulting from unscheduled downtime and failure repairs.

SPARE & WEAR PARTS Our international market strength shows our ability to source and ship material and components anywhere. This also translates into highly effective spare parts support, which is further strengthened with the global MCI logistics organization. We can provide all wear and spare parts to keep your equipment and plant in good condition.

LIFE-ENHANCEMENT, UPGRADES & REPAIRS At MCI, we are dedicated to enhancing the durability, efficiency, and reliability of your mining and material handling equipment through comprehensive upgrades, repairs, and refurbishments. Our skilled team leverages extensive industry knowledge to rejuvenate your machinery, ensuring it operates at peak performance and enjoys an extended lifespan. We also focus on modernizing your equipment and processes, introducing new monitoring systems, improving serviceability, and upgrading training programs. By integrating the latest advancements, MCI ensures your operations remain productive and future-ready, keeping you ahead in a competitive industry.

AUTOMATION & DIGITALIZATION MCI delivers cutting-edge automation and digitalization for mining and material handling. Our offerings include equipment automation, radar systems, and advanced PLCs, alongside predictive tools for service periods and trend forecasting. Trust MCI to keep your operations efficient, intelligent, and future-ready.

FIELD SUPPORT At MCI, we understand that continuous supervision and professional support are crucial to ensure the optimum performance of Mining & Material Handling machines and equipment. Our technical experts not only provide specialised training for machine operators, but are also available for ongoing support and monitoring.

REPLACEMENT BY NEW MACHINERY At the end of a life cycle, MCI can provide recommendations for replacement with a new plant or piece of machinery, utilizing the newest technology for improved productivity and cost efficiency.

Your Benefits

- Proactive technical support
- Reduced costs
- Higher reliability and safety (fewer unscheduled stops)
- Increased availability (less downtime)
- Better service and parts forecasting
- Reduced manpower requirements
- Extended equipment lifetime





**TOGETHER WE
SHAPE
TECHNOLOGY**



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