



RCR MINING TECHNOLOGIES

CAPABILITY

RCR Mining Technologies is a market leader in the design and manufacture of innovative and award-winning materials handling solutions.



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OUR COMPANY

RCR MINING TECHNOLOGIES

RCR Mining Technologies (RCR MT) is a leading original equipment manufacturer (OEM) for integrated engineering solutions.

With unparalleled experience in the design for materials handling and processing equipment manufacture, we have the resources to transform the most complex of visions into turnkey projects. We take a hands-on approach with every client, from the commencement of a project through to commissioning and handover.

RCR MT's design team has comprehensive knowledge with expertise extending to most areas of the mining and process industries. Our highly trained and skilled team has access to the latest technology and offers detailed integrated solutions to projects.

RCR MT has developed innovative, bespoke, award-winning designs for relocatable and modular crushing, conveying, screening and scrubbing plants. Our equipment is renowned for its robust design and low maintenance features and operates in applications nationally and internationally, across all minerals from coal, iron ore, gold, mineral sands and diamond recovery.



HEALTH, SAFETY & ENVIRONMENT

HEALTH, SAFETY & ENVIRONMENT

RCR Mining Technologies' priority is to provide a safe workplace for our workforce and to achieve our health and safety aspiration of a harm free workplace. RCR MT work on providing quality processes, practices, structures, equipment education and training, such that our employees and subcontractors are free from the risk of workplace injury or illness.

We have created a culture that empowers our workforce to act in a safe and responsible way through a number of safety initiatives and programs throughout RCR MT.

Our Commitment To Health & Safety

- Maintain an effective planned approach to an efficient Workplace Health and Safety (WHS) management system that aligns our operations in accordance with ISO 45001.
- Comply with all applicable health and safety laws and regulations
- Provide health and safety training for our workforce
- Conduct regular reviews of work areas, equipment, behaviour and methods to continuously improve health and safety performance
- Measure, review and monitor both leading and lagging key performance indicators to continually improve our workplace health and safety performance
- Create a culture that empowers our workforce to act in a safe and responsible way

Environmental

RCR Mining Technologies aligns our operations in accordance with ISO 14001 Environmental Management Systems - Requirements.



QUALITY

WE DELIVER

RCR Mining Technologies' Quality Management System has been developed in line with the requirements of the international standard for Quality Management Systems ISO 9001 standard for over 30 years.

RCR MT has a robust Integrated Management System (IMS), designed to support the continuous development of our business and increase transparency and compliance functionality of which we adhere for all our product deliveries.

RCR MT's comprehensive Quality Management Systems and Procedures places particular emphasis on the below key areas:

- Leadership
- Communication
- Process Control
- Records & Data
- Reviews & Assessments

Compliance to IMS requirements is validated by our commitment to support an audit framework which includes the conduct of internal and external system audits, supplemented by formal work activity-based quality control processes inspections, ensuring compliance to specified requirements.



CAPABILITIES

OUR SERVICES

RCR Mining Technologies' team has considerable materials handling expertise which gives them the capacity to innovate and solve many engineering challenges in the mining industry. We support our 1,500+ products in the global market via the OEM product support technical and spares teams. Our workshops have built a reputation as specialist manufacturers with an extensive knowledge base to deliver our equipment and process plants.

When all the elements join forces on larger projects the impossible becomes possible. Working with our clients our engineering team seek to understand a client's mining requirements and with the aid of years of experience, develop specialist solutions all delivered via our in-house capabilities.

These solutions extend to new award-winning innovations in the materials handling market which have been changing the mine planning process.

Turn Key Delivery

- Crushing & conveying plant relocatable and fixed
- Fully track-mounted in-pit mobile mining units
- Conveyors relocatable and fixed
- Feeders including apron, belt and hybrid options
- Conveyor belt reelers and turning stations
- Rail logistics solutions via Kiruna Wagons exclusive license for Helix Dumper and other technologies
- Knife gates and spile bars systems
- Stackers and spreaders
- Scrubbers and screens
- Ball and rod mill chargers

Heavy Fabrication & Manufacturing

- Hopper, chute plate packages
- Heavy structural steel
- Mechanical equipment
- Equipment repairs
- Heat exchangers
- Vessels
- Plate rolling
- Kilns
- **Trommels**

Specialised Solutions Remote & Site Based

- OEM product support technical and spares support
 - Remote flexible dedicated technical
 - Site based OEM specialised
- Reliability engineering lead rotatable spares solutions, inclusive of
 - Repairs to crushers, screens, plant and equipment
 - Off-site repairs program (OSRTM)
 - New solutions design manufacture and install
- Plant remediation
 - Blasting, painting, concrete reestablishment, grouting and coatings
- Rubber lining and belt splicing
 - Belt splicing including steel chord
 - Chute lining
 - Pulley lagging
- Hydraulic systems
 - Design, supply, diagnostics and repairs
- Heat treatment
 - Off site
 - On site mobile solutions



SERVICES

OSR™ REPAIR PROGRAM

RCR Mining Technologies via its proven Off-Site Repair (OSR™) Program offers a reliability engineering lead management process. The OSR™ management program strength comes from its management procedures and reporting manual which defines the principles, strategies and priorities that underpin the management activities related to off-site repairs performed by RCR MT on your rotatable assets.

Co-ordination and communication with the sites is paramount to ensure the success of this Management Procedures and Reporting Manual. The RCR MT OSR™ Manager and RCR MT Reliability Engineer (RE) work with the relevant clients RE's, maintenance and operating personnel, initially to develop a 'priority list' for repairable equipment. In addition to critical equipment, consideration is given to equipment where there are significant opportunities for improvement, such as items with high maintenance costs or if high levels of stock are required to support the equipment.

Continuous and ongoing review of equipment criticality, actual and potential failure modes and subsequent predictive and preventive maintenance and repair strategies.

The continuous consideration of each asset and implementation of change where justified has been proven to:

- Improve safety
- Reduce environment incidents
- Increase Mean Time Between Failure (MTBF) on all plant and equipment
- Increase equipment performance
- Streamline repairs
- Management and reporting
- Match repairable items to scheduled outages, and reduce OPEX costs









SERVICES

OEM PRODUCT SUPPORT

RCR MT, an original equipment manufacturer (OEM) of specialised bespoke mining equipment, is well placed through its Product Support group to provide the best quality commissioning, training, audits and rebuilds for all its OEM equipment.

As a result of these services, RCR MT provides a list of recommendations and spare parts supply to enable its clients to maintain plant availability and optimise production capability.

RCR Mining Technologies OEM product support includes:

Technical Services

The Technical Services personnel have extensive depth of knowledge on all areas of OEM plant and equipment.

OEM Product Support

- Factory based full life cycle support
- Improve maintenance practices
- 24/7 support for all OEM equipment and drives
- Technically lead integrated team projects
- Proactive execution for all projects
- Product support for RCR MT OEM Plant

On-site Support

- On-site plant audits and inspections provide specific documented checks to ensure the equipment meets specification standards for operation
- Constant reviews of OEM equipment gaining invaluable intelligence from applications that are spread across local, national and international clients
- Depth of knowledge in all areas associated with **OEM** equipment
- Factory based full life cycle support latest technology is delivered

OEM Rebuilds & Major Works Planning

- Value-add to OEM equipment rebuilds through innovation of repair process and depth of knowledge whilst keeping safety at the forefront of all decisions
- Planning, scheduling and project management execution of rebuilds

Training

- RCR MT's OEM specific training packages are designed to value-add to client operations
- **Drive Mechanisms**
 - Hydraulic, electro mechanical, linear
 - Overhauls of all components
 - Service exchange
 - Data logging and system analysis
- Hydraulics
 - RCR MT's hydraulics department can take care of all your hydraulics needs
- Asset Management
 - Maintenance Service Agreements cradle to grave on plant performance and reliability

Spare Parts

The Spare Parts department provides support for all OEM equipment. The team have a comprehensive knowledge and are able to identify, source and deliver all OEM equipment components ensuring continuity of supply.

RCR MT carry a small range of regular-use spare parts 'on the shelf'.

- Spare parts enquiries manufacture and supply
- Spare parts and consumables
- Critical spares inventory critical spares stocked to mitigate impact on production losses
- Dedicated spares and inventory management team



OTHER SERVICES



SURFACE TREATMENT

RCR MT has one of the largest and most comprehensive surface treatment facilities to complement our OEM equipment manufacture. This extends to external client needs as required. We adhere to the strictest standards and will work with our client to ensure all project needs are met.



BELT & LINING SERVICES

Via our in-house teams, RCR MT regularly splices large fabric belts, rubber and ceramic lines chutes and pulleys, and offer site services.



HYDRAULICS

RCR MT as part of its OEM supply, design, build, test and commission all hydraulic components either in-house or via value add agreements. Some components designed and supplied in-house include hydraulic power units, flushing rigs, specialised actuators and more.



CONCRETE REMEDIATION

These Services include concrete repair, abrasive blasting and coating, general maintenance, cleaning and contracting services. RCR MT provides survey techniques which include: cover meter testing, physical sampling, laboratory testing, carbonation testing and potential mapping for concrete and steel to diagnose the cause of the deterioration. RCR MT then provide a report and pricing to facilitate remediation works.

PRODUCTS



PROCESS PLANTS

RCR MT has delivered many turnkey process plant solutions including, crushing, stacking, conveying and processing.

These have been in fixed and relocatable designs and are adaptable to many feed configurations from front end loader (FEL) feed to truck feed.



CONVEYORS

RCR MT design fixed and relocatable conveyor solutions and offer customer specific features to ensure safety, reliability, maintainability to the clients budget.



IN-PIT MOBILE MINING UNITS

RCR MT's award-winning In-Pit Crushing & Conveying units are designed to meet the needs of modern mining practices through a combination of feeding, screening, and processing functions mounted on a single self- propelled mobile platform.



FEEDERS

RCR MT's OEM apron, belt and hybrid feeders are world renowned as heavy duty, reliable and maintenance friendly. We work closely with clients to offer a complete package inclusive of hopper, skirts and chutes to ensure all materials handling aspects are optimised to reduce wear and increase throughput efficiencies.

PRODUCTS



BELT REELERS

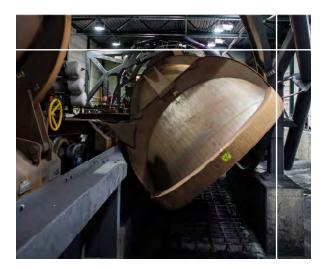
RCR MT Belt Reelers are available to meet all your belt reeling pulling and braking needs.

Our designs feature modular assemblies to allow efficient single truck transport from site to site. The drive and braking systems are controlled via PLC to ensure the safest possible safety interlocks and operation simplicity.



KNIFE GATE

RCR MT design purpose-built knife gates and spile bar systems to meet all your material handling and isolation needs. These solutions can incorporate wear modules that allow rotatable spares solutions for efficient maintenance.



KIRUNA WAGON - HELIX DUMPER

The Helix Dumper unloading station is a robust and low-cost solution that requires minimal maintenance.

The Helix Dumper wagon is rotated 148 degrees to dump its load. Achieving 25,000 tonnes per hour unloading with 32-tonne axle load wagons.



STACKERS

RCR MT's Stacker Conveyors are purpose built for each application and offer unique operational features to allow luffing, slewing and telescoping action as required, to establish the maximum stockpile capacity at the required tonnes per hour.

PRODUCTS



SCRUBBERS & SCREENING

RCR MT has a variety of established proven designs for scrubbers, screens and vibrating grizzlies that can be adapted to meet your specific materials handling process requirements. RCR MT has a proven track record in providing high capacity, low maintenance trommels to major mineral sands miners with extreme screening and material demands.



MARINE GANGWAYS

RCR MT Mobile Marine Gangway is a self-propelled electro-hydraulic walkway allowing safe access from wharf to ship.

Designed with full on-board and remote control, the gangway can be manoeuvred and controlled to accommodate variances within the world's shipping fleet.



BALL & ROD MILL CHARGES

RCR MT has recognised a need for the automation of ball and rod mill replenishment system solutions.

These solutions are proven and adaptable to your requirements. We can also offer recycling options for ball scats to allow further process use of ball scats.



SPECIALISED MECHANICAL HANDLING

RCR MT has extensive intellectual property spanning over a number of years in design and manufacture, which allows us to custom-design mechanical handling equipment for most applications.

HEAT TREATMENT

HEAT TREATMENT

With sites in Western Australia and Victoria, RCR Heat Treatment provides in-house and call out heat treatment services throughout Australia.

The RCR Heat Treatment division has in excess of 100 years of industry experience in heat treatment and includes qualified metallurgists. The business has an extensive portfolio of in-house and call-out thermal engineering and heat treatment services.

RCR Heat Treatment's operation at Welshpool in Perth, Western Australia, has one of the most comprehensively equipped facilities in the Southern Hemisphere, housing the largest permanent stress relieving furnace in Australia. The facility's laboratory has accredited to the ISO 17025 standard for over 60 years.

Our facilities operate 24 hours a day conducting stress relieving, normalising, annealing and solutionising, carburising, refractory, induction hardening and NATA accredited materials testing. Ongoing call out services are also provided for various fabrication shops and companies.

RCR Heat Treatment services include:

- Stress relieving
- Normalising, annealing & solutionising
- Carburising & controlled atmosphere hardening
- Induction hardening

- Water quenching
- Ageing & tempering
- Cryogenic heat treatment
- NATA accredited testing









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