



// ONE BRAND // ONE SOURCE // ONE SYSTEM



REMA MCUBE

INTRODUCING THE MCUBE BELT RIP DETECTION (BRD2)

Protect Your Mining Operations with MCube BRD –
Innovative Rip Detection for Steel Cord Conveyor Belts

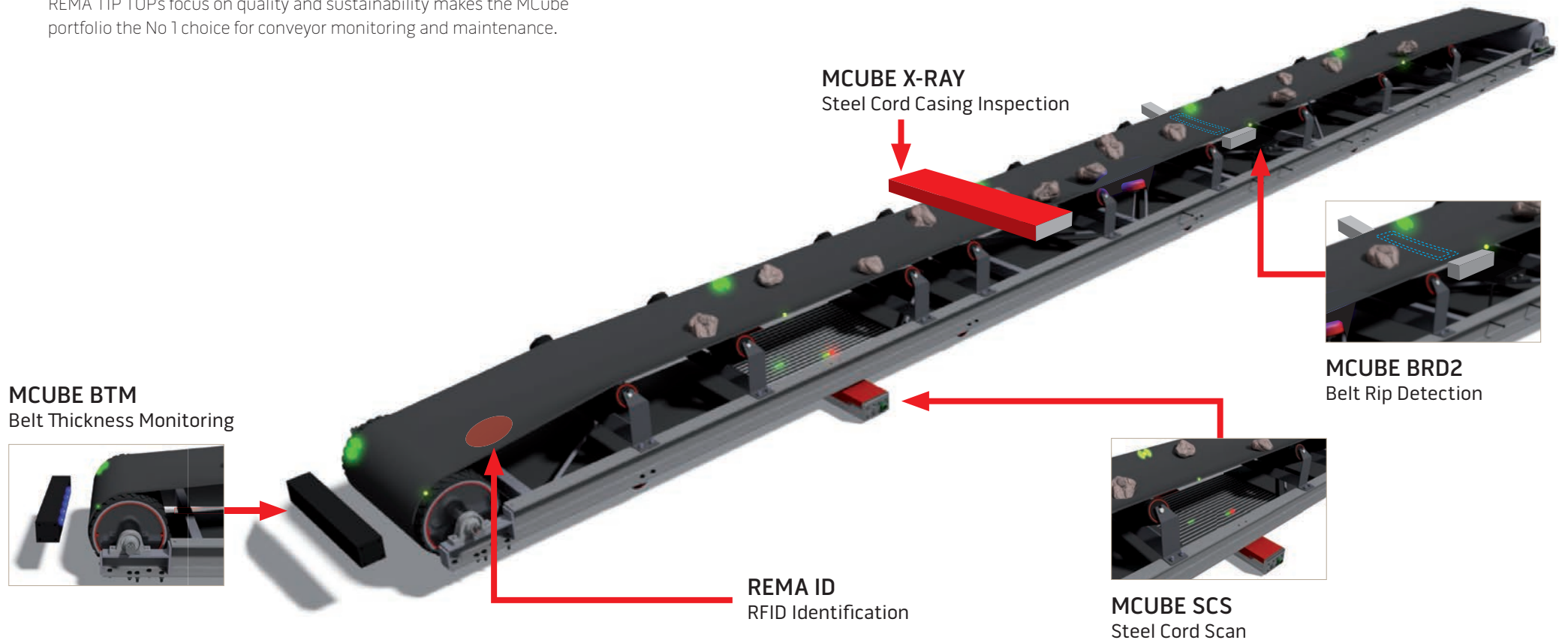
REMA MCUBE

REMA MCUBE PORTFOLIO OVERVIEW

The REMA TIP TOP MCube portfolio offers a wide range of products for maintaining and servicing conveyor belts.

It uses most advanced technology and durable materials to provide efficient and reliable solutions. The portfolio empowers to improve conveyor performance and save costs by reducing downtime.

REMA TIP TOP's focus on quality and sustainability makes the MCube portfolio the No 1 choice for conveyor monitoring and maintenance.



REMA MCUBE INTRODUCING THE MCUBE RIP DETECTION SYSTEM (BRD2)

MCube BRD2 – Assured Protection with Most Reliable Detection

MCube BRD2 delivers unmatched protection through its cutting-edge belt monitoring technology, optimized for use with MCube Sensor Loops.

MCube Sensor Loops enhance the system's most reliable detection of belt rips, ensuring the safety and efficiency of your conveyor operations.

The system's design ensures that the longest possible rip is limited to the distance between the sensor loops, minimizing damage.

In the event of a detected rip, MCube BRD2 allows to automatically stop the belt, preventing further issues and costly downtime, giving you the confidence to operate at peak performance.



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INTRODUCING THE MCUBE RIP DETECTION SYSTEM (BRD2)

At REMA TIP TOP, we are committed to providing innovative solutions for the mining industry. Our Belt Rip Detection System, MCube BRD2, increases conveyor belt productivity by detecting rips as reliably and quickly as possible.

Why Choose REMA TIP TOP's MCube BRD2?

Real-Time Monitoring: Continuous diagnostics detect rips instantly, halting the belt to minimize damage and reduce downtime.

Precise Belt Mapping: Detailed real-time data displays loop position, status, and signal strength, ensuring proactive maintenance.

Detailed System Overview: Displays belt speed, direction, and a log of the last 10,000 status changes, accessible locally and remotely.

Local & Remote Access: Easily monitor and operate the system locally on a 12" TFT screen or remotely via TCP/IP.

User-Friendly Design: Includes a color 12" TFT display, shortcut buttons, and visual indicators, making operation simple and intuitive.

Reliable Rip Detection Technology

MCube BRD2 uses the most reliable technology available for steel cord belt monitoring. Sensor loops embedded in the belt form an inductive link, ensuring precise detection of rips. If a loop is missing, indicating a rip, the central unit is able to shut down the conveyor immediately to prevent further damage.

Built to Withstand Harsh Environments

MCube BRD2's stainless steel IP65 housing provides superior resistance to dust, water, and corrosion, making it ideal for industrial settings. With an operating range of -20°C to +60°C and specialized versions for ATEX or extreme climates, MCube BRD2 ensures dependable rip detection under challenging conditions.

Measure with Precision, Optimize with Confidence

The advanced rip detection and measurement technology of MCube BRD2 ensures precise detection of belt rips and stops the belt, providing accurate data that allows operators to take swift action. This precision enables optimal performance and safety, giving users the confidence to maintain efficient conveyor operations.



MONITORING



REPORTING

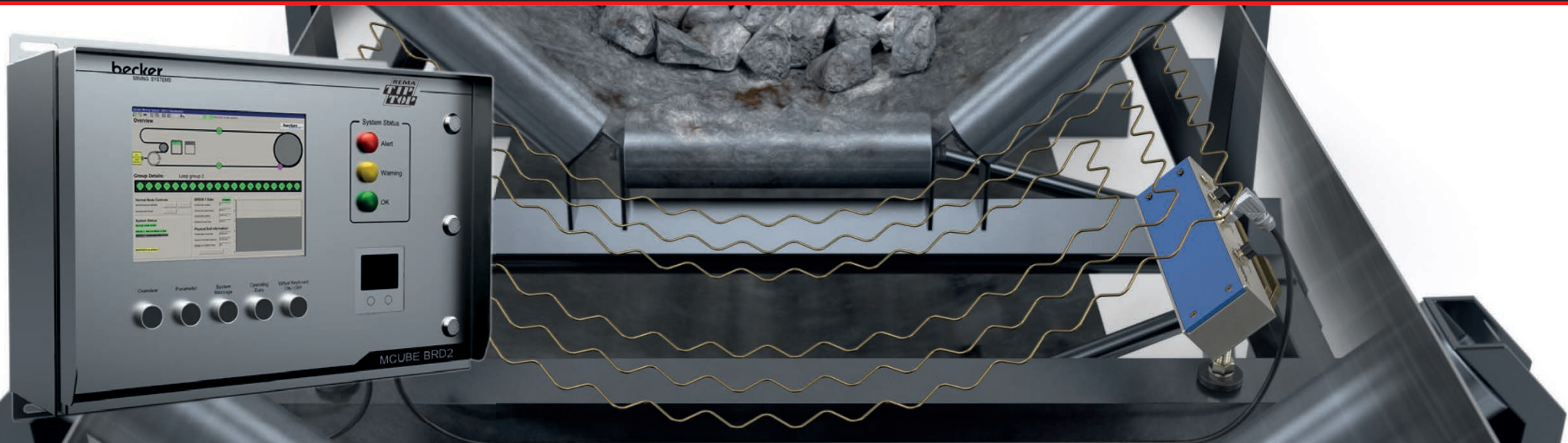


INSPECTION



EXECUTION

REMA MCUBE INTRODUCING THE MCUBE RIP DETECTION SYSTEM (BRD2)



MCube BRD2 and Sensor Loops – Better as a Team

MCube BRD2 is optimized for MCube Sensor Loops, delivering precise, real-time rip detection for effective conveyor monitoring to minimize risks and costly downtime.

MCube Sensor Loops – Durable, Reliable Signal Carriers

MCube Sensor Loops, built with 2.5 mm thick, endless wire sets (double or triple coil), include RFID tags for contactless identification. Embedded during production or retrofitted, placed above or below the carcass they are essential for cross-belt signal transmission and providing dependable monitoring.

The Right Spacing Makes All the Difference

Optimal loop spacing reduces rip detection time, with 50 meters as the recommended maximum for fast response and minimal damage.

Flexible Sensor Loop Options for Every Belt Width

MCube Sensor Loops are available as double and triple coil loops for belts from 650 mm to 3,200 mm (metric) and 36" to 96" (imperial), ensuring various size options.

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MCUBE PORTFOLIO OVERVIEW



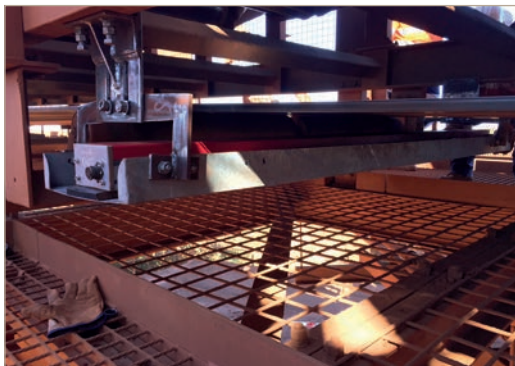
MCube BTM

- ✓ Non-contact belt and top cover wear measurement in just one revolution
- ✓ Provide information to define the policies for maintaining belts
- ✓ Perform measurements with the conveyor in operation
- ✓ Enable diagnosis of possible causes of performance loss
- ✓ Perform historical analysis of the wear profile



MCube BRD

- ✓ Prompt and accurate detection of belt rips utilizing sensor loops in the belt
- ✓ Minimize downtime and prevent catastrophic failures
- ✓ Enhance operational safety and reduce risks
- ✓ Facilitate proactive maintenance planning
- ✓ Optimize belt replacement strategies based on real-time data



MCube SCS

- ✓ Non-contact high resolution system
- ✓ Structural monitoring of the steel cord casing for broken, corroded or torn cables
- ✓ Location and analysis of splices in the belt
- ✓ Parameterizable automatic and instantly available report
- ✓ Inspection during production

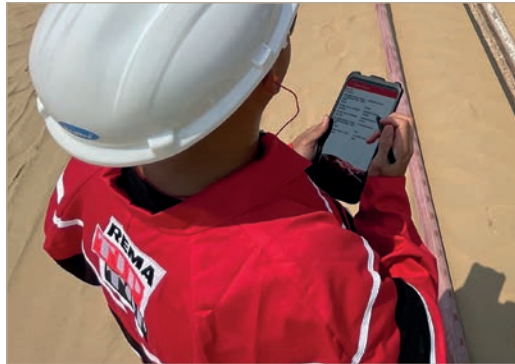


MCube X-Ray

- ✓ Obtain high-quality X-ray radiography inspections for industrial applications
- ✓ Accurately detect defects and anomalies in materials and products
- ✓ Enhance your quality control and assurance processes
- ✓ Improve safety by identifying potential hazards and structural weaknesses

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REMA ENGINEERED TECHNOLOGIES OVERVIEW



CCube – Improving Process Efficiency and Customer Interactions

- ✓ Available 24/7 on a global level
- ✓ Field inspections scheduling, inspection execution & documentation
- ✓ Professional asset management
- ✓ Significant increase in process efficiency through standardization of data
- ✓ Better knowledge management and faster response times



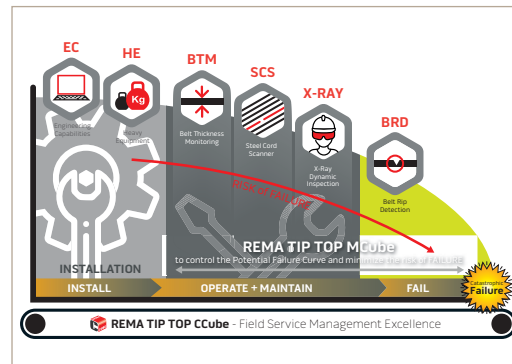
Heavy Equipment

- ✓ Our high-quality heavy equipment ensures that our teams are best positioned to deliver industry leading, world class conveyor installation & maintenance services
- ✓ Whether it's belt winders, stand ups, high torque auxiliary and clamping drives or turning and lapping stations as well as vulcanizing presses up to 3.2 m wide, REMA TIP TOP has a full range of equipment to offer its customers industry proven services
- ✓ REMA TIP TOP manages the entire construction process for its customers and is specialized in the design, manufacturing and implementation of heavy equipment custom tailored to specific uses and capabilities



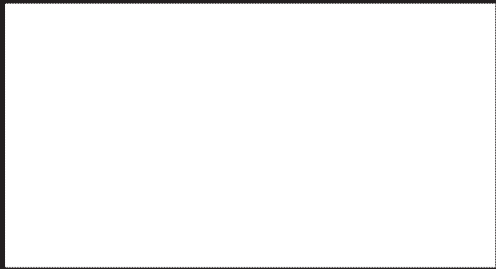
Engineering Capabilities

- ✓ In addition to the maintenance and repair of industrial plants, REMA TIP TOP also develops specific projects to optimize industrial plants
- ✓ Aspects such as functionality and efficiency are reviewed and improved to make processes more effective
- ✓ All necessary steps of the project are developed "in house": design and engineering, internal production as well as the complete installation and maintenance of the project



REMA Engineered Technologies – Driving the Digitization of Service

- ✓ Innovation and Efficiency: Combining engineering and digital technologies drives innovation and operational efficiency
- ✓ Reliability and Quality Assurance: Integrating reliability engineering ensures consistent performance while reducing downtime
- ✓ Adaptability and Resilience: The synergy enables quick adaptation to market changes, fostering resilience and business continuity
- ✓ Global Scalability: Centralizing expertise for consistent excellence and scalable growth



Your local contact



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