

"ONE BRAND "ONE SOURCE "ONE SYSTEM















COAL

Sustainable solutions for the coal industry

Every industry is different, as is every plant. The processing of raw materials, minerals and ores requires plant machinery and equipment to be operating efficiently at all times. REMA TIP TOP Industrial Solutions gives coal mine operators a complete range of conveyor belting and components, wear protection and surface protection solutions tailored to the specific needs of your plant.







Copper



Gold



Iron Ore



Lithium

COAL

For a very long time, the coal industry has been a critical player in the development of industries, energy generation and innovation for the future.

Some of the key challenges in a shifting economic, political and social environment centre around the sustainability and maintainability of coal plants and equipment, and in technology-based improvements that drive efficiencies.

One of REMA TIP TOP's core global values is the mantra of 'repair, don't replace', which speaks to our approach in delivering products and services that improves the lifecycle and availability of our customers' assets.

Our range of conveyor maintenance products, services, technologies and analytics tools increase the efficiency and availability of our customers' systems, while our wear and corrosion protection systems protect our customers' plant and keep machinery running far longer than its normal lifecycle.

Specialised products like REMA dust covering systems also improve the environmental outcomes for our customers, and OTR tyre patches and servicing reduces your reliance on new tyres and keeps your vehicles on the road longer.





YOUR REMATIP TOP PRODUCTS & SERVICES PORTFOLIO



Belting



Pulley Lagging



Impact Bed/Bars



REMA Technology

& Monitoring

Wear Rubber Linings



ldlers, Rollers & Trackers



Bearings*



Pulleys



Skirting Systems



Safety Equipment*



Belt Cleaning Systems



Ceramics



Adhesives



Heavy Wear Protection



Rubber Steel Plates



Anti-Caking



24/7 Service



Engineering



Tools Repair System



Fluoropolymer Linings



Coatings



Corrosion Rubber Linings



Brick Linings



Combined Linings



Mill Lining



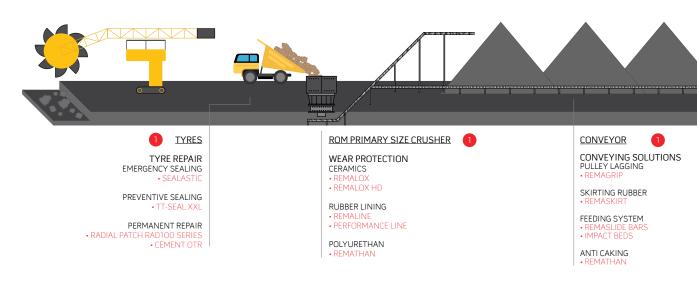
Screening Mats

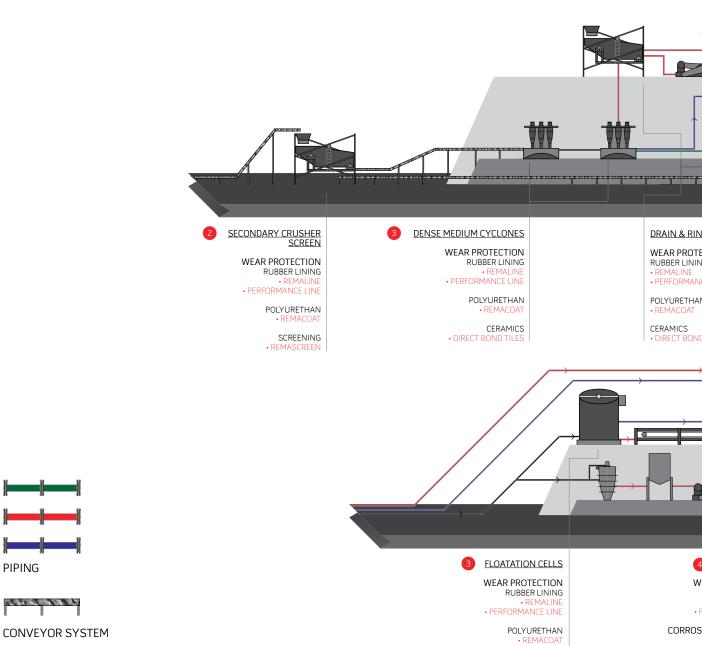


Vulcanisation Presses

3

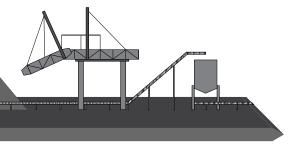
^{*}Please contact your local REMA TIP TOP representative for availability





CORROSION PROTECTION

RUBBER LINING • CHEMOLINE



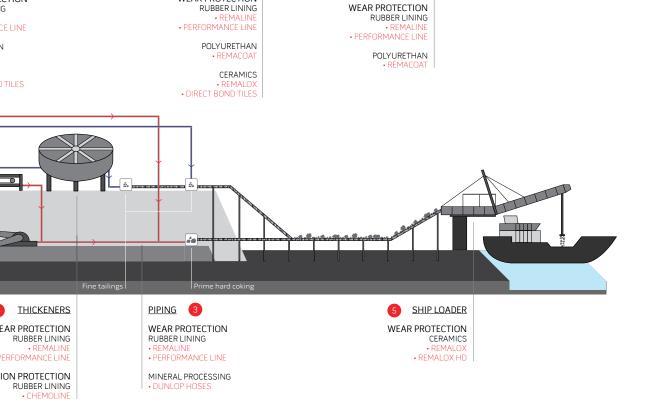
TECHNOLOGIES
REMA MCUBE
- BELT THICKNESS MONITORING
- SCS STEEL CORD SCANNER
- RIP GUARD DETECTION

Coal Process

- PRODUCTION FEED PRODUCTS & SOLUTIONS
- PRE-TREATMENT PRODUCTS & SOLUTIONS
- CLEANING PRODUCTS & SOLUTIONS

SHIP LOADING PRODUCTS & SOLUTIONS

SUBSEQUENT TREATMENT PRODUCTS & SOLUTIONS



<u>CYCLONE</u>

WEAR PROTECTION

CLASSIFYING SIEVE BEND

- BELTING
- STEEL CORD FABRIC
- SOLID WOVEN

SE SCREENS CTION

COMPONENTS • IDLERS • ROLLERS • TRACKERS • CLEANERS







Copper



Gold



Iron Ore



Lithium

CASE STUDIES

REMALOX HD 35

Reducing wear and extending lifetime of discharge chutes

At a coal terminal in China, a discharge chute was experiencing a high degree of abrasion and wear.

UNIGRIP CR-L

Reducing slippage and increasing service life

A coal handling prep plant in China was experiencing slippage on one of its main transfer belts, causing downtime and reduced throughput.

2month Prev

Previous lining: Steel

 2_{years}

Ongoing service life

18_{month}

Lifetime with REMALOX HD 35



Perfect for wet conditions

 $_{x}$ g

Increase in lifetime



Long service life

It was previously 20mm steel-lined, and was subject to a service life of approximately 2 months. The chute was relined with REMALOX HD 35 – a steel-backed rubber and ceramic composite, which extended the service life of the transfer chute to over 18 months.

The solution was the installation of UNIGRIP CR-L, a pulley lagging material with ceramic inserts. Perfect for wet conditions, UNIGRIP has a higher coefficient of friction and a very long service life.

This pulley remains in service more than two years later.





INNOVATIVE PRODUCT SOLUTIONS

Low noise rollers

Following a successful trial of low-noise rollers, REMA TIP TOP changed out 4,500 rollers for an Australian coal mining customer.

4500 Low noise rollers installed

75% Reduction in noise

MAINTENANCE EXPERTISE PAYS DIVIDENDS

Reducing cost, increasing availability

In January 2015, a coal mining client in Queensland, Australia approached us about its conveyor availability issues.

Reliability engineering approach

98% Conveyor availability

4]% Reduction in maintenance costs

The initial trial was undertaken in September 2016 after proactive noise testing found improvements were needed to meet community and environmental expectations. Independent testing found that the change out reduced roller noise by 75 per cent. Our unique condition monitoring techniques continue to be utilised on site to monitor roller performance and proactively implement maintenance strategies.

REMA TIP TOP implemented a reliability engineering approach to track and analyse the data of all aspects of the conveyor components.

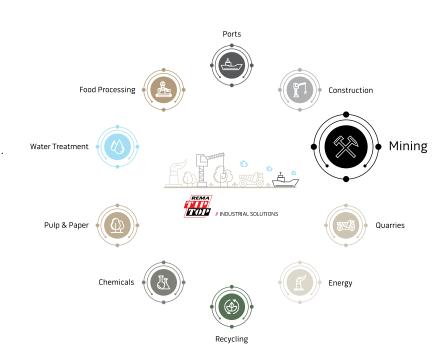
In taking up our data-driven recommendations we have been able to improve the conveyor availability to 98 per cent, and reduce maintenance costs by more than 40 per cent.



OUR SERVICE PROMISE

The REMA TIP TOP group of products are specifically designed with your plant and assets in mind. From wear and surface protection to conveyor technology and components, our products paired with out service solutions warranty to dramatically increase the lifecycle or your assets, lower your maintenance costs and improve the availability of your system.

For decades we have been working on-site with our customers and partners in the development of industry best practice installation, maintenance, and upkeep strategies to optimise your site beyond the benchmarks of your competitors. From developing methodologies and undertaking engineering audits, to implementing data collection technologies and tapping into The Internet of Things, we have the knowhow and experience to keep you up and running longer, safer, and more efficiently.





"ONE BRAND "ONE SOURCE "ONE SYSTEM

REMA TIP TOP AG

Gruber Strasse 65 · 85586 Poing / Germany Phone: +49 8121 707-100 Fax: +49 8121 707-10 222 info@tiptop.de

www.rema-tiptop.com



582 2051 - III.19 Printed in Germany