



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



Industrial Solutions  
Mining









## Iron Ore Building the future

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 iron ore plant operators a complete range of conveyor belting and components, wear protection and surface protection solutions tailored to the specific needs of your plant.



# Mining

-  Coal
-  Copper
-  Gold
-  Iron Ore
-  Lithium
-  Minerals



## Iron Ore






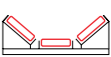





















In the early 2000s global commodity markets grew dramatically, driven extensively by the urbanisation and industrialisation of emerging economies in Asia and Latin America. This was particularly evident in industries like iron ore. China continues to be one of the largest consumers of base metals, particularly for its steel mills and power generation.

The key challenges ahead for the iron ore industry are the rebalancing of supply and demand, stabilising global iron ore prices; domestic and international government decisions effecting sourcing of raw material; and the continued focus on operating costs for mine operators.

REMA TIP TOP's core products in conveying solutions, wear and corrosion protection are tailored to, and proven in the iron ore industry around the world.

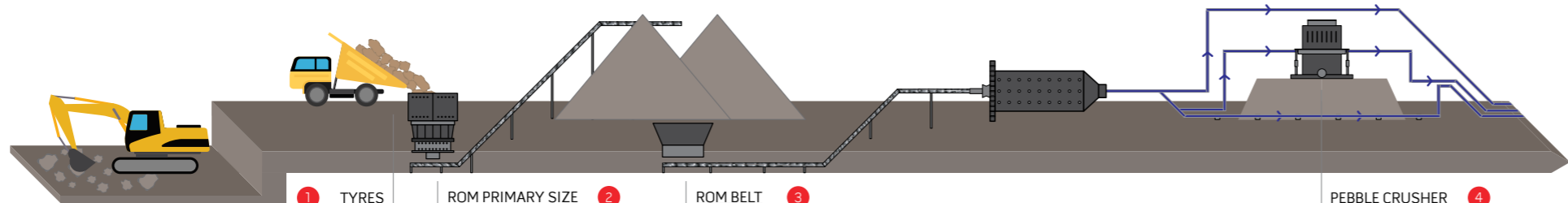
Heavy duty wear protection systems feature high abrasion-resistance characteristics that increase the lifecycle and maintenance cycle of your plant and machinery many times over. Our conveyor maintenance products, services, technologies and analytical tools improve the efficiency of your assets, reducing maintenance costs and improving availability, while our Automotive group of products keeps your vehicles' tyres on the road longer and improves their safety outcomes.

### YOUR REMA TIP TOP PRODUCTS & SERVICES PORTFOLIO

- |                                                                                                              |                                                                                                                 |                                                                                                                |                                                                                                                       |                                                                                                                |                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <br>Belting             | <br>Pulley Lagging         | <br>Impact Bed/Bars       | <br>REMA Technology & Monitoring | <br>Wear Rubber Linings   | <br>Idlers, Rollers & Trackers |
| <br>Bearings*           | <br>Pulleys                | <br>Skirting Systems      | <br>Safety Equipment*            | <br>Belt Cleaning Systems | <br>Ceramics                   |
| <br>Adhesives           | <br>Heavy Wear Protection  | <br>Rubber Steel Plates   | <br>Anti-Caking                  | <br>24/7 Service          | <br>Engineering                |
| <br>Tools Repair System | <br>Fluoro-polymer Linings | <br>Coatings              | <br>Corrosion Rubber Linings     | <br>Brick Linings         | <br>Combined Linings           |
| <br>Mill Lining         | <br>Screening Mats         | <br>Vulcanisation Presses |                                                                                                                       |                                                                                                                |                                                                                                                     |

\*Please contact your local REMA TIP TOP representative for availability

# Magnetite Iron Ore Process



- 1 EXCAVATION**
- WEAR PROTECTION**  
 CERAMICS  
 • REMALOX  
 • REMALOX HD
- RUBBER LINING**  
 • REMALINE  
 • PERFORMANCE LINE
- POLYURETHAN**  
 • REMATHAN

- 1 TYRES**
- TYRE REPAIR**  
 EMERGENCY SEALING  
 • SEALASTIC
- PREVENTIVE SEALING**  
 • TT-SEAL XXL
- PERMANENT REPAIR**  
 • RADIAL PATCH RAD100 SERIES  
 • CEMENT OTR

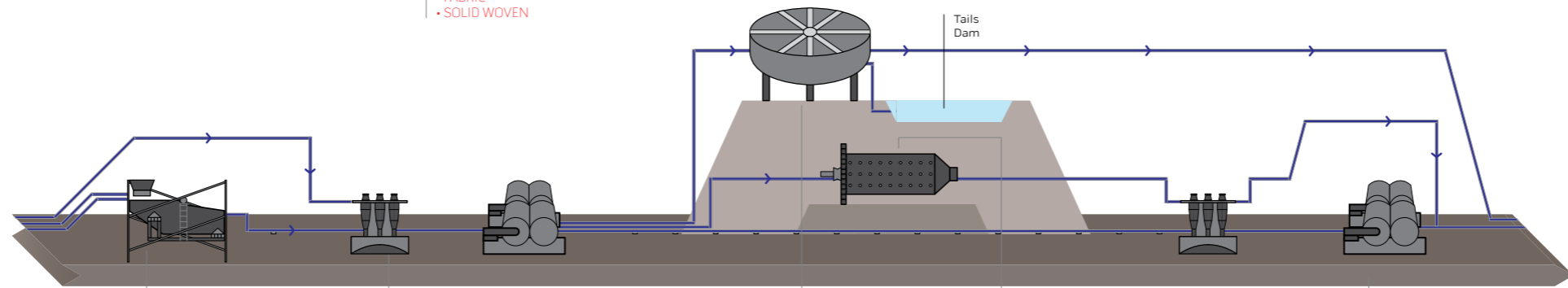
- 2 ROM PRIMARY SIZE CRUSHER**
- WEAR PROTECTION**  
 CERAMICS  
 • REMALOX  
 • REMALOX HD
- RUBBER LINING**  
 • REMALINE  
 • PERFORMANCE LINE
- POLYURETHAN**  
 • REMATHAN

- 3 ROM BELT**
- CONVEYING SOLUTIONS**  
 PULLEY LAGGING  
 • REMAGRIP
- SKIRTING RUBBER**  
 • REMASKIRT
- FEEDING SYSTEM**  
 • REMASLIDE
- ANTI CAKING**  
 • REMATHON
- BELTING**  
 • STEEL CORD  
 • FABRIC  
 • SOLID WOVEN

- COMPONENTS**  
 • IDLERS  
 • ROLLERS  
 • TRACKERS
- TECHNOLOGIES**  
 REMA MCUBE  
 • BELT THICKNESS MONITORING  
 • SCS STEEL CORD SCANNER  
 • RIP GUARD DETECTION

- 4 PEBBLE CRUSHER**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- CERAMICS**  
 • REMALOX  
 • REMALOX HD

- 1 EXCAVATION**  
PRODUCTS & SOLUTIONS
- 2 CRUSHING**  
PRODUCTS & SOLUTIONS
- 3 MATERIAL HANDLING**  
PRODUCTS & SOLUTIONS
- 4 SCREENING & CLASSIFICATION**  
PRODUCTS & SOLUTIONS
- 5 SHIP LOADING**  
PRODUCTS & SOLUTIONS



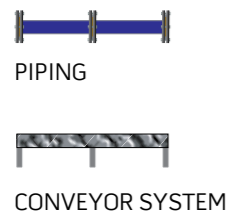
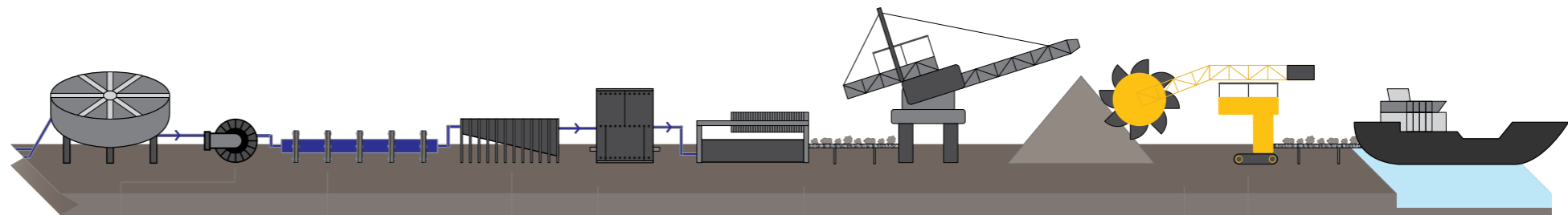
- 4 CLASSIFYING SCREEN**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- CERAMICS**  
 • REMALOX  
 • REMALOX HD  
 • SCREENING MATS

- 4 PRIMARY CLASSIFYING CYCLONE**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- POLYURETHAN**  
 • REMACOAT
- CERAMICS**  
 • DIRECT BOND TILES

- 4 TAILINGS THICKENER**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- CORROSION PROTECTION**  
 RUBBER LINING  
 • CHEMOLINE

- 4 REGRIND BALL MILL**
- MILL LINING**  
 REMAMILL SYSTEM  
 • RUBBER LINING  
 • LIFTER BARS  
 • PROFILES  
 • DISCHARGE PLATES

- 4 FINISHING MAGNETIC SEPARATOR**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- POLYURETHAN**  
 • REMACOAT
- CERAMICS**  
 • DIRECT BOND TILES



- 4 CONCENTRATE PUMP**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- CORROSION PROTECTION**  
 RUBBER LINING  
 • CHEMOLINE

- 4 PIPING**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE
- CORROSION PROTECTION**  
 RUBBER LINING  
 • CHEMOLINE

- 4 CONCENTRATE LAUNDER**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE

- 4 SLURRY TANK**
- WEAR PROTECTION**  
 RUBBER LINING  
 • REMALINE  
 • PERFORMANCE LINE

- 4 FILTER PRESS**
- CORROSION PROTECTION**  
 COATINGS  
 • COROFLAKE  
 • COROPUR
- WEAR PROTECTION**  
 POLYURETHAN  
 • REMATHAN

- 5 EXCAVATION**
- WEAR PROTECTION**  
 CERAMICS  
 • REMALOX  
 • REMALOX HD
- RUBBER LINING**  
 • REMALINE  
 • PERFORMANCE LINE
- POLYURETHAN**  
 • REMATHAN

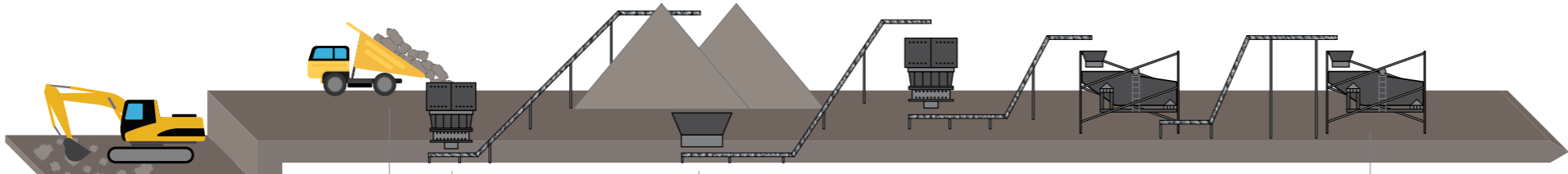
- 5 SHIP LOADING**
- CONVEYING SOLUTIONS**  
 PULLEY LAGGING  
 • REMAGRIP
- SKIRTING RUBBER**  
 • REMASKIRT
- FEEDING SYSTEM**  
 • REMASLIDE
- ANTI CAKING**  
 • REMATHAN

- BELTING**  
 • STEEL CORD  
 • FABRIC  
 • SOLID WOVEN

- COMPONENTS**  
 • IDLERS  
 • ROLLERS  
 • TRACKERS

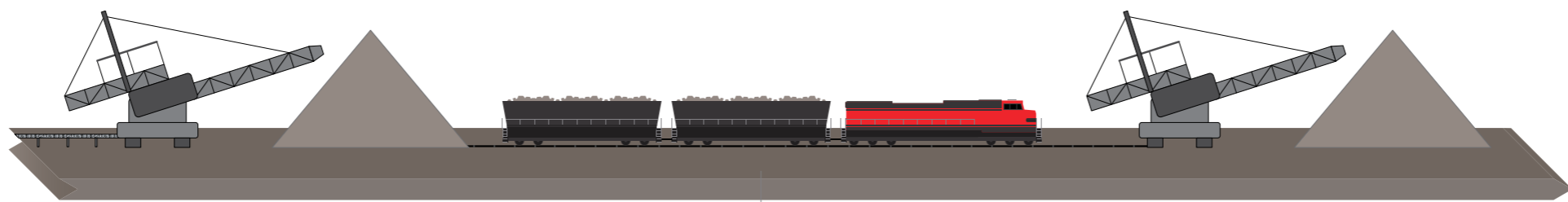
- TECHNOLOGIES**  
 REMA MCUBE  
 • BELT THICKNESS MONITORING  
 • SCS STEEL CORD SCANNER  
 • RIP GUARD DETECTION

# Hematite Iron Ore Process

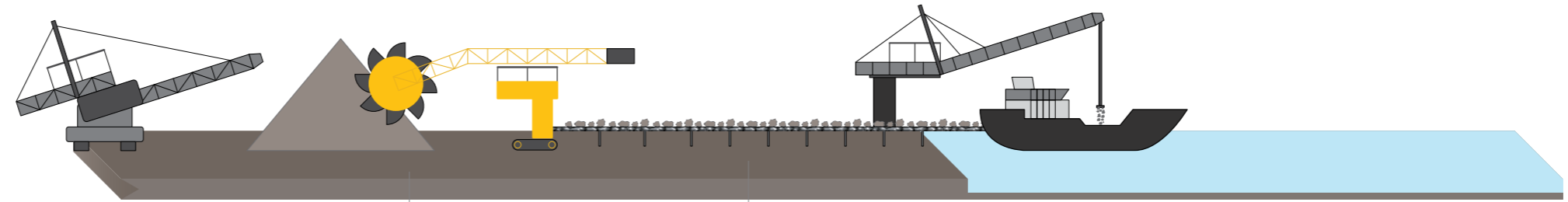


- 1 EXCAVATION**
  - WEAR PROTECTION CERAMICS
    - REMALOX
    - REMALOX HD
  - RUBBER LINING
    - REMALINE
    - PERFORMANCE LINE
  - POLYURETHAN
    - REMATHAN
- 1 TYRES**
  - TYRE REPAIR
  - EMERGENCY SEALING
    - SEALASTIC
  - PREVENTIVE SEALING
    - TT-SEAL XXL
  - PERMANENT REPAIR
    - RADIAL PATCH RAD100 SERIES
    - CEMENT OTR
- 2 ROM PRIMARY SIZE CRUSHER**
  - WEAR PROTECTION CERAMICS
    - REMALOX
    - REMALOX HD
  - RUBBER LINING
    - REMALINE
    - PERFORMANCE LINE
  - POLYURETHAN
    - REMATHAN
- 3 ROM BELT**
  - CONVEYING SOLUTIONS
    - PULLEY LAGGING
      - REMAGRIP
    - SKIRTING RUBBER
      - REMASKIRT
    - FEEDING SYSTEM
      - REMASLIDE
    - ANTI CAKING
      - REMATHAN
    - BELTING
      - STEEL CORD
      - FABRIC
      - SOLID WOVEN
  - COMPONENTS
    - IDLERS
    - ROLLERS
    - TRACKERS
  - TECHNOLOGIES
    - REMA MCUBE
      - BELT THICKNESS MONITORING
      - SCS STEEL CORD SCANNER
      - RIP GUARD DETECTION
- 4 CLASSIFYING SCREEN**
  - WEAR PROTECTION RUBBER LINING
    - REMALINE
    - PERFORMANCE LINE
  - CERAMICS
    - REMALOX
    - REMALOX HD
    - SCREENING MATS

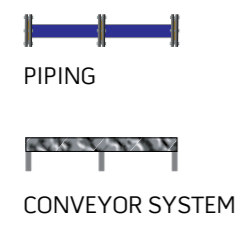
- 1 EXCAVATION** PRODUCTS & SOLUTIONS
- 2 CRUSHING** PRODUCTS & SOLUTIONS
- 3 MATERIAL HANDLING** PRODUCTS & SOLUTIONS
- 4 SCREENING & CLASSIFICATION** PRODUCTS & SOLUTIONS
- 5 TRAIN LOADING & TRANSPORT** PRODUCTS & SOLUTIONS
- 6 SHIP LOADING** PRODUCTS & SOLUTIONS



- 5 TRAIN**
  - WEAR PROTECTION RUBBER LINING
    - REMALINE
    - PERFORMANCE LINE
  - CERAMICS
    - REMALOX

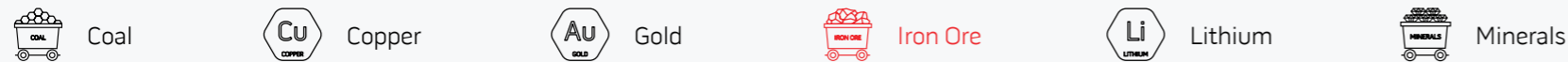


- 6 EXCAVATION**
  - WEAR PROTECTION CERAMICS
    - REMALOX
    - REMALOX HD
  - RUBBER LINING
    - REMALINE
    - PERFORMANCE LINE
  - POLYURETHAN
    - REMATHAN
- 6 CONVEYOR**
  - CONVEYING SOLUTIONS
    - PULLEY LAGGING
      - REMAGRIP
    - SKIRTING RUBBER
      - REMASKIRT
    - FEEDING SYSTEM
      - REMASLIDE
    - ANTI CAKING
      - REMATHAN
  - BELTING
    - STEEL CORD
    - FABRIC
    - SOLID WOVEN
  - COMPONENTS
    - IDLERS
    - ROLLERS
    - TRACKERS
  - TECHNOLOGIES
    - REMA MCUBE
      - BELT THICKNESS MONITORING
      - SCS STEEL CORD SCANNER
      - RIP GUARD DETECTION





Mining



Case Studies

METHODOLOGY

Reduction in belt change-out times

An iron ore port facility was experiencing inefficiencies as a result of their methodologies and response to conveyor maintenance. At the time replacements were prepared and executed case-by-case which

 **Increased production time**

**43%** **Reduction in replacement windows**

 **Immediate response to all breakdowns**

resulted in long shut-downs and risks with readiness and responsiveness. As a result, REMA TIP TOP implemented new belt and stock management, standardised equipment, upgraded and engineered equipment and introduced a new methodology. This resulted in a 43% reduction in replacement windows with an immediate response to all breakdown scenarios.

REMA MCUBE

Monitoring belt condition for efficient change-outs

The REMA scan portable steel cord belt scanning unit is used to monitor a conveyor belt's steel cord condition. As the first of its kind in Australia, a REMA TIP TOP service team in the Pilbara installed the scan unit to

**30mins** **Set up in under 30 minutes**

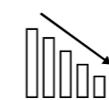
**10mins** **Accurate condition reports in under 10 mins**

provide more accurate information on the condition of the steel cord belt to help our customer make informed decisions about belt change-outs. The initial trial of the REMA scan unit accurately mapped the number of splices, their location and their condition and cord damage. The site's management was impressed with the speed and ease of the data collection to produce a simple report in under two minutes.


BELT TRACKING

Reducing belt mis-tracking

An iron ore port facility was experiencing a high amount of belt mis-tracking and drift switch trips, which resulted in significant downtime and decreased production.

 **80% reduction in downtime**

 **Increased production**


 **Reduced tracker maintenance costs/repairs**

REMA TIP TOP conducted an initial survey and adjustment of the idler alignment and proceeded to install effective, custom engineered, fit-for-duty belt tracking units. The installation of these units has resulted in an 80% reduction in tracking related downtime, which has increased production.

SERVICE

Rapid response times

At a Pilbara port facility a steel plate lodged itself in a conveyor transfer chute, tearing 100 metres of wharf belt. REMA TIP TOP's maintenance team assessed the damage and made the decision to carry out a 100 metre

 **Rapid reponse maintenance team**

**100m** **Insert delivered in just over 2 days**

**0** **Incidents**

belt insert. The repair was completed in just over two days and the conveyor system was back in operation. The customer was extremely impressed with REMA TIP TOP's rapid response maintenance team being able to restore the port's most critical conveyor belt so quickly and without any incidents.

# Driving your Performance



## 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 our service solutions guarantee to dramatically increase the lifecycle of 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 know-how and experience to keep you up and running longer, safer, and more efficiently.



### REMA TIP TOP AUSTRALIA

15 Warabrook Boulevard, Warabrook NSW 2304

Tel: +61 (0)2 4935 0200

E: [info@rema-tiptop.com.au](mailto:info@rema-tiptop.com.au)

[www.rema-tiptop.com.au](http://www.rema-tiptop.com.au)

