

Automated Roller Failure Detection and Monitoring

A new technology from a name you trust

REMA TIP TOP's advanced solution offers unmatched conveyor system monitoring by combining Distributed Fiber Optic Sensing (DFOS) technology with easy-to-use monitoring and reporting software. This smart combination automates inspections and takes condition monitoring to the next level by capturing and analysing data in real time.

Our approach uses the latest monitoring techniques to detect faults and signs of wear while improving overall conveyor performance. With round-the-clock scanning and quick fault detection, our system ensures minimal downtime through predictive and scheduled maintenance, eliminating the need for reactive repairs.

The monitoring and reporting software provides clear control and insight through a simple, user-friendly dashboard that shows essential operational data in an easy-to-understand format. Equip your operation with the tools to keep your conveyor system running smoothly and efficiently at all times.



CAPABILITIES AND BENEFITS

Comprehensive Monitoring

Capability : A single device can connect to and monitor a fiber optic cable up to 10 km long.

Benefit : Reduces the need for manual/visual inspections.

Enhanced Safety

Capability : Virtually "walk" the conveyor through an intuitive software interface.

Benefit : Reduces personnel exposure to hazardous environments.

Accurate Data

Capability : Converts the fiber optic cable into thousands of sensors.

Benefit : Ensures precise detection of roller failures and other issues.

Remote Access

Capability : Data is accessible remotely via the internet or local network.

Benefit : Allows for proactive maintenance and offsite monitoring, minimising downtime.

24/7 Monitoring

Capability : Round the clock monitoring and access to data, alerts and reports.

Benefit : No more intermittent checks, continuous surveillance ensures timely detection of issues and improved safety.

Intuitive Software

Capability : Provides comprehensive real-time data and insights on the condition of conveyor rollers.

Benefit : Enables predictive maintenance and efficient scheduling of roller replacements during planned shutdowns.

Efficient Installation

Capability : Quick and easy setup and installation.

Benefit : Minimal downtime during installation, ensuring continuous conveyor operation and maximising productivity.

Maintenance-Free

Capability : Once installed and commissioned, the system requires no maintenance or calibration.

Benefit : Does not take personnel away from their usual schedules.

Long-Range Capability

Capability : A single DFOS unit can monitor up to 10km of conveyor.

Benefit : Complete coverage and awareness of the conveyor improves operational productivity and throughput.

Real-Time Insights

Capability : Continuous and real-time detection of abnormalities.

Benefit : Reduces unexpected downtime and improves operational efficiency, enabling proactive decision making.

No Power Required

Capability : DAS does not need power at the sensing points (fiber optic cable).

Benefit : Simplifies installation and reduces costs.

Historical Data Analysis

Capability : Cloud storage enables retrospective analysis and trend identification.

Benefit : Aids in predictive analysis, improving inspection and maintenance schedules.

Automated Reports

Capability : Statistically summarises alarms and warnings.

Benefit : Provides operators with robust insights into the state of their conveyor.

Seamless Integration

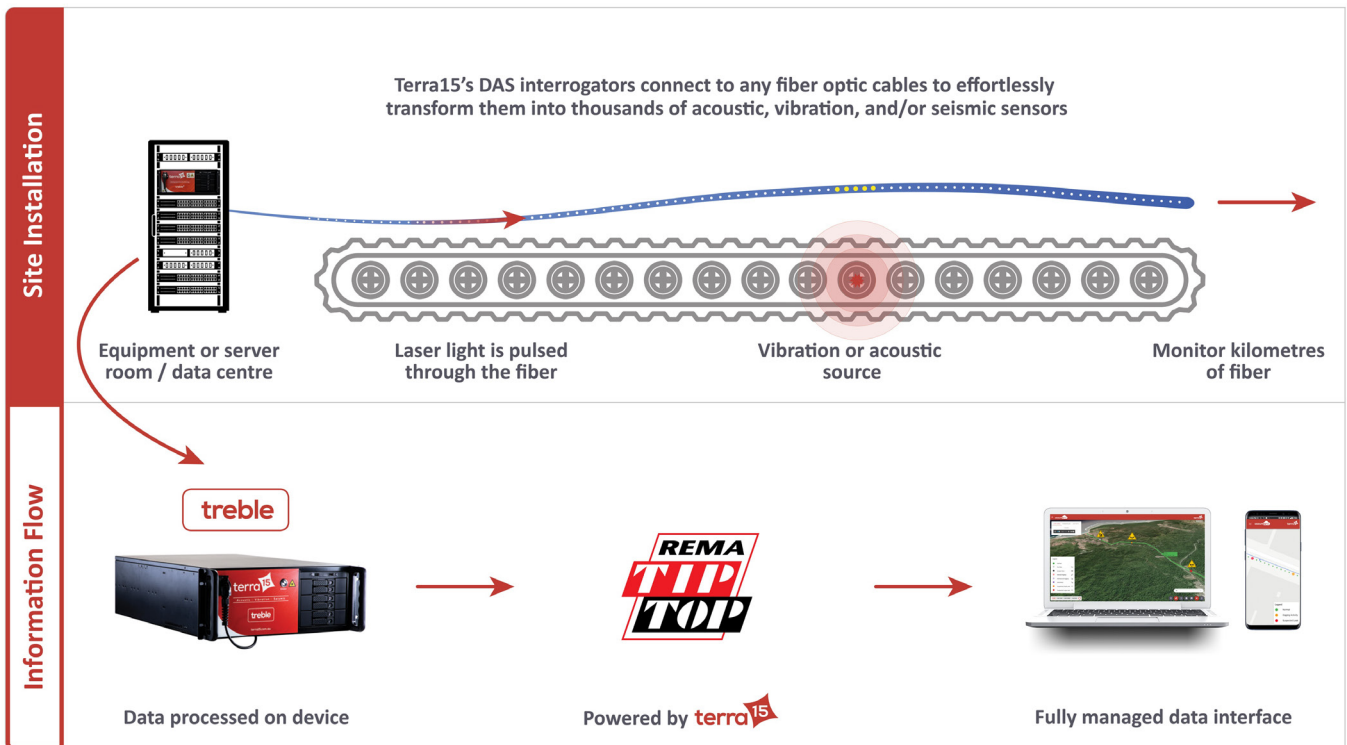
Capability : Compatible with SCADA systems via Weblink.

Benefit : Provides comprehensive and flexible monitoring solutions.

Our system features a one-off hardware and installation cost, along with a monthly software fee, offering a cost-effective and dependable solution. Unlike other systems, there is no need for wireless telemetry or additional power sources. The durable fibre optic cable is designed to withstand harsh and abrasive conditions, making it suitable for challenging and hard-to-reach locations. This reduces the need for personnel to work in hazardous environments and cuts down on maintenance time.

Proven Reliability

REMA TIP TOP has confirmed the reliability and effectiveness of our solution through extensive testing on our training conveyor and in a real-world trial on a mine site. Our system consistently demonstrated exceptional accuracy in detecting early-stage bearing failures, roller faults, and other issues that often escape manual inspection. By automating traditional manual inspection processes, our solution not only enhances fault detection but also significantly reduces labour requirements and minimises unscheduled downtime. Transitioning to a smarter, more efficient monitoring strategy with the RTT solution will improve both the performance and operational safety of your conveyor system.



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

// SERVICE

// MATERIAL PROCESSING

// SURFACE PROTECTION



REMA TIP TOP AUSTRALIA
102 Kurnall Road, Welshpool, WA 6106

☎ +61 8 6253 1900

✉ sales@rema-tiptop.com.au

🌐 rema-tiptop.com.au