



TOMS: Helping mine sites reduce tyre-related downtime by up to 20%

The future of tyre service is strategic and planned – transforming individual service events into smarter decisions that enable higher fleet productivity. As sites work to improve efficiency, safety and cost control, there is a growing opportunity to bring tyre work into the broader maintenance plan, helping teams make more informed decisions, reduce disruption and get more value from every asset.

Kal Tire's TOMS (Tire & Operations Management System) is foundational to the company's mining tyre service offering. "TOMS is a maintenance planning system at heart," says Mark Goode, director, business insights, Kal Tire's Mining Tire Group. "It allows tyre work to be more seamlessly integrated into your maintenance plan, and with AI now embedded, we can enable informed, collaborative decisions to support better planning and fleet availability. Thanks to AI, we typically see an opportunity to reduce tyre related downtime by 20%. On one site, TOMS helped deliver a reduction in tyre downtime events by over 35%."

At site level, the embedded AI in TOMS aggregates inputs from inspections, sensors, planned rotations and change-outs to provide a clearer picture of tyre condition, performance and upcoming maintenance requirements. This visibility enables planning teams to schedule tyre work alongside other planned maintenance activities.

"What we hear customers say, is that having a haul truck down for one scheduled event rather than two separate occasions results in meaningful productivity gains," says Goode.

TOMS uses tablets for inspection and tyre change data collection and for ensuring site teams have the latest information at hand.

The platform supports near real-time dashboards and reporting and integrates with dispatch, TPMS and enterprise platforms. This reduces data handling and improves visibility across teams. It is also the planning hub behind KalPRO™ TireSight autonomous tyre inspections and KalPRO HaulSight autonomous haul road hazard detection.

As mines adopt automated data collection, TOMS is increasingly used to support condition-based maintenance. With TireSight, tyre issues such as heat, tread damage or separations can be identified and reviewed by Kal Tire's condition monitoring experts before TOMS integrates the resulting work into the tyre maintenance workflow. With HaulSight, road hazards such as spillage, undulations or other conditions affecting tyre and truck performance can be flagged, validated and prioritised so customer operational teams can respond efficiently.

"What makes TOMS so valuable is that it turns tyre management from a reactive service activity into an integrated part of fleet performance," says Goode.

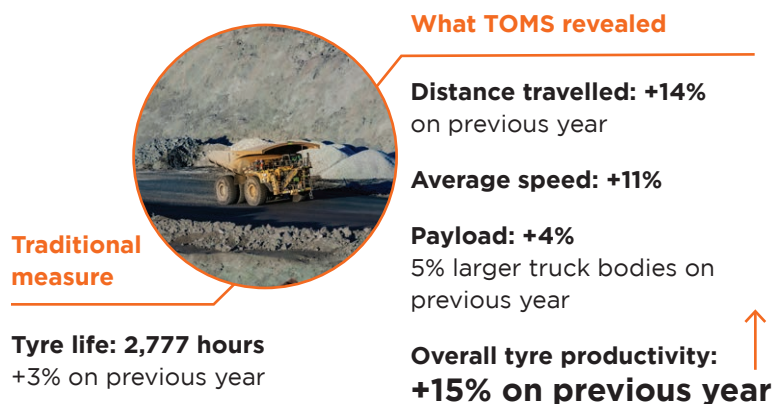
"When teams can see information at the right time and can act on it together, the results are tangible, from fewer unplanned events to a marked reduction in tyre-related downtime," adds Goode. "That is the kind of impact that supports safer, more productive and cost-effective mining."

TOMS case studies

Productivity insights: Measuring more than just tyre hours

Challenge: Tyre performance is traditionally measured in operating hours, but hours alone do not show how hard a tyre has worked or the value it delivered.

Case Study: Using TOMS, Kal Tire combined customer dispatch data from trucks, including operating hours, distance travelled and payload to create a more complete view of tyre performance – giving valuable insight into the value the tyre has delivered.



Outcome: Rather than simply reporting a 3% increase in tyre life as traditional tyre management systems do, **TOMS demonstrated that the fleet moved more material, travelled further and operated more productively.** These insights help both the mine and tyre manufacturers make better operational decisions.

TOMS keeps on top of pressure management

Challenge: Correct tyre pressure is essential for maximising tyre performance and life. However, maintaining inspection schedules and identifying overdue equipment across a large fleet can be difficult.

Case Study: TOMS tracks inspection compliance and pressure accuracy across the fleet, allowing teams to easily identify overdue inspections and monitor the percentage of tyres operating within their target range.

Compliance metrics lets teams easily see if equipment is being inspected within the expected schedule, and heat maps and prioritised lists enable teams to see which equipment is overdue for inspection and when it was last inspected.

Results
Pressure accuracy **improved over 30%.** ↑

How TOMS Helped



Outcome: TOMS gives service teams clear visibility of inspection compliance and pressure management, helping ensure equipment is inspected on time. Overdue equipment is prioritised and correct pressure maintenance **allows tyres to operate at their optimum performance.**