



# With a focus on planned tire work, **TOMS** powers productivity, tire performance and safety

Where traditional tire management systems (TMS) focus on looking back—to past tire performance and what happened last month, Kal Tire saw an opportunity to design a system focused on looking ahead. Teams wanted a system driven by work orders, planning and scheduling the maintenance of OTR tires the way other equipment assets on a mine are proactively managed, while still providing all the traditional tire reporting metrics typically used. That's when Kal Tire realized it would need to approach tire management from a different angle.

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“We recognized that tire service is primarily a maintenance function and that none of the available software was well designed to enable tire service to be managed as a maintenance activity,” says Mark Goode, director, business insights, Kal Tire’s Mining Tire Group. “Kal Tire determined that if it wanted tire service to be considered the asset maintenance function that we feel it is, the best route would be to take an asset maintenance system (EAM) and develop it to be able to track and report on tire performance.”

Built on a foundation of modern, industry-leading technology, TOMS, Kal Tire’s proprietary Tire and Operations Management System, was launched officially in 2018 and is now in use on more than 130 mine sites across five continents. It features automated work orders and planning reports for required tire work, designed to be shared automatically with customer maintenance planning teams, enabling improved communication and optimised work scheduling. It also features market-leading real-time standardised service delivery reporting, available to Kal Tire and customer teams 24/7 via Microsoft Power BI.

Together, the system’s core features allow TOMS to deliver its most impactful benefits: a focus on planned tire work, productivity and operational safety.

“TOMS is designed to follow through on the agreed tire and wheel strategy in clear, accessible and measurable ways—and it all starts with our belief that the best time to identify required tire work is while equipment is operational. This enables effective work scheduling and maximizes fleet availability,” says Goode.

With more than three years of field use, Kal Tire has a clear picture of how the system is already benefitting customers and why its capabilities are more important than ever.

“We’re seeing a shift in the recognition that an operation can best reach its targets when the tire management strategy aligns with the mine’s overall strategy,” says Goode. “With TOMS, having a clear strategic approach to tire management absolutely pays dividends in getting the most out of the power of the system.”

Before TOMS is enabled on a site, Kal Tire and the customer share goals for fleet use, tire life and safety, and set agreed-upon benchmarks for tire work such as inspection frequency and guidelines, tire rotations, target cold pressures and rim non-destructive tests (NDTs).

In an example inspection of a position three tire on a CAT 797 dump truck, the fleet inspector notices a sidewall cut has worsened since the last inspection. So, the fleet inspector records the new finding, the recommended action and work priority, and takes a photo with her phone, uploading the image to the mobile TOMS app. Now, the entire maintenance planning team has access to the TOMS planning report that includes the updated sidewall

cut finding, along with the ability to review the photo taken by the inspector. Together, tire management and maintenance can determine the best time to bring the hauler in so the tire can be repaired, ideally when it’s already scheduled for vehicle maintenance.

“What we know from talking to customers is the chance to have a hauler down for one planned and scheduled event rather than on two separate occasions, including one that was unplanned, can mean thousands of dollars saved in terms of productivity.”

The inspection itself would have been triggered by the agreed-upon benchmarks and an automated planned work order for condition monitoring. With this connected workflow that focuses attention on a tire issue caught early on, what follows is informed decision-making that has a positive impact on uptime and safety: a tire that would have later been at risk of failure and a potential safety incident was taken off the road and repaired.

In the days that follow, TOMS’ accessible, dashboard KPI reporting will demonstrate that tire maintenance activity has been aligning with service delivery compliance targets and goals.

“TOMS is a maintenance planning system at heart. It allows scheduled tire work to be integrated into your maintenance plan and it also supports collaborative, informed decision making because it integrates so well with third-party systems,” says Goode. Some examples are ERP systems, mine dispatch and TPMS. “That really empowers team leaders to spend more time providing leadership than recapturing data that already exist in other systems.”

Another TOMS capability that is proving its value is the ability for Kal Tire teams to report on and make decisions about tire performance using the same

measures used to track truck productivity.

“These insights allow us to make recommendations about the best tire for the application based on a clearer understanding of actual and changing operational conditions and how that is impacting tire performance. Now we have continuous learning and business intelligence that feeds back into and informs the next round of goals and benchmarks.”

Customers also benefit from additional ways TOMS is safety driven. Kal Tire’s equipment-specific safe work procedures are embedded into work orders and the system demands a ‘Take 5’ safety check at the start of every mobile inspection.

*“TOMS inherently reinforces a culture of safety that we know is helping to protect our technicians and customer personnel on site, and that’s a great benefit to everyone.”*

