



## Cut through the noise and get key insights that matter.

The Asset Health Analyzer (AHA) is our base Al-driven predictive maintenance solution. Designed to increase equipment availability and lower maintenance costs





Rithmik AHA<sup>™</sup> Delivers results:

**Rithmik Solutions increases mobile equipment uptime.** Our AI-powered analytics optimize maintenance, reduce greenhouse gas emissions and extend equipment life.

**Rithmik Asset Health Analyzer (AHA™) applies a multi-tiered machine learning approach** to data from pre-existing sensors and available contextual information. It's easy to deploy and resilient enough for the world's most extreme environments.

**AHA requires no manual threshold-setting** and produces valuable, site-specific insights in real time with just weeks of data. Get earlier, more accurate alarms along with intelligence about past and future failures — all delivered via your choice of existing reporting tools or our intuitive dashboards.

## AHA provides:

- Early and new indicators of equipment issues
- Opportunities to improve maintenance planning
- Insights into problematic operator behaviours
- Opportunities to improve road conditions and mine design

## The result?

- Increased equipment availability and utilization
- lower maintenance costs
- reduced fuel burn

## **Rithmik is different:**

- Built specifically for mobile by a team with decades of experience in mines
- Al models tuned rapidly to site for unparalleled accuracy and minimal false positives
- Vendor-independence provides unbiased insights for any brand of equipment
- Integration with existing systems for ease of deployment and use

*To learn more,* Drop us a line.





Rithmik AHA<sup>™</sup> Delivers results:

With proven onsite results from 3 continents, Rithmik has revealed customer-validated opportunities for savings in maintenance, downtime and fuel of more than **US\$350,000/year per 350+ ton haul truck.** A few examples of what we've uncovered:

- Uncovered root cause of brake issues and powertrain failures (\$930,000/site/year): Avoid damage to final drives, diffs, brake groups, and suspension while improving safety and preventing downtime.
- **Rapid uncovering of fleet-wide inefficiencies (\$600,000/site/year):** Rithmik rapidly revealed that temperature regulators failed on 76% of a Zambian copper mine's haul trucks. The issue had gone undetected for multiple years by both the equipment dealer and mine maintenance team. Fixing it will extend engine life and significantly reduce fuel burn.
- Earlier alarm on cooling system issues (\$390,000/site/year): Almost 3 hours earlier than the OEM alarm, soon after the truck came out of maintenance; earlier indication allows for better planning and understanding of the issue along with less damage to the equipment from exposure to high temperatures.
- Earlier alarm on electrical issues (\$360,000/site/year): In this case, there was no other indication until a CAT alarm 7 days later. Rithmik highlighted the extent of the issue with 12 occurrences, provided deeper context to reveal the root cause, and indicated the earliest symptoms to provide ample time to address during planned maintenance before they trigger unplanned downtime.
- Impact of overloads and other non-ideal operator behaviours (\$800,000/site/year)
- **Bad sensor identification:** Often missed with threshold-based approaches, finding bad sensors provides opportunities for scheduling fixes during planned maintenance. It also leads to less time troubleshooting and better-quality data.

