



AUTOMOTIVE MANUFACTURER LEVERAGES WAITES PREDICTIVE MAINTENANCE TO UNLOCK OVER \$32M IN COST SAVINGS

ABOUT THE CUSTOMER

This globally recognized automotive manufacturer with a significant U.S. manufacturing footprint operates multiple high-volume plants focused on advanced engine, transmission, and vehicle assembly. Known for its vertically integrated operations and emphasis on lean manufacturing, the company maintains a reputation for engineering precision, high internal standards, and a deeply technical workforce. The organization prioritizes in-house capability development and frequently pilots emerging technologies to enhance operational efficiency.

THE CHALLENGE

In high-throughput automotive manufacturing, the ability to maintain equipment reliability at scale is critical to meeting production targets and avoiding costly downtime. The customer's in-house Category 3 vibration analysts had deep technical expertise and a well-established route-based monitoring program in place—providing regular assessments across multiple high-output facilities.

However, as operations expanded and equipment complexity increased, even this mature program encountered scalability limits. Route-based data collection, while effective in many ways, offered interval-based insights of equipment health—leaving machines unmonitored between checks and creating potential blind spots in fast-cycle production environments. The team recognized that to stay ahead of failure modes and meet evolving demands, they needed to augment their strategy with a continuous, real-time layer of visibility.

Rather than replace internal processes, the goal was to evolve them—extending their reach, increasing responsiveness, and ensuring that critical assets remained protected as operations grew.

OBJECTIVES

- Increase asset coverage without increasing headcount
- Detect emerging issues earlier to prevent major failures
- Maintain internal oversight while enabling external validation



THE SOLUTION

The customer partnered with Waites in October 2021, followed by a second site just five months later. As early results validated the approach, the company launched a broader corporate rollout in 2023. Today, over 3,200 sensors are active across six facilities, with a seventh site and an additional 800 sensors currently in progress.

What began as a targeted pilot has evolved into a fully integrated reliability program. Each facility adopted a hybrid monitoring model that leverages the strengths of both Waites' remote analyst team and the customer's in-house vibration experts. This collaborative structure has enabled faster issue triage, more efficient root cause analysis, and stronger alignment between condition data and maintenance action.

Key components of the program includes:

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| ■ Shared monitoring and analysis between Waites and the internal team | ■ System-generated alerts used as formal PDM task lists across crews | ■ Designated on-site employees managing alert response and triage | ■ Integration of alerts into workflows for planning and execution | ■ AI-driven insights to catch issues before failure |
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Beyond scaling technology, the rollout helped support a cultural shift—from reactive maintenance to a predictive, insight-driven model. By building confidence through transparency and consistent results, **Waites helped evolve the system from a data collection tool into a company-wide resource for operational decision-making.**



THE RESULTS

Since implementing the Waites system, the customer has achieved **more than \$32.5 million in documented cost savings and an ROI of 990%**. These savings are driven by a meaningful reduction in catastrophic failures and unplanned downtime. Maintenance teams now use real-time alerts as structured, actionable task lists—improving planning, efficiency, and asset reliability across facilities.

The program has also strengthened internal collaboration. In-house analysts regularly validate findings from the Waites platform, accelerating faster root cause identification and resolution, and increasing confidence in alert-driven decision-making. The company has shifted from reactive monitoring to a proactive, insight-led reliability strategy.

Teams use Waites data to prioritize work, extend equipment life, and prevent costly disruptions—all while scaling sensor coverage and refining daily workflows.

REAL WORLD IMPACT

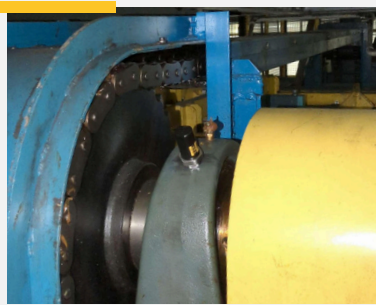
Waites alerts have directly contributed to critical saves, including:



Exhaust Fan Motor Save

Waites identified chain misalignment, prompting early intervention and avoiding mechanical failure.

Estimated Savings: \$403,754*



Chain Slack & Misalignment Detected

Elevated vibration velocity revealed early-stage fretting. Lubrication restored normal levels and prevented further damage.

Estimated Savings: \$348,212*



Bearing Fretting in Shaft Assembly

Bearing defects and misalignment were identified in time to replace the motor and avoid four hours of downtime.

Estimated Savings: \$174,106*

PROTECT YOUR ASSETS BEFORE THEY FAIL

ABOUT WAITES

Waites delivers scalable, AI-powered condition monitoring that helps industrial teams prevent failures before they happen.

With over 500,000+ sensors deployed across six continents, our wireless platform and expert support help eliminate downtime, keep equipment running reliably, and free up your maintenance team to focus on what matters most.

CONNECT WITH US

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