viaduct

CASE STUDY

Miyazaki tire plant improves productivity: cutting equipment repair time by 45% and monthly analysis time by 80%

Dunlop Sumitomo Rubber Industries, Ltd. (SRI) operates 12 tire plants with nearly 30,000 employees worldwide. Like many large, complex manufacturers, their facilities rely on spreadsheets and manual processes to run their operations, creating blind spots and reactive decision making.

The Challenge

SRI sold approximately 98 million tires in 2025 and is expecting to sell around 103 million in 2026, and Miyazaki is one of their largest manufacturing facilities where any disruption can have an immediate impact on production. The facility was already responding to many equipment maintenance issues every day.

Since equipment maintenance and repair is inherently complex, resolving issues requires a slow, trial-and-error process of troubleshooting possible root causes one by one—a challenge that is much more apparent among less experienced team members.

Compounding this problem were aging legacy systems, including over a decade old proprietary CMMS, and manual workflows that prevented them from effectively scaling their operations. While this proprietary CMMS served as the core platform, it lacked built-in analytics features, forcing operational data to live across disconnected systems.

As a result, creating any meaningful visibility into equipment performance was a lengthy process, preventing the team from getting ahead of any potential maintenance issues.

Results at a glance:

3.5
Months to implement

45%
Decrease in repair time

80%
Decrease in monthly analysis time

The Solution

Rather than a lengthy custom-build effort, the team leveraged Viaduct's intelligence platform to build three high-value capabilities in just 3.5 months:

- **Unified data foundation**. By consolidating the plant's various data sources into a single, 360-degree view, the team no longer needs to pull data from multiple applications, making it easier to perform analysis using natural language. The team can also use voice-enabled data entry ingestion capabilities instead of relying on manual data entry to free up time and reduce human error.

- **Real-time operational visibility and automated reporting.** By leveraging Viaduct's AI Assistant, operational insights are put directly in the hands of the people closest to the work, exactly when they need them. The Miyazaki plant team will be able to generate their own analyses on demand versus manually compiling reports that previously took a full day per production process to produce.

- **AI-assisted repair.** When equipment goes down, technicians can use a guided repair assistant that diagnoses issues immediately instead of relying on trial and error. The assistant embeds historical repair context and trained models, surfacing the most appropriate course of action.

"Analysis that used to take hours every month now happens automatically in seconds.

I finally have time to focus on fixing problems instead of spending all of my time preparing data."

The Impact

These capabilities are expected to improve productivity, reduce equipment maintenance time, and decrease unplanned downtime by cutting repair time by 45% and monthly analysis time by 80%.

The Miyazaki plant is now building toward two additional capabilities:

- **Predictive equipment maintenance**. Analyzing anomalies in sensor data to predict equipment failures before they happen, shifting maintenance from reactive to proactive.

- **Tire defect analysis**. Identifying at the time of inspection which stage in the production process caused the defect.

The efficiency gains at Miyazaki is just the beginning of what's possible across SRI' global plant operations. By delivering all of the current capabilities, Viaduct believes SRI could potentially save over $70 million across their plants. For other manufacturers, this would represent a per plant savings of approximately $7 million dollars.

"With Viaduct, I have the information I need to solve problems on my own without escalating to management every time something goes wrong."