

Multinational Food & Beverage Manufacturer **Reduces MTTR by 10% and Saves \$2.6M** with Diagnostic Agent

Industry-Wide Context

Manufacturing organizations are facing a critical knowledge gap in their maintenance operations. Long-serving maintenance professionals, who often relied on their deep expertise and unwritten tribal knowledge, are retiring. Newer technicians and operators, while skilled, lack the years of experience required to diagnose and resolve issues quickly.

Customer Context

The above was true for this food and beverage manufacturer. They found that training staff to operate at the same level as these veterans was slow and resource intensive. Their knowledge gaps resulted in longer MTTR, unplanned downtime, increased maintenance costs, and reduced operational efficiency.



Maintenance data was dispersed across legacy CMMS databases stored in Excel, recent work order data in their new EAM system (SAP), and manuals and SOPs in SharePoint.



Technicians did not have access to this data. They relied their radios, mainly reinventing the wheel each time there was a reactive maintenance issue.



Management felt that poor access to data negatively impacted productivity, particularly when it came to reactive maintenance.

They decided they needed a scalable solution that makes existing maintenance knowledge accessible, actionable, and consistent across teams.

Customer Context Cont.



Insert Diagnostic Agent

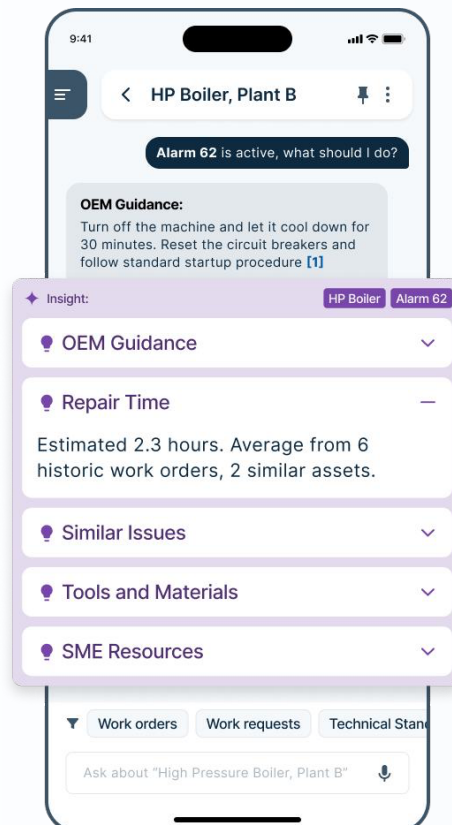


Diagnostic Agent

Accelerate real-time maintenance with intelligent diagnostics.

Reduce Downtime. Empower Operators. Drive Efficiency.

A solution that leverages your existing maintenance data, manuals, and drawings to deliver instant, context-rich troubleshooting guidance. Operators and technicians can now quickly identify issues, access best-practice solutions, and follow step-by-step instructions, all from one intuitive interface.



Asset-Centric Diagnostics

Tailored insights at the asset level, ensuring relevance and precision.



Agentic Maintenance Support

Quick issue recognition and resolutions.



Powered by Cortex

Datch's integrated suite of knowledge graph-powered services.



Contextual Recommendations

Prompt access to work history, technical bulletins, and OEM manuals in real-time.



In Their Old World...

A relatively new robot at the facility was read an “E1” error

The technician in that area – Jeremy – calls over the radio asking if anyone knows what it means

A few stop what they’re doing and ask some clarifying question, but no one knows the answer
“Jeremy’s a smart guy; he’ll figure it out”

“Is the answer in a manual”
“Yes, most likely.”

“Will Jeremy find the manual and the answer?”
“No, that will take too long, he’ll just figure it out.”

In Their New World with Diagnostic Agent

The new robot is reading an E1 error

Jeremy opens the Diagnostic Agent on their device, finds the robot using a QR code or AI search, and inputs the error using voice or text.

Within seconds they receive from the Diagnostic Agent:

01. An excerpt from the manual for that robot stating an E1 error code means there is an Encoder Fault on Joint 1
02. Insights from similar issues that have been logged against this type of asset across plants
 - a. From here Jeremy sees that just last year someone closed out a work record for an encoder fault on this type of robot noting that they “finally realized that it was the fan that was causing the issue”
03. The parts list for that robot, sorted by relevance to that error, which shows where spare fans for this robot are in the facility’s parts store.

Jeremy checks the fan and, sure enough, that seems to be causing the issue

The Bottom Line

Because of Datch’s Diagnostic Agent, Jeremy was able to:

01. Self-serve the diagnostic process in real-time, to a high degree of quality, while preserving his coworkers’ time and focus.
02. Get the machine back up in running 30 minutes faster by:
 - a. not having to manually search for clues from OEM documentation and work history from similar assets
 - b. not troubleshooting from square 1, allowing for immediate action to be taken

In the case study above, we took a reactive work order for an emergency downtime event and reduced the MTTR by

 25%

(from 2 hours to 1.5 hours).

This was just one example, but this manufacturer found that with Diagnostic Agent they were able to **decrease MTTR across a plant by an average of 10%.**

ROI Calculation:

Given:

- ✓ This plant had 10 hours of unplanned downtime a week
 - ✓ Which equates to 520 hours a year
- ✓ The average cost of an hour of downtime was \$50,000/hr

Annual Cost Savings:

$$10\% \text{ improvement} * 520 \text{ hours} * \$50,000/\text{hr} = \$2,600,000$$

Key Benefits:

Direct ROI:



Reduced MTTR:

Faster troubleshooting ensures equipment returns to operation more quickly.



Lower Maintenance Costs:

Improved efficiency reduces labor hours and resource use.



Increased Equipment Uptime:

Minimizes downtime, leading to higher production output.

Second-Order Benefits:



Workforce Enablement:

Enables less-experienced technicians and operators to achieve consistent results.



Knowledge Accessibility:

Makes existing manuals, schematics, and maintenance data actionable and easy to use.



Improved Operational Efficiency:

Teams spend less time searching for information and diagnosing issues.



More about Diagnostic Agent

Diagnostic Agent is a real time asset management solution that helps maintenance technicians and operators troubleshoot equipment issues faster and reduce Mean Time to Repair (MTTR). By breaking down information silos and leveraging existing maintenance data, manuals, and schematics, it provides instant, context-rich troubleshooting guidance through a single, intuitive interface.

In a landscape where time to resolution is critical, Diagnostic Agent streamlines access to relevant information, enabling teams to diagnose and resolve issues quickly. Whether it's navigating complex information or bridging workforce knowledge gaps, Diagnostic Agent delivers structured, consistent guidance that enables teams to quickly diagnose problems and return equipment to operation.

How it works

Ingest

Connect disparate data sources such as CMMS and DMS via simple, read-only integrations

Understand

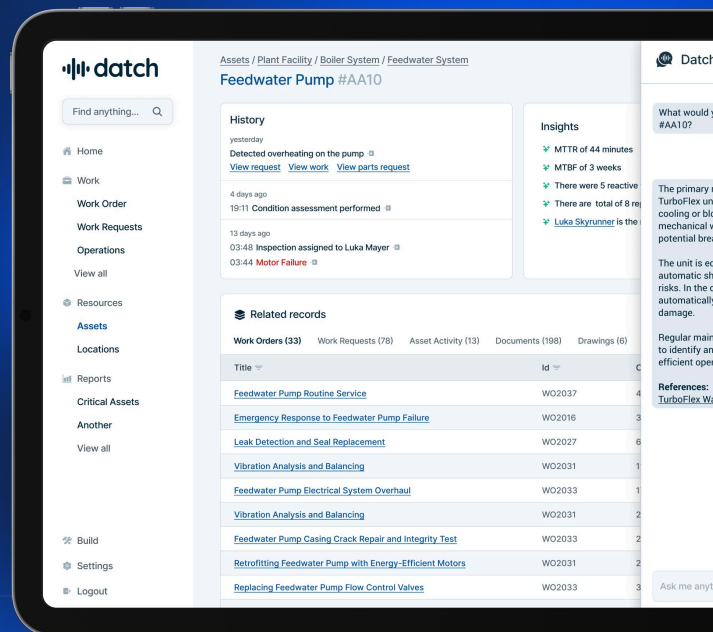
Map entities to an organization-specific knowledge graph

Surface

Use understanding to surface the relevant data points automatically in context

Answer

Ask questions of your data and get real answers via (NLQ), i.e. "How many work orders mention loss of pump pressure?"



[Schedule a Demo](#)

