

Make faster, smarter decisions with real-time data

Benefits

- Improve manufacturing efficiency
- Reduce production waste for increased profits
- Gain real-time shop floor visibility
- Alert shop floor workers with instant notifications
- Improve operator engagement and overall company communication
- Increase overall equipment efficiency

Product overview

MachineMetrics has identified huge gaps in current manufacturing processes: a lack of real-time production visibility and a lack of communication between machine operators and their managers. Previously, no machine monitoring solution truly solved this problem. We spoke with 100+ manufacturers to gather their feedback on why their previous machine monitoring solutions did not fit their needs and how it could be designed better. With MachineMetrics, you can visualize production with customizable real-time dashboards that empower factory floor workers to meet production goals. Real-time machine condition monitoring helps diagnose recurring problems. Historical performance and production analytics help determine if jobs will be delivered on-time. Predictive notifications allow the right person to take immediate action.

Key features

KPI Dashboards

Visualize machine status and production efficiency in real-time with dashboards that include simple color-coded tiles. Provides transparency across the factory floor that empowers works to meet goals. Typically viewed on large screen TVs mounted above each manufacturing cell.

Operator views

Allow operators to add human-context to machine data with a touch screen interface mounted right at the machine tool. Categorize downtime, reject a part, and start/stop jobs right from the machine to manage and record quality data.

Custom Dashboards

Build custom dashboards that display machine status, alarms, performance and other KPIs with MachineMetrics open APIs.

Notifications

When a monitor triggers an alert, a text or email message is sent to the appropriate person to take immediate action. MachineMetrics includes many monitors that trigger alerts including downtime, alarms, overall equipment effectiveness (OEE) Performance, and tool failure prediction. Incidents can be created that can track an issue through a workflow.

Downtime and quality

Track downtime from alarms or from the operator view and display a Pareto chart for any period of time that highlights the bottlenecks that are generating the most downtime.

Key features (cont.)

Job, part, and operator reporting

Track the performance of each job that is running on your equipment with job, part number, and operator analytics. Understand actual cycle times, performance between shifts, actual OEE metrics, operator performance, setup times, etc.

Setup and changeover

Shops will often changeover jobs frequently, and this can be the biggest source of lost production time for a business. Setup times for the same job can vary wildly by operator, or by shift. Only by tracking setup time can this be improved. Operator View will display the remaining setup time, encouraging operators to complete on time.

OEE performance

Real-time automated OEE reporting is available in various reports including the real-time dashboard, historical reports that can be compared by shift, and when viewing individual job/part reports. Integrates with any ERP to eliminate double entry.

Asset Management

Real-time automated OEE reporting is available in various reports including the real-time dashboard, historical reports that can be compared by shift, and when viewing individual job/part reports. Integrates with any ERP to eliminate double entry.

Real-time machine conditions

View and export real-time machine data and alarms as time-series data and charts to help diagnose and resolve problems.

Utilization reporting

View asset utilization by hour, shift, day, week or month to view trends and uncover opportunities for improvements.

How it works

- **Connect** – Easily connect to any machine with MachineMetrics Edge.
- **Visualize** – Data visualizations give powerful insights to your shop floor in real-time.
- **Analyze** – AI and machine learning diagnose and predict problems in real-time.
- **Notify and take action** – Predictive notifications enable your team to take immediate corrective action.

The MachineMetrics advantage

Connect to any modern CNC Machine Tool by connecting the MachineMetrics Edge to the ethernet port of the control. Software on the edge processes data from the machine in real-time and streams the data securely to the MachineMetrics cloud.

Other machine types and older equipment can be connected directly to the cloud with the Digital and Analog IO module. Configure remotely using a simple scripting language that anyone can learn. No need to be a controls engineer to build advanced connection logic.