

# Online Machinery Health™ Monitoring



## PREDICTIVE DIAGNOSTICS FROM ROTATING EQUIPMENT PREVENT UNSCHEDULED DOWNTIME

### ROTATING EQUIPMENT A KEY COMPONENT OF PLANTWEB®

Unexpected machinery downtime can account for as much as 40% of lost capacity and can consume up to 30% of a plant's maintenance budget. Emerson's online machinery technologies and services help prevent unexpected downtime while reducing the overall cost of maintenance and increasing performance.

Online Machinery Monitoring includes four key elements for a complete solution: machinery protection, predictive diagnostics, performance monitoring and integration with process control.

Online Machinery Monitoring also integrates critical and essential machinery into the proven PlantWeb digital plant architecture. These predictive online technologies measure and track faults, analyze data and deliver information to operators and maintenance personnel so you know about problems in advance-long before they become major problems that cause production interruptions.



Online Machinery Health Management powers PlantWeb through condition monitoring of mechanical equipment to improve availability and performance.

[www.assetweb.com/mhm](http://www.assetweb.com/mhm)

### AMS® SUITE DELIVERS INFORMATION FOR FAST ACTION

The AMS Suite applications, vital to Online Machinery Monitoring, deliver meaningful predictive information to maintenance and reliability personnel and control room operators for faster action. Access to powerful diagnostics allows your team to focus resources on problem assets and empowers them to act quickly. Decisions are based on accurate information.

### PRODUCTIVITY GAINS EQUAL SAVINGS

- Reduce time and effort spent manually collecting asset data.
- Troubleshoot potential problems right from operations and maintenance PCs because AMS Suite diagnostics help identify priorities and direct focus.
- Build teamwork as both operations and maintenance receive appropriate PlantWeb Alerts with recommended corrective actions.
- Improve productivity by directing service only to specific assets requiring maintenance.



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## MACHINERY HEALTH MONITORING DRIVES IMPROVED BUSINESS RESULTS

### HIGHLIGHTS OF COMPLETE ONLINE MACHINERY HEALTH MONITORING INCLUDE:

#### CSI 6000 Machinery Health® Monitor

- Provides API 670 Critical Machinery Protection.
- Part of the PlantWeb architecture when integrated with a DeltaV™ or Ovation® digital control system.
- Perfect for obsolete protection system retrofit application.

#### CSI 4500 Machinery Health® Monitor

- Identifies issues with critical equipment before problems trip the protection system.
- Field-configured and customized for a specific asset.
- Integrates with the CSI 6000 to provide a combined prediction and protection machinery health solution.
- Provides industry-leading PeakVue® technology to differentiate early bearing faults from machine noise.

#### AMS Suite predictive maintenance software

- Gives a single, unified view of plant asset information.
- Powerful dashboards and reports show information such as key performance indicators, prioritized lists of active alerts, and health ratings for each asset.
- Collects detailed asset data for management, analysis, predictive maintenance and performance monitoring.

### OUR CUSTOMERS SAY IT BEST

- 44 hours downtime avoided in first 6 months.
- 50% increase in machinery mean time between failures.
- 43% reduction in mechanical emergency maintenance.
- 260% program ROI in first 6 months.

– **Johns Manville, Etowah Tennessee**

### ASSET OPTIMIZATION

Online Machinery Monitoring for your plant's most critical assets is a major element of a comprehensive asset management plan and is a component of Emerson's PlantWeb digital plant architecture. Powerful diagnostics and precise alerts from critical rotating machinery are important cornerstones to building your predictive maintenance environment. By combining protection, prediction, performance monitoring, and your process control system, you are actively ensuring the health and prolonging the life cycle of your critical machinery.

Emerson's Asset Optimization technologies and services span a broad range of critical production assets from mechanical equipment, electrical systems, process equipment, instruments and valves. PlantWeb Services ensure successful implementation of the PlantWeb technologies to deliver maximum benefits from your technology investment.

Contact your Emerson sales representative for more information.

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