

Ovation™ Machinery Health™ Monitor

Proactive Identification and Diagnosis of Vibration Issues on Critical Power Plant Rotating Assets

Degradation or failure of large power plant rotating equipment such as turbines, pumps and fans are a serious threat to plant availability. Frequent and variable operation can make equipment deviate from expected performance, taking a toll not only on these critical assets but also on your budget.

One missed abnormality can trigger a chain of events that could eventually cause an unplanned outage, derate or catastrophic accident. You have an existing machinery monitoring solution, but is it outdated? Not trusted by your staff? Becoming more costly to maintain and operate? Does it provide advanced warning of developing issues?

The loss of employees with vibration knowledge and the increased pressure to do more with less magnifies the problems with standalone machinery monitoring platforms.

Think about your current vibration monitoring system...



Do your operators trust that they will receive early indication of developing equipment issues?



Are you paying more to maintain aging, standalone equipment that has an increased risk of failure?



Can you easily incorporate the system into your cybersecurity program?

The Ovation™ Machinery Health™ Monitor quickly alerts operators to at-risk equipment before those risks become failures and take your unit offline.

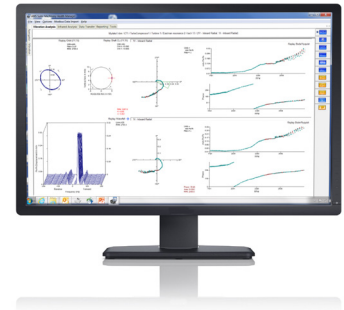
Integrated Protection and Condition Monitoring



Ovation's Machine Works application provides operators with diagnostic plots for vibration analysis.



The Ovation Machinery Health Monitor is a high-performance I/O module dedicated to machinery health functions.



Emerson's AMS Machine Works application adds advanced condition monitoring capabilities that are available from outside of an Ovation system.

The Ovation Machinery Health Monitor fully and seamlessly integrates machinery protection and condition monitoring into your Ovation control system. Leveraging the power of the Ovation platform, the Machinery Health Monitor is a high-performance module that simply snaps into an existing I/O base to provide continuous online monitoring of vibration and other machinery health parameters with orbit, waveform and spectrum analysis display capabilities. Connecting the module to Emerson's AMS Machine Works application provides advanced condition monitoring capabilities outside of the Ovation network.

The Ovation Machinery Health Monitor protects critical plant equipment including pumps, fans, motors, steam turbine generators, gas turbines, hydroelectric turbines and boiler feedpumps from vibration events.

In addition to enhancing reliability and operator awareness of potential issues with essential plant equipment, the Ovation Machinery Health Monitor reduces operational complexity, simplifies lifecycle management, enhances security and improves overall plant safety.



Reliability

Native Ovation machinery health monitoring increases equipment and process reliability by eliminating the integration risks associated with standalone vibration and health monitoring systems.



Diagnostics

Actionable alerts sent to Ovation HMIs with intuitive descriptions of developing problems increase operator awareness of potential plant or safety issues and improve decision making.



Lifecycle

One Ovation platform for plant control, machinery protection and condition monitoring lowers the total cost of ownership by reducing spare parts, maintenance, training and upgrade time.



Security

The embedded Ovation Machinery Health Monitor isolates process information and reduces the number of operating systems which can assist with meeting cybersecurity obligations.