AMS Asset MonitorGearbox Asset Health

Identify issues common to simple and complex gearboxes

Gearboxes are among the most common pieces of equipment used in many different industrial applications, from food and beverage, pharmaceutical, mining, metals, and quarrying, power generation, chemical, and more. Despite their critical role, they are often overlooked until they develop a fault or fail unexpectedly. An unexpected failure can, at best be inconvenient, and at worst result in considerable loss of production and unplanned costs, often totaling to many thousands of dollars.

Maintaining the health and performance of this asset could be critical to maintaining your production schedule.

The AMS Asset Monitor is an edge analytics device that delivers the benefits of continuous monitoring to more plant assets at far less installation expense.

Quick, Easy Deployment and Use

- Small footprint size that is easy to mount.
- Field-located close to the asset for easy and lower-cost wiring.
- Predefined asset templates eliminate costly engineering.
- Easy DIY configuration.
- Built-in web service software interface replaces software, server, and licensing.
- Access asset health with any browser-enabled device from anywhere.

Automated Collection and Built-in Edge Analytics

- Continuous data collection eliminates data gaps typical in manual analysis.
- Automated analysis including PeakVue Plus provides current asset health 24/7.
- Vibration training and experience not required for diagnosis.

Interface Data to Other Systems and Analytics

- Acts as Modbus TCP/IP Slave and OPC UA Server.
- Connects to AMS Optics Platform, Historians, PLC, DCS, and Data Lakes.





Integration with Emerson's DeltaV™ DCS

- Uses the same **Char**acterization **M**odules (CHARMs) as DeltaV Remote for click-in-place technology.
- Similar housing to the DeltaV junction box for ruggedness and familiar installation.

Intuitive Dashboard for Common Issues



Typical issues include:

- Antifriction bearing mechanical damage or improper lubrication
- Tooth wear
- Cracked/broken tooth
- Gear misalignment
- Sleeve bearing Oil Whirl
- Rotors imbalance or misalignment
- Looseness in the support

Intuitive configuration in 8 easy steps:

- 1. Select and configure CHARMS.
- 2. Configure external data points for process parameters such as flow rates and temperature.
- 3. Choose asset type (pump, motor, gearbox, etc.).
- 4. Enter general information about the asset.
- 5. Enter bearing details, or select from the bearing library provided.
- 6. Map available sources to measurement locations.
- 7. Configure alert limits.
- 8. Select machine size... and you are done!

AMS Asset Monitor Dashboard





