

Vibration monitoring and tiered maintenance

Historically, advanced vibration specialists were required to master sophisticated concepts in mathematics and physics to accurately interpret vibration data. The need for special training resulted in some plants avoiding implementation of an in-house vibration program. However, emerging technology has reduced the learning curve by providing easy-to-use vibration solutions that don't require advanced education.



Screening, monitoring and diagnosing

Screening assets is one of the first steps in a tiered maintenance program. When using remote sensors, screening eliminates the need for routine rounds by streaming data around the clock. Vibration is one of the measurement modes used in screening. Technicians can screen for excess vibration by installing semi-fixed sensors on assets. Measurements from sensors, such as the Fluke 3561 FC Vibration Sensor, are automatically uploaded to databases and aggregated by asset.

Fluke Connect™ is a cloud-based software program that integrates users, data and assets. It allows users to store data by asset, trend and graph results, and then share those findings with teams or include it in executive reporting. Real-time and historical asset data is accessible via Fluke Connect as long as there's a viable internet connection.

When screening discovers a problem, technicians will follow up with more precise vibration tools. Vibration frequency meters are powerful handheld tools that take accurate, repeatable measurements to determine overall vibration. The Fluke 805 FC also utilizes Fluke Connect software to automatically upload measurements to the cloud, and attach to the asset record. Vibration frequency sensors and meters offer screening insights and high-level data, but don't diagnose the problem.

To get full insight into the mechanical root cause, vibration testers or analyzers are needed. These devices have the capability to diagnose problems using built-in mathematical algorithms and can provide information for vibration specialists to diagnose machine faults. The Fluke 810 Vibration Tester gives maintenance teams a spectrum analysis of the measured vibration signal wave form with an easy-to-understand diagnostic report, enabling technicians to take corrective action.



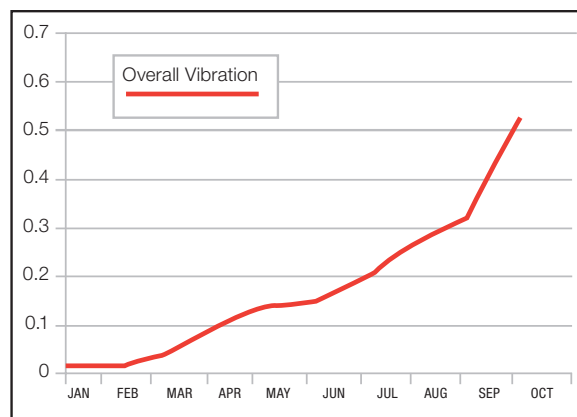
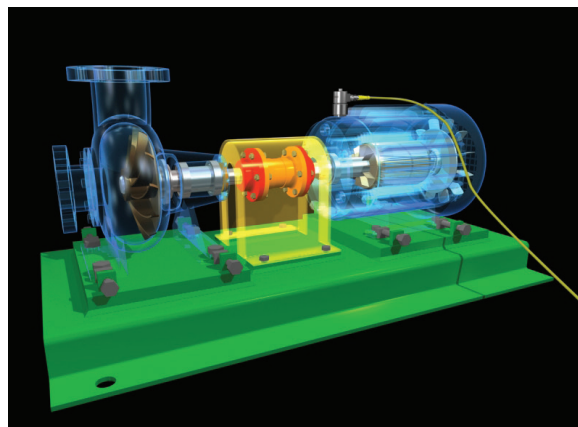
Fluke Overall Vibration Severity Scale

Fluke makes practical condition monitoring sensors and tools to provide a full view into asset health. Both the 3651 FC Vibration Sensor and 805 FC Vibration Meter use the Fluke Overall Vibration Severity scale (FOVS). The FOVS scale informs end-users of asset condition and provides visual, color-coded information showing the degree to which vibration is impacting equipment operation.

Whether sensor activation or route-based measurements, technicians will see if assets have exceeded overall vibration thresholds. Technicians can easily interpret data from the sensor or meter since both devices use the FOVS scale.

When connected to the 3561 FC Vibration Sensor, Fluke Connect will send alarms to smart devices when assets meet the pre-set alarm criteria. Alarms will include the data leading up to the alarm and the color-coded FOVS condition.

To learn more about Fluke vibration products or software, please visit Fluke.com or schedule an appointment with a representative.



Slight	No repair action is recommended. Retest the machine and monitor condition after maintenance.
Moderate	(Months, even up to a year) - No immediate repair action required. Increase the frequency of measurements and monitor the condition of the machine.
Serious	(Weeks) - Take maintenance action during the next planned downtime or maintenance period.
Extreme	(Days) - Immediate action is required. Consider shutting down the equipment and taking repair action now to avoid failure.

Accelix. *Connected Reliability.*

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
In the U.S.A. 866-810-2700
In Europe +353 507 9741
In UK +44 117 205 0408
Email: support@accelix.com
Web access: <http://www.accelix.com>

©2018 Fluke Corporation. Specifications subject to change without notice. 10/2018 6011695a-en

Modification of this document is not permitted without written permission from Fluke Corporation.

Learn more about Vibration Sensors here: www.fluke.com/VibrationSensors