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GET ANSWERS NOW

Mechanical troubleshooting with Fluke vibration, alignment, and diagnostic tools

In the world of mechanical maintenance, vibration remains one of the earliest indicators of a machine's health.

Whether it's the rumble of worn bearings or the shaking, shimmying, or thumping of loose, misaligned, or unbalanced parts, machines have a tale to tell.

For years, mechanical teams faced a tough choice when it came to vibration and alignment testing: complex vibration analysis systems, expensive vibration consultants, or relying on the trained ears of seasoned technicians using low resolution test methods, or complex math.

Now you can get fast, accurate and actionable answers with revolutionary vibration and alignment testers from Fluke. These tools redefine testing for mechanical troubleshooting and predictive maintenance, and help you:

- Quickly and reliably understand machinery health and condition severity
- Increase efficiency by working against a prioritized list of problems
- Take control of downtime costs by anticipating problems earlier and identifying root causes of recurring failures
- Conduct vibration and alignment checks, and perform expert-level corrections with minimal training

Built with FLUKE CONNECT™

Fluke 805 FC Vibration Meter

Make go or no-go maintenance decisions with confidence

The fast, easy-to-use Fluke 805 FC Vibration Meter eliminates the confusion of vibration screening so you can make go or no-go maintenance decisions with confidence. Frontline mechanical troubleshooting teams have a highly reliable, repeatable, and accurate way to check bearings and overall machine health. Instantly upload your data to the Fluke Connect™ app and share vibration measurement results with your maintenance team in real time—all without leaving the field.*

Fluke 810 Vibration Tester

Take a vibration expert along

The Fluke 810 Vibration Tester is the most advanced machine diagnostic tool for mechanical maintenance teams who need an answer now. A simple step-by-step process reports on machine faults the first time measurements are taken, without prior measurement history.

Fluke 830 Laser Shaft Alignment Tool

Precision shaft alignment made easy

The Fluke 830 Laser Shaft Alignment Tool is the ideal test tool to precision-align rotating shafts in your facility. If you're still using rulers and dial indicators to ensure your rotating machinery is properly aligned, you could be losing thousands of dollars per year in replacement bearing costs, hours of unnecessary repair time, and crippling unplanned downtime, not to mention taking years off your machine's useful life.

Fluke 820-2 LED Stroboscope

Rugged, compact and easy-to-use stop motion diagnostic tool

With the Fluke 820-2 LED Stroboscope, investigate and observe potential mechanism failure with confidence on a variety of machinery, in a wide range of industries, without making physical contact with the machine. The Fluke 820-2 LED Stroboscope is a rugged, compact, portable strobe ideal for stop motion diagnostics, mechanical troubleshooting, and process or product research and development.

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805 FC key features

- Innovative sensor and sensor tip design ensures accurate measurements for overall vibration measurement, bearing condition and IR temperature
- Green and red lights minimize user error by indicating how much pressure to apply when measuring
- Four-level scale helps you quickly assess problem severity
- Crest Factor+ provides reliable bearing assessment using direct sensor tip measurements between 4k Hz and 20k Hz
- Measure temperature with Spot IR Sensor to expand your diagnostic power
- Database of real machine vibration levels provides machine health for 37 machine categories

* Within provider's wireless service area. Smart phone, wireless service, and data plan not included with purchase.

Use the Fluke 805 FC to check machines in these categories:
Chillers
Fans
Cooling tower drives
Centrifugal pumps
Positive displacement pumps
Air compressors
Blowers
Machine tools

810 key features

- Unique diagnostic technology identifies and locates the most common mechanical faults: bearings, misalignment, unbalance and looseness
- Repair recommendations on most plant machines and fault severity scales advise technicians on corrective action
- Real-time tips and guidance for new users with on-board context-sensitive help
- Laser tachometer for accurate machine running speed promotes confident diagnoses
- Tri-axial accelerometer reduces measurement time by 2/3 over single axis accelerometers and allows accurate measurements by a technician with minimal training

Use the Fluke 810 to diagnose most common equipment:
Motors
Fans and blowers
Belt and chain drives
Gearboxes
Pumps
Compressors
Spindles

830 key features

- Single laser measurement technology means reduced errors from backlash resulting in better data accuracy
- Intuitive guided user interface quickly and easily complete machine alignments
- Compass measurement mode enables flexible, reliable and repeatable measurements using an activated electronic inclinometer
- Dynamic machine tolerance check provides continuous evaluation of alignment adjustments so you know when your machine in acceptable range
- Unique extend mode handles gross misalignment by virtually increasing laser detector size
- All-in-one screen provides severity scale, misalignment values, and feet correction amount needed to correct misalignment

Use the Fluke 830 to correct shaft alignment issues with motors coupled to:
Fans
Blowers
Gearboxes
Pumps
Compressors
Spindles

820-2 key features

- Identify the running speed of rotating equipment without stopping the operation or making contact with machinery
- Stop motion for diagnoses of parasitic oscillations, flaws, slippage or unwanted distortions
- Measure speed of rotation or frequency of a rotating shaft, speaker, or mechanical part
- Identify part numbers or other markings

Use the Fluke 820-2 to measure rotational speed and perform diagnostic checks on:
Turbines
Variable Frequency Drive motors
Belt driven machines
Roller bearings, shafts, ear teeth or other machine components
Clutches and cogwheels
Foundations
Spindles

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Put Fluke vibration, alignment, and diagnostic tools to work.

Here are just a few examples of contributions Fluke vibration, alignment, and diagnostic tools can make to your mechanical troubleshooting and predictive maintenance programs.

Check conditions

Frontline troubleshooting teams can use the Fluke 805 FC to quickly understand overall machine health and bearing condition. With a single point measurement, technicians can confidently make "go" or "no-go" decisions with a tool they can carry in their toolbelt. With the Fluke 820-2 you can identify running speeds, and perform stop motion diagnostics without taking your equipment offline.

Diagnose problems

The Fluke 810 Vibration Tester will help to pinpoint exactly what the problem is (Bearings? Misalignment? Unbalance? Looseness?), where it is and how bad it is, giving maintenance teams a complete picture of the issue and the repairs needed to fix the problem.

Correct misalignment

The Fluke 830 Laser Shaft Alignment Tool enhanced user interface provides easy to understand results that don't require extensive alignment knowledge. The unique "All-in-One" result screen shows you both coupling results and feet corrections (vertical and horizontal) in real time as misalignment is being fixed.

For more information, please visit fluke.com/vibration

Fluke. *Keeping your world up and running.*®

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