Advanced Test Equipment Corp.

www.atecorp.com 800-404-ATEC (2832)

AT-400

Dual Precision at Every Turn

acoem

Double down on misalignment with the Acoem AT-400, featuring robust dual axis sensors and unmatched versatility for virtually any shaft alignment scenario.

AT-400

Dual Precision at Every Turn

Measurement Programs

Horizontal Shaft Alignment & HSA 2-axis

Determine and correct the relative position of two horizontally mounted machines that are connected, so that the rotational centers of the shafts are collinear.

Vertical Shaft Alignment

Determine and correct the relative position of two vertically/flange mounted machines that are connected, so that the rotational centers of the shafts are collinear.

Flatness

Using the Acoem T21 when paired with the M9 sensor, the deviation in distance between the laser plane and the measurement object can be measured in one or more positions.

SoftCheck™

Check if there is a soft foot condition to verify if the motor is not resting firmly on all its feet.

Target Values

Once you have determined the machine's thermal expansion, this program will allow you to pre-set target values prior to starting your alignment work.

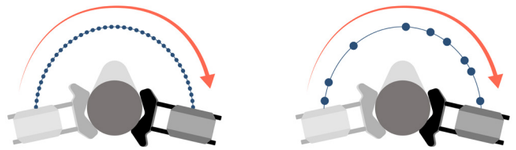
Spacer Shaft Alignment

For machines driven by spacer shafts (or membrane couplings), this specialized program will guide the user through the alignment process.

Arriving Late 2023

Machine Train Alignment, Cardan/Offset Alignment, and Hot Check

Product Highlights



DUAL SWEEP

MULTI POINT

Dual Measurement

Easily obtain readings with a single rotation of the shaft with Dual Sweep. With Dual Multipoint, record measurements in a tight space and from multiple points from any position on the rotation. Witness real-time visualization in both horizontal and vertical directions simultaneously with Dual View throughout the entire alignment.

Cloud Connectivity

Supplied with cloud connectivity, the AT-400 allows users to effortlessly upload alignment reports to Acoem's proprietary web portal, ensuring seamless data management and easy access to alignment records for analysis and comparison. With just a tap of a button, technicians can send their alignment reports directly to the portal, streamlining their process of documentation.

DualXL PSD Detectors

The M9 & S9 position-sensitive detectors simultaneously measure horizontal and vertical measurements and offer a high resolution of 0.001mm. The M9 & S9 are currently the thinnest 2-axis sensor on the market, are lightweight (.67lb), and feature a 20-meter (65 ft) measurement range. Thoughtfully designed sliding covers for the detectors and charging ports ensure the product stays protected when stored or not in use.

Lifetime Warranty Benefit

The AT-400 comes with the added assurance of a lifetime warranty, providing customers with unmatched peace of mind and long-term reliability. This commitment to quality reflects Acoem's confidence in the durability and performance of this cutting-edge alignment system.

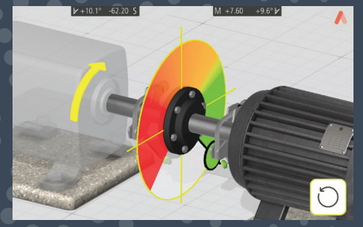
GuideU™ Interface

GuideU™ is the next generation of 3D shaft alignment graphical user interface – our patented, customizable, icon-driven and color-coded display system that makes measuring, aligning, and reporting simple. Featuring realistic machine graphics and animated help screens, the risk of human error is minimized to take the guesswork out of shaft alignment.

Measurement Methods

Dual Sweep Method

The Dual Sweep method automates the measurement recording during a sweep of the shafts, providing a convenient way to assess alignment on coupled machines. By recording numerous points, a precise result is ensured. The recording of data is stopped manually by the user.

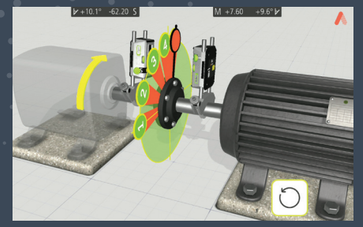


Dual Sweep Express Method

This measurement method is similar to the classic Dual Sweep method, however, data recording halts automatically when shaft rotation ceases.

Dual Multipoint Method

The Dual Multipoint method enables measurement initiation from any position on the rotation, allowing recording of multiple points for optimized calculations. Ideal for uncoupled shafts, non-rotatable shafts, sleeve bearings or journal bearings.



Dual Multipoint Express Method

Similar to the classic Multipoint method, this method records automated measurements for greater convenience.

Tripoint Method

In the Tripoint method, the alignment condition can be calculated by recording three points while rotating the shaft at least 60°. In this method, all points are recorded manually by the user.

Tripoint Express Method

This method seamlessly incorporates the Tripoint approach, offering the added advantage of fully automated measurements throughout the process.

Clock Method

Calculations are made by taking three points with 180° of rotation, great for when machines are resting on non-horizontal foundations or when shafts are not coupled. It is useful for comparing measurement results with dial gauges and reverse rim methods.

What's Included

Each Acoem AT-400 is delivered with the following included hardware:

- **A** Acoem AT Display Unit
- **B** Acoem S9 Alignment Sensor
- **C** Acoem M9 Alignment Sensor
- **D** V-Bracket Complete x2
- **E** Quick Guide AT
- **F** Usb-Cable A-Mini B 2m (6.5 ft)
- **G** Chain 8mm (0.3 in) 60 Links (L=970mm (38.2 in))
- **H** Power Supply 4 USB-Ports 5 VDC
- **I** Magnetic V-Brackets x2
- **J** Extension Fixture 49mm (1.93 in)
- **K** Magnetic Base On-Off
- **L** Tape Measure (16.5 in)
- **M** Acoem T21*
- **N** Angled Universal Tool x2
- **O** Acoem USB
- **P** Rod Kit

*Included with AT-400 Ultimate

Interface Features

The AT-400 interface is designed to make the user experience hassle-free as well as maximize user productivity, facilitate intuitive reporting, and ensure a consistent user experience across all measurements.

- GuideU™
- VertiZontal™
- FeetLock™
- Dual View
- True Live™
- Multiple Feet
- Camera Access
- PDF Report

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Go to **acoem.us/at-400** to learn more or request a quote

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