

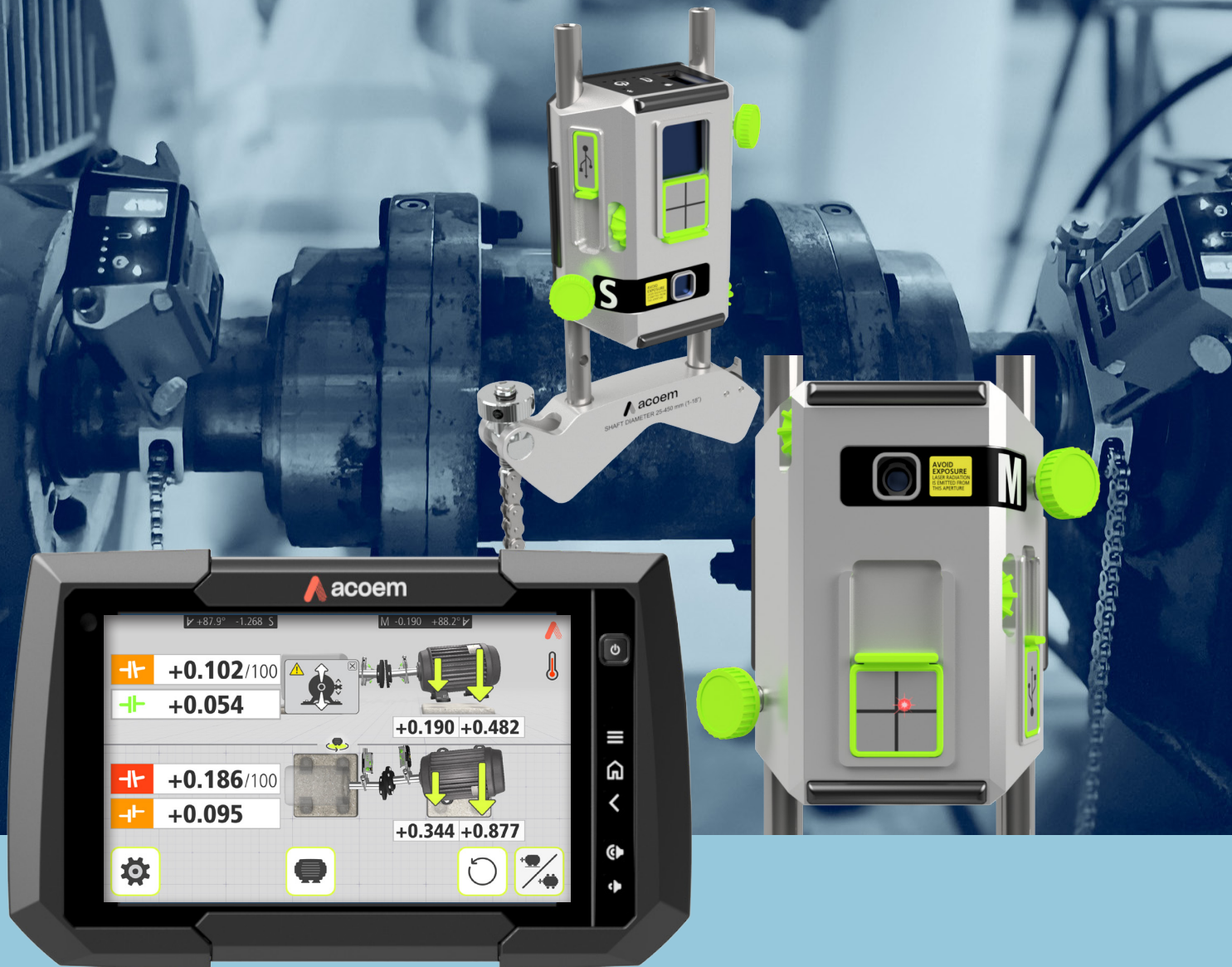
Acoem AT-400

2-AXIS SHAFT ALIGNMENT



acoem

CREATING ENVIRONMENTS OF POSSIBILITY



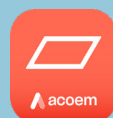
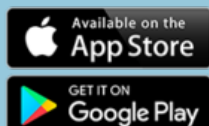
Acoem AT-400

Advanced 2-axis sensors and modern UI boost productivity and efficiency across applications

Enhance precision in shaft alignment with the Acoem AT-400. This advanced equipment incorporates durable dual-axis sensors, providing exceptional flexibility to address a wide spectrum of shaft alignment scenarios.

Elevate Your Measurements with ACOEM AT-400's Innovative Capabilities!

- Versatile Measurement Techniques
- DualXL PSD Sensors
- GuideU™ User Interface
- Lifetime Warranty
- ACOEM AT-400 Dual Sweep Method
- Cloud Connectivity



A comprehensive solution for high-end shaft alignment.

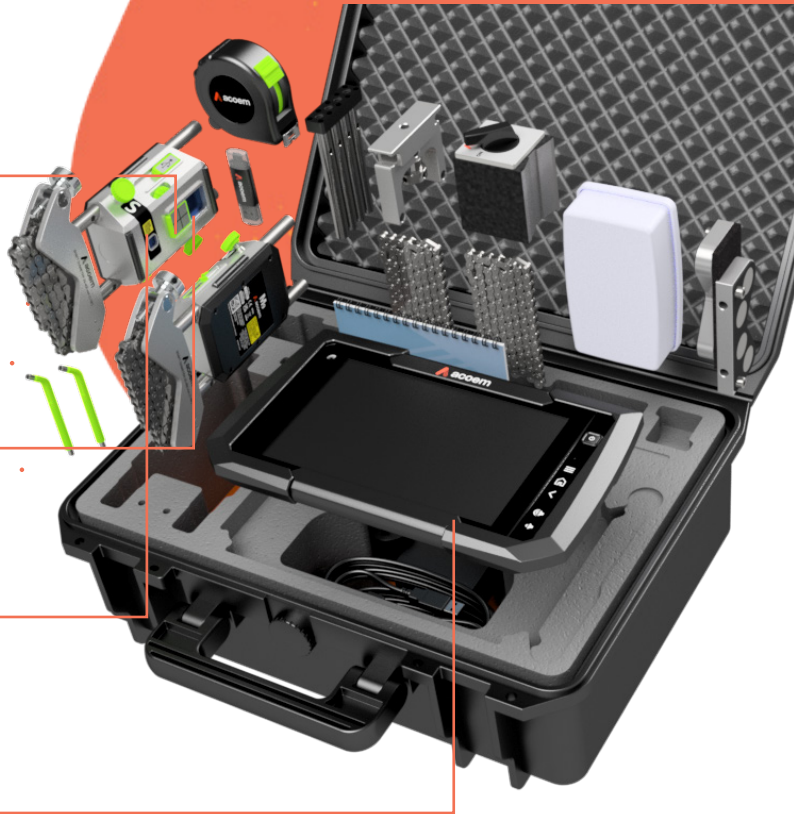
Advanced 2-axis High Performance Shaft Alignment System

With dimensions of 20x20 mm and an impressive 0.001 mm resolution, the detector excels in accurate position sensing and various measurement tasks, proving optimal for diverse applications.

Acoem M9 & S9 sensors feature 2-Axis PSD, 20m range, Integrated Display. Also, 6-Axis MEMS IMS Gyro enables precise Vertical Tri-point measurement.

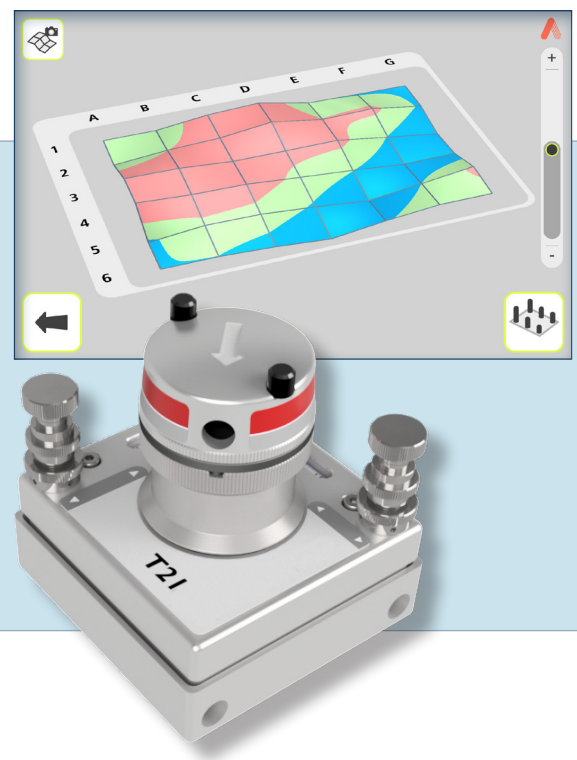
Thoughtful Design: Equipped with sliding covers, our sensors ensure product longevity and protection during storage

Industrial Display Unit: Premium rubber enclosure, adaptable stand for glare-free viewing. Versatile design for flange fastening, hanging, and more.



Acoem AT-400 Ultimate

For those seeking to extend their measurement capabilities, the **ACOEM AT-400 Ultimate**, when integrated with the **Acoem T21**, and leveraging the **Acoem M9** sensor as a receiving component, open up a world of possibilities. One of the exciting expansions is the ability to measure **rectangular flatness** - an essential feature for applications where achieving precise flatness is critical. This comprehensive setup not only enhances precision but also broadens the scope of your measurement capabilities to address a wider range of dimensional assessment needs.

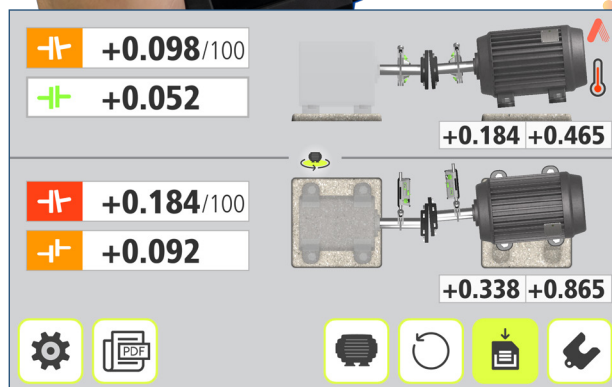


GuideU™

Intuitive 3D graphical user interface

GuideU™ is the next generation alignment 3D graphical user interface – our patented, customisable, icon-driven and color-coded display system makes measuring, aligning, documenting and reporting on each job simple.

GuideU™ delivers precise measurement, 3-D transitions in alignment view and correction values by minimising the risk of human errors, guiding the operator through the process using visual, logical and easy-to-follow steps.



VertiZonal™

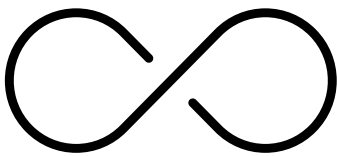
Streamlines machine alignment

VertiZonal™ adaptive user interface automatically indicates exactly how much you need to adjust your misaligned machine by adding or removing shims to the machine's feet. This removes the need to remeasure between the vertical and the horizontal phases to correct the horizontal misalignment. This industry-first function saves time and ensures accuracy with every measurement.



Cloud Connectivity

The Acoem AT-400, with cloud connectivity, enables users to easily send alignment reports to Acoem's web portal for efficient data management and analysis. Technicians can quickly dispatch reports with just one touch, streamlining their documentation process.



Finite Lifetime Warranty

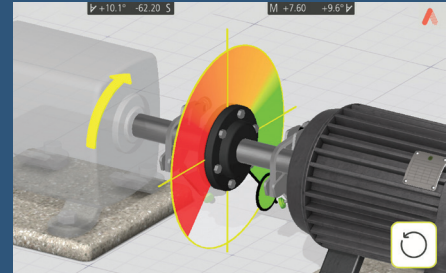
Experience the unparalleled advantage of a lifetime warranty with the Acoem AT-400. Our commitment extends beyond just a product, offering customers exceptional tranquility and enduring dependability. This dedication to excellence mirrors Acoem's unwavering belief in the robustness and proficiency of this state-of-the-art alignment system.

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.



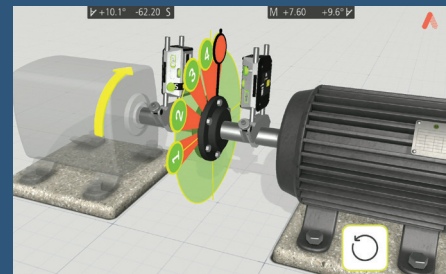
Dual Sweep Express Method

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 90°+90° 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.

Measurement Programs



Horizontal Shaft Alignment

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.



Effortlessly navigate through our user-friendly interface, **GuideU™**, designed to make it a breeze to follow and understand.



Get the position of both the shafts in real time with Acoem **True Live™** feature.

Interface Features

The Acoem AT-400 interface has been meticulously crafted to provide users with a seamless and effortless experience, while also optimizing productivity.



Get better automatic guidance for a base-bound or bolt-bound situation with the **FeetLock™** function



Align machines in horizontal and vertical direction in only one move with Acoem **Vertizentral™** feature and save time



The **Multiple Feet function** is useful for machines with more than two pairs of feet to ensure proper alignment.



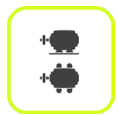
SoftCheck™ Check if there is a soft foot condition to verify if the motor is not resting firmly on all its feet.



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 This program guides alignment for spacer shaft-driven machines (or those using membrane couplings).



DUAL VIEW for large machines, enabling real-time alignment visualization in both horizontal and vertical directions simultaneously.



Instantly generate an automatic **PDF report** from the field on the mobile device, and add logo



Take pictures of your machines and setup to illustrate automatically in the report

What's Included

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



ACOEM AT-400 D

- Acoem S9
- Acoem M9
- Acoem AT DU
- Rod kit
- Magnetic base ON-OFF
- Extension fixture 49mm
- Chain 8 mm 60 links (L=970 mm)
- Magnetic v-bracket 2
- Tape measure 5 m
- Acoem usb
- V-bracket complete 2
- Angled universal tool 2
- USB-cable A-mini B 2m
- Power supply 4 USB-ports 5 VDC
- Quick Guide AT

Hardware Type	M9 1-1216, S9 1-1217
Physical	
Housing Material	Anodized Aluminum frame and high impact ABS plastic.
Weight	M9: 306 g (10,8 oz) S9: 306 g (10,8 oz)
Dimensions	TD9: 100mm x 77,3mm x 43mm (3,9 in x 3,0 in x 1,7 in)
Environment	
Operating Temp	-10 to 50 °C (14 to 122 °F)
Environmental protection	IP65 (Dust tight and protected against watere jets)
Sensing Technology	
Laser power	< 1 mW
Measurement distance	63 mm to 20 m
Detector	2-axis PSD
Detector sizeword	20 mm x 20 mm (0,79 in x 0,79 in)
Detector resolution	1 µm
Measurement accuracy	1% ± 3 µm
Inclinometer	Dual High Performance MEMS inclinometers
Inclinometer resolution	0,01 °
Inclinometer accuracy	±0,1 °
Gyroscope	6-Axis MEMS Inertial Motion Sensor with drift compensation and automatic field calibration
Gyroscope accuracy	±1 °
Battery	
Operating time	8 hours continuous use (measuring)
Charging	8 h
ACOEM Alignment Display	
A sunlight-readable, 8-inch capacitive multi-touch display with super-hardened Gorilla Glass, plus rain and glove mode.	
IP67 ruggedness rating (including the ports) for fullywaterproof and dust-tight performance.	
Wide operating temperatures of -20°C to 60°C (-4°F to 140°F).	

About Acoem

At Acoem, we specialize in striking the perfect balance between progress and preservation for organizations. Our AI-powered sensors and ecosystems provide accurate information to empower informed decision-making. With a global team of over 800 employees, we serve customers in 11 countries through 150 distributors, delivering trusted data solutions worldwide.

Acoem links possibilities with protection.

For more information visit acoem.com

