Acoem **AT-300**

REVOLUTIONARY SHAFT ALIGNMENT
OPTIMAL POWER EFFICIENCY

Available on the App Store
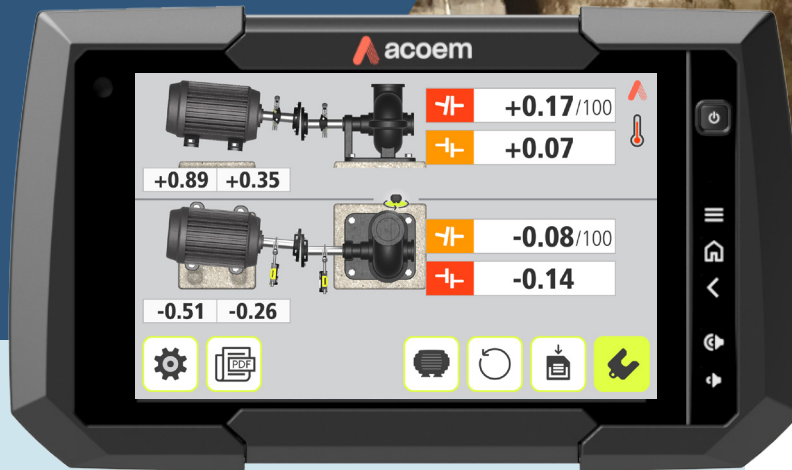
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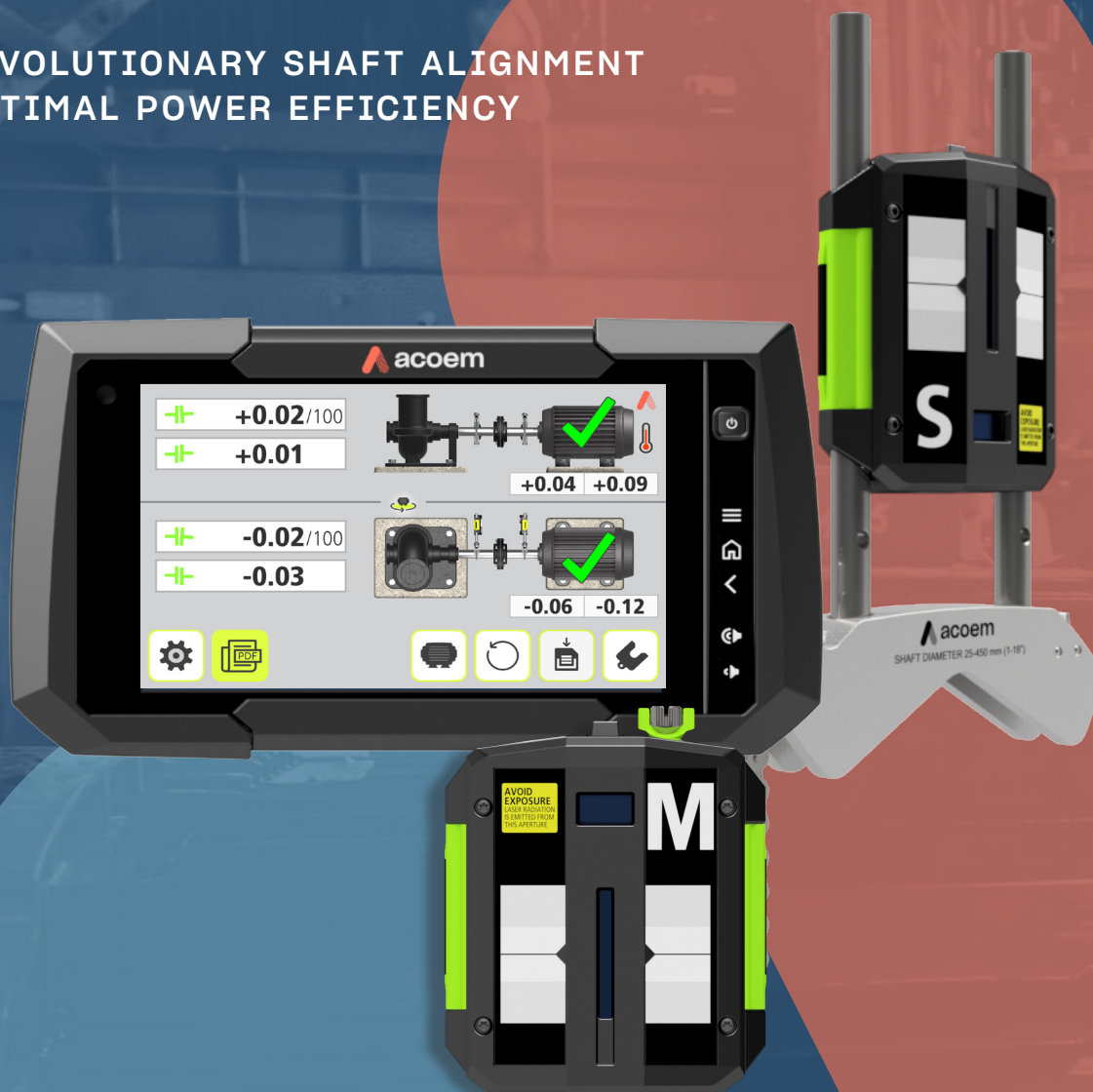
Acoem's tools optimize machine performance through precise shaft alignment.

Acoem AT-300

Pioneering Accuracy, Range, and Efficiency.

Experience enhanced sensor intelligence with our latest advancements. Our **3rd generation digital line sensor** offers a longer **measurement range of up to 15 m,** ensuring precise data capture. High-performance inclinometers provide an impressive **0.01 degrees resolution.** Plus, enjoy reduced power consumption for greater efficiency in your applications. Elevate your sensing capabilities with our cutting-edge technology.

Next-generation digital line laser system

|	
· Broad software functionality	**+10 software functions**
· Streamlined user interface	**GuideU™**
· Intelligent sensor technology	**30 mm, 3rd gen Digital sensor**
· Exceptional performance	**15 m measuring distance**
· Acoem AT-300 measures	**5 measuring methods**
· Slim. Compact. Unmatched	**33 mm**
· Swift and accurate results	**0,3% ± 7 µm**
· Accurate. Consistent. Reliable	**VertiZontal™**

GuideU™
Intuitive 3D graphical user interface

GuideU™: a revolutionary 3D graphical interface, patented for its customizability, icon-driven design, and color-coded system. It streamlines tasks like measuring, aligning, documenting, and reporting with precision. GuideU™ minimizes human errors by guiding operators through visual, logical, and easy-to-follow steps, offering a seamless 3D alignment view and correction values. Experience a new era of efficiency and accuracy with GuideU™.
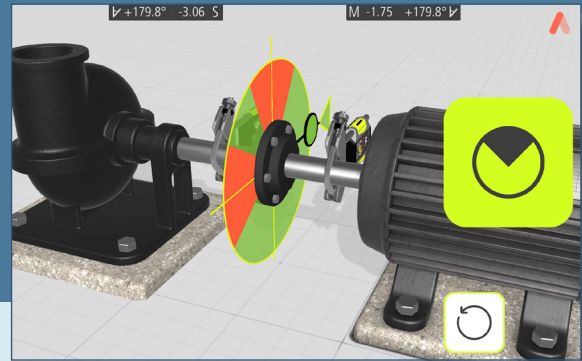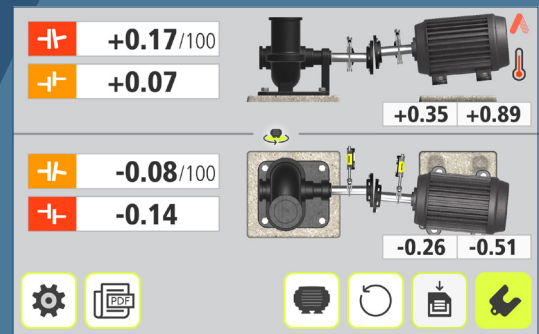
Measuring methods.

The availability of multiple measuring methods empowers maintenance teams to choose the most appropriate technique for their specific applications.
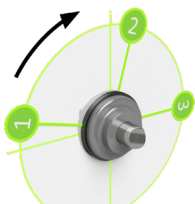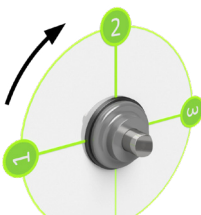
Tripoint™ method
In the Tripoint method, the alignment condition can be calculated by taking three points while rotating the shaft at least 60°. In this method, all points are taken manually.

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

Clock™ method
In the Clock method, machinery positions are calculated by taking three points with 180° of rotation.

Multipoint method
This function enables measurement initiation from any position on the rotation, allowing recording of multiple points for optimized calculations. Ideal for turbine and sliding bearing applications.

Multipoint Express method
Our method follows the classic Multipoint method approach, but with the advantage of automated measurements for greater convenience.

Acoem Sensors M10/S10

Discover precision with our laser sensors:

- **15m measurement range -** Laser: 650nm, <1mW power
- **Precision -** 3rd gen. digital sensor
- **Consistency -** Accuracy: 0.3% ± 7 µm
- **Robust -** Intelligent signal processing: sidespot rejection, edge detection, anti-vibration
- **Accurate -** Inclinometer: Dual MEMS, 0.01° resolution, ±0.2° accuracy
- **Stability -** Gyroscope: 6-Axis MEMS, ±1° accuracy

Reliable measurements in a compact design. Choose precision—choose our laser sensors.

Acoem display unit

This display unit stands out for its **sunlight readability**, durable **Gorilla Glass**, specialized **modes for adverse weather**, impressive **IP67** ruggedness rating, and its ability to operate efficiently in a **wide range of temperatures**. It is a robust and versatile solution for users who demand reliable performance in challenging and dynamic settings.

· Access data, reports, and applications in one place.
· Transfer data via USB or WiFi.
· Email results with ease.
· Manage assets through the Acoem WebPortal.
· Quickly access support resources.
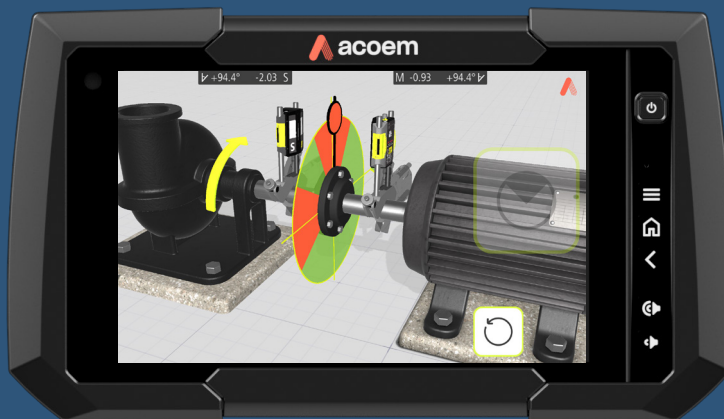
Interface Features

The Acoem AT-300 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 **VertiZontal™** feature and save time

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

Target Values For spacer shaft-driven machines (or those using membrane couplings), this program will efficiently guide users in alignment.

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

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

Hot Check™
Target values obtained by measuring in cold condition and then in hot condition to determine the machine's thermal expansion.

Offset/Cardan provides you with shaft alignment of horizontally and vertically mounted machines with offset drive shaft.

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

OL2R measures machine movements between hot and cold conditions, calculates thermal growth and dynamic measurement. (OL2R brackets is needed)

Shim Simulator shows how different shim adjustments affect coupling errors.

VertiZontal™
Streamlines machine alignment

VertiZontal™ 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.

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.

Machine Train™ Alignment
Align multiple connected rotating machines in a series with precision and efficiency.

Pre- Alignment
Ensure precise alignment by checking runout, soft foot, bearing clearances, pipe strain, thermal growth, coupling hub mounting, and bent shafts.

PDF Report Generator
Easily create comprehensive reports by accessing and combining saved measurements from multiple alignment apps on your tablet

Vital functions

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.

Cloud Connectivity

The Acoem AT-300, 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.

Lifetime Warranty

Experience the unparalleled advantage of a lifetime warranty with the Acoem AT-300. 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 alignment system.

What's Included

Each Acoem AT-300D is delivered with the following included hardware:

ACOEM AT-300 D

- **Acoem Alignment Display**
- **Acoem M10**
- **Acoem S10**
- **Magnetic base ON-OFF**
- **Extension fixture 49mm**
- **Rod kit**
- **Chain 8 mm 60 links (L=970 mm)**
- **Magnetic v-bracket**
- **Tape measure 5 m with label**
- **V-bracket complete**
- **Angled universal tool**
- **Acoem USB**
- **Spacer magnet v-brackets**
- **USB-cable A-mini B 2m**
- **Power supply 4 USB-ports 5 VDC**
- **Quick Guide AT**

Physical	
Weight	M10 212 g (7,5 oz) S10 188 g (6,6 oz)
Dimensions	M: 92mm x 77mm x 33mm (3,6 in x 3,0 in x 1,3 in)
	S: 88mm x 77mm x 33mm (3,5 in x 3,0 in x 1,3 in)

Environment	
Operating Temp	-10 to 50 °C (14 to 122 °F)
Long term storage Temp Room Temp	18 to 28 °C (64 to 82 °F)
Relative humidity	10 – 90 %
Environmental protection	IP65 (Dust tight and protected against watere jets)

Sensing Technology	
Laser	650 nm class II diode laser
Laser power	< 1 mW
Measurement distance	Up to 15m
Detector	3rd gen. digital sensor
Detector resolution	1 µm
Measurement accuracy	0,3% ± 7 µm
Inclinometer	Dual High Performance MEMS inclinometers
Inclinometer resolution	0,01 °
Inclinometer accuracy	±0,2 °
Gyroscope	6-Axis MEMS Inertial Motion Sensor with drift compensation and automatic field calibration
Gyroscope accuracy	±0,5° + 0,5%

Battery	
Type	High performance Li Ion rechargeable battery or external power
Operating time	20 hours continuous use (measuring)
Charging	8 h
LED indicators	Unit state, laser transmission and 5 battery status indicators with instant battery check

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

As a pioneer in industrial measurement technology, Acoem offers a comprehensive range of products, including advanced shaft alignment tools. Our solutions empower businesses to achieve maximum efficiency and reliability.**Acoem links possibilities with protection.**

For more information visit acoem.com

acoem
CREATING ENVIRONMENTS OF POSSIBILITY

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