

Machine Defender

INSTANT MACHINERY DIAGNOSTIC



acoem
CREATING ENVIRONMENTS OF POSSIBILITY



How do you shorten the path between monitoring and informed action?

For more than 50 years we have been designing and manufacturing class-leading multi-parameter environmental monitoring and industrial reliability solutions. We offer our global customers a complete range of integrated measurement technologies and services, ensuring that your data is always accurate and your equipment operates with maximum efficiency.

We believe in helping you find the right balance between progress and preservation. Empowering industries, government authorities, scientists and communities to make knowledgeable decisions based on reliable data, our holistic solutions lead to operational excellence and better outcomes.

At Acoem, we create environments of possibility.

Machine Defender

Maximize Machine Life & Optimize Machine Performance

ACOEM Machine Defender app has been designed to put rotating machinery health assessment at the grasp of every mechanics. By simple selection of the machine components and input of the speed range, power range and type of mounting, the Machine Defender tells the user if his asset is at risk and what type of faults are most likely present on the machine. Thanks to its visual 3D graphics guided interfaces, any worldwide user can handle the Machine Defender without prior training.



Accurex™ Automatic Diagnostic

The Acoem Machine Defender's unique automatic machine diagnostic Accurex™ is built into the system. The patented machine diagnostics feature provides unbeatable, fast, relevant and reliable results for a wide range of machine problems such as unbalance, alignment errors, cavitation, structural resonance, bearing problems and more.



No action required



Monitoring required and/or action conceivable during scheduled shutdown



Action to be scheduled as soon as possible

Faults managed by the patented ACOEM Accurex™



Bearing / Lubrication



Unbalance



Misalignment



Structural resonance



Pump Cavitation



Gear wear



Shocks/modulation resulting from looseness or electrical defects



Other ISO defect (Soft foot, Belt wear, Nearby disturbance)



Suspicious machine

The Perfect Rotating Machinery Service Partner

Easy To Use

Thanks to our patented, color-coded and icon-based GuideU™ user interface, the operation of the Machine Defender app is intuitive and adaptive minimizing the risk of operator errors and wrong interpretations of the result.

Instant Field Reporting Capabilities

At the era of factory digitalization, it has never been as important to provide connectivity tools to field operators. Machine Defender now completes the ecosystems of apps augmenting operators capabilities in the field. The pdf report can be edited and shared immediately from the mobile device right after the measurements.

Easy Machine Setup In A Few Seconds

In only a few steps with basic information such as machine type, rpm and Hp you are ready to start.

Transmission Types

- Direct driven / Belt drive / Gearbox driven
- Coupling: Rigid / Flexible

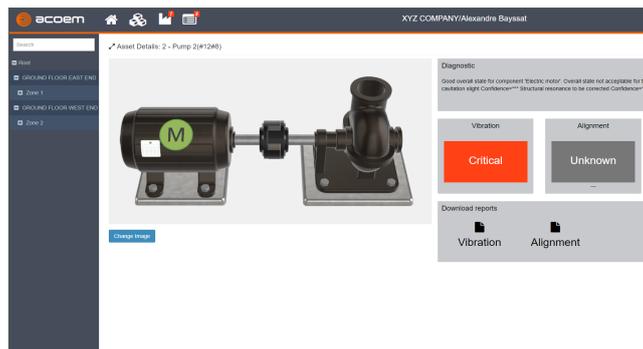
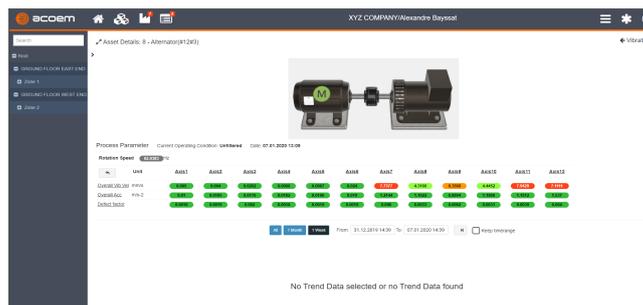
Driven Components

- Fans (btw bearings, overhung)
- Pumps (btw bearings, overhung)
- Alternator / Centrifugal Compressor / Roller / Shaft



Acoem Cloud Collaborative Platform

Thanks to Acoem cloud platform, it is easy to get an overview of your plant's health status and identify some leverages of performance. Providing detailed access to reports history as well as trending capabilities, it facilitates the maintenance decision making process, and management of measurement jobs.



Fast Wireless Measurements



- Wireless measurement up to 25m
- Synchronous tri-axial measurements in typical 10s
- Good diagnostic capabilities including for bearings, gears and cavitation problems
- Dimensions: Ø42 x H116 mm
- Android and iOS compatible
- IP65
- Resists to a 1.2m drop
- 8h rechargeable battery

What's Included

- 1 VT-300 wireless sensor with Smart License
- 1 USB power supply module with international plugs and USB cable
- 1 High power bipolar magnet (suited for curved shafts) with orientation key for tri-axial positioning
- 1 Carry-on bag
- 1 Contact point to make single axis measurements on small surface
- 1 Printed safety instructions manual
- 1 Printed calibration certificate.





Augmented Mechanics Ecosystem

The Ultimate Solution For Proactive & Predictive Maintenance

Machine Defender app is part of Acoem's Augmented Mechanics Ecosystem, the first truly flexible and scalable solution for combining different technologies on the same mobile platform to deliver reliable and precise proactive and predictive maintenance for industrial machinery.

Designed to allow you to continually add to or upgrade as new technologies become available, or as your specific needs change over time, the Ecosystem is made up of a combination of mobile applications, connected wireless sensors, compatible equipment from our partner suppliers and our cloud-based software – all working seamlessly together to form a virtual protective ring around your machinery's rotating components.

In addition to the horizontal and vertical shaft alignment apps, the Ecosystem currently features four other applications:



Pre-alignment app



Bearing Defender app



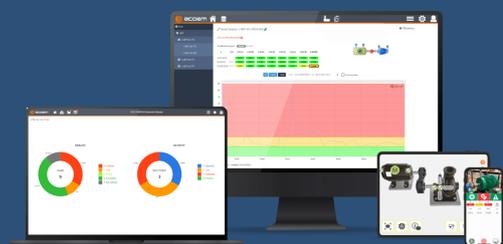
Horizontal shaft alignment



Vertical shaft alignment

A New Environment Of Possibility

- Total control over your machinery's proactive & predictive maintenance
- Accessible via any enabled device – tablet, smartphone, laptop etc.
- Upgradable, customisable & scalable based on your needs
- Easy to use with new generation ergonomics and guided interface
- Links vibration & alignment data to optimise maintenance process
- Share information instantaneously among your teams
- Make timely & informed maintenance decisions
- Benefit of insightful product-training videos & Acoem technical support





Future-Proof Your Investment

By focusing on improving the user experience and the value that we add through the superior diagnostic capabilities of our apps, rather than the physical display unit, we can offer a wider range of features and a guaranteed ease of use throughout your toolbox's lifecycle.

The Augmented Mechanics Ecosystem is a huge leap forward in machinery reliability through enhanced connectivity, integrated technology, the ability to easily share data and the automatic report generation function that is as simple as sending an email directly from your tablet.

It is also the only system on the market that grows with your requirements. Always upgradable, it is an assurance that your investment will be protected and as technology evolves, your system will remain compatible, easy to use and up to date.

So much more than an alignment and monitoring tool – the Augmented Mechanics Ecosystem represents the next generation of holistic maintenance solutions.



About Acoem

Creating environments of possibility

At Acoem, we create environments of possibility - helping organisations find the right balance between progress and preservation - safeguarding businesses and assets, and maximising opportunities while conserving the planet's resources. We deliver unrivalled, interoperable AI-powered sensors and ecosystems that empower our customers to make enlightened decisions based on accurate information.

Together with 150 distributors, our 800+ employees work across 27 offices, 5 manufacturing facilities and 3 R&D centres in 11 countries to provide trusted, holistic data solutions for customers worldwide.

Acoem links possibilities with protection.

For more information, please visit acoem.com

