

# Industrial Reliability Solutions

ENABLING DATA-DRIVEN  
SMART OPERATIONS



**acoem**  
CREATING ENVIRONMENTS OF POSSIBILITY



# Acoem is your total reliability partner

Reliability issues can significantly affect industrial performance, maintenance costs and operational efficiency. More importantly, they can negatively impact the health and safety of your workforce and the environment.

Acoem is committed to adding value to your industrial maintenance processes and helping you harness the full potential of Industry 4.0 for your plant, factory or manufacturing facility with our targeted reliability solutions

## Beyond vibration & rotating assets

Although we have gained a global reputation for the technological excellence of our predictive maintenance and condition monitoring systems, particularly when it comes to rotating machinery, Acoem isn't stopping there. We're dedicated to offering more than just hardware and software. Our goal is to provide complete reliability solutions that are specifically designed to address your current and future challenges.

## Solutions for every application



Mining



Wind Energy



Manufacturing



Renewable



Marine & Offshore



Pulp & Paper



Chemical



Oil & Gas



Aerospace



Defence



Metal



Cement

# Keeping an eye on every asset with Acoem's reliability ecosystem

Our ecosystem, featuring various diagnostic tools such as portable, wireless, real-time devices, alignment solutions, multiple sensors, and more, consolidates all your asset information into a centralized platform.

Our integrated ecosystem streamlines asset monitoring, allowing you to adjust strategies based on priorities, ultimately saving time and increasing efficiency.

With a unified and user-friendly interface, you can easily identify maintenance requirements, empowering you to make smarter, more confident collective decisions.

## Why partner with Acoem?

Nobody else in the global industrial reliability market can match Acoem when it comes to flexibility, expertise, field experience, technology and R&D

- Actionable data
- Reliable advisor
- Holistic ecosystem
- Efficient at 100% since day one



## NEST Vision

Keeping an eye on every asset.



### Advisor diagnostic services

An individually tailored, custom-designed condition-based maintenance program





### Augmented Mechanics Ecosystem

Shaft alignment & AI diagnostics



### Laser Shaft Alignment

Smart measurement to safeguard machine's operating condition



### Portable Analyser

Wireless and AI powered periodic analysis



### Bearing Defender

Instantaneous advice on a bearing health



### Nesti4.0

Predictive maintenance platform



### Powered by Accurex™



### Wireless

AI powered wireless remote diagnostic



### Wireless

Wireless remote diagnostic for BoP



### Real Time

AI powered variable & low speed technology



### Multi-tech

Oil, Ultrasound, thermography

# Industrial reliability technologies

Condition monitoring powered by for Industry 4.0

## ACCUREX™

Automatic diagnosis software

Accurex™ Artificial Intelligence provides unparalleled instant automatic diagnostic capabilities. It is the result of the modelization of our 50+ years of experience through a Bayesian network, additionally powered by machine learning on our long history of qualified diagnostics. Automatic vibration diagnostics are swiftly delivered to your tablet within seconds. This expert system is user-friendly and yields fast, relevant, and reliable results, addressing a diverse range of potential machine faults. Improves the efficiency of your condition monitoring program.

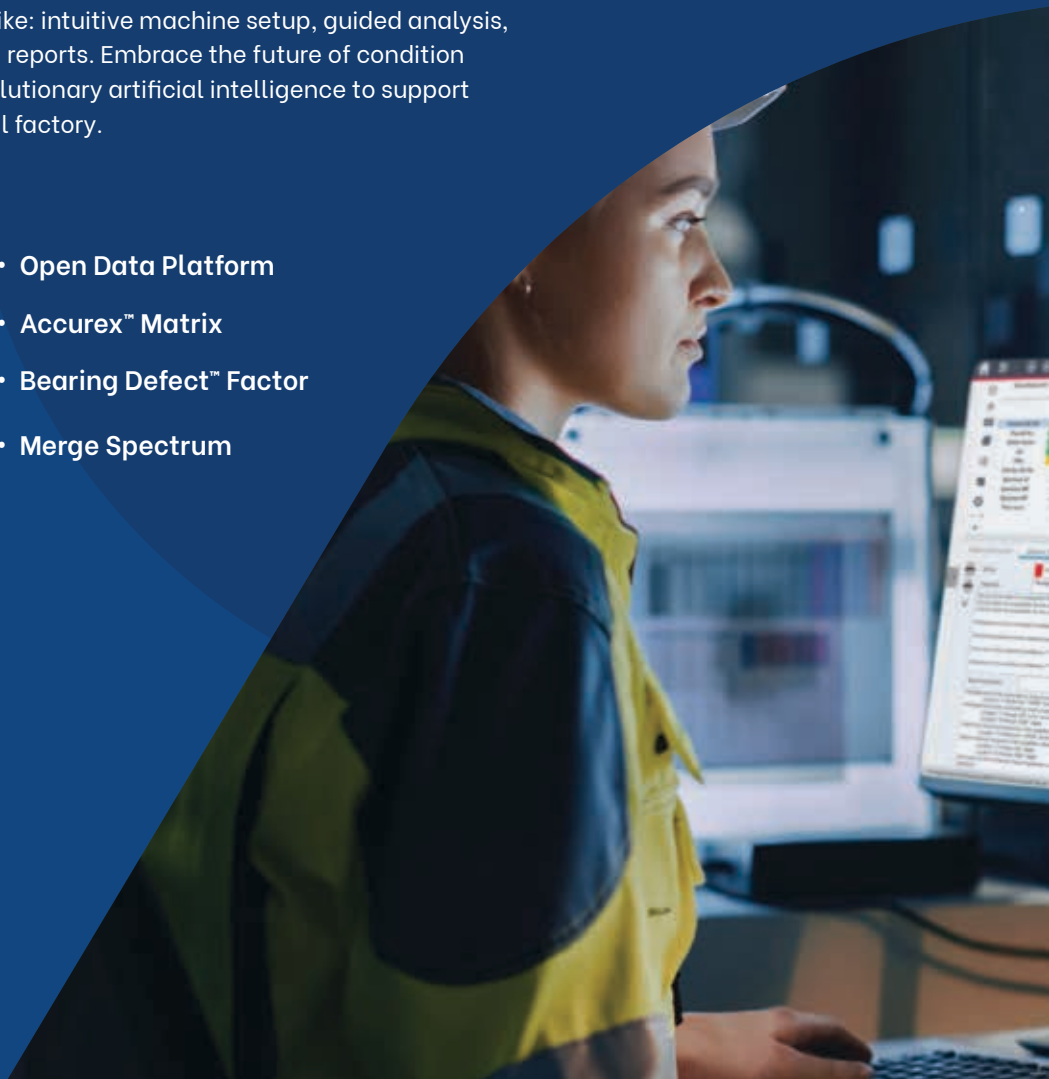
## NESTi4.0

Predictive maintenance software platform

NESTi4.0 software platform provides clear, concise and easy to understand information, for everyone involved in maintaining industrial machinery in operational conditions. NESTi4.0 is the most productive vibration analysis software platform available in the market. In addition to the full range of conventional analysis tools, the user is literally guided through his analysis with the help of a set of innovative tools, like: intuitive machine setup, guided analysis, and ease of access to the automated reports. Embrace the future of condition monitoring with NESTi4.0 and its revolutionary artificial intelligence to support predictive maintenance in your digital factory.

## FEATURES

- Machine Health Matrix
- Harmonix™ Index
- Machine Setup
- Shock Finder™ Index
- Open Data Platform
- Accurex™ Matrix
- Bearing Defect™ Factor
- Merge Spectrum



## NEST Vision

Keeping an eye on every asset.

NEST Vision – the latest addition to the Acoem NEST4.0 software platform, your gateway to comprehensive machine maintenance management. It offers advanced functionality and improved accessibility to monitor the health status of critical assets.

### Customized overview

The WebPortal adapts to individual user needs, providing a holistic view of critical machinery within various operational contexts.

### Data accessibility

Advanced functionality maximizes access to actionable data collected by Acoem's diverse monitoring instruments and apps, including portable, wireless, and continuous monitoring devices.

### Integration capabilities

It seamlessly integrates data from various sources, facilitating comprehensive trending analysis for enhanced decision-making.

### Device flexibility

Enjoy the flexibility of viewing information from any fixed or mobile device with a responsive display. No software downloads are required for seamless accessibility.

### Data storage options

Store your data either on premises or in the cloud, providing flexibility and security based on your specific data management preferences.

### Real-time monitoring

Access tailored interfaces in real-time via a dedicated URL, allowing you to leverage insightful monitoring data instantly.



# Advisor diagnostic services

Adaptable, scalable & flexible:

Advisor is an individually tailored, custom-designed condition-based maintenance strategy. It seamlessly integrates into your organisation's existing maintenance program to increase asset integrity and availability using a wide selection of user-friendly wireless, portable,

offline and online tools for data collection and AI-driven analysis complemented by human expertise. Advisor prioritises your maintenance schedule by identifying what actions need to be taken, when and for how long to achieve the highest level of asset reliability.

## Maintenance journey with advisor

Based on your specific requirements, our in-house experts will develop a customized plan to monitor the condition of your machines utilizing vibration analysis and an extensive range of other predictive technologies as required.

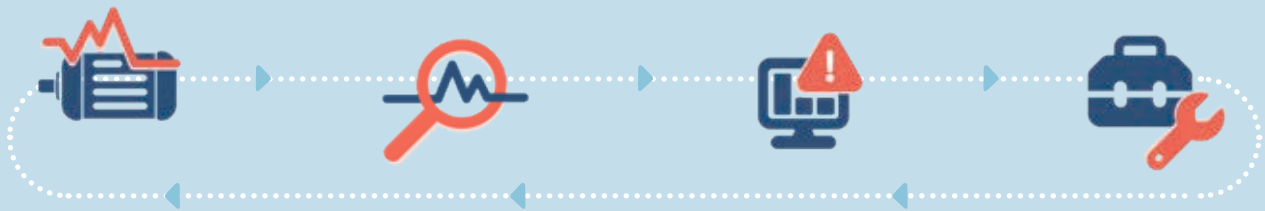
Factoring in each machine's unique characteristics like accessibility, complexity and criticality, we'll determine the most effective and user-friendly data collection methodology for each asset.

### 1. Data Collection

### 2. Vibration Analysis

### 3. Actionable Data

### 4. Corrective Action



## Why Advisor

- Maintain your assets at peak efficiency and condition thus reducing energy consumption
- Improving safety reducing cost
- Internal or external cloud storage to meet security protocols
- Global pool of Level 3 & 4 vibration analysis experts with intrinsic knowledge of the latest technologies available in every time zone, 24 x 7
- Combined Accurex AI-driven & human experience for remote diagnostics
- Total overview of individual asset condition or entire network of plants if applicable
- Eliminate the need to hire expensive specialists on each site with no onboarding or additional training costs
- Mentoring services provided & hand over process for new employees.



*Advisor provides a world class reliability program efficient at 100% since day one.*





## Asset reliability services & consultancy

We provide comprehensive monitoring and diagnostic services both remotely and on-site. Whether you prefer to be trained in deploying, maintaining, and monitoring your equipment, our team of experienced engineers is ready to assist you.

Alternatively, if you'd like us to handle the monitoring for you, we can guide you through every step of the process—from model training to diagnostics and implementing best practices.

### Vibration monitoring services

- Analysis & troubleshooting
- FRF/ODS
- Structure & pulsation
- Design validation
- 24x7 Onsite Service Contracts
- Annual Maintenance Contract
- Call based Troubleshooting Services

### Alignment service

- Shaft & bore
- Geometric
- Machine tool measurement

### ISO certification program

Powered and certified by Mobius Institute

- Vibration Analysis
- Ultrasound Inspection
- Asset Reliability Practitioner

### Advance Engineering Services

- Piping Monitoring & Stress Analysis
- Turbo Machinery - Troubleshooting & Balancing
- Noise Mapping
- False air detection/Vacuum leak detection services

### Other services

- Ultrasound & thermography inspection
- Oil analysis

### Acoem certification program

Vibration Technology | Bearing Technology  
Alignment Turbo Machinery | Precision Maintenance





## Laser shaft alignment

We offer a range of precision laser shaft alignment tools and packages to suit a variety of applications, budgets and expertise, from simple entry level, no frills devices to augmented mechanics Cloud-based connected systems.

### Acoem's alignment technologies



### GuideU™ interface revolutionizing 3D shaft alignment

Minimize human error and uncertainty in shaft alignment through realistic graphics and animated help screens. Our proprietary and patented graphical user interface redefines precision, simplicity, and accuracy in the alignment process.

- Customization
- Icon-driven design
- Color-coded display
- Realistic machine graphics
- Animated help screens
- Omniview



### Seamless Cloud Connectivity

Effortlessly upload alignment reports to Acoem's proprietary web portal, ensuring seamless data management and easy access to alignment records for analysis and comparison, thereby streamlining the documentation process.

### VertiZonal™ Measure once, move in two directions

Our adaptive interface displays exactly how much a misaligned machine needs to be adjusted and in which direction, no more re-measuring between the vertical and the horizontal phases to correct the horizontal misalignment. This industry-first function saves time and ensures accuracy the first time around.

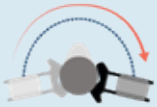


## Connected systems

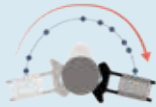


### AT-400

High-end dual-axis shaft alignment system with dual sweep for precise shaft rotation calculations and programs for horizontal, vertical, flatness and soft foot conditions.



Dual sweep



Multi point

### AT-300

Next-generation digital line laser system with extensive software functionality, streamlined user interface and intelligent sensor technology.

### AT-200

A smart app-based alignment solution making it a tool for short response time between machine failures and corrective actions.

### AT-100

App-based entry-level alignment tool with easy connectivity.

## Classic systems

### NXA Pro

Intuitive system with lightning-fast and straightforward operations

### NXA Ultimate

Advanced shaft alignment applications as well as geometric applications



### EVO



Simple and standard precision laser shaft alignment tools.

### ECO



Entry-level horizontal laser-based shaft alignment.

### EXO



Shaft alignment solution for hazardous areas.

## Precision systems



### RT-300

On-the-spot machine diagnostics with a complete precision shaft alignment tool and cloud connection.



### PAT

Laser belt alignment solution.

# Condition monitoring solutions

Acoem solutions are designed to help your critical machinery operate smoothly and efficiently to ensure greater longevity for your assets. Built around patented Artificial Intelligence (AI) technology, they help beginners as well as experienced users monitor machine vibrations and obtain precise and accurate results.



## MV-x

Fully automated, online system to monitor data in realtime that can identify defects.

- Embedded intelligence & processing
- Variable operating condition management
- Versatile 6 - 32 analog channels with field configurable universal inputs
- Powerful for low speed applications
- Powered by **Shock Finder™ & Defect Factor™**
- Connected & compatible (Modbus TCP, OPC UA)

## Sparrow

Advanced Wireless Monitoring for Balance of Plant

- Flexible software & hosting platform
- Compact, durable & effortless deployment
- Low cost of ownership
- Advanced diagnostics capabilities
- Remote support via our Acoem Advisor service whenever needed.
- Excellent meteorological performance
- Connect to data lake: OPC UA, Modbus TCP, MQTT



## Eagle

Automatic smart wireless vibration monitoring

- Accurex™ AI-powered diagnostics
- Remote diagnostic capabilities for critical assets
- Best TCO with field replaceable batteries
- Stainless steel body with very low thermal expansion
- Ideal for variable speed drives
- Connected & compatible (Modbus TCP, OPC UA)





## Falcon

Smart & advanced 4 channel vibration analyser

- Accurex™ AI-powered diagnostics
- Fastest data collection
- Triaxial wireless measurements
- Built in accessories: pyrometer, strobe light, camera
- Stand alone analyser & in-situ dynamic balancer



## Bearing Defender

Bearing health checker

- Patented wireless triaxial measurements
- Enhanced vibration meter
- Easy to use with instant results
- Innovative Zyxtum™ display
- The perfect lubrication assistant
- Smart health assessment powered by the bearing DefectFactor™ algorithm

## Machine Defender



Automatic vibration diagnostics

- Accurex™ AI-powered diagnostics
- Guided setup & measurement process
- Innovative wireless measurements
- Instant PDF report sharing
- Cloud trending capabilities





## Delivering 'back to original calibration for monitoring equipment

Whether your instrument is still under warranty, or needs an annual routine service and calibration, we perform all necessary testing to keep it in field-ready condition.

There is a difference between calibration and 'manufacturer's calibration'. And it can prove to be crucial during your monitoring. As people who know our sensors, monitors and devices inside and out, we make the difference. Our expert knowledge along with comprehensive and high-quality services, ensure that your instruments are returned in a 'back to new' status, in the shortest possible time.

At Acoem, we understand that accuracy of measurements goes beyond just ensuring the operational longevity of your instruments – accuracy of measurement has a key impact on your overall business ecosystem. This detailed approach to calibration and service has earned us the trust of customers from industries across the globe



## Manufacturing and R&D Facilities

Our aim of finding the right balance between quality and the environment also applies to our manufacturing facilities. Following the highest global standards of excellence, our high-technology business operations are equipped with state-of-the-art capabilities to manufacture products for local and international markets.



### 9 Countries

- Australia
- France
- Sweden
- Brazil
- Germany
- India
- Thailand
- USA
- UK



### 6 Factories\*

- Australia
- France
- Sweden
- India
- USA
- UK



### 5 R&D Centres\*

- Australia
- France
- Sweden
- USA
- UK

## About Acoem

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 220 distributors, our 850+ employees work across 28 offices, 6 manufacturing facilities and 5 R&D centres in 9 countries, to provide trusted, holistic data solutions for customers worldwide.

**Acoem links possibilities with protection.**

For more information visit [acoem.com](https://acoem.com)

