MVX
Real-time Monitoring Systems
Condition-based maintenance for critical machines

REDUCE YOUR ENVIRONMENTAL IMPACT
The reliability of critical machines is an essential factor for all industrial companies. The slightest unexpected shutdown results in direct production losses, and the associated maintenance issues (logistics, spare parts, etc.) can be significant. **MVX** is a multi-channel real-time monitoring system that enables the onset of faults to be detected early, thus providing peace of mind for industrial operators.

**MVX**
Monitoring and diagnostics for critical machinery

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**SMART MONITORING**

The smart measurement and processing functions built into MVX are used to collect the highly qualified information required to monitor and diagnose your most critical machinery. With **MVX**, kinematic complexity and the variability of operating conditions are no longer an issue.

**SMART DESIGN**

With 8 to 32 channels within the same sized instrument, MVX can receive vibration, electrical, oil or process information, and adapt to your mode of condition-based maintenance. The system can be extended virtually to several hundred channels via communication interfaces with PLCs.
A RESPONSE TO ANY CHALLENGE

**MVX** can detect and capture transient sub-millisecond phenomena over 100% of the signal. Time signals are recorded using a «pre-trigger» on all relevant channels so that the event can be analyzed retrospectively. Its real-time processing capabilities make it possible to:
- capture and record a transient phenomenon on a turbine for subsequent analysis
- control a rolling mill based on its vibration behavior.

MONITORING OF LOW SPEED SHAFTS

**MVX** offers an unrivaled solution for the monitoring of low speed shafts with a smart Shock Finder indicator. Abnormal impacts on shafts turning at very low speeds (from just a few rpm) are detected early and fully automatically. Real-time management of variable operating conditions enables **MVX** to escalate data required for analysis and allowing comparison over time.

ANALYSIS PRODUCTIVITY

**MVX** will notify you in real time of any event requiring your intervention, by e-mail, text message or digital output. The stored data, associated with operating conditions, is highly qualified: no false alarms!

« Reports are accessible in just a few clicks, navigating from a map of the world to a detailed view of a machine. »
INTEGRATED AND CONNECTED

A CENTRALIZED SYSTEM

The data acquired by MVX is automatically stored in the NEST software platform. Analysis of and access to the condition of production sites is simple: reports are accessible in just a few clicks, navigating from a map of the world to a detailed view of a machine. Wherever measurements have come from (a FALCON portable instrument, an EAGLE online wireless sensor, or an MVX online cabled monitoring system), the data is accessible via the same interface from any connected computer.

EASY TO DEPLOY

MVX communicates and transfers its results in automatically and reliably to the NEST software via a secure Ethernet link. Operators can choose to use the local cabled network, a Wi-Fi network, or over the Internet via a 3G link, for example.

INTEGRATED INTO YOUR ENVIRONMENT

MVX can be fully integrated into your environment. Process information is retrieved directly from the PLCs, eliminating any duplication of data. The advanced indicators defined can be transmitted in order improve process management, and maintenance management is optimized thanks to an interface with the CMMS system.

« With MVX, kinematic complexity and the variability of operational conditions are no longer an issue. »

Shock Finder automatic filtering

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FLEXIBLE
- All types of sensor
- 8 to 32 channels
- Number of channels can be extended for process information using Modbus and OPC interfaces
- Option: portable version for temporary monitoring (VMS)

COMMUNICATION
- Two-way communication with PLCs
- Alerts by e-mail / logic outputs
- Management of sub-optimal communication conditions (3G) for isolated machines

SMART MONITORING
- Real-time monitoring of one or more machines
- Storage of measurements required for analysis: the right information at the right time.
- Easy analysis of complex machines through management of operating conditions
- Early detection of faults on slow shafts with Shock Finder

ALL IN ONE
- Monitoring of vibrations
- Monitoring of oil (quality, particle count)
- Correlations with process information

A UNIQUE SYSTEM WITH INFINITE CAPABILITIES

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About ACOEM
Reduce your environmental impact

In today’s fast-moving world, the environment is increasingly impacted. The ACOEM Group is committed to sustainable development and help companies and public authorities limit their environmental impact by offering products and services that:

• Prevent and control air, noise and vibration pollution
• Increase the productivity and reliability of industrial machinery
• Contribute to the development of effective, robust & noiseless products
• Protect soldiers, sites and vehicles in military theaters of operation

The ACOEM Group is based in Limonest, France, and has 17 subsidiaries and offices around the world. The Group generates an annual turnover over €100 million and currently employs 750+ people globally.

For more information, please visit our website at acoem.com