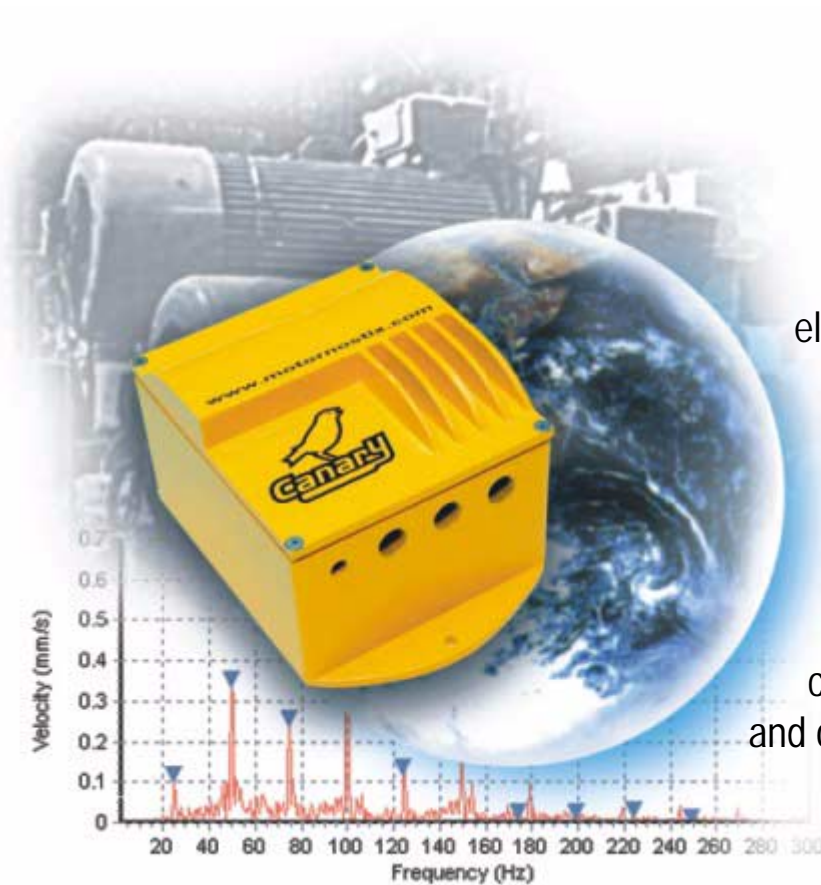


# Introducing the world of **WEB-BASED CONDITION MONITORING**



for  
electric motors  
gearboxes  
pumps  
fans  
rollers  
crushers  
conveyors  
compressors  
and other machinery



[www.motornostix.com](http://www.motornostix.com)



WEB BASED MONITORING

- About Us
- Product
- Demo
- News
- Training
- Links
- Contact Us
- Brochure

Motornostix is a web-based, online, condition monitoring system for electric motors, gearboxes, pumps, fans, rollers, crushers, conveyors, compressors and other machinery. The system is a complete, cost-effective maintenance management solution, designed to minimize downtime and increase productivity.

### The benefits to users of Motornostix:

- Improvement in plant reliability
- Reduction in annual repair bills
- Use of reliable predictive maintenance management tools

### Diagnostic indicators measured by each Motornostix Canary:

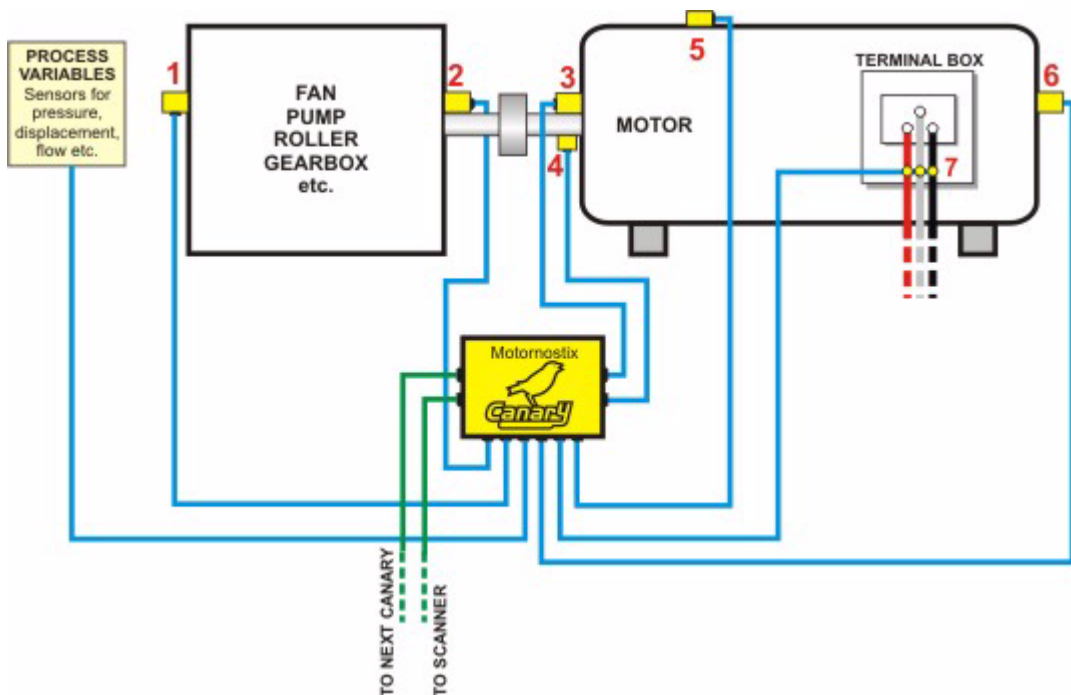
- Vibration and temperature at each bearing (refer to schematic)
- Motor current (all 3 phases)
- Motor speed
- Motor stray flux
- System process variables (e.g. pressure, flow and displacement)



### Motornostix technology

Motornostix is an integrated system incorporating hardware and software. At the core of the system is the Motornostix Canary, an intelligent data-acquisition unit providing advanced monitoring capability.

### Schematic of Canary and Sensor Layout



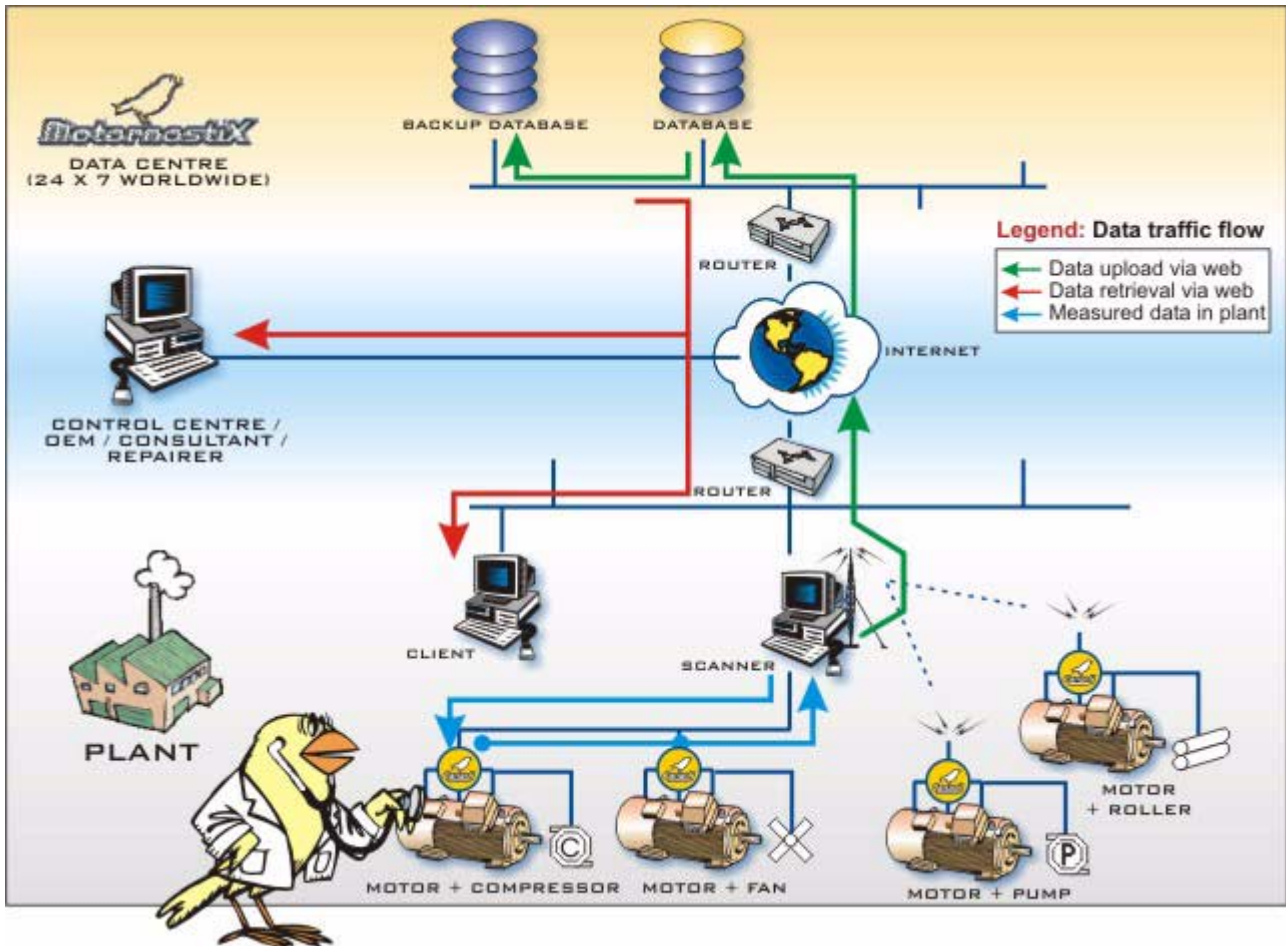
### Sensor Description

1. Machinery non-drive end  
2 axes of vibration and temp
2. Machinery drive end  
2 axes of vibration and temp
3. Motor drive end  
3 axes of vibration and temp
4. Motor speed
5. Motor stray flux
6. Motor non-drive end  
2 axes of vibration and temp
7. 3 x motor current sensors  
All 3 phases



## Incorporated in the client software is:

- A comprehensive, user-friendly database incorporating details of all the equipment being monitored
- Web access to continuous updates of measured data
- Diagnostic tools for analysing vibration spectra
- Neural analysis and diagnosis
- Graphing and trending of data
- Raising of alarms
- Reports: Alarm, Financial, Failure, Plant/Machinery Performance, Performance Histories, Total Runtime Hours
- Statistical analysis (Performance and Failure)

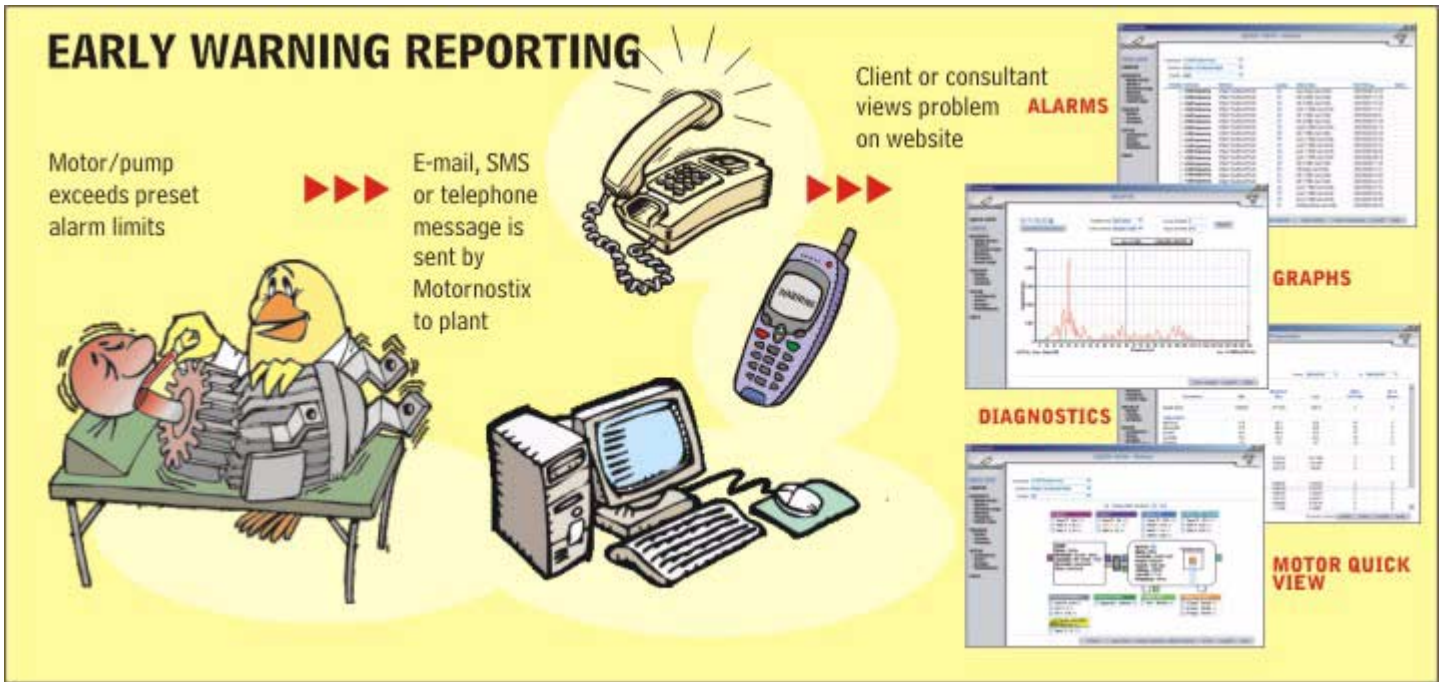


## System architecture from the factory through to Motornostix

Each motor to be monitored has a Canary (data-acquisition hardware unit) attached.

- The Canary units are linked to a scanner at the plant (by wire or wireless link)
- The scanner interrogates each Canary, typically every minute, uploading measured data
- The scanner wraps the accumulated data and sends it via the Internet to Motornostix, where it is securely warehoused
- At the Motornostix Data Centre the measurement data is intelligently filtered through a neural network to check for variations in the measured data. If significant, a fault is diagnosed and alarms are raised
- Plant personnel are alerted by SMS, email or telephone
- Web connectivity gives immediate, continuous access to all plant data
- Graphs/Alarms/Reports/Performance Histories and other decision-support information on monitored equipment can be accessed online via the web, from anywhere, at any time
- Authority to access data can be given to plant managers, consultants, OEM's, repairers, etc.
- Support staff at Motornostix Control Centres are available to answer customer queries
- Motornostix takes responsibility for the installation and maintenance of the whole system, including the database
- Backups are also provided for all system hardware and software





## Motornostix expertise

The Motornostix team brings a wealth of experience in intelligent instrumentation, engineering software and commercial application.

## About Motornostix

Motornostix operates on four continents with regional offices in UK, USA, Australia and South Africa. This service is backed by more than 150 technical and support staff.

Motornostix systems are non-intrusive and provide a continuous monitoring function. Data measured by each Motornostix Canary is uploaded via the Internet to a centrally located database where advanced analysis, including neural network classification, provide proactive diagnostic tools for professional investigation. The analysis software

can be accessed by authorized users from anywhere in the world using a web browser.

Motornostix provides a complete condition monitoring service that includes all aspects of design, installation, commissioning and support. The service is provided on the basis of a monthly fee covering monitoring, upgrades, support and maintenance.

Motornostix is committed to the highest standards of technical competence and customer service. Staff and associates receive rigorous training and accreditation.

Motornostix serves a broad range of industries including mining, power generation, petrochemical (refineries, on- and offshore oil rigs), manufacturing (paper, steel and vehicle assembly),

water pumping and treatment, railways (electrical traction) and shipping (propulsion and on-board power generation).

Motornostix's mission is to provide affordable, innovative, online web-based condition monitoring systems for a broad range of electrical and mechanical equipment.

## Business model

The Motornostix system is offered on the basis of a 12 - 60 month service contract. Clients simply pay for the installation (mainly labour and cabling) and a monthly service fee.



It pays to know before you blow!



**Motornostix (Pty) Ltd**

Reg. No: 2000/010900/07



United Kingdom: [uk@motornostix.com](mailto:uk@motornostix.com)



United States of America: [usa@motornostix.com](mailto:usa@motornostix.com)



Australia: [au@motornostix.com](mailto:au@motornostix.com)



South Africa: [za@motornostix.com](mailto:za@motornostix.com)

Website: [www.motornostix.com](http://www.motornostix.com)