



## IF THIS IS YOUR EXPERIENCE OF CONDITION MONITORING...

- You have already tried condition monitoring, and you know that Condition Based Maintenance should bring real advantages, but it's not been as easy to achieve as you'd like -

Hand held vibration monitoring equipment looks affordable up-front, but requires staffing to go and take those readings – which costs money and means diverting them from other important, and sometimes urgent, tasks.

Permanently installed sensors get around the manpower problem but at a cost – the cabling alone can be a very significant expense.

Wireless sensors can help avoid the cabling problem, but can be vulnerable to hostile environments.

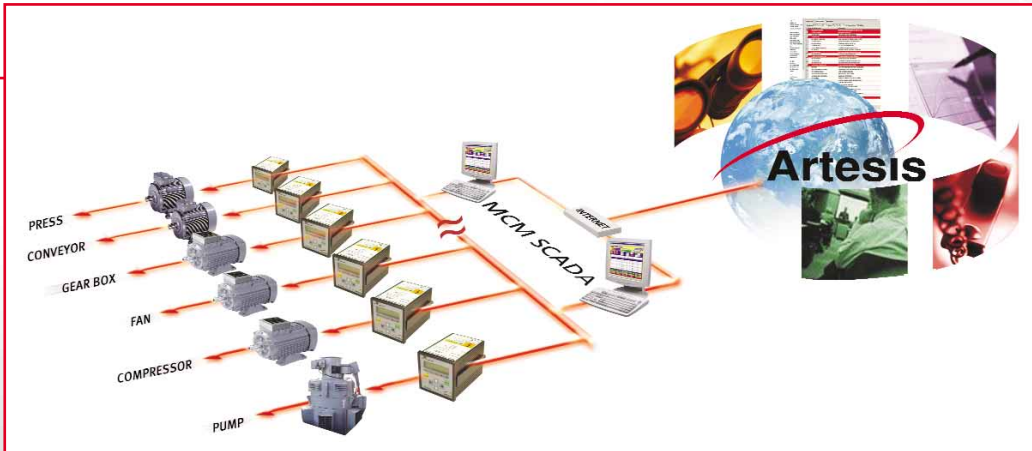
And there are some situations (eg submerged pumps, hazardous environments, nuclear zones or severe space constraints) where inaccessibility makes it hard to use either handheld or permanently installed sensors, regardless of whether they are wireless or not.

And after all that, maybe you're not sure whether you get the full value you should from all those readings you take – it takes time to analyse all those graphs. Sometimes you wonder whether the conclusions your people draw from those wiggly lines are 100% reliable as a basis for action.

Additional techniques such as oil analysis, Infra-Red Cameras, and acoustic emission have a role, but all take time to do and require skill and experience to deliver useful results.

## ...THEN ARTESIS HAS THE ANSWER FOR YOU:

- Artesis gives you the benefit of continuous monitoring, at a cost comparable to handheld portable devices, without the need for staff to gather data.
- It provides continuous information on the status, condition and performance both of your equipment and the electric motor driving it. Where an incipient problem is identified, it provides simple guidance on the action to be taken – whether simply to keep an eye on the equipment, or to plan in maintenance work, or to stop the plant right away. And if maintenance is required, it gives clear guidance on the nature of the problem.
- When an alert is raised, it can be automatically and immediately sent by email or text message to the person who needs to know – eg the operator to check or stop the plant, or the technician or foreman to carry out maintenance work.
- Really clever technology makes it really simple to use. The technology, developed for NASA and covered by worldwide patents, uses the electric drive motor as a sophisticated transducer to capture information about the driven equipment, and presents this in a simple format which can be understood by operators or technicians directly, without the need for an expert to study and interpret trends or other “wiggly lines”.
- This information is accessible via any device with a browser connected to the data – whether it is a technician on-site with a wireless handheld device, a maintenance planner in his office, or a manager working offsite accessing the data via the internet at any time of day or night, anywhere in the world.
- Because it uses the electric motor as a transducer, it only needs to be connected to the electrical supply to the equipment, in the switch room or feeder panel, so it doesn't require modifications to your plant to fit sensors, nor any new cabling out to the equipment, making it quicker, simpler and cheaper to install.
- The absence of a need for on-plant sensors also means it is ideally suited for monitoring inaccessible equipment such as submersible pumps, or equipment in hazardous or inaccessible environments such as flammable, toxic or radioactive locations. All connection work can be carried out safely in the switch room or supply panel area.
- And the absence of on-plant sensors means it is invulnerable to damage from a hostile plant environment, whether temperature, corrosion, humidity, vibration or simply being wiped out by a forklift truck, so it offers a more robust and reliable service.



## WHAT IT CONSISTS OF:

- For each item of equipment you monitor, you need an Artesis MCM unit, that connects into the three-phase electrical supplies to the motor. It installs in the switch room, and gives both local and remote outputs. The local output is an LED status indicator, with 5 conditions:

Normal operation

Watch line (eg abnormal voltage dips or spikes have been observed)

Watch load (eg total load on the equipment is exceeding permitted normal range)

Perform Maintenance (more detail is provided via MCM SCADA)

STOP (urgent problem – more detail provided via MCM SCADA)

- You need a single copy of the MCM SCADA software – this is a powerful package that provides the diagnostic and graphical outputs and manages the communication of alerts via email or text message to whoever you choose to inform. Only one copy of the software is required however many drives you are monitoring, and however many people log into the system.
- You also need an available PC to drive the system, and communications cabling to link to your network.

## THIS SOUNDS SO GOOD, HOW DO I GET ARTESIS WORKING IN MY PLANT?

- Like everything else about Artesis, it is simple and inexpensive. Just give us a call or email or fax on the number below, and tell us about your situation. We will send out an advisor to come and discuss your situation, and provide you with a quote for the best system for you, whether that is a simple purchase of a number of monitoring units and software, or a complete installation and advisory service, or anything in between. After that, you simply give us a purchase order and we do the rest.

Simple isn't it?



**SIMPLE, EFFECTIVE  
CONDITION MONITORING**

**“...IT SIMPLY WORKS”**