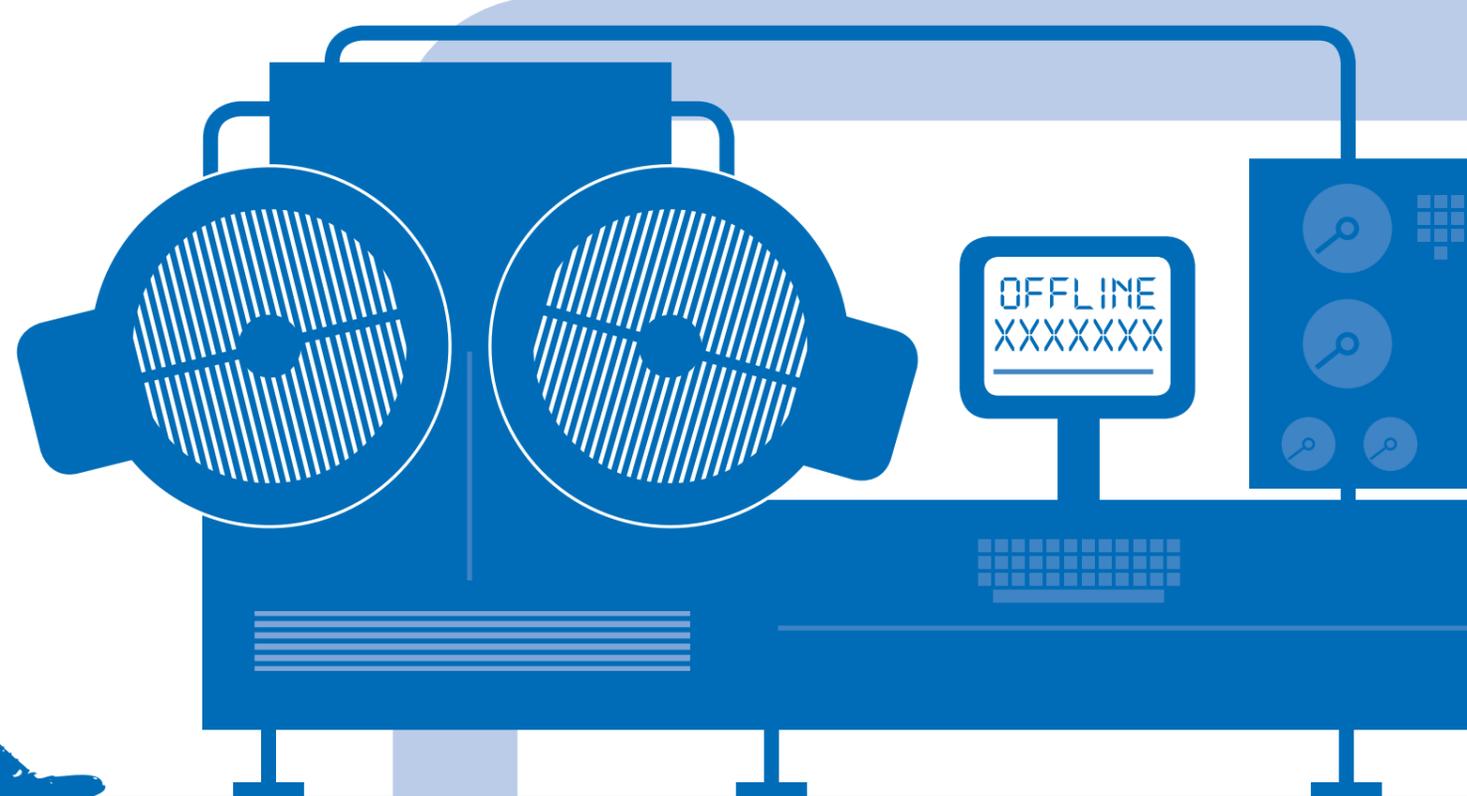


Let's talk about this

WHAT'S GOOD FOR PEOPLE WITH PROBLEMS IS GOOD FOR MACHINES WITH PROBLEMS TOO. THOUGH GETTING A CONVEYOR OR A PUMP ONTO THE PSYCHIATRIST'S COUCH MIGHT PROVE TRICKY.



Information gained from Condition Monitoring is essentially the equipment 'talking' about its operations. Then, just as a psychiatrist can interpret dreams, for instance, to get to the root of the problem, so the experienced engineer can interpret vibration data, or temperature, pressure, speed or airflow variations, to diagnose a potential or actual machine fault.

At its most basic, Condition Monitoring is like the patient who won't say much. A green, amber or red light on a control panel doesn't tell you much more than 'Yes, I'm okay', 'Actually I feel a bit funny', or 'Help, it's all gone horribly wrong!' But at its most advanced, Condition Monitoring with cloud-hosted PPM and asset management information is as close as you can get to seeing inside the patient's – or the machine's – brain.

If it's not dragging out the analogy too far, the patient will get the best treatment if the psychiatrist already knows that the doctor has diagnosed a physical ailment, or that the dentist has discovered a problem with the patient's teeth. In the same way, an engineer will be able to take more relevant, more timely action if he has access to all

the data available about the machine – from inspection and diagnostic reports to repair reports, oil analysis and any other post-data acquisition condition monitoring reports.

Having all the information available and easily accessible in one place – online – saves time, facilitates an easier flow of information, and can increase uptime. Linking together Online Condition Monitoring with Asset Management provides a flow of information which rarely exists in most facilities, and which can massively change the awareness of, and ability to act on, equipment issues. In other words, a report is only a report if it is reported to someone who can act on it. Whereas, if it remains on the desk of the person who wrote it, it might make them feel good but it won't do much to help keep production running.

With easier access to all of the data, for all of the people, all of the time, it's possible to put into place a virtuous circle of continuous improvement of any asset.

This begins with an assessment of the data to identify and prioritise opportunities

for improvement. The next step is then to take action – making the change identified as necessary to improve the process. The third step is to monitor: measuring the key areas, checking the effect of the actions taken, and implementing action triggers. The fourth is to maintain, by undertaking corrective actions when the triggers are reached. Then finally – or firstly, depending on how you look at it – we come round to assessment once more.

Without a system in place to share the data, quickly and automatically, this virtuous circle can soon become a tangle of late actions, missed opportunities, poorly maintained equipment and unnecessary downtime – or 'analysis paralysis'.

If, for example, a report sits on someone's desk for too long, by the time it reaches the people who can take action the next assessment may have already taken place, which naturally records no change (or a deterioration) in the condition of the equipment because no action had been taken at that time. But by the time the second report arrives, the actions may have been taken. So now the whole system is out of sync and the data is worthless.

Similarly, technicians can be overwhelmed with requests for actions when there is no possibility of a break in production to carry them out. And by the time there is, the actions required may have been lost or forgotten, or simply get overlooked.

A properly set-up Online Condition Monitoring programme, co-ordinated with an Asset Management programme managed by an outside agency such as ERIKS, can overcome all these difficulties.

ERIKS can act as a central point for assessing the data which has been gathered and shared, and then has all the information needed to establish what actions are required, is able to monitor the effects of those actions, and can carry out any maintenance needed.

With a full sharing of information, ERIKS will also be aware of the relative criticality of each piece of machinery, and of the opportunities available for planned downtime, and will then be able to take timely, corrective steps. Because after all, talking is only effective if it leads to action.

Let's listen to this

You can find out more about how Online Condition Monitoring could work for your equipment, at Maintec 2013. ERIKS' Condition Monitoring Manager – Dave Manning-Ohren – will be giving a talk on 5th March, entitled 'Web-based Condition Monitoring. Where and when will it work for me?'

This short introduction to Online Condition Monitoring will clarify where such systems pay dividends, and how

they integrate with CMM or asset management programmes. Online Condition Monitoring is a constantly changing development within the CM field, and can create significant reliability improvements if used in the right area. However this has to be balanced with the high level of skill needed to design and implement these systems.

Dave Manning-Ohren explains how to achieve this balance and the results you need.



Dave Manning-Ohren
Condition Monitoring
Manager, ERIKS



- **Assess** – Identify and prioritise opportunities for improvement
- **Action** – Make changes identified to improve the process
- **Monitor** – Measure the key areas and implement action triggers
- **Maintain** – Undertake corrective actions when triggers reached

