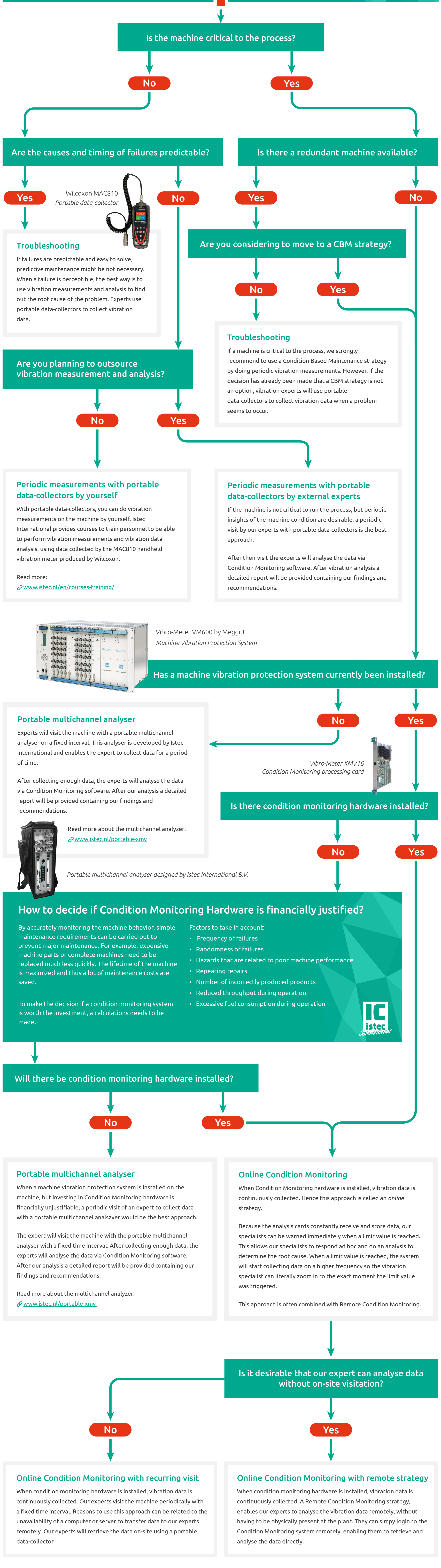


Which Vibration Monitoring Strategy fits my machine?



Troubleshooting
If failures are predictable and easy to solve, predictive maintenance might be not necessary. When a failure is perceptible, the best way is to use vibration measurements and analysis to find out the root cause of the problem. Experts use portable data-collectors to collect vibration data.

Are you planning to outsource vibration measurement and analysis?

No

Periodic measurements with portable data-collectors by yourself
With portable data-collectors, you can do vibration measurements on the machine by yourself. Istec International provides courses to train personnel to be able to perform vibration measurements and vibration data analysis, using data collected by the MAC810 handheld vibration meter produced by Wilcoxon.

Read more:
www.istec.nl/en/courses-training/

Troubleshooting
If a machine is critical to the process, we strongly recommend to use a Condition Based Maintenance strategy by doing periodic vibration measurements. However, if the decision has already been made that a CBM strategy is not an option, vibration experts will use portable data-collectors to collect vibration data when a problem seems to occur.

Periodic measurements with portable data-collectors by external experts
If the machine is not critical to run the process, but periodic insights of the machine condition are desirable, a periodic visit by our experts with portable data-collectors is the best approach.

After their visit the experts will analyse the data via Condition Monitoring software. After vibration analysis a detailed report will be provided containing our findings and recommendations.



Vibro-Meter VM600 by Meggitt
Machine Vibration Protection System

Has a machine vibration protection system currently been installed?

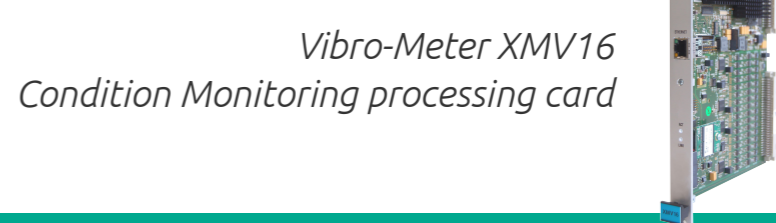
Portable multichannel analyser
Experts will visit the machine with a portable multichannel analyser on a fixed interval. This analyser is developed by Istec International and enables the expert to collect data for a period of time.

After collecting enough data, the experts will analyse the data via Condition Monitoring software. After our analysis a detailed report will be provided containing our findings and recommendations.



Read more about the multichannel analyzer:
www.istec.nl/portable-xmv

Portable multichannel analyser designed by Istec International B.V.



Vibro-Meter XMV16
Condition Monitoring processing card

Is there condition monitoring hardware installed?

How to decide if Condition Monitoring Hardware is financially justified?

By accurately monitoring the machine behavior, simple maintenance requirements can be carried out to prevent major maintenance. For example, expensive machine parts or complete machines need to be replaced much less quickly. The lifetime of the machine is maximized and thus a lot of maintenance costs are saved.

To make the decision if a condition monitoring system is worth the investment, a calculations needs to be made.

Factors to take in account:

- Frequency of failures
- Randomness of failures
- Hazards that are related to poor machine performance
- Repeating repairs
- Number of incorrectly produced products
- Reduced throughput during operation
- Excessive fuel consumption during operation

Will there be condition monitoring hardware installed?

Portable multichannel analyser
When a machine vibration protection system is installed on the machine, but investing in Condition Monitoring hardware is financially unjustifiable, a periodic visit of an expert to collect data with a portable multichannel analyser would be the best approach.

The expert will visit the machine with the portable multichannel analyser with a fixed time interval. After collecting enough data, the experts will analyse the data via Condition Monitoring software. After our analysis a detailed report will be provided containing our findings and recommendations.

Read more about the multichannel analyzer:
www.istec.nl/portable-xmv

Online Condition Monitoring
When Condition Monitoring hardware is installed, vibration data is continuously collected. Hence this approach is called an *online* strategy.

Because the analysis cards constantly receive and store data, our specialists can be warned immediately when a limit value is reached. This allows our specialists to respond ad hoc and do an analysis to determine the root cause. When a limit value is reached, the system will start collecting data on a higher frequency so the vibration specialist can literally zoom in to the exact moment the limit value was triggered.

This approach is often combined with Remote Condition Monitoring.

Is it desirable that our expert can analyse data without on-site visitation?

Online Condition Monitoring with recurring visit
When condition monitoring hardware is installed, vibration data is continuously collected. Our experts visit the machine periodically with a fixed time interval. Reasons to use this approach can be related to the unavailability of a computer or server to transfer data to our experts remotely. Our experts will retrieve the data on-site using a portable data-collector.

Online Condition Monitoring with remote strategy
When condition monitoring hardware is installed, vibration data is continuously collected. A Remote Condition Monitoring strategy, enables our experts to analyse the vibration data remotely, without having to be physically present at the plant. They can simply login to the Condition Monitoring system remotely, enabling them to retrieve and analyse the data directly.



About Istec International

Istec International has over 40 years of experience in the field of measurement and control. Istec specializes in machine vibration protection systems and condition monitoring. Our team consists of highly educated specialists and certified with ISO 18436-2 LEVEL 3 and ISO 18436-2 LEVEL 4. We aim for high customer satisfaction, optimal support and services.

Do you want to know more about our Condition Monitoring services?
www.istec.nl