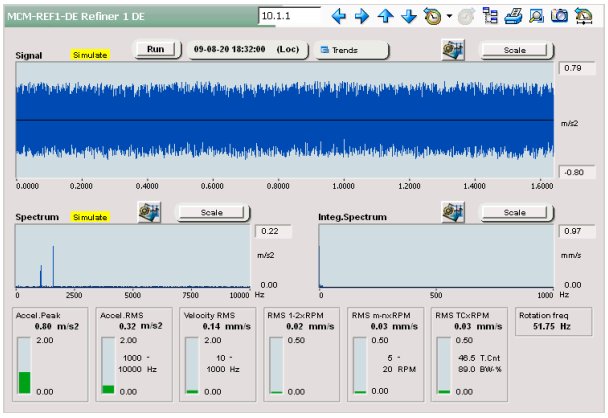
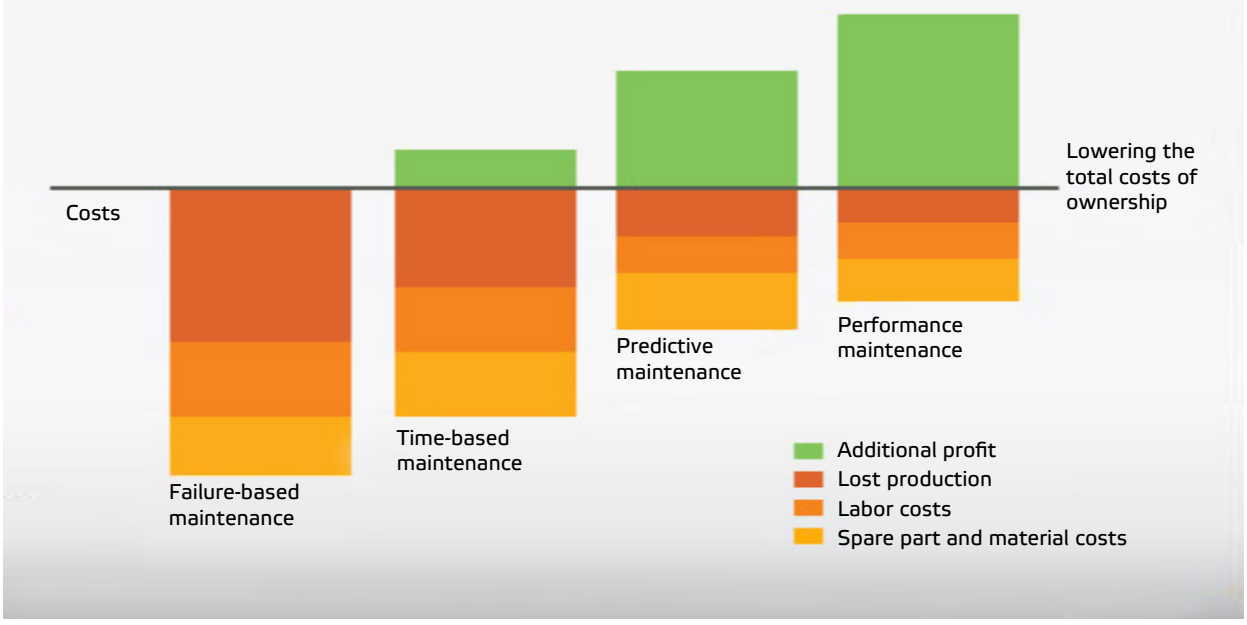
Valmet DNA Machine Monitoring

Predictive maintenance brings significant cost savings by preventing unexpected machine failures and production downtime. Vibration-based condition monitoring is a central tool for predicting mechanical faults in critical machinery. Condition monitoring produces real-time machinery health information that can be utilized in planning and scheduling maintenance operations. Taking the right action at the right time guarantees maximum process availability and an efficient maintenance process.



Benefits

- High production availability
- Efficient maintenance process
- Support for collaborative operation and maintenance
- Easy integration of process and machine condition information
- Cost-efficient system implementation and maintenance



Predictive maintenance with DNA Machine Monitoring lowers the costs of unplanned downtime and production losses

Valmet

Real-time machinery health information for operators and maintenance

DNA Machine Monitoring provides condition information for process operators and maintenance personnel through one common user interface. This interface provides personnel in the control room and maintenance office with the same view. Operators are alerted immediately if a risk of severe machine failure occurs. Tools for more detailed signal analysis are available for maintenance personnel.

Efficient problem solving by integrating process data with condition information

Process control and condition monitoring are fully integrated in Valmet DNA. Process data and machinery condition information can be easily combined for efficient analysis and problem solving. It is no longer necessary to search for information from several sources or build data links between separate systems.



Enabling collaborative operation and maintenance through one common view for all users.



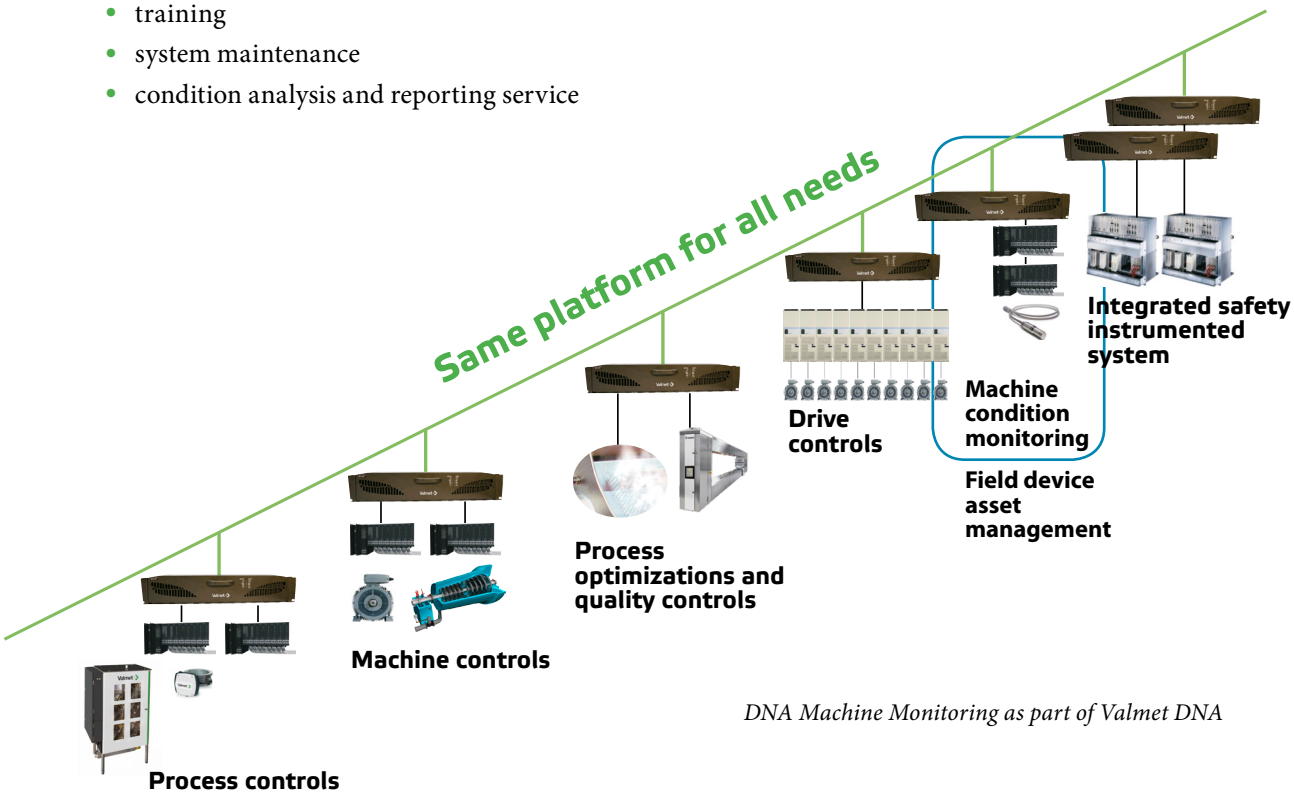
The new user interface combines machine vibration data with process information

Valmet

Complete solution for condition monitoring

Valmet is a one-stop supplier for condition monitoring. Our offering includes a full range of products and services for successful implementation and use of online systems:

- sensors and cabling
- system HW
- application SW
- engineering service
- start-up support
- training
- system maintenance
- condition analysis and reporting service



DNA Machine Monitoring as part of Valmet DNA

System integration brings cost benefits

An integrated solution allows shared system resources to be utilized for control and condition monitoring applications. The same operator stations, history databases, and system network can be used by both applications. System maintenance is easier because only one engineering environment is needed.

I/O units for high frequency measurements

I/O units measure condition monitoring signals with a 20 kHz sampling rate. AIF8V has built-in signal conditioning that includes a constant current source for piezoelectric accelerometers. The unit can also be configured for voltage or current input from other sensor types. AIF8T measures trigger signals that are used for tracking the rotation frequency of the machinery being monitored.

AIF8V for AC/DC coupled signals:

- 8 channel parallel measurement
- 20 kHz sampling frequency
- 4 mA constant current supply for IEPE sensors
- galvanic isolation between field and system.

AIF8T for trigger and status signals:

- 8 channel parallel measurement
- 20 kHz sampling frequency
- continuous 24 V/30 mA power supply for all I/Os
- galvanic isolation between field and system.



DNA Machine Monitoring hardware

Reliable sensors for harsh environments

Valmet's condition monitoring sensors and cabling solutions are designed for demanding industrial applications. In addition to accelerometers for vibration monitoring, dynamic pressure sensors are available for measuring pressure variations in process piping or hydraulic systems. Trigger sensors can be used for measuring the rotation frequency of the machinery being monitored.



RVT-105
Vibration sensor specially designed for wet and humid environments where chemical splashing can occur.



RVT-120
Vibration sensor for dry environments, designed to withstand high temperatures.



RTS-226
Magnetic trigger sensor with a magnet attached to a rotating machine element. The sensor is used for measuring rotation frequency.



RPT-122
Pressure sensor for measuring dynamic pressure variations in process piping.



RPT-133
Pressure sensor for measuring dynamic pressure variations in hydraulic systems.

For more information, contact your local Valmet office. www.valmet.com

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