

# Valmet DNA Machine Monitoring course

This course details the Valmet DNA Machine Monitoring features as well as the theory and main concepts of mechanical condition monitoring. Course covers DNA Machine Monitoring tuning displays, acceleration sensors and the Valmet I/O units used by DNA Machine Monitoring.



## Objective

After completing the course the participant will understand the purpose and main principles of computer based mechanical condition monitoring.

He/She is familiar with the measurement units used in vibration measurement and can interpret the Valmet DNA Machine Monitoring operator picture.

The participant can use maintenance pictures to set up scales and vibration limits. He/she has skills to troubleshoot and change a faulty ACN I/O unit or sensor.

## Target group

Persons responsible for site mechanical condition monitoring

## Prerequisite

Valmet DNA operating skills.

## Course duration

2 days

## Course limit

Max. 8 attendees

## Benefits

Through Valmet's professional training programs, either standard courses or tailored to your specific needs, you will have optimized competences available in your organization.

Together we make a development plan for your personnel based on your business needs, and deliver the agreed training flexibly and effectively.

Optimized competence development enables

- better utilization of features in the automation and control solutions

- proper installation, start-up, operation and maintenance of the solutions and equipment
- improved knowledge of product-related safety and environmental issues
- better employee motivation

The results are typically visible as higher productivity, plant availability, improvements in end product quality, time and material savings.



# Course Program

## Day 1, 9:00 – 16:00

### Basic concepts of mechanical condition monitoring

- Vibration and rotating elements as a source of vibration
- Basic concepts of vibration measurements
- Frequency analysis and spectrum
- STA Synchronous Time Averaging

### Valmet DNA Machine Monitoring user Interface

- User picture in Valmet DNA Operate hierarchy
- Info database: saving and retrieving a measurement

### Typical mechanical condition monitoring cases

- Bearings
- Motors
- Pumps and fans
- Gearboxes

## Day 2, 8:30 – 15:30

### Valmet DNA Machine Monitoring hardware

- Acceleration, pressure and trigger sensors
- ACN I/O units AIF8V and AIF8T

### Valmet DNA Machine Monitoring maintenance pictures

- Grouping the devices
- Setting vibration alarm limits

### Hands-on condition monitoring with Valmet DNA Machine Monitoring

- Faulty bearing
- Unbalanced rotating element
- Replacing the ACN I/O units and sensors

