

Valmet IQ CD Controls course

This course provides a review of the theory and algorithms of Valmet IQ CD Controls profile control software. Controls are detailed through the use of theory and with the help of Valmet DNA simulator. Tuning displays and tuning procedures are also examined.



Objective

After completing the course the participants will be familiar with the Valmet IQ CD Controls product. They will be able to evaluate the process and the current CD control performance as well as maintain the CD control tuning.

Target group
QCS maintenance persons

Prerequisite

Valmet DNA operator skills

Course duration

4 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

Profile controls by Valmet

Valmet IQ CD Controls operator interface

- Exercises with simulator

Profile controls and multi variable theory

IQ CD Controls application components

Optimization algorithm

- Exercises with simulator
- Error vs. action
- Execution interval

Day 2, 8.30 – 16.00

IQ Automodeling CD test tool

- Bump testing the simulator

Fixing mapping errors

- Mapping geometry
- Exercises with simulator

Defining the response shape

- Exercises with simulator

Day 3, 8.30 – 16.00

Performance trends

- 2-sigmatrends
- Control A/M-trend

Measurement preprocessing

- Profile filtering
- Profile validation

Profile predictor

- Model based profile prediction
- Time or profile synchronization

Actuator handler

- Actuator limitations
- Level hold
- Handling the sheet break

Day 4, 8:30 - 15:00

IQ CD Controls and actuator specialties

- Dry weight control with dilution HB
- Caliper control with roll heating
- Dry weight control with dilution HB

