

ABB UNIVERSITY COURSE DESCRIPTION

# C302

# Maintaining an Industrial IT Quality Control System with AC800M Controllers



Learn to maintain the hardware and software of an Industrial IT Quality Control System with Process Portal A and AC800M process controller.

# Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

# **Student Profile**

This course is targeted to technicians responsible for first echelon maintenance of Industrial IT quality control.

## **Prerequisites**

Students should have some basic knowledge of personal computers, process control, and electronics. Students should first attend course T314, Basic Configuration for 800xA, or have equivalent experience.

Upon completion of this course, the student should attend the course C232, Smart Platform, to also learn frame maintenance.

### **Course objectives**

Upon completion of this course the participants will be able to:

- Scan the Smart Platform frame
- Make a grade change to a different grade of paper
- Put control in auto, change setpoints, force manual outputs

- Select and control PID loops using the video pages
- Run standardize and sample check procedures on the sensors
- Print and interpret standardize and sample check reports for each sensor
- Correlate sensor readings and adjust for the grade of paper
- Test the TCP/IP network, and the QC LAN
- Use the OPC Inspector to test data flow
- Restart the controller, the operator station, and the frame
- · Restore and back-up software
- · Modify a grade of paper using video pages
- Set up a log configuration and trend display
- Start up the service work station and use health reports to check frame and sensors
- · Maintain controller hardware
- Use Smart Profiler work station to check Smart Profilers

#### **Main Topics**

- · Operate IT Process Portal A
- AC800M process controller
- Smart Platform and Smart Profilers
- Service work station

#### **Duration**

The duration is 5 days

#### **Course Outline**

Day 1	Day 2	Day 3	Day 4	Day 5
Course introduction	System 800xA fundamentals	• QC grade setup	Standardize	Frame software back-up and
• System introduction training	<ul> <li>Aspects/objects</li> </ul>	· Log configuration and trend-	Sample check	restore
system	<ul> <li>Plant explorer layout</li> </ul>	ing	Calibrate sample	• System 800xA import/export
<ul> <li>Screen navigation</li> </ul>	• QC workplace	<ul> <li>Reel report history mainte-</li> </ul>	<ul> <li>SP health reports</li> </ul>	<ul> <li>System 800xA back-up</li> </ul>
Grade change	Controller hardware	nance	<ul> <li>Troubleshooting</li> </ul>	<ul> <li>Norton ghost back-up</li> </ul>
• L2 mode change	Control Builder	• Lab	• Lab	• Lab
<ul> <li>Scanner operation</li> </ul>	• Lab	- Grade date	- Sensor procedures	- System back-up
• Lab	- Remove and replace hard-	- Trend setup	- Network troubleshooting	- Service work station
- System familiarization op-	ware modules	- Report history mainte-	- System status	
erations	- Test power supplies	nance		
	- Test I/O signals			
	- Inspect programs			