

## C302R6

# Maintaining an Industrial IT Quality Control System with AC800M Controllers Version 6



Learn to maintain the hardware and software of an Industrial IT Quality Control System 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 C235, Network Platform, to also learn frame maintenance.

### Course objectives

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

- Scan the Network 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 standardize and sample check reports for each sensor
- Adjust sensor reading for the grade of paper
- Test the TCP/IP network, and the QC LAN
- Use tools to test data flow
- Restart the controller and the operator station
- Restore and back-up software
- Modify a grade of paper using video pages
- Set up a log configuration and trend display
- Maintain controller hardware

### Main Topics

- Operate 800xA Quality Control System
- Modify Quality Control System displays
- AC800M process controller
- Product Codes

### Duration

The duration is 5 days

## Course Outline

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"><li>• <b>Introductions</b></li><li>• <b>Quality Control 800xA System Overview</b></li><li>• 800xA Basics</li><li>• Quality Control 800xA Architecture</li><li>• Software Release History</li><li>• Project Osprey</li><li>• System Start-up</li><li>• <b>Exercise - QCS Start-up</b></li><li>• QCS Tools</li><li>• Reports</li><li>• <b>Exercise - Web Quality Control Tools</b></li><li>• Memory Map Viewer</li><li>• Smart Inspect Diagnostics Tool</li><li>• Measurement Components</li><li>• QC Report History Setup Tool</li><li>• QCS Tools Continued</li><li>• <b>Exercise - Web Quality Control Tools Continued</b></li><li>• QC Text Translations</li><li>• QC Excel Sensor History Reporting</li></ul>	<ul style="list-style-type: none"><li>• <b>Review – Q/A Session</b></li><li>• <b>Quality Control 800xA System Overview</b></li><li>• Product Codes</li><li>• <b>Exercise - Product Codes</b></li><li>• Online Product Code Editor</li><li>• Offline Product Code Editor</li><li>• <b>System Operation</b></li><li>• Quality Control Workplace</li><li>• Grade Change</li><li>• MCD Control Operation</li><li>• MD Control Operation and Control Modes</li><li>• Scanner Operation</li><li>• <b>Exercise - Navigation and Operation</b></li><li>• Workplace Tool \ Plant Explorer</li><li>• Scanner Control</li><li>• Grade Change</li><li>• MCD Controls</li><li>• MD Controls</li></ul>	<ul style="list-style-type: none"><li>• <b>Review – Q/A Session</b></li><li>• <b>AC800M Controller &amp; Control Builder</b></li><li>• MD Control program functions</li><li>• AC800M Controller Hardware</li><li>• IP Address configuration, Firmware update</li><li>• Re-assign I/O point for the QCS application</li><li>• <b>Exercises</b></li><li>• <b>AC800M Controller and Control Builder M</b></li><li>• IP Address configuration, Firmware update</li><li>• Re-assign an I/O point for the QCS application</li><li>• Diagnosis</li><li>• <b>QCS Workplace and Graphics</b></li><li>• PG2 Graphics Editor</li><li>• QCS Graphics</li><li>• QC Workplace</li><li>• Operator User Configuration</li><li>• <b>Exercises</b></li><li>• <b>QCS Workplace and Graphics</b></li><li>• Fixed Display Status Bar</li><li>• Create User</li><li>• Hot Keys</li><li>• Operator Workplace Configuration</li></ul>	<ul style="list-style-type: none"><li>• <b>Review – Q/A Session</b></li><li>• <b>Logs and Trends</b></li><li>• Configuration Logs</li><li>• Trend Templates</li><li>• Trend Displays</li><li>• <b>Exercise – History Logs and Trends</b></li><li>• Configuration of Logs, Trend Templates, &amp; Trend Displays</li><li>• <b>Troubleshooting</b></li><li>• Network</li><li>• OPC</li><li>• Licensing</li><li>• <b>Exercise – Troubleshooting</b></li><li>• System Version</li><li>• Ping Command</li><li>• OPC Tools</li><li>• Licensing 800xA and QCS</li></ul>	<ul style="list-style-type: none"><li>• <b>Review – Q/A Session</b></li><li>• <b>Backups</b></li><li>• Backup requirements for Quality Control 800xA</li><li>• 800xA system backup and restore</li><li>• 800xA Import/Export</li><li>• Image backups</li><li>• <b>Exercise – Backups</b></li><li>• Import Export Tool</li><li>• 800xA system Backup</li><li>• QC System Folders Backup</li><li>• SQL Database Backup</li></ul>

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