T308 System 800xA
Plant Maintenance

Course Description

Course Duration
The duration is 5 days.

Course Type
This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Course Goal
The goal of this course is to learn how to troubleshoot the AC 800M hardware in an Extended Automation System 800xA.

Student Profile
This training is targeted to first level maintenance personnel.

Prerequisites and Recommendations
Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows 2000.

Course Objectives
Upon completion of this course, students will be able to:
- Explain the System 800xA architecture and the function of the different components
- Understand the basics of the 61131 languages
- Operate objects through faceplates
- Handle alarms
- Navigate in the Project Explorer
- Describe the structure of application programs i.e. variables, libraries, programs, tasks
- Configure the AC 800M hardware and corresponding I/O’s
- Load the controller and work in online mode
- Troubleshoot and exchange AC 800M hardware
- Troubleshoot Profibus and Modulebus communication to the S800 I/O’s
- Troubleshoot the OPC communication to the AC 800M controller
- Monitor control applications
- Trace alarms from the Human System Interface (HIS) down to control logic
- Trace signals in Control Builder
- Collect log files

Main Topics
- System 800xA architecture
- Operation
- Project Explorer
- AC 800M hardware
- Hardware diagnostics
- Hardware redundancy
- Monitoring applications
- Alarm tracing
- Signal tracing
- I/O communication
- OPC communication
## Course Outline

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