ABB

US806
Control Builder, Process Panel, and Drives Integration using AC800M Controllers for AC880 Drives

Learn to configure an AC800M controller using Control Builder M Professional, configure Process Panel using Panel Builder and interface drives to AC800M using Drive Composer and ACS880 drive. Review PMC800 application software for Paper Machine drive control application.

Course type and methods
This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion. Approximately 50% of the course is hands-on lab.

Student Profile
This course is targeted to control engineers, system engineers, service engineers, and maintenance technicians. While targeted to a specific application, ABB PMC800 Paper Machine drive control, this course is also applicable to similar drive control applications.

Prerequisites
Students should have basic knowledge of process control and the Microsoft Windows® operating system.

Course objectives
Upon completion of this course the participants will be able to:
- Build and configure a small system using AC800M controllers and Process Panel
- Use a project description and P&ID to define a control logic solution to meet process control objectives
- Use Control Builder to make the connection between
- S800 I/O modules and the control logic
- Recognize a variety of IEC 61131-3 compliant

languages that Control Builder uses to implement control logic in an AC800M controller.
- Configure a Process Panel to act as an operator interface and establish communication with the AC800M controller
- Configure an interface between the AC800M controller and an ABB drive
- Review PMC800 application software for Paper Machine drive control.

Main Topics
- AC800M, Control Builder, and Process Panel system architecture
- AC800M and S800 hardware
- Interface drives with ACS880 using Drive Composer
- Creating a Control Builder project
- Managing libraries
- Connecting I/O
- Using IEC 61131-3 programming languages
- Creating an using control modules
- External communications
- Process panel communications
- Process panel configuration
- Control Builder and Process Panel builder project maintenance
- Drives integration

Duration
The duration is 4 1/2 days

Course Outline

Day 1	Day 2	Day 3	Day 4	Day 5
• AC800M Hardware • Creating a Project • Managing Libraries • Variables and Data Types • Function Block Programming	• Structured Text Programming • Assigning Tasks and Scheduling • Control Module Programming	• Introduction to Process Panel Builder • Control Builder - Paper Machine Project • Panel Builder - Paper Machine Project	• Introduction to Drive Composer • Interfacing Drives with AC800M - Paper Machine Project	• Bonus Exercise – Modifying Paper Machine Project

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