M202 – Composer Engineering Software Tools
Course Description

Course Duration

The duration is 5 days.

Course Goal

The goal of this course is teach students about the basic programming functions and features of the Engineering Work Station utilizing the software package, Composer.

Student Profile

This training is targeted to students responsible for DCS installation and maintenance, process control implementation and documentation, and anyone planning to attend the Human System Interface courses.

Prerequisites and Recommendations

Students should have a basic knowledge of process control and operations concepts. Successful completion of the M101, M111 or M201 courses is required unless special permission is requested and granted by the instructor. Basic knowledge and usage of applications running on a Windows NT or 2000 operating system is also recommended.

Description

In this course, students will learn a complete methodology for Symphony®/Infi90 Open® control system documentation and controller programming. Using a simple process control loop model as a base project the student will utilize the Composer software to create a process control strategy and documentation. This course will also discuss the monitoring, tuning, and diagnostic capabilities of the Composer software. A discussion of the overall Client/Server networking architecture and global database generation will be discussed. Additionally, this course builds upon the knowledge acquired in M101, M111 or M201, and prepares the student for the Human System Interface courses.

Course Objectives

Upon completion of this course, students will be able to:

- Organize a Composer Server/Client networking architecture

- Create a Project structure in the System Architect window based upon a process control architecture

- Configure a control logic document (CLD) using the Automation Architect tool of Composer

- Load the compiled configuration file to the controllers and perform an on-line configuration change

- Evaluate control loop and controller characteristics by retrieving reports and trending and monitoring values

- Create User folders in the project and utilize macros and shapes in the CLD's

- Understand the use of Templates in the creation of a control logic strategy

- Configure a tag list for a console (HSI) utilizing the Tag Synchronization tool with the CLD's

ABB

Main Topics

- Symphony®/Infi90 Open® System Architecture

- Composer Automation Architect Programming and Documentation

- ABB Function Code Programming Basics

- Symphony/Infi90 Open® System Diagnostics and Monitoring

Course Calendar - M202 Composer Engineering Software Tools

Day 1	Day 2	Day 3	Day 4	Day 5
• Introductions • Symphony/INFI90 Open Overview • Composer Architecture • Create a Project	• Review: Q/A's • Connect to C-Net • Configure a CLD • Compile, Load, & Verify Logic to Controller • Monitor & Trend	• Review: Q/A's • On-line Configuration • Create User Macro & Shape Folders	• Review: Q/A's • System Drawings • Control Logic Templates	• Review: Q/A's • Tag List Creation • Misc Tools