T309S

Control Builder Safe-Configuration and Maintenance

The goal of this course is to learn the configuration and maintenance of the Control Builder Safe.

Course type and methods

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

Student Profile

This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

Prerequisites

Students should have attended the course T315C "Engineering with Control Builder" and T315H "Engineering with HIS" or have knowledge and experience associated with the content of this course. The required knowledge should be verified via the user assessment T710-01e "Engineering using AC 800M".

Course objectives

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

• Describe the requirements for a SIL certified application and explain the different SIL levels
• Use the Safety manual as important document
• Describe the function of the AC 800M High Integrity components
• Configure the AC 800M HI controller with the corresponding I/O's
• Set up safety relevant controller settings and explain the execution in the controller

• Maintain and troubleshoot an HI controller, incl. firmware online upgrades
• Configure SIL2 / SIL3 applications by using standard libraries and describe the purpose of VMT and CTA applications
• Modify applications considering safety relevant topics
• Configure the access management
• Create communications between SIL applications
• Set up and exchange redundant HI controllers

Main topics

• Course Overview
• Introduction to Functional Safety
• Control Builder Safe Overview
• AC 800M High Integrity hardware
• Hardware configuration
• Controller settings
• SIL marked applications for: Emergency Shutdowns / Burners
• Access management (modify parameters, download applications etc.)
• Communication between SIL applications
• Maintenance and troubleshooting
• Redundancy
• Safety manual

Duration

The duration is 4 days

Course Outline

Day 1	Day 2	Day 3	Day 4
• Course overview • Introduction to Functional Safety • AC800M High Integrity Hardware • Hardware Configuration	• Hardware configuration • Controller settings • SIL marked applications	• SIL marked application • Access Management • Communication between SIL application	• Maintenance and Troubleshooting • Redundancy

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