

SIMOCRANE BASIC Technology V5.0 DEEP DIVE (CR-SICR-BT5-D)

Short Description

SIMOCRANE Basic Technology V5.0 is an advanced automation system designed by Siemens to optimize crane operations. This technology integrates sophisticated motion control capabilities by use of standard libraries, ensuring precise and efficient control of crane movements. It requires SINAMICS S120 drives and SIMATIC S7-1500 controllers, making it a robust solution for various industrial applications. The system includes several standard applications tailored for different crane types, enhancing versatility and performance. With user-friendly integration through the TIA Portal, SIMOCRANE Basic Technology V5.0 simplifies configuration and operation, making it an essential tool for modern crane automation.

Objectives

This face-to-face training will equip you with the skills to utilize the TIA-Portal global libraries, standard application software, and BT-Configurator of SIMOCRANE Basic Technology V5.0. You'll gain a detailed understanding of the software structure, functions, and standard applications, along with an in-depth introduction to the BT-Configurator. Unlike the online training, this course includes hands-on exercises using a BT5 Training Kit, enhancing your practical knowledge and proficiency in TIA Portal, Startdrive, and DCC.

Target Group

- Crane software engineers
- Commissioning engineers
- Application engineers

Content

Day 1: Getting Started

- Overview of Hardware and Engineering systems
- Introduction of PLC and drive configuration
- Introduction of SIMOCRANE Basic Technology V5.0
- Introduction of PLC Software (data type, LC Tags, program blocks, libraries and functions)
- Exercises

Day 2&3: SW structure, function and application

- Introduction of Drive software (DCC-plan, Setpoint-channel...)
- Standard application example
- BT-Configurator (Script in STARTER)
- Exercises

Day 4&5: Commissioning and Diagnostic

- Deepening in PLC software (Control-/Status-word, enable drive...)
- Deepening in all DCC-Blocks
- Coupling of Master and Slave axis (Torque, Synchron and Grab)
- Diagnostics (Interface, signal flow and Trace)
- Exercises

Prerequisites

The following prerequisites are required

- Basic knowledge of TIA-Portal (S7 Pprofessional, Startdrive, DCC)
- Good knowledge of Sinamics S120,
- Basic knowledge of Crane technology

Type

Face-to-face training

Duration

5 days

Language

en