SIEMENS

Online Training - SINAMICS S120 Advance (DR-OL-S120ADV)

Objectives

In this technology course, you will learn how you can use integrated position control for positioning. You will create flexible function extensions with Drive Control Chart DCC, Commission the drive for demanding and complex applications.

Target Group

Users, Commissioning / Service / Maintenance Engineers

Content

• Close loop control structure Servo mode & Integrated position control for Positioning application with other features

HARDWARE
• Control unit, line infeed and motor modules
• Option boards, Terminal modules, Sensor modules.
• Motors, encoders, and interfaces
• Block diagram of Drive System

COMMISSIONING
• Parameterization using STARTER / SCOUT
• Online connection via Profibus or Profinet
• Automatic configuration.
• Project structure: drive objects and drive components
• Topology Concept.

S120 FUNCTION & FEATURE
• Position control and basic positioner
• Operating modes:
- Velocity Setpoint
- Absolute & Relative positioning
- Positioning block (MDI/Traversing /EPOS)
- Homing (Reference output cam and encoder zero mark)
• Jog
• Drive Control Chart (DCC)
• DCC block library

PLC DRIVE COMMUNICATION
• Establishing Communication between Sinamics S120 & Simatic PLC (S7-S7-1500) over Profibus or Profinet.
• PZD description (Send / Receive data)
• Diagnostics at Drive & Plc Side (Control word /Setpoint / Status word)
• Technology object blocks
• Logic Blocks for Send / Receive data.
• Integrated project with defined positioning PZD

HARDWARE COMMUNICATION
• Drive HMI direct communication.
• Drive to Drive communication over Sinamics Link (CU320-2 & CU320-2)
• Drive to Drive communication over drive CLIQ (OA-link)

DIAGNOSTICS
• Fault Diagnostics with Trace in Starter & other software / hardware options
• Project Backup

DIGITALIZATION
• Access of S120 with web browser without using commissioning software ***New***

HANDS ON
• Exercises defined based on Topic explained.
• Hands-on practice on demo kit

Prerequisites

Engineers in Electrical / Electronic Engineering with Power Electronics Background

Note

TECHNICAL REQUIREMENT (ONLY FOR ONLINE TRAINING)
• A Desktop or laptop with Windows 7/10 OS and a stable internet connection. (We recommend a data transfer rate of 5 Mbit/s.)
• Microsoft Teams platform for technical presentations
• TeamViewer platform for Hands-on

Type

Online-Training

Duration

5 days

Language

en

Fee

37,500 INR
18% GST additional on course fees