

# SINAMICS S120 Service and Commissioning - servo control with StartDrive in TIA Portal / SINAMICS S120 服务与调试课程-伺服控制(基于TIA博途StartDrive) (D7232)

### **Objectives**

This training course encompasses the basics of the SINAMICS S120 drive system. It provides the technical knowledge for startup, parameterization, maintenance, drive optimization, and troubleshooting. Also, in this course, basic knowledge of communication of PROFINET is included. Practical exercises for reinforcing the knowledge will be carried out on the SINAMICS S120 Training Case. In this course you learn to put the converter system SINAMICS S120 into operation using the PC-tool StartDrive in TIA Portal. You can adapt the parameters to the respective application and perform diagnostics in case of a fault.

# Target Group

Programming engineer, Commissioning engineer, Project design engineer, Service personnel, Maintenance personnel

#### Content

- Brief overview of fundamentals of SINAMICS drive system
- Hardware setup and wiring of:
  - Control unit, line infeed and motor modules
  - Motors, encoders and interfaces
- Startup and parameterization with StartDrive in TIA Portal
- Drive Objects, Drive components and their relationship, Topology
- lacktriangledown Analysis of the operating status using enable signals, warnings, and alarms
- Data exchange with SIMATIC S7 via PROFINET using PROFIdrive Standard Telegram
- Software functions, closed-loop control and optimization of SERVO and VECTOR drives
- Introduction to positioning and Safety Integrated
- Parameter list structure and Function Diagrams
- Practical exercises on training kits with SINAMICS S120

### Prerequisites

General knowledge of AC drives, converter technology and control engineering

# Type

Face-to-face training

# Duration

5 days

# Language

zh

copyright by Siemens AG 2025