

TIA S7-1500 and SINAMICS S120 Startdrive for Cranes (DR-S12-P1TCR)

Korte beschrijving

In this course you will learn the basics of the Automating system SIMATIC S7 and the Engineering software TIA portal. All subjects are tested with practical exercises using a SIMATIC S7-1500 and conveyor model. In this course you also learn to put the converter system SINAMICS S120 into operation using the PC-tool Startdrive in the TIA Portal. You can adapt the parameters to the respective application and perform diagnostics in case of a fault

Doelen

You are responsible for the commissioning of SINAMICS S120 drive systems using the commissioning software Startdrive in TIA Portal. Understand the program in the PLC that controls the S120 drive. Modern converter systems offer a variety of functions and setting possibilities. By a purposeful procedure you can save time and avoid faults. In this course you will learn the procedure at commissioning step by step. You can handle parameter setting and data saving with the software Startdrive in the TIA Portal. By a correct parameter setting you support the reliable operation of the entire plant. After the course you can put the converter system SINAMICS S120 efficiently into operation. You can adapt the parameters of the closed-loop controller to the respective application and use the diagnostic tools in case of a fault.

Inhoud

Introduction SIMATIC STEP7 TIA portal
Configuration of systems and networks to access the PLC via the PC
Creating TAG lists
How programs are structured using the correct program blocks
Understand Binary instructions to create programs
Program the IEC Timers and Counters
Additional Functions of the device configuration.
Test and debug tools to monitor the program
Functional principle of the converter system SINAMICS S120:
Control unit, line infeed and motor modules
Motors, encoders and interfaces
Parameterization, data backup and diagnostics using Software Startdrive in the TIA Portal:
Online connection via PROFINET and Ethernet
Project structure: drive objects and drive components
Topology of the DRIVE-CLiQ-Interface
Function charts: setpoint channel, Input and output signals
Control signals and internal signal interconnection using BiCo-technology
Optimization of the closed loop control using automatic procedures
Functional principle of the operating modes Servo and Vector
Analysis of the operating status using enable signals, warnings and alarms
Monitoring of signals using the trace function
Introduction and Safety Integrated
Data exchange with SIMATIC S7 via PROFINET using PROFIdrive Standard Telegram with an S71500 cpu.
Practical exercises at training kits with SINAMICS S120 in frame size booksize with servomotor and induction motor

Soort

Face-to-face-training

Duur

5 dagen

Taal

en, nl

Prijs

2.700 EUR