SIEMENS

SINUMERIK Safety Integrated (NC-SAFETY)

Présentation

This course provides you with knowledge for the project planning and startup of the Functions of Safety Integrated (F-PLC) for SINUMERIK ONE and Safety integrated (plus) for SINUMERIK 840D sl. You will learn how to select suitable functions as well as how to implement and validate them.

Objectifs

This course teaches the handling of the safety functions of SINUMERK Safety Integrated (F-PLC). This safety variant using the F-PLC is required for the SINUMERIK ONE, but can also be used with the SINUMERIK 840D sl. The PLC is configured and programmed with the TIA Portal.
You will learn how to apply the different safety functions and know their parameterization, programming and test.
In the course, You perform all the steps, from the activation, parameterization and programming of the functions up to the acceptance test with protocol. This allows you to make the most of the benefits of Safety Integrated (F-PLC) for your machine tool.

Groupes cibles

Commissioning engineers
Engineering personnel
Service personnel

Programme / Contenu

General information on safety technology and standards
System requirements
TIA Safety for the SINUMERIK F-PLC; Differences S7-300 (840) and S7-400 (ONE)
Description of the safety functions; Differences to Safety Integrated (spl)
Safe programmable logic in the F-CPU
Safe communication with PROFIsafe
Sensor/actuator integration
Safe Brake Management and Test stop with SIC/SCC
Adaptation of the safety functions by parameterizing the drives and creating the F-program
Procedure for commissioning and troubleshooting
Evaluation of diagnostic and alarm displays
Circuit examples for Safety Integrated
Acceptance test
Practical commissioning exercises with a SINUMERIK training rack

Prérequis

Knowledge according to the course NC-ONE-COM or NC-ONE-UP or NC-84SL-COM (formerly NC-84SLSIP).
Programming knowledge with TIA Portal according to the courses TIA-PRO1 oder TIA-SERV1.

Remarque

Included in the course price: Free access to the digital learning platform SITRAIN access – starting one week before the start of the course until two weeks after the end of the course.
With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

This course is the successor to the NC-SAF-SIW course. The content is comparable and updated.

Type

Formation en salle

Durée

5 Jours

Langue

en