

SINUMERIK ONE Start-up and Service (NC-ONE-SIP)

Short Description

This course will be renamed. For dates from 01.01.2025 please see [NC-ONE-COM](#). This course provides knowledge for project planning and commissioning of the SINUMERIK ONE as digital twin and real, as well as the knowledge to create and test different machine configurations.

Objectives

This course provides knowledge for project planning and commissioning of the SINUMERIK ONE as digital twin and real, as well as the knowledge to create and test different machine configurations.

In practical exercises, you train commissioning and service on training equipment.

After the course ends, you will master the commissioning of the SINUMERIK ONE control system with a SINAMICS S120 drive. By knowing the various functions of the controller, you are able to optimally adapt the control to the machine and thus maximize the productivity of your machine.

NC-NCAN course participants are advised to attend this course only after a period of gaining practical experience of 2 to 4 months.

Target Group

Commissioning engineers
Engineering personnel
Service personnel

Content

Overview and components of SINUMERIK ONE

Overview of SINUMERIK ONE functionality

Data backup of the SSD/SD as well as the IPC, recommissioning, SW upgrade

Commissioning of the digital twin with TIA portal and CreateMyVirtualMachine

Adaptation of the control functions to the machine with machine data and interface signals

Machine kinematics and collision monitoring

Transfer of data to the real machine

Drive configuration and axls assignment

Basics of optimization

PLC basic program and interface signals

PLC user program and user alarms

Commissioning of compensations and axls couplings

Adaptation SINUMERIK Operate

Introduction of synchronous actions

Practical commissioning exercises on the PC (digital twin) as well as on a SINUMERIK training device

Prerequisites

Basic knowledge according to the course NC-NCAN or NC-BASIC.

Knowledges in TIA Portal equivalent to the course Tia-Sysup.

Relevant education, knowledge and experience to enable him or her to analyze risks and to avoid hazards which electricity could create.

Note

none

Type

Face-to-face training

Duration

10 days

Language

en