

SINUMERIK Basics (NC-BASIC)

Short Description

This course teaches the fundamentals of CNC and drives engineering. Practical exercises on our training equipment are an important part of the course.

Objectives

This course teaches the fundamentals of CNC and drives engineering. Practical exercises on our training equipment are an important part of the course.

On completion of the course, you will be familiar with the design and principle of operation of a machine tool with CNC control and drives. You will have laid sound foundations for successful use of your knowledge on your machines. A fundamental understanding of the whole system will enable you to precisely describe problems on your machine tool and solve them together with your partners. Application of the knowledge gained will boost your machine's productivity and reduce standstill times.

Attendance at this course is a prerequisite for attending our advanced SINUMERIK service and commissioning courses. We recommend a period of 2 to 4 months to gain practical experience before attending the advanced courses.

Target Group

Commissioning engineers
Engineering personnel
Service personnel
Maintenance personnel
Sales personnel for SINUMERIK systems

Content

Structure and tasks of a CNC control
Components of a machine tool
Operating modes and operator functions
Fundamentals of parts programming
Meaning of compensations, parameters, setting data and machine data
Fundamentals of data backup
Introduction to drive engineering and closed-loop control technology
Principle of position control, speed control and current control
Methods for the recording of internal signals
Overview of the feed drive and the main spindle drive
VDI interface and interface signals
Practical exercises on training models with digital drives

Prerequisites

Basic knowledge of PLC programming.

Note

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-NCAN course. The content is comparable and updated.

Type

Face-to-face training

Duration

10 days

Language

en