

## Online-Training - SIMOTICS Motion Control Motors - Planning and Engineering (DR-MCM-PL)

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### Short Description

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In this online course, you will learn how to determine the optimum Motion Control motor for the respective application. You will be able to scale the motor using the load data and use the catalog and PC program for this.

[Also available as face-to-face training](#)

### Objectives

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You will plan and develop the implementation of highly dynamic and precise drives with a SINAMICS S120 converter system and the related motors. Selecting the correct type of motor with the corresponding power and necessary options is extremely important here, as subsequent amendments are often extremely costly.

In this course, you will learn how to determine the optimum Motion Control motor for the respective application, for example: synchronous or asynchronous, air or water-cooled, high inertia or high dynamic. You will be able to scale the motor using the load data and use the catalog and PC program for this.

### Target Group

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For Siemens employees only  
Planners, Decision makers, Sales personnel

### Content

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Functionality and selection criteria of

- SIMOTICS S - Servo motors 1FK7 and 1FT7
- SIMOTICS S - Geared servomotors 1FG1
- SIMOTICS M - Main motors 1PH
- SIMOTICS T - Torquemotors 1FW
- SIMOTICS L - Linear motors 1FN

Electrical and mechanical characteristics and options with motors

Functionality and selection criteria of measuring systems:

- Resolver and optical encoder
- Singleturn and multiturn
- DRIVE-CLiQ topology

Calculating the suitable motor using the duty cycle with torque and speed

Influence of DC link voltage, ambient temperature, attachment dimensions

Selecting the Motion Connect power and signal cables

Engineering of motors with the PC programs:

- DT Configurator
- SIZER
- CAD Creator

Comprehensive exercises with the catalog and PC programs for determining the appropriate motor

### Prerequisites

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- Basic knowledge of drives.
- Recommended: Knowledge of SINAMICS S120 according to course DR-S12-PL.
- [Technical requirements](#)

### Type

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Online-Training

### Duration

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3 days

### Language

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