



**SIEMENS**

*Ingenuity for life*

Drives knowledge  
for practical use

SITRAIN – Training for Industry

[siemens.com/sitrain](https://www.siemens.com/sitrain)

# Skills development with perspective by SITRAIN

Opt for practical knowledge coming directly from the manufacturer

Well-trained employees are a crucial factor in any company's success. Skills development and expert knowledge make companies competitive and innovative. With our globally available training courses for industry, we help you achieve these goals – with practical experience, innovative learning methods, and a concept that's tailored to the customer's specific needs.

## Wide range of courses available

Our training is conducted by certified experts with extensive hands-on experience. Practical exercises on specially developed training equipment and high-quality course documentation ensure successful learning.

Over 300 courses and special advanced training activities for individual industries are offered at more than 170 locations worldwide. Courses can also be customized and held on your own premises.

## Long-term competence developed in three phases

The holistic competence development program with SITRAIN ensures that all participants can fill the gaps in their knowledge and increase their capabilities.

### Phase 1: Requirement analysis

A requirement analysis establishes clarity in advance. The comprehensive, task-specific assessment of the services to be provided and the participants' current level of knowledge lay the foundation for individual recommendations for further training. Building on this assessment, a course curriculum for building skills is created – adapted to individual customer requirements, of course.

### Phase 2: Our trainings

Participation in our training courses forms the core of the skills development program. In the courses, we discuss the capabilities and functions of our products, making transparent the workflows and relationships of different product components. The individual training courses are optimally coordinated with each other and purposefully build skills and knowledge for the long term.

### Phase 3: Follow-up

At the end of the training course, follow-up measures provide a way to monitor success as well as reinforce and refresh the knowledge acquired. Appropriate courses, e-learning activities, and online support forums keep the knowledge up to date over the long term.



Long-term development of competence with training courses for Siemens Industry customers: Comprehensive qualification solutions to suit all needs

- Analysis of requirements
- Training
- Follow-up



### Training for everyone

SITRAIN supports your training requirement throughout the entire lifecycle of your plant. Planners, sales staff and decision-makers find just as many specialized courses on offer as programmers, and commissioning and configuration engineers. Our training also enables the personnel responsible for operating a plant – such as repair, maintenance and service staff – to handle our technology quickly and efficiently.

### Excellent quality

The high quality of SITRAIN courses is verified at regular intervals by TNS Infratest, an independent market research institute. We receive a lot of positive feedback from those who have attended our courses, as reflected by the overall satisfaction with our courses expressed in contributions in the Internet.

### Your SITRAIN benefits – at a glance

- Reduced familiarization times after changes in technology or staff make for resource efficiency
- Training in diagnosis and fault rectification shortens downtimes and improves production processes
- Training certified according to DIN EN ISO 9001 ensures the maintenance of production quality standards

## Three good reasons for training with Siemens

- +** 1. Innovation  
During production, SITRAIN creates the appropriate training courses and sets standards for the future parallel to the development process.
- +** 2. Practical relevance  
Courses are characterized by a large number of hands-on exercises – usually for half of the course time. This enables the knowledge gained to be immediately applied to everyday work.
- +** 3. Holisticity  
We support your requirement for training personnel – from the planner to the service technician – throughout the entire lifecycle of your plant.

# The right training course for every drive

SINAMICS is currently the most comprehensive family of converters on the market. It is based on straightforward and standardized engineering, it is energy-efficient, and importantly, it is future-proof because it keeps pace with absolutely every innovation step. Whatever direction you choose, SINAMICS offers you the right converter for every drive.

The range of SIMOTICS electric motors is equally comprehensive. As the core element of the drive system, SIMOTICS can be optimally integrated into the drive train.

If you're looking for a fast, reliable solution that's the right fit for your application – or want to know which converter or motor is suitable and how they can be put to optimal use – SITRAIN can help you. SITRAIN has a portfolio of training courses that are perfectly matched to your requirements and your plant's lifecycle.

## Custom solutions for your needs

SITRAIN offers a unique range of training courses for the basic applications in your sector. No matter what your application is, whether it's the operation of pumps, fans, or compressors, powering conveyor belts or elevators, processing in mills or extruders, motion control, machining operations (milling or turning), packaging, printing, drilling, or sawing – SITRAIN provides an ideal means of planning, implementing, operating, servicing, and repairing your applications.

## Minimizing your costs

Engineering costs for project planning and putting drive solutions into operation need to be kept as low as possible. SITRAIN also helps you cut costs through the correct use of standardized tools in the planning, implementation, and operating phases. These tools facilitate fast, simple, and low-cost engineering.

As much as 70 percent of the power requirement in the industrial sector is accounted for by electric drives. This makes it all the more crucial to employ drive technologies that enable you to determine your savings potential over the entire lifecycle of your equipment. Our courses will provide precise explanations on how to use SinaSave, the amortization calculator for energy-efficient drive technology. They also help you calculate the savings potential of actual drive applications based on your plant's performance characteristics.

Find out more  
about SINAMICS  
Training online



[www.siemens.com/sitrain-sinamics](http://www.siemens.com/sitrain-sinamics)



# Planning, calculation, configuration and decision-making

## From the initial orientation to the actual selection

What is the most effective drive system for you? We provide you with all the information you need to make the right choice in our general and project planning courses.

### Your benefits:

- Faster and more efficient identification and implementation of optimization potentials; expensive planning mistakes can be eliminated at the outset
- Identification, evaluation, and systematic implementation of your savings potentials thanks to optimal energy management
- Faster and more flexible adaptations to new market requirements
- Energy-efficient design and installation of machines and plants

### Courses for the planning phase

#### SINAMICS low voltage converters and SIMOTICS motors

- SINAMICS and SIMOTICS – System Overview (DR-SYS)
- SINAMICS and SIMOTICS – Basics of Drive Technology (DR-GAT)
- SINAMICS G120 – Planning and Engineering (DR-G12-PL)
- SINAMICS S120 – Planning and Engineering (DR-S12-PL)
- SIMOTICS Asynchronous Motors – Planning and Engineering (DR-ASM-PL)
- SIMOTICS Motion Control Motors – Planning and Engineering (DR-MCM-PL)
- SIMOGEAR Geared Motors – Planning and Engineering (DR-SGM-PL)



*“Now I really know what SIZER is capable of.”*

*“The technical interactions are well summarized and implemented for planning with SIZER.”*

*“Thanks to the good course materials, it is easily possible to use the exercises as a model for actual applications later on.”*

Statements from participants in a project planning course

# Parameterization and commissioning

## From initial commissioning to optimization

The commissioning courses help you create functionality and optimize the machine settings at your plant to improve production output and reliability.

### Your benefits:

- Significantly reduced time expenditure for setting parameters and commissioning
- New products are integrated in your plant quickly and efficiently
- Production processes are optimized and potential sources of error minimized

*“First-rate instructor!!! Went into every question and always had an answer.”*

*“Very well qualified trainers who could also see the big picture when answering questions.”*

*“Very good content for a start-up engineer providing a good overview of what the system is capable of.”*

Statements from attendees at a start-up course

### SINAMICS Safety

#### **SINAMICS S120 – Parameterizing Safety Integrated (DR-S12-SAF)**

- The topic of machine reliability is dealt with thoroughly in this course: from technical implementation to validation (carrying out the acceptance test with standard-compliant test record), retrofitting, and cases where spare parts are needed.

#### Your benefits:

- Reliable and fast reaction in an emergency
- Clarification of the legal situation

### Courses for the realization phase

#### **SINAMICS G120 low voltage converters**

- SINAMICS G120 – Parameterizing and Commissioning (DR-G12-PM)
- SINAMICS G120 – Parameterizing Advanced (DR-G12-PA)
- SINAMICS G120 – Parameterizing Safety Integrated (DR-G12-SAF)

#### **SINAMICS G130 / G150 / S150 low voltage converters**

- SINAMICS G150 / G130 / S150 – Diagnostics and Service (DR-G15-DG)

#### **SINAMICS S120 low voltage converters**

- SINAMICS S120 – Parameterizing and Commissioning (DR-S12-PM)
- SINAMICS S120 – Parameterizing Advanced (DR-S12-PA)
- SINAMICS S120 – Parameterizing and Optimization (DR-S12-OPT)
- SINAMICS S120 – Parameterizing Safety Integrated (DR-S12-SAF)
- SINAMICS S120 – Diagnostics at Chassis and Cabinet Units (DR-S12-CHA)

#### **SINAMICS medium voltage converters**

- SINAMICS GM150 – Commissioning and Service (DR-GM150)
- SINAMICS GL150 – Commissioning and Service (DR-GL150)
- SINAMICS SM150 – Commissioning and Service (DR-SM150)
- SINAMICS SL150 – Commissioning and Service (DR-SL150)
- SINAMICS PERFECT HARMONY GH150 – Parameterization and Commissioning (DR-GH15-PM)

#### **DC converters SINAMICS DCM**

- SINAMICS DCM – Parameterizing and Commissioning (DR-DCM-PM)
- SINAMICS DCM – Parameterizing Advanced (DR-DCM-PA)

# Fault diagnostics, maintenance, repair and operation

## From fault clearance to re-commissioning

Fast and efficient fault identification cuts plant downtime. In the following courses you will learn how to minimize the time you spend locating, identifying, and clearing faults.

### Your benefits:

- Optimized production sequence and reduced downtime thanks to specific fault diagnostics and routine fault clearance
- Potential for increasing productivity

A training course with SITRAIN introduces you to tools that enable you to do your work more quickly and easily. You will not only learn how to use individual components, you'll also understand how they interrelate.

SITRAIN continues to offer diagnostic courses for the following older converter systems: SIMOVERT MASTERDRIVES, MICROMASTER 4, SIMODRIVE 611 and SIMOREG DC Master.

**Additional information is available at:**  
[www.siemens.com/sitrain](http://www.siemens.com/sitrain)



### Courses for the operating phase

#### SINAMICS G120 low voltage converters

- SINAMICS G120 – Parameterizing and Commissioning (DR-G12-PM)

#### SINAMICS G130 / G150 / G180 / S150 low voltage converters

- SINAMICS G150 / G130 / S150 – Diagnostics and Service (DR-G15-DG)
- SINAMICS G180 – Diagnostics and Service (DR-G18-DG)

#### SINAMICS S120 low voltage converters

- SINAMICS S120 – Diagnostics and Service (DR-S12-DG)
- SINAMICS S120 – Diagnostics at Chassis and Cabinet Units (DR-S12-CHA)
- SINAMICS S120 – Diagnostics PROFINET and PROFIBUS (DR-S12-NET)

#### SINAMICS medium voltage converters PERFECT HARMONY GH180

- SINAMICS PERFECT HARMONY GH180 – Diagnostics and Service (DR-GH18-DG)

#### DC converters SINAMICS DCM

- SINAMICS DCM – Diagnostics and Service (DR-DCM-DG)

*“Our instructor was very professional. He presented the course content very well! This is one of the best courses I’ve ever had.”*

Statement from attendee at a maintenance course

**Find out more:**  
[siemens.com/sitrain](http://siemens.com/sitrain)

**Find out more about SITRAIN –  
Training for Industry and experience how  
courses directly from the manufacturer  
enable you to gain optimal benefit from  
your Siemens products and systems.**



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**Published by**  
**Siemens AG 2016**

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Article No.: DFCS-B10089-00-7600  
Printed in Germany  
Dispo 46332  
LMB/1545 WS 09162.0

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