

#HowTrainingWorks



TECHNICAL ACADEMY



This is who we are

GROB-WERKE





Technology at its best

STEP INTO A GREEN FUTURE WITH US

At GROB, we strive for continuous progress and improvement. Not only do we strive to develop outstanding solutions and products for our customers, but we also seek to make a contribution to our environment and future generations. This is firmly anchored in our corporate philosophy and lived every day.

We therefore utilize photovoltaics and geothermal energy in our locations and support a wide variety of social projects. But we also place great emphasis on SUSTAINABILITY in our internal departments. Our products are based on the highest energy efficiency and regenerative drive systems. We integrate our supplier network in reducing the carbon footprint.



OUR PRODUCT RANGE

*#MachiningTechnology #UniversalMachiningCenters
#AssemblyPlants #Electromobility
#Automation #AdditiveManufacturing #Digitalization
#NewAndQualityCheckedUsedMachines #Service*

Concentrated competence worldwide

INTELLIGENT TECHNOLOGY IS HUMAN

For generations, we at GROB have lived and experienced this principle by making customer requirements the focus of our work. The result is sophisticated technology creating more efficient production processes worldwide and delivering highest quality.



RESEARCH & DEVELOPMENT

With a high degree of creativity and technical intuition, as well as the best engineering expertise, our developers have worked hard to earn the reputation of being a technology leader.



ASSEMBLY

From pre-assembly to machine assembly to process commissioning – our employees demonstrate their expertise with optimally coordinated workflows.



ENGINEERING

With method development and structured problem solving, our employees in Engineering develop innovative concepts representing milestones for precision, dynamics, and reliability.



COMMISSIONING

With simulation techniques and virtual commissioning, we achieve the highest adherence to delivery dates and product quality.



PRODUCTION

The high degree of vertical integration along the entire value creation chain, numerous machining technologies and our employees' distinctive specialist knowledge create the best conditions for state-of-the-art production.



TECHNICAL APPLICATION CENTERS

Our production plants in Germany, Brazil, the USA, China, Italy and India have technical application centers for the machining and electromobility sectors, where our customers can experience GROB technologies up close.



We demonstrate how to make optimum use of machines

GROB TECHNICAL ACADEMY

UNIVERSAL MACHINING CENTERS

MACHINING TECHNOLOGY

ASSEMBLY & E-MOBILITY

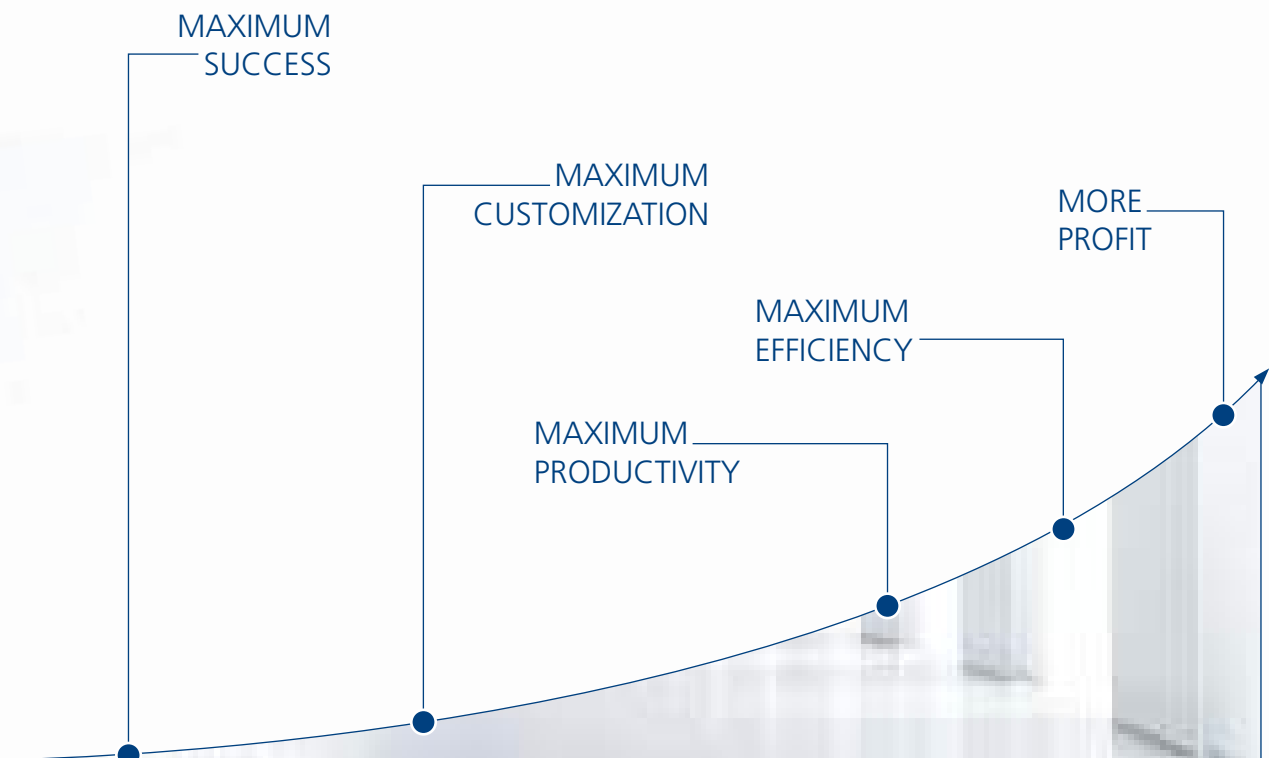
GENERAL CONDITIONS

GROB CAMPUS

Gain new insights

GROB TRAINING MODULES

Whether operator, programmer, installation technician, or maintenance technician: we provide various training modules for optimum use of your GROB system in your production. All training programs on offer are available for the SIEMENS 840D sl, SIEMENS TIA, BECKHOFF TwinCAT3, HEIDENHAIN iTNC 530, TNC 640, and FANUC 30i-B machine control systems.



ANALYSIS OF

- + your needs and requirements

DESIGN OF

- + customized training courses

TRAINING

- + tailored to your requirements



WOULD YOU LIKE TO KNOW MORE?

Our training team is always available for you!

GROB TECHNICAL ACADEMY

Phone: +49 8261 996-7488

E-mail: training@grob.de

GROB SERVICE / SALES

Phone: +49 8261 996-6000

E-mail: sales.service@grob.de



Whether you are a novice or an experienced machine operator

UNIVERSAL MACHINING CENTERS

You will learn about GROB machining centers in various modules. Whether you are a novice or an experienced machine operator – we will show you how the machines work to optimal effect.

- ⊕ We convey important know-how in handling your machine in a practical manner
- ⊕ The safety of man and machine is guaranteed by learned knowledge
- ⊕ Increase your team's problem-solving skills
- ⊕ **Our machine types:** G440, G640, G840, G150, G350, G550, G750, G350T, G550T, G750T, and automation solutions



GROB TECHNICAL ACADEMY – PORTFOLIO
#UniversalMachiningCenters #E-learning
#MachiningTechnology #SpecialEquipmentBox
#AssemblyAndElectromobility #Service

*Whether you are a novice or
an experienced machine operator*

UNIVERSAL MACHINING CENTERS TRAINING MODULES

Choose the right training course now! All training programs on offer are available for the SIEMENS, BECKHOFF TwinCAT3, HEIDENHAIN iTNC530, TNC640 & TNC7 machine control systems. As an official SIEMENS and HEIDENHAIN training partner, we offer all of the following training courses for the current control systems. Please get in touch if you use other or older control systems.

Operation

NC programming – basic course

NC programming – swiveling

NC programming – advanced course

NC programming – GROB-specific programming

GROB machine calibration

GROB part clamping

NC programming – interpolation turning

NC programming – in-process tool measurement

NC programming – GROB file input output (FIO)

Turning technology

Touch probe programming

GROB pallet storage systems

Course for switching from HEIDENHAIN iTNC530 to TNC640 or TNC7

Electrical maintenance – basic course

Electrical maintenance – advanced course

GROB spindle diagnostics (GSD) – electrical systems

Mechanical maintenance

Robot training – basic course

Operation – robot station

Setup – robot station

*Training modules***UNIVERSAL MACHINING CENTERS**

OPERATION	
Requirements	Basic knowledge of the control system used
Duration / venue	3 days (4 days for mill-turn machines) – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety • Operation incl. pallet change • Program introduction • Tool management • Loading and unloading tools • Touch probe calibration • Introduction to swiveling in manual mode • Touch probe in manual mode • Standard machine calibration • Daily inspection and maintenance of universal machining centers
Learning objective	<ul style="list-style-type: none"> • Autonomous and safe machine operation in manual and automatic mode • Correct handling of tools and associated data • Correct handling of the touch probe • Recognizing the need for machine maintenance

NC PROGRAMMING – BASIC COURSE	
Requirements	Knowledge of milling according to technical drawings, CNC basics
Duration / venue	3 to 4 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Introduction to the corresponding control system functionality • Axis designations and coordinate systems • File management and tables • Tool management • Standard and contour cycles • Reference and zero points • Web functions • Basics of NC programming of the specific control system manufacturer • Programming techniques such as partial program repetition and subroutine technology
Learning objective	Creating and testing 3-axis NC programs according to part drawings

*Training modules***UNIVERSAL MACHINING CENTERS****NC PROGRAMMING – SWIVELING**

Requirements	Knowledge from the NC programming basic course
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Swiveling the machining plane with the control system's own swivel cycles • Producing boreholes and surfaces on swiveled-in planes • Resetting the swivel plane • GROB manufacturer cycles
Learning objective	Machine programming in five axes

NC PROGRAMMING – ADVANCED COURSE

Requirements	Knowledge from the NC programming basic course
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Using calculation parameters • Reading and writing system variables • Creating log files • Definition and usage of user variables
Learning objective	<ul style="list-style-type: none"> • Flexible program design • Basics of high-level language programming

NC PROGRAMMING – GROB-SPECIFIC PROGRAMMING

Requirements	Knowledge from the NC programming basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Using GROB manufacturing cycles • Adapting the homing program • Checking the tool data • Automatic program initialization after program abort
Learning objective	Reliable program design

*Training modules***UNIVERSAL MACHINING CENTERS****GROB MACHINE CALIBRATION**

Requirements	Comprehensive experience with GROB machining centers and knowledge from the basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • GROB swivel axis calibration (GSC), explanation, tips • Context of machine calibration • Calibration manipulation via variables • Defining individual measuring positions • Checking the calibration via measuring programs and the log file • Automation options
Learning objective	<ul style="list-style-type: none"> • Understanding the necessity for calibration and individual adjustment • Detailed insight into the calibration process and its variables • Safe use of control programs and logs

GROB PART CLAMPING

Requirements	Knowledge from the advanced course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Creating and defining clamping programs • Basic structure of setting, clamping and unclamping programs • Program assignment in the GROB HMI • Relevant functions and signals • Manual clamping and unclamping • Practical exercises on the machine
Learning objective	Creating an automatic clamping and unclamping operation

NC PROGRAMMING – INTERPOLATION TURNING

Requirements	Knowledge from the NC programming basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Tool management, defining tool data • Interpolation turning cycles • Plane switchover • Programming a part with turning contour
Learning objective	Creating and editing turning contours



NC PROGRAMMING – IN-PROCESS TOOL MEASUREMENT

Requirements	Knowledge from the NC programming basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Calibration • Tool measurement • Wear measurement • Tool breakage detection • Single cutting edge control
Learning objective	Integrating the tool measurement system into the process

NC PROGRAMMING – GROB FILE INPUT OUTPUT (FIO)

Requirements	Knowledge from the NC programming advanced course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Creating, reading and copying files • Creating time stamps • Output of records, such as measured value records, in a protocol • Creating tolerance and progress bars • Creating message boxes and selection softkeys
Learning objective	<ul style="list-style-type: none"> • In-process communication with the machine • Extracting machine information

Training modules

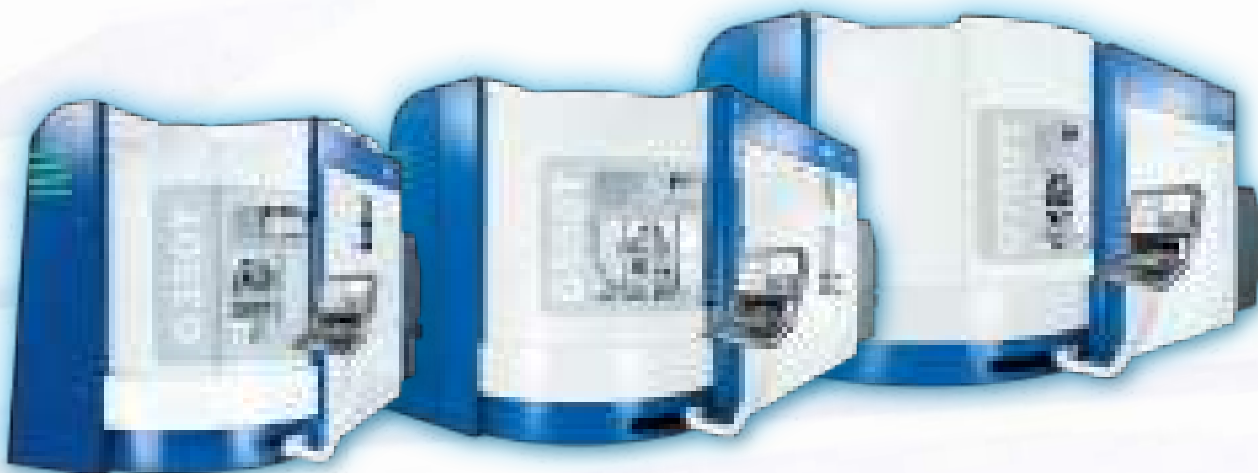
UNIVERSAL MACHINING CENTERS

TURNING TECHNOLOGY

Requirements	Knowledge from the NC programming basic course and machine operation
Duration / venue	3 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none">• Basics of turning mode• Balancing parts• Advanced tool management• In-process measurement of turning tools• Toggling between milling and turning mode• Using turning cycles• Practical exercises on the machine
Learning objective	Operating and programming mill-turn machines

TOUCH PROBE PROGRAMMING

Requirements	Knowledge from the NC programming basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none">• Measuring cycles in automatic mode• Positioning parts• Setting part zero points• Correcting tool geometry data
Learning objective	<ul style="list-style-type: none">• Positioning parts in the work area• Checking and correcting parts





GROB PALLET STORAGE SYSTEMS

Requirements	Basic knowledge of the machining unit used
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety • Design and function of GROB pallet storage systems • Pallet storage system control software basics • Generation of work plans • Production planning
Learning objective	<ul style="list-style-type: none"> • Autonomous and safe PSS operation • Proper equipping and production planning

COURSE FOR SWITCHING FROM HEIDENHAIN iTNC530 TO TNC640 OR TNC7

Requirements	Knowledge of the old control system or from the NC programming basic course
Duration / venue	1 day – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • New cycles (face milling cycle 233 and more) • New, fast and high-performance cutting simulation • Working with the preset table • New probing functions • New TNC functions • DXF converter • iTNC530 ↔ TNC640 control system comparison
Learning objective	Learning and applying special features and functions of the TNC640

*Training modules***UNIVERSAL MACHINING CENTERS****ELECTRICAL MAINTENANCE – BASIC COURSE**

Requirements	<p>Training on electrical or electronic systems</p> <ul style="list-style-type: none"> • Basic knowledge of drive and control systems technology as well as of the control system used
Duration / venue	3 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety training • Function description of the electrical components • Data backup • Data recovery • Hardware replacement • Hardware settings • Diagnostic options • Error analysis and the correct approach to machine malfunctions
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtime through preventive maintenance activities • Repair of electrical components • Localizing and rectifying electrical faults • Creation and use of the data backup as a reference • Proficient use of the documentation

ELECTRICAL MAINTENANCE – ADVANCED COURSE

Requirements	<p>Training on electrical or electronic systems</p> <ul style="list-style-type: none"> • Basic knowledge of drive and control systems technology as well as of the control system used • Participation in the "Electrical maintenance – basic course" or equivalent knowledge
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety training • Basic knowledge of editing GROB diagnostic diagrams • Evaluating alarms and messages • General PLC and HMI program overview • Customer-specific functions • Diagnostic options
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtimes through preventive maintenance activities • Repair of electrical components • Localizing and rectifying electrical faults • Creation and use of the data backup as a reference • Proficient use of the documentation

*Training modules***UNIVERSAL MACHINING CENTERS****GROB SPINDLE DIAGNOSTICS (GSD) – ELECTRICAL SYSTEMS**

Target group	Specifically for electrical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on electrical systems • Basic knowledge of drive and control systems technology as well as of the control system used
Duration / venue	<p>1 day – GROB Mindelheim Training Center or at customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (30 %) and practical exercises (70 %)
Contents	<ul style="list-style-type: none"> • Structure and function of GROB spindle diagnostics • Basics of the software used (IFM Octavis) • Troubleshooting on the machine • Maintenance, commissioning, and hardware replacement
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtimes following malfunctions • Proper use of the software

MECHANICAL MAINTENANCE

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basic knowledge of hydraulic and pneumatic systems • Basic knowledge of the control system used
Duration / venue	<p>3 days – GROB Mindelheim Training Center or at customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (30 %) and practical exercises (70 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure of the machine (assemblies, drives, tool magazine) • Using the machine documentation • Motorized spindle (inspection) • Machine zero points • Service and preventive maintenance measures • Introduction to the special equipment • Fluid technology
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Minimizing machine downtime through preventive maintenance activities • Implementing simple mechanical repair and maintenance activities

*Training modules***UNIVERSAL MACHINING CENTERS****ROBOT TRAINING – BASIC COURSE**

Target group	Operators, installation technicians
Requirements	Technical knowledge
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety instruction • Structure and components of a robot system • Robot operating modes • Structure and functions of the control panel • Moving the robot arm in setup mode (by axis/Cartesian) • Selecting, starting, and stopping programs • Tool measurement • Basic measurement
Learning objective	<ul style="list-style-type: none"> • Basic knowledge of robots • Correct robot operation

OPERATION – ROBOT STATION

Target group	Operators, installation technicians
Requirements	Robot training – basic course or equivalent knowledge
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none"> • Robot station safety devices • Operating the robot cell via the station HMI • Explanation of coordinate systems in place • Retracting the robot in setup mode in case of faults • Retracting the robot from the safety area • Switching the robot station to automatic mode • Automatic program sequence of the robot station
Learning objective	<ul style="list-style-type: none"> • Knowledge of the special features of the system • Independent operation of the robot station • Independent rectification of (simple) faults



SETUP – ROBOT STATION

Target group	Installation technicians
Requirements	Robot station operation course
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none">• Explanation of GROB-specific programs• Remeasuring a base• Adjusting robot positions• Adjusting robot paths• Adjusting program parameters
Learning objective	Making independent changes to robot programs



Equipped for the future

MACHINING TECHNOLOGY

The GROB G-modules! In GROB machining technology, machining centers of various sizes are built in a modular fashion. These can be connected via automation solutions. Their field of use lies in series production – in the automotive industry, among others.

- ✦ Get the most out of your productivity with trained staff
- ✦ Our customized training courses improve your workflow and speed
- ✦ Avoid application errors due to a high performance level of your staff
- ✦ **Our machine types:** G300, G320, G500, G520, G700, G720, G500F, G520F, G600F, G700F, G720F, G920F, G920X, and automation solutions



GROB TECHNICAL ACADEMY – PORTFOLIO

#UniversalMachiningCenters #E-learning

#MachiningTechnology #SpecialEquipmentBox

#AssemblyAndElectromobility #Service

Equipped for the future

MACHINING TECHNOLOGY TRAINING MODULES

Operation – G-module and automation system

NC programming – basics (SIEMENS)

NC programming – GROB-specific (SIEMENS)

Touch probe

Electrical maintenance – basic course

Electrical maintenance – advanced course

GROB spindle diagnostics (GSD) – electrical systems

Mechanical maintenance – G-module

Motorized spindle – mechanical systems (installation and removal)

Motorized spindle – mechanical systems (with cross-feed unit type 22)

Tool change – mechanical systems

RENISHAW ballbar measurement

Crash Management (main machining axes)

Assembly replacement

Mechanical maintenance – automation system

Mechanical maintenance – special-purpose machines

Operation – special-purpose machines

Robot training – basic course

Operation – robot station

Setup – robot station

Training modules

MACHINING TECHNOLOGY

OPERATION – G-MODULE AND AUTOMATION SYSTEM

Target group	<ul style="list-style-type: none"> • Specifically for operating personnel • Also recommended for maintenance personnel depending on their tasks
Requirements	<ul style="list-style-type: none"> • Knowledge of the function of automated machine tools • Basic course of the control system manufacturer
Duration / venue	<p>2 days – GROB Mindelheim Training Center or at customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Safety training • Introduction to safety technology • Structure of the machine • Basics of machine operation • Operating modes and how they are used • Tool management and its use • Detecting faults (troubleshooting) • Seating check
Learning objective	<ul style="list-style-type: none"> • Correct and safety-conscious machine operation • Minimizing machine downtimes through proactive machine operation • Adequate knowledge of GROB system solutions

NC PROGRAMMING – BASICS (SIEMENS)

Target group	<ul style="list-style-type: none"> • Specifically for operating personnel and NC programmers • Also recommended for persons who optimize process quality through program modifications
Requirements	<ul style="list-style-type: none"> • Knowledge of the function of automated machine tools • Knowledge of the use of production documents, such as drawings, parts lists, tool layouts
Duration / venue	<p>1 day – GROB Mindelheim Training Center or customer premises, or online training via MS Teams</p> <ul style="list-style-type: none"> • Course composition: Theory (100 %)
Contents	<ul style="list-style-type: none"> • Basic structure of NC programs • SIEMENS NC commands • Main and additional functions • Learning the most important G-functions and M-functions • Zero points and their influence • Simple programming exercises
Learning objective	<ul style="list-style-type: none"> • Using basic SIEMENS NC commands • Understanding the NC functions and their use • Basic knowledge of SIEMENS NC programming

NC PROGRAMMING – GROB-SPECIFIC (SIEMENS)

Target group	<ul style="list-style-type: none"> Specifically for NC programmers Also recommended for persons who optimize process quality through program modifications
Requirements	<ul style="list-style-type: none"> Participation in the "NC programming – basics (SIEMENS)" training module or equivalent knowledge Knowledge of the function of automated machine tools Knowledge of the use of production documents, including drawings, parts lists, tool layouts
Duration / venue	<p>2 days – GROB Mindelheim Training Center or customer premises, or online training via MS Teams</p> <ul style="list-style-type: none"> Course composition: Theory (100 %)
Contents	<ul style="list-style-type: none"> Familiarization with the coordinate systems used by GROB Program management Structure of machining programs Machining sub-routines Quality optimization/offset parameters Tool correction and monitoring Speed, feed and position parameters
Learning objective	<ul style="list-style-type: none"> Autonomous modification to machining programs (without touch probe) Performing quality optimizations Understanding the machine, its functions and machining programs Localizing sources of faults Comprehensive knowledge of the GROB-specific NC program

TOUCH PROBE

Target group	<ul style="list-style-type: none"> Specifically for NC programmers Also recommended for persons who optimize process quality through program modifications
Requirements	<ul style="list-style-type: none"> Participation in the "NC programming – basics (SIEMENS)" training module or equivalent knowledge Knowledge of the function of automated machine tools Knowledge of the use of production documents, including drawings, parts lists, tool layouts
Duration / venue	<p>1 day or ½ day in connection with the "NC programming – GROB-specific (SIEMENS)" training course</p> <ul style="list-style-type: none"> Course composition: Combination of theory (50 %) and practical exercises (50 %)
Contents	<ul style="list-style-type: none"> Basic knowledge of the different manufacturers of touch probes Calibration of the touch probe Replacement of the battery and probe head Internal function settings Replacement and initial operation of a touch probe Programming in main and subprograms Customer-specific functions
Learning objective	<ul style="list-style-type: none"> Autonomous modification of the touch probe programming Quality optimization Understanding touch probe functions and their NC programming Localizing sources of faults Comprehensive knowledge of the GROB-specific use of the touch probe

Training modules

MACHINING TECHNOLOGY

ELECTRICAL MAINTENANCE – BASIC COURSE	
Requirements	Training on electrical or electronic systems <ul style="list-style-type: none"> • Basic knowledge of drive and control systems technology as well as of the control system used
Duration / venue	3 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety training • Function description of the electrical components • Data backup • Data recovery • Hardware replacement • Hardware settings • Diagnostic options • Error analysis and the correct approach to machine malfunctions
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtime through preventive maintenance activities • Repair of electrical components • Localizing and rectifying electrical faults • Creation and use of the data backup as a reference • Proficient use of the documentation

ELECTRICAL MAINTENANCE – ADVANCED COURSE	
Requirements	Training on electrical or electronic systems <ul style="list-style-type: none"> • Basic knowledge of drive and control systems technology as well as of the control system used • Participation in the "Electrical maintenance – basic course" or equivalent knowledge
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety training • Basic knowledge of editing GROB diagnostic diagrams • Evaluating alarms and messages • General PLC and HMI program overview • Customer-specific functions • Diagnostic options
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtimes through preventive maintenance activities • Repair of electrical components • Localizing and rectifying electrical faults • Creation and use of the data backup as a reference • Proficient use of the documentation

Training modules

UNIVERSAL MACHINING CENTERS

GROB SPINDLE DIAGNOSTICS (GSD) – ELECTRICAL SYSTEMS

Target group	Specifically for electrical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on electrical systems • Basic knowledge of drive and control systems technology as well as of the control system used
Duration / venue	1 day – GROB Mindelheim Training Center or at customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (30 %) and practical exercises (70 %)
Contents	<ul style="list-style-type: none"> • Structure and function of GROB spindle diagnostics • Basics of the software used (IFM Octavis) • Troubleshooting on the machine • Maintenance, commissioning, and hardware replacement
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtimes following malfunctions • Proper use of the software

MECHANICAL MAINTENANCE – G-MODULE

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of hydraulic, pneumatic, and lubrication systems (lubricants, lubrication diagrams) • Experience in the preventive maintenance of automated machine tools • Experience in diagnosing faults and their causes
Duration / venue	3 days – GROB Mindelheim Training Center or at customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (30 %) and practical exercises (70 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure of the machine (assemblies, guides, drives, measuring systems, tool magazine) • Introduction to the machine documentation • Service and preventive maintenance measures • Introduction to the special equipment • Motorized spindle (inspection) • Machine zero points • Fluid technology
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Analyzing and rectifying mechanical faults • Replacing spare and wear parts • Performing preventive maintenance and inspection tasks • Localizing sources of faults • Carrying out repair activities

Training modules

MACHINING TECHNOLOGY

MOTORIZED SPINDLE MECHANICAL SYSTEMS (INSTALLATION AND REMOVAL)

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation • Experience with machine tools
Duration / venue	2 days – GROB Mindelheim Training Center <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Service and preventive maintenance measures • Introduction to the special equipment • Installation and removal of a motorized spindle using the special equipment provided • Checking perpendicularity, correcting as necessary • Spindle 0° setting • Setting the machine zero point (Z-axis)
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Performing preventive maintenance and inspection tasks • Correcting reference setting points • Localizing and rectifying mechanical faults • Replacing spare and wear parts • Localizing sources of faults • Carrying out repair activities

MOTORIZED SPINDLE MECHANICAL SYSTEMS (WITH TYPE 22 CROSS-FEED UNIT)

Target group	Mechanical maintenance technicians or machine operators (prior arrangement required)
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation, NC programming, and geometry • Experience with machine tools
Duration / venue	1 or 2 days (prior arrangement required) – GROB Mindelheim Training Center or customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure, function, service, and preventive maintenance activities for the motorized spindle with cross-feed (clamping set maintenance) • Introduction to the special equipment and standard parts (sealing elements) • Removal and installation of a motorized spindle with cross-feed using the special equipment provided (prior arrangement required) • Check and adjustment of the motorized spindle position • Spindle 0° setting with special equipment • Configuration of the feed-out tool in tool management • NC programs and the associated contexts
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Presentation of specific knowledge used across all relevant technical departments • Performing preventive maintenance and inspection tasks • Carrying out repair activities

*Training modules***UNIVERSAL MACHINING CENTERS****TOOL CHANGE – MECHANICAL SYSTEMS**

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation • Experience with machine tools
Duration / venue	3 days – GROB Mindelheim Training Center <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Tool magazine (structure) • Configuration and installation using special equipment (positioner) • Checking and setting up the transfer position • Setting the software cams • Checking the tool change operation in automatic mode
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Localizing and rectifying mechanical faults • Performing preventive maintenance and inspection tasks • Carrying out repair activities

RENISHAW BALLBAR MEASUREMENT

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation and geometry • Experience with machine tools
Duration / venue	3 days – GROB Mindelheim Training Center <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Basics of machine operation • Operating modes and how they are used • Structure and function of the RENISHAW applications • Introduction to fault overviews • Evaluation of diagnostic routines and graphics • Restoring perpendicularity
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Localizing and rectifying mechanical faults • Performing preventive maintenance and inspection tasks • Carrying out repair activities

*Training modules***MACHINING TECHNOLOGY****CRASH MANAGEMENT (MAIN MACHINING AXES)**

Target group	Specifically for mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation and geometry • Experience with machine tools
Duration / venue	5 days – GROB Mindelheim Training Center <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Identification of geometry errors • RENISHAW ballbar measurement and corresponding machine settings • Restoring machine geometry • Setting of machine zero points
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Localizing sources of faults • Localizing and rectifying mechanical faults • Performing preventive maintenance and inspection tasks • Carrying out repair activities

ASSEMBLY REPLACEMENT

Target group	Specifically for experienced mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical systems • Basics of machine operation and geometry • Experience with machine tools
Duration / venue	1 to 5 days – Mindelheim Training Center (prior arrangement required) <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Identification of geometry errors • Replacement of an assembly (prior arrangement required) • Restoring machine geometry • Commissioning of the assembly • Setting of machine zero points
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Localizing and rectifying mechanical faults • Performing preventive maintenance and inspection tasks • Carrying out repair activities

MECHANICAL MAINTENANCE – AUTOMATION SYSTEM

Target group	Mechanical maintenance technicians, electrical maintenance technicians, or machine operators (prior arrangement required)
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical/electrical systems • Basics of machine operation • Experience with machine tools
Duration / venue	<p>1 or 2 days (prior arrangement required) – at customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Operating modes and how they are used • Structure of linear gantry/part changer/automation system • Setting up the axes and grippers • Setting the axis zero points • Checking and setting up the transfer positions • Setting the GUDs and software cams • Automatic mode and operation
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Localizing and rectifying mechanical and electrical faults • Performing preventive maintenance and inspection tasks • Correct and safety-conscious machine operation • Minimizing machine downtimes through proactive machine operation

MECHANICAL MAINTENANCE – SPECIAL-PURPOSE MACHINES

Target group	Mechanical maintenance technicians or electrical maintenance technicians (prior arrangement required)
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical/electrical systems • Basics of machine operation and geometry • Experience with machine tools
Duration / venue	<p>1 day – on customer premises (prior arrangement required)</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure of the machine (assemblies, guides, drives, measuring systems, tool magazine) • Introduction to the machine documentation • Service and preventive maintenance measures • Introduction to the special equipment • Motorized spindle (inspection) • Machine zero points • Fluid technology
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Analyzing and rectifying mechanical faults • Replacing spare and wear parts • Performing preventive maintenance and inspection tasks • Localizing sources of faults • Carrying out repair activities

Training modules

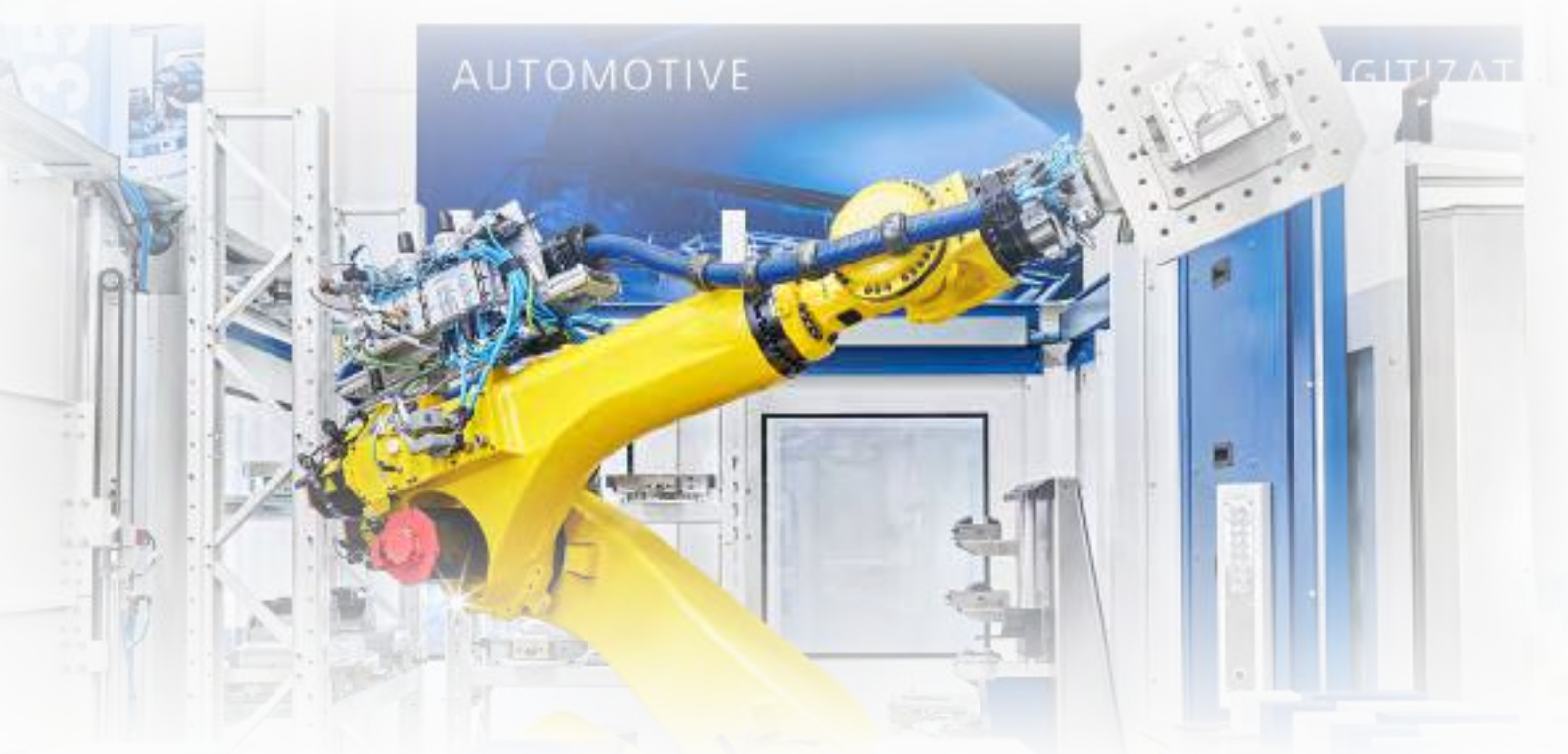
MACHINING TECHNOLOGY

OPERATION – SPECIAL-PURPOSE MACHINES

Target group	<ul style="list-style-type: none"> Specifically for operating personnel Also recommended for maintenance personnel depending on their tasks
Requirements	<ul style="list-style-type: none"> Knowledge of the function of automated machine tools Basic course of the control system manufacturer Training immediately follows process commissioning
Duration / venue	<p>1 day – on customer premises (prior arrangement required)</p> <ul style="list-style-type: none"> Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> Safety training Introduction to safety technology Structure of the machine Basics of machine operation Operating modes and how they are used Tool management and its use Detecting faults (troubleshooting) Seating check
Learning objective	<ul style="list-style-type: none"> Correct and safety-conscious machine operation Minimizing machine downtimes through proactive machine operation Sufficient knowledge of GROB machining technology

ROBOT TRAINING – BASIC COURSE

Target group	Operators, installation technicians
Requirements	Technical knowledge
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> Safety instruction Structure and components of a robot system Robot operating modes Structure and functions of the control panel Moving the robot arm in setup mode (by axis/Cartesian) Selecting, starting, and stopping programs Tool measurement Basic measurement
Learning objective	<ul style="list-style-type: none"> Basic knowledge of robots Correct robot operation



OPERATION – ROBOT STATION

Target group	Operators, installation technicians
Requirements	Robot training – basic course or equivalent knowledge
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none"> • Robot station safety devices • Operating the robot cell via the station HMI • Explanation of coordinate systems in place • Retracting the robot in setup mode in case of faults • Retracting the robot from the safety area • Switching the robot station to automatic mode • Automatic program sequence of the robot station
Learning objective	<ul style="list-style-type: none"> • Knowledge of the special features of the system • Independent operation of the robot station • Independent rectification of (simple) faults

ROBOT STATION SETUP

Target group	Installation technicians
Requirements	Robot station operation training module
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none"> • Explanation of GROB-specific programs • Remeasuring a base • Adjusting robot positions • Adjusting robot paths • Adjusting program parameters
Learning objective	Making independent changes to robot programs



Knowledge for tomorrow

ASSEMBLY & E-MOBILITY

GROB offers its customers a broad spectrum of state-of-the-art training courses. With all expertise and core processes in-house, we can elaborate on your individual systems.

- ⊕ Increase the expertise of your employees in the complex world of electromobility
- ⊕ Learn how to master technical challenges quickly and efficiently
- ⊕ For an optimal use of your capacities and resources



GROB TECHNICAL ACADEMY – PORTFOLIO
#UniversalMachiningCenters #E-learning
#MachiningTechnology #SpecialEquipmentBox
#AssemblyAndElectromobility #Service

Knowledge for tomorrow

ASSEMBLY AND ELECTROMOBILITY TRAINING MODULES

GROB offers diverse and customer-specific concepts for tomorrow's components through its modular, flexible, and scalable solutions for electric powertrains. Our broad range of training courses includes courses on stator technologies, rotor technologies, as well as battery cells and modules.

Operation

Mechanical maintenance

Electrical maintenance

Mechanical maintenance – linear gantry

SIEMENS TIA – basic course on the GROB structure

BECKHOFF – basic course on the GROB structure

Camera systems – basic course (Keyence, Baumer, Cognex, etc.)

LASER BASICS BASED ON TRUMPF

Robot training – basic course

Operation – robot station

Setup – robot station

Kistler spindle training

Training modules

ASSEMBLY & E-MOBILITY

OPERATION	
Target group	Machine operators, mechanical and electrical maintenance technicians
Requirements	Basic knowledge of the assembly line
Duration / venue	0.5 days per station (project-specific adaptation required) – customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure of the machine • Basics of machine operation • Operating modes and how they are used • Detecting faults (troubleshooting) Additional training course content must be adapted individually for the system.
Learning objective	<ul style="list-style-type: none"> • Correct and safety-conscious machine operation • Fast correction and analysis of malfunctions • Minimizing machine downtimes

MECHANICAL MAINTENANCE	
Target group	Mechanical maintenance technicians
Requirements	<ul style="list-style-type: none"> • Training on mechanical systems • Basic knowledge of hydraulic and pneumatic systems • Knowledge of preventive maintenance for assembly lines
Duration / venue	0.5 days per station (project-specific adaptation required) – customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (20 %) and practical exercises (80 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure of the machine (assemblies, guides, drives, measuring systems, etc.) • Service and preventive maintenance measures • Replacing wear parts Additional training course content must be adapted individually for the system.
Learning objective	<ul style="list-style-type: none"> • Localizing and rectifying mechanical faults • Replacing spare and wear parts • Minimization of machine downtimes • Carrying out inspection and preventive maintenance tasks

ELECTRICAL MAINTENANCE

Target group	Maintenance technicians, electronics technicians
Requirements	<ul style="list-style-type: none"> • Training on electrical or electronic systems • Basic knowledge of drive and control systems technology as well as of the control system used
Duration / venue	<p>0.5 days per station (project-specific adaptation required) – customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (50 %) and practical exercises (50 %)
Contents	<ul style="list-style-type: none"> • Safety training • Function description of the electrical components • Data backup • Data recovery • Hardware replacement • Hardware settings • Diagnostic options • Error analysis and the correct approach to machine malfunctions
Learning objective	<ul style="list-style-type: none"> • Minimizing machine downtime through preventive maintenance activities • Repair of electrical components • Rectifying and finding electrical faults • Creation and use of the data backup as a reference

MECHANICAL MAINTENANCE – LINEAR GANTRY

Target group	Mechanical maintenance technicians, electrical maintenance technicians, or machine operators (prior arrangement required)
Requirements	<ul style="list-style-type: none"> • Comprehensive training on mechanical/electrical systems • Basics of machine operation • Experience with assembly systems
Duration / venue	<p>1 day – on customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Operating modes and how they are used • Linear gantry (structure) • Structure and setup of the axes and grippers • Checking and setting up the transfer position • Setting the required parameters • Automatic mode and operation
Learning objective	<ul style="list-style-type: none"> • Using the technical documentation as a reference • Correcting reference setting points • Localizing and rectifying mechanical and electrical faults • Performing preventive maintenance and inspection tasks • Correct and safety-conscious machine operation • Minimizing machine downtimes through proactive machine operation

Training modules

ASSEMBLY & E-MOBILITY

SIEMENS TIA – BASIC COURSE ON THE GROB STRUCTURE

Target group	Maintenance technicians, electronics technicians
Requirements	<ul style="list-style-type: none"> • Training on electronic systems • Basic knowledge of the control system used
Duration / venue	<p>3 days (can be adapted to the specific project) – customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (70 %) and practical exercises (30 %)
Contents	<ul style="list-style-type: none"> • Introduction to the hardware • Introduction to the GROB structures • Basics of programming • Data backup • Diagnostic options • Data processing • Interface description • Sequences • Visualization
Learning objective	<ul style="list-style-type: none"> • Correct and safety-conscious machine operation • Knowledge of the GROB structures • Tracking data communication • Understanding the sub-components' interfaces

BECKHOFF – BASIC COURSE ON THE GROB STRUCTURE

Target group	Maintenance technicians, electronics technicians
Requirements	<ul style="list-style-type: none"> • Training on electronic systems • Basic knowledge of the control system used
Duration / venue	<p>2 days (can be adapted to the specific project) – customer premises</p> <ul style="list-style-type: none"> • Course composition: Combination of theory (70 %) and practical exercises (30 %)
Contents	<ul style="list-style-type: none"> • Introduction to the hardware • Introduction to the GROB structures • Basics of programming • Data backup • Diagnostic options • Data processing • Interface description • Sequences • Visualization
Learning objective	<ul style="list-style-type: none"> • Correct and safety-conscious machine operation • Knowledge of the GROB structures • Tracking data communication • Understanding the sub-components' interfaces



CAMERA SYSTEMS – BASIC COURSE (KEYENCE, BAUMER, COGNEX, ETC.)

Target group	BASICS (KEYENCE, BAUMER, COGNEX, etc.) Maintenance technicians, electronics technicians, quality assurance personnel
Requirements	Training on electrical or electronic systems
Duration / venue	1 day (project-specific adaptation required) – customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (60 %) and practical exercises (40 %)
Contents	<ul style="list-style-type: none"> • Structure of a camera system • Function description of the electrical components • Hardware replacement • Hardware settings • Diagnostic options • Fault analysis
Learning objective	<ul style="list-style-type: none"> • Quality improvement through better understanding • Safe replacement of components • Localizing and rectifying faults • Creation and use of data backups

LASER BASICS BASED ON TRUMPF

Target group	Application technicians, operators
Requirements	Technical training
Duration / venue	2 days – GROB Mindelheim Training Center or at customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (40 %) and practical exercises (60 %)
Contents	<ul style="list-style-type: none"> • Safety training • Introduction to safety technology • Basics/structure of the various laser systems • Basics of machine operation • Detecting faults (troubleshooting)
Learning objective	<ul style="list-style-type: none"> • Correct and safety-conscious machine operation • Basic understanding of laser systems

Training modules

ASSEMBLY & E-MOBILITY

ROBOT TRAINING – BASIC COURSE

Target group	Operators, installation technicians
Requirements	Technical knowledge
Duration / venue	2 days – GROB Mindelheim Training Center
Contents	<ul style="list-style-type: none"> • Safety instruction • Structure and components of a robot system • Robot operating modes • Structure and functions of the control panel • Moving the robot arm in setup mode (by axis/Cartesian) • Selecting, starting, and stopping programs • Tool measurement • Basic measurement
Learning objective	<ul style="list-style-type: none"> • Basic knowledge of robots • Correct robot operation

OPERATION – ROBOT STATION

Target group	Operators, installation technicians
Requirements	Robot training – basic course or equivalent knowledge
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none"> • Robot station safety devices • Operating the robot cell via the station HMI • Explanation of coordinate systems in place • Retracting the robot in setup mode in case of faults • Retracting the robot from the safety area • Switching the robot station to automatic mode • Automatic program sequence of the robot station
Learning objective	<ul style="list-style-type: none"> • Knowledge of the special features of the system • Independent operation of the robot station • Independent rectification of (simple) faults

Training modules

ASSEMBLY & E-MOBILITY

SETUP – ROBOT STATION

Target group	Installation technicians
Requirements	Operation – robot station
Duration / venue	1 day – customer system at customer premises
Contents	<ul style="list-style-type: none"> • Explanation of GROB-specific programs • Remeasuring a base • Adjusting robot positions • Adjusting robot paths • Adjusting program parameters
Learning objective	Making independent changes to robot programs

KISTLER SPINDLE TRAINING

Target group	Mechanical maintenance technicians, machine operators, quality assurance personnel
Requirements	<ul style="list-style-type: none"> • Training on mechanical systems • Basics of machine operation
Duration / venue	2 days – GROB Mindelheim Training Center or at customer premises <ul style="list-style-type: none"> • Course composition: Combination of theory (10 %) and practical exercises (90 %)
Contents	<ul style="list-style-type: none"> • Introduction to safety technology • Structure, function, service, and preventive maintenance activities for spindles • Spindle removal and installation incl. referencing • Basic spindle settings • Operation of the maXYmos HMI (control system) • Basic structure of the programs • Evaluation of press-fitting programs • Calibration of press-fitting spindles
Learning objective	<ul style="list-style-type: none"> • Understanding the maXYmos control system • Performing preventive maintenance and inspection tasks • Carrying out repair activities • Correct and safety-conscious machine operation



*Stabilized production
with training*

UNIVERSAL CONCEPTS FOR ALL TECHNOLOGIES

GROB offers its customers a broad spectrum of state-of-the-art training courses. With all expertise and core processes in-house, we can elaborate on your individual systems.

- ⊕ Strengthening of individual maintenance competence
- ⊕ Understanding & lasting correction of faults
- ⊕ Stabilization of internal workflows
- ⊕ A highly qualified contact person on site

Identnr GROB	GROB Bene
G503-1920-0200-02-2	Deckel
G503-1920-0200-02-3	Ritzelwelle
G503-1920-0200-02-4	Rohr
G503-1920-0200-02-5	Scheibe
G503-1920-0200-02-9	Zahnrad
DIN988-17x24x1	Passscheibe



GROB TECHNICAL ACADEMY – PORTFOLIO
#UniversalMachiningCenters #E-learning
#MachiningTechnology #SpecialEquipmentBox
#AssemblyAndElectromobility #Service

Training modules

UNIVERSAL CONCEPTS FOR ALL TECHNOLOGIES

SKILL GAP ANALYSIS (WORKSHOP)

Target group	Machine operators, mechanical and electrical maintenance technicians
Duration / venue	Dependent on the number of participants and system complexity – GROB Mindelheim Training Center
Contents	Joint elaboration of a qualification matrix and associated job profiles for different roles
Learning objective	<ul style="list-style-type: none">• Covering all required skills and qualifications to operate the system safely• Developing an understanding of the complexity of the machine• Identifying possible qualification deficits of various target groups

The skill gap analysis as an introduction to customer-specific training concepts



Which competencies/skills are required for the operation and maintenance of the specific systems?

Which competencies/skills are required for a particular activity (e.g., operator)?

What competencies/skills are already available to the customer on an employee basis?

How do the training plans need to be adapted as a result?



ON-THE-JOB TRAINING

Target group	Maintenance technician, maintenance personnel, operator
Requirements	Basic training
Duration / venue	After consultation – GROB Mindelheim Training Center or customer premises For example: during shifts, 8–10 h per day, Mon.–Fri. Recommendation: min. 1–3 months, ongoing if needed
Contents	<ul style="list-style-type: none"> • Maintenance qualification • Developing system-specific competence: mechanical and electrical • Developing problem-solving competence • Fault analysis • Stabilization of systems • Preventing machine downtime • Attending and establishing shop floor meetings and documentation, 8D, FMEA, RCA, etc.
Learning objective	<ul style="list-style-type: none"> • Strengthening of individual maintenance competence • Understanding and lasting correction of faults • Stabilization of production and internal workflows

Everything at a glance

GENERAL CONDITIONS

GENERAL INFORMATION

Registration	<p>Please provide the following information when submitting your training inquiry/application:</p> <ul style="list-style-type: none"> • Relevant training module • Number of participants including first and last names (The maximum number of participants per course is limited to five. No minimum number of participants is required.) • Your complete contact data (Company name, address with telephone number and e-mail address, as well as a contact for queries.) The training application is binding only after our e-mail confirmation!
Training duration	The training time is indicated to the customer in days, where one day lasts from 8 a.m. – 3 p.m. unless otherwise agreed. The total break time is 45 minutes, usually divided as follows: 15 minutes in the morning, 30 minutes at noon.
Language of the training	German or English – if interpreters are required, these must be provided by the customer. We will of course assist you with your search for a suitable interpreter.
Cancellation	A cancellation of the training is free of charge, provided that the written cancellation notice arrives at GROB 14 days before the start of the course at the latest. Cancellations received after this time will incur a charge of 30 % of the course fees. If a participant fails to attend or leaves the course prematurely, the full fee will be charged.
Agreed performance period	The ordered training course(s) must be completed within three years from the date of order confirmation, otherwise the customer's claim to fulfillment expires and the service is considered to have been rendered.
Course procedure	All courses are held at GROB in professionally-equipped training rooms.
Customer system	No modifications that influence the process are implemented in practice during training courses on customer systems. The theory behind these topics is discussed directly at the system.
Course materials	Training documentation is provided in German or the language of the Technical Documentation supplied. Please contact us if further languages are required. The course materials are protected by copyright. They must not be copied nor otherwise reproduced, either in whole or in part, without the trainer's prior consent. Use of online content: For training measures and content made available online by GROB(e.g., webinars, online courses, etc.), the customer receives a temporary, non-transferable right of use depending on the contract.
Disclaimer	The information provided in the courses and related documents is always given to the best of our knowledge and ability. GROB does not accept any liability for discrepancies or errors. The written information in particular does not constitute any assurance of quality or the equipment versions of the machines sold.
Accommodation during the courses	The participants must arrange their own accommodation. We will of course assist you with your search for overnight accommodation.
Safety	The training participants are obliged to observe and comply with the safety regulations applicable on GROB company premises. Specifically, the participants are obliged to wear safety footwear. Please bring safety footwear with you to the training.
Costs	We will happily inform you of all costs on request. Generally speaking, the costs are calculated per training day.
Meals	Per training day, each participant will receive drinks, snacks and one lunch free-of-charge in the GROB company restaurant.

Learn when and where you want

GROB CAMPUS



The GROB Campus gives you the opportunity to flexibly expand your skills to meet your requirements at any time. This ensures that you are perfectly prepared for your future challenges.

Expand and enhance your knowledge with customized digital training offers!

WHAT IS THE GROB CAMPUS?

- + Innovative learning management system
- + Targeted learning and expertise management
- + Provision of digital learning content such as online courses or videos
- + Digital training catalog on our training offer



Learning management

View the GROB training courses that your employees have already completed at any time.



Expertise management

Central management of expertise to close current and future knowledge and skill gaps.



Digitalization

Learn when and where it best suits your company and your employees.



Worldwide throughout the machine service life

GROB – GLOBAL AND INTERNATIONAL

From Bavaria to the world: Since our founding in 1926 in Munich, we as a global, family-managed company have been on a constant growth trajectory developing and manufacturing systems and machine tools. Our customers include the world's leading automotive manufacturers, their suppliers, and renowned companies from the aerospace, mechanical engineering, and other industries. With our production facilities in Germany, Brazil, the USA, China, Italy and India, as well as 15 worldwide service centers and sales branches, we are represented around the globe, ensuring the highest quality.

FOUNDED IN 1926



NORTH AMERICA

Bluffton, Ohio, USA
Detroit, Michigan, USA
Querétaro, Mexico

6 PLANTS

15 SALES
AND SERVICE BRANCHES WORLDWIDE

SOUTH AMERICA

São Paulo, Brazil

Our global production sites



Mindelheim, Germany



São Paulo, Brazil

EUROPE

Mindelheim, Germany
Pianezza, Italy
Stratford-upon-Avon, Great Britain
Hengelo, Netherlands
Senlis, France
Baar, Switzerland
Poznań, Poland
Győr, Hungary
Istanbul, Turkey

24/7 SUPPORT



ASIA

Dalian, China
Bangalore, India
Beijing, China
Shanghai, China
Yokohama, Japan
Suwon, South Korea
Haiphong, Vietnam
Bangkok, Thailand



Bluffton, USA



Dalian, China



Pianezza, Italy



Bangalore, India



www.grobgroup.com

© GROB-WERKE GmbH & Co. KG - 04/2024/EN

GROB-WERKE GmbH & Co. KG

Pioneers in designing and building highly innovative production and automation systems for almost 100 years.

*#MachiningTechnology #UniversalMachiningCenters
#AssemblyPlants #Electromobility #Automation
#AdditiveManufacturing #Digitalization
#NewAndQualityCheckedUsedMachines #Service*



Stay informed and
subscribe to the
GROB Newsletter now!



Excellence in sustainable technology