



CUSTOMER TRAINING GERMANY

January to June 2021

ARBURG



Dear Sir or Madam

“Wir sind da.” With efficient machine and plant technology in a class of its own. But this alone is not enough. It is just as important that you can fully exploit the potential of our products.

This is why we invest continuously in our courses. And further develop these according to specific requirements – for example in the field of automation, which has been gaining in importance for years. We have now added two new service courses: MULTILIFT and INTEGRALPICKER V.

How to find your way around our extensive range of courses? It's quite simple: Our new step-by-step model will guide you straight to the courses that suit your knowledge and your machine technology.

Simply sign up for a training course at the new Training Center in Lossburg or arrange a bespoke course at your premises. Please book your accommodation yourself. We would be pleased to send you a list of recommended hotels.

You can contact us via e-mail (kundenschulung@arburg.com), by phone (+49 7446 33-4343) or using the contact form on our website.

Best wishes,

Uwe Klumpp

Product Training

ARBURG GmbH + Co KG

GENERAL INFORMATION

1. Registration/confirmation

Our administration team will be pleased to answer your questions and register you on our courses. You can also submit an enquiry regarding our courses via our website: www.arburg.com/info/courses. You will receive confirmation no later than two weeks before the start of the course.

2. Contact

E-mail: kundenschulung@arburg.com
Tel.: +49 7446 33-4343
Fax: +49 7446 33-3170

3. Course times/scope

You will find the course times in the description for your particular course.

The price (not including VAT) covers extensive course documentation, lunch, snacks and beverages.

4. Hotel reservation

We kindly request that you book your own accommodation. We would be happy to send you a list of hotel recommendations.

5. Cancellation/amendment

Please note that ARBURG reserves the right to cancel or change course dates for important reasons.

Cancellations up to seven working days (Mon–Fri) prior to the start of the course will incur a 10% cancellation charge; cancellations made within three working days of the start date will require the full course fee to be paid.

6. Standards/certification

ARBURG works with a high-calibre team of trainers. All courses offered worldwide are delivered to the same high standard of quality.

7. Downloads

At the end of the course, all participants will be provided with electronic documents on a storage device.

OUR TEAM

Administration



Nadja Schmitz



Janina Schmid

Application courses in Lossburg



Joachim Burkhardt



Frank Eberhard



Tobias Feigenbutz



Patrick Haid



Stefan Kalmbach



Klaus Schwab



Kai-Uwe Vorwalder



Thomas Wursthorn



Kedao Yu

OUR TEAM

Service courses



Timo Böhringer



Marco Dölker



Christian Gaiser



Benjamin Gnegel



Günter Himmelsbach



Martin Jeckle



Elmar Mäntele



Simon Rebholz



Stefan Seid

OUR TEAM



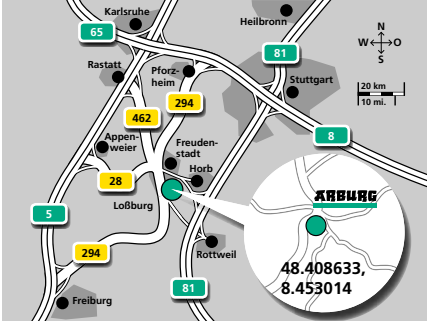
TRAINING LOCATIONS/ADDRESSES



ARBURG Training Center in Lossburg



ARBURG GmbH + Co KG
Arthur-Hehl-Strasse
72290 Lossburg
Tel.: +49 7446 33-0

DIRECTIONS

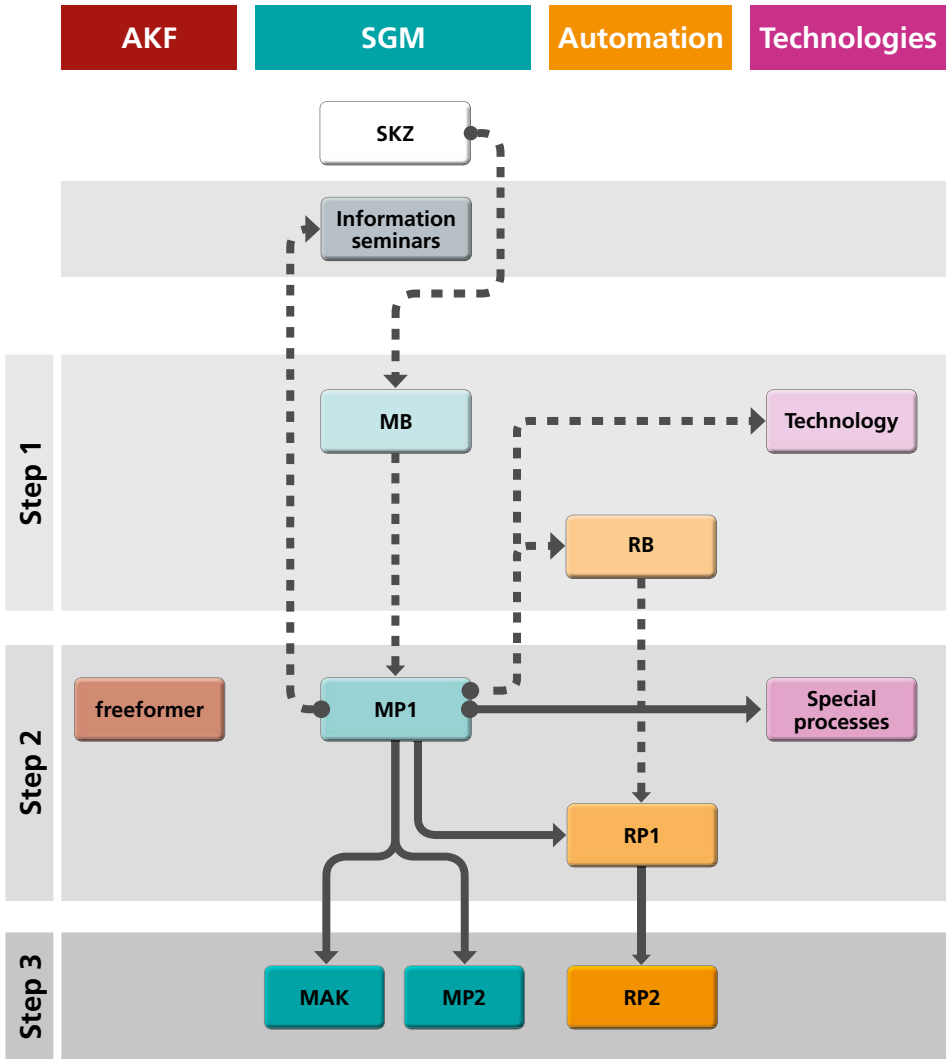


Lossburg

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APPLICATION



ELECTRIC ALLROUNDERS

SELOGICA DIRECT/SELOGICA ND

Course objective:	Basic knowledge of how to operate electric ALLROUNDERS
Target group:	Those new to injection moulding, machine operators
Prerequisites:	None
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in machine programming course 1 (MP1)

Training course topics

- Principles of the injection moulding machine and control system
- Injection moulding process
- Typical plastics processing requirements
- Practicals: starting/stopping the injection moulding process, rectifying faults and start-up malfunctions, changing moulds

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER E/ ALLROUNDER GOLDEN ELECTRIC/ ALLROUNDER H	SELOGICA direct/ND	MB-EL SEL

ELECTRIC ALLROUNDERS GESTICA

Course objective:	Basic knowledge of how to operate electric ALLROUNDERS
Target group:	Those new to injection moulding, machine operators
Prerequisites:	None
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in machine programming course 1 (MP1)

Training course topics

- Principles of the injection moulding machine and control system
- Injection moulding process
- Typical plastics processing requirements
- Practicals: starting/stopping the injection moulding process, rectifying faults and start-up malfunctions, changing moulds

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER H	GESTICA	MB-EL G

HYDRAULIC ALLROUNDERS SELOGICA DIRECT/SELOGICA ND

Course objective:	Basic knowledge of how to operate hydraulic ALLROUNDERS
Target group:	Those new to injection moulding, machine operators
Prerequisites:	None
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in machine programming course 1 (MP1)

Training course topics

- Principles of the injection moulding machine and control system
- Injection moulding process
- Typical plastics processing requirements
- Practicals: starting/stopping the injection moulding process, rectifying faults and start-up malfunctions, changing moulds

Machine

ALLROUNDER S/
ALLROUNDER GOLDEN EDITION

Control system

SELOGICA direct/ND

Course name

MB-HY SEL

SELOGICA DIRECT/SELOGICA ND

Course objective:	How to operate and program the ALLROUNDER
Target group:	Machine operators, machine programmers
Prerequisites:	Experience working with injection moulding machines recommended
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950
Note:	To enhance your knowledge, we recommend that you take part in machine programming course 2 (MP2)

Training course topics

- Typical machine features
- Programming the SELOGICA direct/ND machine controller
- Setting up the clamping unit and the injection unit
- Adapting the set values
- Monitoring quality
- Maintaining the machine

Machine	Control system	Course name
ALLROUNDER 170–570 S	SELOGICA direct/ND	MP1-S SEL
ALLROUNDER 630–920 S	SELOGICA direct/ND	MP1-S GM SEL
ALLROUNDER GOLDEN EDITION	SELOGICA direct/ND	MP1-GE SEL
ALLROUNDER A	SELOGICA direct/ND	MP1-A SEL
ALLROUNDER GOLDEN ELECTRIC	SELOGICA direct/ND	MP1-EG SEL
ALLROUNDER H	SELOGICA direct/ND	MP1-H SEL
ALLROUNDER V	SELOGICA direct/ND	MP1-V SEL
ALLROUNDER T	SELOGICA direct/ND	MP1-T SEL

GESTICA

Course objective:	How to operate and program the ALLROUNDER
Target group:	Machine operators, machine programmers
Prerequisites:	Experience working with injection moulding machines recommended
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950
Note:	To enhance your knowledge, we recommend that you take part in machine programming course 2 (MP2)

Training course topics

- Typical machine features
- Programming the GESTICA machine controller
- Setting up the clamping unit and the injection unit
- Adapting the set values
- Monitoring quality
- Maintaining the machine

Machine	Control system	Course name
ALLROUNDER A	GESTICA	MP1-A G
ALLROUNDER H	GESTICA	MP1-H G

ELECTRIC ALLROUNDERS SELOGICA DIRECT/SELOGICA ND

Course objective:	Developing knowledge of setting ALLROUNDERS, learning about options
Target group:	Machine programmers
Prerequisites:	Participation in machine programming course 1 (MP1) with SELOGICA direct or SELOGICA ND control system
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in a plastics technology course

Training course topics

- Advanced movements
- Advanced programming
- Monitoring charts
- Options

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER H/ ALLROUNDER GOLDEN ELECTRIC	SELOGICA direct/ND	MP2-EL SEL

HYDRAULIC ALLROUNDERS SELOGICA DIRECT/SELOGICA ND

Course objective:	Developing knowledge of setting ALLROUNDERS, learning about options
Target group:	Machine programmers
Prerequisites:	Participation in machine programming course 1 (MP1) with SELOGICA direct or SELOGICA ND control system
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in a plastics technology course

Training course topics

- Advanced movements
- Advanced programming
- Monitoring charts
- Options

Machine	Control system	Course name
ALLROUNDER S/ ALLROUNDER GOLDEN EDITION/ ALLROUNDER V/ ALLROUNDER T	SELOGICA direct/ND	MP2-HY SEL

ELECTRIC ALLROUNDERS GESTICA

Course objective:	Developing knowledge of setting ALLROUNDERS, learning about options
Target group:	Machine programmers
Prerequisites:	Participation in machine programming course 1 (MP1) with GESTICA control system
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650
Note:	To enhance your knowledge, we recommend that you take part in a plastics technology course

Training course topics

- Advanced movements
- Advanced programming
- Monitoring charts
- Options

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER H	GESTICA	MP2-EL G

USER TRAINING ARBURG PLASTIC FREEFORMING

Course objective:	How to prepare component data and operate the freeformer
Target group:	Machine operators, machine programmers, employees working in the design of prototypes
Prerequisites:	A freeformer must be available in the company
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 1 p.m.
Course fee:	EUR 1550

Training course topics

- General machine and process description
- freeformer control system
- Operating ARBURG freeformer software
- Preparing 3D data
- Working with the freeformer, practical exercises
- Maintaining the freeformer

Machine

freeformer 200-3X

freeformer 300-3X

Course name

AS-AKF 200-3X

AS-AKF 300-3X

MULTILIFT

Course objective:	How to operate the MULTILIFT V, MULTILIFT SELECT and MULTILIFT H robotic systems
Target group:	Operators of MULTILIFT robotic systems (not programmers)
Prerequisites:	Basic knowledge of operating an injection moulding machine desirable
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Design and equipment of vertical (V) mould entry MULTILIFT V and MULTILIFT SELECT as well as horizontal (H) mould entry MULTILIFT H
- Operating the MULTILIFT
- Practicals: sequences, start-up, set-up, troubleshooting, parameter adjustment, area monitoring
- Inspecting safety devices

Robot system

MULTILIFT V/
MULTILIFT SELECT/
MULTILIFT H

Control system

SELOGICA direct/ND

Course name

RB ML

MULTILIFT

Course objective:	How to operate MULTILIFT V, MULTILIFT SELECT and MULTILIFT H robotic systems
Target group:	Programmers of MULTILIFT robotic systems
Prerequisites:	Participation in machine programming course 1 (MP1)
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- Operating vertical (V) mould entry MULTILIFT V and horizontal (H) mould entry MULTILIFT H
- Programming MULTILIFT
- Practicals: teach-in programming, programming sequences, pattern placements and monitoring functions
- Data set administration
- Maintaining and testing safety devices

Robotic system	Control system	Course name
MULTILIFT V/MULTILIFT SELECT	SELOGICA direct/ND	RP ML-V1
MULTILIFT H	SELOGICA direct/ND	RP ML-H

MULTILIFT

Course objective:	Developing knowledge of how to program MULTILIFT V and MULTILIFT SELECT robotic systems
Target group:	Programmers of MULTILIFT V and MULTILIFT SELECT robotic systems
Prerequisites:	Participation in a robotic system course (RP-ML 1)
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Development of knowledge from programming course 1
- Practicals: programming the first and last cycles, multiple samples, random sample selection, intermediate placements, synchronous movements and multi-component applications

Robotic system	Control system	Course name
MULTILIFT V/MULTILIFT SELECT	SELOGICA direct/ND	RP ML-V2

INTEGRALPICKER

Course objective:	How to program INTEGRALPICKER V
Target group:	INTEGRALPICKER V programmers
Prerequisites:	Basic knowledge of operating injection moulding machines
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Design and basic equipment of INTEGRALPICKER V
- Operation and teach-in programming
- Practicals: sequences, working area monitoring, synchronous movements
- Data set administration
- Maintaining and testing safety devices

Robotic system
INTEGRALPICKER V

Control system
SELOGICA direct/ND

Course name
RP IP-V

SIX-AXIS ROBOTS

Course objective:	How to program six-axis robots
Target group:	Programmers of six-axis robots with SELOGICA direct user interface
Prerequisites:	Automation experience
Course duration:	5 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 1550

Training course topics

- Six-axis robot
- Technical data, Kuka Control Panel, safety circuits
- Movement types for the six-axis robot
- Creating teach points
- Home position, programming various removal processes, set-down sequences and pattern placements
- Creating a complete production sequence
- Monitoring functions, working area monitoring

Robotic system

Six-axis robot

Control system

KUKA KR C4

Course name

RP 6AC

INJECTION MOULDING COMPOUNDS/ INJECTION MOULDING PROCESS

Course objective:	Developing knowledge of injection moulding compounds and the injection moulding process
Target group:	machine operators, machine programmers, production managers, controllers, sales personnel, designers, planners
Prerequisites:	Basic knowledge of injection moulding and injection moulding compounds
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

Injection moulding compounds

- Composition/properties of plastics
- State/structure of plastics
- Overview of important plastics

Injection moulding process

- Design of an injection moulding machine
- Overview of the injection moulding process
- Process parameters and their influence on moulded parts

Technology

Injection moulding compounds/injection moulding process

Course name

KT1

INJECTION MOULDED PART/INJECTION MOULD

Course objective:	Developing knowledge of designing injection moulded parts and injection moulds
Target group:	Designers of injection moulded parts or moulds, mould-makers, machine programmers, production managers, controllers
Prerequisites:	Basic knowledge of injection moulding, injection moulds
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

Injection moulded part

- Designing injection moulded parts
- Shrinkage characteristics/dimensional accuracy

Injection mould

- Construction and design of injection moulds
- Types of mould and demoulding
- Design of sprue and runner systems
- Mould temperature control

Technology

Injection moulded part/injection mould

Course name

KT4

RECORDING QUALITY MOULD CAVITY PRESSURE/ SENSOR TECHNOLOGY

Course objective:	Sensor technology for improving quality
Target group:	Machine operators, machine programmers, production managers, controllers
Prerequisites:	Basic knowledge of injection moulding
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

Sensor technology

- Sensor for pressure and temperature
- Measuring mould cavity pressure and temperature
- Measuring systems in the control system
- Holding pressure variants

Recording quality

- Quality optimisation
- Quality monitoring
- Documentation

Technology

Mould cavity pressure/sensor technology

Course name

KT Q/W

MOULDED PART FAULTS

Course objective:	Identifying and rectifying causes of moulded part faults
Target group:	Installation technicians, machine operators, mould-makers
Prerequisites:	Basic knowledge of injection moulding and injection moulding compounds
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 1 p.m.
Course fee:	EUR 650

Training course topics

Fault description

- Definition and detection of various moulded part faults

Causes of faults and troubleshooting

- Classifying the causes based on:
 - Human
 - Machine
 - Material
 - Mould
- Troubleshooting measures

Technology

Moulded part faults

Course name

KT STF

MULTI-COMPONENT INJECTION MOULDING

Course objective:	How to equip, set up and operate multi-component injection moulding machines
Target group:	Process technicians and machine programmers of multi-component injection moulding machines
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- Multi-component injection moulding
- Various multi-component moulds
- Machine technology and accessories
- Equipping, setting up and adjusting various moulds, including rotary platen and spacer plate
- Programming various production sequences
- Process optimisation
- Maintaining machines and accessories

Special processes

Multi-component technology

Course name

SV MK

THERMOSET PROCESSING

Course objective:	Developing knowledge of material properties and thermoset injection moulding
Target group:	Machine operators, machine programmers, mould designers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Composition/properties of plastics and various thermoset materials
- Thermoset-specific equipment of ALLROUNDERS
- Programming, setting and monitoring the ALLROUNDER specifically for thermosets
- Principles of designing thermoset injection moulds
- Process optimisation

Special processes

Thermoset processing

Course name

SV DURO

POWDER INJECTION MOULDING

Course objective:	Developing knowledge of material properties and metal and ceramic powder injection moulding (PIM)
Target group:	Machine operators, machine programmers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- Composition/properties of powder materials and binders
- PIM-specific equipment of ALLROUNDERS
- Programming, setting and monitoring ALLROUNDERS
- Detection, diagnosis and rectification of faults
- Process optimisation
- Maintaining the machine

Special processes

Powder injection moulding

Course name

SV PIM

LSR PROCESSING

Course objective:	Developing knowledge of material properties and Liquid silicone rubber injection moulding (LSR)
Target group:	Machine operators, machine programmers, mould designers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- Introduction to the composition/properties of plastics and LSR materials
- LSR-specific equipment of ALLROUNDERS
- Programming, setting and monitoring the injection moulding machine specifically for LSR
- Principles of designing LSR injection moulds
- Process optimisation

Special processes

LSR processing

Course name

SV LSR

INJECTION COMPRESSION MOULDING

Course objective:	Developing knowledge of injection compression moulding processes and functions
Target group:	Machine operators, machine programmers, mould designers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Mould technology
- Various injection compression moulding processes
- Injection compression moulding functions of the control system
- Programming an injection compression moulding process in a test run on an ALLROUNDER
- Process documentation

Special processes

Injection compression moulding

Course name

SV PTP

MICRO INJECTION MOULDING

Course objective:	How to work with the ARBURG micro injection module
Target group:	Machine operators, machine programmers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 for ALLROUNDER A (MP1-A)
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Design and function of the micro injection module
- Setting up and commissioning the micro injection module
- Creating a precision small part sample with the ARBURG micro injection module
- Sample part – process optimisation
- Maintaining accessories

Special processes

Micro injection moulding

Course name

SV MIKRO

PHYSICAL FOAMING – PROFOAM

Course objective:	Developing knowledge of physical foaming with ProFoam
Target group:	Machine operators, machine programmers
Prerequisites:	Basic knowledge of injection moulding and participation in machine programming course 1 (MP1)
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Design and function of the ProFoam unit
- Setting up and commissioning the ProFoam unit
- Using the ProFoam unit to create a foamed component sample
- Suitable materials for physical foaming
- Maintaining accessories

Special processes

Physical foaming with ProFoam

Course name

SV PF

OPTIMISING SET-UP TIMES

Course objective:	Improving set-up processes and shortening set-up times on injection moulding machines
Target group:	Production managers, heads of department and team managers, machine operators, machine programmers, employees working in work preparation
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Definition of set-up and set-up costs
- Advantages of shortening set-up times
- Procedure for optimising set-up times (SMED method)
- Mould and machine equipment to shorten set-up times
- Methods for improving workstations and processes
- Identifying waste
- Sharing experience

Subject

Optimising set-up times

Course name

I RZO

CHANGING THE CYLINDER/CLEANING THE SCREW

Course objective:	Safely changing the plasticising cylinder and cleaning the plasticising screw
Target group:	Machine operators, machine programmers, fitters, maintenance personnel
Prerequisites:	Basic knowledge of an ARBURG injection moulding machine and control system
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Pivoting the injection unit
- Changing the plasticising cylinder
- Removing and cleaning the screw
- Changing the nozzle heater band

Subject
Changing the cylinder/cleaning the screw

Course name
I ZS

ASSISTANCE PACKAGES

Course objective:	Knowledge to improve injection moulding routines, e.g. using assistance packages
Target group:	Production managers, heads of department and team managers, machine operators, machine programmers
Prerequisites:	Basic knowledge of injection moulding and machine operation
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Basic knowledge of assistance packages:
 - 4.set-up (simplified machine set-up)
 - 4.optimisation (production cycle optimisation)
 - 4.production (customising cycles for complex moulds)
 - 4.start-stop (reducing bad parts when starting up and stopping the machine)
 - 4.monitoring (optimum and custom process monitoring)

Subject
Assistance packages

Course name
I AP

GESTICA

Course objective:	Learning about the GESTICA machine controller
Target group:	Machine operators, machine programmers, team managers, heads of department, production managers
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Design of the machine controller
- Functions of the machine controller
- Applications of the machine controller

Subject
GESTICA

Course name
I GESTICA

ARBURG HOST COMPUTER SYSTEM

Course objective:	Basic knowledge of the ARBURG host computer system (ALS)
Target group:	Anyone looking to introduce production and machine data acquisition (PDA/MDA) and/or optimise production planning
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	Free

Training course topics

- Design and principles of classic production and machine data acquisition (PDA/MDA) systems
- Design and principles of the ARBURG host computer system (ALS)
- Moulding shop management functions: machine hall, DNC, mould maintenance
- Quality assurance functions: MPS documentation, process parameter monitoring
- Planning functions: master data, order administration, schematic planning chart and connection to PPC system
- Management/controlling functions: status and shift reports, order, item and machine utilisation levels, equipment accounts, mould evaluations
- Practical application in conjunction with ALLROUNDERS
- Overview of other systems, e.g. ARBURG quality assurance system (AQS) and ARBURG Remote Service (ARS)

















Subject

ARBURG host computer system

Course name

I ALS

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	Independent maintenance of the MULTILIFT robotic system	R-ML-SERVICE	54
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MACHINE OPERATION

Course objective:	Basic knowledge of how to operate ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- General information on the injection moulding process
- SELOGICA direct and SELOGICA ND user interfaces and manual control panels
- Operating modes
- Starting up and shutting down the machine
- Data set administration

Machine
all ALLROUNDERS

Course name
MB-INST SEL

ALLROUNDER SERVICE COURSE

Course objective:	Basic electrical knowledge of ALLROUNDERS
Target group:	Mechatronics engineers, electronics engineers, electricians
Prerequisites:	Qualified electrician in accordance with DGUV Regulation 3 or DIN VDE 0105-100
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Control system design: +A cards
- Control cabinet design: +B cards
- Basic circuit diagram:
 - Star-delta connection
 - Power supply
 - Safety circuit
 - Emergency-stop circuit
- Controlling valves with 12 V technology
- Heating control
- Proportional valves
- USB network
- Display control
- Cooling water manifold

Machine	Control system	Course name
ALLROUNDER A/	SELOGICA direct/ND	ELSTEP1
ALLROUNDER E/		
ALLROUNDER GOLDEN ELECTRIC/		
ALLROUNDER H/		
ALLROUNDER S/		
ALLROUNDER GOLDEN EDITION/		
ALLROUNDER V/		
ALLROUNDER T		

ALLROUNDER SERVICE COURSE

Course objective:	Developing basic electrical knowledge of ALLROUNDERS
Target group:	Mechatronics engineers, electronics engineers, electricians
Prerequisites:	STEP1
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Diagnostics
- Diagnostics chart
- Troubleshooting

Machine	Control system	Course name
ALLROUNDER A/	SELOGICA direct/ND	ELSTEP1UP
ALLROUNDER E/		
ALLROUNDER GOLDEN ELECTRIC/		
ALLROUNDER H/		
ALLROUNDER S/		
ALLROUNDER GOLDEN EDITION/		
ALLROUNDER V/		
ALLROUNDER T		

ALLROUNDER SERVICE COURSE

Course objective:	Knowledge of electric drives
Target group:	Mechatronics engineers, electronics engineers, electricians
Prerequisites:	STEP1
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- General converter technology
- SERCOS/VARAN communication
- Special features of electric circuit diagrams for electric machines:
 - Euchner locking switch
 - Emergency-stop circuit
 - Safety circuit
- Sensor system: injection force and mould locking force
- Reversing contactor

Machine	Control system	Course name
ALLROUNDER A/	SELOGICA direct/ND	ELSTEP2
ALLROUNDER E/		
ALLROUNDER GOLDEN ELECTRIC/		
ALLROUNDER H/		
ALLROUNDER S/		
ALLROUNDER GOLDEN EDITION/		
ALLROUNDER V/		
ALLROUNDER T		

ALLROUNDER SERVICE COURSE

Course objective:	Developing knowledge of electric drives
Target group:	Mechatronics engineers, electronics engineers, electricians
Prerequisites:	STEP2
Course duration:	2 day
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Diagnostic options for SELOGICA direct
- Diagnostics chart for electric drives
- Troubleshooting for electric drives
- Converter replacement

Machine	Control system	Course name
ALLROUNDER A/	SELOGICA direct/ND	ELSTEP2UP
ALLROUNDER E/		
ALLROUNDER GOLDEN ELECTRIC/		
ALLROUNDER H/		
ALLROUNDER S/		
ALLROUNDER GOLDEN EDITION/		
ALLROUNDER V/		
ALLROUNDER T		

ELECTRIC ALLROUNDER SERVICE COURSE

Course objective:	Basic knowledge of electric ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	Prior knowledge of machine operation
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Basic components of an injection moulding machine
- Aligning a machine
- Maintaining an electric machine

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER E/ ALLROUNDER GOLDEN ELECTRIC/ ALLROUNDER H	SELOGICA direct/ND	EASTEP1

ELECTRIC ALLROUNDER SERVICE COURSE

Course objective:	Developing basic knowledge of electric ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	EASTEP1 or ELSTEP2
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Mechanical design of the clamping unit
- Design and function:
 - Spindles
 - Mould installation height
 - Clamping unit
 - Injection unit
 - Cooling system
- Sensor system:
 - Injection force
 - Mould locking force
- Hydraulic circuit diagram

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER E/ ALLROUNDER GOLDEN ELECTRIC	SELOGICA direct/ND	EASTEP2-A/EG
ALLROUNDER H	SELOGICA direct/ND	EASTEP2-H

ELECTRIC ALLROUNDER SERVICE COURSE

Course objective:	How to calibrate electric ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	EASTEP2
Course duration:	2.5 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 1 p.m.
Course fee:	EUR 950

Training course topics

- Replacing components
- Calibration:
 - P/Q valves
 - Pressure transducer
 - Position measurement
 - Injection force sensor
 - Mould locking force sensor
 - Toggle characteristics

Machine	Control system	Course name
ALLROUNDER A/ ALLROUNDER E/ ALLROUNDER GOLDEN ELECTRIC/ ALLROUNDER H	SELOGICA direct/ND	EASTEP3

HYDRAULIC ALLROUNDER SERVICE COURSE

Course objective:	Basic knowledge of hydraulic ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	Prior knowledge of machine operation
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Basic components of an injection moulding machine
- Aligning a machine
- Maintaining a hydraulic machine

Machine

ALLROUNDER S/
ALLROUNDER GOLDEN EDITION/
ALLROUNDER V/
ALLROUNDER T

Control system

SELOGICA direct/ND

Course name

HYASTEP1

HYDRAULIC ALLROUNDER SERVICE COURSE

Course objective:	Developing basic knowledge of hydraulic ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	HYASTEP1
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Hydraulic principles
- ΔP control at the control pump
- Design of the injection unit
- Reading a hydraulic circuit diagram:
 - Injection regulation
 - Position-regulated screw

Machine	Control system	Course name
ALLROUNDER S/ ALLROUNDER GOLDEN EDITION/ ALLROUNDER V/ ALLROUNDER T	SELOGICA direct/ND	HYASTEP2

HYDRAULIC ALLROUNDER SERVICE COURSE

Course objective:	Developing knowledge of the clamping unit for hydraulic ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	HYASTEP2
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Specific introduction to the series:
 - Design of the clamping unit
 - Hydraulic circuit diagram for the clamping side

Machine	Control system	Course name
ALLROUNDER S/ ALLROUNDER GOLDEN EDITION	SELOGICA direct/ND	HYASTP2UP-S/GE
ALLROUNDER 630–920 S	SELOGICA direct/ND	HYASTP2UP-S GM
ALLROUNDER V/ ALLROUNDER T	SELOGICA direct/ND	HYASTP2UP-V/T

HYDRAULIC ALLROUNDER SERVICE COURSE

Course objective:	How to calibrate hydraulic ALLROUNDERS
Target group:	Maintenance engineers, electronics engineers, mechanics
Prerequisites:	HYASTP2UP
Course duration:	2 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 650

Training course topics

- Replacing components
- Calibration:
 - Proportional valve
 - Pressure transducer
 - Position measurement
- Pump control
 - ΔP settings
 - High/low pressure pumps

Machine	Control system	Course name
ALLROUNDER S/ ALLROUNDER GOLDEN EDITION/ ALLROUNDER V/ ALLROUNDER T	SELOGICA direct/ND	HYASTEP3

MULTILIFT SERVICE COURSE

Course objective:	Independent maintenance of the MULTILIFT robotic system
Target group:	Maintenance engineers, electricians, mechanics
Prerequisites:	None
Course duration:	3 days
Course times:	8 a.m. to 4 p.m. 8 a.m. to 4 p.m. 8 a.m. to 3 p.m.
Course fee:	EUR 950

Training course topics

- Presentation of the MULTILIFT V and SELECT robotic systems
 - Mechanical components of the two robotic systems
 - Maintenance of the MULTILIFT V and SELECT robotic systems
- Replacing a toothed belt
 - Removing the toothed belt
 - Installing the new toothed belt and setting the correct tension
 - Calibrating the servo axes

Robotic system

MULTILIFT V/MULTILIFT SELECT

Control system

SELOGICA direct/ND

Course name

R-ML-SERVICE

INTEGRALPICKER V SERVICE COURSE

Course objective:	Independent maintenance of the INTEGRALPICKER V robotic system
Target group:	Maintenance engineers, electricians, mechanics
Prerequisites:	R-ML-SERVICE
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Presentation of the INTEGRALPICKER V robotic system
 - Mechanical components
 - Maintenance of the INTEGRALPICKER V robotic system
- Replacing a toothed belt
 - Removing the toothed belt
 - Installing the new toothed belt and setting the correct tension
 - Calibrating the servo axes

Robotic system
INTEGRALPICKER V

Control system
SELOGICA direct/ND

Course name
R-IPV-SERVICE

ENERGY EFFICIENCY

Course objective:	Saving energy in the injection moulding process
Target group:	Maintenance engineers, production managers, supervisors
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Criteria for selecting energy-efficient injection moulding machines
- Ways to reduce energy requirements throughout the injection moulding process
- Measuring the total output of an ALLROUNDER and calculating the specific energy consumption
- Illustrating losses dependent on and independent of the operating point

Machine	Control system	Course name
all ALLROUNDERS	SELOGICA direct/ND	I E ²

PREVENTIVE MAINTENANCE

Course objective:	Preventive maintenance to increase machine availability
Target group:	Maintenance engineers, production managers, supervisors
Prerequisites:	None
Course duration:	1 day
Course times:	8 a.m. to 3 p.m.
Course fee:	EUR 350

Training course topics

- Purpose and tasks of preventive maintenance
- Measures to increase the availability and reliability of ALLROUNDERS
- Oil management
- Preventive maintenance of an injection moulding machine

Machine	Control system	Course name
all ALLROUNDERS	SELOGICA direct/ND	I PM

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