



CONSULTING

Product overview
Consulting and training

Valuable knowledge for your success

Innovative products and manufacturing solutions from Bihler secure your economic success. To ensure efficient use and operation, we offer you a wide range of consulting services and training courses.

During our customized consulting, we show you how to optimally use your Bihler technologies with the greatest economic benefit. This starts with the design of your production process as well as your tools and continues with the optimization of your cutting tools all the way to programming your system and setting up your welding process.

In the training courses, our experts share their wealth of knowledge with your staff in a practical, exciting and easily understandable way – in our state-of-the-art training center in Halblech or directly at your site. Your employees expand their skills in basic seminars for an initial introduction to Bihler technology as well as in individual training courses perfectly matched to your application. This increases motivation for day-to-day tasks as well as safety when handling the equipment.

Obtain an overview of our wide range of consulting services and contact us.

Your Bihler Consulting Team



Contents

Consulting

Machine and tool technology	4, 5, 6
Tool design	8
Control system	9
Welding	9

Basic seminars

System operation and maintenance	10
Tool design	11
Control system	12
Welding	13
bNX Software	14, 15

Individual training

System operation and maintenance	16, 17
Control system	18
Welding	19

General conditions	22
Contact	23

CONSULTING

Benefit from our competence

Increase the productivity of your Bihler system, increase the service life of your tools and efficiently perform programming and welding tasks. We are happy to show you how during our customized consultation. All this with the goal that you meet the requirements of your customers faster and more cost-effective.



➔ Machine and tool technology

Cutting tool optimization

Duration:
By arrangement

The main focus of our consultation lies exclusively on finding and implementing approaches for increasing the service life of your cutting tools, increasing your productivity for stamping operations and improving your stamping results.

First, our in-house tool making experts analyze the design of your cutting tools. Then the actual tool components are assessed in detail. Design, process and productivity weaknesses are identified. Optimization potentials are recorded and calculated. This shows which costs lead to weak points. Then a target concept is created to describe the solutions and efforts that allow the greatest potentials to be realized. In cooperation with you we implement the optimization measures. The project is completed after verifying that the measurable objectives have led to the desired success.

Your benefit is that optimizing your cutting tools increases the efficiency and profitability of your systems and your equipment.

Cutting gap test

Duration:
By arrangement

Your task is to design a new cutting tool or optimize an existing cutting tool. One of the most important factors is the correct cutting gap.

A strip progression with different cutting gap sizes is created with a Bihler test tool and your original material. Smooth cut proportion, interruption, radius of entry and the formation of burrs are evaluated and documented. After completion of the tests, you will receive the generated strip progression together with an extensive evaluation. This includes our recommendation for the optimum cutting contour.

Your benefit The correct cutting gap improves your part quality, increases the tool service life and reduces the creation of chips and flakes.

Manufacturing process optimization

Duration:
By arrangement

The main goal of this consultation is optimizing the tool and module setup on your system.

Together with you, our expert analyzes the current state of your production process on-site at your facilities. At the same time, you learn about the influence of various factors on your production. Our expert then presents you with necessary measures for optimum machine and tool settings and implements them directly if possible. Setup times are also examined carefully. Because they are downtime and must be kept as short as possible. Our expert provides you with a defined procedure to minimize your tool setup and adjustment times.

Your benefit: By optimizing your production processes, the process and economic efficiency of your system is increased significantly. Standardized setup procedures help minimize errors.

Tool adaption

Duration:
By arrangement

You want to adapt a component previously produced on an old machine type to a new Bihler machine type?

This means you need to adapt and use an existing tool with your new machine. This is the exact core competence of our experts. They have successfully completed hundreds such tool adaptations. Our experts analyze your tool and specify if and which tool parts are required for an adaptation. We then manufacture these tool parts and set them up on your new machine together with the existing tool. During setup of the tool operation, we optimize the individual movements of the servo axes.

Your benefit: In the shortest possible time, you produce stamped and formed parts which were formerly produced on an old machine type on your new machine. You profit from higher pulse rates and improved accuracy.



→ Tool design

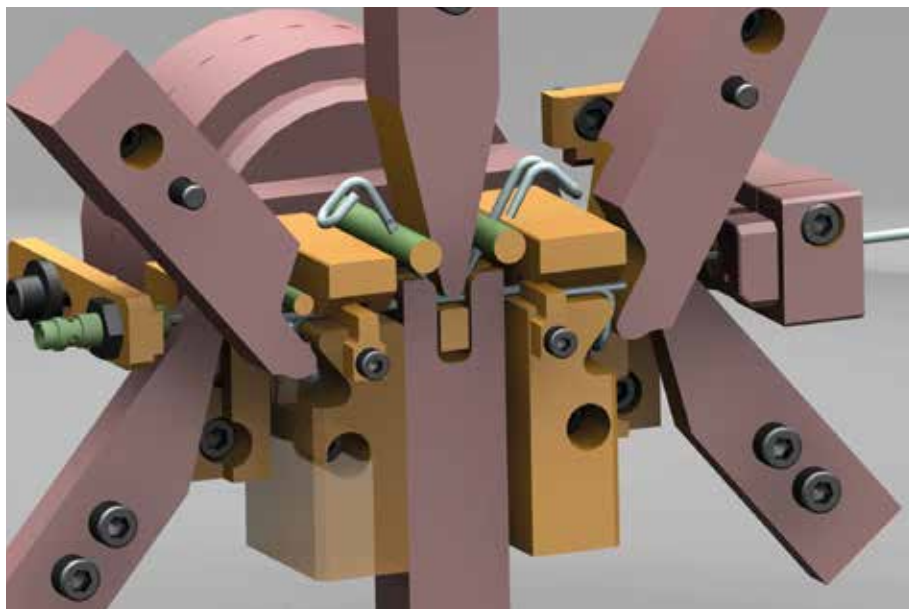
Manufacturing process development

Duration:
By arrangement

You need to design a production concept for a Bihler system and develop tools based on this concept?

This is the exact core competence of our experts. Over the years, we have developed and implemented optimized production processes for hundreds of different parts. We provide you with this know-how during our consultation and develop specific solutions together with you as well as assist you during their implementation.

Your benefit is that we can find an efficient production concept and ensure optimum tool design for your application with our experience and expertise. In addition, you learn from our know-how and can profit from this expertise for future tasks.



→ Control system

Programming control system

Duration:
By arrangement

You need to create part specific programs for your system?

This is the exact core competence of our experts. During our consultation, we support you with programming your system. In cooperation with you, we develop specific solutions, create programs for your applications and accompany you during the course of your projects.

Your benefit is a perfectly suited and fast implementation of your programming tasks thanks to our experience and competence. In addition, you learn from our know-how and can profit from this expertise for future tasks.

→ Welding

Setup welding process

Duration:
By arrangement

You need to create a welding application for your system?

This is the exact core competence of our experts. They have developed and implemented countless resistance welding processes and solutions. During our consultation, we support you with information for your resistance welding applications and answer any questions regarding theory and practice. In cooperation with you, we develop specific solutions, support the performance of your welding application and accompany you during the course of your projects.

Your benefit is a perfectly suited and fast implementation of your welding application thanks to our experience and competence. In addition, you learn from our know-how and can profit from this expertise for future tasks.



BASIC SEMINARS

The perfect introduction to Bihler technology

For newcomers to Bihler technology, we offer a wide range of basic seminars. Our experts connect theory with practice on modern training machines. This provides increased confidence with machine operation and promotes independent, target-oriented working.



System operation and maintenance

Seminar mechanical stamping and forming machines and machining centers

Duration: 3 days

This seminar provides you with the basic knowledge for handling our various mechanical machines. You will also be introduced to tool technology as well as innovative work practices.

Your benefit: After this seminar, you have the basic knowledge for operation, maintenance and tool setup for these systems.

Seminar BIMERIC servo production and assembly systems

Duration: 3 days

This seminar provides you with the basic knowledge for handling the BIMERIC servo production and assembly systems including their process modules. You will also be introduced to the basics of structure, function and programming of the VC 1 machine control system.

Your benefit: After this seminar, you have the basic knowledge for operation, maintenance and creating simple programs and applications for these systems.

Seminar RM-NC and GRM-NC servo stamping and forming machines

Duration: 4 days

This seminar provides you with the basic knowledge for handling the RM-NC and GRM-NC servo stamping and forming machines. You will also be introduced to the basics of structure, function and programming of the VC 1 machine control system. The seminar includes an introduction to tool technology.

Your benefit: After this seminar, you have the basic knowledge for operation, maintenance and creating simple programs and applications as well as tool setup for these systems.



Tool design

Seminar tool design

Duration: 3 days

This seminar provides you with the basic knowledge for design and construction of stamping and forming tools as well as machine and tool planning. You will also be introduced to tool technology.

Your benefit: After this seminar, you have the basic knowledge to efficiently plan and design tools.

Control system

Seminar VC 1 control system

Duration: 2 days

This seminar provides you with basic knowledge about structure, function and programming of the VC 1 control system. You learn how to create and manage system applications. You are also introduced to locating and repairing faults.

Your benefit: After this seminar, you are able to operate the VC 1 control system and create simple control programs for your systems.

Welding

Seminar welding technology

Duration: 2 days

This seminar provides you with basic knowledge about Bihler resistance welding technology. This includes an introduction to physical, electrical and mechanical details as well as the design of resistance welding equipment. You learn how to set and monitor welding parameters. You also learn to understand welding errors and their causes.

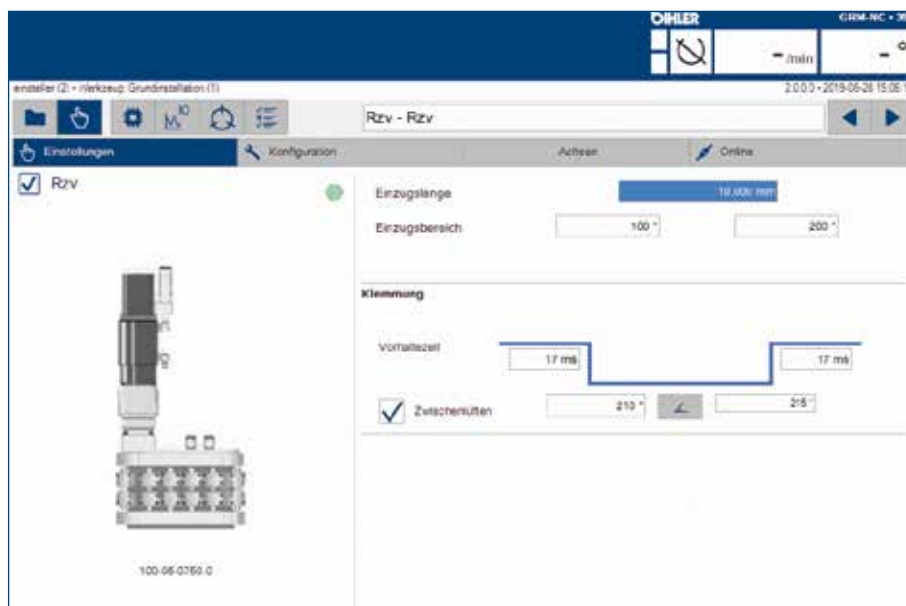
Your benefit: After this seminar, you know how resistance welding works and what it can be used for.

Seminar B 20K welding system

Duration: 1 day

This seminar provides you with basic knowledge about design, handling, maintenance and programming of the B 20K welding system. You also learn about welding parameters including monitoring options.

Your benefit: After this seminar, you are able to operate and maintain the B 20K welding system and adjust it for your requirements.





➔ bNX Software

Seminar bNX – Basics

This seminar provides you with basic knowledge about operating the Siemens NX 3D-CAD system. You learn how to use standard CAD functions and receive in-depth knowledge of design and drawing generation. You also learn how to use curves, sketches and shape elements.

Your benefit: After this seminar, you are able to confidently use the structure of Siemens NX and design more complex elements independently.

Duration: 3 days

Seminar bNX – Assemblies

Building on the knowledge from the basic seminar, this seminar provides you with basic knowledge about handling complex assembly structures in the Siemens NX 3D-CAD system. You learn about the application of methods and WAVE links.

Your benefit: After this seminar, you are able to create, handle and apply complex assemblies for large designs independently and consistently.

Duration: 3 days

Seminar bNX – Tool design

This seminar will provide you with basic knowledge about the design of tools on Bihler machines. Using an article, you will learn how to create a production-oriented forming study and use it to generate the corresponding stage plan for mechanical or NC-controlled machines. We will also teach you how to use the system configurator correctly to quickly design linear progressive tools with the LEANTOOL modular system.

Your benefit: After this seminar, you will be able to design your own stage plans and tools for your application in practice and to design linear progressive tools with the system configurator.

Duration: 3 days

Seminar bNX – Kinematics

In this seminar, we will teach you how to set up and create function plans on Bihler machines using Kinematik Express. By selecting the correct curve diameter or NC travel profile, the appropriate transition angles and the use of dependencies, you can design the function plan optimally. You will also learn how to optimize motion sequences in the tool by using simulation. We will also show you how to derive optimized cam or NC travel profiles for use on real machines.

Your benefit: After this seminar, you will be able to create function plans and use simulation to check and optimize motion sequences.

Duration: 1 day

Seminar bNX – Update

Using the full potential and increasing productivity: In our three-day seminar, you learn all about the latest updates of our bNX software. You are introduced to all useful new features.

Your benefit: After this seminar, you will be even more efficient and more productive when using our bNX software.

Duration:
by arrangement

➔ Presence or online seminars: Dates by arrangement

INDIVIDUAL TRAINING

Even more knowledge

For even deeper insights into Bihler technology, we offer individual training – also on-site at your premises. This training takes the individual details of your component, your requirements and your system into account. (dates by arrangement)



System operation and maintenance

Maintenance and mechanical service

Duration: 1 day

This individual seminar provides you with knowledge about maintenance operations to be carried out on your system. You learn about valuable information for maintaining the mechanical components. In addition, this seminar includes an introduction to the basic functionality of the system.

Your benefit: After completing this seminar, you are able to perform maintenance activities on your systems, locate faults and repair the equipment correctly.

Maintenance and servicing RZV radial gripper feed

Duration: 1 day

This individual seminar provides you with knowledge about maintenance operations to be carried out on the RZV radial gripper feed of your system. You learn about details to perform qualified repair work. In addition, this seminar includes an introduction to the possible applications of the feed system.

Your benefit: After completing this seminar, you are able to perform maintenance activities on the RZV radial gripper feed, locate faults and repair the feed of your system correctly.

BNC servo production system

Duration: 3 days

This individual seminar provides you with the basic knowledge for handling the BNC servo production system. You will also be introduced to the basics of structure, function and programming of the VC 1 machine control system.

Your benefit: After this seminar, you have the basic knowledge for operation and maintenance as well as creating simple programs and applications and setting up tools for this system.

Bending tool installation and adjustment

Duration: 2 days

In this individual seminar, you learn how to optimally mount and adjust a bending tool on a machine. In addition, we provide you with a defined and standardized approach for optimum tool settings.

Your benefit: After completing this seminar, you will be able to efficiently and reproducibly set up bending tools.

MSE multi-screw insertion unit

Duration: 1 day

This individual seminar provides you with knowledge about the automation of your screw insertion processes with the MSE multi-screw insertion unit. You learn about basic knowledge of design, programming and maintenance of the screw unit.

Your benefit: After this seminar, you are able to adjust and parametrize the MSE screw insertion unit of your system according to your specific parts and your requirements.

GSE thread forming unit

Duration: 1 day

This individual seminar provides you with knowledge about the automation of your thread forming processes with the GSE thread forming unit. You learn about basic knowledge of design, programming and maintenance of the thread cutter unit.

Your benefit: After this seminar, you are able to adjust and parametrize the GSE thread forming unit of your system according to your specific parts and your requirements.

 **Control****Maintenance and service control system**

This individual seminar provides you with knowledge about design, handling and functions of the separate electrical components in your system. You learn about the possibilities for fast troubleshooting and the correct interpretation of error messages. In addition, you learn about system and part specific data backup and data recovery.

Your benefit: After completing this seminar, you are able to perform maintenance activities on your system, locate faults and repair the equipment correctly.

Duration: 1 day

Seminar VC1-E control system

This seminar provides you with basic knowledge about structure, function and programming of the VC1-E control system. You learn how to create and manage system applications. You are also introduced to locating and repairing faults.

Your benefit: After this seminar, you are able to operate the VC1-E control system and create simple control programs for your systems.

Duration: 1,5 days

Seminar P CNC 300/400 control system

This seminar provides you with basic knowledge about structure, function and programming of the P CNC 300/400 control system. You learn how to create and manage system applications. You are also introduced to locating and repairing faults.

Your benefit: After this seminar, you are able to operate the P CNC 300/400 control system and create simple control programs for your systems.

Duration: 2 days

 **Welding system****Operation and programming of the B 5000 welding system**

This individual seminar provides you with basic knowledge about design, operation, maintenance and programming of your B 5000 welding system. Participants also learn about welding parameters including monitoring options.

Your benefit: After this seminar, you are able to operate your B 5000 welding system specific to your parts, perform maintenance tasks, locate faults, perform professional repair measures and set up the system according to your requirements.

Duration: 2 days

Operation and programming of B 5000-NC welding system

This individual seminar provides you with knowledge about design, handling, maintenance and programming of your B 5000-NC welding system. You learn about setting welding parameters including monitoring options.

Your benefit: After this seminar, you are able to operate your B 5000-NC welding system specific to your parts, perform maintenance activities, locate faults, perform correct repair measures and setup the system according to your needs.

Duration: 2 days

Handling and maintenance of contact welding equipment

This individual seminar provides you with knowledge about design, handling and maintenance of your contact welding equipment. You learn about setting welding parameters including monitoring options.

Your benefit: After this seminar, you are able to operate your contact welding equipment specific to your parts, perform maintenance activities, locate faults, perform correct repair measures and setup the system according to your needs.

Duration: 1 day

BIHLER CONSULTING TEAM



→ General conditions

Registration

A telephone booking is possible, but must be confirmed in writing immediately. The number of participants is limited and your registration should be made as early as possible to ensure your preferred date is available. With your registration, you agree to be bound by the general Terms and Conditions of Otto Bihler Maschinenfabrik. After your registration, you receive an immediate confirmation. Reserved, but not fully booked spots are given to other participants 3 weeks prior to the start of the course.

Seminar location and time

All consultations and training courses take place in our training center at Lechbrucker Strasse 15 87642 Halblech, Germany

Our training times are:

Monday – Thursday	8am – 4pm
Friday	8am – 12am

Cancellation

The written cancellation of your registration is possible free of charge up to ten working days before the start of the course. Any cancellation fees for hotel reservations are your sole responsibility. If the cancellation is made within ten working days of the start of the course, we will charge 50% of the price. Cancellations made on the working day before the start of the course or on the day of the course are subject to a cancellation fee of 100%. The cancellation fee is waived if you name a substitute participant. Bihler reserves the right to cancel a course or change the date of a course. Paid fees will be refunded; any further claims are excluded.

Accommodation

Accommodation is not included in the course price. We have compiled a list of selected hotels for participants who require overnight accommodation that we are happy to share. We can also assist you with your reservation.

Exclusion of Liability

All of our consultations and training courses are prepared and carried out with utmost care. Bihler assumes no liability for correctness, topicality and completeness of contents and documents. Bihler assumes no liability for any damage caused by the use of this information. Regarding consulting and training at the premises of the customer, Bihler is not liable to participants in case of accidents and loss of or damage to their property.

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