



DIGITAL VALUE CREATION

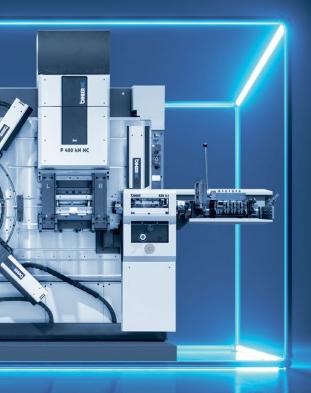
ENGINEERING



PRODUCTION

Digitalization is progressing rapidly. The focus is on the digital networking of products, machines, people, and processes and thus on cross-system data availability in real time.

To provide you with the best possible support for all these requirements, Bihler combines the real world of stamping and forming technology with the digital world. Our digital services for engineering, production and training/support set the course for your success. All with the aim of faster development, being more productive and saving valuable resources.



TRAINING/ SUPPORT

ENGINEERING

Achieve greater transparency and efficiency right from the planning and creation of stamping and forming processes. Save costs and time in the realization of your high-quality components and benefit from smooth commissioning.

BIHLER-PLANNING WEBAPP

The know-how database for stamped and formed parts made of strip and wire



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Sample database with stamped and formed parts made of wire and strip. Includes a complete overview of the forming steps (stage plan), the animated tool sequence and information on tool standards.

Advantages

- Comprehensive overview of the forming processes for stamped and formed parts made of strip and wire
- Visualization of the entire forming steps as well as the animated tool sequences
- Information on the tool/ tool standards

Benefits

Improved transparency and efficiency in the planning and execution of stamping and forming processes. Optimized production and quality control.

bNX-CAD

Revolutionary design software for all aspects of stamping and forming technology for wire and strip parts



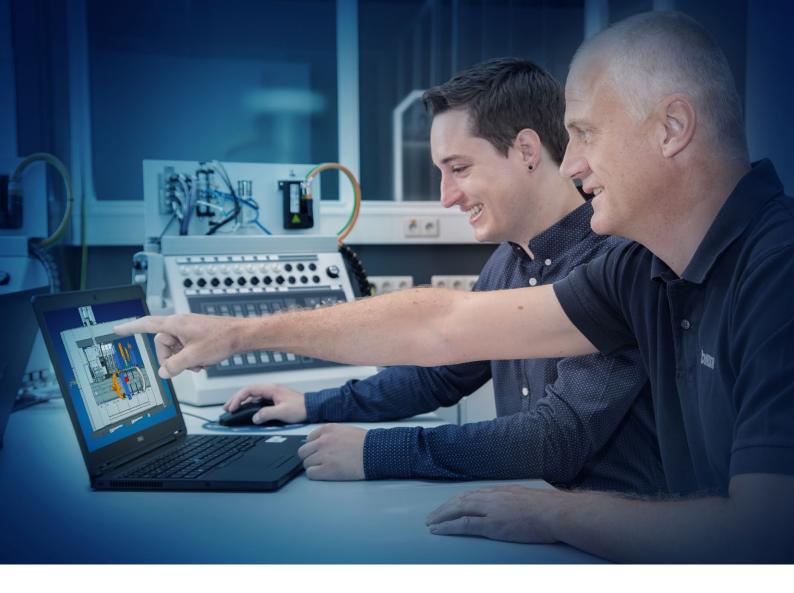
CAD design software (based on Siemens NX) for a continuous, transparent process for the realization of a formed part made of wire or strip. Includes the corresponding tool designs and the necessary technology packages for Bihler technology.

Advantages

- All functionalities for creating a forming study of a wire and/or strip part
- Customized functionalities for the simple creation of the method plan, the tool design with corresponding system configurator and the output of the motion profiles/cams
- Integrated technology packages for the forming process, machine equipment and tools

Benefits

Efficient and high-quality realization of the formed part, in which all process steps are seamlessly linked. This saves you time and money and gives you an optimum result.



VIRTUAL COM-MISSIONING

Virtual commissioning for smooth commissioning and optimized project times



Simulation and programming parallel to production of the entire Bihler system with tool. Kinematization of all movements and signals of the complete Bihler system

Advantages

- Error prevention on the system during commissioning
- Saves time when setting up the system
- Complete transparency of complex interrelationships

Benefits

Smooth commissioning by avoiding downtimes. Faster installation times and shorter overall project duration. Comprehensive overview of the system, processes and workflows. Potential problems can be identified and rectified at an early stage.

PRODUCTION

Benefit from more production time and higher productivity of your Bihler machines. Identify potential problems at an early stage, act proactively and optimize your work processes. All with the aim of saving valuable time and resources.

OFFLINE VC 1 FOR CHANGES

Create and test program changes offline - more production time and productivity on the machine



OR1070

Changes, extensions and testing of machine programs at the PC workstation with bidirectional transfer to a Bihler machine.

Advantages

- Efficient procedure for changes
- Fewer production errors, waiting times and downtimes
- More production time and productivity at the machine

Benefits

Reduction in production errors and downtimes. Bidirectional transfer from the machine to the PC workstation saves time and resources. More production time and higher productivity at the machine.

DASHBOARD

Machine status and production progress in real time - all information at a glance



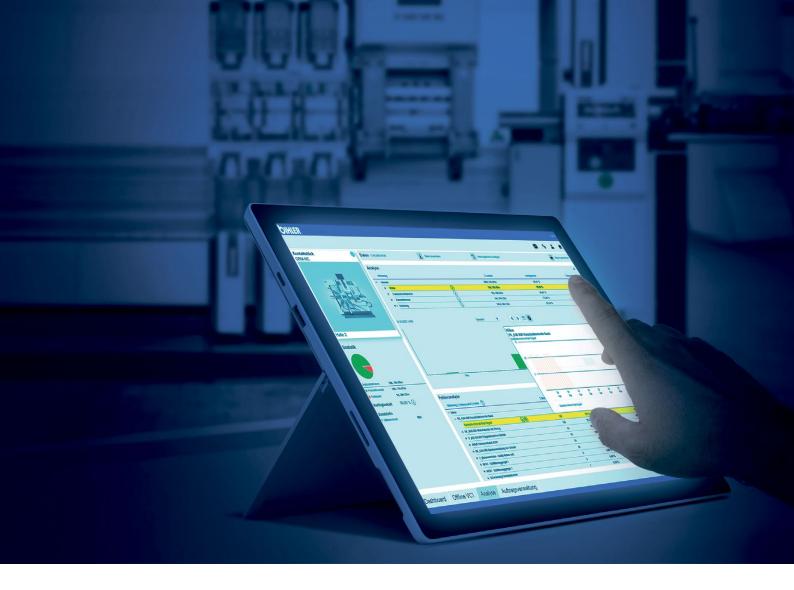
Overview of ongoing production in the machine park in real time

Advantages

- Quick overview of the status of the machines in real time at the PC workstation
- All relevant information visible at a glance
- Track and ensure the progress of orders

Benefits

Comprehensive solution for a comprehensive overview of production and early identification of potential problems and bottlenecks.



ORDER MANAGE-MENT

Prioritizing, organizing and paperless feeding of orders to the machine in real time



www.bihler.de QR1072

Prioritize and organize orders. Creating, processing and paperless transfer of orders to production in real time. Digital transmission path from the office to the machine.

Advantages

- Seamless communication between office and machine(s)
- Increased productivity saving time and resources
- Reduced manual effort and reduced risk of errors

Benefits

Optimization of work processes and increase in productivity. Saves time and resources. Reduction of the risk of errors.

ERROR ANALYSIS

Effective problem detection, optimization and proactive action



Advantages

- Targeted optimization
- Understanding the causes of failures and faults
- Fault displays and warnings help to identify potential problems at an early stage and take proactive action.

Visual evaluation of error times and error frequencies. Fault identification

Benefits

The analysis software helps to detect potential problems at an early stage, act proactively and optimize them.

TRAINING/ SUPPORT

Shorten the familiarization time of your employees through targeted preparation for the real production process. Increase work productivity and quality by maximizing employee understanding of the process and simplifying information procurement.

OFFLINE VC 1

More flexibility and greater learning success for employees - offline software for programming and training



www.bihler.de QR1074

Operation of the tool program and control functions of the VC 1 control system in offline mode.

Advantages

- Education and training independent of production
- Faster familiarization time in a comfortable working environment (PC workstation)
- Fixed training times independent of production

Benefits

No disruption to ongoing work processes due to training. Massive reduction in employee familiarization time. Flexible planning and implementation of training courses.

ANIMATION

Maximum process understanding for increased work productivity without interruptions Virtual representation of the Bihler production plant with machine/manufacturing process/ tool technology. Enables smooth integration into the production process and contributes to a comprehensive understanding of the production process.

Advantages

- Comfortable training of employees in a quiet office environment with ideal learning conditions
- Simple and targeted training of machine maintenance, production and tooling processes (PC workstation)
- The real production process can be viewed down to the last detail and each individual forming step can be analyzed.

Benefits

Massive time savings through targeted and practical preparation for the real production process without interrupting production. Increased productivity and quality thanks to the employee's maximum understanding of the process





DIGITAL DOCU-MENTATION

Getting specialists to their destination faster and more efficiently - interactive documentation with videos and animations Interactive documentation platform from Bihler. Effective and engaging way to access documentation, communicate information and facilitate learning.

Advantages

- Faster understanding through visual presentation of information
- Clear and customized explanations of complex information through the combination of text, images and movement
- Very fast communication of technical and/or practical applications relating to machines/accessories/process modules

Benefits

Faster understanding and easier access to information for employees. Employees work more efficiently. Saves time when obtaining information.

SUBSCRIPTION MODEL

The subscription model is tailored to your individual needs. This means that you only pay for the modules that you actually need.

ANALYSIS MODULE

for calculations, statistics and error messages



OFFLINE VC 1 MODULE

for offline programming, training and operation



BASIC PACKAGE

Machine overview + initial installation

JOB MANAGEMENT MODULE

Create, edit, plan, priorize, feed jobs



ANIMATION MODULE

Animation of plants, assemblies, toolings



SYSTEM REQUIREMENTS

- VC 1 control software version 2 or higher
- OPC UA server
- End device: Desktop, laptop or tablet with Windowsversion 10 or higher

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OPC UA VC1

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