

## THE BIHLER TECHNOLOGY

### In a class of its own

There's something quite fascinating about watching a genuine "Bihler" in action. To experience how high-precision components emerge at the end of a process from wires, strips and individual parts fed into the machine leaves you speechless from time to time.

The performance, reliability and accuracy of a Bihler machine creates the reassuring feeling of always being a step ahead of the competition. This generates freedom for new ideas – to extend the boundaries of the technically feasible a little further every day.

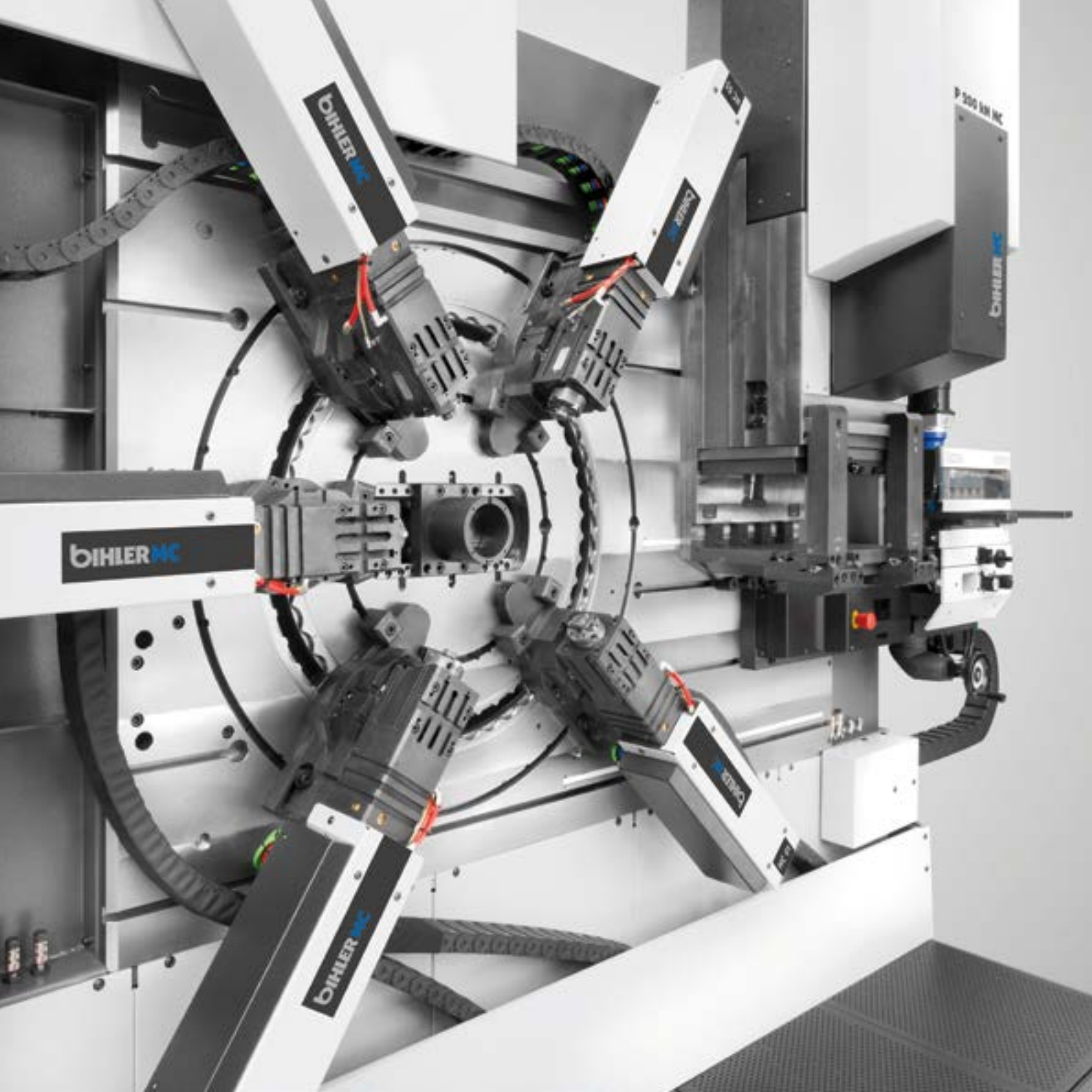
## MACHINES

„No more limits“

Selecting the correct machine is the first step to realizing your idea. The broad spectrum of Bihler machines includes different machine types tailored to suit specific manufacturing tasks:

- Powerful mechanical stamping and forming machines for mass production
- Flexible servo production and assembly systems for small and medium batch sizes.

The extension and linking to complete production lines is not limited in any way thanks to their modular and open design.



## STAMPING AND FORMING MACHINES

- RM Series / GRM Series
- Multicenter MC
- Multicenter Sprint MCS



Stamping and Forming Machine  
RM 40K



Stamping and Forming Machine  
RM 40KS



Stamping and Forming Machine  
GRM 80E



Stamping and Forming Machine  
GRM 80P

## PROCESSING CENTERS

- BZ
- COMBITEC



Processing Center  
BZ 1



Processing Center  
BZ2-S8

## SERVO STAMPING AND FORMING MACHINES SERVO PRODUCTION & ASSEMBLY SYSTEMS

- RM-NC
- GRM-NC
- BNC
- BIMERIC BM
- BIMERIC SP



Servo Stamping and Forming Machine  
RM-NC



Servo Stamping and Forming Machine  
GRM-NC



Stamping and Forming Machine  
RM 40P



Bushing Machine  
RM 40B



Bushing Machine  
GRM 80B



Multicenter  
MC 42



Multicenter  
MC 82



Multicenter  
MC 120



Multicenter Sprint  
MCS 1



Multicenter Sprint  
MCS 05



COMBITEC  
CC 1



Servo Production System  
BNC



Servo Production/Assembly System  
BIMERIC BM



Servo Production/Assembly System  
BIMERIC SP

## PROCESS MODULES

„For greatest depth of in-house manufacturing“

With servo process modules and peripherals from Bihler you create new applications and perspectives. The modules can be easily and modularly integrated into manufacturing concepts and enable an even larger depth of production.

Irrespective of whether it is thread forming, screw-insertion, material or component feed, and much more – Bihler’s strength has always been the integration of as many procedures as possible on a single machine.



RZV 2.1

2007552

Date 100-08-03-2005

## SERVO PROCESS MODULES

- Feeds
- Thread forming units GSE
- Multiple-use screw insertion unit MSE
- Pick & Place units PPE
- Lift-rotary unit HDE
- Processing units
- Presses



Radial Gripper Feed Unit  
RZV 2.1



Roller Feed Unit



Screw Insertion Unit  
MSE 2



Pick & Place Units  
PPE

## PERIPHERAL UNITS

- Reels
- Feeding systems



Reels



Feeding systems





Thread Forming Units  
GSE K1, K2, K3



Thread Forming Units  
GSE KS1, KS2, KS3



Servo Lift Rotary Unit



Servo Units  
(1,5 kN - 200 kN)



Servo two-point eccentric presses  
(200 kN - 300 kN)



Servo friction press  
(400 kN)

## WELDING TECHNOLOGY

„For solid bonds“

A permanent connection is worth its weight in gold. Especially for welding it is instrumental to your success. For 50 years, Bihler has been integrating welding processes in fully automated solutions.

Our strengths are in the areas of resistance butt welding, mash seam welding, projection welding, contact welding/soldering, compacting strands, nut welding and soldering. In the field of laser welding, we rely on the top quality of our technology partner TRUMPF.



## WELDING CONTROL SYSTEM

### ■ B 20K



Welding control system  
B 20K

## CONTACT WELDING

- Contact welding units "Quickchange"
- Contact welding units with servo drive
- Silver-graphite contact welding unit



Contact Welding Units  
„Quickchange“

## LASER WELDING

- CO<sub>2</sub> laser
- Solid state laser



Laser Welding  
CO<sub>2</sub> Laser



Laser Welding  
Solid State Laser



NC Contact Welding



Silver-Graphite Contact Welding Unit

## CONTROL TECHNOLOGY

„Everything under control“

Intelligent control technology from Bihler boosts your production performance. Even the most complex automation solutions in stamping, forming and assembly technology are mastered safely and intuitively with the VariControl machine and process control system – on all Bihler machine types as well as on many third party systems.

During production, the bASSIST multimedia diagnostic and online help system supports your operator with descriptive texts, images and setup videos.



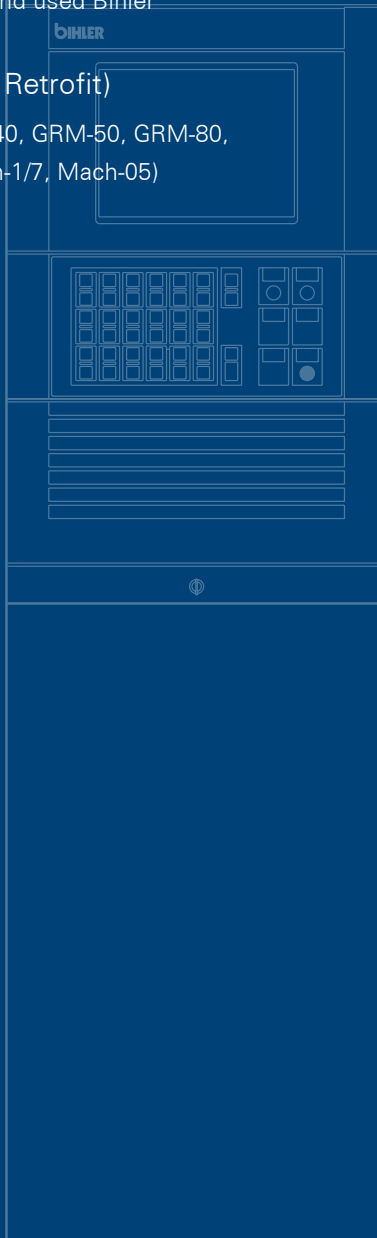
## CONTROLS

- VariControl VC 1
- VariControl VC 1E

(for RM 40K, GRM 80E and used Bihler machines)

- BC R (Bihler Control Retrofit)

(for RM-30, RM-35, RM-40, GRM-50, GRM-80, GRM-100, Mach-1, Mach-1/7, Mach-05)



VariControl  
VC 1



VariControl  
VC 1E



BC R



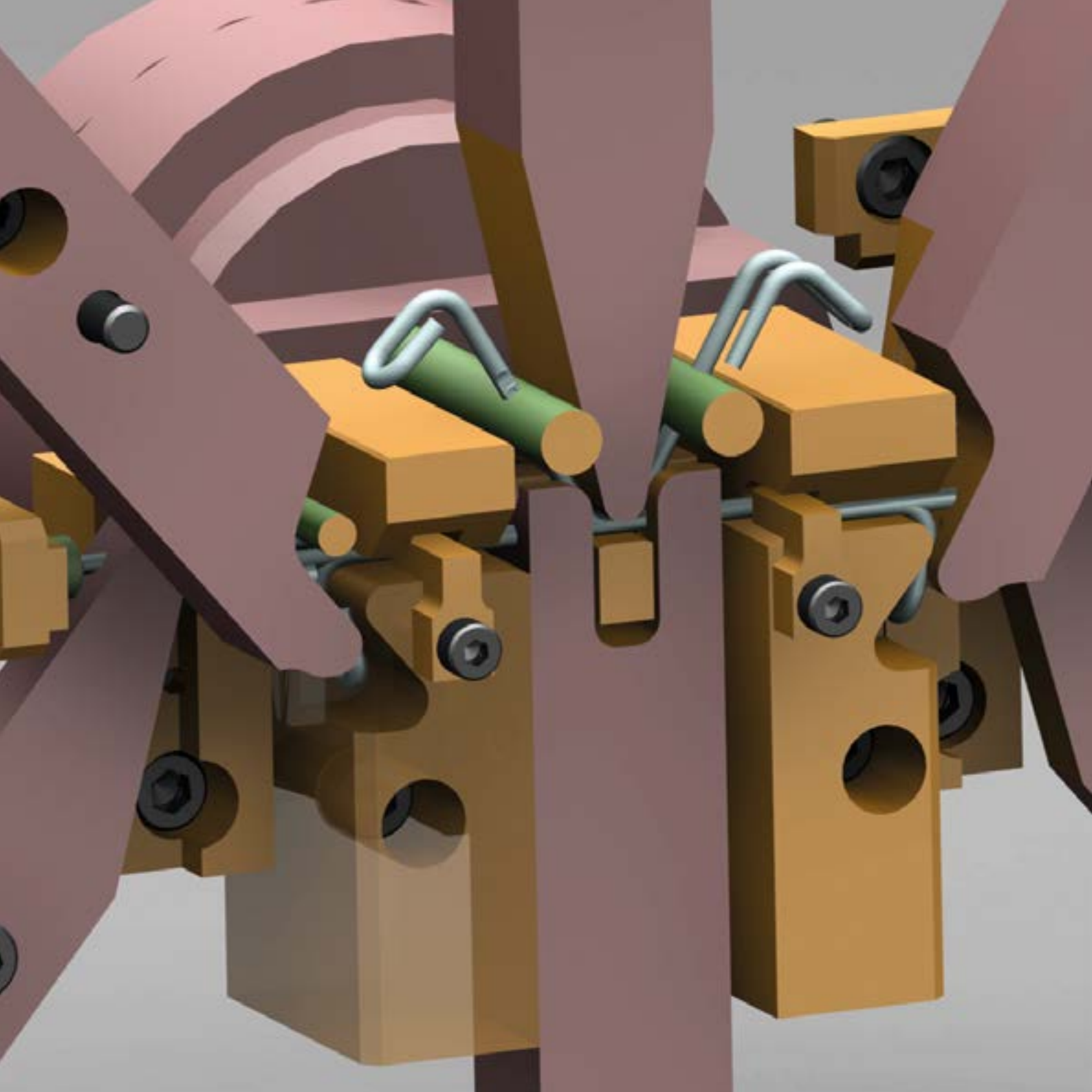


## TOOLING TECHNOLOGY

„Competence from expertise“

Bihler offers tool solutions perfectly suited to your applications for economical complete manufacturing. The latest manufacturing technologies and the experience of our employees ensure highest quality standards and guarantee a long service life for your tools.

With the standardized LEANTOOL tooling kit you implement radial bending tools and linear progressive tools easier, faster and cheaper. The modular system impresses with perfect consistency from planning through design and manufacturing all the way to production.



## TECHNOLOGY SOFTWARE bNX

„The Next Generation“

Process optimization already starts with the corresponding software. The modular Bihler technology software bNX perfectly assists you with virtual product modeling and with the development and design of Bihler blanking and bending tools.

Using the Bihler bNX technology software processes can be analyzed, configured, drafted and simulated more efficiently. The result: you can significantly reduce development times, risks and costs.





Intelligent solutions  
for your ideas

