

b **BIHLER**

 **PRODUCT OVERVIEW**

Otto Bihler Maschinenfabrik GmbH & Co. KG

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.

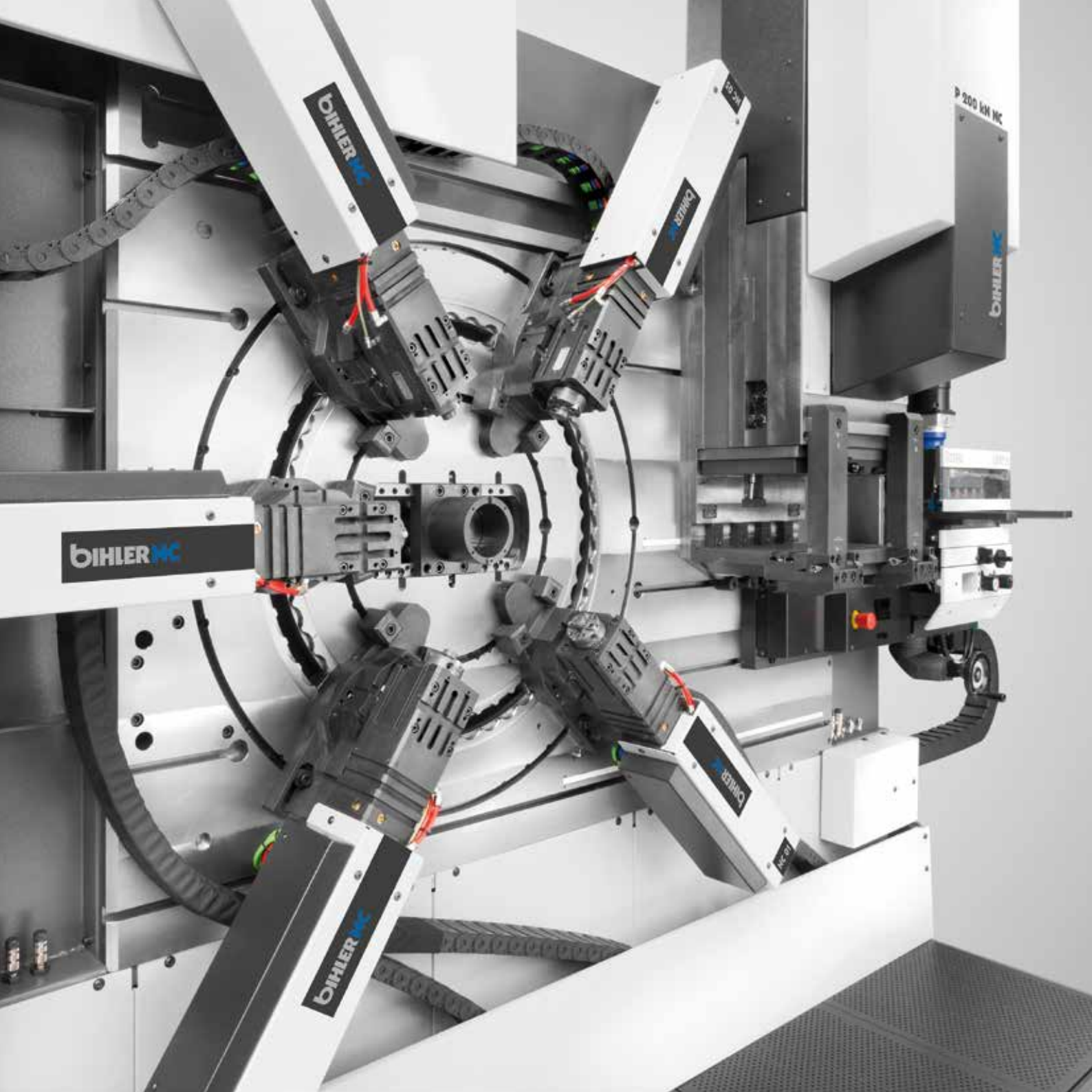
The performance, reliability, accuracy and efficiency of a Bihler machine create the reassuring feeling of always being a step ahead of the competition. This generates freedom for new ideas – to extend the boundaries of the technically feasible a little further every day.

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 stamping and forming machines, universally applicable processing centres and flexible NC production and assembly systems.

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



STAMPING-FORMING MACHINES

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



Stamping-Forming Machine
RM 40K



Stamping-Forming Machine
RM 40KS



Stamping-Forming Machine
GRM 80E



Stamping-Forming Machine
GRM 80P

PROCESSING CENTERS

- BZ 1/2
- COMBITEC
- TWINTEC



Processing Center
BZ 1



Processing Center
BZ 2/5-12

NC PRODUCTION AND ASSEMBLY SYSTEMS

- RM-NC
- GRM-NC
- BNC 2
- BIMERIC BM
- BIMERIC SP



NC Production System
RM-NC



NC Production System
GRM-NC



Stamping-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



TWINTEC



NC Production System
BNC 2



NC Production/Assembly System
BIMERIC BM



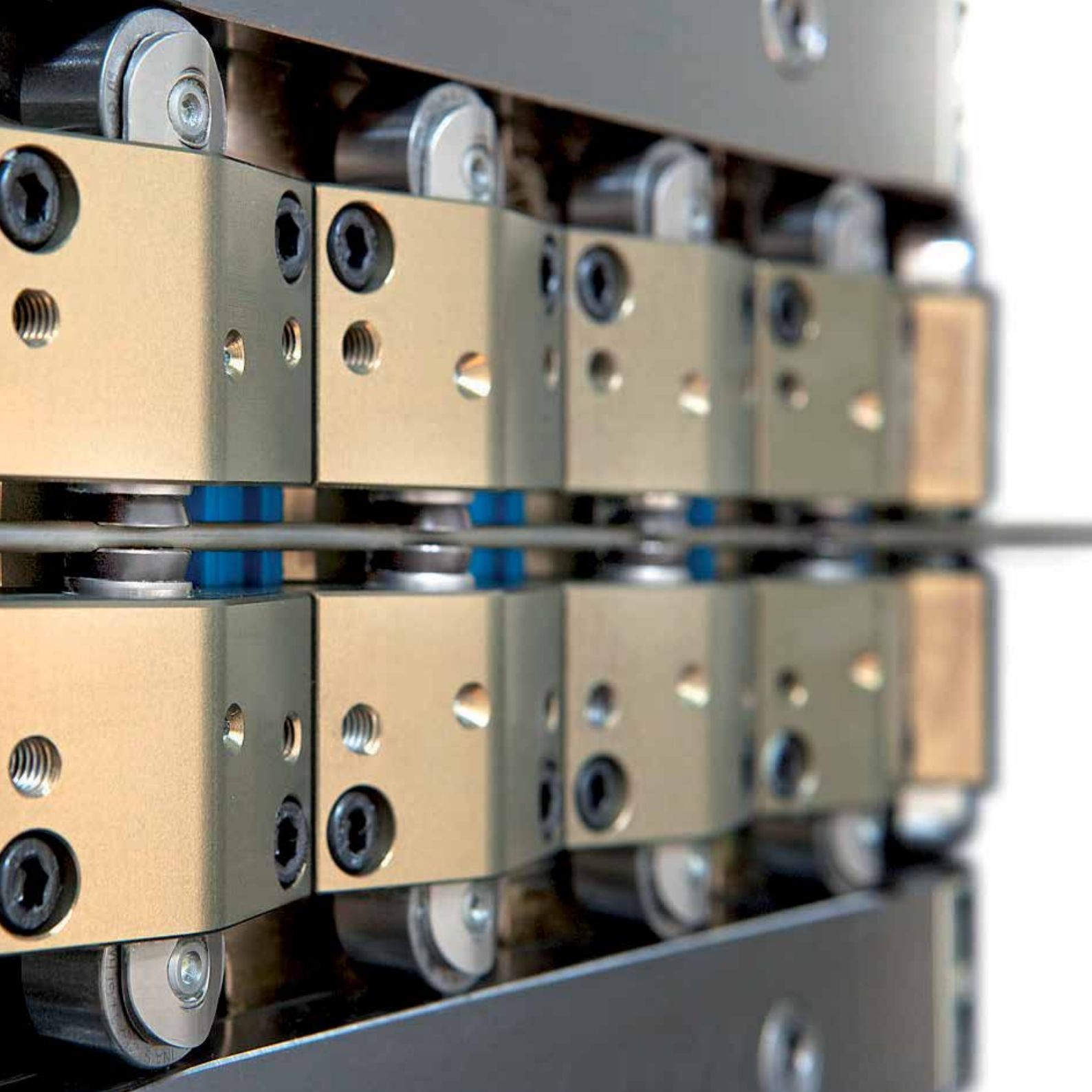
NC Production/Assembly System
BIMERIC SP

PROCESS MODULES

„For greatest depth of in-house manufacturing“

When boundaries disappear, new prospects arise; new applications develop. These can be fully exploited with Bihler process modules and peripheral units. They can be integrated simply in every manufacturing concept and allow you an even greater depth of in-house manufacturing.

Irrespective of whether it is threading, screw-insertion, material or component feed, insulation removal and much more – Bihler's strength has always been the integration of as many procedures as possible on a single machine, so what was previously impossible becomes reality.



PROCESS MODULES

- Feeds
- Thread forming units GSE
- Multiple-use screw insertion unit MSE
- Pick & Place units PPE
- BihlerNC modules



Radial Gripper Feed Unit
RZV 2



Roller Feed Unit



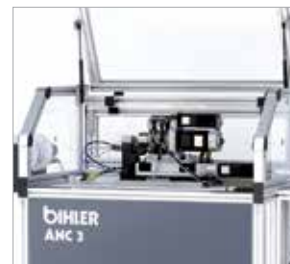
Screw Insertion Unit
MSE 2



Pick & Place Unit
PPE 2

PERIPHERAL UNITS

- Insulation shaving device ANC
- Reels
- Cleaning system RS
- Feeding system ZSK



Insulation Shaving Device
ANC 3



Reels



Thread Forming Units
GSE K1, K2, K3



Thread Forming Units
GSE KS1, KS2



NC Lathe Mandrel



NC Team Axis



NC Units
(200N - 80kN)



NC Presses
NCP 150kN - 400kN



Cleaning System
RS 3



Feeding Unit
ZSK

WELDING TECHNOLOGY

„For solid bonds“

Reality shows it daily – a solid bond is worth its weight in gold, and especially in welding where it is a major factor contributing to success. Bihler has been providing this solid bond for more than three decades with its innovative welding devices and systems.

Bihler works purposefully and with unstinting innovative spirit that this remains also the case in the future. Permanently keeping the target in its sight to safeguard your future with highly economical high-tech systems.



WELDING SYSTEM

- B 5000 (-NC)



Welding System
B 5000 (-NC)

CONTACT WELDING

- D1Q/D2Q/D3Q "Quickchange"
- NC contact welding units
- Silver-graphite contact welding unit



Contact Welding Units
„Quickchange“

STRIP WELDING

- BS 1



Strip Welding
BS 1

LASER WELDING

- CO₂ laser
- Solid state laser



Laser Welding
CO₂ Laser



Laser Welding
Solid State Laser



NC Contact Welding



Silver-Graphite Contact Welding Unit

PROCESS CONTROLS

„Everything under control“

Bihler's innovative controls also guarantee your future competitiveness. They allow intuitive, user friendly handling of Bihler machines and NC axes. In addition, they provide control functions for high-speed presses and a multitude of rotary transfer and assembly machines without, in part, additional software programming.

With Bihler controls everything is under control – for greatest process reliability.



SIEMENS

VariControl

0 min 178 s

766478

2840

NC

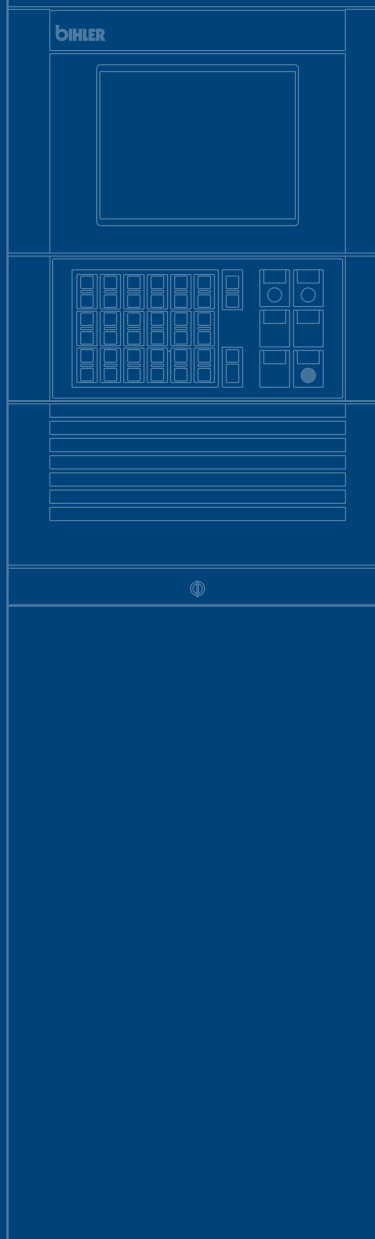
Produktion

Enden

0 1 2 3 4 5 6 7 8 9
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9
1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9
2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9
4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9
5.0 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9
6.0 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9
7.0 7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9
8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 8.9
9.0 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 9.9

CONTROLS

- VariControl VC 1
- VariControl VC 1-E



VariControl
VC 1



VariControl
VC 1-E



BIHLER



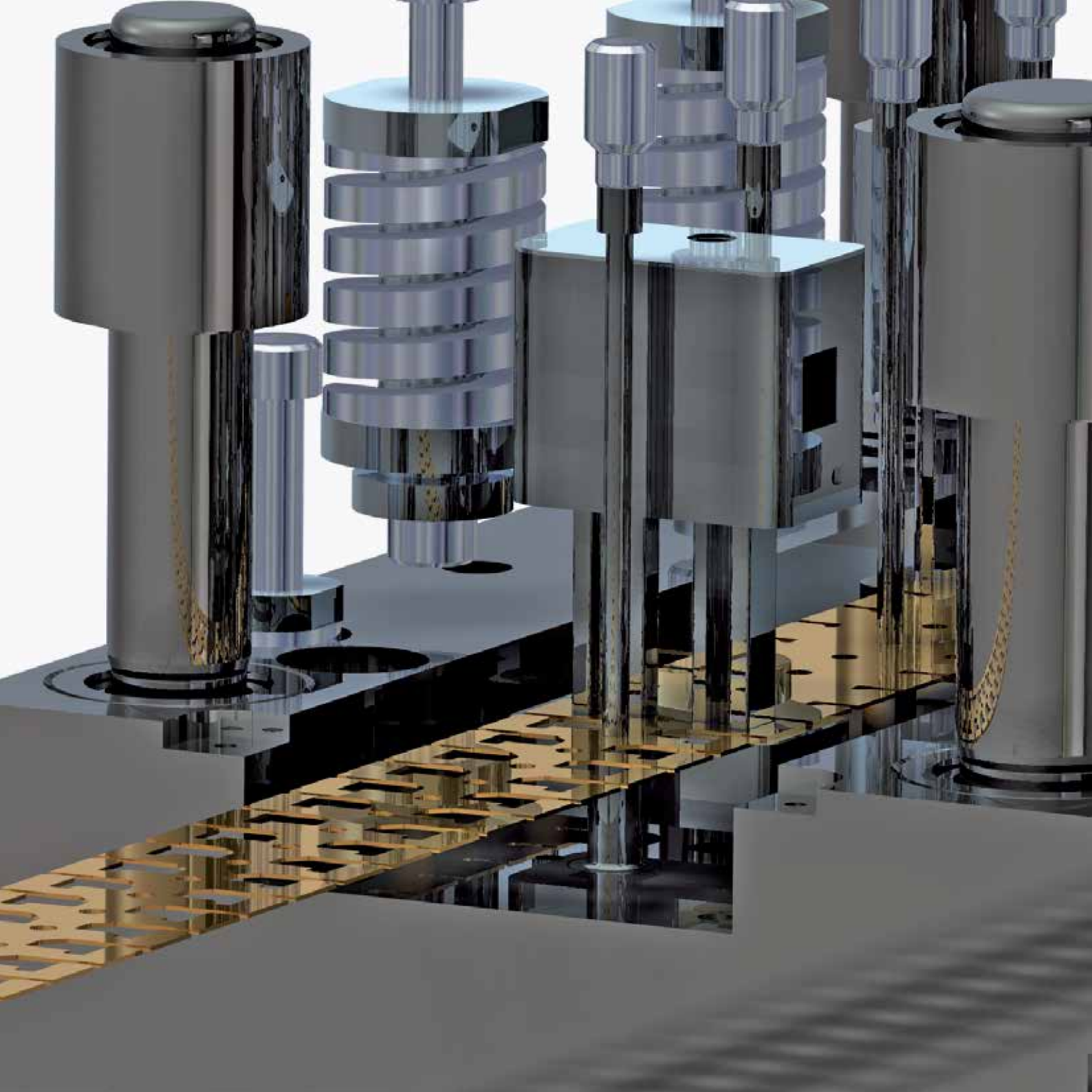
TECHNOLOGY SOFTWARE bNX

„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.

SOFTWARE bNX



TOOLING SOLUTIONS

„Expertise born from Experience“

Bihler offers you tooling solutions perfectly designed to match your applications for economical complete processing. They fulfill every demand of progressive and flexible tool technology. Quality from a single partner based on flexibility, know-how and expertise.

Safeguard your competitive edge so that your production leads automatically to success!



TECHNICAL DATA

„All machines at a glance“

	Stroke rate (1/min.)	Press (max. nominal force kN, stroke mm)	Forming units (max. nominal force kN, stroke mm)	max. feed length mech. (mm)	max. strip width (mm)	Central mandrel (max. nominal force kN, stroke mm)	Central aperture (WxH, mm)	Drive positions
RM 30K	5-350	90/12	40/40	240	60	20/45	400/122	26
RM 40K	5-350	90/12	60/40	240	60	20/45	400/122	26
RM 40KS	5-350	150/12	60/50	240	80	20/45	400/122	32
RM 40P	5-350	200/12	60/50	240	80	20/45	400/122	35
RM 40B	5-400	70/12	30/50	60	30	30/50	378/122	24
RM-NC	5-300	200/12	20/120	any (NC)	80	20/120	400/122	
GRM 80B	5-250	100/12	50/50	130	50	60/80	270/200	15
GRM 80E	5-250	300/16	90/95	500	80	35/80	644/200	32
GRM 80P	5-250	400/20	90/95	500	80	35/80	644/200	36
GRM-NC	5-250	400/60	40/100	any (NC)	90	40/100	630/200	
MC 42	5-350	90/12	60/40	240	60	20/45	378/122	36
MC 82	5-250	300/16	90/95	500	80	35/80	644/200	40
MC 120	5-150	700/16	160/140	350	160	10/160	780/280	41
MCS 1	5-800	70/8	30/25	70	60	15/45	400/122	36
MCS 05	5-500	300/16	50/50	160	60	30/50	644/200	42
BZ 1	5-100	300/16	120/95	500	160	18/150	968/320	42
BZ 2/12	5-400	300/12	50/50	240	80	10/50	2646/296	48
CC 1	5-200	800/30	160/140	500	160	20/160	780/280	27
BNC 2	0-300	70/10	12/120	any (NC)	25	12/120	110/122	
BIMERIC BM	5-250	300/60	40/120	any (NC)				
BIMERIC SP	5-250	500 (800)	40/120	any (NC)				
TWINTEC (BZ 1)	5-100	1600 - 3000	120/95	200	160	18/150	968/320	42
	Stroke rate (1/min.)	Nominal force (kN)	Stroke adjustment (mm)	Stroke position adjustment (mm)		Area of bolster plate (mm)	max. strip width (mm)	
SP 500	0-400	500	15-63	0-60		1000x560	250	
SP 800	0-200	800	fixed stroke 30	-8 mm from B.D.C.		1000x510	160	

For further information on the machines please see the respective brochures and flyers.

(subject to change without notice 03/15)

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