

CNC-Controlled Dual-Head Bending Machines for the Production of Two- and Three-Dimensional Parts and Frames from Round Wire

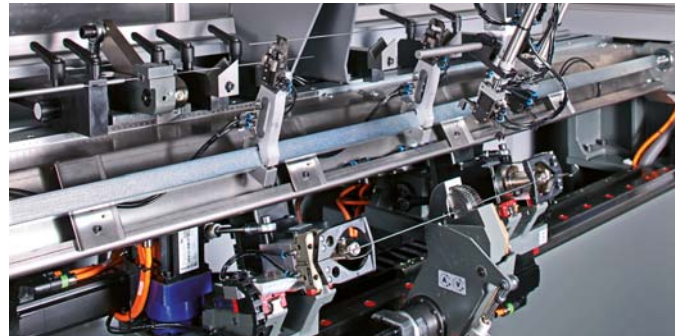
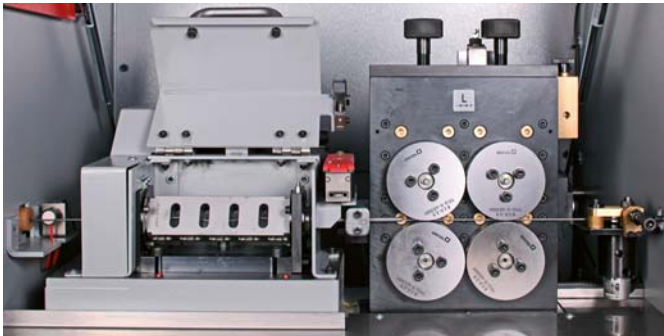


Series
BMS

Series BMS

▼ Highly dynamic rotary straightening system with pull roller advance feed (BMS 25)

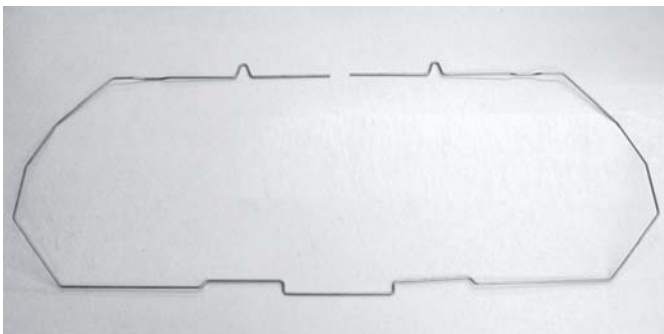
▼ Cycle-time optimized through freely programmable positioning of insertion arms (BMS 25)



Our Accomplishments for your Benefit

- **Production of wide range of parts due to:**
 - CNC-controlled rotary gripper with large bending clearance
 - Short center sections
- **High precision and quality due to:**
 - Highly dynamic, rotary straightening system
 - Latest servodrive technology
- **Process reliability due to:**
 - CNC-controlled wire loader
 - Rod supports
 - CNC-controlled monitoring of axis positions
- **High output due to:**
 - Synchronous straightening and bending process
 - Parallel processing via two bending heads
- **Short set-up times due to:**
 - Process-optimizing functions like *iQbend* and *iQsmartbend*
 - Quick generation of programs by reading in STP and IGES files
 - Geometric programming of parts

▼ Frame part for car seat structure, BMS 36



Design Features

Efficiency

- Rotary straightening system BMS 36 + 50 (BMS 25 option)
- Highly dynamic bending head drives
- Powerful electrical system

Rotary gripper

- Servodrive for infinite rotation
- Servodrive for clamping wire with a high clamping force

Bending heads

- Positionable bending mandrels (option)
- Reuse of some of the tools from previous models possible
- Simple change of tools reduces tooling times

Control

- WAFIOS Programming System WPS 3.2 EasyWay
- User-optimized and quick set-up
- Simple programming also of asymmetric bending sequences

Process optimization at bending machines

- *iQbend*: Optimization of bending sequences
- *iQwire*: Simulation of wire bending processes
- *iQsmartbend*: Automatic optimization of bending processes
- *iQinspect*: Automatic measurement and correction of bent parts

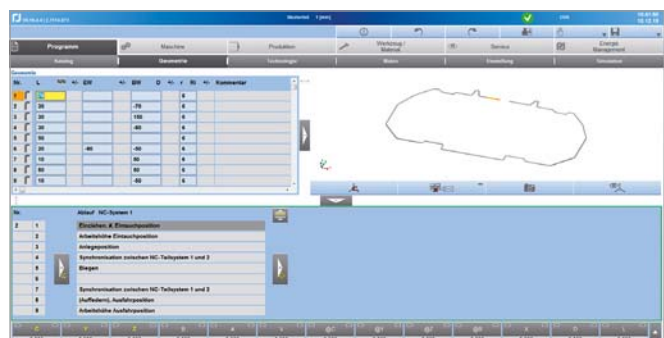
Quality, Reliability and Efficiency – WAFIOS CNC Dual-Head Bending Machines

New Definition of Productivity

The BMS series has been designed for the production of two- and three-dimensional parts as well as frames from round wire. It provides new solutions for increasing your output and optimizing costs.

The standard equipment of the BMS 25 includes 10 CNC axes while the standard version of the BMS 36 has 11 CNC axes and the BMS 50 12 CNC axes.

As an option (at BMS 36/50), there is the possibility to upgrade the machines with bending heads that can be moved offcenter (2 CNC axes). The additional axes broaden the range of parts that can be produced.



▲ WPS 3.2 EasyWay – Geometry level

Quality

For more than 125 years, the name of WAFIOS has been synonymous with highest quality, safety standards, and technical innovations in the German machine manufacturing industry.

Reliability

Strict quality controls, state-of-the-art production systems, and many years of experience guarantee that your investment is safe in our hands. Our global service network ensures high availability of WAFIOS machinery.

Cost efficiency

High production output and a long service life will save money and shorten the amortization time of your investment.

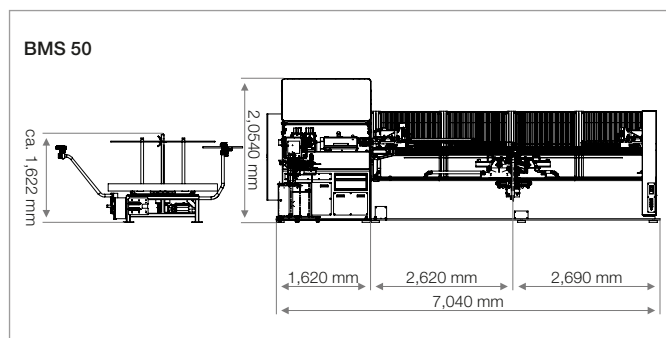
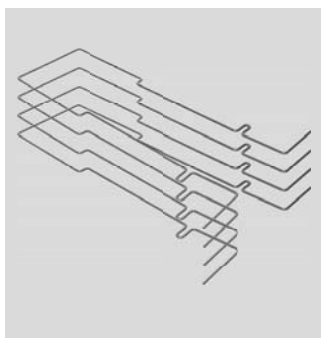


▲ Option - Bending heads that can be moved off center enable the use of the most diverse tool concepts



▲ Standard 4-pin bending tools

Technical Data	BMS 25	BMS 36	BMS 50
Wire Ø: <div style="display: flex; justify-content: space-between;"> < 600 N/mm² 1.5 – 3.5 mm </div> <div style="display: flex; justify-content: space-between;"> < 1.900 N/mm² 1.5 – 2.5 mm </div>	<div style="display: flex; justify-content: space-between;"> 1.5 – 3.5 mm 2.0 – 6.5 mm </div> <div style="display: flex; justify-content: space-between;"> 1.5 – 2.5 mm 2.0 – 3.6 mm </div>	<div style="display: flex; justify-content: space-between;"> 2.0 – 6.5 mm 4.0 – 10.0 mm </div> <div style="display: flex; justify-content: space-between;"> 2.0 – 3.6 mm 4.0 – 5.0 mm </div>	<div style="display: flex; justify-content: space-between;"> 4.0 – 10.0 mm </div> <div style="display: flex; justify-content: space-between;"> 4.0 – 5.0 mm </div>
Rod length:	250 – 2,000 mm	320 – 4,000 mm	320 – 4,000 mm
Distance of bending heads to center of tool:	min. 75 mm max. 1,900 mm	min. 138 mm max. 3,750 mm	min. 160 mm max. 3,750 mm
Rotary angle, rotary gripper:	Infinite	Infinite	Infinite
Rotary angle, bending and optional mandrel axis:	Infinite	Infinite	Infinite
Bending torque:	max. ca. 32 Nm	max. ca. 180 Nm	max. ca. 360 Nm
Bending head, up/down stroke:	max. 25 mm	max. 40 mm	max. 50 mm
Bending head, laterally displaceable (B axis)	–	Option	Option
Cutting unit:	Pneumatic	Pneumatic	CNC axis



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Precision Machinery for Wire and Tube