

CNC Bending and Coiling Machine for the Production of Two- and Three-Dimensional Parts and Frames from Wire and Profiled Materials



Series
BM

Series BM

▼ Bending head & Cut



▼ Feed unit including straightening unit



Our Accomplishments for your Benefit

- Tried and tested, successful machine structure
- Most of the tools from predecessor machines can be used
- Higher process safety thanks to adjustable bend-back clearance
- Consistent standard operating system

Design Features

- Bending machine available in 3 sizes
- Basic machine with 7 CNC axes, upgradable to 8 standard CNC axes
- Robust feed unit for advancing and rotating the wire, manually displaceable together with the combination roller straightener for adjusting the bend-back clearance
- Fast CNC-controlled cutting unit with optimized cycle times
- Versatile bending head with large bending clearance and flexible application possibilities thanks to the infinitely rotating bending and mandrel axis as well as long transverse and up/down strokes
- User-friendly user interface WAFIOS WPS 3.2 EasyWay with plain-text programming of lengths, angles or coordinates, and linking of all machine components
- Control panel carriage with touchscreen display and hand-held operating device
- Fast CNC machine control, upgradable to 14 CNC axes
- Numerous add-on devices available (options)
- Combination roller straighteners cover the entire operating range of the machine
- Air-conditioned switch cabinet

Operation

- User-friendly and fast set-up thanks to hand-held operating device with touchscreen
- Reduced set-up times due to ergonomic access to all tool positions as well as simple and fast programming of tools, material properties and bending programs with WPS 3.2 EasyWay
- *iQbend*: automatic optimization of CNC program sequences with regard to the geometry of the bent part (option)
- *iQwire*®: Real-time simulation for determination of cycle times and collision control (option)
- *iQinspect*: Import/export of nominal data or correction data from external measuring system to WAFIOS Programming System WPS 3.2 EasyWay (option)

▼ Displaceable feed and straightening unit



Versatile, Flexible and Profitable - WAFIOS CNC Coiling and Bending Machines, Series BM

Trend-Setting Machine Concept

The WAFIOS BM series has been designed for the production of two- and three-dimensional parts and frames made of wire and profiled material. It offers a new machine concept based on components and tools that have been tried and tested hundred of times. High process safety, the possibility to employ tools of predecessor models and the familiar standard operating system WAFIOS WPS 3.2 EasyWay enable high outputs.

The rotation of the wire is based on a well proven concept. The stationary mounted bending head is very robust even when high bending speeds are used.

Reliable concept: Fast and precise bending and coiling operations due to high flexibility of tools.

Sophisticated safety concept, CE conformity in accordance with Machinery Directive 2006/42/EC, in connection with pay-off unit H / AHP and protective fence.

Quality

For over a 120 years, the name WAFIOS has represented the highest level of quality expectations, safety standards and German technical innovation related to the engineering of manufacturing systems.

Reliability

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

Efficiency

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



▲ Multi-radii bending tool for bending and free-form bending



▲ 4-Pin bending tool, type 5

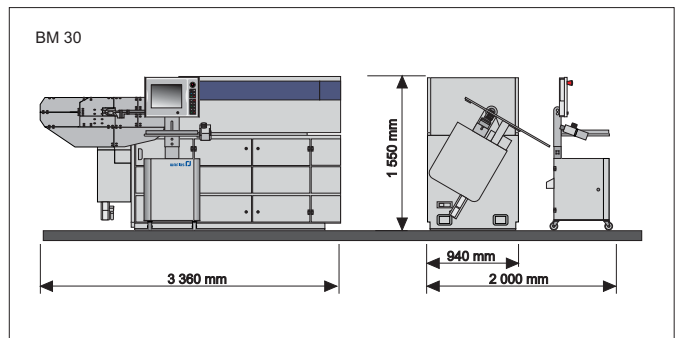


▲ iQbend in WPS 3.2 EasyWay



▲ User-friendly WAFIOS programming system WPS 3.2 EasyWay

Technical Data	BM 30	BM 40	BM 50
Operating range, wire Ø 600 N/mm ² 1,200 N/mm ² 1,900 N/mm ²	2.0 – 6.5 mm 2.0 – 4.5 mm 2.0 – 4.0 mm	3.0 – 8.0 mm 3.0 – 5.0 mm 3.0 – 4.0 mm	4.0 – 10.0 mm 4.0 – 6.0 mm 4.0 – 5.0 mm
Extended working range (opt.)	Wire from 1.5 mm dia.	Wire from 1.5 mm dia.	Wire from 2.0 mm dia.
Feed rollers	3 Pairs	3 Pairs	4 Pairs
Rotary angle, mandrel axis	Infinite	Infinite	Infinite
Rotary angle, bending axis	Infinite	Infinite	Infinite
Bending head, up/down stroke	+5 mm / -80 mm	+25 mm / -120 mm	+25 mm / -120 mm
Lateral stroke of bending head	+40 mm / -40 mm	+200 mm / -100 mm	+200 mm / -100 mm
Manual bend-back clearance (mm)	300/700/1 000	400/700/1 000/1 300	400/700/1 000/1 300
Bending head positioning	+30° fix	+30° fix	+30° fix
Stroke of CNC support plate (opt.)	+25 mm / -200 mm	+25 mm / -235 mm	+25 mm / -235 mm
Max. feed speed	120 m/min	120 m/min	120 m/min
Bending torque	ca. 250 Nm	ca. 520 Nm	ca. 1050 Nm
Number of standard CNC axes	7 (8 / max.14)	7 (8 / max.14)	7 (8 / max.14)



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Precision Machinery for Wire and Tube