

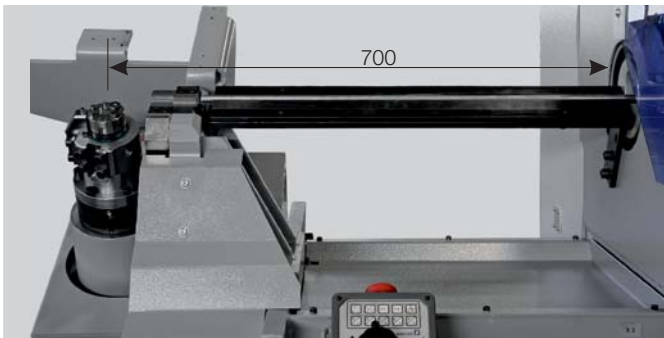
# CNC Coiling and Bending Machines for the Production of Two- and Three-Dimensional Parts Made of Wire



Series  
B

# Series B

▼ Fixed bend-back clearance



▼ Feed unit including straightening unit



## Our Accomplishments for your Benefit

- Reduced machine concept cuts costs per unit
- High flexibility and safety due to reliable and proven tool concept
- Safe and simple operation due to our WAFIOS programming system WPS 3
- Minimization of set-up times due to *iQ* software functions
- Simple handling of wire, from infeed unit up to bending head

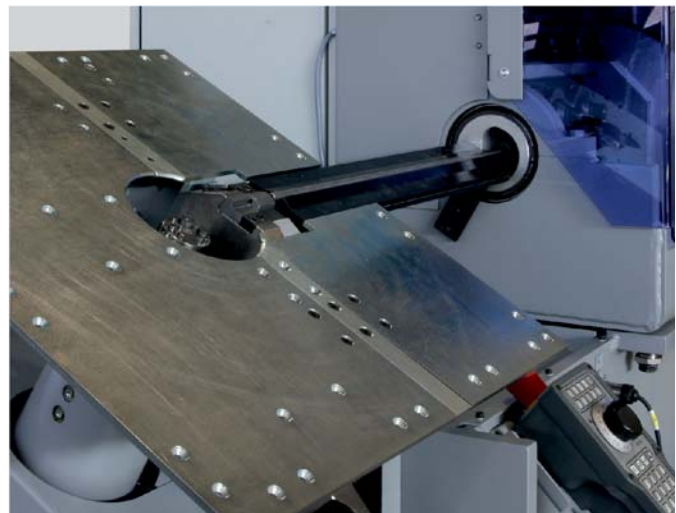
## Design Features

- 6 CNC axes (standard)
- Robust feed unit for advancing and rotating the wire, together with combination roller straightener
- Fast, cycle-time optimized, CNC-controlled cutting unit
- Versatile bending head with large bending space and flexible application possibilities by infinitely rotating bending and mandrel axis as well as large up/down strokes
- Feed and bending tools compatible with BM series as of 2003 (multi-radii and 4-pin tool)
- No lateral displacement of the bending head
- Combination roller straighteners cover the entire operating range of the machine
- Hand-held operating device
- Fast, PC-based CNC control
- Electr. M functions, standard
- Optical control for process monitoring (option)

## Operation

- User-friendly and fast set-up with the hand-held operating device
- 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
- *iQbend*: Automatic optimization of CNC program sequences with regard to the geometry of the bent part (option)
- *iQinspect*: Import/export of nominal data or correction data from external measuring systems to WAFIOS Programming System WPS 3

▼ Bending head



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

## Trend-Setting Machine Concept

The WAFIOS B Series has been designed for the production of two- and three-dimensional wire parts. It offers a new machine concept based on components and tools that have been tried and tested hundreds of times. High process safety, the possibility to employ tools of predecessor models and the familiar standard operating system WAFIOS WPS 3 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/EG, in connection with pay-off unit AHP / AGH / H and protective fence.



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



▲ 4-Pin bending tool, type 5

## Quality

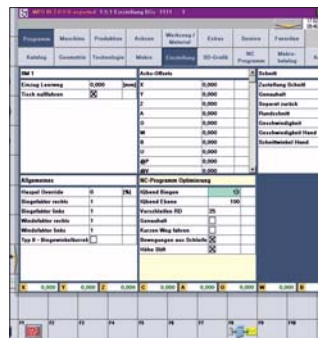
For over a 120 years, the name WAFIOS has represented the highest level of quality expectations, safety standards and German technical innovation related to the engineering of manufacturing systems.

## Reliability

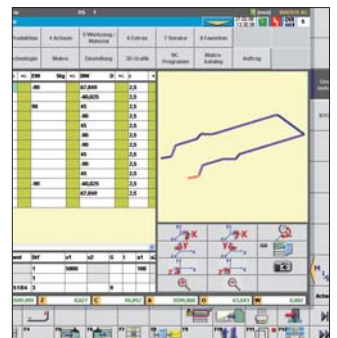
Strict quality controls, state-of-the-art production systems and many years of experience guarantee that your investment is in safe hands. Our global service network ensures high availability of WAFIOS machinery.

## Efficiency

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

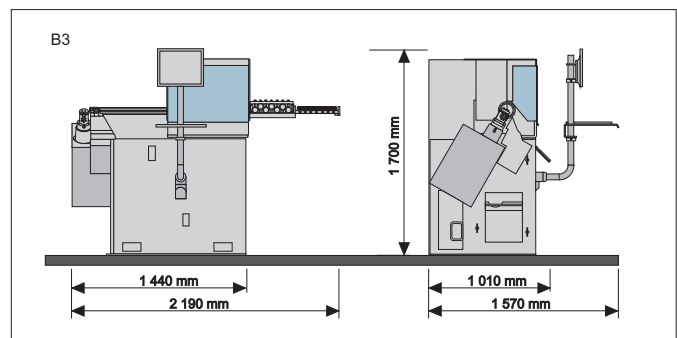


▲ iQbend in WPS 3



▲ User-friendly WAFIOS programming system WPS 3

Technical Data	B3	B4	B5
Operating range, wire Ø 600 N/mm <sup>2</sup> 1,200 N/mm <sup>2</sup> 1,900 N/mm <sup>2</sup>	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
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
Bend-back clearance	700 mm	700 mm	700 mm
Bending head positioning	+30° fix	+30° fix	+30° fix
Max. feed speed	120 m/min	120 m/min	120 m/min
Bending torque	ca. 250 Nm	ca. 520 Nm	ca. 1,050 Nm
Number of standard CNC axes	6 fix	6 fix	6 fix



**WAFIOS Machinery Corp.**  
27 Northeast Industrial Road  
Branford, CT 06405 USA  
Phone: (203) 481-5555  
Fax: (203) 481-9854  
sales@wafios.us  
www.wafios.us

**Midwest Technical Center**  
9830 W. 190th Street, Unit D  
Mokena, IL 60448 USA

Precision Machinery for Wire and Tube