

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 bending 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

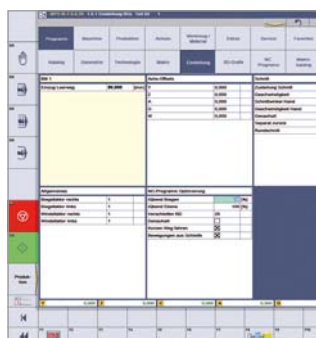
For more than 125 years, the name of WAFIOS has been synonymous with highest quality, safety standards, and technical innovations in the German machine manufacturing industry.

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.

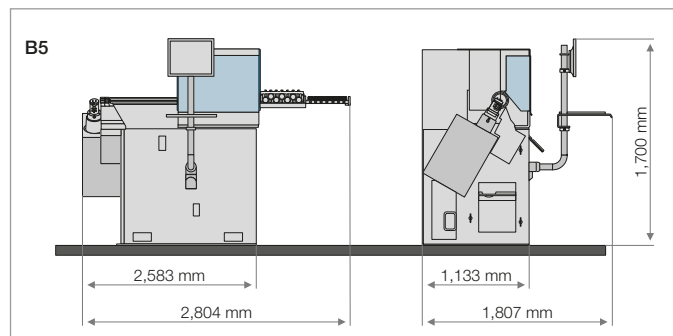


▲ *iQbend* in WPS 3



▲ User-friendly WAFIOS Programming System WPS 3

| Technical Data | B4 | B5 |
|---|--|---|
| Operating range, wire Ø: 600 N/mm ² 1.200 N/mm ² 1.900 N/mm ² | 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 | 4 Pairs |
| Rotary angle, mandrel axis | Infinite | Infinite |
| Rotary angle, bending axis | Infinite | Infinite |
| Bending head, up/down stroke | +25 mm / -120 mm | +25 mm / -120 mm |
| Bend-back clearance | 700 mm | 700 mm |
| Bending head positioning | +30° fix | +30° fix |
| Feed speed | max. 120 m/min | max. 120 m/min |
| Bending torque | ca. 520 Nm | ca. 1,050 Nm |
| Number of standard CNC axes | 6 fix | 6 fix |



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Precision Machinery for Wire and Tube