

CNC Tube Bending Machine for the Production of Two- and Three-Dimensionally Bent Parts of Tube or Solid Material



RBV 35

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▼ Right and left bending is enabled by traversing paths via two follow bars

▼ Intelligent tool system
▼▼ Bending head to be moved independently of the follow bar



Design features

Machine structure

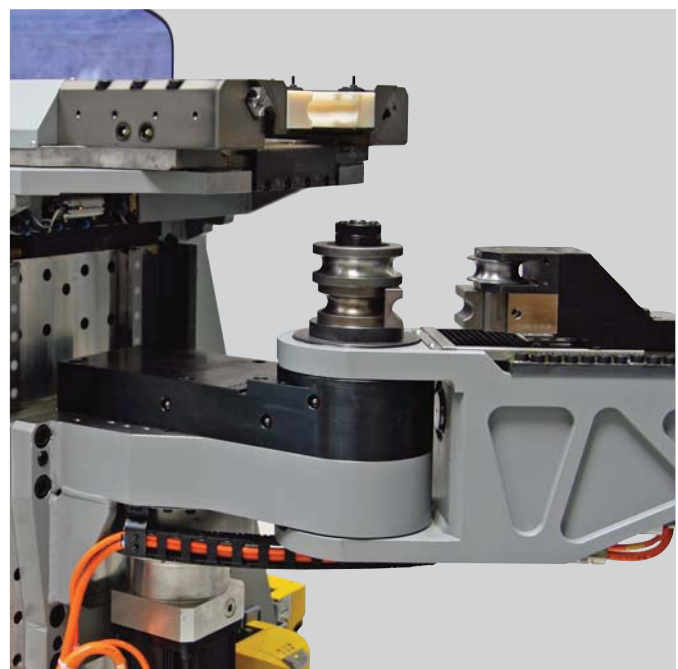
- Perfect harmony of functionality and design
- Very rigid machine design
- Right and left bending (option)
- CNC-control of all functions
- Fully electric drive concept
- Tube positioning with boost pressure function of advance feed unit
- Patented clamping concept for maximum degrees of freedom in the geometry of parts
- For tube diameters up to 35 mm
- High degrees of freedom for extreme bending geometries
- Standard machine with 8 interpolatable CNC axes
- Intelligent tool systems

Control

- New user interface **WAFIOS WPS 3.2 EasyWay**
- Intuitive control concept for the creation of a bending program in short and concise steps
- User-friendly touch screen with ergonomic control panel (option)
- Activity-oriented touch-screen user interface (option)
- Interactive graphical 3D programming of tubes
- Exactly repeatable bending results
- Definition of different user levels
- Functions for monitoring the machine status and maintenance intervals
- 3D simulation bending process **iQtube®** as option
- Software for external programming stations

Our accomplishments for your benefit

- Very rigid machine design ensures high quality of parts and high repeat accuracy
- Modular structure with standardized components enables economical stand-alone versions as well as fully integrated production cells
- Highly dynamic drive concept with interpolatable axes over all movements, intelligent tool system and new, patented clamping concept ensure high outputs



Dynamic, Robust and Economical – WAFIOS RBV 35 CNC Tube Bending Machine

A Power Pack Full of Innovative Technology

The WAFIOS RBV 35 CNC tube bending machine offers a very good cost/performance ratio for tube diameters up to 35 mm. Due to the machine's modular structure that uses standardized components, it can be produced at low costs. Moreover, the modular structure allows the expansion of the machine from a stand-alone solution to a fully integrated production cell. The enormous rigidity of the machine body ensures high quality of parts and repeat accuracy at all times.

The enormous rigidity of the machine body ensures high quality of parts and repeat accuracy at all times. The high output is enabled, on the one hand, by a highly dynamical drive concept in which all movements are interpolatable via axes. On the other hand, the innovative bending technology is found in the details. The intelligent machine concept requires only one stationary follow bar. The bending head is moved independently of the follow bar. The possibility to make right- as well as left-bending operations allows traversing via two follow bars.

A new, patented clamping system has been implemented for the first time. The intelligent drive develops the ideal combination of speed and force. The reduction of the component size without any loss of efficiency enables maximum degrees of freedom in the geometry of parts.

Quality

For more than 100 years the name WAFIOS has stood for the highest in terms of quality expectations, safety standards and technical innovation in German manufacturing systems engineering.

Reliability

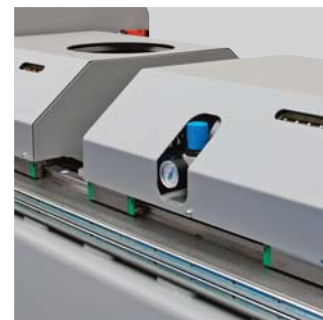
Strict quality controls, state-of-the-art production systems and many years of experience guarantee that your investment is in safe hands. Our global service network ensures high availability of WAFIOS machinery.

Efficiency

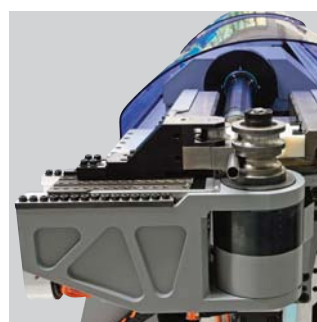
High production output and a long service life will save money and shorten the amortization time of your investment.



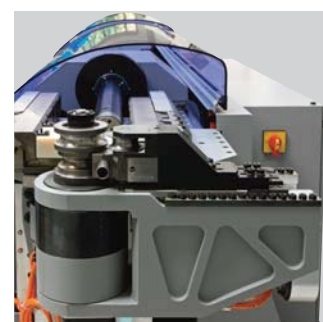
▲ Versatile connection possibilities



▲ Tube positioning with boost pressure function (booster) of advance feed unit



▲ Option: Left-hand- and Right-hand bending



Technical Data	RBV 35
Bending capacity Bending torque Clamping force Boost pressure: advance feed unit	6 kNm 52 kN 12 kN/24 kN
Bending geometry parameters Max. tube diameter Infeed length Max. bending radius, rotary-draw bending Max. bending radius, free-form bending Max. bending angle Max. freely programmable traversing path of boost pressure unit Max. freely programmable traversing path of mandrel unit	35 mm 2,500 mm (4,500 mm*) 170 mm endless 190° over entire machine length over entire machine length
Bending procedures (rotary-draw and free-form bending) Bending directions Bending levels Tool installation height	Right-hand/left-hand (option) up to 3 210 mm
Maximum speed Advance feed Rotation Bending	2 m/s 420° /s 165° /s
Axes accuracy Advance feed Rotation Bending	+/- 0,05 mm +/- 0,05° +/- 0,05°
Dimensions/Weight l x w x h mm Weight	4,610 x 1,420 x 1,475 4,000 kg
Connection and consumption data Voltage Frequency Max. current consumption Compressed air connection Max. compressed air consumption	400 V 50 Hz 18 A 6 bar 10 l/min

* Option



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