

## CNC Tube Bending Machine for the Production of two- and three-dimensionally Bent Parts from Tube



BMZ 8  
BMZ 12

# BMZ 8 BMZ 12

▼ Flexible gripper system with intelligent bending tool

▼ The loading arm axis serves for automation purposes (option)



## Our Accomplishments for your Benefit

- High level of flexibility and high degree of automation
- Highest output and quality
- Value added superior and precise technology
- Perfect handling of machine due to functional design
- Configuration of machine according to customer requirements

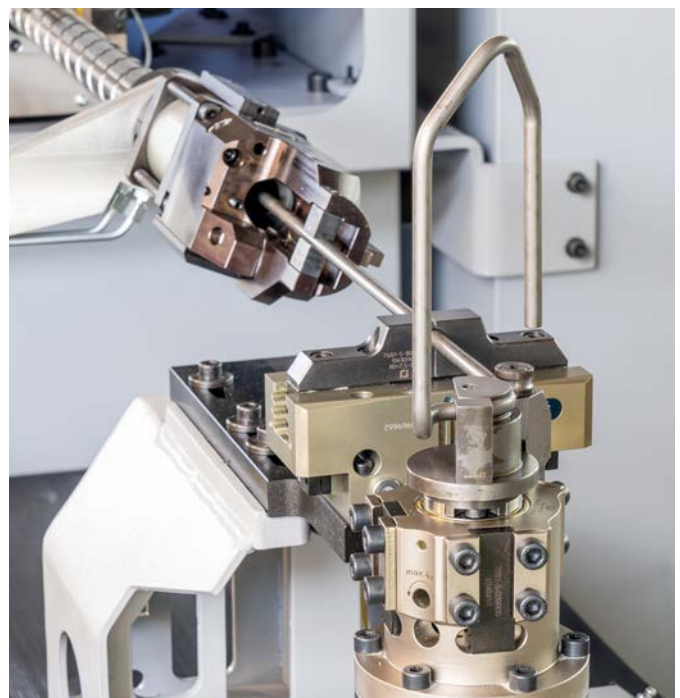
## Design Features

- Extremely high bending speeds
- Integrated loading and unloading automation (option)
- Right/left bending in one clamping
- Combined rotary-draw, roll and free-form bending
- Fully electronic machine concept, all relevant bending parameters are CNC-controlled
- Precise production of 3-dimensional bent parts by means of CNC controlled support plate (option)
- High dynamics due to state-of-the-art drive technology even for complex parts
- User-friendly machine control WAFIOS WPS 3.2 EasyWay with plain-language programming of lengths / angles or coordinates and 3D-simulation
- Numerous software packages for process optimization such as *iQsmartbend*, *iQinspect*...
- Open system for the complete networking of WAFIOS machines enables, for example, the machine-to-machine communication or, via interface the integration into the existing customer infrastructure (OPC UA)
- Equipped with hand-held operating device and 24" Multi Touch Screen
- Reduced retooling times due to simple and repeatable tool changes
- Open collet system allows the acceptance of end-treated tubes also with cap nuts

## Bending Head

The bending head has been designed for combined right/left bending procedures in one clamping. The lateral displacement of the bending head also enables the production of complicated geometries. This multi-functional bending head is able to hold all common WAFIOS tube tool systems.

▼ Bending head with tooling and part



# Versatile, Powerful and Profitable – WAFIOS CNC Tube Bending Machines

## Tube bending “State of the Art”

The BMZ series is based on a successful and reliable concept. Designed for the production of complicated bent parts from cut-to-length, end-treated and ready-to-install tubes, the WAFIOS BMZ series sets standards on the market since many years.

The graphical programming WPS 3.2 EasyWay allows geometry input by means of lengths, planes, angles or via coordinates. Alternatively, CAD files and other formats can be imported directly into the programming system. Other available additional software functions such as *iQtube* for 3D simulation of the programmed components support the machine operator even in complex tube geometries.



▲ Hand-held operating device with Touch Screen



▲ Standard bending tool combines draw and roll bending

## Quality

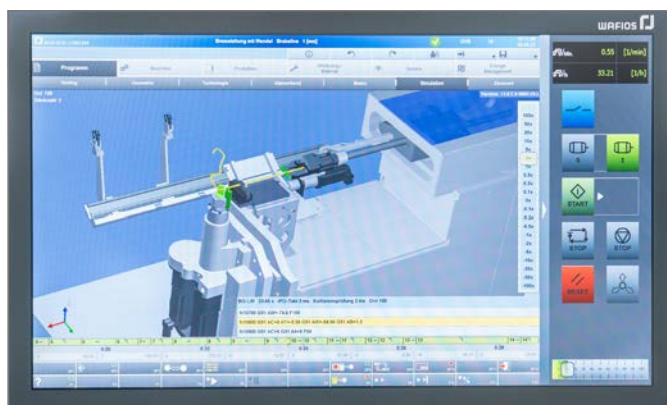
For more than 125 years the name WAFIOS has stood for the highest in terms of quality expectations, safety standards and technical innovation in German manufacturing systems engineering.

## 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.



▲ User-friendly work piece simulation thanks to WAFIOS-Programming-System WPS 3.2 EasyWay with *iQtube*

Technical Data		BMZ 8	BMZ 12
Operating range	Tube diameter, max.* Standard lengths* (recommended) From BMZ magazine	8.0 mm up to 2,000 mm 100 - 2,000 mm	12.7 mm up to 2,000 mm 100 - 2,000 mm
CNC axes	Standard/Maximum Bending head Spindle unit (without swiveling) Lateral displacement of bending head Internal mandrel unit Auxiliary gripper  Loading arm Swiveling the collet	6 / 10 3 axes 2 axes 1 axes ---- Pneumatic / 1 axes (optional) 1 axes (optional) 1 axes (optional)	7 / 10 3 axes 2 axes 1 axes 1 axes (optional) Pneumatic / 1 axes (optional) 1 axes (optional) 1 axes (optional)
Collet	Operating principle Structure Single stroke Multiple stroke	Pneumatic Open sideways 750 mm Any often	Pneumatic Open sideways 750 mm Any often
Automation	Loading from a magazine Position-oriented depositing Combination with robots	Optional Optional Optional	Standard Standard Optional
Weight		1,150 kg	1,950 kg
Space requirements (l x w x h mm)		2100 x 1250 x 2050	2150 x 1250 x 2050
Machine control		WPS 3.2 EasyWay	WPS 3.2 EasyWay

\* All specifications depend on material and bending radius, different lengths on request



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Precision Machinery for Wire and Tube