

"Form follows function"**At the In-House Exhibition in Wuppertal in May 2015, WAFIOS is to present its follow-up plan for the BMZ series for the very first time**

The BMZ series is based on a successful and reliable concept. Designed from the very beginning for the production of complicated bent parts from cut-to-length, partially ready-to-install tubes with processed ends, the WAFIOS BMZ series has been setting standards in the market for years. With the new BMZ 8 model and subsequent models, the BMZ 42 series, which has been well-established on the market for a number of years, is set to be replaced.

During the redevelopment, the closest possible attention was paid to functionality, in keeping with the truism "form follows function" or the WAFIOS version "minimalism in the areas of the machine which offer no added value to the product manufactured".

getreu dem Motto „form follows function“ gelegt oder nach WAFIOS Lesart „Minimalismus in den Maschinen-Bereichen die keine Wertschöpfung am erzeugtem Produkt bringen“. Ultimately, however, the BMZ series focuses on re-justifying its core values: the highest degree of performance with outstanding, precision technology supported by perfect machine handling.

Highest output and quality

Extremely high bending speeds, thanks to reliable technology from over 100 years of experience in wire processing transferred to tube technology, lead to increases in output. The combined rotary-draw, roll, and free-form bending it provides allows the arrangement of up to 3 bending levels and the combination of processing techniques. This advantage of employing various bending techniques is particularly effective with respect to tube-hose-tube combinations with extremely short lengths between the bending operations. As a result, the shortest possible distances between the bend and attached components can be achieved.

The fully electronic machine design, whereby all relevant axes are CNC-controlled and can be repeatedly re-assembled after a comprehensive tool change, results in significant savings in upgrade costs and in high repeat accuracy.

hohe Wiederholgenauigkeit. The BMZ 8 can be optionally extended with an automatic load and unload function, and the modular machine design allows you to adjust settings to the varying demands of the automation level.

die Anpassung an unterschiedlichste Bedarfe des Automatisierungsgrades.

Added value with superior and precise technology

The re-designed, multi-functional bending head, with up to 3 planes for various bending radii and tube diameters, enables the simultaneous bending of protective cladding around the tube. The basic package includes right and left bending using a clamp, allowing you to manufacture even complex 2- and 3-dimensional work pieces in one operation. Rotary-draw, roll, and free-form bending tools can be used; thanks to standardized tool holders, set-up times can also be minimized. Existing sets of tools from the previous BMZ 42 machine can be used.

Reliable technology from renowned German suppliers is the machine's standard. der Maschine.

The WAFIOS BMZ 8 offers the option of decentralized application of the programming software at any workstation. Decentralized usage is beneficial for performing simulation processes, e.g., in feasibility studies for project preparation or for calculation purposes. This generates significant savings and shortens downtimes during the actual set-up process or while operating the machine. Numerous interfaces such as those for robots, valve functions, input/output boards, etc., are also optionally available.

Perfect handling of machine due to functional design

The modular design allows you to configure the BMZ 8 according to product requirements or in relation to the individual automation strategy.

The new programming software WPS 3.2 EasyWay has been integrated into the machine. The latest version has recently become the standard programming system for all new WAFIOS tube bending machines. Popular and successful features include the user-guided control, simulation options, graphically supported programming, hierarchy-based user levels (programming levels), as well as plain-language programming of lengths/angles/coordinates, and interfaces for the periphery. Features such as a re-designed, very clear, and convenient hand-held operating device, as well as a 24" monitor, are also part of the basic package. Thanks to its user friendliness and guidance, even untrained users will master the BMZ 8 in a very short space of time.

Various magazines are available for loading components. These include inclined magazines for separating assembled lines with screw fittings, expansions, or flanges. Location-oriented alignment for non-rotationally symmetrical attachment parts is also available. The parts are conveyed with precision regardless of attachment such as elbow joints or joint plates, and can be easily and optimally handled with the open gripper system (see image). All machine areas are well visible and very accessible, which enhances their maintenance and availability.

The further development of the WAFIOS BMZ 8 is characterized by a further increase in bending speeds thanks to the use of re-designed bending heads, reduced handling times, and optimized downtimes. For loading and unloading, various designs are available and make a significant contribution toward increasing manufacturing output. Despite the high operating speed, the WAFIOS BMZ 8 continues to maintain the tightest bending tolerances.

The new development focuses on suppliers to the automotive industry. In particular, these include companies whose work revolves around the cost-efficient mass production of brake and fuel lines. Thanks to reduced investment and operating costs, and the higher output rate, the BMZ 8 is an attractive alternative.



Fig. 1 WAFIOS BMZ 8