

WAFIOS - "Future Forming Technology"

Finally: After several years of absence, the "live" comeback of the wire & Tube show in Düsseldorf, Germany, is scheduled for June. "Future Forming Technology" - This year's theme of the Reutlingen-based forming expert defines the company's exhibition program. The focus is on trendsetting high-speed technologies that enable productivity leaps in manufacturing, as well as revolutionary production processes and automation solutions. Numerous machine premieres from all WAFIOS product ranges complete the exhibition program. This and much more will await visitors on more than 1,600 m² of exhibition space at the WAFIOS booths in hall 10 F22/F40 (wire) and in hall 5 A21/A22 (Tube) from June 20 through 24, 2022.

World premiere of the revolutionary WAFIOS HotBend 35 for bending plastic tubes

Unique, versatile and flexible machine concept with trend-setting production process for bending plastic tubes up to 35 mm outer diameter. The HotBend 35 enables straight plastic tubes to be bent using the 3D bending process, comparable to a classic tube bending machine. In this process, the bend area is heated with hot air in the patent-pending heating system and then formed conventionally in the rotary-draw bending technique. The proven TWISTER² technology is used to support the tube geometry. During the bending process, the handling robot dynamically supports the plastic tube and stabilizes it during the cooling process. The robot movements are automatically determined by the WAFIOS WPS 3.2 programming system. Accordingly, even small series can be produced flexibly and economically.

With the HotBend 35, WAFIOS is meeting the increasing demand in the automotive industry for weight-optimized corrugated tubes, fluid and fuel lines. It can also be used for new applications in the e-mobility sector, such as battery temperature control.

New introduction of the WAFIOS TWISTER² RL 25 right / left tube bending machine up to 25 mm diameter and 4,000 mm length

Extension of the TWISTER² product family in the upper operating range. The robot bending machine combines flexible tube handling and the bending process in a unique overall system. As a result, components with pre-assembled screw connections on both sides, such as those used for hydraulic lines with hose segments, can also be bent efficiently by sequentially processing both sides of the tube. By using rotary-draw bending tools with several planes, special and forming tools for short clamping lengths can also be used.

High-speed tube bending machine RST 28 celebrates international trade fair premiere and sets new standards in productivity

The latest machine development from WAFIOS in the field of stabilizer bar production ensures top values in output and tool life. The RST 28 features unique patented kinematics and reduces downtimes during bending by up to 70 %. It is the first tube bending machine that is 100 % tailored to the requirements of cold forming of prehardened stabilizer bars with complex geometries. The high bending speed combined with high forming forces also make the machine very attractive for other tube applications such as seat frames made of dual-phase steel.

The new RU 12 compact from WAFIOS Tube Automation ensures maximum flexibility in tube end forming operations

End forming operations with short cycle times – The machine will be exhibited at the show for flexible use, both as standalone and cell solution. Newly developed compact forming machine for individual tube ends. The horizontal tool concept



ensures high accessibility, is suitable for bent and short workpieces and optimized feeding and handling systems. The RU 12 allows the use of standard tool holding fixtures as well as the "Easy Lock System" to reduce set-up times. Areas of application include fluid lines such as oil, fuel or hydraulic tubes from the automotive industry, tube forming in medical technology or refrigeration and air conditioning technology.

Further machines from the current tube bending machine program of the WAFIOS Group

The WAFIOS RBV 60 R must not be missing from the show program. Successfully established on the market for years, the bending machine impresses with maximum dynamics, rigidity and the highest precision of the machine body and bending head. The modular machine structure can be adjusted to a wide range of applications and can be fully integrated into automated solutions.

Developed for the production of complex bent parts with endworking and partly prefabricated tubes, the WAFIOS BMZ series sets standards on the market. Highest output rates with superior, precise technology and perfect machine handling are the hallmarks of the series.

Flexible, fast, precise with short set-up times are features of the price-oriented RB 20 bending machine by WTA, for classic fields of application in automotive, refrigeration and air conditioning technology.

"Future Forming Technology" theme also reflected in the program of the WAFIOS Tube booth in hall 10

Minimum cycle times, with maximum flexibility and modularity — World premiere of the new transfer and bending technology by WAFIOS, flexible system for reducing cycle times by carrying out different process steps in parallel. Trendsetting: cold forming up to max. 22 mm high-strength spring steel wire — International world premieres of the FUL 126 and 226! Productivity leaps with high-speed technology for the production of springs and wire parts.

Automated production solutions from WAFIOS integrated in one programming system

WAFIOS will present new automation solutions, like loading units, feeding systems and production cell solutions, for all fields of application.

The programming system WPS 3.2 EasyWay stays a decisive step ahead by integrating previously independent systems, like a handling robot or other processing units, completely into the machine's control system.

The wire bending machine BM 60 and the servo-electric header RU 60 from WAFIOS Tube Automation will show how this integration works. The combination of 60 tons of forming force and newly developed tool system offers new possibilities in the production of wire parts that require an endworking process on one of their ends.

Trendsetting e-mobility technology for the first time at the wire show WAFIOS will present the FMU 40E, with a handling robot completely integrated in the machine's control system, for the production of stator hairpins. Other applications, like e.g. busbars and cooling lines used in the e-mobility industry, can be found at all WAFIOS booths in Düsseldorf.



Keeping maintenance processes intelligently under control - "Digital Services" by WAFIOS

WAFIOS' intelligent maintenance software "connectavo – The digital assistant for machines and machinery systems" will debut at the fair.

WAFIOS also presents for the first time a standardized, open system for the complete networking of machines and machinery systems: the IoT Suite.

Attractive service offers and innovative tool solutions, such as newly developed tool technology especially for bending plastic tubes, demonstrated on the WAFIOS HotBend 35, complete the broad exhibition program.

Visit WAFIOS at the wire & Tube show in Düsseldorf on June 20 – June 24, 2022 Hall 10 – booth F 22/40 and hall 5 – booth A21/A22. For our complete exhibition program under the motto "Future Forming Technology" go to www.wireandtube.wafios.com. Arrange a meeting with us at the fair online today.



Fig.1 WAFIOS RST 28





Fig. 2 WAFIOS TWISTER² 25 RL



Fig. 3 WAFIOS Tube Automation RU 12 compact





Fig. 4 WAFIOS impressions of Tube Düsseldorf