CNC Tube Bending Machine for Bending Stabilizer Bars
Our Accomplishments for your Benefit

- The RST series meets all requirements of the stabilizer bar production
- Compared to conventional CNC tube bending machines, clamping and counterholding forces are considerably higher and enable the production of short end lengths, bend-in-bend geometries and small bending radii
- The newly developed kinematics reduces moving masses, increases dynamics and allows an automatic loading without the help of an additional loading unit
- Changing to the latest generation of machines reduces tool costs as the tools of the RST 28, RST 35 and RBV 60 ST are fully compatible
- The revision of the drive trains, of the mechanical system and of the control have increased the output rate by up to 70% as compared to the previously used bending technology

Design Features

- Two machine sizes for customer-specific configuration based on the range of products produced with the machine
- Designed for processing high-strength materials
- Improved flexibility due to extension of the operating range (RST 35)
- Modular tool structure for customer-specific tools
- Optimum accessibility for drives and cable carriers
- Highest repeat accuracy thanks to state-of-the-art CNC technology and new design of the bending head’s positioning axes and the tube gripper module

Control System

- Convenient programming of geometries due to the reliable WAFIOS WPS 3.2 EasyWay control concept that is installed in all WAFIOS CNC tube bending machines.
- In the RST series, the award-winning iQsmartbend control solution (optional) is used for the first time for bending stabilizer bars. This software automatically optimizes bent parts by calculating the ideal tool motion profiles and thus improves the quality and output of parts.

WAFIOS Technology: For Those Who Demand the Best! Solutions for process optimization (iQs)

- iQtube: Graphical simulation of the bending sequence, with integrated collision monitoring and theoretical output calculation
- iQtube+: iQtube add-on that features an additional automatic optimization of axis travels and reduces cycle times even more
- iQinspect: Interface for exchanging data with a measuring system, like e.g. Aicon, and for automatically transferring correction data
RST – The Machine for Stabilizer Bars

The all-electric tube bending machines of the RST series unite precision and dynamics in a new dimension.

The innovative and patent-pending kinematics for handling tubes as well as the travel paths of the bending head reduce downtimes to a minimum. Based on the geometry of the part produced, the cycle time is thus reduced and the output is increased. Technical innovations ensure maximum precision and quality of the manufactured products with minimum cycle time.

Semi-finished tubes can be fed in at the same time as the last bend is being made at the previous tube or bar. An inline loading process can be realized by employing a loading unit.

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.
### Technical data

#### Max. tube diameter
- Tensile strength 700 N/mm²
- Tensile strength 1,200 N/mm²
- Tensile strength 1,400 N/mm²

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<thead>
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<th>RST 28</th>
<th>RST 35</th>
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<tbody>
<tr>
<td>Diameter</td>
<td>27.0 x 4.8 mm</td>
<td>35.0 x 5.8 mm</td>
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<td>24.0 x 3.4 mm</td>
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<td>22.0 x 4.0 mm</td>
<td>28.0 x 4.6 mm</td>
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#### Max. dimensions of solid material
- Tensile strength 700 N/mm²
- Tensile strength 1,200 N/mm²
- Tensile strength 1,400 N/mm²

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<td>Diameter</td>
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Precision Machinery for Wire and Tube