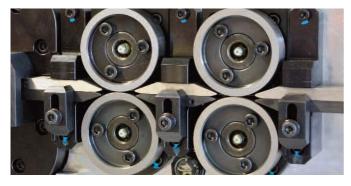


Universal Spiral Spring Machine for the Production of Spiral Springs made of Strip Material



SPM 2

 Newly designed advance feed of strip material including height adjustment and two pairs of feed rollers



Our Accomplishment - Your Benefit

- Highest output with optimized unit costs
- Reduction of total cost of ownership
- Very high quality standards

Design Features

Machine Structure

- Standard equipment with 7 CNC axes (coiling axis / pitch axis / roller feed / 3 slides / roller release)
- Vertical machine structure
- Welding body with switch cabinet
- Infeed via two smooth roller pairs with control for advance feed of strip material, contact pressure and height adjustment (option)
- Bending unit accessible from the front
- Slide attached to front plate
- Innovative, ergonomic machine design
- Up to 11 CNC axes
- Hand-held operating device for axis movements, override, motors
- Wire-end detection by means of sensor
- CNC Punch for greater range of parts (option)

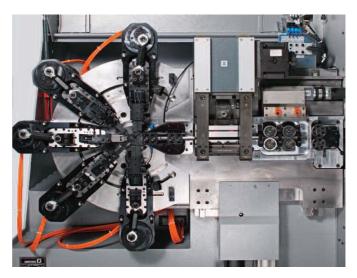


Bending slides with tool support

Control System

- Latest version of the reliable control software WAFIOS WPS 3.2 EasyCam
- Clear and simple menu navigation for convenient operation
- Programming of production sequences by means of electronic cams
- Axis movements can be "electronically merged"

Tool room with die cutter and slip control



Quality, Reliability and Efficiency – WAFIOS Universal Spiral Spring Machine SPM 2

New Definition of Productivity

The SPM 2 is using the coiling technique for the production of spiral springs. It manufactures mostly semi-finished products from strip material. In some cases, also round wire is processed after previous examination.

The roller feed has a program-controlled up and down axis. Therefore, the strip material can be lead tangentially from the edge of the strip material guide to the coiled material.

The coiling unit of the machine has two programmable axes for the number of spring body coils as well as for the displacement of the coiling mandrel in axial direction.

Up to six bending slides are mounted in the shape of a star around the coiling unit on the front plate. They can be arranged in arc-shaped grooves at any angle on the front plate. Due to the program-controlled movements, holding and support movements as well as cutting processes can be carried out with form-giving tools.

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.





▲ Operating software WPS 3.2 EasyCam – Extension for sequence programming with electronic cams

▲ Ejection control by means of laser



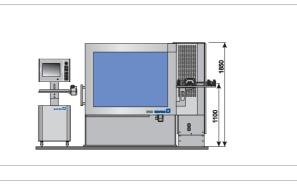
▲ Strip material guide and end-of-strip-material control

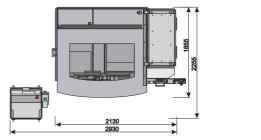


Straightener with strip material guide



| Technical Data | SPM 2 |
|---|------------------------------|
| Spring strip: Max. cross section A _{max} Max. strip height h _{max} Max. strip thickness t _{max} | 6.5 mm² 15.0 mm 1.5 mm |
| Tensile strength max. | 1800 N/mm ² |
| CNC axes max. | 11 |
| Feed axis speed | max. 80 m/min. |
| Output max. | 100 pcs/min |
| Dimensions I x w x h mm | 3,000 x 2,300 x 3,010 |
| Weight | appr. 2,400 kg |
| Energy | appr. 9.5 kW |









WAFIOS AG

Silberburgstraße 5 72764 Reutlingen, Germany Tel. +49 71 21 14 60 Fax +49 71 21 49 12 09 www.wafios.com sales@wafios.de

Precision Machinery for Wire and Tube