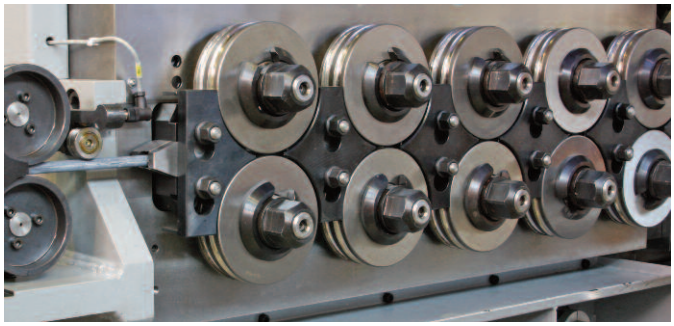
WAFIOS

Electronic Spring Coiling Machine for the Production of Compression Springs

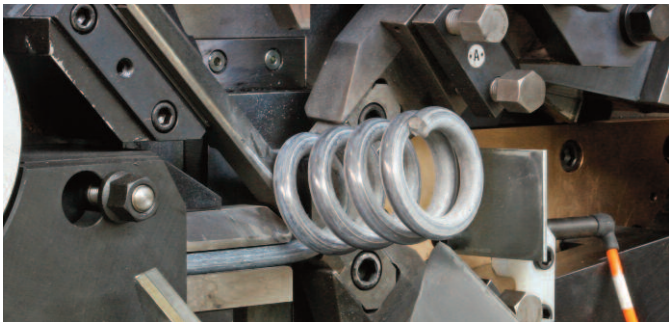
FSE 143

FSE 143

▼ Powerful infeed unit with high feeding force for tight coiling ratios



▼ Rigid coiling unit with separately programmable shape slide (top and bottom)



Our Offer - Your Benefit

- **Rigidity ensures precision for years**
- **Consequent optimization of costs per unit**
- **Extensive control software with graphic programming**
- **Low-maintenance structure**

Design Features

Machine Structure
- Auxiliary feed for drawing in the start of the wire
- High-precision feed with up to 5 pairs of feed rollers and programmable pneumatic roller contact pressure
- Programmable mandrel height adjustment, programmable mandrel movement available as an option
- Programmable parallel pitch, vertical pitch available as an option
- Rigid 2-finger coiling unit with shape slides which can be programmed separately from each other
- The individually programmable shape slides enable easy bending to provide the initial coiling
- Maximum upgrade level: 8 CNC axes
- Torsion spring device (optional)

Cutting System
- Robust cutting unit for right-handed straight cut
- Hydraulic mandrel clamping for high cutting stability
- Torsion cut optionally available

Software
- User-friendly programming of complicated spring geometries and CNC processes thanks to the tried and tested WAFIOS WPS 3 programming system
- Simple, program-assisted tool configuration
- Short setup times thanks to simplified input masks

Reliability and Quality
- Safety sensors and automatic shut-off sensors
- Camera system for spring measurement (option)

Enduring, Profitable, Simple – WAFIOS FSE 143 Spring Coiling Machine

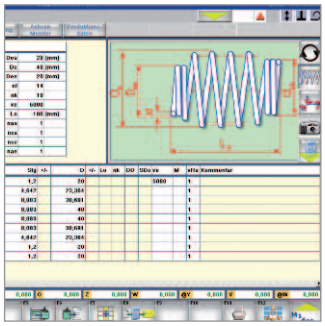
Redefining Productivity

The WAFIOS FSE 143 has been designed for the production of compression springs – and particularly of suspension springs. Therefore, it is a cost-efficient solution for producing all current suspension spring shapes.

The reliability of the machine ensures smooth and trouble-free production – not only because any standstill time is reduced to a minimum, but also thanks to the high repetition accuracy which delivers perfect production results time after time.

With easy setup and straightforward handling, tool change and setup time is minimized and machine availability is increased to its full potential.

The WAFIOS FSE 143 supplements the existing range in the upper wire diameter range up to 14.0 mm.



▲ WAFIOS WPS 3 programming system

▲ Motorized auxiliary feed

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.

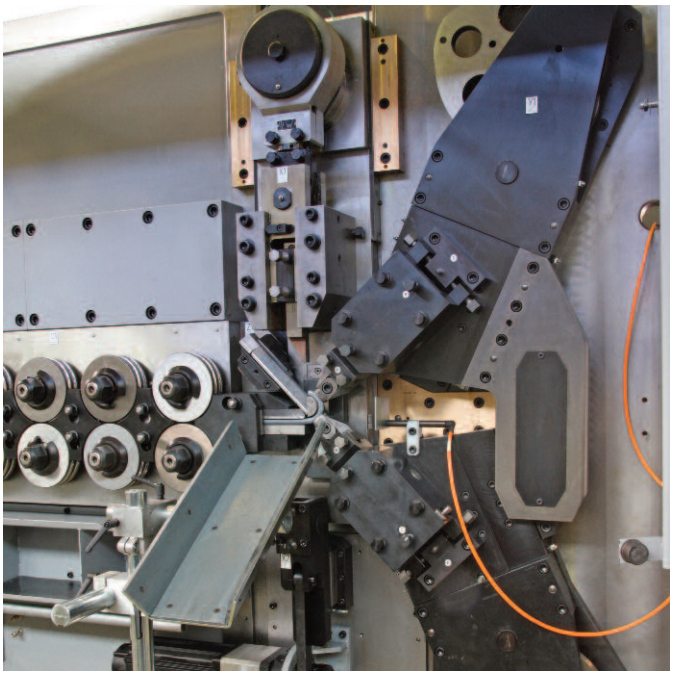
Reliability

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.

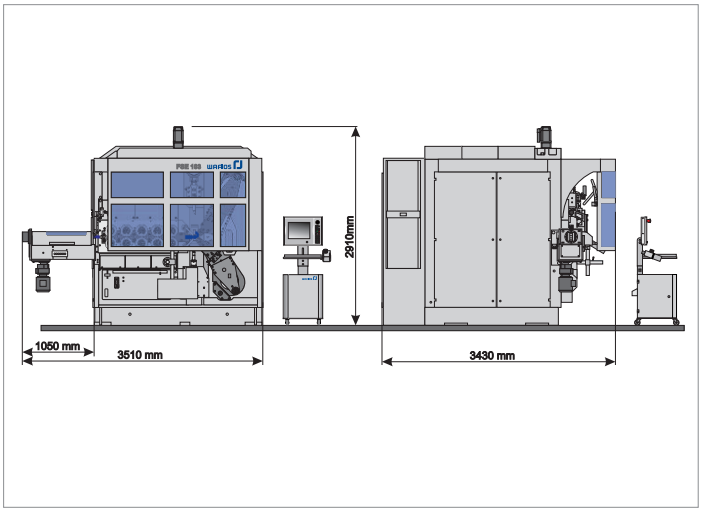
Efficiency

High production output and a long service life will save money and shorten the amortization time of your investment.

▼ Tool room FSE 143



Technical Data	FSE 143
Wire dia. (Rm 1,800 N/mm²) Wire dia. (Rm 1,400 N/mm²)	6.1 - 14.0 mm 6.1 - 16.0 mm
Spring dia.	240 mm
Feed speed (max.)	70 m/min.
Springs, pcs/min (max.)	50
Dimensions l x w x h mm	3,200 x 3,500 x 2,700
Weight	ca.18,000 kg



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Precision Machinery for Wire and Tube

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