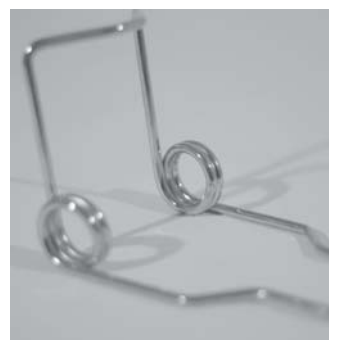


CNC Spring and Wire Forming System for the Production of all Types of Springs

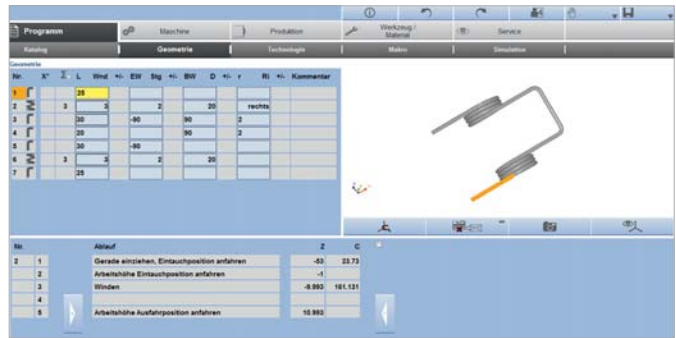


FMU 40-80

FMU 40-80

▼ Force-locked cutting unit attachment

▼ New WPS 3.2 EasyWay with EasyTab for simple programming



Our Accomplishments for your Benefit

- **Very high flexibility and user friendliness through numerous options**
 - Configuration diversity with slides, rotary units and further axes
 - Most variable tool concepts for winding, coiling and bending
 - Applications for the production of loops
 - Production of a wide parts spectrum through a modular machine concept
 - Perfect for small and medium size series
- **Comfortable programming of complex spring geometries**
 - Simple, graphically supported spring programmes by geometrical input with WPS3.2 EasyWay
 - **iQspring**: simulation, determination of cycle times and control of collision
- **High quality standards ensure a zero error production**
 - Visual measuring systems available (camera and laser)
 - Modern monitoring and control technique
 - Evaluation of measurement data by feedback to control
- **High machine availability**
 - Quick modification possible due to innovative tool solutions and individual arrangement of slides and rotary units
 - High quality machine elements e.g. linear guiding with rolling element

Design Features

- High-precision rotary feed unit
- Rotating wire guide for individually programmable cutting and wire-guiding direction
- Force-locked cutting unit attachment for FMU 16/25 and 32
- Full HD multi-touch monitor (at least 21.5") for a better overview and gesture-based control
- Reuse of some of the tools from previous models is possible

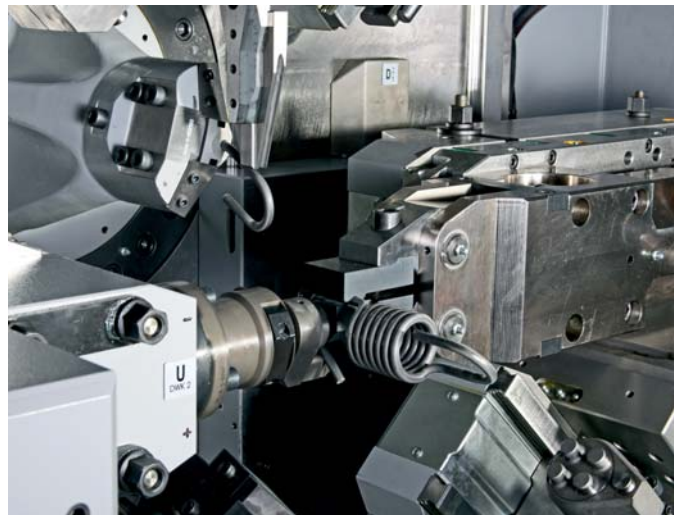
Coiling unit:

- Standard equipment with 2-axes coiling/bending unit for coiling spring bodies
- 3-axes coiling/bending unit option:
 - Possibility of lateral displacement of coiling unit for mandrel coiling and carrying out bending operations
 - Axial tables displaceable in longitudinal wire direction for carrying out highly complex bending operations and the possibility of working backwards

CNC Linear unit: (FMU 40/50)

- Increased output due to fewer subsequent operations
- Greater range of parts and higher output is possible

▼ Highest flexibility due to versatile tool application possibilities



Versatile, Powerful and Reliable - WAFIOS FMU Spring and Wire Forming Systems

Masters of Flexibility and Productivity

Designed for the production of torsion, extension and extended loop springs and bent parts, the WAFIOS FMU series opens up a host of new options for the spring industry.

The tool carriers can be freely moved in different dimensions to unlock completely new design concepts for the production of parts, including simple or even highly complicated torsion springs and bent parts, double torsion springs with inner or outer spring bodies and extended loop springs even with tight spring indices.

The machines are characterized by quick tool change and set-up times thanks to the speed and ease with which the parts can be changed and the corresponding tool settings can be adjusted.

Additional equipment like laser sensors and optical measuring systems for quality assurance and production monitoring can also be integrated.

It is also possible to upgrade to multiple-station bending systems, pick-and-place transport systems and the WAFIOS Teleservice for remote software support and diagnostic support.

Quality

For more than 120 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

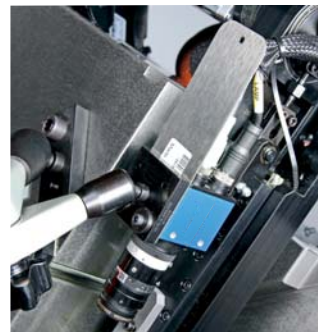
High production output and a long service life will save money and shorten the amortization time of your investment.



▲ FMU 40 Standard



▲ FMU 40 with lateral roller shutter (option)

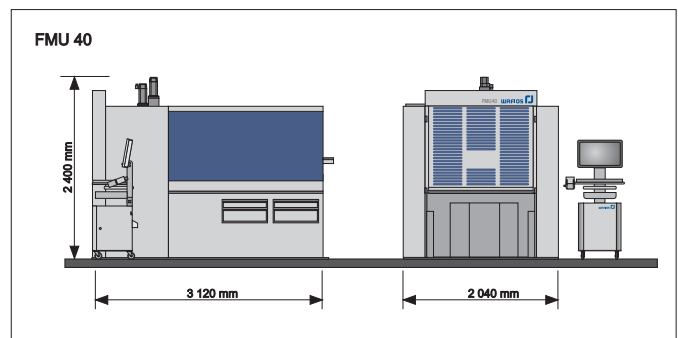


▲ Camera measuring system



▲ 2-Axis coiling/bending unit FMU

Technical Data	FMU 40	FMU 50	FMU 65	FMU 80
Wire Ø (nach DIN-EN 10270) mm	1.8 - 4.0	1.8 - 5.0	2.8 - 6.5	2.8 - 8.0
Feed rate m/min.	max. 80	max. 80	max. 70	max. 70
Bend-back clearance max. mm	200	200	320	320
Stroke, vertical table mm	+ 55 / - 175	+ 55 / - 175	+ 55 / - 175	+ 55 / - 175
Stroke, horizontal table (option) mm	+ / - 70	+ / - 70	+ / - 100	+ / - 100
Stroke, axial table (option) mm	260	260	340	340
Stroke, linear unit mm	750	750	----	----
Stroke, slide mm	130	130	200	200
Dimensions w x d x h mm	2 040 x 3 120 x 2 400	2 040 x 3 120 x 2 400	2 230 x 4 150 x 2 650	2 230 x 4 150 x 2 650
Weight without pay-off unit kg	ca. 5,900	ca. 6,000	ca. 10,000	ca. 10,000
Upgradable to max. CNC axes	24	24	24	24



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Precision Machinery for Wire and Tube