

Spring Coiling Machine for the Production of Compression Springs



Baureihe
F

Versatile, Flexible and Profitable – WAFIOS CNC Spring Coiling Machines, Series F

Trend-Setting Machine Concept

The F series has been designed for the production of high-precision compression springs of 0.12 - 7 mm wire diameter. The Performance Machine combines high output with an attractive price. It thus constitutes an economical alternative to all established compression spring coilers.

The machines of the F series are fully-fledged, fully functional and precise production facilities, even in their standard version. The modular machine design can be adjusted depending on the requirements and production range. The F machine can be upgraded or downgraded to meet the needs of the production line. Modern, optical measuring systems for measuring the spring length and diameter and a sorting device guarantee a high quality of springs.

The F 08 succeeds the FSE 15 while the F 18 is the successor machine of the F2. The gap between the two machine sizes is closed by the F 12.

Application area: All types of compression springs and extension spring strands for e.g. the automotive industry, medical goods and technical components

Quality

Since 1893, the WAFIOS name is synonymous with outstanding quality, safety standards, and technical innovations in the German mechanical engineering 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.



▲ Product example



▲ Sorting device



▲ User friendly WAFIOS Programming System WPS 3.2 EasyWay

| Technical Data | | F4 | F6 | F 08 |
|---|----------------------|-------------------------------|-------------------------------|-------------------------------|
| Wire-Ø bei (Wm) Rm | [mm] | 1,5 – 4,0 mm | 2,1 – 6,0 mm | 0,12 – 0,6 (6) mm |
| | [N/mm ²] | at Rm 2.000 N/mm ² | at Rm 2.000 N/mm ² | at Rm 2.600 N/mm ² |
| | | 1,5 – 4,5 mm | 2,1 – 7,0 mm | 0,6 – 0,8 (4) mm |
| | | at Rm 1.800 N/mm ² | at Rm 1.800 N/mm ² | at Rm 2.300 N/mm ² |
| Spring diameter, max.: | [mm] | 100 mm | 130 mm | 20 mm |
| Feed speed, max.: | [m/min] | 100 m/min | 100 m/min | 160 m/min |
| Springs, max.: | [Stk/min] | 280 Stk/min | 160 Stk/min | 1.500 Stk/min |
| Dimensions (lxwxh) mm (without pay-off unit) | [mm] | 1.900 × 1.800 × 2.350 mm | 2.300 × 2.200 × 2.450 mm | 900 × 1.700 × 900 mm |
| Weight | [kg] | ca. 3.200 kg | ca. 5.400 kg | ca. 700 kg |

| Technical Data | | F 12 | F 18 | F 30 |
|---|----------------------|-------------------------------|-------------------------------|-------------------------------|
| Wire-Ø bei (Wm) Rm | [mm] | 0,2 – 1,1 (4) mm | 0,35 – 1,6 (4) mm | 0,7 – 2,5 (4) mm |
| | [N/mm ²] | at Rm 2.500 N/mm ² | at Rm 2.300 N/mm ² | at Rm 2.000 N/mm ² |
| | | > 1,1 – 1,2 (5) mm | > 1,6 – 1,8 (4) mm | > 2,5 – 3,0 (6) mm |
| | | at Rm 1800 N/mm ² | at Rm 1900 N/mm ² | at Rm 1800 N/mm ² |
| Spring diameter, max.: | [mm] | 30 mm | 40 mm | 65 mm |
| Feed speed, max.: | [m/min] | 160 m/min | 140 m/min | 135 m/min |
| Springs, max.: | [Stk/min] | 600 Stk/min | 450 Stk/min | 300 Stk/min |
| Dimensions (lxwxh) mm (without pay-off unit) | [mm] | 900 × 1.700 × 900 mm | 1.200 × 1.850 × 1.650 mm | 1630 × 2.100 × 1.800 mm |
| Weight | [kg] | ca. 700 kg | ca. 1.200 kg | ca. 1.400 kg |

F08 Limited operating range only with optional second pair of feed rollers (see FUL 16+ flyer)

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