

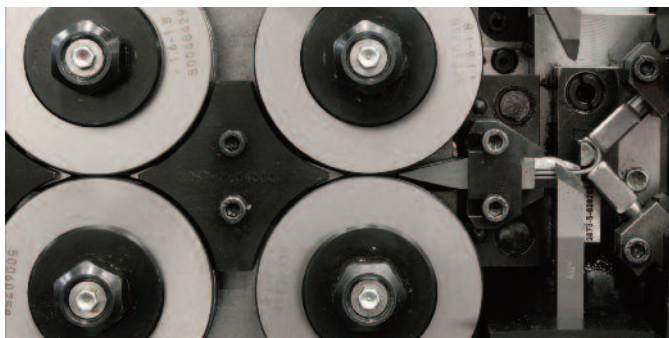
## Electronic Spring Coiling Machine for the Production of Compression Springs



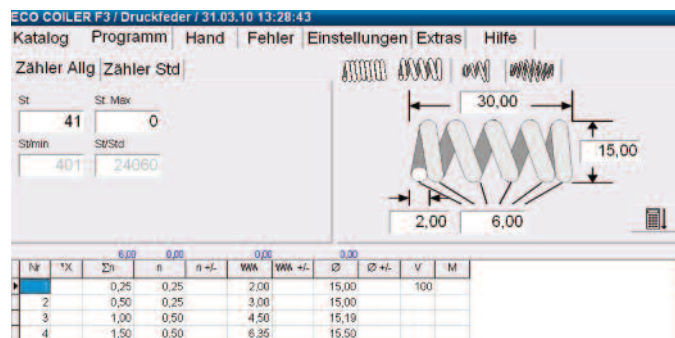
EcoCoiler  
F Series

# EcoCoiler F Series

▼ High precision roller infeed



▼ Compression spring programming EcoCoiler



## Our Accomplishments for your Benefit

- Full-value compression spring machine in the base configuration
- Part-cost optimised compression spring production
- High availability thanks to reliable, proven machine control and easy-to-maintain design
- Flexibility thanks to the modular concept
- Precision with the most modern of measuring and sorting technology

Measuring and sorting technology (option)

- Capacitive spring length measurement (FRM)
- Optical camera measurement system for measuring and regulating spring length and diameter
- Sorting flaps

Software /Programmierung

- Industrial-grade PC with flat panel display, keyboard and mouse
- Touch-screen control panel (option)

## Design Features

### Machine Construction

- Cost optimised standard model with 4 CNC axes
- Axes for infeed, straight-cut, vertical pitch and shape
- High precision roller infeed with two or three (F6) pairs of feed rollers
- Manually adjustable cutting mandrel, optionally available with pneumatic mandrel displacement
- Electronic hand-jogging wheel for safe and easy set-up of the machine and spring (option)
- Straight cut (multi-cut optional)
- Vertical pitch (parallel optional)
- Rigid driven 2-finger coiling unit
- Second form axis for quickly converting from right to left hand coiling (option)
- New machine and equipment cabinet design
- Can be modularly configured as a stand alone solution or integrated into existing production lines
- Torsion cutting, colour recognition, slip control, servo driven mandrel moving (options F4 and F6)

▼ EcoCoiler F3



# Economic, Safe and Flexible - WAFIOS EcoCoiler Spring Coiling Machines

## Customized economic production system

Designed for the production of high-precision compression springs in the medium wire diameter range, the WAFIOS EcoCoiler stands for an economic alternative for the production of all common compression springs.

Even the basic configuration of the EcoCoiler is a full-value, highly functional and precise manufacturing device. The modular machine concept allows the individual configuration of equipment to match the production of a wide variety of parts. The EcoCoiler can be upgraded or downgraded to fulfill a specific purpose and can be customized to fit space requirements, e.g. for the integration into pre-existing production lines.

The EcoCoiler can be upgraded with sorting-flaps combined with measuring systems - a conventional (FRM) for spring length measurement or an advanced camera for spring length and diameter measurement - for the purpose of quality control within the scope of zero-error production

## 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

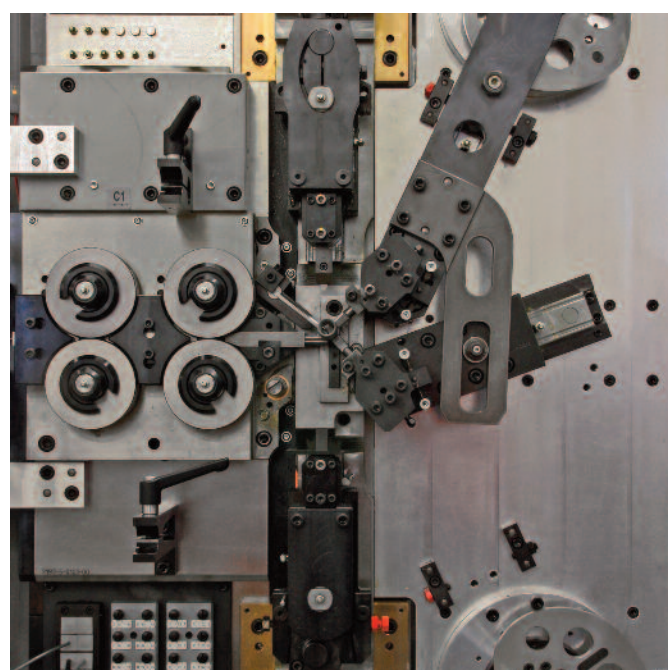
Strict quality controls, state-of-the-art production systems and many years of experience guarantee that your investment is in safe hands. Our global service network ensures high availability of WAFIOS machinery.

## Efficiency

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

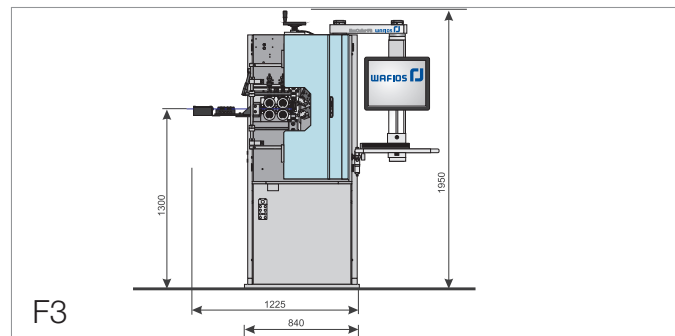
▲ WAFIOS EcoCoiler F6

▼ WAFIOS EcoCoiler F4



Technical Data	EcoCoiler F2	EcoCoiler F3
Wire dia. (Rm 2.000 N/mm <sup>2</sup> ) (Rm 1.800 N/mm <sup>2</sup> )	0,35 - 1,6 mm 0,35 - 1,6 mm	0,7 - 2,5 mm 0,7 - 3,0 mm
Spring dia. (max.)	ca. 30 mm	ca. 45 mm
In-feed speed (max.)	ca. 100 m/min.	ca. 100 m/min.
Output rate (max.)	ca. 500 pcs./min.	ca. 330 pcs./min.
Dimensions LxBxH (mm) (no pay-off)	1.350 x 1.050 x 1.800	1.350 x 1.225 x 1.950
Weight	ca. 1.500 kg	ca. 1.800 kg

Technical Data	EcoCoiler F4	EcoCoiler F6
Wire dia. (Rm 2.000 N/mm <sup>2</sup> ) (Rm 1.800 N/mm <sup>2</sup> )	1,5 - 4,0 mm 1,5 - 4,5 mm	2,1 - 6,0 mm 2,1 - 7,0 mm
Spring dia. (max.)	ca. 100 mm	ca. 130 mm
In-feed speed (max.)	ca. 100 m/min.	ca. 100 m/min.
Output rate (max.)	ca. 280 pcs./min.	ca. 160 pcs./min.
Dimensions LxBxH (mm) (no pay-off)	1.900 x 1.800 x 2.350	2.300 x 2.200 x 2.450
Weight	ca. 3.200 kg	ca. 5.400 kg



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