

## Torsion Spring Coiling Machines for the Production of Torsion Springs and Copper Coils



FTU 1.5  
FTU 2.5

# FTU 1.5 FTU 2.5

▼ Slide feed with linear motor

▼ Coiling unit, moving transversely to wire direction (option)



## Our Accomplishments for your Benefit

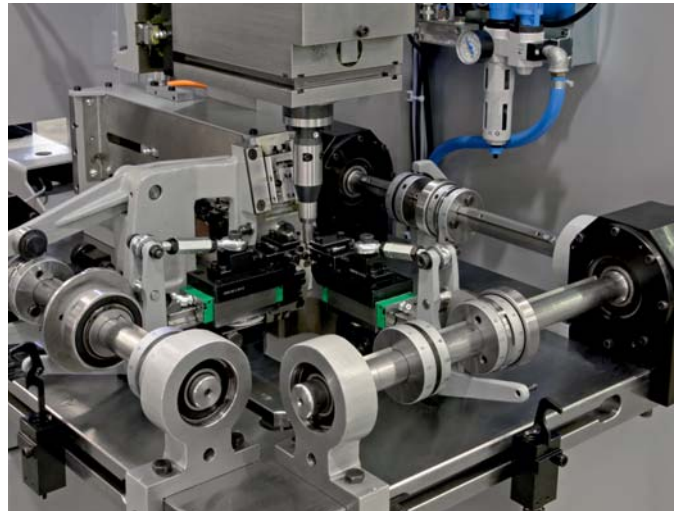
- **Remarkable increase of output is responsible for optimized unit costs in large batch production**
  - Increase of output by up to 25 % in comparison to previous machine
  - Minimization of latency times due to servomotor-driven mandrel retraction
- **Highest quality, repeatability and energy efficiency due to most modern drive technology**
  - Free from play due to separately driven control shafts
  - Infeed with linear motor ensures repeatability
- **Flexible field of application and less setup times with WAFIOS WPS 3.2 EasyCam**
  - Sideward movable coiling shaft ensures high variances in product design
  - Intuitive sequential programming by electronical cam
- **High compatibility with existing tool sets of the FTU series**
  - Less capital expenditure due to high recyclability

## Design Features

### Machine Structure

- Slide feed with linear motor
- Pneumatically clamped feed rollers, individually adjustable
- Horizontal and vertical straightener
- New and more efficient winding gear
- Lateral displacement of the winding unit by servomotor (option)
- Up to three separate, servomotor-driven control shafts
- Completely revised machine design
- Roller feed, slides, rotary units, device for setting spring legs upright and sorting unit are available as options

▼ Arrangement of tools



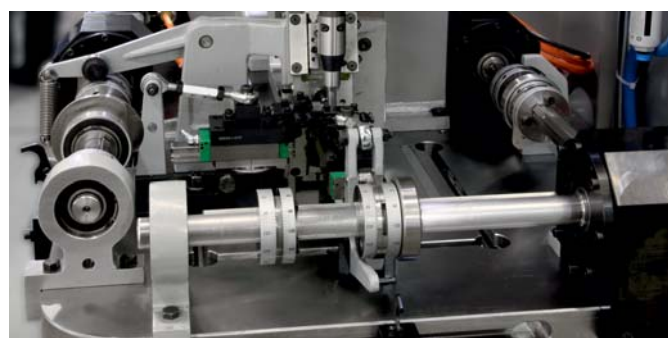
# Powerful, Robust and Profitable – WAFIOS FTU 1.5 CNC Torsion Spring Coiling Machine

## Power packages full of innovative technology

Compared to predecessor machines, the WAFIOS FTU 1.5 and FTU 2.5 CNC torsion spring coiling machines achieve considerably higher outputs because of the new slide infeed units and efficient winding gears installed. Unit costs can be optimized, especially in large-volume production.

Further cost-optimizing factors are the compatibility of tools with existing tools from predecessor machines as well as the new and revised machine design. A robust machine body ensures a consistently high product quality.

The innovative WAFIOS programming system WPS 3.2 EasyCam ensures fast and simple operating sequences for high user convenience, short set-up times and flexible applications. One type of the WAFIOS FTU machines also enables the connection of an insulation stripping device to produce inductor coils made of enamel-insulated copper wire.



▲ Version with three control shafts (option)

## Quality

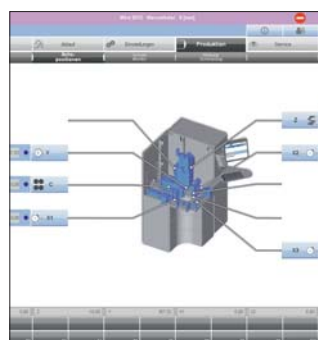
For over a 120 years, the name WAFIOS has represented the highest level of quality expectations, safety standards and German technical innovation related to the engineering of manufacturing systems.

## Reliability

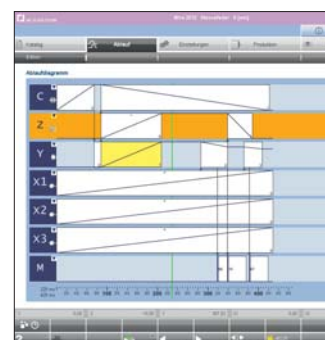
Strict quality controls, state-of-the-art production systems and many years of experience guarantee that your investment is in safe hands. Our global service network ensures high availability of WAFIOS machinery.

## Efficiency

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

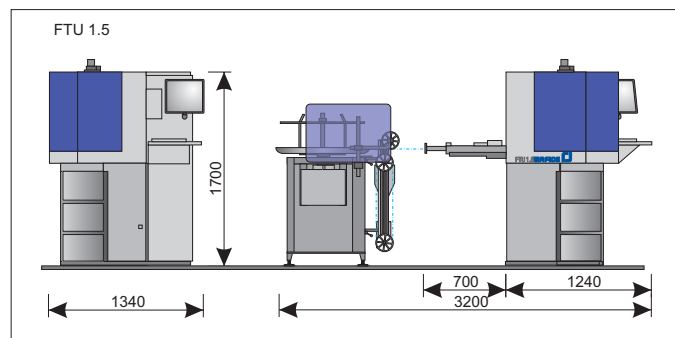
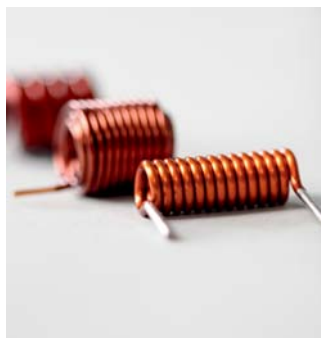


▲ New user-friendly WAFIOS Programming System WPS 3.2 EasyCam



▲ Spring sequence diagram

Technical Data	FTU 1.5	FTU 2.5
Spring steel wire Ø (according to DIN EN 10270-1 / -2 and -3)	0.2 - 1.0 mm	0.5 - 2.2 mm
Enamelled copper wire Ø	0.3 - 2.0 mm	1.0 - 4.0 mm
Height of spring body / copper coil body	max. 90 mm	max. 120 mm
Diameter of coiling mandrel = d, max.	15 mm	25 mm
Max. length of the circumferential first leg	50 mm	120 mm
Max. output, depending on spring shape	200 springs / min.	120 springs / min.
Space requirement (mm)	1 940 x 1 340 x 1700	2 300 x 1 340 x 2 300
Weight	1 200 kg	2 000 kg



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Precision Machinery for Wire and Tube