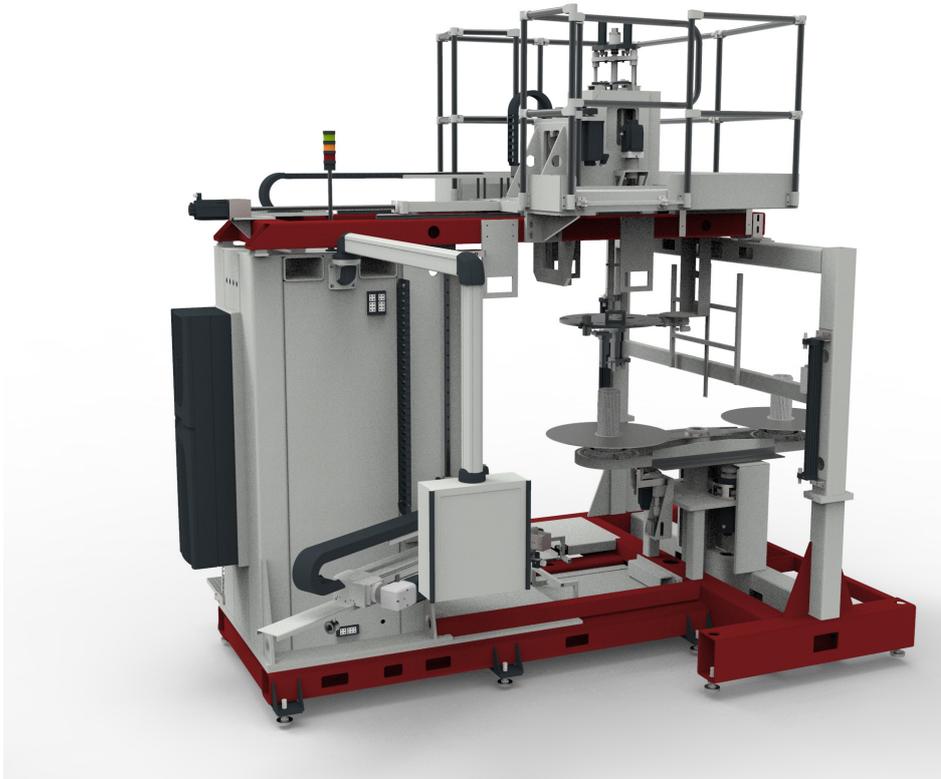


TFW / TFWE-Series Twist free winder

ELMOTEC **STATOMAT**

A Schaeffler Company



Automotive



E-Mobility



Industry

Twist free winder

Twist free Winders for maximum efficiency.

The increasingly stringent specifications with regard to energy efficiency lead to higher demands on motor design and motor control. To realize the demanding designs, efficient processes in the production of the stators are crucial. Coil winding technology plays a central role here. A winding design that is as compact as possible is the decisive factor in achieving the power density and the specified installation space.

- Up to 42 parallel wires
- With or without intercoil connections
- Optimized copper fill factor
- Compact and resource-saving winding

Twist free winding for applications where maximum efficiency is important.

Twist free winders are used wherever the winding specification requires many parallel wires. Unlike the flyer winder, the wires do not cross each other, but are wound neatly next to each other. It is possible to work with significantly more parallel wires. The winders of the TFW series make it possible to process up to 42 parallel wires. Here, a precision layer winding is created, which enables optimum results when inserting. Combined with the patented ELMOTEC STATOMAT insertion system, the fill factor to be achieved is maximised.

88%

We achieve fill-factors of up to 88%.

42 parallel wires

Our twist free winders can process up to 42 wires simultaneously.

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Production steps

<input type="checkbox"/> Slot Insulation	<input checked="" type="checkbox"/> Winding	<input checked="" type="checkbox"/> Insertion	<input type="checkbox"/> Intermediate forming
<input type="checkbox"/> Lacing	<input type="checkbox"/> End forming	<input type="checkbox"/> Testing	<input type="checkbox"/> Automation

Specifications

- Multi-station turn table for automatic or manual load/unload
- Multi-station turn table as interlinkage system between the coil insertion station and the single winding stations
- Single winding stations designed for automatic winding of coil groups with or without intercoil connections
- Wedge making station designed for automatic manufacturing and positioning of wedges
- Coil inserting station designed for automatic inserting of windings

Options

- Subsequent wire bundling
- Directly integrated insertion station
- Automatic insertion of Phase separator
- Isolation of End Wires
- Direct loading by a robot -> can be completely integrated into a fully automated production line
- Flipping (Roebelstab)
- Second winding stations
- Winding of equal width

Operating range

Stator inner diameter



Stator outer diameter



Stator stack height



Parallel winding wires



Power rating	<ul style="list-style-type: none">• Three phase current 400V 50 Hz or 480V 60Hz• Compressed air
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Dimensions	<ul style="list-style-type: none">• W D H (mm)	1600 - 3800 2500 - 6500 2500 - 4000
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Your contact



Schaeffler Elmotec Statomat GmbH

Max-Plank-Straße 20 - 24

61184 Karben

Germany

www.elmotec-statomat.de

info@elmotec-statomat.com

Phone +49 6039 488 0

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Issued: 2024, March

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