

# SE - Series Coil inserting machine

**ELMOTEC** **STATOMAT**

A Schaeffler Company



**Automotive**



**E-Mobility**



**Industry**

Coil inserting

## Insertion technology with the highest precision.

The insertion technique is a widely used process for the production of closed stators with distributed winding. Due to the high flexibility and good automatability, a wide range of stators can be produced economically with this process.

## Highlights.

- Up to 60% time savings (depending on stator type)
- Consistent quality due to prevention of wire damage

## Maximum precision.

In the insertion technique, a winding is first wound into a transfer and insertion tool in an upstream process, usually with the flyer winding or a twist free winding station. It is then “inserted” or mounted into the stator slots using the insertion machine. The wound coils can be inserted either per phase or together. Once all the coils have been mounted with the help of the insertion machine, a cover slide is inserted to close the slot.

# 60%

Time Savings of up to 60% compared to manual process.

# 15 min

The tooling for our coil inserting machines can be changed in less than 15 minutes.

# Technical data

## Coil inserting machine

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### Production steps

<input type="checkbox"/> Slot Insulation	<input 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

- Automatic coil insertion into the stator slots of single and three-phase motors
- Automatic insertion of manually transferred coils
- Inserting tool indexing
- Automatic insertion of pre-fabricated wedges (after manual positioning of the wedge into the inserting tool, only at the EV - Series)
- Automatic wedge making and positioning
- Electric stack height adjustment (stator i.d. needs to be more than 45mm)

### Options

- „Fiedern“ (cutting the sides of the wedge to prevent it from slipping through) of the intermediate wedge
- Inserting wedges of different lengths into a stator
- Insertion force monitoring
- Stack height adjustment

### Operating range

Stator inner diameter



Stator outer diameter



Stack height



Wedge length



### Power rating

- Three phase current 400V | 50 Hz or 480V | 60Hz
- Compressed air

### Dimensions

- W | D | H (mm) 850 - 1600 | 2000 - 4000 | 1800 - 2500

## Your contact



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