



# **P8 PIN INSERTION MACHINES**

**Product Brochure** 

# **P8 PIN INSERTION MACHINES**

TE's next-generation P8 pin insertion machine offers best-in-class speed and sustainability by allowing less power consumption, increased tool lifetime and quality management providing foolproof changeover and traceability within automotive, energy, industrial, consumer electronics and appliances industries. Our new high-performance tool can provide low cost per pin, low wearing allowing for less maintenance needed creating higher overall equipment effectiveness (OEE). The high accuracy XY table, the fix mount insertion tool and the insertion finger rotation feature provides the highest positioning accuracy and precision of the contact tip position. Its smallest footprint saves valuable manufacturing floor space with the fastest reel changeover of less than 30 seconds – average is 3-4 minutes. It also provides less power consumption through weight optimization and increased tool lifetime. Our P8 pin insertion machine offers the full range of traceability data features available. The new human machine interface (HMI) programming with computer aided design (CAD) import allows fast programming and ease of use for the operators. Together with our experienced manufacturing supply chain, we can offer the quality, reliability and trust to meet your next project's needs.



**New High-Performance Tool** 



Sustainability



**Quality Management** 

Key Features	Benefits
New High-Performance Tool	<ul> <li>Best-in-class machine within the market</li> <li>Low cost/pin</li> <li>Low wearing allowing for less maintenance needed creating higher overall equipment effectiveness (OEE)</li> <li>Insertion finger rotation provides highest accuracy and high precision contact tip position</li> <li>Smallest footprint saves valuable manufacturing floor space</li> <li>Fastest reel changeover - less than 30 seconds - average is 3-4 minutes</li> </ul>
Sustainability	<ul> <li>Less power consumption through weight optimization lowest weight of xy table</li> <li>Increased tool lifetime</li> <li>Single pin process vs. connector seating or surface mount device (SMD) connectors</li> </ul>
Quality Management	<ul> <li>Highest insertion accuracy in the market</li> <li>Easy changeover following poka yoke</li> <li>Full range of traceability data features available</li> <li>New human machine interface (HMI) programming with computer aided design (CAD) import with intuitive menus for ease of use</li> </ul>

#### **Industries**

- Automotive
- Energy
- Industrial
- Consumer Electronics
- Appliances

#### **Applications**

- PCRs
- Connector Stitching
- Plastic Housings
- Power Modules e.g. IGBTs
- Mold Inlays

### **Machine Specification I Standards & Features**

Description	Standard	Options
Insertion tools with free programmable rotation	1	up to 4
Conversion kits	X	
Pin presence detection	X	
Automatic board handling	X	
Universal PCB clamping	X	
Auto width adjust		X
Auto speed adjust		X
Stand-by mode for consumption reduction	X	
Contact pre check		X
PCB position correction		X
Force- / force vs distance monitoring		X
Thickness-measurement / -compensation		X
Traceability		X
Bi-directional PCB / pallet transport		X
Reel change w/o stop		X
CAD - import (ODB++, stp)		X
Automatic performance capability check		X

Description	Standard	Options
Insertion rate single mode / triple mode (pins / second)	6.6 / 20	
Wear part lifetime (up to, *)	10 Mio	
Machine capability Cmk at tolerance of +/- 0,02mm	2.0	
Machine size (with reel holder & light tower) [mm]	X1600 * Y2600 * Z1960	
Machine size (without reel holder & light tower) [mm]	X1600 * Y1730 * Z1640	
Weight [t]	~ 2,3	
Max. PCB size [mm]	400 * 360 * 5	
Positioning repeatability XY [mu m]	+/- 5	
PCB position correction camera resolution (mu/pixel)	5	
Power consumption average [kW] / [compressed air m³/h]	1 / 0,2	

<sup>\*</sup> Depending on contact material and plating

## **Machine Specification III Products**

### Contacts

- Press fit / non-press fit (solder)
- Pins & tabs & sockets
- Fuse holders
- Fork contacts
- F-Posts 90°
- Board to board contacts

- Continuous wire
- Special contacts
- Holetite (on mylar tape)
- Screw sockets (bulk)
- Contacts which need bending
- TE and non-TE contacts

### **Connect With Us**

Our tooling is supported by an established, experienced and responsive field service organization. TE Connectivity field engineers are located worldwide and are available to assist with on-site and remote service; selection and installation of new equipment; training; and technical support. Service agreements are available to provide protection and support for all your application tooling equipment.

Contact Us

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#### te.com

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