

TE CONNECTIVITY® APPLICATION TOOLING PRODUCT LINE CARD

A COMPLETE LINE OF QUALITY
TOOLING SOLUTIONS



PORTABLE WIRE PROCESSING

SELECTION GUIDE

-  Flexibility
-  Value
-  Ergonomic
-  Hydraulic
-  Pneumatic
-  Semi-automatic
-  Battery
-  Cycle count
-  Manual
-  Portable
-  30 crimps/hr.
-  60 crimps/hr.
-  90 crimps/hr.
-  Electric
-  Safety

INSERTION/ EXTRACTION



Making terminal extractions is as easy as 1, 2, 3.

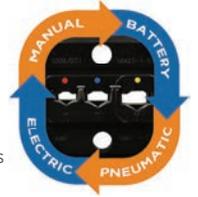


Select Your Die Platform

Standard Die Envelope - SDE (Commercial)



Standard Die Envelope (SDE) technology is a flexible approach to crimp tooling that allows use of the same TE dies on tooling across a range of application platforms. Dies are interchangeable in tools from manual, battery, pneumatic, and electrically powered tools it is a family of tools that you can take from bench to production or into the field, without the need for dies fitted to each kind of tool. They are suited for R & D, networking applications and on-site maintenance work.



32-8 AWG

CERTI-CRIMP (Premium)



The CERTI-CRIMP family consists of reliable, repeatable and certified crimping tools to handle a variety of industry mandated specifications. Their interchangeable head designs allow users to easily upgrade their manual CERTI-CRIMP tools to battery or electric powered alternatives.



32-8 AWG

Hydraulic Dies & Crimp Heads



Our line of quality hydraulic tooling includes industry-standard 10,000 psi [68,950 kPa] and 8,200 psi [56,540 kPa] tool systems. The basic hydraulic tool system requires a pump, hose (multiple lengths are available with all configurations), crimp head, and crimp die. U-dies for a 10,000 psi hydraulic system are well suited for applications requiring a crimp force of up to 14 tons [125 kN]. For wire sizes requiring up to 33 tons [294 kN], TE offers crimp heads that are compatible with shank dies

8 AWG -1000 MCM.



8 - 4/0 AWG
22 ton output force
16 lbs



4/0 AWG - 1000 MCM
26 ton output force
29 lbs



8 - 4/0 AWG
33 ton output force
28 lbs



12-10 AWG - 350 MCM
18 ton output force
13 lbs



12 ton output force
1 stroke;
20,000 cycle
Light Duty
Compression Head*
U-Die Compatible



12 ton output force
1.5 stroke;
20,000 cycle
Light Duty
Compression Head
U-Die Compatible



12 ton output force
1 stroke Titanium
Compression Head
U-Die Compatible



14 ton output force
1.5 stroke;
Heavy-Duty
Compression Head
U-Die Compatible



14 ton output force
1.5 stroke
Compression Tool
U-Die Compatible



1 stroke Hand
Compression Tool
U-Die Compatible

SELECT YOUR POWER SOURCE

Portable Tooling - Manual (Hand)

 <p>SDE (Commercial)</p> <ul style="list-style-type: none"> Flexible standard die envelope design Adjustable ratchet control system Ergonomic design 	 <p>CERTI-CRIMP (Premium)</p> <ul style="list-style-type: none"> Designed to exacting specifications Requires minimum skill Meets military, UL and CSA requirements as applicable 	 <p>Hydraulic Assist</p> <ul style="list-style-type: none"> 8,200 & 10,000 psi Shank & U-dies Heads, pumps & hoses Among industry leaders in reliability 
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Portable Tooling Battery

 <p>SDE (Commercial)</p> <ul style="list-style-type: none"> Lithium-Ion Ergonomic design Short charge times Completely portable 3,400 - 3,500 lb crimp force Large range of die options 	 <p>CERTI-CRIMP (Premium)</p> <ul style="list-style-type: none"> Lithium-Ion Ergonomic design Short charge times Completely portable 3,500 lb crimp force 	 <p>U & Shank Dies</p> <ul style="list-style-type: none"> Lithium-Ion Ergonomic design Short charge times Completely portable 12,000 - 24,000 lb crimp force 
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Portable Tooling Pneumatic

 <p>626</p> <ul style="list-style-type: none"> Lightweight designs Hand or foot operated Ratcheted control Rotating heads Accepts SDE die sets 	 <p>AT SC MKII</p> <ul style="list-style-type: none"> Straight action machine Pneumatic crimping Safe, ergonomic design 	 <p>Insertion & Extraction Kits</p> <ul style="list-style-type: none"> Compatible with most manufacturers' wiring harnesses Tool kits & individual tools available
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Portable Tooling Electric

 <p>AT 300</p> <ul style="list-style-type: none"> Compatible with over 100 SDE die sets Accommodates CERTI-CRIMP tool heads Small footprint Foot actuated 	 <p>AT-66 Hydraulic</p> <ul style="list-style-type: none"> Programmable Adaptive crimp force Fast changeover times Compact design 	 <p>Manual (Hand) Tools Kits</p> <ul style="list-style-type: none"> Customizable kits Includes sample terminals Cost effective Portable
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APPLICATORS

SELECTION GUIDE

-  Flexibility
-  Manual
-  Value
-  Portable
-  Ergonomic
-  1200 crimps/hr.
-  Hydraulic
-  3600 crimps/hr.
-  Pneumatic
-  Electric
-  Semi-automatic
-  Safety
-  Battery
-  Fully-Automatic
-  Cycle count



Spare Tooling

- Precision ground, chrome plated
- Engineered for compliance to meet OEM specifications
- UL Listed
- CSA certified



Mid Size

- Wire range: > 10.0 – 25.0 mm²
- Can fit on presses that accept traditional applicators
- Robust casting frames



Large Wire

- Wire range: 25.0 – 50.0 mm²
- Fine adjustment
- Press stroke: 40.0 mm
- Shut height: 135.78 mm



Splice

- Wire Range: 0.5 – 25 mm²
- Fine adjustment
- Press stroke: 40.0 mm
- Shut height: 135.78 mm
- Side feed splice terminals up to 45.0 mm



OCEAN Mechanical

- Mechanical feed
- Excellent repeatability
- Atlantic & Pacific style ram configurations available



OCEAN Pneumatic

- Single piece piston and rod assembly
- Atlantic & Pacific style ram configurations available
- Self actuated



OCEAN Servo

- Maximum feed repeatability
- Automatic setup
- Modular feed stays with terminator















Center Line & Applicator Alignment Gauges

- Ideal instrument to assure correct positioning of all TE applicators
- Compatible with TE & commercially available crimping presses, using quick changes style applicators



CrimpData App

- Provides compatibility verification between terminals and tooling
- Scans and looks up applicator and terminal information
- Enables you to record cycles on the applicator spare parts
- Scan this QR code to download from the APP store



Collars

- Designed to protect applicators from unwanted motion and damage during transport
- Available in three colors to help differentiate between active and inactive applicators













SEMI & FULLY AUTOMATIC

Semi-Automatic Terminators

3K

- Small footprint
- Open architecture for design flexibility
- Fast, quiet design



CE CERTIFIED

1200

5K

- Small footprint
- Open architecture for design flexibility
- Fast, quiet design
- Optional stripping module available



CE CERTIFIED

1200

GII

- Improved lighting and safety features
- Open architecture for design flexibility
- Fast, quiet design
- Optional stripping module available



CE CERTIFIED

1200

GII+ (coming soon)

- Versatile crimping press for large conductor cross-sections up to 21mm²
- LED lighting and safety features

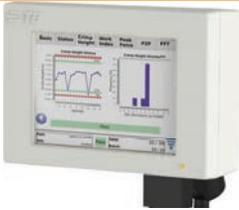


CE CERTIFIED

1200

CQM II

- Effective for monitoring the crimp of open barrel, uninsulated contacts and terminals. CQM II monitors the entire crimp



CE CERTIFIED

1200

FFC

- Number of pins can be programmed
- Pitches between 1.27mm and 5.08mm can be programmed
- Interchangeable applicators available for different products



CE CERTIFIED

1200

Fully Automatic Lead-Makers

UNIQA PRO

- Single ended wire processor
- 20% smaller footprint than traditional lead makers
- 4x faster thruput than standard wire prep and benchtop units



CE CERTIFIED

3600

Alpha 355

- Equipped with up to three processing stations, enabling crimping of both ends of the wire, double-crimp connections with three different contacts, single-ended seal applications, tinning, or ink-jet marking



CE CERTIFIED

3600

Alpha 530

- Solid and reliable processing of wire cross sections 0.13mm² to 4mm²
- Manifold configuration possibilities on 4 stations for industrial production



CE CERTIFIED

3600

Alpha 550

- Precise and reliable processing of wire cross sections 0.13mm² to 6mm²
- Integrated conductor detection (ACD) for high quality stripping



CE CERTIFIED

3600

Gamma 263

- Equipped with up to three processing stations, enabling crimping of both ends of the wire, double-crimp connections with three different contacts, single-ended seal applications, tinning, or ink-jet marking



CE CERTIFIED

3600

Gamma 333

- Handles double-crimp connections involving varying lengths
- Dual channel cuthead allows for a large range of wire sizes without blade changes



CE CERTIFIED

3600

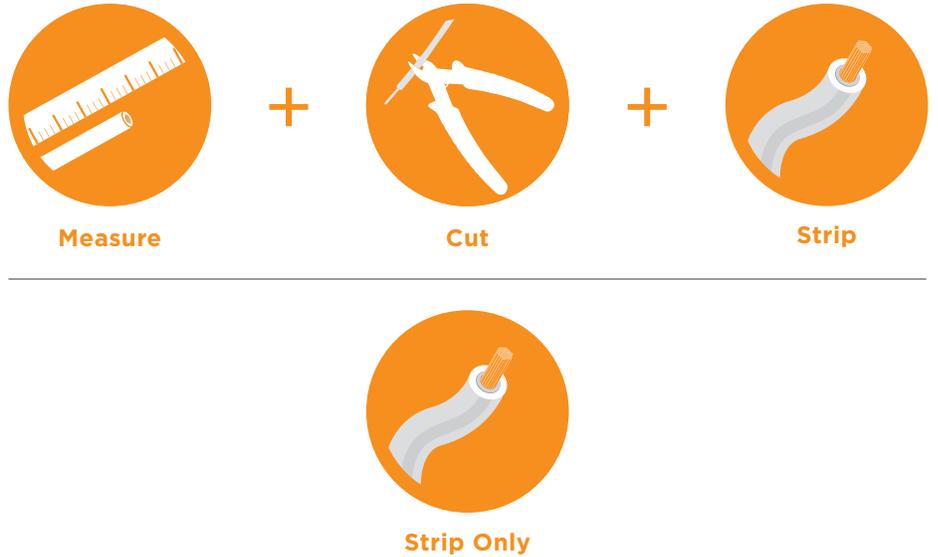
WIRE PROCESSING EQUIPMENT

SELECTION GUIDE

-  Flexibility
-  Value
-  Ergonomic
-  Electric
-  Safety
-  Semi-automatic
-  Cycle count
-  Manual
-  Portable
-  1800 crimps/hr.
-  3600 crimps/hr.
-  Sequencing

Determine Your Processing Type

Achieving crimp quality starts with prepping the wire strand. Our tooling portfolio covers almost all processing requirements. We offer processing solutions for both standard, as well as specialized stripping and cutting challenges for demanding insulation materials.



Measure, Cut & Strip

 <p>Kappa 310</p> <ul style="list-style-type: none"> • Compact, high-speed machine • Can handle wire sizes from 0.02mm² to 6mm² • Intuitive, flexible, and simple touch-screen operation <p></p>	 <p>Kappa 315</p> <ul style="list-style-type: none"> • Compact, high-speed machine • Can handle wire sizes from 0.05mm² to 10mm² • Intuitive, flexible, and simple touch-screen operation <p></p>	 <p>Kappa 320</p> <ul style="list-style-type: none"> • Wire sizes from 0.05 mm² to 10 mm² • Innovative sensors to aid in setup and to monitor processing • TopWin software for connecting inkjet, part list production and network solutions <p></p>
		

 <p>Kappa 322</p> <ul style="list-style-type: none"> • Designed for a wide variety of special applications or the separation and processing of inside wires in multi-pole cables • TopWin software for connecting inkjet, part list production and network solutions <p></p>	 <p>Kappa 330</p> <ul style="list-style-type: none"> • For processing cables with a cross section of up to 35 mm², multi-core conductors with an outside diameter of up to 16 mm or flat cables with a width of up to 40 mm • Belt drive or various double-roller drives • TopWin interface <p></p>	 <p>Kappa 350</p> <ul style="list-style-type: none"> • Designed for processing round conductors with a cross section of up to 120 mm² and a maximum outside diameter of up to 35 mm • Minimal wire loss thanks to sensor monitoring • TopWin interface <p></p>
		

WIRE PREPARATION EQUIPMENT

Wire Strip Only

 <p>Cosmic 32M</p> <ul style="list-style-type: none"> • High-speed electric wire stripper • Operates anywhere in the world with AC 100 V - 240 V compatibility • Wide strip range of AWG 12 - 32 <p>CE CERTIFIED</p> 	 <p>Cosmic 42R</p> <ul style="list-style-type: none"> • For ultra-micro coaxial cables • Repeatable high precision • Equipped with waste vacuum system • Stores up to 1,000 sets of data <p>CE CERTIFIED</p> 	 <p>Cosmic 48R</p> <ul style="list-style-type: none"> • For stripping coaxial or standard wire • Can store up to 1,000 different sets of data • Stripping up to 9 steps <p>CE CERTIFIED</p> 
 <p>Cosmic 60R</p> <ul style="list-style-type: none"> • Patented rotary 4-blade system, for larger diameter multi-conductor cable • Strip different wire sizes without the need to change the stripping blades • Easy to adjust the cutting diameter • Powered by electricity only <p>CE CERTIFIED</p> 	 <p>Cosmic 927R</p> <ul style="list-style-type: none"> • Micro-cable stripping machine • AWG 36 - to 10 (0.11 mm to 3.5 mm) • For most wire types, optimized to maximize stripping quality • Can be selected to twist with clockwise/ counter-clockwise or non-twist <p>CE CERTIFIED</p> 	 <p>Mira 230</p> <ul style="list-style-type: none"> • Ideal for multi-conductor processing • Large processing range up to 8 mm²/AWG 8 • Unique scope of functions, including sequence processing <p>CE CERTIFIED</p> 

Spare Parts

Wire Guides



Blades



Belts



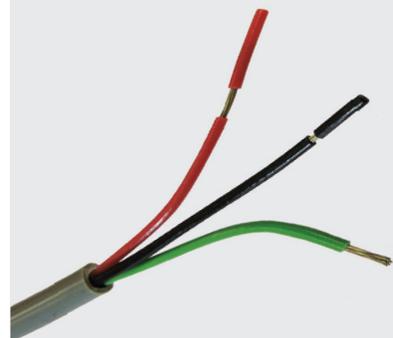
Rollers



Multi-conductor processing in a single work operation

Its unique ability to sequence makes the Mira 230 the first pick for processing multi-conductor cables. In consecutive steps, it strips and cuts the inner conductors with a variety of parameters and without a program change.

Every cable and every sequence can be stored for reproduction at any time. All recorded articles (cables and sequences) are stored in the library. That way, the operator can retrieve the processing parameters at any time using search and filter functions.



HEAT SHRINK EQUIPMENT

SELECTION GUIDE

-  Flexibility  30 crimps/hr.
-  Value  60 crimps/hr.
-  Ergonomic  90 crimps/hr.
-  Pneumatic  500 Heat shrink/hr.
-  Semi-automatic  120 Heat shrinks/hr.
-  Manual  Electric
-  Portable  Safety

Manual



RBK MK IV

- Bar code scanning option
- Automatic calibration
- PC controlled with touchscreen monitor
- Adaptable for different applications



Semi-Automatic



Model 17

- Closed-loop temperature and belt speed control
- Suitable for continuous running
- Tubing diameter up to 19 mm
- Tubing length up to 90 mm



Semi-Automatic



Model 19

- Can handle tubing up to 25 mm diameter and 102 mm long
- Tubing up to 178 mm long can be handled with the use of the wide heating element tool



Model 105

- Can handle unlimited tubing lengths and large substrate diameters if run parallel to belt travel



CV-OBHAT

- Lightweight, portable hot air tool, used to install TE's Raychem escap stub splice sealing products



IR-1891 Shuttle

- Twin workstation heater for multiple installation of short length tubing products
- Multiple product fixture assemblies give increased process rates
- CE approved



AD-3050 Seal Test

- Fast determination of sealing integrity
- Multiple test fixtures
- Easy load and release of test samples



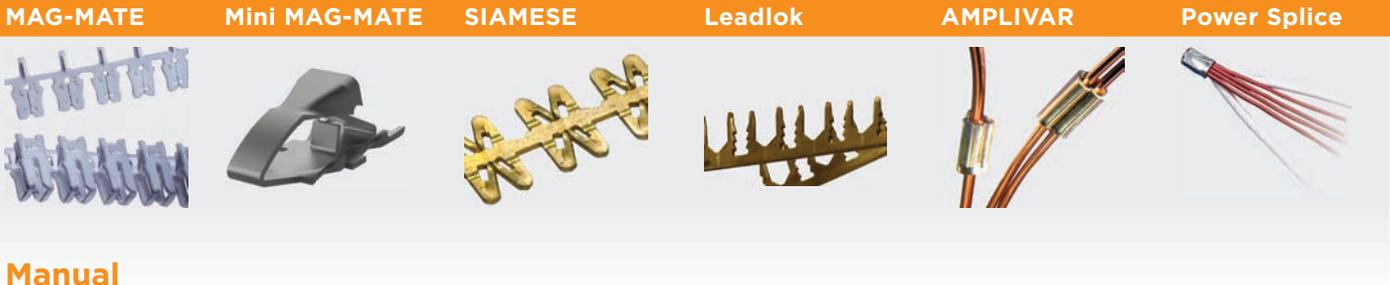
Power of Automation



*Crimps per hour is estimated based on 4-wire splices with 2-inch heat shrink tubing. Actual run rates may vary based on tubing length and diameter.

MAGNET WIRE EQUIPMENT

Select Your Terminal Type



Manual

Manual Arbor Press



- Ideal for repair, service and prototype work



MPT Head



- For manual SIAMESE and Leadlok terminal applications
- Can be integrated into custom automatic production line



Semi-Automatic

MK I & II



- Single, dual, triple and quadruple insertion capabilities
- Cycle time: 0.9 - 1.3 sec depending on terminal type
- Force distance control available on MARK II



MPT-5 Bench Machine



- Available as a horizontal or vertical bench machine
- Inserts a SIAMESE terminal into a customer-designed cavity in the coil bobbin or similar magnet wire housing



MARK Workstation



- Standardized and customized work stations to meet customer demands
- Designed to automatically insert terminals into cavities of coil bodies



Semi-Automatic

APT-5



- Fast, efficient system with no need to strip mag-wire insulation
- CQM II controlled
- CE Approved
- Connects up to 3 wires in 1 splice



Power Splice



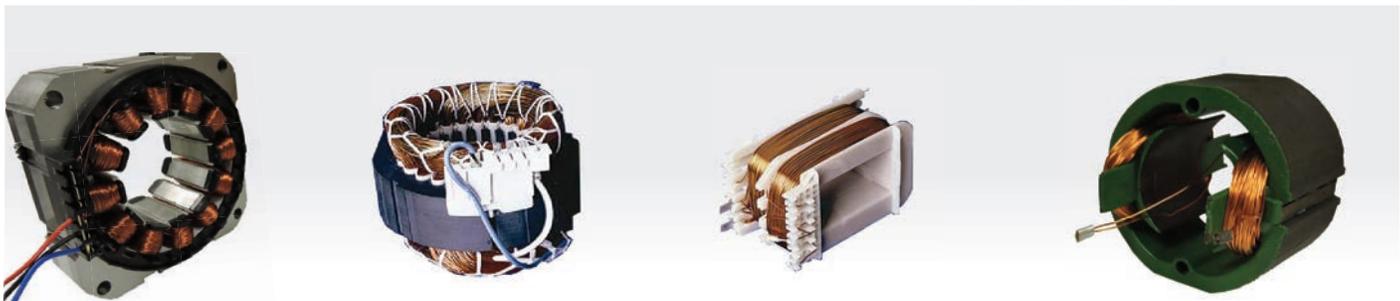
- Reliable pigtail splice termination of magnet wire and solid or stranded lead wire



Thru-Splice



- Includes fine crimp height adjustment, full guarding with interlocks, total and batch counter and capabilities for jog and split-cycle operation



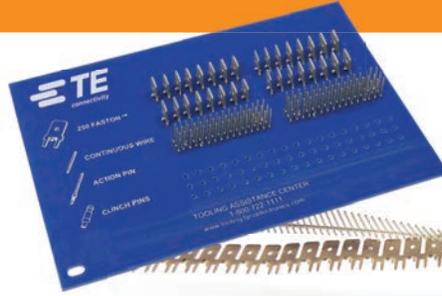
BOARD PROCESSING EQUIPMENT

SELECTION GUIDE

-  Flexibility
-  Value
-  Pneumatic
-  Semi-automatic
-  Cycle count
-  Manual
-  30 crimps/hr.
-  60 crimps/hr.
-  90 crimps/hr.
-  Electric
-  Safety

Select Your Processing Type

Pin Insertion



All of our insertion machines can be supplied with a rotary insertion finger that can apply products at different angles without decreasing the insertion rate. This eliminates costly lost production time associated with rotating the PCB.

Conversion Kit



The P50/P100/P300/P350 machines can be supplied with modular insertion tools that allow the tooling to be quickly changed on the insertion head. A wide range of conversion kits for various TE Connectivity and non TE Connectivity products is available.

Pin Insertion - Repair

P10



- Convenient and easy operation due to a touch screen monitor
- Single pins can be interchanged on a complete equipped PCB
- High insertion quality due to press cycle monitoring with PQM



Pin Insertion - Manual

P50



- Manually loaded bench top machine
- PCB size: 350 x 300 mm max.
- PCB thickness: 1.0 - 3.5 mm
- Applies reeled products, press-fit terminals, solder terminals and others



Pin Insertion - Semi Auto

P100



- Discrete pin insertion into PC-board applications
- Manual and semi-automatic designs
- Simple operator interface
- Multiple quality tools available



Pin Insertion - Fully Auto

P300



- Board capacity up to 400 x 600 mm (15.5 x 23.5 in) 370 x 480 mm (14.5 x 19 in) when in-line
- Repeatability: ± 0.01 mm
- Insertion rate up to 3 cycles per second at 5.08 mm (0.2 in) pitch
- Optional automatic tool changer can apply up to 4 different products



P350



- Board capacity up to 450 x 450 mm (17.5 x 17.5 in)
- Repeatability: ± 0.01 mm
- Insertion rate up to 5 cycles per second at 5.08 mm (0.2 in) pitch
- Automatic tool changer to apply up to 4 different products on one machine



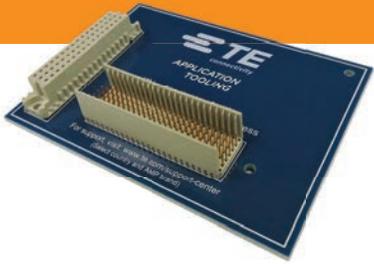
P360



- Board capacity up to 450 x 450 mm (17.5 x 17.5 in)
- Repeatability: ± 0.01 mm
- Insertion rate up to 5 cycles per second at 5.08 mm (0.2 in) pitch

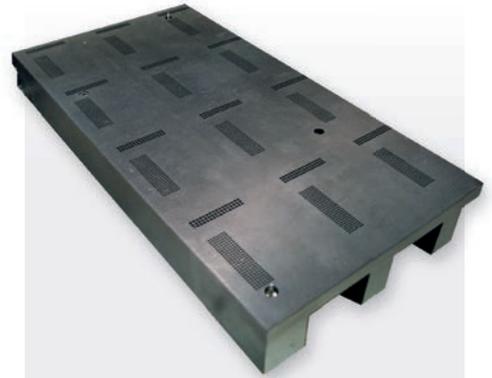


Connector Press Fit

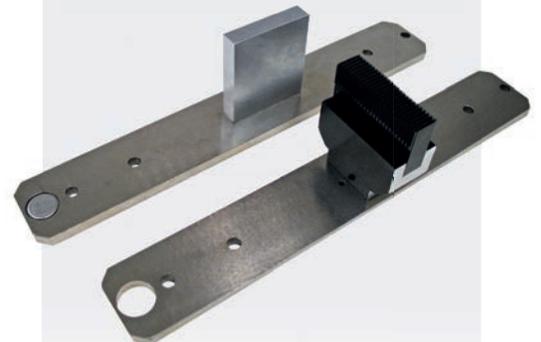


TE Connectivity offers a wide range of servo presses that mass terminate compliant pin connectors. So there's one that is perfectly suited for your product needs. And each model leverages the simple, field-proven, solder-free manufacturing offered by the entire product line.

Board Processing Accessories



Dedicated support fixture for quick product changeover



Process flat-rock and header type products from TE Connectivity and other suppliers

CBP-5T



- Servo electric press
- PCB capacity of 460 x 610 mm (18 x 24 in)
- Press force capacity of 44 kN (5 tons)
- Small footprint for low to medium volume product levels



CSP-5T



- Shuttle system for product location under press ram
- Housing capacity of 75 x 150 mm (3 x 6 in)
- Manual & Pneumatic option
- Small footprint



CMP-6T



- 53 kN force (6 tons) CMP-6T
- Board capacity of 610 x 915 mm (24 x 36 in) CMP-6T
- Wide range of insertion heads for TE Connectivity and non TE Connectivity products available



CMP-12T



- 107 kN force (12 tons) CMP-12T
- Board capacity of 610 x 915 mm (24 x 36 in) CMP-6T
- Wide range of insertion heads for TE Connectivity and non TE Connectivity products available



CAP-6T



- Automatic pressing capabilities help improve quality, lower rework and helps prevent rejects
- Board capacity of 760 x 910 mm (30 x 36 in)
- 53 kN force (6 tons)
- Manual loading drawer for simple loading and unloading of PCBs



CAPI-6T



- Automatic pressing capabilities help improve quality, lower rework and helps prevent rejects
- Board capacity of 760 x 910 mm (30 x 36 in)
- 53 kN force (6 tons)
- Inline system SMEMA compatible





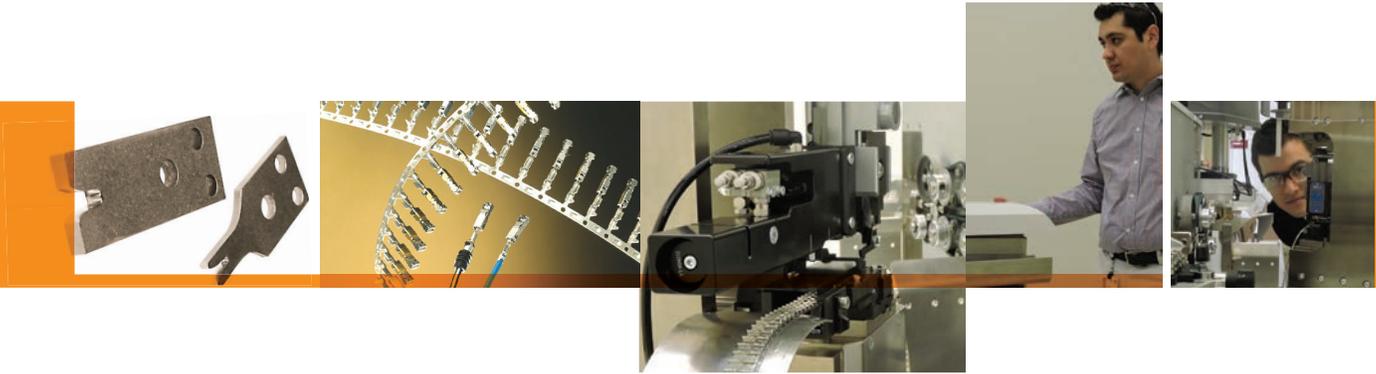
Let's Connect

Learn more about our comprehensive line of tooling solutions at www.tooling.te.com. To find the right TE tooling for your needs, call us at **717-810-2082** or email toolingSales@te.com.



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Waste Not. Want Not.

Whether it's time or scrap, in manufacturing everyone knows that waste costs money. With our on-site certification and consultation services, we can help you:

- Reduce downtime
- Reduce scrap
- Maintain crimp quality
- Improve manufacturing efficiency



Time is Money.

In manufacturing downtime can be expensive. That's why TE is constantly working to improve product availability and delivery rates. With a strong global footprint, short lead times and a strong distribution channel, TE has the equipment and the accessories to keep production online.

To check distributor stock and availability for your tooling needs go to: www.te.com/commerce/sck/cdi.do

te.com

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