DELTA 540

crimper

komax

EN

SEMI-AUTOMATIC SOLUTION

START TO AUTOMATE INSULATION DISPLACEMENT CONNECTIONS

DELTA 540

The Delta 540 is a semi-automatic BenchTop machine equipped with all the necessary functions to process IDC connectors. It is available with several optional connector-specific kits.

The Delta 540 is equipped with a cable clamp that securely holds the hand-fed wires, allowing the cutting unit to precisely cut them to the desired length. The machine also includes a component feeder, which automatically supplies the connectors from trays, and a component holder to position the connectors for termination with the wires. An IDC unit simultaneously presses all the wires into the connectors' slots, establishing an insulation displacement connection. Once the process is complete, the finished product is transported to the take-out position.

The Delta 540 also offers several optional components to improve the process and integrate quality control into the workflow, such as connector-specific kits, a vision sensor for component monitoring, remote access, and a table for setup.

Options

– Several connector-specific kits
– Vision sensor for component monitoring
– Remote access
– Table

Smart cable clamp, manually insert wires one by one or all at once.

HIGH FLEXIBILITY
FOR A VARIETY OF CONNECTORS

Conveniently set up on the optional height-adjustable table with drawer

From connector manufacturer straight into the machine
Manually insert your supply of trays with connectors directly from the manufacturer into the machine. Connector-specific cartridges are available to adapt the machine to different types of trays.

Fully automatic connector feeding
Manually provide the machine with a tray of connectors and the machine will do the rest. The component feeder automatically feeds, orients and positions the connectors for termination.

Quality control conform the connector manufacturer's quality specifications
Standard equipped with force and wire monitoring. Optionally expandable with component monitoring. All integrated and fully automated, ensuring consistently high quality products. The orientation, color and state of each connector, and the color and quality of each wire is monitored before termination even starts. Any disturbance in the force curve during pressing is detected and the faulty product is eliminated by the bad-part cutter.

Achieve shortest possible changeover times to increase efficiency
Exchangeable parts are bundled in connector-specific kits tailored specifically for a particular connector. All parts are engraved and conveniently equipped with quick-change systems. Program settings can be accessed on the user interface with clear graphics. Quickly change to another connector and change the wire sequence. Access the programmed settings from the memory for simple handling and quick changeover.

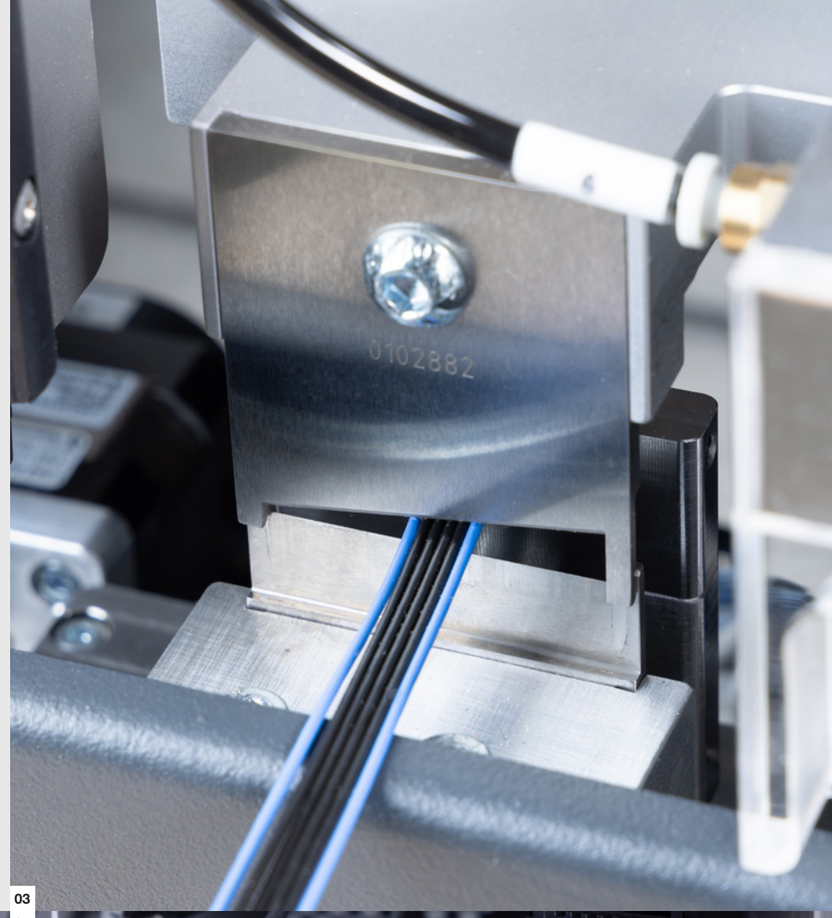
Additional options for your convenience
Setup the machine on any table or choose our optional height-adjustable table. Use the lockable drawer to store the connector-specific kits and documentation. With the remote access option you benefit from an extended range of service. This gateway for sustainable machine support will make you future-ready for digital services.

01

02

03
The bad part cutter cuts the wires off a faulty product. Any disturbance in the force curve during pressing is detected and the faulty product is eliminated. The bad part cutter prevents faulty products from being processed further.

04
The vision sensor of the optional component monitoring checks the orientation, color and state of a connector. If the sensor detects that anything is wrong with the connector, it is rejected and termination won't even start. Programming and viewing the results of the vision check is done on the laptop.



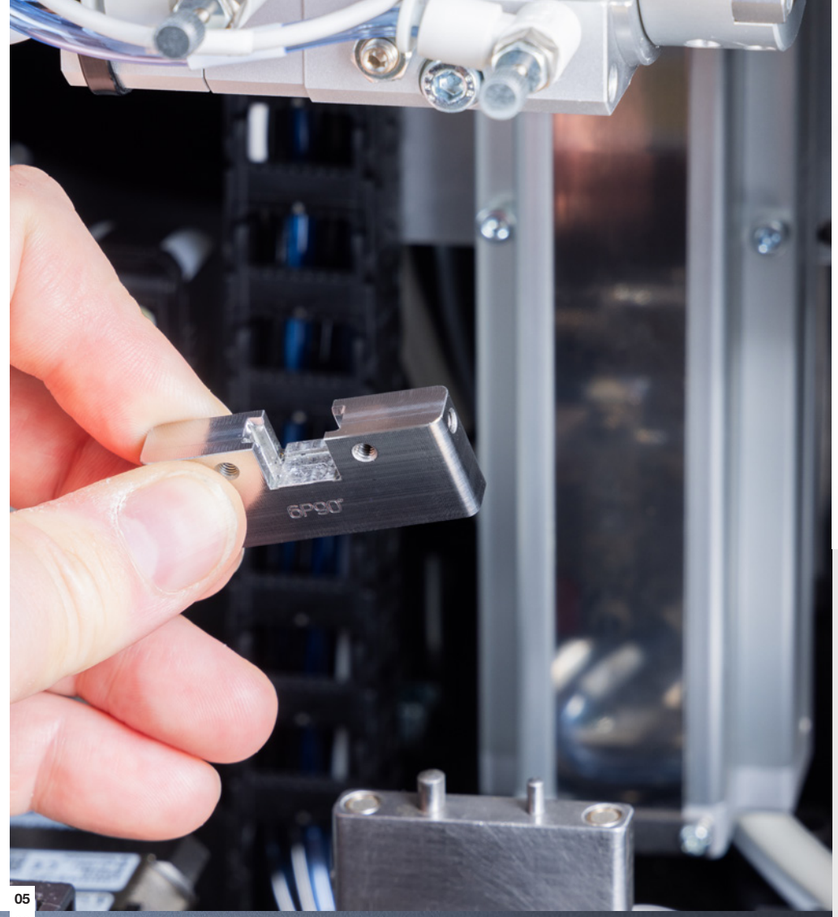
03

04

01
Insert trays from the connector manufacturer straight into the machine. In order to handle the different types of connectors, connector-specific cartridges are available. Each cartridge is adapted to fit the different types of trays.

02
The component feeder processes one of the connectors. It automatically feeds, orients and positions the connectors for termination. In order to handle the different types of connectors, the unit can be equipped with connector-specific adapters and parts.

05
Changing one of the adapters of the component feeder. Easy and quick thanks to the magnetic quick-change system. All exchangeable parts specifically tailored for a particular connector are bundled in connector-specific kits.
06
Programming on the user interface with clear graphics. Quickly change to another connector and change the wire sequence. Load, edit, save and backup programs in the database environment for simple handling and quick changeover.



05

06

Application examples with a variety of connectors

Technical data

Wire cross section*	0.35 mm² (AWG 22)
Zero cut	2 – 4 mm (0.08 – 0.16 in)
Wire length**	Single wire: min. 60 mm (2.36 in) Bridging: min. 60 mm (2.36 in) Twisted pairs: 70 – 90 mm (2.75 – 3.54 in)
Processable connectors	Erni MicroBridge 90° connector 4 – 14 pin Erni MicroBridge 180° connector 6 pin
Pressing force	max. 7500 N (1686 lbf)
Electrical connection	3 × 230 / 400 V, 50 / 60 Hz
Power	2500 W
Compressed-air connection	6 bar (87 psi)
Dimensions L × W × H***	1895 × 958 × 904 mm (74.6 × 37.7 × 35.6 in)
Weight	ca. 250 kg (ca. 551 lb)
Noise level	< 70 dB
Ambient temperature	10 – 40 °C (50 – 104 °F)
Humidity (non-condensing)	max. 90%
Installation site	Level, stable surface free of vibration Table size: min. L × W = 1240 × 820 mm (49 × 33 in) Loading capacity of the table: min. 250 kg (551 lb) (e.g. optional table)
Scrap rate	max. 2%
Cycle time****	max. 7.5 s
Technical availability	85% based on VDI3423
Processing outside the specifications	Processing outside the specifications upon request. In case of doubt, we will be happy to provide processing samples for your connetors and wires.

*Specified by the connector manufacturer.
**For ergonomic reasons, longer lengths are recommended.
***With the safety doors open and the tray feeder out.
****Adding certain options will increase the cycle time of the machine.

Komax – leading the field now and in the future

As a pioneer and market leader in automated wire processing, Komax provides its customers with innovative solutions. Komax manufactures series and customer-specific machinery, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent software and networking solutions complete the portfolio, and ensure safe, flexible, and efficient production.
Komax is a globally active Swiss company with highly qualified employees and development and production facilities on several continents. It provides local support to customers worldwide through its unique sales and service network and offers services that help them get the most out of their investments.

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Subject to change