



# EPT-A1 SEMI AUTO IDC MACHINE

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Product Brochure

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# EPT-A1 SEMI AUTO IDC MACHINE

TE Connectivity's (TE) new EPT-A1 semi auto insulation displacement contact (IDC) machine terminates wires to connectors without the need to strip the insulation from the wires. This new technology allows for quality, efficiency and cost-effectiveness for large, medium, and even small production volumes in various automotive and industrial applications. The vision inspection abilities allow the operator to ensure the appropriate wire colors are in a secure and correct position. The quality assurance devices have a force monitor and sensors that enable on-time termination force monitoring. The overall compact design and modular design allow for short machine cycle time of only 30 minutes changeover between 90° and 180° connectors. The machine offers lower initial investment costs while providing flexibility to process both 90° and 180° connectors by using just one machine. The easy handle on connector feeding automatically rotates the connector to the desired position. The carrier fixture for 2-20 pos prevents the need of changing over between different positions. The EPT-A1 semi auto insulation displacement contact (IDC) machine supports ERNI MicroBridge connectors and can easily extend to ERNI MiniBridge products and future IDC platforms with different fixtures.



**Multiple Assurance devices**



**Competitive Initial Cost**



**Suits any customer requirement**



**Very Short Machine Cycle Time**

Product Features	Benefits			
Quality	<ul style="list-style-type: none"> <li>Wire insertion length check before termination</li> <li>Vision inspection abilities allows the operator to ensure the appropriate wire colors are in the right position</li> <li>Quality assurance devices as force monitor and sensors enable on-time monitoring on termination force</li> </ul>			
Efficient and Cost Effective	<ul style="list-style-type: none"> <li>Overall compact design and modular design</li> <li>Short machine cycle time</li> </ul>			
	Type	90°	180°	
	P Number	2P-7P	8P-14P	2-20P
	Cycle Time	5s	6.5S	5s
Flexibility	<ul style="list-style-type: none"> <li>30 minutes only for changeover between 90° and 180° connectors</li> <li>Connector rotation mechanism can easily change between 90° and 180° connectors</li> <li>Handle on connector feeding automatically rotates connector to the desired position</li> </ul>			
	<ul style="list-style-type: none"> <li>Carrier fixture for 2-20 pos prevents the need of changing over between different positions</li> <li>Different machine configurations are available upon customer request to best suit their needs</li> <li>Supports ERNI MicroBridge connectors and can easily extend to ERNI MiniBridge products and future IDC platforms with different fixtures</li> </ul>			

## Potential Industries and Applications

### Industries:

- Automotive
- Industrial

### Applications:

- Automotive headlamps
- Front and rear-view cameras
- Electric vehicle battery
- LiDar, Radar
- Precision molded electronics
- Warehouse automation
- Hydraulic business CCTV-cameras (building automation)

## Machine Overview



## Technical Details

Basic data		
Size	Dimension	650 mm X 1200 mm X 840 mm (W X L X H)
	Weight	Ca. 450 Kg
Energy	Power	AC 220V, Three Phases, 50 Hz
	Air	Min 0.4Mpa
Performance	Cycle	5-6.5 Seconds
	Working condition relative humidity:	10-90%
	Storage environment relative humidity	30 - 60%

## Basic Description

- Application for ERNI MicroBridge connectors, including 90° & 180°
- Compatible for different pole-number of ERNI MicroBridge series
- Automatically loading the ERNI MicroBridge connectors & manual inserting the cable
- Automatic rotating the ERNI MicroBridge connectors
- Manual press the start button, then automatic pressing the ERNI MicroBridge connectors
- Color Camera checking the cable before pressing, and after pressing
- Laser camera checking the insertion quality of the 90° ERNI MicroBridge connectors
- Force & displacement monitoring the pressing quality

## Choice of Machine Configurations

PN	Configurations	Description
2447854-1	Combo for both 90 and 180 degree with CCD	Process both 90° and 180° connectors with one base machine, vision check on wire insertion length, and wire color
2447854-2	180 degree with CCD	180° connector only, vision check on wire insertion length, and wire color
2447854-3	90 degree without CCD	90° connector only, check on wire insertion length only
2447854-4	90 degree with CCD	90° connector only, vision check on wire insertion length, and wire color

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