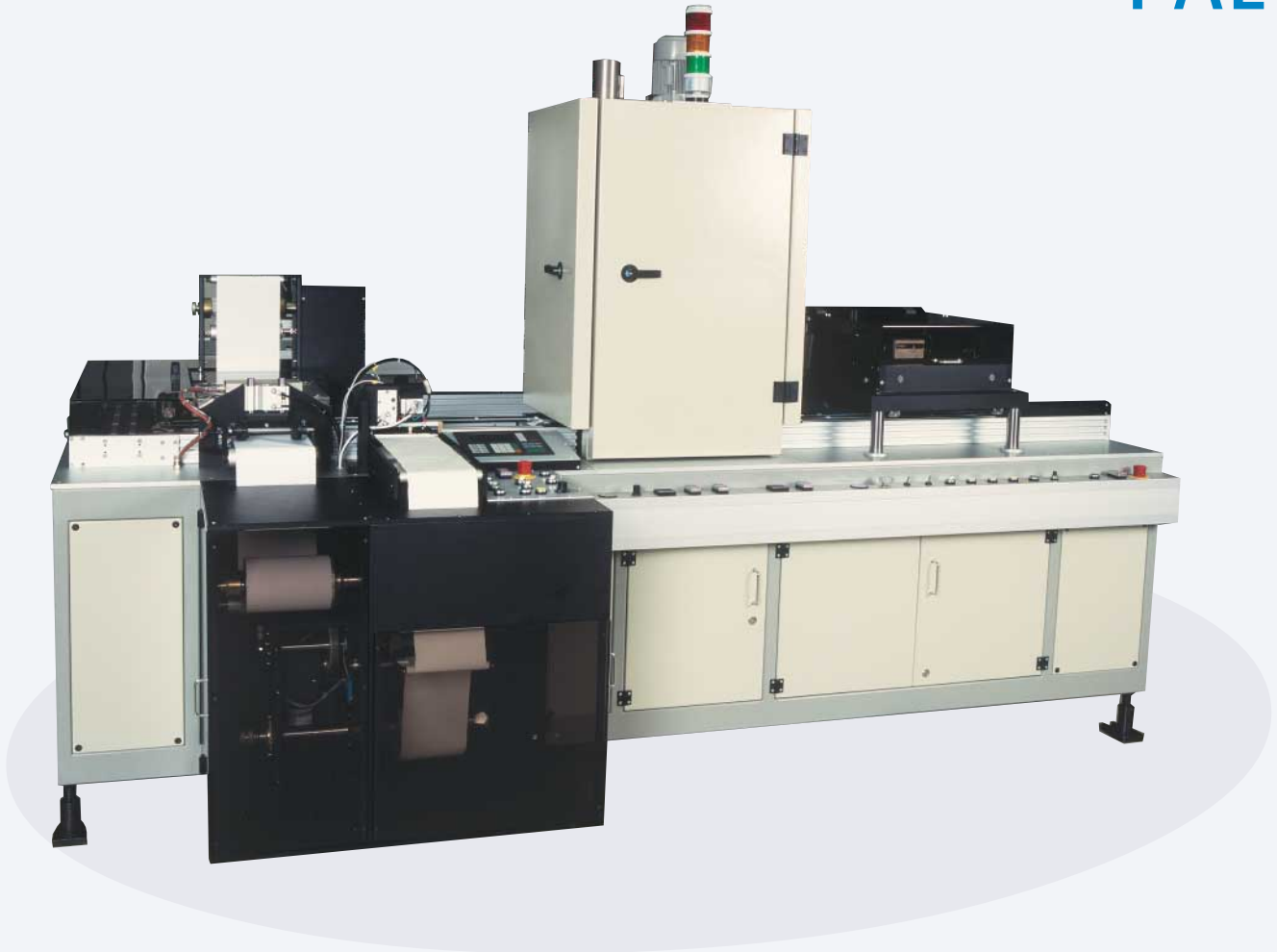


FULLY AUTOMATIC MLC PRINTER STACKER

PAL-9



- Superior stacking at high layer counts
- High productivity = low cost per component
- High printing accuracy, suitable for the smallest components
- Designed to integrate into your automated production line
- Uses all carrier and freestanding tapes
- Perfect carrier film removal ensures high quality product
- Any special request will be designed into your machine

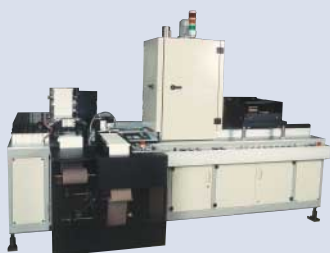
High layer counts, large production volumes

The speed, capacity, precision and versatility of the PAL-9 make it the best value of any Automatic MLC Printer Stacker model on the market. The machine is based on highly refined "print on stack" technology. Palettes load and unload automatically, with capacity for up to 100 palettes traveling at one time around a horizontal carousel. New layers of tape are cut from the roll and pressed onto the stack. Then electrodes are precisely printed and dried. An innovative system to remove the ceramic tape from the carrier is available as an option. The cycle continues until the required number of layers and electrodes have been deposited. Pressing yields a completely flat and smoothed top surface of

the stack, well suited for low electrode laydowns¹. Printing conditions are fully stabilized with respect to temperature and mechanical stability. The superior positioning accuracy of points is well suited for even the smallest chip components (i.e. 0402). Efficient, high speed operation results in a low cycle time (down to 5 seconds printing cycle time inclusive of palette transport). For special components the machine can be equipped with 2 printers. Also, if your application requires a new feature to be added onto the machine, we will design and build the machine to accommodate this feature, working closely with you to make sure your performance expectations are met.

Fully Automatic MLC Printer Stacker PAL 9

Typical specifications²



Printing/pressing area:	160 x 160 mm (6 x 6 inches) (optionally 8 x 8")
Number of palettes:	1-100 pieces
Palette transport:	high-speed belt
Cycle time:	min 5 sec. (at 3 sec. pressing time)
Squeegee:	drag or diamond type with spread bar option
Squeegee speed:	50-250 mm/sec. or 2-10 inches/sec.
Snap-off:	automatic adjustment with 1 micron or 1/25 mil accuracy
Stacker press force:	up to 350 kN or 76,000 lbf (optionally 440 kN or 95,000 lbf)
Stacker press:	heated up to 120 C
Dryer:	circulating air heated up to 100°C
Drying time:	typically 5 minutes, adjustable
Clean air:	tracks fully covered for clean room application
Safety:	equipment complies with US and CE safety regulations
Dimensions:	Length: 3,630 mm or 143 inches Width: 1,440 mm or 57 inches Height: 2,255 mm or 89 inches Weight: approx. 2,200 kg or 4,800 lbs.

Options:

- Cassete loading system
- Automatic ink dispensing
- Palette cooling
- Reel feeding systems for freestanding ceramic tape
- Reel feeding systems for carrier foil based ceramic tape
- Up to 2 printers can be installed
- Up to 4 tape feeders can be mounted (coversheet dispensing, etc.)
- Off-line automated coversheet stacker
- Automatic visual inspection systems: electrode print quality, tape quality
- Custom designs to meet special requests for your technology

1) Results depend on the tape technology used, please ask for recommendations

2) Because our equipment is customized for specific requirements, specifications given are subject to change



Grajski trg 15
8360 Žužemberk, SLOVENIA
phone: +386 7 3885 200
Fax: +386 7 3885 203
E-mail: kekoequipment@siol.net
URL: <http://www.keko-equipment.com>

Agent: