

GLMS Laser Cell



Ideal for marking of PCB's

GLMS is an Inline Laser Marking machine specifically designed to laser mark PCBs with high positional accuracy and repeatability.

It is capable of handling large format heavy PCBs, ultra-thin and flexible printed circuit board assemblies (PCBA).

The system is designed for High Speed laser marking of formats ranging from 1D barcodes, 2D Matrix, QR codes and human readable characters as well as Image formats.

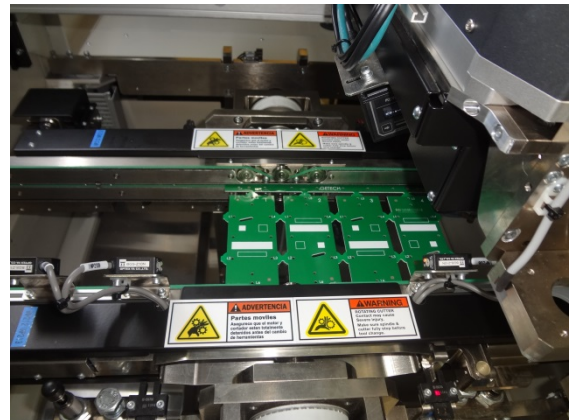
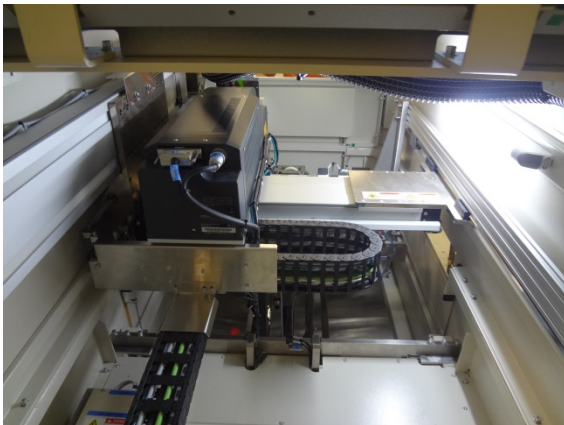
With a scanning system inside the GLMS each mark can be verified before being released to down-stream processes.

The GLMS has a large panel capability that can accommodate a single large panel or multiple smaller parts panelized on a single PCB.

The 30 watts CO2 laser wavelength (10.6µm) is ideal for PCB applications.

Features:

- Max. PCB size 450 mm x 400 mm
- Move, Teach and Marking Visual Programming System
- Programmable Z height adjustment
- 1D/2D mark verification by Scanner (Option)
- Class 1 Laser machine enclosure
- Quick product change-over
- Class 4 Laser Class
- Fume extraction (Option)
- 30 Watts CO2 Laser
- Link to customer's MES Server (Option)
- Internal flipper system for double sided marking
- Barcode, 2D codes, text and graphics capable
- SMEMA connection
- Programmable conveyor width adjustment
- Uninterruptable Power Supply (Option)
- ESD Edge belt conveyor
- Dual Lane (Option)



Specifications

Positioning System

Configuration	X and Y axis
Motors	Two axis AC brushless servo motors
Repeatability	± 20 µm
Resolution	± 10 µm

Work station

PCB Positioning	Pneumatic stopper
Panel Location	Located by tooling holes or edges of PCB
Panel Size	450 mm x 400 mm
Panel Thickness	0,8 mm – 4,0 mm
Component height top	30 mm
Component height bottom	30 mm

Laser System

Laser Type	30 Watt CO ₂ Laser (class 4)
Cooling system	Ambient Air cooled (standard)
Guide Laser	Red Laser Pointer
Marking FOV	120 mm x 120 mm (450mm x 400 mm single side marking)

Marking Formats

1D Barcode (Code39, Code128, ITF, 2of5, NW7, JAN)
 2D Code (QR Code, Micro QR Code, ECC200 DataMatrix, GS1 DataMatrix)
 DataBar (GS1 DataBar Truncated, Stacked and Limited)
 Logo Images (CAD Data, BMP/JPEG/PNG/TIF formats)

Vision System

Video Camera	High resolution CCD video camera
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Scanner System

Decoder	Vision System and Scanner
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Conveyor

Edge Clearance	3 mm
Max. payload	4 kg
Conveyor width	Auto adjust (programmable)
Conveyor speed	600 mm/sec. (minimum)
Conveyor flipper	yes

Safety Features

„E-Stops“, Laser stop, laser light protection, servo overload protection, enclosed work area

System dimensions, weight & utilities

Dimensions (W/D/H)	0,82 m x 1,80 m x 1,55 m
Weight	600 kg
Power supply	208 – 240 volts
Air supply	6 bar

Available Options:

- Fiducial Option
- Link to customer's MES-Server
- PCB Flow direction according to customer's specifications

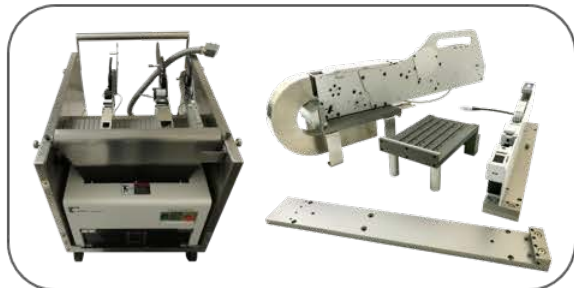
Our Product Portfolio



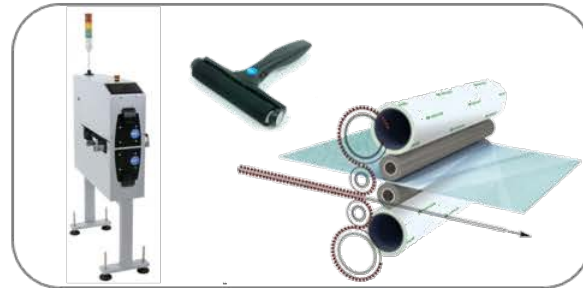
Feeding Technology



Label Feeder, Labels and Marking Solutions



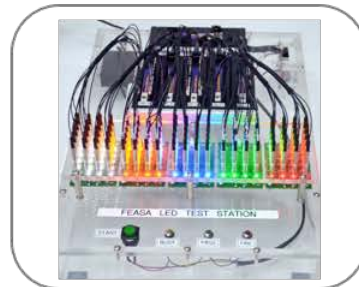
Special Applications



Bare Board Cleaning



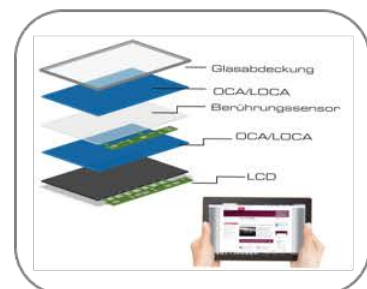
In-System Programming



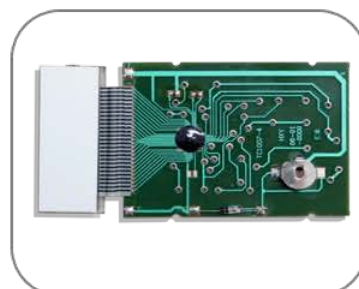
LED Analysis



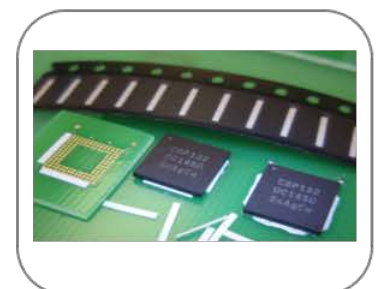
Reflow Inline Camera



Optical Bonding



Thermal Bonding



Place-N-Bond