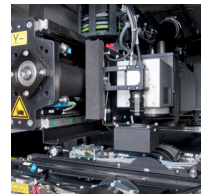
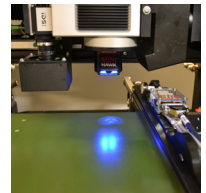


Laser Marking



Laserhead



Camera

FlexMarker II

Laser Marking System

The FlexMarker II is an in-line Laser Marking machine specifically designed to laser mark PCBs with high positional accuracy and repeatability. It is capable of handling a variety of PCB sizes, thickness and color.

The FlexMarker II is designed for the flexible laser marking of 1D barcodes, 2D Matrix Codes and human readable characters as well as images.

The optional superfast flipunit makes marking on both sides possible within shortest cycletime.

Each marking can be scanned and verified before being releasing the PCB to the next process.

Key features

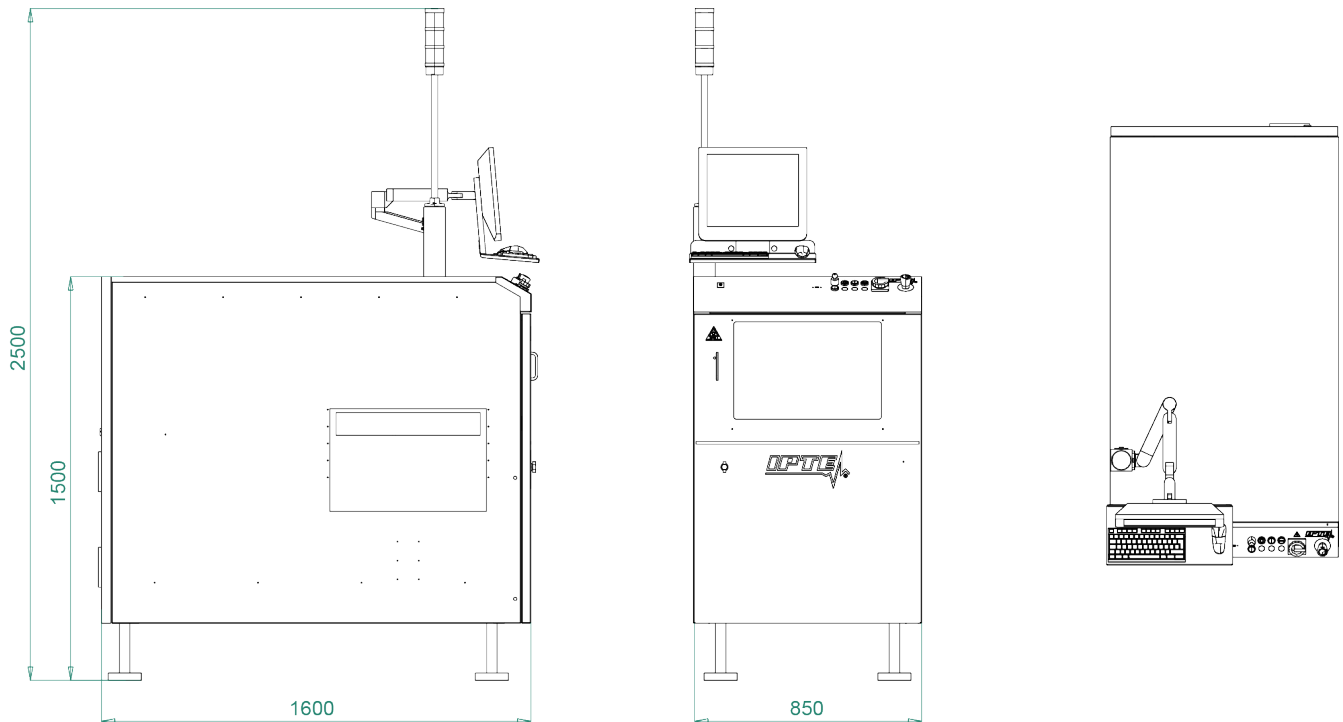
- High volume - high mix in-line laser marking
- Moveable laser, fixed transport
- Ultra wide marking field processing
- User friendly HMI (TS1)
- CO2, Fiber Laser
- PCB or carrier transport
- Fast PCB exchange time
- Optional Integrated Flip Unit

Options

- Integrated electrical flip unit with PCB thickness compensation (FOV 90 x 90 mm)
- Fume extraction system
- Verify@Mark
- Automatic width adjustment
- PCB Thickness independent clamping
- Fiducial recognition / alignment
- Board orientation and Bad part recognition
- Laser power monitoring and calibration

FlexMarker II

Laser Marking System



PCB Specification

	Fixed conveyor	Optional Flip unit	Optional Long Flip Unit
PCB Width:	50 - 522 mm	50 - 480 mm	50 - 500 mm
PCB Length:	50 - 522 mm	50 - 522 mm	50 - 522 mm
PCB Ratio:	0,8 (length \geq 0,8 x width)		
PCB Thickness:	0,8 - 4 mm		
Component height (top side):	max. 40 mm		
Component height (bottom side):	max. 40 mm (25 mm with fixed transport)		
PCB Edge support:	2,0 - 4,5 mm adjustable (optional carrier edge support 10 mm)		
PCB Weight:	2,5 kg		

Process Specification

	CO ₂	Fiber
Laser:		
Field of view:	100 x 100	110 x 110 mm
Field of marking:	522 x 522 mm	522 x 522 mm
Position accuracy:	$\pm 0,1$ mm	

Technical Specification

PCB Exchange time	< 4 sec (+ 1,1 sec for flipping)
PCB Transport speed:	300 - 700 mm/sec
Transport height:	830 - 980 mm / 940 - 965 mm
Transport direction:	L \Rightarrow R, R \Rightarrow L (to be specified at time of order)
Controller:	BeckHoff
Energy requirements:	3 x 400 V + N or 3 x 208 V, 5 kVA max
Compressed air:	6 - 20% bar, according to DIN ISO 8573 3.4.5
Color:	RAL 7035 ESD Safe
Dimensions (L x D x H):	850 x 1.600 x 1.500 mm
Weight:	1.040 kg
Interface:	TS1
Standards:	CE, SMEMA, Laser class 1