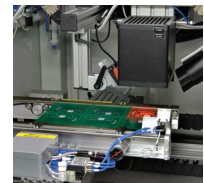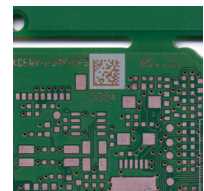Laser Marking

Laserhead

2D Matrix Code

FlexMarker

Laser Marking System

The FlexMarker is an in-line Laser Marking machine specifically designed to laser mark PCBs with high positional accuracy and repeatability. It is capable integration of a variety of laser devices (Co2, Fiber, …)

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

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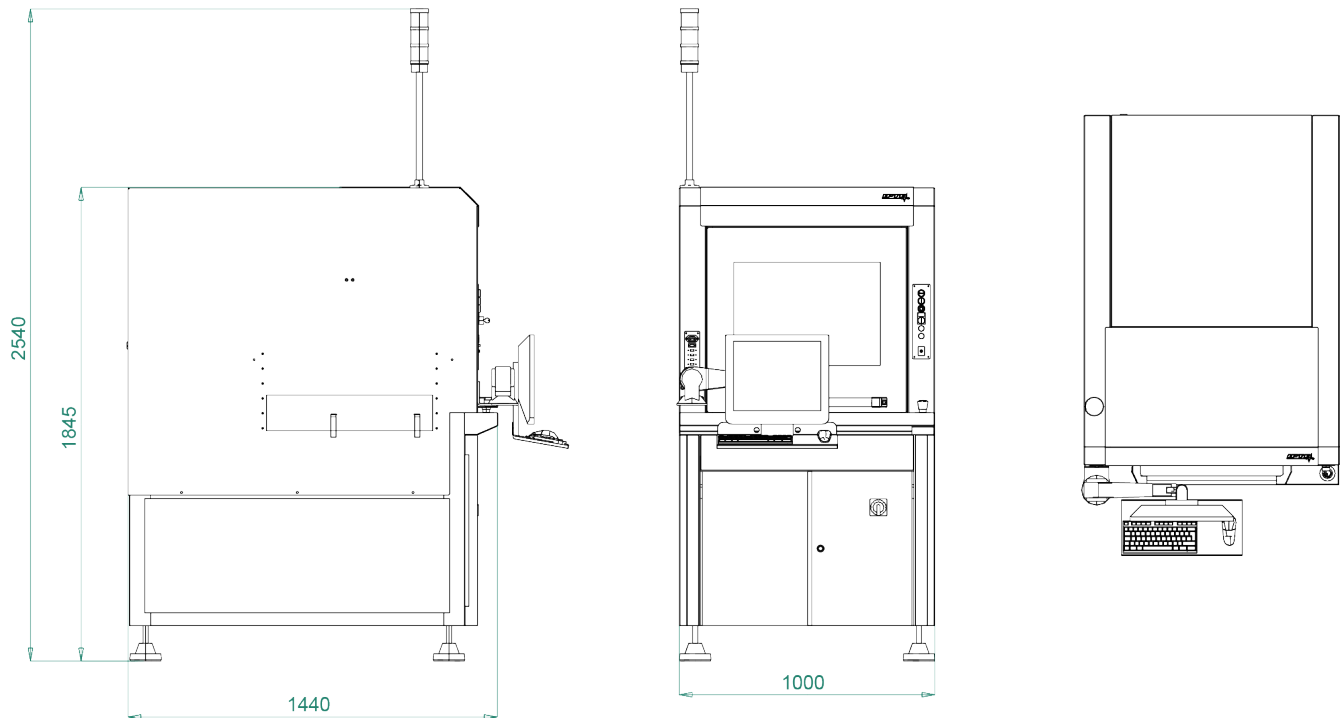
Key features

- High speed in-line laser marking
- Medium volume high mix
- Modular cell structure
- Large marking area
- User friendly HMI
- CO2 or Fiber laser
- PCB or carrier transport
- Fast PCB exchange time

Options

- Automatic width adjustment
- Fume extraction system
- Verify@mark
- Code scanner integration
- Fixed transport with output buffer (PCB or carrier)
- PCB Thickness independent clamping
- Fiducial recognition / alignment
- Board orientation and Bad part recognition

FlexMarker
Laser Marking System

PCB Specification

PCB Width:	50 - 460 mm
PCB Length:	50 - 460 mm
PCB Ratio:	0,8 (length ≥ 0,8 x width)
PCB Thickness:	0,8 - 4,0 mm
Component height (top side):	max. 80 mm
Component height (bottom side):	max. 25 mm
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:	70 x 70 mm	110 x 110 mm
Field of marking:	460 x 460 mm	460 x 460 mm
Position accuracy:	± 0,1 mm	

Technical Specification

PCB Exchange time	< 5 sec
PCB Transport speed:	300 - 700 mm/sec
Transport height:	925 - 975 mm
Transport direction:	L ⇒ R, R ⇒ L (to be specified at time of order)
Controller:	BeckHoff
Energy requirements:	3 x 400 V + N or 3 x 208 V, 2 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):	1.000 x 1.440 x 1.845 mm
Weight:	570 kg
Interface:	TS1
Standards:	CE, SMEMA, Laser class 1