

IMP Intelligent Mark Positioning

The patented IMP, Intelligent Mark Positioning offers a unique means of improving laser marking and engraving processes through mark verification and alignment. This unparalleled integrated system results in superior marking precision with "through-the-lens vision".



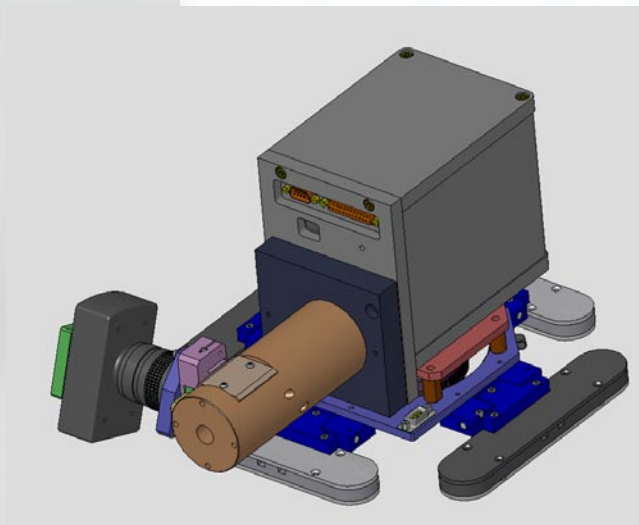
Advantages

- No Misaligned Parts
- Integrated Vision
- No Waste
- Machine to Machine Consistency
- Precision Tooling
- No Fixturing



IMP

Intelligent Mark Positioning



System Components

Software	FOBA IMP
Camera	1.3 Megapixel, CMOS
Lighting	Red LED Array
System Controller	S3000
Installation Kit	Optics, cables and mounting

System Features

Operation System	Microsoft 2000, XP US & European
Available Languages	English, German, Spanish

Minimum System Requirements

System Controller	S3000 FOBAGRAF Ver. 4.35 or higher EMC Ver. 1.21 1.4 GHz or faster 0.5 GB RAM minimum USB 2.0
Laser System	Compatible with all FOBA Laser Systems

Technical Specification

Camera Effective Pixels	1280 x 1024, 5.2 µm square pixels
Camera Dimensions	190 x 120 mm x 90 mm
Camera Classification	FCC Class B, CE Ready
Electrical Requirements	24 VDC
Power Consumption	~ 2.5 Watts
Operating Temperature	15 °C to 40 °C
Operating Humidity	20 % to 80 %, non-condensing
LED Lighting	CE Class 1 Dark & light field configurable 10,000 hours expected lifetime
Typical Inspection Speed	250 ms

Vision Specifications *

Lens (mm)	Field Size (mm)	Field of View (mm)	Alignment Accuracy (nominal / best)	Repeatability	
				XY (nominal / best)	Angular
100	70 x 70	11 x 7	± 40 µm / ± 15 µm	8 µm / 2 µm	0.05°
160	110 x 110	19 x 15	± 50 µm / ± 25 µm	10 µm / 3 µm	0.05°
163	120 x 120	19 x 15	± 50 µm / ± 25 µm	10 µm / 3 µm	0.05°
254	185 x 185	28 x 20	± 70 µm / ± 35 µm	14 µm / 4 µm	0.05°
420	290 x 290	49 x 30	±100 µm / ± 50 µm	20 µm / 5 µm	0.05°

*Values may vary depending on application

FOBA®

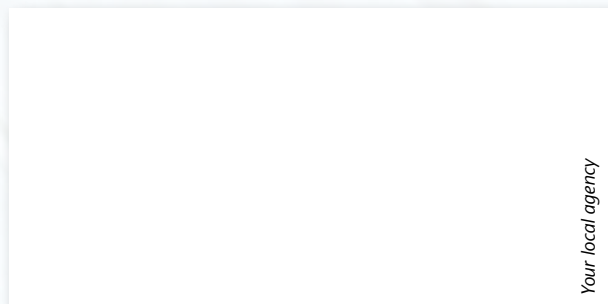
Laser Marking + Engraving

A Gerber Technology Company

FOBA
Technology + Services GmbH
Altenaer Straße 170
D-58513 Lüdenscheid
Germany

Tel. +49 (0) 23 51 996-0
Fax +49 (0) 23 51 996-210
sales@foba.de

www.foba.de
www.gerbertechnology.com



Your local agency

