Automated
laser marking system
SIM-Marker Mini

Expertise based on experience®

Successful together!

SIM Automation GmbH
Manufacturer of:
- Customised assembly systems
- Testing and inspection systems
- Feeding systems

Keyence Deutschland GmbH
Manufacturer of:
- Laser marking equipment
- Sensors / optical measuring technology
- Microscopes / macroscopes

If you need:
- Product traceability
- A self-contained marking system with integrated autofocus for simultaneous X, Y and Z-axis control of the laser beam
- Fully automated marking of your products, e.g. with barcode, DMC code, series and batch number or plain text for quality-related information
- A customised solution

The SIM-Marker Mini is the right choice for you!

The SIM Marker Mini laser marking system can be used to label 2D and 3D models

2D

3D

SIM-Marker Mini versions	
Standard	■ Manual setting of the focal point with mechanical lift table ■ Door opening by hand ■ Connection to PC via LAN or USB
Customised	■ Integrated suction (automatically activated while marking) ■ PC or notebook with side table ■ Sub-table for the laser cell and the laser controller

PC, screen or notebook are provided by the customer and are not included in the scope of delivery.
The Keyence operating software is installed on the PC or notebook provided by the customer.

Laser variants

MD-X series

MD-F series

MD-U series

MD-X series Keyence YVO$_4$ laser marking system 13W / 25W	■ Marking of metal, plastic and ceramic ■ Processing of thin films and all-purpose applications ■ Integrated camera for reading 2D codes
MD-F series Keyence fibre laser marking system 30W / 50W	■ Marking of metal, plastic and ceramic ■ High-performance engraving of metals
MD-U series Keyence UV laser marking system	■ Higher contrast and improved readability due to "cold marking" ■ Marking of metal, plastic and ceramic

Technical information about integrated laser

Marking area	■ From 120 x 120 mm to 330 x 330 mm ■ Tray insert containing several parts for marking reduces loading time
Marking resolution	■ 2–5 µm (depending on type)
Scanning speed	■ Max. 12,000 mm/sec
Integrated performance monitoring	■ With alarm output ■ Ensures constant quality of marking and therefore increases process reliability
Option	■ Software for reading 2D codes

Also possible with the SIM-Marker Mini
- Focal point can be set within a range of 42 mm (±21 mm)
- Autofocus with 3-axis laser control (simultaneous control of the X, Y, and Z-axis of the laser optics)
- Distortion-free marking of 3D objects such as slanted surfaces, cylinders, spheres and cones

SIM-Marker Mini data sheet

Standard	■ Laser marking cell in table design:	460 x 1000 (with lamp) x 624 (W x H x D)
	■ Max. dimensions of the part to be marked:	350 x 350 x 300 mm (W x D x H)
	■ Adjustment range of the lifting table:	300 mm
	■ Hinged door opening:	350 x 650 mm (W x H)
	■ Viewing window in door:	210 x 290 mm (W x H)
	■ Suction hose:	Ø 50 mm
	■ Electrical connection:	230 V~
	■ Interior lighting	Lamp
Options	■ Movable external extraction system with "universal" filter insert	

Other SIM markers

SIM-Marker Rotary   SIM-Marker Compact   SIM-Marker Classic   SIM-Marker Plus

	Rotary	Compact	Classic	Plus
Door opening W x H	220 x 185	320 x 270 open on 3 sides	625 x 375	1000 x 505
T- groove plate W x D	WA ~ 330 x 175	400 x 400	400 x 500	800 x 800
Interior size W x D	Ø plate 550	450 x 750	600 x 720	1100 x 1000
Max. height of the part to be marked	185	200	300 230 at drawer	500
Z-axis adjustment area	300	200	300	500 (600 man.)

all dimensions in mm

SIM – Expertise based on experience

SIM Automation GmbH has been a manufacturer of special-purpose machines for over 50 years and focuses on developing and manufacturing **individual, customised all-in-one solutions**. The product range includes assembly systems and feeding technology as well as testing and inspection systems and system components.

We work in the following sectors:

- Medical technology
- Pharmaceutical diagnostics
- Cosmetics
- Automotive
- Electrical engineering

Your expert partner

- Production facilities are technically and economically optimised to meet customer requirements
- Improved availability with SIM quality and SIM service
- Certified according to DIN ISO 9001:2015

SIM®