

Automated laser marking system **SIM-Marker**



Successful together!

SIM Automation GmbH

Manufacturer of:

- Customised assembly systems
- Testing and inspection systems
- Feeding systems

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

Keyence Deutschland GmbH

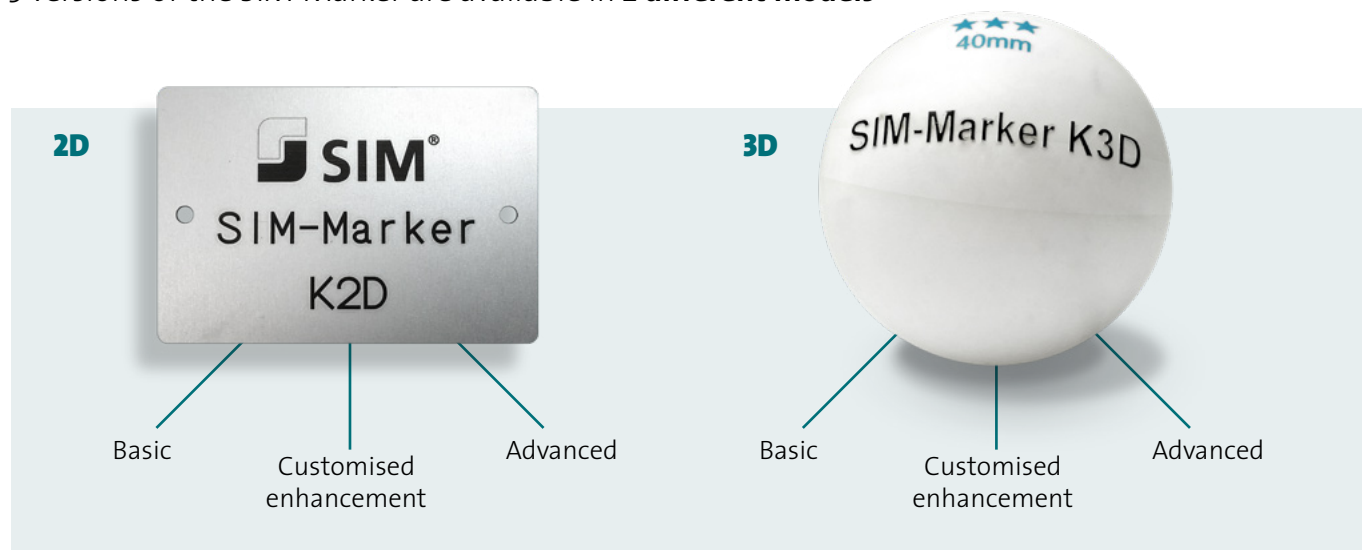
Manufacturer of:

- Laser marking equipment
- Sensors / optical measuring technology
- Microscopes / macrosopes



The SIM-Marker is the right choice for you!

3 versions of the SIM-Marker are available in **2 different models**



SIM-Marker versions

BASIC (manual operation)	<ul style="list-style-type: none"> ▪ Mechanical Z-axis, focal point is set manually using adjusting wheel ▪ Manual opening and closing of lift door once the safety mechanism is enabled ▪ PC link
ADVANCED (automated operation)	<ul style="list-style-type: none"> ▪ Electrical Z-axis, focal point is set using operator push-buttons ▪ Opening and closing of lift door using operator push-buttons ▪ PC link
Customised	<ul style="list-style-type: none"> ▪ Customised version of the SIM-Marker to meet customer requirements

Laser variants

MD-X series



MD-F series



ML-Z series



MD-X series

Keyence YVO₄ 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

ML-Z series

Keyence CO₂ laser marking system
30W

- Marking of paper, plastic, glass and ceramic
- Processing of special materials such as films

Technical information about integrated laser (SIM-Marker)

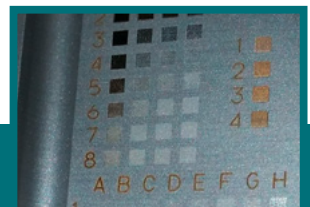
Marking area	<ul style="list-style-type: none"> ■ From 120 x 120 mm to 330 x 330 mm ■ Tray insert containing several parts for marking reduces loading time
Marking resolution	<ul style="list-style-type: none"> ■ 2–5 µm (depending on type)
Scanning speed	<ul style="list-style-type: none"> ■ Max. 12,000 mm/sec
Integrated performance monitoring	<ul style="list-style-type: none"> ■ With alarm output ■ Ensures constant quality of marking and therefore increases process reliability
Option	<ul style="list-style-type: none"> ■ Software for reading 2D codes

Also possible with the SIM-Marker

- 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 data sheet

Standard	<ul style="list-style-type: none"> ■ Laser marking cell in table design: 780 x 1,010 x 960 mm (W x H x D, external measurements) ■ Clamping plate with T-slots: 400 x 500 mm ■ Z-axis adjustment area: 300 mm ■ Max. height of the part to be marked: 300 mm ■ Lift door opening: 625 x 375 mm ■ Viewing window in lift door: 290 x 210 mm ■ Suction hose: Ø = 50 mm (installed in the laser marking cell) ■ Electrical connection: 230 V~ ■ Interior lighting
Options	<ul style="list-style-type: none"> ■ Movable base frame with footprint for laser source and PC Total height of the laser marking cell with base frame: 1,830 mm ■ Movable external extraction system with “universal” filter insert ■ Table mounting kit (necessary when ordering without base frame)



Examples of SIM markers

Front loading with workpiece carrier



Sliding table at side



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 9001:2008



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