

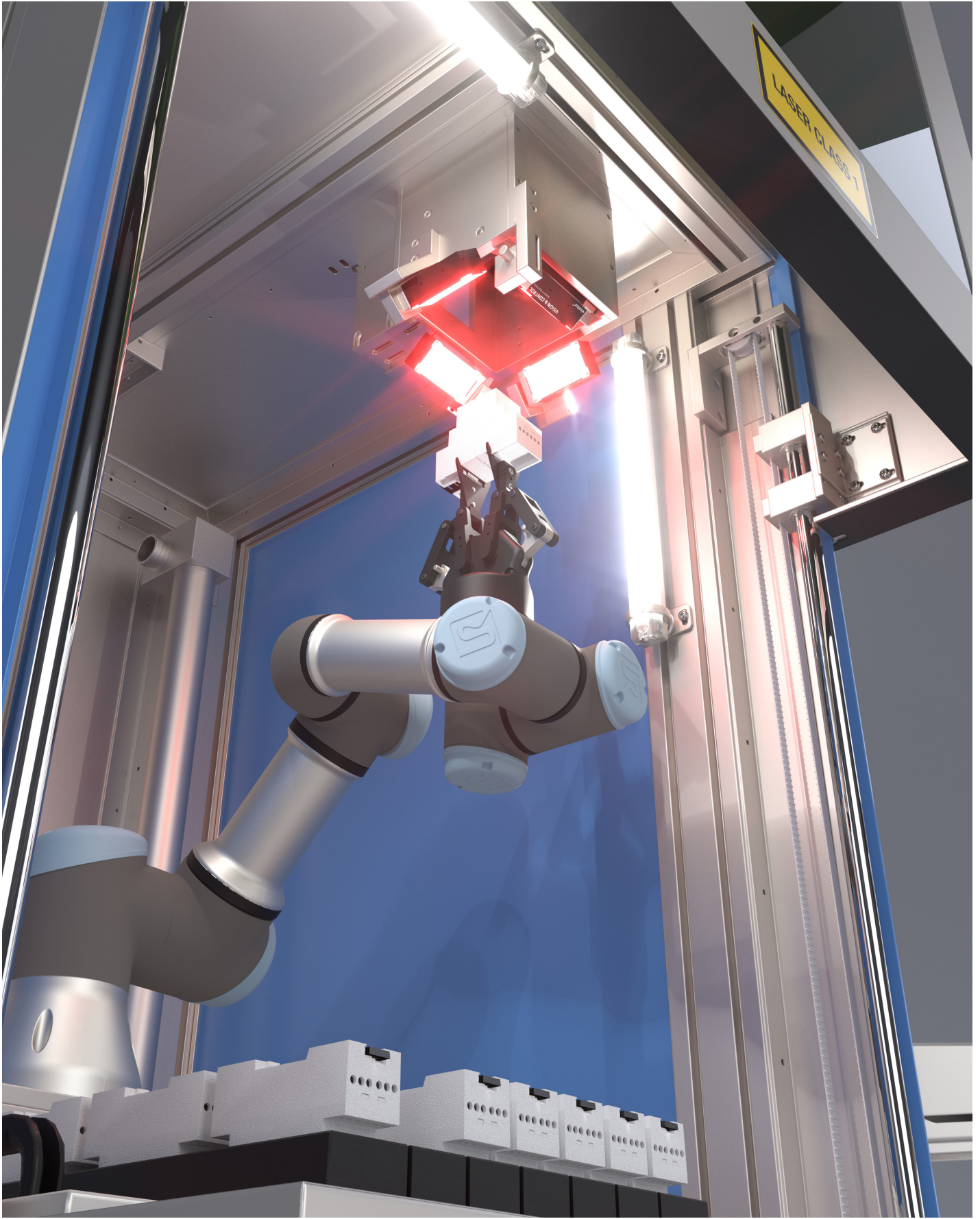
# Workstation Robotic

## The automated laser station

The **Workstation Robotic** is a laser station equipped with an ultra-lightweight, compact industrial robot. The robot boasts excellent repeat accuracy, enabling products to be machined to consistent quality standards and with a high cycle time.

### CONTENTS

- Workstation Robotic | Page 3
- Features/properties | Page 5
- Views | Page 6
- Technical specifications | Page 7
- Robot control | Page 8
- Collaborating with ACI | Page 9
- Contact details, legal information | Page 10





# Workstation Robotic



Workstation Robotic

## Flexible laser marking station with industrial robot

A robot which is integrated into the **Workstation Robotic** is able to rapidly execute complex motion sequences when handling objects. Components can be automatically rotated, tilted or flipped so that they can be marked in any position on more than one side. The station is suitable for automated laser marking of large batches, as well as large and heavy components, or alternatively, large batches of small components, which can be machined in multi-position holders.

→ Features/properties

→ Optional features

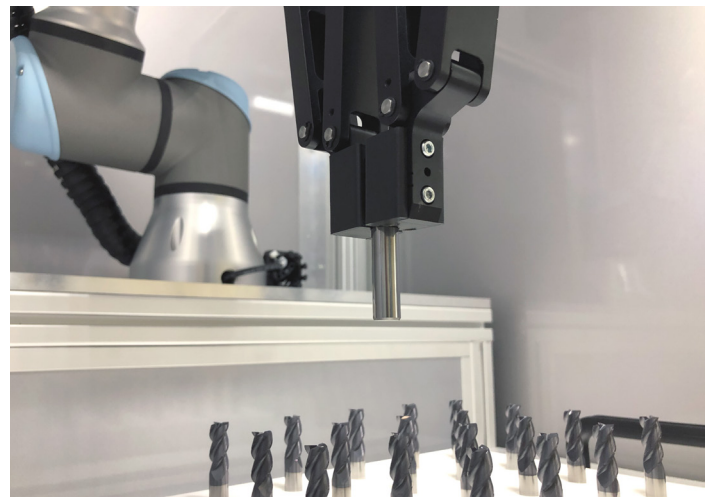
→ Technical specifications

## Features/ properties

- Can be combined with any of ACI's lasers
- Laser marking on multiple sides, e.g. three-sided marking
- 360° circumferential marking, e.g. shank tools
- Laser class 1
- Integrated control panel
- Large laser safety window
- Electric door
- Industrial PC
- Flexible monitor arm

## Optional features

- Motorised Y-axis/Z-axis table
- Imaging systems for camera-assisted laser marking (AOI)
- ID-/code-reading systems (code reader, tool reader)
- Workpiece holders
- Laser extraction system with control line and suction hose (external)



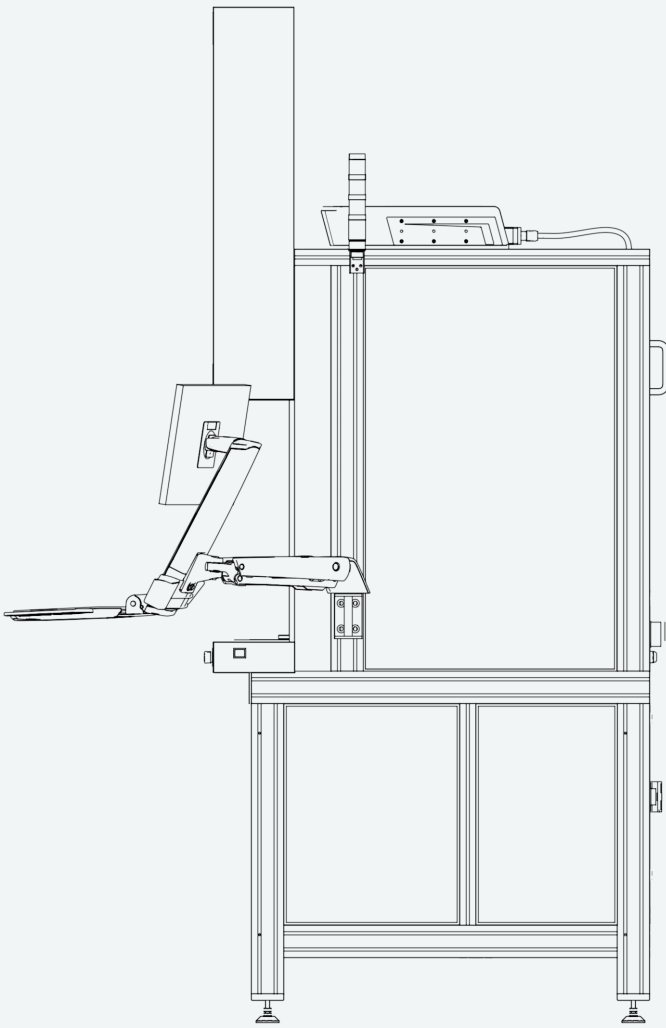
An industrial robot integrated into the **Workstation Robotic** automatically removes objects from a pallet and replaces them afterwards. Six articulated joints allow free movement anywhere within the laser station. This means that there are fewer steps for the user to perform and cycle times are therefore reduced. Especially when handling delicate components, robots offer considerable potential savings through improved product quality.

Time-consuming changeover times are no longer needed because the robot can be easily reprogrammed for different components. An individual gripping system can be selected to match the component. The robot is fully integrated into the laser station's safety circuit. The Magic Mark laser software provides an intuitive control function.

Other handling systems can be added to the **Workstation Robotic** to make process sequences and checks even more efficient. It is also possible to integrate camera-based position recognition systems (AOI) or reading systems for retrieving, reading back and checking codes and plain text into the laser station.

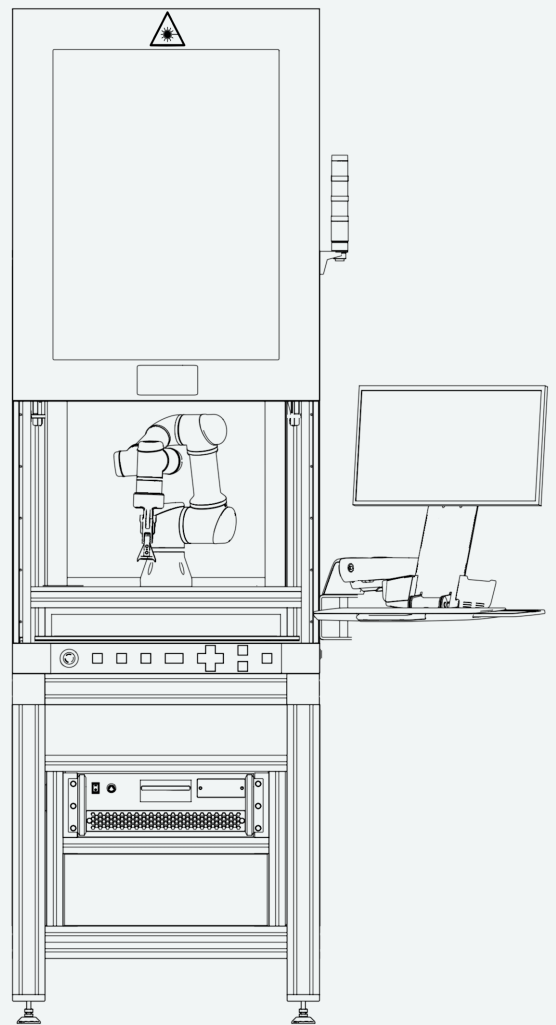
The **Workstation Robotic** is a system solution that complies with the requirements of laser safety class 1 and does not require any additional safety measures. It can be combined with any of ACI's lasers.

# Workstation Robotic Views



**Frame (with feet)  
when door is open**

Dimensions (W×H×D)  
760x2690x1090 mm <sup>1</sup>



**Frame (with feet)  
when door is closed**

Dimensions (W×H×D)  
760x1901x1090 mm <sup>1</sup>

<sup>1</sup> Dimensions apply without monitor arm

# Technical specifications

## Laser station

Size (W×H×D) <sup>1</sup>	760 x 1901 x 1090 mm – when door is closed 760 x 2690 x 1090 mm – when door is open
Surface area of installation space (W×H×D)	650 x 920 x 1000 mm
Clamping plate of Y-axis table (W×D)	615 x 430 mm
Travel of Y-axis table (W×D)	240 mm
Load capacity of Y-axis table (max.) <sup>2</sup>	25 kg
Software	Magic Mark V3

<sup>1</sup> Specifications apply with feet

<sup>2</sup> Assumes evenly distributed load when using a Y-axis

## 6-axis robot

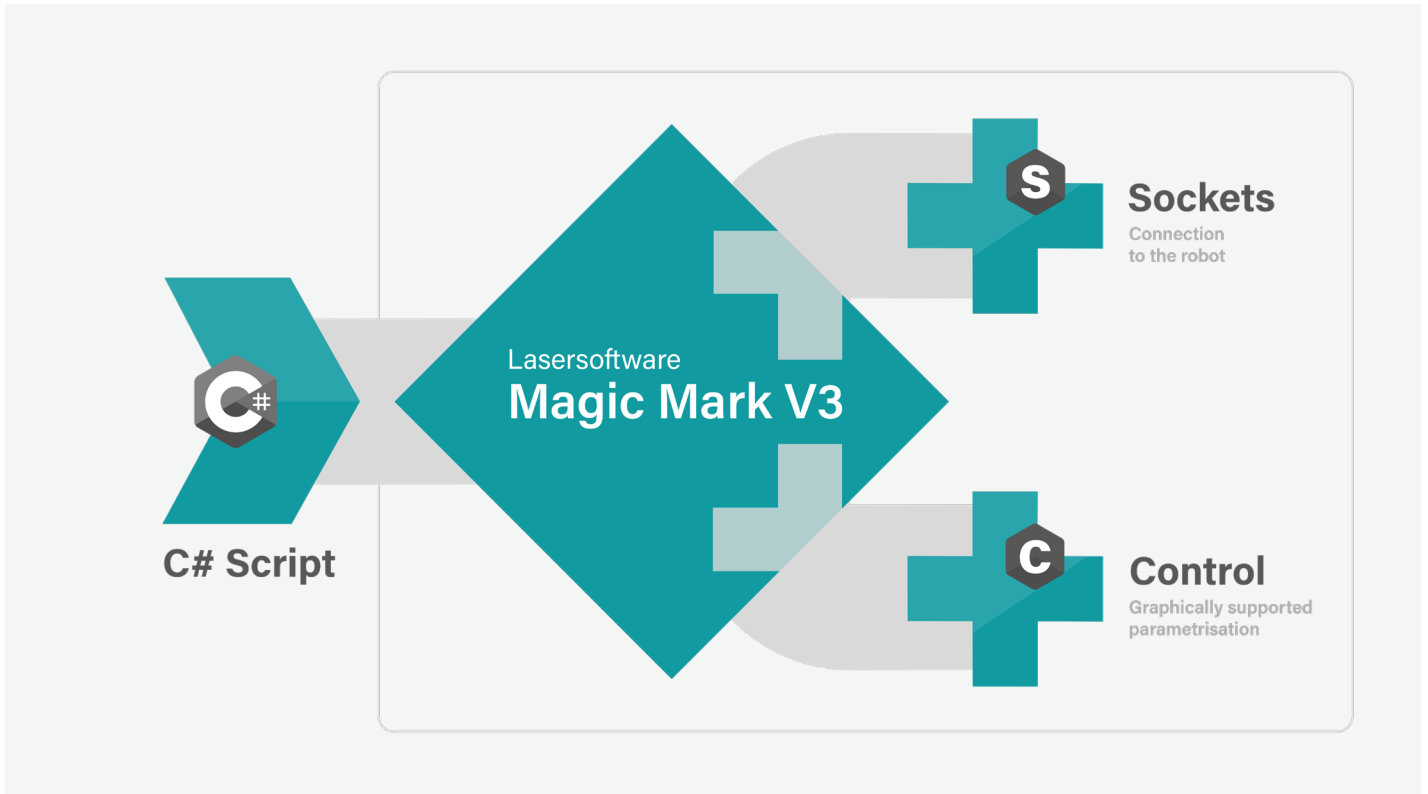
Robot type	UR3e
Weight	11.1 kg
Load capacity (max.)	3 kg
Working range	500 mm
Repeat accuracy	±0.03 mm
Degrees of freedom	6 rotating articulated joints
Speed	All wrists: 360°/s Other articulated joints: Max. 180°/s Tool: Approx. 1 m/s
Programming (optional)	Graphical user interface on 12-inch panel

# Control

The modern software architecture of the **Magic Mark V3** laser software enables targeted access to all available functions and allows users to control the laser and laser peripherals (workstation, axis of rotation, etc.).

The **Sockets** plugin provides the connection (interface) between the robot and the Magic Mark laser software and is responsible for sending control commands.

The **Control** plugin is used to control and implement the entire program sequence of the robot from Magic Mark.



**Internal programming**  
 VB.Net [Winwrap Basic]  
 integrated into Magic Mark V3

**External programming**  
 C#.Net [MS Visual Studio]  
 Access to class library

## Benefits of Magic Mark V3

**Software package**  
 included with product

**Predefinable**  
 parameter sets

**Easy addition**  
 of features  
 using plugins







## Collaborating with ACI Laser Benefits for customers

We prioritise cultivating excellent working relationships with our customers so we can successfully serve their needs. We offer our customers sustainable solutions based on all-encompassing advice, reliability and stability.

ACI Laser is proud to offer:

- ✓ *German engineering* – development and production drawing on over 20 years' experience
- ✓ Complete solutions from a single source: Laser systems, protective housings, software and accessories
- ✓ Customisable laser systems
- ✓ Plugins for easy addition of software features

  
Made in Germany



We would be happy to advise you.

We guarantee you a tailor-made, all-in-one solution that meets the requirements of your application. Our experienced sales team will provide you with comprehensive, in-depth advice. We look forward to hearing from you.

© ACI Laser GmbH  
[www.aci-laser.de](http://www.aci-laser.de)

Last updated: 07/2023  
Subject to change

**Company headquarters**  
Steinbrüchenstr. 14  
99428 Grammetal  
Germany  
Tel. +49 (0) 3643 4152 0  
Fax +49 (0) 3643 4152 77  
[kontakt@aci-laser.de](mailto:kontakt@aci-laser.de)

**Chemnitz sales office**  
Leipziger Str. 60  
09113 Chemnitz  
Germany  
Tel. +49 (0) 371 238701 30  
Fax +49 (0) 371 238701 39  
[soc@aci-laser.de](mailto:soc@aci-laser.de)