



TEXT PATH



GS1 BUILDER



AOI PLUGIN



VARIABLEN
MANAGEMENT



LASER
FILE
MANAGER



RULER SCALE
PLUGIN



OCR PLUGIN

Plugins

Software add-ons for Magic Mark

Plugins

Software add-ons for Magic Mark

ACI plugins are developed in close cooperation with our customers and through our own innovations. Plugin technology has established itself as an excellent tool for increasing the performance and flexibility of our laser systems. The Magic Mark laser software can be expanded to include important functions for specific applications.

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NOTE

All data plugins require Magic Mark V3 Build 500 marking software and above.

Data Import plugin

Variable management



Using the Data Import plugin, data can be imported from a data source. This may be a relational database or, in the simplest case, a data file – for example, SQL data-bases, OLE DB, ODBC, binary data files (TXT, CSV) or XML data files.

- Key facts**
- 1 Variable management
 - 2 Simple connection to external data sources

Variablenmanagement

Sockets [1.0.1.5]Plugin ControlData Import [4.5.4.5]GS1 Builder

Einstellungen

☐ Nicht verwendet

Dongle-Option benötigt!

☒ Aktiviert

Control Element

Index

Daten Quelle

SqlClientOleDbOdbcDaten DateienXml Daten Dateien

Ort

Pfad

C:\Anwendung\CSV_Import.csv

...

Import Optionen

☒ Jede Zeile in eine Reihe

Encoderiso-8859-

☒ Erste Reihe als Spalte

Teilen:

☐ Jede Zeile in eine Spalte

Accessing a CSV file

Daten Tabellenansicht

Tabelle

CSV_Import

	Identnummer	Layout	Herstellenummer	Variable	SerNum
▶ 0	593334-01	Druckring 593334-01	5	1	001
1	759322-01	Nabe 759322-01	5	2	002
2	771883-01	Nabe 771883-01	5	3	003
3	771885-01	Druckring 771885-01	5	4	004
4	771886-01	Platte 771886-01	5	5	005

Configuration dialogue

Daten Import

Index:

0

Gesamt:

12

Anfrage:

Laden

Control element

Laser. Marking. Solutions.

3

GS1 Builder

Variable management

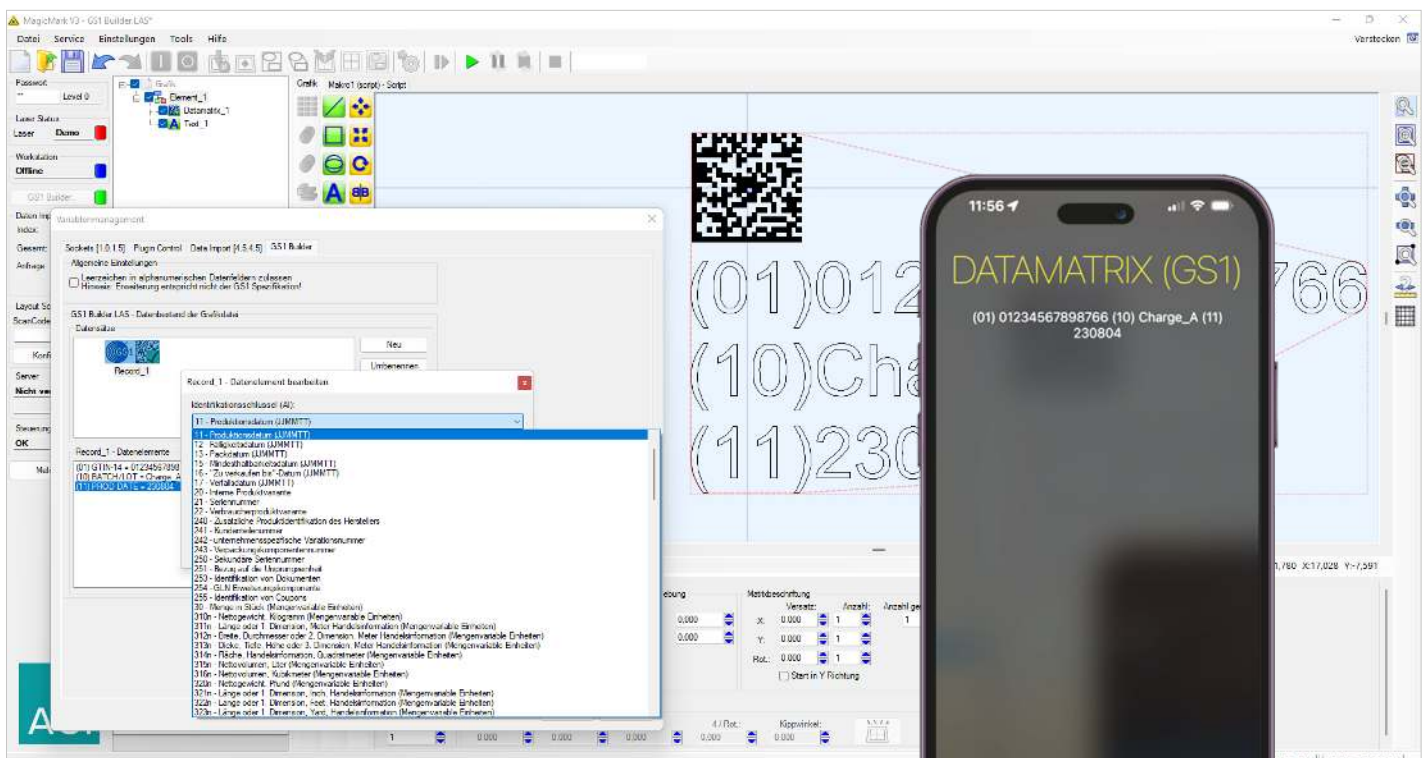


The GS1 Builder plugin helps the user create a data matrix code with a valid GS1 data structure. GS1 is a standard developed by GS1 to establish an article number system for the international retail of consumer goods, especially food.

The content encoded in accordance with GS1 can be assigned to any DMCs in the graphics tree in Magic Mark. The plain text, with the application identifiers (AIs) specified in brackets, can be assigned to text objects in the graphics tree.

Key facts

- 1 Generation of data strings in accordance with the GS1 standard



A data matrix code generated with the GS1 Builder and batch lot number

Successful readback of the DMC

AOI plugin

Image recognition



When you purchase a marking laser with an AOI imaging system, the AOI plugin is included with the Magic Mark marking software as standard. The AOI (Automatic Object Identification) system is a compact, autonomous imaging system used for the fully automated detection, identification and measurement of objects, text and codes with complex geometries.

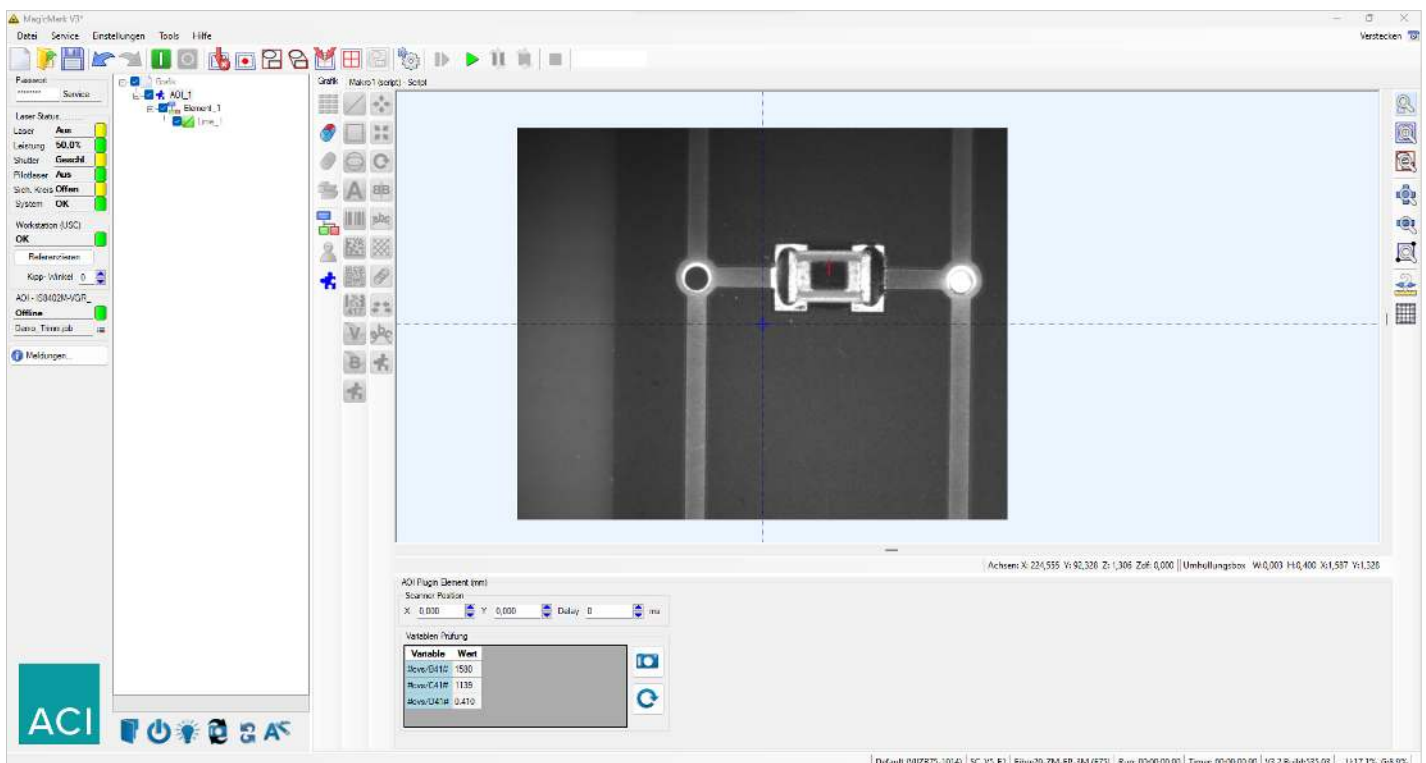
Key facts

- 1 Software add-on for vision system for image processing and evaluation
- 2 User-friendly parametrisation from the Magic Mark graphics tree

For this purpose, the marking area is recorded and analysed online by a camera system. The laser marking is oriented on the object and then checked once the marking process is finished, completely automatically.

The functions of the AOI plugin can be parametrised in a user-friendly way from the graphics tree level.

Another application for AOI is optical character recognition (OCR).



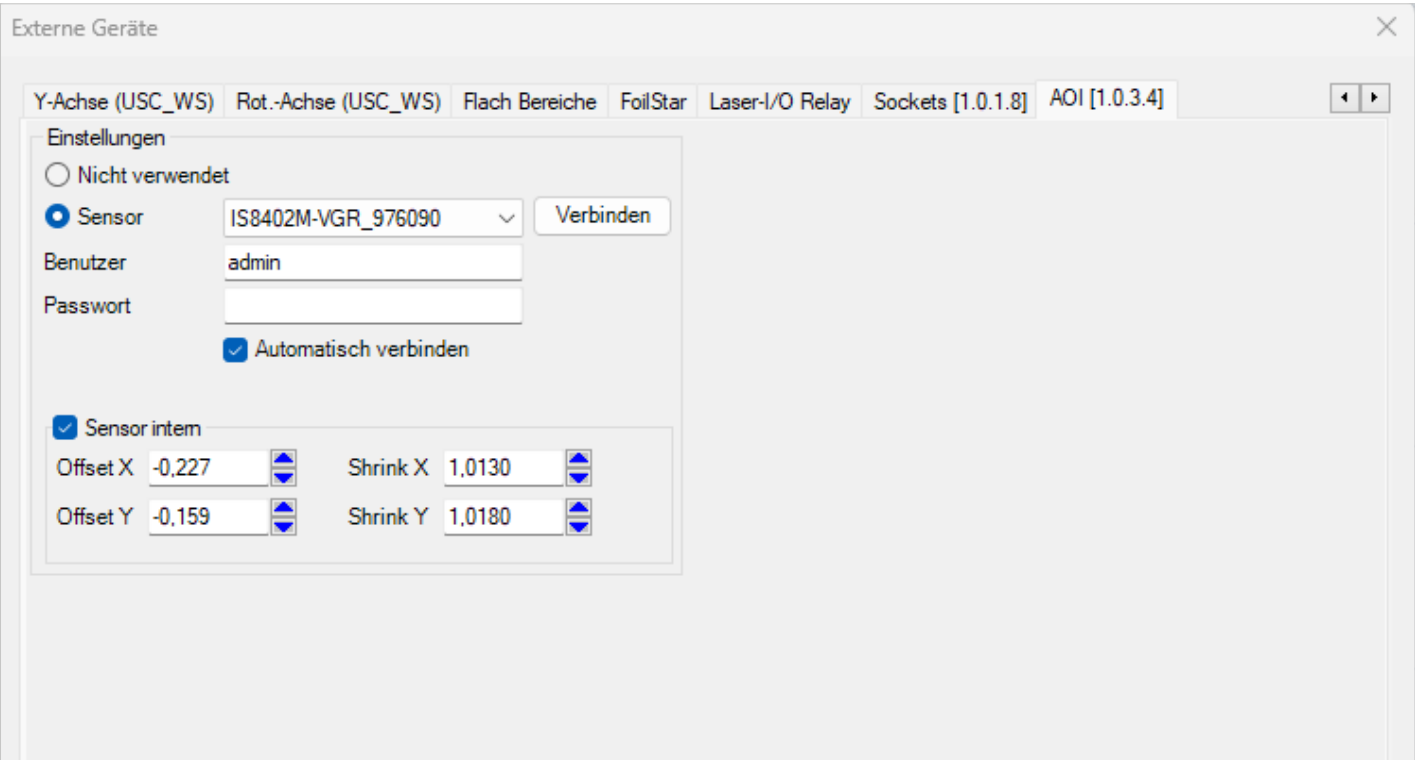
Magic Mark user interface with an activated camera using an AOI imaging system.
Live camera image in the graphics preview window and AOI plugin element in the graphics tree

AOI plugin

Image recognition



Camera preview screen with display of spreadsheet and extended toolbar



Settings

Control plugin

Control/automation



The Control plugin can be used to implement smaller control tasks from the graphical user interface without having to use a script. Each option has an individual benefit for a wide range of applications.

Key facts

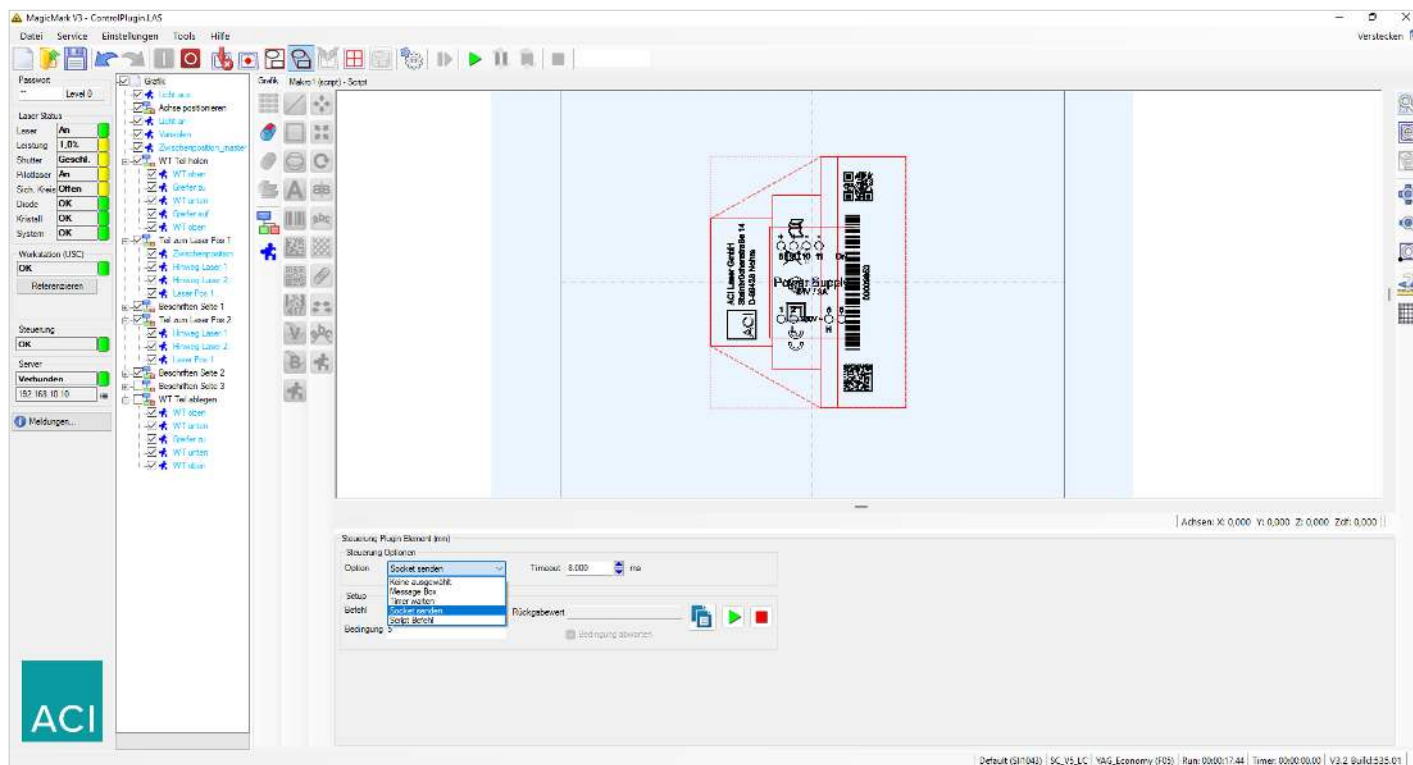
- 1 Cross-platform and cross-manufacturer control tasks from a graphical user interface without a script

The Control plugin is used in conjunction with the Sockets plugin. The aim of the Control plugin is to interrupt or pause the graphics tree output in Magic Mark. External devices that are required to handle the marking output – such as robot sequences or ID readers – can be addressed from the graphics tree using a socket command. For example, components to be marked can be moved under the laser and several sides can be flexibly marked. Users without programming experience can therefore implement simple and clear control sequences without having to familiarise themselves with complex scripts. This significantly increases the user-friendliness of the Magic Mark software.

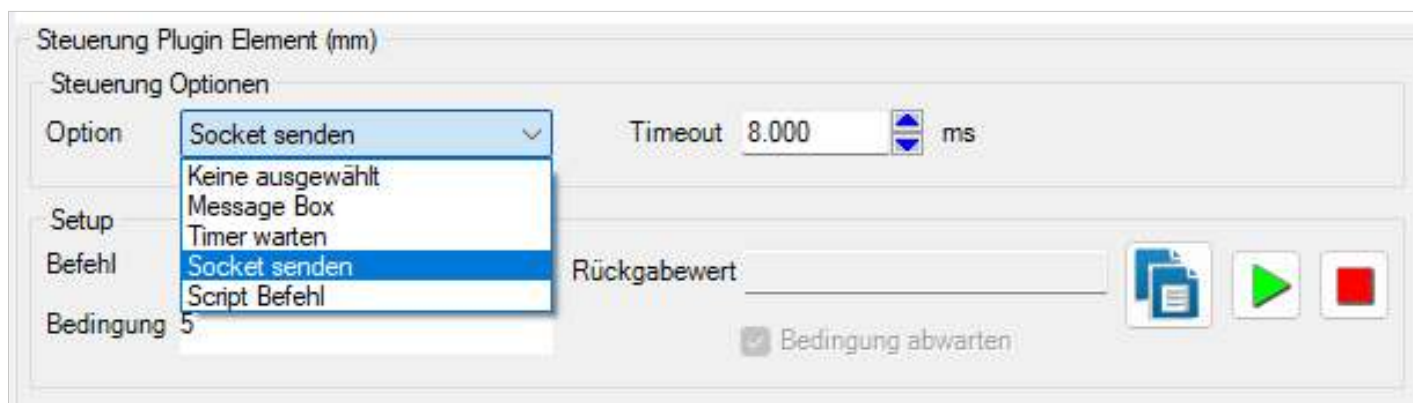
The "Script command" option enables individual script commands to be executed, such as controlling the lighting, setting a laser output after reaching a certain graphics tree element or playing an acoustic signal at the end of the output. In addition, pauses, switching conditions or confirmation dialogues can also be inserted into the sequence of the graphics tree. When trimming a resistor, the direction of the laser beam can be changed depending on the position data.

The "Wait timer" option allows you to pause the graphics tree output at the required point. This can be useful for applications where waiting gives the material to be processed time to cool down. This is also done directly from the graphics tree and without a script.

Control/automation



Magic Mark user interface: Control plugin with multiple plugin elements in the graphics tree



Selection options for control with an activated plugin element

Sockets plugin

Control/automation

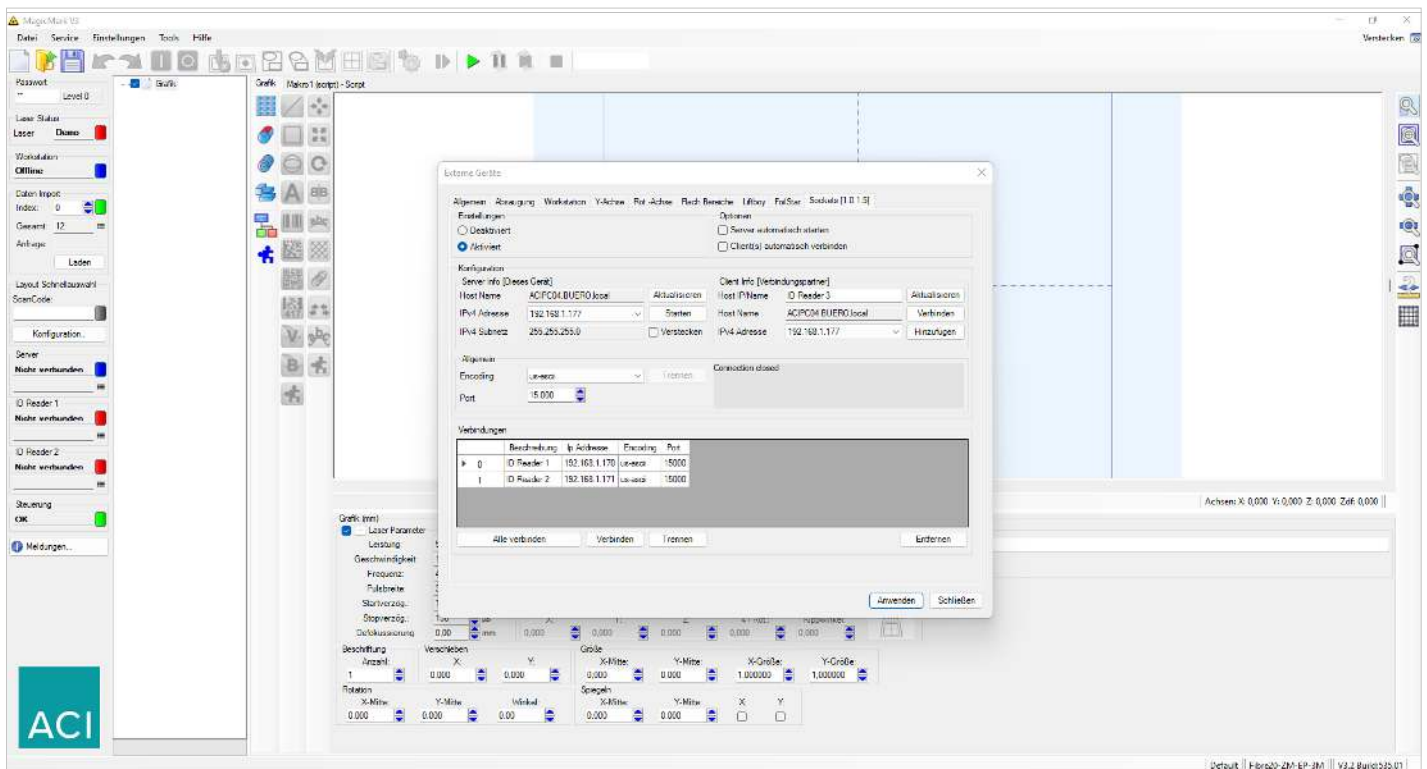


The Sockets plugin enables cross-platform and cross-manufacturer communication between Magic Mark, the laser and external devices. External devices may be ID readers, power adapters, camera systems or other IP-controlled devices.

The plugin makes the socket server and socket client connections available via the TCP/IP protocol and manages them. The connections make it possible to send and receive control messages between different participants. The plugin can be controlled and configured in the Magic Mark script by means of API command extension.

Key facts

- 1 Cross-platform and cross-manufacturer communication between Magic Mark, the laser and external devices
- 2 Adding external devices to Magic Mark without additional software interfaces



Screenshot of sockets configuration dialogue

Contour Tool

Contours and filling



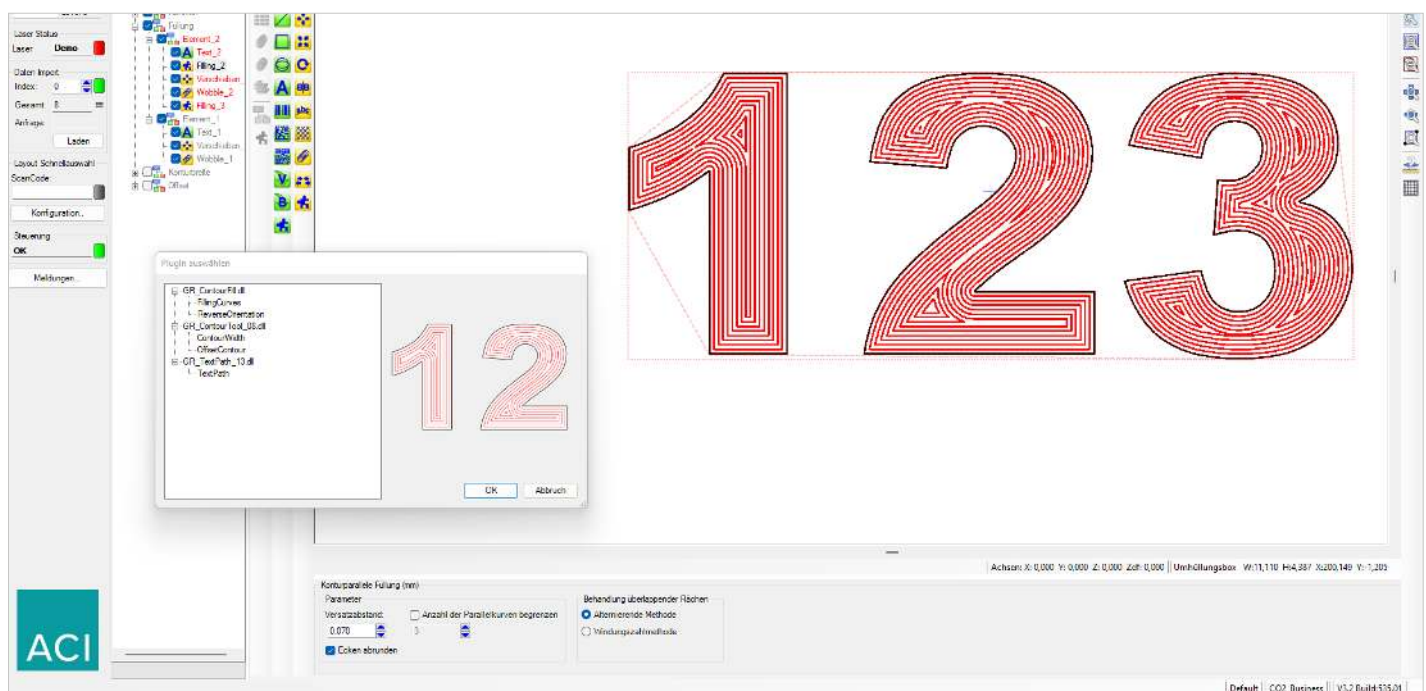
The Contour Tool can be used to fill text or graphic objects with lines that run parallel to the contour or to stretch the contour of these objects.

The following functions are available:

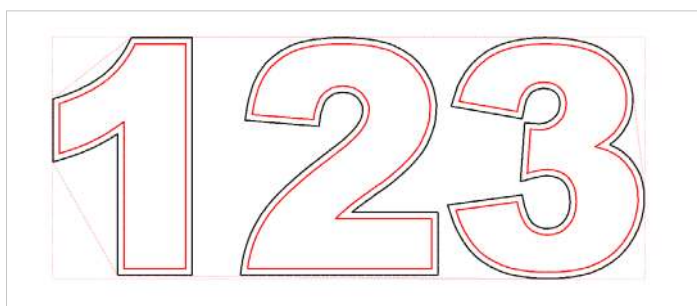
- Filling with lines that run parallel to the contour (filling curves)
- Reverse orientation
- Contour width
- Offset contour

Key facts

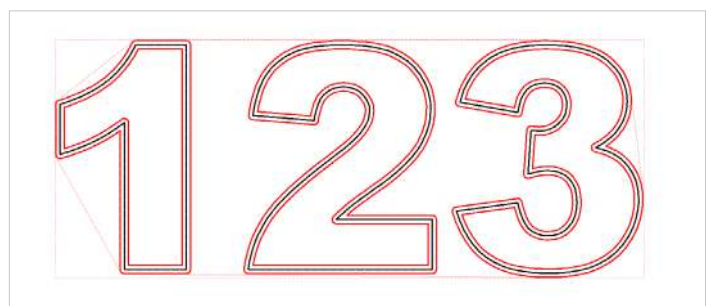
- 1 Filling curves
- 2 Contour width
- 3 Offset contour



Filling curves



Contour width



Offset contour

Ruler Scale plugin

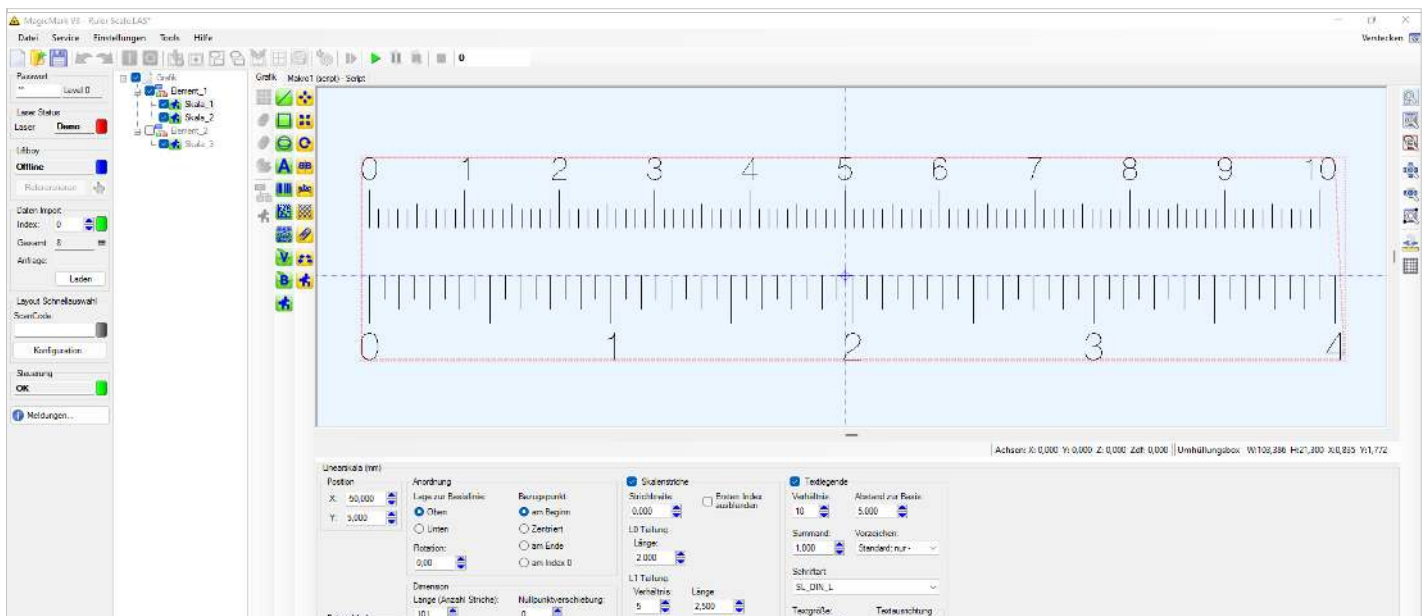
Scale marking



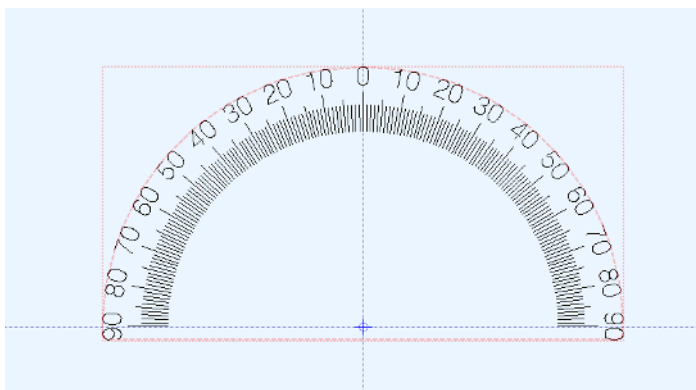
The Ruler Scale plugin can be used to create marking files with scales in Magic Mark. The program offers a wide variety of different design possibilities for linear scales and dials, including the use of an axis of rotation.

Key facts

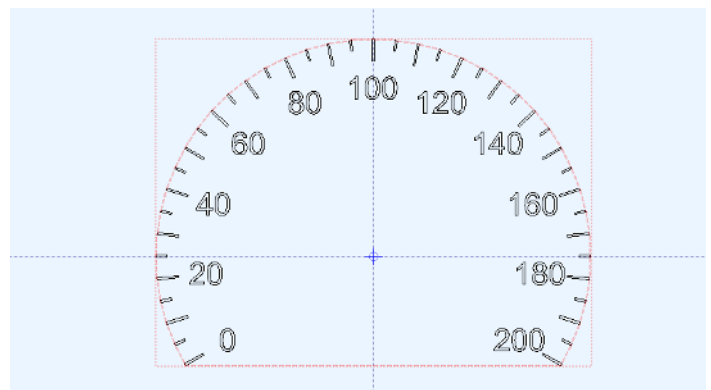
- 1 Linear scales
- 2 Dials
- 3 Scales around the perimeter of objects with rotational symmetry



The plugin icon in the graphic toolbar can be used to insert scale objects, such as a linear scale, within an element branch.



Dial



Speedometer

Foil Star plugin

Film handling

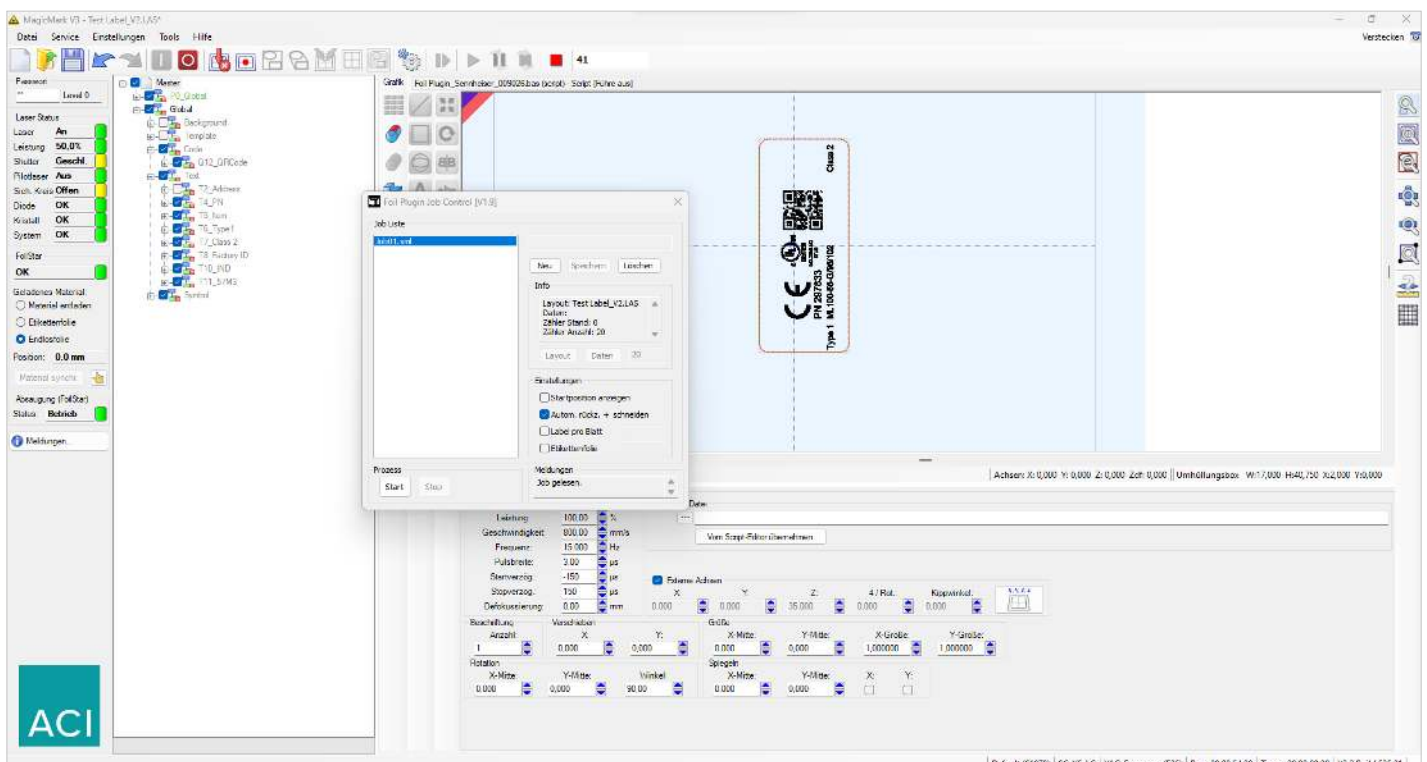


The film transportation and marking processes are controlled using the Magic Mark marking software provided with the product. The integrated FoilStar plugin is used for connecting and controlling the film handling system and for the fully automated processing of marking templates.

Key facts

- 1 Connecting and controlling Foil Star
- 2 Fully automated processing of marking templates

Any number of marking jobs can be defined. The number of labels on a predefined length of film can be configured, as can the total number of labels. Multiple predefined label templates can be combined into one marking job and can be processed in batch mode with a click of the mouse.



Magic Mark user interface with Foil Star plugin and Job Control Foil plugin program window for creating and processing marking jobs

Liftboy

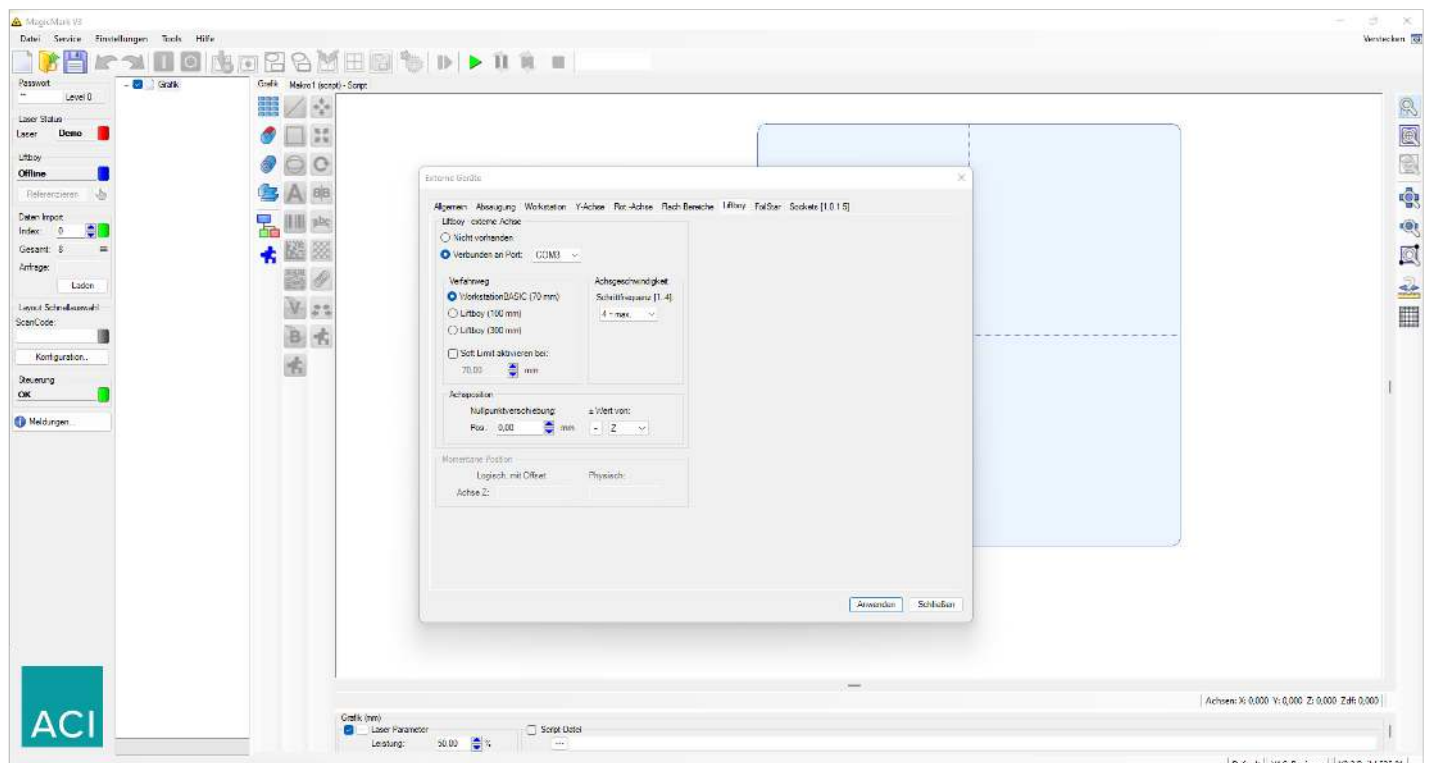
Z axis



With the LiftBoy plugin installed, external Z axes (LiftBoy 100 and LiftBoy 300) can be controlled using the Magic Mark marking software.

Key facts

- 1 Software add-on for Z axis
- 2 Application: 1st generation laser systems, class 4 systems



Las File Quick Select

Layout quick selection

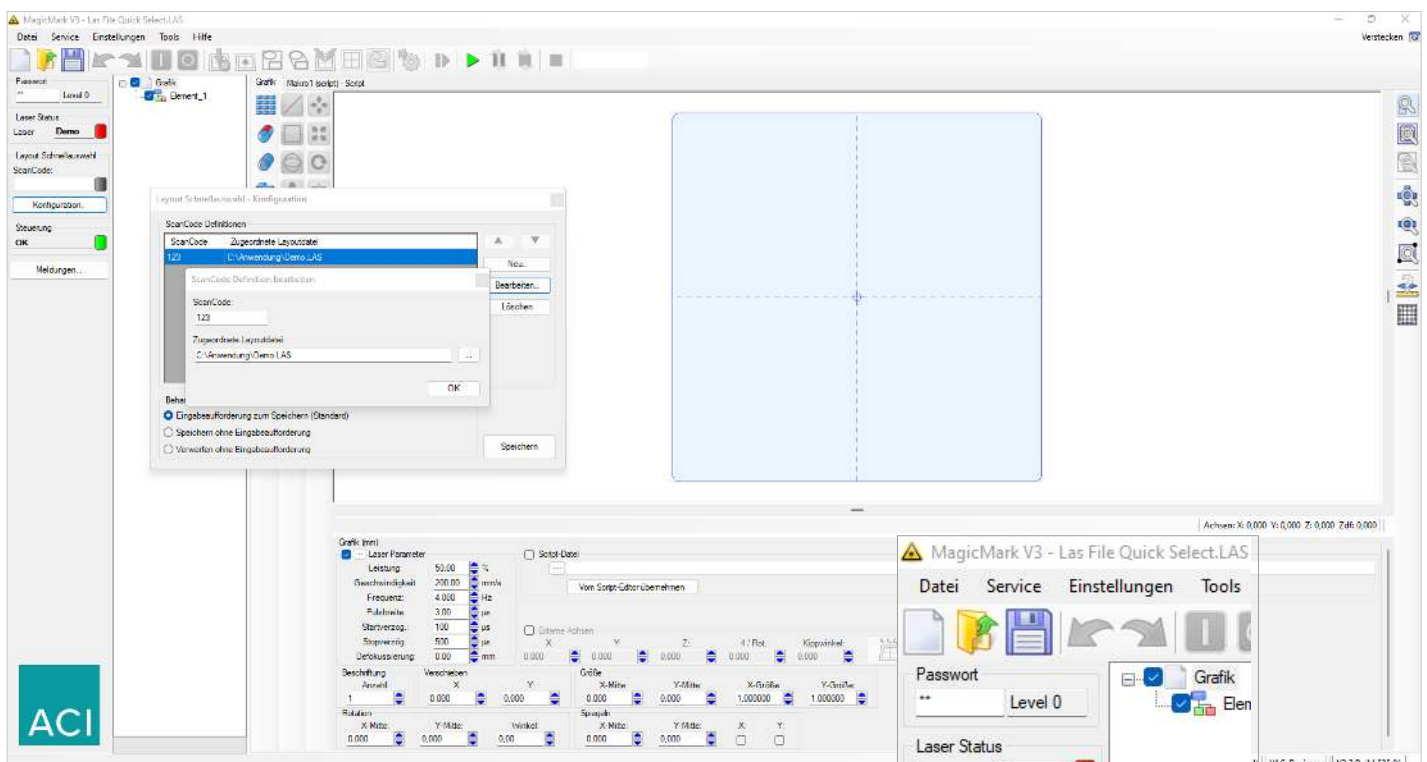


Las File Quick Select allows you to quickly load a graphics file using a code. A selection of graphics files can be accessed with a user-defined shortcut.

Key facts

- 1 Layout quick selection
- 2 Hand scanner-based loading of files

This plugin increases the efficiency of the workflow and ensures greater process reliability. Reading back a predefined scan code using a hand scanner ensures that the correct graphics file is used for the marking job.

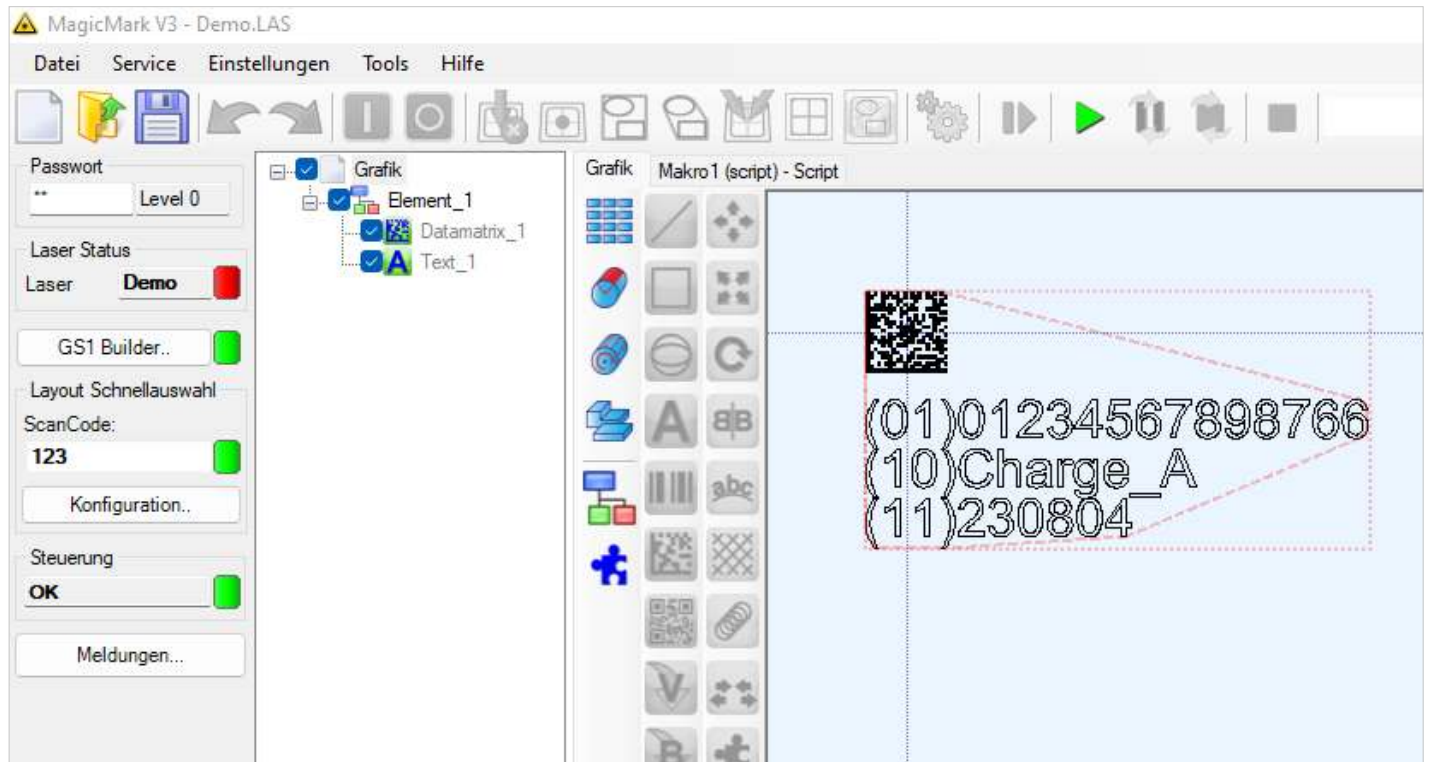


Configuration menu for the scan code, defining the file link

Retrieving the graphics file by entering or reading back the predefined code

Las File Quick Select

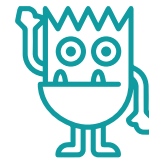
Layout quick selection



Loading the saved graphics file

Character-to-DXF

Character encoding

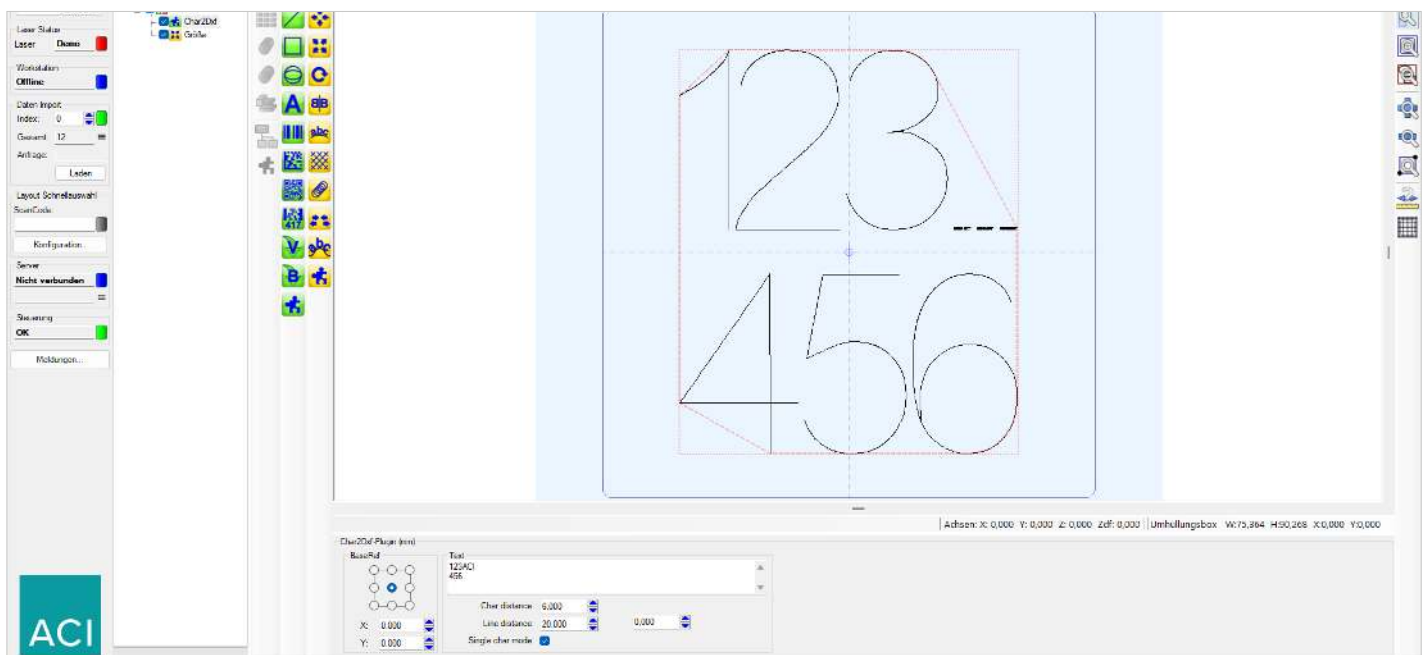


Magic Mark uses the standard fonts installed on the Windows PC (TTF and OTF) and user-defined fonts. The Character-to-DXF plugin increases the flexibility in choosing characters. Customised characters, such as fonts, symbols or even graphics, can be output as DXF files in Magic Mark using the Character-to-DXF plugin.

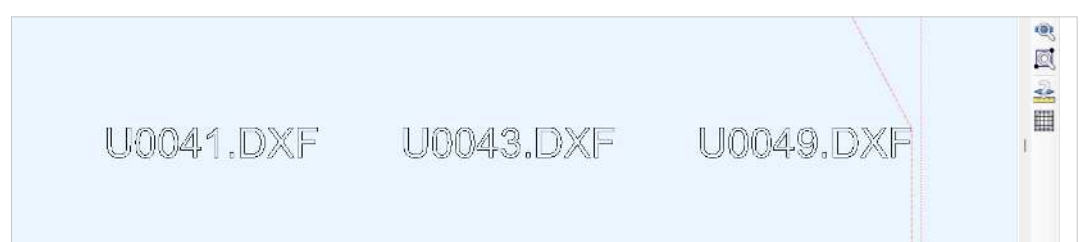
Key facts

- 1 Alternative output of customised characters in DXF format instead of a TrueType font
- 2 Flexibility in choosing characters

The required characters are stored as a DXF file with a Unicode in the file name in the plugin folder. The encoded characters can then be called up and output via the Magic Mark text input field. The DXF files can be modified by the user at any time.



Calling up encoded characters via the Magic Mark text input field



The file name of unencoded characters is displayed as Unicode

Text Path

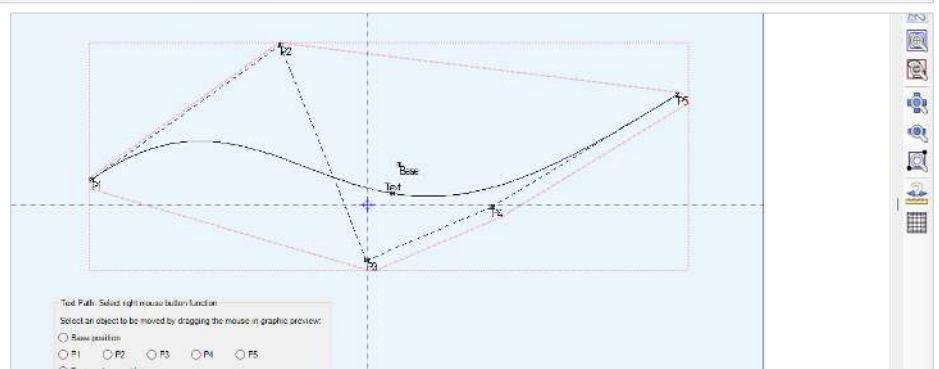
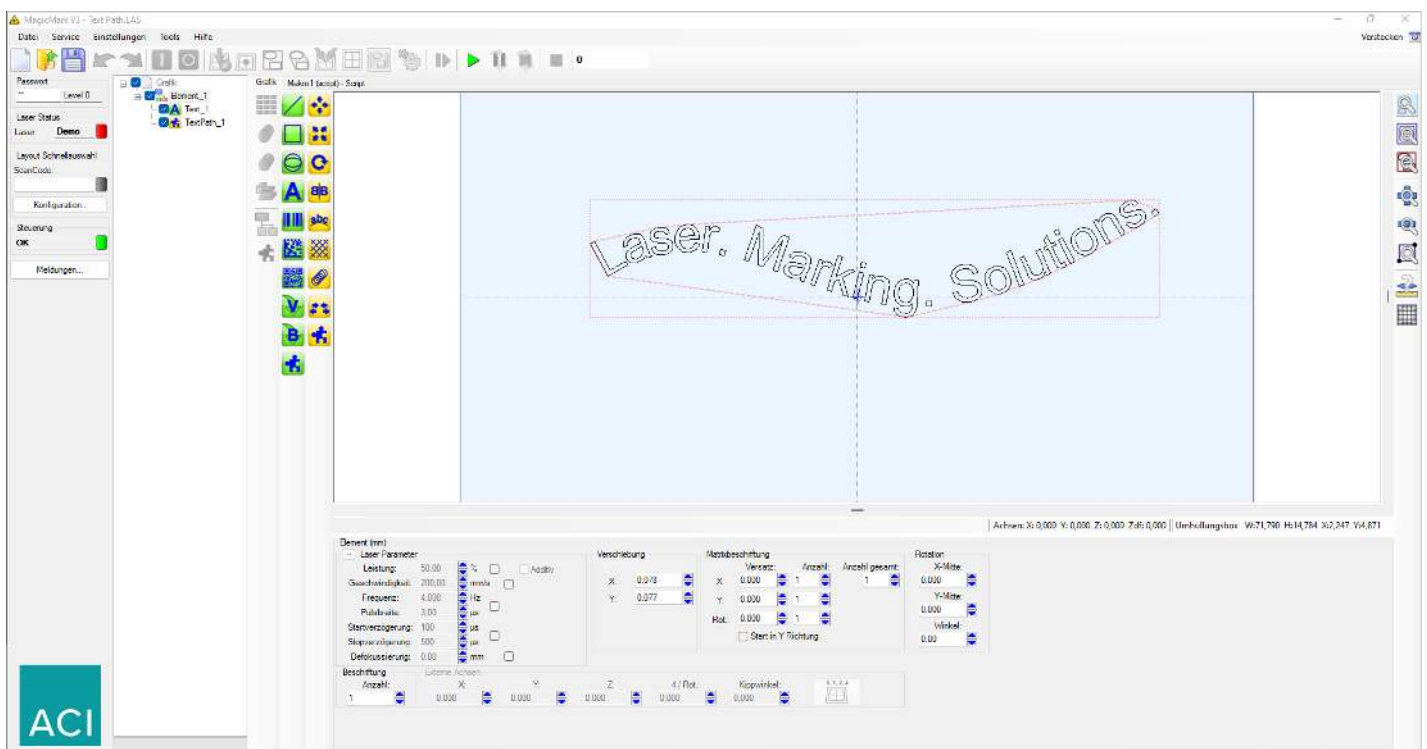
Text alignment



The Text Path modifier can be used to align text to paths. The Text Path can be edited with control points (3 to 5). These can be added to the path and moved individually. Each control point has an x-y coordinate, which can be changed numerically in the parameter area or by clicking the mouse in the preview of the graphics area. Layouts can be created and modified directly in Magic Mark.

Key facts

- 1 Aligning text to paths
- 2 Application: Mainly jewellery marking, e.g. engraving rings



OCR plugin

Semi OCR font

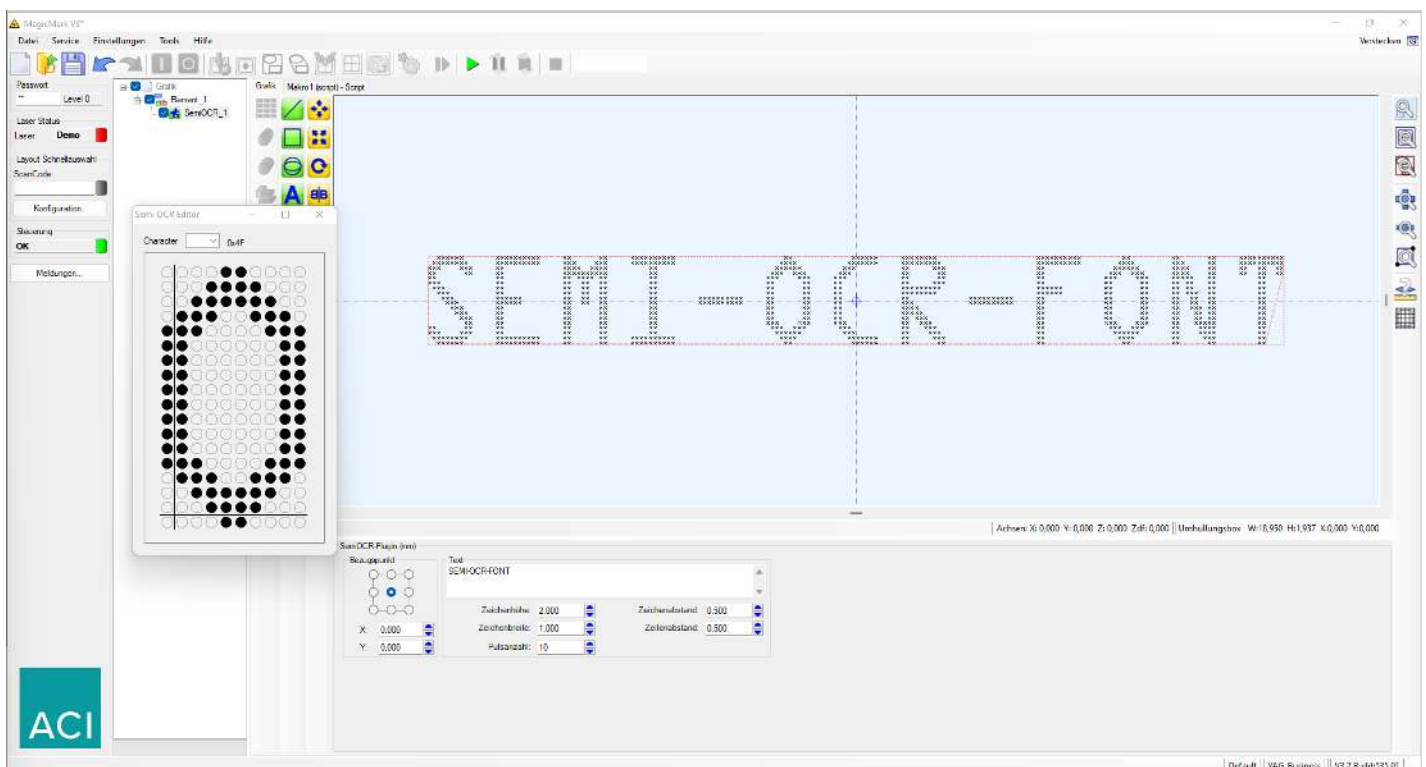


Using the OCR plugin, the Magic Mark marking software can output SEMI OCR font on the basis of dots rather than vectors. This may be necessary if it is not possible to laser vectors due to the material or if lasering leads to poor quality results.

Key facts

- 1 SEMI OCR font character set
- 2 10x18 double density
- 3 Application: Wafer marking

The origin of this matrix is where the "0-0" lines intersect; it is centred among four dots (dot matrix format). Single-density mode places the matrix origin at the centre of a single dot. In double-density mode, the SEMI OCR font uses a matrix with 10 horizontal and 18 vertical dots.



The plugin icon in the graphic toolbar can be used to insert an OCR object (Semi OCR) within an element branch.



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.

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