MEGAFLEX
The Marking Company
trotec / Gold Partner

# rayjet
# U-lasers




**Everything you need for efficient and easy laser marking**

www.rayjetlaser.com

# Developed for Your Needs









Precise marking – even with the smallest font sizes



Marking in recesses thanks to long focus distance



Permanent marking by re-colouring of plastics



Marking individual individual pieces

With the laser markers of the U series you can mark individual single pieces as well as small and medium series quickly and easily. Thanks to the maintenance-free fiber laser source, plastic can be recolored and metal permanently marked directly – without the use of sprays or pastes.
No matter if data matrix codes, serial numbers or smallest fonts – with the Galvo Markers engravers, job shops and machine builders are able to easily mark components, type plates or tools - even in hard-to-reach areas. The permanent marking of max. 190 x 190 mm enables complete traceability. Advertising materials such as ballpoint pens or USB sticks are individually marked with logos or names.

Both models of the U series are optimized for manual feeding and convince by their compact design. The U300 is a class 2 laser desktop workstation, so no safety precautions are required. The U50 - an open system of laser class 4 – can be positioned at will and thus also marks larger or bulky components. Variable data – no matter whether codes, consecutive numbering or names – can be lasered onto your workpieces in no time at all thanks to UMark. The intuitive marking software is easy to use. The U Series products are equipped with high-quality optical elements and scanners - both components ensure precisely marked parts.
The U Series was developed by Trotec. We adhere to stringent regulations regarding production processes and European manufacturing standards. With 68 locations in 18 countries, we have the largest service and training network in the industry.
In addition, our dealer network includes 113 partner companies worldwide.

# Features and Options







## Process dynamic data in the twinkling of an eye

The „UMark" software enables you to mark your information on the object in no time at all. This allows you to generate codes, import data files or graphics, and create texts.

The software also has a material database so that you can mark with the correct parameters as quickly as possible. You can also add your own parameters to this database.





## Save time with bordermarking

The special highlight of the UMarker series is the „Bordermarking" function - this allows you to project the surface to be marked or even the contour onto the component at any time, position it in real time and, if necessary, correct it with a mouse click.





## Best engraving quality thanks to high-quality optics

High-quality lenses and an excellent laser spot guarantee a perfect application result for your marking. This allows even the smallest details to be marked precisely.

Functions such as polishing and deep engraving ensure legibility even on demanding materials.

## Independent and flexible through Ethernet

Due to the newly integrated interface, the laser can be controlled with any Windows PC. This means that you are no longer tied to the functionality of an Industrial PC's. Simply plug in and laser – you will be surprised how much time you will save!







## Stay safe and productive

The marking laser works only when the door of the U300 is closed. The reason for laser class 2 is the inbuilt positioning laser that allows you to align your work materials quickly and easily. This means that no special protective devices are required - the operator can work safely at all times.

## Better environments with Atmos exhaust systems

Trotec is also setting new standards with regard to exhaust systems with the Atmos model series. As the only laser manufacturer, we produce models that are optimally adapted to the respective laser machine. A suitable exhaust system ensures the safe and clean operation of your laser machine. It reliably removes dust and gases from the processing area and, with its activated carbon filters, it filters out odors that may be generated during laser processing. The Atmos exhaust system helps to deliver the best possible marking quality. We recommend the model Atmos Nano for the combined use of a U marker with exhaust system.

# Applications and Materials

The laser machines of the U series can be used to mark countless metals and plastics. In detail, plastics are re-coloured or foamed, metals (deep) engraved or surfaces polished to ensure the best possible legibility and 100% traceability.

## Metals suitable for laser engraving and marking:

- Stainless steel
- Steel and hard metals
- Aluminum and anodized aluminum
- Precious metals
- Brass
- Copper
- Titanium and titanium alloys
- Other metals

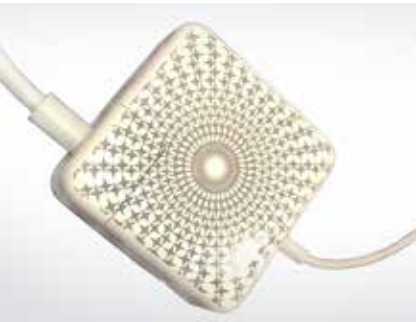














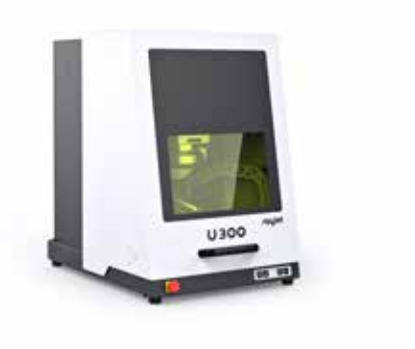




## Plastics that are suitable for laser marking:

- Polyamide (PA)
- Polycarbonate (PC)
- Polyoxymethylene (POM)
- Polyarylsulfones (PSU, PPSU)
- Polyetheretherketone (PEEK)
- Acrylonitrile butadiene styrene copolymer (ABS)
- Polyimide (PI)
- Polymethylmetacrylate (PMMA)
- Polyester (PES)
- Silicone

# Technical Data






| | U300 02F F160 | U300 02F F254 | U50 02F F160 | U50 02F F254 |
|---|---|---|---|---|
| Working area | 120 x 120 mm | 190 x 190 mm | 120 x 120 mm | 190 x 190 mm |
| Working distance (+/-0.2mm) | | | 211.6 mm | 361.6 mm |
| Loading area | 350 x 400 mm | | - | - |
| Max. height of workpiece | 171 mm | 22 mm | - | - |
| Max. loading weight | 25 kg | | - | - |
| Max. marking speed | 6 m/s | 9.5 m/s | 6 m/s | 9.5 m/s |
| Max. positioning speed | 12 m/s | 19 m/s | 12 m/s | 19 m/s |
| Z-axis | Software-controlled servo axis | | | |
| Door | manual | | | |
| System requirements | Windows compatible PC at least 1GHz and Windows 10, CD-Tray, Ethernet interface | | | |
| Supported fonts | all installed TrueTypeFonts | | | |
| Supported 1D barcodes | Australian Post; Codebar; Code 11; Code 128; Code 39; Code 93; DAFT; Deutsche Post; DPD; EAN-13; EAN-14; EAN-8; GS1; HIBC; ISBN; GS1; Pharmacode | | | |
| Supported 2D codes | Datamatrix; QR-Code; Aztec; Codeblock-F; GS1 Databar; HIBC; Maxi Code; PDF 417 | | | |
| Supported image formats | BMP; JPG; DXF; PDF; EPS; PS; TSF; DWG | | | |
| Interfaces | Ethernet; Laser-Interlock; Marking-Start, (24 VDC) | | | |
| Dimensions (L x D x H) | 445 x 851 x 653 mm | | 120 x 643 x 110 mm | |
| Weight | 56 kg | | 8 kg | |
| Weight laser rack | 20 kg | | | |

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