



THREE-DIMENSIONAL MARKING AT HIGH DEFINITION

The WR 3D marker is a high-precision laser system for the **quality three-dimensional marking of metal objects**.

The WR 3D is based on technology developed especially to create a finished product **with a smooth surface that does not require any further machining** and guarantees detailed marking of exceptional precision.



USE

Creation of moulds or dies

Perfect for creating moulds for the goldsmith industry, the WR 3D can work up to 10 times faster than other processes such as EDM or milling and produces a mould with a surface that is completely free of pores and requires no further heat treatment or polishing.

Three-dimensional marking on cylindrical surfaces

A specially designed rotary system can make deep markings even on cylindrical objects.

Marking with chromatic effects

Creation of bas-reliefs

Creation of metal stamps

Creation of jewellery with arabesque motifs



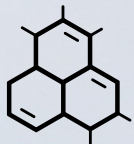
COMPATIBLE MATERIALS



Steel, hard alloys,
ferrous and non-ferrous metals

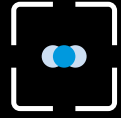


Rings and valuables



Plastics and rubber

ADVANTAGES



No margin of error

Unlike mechanical processes, the WR 3D does not require any specialist skills and always guarantees the quality of the product and the possibility of making perfectly identical moulds.



Ease of use

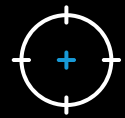
Thanks to the specially developed proprietary software and the user-friendly interface, the WR 3D is simple to use and allows even less experienced operators to perform marking in a few clicks.



Speed

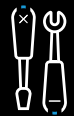
Up to 10 times faster compared to other processes such as EDM or milling.

No need for subsequent heat treatments or polishing.



Quality and precision

Millimetric precision with perfectly defined details thanks to a special technology that consists of the gradual removal of very thin layers of material with a focused laser beam with a repeatability of 0.5 micron.



Minimal maintenance

IPG laser with a life of 100,000 hours, does not require maintenance or consumables.



Marking on a variety of materials

Possibility of marking on steel, brass, copper, aluminium and other metals, but also plastics, rubbers and other materials.



TECHNICAL SPECIFICATIONS

Model	Marker WR 3D	Power	110 - 220 V, 50/60 Hz (1P + N + PE)
Type of laser	Ytterbium Impulse Fibre MOPA Laser	Max consumption	700 W
Pulse power	30 W	Weight	110 Kg
Recommended processes	Marking graphics and texts in vector and raster, barcodes	Spot diameter	50 µm
Type of material that can be marked	All metals, plastic, rubber	Optional accessories	Rotary motor with lathe-type spindle
Focal lenses available	180 mm		
Marking area	130×130 mm		
Type of Z axis	Electrical with manual and software control		
Stroke of Z axis	220 mm		
Laser pulse speed	Up to 10 m/sec		
Frequency	1.6 kHz - 2000 kHz		
Pulse energy	0.7 mJ		
Pulse duration	2, 4, 8, 14, 30, 50, 100, 200 ns		
M2	2		
Safety class	Class 4		
Software	Maxigraf-Cube software for PC/Notebook, Ethernet		
Hardware & software resolution	3 microns		
Cooling system	Forced air		
Wave length	1064 nm		



DIMENSIONS

	Hatch closed	Hatch open
Height	800	1450
Width	680	680
Depth	840	840

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