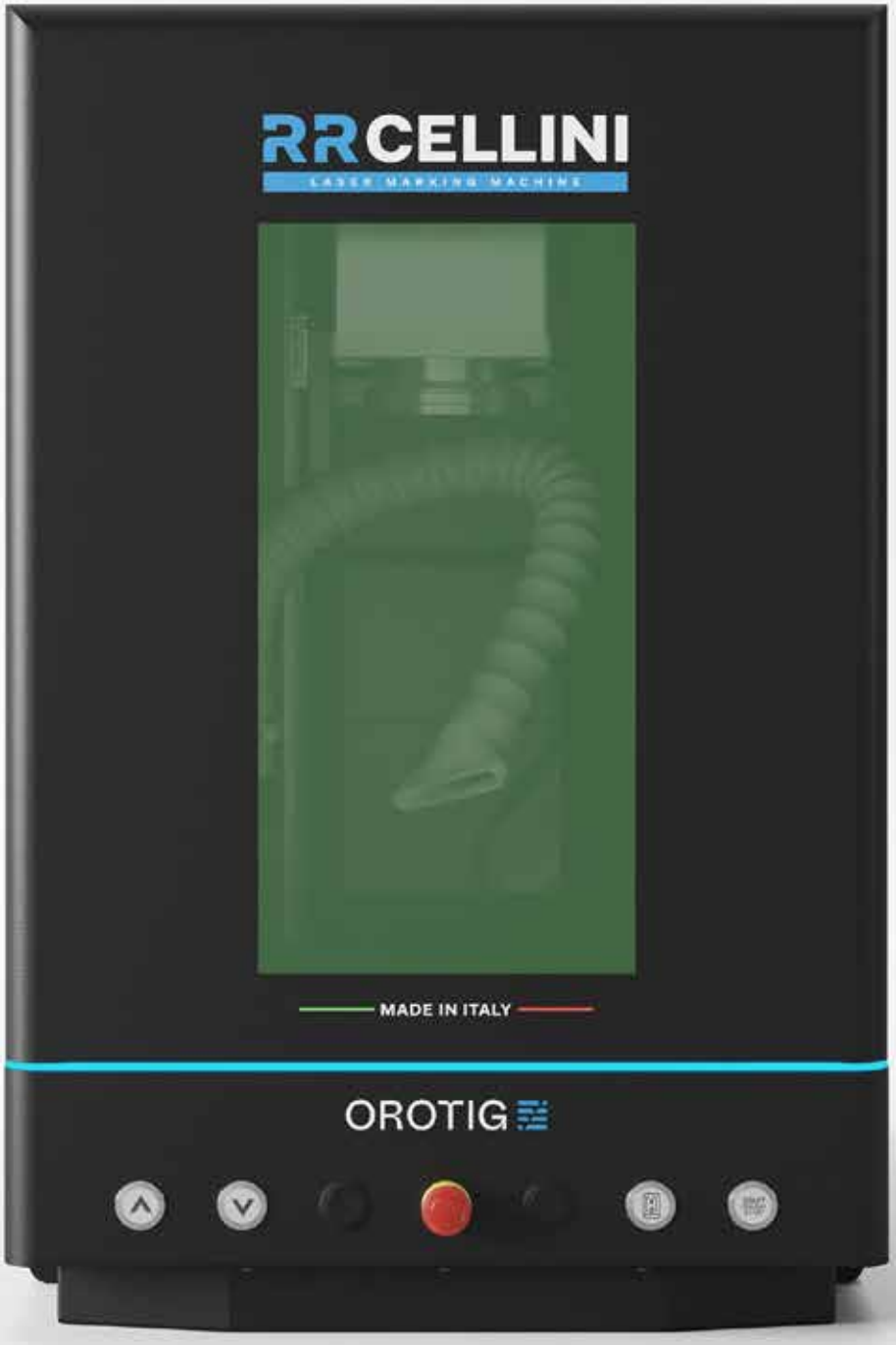
OROTIG



MARKER - **RR CELLINI**

RR CELLINI

High definition three-dimensional marking

The RR Cellini engraver is a high-precision laser system for the **high-quality 3D marking of metal objects**.

The RR Cellini is based on a technology especially developed to create a finished product **with a smooth surface that does not require any further machining** and guarantees an exceptional precision and definition of the details.

Use

Creation of moulds or dies

Perfect for creating moulds for the goldsmith industry, the RR Cellini can work up to 10 times faster compared to 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.

Marking with chromatic effects

Creation of bas-reliefs

Creation of metal stamps

Creation of jewellery with arabesque motifs

RR CELLINI

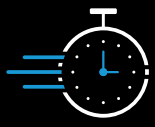
Advantages

No margin of error

Unlike mechanical processes, the RR Cellini does not require any special skills and always guarantees the quality of the finished 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 RR Cellini is simple to use and allows even less experienced operators to perform marking in just a few clicks.

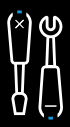


Speed

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

High 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 1 micron.



Minimal maintenance

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

Marking on all metals

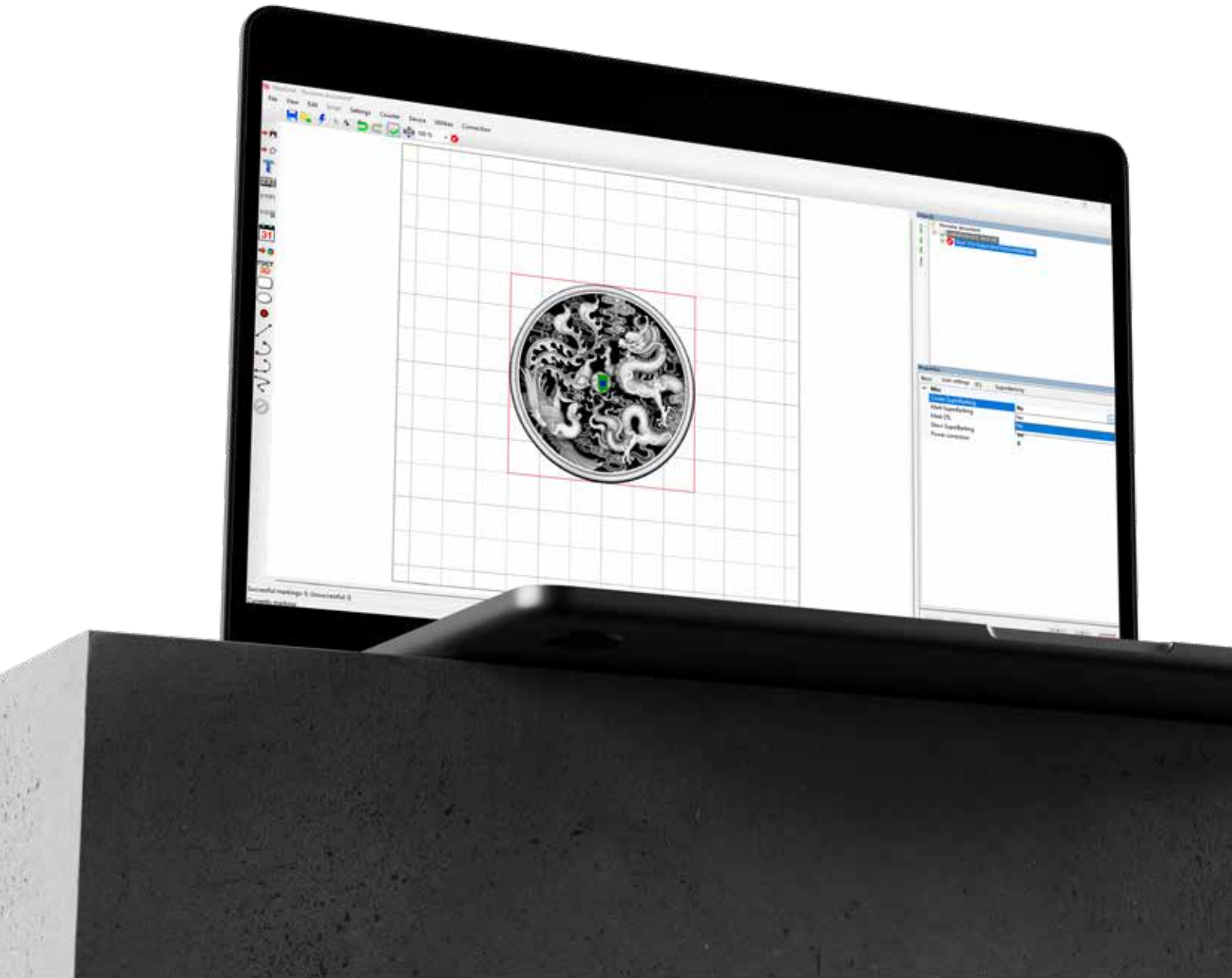
Standard marking is available for all metals, and 3D marking is applicable to specific alloys of yellow gold, rose gold, silver, titanium, copper, tungsten carbide (widia), bronze, brass, steel, and aluminum.


RR CELLINI
MADE IN ITALY
OROTIG
800 mm (with hatch open 1450)
680 mm
840 mm

Orotig software: high-definition marking in just a few clicks

Thanks to the proprietary software specially developed for RR Cellini, **high-definition 3D marking will be a simple and intuitive process** that anyone can complete with no training.

More experienced operators will have access to more sophisticated tools, such as the parameter board, which allows to test and save **the perfect parameter settings for each type of material.**



3D marking in a few steps

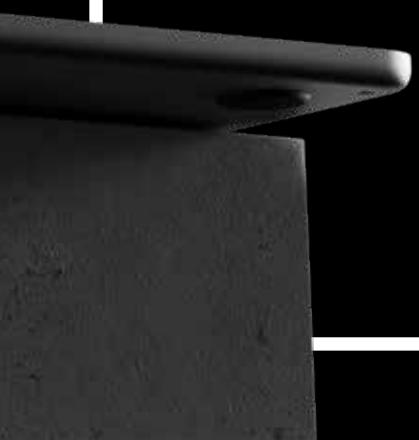
Even less experienced operators can perform 3D marking in a few simple steps: just select the material to be processed, load the file, go to focus on the workpiece, and you can start marking.

Perfect parameters for each material

RR Cellini's software makes it easy to find the ideal marking parameters for a specific material, thanks to a matrix that allows you to experiment with different combinations of frequency, power and speed and then save the perfect configuration for that material.

MOPA source for special processing

Thanks to the MOPA laser source, with waveforms that allow the duration of the laser pulse to be modulated, RR Cellini makes it possible to achieve special effects on metal, such as colored marking.



Accessories

Rotary & spindles

The Orotig rotary motor, in combination with 4 different types of spindle, makes it easy to mark not only the **inside or outside of rings and bracelets**, but also **irregularly shaped bracelets**.
The **stepper motor** and **graduated scale** allows the software to set the degree of inclination and position itself with ease and precision.

3 in 1 clamp

The practical 3 in 1 clamp is a single accessory that can be used to **clamp the most disparate of workpieces**: from sheets of metal to medals and parts of irregular shape. The 3 in 1 clamp is flexible in terms of both shape and size: it can be used for workpieces measuring up to 130 × 130 mm.

Tilting angle support

Useful for fast marking of rings and bracelets, the angle bracket **is manually tilted with reference to a graduated scale** to ensure repeatability of the machining.

Spindle for irregular rings

Engineered for engraving rings with irregular shapes and settings of various sizes, this spindle ensures precise markings even on uneven surfaces, delivering high-accuracy results for complex designs.

Spindle for bracelets

Specifically designed for engraving regularly shaped bracelets, this spindle supports diameters up to 80mm, making it ideal for the efficient and precise marking of a wide range of bracelet sizes.

OTHER ACCESSORIES

Desktop PC

Telecentric lens

Focus comparator tool for telecentric lens

HW17 vacuum system

TBH BF 100 R vacuum system

TBH LN 230 vacuum system

Cyclone and prefilter for TBH BF 100 R and LN 230 vacuum systems

External control for vacuum system

Technical specifications

LASER TYPE	Ytterbium Impulse Fibre MOPA Laser
LASER SOURCE (NOMINAL POWER)	30 W
FOCAL LENSES	180 mm
MAX ENGRAVING AREA	130×130 mm
WORKTOP SIZE	422×320 mm
SPOT DIAMETER	50 µm
Z-AXIS TYPE	Electrical with manual and software control
Z-AXIS STROKE	220 mm
SPEED RANGE	Up to 10 m/sec
PULSE FREQUENCY	1.6 kHz - 2000 kHz
MAX PULSE ENERGY	0.7 mJ
PULSE WIDTH	2, 4, 8, 14, 30, 50, 100, 200 ns
BEAM QUALITY	≤ 2 M^2
REPEATABILITY	1 micron
LASER CLASS	Class 1 (Closed), Class 3R (Open)
SOFTWARE	Via PC/Notebook
HARDWARE & SOFTWARE RESOLUTION	3 microns
COOLING SYSTEM	Forced air
WAVE LENGTH	1064 nm

POWER SUPPLY	230 Vac ± 10%, 50/60 Hz, 1P + N + PE, 0.5 kW
MAX CONSUMPTION	700 W
WEIGHT	71 kg
TYPES OF MARKABLE MATERIALS	All metals (standard marking) Specific alloys of yellow gold, rose gold, silver, titanium, copper, tungsten carbide (widia), bronze, brass, steel, and aluminum (3D marking)