OROTIG

MARKER - **WR 23**

A COMPACT, EASY-TO-USE MARKING LASER BASED ON OROTIG TECHNOLOGY

WR 23, the first in the new generation of Orotig markers, is **a compact laser of simple design** that stands out for its superior quality of marking and attention to detail.

This **fast, safe and precise** laser is ready to become the pivotal way for your business to offer customers an immersive experience for personalising their jewellery in real time, and can be smoothly integrated in the workflow of your company.

Compact

The reduced size and **innovative helmet-style opening of the hatch** make the WR 23 a compact laser ideal for even the smallest spaces.

Safe

This is a Class 1 laser device. It has a special CE-certified inspection window, which allows safe marking without the need for goggles, and sensors that inhibit operation when the hatch is open, guaranteeing total safety for operators and customers.

Easy to use

Expert operators? No need!
Thanks to the Wizard interface, even the least experienced operator can perform marking in just a few clicks.

Low energy consumption

With a maximum power consumption of only 300 W, the Orotig WR 23 marker is one of the most eco-friendly on the market.

Look for this wording on the inspection window of your marker to check that it complies with the CE safety regulations for class 1!

LIVE PREVIEW

FOR MORE PRECISE POSITIONING ON THE WORKPIECE

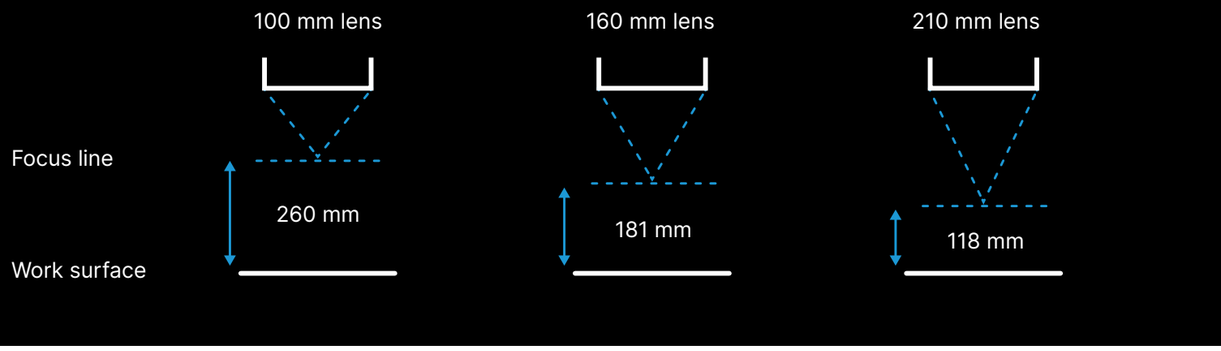
Do you want to be sure of the result before marking precious jewellery?
The integrated camera of the WR 23 allows you to **preview the desired image or text directly on the workpiece**. The operator displays the marking area on the screen and overlays the design to be marked, creating a real-time preview.

VERSATILITY

A FOCAL LENS FOR EVERY NEED

The WR 23 offers the possibility of installing focal lenses of different lengths, each able to guarantee the best marking results on various types of workpiece. In addition to the standard **160 mm** lens, one can use a **100 mm** lens, which is perfect for extreme precision and **ultra-high definition of the details**, or a **210 mm** lens, which is suitable for **larger objects** with a marking area of up to 145 × 145 mm.

With a Z axis stroke of more than 260 mm and a large work surface, it is possible to mark **rigid bracelets and necklaces up to a diameter of 118 mm** even with the longer 210 mm lens.

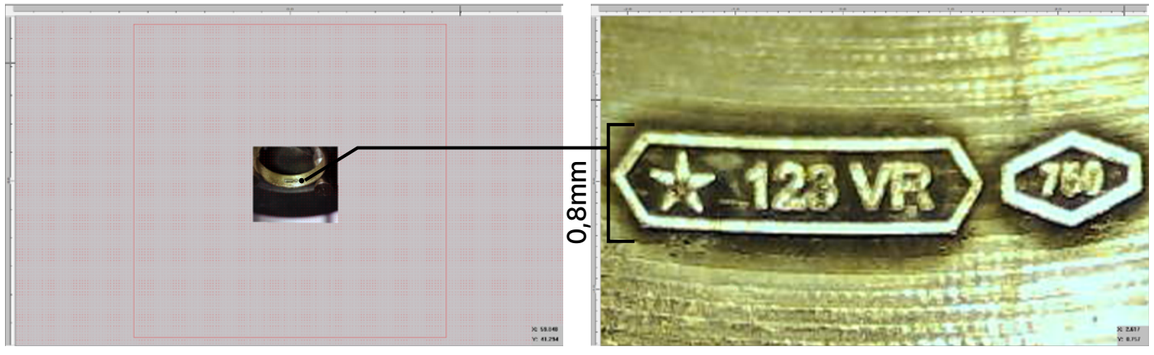


TWO BUILT-IN CAMERAS

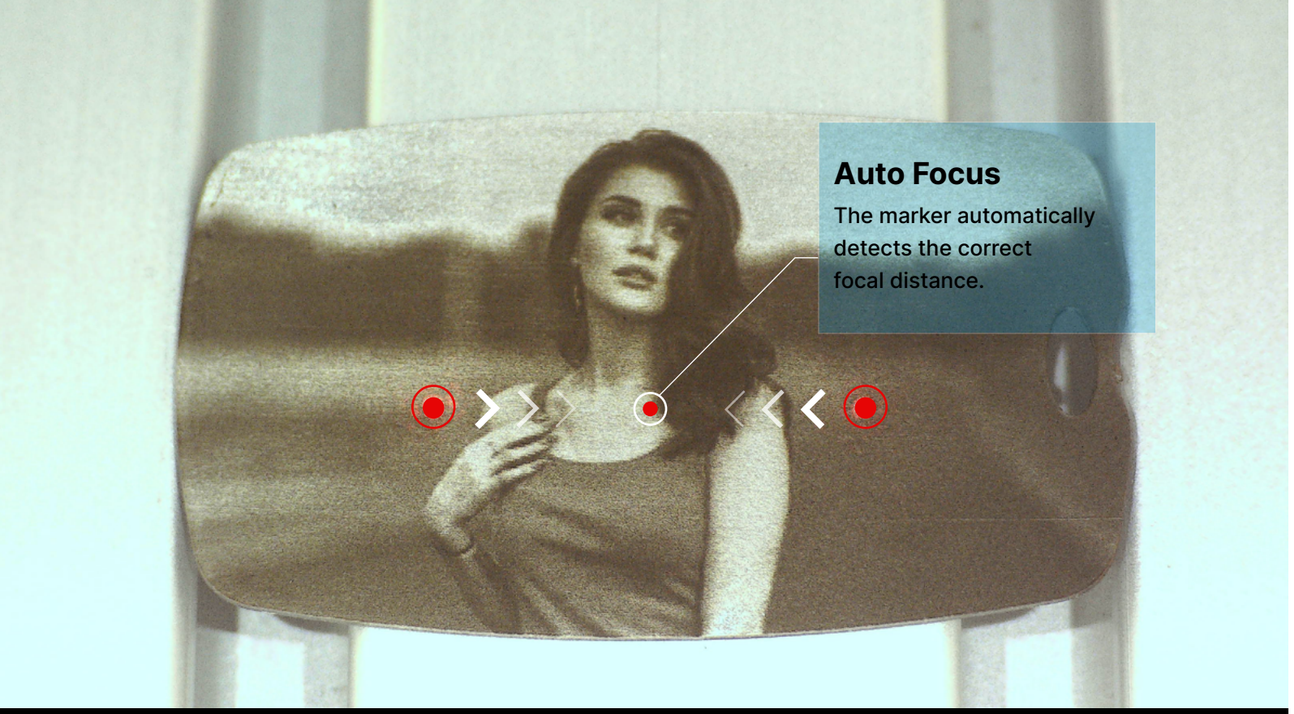
WITH ZOOM UP TO 0.5 MM

Two cameras allow perfect visibility of the workpiece: one angled camera offers a **panoramic view of the part**, while the second has powerful magnification for viewing the smallest details. The operator can **zoom right into the marking area** and position himself on the workpiece with centesimal precision, and this is particularly useful to perform very small markings.

To achieve even higher standards of accuracy, the WR 23 also offers the option of replacing the standard 12 mm lens with longer lenses (16 mm and 25 mm), which allow even greater magnification, **displaying details down to 0.5 mm in high resolution.**



Safe marking
With the WR 23, you can open the encrypted files of the Chamber of Commerce and apply a trademark on your jewellery.



AUTOMATIC FOCUSING

TO REDUCE THE MARGIN OF ERROR

The WR 23 uses new Autofocus technology for **fully automatic focusing**.
The operator simply has to place the workpiece in the marking area: the marker will then detect the height of the workpiece, automatically finding the correct focal distance.

However, it is also possible to activate manual mode and easily find the focus using the up and down arrows on the keypad or screen. Red pointers assist in focusing: when the 2 red dots join up, the workpiece is in focus and the WR 23 is ready to mark.

FOCUS CONTROL

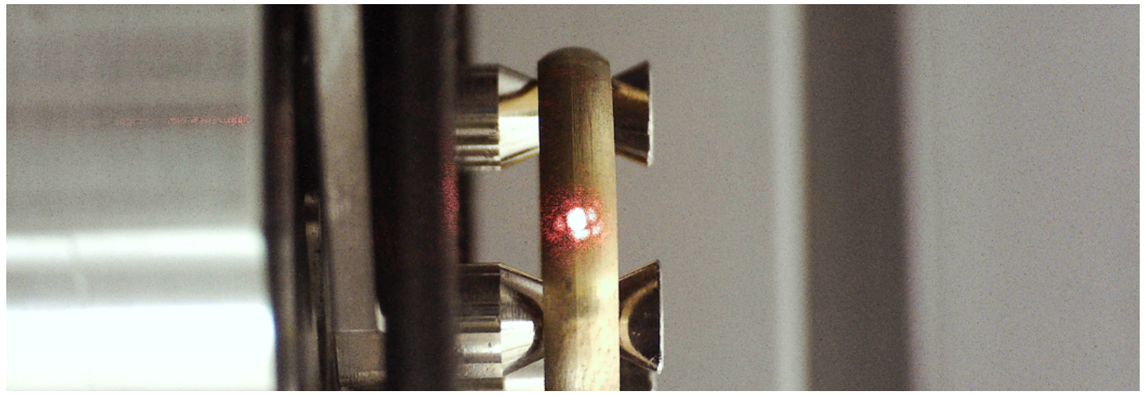
Automatic movement of the motorised Z axis can be set for marking workpieces with an uneven surface or to perform particularly deep marking. **The software adapts the focus dynamically according to the set increment.**

AUTO-CENTERED DESIGN

FOR MORE PRECISE POSITIONING ON RINGS AND BRACELETS

When marking on the inside or outside of rings and bracelets, it is often difficult to perfectly center the texts being marked, with the risk of inaccurate markings on valuable jewellery.

WR 23 offers a function specially developed for our spindles that allows the text to be **automatically centered on the ring to be marked:** you simply need to set parameters such as ring diameter and thickness and the software not only automatically finds the correct focal distance, but also moves the text to be marked by the necessary increment to perfectly center it on the workpiece.



EASY DUST RECOVERY

FOR CLEANING THE EXTRACTION SYSTEM IN MOMENTS

The extraction system of the WR 23 has been designed to optimise removal of particles during the marking of precious metals. The two flexible hoses allow the suction nozzles to be positioned as close to the workpiece as possible. **The central hose is straight and simple in design and can be cleaned with a rag without detaching it from the machine**, or it can also be easily removed from the back without having to dismantle the marker.

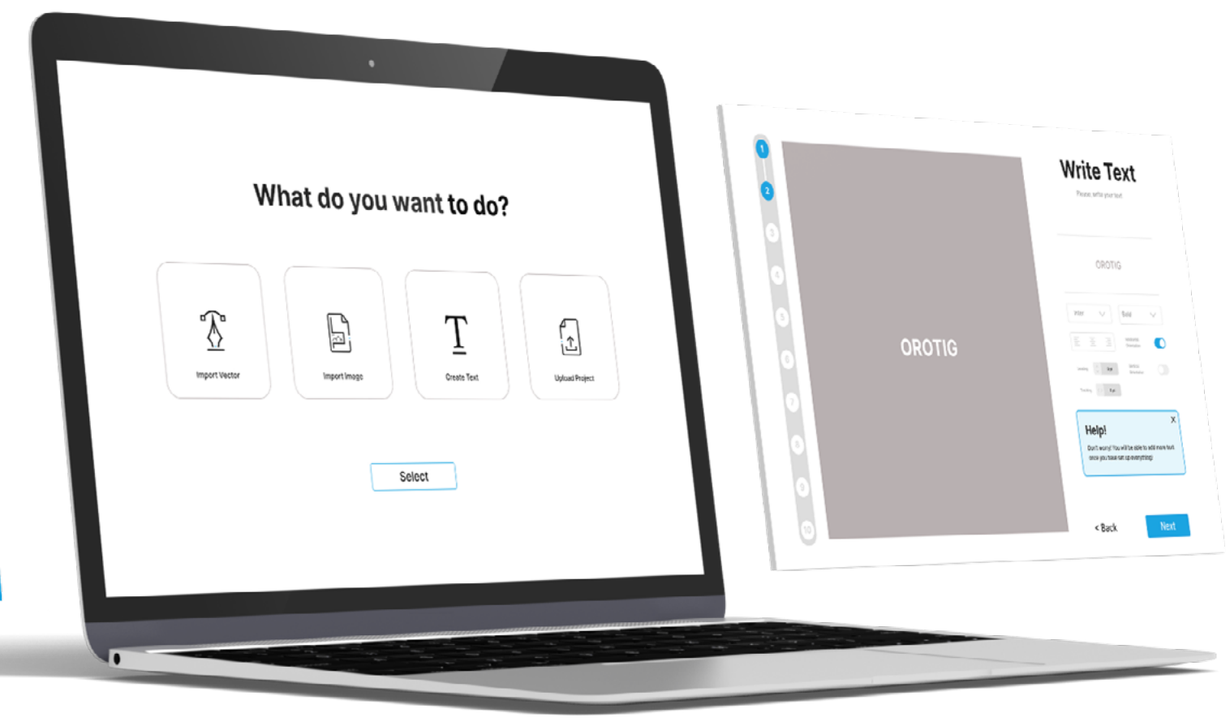
Access from the back for easy cleaning of the hose

WIZARD INTERFACE

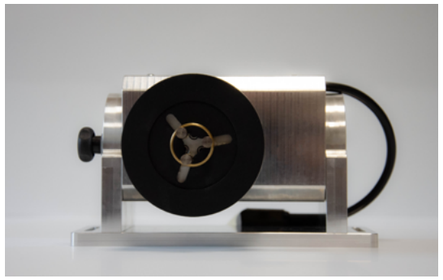
FOR PROFESSIONAL MARKING IN JUST A FEW CLICKS

The new wizard interface allows even inexperienced operators to perform marking in just a few clicks and with no margin for error.
The **wizard** guides the operator intuitively through the process, allowing him to import an existing file or create text from scratch.

The operator can set the marking parameters himself or choose from one of our **preset programs**, specially designed by our technicians to achieve the best results for the type of metal and work in hand, to enable even novices to carry out professional marking.



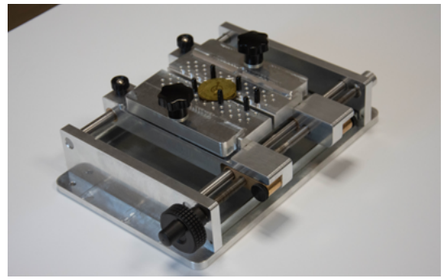
ACCESSORIES



Internal/external ring spindle

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** and even **tubular bracelets with a diameter up to 27 mm**, thanks to its central through-hole.

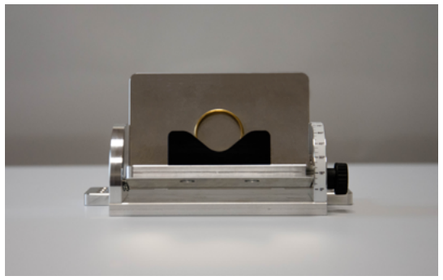
The **stepper motor** and **graduated scale** allows the software to set the degree of inclination and position itself with ease and precision.



3 in 1 clamp

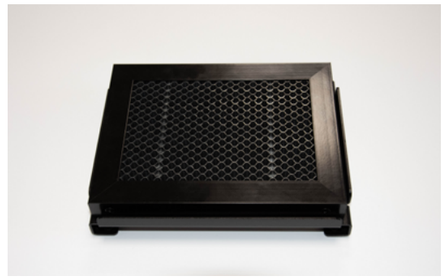
The practical 3 in 1 clamp is a single accessory that can be used to **clamp the most disparate of workpieces**: from sheets of metal to medals and parts of irregular shape.

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 bracket

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.



Honeycomb bracket

The tray with honeycomb bracket is a useful accessory especially for processes that require **cutting**.

In addition to protecting the work surface from the action of the laser, the honeycomb bracket allows less overheating of the workpiece and for better quality of machining.

DATI TECNICI

Model	Marker WR 23
Type of laser	Diode pumped fibre (Yb) LASER
Power ranges available	30 W, 50 W
Recommended processes	Marking, photo engraving, cleaning, excavation, cutting
Type of material that can be marked	All metals, ceramics, some plastics
Focal lenses available	100 mm, 160 mm, 210 mm
Marking area	60×60 mm (with 100 mm focal lens) 110×110 mm (with 160 mm focal lens) 145×145 mm (with 210 mm focal lens)
Type of Z axis	With stepper motor that can be controlled by the software and at the pushbutton control panel (SCAPS only)
Stroke of Z axis	263 mm
Max dimensions of workpiece (LxWxH)	326 × 260 × 260 mm (with 100 mm focal lens) 326 × 260 × 181 mm (with 160 mm focal lens) 326 × 260 × 118 mm (with 210 mm focal lens)
Max weight of workpiece	20 Kg
Speed	Up to 8000 mm/sec
Frequency	37-600 Khz (30W) / 40-600 kHz (50W)
Pulse energy	0.8 mJ 37 kHz (30W) / 1.25 mJ 40 kHz (50W)
Pulse duration	200 nS (30 W - 50 W)
M2	<1,5 (30W) / <1,8 (50W)
Safety class	Class 1 (hatch closed), Class 3R (hatch open)
Software	SCAPS (optional EZ CAD)

Cooling system	Forced air
Wave length	1064 nm
Power	115-230 V ±10% 50-60 Hz
Max consumption	300W
Weight	45 Kg
Spot diameter	35 µm
Accessories included	• Rotary with inner spindle for rings and bracelets, outer spindle for rings and bracelets, outer spindle for irregular bracelets, spindle for tubular bracelets of a diameter up to 27 mm • 3 in 1 clamp • Honeycomb bracket for cutting • Tilting angle bracket • Pedal for starting marking

DIMENSIONIS

	Hatch closed	Hatch open
Height	608	1028
Width	390	390
Depth	597	667