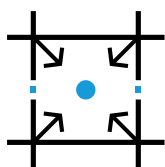




The Orotig technology in a compact, easy-to-use marking laser

Canova, 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 Canova a compact laser ideal for even the smallest spaces.



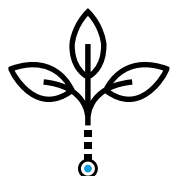
Safe

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 **new proprietary software**, 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, Canova marker is one of the most eco-friendly on the market.

100-K0242-3-402x213
D AB6+IRM AB7 (OD7+) >880-900
D AB6+IRM AB7+M AB8 (OD8+) >900-1070
DIRM AB6 (OD6+) >1070-1075
PF CE
S/N: 22011059



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



MARKo: fast and intuitive integrated software

FOR MARKING IN A FEW MINUTES

Thanks to the **new proprietary MARKo software**, even inexperienced operators can **perform marking in just a few clicks and with no margin for error**.

The **guided procedure intuitively assists the operator throughout the entire process**, allowing them to import an existing file or create text from scratch.

To enable even novices to carry out professional marking, 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.



GUIDED MARKING

Guided paths to guide the operator through the various steps and reduce the margin for error.

ANIMATED TOOLTIPS

Animated tooltips to explain the functionalities of the software even to those using the marker for the first time.



Automatic focusing

MINIMIZED MARGIN FOR ERROR

Orotig has developed an innovative autofocus system that allows for **completely automatic focusing on the piece to be marked.**

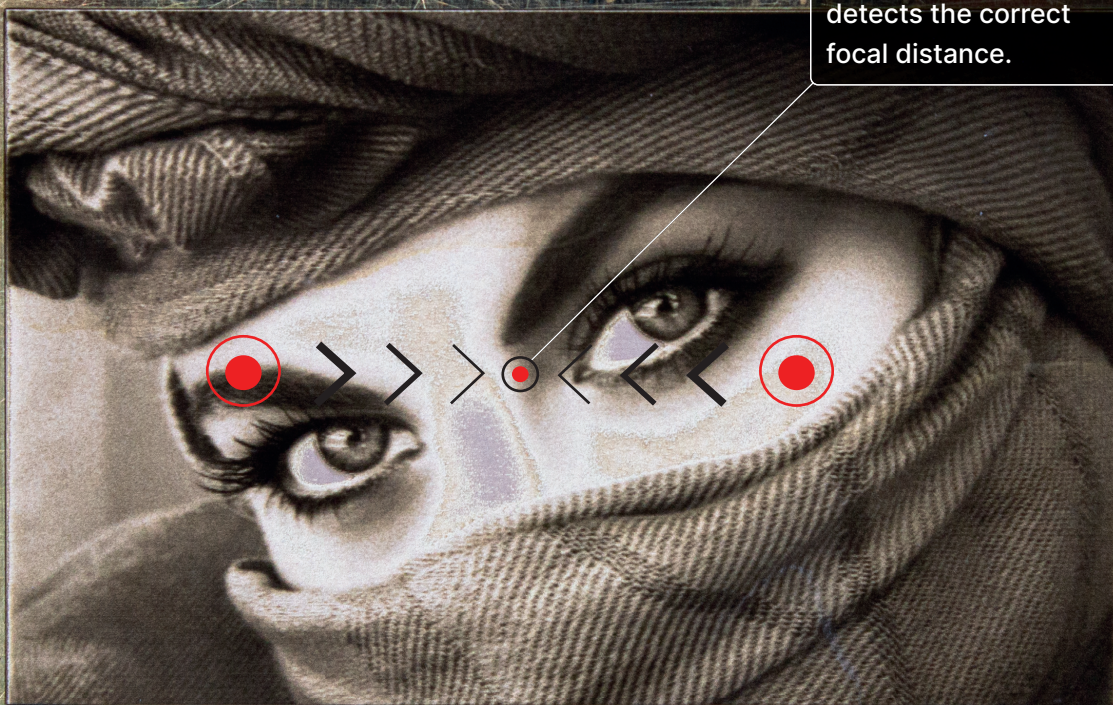
Thanks to the depth camera equipped with sensors similar to those used in the automotive industry for autonomous driving systems, Canova scans the field of view, accurately measuring the distance of objects positioned on the work surface. This measurement enables the movement of the head along the Z-axis, **achieving the correct focal distance within seconds.**

This consistently guarantees high-quality results, eliminating human error and enabling perfect focusing even for less experienced operators. They will achieve precisely defined markings without requiring specific training.

Unlike most autofocus systems in the market that focus solely at the center of the work surface, perpendicular to the marking head, **Canova allows focusing on pieces or parts of objects in peripheral areas of the work surface.** This feature facilitates marking on larger-sized items such as knives or frames.

Auto Focus

The marker automatically detects the correct focal distance.





FOCUS CONTROL

When dealing with pieces having irregular surfaces or requiring particularly deep markings, **the motorized Z-axis allows for the automatic adjustment of the axis movement during marking.**

The software **dynamically adapts the focus based on the predefined increment.**



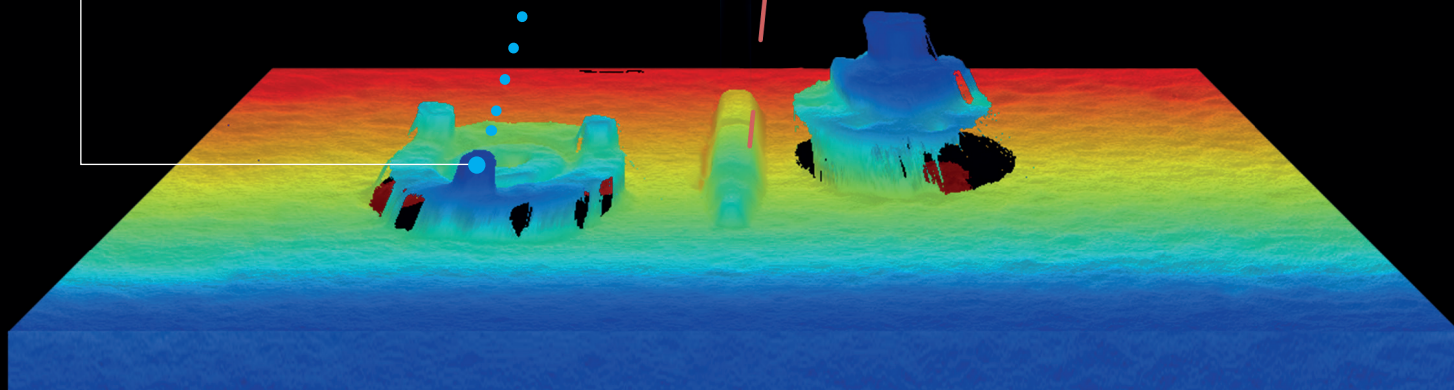
VERSATILE FOCUS

The new focusing system **makes it possible to focus even in the peripheral areas of the working surface.**



DEPTH CAMERA

Thanks to the depth camera, Canova scans the field of view by measuring the distance of objects placed on the working surface.



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, Canova 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.**

Live preview

FOR MORE PRECISE POSITIONING ON THE WORKPIECE

Do you want to be sure of the result before marking precious jewellery?

The Canova integrated camera 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.

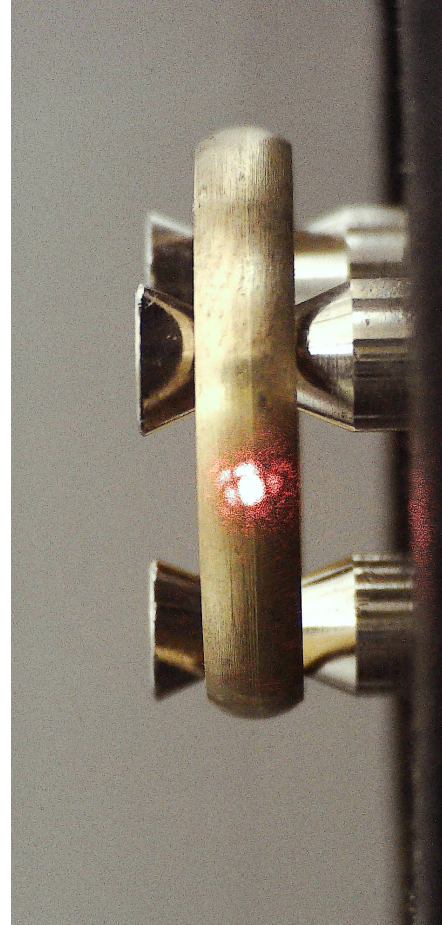


Auto-centered design

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.

Canova offers a functionality 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.

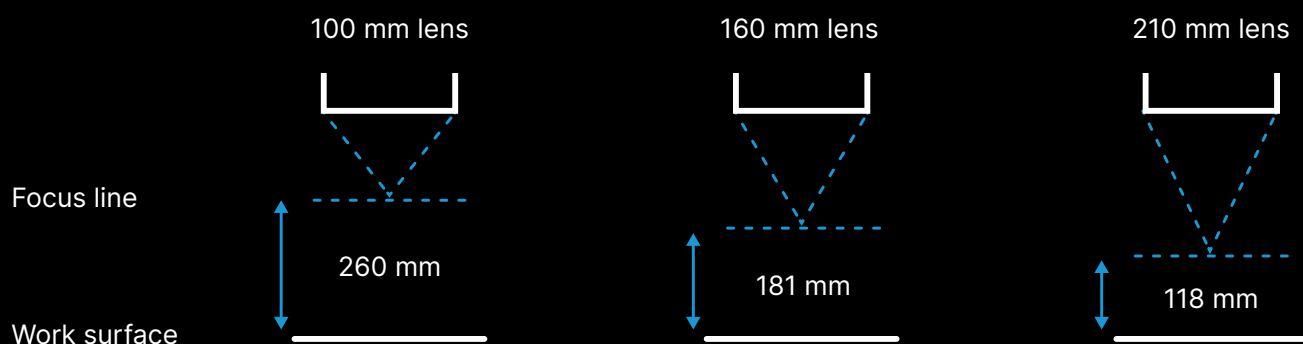


Versatility

A FOCAL LENS FOR EVERY NEED

Canova 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.



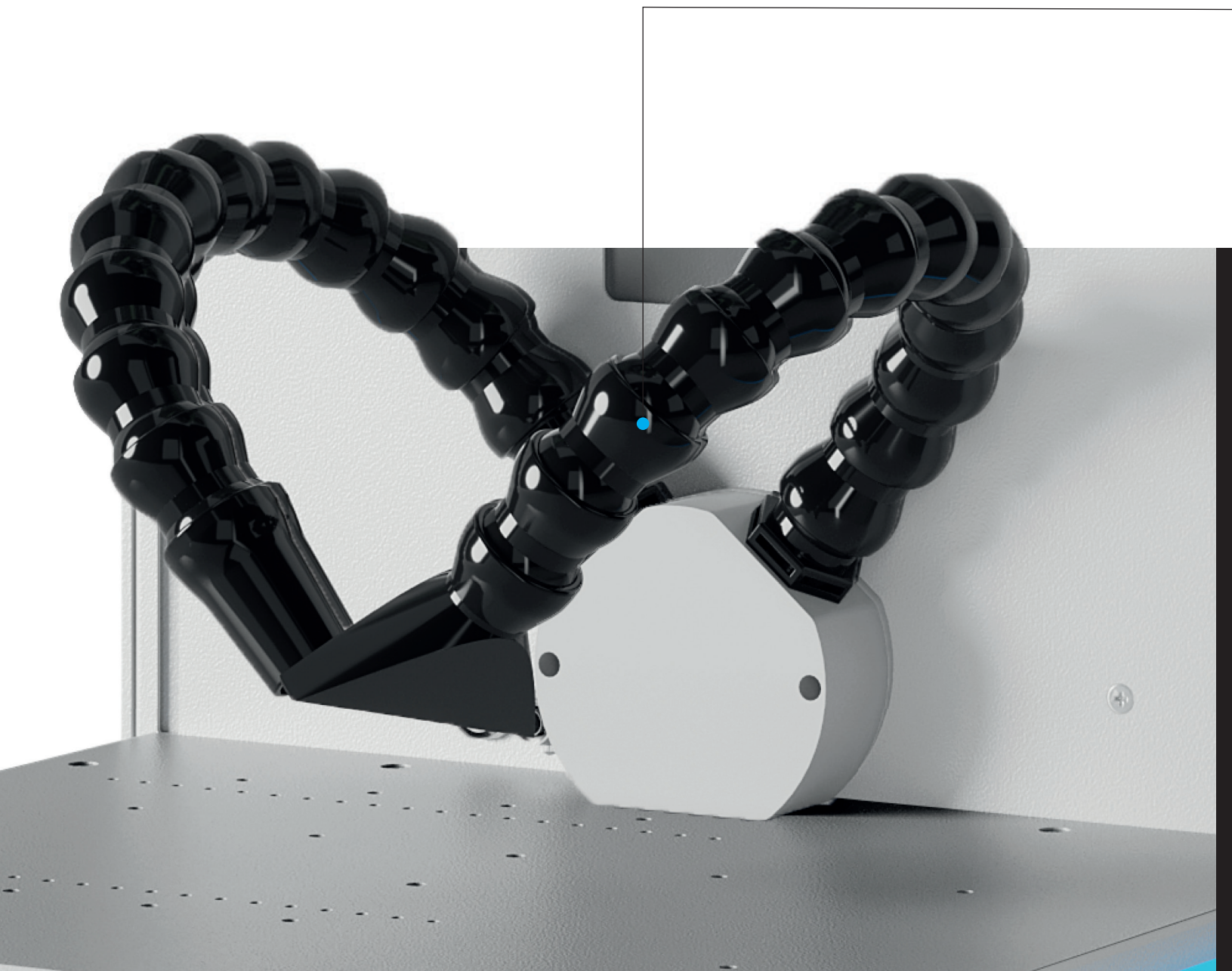
Easy dust recovery

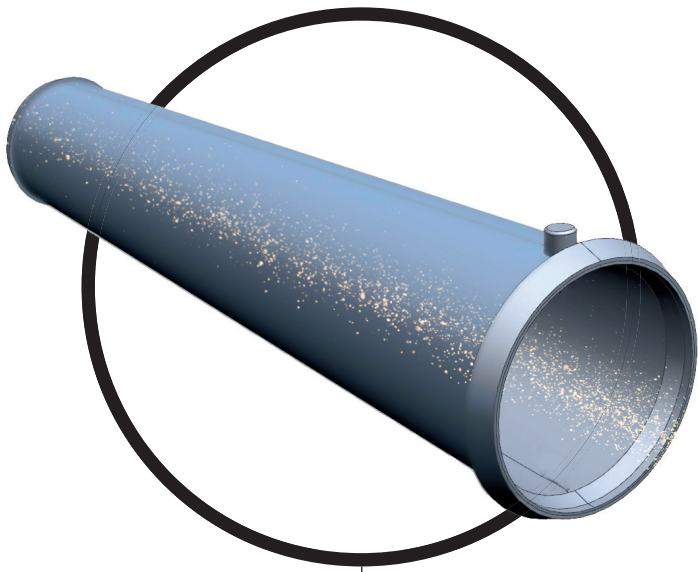
FOR CLEANING THE EXTRACTION SYSTEM IN MOMENTS

The extraction system of the Canova has been designed to optimise dust recovery 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 disassemble the marker.





Easy cleaning facilitated by the design of the central tube that **allows it to be easily removed from the back without the need to disassemble the marker.**



Small marking

Canova, enabling high-definition markings even on very small designs, allows goldsmiths to apply the trademark on jewelry.



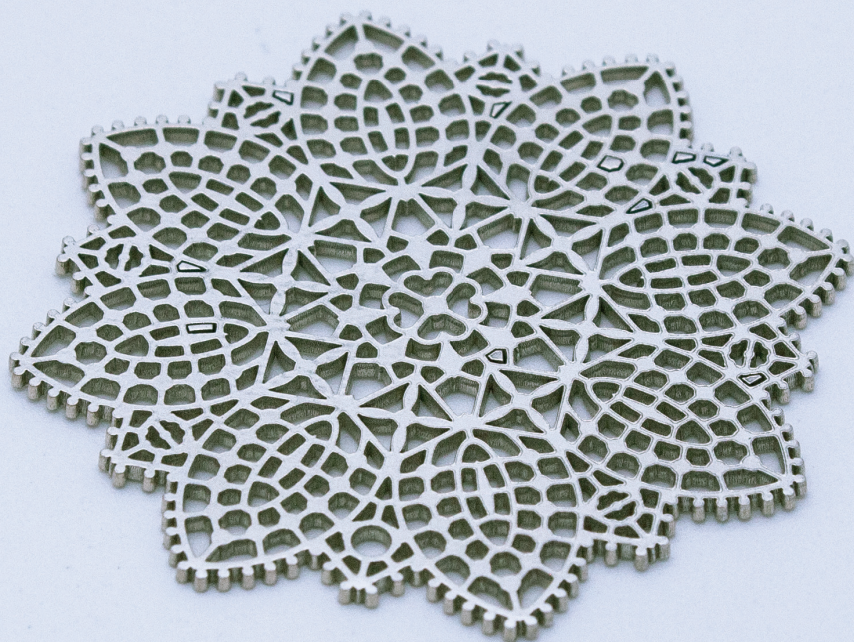
Very high marking quality

TWO POWER SOURCES AVAILABLE

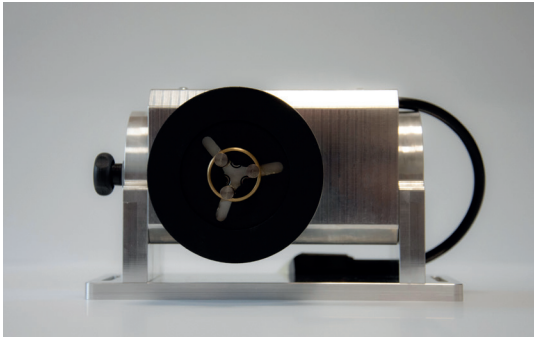
Extremely compact, efficient and extremely low maintenance, Canova is a laser with a fibre source fibre source, boasting **precision and high beam quality with an M2 of less than 1.5** (30W).

The wide frequency range allows maximum customisation of parameters to ensure **high performance in high-precision and highly complex applications**, such as those required by the high jewellery sector.

The optical component joining system, typical of fibre source lasers, allows Canova to operate without requiring any realignment of the integrated components, up to 15,000 hours of operation (considering medium intensity use).



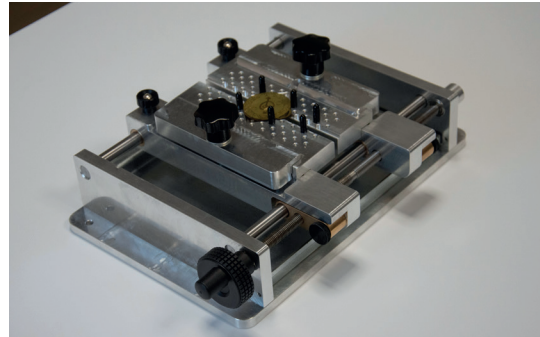
Accessories



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 16 mm**, thanks to its central through-hole.

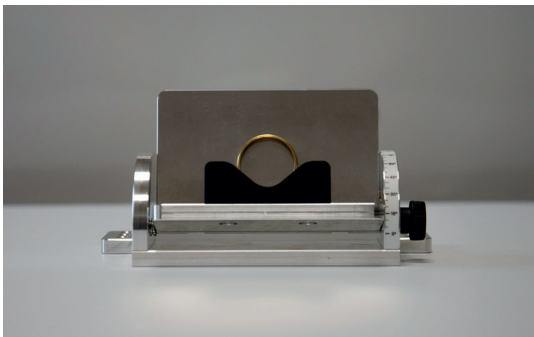
The **stepper motor** and **graduated scale** allows the software to set the degree of inclination and position itself with ease and precision.



3 in 1 clamp

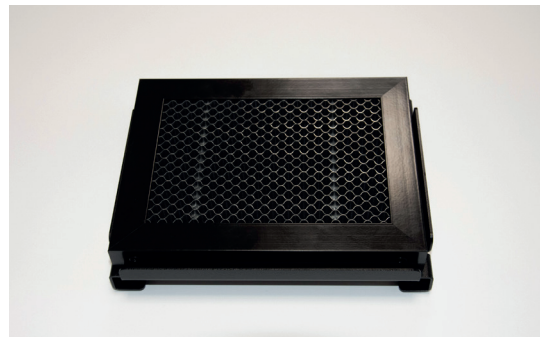
The practical 3 in 1 clamp is a single accessory that can be used to **clamp the most disparate of workpieces**: from sheets of metal to medals and parts of irregular shape.

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 for less overheating of the workpiece and for better quality of machining.

Technical data

Model	Canova
Type of laser	Diode pumped fibre (Yb) LASER
Power ranges available	30 W, 50 W
Recommended work	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	MARKo

Cooling system	Forced air
Wave length	1064 nm
Power	115-230 V ±10% 50-60 Hz
Max consumption	300 W
Weight	49 Kg

orotig.com