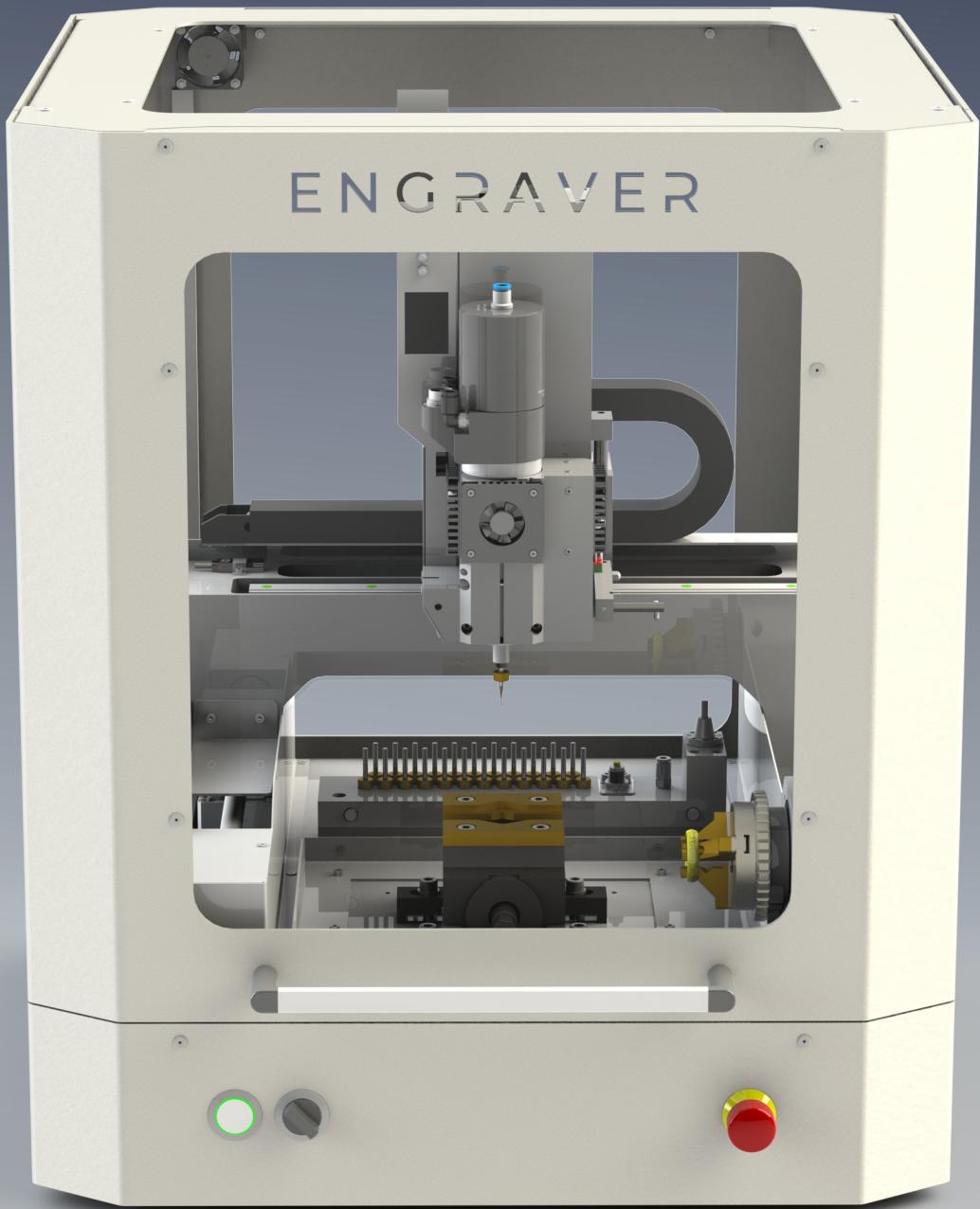


ENGRAVER

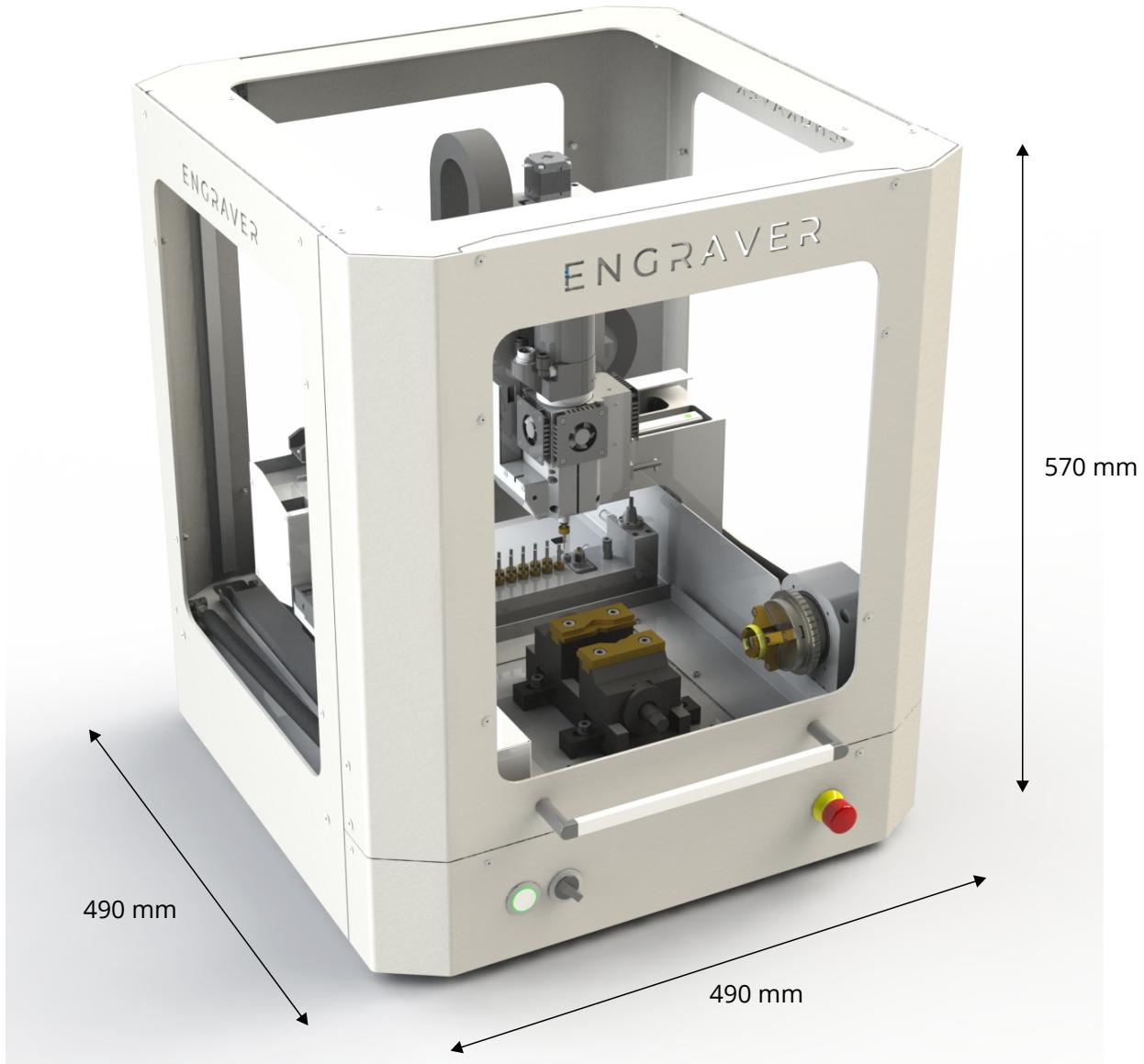
MILLING-ENGRAVING-CENTER



SCHLEICHER
GRAVIERTECHNIK



Discover the ENGRAVER, the innovation for CNC milling and engraving jewelry or workpieces. Precise and flexible, it adapts perfectly to your applications, products and jewelry. An asset for every workshop and every store.



Precise.

The rock-solid engraving machine design guarantees highest precision during engraving or milling of your jewelry. Basic components accurate to the millimeter, the use of high-quality machine components and exact assembly result in a precision that leaves nothing to be desired. Precision made in Germany.

Powerful.

Due to the innovative machine concept, our jewelry engraving machine achieves the highest stability and rigidity. Reduce your tool wear and get machining surfaces of the highest quality. Highly polished machining surfaces are achieved when milling with the ENGRAVER, giving your jewelry and workpieces an incomparable value.

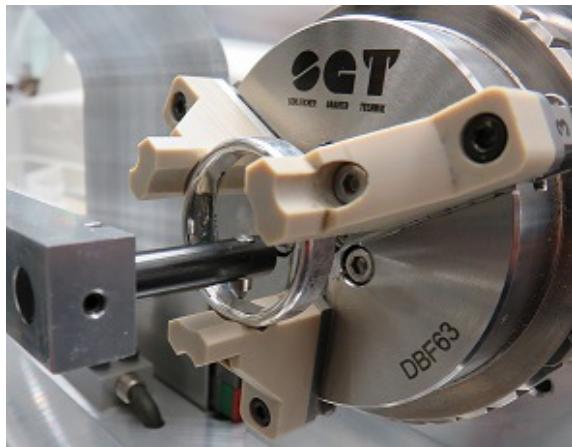
Unique.

The newly developed measuring system integrated into the CNC milling machine enables you to precisely measure your workpiece surfaces. The measurement data thus obtained is used to compensate for curved or uneven workpiece surfaces. This allows you to engrave and mill curved and three-dimensional jewelry surfaces despite simple 2D drawings. In addition, electronic compensation reduces tool wear and manual adjustment of engraving depths is a thing of the past.

Automated.

Thanks to the integrated tool changing system with a capacity of 23 tools, you can also mill and engrave more complex applications automatically. Various machine cycles automatically set up the CNC engraving machine for your workpiece.

MACHINING TYPES

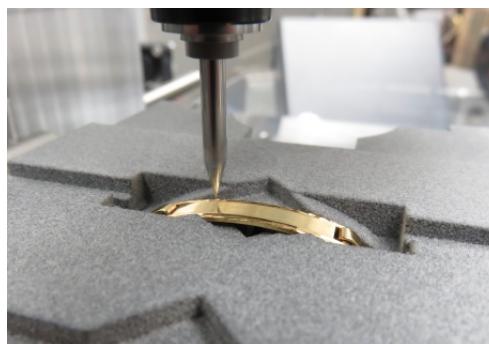
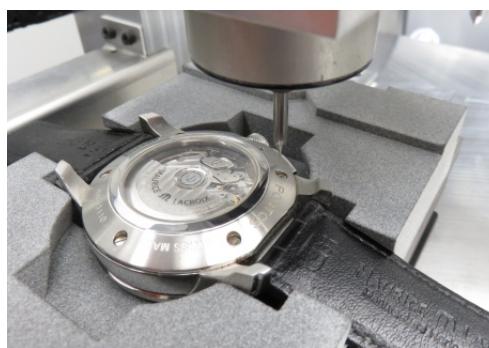
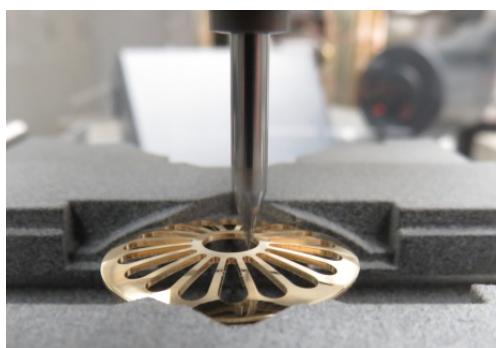
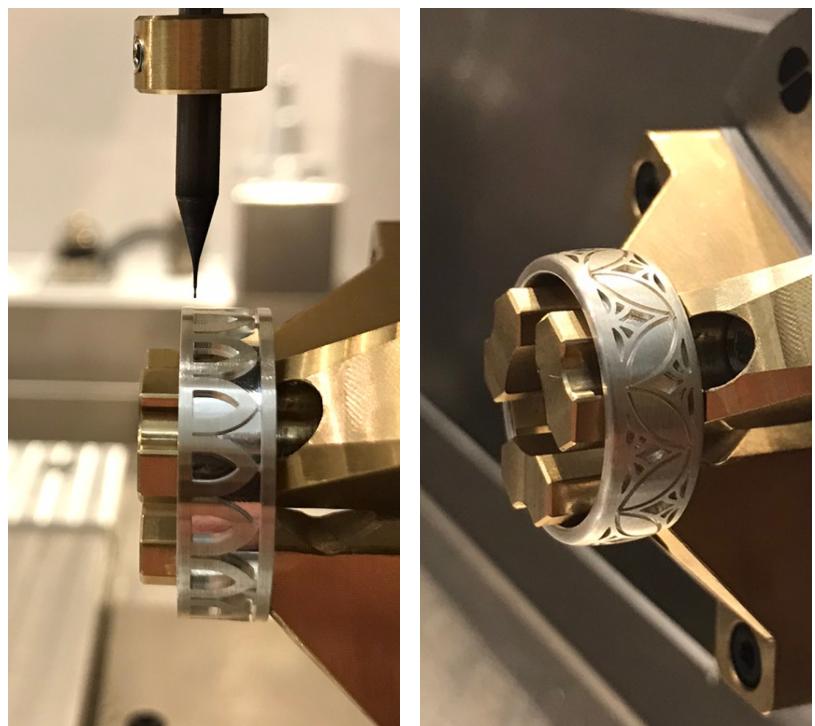


Round inside machining

Refine your jewelry or workpieces with high-quality deep engravings that are second to none. No matter if ring or bracelet. With the engraving unit of the ENGRAVER, you can process any piece of jewelry from the inside. The rotary axis of the CNC milling machine clamps and rotates the workpiece around its own axis. Specially designed interchangeable clamping jaws clamp your workpieces stably and with repeatable accuracy. Due to the high repeatability, you always hit exactly the center of the ring. The spring force of the scribe engraving unit can be precisely adjusted to the material to be engraved.

Round outside machining

Outside engraving of round jewelry takes place with the milling spindle. Mill and engrave all imaginable patterns and fonts into the workpiece surfaces. The setup of the CNC engraving machine and scanning of the jewelry surface is done automatically before the actual milling. Rings, bracelets and writing instruments, for example, can be clamped and engraved on the rotary axis. A 4-jaw chuck is available for clamping oval jewelry, e.g. bangles. This allows more complex and oval workpieces to be clamped securely and with repeatable accuracy. You are welcome to ask us for clamping solutions specially adapted to your needs.



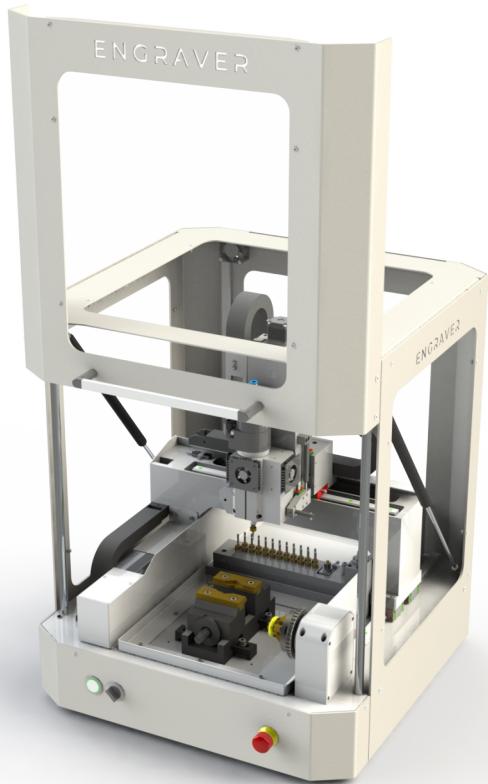
Flat machining

In addition to engraving round jewelry, the ENGRAVER can also effortlessly handle flat workpieces. Flat workpieces, such as medallions, watches, bracelets or signs, are clamped into the CNC milling machine with a precision centering clamp. The clamping jaws are fastened with screws and are reversible and exchangeable. We can also offer you individual clamping jaws for your jewelry pieces.

MAIN FEATURES

Automatic tool change

The ENGRAVER has an automatic tool change. With this, you can automatically insert and exchange your tools. Engrave or mill your jewelry with different tools without interruptions and fully automated. The tools are clamped pneumatically by means of a collet chuck. The tool magazine of the engraving machine includes 23 places and a receptacle for the measuring tip. A tool length sensor is integrated in the magazine to correct the different tool lengths. The tool magazine is located safely and separately in the rear interior of the CNC engraving machine.



Measuring system for height compensation of curved surfaces

The newly developed and fully integrated measuring system in the ENGRAVER engraving machine is unique. Even curved jewelry surfaces can be measured with this system. The measurement data obtained is used to compensate for the height profile of the workpieces. Thus, even curved jewelry pieces (3D) can be engraved or milled optimally and quickly with simple and two-dimensional drawings. Gain an advantage over conventional engraving depth controllers, where the engraving depth must be set manually. In addition, you can reduce your tool wear enormously through the electronic height compensation. This is due to the use of optimum cutting data for your tools. The engraving depth no longer has to be achieved in a single cut.

Innovative machine casing

The ENGRAVER safety concept consists of a stable sheet metal housing in cube format. The transparent glass panes provide an optimum view of all parts of the machine. The door of the machine is designed as a lifting door. This makes it very easy to open the machine and load workpieces from the front. High-performance LED strips are installed in the upper area of the housing and thus always ensure optimum illumination of the machine interior. Impress your customers with the innovative housing design of the ENGRAVER.

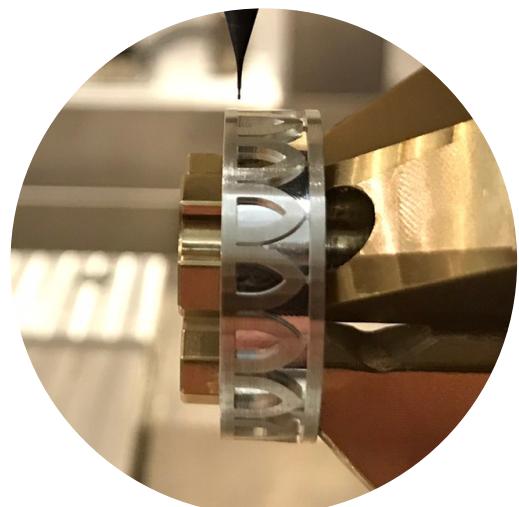
To 3D view of machine



APPLICATION EXAMPLES



Deep engraving of jewelry rings



Outside milling of a wedding ring



Micro engraving of a jewelry pendant - 1



Micro engraving of a jewelry pendant - 2 (Detail)



Milled patterns in rings - for ceramic materials



Milling of a jewelry pendant

TECHNICAL DATA

ENGRAVER

Technology	CNC Milling, CNC Diamond carving
Dimensions (W x D x H)	490 x 490 x 570 mm
Weight	approx. 55 kg
Max. Machining area (W x D x H)	165 x 152 x 108 mm
Gantry clearance height	99 mm
Max. Object size flat machining (W x D x H)	202 x 205 x 98 mm
Max. Object size round machining (Ø x L)	Ø 110 x 220 mm
Power supply	230 V / AC
Spindle speed	variable adjustable 5.000 - 60.000 rpm
Clamping mechanism (spindle - tool)	Collet, Pneumatic 6 - 8 Bar
Spindle power	200 Watt
Radial runout Clamping taper (spindle)	< 0.001 mm
Number of tool places (magazine)	23 + 1 (measuring tip)
Allowable tool shank diameter	Ø 2.35 mm, Ø 3 mm, Ø 3.175 mm, Ø 4.0 mm
Tool cooling and lubrication	Lubrication / Cooling with liquid and air
CAM-Software	CamDRAW / Autodesk Fusion 360

ADVANTAGES OVER OTHER ENGRAVING SOLUTIONS

- Higher precision and stability due to innovative machine design
- High repeatability and exact workpiece zero points (e.g. ring centers)
- Excellent quality and grade of engraved surfaces
- Ecological, economical and no burning of precious metals
- High degree of automation due to automatic tool change
- Minimum quantity lubrication to increase tool life
- Long tool life due to electronic height compensation and high-precision spindle
- No manual setting of engraving depths necessary anymore
- No scratching of workpiece surfaces compared to mechanical engraving depth regulators
- Use of optimal cutting data due to adjustable speed and electronic height compensation
- Low costs due to very small external dimensions and minimal power consumption

SCOPE OF DELIVERY

ENGRAVER | 3 AXES

Innovative and stable 3-axis basic structure

Precision high-frequency spindle

Automatic tool changer

- High frequency spindle pneumatically operated
- Tool magazine with 23 places
- Holder for measuring tip
- Tool length sensor

Probe unit for surface measurement

Innovative machine housing with lifting door

Precision centric clamp with jaws

Minimum quantity lubrication

- Spray mist for cooling and lubrication of the tools
- Operating pressure and liquid quantity adjustable
- Fully integrated in machine

Machine control incl. software

- Control ready for operation

Software

- CamDRAW Plugin for CorelDRAW
- Postprocessors for CamDRAW and Fusion 360

Engraving font package with 62 fonts

ENGRAVER | 4 AXES

Total scope of delivery of ENGRAVER | 3 Axes



Precision rotary axis for round machining

- Backlash-free Harmonic Drive gearbox
- High-precision 3-jaw chuck made of stainless steel
- Brass clamping jaws (reversible, exchangeable)

Ring inside engraving unit

- For inside engraving of rings
- Including engraving diamond and holder

ENGRAVER | 3 AXES

[Contact us](#)

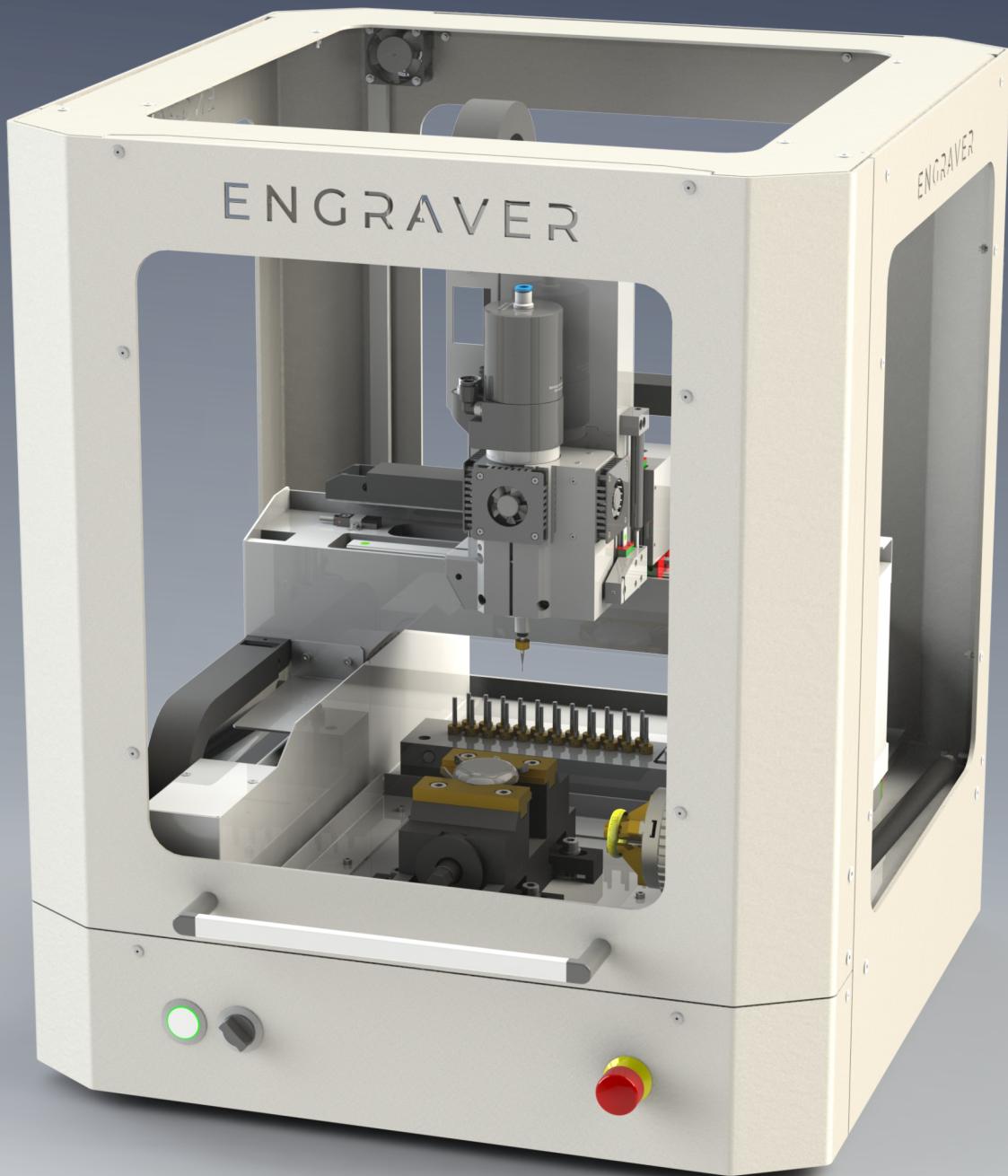
ENGRAVER | 4 AXES

[Contact us](#)

Our ENGRAVER packages are fully equipped and include all machine components for direct startup.

ENGRAVER

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