



MARKING SYSTEMS

Custom technologies



LASER
MICRODOTS
SCRATCH
CUSTOM

RMU, **MADE IN ITALY** SINCE 1972



Reggiana **Macchine Utensili** was born in 1972 from an idea by Luciano Ruozzi. From trading in machine tools it soon became RMU Marking, specializing in marking systems. To date we design and build **the widest range of technologies (laser, microdots and scratching)** for permanent marking, serving the traceability of production processes. Fixed, portable, customized machines: **our know-how is at the customer's service**. You can contact us for consultancy and free tests on marking, installation and training. Internal production allows us to be flexible and consequently fast in deliveries and live or remote assistance. We are committed to providing our customers with increasingly advanced products and services in terms of effectiveness and efficiency, collaborating with the customers themselves in all phases of needs analysis.





INDELIBLE MARKING SOLUTIONS WITH THE BEST TECHNOLOGIES

Our Research & Development department is constantly updated on the evolution of marking technologies. We believe it is essential to be versatile and offer a diverse range of solutions, both mechanical and laser. We have ytterbium and Co2 fiber sources. We also provide micro-percussion and scratch engraving systems.



"CUSTOM" IS OUR STRENGTH

Design, production, assembly, aesthetics: everything is managed internally. Customizations can concern the mechanical and software aspects, which are also our property, and all accessories are modular. Thanks to our 50 years of experience in the mechanical sector, we are able to quickly understand the customer's needs and build a tailor-made machine around them.



GUARANTEED FAST DELIVERIES

LASER



Laser engraving is a marking technique that uses a laser with a high energy density to specifically irradiate the component being machined. Laser marking represents the optimal solution to guarantee the traceability of your products, quickly and efficiently. RMU Marking lasers offer flexibility and safety: for every need we guide you in the choice, both standard or tailor-made.

ZEUS CAD SOFTWARE

Zeus Cad is a Windows-based software for creating and editing 2D Cad. Intuitive and very simple to use.

- “Operator” and “Supervisor” mode
- Online Instruction Manual
- On screen verification and diagnostics of the program
- Automatic management of peripheral axes
- Automatic fragmentation for marking on round surfaces with W rotary axis
- Edit and import drawings in DXF, BMP, TIF, JPG, DWG, SVG, PLT formats
- Communication protocols **RS-232, RS-485**



ENDLESS MARKING POSSIBILITIES

The marking programs take into account the material used, required power and desired speed and allow infinite engraving possibilities:

- Serial numbers, production batches, date, time, shifts
- Automatic compilation of marking programs from databases with **Excel** formats
- Traceability and marking of **Barcode, QRCode, Data Matrix**
- Inline, arched and mirrored texts with Truetype Single, double and filled line fonts
- Text edit functions



LASER SOURCE

Laser technology allows you to mark most **materials** (metals, plastics and more) and is therefore suitable for all product **sectors**.

We rely on industry leaders for the supply of laser sources and offer the following types:

- **FIBER SOURCE**
- **CO2 SOURCE**

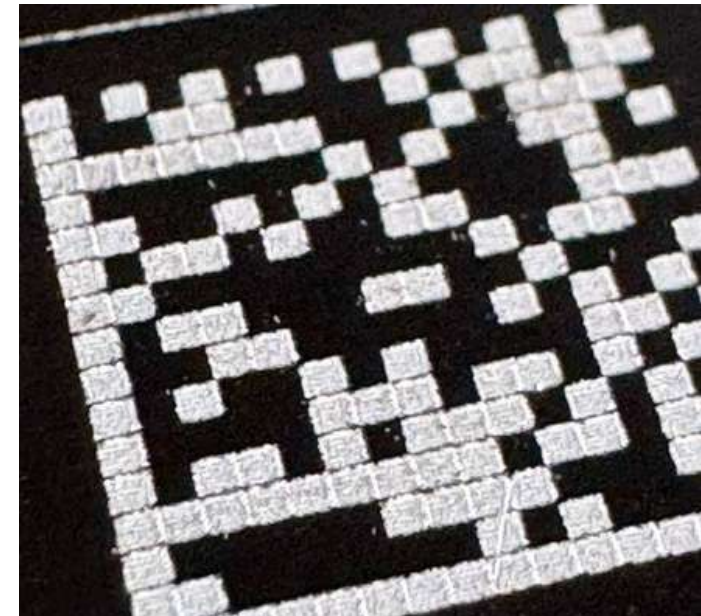
Sources of different power and performance quality are available. The fiber is ideal for marking metals and some types of plastic. CO₂ is dedicated to living materials (paper, wood first and foremost) and some types of plastic.

TRACEABILITY

Traceability responds to the need to manage the **history of the product** and therefore to know, through a code, what it is, where it was made, when and by whom.

The RMU systems imprint the code **indelibly** and are designed to be inserted into automatic lines, with a bidirectional interface to the company management software. It is possible to mark alphanumeric codes, barcodes, QR Codes and Data Matrix, and insert a vision system for quality control.

- **Data Matrix:** identifies the details of the component such as the product identifier, the piece identification number, a unique and different serial code for each piece produced.
- **QR Code:** two-dimensional barcode composed of black modules arranged within a square-shaped pattern. It can store up to a maximum of 4,296 alphanumeric characters and 7,089 numeric characters.
- **Barcode:** Set of high contrast graphic elements arranged so that they can be read by a scanning sensor and decoded to return the information contained.



FIBER LASER



LINEA EVOLUTION 4

System for “on the fly” integration, safety class 4. Equipped with ytterbium fiber source, ideal for metals and some plastics. Compact and functional, it can be easily inserted into any production line. Sources of different power and performance available.



HAND PRO FIBER

20W fiber laser source equipped with handle for "on the go" marking. Transportable on a trolley for engraving large pieces without giving up the advantages of laser systems. Environments to be set up safely with the use of adequate PPE.

LASER HEAD



We have created a customized head for the laser lenses to optimize the performance of the lens itself.

The **aluminum head** gives greater structural resistance and better heat dissipation.

With **IP67 protection**, it is completely protected from dust and contact with water, to ensure it can work even in difficult conditions.

BENCHTOP



Our benchtop laser systems, **in safety class 1**, are small lasers, without however sacrificing the quality of **Made in Italy**. Ideal for positioning in environments such as offices or small workshops to mark gadgets, nameplates, accessories or small mechanical components.



SMART

SOURCE	20 W
AREA	110x110 MM
WORK TOP	CAVE DISTANCE 45 MM
COOLING SYSTEM	AIR
DOOR	MANUAL
MOTORIZED AXES	Z



MINI

SOURCE	20 - 40 W
AREA	110x110 MM - 175x175 MM
WORK TOP	CAVE DISTANCE 45 MM
COOLING SYSTEM	AIR
DOOR	MANUAL
MOTORIZED AXES	Z - W - X



CUBO

SOURCE	20 - 30 - 40 W
AREA	110x110 MM - 175x175 MM
WORK TOP	CAVE DISTANCE 45 MM
COOLING SYSTEM	AIR
DOOR	PNEUMATIC
MOTORIZED AXES	Z - W - X

MODULA



The lasers of the Modula line, **in safety class 1**, are aimed at companies that have particular marking needs: projects that involve the **production** of thousands of components per month, with partially automated processes and marking of large pieces. They can mount Fiber or Co2 sources.



MODULA EVO

Intermediate laser ideal for productions characterized by limited numbers but with large and different components.

SOURCE	20 - 30 - 40 W
AREA	110x110 - 175x175 MM
WORK TOP	ALUMINUM WITH PREPARATION FOR PLUGS
COOLING SYSTEM	AIR
DOOR	PNEUMATIC
MOTORIZED AXES	Z - W - X

MODULA ROTATING TABLE



SOURCE	20 - 30 - 40 W
AREA	110x110 MM - 175x175 MM
TABLE	500 - 800 - 1200 MM
COOLING SYSTEM	AIR
DOOR	AUTOMATIC + MANUAL
MOTORIZED AXES	Z

MODULA EVO TAG

Laser with automatic tag loader. The operator loads a predefined number of tags, with the same or different sizes.

SOURCE	20 - 30 - 40 W
AREA	110x110 MM - 175x175 MM
WORK TOP	PICK AND PLACE LOADER
COOLING SYSTEM	AIR
DOOR	MANUAL
MOTORIZED AXES	Z

THREE AXES



Custom Bestseller | Our three-axis laser is one of the most requested special models. It is composed of aluminum profiles and paneling. The support surface can support pieces weighing more than 200 kg. It has a pneumatic front panel with a **stroke of 600 mm**, complete with an inspection glass. All moving parts are protected in accordance with the CE machinery directive or particular standards where required. The machine is complete with **3 controlled axes (x,y,z)**. Marking programs are managed directly by the computer. The axis travels are such as to guarantee a **working area of X=600, Y=400**. In particular, the Y axis is made up of a mobile table suitable for facilitating the loading and unloading operations of the piece. For each marking program it is possible to manage infinite positions of the axes so as to mark freely on infinite positions on the piece. All data relating to the axes are saved on the management software, and are therefore automatically recalled when the file is loaded. High performance laser, ideal for large productions. It can be accessorised with vertical warehouse, vision systems and aspirator.



The EP fiber source, if specially adjusted, can allow the **marking of color gradations on stainless steel**.

CO2 LASER



An alternative to the fiber source is the Co2 source. The CO2 light beam is focused on a very small point on the surface of the material to be marked, generating heat that vaporizes the material, thus creating a high-quality and long-lasting mark. It is suitable for so-called "living" materials. In addition to the standard versions indicated below, it is possible to mount the Co2 source in customized systems.



CO2

System for online integration, safety class 4. Equipped with a carbon dioxide Co2 source, it is ideal for marking plastic, wood, ceramic, paper and glass materials. Working area **50x50 or 110x110 mm**, Power **30 W** and **air cooling**.




CO2 TAGS

Laser with Co2 source specifically designed for marking labels in organic materials such as wood or some types of plastic. The loader loads the individual tags and after engraving pushes them into the collection chute.

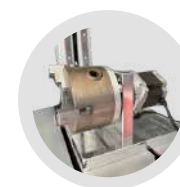


DATASHEET

	FIBER	CO2
Working Area	110x110; 175x175; 200x200 MM	50x50; 110x110 MM
Power Supply	230/115 V; 50/60 HZ; 16 A	230/115 V; 50/60 HZ; 16 A
Nominal Working Power	20;30;40;50 W	30 W
Power Consuption	550 W; 2000 W	550 W; 2000 w
Nominal Wavelength	1064	10,6 µm
Laser Beam Deflation	Galvanometers	Galvanometers
Process Speed	6000 MM/SEC	6000 MM/SEC
Working Methods	Pulsed; Pulsed + CW; CW Modular 15-	CW Modular
Working Temperature	35°	15-35°
Relative Humidity	5-95% RH	5-95% RH
Minimum Laser Diameter	0,022 MM	0,16 MM
Repetition/Modulation Frequency	1-1000 KHZ o CW	100% up to 5 KHZ
Stability of Laser Power	+/-5%	+/-10%
Cooling System	Air	Air
Red Aiming Beam	Standard	Standard

Further special versions available upon specific customer request

ACCESSORIES



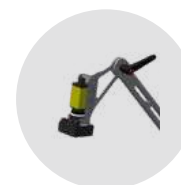
**W
ROTATORY
AXIS**



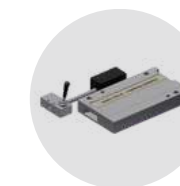
**X AXIS FOR
MINI AND
CUBO**



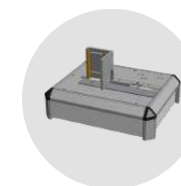
ASPIRATOR



**VISION
SYSTEMS**



TAG LOCK



TAG LOADER

MICRODOTS



Microdot marking is a **mechanical incision** that imprints the material in a more or less deep way depending on needs. It is divided into **controlled micropercussion** (for marking irregular surfaces) and **vibrating micropercussion** (for very high speed performances).

Our machines allow you to engrave most **materials** at different **depth** levels and with different working areas depending on your needs. Our heads, control electronics and all mechanics are made entirely in Italy at our factory. Microdot systems are highly customizable both mechanically and electronically and are available in portable and fixed solutions. Each model has a different work area and engraving can be carried out flat, on cylindrical surfaces and on multiple levels.

The micropercussion systems are managed by the **Brain Touch** electronic console, easy to program and use. Once the program has been prepared, simply place the head on the piece, if portable, or the piece on the column and with a simple button the marking process will start.





Market leader for **deep marking**

Dot peen marking, although an older technology than laser marking, is no less effective. Indeed, there are situations in which it is advisable to use it, especially when you want to obtain **a very deep marking on materials that will undergo subsequent surface treatments**, such as sandblasting or painting.

This process is in great demand for example in the cylinder sector (gas, hydraulics, fire extinguishers), for this reason we have created a special support for portable marking on cylindrical surfaces.



Deep vs. thin marking



Support for cylinder marking

P SERIES



All P Series models are available in a **portable version** and in a **fixed column version**.



P1

Marking area **65x35 mm** and weight of **2.1 Kg**. The ideal model in terms of lightness and easy handling. After preparing the programs on the electronics, simply position yourself on the piece to be marked and press the start button. Suitable for large pieces.



P2

Marking area **100x35 mm** and weight of **2.4 Kg**. The P2 model is our best seller: the ideal compromise between portability and performance, with a very high marking depth. Ideal for heavy industry sectors such as metallurgy, naval, hydraulics and many others.



P3

Marking area **180x35 mm** and weight of **4.5 Kg**. The P3 model has a larger marking area. Like the other models, it is particularly necessary for traceability issues. It allows you to engrave serial numbers, alphanumeric codes, logos, data matrices and QR codes.

F SERIES



F1

Marking area **65x65 mm** and weight of **3 Kg**. Micro-percussion system to obtain high quality engravings with a lower economic investment compared to laser machinery. Available in **fixed version on column**.



F2

Marking area **100x100 mm** and weight of **4.5 Kg**. The F2 model allows you to reach the maximum marking depth, and is a very robust machine, often chosen by the carpentry sector. Available in **fixed or portable version**.



F3

Marking area **180x100mm** and weight of **5.5 Kg**. Micropercussion system with large marking area, chosen by those who need to mark many characters of larger dimensions, such as in automotive sector frames. Available in **fixed or portable version**.

MICRODOTS



T1

Micropercussion system specifically designed for marking plates, even of different sizes, for a maximum marking area of **180x100 mm**.

Marking programs managed by PC with dedicated software. Possibility of engraving progressive numbers.



R1

Micropercussion system with robotic arm that allows the engraving of larger areas, up to **340x170 mm**.

R1 is controlled by external electronics and can engrave the piece in different points and directions within a single marking program.



FIONDA

Micropercussion system with **60x20 mm** area and weight of **1.9 Kg**. Designed to work in difficult and demanding conditions, even with 24-hour shifts. It is equipped with static components and few moving masses, to be able to obtain accelerations and decelerations of the highest level. Controlled by external electronics.

BRAIN TOUCH ELECTRONICS

Micro-percussion marking represents a solution to guarantee the traceability of your products, quickly and efficiently. RMU Marking systems offer flexibility and security: for every need we guide you in the choice, standard or tailor-made.

- VGA 640x480 pixel color touch screen display
- 1 USB port: saving programs, loading logos
- Automatic saving of programs on SD card, divisible by folders
- Inline, arched and mirrored texts with Truetype Single, double and filled line fonts.
- Simple and intuitive text editing functions
- PLC programming logic for implementation on robotic islands
- TCP-IP10 Ethernet port for connection to corporate networks
- I/O inputs for start/stop signals, zeroing of axes and loading of 256 programs with PNP or NPN signals
- Communication protocols **RS-232, RS-485, Profinet, Ethernet IP**



SCRATCH



Scratch technology is a particular type of mechanical engraving in which a diamond or tungsten carbide tip drags across the material to leave an indelible mark. With a **refined finish**, it is often requested by the fashion, jewelry and accessories sectors, which work on **very hard materials** and in **silent environments**.



G1

Working area **40x60 mm** for **5 Kg**. Engraves materials with surface hardness up to 80 Hrc.



G2

Work area **100x100 mm** for **7 Kg**. The G Line models are also managed by the proprietary Brain Touch electronics.




G3

Working area **180x100 mm** for **9 Kg**. Line can be accessorised with rotating W axis, tag loaders and more.

Total
absence of
noise



DATASHEET

	Marking Area	Head Weight	Head Technology	Hardness	Idle Noise
P1	65x35 MM	2,1 KG	Pneumatic micropercussion They can mark irregular surfaces up to 14MM	Up to 64 HRC	Up to 68 DB
P2	100x35 MM	2,4 KG			
P3	180x35 MM	4,5 KG			
F1	65x65 MM	3 KG			
F2	100x100 MM	4,5 KG			
F3	180x100 MM	5,5 KG			
FIONDA	60x20 MM	1,9 KG			
R1	340x170 MM	5 KG	Micropercussion		
T1	180x100 MM	5 KG			
G1	40x60 MM	5 KG	Diamond or Tungsten Carbide	Up to 80 HRC	No noise
G2	100x100 MM	7 KG			
G3	180x100 MM	9 KG			

ACCESSORIES

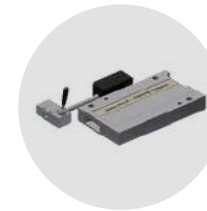
MARKING TIPS



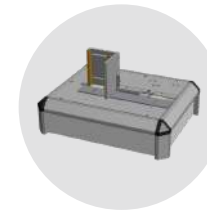
We have different marking heads, with tips of different angles and intensities. Depending on the type of material and the desired effect, we will propose the appropriate model. The tips can be sharpened independently up to 50 times.



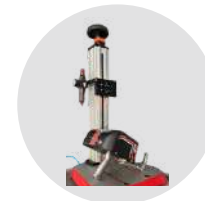
**W ROTATORY
AXIS**



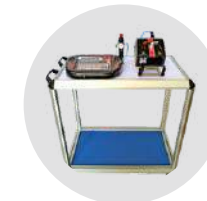
TAG LOCK



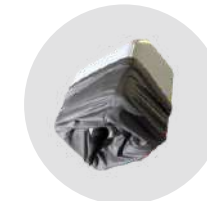
**TAG
LOADER**



**FIXED OR
PORTABLE
SOLUTIONS**



CART



**PROTECTION
SET**

SYSTEMS FOR CUSTOM MARKING

RMU Marking offers Made in Italy products, this allows us to create tailor-made mechanical and software solutions. Thanks to the consultancy with our technicians we create real turnkey automations, starting from the customer's idea and guiding him towards an ad hoc system to satisfy all production needs. Our machinery can be integrated into production lines, **automations**, can communicate with company management systems, interact with robotic arms and much more.

FROM THE IDEA TO THE FINISHED PROJECT

Attention to detail is a fundamental value for us: it is possible to request customizations also regarding aesthetics, using your company colors. With over 50 years of experience in the mechanical sector we know how to identify the opportunities of our lasers and put them at your service, from an **Industry 4.0** perspective.

Fast Delivery

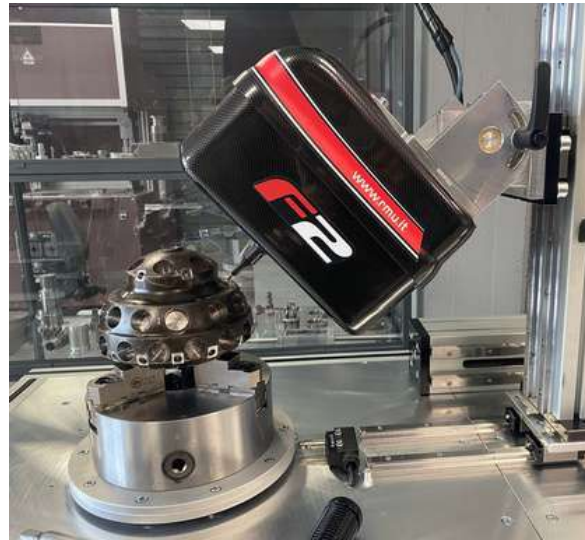


Some examples of tailor-made systems created for our customers:



LASER WITH CAROUSEL

Laser created for the valve sector with automatic loaders and unloading carousel. The system aims to **mark plates** with various layouts **in automatic mode**. The laser mounts a pre-established number of tag holders, in this case four, but is modular and implementable. Thirty numbered unloading positions.



F2 FOR FLAT, 45° AND 90° MARKING

Special marking F2 model for the drilling sector. Manual Z axis with 250mm travel complete with height indicator, a 0° and 90° tilting bracket. Vertical Z axis complete with machine inclination adjustment system, with manual mode. Necessary to be able to mark on inclined surfaces.

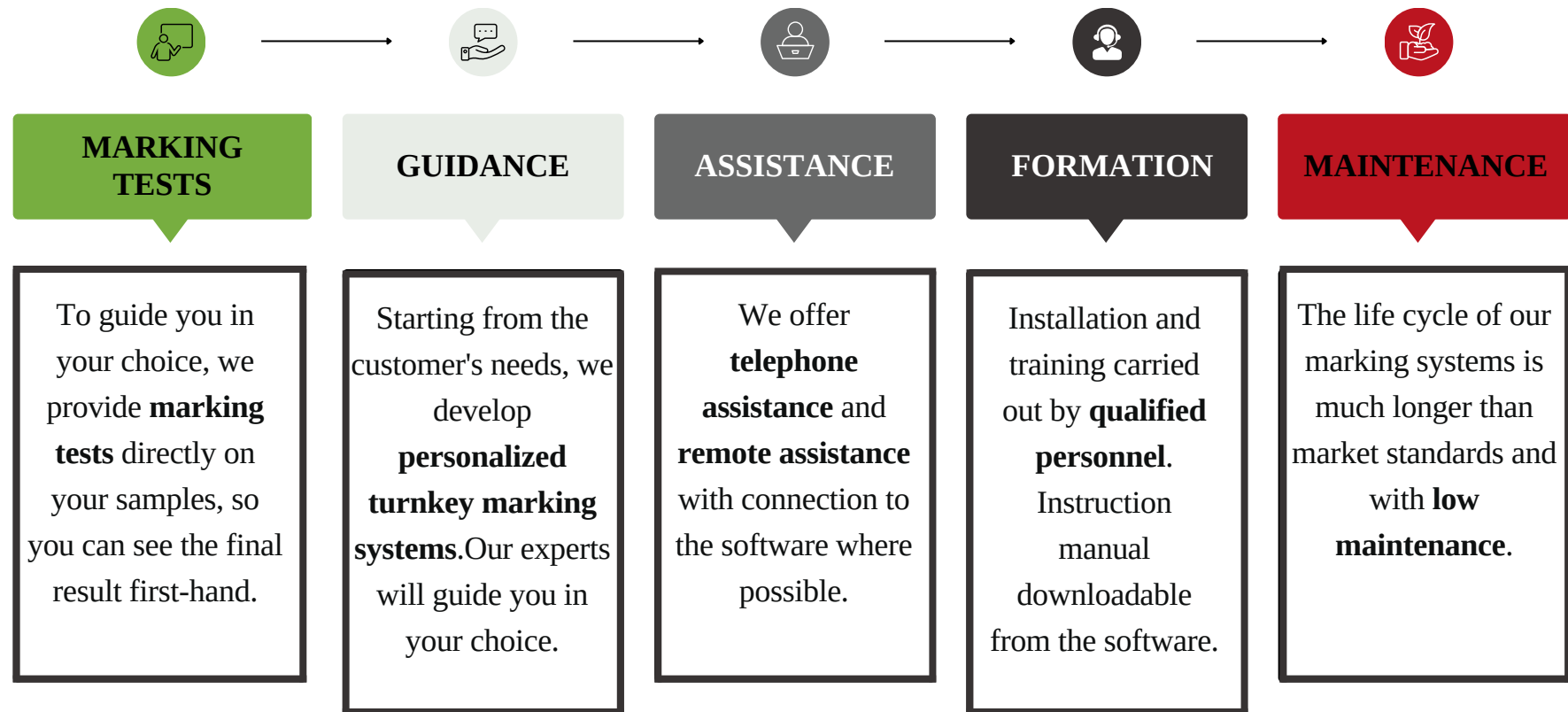


LASER WITH VERTICAL WAREHOUSE

Laser with vertical magazine for loading numerous components with vision system for piece recognition. Designed for the fashion sector. It allows the marking of **fashion accessories** which are then stored in the warehouse, to reduce production times. Accessory: suction system for material particles generated by marking.

OUR SERVICES

We provide the widest range of solutions for direct and indelible marking. Our expert staff can guide you in your choice and offer the best sales and after-sales services.



APPLICATIONS

MATERIALS



ALUMINUM



STEEL



CARBON



CERAMIC



PAPER



CAST IRON



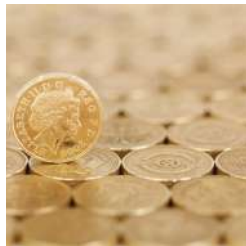
WOOD



PLASTICS



BRASS



GOLD



GLASS



RESINS

SECTORS

RMU Marking technologies allow you to mark most materials (metals, plastics and more) and are therefore suitable for all **product sectors**. For years we have been suppliers in the following areas:

- Fashion Accessories and Jewellery
- Aeronautics and Aerospace
- Automotive
- Cylinders
- Carpentry and Tools
- Electronics
- Renewable energies
- Gadgets
- Hydraulics
- Mechanics and Metallurgy
- Medical
- Military and Naval
- Nuclear
- Packaging and Molds
- Labels

OUR VALUES

**50 years of
Made in Italy**

We are committed to creating an inspiring, innovative and success-oriented work environment. Our corporate values are the foundation on which we have built our reality and our identity. We believe that values are more than just words on a page; they are guiding principles that inform every decision we make and influence how we relate to our employees, customers and business partners. We pay particular attention to **Research & Development**, the **well-being** of our employees and the functionality and design of our products.


We constantly strive to improve quality and reduce environmental impact, with **ISO 9001:2015** and **ISO 14001:2015 certificates**. These are based on the concept of continuous improvement: this is a collective effort to identify areas where improvements can be made, develop innovative solutions and implement positive changes.





Made in Italy since 1972

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