



GRAVOTECH
EXPRESSION OF THINGS

ERBOOK

Craftsmen & Traders:

How to choose your engraving machine?





How to choose your engraving machine?

Independent physical or online stores, craftsmen... To personalize your products, you want to turn to engraving, but among all the existing **engraving machines** and technologies, which one best suits your business?

A mechanical or laser machine? A solution for the personalization of one-off or mass-produced products?

How do you make the right choice? Zoom in on the selection criteria to determine **the best engraving technology or type of machine** for your professional needs.

The Gravotech experts:



Martin has been market manager for the personalization, signage and creative sectors at Gravotech for over 5 years. He transforms trends in the field and customer needs into specifications for future product development.

Martin ROTH

Personalization, Creative and Signage Market Manager



With over 14 years' experience at Gravotech, Grégoire is now in charge of the Western European sales team for the Personalization and Signage markets. They are responsible for providing craft retailers with tools to extend their range of services and enhance the value of their products.

Grégoire DELAHAYE

Sales Manager, Western Europe cluster

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What types of products would you like to engrave?



Marking objects made from organic materials

Organic materials are carbon-based materials derived from living organisms. They are natural, biodegradable elements. They include paper, wood and leather... They can be used to make:



leather bracelets



knife handles



luggage tags



slate boards



candle holders



greeting cards



boxes



coasters



picture frames

To mark these objects, you can use a **WeLase™** or **LS laser machine**. For this type of material, we prefer a laser with a CO2 source.

Marking objects made of inorganic materials

Inorganic materials are the result of chemical transformation. They have specific physical properties, often characterized by increased **hardness** and rigidity. In practice, they make up :



vases and other glass objects



kitchen utensils, metal utensils



water bottles



stainless steel cutlery



jewelry made of precious metals or stainless steel



pens



Note

Do you need contrast for your engravings? There are two possibilities, **depending on the material of the object to be engraved.**

- **Choose a laser machine** - depending on the **laser source** and **material**, you can obtain a contrasting finish.
- **Use a mechanical machine** - the finish is always tone-on-tone, but you can add **gold** or silver-colored **gilding wax to create contrast.**

What type of personalized product offer would you like to provide?

ENGRAVING INDIVIDUAL PRODUCTS

For which companies?

This application is ideal for companies offering on-demand product engraving to enhance **product value** and/or **brand image**, or as part of a **promotional event** or product launch.

This can be:



An **artisanal/custom jewelry store** offering in-store or online jewelry personalization



A **store** offering engraving of various items



A **pop-up store** offering engraving of objects, such as wooden knife handles, as part of a promotional event

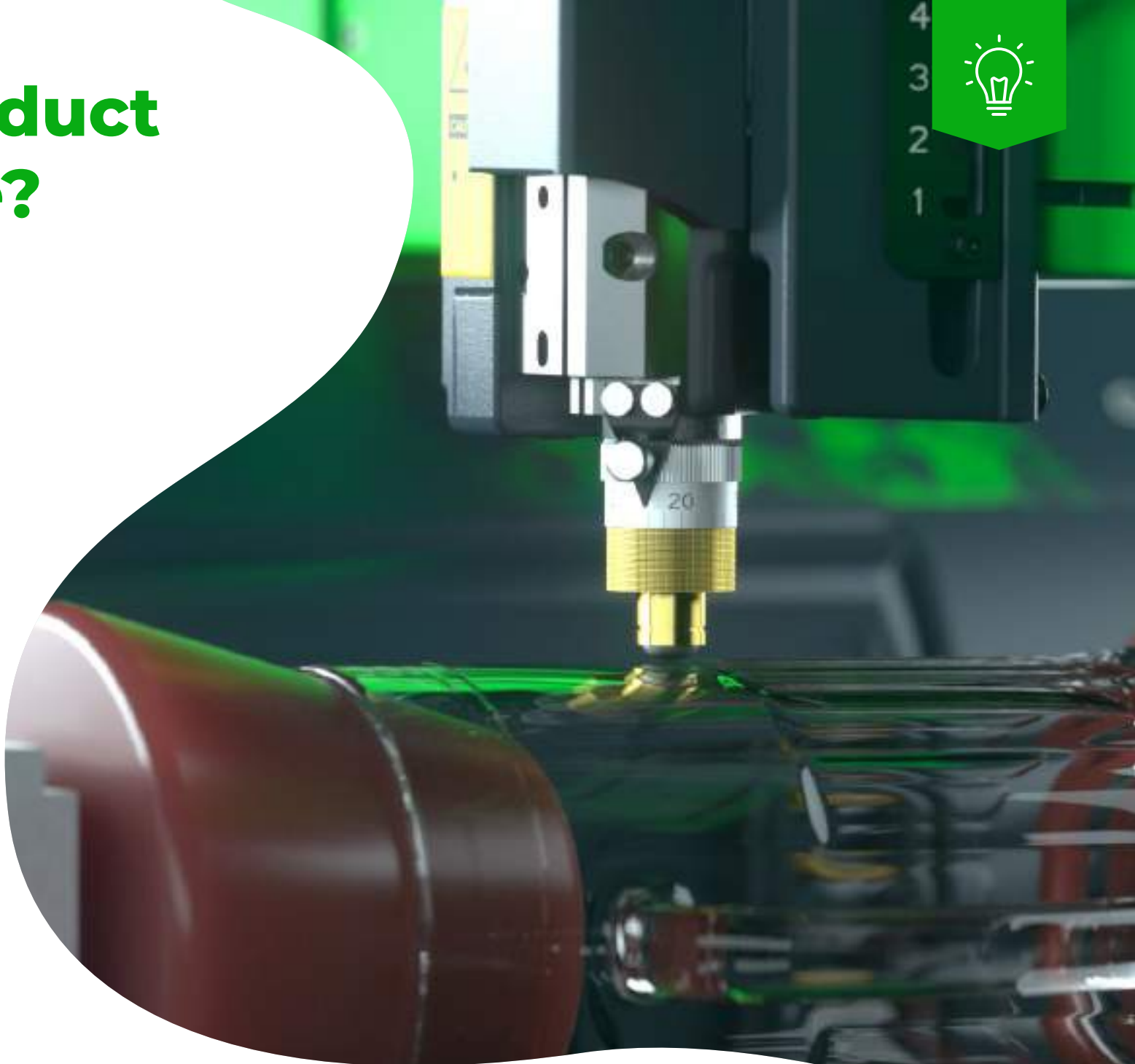


Any physical or online business wishing to offer its customers one-to-one personalization of its product range

In these cases, **serialization is not an issue**. Requests are **unique** and the results varied.

A unique offer for special occasions

Engraving can boost your sales on special occasions such as Christmas, Valentine's Day, Mother's Day or national events.



With which machines?



M20



M40



WELASE™

M20 or M40 mechanical machines, as well as the **WeLase™** laser station, are recommended for these uses. They are suitable for **unit** production volumes and offer **high precision**.



BATCH OR MASS ENGRAVING

For which companies?

Mass engraving concerns companies (physical stores, e-retailers...) whose business model is based on the **identical or almost identical personalization** of all the products in their catalog.

The challenge? Efficiently process batch or mass production orders. This requires a machine with a large marking area to engrave a large number of products while maintaining **consistent quality**. The machine also needs to be robust and fast, to cope with your production rates.



Note

When choosing a machine, you need to take into account the size of the objects you wish to engrave.

With which machines?

It all depends on the size of objects you need to mark, their material and your constraints.

LS laser tables



LS100EX



LS100



LS900

These machines are particularly recommended for mass production marking, as they can engrave **several products simultaneously thanks to their large marking area**. The technician's time is optimized: he can take over other tasks during marking.



What type of software should you use to operate your engraving machine?

Whether you choose a mechanical or laser engraving machine, the level of expertise required to operate them is identical, since the same software is used by both. The difference lies in the technology employed by the machine itself.

If the choice of machine is important, so is the choice of **software**!

OPT FOR SIMPLICITY WITH ABC SOFTWARE



For professionals who need identical personalization on a limited range of products, or of the same material, it's possible to equip yourself with **ABC-type software** - even more so if the engraving machine is used in a store.

It is compatible with the M20, M40 and WeLase™ and is very quick to learn.



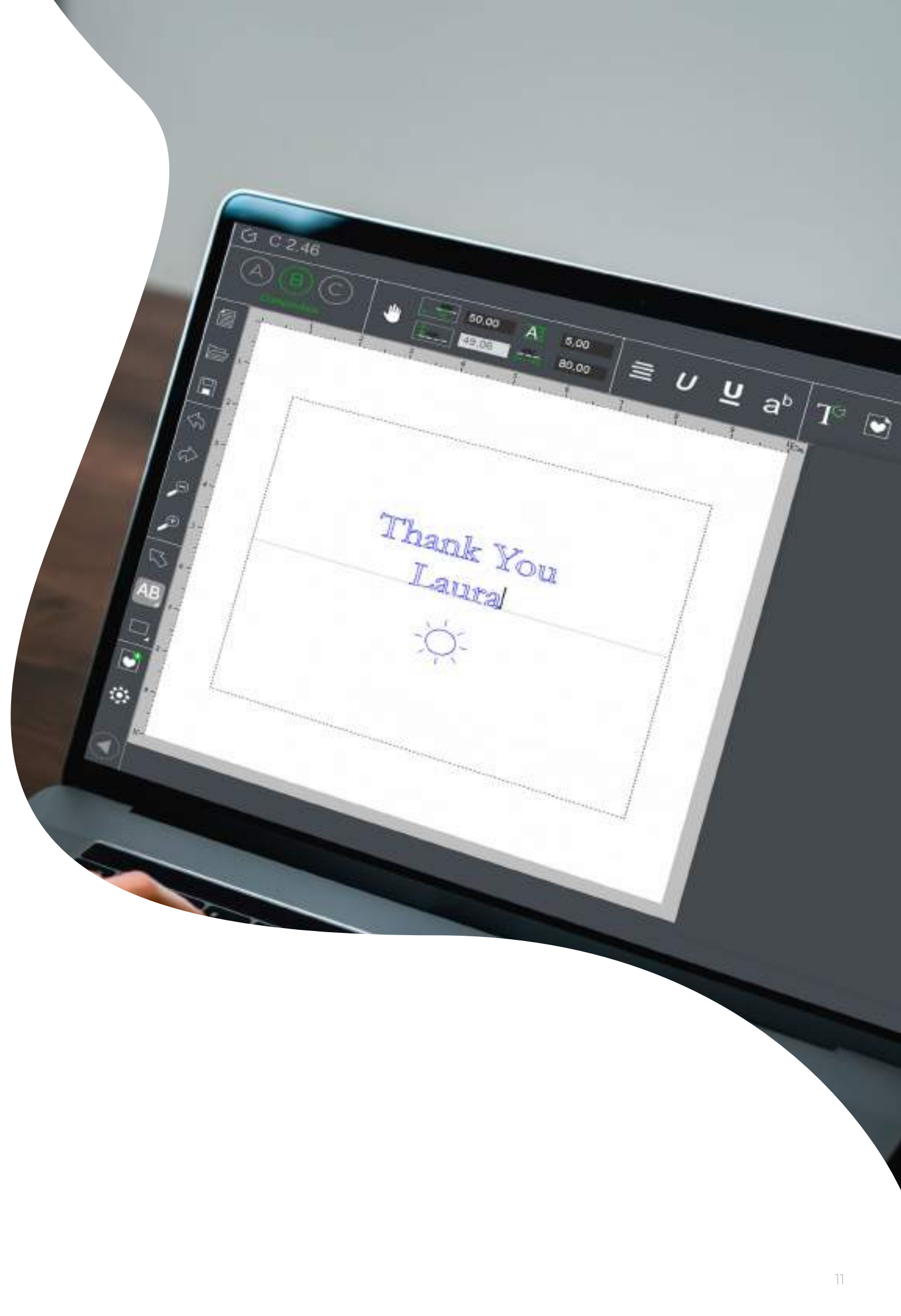
Note

The "Catalog" version of the software is often offered on tablet to provide **a better experience for your customers**. This is particularly advantageous, as it allows you to set your engraving parameters (fonts, styles, locations...) in advance, and let customers browse the product catalog to play with the proposed scripts and motifs.

These settings prevent engraving errors, which can be problematic on high-value products such as jewelry.

In this way, customers select an object and the engraving to be done on it, and the software takes care of the rest!

ABC software is easy to use, but it doesn't allow you to discover all the personalization possibilities. If you need to engrave specific patterns (like photos, drawings, fingerprints...), turn to Gravostyle™ software instead.





CHOOSE GRAVOSTYLE™ FOR A WIDE CHOICE OF PERSONALIZATION OPTIONS



Gravostyle™ is an **engraving** and **cutting** software. Compared with ABC software, it offers a wider choice of possibilities when creating engraving.

It adapts perfectly to a wide variety of products and offers more features.

It is possible, for example, to **engrave photos** and **mark objects in series**. Gravostyle™ can also be connected to databases to **facilitate the processing of personalization orders** on e-commerce sites.

With this solution and the **Dedicace** option, your customers can add a handwritten message or even a drawing, and have the result engraved directly onto the chosen product.

The little extra: Gravostyle™ is compatible with both **mechanical and laser machines**. So you can control all your engraving operations from a single computer.



Note

Watch out for precious metals and high-value products: these are expensive, so you don't want to miss out on engraving. That's why Gravotech offers **training sessions** to teach you how to use your engraving machine and the accompanying software.

And, whatever software you choose and whatever products you want to engrave, Gravotech experts are on hand to train you in its use.

GETTING TO GRIPS WITH MACHINES AND SOFTWARE

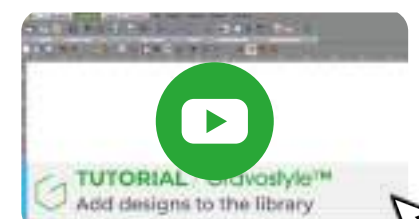
Mechanical machines require a **little practice**. **Product height measurement is automatic**, but it is necessary to adjust the tool manually. For identical products, once the parameters have been set, all items can be customized sequentially.

Laser machines, on the other hand, are **easier to handle**, although they still require a number of **test phases** to obtain the best possible rendering, depending on the product and its material.

As far as software is concerned, it requires a **variable adaptation period**.

ABC software, because it is **simple and fast**, quickly reaches its limits in terms of functionality. We recommend estimating **around a week** to get to grips with it effectively.

Gravostyle™, on the other hand, is **more powerful**, requiring more time and testing before fully mastering the tool. An adaptation period of **about a month** is to be expected.



DISCOVER GRAVOSTYLE™
IN VIDEOS



What budget should you allocate?



If you're hesitating between a mechanical or laser machine, and both are capable of meeting your needs, the price will certainly help you narrow down your choice.



If your budget is **under \$12,000**, the most suitable machines are the **M20** and **M40** mechanical machines.

- They are extremely **versatile** and adapt to all your needs.
- Engraving rendering is non-contrasting. Its appearance is **authentic and traditional**.
- You can add color by using a **gilding wax** after engraving.



If you have a budget of **over \$12,000**, you can turn to **laser marking technologies**. These enable you to engrave organic materials (ceramics, leather, glass...), create **contrasting engravings**, or even **cut out certain materials**.

WeLase™ laser marking stations, for example, enable **rapid marking** and **mark one object** at a time. This is a machine particularly recommended for boutique use.

As for **LS laser tables**, they are ideal for engraving objects **in batches** and doing **cutting**. They can also engrave **bulky objects** (bottles, boxes) individually.



HOW TO ESTIMATE THE RETURN ON INVESTMENT OF AN ENGRAVING MACHINE?

Return on investment takes into account the price of the part you wish to have engraved. In most cases, this cost is increased. Products can therefore **cost between 4 and 5 times more**. When it comes to personalization, there are three different options.



Engraving as an optional service for a fee or with a surcharge

You multiply the engraving price by the estimated number of engravings per day. ROI is based on sales of this service.



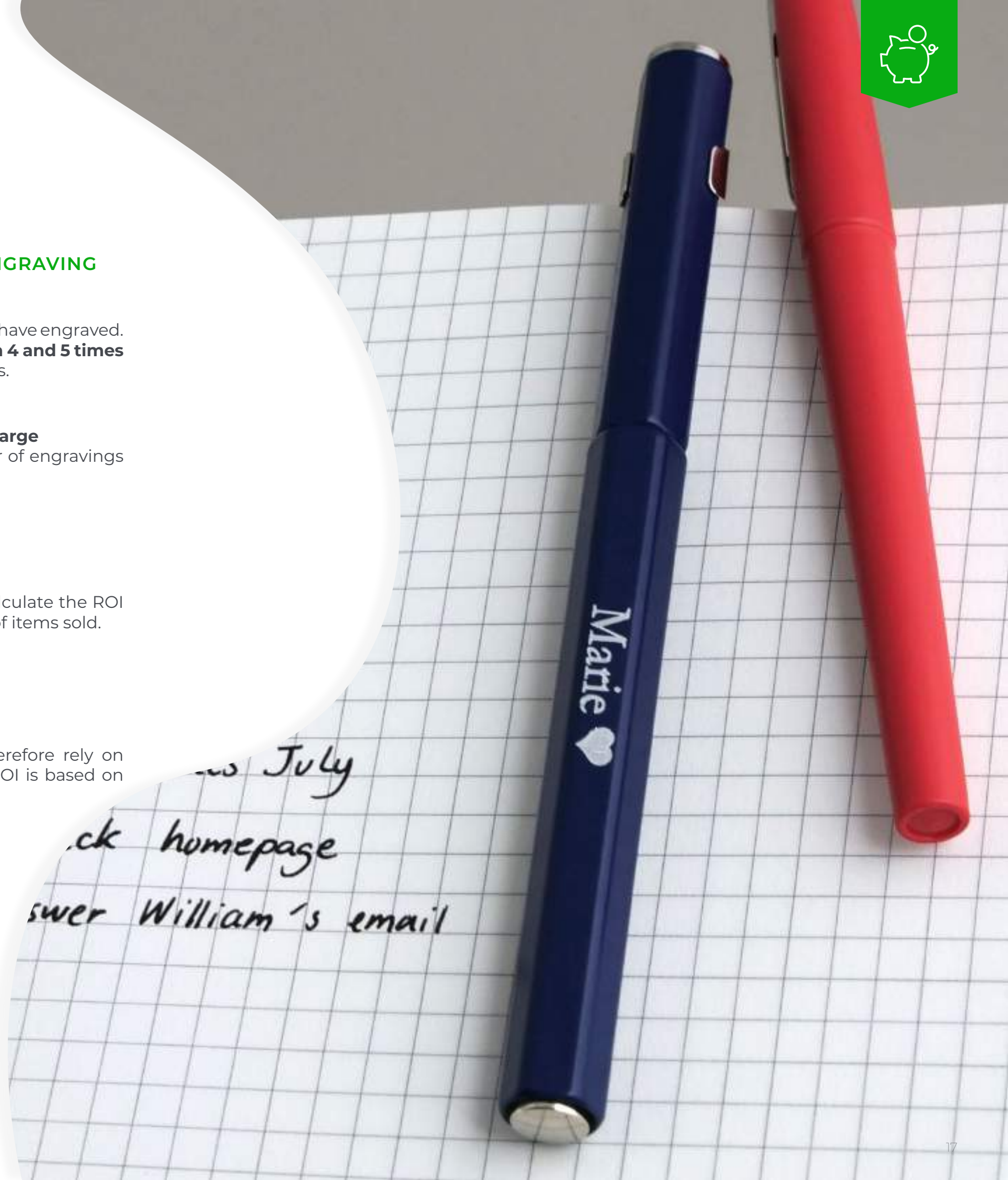
Increase your margin on the product price

The engraving itself increases the price of the object. To calculate the ROI here, multiply the margin on the item sold by the number of items sold.



Free engraving

The price of the item remains unchanged. You must therefore rely on the fact that sales will increase thanks to the engraving. ROI is based on additional sales, multiplied by the margin for each item.



How much space do you need in your store?

Whether you place the machine at the front or back of your store, to liven up your point of sale, you need to devote space to it.

- For **mechanical machines** like the M20 or M40, allow for the size of an **office printer** in width, height and depth.
- **Laser stations**, like the WeLase™, are a little **larger than a desktop printer**. If you add an extractor to suck up dust, you need to leave space under or near the laser to accommodate it.
- **LS lasers**, on the other hand, are wider and taller: for a small standard table, allow a **29,53 x 29,53 in (75 x 75 cm) space** as well as room under the table for an air extractor.

MACHINES FOR YOUR EVENTS



If you want to **engrave in front of an audience** at an event, give preference to a transportable machine such as the WeLase™ or the M20. They can be placed on a counter, and are easy to transport (thanks to their reduced weight and volume). These machines are also **silent** and **100% safe** for the public.

In the store, they are a real asset, as they feature large glass surfaces on the sides to showcase **the engraving**. This means your customers can make superb videos suitable for sharing on social networks, highlighting their experience in your store.



How to automate your e-commerce site?



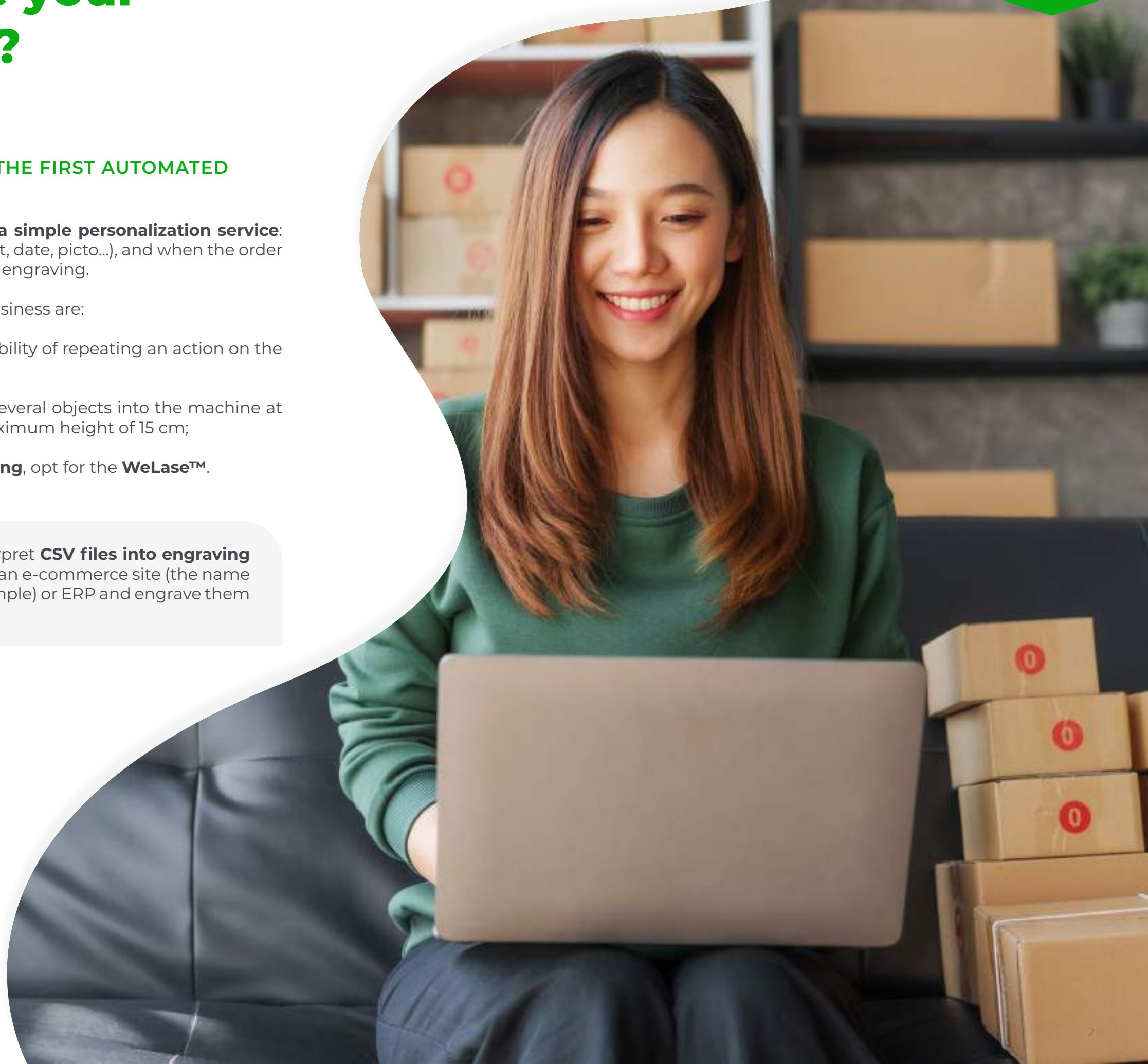
FROM STARTING AN ONLINE BUSINESS TO THE FIRST AUTOMATED SOLUTIONS

To start your business, the ideal solution is to **offer a simple personalization service**: buyers enter the data they wish to have engraved (text, date, picto...), and when the order is received, the operator takes charge of creating the engraving.

The most suitable machines for starting an online business are:

- the **M20**, for **one-off engraving**, but with the possibility of repeating an action on the next object without changing the parameters;
- the **LS100**, for **serial engraving**, as you can insert several objects into the machine at the same time - although these are limited to a maximum height of 15 cm;
- and if you're looking for **speed and unitary engraving**, opt for the **WeLase™**.

To automate your process, Gravostyle™ can interpret **CSV files into engraving data**. This makes it possible to retrieve data from an e-commerce site (the name or message of the person to be engraved, for example) or ERP and engrave them quickly without intermediate manual input.





100% AUTOMATED E-COMMERCE, GRAVOTECH'S SUPPORT

It's possible to **customize product visuals** on the e-commerce platform of your online store. Indeed, Gravotech provides a "Font web server" API that offers **engraving rendering that can be interfaced to a website** via development (not offered by Gravotech). In this way, your customer can dynamically visualize the engraving rendering on your product.

The advantage of such a system is **online preview**. When the customer confirms the engraving details, the information is isolated and sent to a server. The order form is then generated, and all the operator has to do is start engraving!

But this system requires a **certain amount of upstream preparation** on your part:

- setting up data transmission;
- automatic generation of the order form...

Every action can be automated, depending on the type of machine or product.

Which machines are recommended?

Gravotech offers several laser solutions to suit your needs.

Laser tables have a large marking area, enabling them to engrave large objects (boxes, etc.). It is also possible to engrave several small objects in series, such as pens. To guarantee the stability of your products, you can use our materials, notably ecocut, to set them in place. Laser stations are solutions for individual engraving. Thanks to the technology used, engraving takes just a few seconds. It is also possible to semi-automate the process to increase productivity.



Recommended machines



CHOOSE ENGRAVING VERSATILITY WITH AN M20 OR M40 MECHANICAL MACHINE

M20 and M40 mechanical engraving machines are compact and lightweight. At less than 20 kg on the scale, they are easy to move around. The M20 can also be supplied with a carrying case. They are also very quiet, provided you use a diamond tip.

They can engrave **more than 30 types of material**, including:

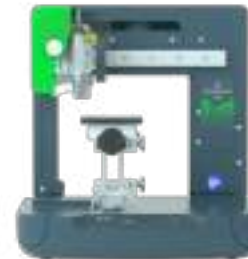
- glass,
- plastic,
- metal...

The **diamond tip** of this machine creates a slight groove in the material to give a **finer, wiry finish** - particularly recommended on precious metal. For a different effect, the diamond can be rotated. This digs into the material to create a **deeper engraving**.

The advantage of a mechanical machine is its **high-end craftsmanship**. It brings a **timeless, classic aesthetic** with precise lines. The delicacy and depth of the engraving create a subtle play of light, highlighting every curve of the marking.



The three M20 formats



The **standard**

Designed to be integrated in or on the furniture of your physical store.



The **Jewel**

Features a **cylinder turner** for engraving rings and other cylindrical objects (pens, small glasses and candles, kettledrums, cosmetics jars...).



The **cube**

Has **transparent protective surfaces** surrounding the machine. These enable customers to see the machine engraving their product, thus creating entertainment in your store. This version also features a locking system for **optimum safety** when used in public.

The two M40 formats



The **standard**

Designed to be integrated in or on the furniture of your physical store.

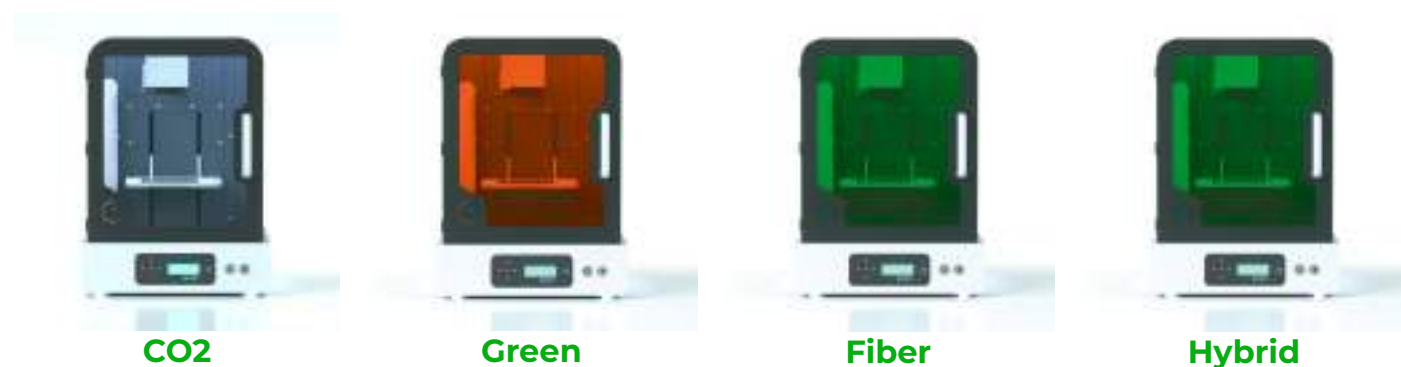
The **M40 Gift**

Features an **automatic lubricant reservoir** and a **cylinder turner**, ideal for engraving glass (bottles, glasses...). It is also possible to engrave conical-shaped products, as the cylinder turner can be tilted.



CHOOSE THE PRECISION OF LASER ENGRAVING WITH THE WELASE™ MACHINE

Depending on the material to be engraved, four WeLase™ laser sources are available:



CO2

Green

Fiber

Hybrid

For organic materials

For metals and plastics

With its Plug & Play operation, the WeLase™ is **easy to use** and is much **quieter and faster** than a mechanical marking machine. It features a large glass surface to offer customers the spectacle of engraving **in complete safety**. Good to know: for added safety, the machine won't start until the door is closed!

The WeLase™ engraves quickly, including high-resolution photos. It also offers **contrasting engraving**, with deep marking that can be black, white or have several different tones. However, because the laser heats the surface, the engraving depth is less than that of an engraving made with a mechanical machine.





GO FOR MASS PRODUCTION WITH LS LASER TABLES

Laser tables are ideal for **batch engraving objects** of different materials, thanks to their multiple laser sources. The most popular source is the **CO2**: it marks all organic and mineral materials, plastics and anodized metals, but can also **cut organic materials** (with the exception of glass).



LS100



LS100EX



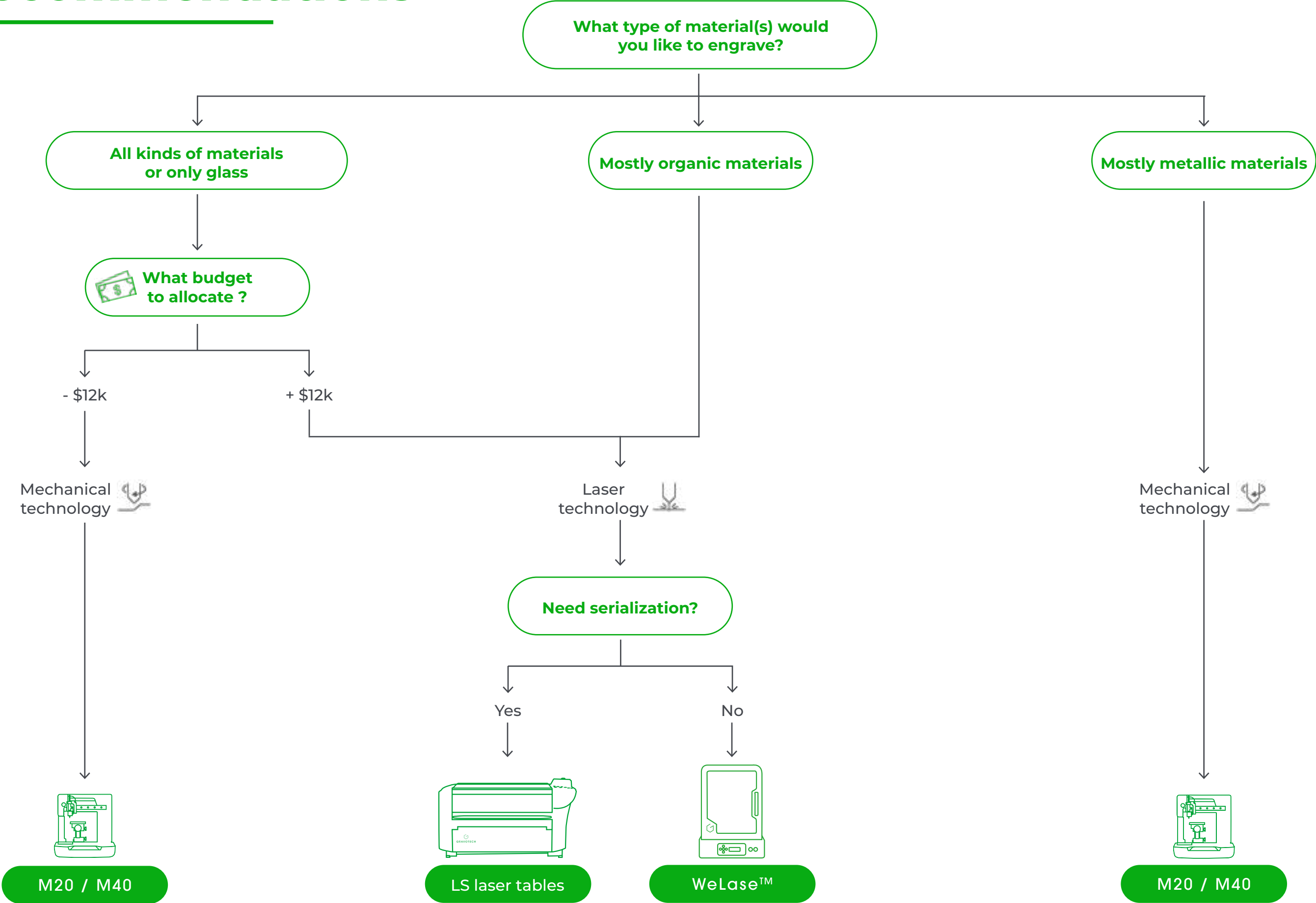
LS900

The LS100EX and LS900 tables are available in **fiber versions** for engraving all metals (treated and untreated) with contrast.

Laser tables are often used by **signage specialists** or **people with creative professions**. They enable **very fine, detailed cutting** for making models, toys, cards... All in all, it's a great tool for diversifying your business.



Gravotech recommendations



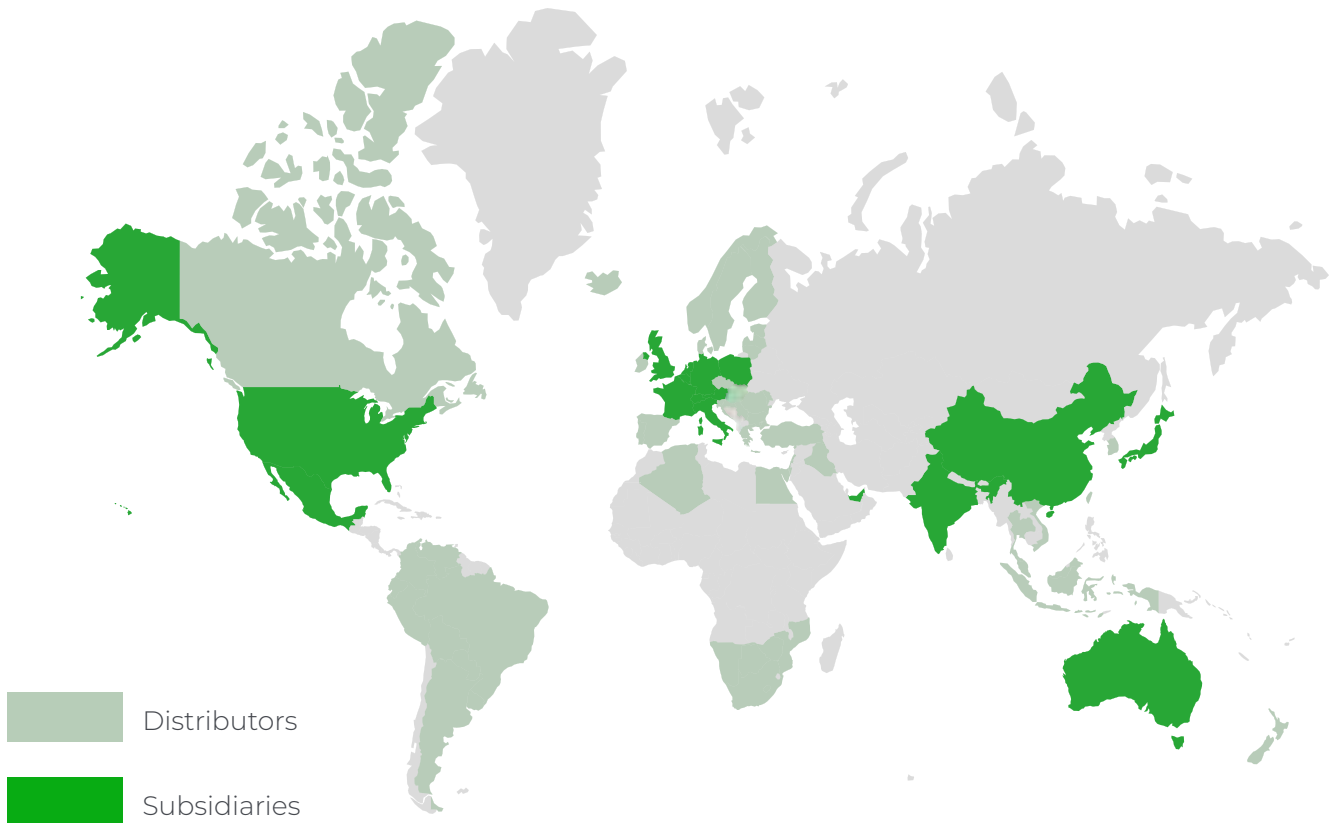


When choosing your engraving machine, take into account the type of materials, the quantity of products to be engraved, the technology used and, last but not least, your budget. If you have any further questions about engraving machines, contact the Gravotech teams: they'll be happy to help you choose the model that's right for you.

[Contact a Gravotech expert](#)



Gravotech, leader in permanent marking solutions



+85

years of expertise



+60.000

customers



+85%

of export
sales



77

countries



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contact@gravotech.com
+33 (0) 4 78 55 85 50
www.gravotech.com

GRAVOTECH MARKING

466 rue des Mercières - Z.I. Périca
69140 Rillieux-la-Pape
France

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