

**GRAVOTECH GROUP** 



**XY GANTRY LASERS** 

## LASER OUR KNOW-HOW

#### INNOVATION

Gravograph constantly innovates. Our ability to anticipate market trends, and our dedication to satisfy our customers drive our strategy and product development. Our dedicated Center of Innovation and Technology paves the way to future solutions

User friendly and innovative, our laser equipment sets standards across the world.

Strong customer relationships are the key to our success. From the freelance professional engraver to the largest international corporation, we understand their needs and satisfy them.

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In our sector, a constant stream of new products and applications is indispensable for lasting success.

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#### A WORD ABOUT FUMES

Many industrial processes can generate harmful dust and fumes. Any operation where a material is cut, marked or engraved has the potential to produce harmful by-products.

To ensure compliance with health and safety regulations, to protect employees' health, provide a better working environment and reduce downtime, we recommend you install the most appropriate extraction system for your machine.

#### **EXPERT ADVICE**

Investing in a laser solution requires careful consideration. Here are a few crucial parameters you need to think about before you make your decision:

- The type of materials you intend to laser will help you to determine your ventilation requirements.
- Consider the size and volume of the materials you will be working on, to help you decide which machine would best suit you.
- The comfort and ergonomics of your solution will determine how much time you spend on it and eventually your ROI.

## PRODUCTIVITY GAINS START WITH GRAVOSTYLETM



## A SPECIALIZED SOFTWARE FOR LASER

All Gravograph lasers come with our professional lasering software, Laserstyle  $^{\text{IM}}$ . Specifically designed for lasering applications, Laserstyle  $^{\text{IM}}$  helps you to maximise the potential of your Gravograph laser engraving machine.

Focus on Print & Cut solution

Our software allows you to precision-cut printed shapes on rigid media thanks to UV-LED digital flatbed printing and your Gravograph solution



GOLE

## SIMPLIFY YOUR LASERING WITH PROFESSIONAL FEATURES

The powerful possibilities offered by Laserstyle<sup>TM</sup>'s built-in wizards and advanced productivity tools resolve the daily concerns of many customers. What's more, the wizard is so simple to use and intuitive, that it allows you to explore countless new possibilities.

Save time and maximise quality during engraving thanks to our professional wizards.

Versatile engraving and cutting laser solutions





## COMPACT

The LS100 and LS100Ex will be at home in any environment, from retail outlets to industrial workshops. These compact desktop systems achieve a market leading footprint to working area ratio.



## **VERSATILE**

Plastics, wood, acrylic, metals, glass, leather... there is little that the LS100 laser range cannot handle. A wide range of accessories are available to further add to the machines' capabilities.



## **PRODUCTIVE**

The front loading system allows easy positioning of parts inside a well-lit cabinet. The laser automatically detects the item height for accurate focusing. All lasering parameters are saved in a material library for increased productivity.



#### INTEGRATED AIR COMPRESSOR

Keep the lens clean to ensure high quality engraving results. Protect the focal lens by pushing the fumes towards the exhaust area and reduce flaming when cutting. This also increases the life span of lenses and creates safer working conditions for the user.

Large format solutions for optimum productivity





## **HEAVY DUTY**

610x610mm lasering area, 250mm maximum item height and 25kg weight, full access to table with opening front and top doors, solid cast aluminium frame... the LS900 series has been designed for all applications and environments.



## **ACCURATE**

Engineered for productivity, the LS900 series achieves lasering speeds up to 4000 mm/s with with a  $50\mu$  (0.05mm) repeatibility accuracy. The LS900 lasers are able to precisely laser characters down to a height of 0.5mm, as well as highly detailed images.



## PRINT AND CUT COMPATIBLE

Also available on the LS100 and LS1000 series, the Print & Cut solution makes cutting of printed media extremely simple, widening the LS900 range of applications at no extra cost.



#### PRINT & CUT CAMERA (OPTION)

The high definition Print & Cut camera automatically detects the markers plotted around the print. The visual information is sent to the Gravostyle<sup>TM</sup> software which adjusts the cutting path.

#### Powerful and heavy duty laser solutions





## WORKING SPACE

Loading of a whole material sheet size  $1220 \times 610$  mm is easy with the LS1000 Series. It allows a vertical capacity of 300 mm for engraving of bulky objects, the production of rubber stamps and has cylindrical capability also.



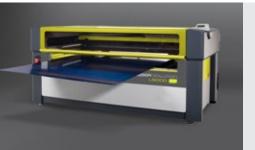
## MADE FOR CUTTING

Designed for optimal productivity with engraving speeds of up to 4 meters/sec on a  $1220 \times 610$  mm working area. CO2 laser sources ranging from 60 to 150 W for precise engraving and large scale cutting applications.



## **ERGONOMIC**

The LS1000XP standard configuration includes a multitude of innovative functions aiming to reduce production times and increase usability. These include a front-loading concept for total accessibility, integrated cutting table with removable slats, material recovery tray, modular engraving table and double pass-trough.



#### **PASS THROUGH**

The double pass-through feature enables the lasering of items larger than the machine working area, with four opening panels located at the font, back and sides of the laser. Only available on the LS1000XP series.

Flat bed fibre laser marking systems





## METAL MARKING

The LS100ex Fibre and LS900 Fibre machines are perfect solutions for direct engraving on a wide variety of metal parts and plates. This process dispenses with the need to apply a surface additive.



## **WORKING SPACE**

The LS100EX and L900 Fibre series presents an interesting alternative to traditional metal marking lasers by offering a large marking area up to 610 x 610mm. Large items or multiple small items can be lasered in a single operation.



## **VERSATILE**

The LS100EX and LS900 Fibre solutions engrave with enhanced contrast quality. Sources from 20W to 50W allows for a wide range of metal marking and cutting applications as well as excellent engraving on some plastics.



#### CYLINDRICAL ATTACHMENT (OPTION)

Accurate engraving around cylindrical parts with perfect repeatability when several passes are required. Tiltable for conical shape cylinders. Exceptional results on glass.

Hybrid fibre-CO2 laser solution





## **DUAL-SOURCE**

The LS900 EDGE laser solution boosts your production capacities thanks to its two-in-one design. It incorporates both a fibre laser source, for marking the hardest materials, and a CO2 laser source for optimal engraving on organic materials.



## **USER-FRIENDLY**

Adjust your laser settings easily thanks to the Laserstyle™ software (supplied as standard). Use the colour system to manage the use of both sources on one and the same workpiece. The LS900 EDGE is compatible with every one of the accessories in the range.



## HIGH PRODUCTIVITY

Maximise the profitability of your machine from its very first month of use! The unlimited possible applications of these lasers guarantee high production levels.

If only one source if required for a project, start up just the one required to minimise wear on the other.



#### FLOATING PIN TABLE (OPTION)

The floating pin table greatly improves cutting quality by eliminating 'back-flashes' created by heat being reflected from a support table and reduces the risk of flaming.

## EXHAUSTS

Our laser extraction and purification systems? Clean, pure, safe.





### **PRECISION**

Without proper extraction, particles may build up between the laser and the engraved object. This could deflect the laser beam and impair engraving precision. Gravograph extraction systems keep your equipment dust free, maintaining precision levels and ensuring engraving excellence day after day.



## EASY TO MAINTAIN

Our extraction systems are designed to optimise access and facilitate maintenance operations. Gravograph exhausts are equipped with cleanable pre-filters, separate HEPA filter, refillable charcoal cartridges and brushless motors; making them very cost-effective systems to run.



## USER AND PLANET FRIENDLY

Every system in the range complies with international health & safety legislation and RoHS norms. All contaminants are secured in disposable filters. Only clean and pure air is pumped back into the workshop, ensuring premium user comfort.



#### PURPOSE DESIGNED

Our systems provide extraction when marking, engraving and cutting noxious materials. A triple filtration system secures all particles in the filters for the ultimate in user comfort, safety and air purification.

# TECHNICAL SPECIFICATIONS

	CO2 TECHNOLOGY		
	LSIOO	LSIOOEX	LS900
Maximum engraving area (mm)	460 x 305	610 x 305	610 x 610
Max Z clearance (mm)	145		250
Laser wattage - air cooled (W)	40-6	60	40-60-80
Laser wattage - water cooled chiller as standard (W)		25 (Energy range)	
Standard features	Z motorised table - Front loading opening - Red dot pointer - Auto focus sensor - Print & cut media registration - Embedded laser control panel with LCD screen - Job complete alarm - Buffering memory - Jobs queuing - Automatic safety shut off.		
Positioning camera	×	×	option
Driver	Professional driver for graphic software included		
Software	Laserstyle™ graphic (Energy Range : Laserstyle™ discovery)		
Operating mode	Optimised Raster, High quality Raster, Vector, Cutting		
Max. speed (m/s)	2.5		
Size (mm)	755 x 725 x 450 1025 x 725 x 450 9		940 x 1065 x 815
Product weight (kg)	42	70	170
Laser classification	Class 1 - Laser product. Door closed		
Base stand	×	Option	
Vector cutting table - honeycomb grid	Option		
Floating pin table	Option		
Cylindrical attachment option	Ø 3 - 130 mm		Ø 3 - 200 mm
Integrated air exhaust in option	LE 120HP - LE140HP	LE150HP	Lni 900
Floor stand external exhaust in option	ES 10 - 30 - 50		
Alternate lenses	1.5 - 2"		





CO2 TECHNOLOGY FIBRE TEC		FIBRE TECHN	OLOGY	DUAL-SOURCE TECHNOLOGY
LS900XP	LSIOOOXP	LSIOOEX FIBRE	LS900 FIBRE	LS900 eDGe
610 x 610	1220 x 610	610 x 305	610	) x 610
250	300	145	,	250
40-60-80	60-80	20-30	20-30-50	20-30-50 (Fibre) - 40 (CO2)
×	100 - 150	×		×

		pointer - Auto focus sensor - Print & cu alarm - Buffering memory - Jobs queu		
opt	option × option			option
Professional driver for graphic software included				
Laserstyle™ graphic				
	Optimised	Raster, High quality Raster, Vec	ctor, Cutting	
4	4.0 1.5 2.5 (CO2)		2.5 (CO2)	
940 x 1065 x 815	1660 x 1160 x 800	1025 x 725 x 450	940 x 1065 x 815	
170	300	70	170	
Class 1 - Laser product. Door closed				
Option	Included as standard	Option		
Option				
		Option		
Ø 3 - 200 mm Ø 3 - 130 mm		Ø 3 - 200 mm		
Lni 900	LE 190 HP	LE 140HP - 150HP	Lni 900	
ES 10 - 30 - 50				

2 - 3"

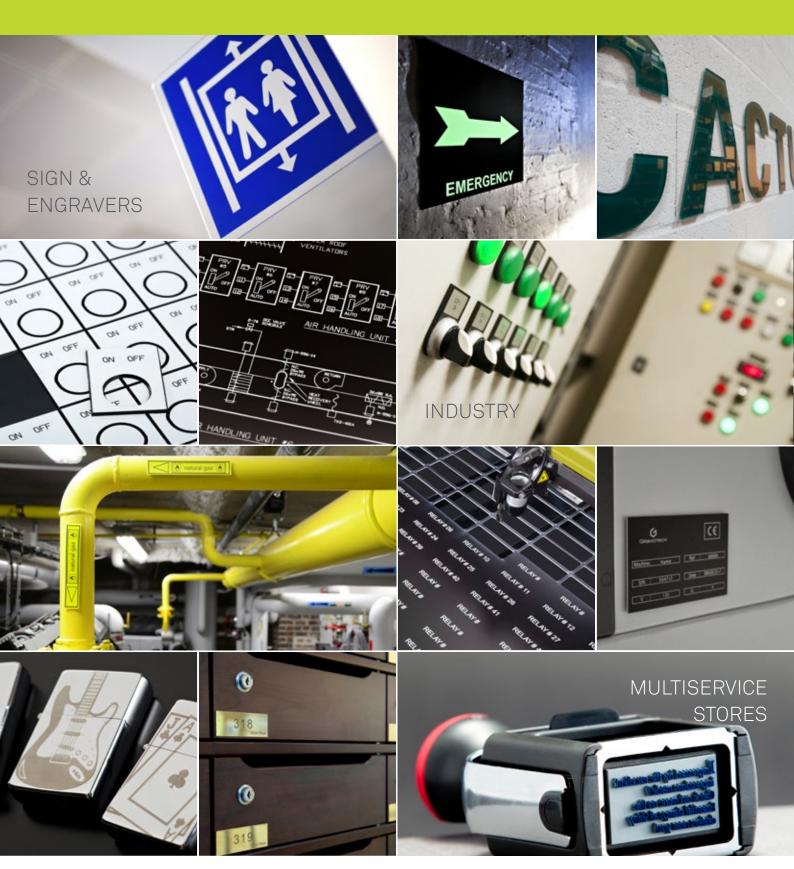


2 - 3 - 4"

2 - 3 - 4"

1.5 - 2- 3 - 4''

# APPLICATIONS / MARKETS



MORE GRAVOGRAPH APPLICATIONS



Let us introduce you to the endless marking and engraving applications that you can achieve with Gravograph solutions, equipment, materials and accessories. Our creative and industry-specific technologies can be catered closely to your needs, achieving the right marking and engraving solution for you. Gravograph's drive for innovation and customer satisfaction leads to constant enhancements and new discoveries. In everyday life, you can find products engraved with a Gravograph machine almost anywhere!





## OUSTANDING SERVICES

#### **CUSTOMISATION & ADAPTATION**

Want the best service? Gravograph offer dedicated customisation and adaptation services to ensure your machine is the perfect fit for you.

Adapted or customised, our software can exchange data with any system or send information directly to the machine. Wether it is holding systems or fixing mechanisms, we can adapt the tools to your needs. Specific developments, whether minor or major, are the ultimate solutions to perfectly match your requirements.



Enjoy the convenience of Gravograph's team installing and implementing your solution and help you get the most of your equipment with in-depth training.

We know that user's needs and applications of their Gravograph solution can evolve over time. Our proximity allows us to always be present, should you need our assistance. Tailored maintenance contracts allow you to extend the reliability and life of your equipment, software upgrades and your machine's capabilites.







#### **EXPERT ADVICE**

At Gravograph, we pride ourselves on providing our customers with the best possible solutions for their businesses, meaning we carefully consider your applications and requirements before recommending a solution.

We have experienced teams across 5 continents that take the time to set up the parameters of your machine to best accomplish your goals. No matter what your objective is.

#### QUALITY

The development of our quality policy allowed us to initiate an ISO 9001 certification process in 1999 and today our main industrial and commercial facilities are ISO 9001: 2015 certified.

## CONSUMABLES FOR LASER SYSTEMS



With thousands of colour combinations and the largest selection of laser engraving materials, Gravograph offers what you need, when you need it. You can also save time and money using our cut-to-size and fabrication services.

Use our fabrication services to get any metal or laminate cut to your exact requirements, whatever the shape. Available finishes include bevelling, corner rounding, drilling, slotting or bending. Most materials can be supplied with a self-adhesive backing.

- Metal & plastic ranges for indoor & outdoor use
- Suitable for engraving & cutting applications
- Custom colours available
- Various thicknesses and sheet sizes available
- Custom fabrication to your specifications, on demand
- Expert advice available

		CO2	FIBRE
PLASTICS	Gravoply® 2		•
	Acrylic	•	
	Flexilase™	•	
	Gravotac™	•	
	Gravoglas™ 1	•	
	Gravoply® Laser	•	
	Gravoply® Ultra	•	
	Gravolase™ Metallics	•	
	Metallex®	•	
	Stickalase™	•	
ALUMINUM	Alumamark®	•	
	Gravoxal™	•	•
	Gravometall™	•	•
	Colored Aluminum	•	•
	Durablack®	•	•
BRASS	Trophy Brass	•	•
	Rubbalase™	•	
	Gravostrat™	•	

	CO2	FIBRE
Gold		•
Platinum		•
Silver		•
Glass, crystal	•	
Cork	•	
Horn	•	
Leather	•	
Paper, cardboard	•	
Fabrics, textile	•	
Fruit, food	•	
Wood, wood veneer	•	
Stone, marble, granite, ceramic	•	
Silicone	•	
Medical & electrical ceramics		•
Titanium, carbide, carbon		•
Fiberglass	•	
Nickel plated		•
Steel, stainless steel		•

FOR MORE INFORMATION, CHECK OUR E-CATALOGUE



## ABOUT GRAVOTECH

Gravotech is the global leader in cutting, engraving, scoring and permanent marking solutions for the personalization, signage and traceability sectors. The group has two main brands: Gravograph and Technifor. Gravotech is the reference supplier of laser and mechanical machines and materials for cutting, engraving and scoring operations. Technifor specialises in dot peen marking, scoring and permanent marking machines using lasers dedicated to traceability.

Gravotech's head office is in Lyon, France, and it operates three production sites and provides solutions via 21 subsidiaries and distributors in over 100 countries, employing 920 people worldwide.

Additional information on the group, its products and services is available on our sites: www.gravotech.com, www.gravograph.com and www.technifor.com

Providing quality, user-dedicated and productivity-driven solutions to our customers drives our development and teams everyday.

Gérard Guyard - Group chairman & CFO







### **CONTACT US**

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TÉL: +33 (0)3.25.41.67.26 information@gravograph.com www.gravograph.com

Gravotech Marking 56, avenue Jean Jaurès 10600 La Chapelle-Saint-Luc FRANCE



