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.

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

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 GRAVOSTYLE™

SIMPLIFY YOUR LASERING WITH PROFESSIONAL FEATURES

The powerful possibilities offered by Laserstyle™’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.

A SPECIALIZED SOFTWARE FOR LASER

All Gravograph lasers come with our professional lasering software, Laserstyle™. Specifically designed for lasering applications, Laserstyle™ 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.
LS100 - LS100EX

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.
LS900 - LS900XP
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 4000mm/s with with a 50μ (0.05mm) repeatability 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™ software which adjusts the cutting path.
Powerful and heavy duty laser solutions

WORKING SPACE
Loading of a whole material sheet size 1220 x 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 x 610 mm working area. CO2 laser sources ranging from 60 to 150W 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.
METAL MARKING
The LS100EX 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.
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.

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.

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.

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

<table>
<thead>
<tr>
<th></th>
<th>LS100</th>
<th>LS100EX</th>
<th>LS900</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum engraving area (mm)</strong></td>
<td>460 x 305</td>
<td>610 x 305</td>
<td>610 x 610</td>
</tr>
<tr>
<td><strong>Max Z clearance (mm)</strong></td>
<td>145</td>
<td>250</td>
<td></td>
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<tr>
<td><strong>Laser wattage - air cooled (W)</strong></td>
<td>40-60</td>
<td>40-60-80</td>
<td></td>
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<tr>
<td><strong>Laser wattage - water cooled (W)</strong></td>
<td>25 (Energy range)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standard features</strong></td>
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<td></td>
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<tr>
<td><strong>Positioning camera</strong></td>
<td>×</td>
<td>×</td>
<td>Option</td>
</tr>
<tr>
<td><strong>Driver</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Software</strong></td>
<td>Laserstyle™ graphic</td>
<td>(Energy Range: Laserstyle™ discovery)</td>
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</tr>
<tr>
<td><strong>Operating mode</strong></td>
<td>Optimised Raster, High quality Raster, Vector, Cutting</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Max. speed (m/s)</strong></td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size (mm)</strong></td>
<td>755 x 725 x 450</td>
<td>1025 x 725 x 450</td>
<td>940 x 1065 x 815</td>
</tr>
<tr>
<td><strong>Product weight (kg)</strong></td>
<td>42</td>
<td>70</td>
<td>170</td>
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<tr>
<td><strong>Laser classification</strong></td>
<td>Class 1 - Laser product. Door closed</td>
<td></td>
<td></td>
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<tr>
<td><strong>Base stand</strong></td>
<td>×</td>
<td></td>
<td>Option</td>
</tr>
<tr>
<td><strong>Vector cutting table - honeycomb grid</strong></td>
<td>option</td>
<td>Option</td>
<td></td>
</tr>
<tr>
<td><strong>Floating pin table</strong></td>
<td></td>
<td></td>
<td>Option</td>
</tr>
<tr>
<td><strong>Cylindrical attachment option</strong></td>
<td>Ø 3 - 130 mm</td>
<td>Ø 3 - 200 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Integrated air exhaust in option</strong></td>
<td>LE 120HP - LE140HP</td>
<td>LE150HP</td>
<td>Lni 900</td>
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<tr>
<td><strong>Floor stand external exhaust in option</strong></td>
<td>ES 10 - 30 - 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alternate lenses</strong></td>
<td>1.5 - 2&quot;</td>
<td>1.5 - 2 - 3 - 4&quot;</td>
<td></td>
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**MORE PRODUCT INFORMATION**
### CO2 TECHNOLOGY

<table>
<thead>
<tr>
<th>LS900XP</th>
<th>LS1000XP</th>
<th>LS1000 EX FIBRE</th>
<th>LS900 FIBRE</th>
<th>LS900 EDGE</th>
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<tbody>
<tr>
<td>610 x 610</td>
<td>1220 x 610</td>
<td>610 x 305</td>
<td>610 x 610</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>300</td>
<td>145</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>40-60-80</td>
<td>60-80</td>
<td>20-30</td>
<td>20-30-50</td>
<td>20-30-50 (Fibre) - 40 (CO2)</td>
</tr>
<tr>
<td>×</td>
<td>100 - 150</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

Maximum engraving area (mm)
- LS100: 610 x 305
- LS1000 XP: 610 x 610
- LS900: 610 x 305

Max Z clearance (mm)
- LS100: 145
- LS1000 XP: 250
- LS900: 250

Laser wattage - air cooled (W)
- LS100: 40-60
- LS1000 XP: 40-60-80
- LS900: 40-60-80

Laser wattage - water cooled chiller as standard (W)
- LS100: 25

Software
- Laserstyle™ graphic

Operating mode
- Optimised Raster
- High quality Raster
- Vector
- Cutting

Max. speed (m/s)
- LS100: 2.5
- LS1000 XP: 4.0
- LS900: 1.5

Size (mm)
- LS100: 755 x 725 x 450
- LS1000 XP: 1025 x 725 x 450
- LS900: 940 x 1065 x 815

Product weight (kg)
- LS100: 42
- LS1000 XP: 70
- LS900: 170

Laser classification
- Class 1 - Laser product. Door closed

Base stand
- Option

Vector cutting table
- Option

Floating pin table
- Option

Cylindrical attachment option
- Ø 3 - 130 mm
- Ø 3 - 200 mm

Integrated air exhaust in option
- LE 120HP - LE 140HP - LE 150HP

Floor stand external exhaust in option
- ES 10 - 30 - 50

Alternate lenses
- 1.5 - 2 - 3 - 4"
- 2 - 3 - 4"
- 2 - 3 - 4"

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Professional driver for graphic software included

Laserstyle™ graphic

Optimised Raster, High quality Raster, Vector, Cutting

<table>
<thead>
<tr>
<th>4.0</th>
<th>1.5</th>
<th>2.5 (CO2)</th>
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</thead>
<tbody>
<tr>
<td>940 x 1065 x 815</td>
<td>1660 x 1160 x 800</td>
<td>1025 x 725 x 450</td>
</tr>
<tr>
<td>170</td>
<td>300</td>
<td>70</td>
</tr>
</tbody>
</table>

Class 1 - Laser product. Door closed

Option

Included as standard

Option

Option

Option

Ø 3 - 200 mm

Lni 900

LE 190 HP

LE 140HP - 150HP

Lni 900

ES 10 - 30 - 50

1.5 - 2 - 3 - 4"

2 - 3 - 4"

2 - 3 - 4"
APPLICATIONS / MARKETS

SIGN & ENGRAVERS

INDUSTRY

MULTISERVICE STORES

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!
OUTSTANDING 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. Whether 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.

INSTALLATION & TRAINING

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 capabilities.

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

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

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

Gérard Guyard - Group chairman & CEO

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