



GRAVOTECH

Technifor 

GRAVOGRAPH 



# LASER STATIONS FOR MARKING AND ENGRAVING



## LASER WORKSTATION

# A SOLUTION FOR EVERY APPLICATION

## A COMPLETE RANGE

Laser workstations enable safe laser marking in any environment: factory, workshop, front and back office. These benchtop enclosures are available in different sizes from compact to large scale and can accommodate any of our laser technologies. The widest range of materials can therefore be marked: plastic, metal, organic or mineral.



**LWI**  
manual station



**LW2**  
automated station



**LW custom**  
customised stations

## INCREASE YOUR PRODUCTIVITY

The laser workstations are easy to install and easy to move with the optional wheeled laser bench, adding flexibility and portability to the laser system.

Build quality and reliability ensure that the workstations can be used intensively, with a range of features and accessories to match any productivity requirements.

## COMPLETE SAFETY

### FOR THE OPERATOR

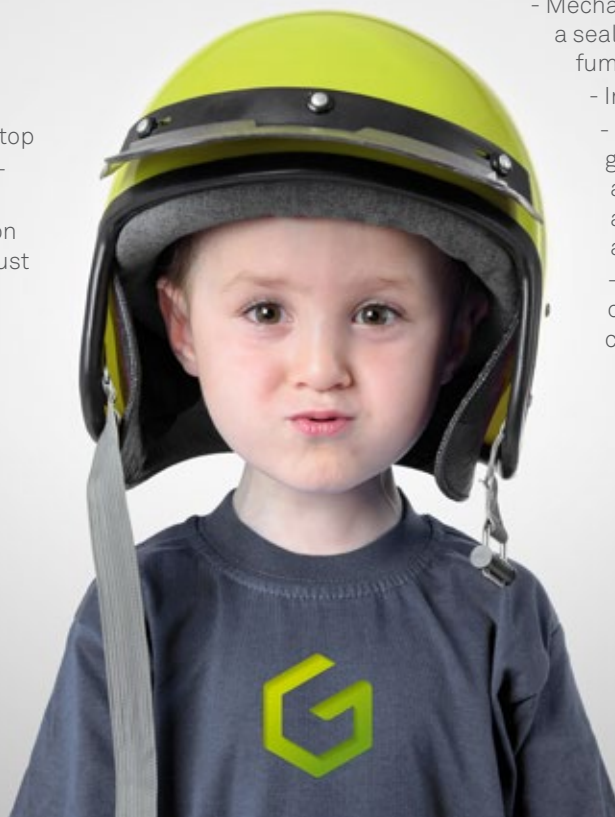
The workstations are certified as Class I laser products meeting all safety requirements, allowing use in unrestricted environments:

- Integrated fail-safe valve
- Certified protective glass
- Door closure security (Interlock)
- Control system with emergency stop
- Door fitted with sensors and anti-pinch system
- Integrated extraction and filtration solutions to protect users from dust and smoke

### FOR THE MACHINE

The laser workstations are designed to achieve maximum productivity as well as longevity:

- Mechanics and electronics fully protected in a sealed watertight box resistant to dust and fumes
- Integrated alarms and controls
- Dual focal lens dual protection: integrated glass cover to protect the focal lens against dust and projections + reinforced aluminium ring to protect against accidental shocks
- Fume extraction systems to prevent optics and internal moving parts contamination

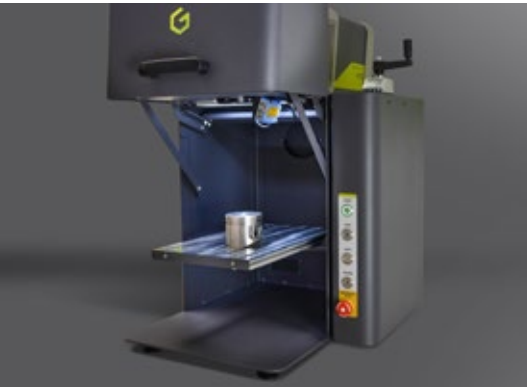


# CONFIGURE YOUR SOLUTION



## 1. CHOOSE YOUR LASER

Fibre / Hybrid / Green / CO2



## 2. CHOOSE YOUR STATION

LW1 / LW2



## 3. CUSTOMISE YOUR STATION

LW CUSTOM / Accessories



## 4. CHOOSE YOUR SOFTWARE

Lasertrace™ / Laserstyle™

## SUPPORT THROUGHOUT THE PROJECT

Our team will support you throughout your project, from process definition to validation including marking of your samples. Our objective: to provide you with the equipment matching your marking requirements.



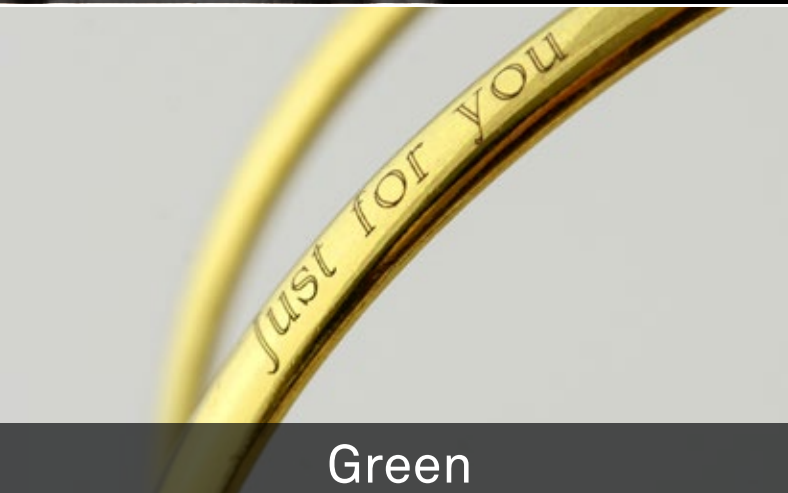
# 1. CHOOSE YOUR LASER TECHNOLOGIES



Fibre



Hybrid



Green



CO2



## OUR EXPERTS AT YOUR SERVICE

Gravotech provides expertise with free of charge access to application laboratories equipped with all technologies and machine configurations. Our technical teams test-mark your parts and advise on best suited system and marking parameters.



## LASER TECHNOLOGIES

Materials react differently depending on the wavelength of the laser beam used. Many complex factors affect the outcome: pulse length, power, frequency, speed, etc. Having a selection of laser technologies on offer is critical to ensuring impartial professional advice.

With over 20 years experience in designing and manufacturing lasers, our wide range of technologies enables us to advise you on the right solution for your specific marking and engraving requirements.



## SOMETHING TO SUIT EVERY BUDGET

From manual workstation to a fully custom-designed laser enclosure we are able to provide solutions to meet all budgets. Accessories can be added over time to all workstations to follow growing requirements.

# FREE SAMPLE ASK US !



## A LASER FOR EVERY MATERIAL

		FIBRE 20 - 30 - 50 W	HYBRID 6 - 10 - 20 W	GREEN 5 - 10 W	CO2 20 - 30 W
METALS	Steel, stainless steel	●	●		
	Aluminium	●	●		
	Carbide, carbon	●	●	●	
	Copper, brass	●	●		
	Titanium	●			
	Gold, silver, nickel, platinum		●	●	
PLASTICS	ABS	●	●	●	○
	PA	●	●	●	○
	PC		●	●	○
	PE - PET			●	○
	POM - PBT	●	●	●	○
	PP			●	○
ORGANIC MATERIALS	Wood, varnished wood				●
	Rubber				●
	Leather				●
	Paper, cardboard, cork				●
	Stone, marble, granite				●
OTHERS	Pottery				●
	Electrical and medical ceramics	●	●	●	
	Silicon			●	●
	Glass, crystal				●

● = Contrasted marking    ○ = Non-contrasted marking



## MORE ABOUT... PLASTIC MARKING

Natural, coloured, clear or doped, plastics react differently depending on laser technology and parameters used.

The Hybrid laser creates a clear contrast mark on the majority of plastics.

The Green laser is recommended for use on more technical plastics as well as clear plastics when very detailed marking is required.

Both have very short pulse duration and can mark without generating heat onto the part, therefore limiting burning or deformation.



## FOCUS ON PHOTO MARKING

The galvanometric mirror system used in our lasers enables both fast and high resolution marking.

The graphic quality achieved is simply outstanding.

With a graphic resolution of up to 1200 Dpi our laser systems enable high precision renderings of all photos regardless of media or material used.

# 2. CHOOSE YOUR STATION

## LW1 / LW2

### LW1



### EASY SETUP

Supplied ready for marking, the LW1 marking station can be safely installed on a table or workbench within minutes. No technical assistance required.



### EASY TO USE

Integrated red pointers help with positioning and simulating the engraving on the part as well as setting the laser head to the correct distance.



### EASY ON BUDGET

With a simple and robust design, the LW1 station is a great solution for low to medium volume part marking.

### LW2



### ERGONOMY

The LW2 station is fully automated with a motorised programmable door and Z-axis movement. Less input is required from the operator. Remote control operation for increased ease of use.



### VERSATILITY

Small and large parts can be easily marked, with a table designed for additional clamping. No part weight restriction..



### PRODUCTIVITY

The LW2 has been designed for high volume production and intensive use. It can also be customised to accommodate extra large parts.

# DISCOVER OUR PRESENTATION VIDEO



## LW1

## LW2

## LW CUSTOM

	Available with all lasers from the Gravograph / Technifor range: Fibre, Hybrid, Green, CO2		
Weight (kg)	50	60	Custom made to customer's specifications
Dimensions (mm)	650 x 504 x 549	600 x 622 x 772	
Size of marking area (mm) *	From 65 x 65 to 205 x 205		
Work area (mm) *	max. height 284 - max. length 539	max. height 365 - max: length 558	
Safety	Class I certification (closed door) Safety interlock system	In addition to LW1 options: Door fitted with sensors and anti-pinch system	
Included	<ul style="list-style-type: none"><li>- Marking software Lasertrace or LaserStyle</li><li>- Selected laser marking system</li><li>- Selected focal lens</li><li>- Internal LED lighting</li><li>- Manual Z axis</li></ul>	<p>In addition to LW1 options:</p> <ul style="list-style-type: none"><li>- Z axis 300mm</li><li>- Motorised door</li><li>- Magnetic remote control</li><li>- Fume extraction remote control</li></ul>	
Available options and accessories	<ul style="list-style-type: none"><li>- 3D marking</li><li>- Vision Manager</li><li>- Fume extraction systems</li><li>- Part rotation systems</li><li>- Range of focal lenses</li><li>- Barcode and Datamatrix code readers</li><li>- Laser workstation cabinet on wheels</li></ul>	<p>In addition to LW1 options:</p> <ul style="list-style-type: none"><li>-Class 4 interlock (use with door opened)</li><li>- Aluminium clamping table</li><li>- Rubber protection mat</li></ul>	

\* As per focal



## MORE ABOUT... LASERING AREA

A range of focal lenses is available for our laser markers, with specific properties on marking area, spot size, engraving depth or lasering distance from part.

The high quality German made optics evenly distribute power and provide consistent marking over the whole marking area.



## FOCUS ON 3D MARKING

Gravograph - Technifor lasers can be equipped with a unique 3D module enabling lasering in one operation on surfaces with up to 120mm height variation. Unlike other system using a mechanical telescope, the reaction time is instantaneous. The engraving is precise and uniform over the entire part, with no character distortion.

### AUTOFOCUS

The autofocus module automatically adjusts the focal length required with no calibration or waiting time required.



# 3. CUSTOMISED WORKSTATIONS

## LW CUSTOM



Custom -made stations



Rotary plates



Semi-automatic stations



Parts loading tray



## CUSTOM-MADE

Detailed feasibility studies matching specific requirements are carried out by our customisation department. This unique service aims at producing functional and reliable solutions that will be implemented and supported by our local technical teams.



## FROM BASIC TO FULLY AUTOMATED

From modifying existing workstations to designing fully automated systems, our machine and software customisation teams will work to your specifications. Large complex projects are often managed locally working in partnership with trusted special purpose machinery manufacturers.

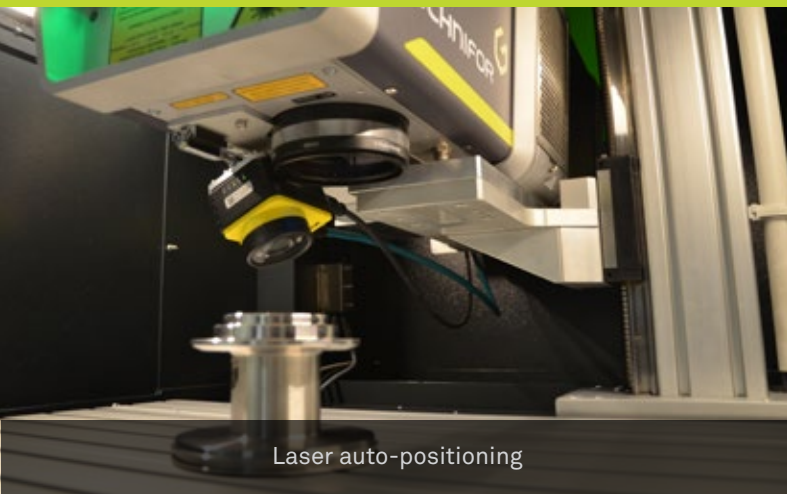


## CUSTOMISED SOFTWARE

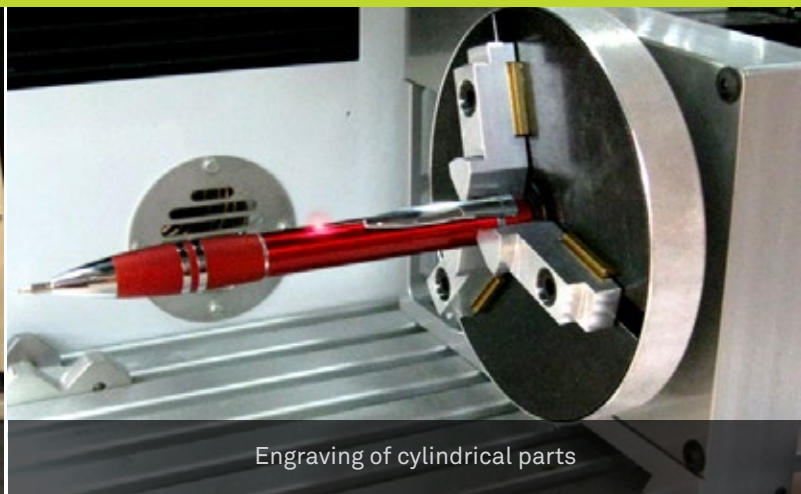
Software can be customised too. A simple change in interface colour, a dedicated logical process with automatic data import from a networked database or a picture driven tactile interface, our software team will study all specific requirements.



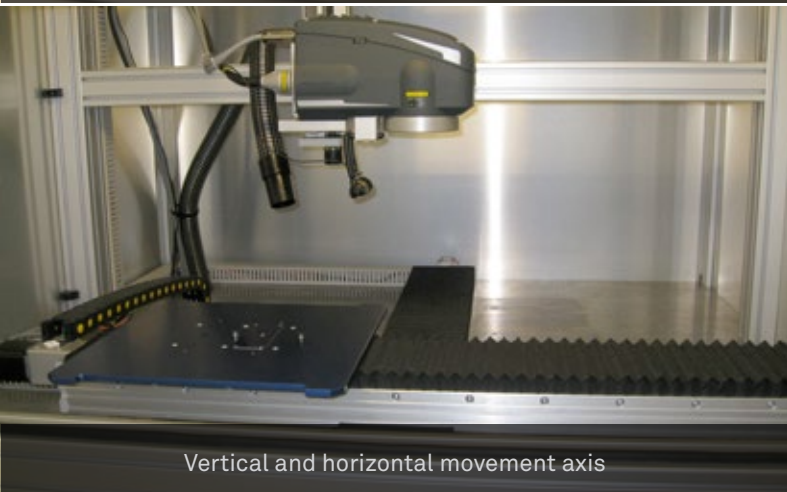
# ACCESSORIES



Laser auto-positioning



Engraving of cylindrical parts



Vertical and horizontal movement axis



Fumes extractors



## MORE ABOUT... PLATE MARKING

The automatic plate feeder (APF) enables a stack of plates to be individually lasered (with identical or varying information) without user intervention.

Compatible with all our laser machines and suitable for plastic and metal plates, the APF can be set up in a few minutes.

This accessory can continuously load and mark up to ten plates per minute: text, logos, variables... all your data can be transmitted directly by the software, your database or PLC.



## FOCUS ON VISION

Our solutions are compatible with vision systems and enable:

- Detection of part orientation and automatic alignment of the engraving
- Positioning of the part and checking of the mark by camera
- Instant check-read of barcodes, DataMatrix™, QT codes to verify traceability
- Data import by scanning and historic log in internal database

# 4. CHOOSE YOUR SOFTWARE

## LASERTRACE

All coding formats: Datamatrix, barcodes, QR codes, UID, GS1, etc

Serialisation tools:  
counter, variables,  
shift codes, automatic  
timestamping, etc

Direct access to  
marking parameters



**+** Multilingual interface

**+** Library of pre-settings by material, Marking colour chart  
Link to databases (ODBC, Excel, ASCII, etc.)

## IDENTIFICATION AND TRACEABILITY

### AUTONOMOUS MODE

Lasertrace is specifically designed for traceability and part marking applications.

Single screen interface, serial numbering and codification, auto counters / dates / shifts, logos and 1D-2D barcodes, laser presets, real-time preview... some of the features included as standard.

The supervisor / user mode makes Lasertrace the perfect software for industrial part marking.

### PRODUCTION MODE

In production mode Lasertrace will connect and interact with your IT infrastructure.

Access your database and your ERP, manage duplicates and automatically create historic log files. In addition, use code readers to verify the quality of the engraving.





# LASERSTYLE

Compatible with all file types: EPS, JPEG, PNG, BMP, PDF, DXF, etc

Laser any font in any language



Engraving in relief and 3D

Full control of all laser parameters



Photo lasering

## CREATIVITY & PRODUCTIVITY

### THE MOST COMPREHENSIVE SOFTWARE ON THE MARKET

From general engraving to personalisation Laserstyle offers in one package all the tools required whatever your application.

- Import, create and retouch your logos, texts, photos
- Engrave several items at once with variable text or logo
- Built-in wizards and tutorial videos to assist with all tasks and functions

Take it a step further: Laserstyle 3D module enables the engraving of relief and texture with full controls of all parameters.





# ABOUT GRAVOTECH

Gravotech is the global leader in cutting, engraving, scribing and permanent marking solutions for the personalisation, signage and traceability sectors.

The group has two main brands: Gravograph and Technifor. Gravograph is the reference supplier of laser and mechanical engraving machines and consumables such as engraving laminate. Technifor specialises in dot peen, scribing and laser marking and engraving parts identification and traceability applications.

Gravotech operates worldwide with three production facilities, 29 subsidiaries and a network of distributors located in over 100 countries.

In the UK a team of over 30 people supports Gravotech customers with local showrooms and engineers across the country.

“

Constant investment in R&D and quality is key to our common goal: customer satisfaction.

”

*G rard Guyard - CEO*



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