

Technifor



HAL

# LASER STATIONS FOR MARKING AND ENGRAVING



#### **LASER WORKSTATION** RANGE

www.gravotech.com

# A SOLUTION FOR EVERY APPLICATION

#### A COMPLETE RANGE

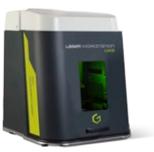
Laser marking stations can be used to mark all your components regardless of the material: plastic, metal, organic minerals and more. The workspace it optimized to identify, in a series of by unit, without cluttering your environment. Our stations are compatible with all our laser technologies.

#### INCREASE YOUR PRODUCTIVITY

Easy to install and use, these workstations are great for any workshop or product line. Reliability is our key word. Our laser stations offer quality marking without compromising on execution speed.



LVVI manual station



LW2 automated station



LW CUSTOM personalized stations

#### COMPLETE SAFETY

FOR THE OPERATOR

Certified as class 1 (closed door), our marking stations comply with the strictest safety requirements and protect the user and environment from all laser emissions.

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

#### FOR THE MACHINE

Designed to maintain maximum productivity, our stations guarantee performance and sustainability of your investment.

-Mechanics and electronics are fully protected from dust, smoke and splashes in a sealed and watertight box.

-Dual protection for the laser focus: -Layer 1: Glass protection preventing deposits. Removable and cleanable

-Layer 2:Aluminum ring protection from accidental shocks

-Removal of smoke preventing deposits on the optics, via exhaust units.

# HOW TO: CONFIGURE YOUR SOLUTION



#### 1. CHOOSE YOUR LASER

Fiber / Hybrid / Green / CO<sup>2</sup>

#### 2. CHOOSE YOUR STATION

LW1 / LW2

#### **3.** PERSONALIZE YOUR STATION

LW CUSTOM / Accessories



#### 4. CHOOSE YOUR SOFTWARE

Lasertrace™ / Laserstyle™

#### SUPPORT THROUGHOUT THE PROJECT

We guarantee total support throughout your project, from the process definition to validation of the marking on your samples. Our objective: to provide you with adapted and scalable equipment, which promotes your productivity.

# **1.** CHOOSE YOUR LASER 4 TECHNOLOGIES





#### AT YOUR SERVICE

As an expert in marking and laser engraving, Gravotech provides free-of-charge access to an applications laboratory, which is equipped with all technologies and machine configurations; our technical teams are able to perform real-life tests on your parts and to advise you on the system and the parameters adapted to your particular requirement.



# EXPERTISE IN LASER TECHNOLOGY

Materials react differently depending on the wavelength of the laser beam used. There are many complex factors which affect the outcome: pulse length, power, frequency, speed, etc.

Invested in laser technology for over 20 years, we use laser technologies to offer you the best solution for the direct marking of your parts.



## SOMETHING TO SUIT EVERY BUDGET

You'll find equipment sized according to your needs. From the simplest and most economical functions to more advanced features and semi-automatic workstations, your new marking solution will meet all your production requirements.

# **FREE SAMPLE** ASK US !



A LASER FOR EVERY MATERIAL		FIBER 20 - 30 - 50 W	HYBRID 6 - 10 - 20 W	GREEN 5 - 10 W	CO <sup>2</sup> 20 - 30 W
METALS	Steel, stainless steel	•	•		
	Aluminium	•	•		
	Carbide, carbon	•	•	•	
	Copper, brass	•	•		
	Titanium	•			
	Gold, silver, nickel, platinum		•	•	
	ABS	•	•	•	0
PLASTICS	PA	•	•	•	0
	PC		•	•	0
	PE - PET			•	0
	POM - PBT	•	•	•	0
	PP			•	0
	Wood, varnished wood				•
ORGANIC MATERIALS	Rubber				•
	Leather				•
	Paper, cardboard, cork				•
	Stone, marble, granite				•
OTHERS	Pottery				•
	Electrical and medical ceramics	•	•	•	
	Silicon			•	•
	Glass, crystal				•

= Contrasted marking O = Non-contrasted marking



#### A LITTLE MORE ABOUT ... MARKING PLASTICS

Natural, colored, transparent, boosted or not by multiple additives, the plastic reacts differently depending on the laser and the parameters used.

Offering contrasted and surface marking, the hybrid laser is perfect for a wide range of plastics.

The green laser can be used for more technical plastics and transparent plastics.

Both have very short pulse lengths and they mark without heating the part (no burns or deformation).

#### FOCUS ON PHOTO MARKING

The galvanometric head system used in our stations is a perfect combination of speed and high resolution marking.

The quality of the engravings obtained highlights your products and your communications.

As with the printing, there is almost no limit to the engraving process: the laser equipment enables high precision renderings of all your photos regardless of your media material (up to 1200 Dpi).

# 2. CHOOSE YOUR STATION LW1/LW2



Easy access to control buttons

ငြရ ကြည့်

#### EASY TO USE

This turn-key marking station is installed with a completely secure environment on a table or workbench. No specialized training is required.

#### EFFECTIVE

The positioning guide uses a laser pointer to simplify your operation and handling while reducing the risk of error.

#### COST-SAVING

With a simple and robust design, this marking station is a great solution for quickly identifying small and medium sized parts.

LW2



Large work area with 27 fixing holes (M6)

DB37 Connector : automated piloting and integration

### COMFORTABLE

A more advanced model in terms of its equipment and scope, the LW2 is fully automated: automatic door, motorised Z-axis, allowing for rapid, ondemand adjustments.

#### FLEXIBLE

You can easily mark all of your parts thanks to the automatic positioning system. The high work volume accepts tools and inserts of all sizes and automatically adjusts to provide the best mark.

#### PRODUCTIVE

Adapting to your production workflow by automating marking, receiving data from other systems, simplified operator tasks and more. Timesaving and error-free marking are guaranteed.

# DISCOVER OUR PRESENTATION VIDEO



	LVVI	LW2	LW custom
	Compatible with all lasers f	, Green, CO²	
ight (lbs)	110.23	132.37	
nensions (inch)	25.59" x 19.84" x 21.61"	23.62" x 24.48" x 30.39"	
e of marking area (inches)	2.55" x 2.55" to 8.07" x 8.07		
rts insertion area (inches)	max. height: 11.18 - max. length 21.22	max. height: 14.37 - max:. length 21.96	
fety	Certified Class 1 Complete «Interlock»		
luded	- Selection of marking software Lasertrace™ or LaserStyle™ - Laser marking system of your choice - Focal length - LED lighting of the marking zone - Manual Z axis	In addition to LW1 options: Motorised Z axis 11.81"	Tailor-made to fit any requirement
rsonalize your station with ange of options «Plug and yy»	- 3D Marking - Vision Manager - Fumes extractors - Part rotation systems - Focal range - Barcode and Datamatrix code reader - Supports	In addition to LW1 options: - Motorized door - Class 4 safety option	

\* As per focal

Play



#### A LITTLE MORE ABOUT... MARKING SURFACE

Since most parts have a unique shape, our laser systems can automatically adapt to the proper focal length to ensure a perfect mark.

Our high-quality optics distribute the energy from the laser beam over the part without side effects or loss of power.



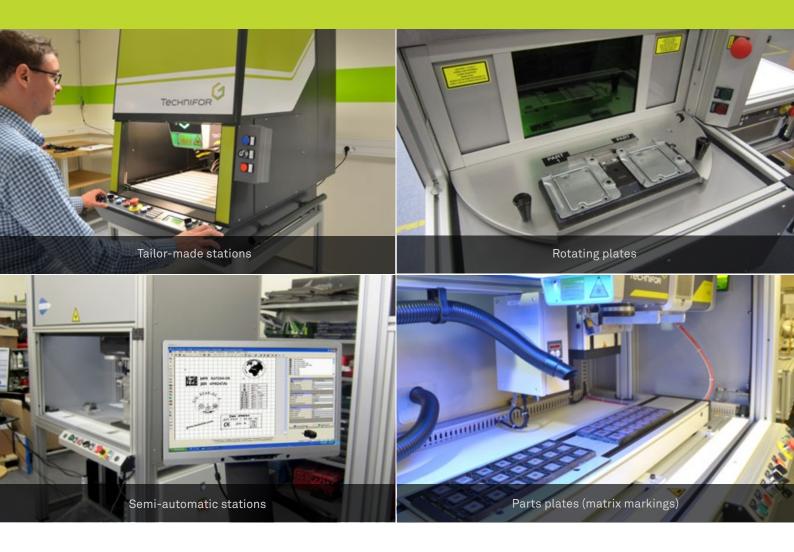
#### FOCUS ON 3D MARKING

Unique to Gravotech machines, laser marking stations allow for optimal marking with a range up to 120mm for a variety of parts. Flawless marking is guaranteed regardless of the complexity of the shape. The engraving is precise and uniform over the entire part, with no deformation of characters.

OPTION: AUTOFOCUS

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

# **3.** PERSONALIZE YOUR STATION LW CUSTOM



75-33

### TAILOR-MADE

Gravotech offers a personalised study of your needs and proposes an adapted solution ensuring that it can be effectively maintained throughout its life.

This unique service aims to provide you with a functional and reliable solution, guaranteeing "zero faults" and simplifying operator tasks.



#### SIMPLE TO AUTOMATED

From simple tooling to the automated marking station, our experience and our structure allows us to offer optimal solutions fully integrated into your environment. Minimize manual operations, adjust to the size of the part to be marked, automate repetitive tasks, secures the marking area and more. Gravotech's standard or fully-customized solutions can meet any need.



#### PERSONALIZED SOFTWARE

Since our lasers can mark anything, our proprietary operating software needs to function just as seamlessly. Personalize your software by changing the interface to your business' colors, create a customized piece of software, develop dedicated functions, or create your own machine/software/accessory package. Modernize your production like with customized software.

#### ACCESSORIES



Vertical and horizontal movement axes







#### A LITTLE MORE ABOUT... PLATES MARKING

The automatic plate loading module manages the supply, marking and automatic ejection of all your nameplates.

Compatible with all our laser machines, it can be set up in a few minutes and accepts all plate formats, thicknesses and materials (steel and plastic).

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

#### FOCUS ON VISION

Our solutions are compatible with vision systems that enable response to all your requirements:

- Detection of parts and automatic marking alignments
- Part positioning and verification via WebCam
- Instantaneous readout of barcodes, Datamatrix, QR codes. All guaranteeing your traceability.
- Reading of manufacturing orders and registration of the data

# 4. CHOOSE YOUR SOFTWARE LASERTRACE

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

NE D

DD/MM/YYYY

St0016-5

hh:mm:ss Gounter:001

Shift A

1. . . . .

( E TECHNIFOR

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



ultilingual interface

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

# KEEPING CONTROL OF YOUR PRODUCTS TRACEABILITYAUTONOMOUS MODEPRODUCTION MODE

Lasertrace<sup>™</sup> facilitates the traceability and identification of all types of parts.

Serialize your parts easily, generate unique codes and configure your variables, counters and shift codes. Include your logos and barcodes. Finally, preview the marking to reduce the risk of error.

When you create your template, all your artwork is updated automatically!

Lasertrace goes one step further and can be integrated into your working environment.

Direct access to

marking parameters

Access your database and ERP, manage duplicates, access recorded files and utilise a code reader to verify all marks seamlessly.



#### LASERSTYLE

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

Import all types of font: TrueType, customized fonts, etc

Engraving in relief and 3D

Engrave high resolution photos on all types of supports

#### GIVE EXPRESSION TO YOUR CREATIVITY THE MOST COMPREHENSIVE TOOL ON THE MARKET

Laserstyle<sup>™</sup> allows you to create your own customized engraving jobs easily. Unleash your creativity and conquer new markets.

Create

Imagine\_ Personalize

永恒

- Import, create and retouch your logos, texts, photos
- Configure precise engraving depths
- 3D and artistic designing

Laserstyle offers an additional 3D marking and texture module so you can push even further and exceed your limits.



# ABOUT GRAVOTECH

Gravotech is the global leader in cutting, engraving, scoring and permanent marking solutions for the perzonalisation, 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

#### "

The deployment of a group quality system is the basis of our common goal: customer satisfaction.

JJ



#### CONTACT US

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



**Gravotech Marking SAS** 466 rue des Mercières - Z.I. PERICA 69140 Rillieux-la-Pape FRANCF





Stations-laser\_Leaflet\_FR\_V1\_0317 - Les informations, photos et illustrations contenues dans ce document ne sont pas contractuelles et peuvent être modifiées sans préavis. Windows® est une marque déposée de Microsoft Corporation. ©Gravotech Marking - 466 rue des Mercières - Z.I. Périca - 69140 Rillieux-la-Pape - France. SAS au capital de 8 437 520 € - SIREN : 334 818 515 RCS Lyon.