# LASER STATIONS RANGE











## WHY CHOOSE A LASER STATION?





**WELASE**<sup>™</sup>

**OUR LASER STATIONS** 

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



LW3

### **INCREASE YOUR PRODUCTIVITY**

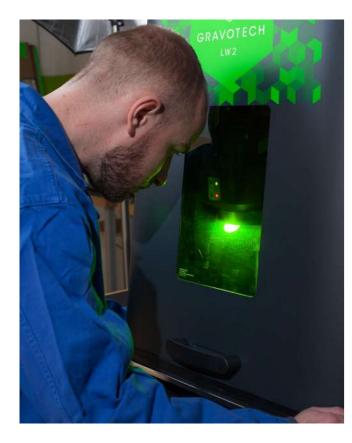
Easy to install and use, these workstations are great for any workshop or product line. Reliability is our key word. Our laser stations offer quality marking without compromising on execution speed.

## HOW TO CONFIGURE YOUR SOLUTION:





## 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.

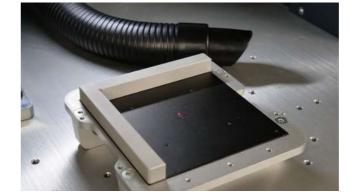
- Completely closed casing
- . Certified protective glass
- Door closure security (safety sensors) .
- Control system with emergency stop .
- External extraction and filtration solutions to protect the user . from dust and smoke

### FOR THE MACHINE

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

Mechanics and electronics are protected from dust, smoke and industrial environments in a 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.







# 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 technology



Depending on your material. \*Onlv available with WeLase™

## H-Series (DPSS) C-Series (CO2)\*

## 2. Choose your casing



LW2



LW3

Depending on the part size and productivity rate.

## 3. Choose your accessories

### Accessories: • Rotary device

• Exhaust systems

• Plate holder

• Pack easy fix

Focal Lens

### Options:

- 3D module
- Autofocus

## 4. Choose your engraving software

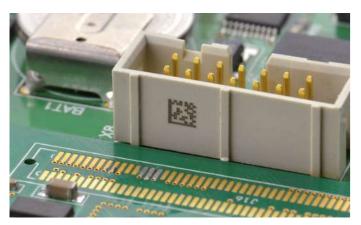
 Lasertrace Gravostyle<sup>™</sup>

## 1. CHOOSE YOUR LASER TECHNOLOGY

Every material has its corresponding laser technology.



Fiber



Green



Hybrid



CO2



## Experts 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 them 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.

## We engrave more than 30 materials

		<b>Fiber</b> 20 W - 30 W - 50 W	<b>Hybrid</b> 10 W - 20 W	Green 5 W	<b>CO2</b> 20 W - 30 W
METALS	Steel, stainless steel	•	•	•	
	Aluminium	•	•		
	Carbide, carbon	•	•	•	
	Copper, brass	•	•		
	Titanium	•			
	Gold, silver, nickel, platinium		•	•	
PLASTICS	ABS	•	•	•	0
	PA	•	•	•	0
	PC		•	•	0
	PE - PET			•	0
	POM - PBT	•	•	•	0
	РР			•	0
ORGANIC MATERIALS	Wood, varnished wood				•
	Rubber				•
	Leather				•
	Paper, cardboard, cork				•
	Stone, marble, granite				•
	Ceramic				•
	Electrical and medical ceramics	•	•	•	
	Silicon			•	•
	Glass, crystal				•



• = Contrasted marking • = Non-contrasted marking

## A LITTLE MORE ABOUT ... MARKING PLASTICS

Natural, colored, transparent, boosted or not by multiple additives, plastic polymers react differently depending on the laser and its parameters.

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 mark without heating the part (no burns or deformation).

Contact us if you have questions about marking your plastic part.

## 2. CHOOSE YOUR CASING



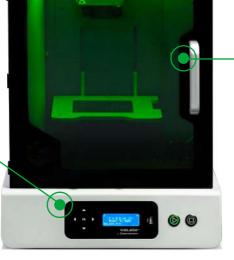


# EASY-TO-USE

• Plug & play machine • Quick focus with the red pointers

# INTUITIVE

- No clamping needed
- Easy settings and positioning



# COMPACT DESIGN

- 3 large windows
- · Maximum security Class 1, no safety glasses required

## FLEXIBLE

- · Combined circular and flat marking
- Large working area

## PRODUCTIVE

- Batch or unit marking
- Programmable: no risk of errors



Max. part size CO2: 340 x 200 x 180 mm (13.4 x 7.9 x 7.1 in) Others: 340 x 200 x 100 mm (13.4 x 7.9 x 3.9 in)

(18 x 22 x 24 in)

Machine dimensions (L x W x H) 450 x 560 x 610 mm

Machine weight 42 kg (92.6 lbs)

Max. part size L x W x H: 502 x 477 x 322 mm (19.8 x 18.8 x 12.7 in)

(depending on the focal length)

# FOCUS ON LASER SOURCES

WeLase and LW2 are available with different laser sources, among which:

Fiber: Power and versatility for surface marking, deep engraving.

Hybrid & Green: Precise marking which creates little dust (less cleaning required) and requires no finishing or treatment after the marking. It can appear in different rendering possibilities, from black to white.



Thanks to its touch screen, the LW2 facilitates demanding marking rates. The door closes on its own, the laser is automatically positioned at the right height, the marking is done in a few seconds and the door opens. This laser station does not require training. All you have to do is prepare your marking files and load them into the station via the USB port.





Machine dimensions  $(L \times W \times H)$ 600 x 622 x 772 mm (23.6 x 24.5 x 30.3 in)

Machine weight 60 kg (132.3 lbs)

## FOCUS ON PRODUCTIVITY

## **TECHNICAL DATA**

### **WELASE<sup>™</sup>** LW3 HIGH Laser sources All lasers from Gravotech range CAPACITY Up to 110 x 110 mm Size of the marking area (4.33 x 4.33 in) ( 1 Larger internal capacity CO2: 340 x 200 x 180 mm • Higher volume capacity to (13.4 x 7.9 x 7.1 in) GRAVOTECH match higher needs Max. part size INDUSTRY Others: 340 x 200 x 100 mm · Also suited for several (13.4 x 7.9 x 3.9 in) LW3 medium sized parts ORIENTED Machine weight max. 44 kg (97 lbs) 450 x 560 x 610 mm Touchscreen **Machine dimensions** (18 x 22 x 24 in) Solid base and construction • Large window for marking Safety verification VERSATILE Class 1 laser certification Software Focal lens From unique identification Included with machine LED lighting marking to multi-level and batch marking Focal diode • Mark a wide range of metals and plastics Rotary device Pack safe air Accessories and options Pack easy fix Machine dimensions (L x W x H) Max. part size Machine weight Q 810 x 720 x 628 mm 1213 x 1023 x 1120 mm 200 kg (31.89 x 28.35 x 24.72 in) (47.76 x 40.28 x 44.09 in) (420.92 lbs) (depending on the focal length) FOCUS ON ZX BRIDGE The LW3 is also available with a ZX bridge configuration, to move the laser marking head along the Z (height) and X (machine length) axes. It can mark very large parts from one end to the other, extending the effective marking area from 300 x 300 mm to 875 x 300 mm (34.45 x 11.81 in). New option exclusively designed for the LW3.





perfect mark.

Gravotech laser marking systems 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 distance required with no calibration or waiting time required.

### LW3

300 x 300 mm (11.81 x 11.81 in)

(up to 875 x 300 mm in ZX

config)

810 x 720 x 628

(31.89 x 28.35 x 24.72 in)

Fiber, Hybrid and Green laser series

Up to 300 x 300 mm
(11.81 x 11.81 in)

502 x 477 x 322 mm (19.8 in x 18.8 in x 12.7 in) (depending on the focal length)

(depending on the focal length)

600 x 622 x 772 mm (23.62 x 24.49 x 30.39 in)

60 kg (132.3 lbs)

200 kg (420.92 lbs)

1213 x 1023 x 1120 mm (47.76 x 40.28 x 44.09 in)

Class 1 Door Closed/ Class 2M Door Open (Aiming Diode)

Lasertrace or Gravostyle™

Trolley

Focal lens In addition to LW2 options: LED lighting Industrial table with rails Automatic motorized door 3D Module Autofocus module Vision Manager Focus diode In addition to LW2 options: Rotary device ZX Bridge Class 4 override 1D/2D codes reader Fumes extractor

A LITTLE MORE ABOUT .... MARKING SURFACES

Since most parts have a unique shape, our laser systems can be adapted through our software to the proper focal length to ensure a

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

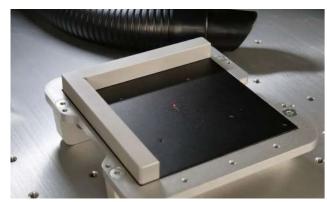
## FOCUS ON 3D MARKING

## **3. CHOOSE YOUR ACCESSORIES**

## 4. CHOOSE YOUR ENGRAVING SOFTWARE



**Focusing diode** 



Jigs and holding plates



Engraving of cylindrical parts



Validation camera



**3D Module** 





**Fumes extractors** 

Autofocus



Trolley



**C** LASERTRACE

Developed by Gravotech and enriched by numerous application experiences,

Lasertrace is a unique software specially designed to create marking files to be loaded in the laser system.

It includes a graphic composition to add text, logos and 1D/2D codes in your marking templates.

You can describe your marking process according to specified rules: the actions (marking blocks) to be carried out, the sequence of execution and the possibility to implement a large choice of transitions (output activations, camera blocks, variables, etc).

GRAVOSTYLE



# engravers

Benefit from advanced possibilities and save time! Unique features available. Due to our history of making engraving machines, we have a full understanding of the engraving process.

## Gravostyle<sup>™</sup>: unique software for laser

No need to learn how to use another software, switch in one click on the Gravostyle<sup>™</sup> interface to set-up laser engraving!



## Embedded on the laser control unit

This laser marker can work independently in a production line and generate all data necessary to your identification without a computer.

It can serialise your parts instantaneously, generate unique ID with complex marking content (time stamps with multiple formats, variables, counters, shift codes) and update the text and 1D/2D codes predefined in your templates.

This powerful embedded electronic can communicate using industrial protocoles and centralise information coming from your PLCs and database in real-time, saving you time while increasing your productivity.

## Expert software made by engravers for

## SERVICE & SUPPORT



## Training

Our training modules are designed to optimise your use of our solutions and are available for our full range of machines, software and accessories.



## **Technical Support**

We bring you local support in your language in more than 50 countries, where we have established presence directly and with our distribution partners.



### Maintenance

Thanks to experience gathered with Gravograph and Technifor and our global presence in more than 50 countries with 150 Gravotech technicians and our distributor partners, we can offer you a wide range of services.

## DISCOVER OUR LASER STATIONS IN ACTION







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