









### WHY CHOOSE A LASER STATION?







 $\mathbf{WELASE}^{\mathsf{TM}}$ 

LW2

LW3

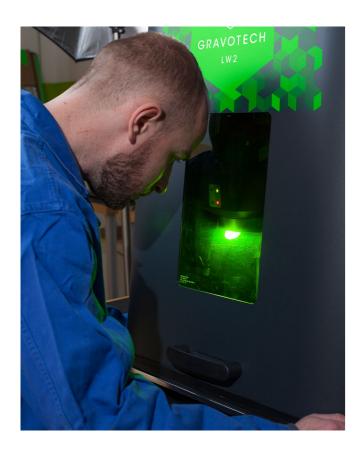
#### **OUR LASER STATIONS**

Laser marking stations can be used to mark all your components regardless of the material: plastic, metal, organic minerals and more. The workspace is optimized to identify, in a series or 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.

### **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.

#### HOW TO CONFIGURE YOUR SOLUTION:



### 1. Choose your laser technology





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



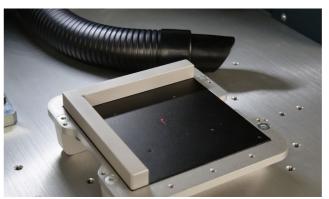
# 2. Choose your casing







Depending on the part size and productivity rate.



### 3. Choose your accessories

#### Accessories:

- Rotary device
- Plate holder
- · Pack easy fix
- Pack easy
- Lens
- · Exhaust systems



# 4. Choose your engraving software

Options:

· 3D module

Autofocus

- Lasertrace
- Gravostyle<sup>™</sup>

# 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

Every material has its corresponding laser technology.





Hybrid









Green

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	<b>Green</b> 5 W	<b>CO2</b> 20 W - 30 W
METALS	Steel, stainless steel	•	•	•	
	Aluminum	•	•		
	Carbide, carbon	•	•	•	
	Copper, brass	•	•		
	Titanium	•			
	Gold, silver, nickel, platinum		•	•	
	ABS	•	•	•	0
	PA	•	•	•	0
DI 167100	PC		•	•	0
PLASTICS	PE - PET			•	0
	POM - PBT	•	•	•	0
	PP			•	0
	Wood, varnished wood				•
	Rubber				•
	Leather				•
	Paper, cardboard, cork				•
ORGANIC MATERIALS	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 they mark without heating the part (no burns or deformation).

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

### 2. CHOOSE YOUR CASING





LW2



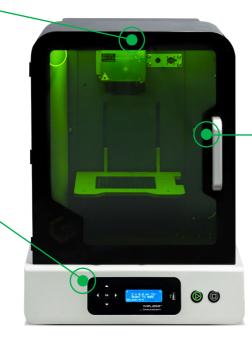


# EASY-TO-USE

- · 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  $(13.4 \times 7.9 \times 7.1 \text{ in})$ Others: 340 x 200 x 100 mm  $(13.4 \times 7.9 \times 3.9 \text{ in})$ 



#### Machine dimensions (L x W x H)

450 x 560 x 610 mm (18 x 22 x 24 in)



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)



#### Machine dimensions (L x W x 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 LASER SOURCES

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

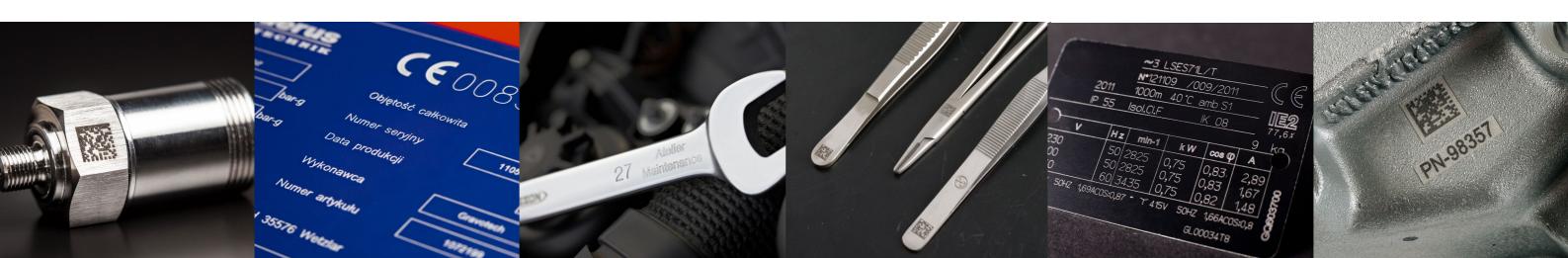
Fiber: Power and versatility for surface marking, deep engraving.

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.



# **FOCUS ON PRODUCTIVITY**

Thanks to its touch screen, the LW2 facilitates demanding marking rates. The door closes automatically, 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.



# HIGH CAPACITY

- · Larger internal capacity
- · Higher volume capacity to match higher needs
- · Also suited for several medium sized parts

# **VERSATILE**

- · From unique identification marking to multi-level and batch marking
- · Mark a wide range of metals and plastics





# **INDUSTRY ORIENTED**

- · Touchscreen
- · Solid base and construction
- · Large window for marking verification
- · Class 1 laser certification





Max. part size 810 x 720 x 628 mm (31.89 x 28.35 x 24.72 in)

(depending on the focal length)



Machine dimensions (L x W x H) 1213 x 1023 x 1120 mm (47.76 x 40.28 x 44.09 in)



Machine weight 200 kg (420.92 lbs)





# 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.



### TECHNICAL DATA

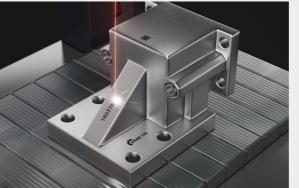
	WELASETM	LW2	LW3		
Laser sources	All lasers from Gravotech range	Fiber, Hybrid and Green laser series			
Size of the marking area	Up to 110 x 110 mm (4.33 x 4.33 in)	Up to 205 x 205 mm (8.07 x 8.07 in)	300 x 300 mm (11.81 x 11.81 in) (up to 875 x 300 mm in ZX config)		
Max. part size	CO2: 340 x 200 x 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)	502 x 477 x 322 mm (19.8 in x 18.8 in x 12.7 in) (depending on the focal length)	810 x 720 x 628 mm (31.89 x 28.35 x 24.72 in) (depending on the focal length)		
Machine weight	max. 44 kg (97 lbs)	60 kg (132.3 lbs)	200 kg (420.92 lbs)		
Machine dimensions	450 x 560 x 610 mm (18 x 22 x 24 in)	600 x 622 x 772 mm (23.62 x 24.49 x 30.39 in)	1213 x 1023 x 1120 mm (47.76 x 40.28 x 44.09 in)		
Safety	Class 1 Door Closed/ Class 2M Door Open (Aiming Diode)				
Software	Lasertrace or Gravostyle™				
Included with machine	Focal lens LED lighting Focal diode	Focal lens LED lighting Automatic motorized door	In addition to LW2 options: Industrial table with rails		
Accessories and options	Rotary device Pack safe air Pack easy fix	3D Module Autofocus module Vision Manager Focus diode Rotary device Class 4 override 1D/2D codes reader Fumes extractor Trolley	In addition to LW2 options: ZX Bridge		



### 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

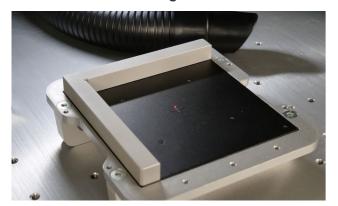
Gravotech laser marking systems allow for optimal marking with a range up to 120mm for a variety of parts. Flawless marking is guaranteed regardless of the complexity of the shape. The engraving is precise and uniform over the entire part, with no deformation of characters.

#### **OPTION: AUTOFOCUS**

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

### 3. CHOOSE YOUR ACCESSORIES

**Focusing diode** 



Jigs and holding plates



**3D Module** 



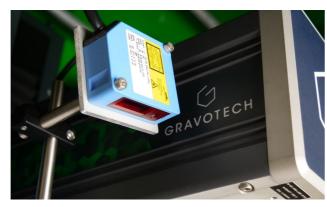
**Fumes extractors** 



**Engraving of cylindrical parts** 



Validation camera



**Autofocus** 



Trolley

#### 4. CHOOSE YOUR ENGRAVING SOFTWARE





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).



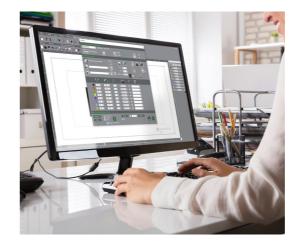
# Embedded on the laser control unit

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

It can serialize 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 centralize information coming from your PLCs and database in real-time, saving you time while increasing your productivity.





# Expert software made by engravers for 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™: unique software for laser

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

### **SERVICE & SUPPORT**



Training

Our training modules are designed to optimize 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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