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LASER CUTTING & ENGRAVING SYSTEMS

Delivery To Site

All of our machines include delivery to site as part of the package price. When your machine is delivered to site it will be met by one of our experienced engineers who will ensure the machine is located in position.

Installation

Once your machine has been positioned, our engineer will fully commission the machine.

This process includes:

- Connect the machine to the extraction point.
- Check the calibration after being in transit.
- Fill coolant (if required).
- Fully check over the machine to ensure it is fully operational before training commences.

System Training

When the machine is up and running our engineer will fully train you and your team on:

- Operating the machine
- The control panel interface
- Software
- Key maintenance for daily use

After-care & Technical Support

It is quite possible that you may have questions or require help from time to time after your machine is installed which is why we provide lifetime technical support.

You can contact us on the phone during business hours or via email and we well help you with any questions that you may have about software, files or even settings on your machine.

Laser Compatible Materials

Different Ways To Use Your Laser

WidLaser expands our range of cutting equipment and allows us to offer an option to consumers looking for an engraving solution for glass, granite and slate as well as a cutting option for rigid materials such as acrylic, MDF, wood, cork, some fabric materials, and many more.

The laser cutting & engraving systems on board further expands our ability to supply equipment into the manufacturing, packaging, pre-production sampling and even product testing & personalisation environments.

Demonstration & Sale

Graphtec GB Ltd are actively seeking out opportunities to increase the exposure of these feature rich laser cutting & engraving systems through our already extensive UK dealer network.

If you would like a demonstration on the system please get in touch or you can call us and ask to speak with one of our sales team for further information.

Due to the size and installation requirements of the WidLaser system, all of the demonstrations will be carried out in our demonstration suite at our HQ in Wrexham, North Wales. We invite you to bring your own media with you to test so that you know when you leave that the system will cut or engrave onto your media when delivery of the system is taken.





Laser Tube Buying Guide

When choosing a laser cutting, engraving & marking machine there are three main options when it comes to tube choice, CO2, Ceramic or fiber.

In this buying guide we explain the main differences between the different types of tubes that are available and which system is best for your business and material processing requirements.

Ceramic (aka Metal) CO2 RF Tubes

Users of machines that utilise ceramic tubes are often full commercial operations that require media to be processed quickly, precisely and efficiently. Ceramic machines are often used for long periods every day for high volume manufacturing purposes.

Ceramic RF (Radio Frequency) Tubes last far longer than standard CO2 Glass DC tubes, you are looking at a potential lifespan of 5+ years depending on use and maintenance of the machine as opposed to approximately 6 months with standard Glass DC CO2 tubes.

Ceramic tubes are more environmentally friendly then CO2 tubes as they can be sent back to the manufacturer to be renewed unlike glass tubes which once spent have to be disposed of.

Ceramic RF tubes are more powerful than the Glass DC equivalent and are commonly air cooled which means they are not prone to frost damage like the CO2 Glass tubes which are fluid cooled.

RF tubes produce their photonic beam immediately from the moment you flick the switch, there is no wait time like with the CO2 version. RF tubes produce a fast repeatability rate which in turn allows them to produce finer and more intricate work than glass CO2 tubes and provide a much faster media processing time.

Points Of Interest

- System Cooling Type: Air
- Common Lifespan: Approx: 40,000 hrs (5+ Years)
- Laser Pulse Rate: Fast
- Can The Tube Be Renewed: Yes

Common Uses For Ceramic Tube CO2 Laser Systems

- Cutting: Rigid Type Materials Such As Acrylic, Wood, MDF
- Engraving: Rigid Type Materials Such As Acrylic, Wood, MDF
- Marking: Rigid Type Materials
 Including Coated Metals

Glass CO2 DC Tubes

Users of machines that utilise CO2 tubes are often creating bespoke smaller volume products that have been personalised or for prototyping parts for future mass manufacture. CO2 machines are often used for shorter periods of time to create shorter run or one-off projects to users who create items to sell on platforms such as Etsy, Shopify or within smaller private business outlets and markets. CO2 machines are also incredibly popular within educational institutions and design departments.

CO2 Glass tubes are filled with a mixture of gasses (Carbon Dioxide | Helium | Nitrogen | Hydrogen | Xenon) and once electricity is sent through the tube it agitates & excites these gasses which creates a direct electrical discharge.

This discharge generates an invisible photonic laser beam that bounces around the tube until the desired level of charge has been achieved which then creates the photonic light beam (laser) that then leaves the laser tube.

The created photonic laser beam is infrared which means it is invisible to the naked eye but extremely powerful and can then be used to cut, engrave or mark material.

All Glass CO2 DC Tubes are cooled using liquid which means they can be prone to frost damage should the system be used / stored in a cool environment (such as an uninsulated shed or garage), care and prior consideration should be given in regards to where the laser system is located at time of install to help to prevent this from happening and to maximise the full lifespan of the tube.

Points Of Interest

- Tube Cooling Type: Liquid
- Common Lifespan: Approx; 4000 hrs (6 Months)
- Laser Pulse Rate: Slow
- Can The Tube Be Renewed: No

Common Uses For Glass Tube CO2 Laser Systems

- Cutting: Rigid Type Materials Such As Acrylic, Wood, MDF
- Engraving: Rigid Type Materials Such As Acrylic, Wood, MDF
- Marking: Rigid Type Materials Including Coated Metals





Fiber Tubes

Users of machines that utilise Fiber powered laser machines use them to mark materials only. This method is popular within industires that specialise in personalising promotion products or creating identification tags using metal plates.

Fiber tubes work by creating and pumping light from laser diodes. The diodes create light that is then transferred through a fiber optic cable through to an amplifier to increase their intensity.

Once the light has been amplified in the laser cavity is is optimised into a spcific wavelength that can then be shaped into a stright beam.

The beam that a Fiber System creates means it is specifically used to mark onto most materials including uncoated metals which CO2 or Ceramic powered laser systems are unable to do.

Fiber systems can be operated in either continuous or pulsed modes, the WidLaser F150 that we supply operates using a pulsed mode operation.

Points Of Interest

Tube Cooling Type: Ait Cooling
Common Lifespan: Approx; 100,000 Hours
Laser Pulse Rate: Up To 100khz
Can The Tube Be Renewed: No

Fiber Laser Systems Mark Onto

- Steel
- Aluminium
- Brass
- Copper



Who Are Ceramic Tube CO2 Laser Systems For?

Users of machines that utilise ceramic tubes are often full commercial operations that require media to be processed quickly, precisely and efficiently. Ceramic machines are often used for long periods every day for high volume manufacturing purposes.

Due to their fast speeds, increased power and enhanced intricacy, ceramic powered machines are often used for manufacturing purposes to quickly cut, engrave or mark materials in fast paced, high-volume production environments.

Although Ceramic and CO2 powered machines are capable of processing the same materials, ceramic machines offer the user an increased speed and longer tube lifespan meaning they can process increased amounts of materials and be run for longer periods of time between service intervals.

These systems are quiet, incredibly precise and allow users to cut rigid type and thicker mailable materials that traditional cutting plotters cannot cut through.

Cut Through Materials Such As:

- Wood
- Acrylic
- MDF
- Fabric
- Foam
- Delrin

- Cloth
- Leather
- Paper
- Card

Mark Onto Materials Such As:

- Ceramic
- Fabric
- Marble
- Tiles

- Plastics (PVC Free)

- Anodised Aluminium
- Coated Stainless Steel
- Coated Bare Metals

Engrave Into Materials Such As:

- Wood
- Stone
- Acrylic
- MDF Glass
- Coated Metals
- Foam
- Delrin
- Cloth
- Leather

Rubber

Matte Board

Melanine

Paper

- Wood Veneer
- Fibreglass
- Plastics (PVC Free)
- Cork
- Corian



Ceramic Tube CO2 Laser Systems

We offer the full range of Ceramic Tube Laser Systems from premium Portuguese laser manufactuer, Widlnovations.

Our range of WidLaser S Series Machines are equipped with high-end American made Iradion Ceramic Laser Tubes and are specifically designed and manufactured around the needs of high volume commercial users where speed and precision is key.

Ceramic Tube CO2 Laser Systems are capable of cutting, engraving & marking onto a wide range of rigid and malleable materials.

Included With All S Series Systems

- Auto-Focus Lens
- LED Illuminated Workspace
- Removable Honeycomb Table
- Processed Material Collection Draw
- Air Compressor
- Automatic Airflow & Temperature Control
- Smoke Extraction System & Vent
- USB & Network Connectivity
- 1 Year Manufacturer Warranty
- Lifetime UK Technical Support

WidLaser Software & Operating System Requirements

All WidLaser Systems work with Apple & Windows operating systems are supplied with **RD Works** Design Software. WidLaser Systems are fully compatible with Light Burn Software and can accept AI, DST, PLT, BMP, DXF files as standard.

WidLaser UK Warranty & Technical Support

All WidLaser machines come with a full 1 year UK warranty, lifelong technical support, delivery to site & installation are included as standard. We also supply comprehensive training on all of our machines as well as email and phone guidance post-delivery or installation.



WidLaser S600

Work Area: 813mm x 508mm

S600 Key Specifications

- Tube Options: 30W | 60W
- Machine Dimensions: 1360 x 1070 x 1140mm
- Working Area: 813mmx508mm
- Max Object Thickness: 150mm
- Max Cutting Speed: 2000mm/s
- Resolution: Toto 1000 DPI
- 1 Year UK Warranty
- Lifetime UK Technical Support

Optional Machine Upgrades

- Rotary Attachment
- Air Purification System



WidLaser S1000

Work Area: 1000mm x 1600mm

S1000 Key Specifications

- Tube Options: 100W | 120W
- Machine Dimensions: 2200 x 1505 x 1040mm
- Working Area: 1000mm x 1600mm
- Max Object Thickness: 230mm
- Max Speed: 2000mm/s
- Resolution: Up To 1000 DPI
- 1 Year UK Warranty
- Lifetime UK Technical Support

Optional Machine Upgrades

- Rotary Attachment
- Air Purification System



Who Are Glass Tube CO2 Laser Systems For?

Users of machines that utilise CO2 tubes are often creating bespoke smaller volume products that have been personalised or for prototyping parts for future mass manufacture.

CO2 machines are often used for shorter periods of time to create shorter run or one-off projects to users who create items to sell on platforms such as Etsy, Shopify or within smaller private business outlets, markets and craft events.

CO2 machines are also incredibly popular within educational institutions such as schools and universities as well manufacturing design departments.

These systems are quiet, incredibly precise and allow users to cut rigid type and thicker mailable materials that traditional cutting plotters cannot cut through.

Cut Through Materials Such As:

- Wood
- Acrylic
- MDF
- Fabric
- Foam
- Delrin

- Cloth
- Leather
- Plastics (PVC Free)
- Paper
- Card
- Mark Onto Materials Such As:
- Ceramic

Anodised AluminiumCoated Stainless Steel

Coated Bare Metals

- Fabric
- Marble
- Tiles

Engrave Into Materials Such As:

- Wood
- Stone
- Acrylic
- MDF
- Glass
- Coated Metals
- Foam
- Delrin
- Cloth
- Leather

- Matte BoardMelanine
- Paper
- Rubber
- Wood Veneer
- Fibreglass
- Plastics
- Cork
- Corian



Glass Tube CO2 Laser Systems

We offer the full range of CO2 Tube laser systems from premium Portuguese laser manufacturer, Widlnovations,

Our range of WidLaser C Series Machines are equipped with high-end CO2 Laser Tubes and are specifically designed and manufactured around the needs of the professional user.

Glass Tube CO2 Laser Systems are capable of cutting, engraving & marking onto a wide range of rigid and mailable materials.

Included With All C Series Systems

- Auto-Focus Lens
- LED Illuminated Workspace
- Removable Blades
- Removable Honeycomb Table
- Processed Material Collection Draw
- Integrated Chiller Unit
- Air Compressor
- Automatic Airflow & Temperature Control
- Smoke Extraction System & Vent
- USB & Network Connectivity

WidLaser Software & Operating System Requirements

All WidLaser Systems work with Apple & Windows operating systems are supplied with **RD Works** Design Software. WidLaser Systems are fully compatible with Light Burn Software and can accept AI, DST, PLT, BMP, DXF files as standard.

WidLaser UK Warranty & Technical Support

All WidLaser machines come with a full 1 year UK warranty, lifelong technical support, delivery to site & installation are included as standard. We also supply comprehensive training on all of our machines as well as email and phone guidance post-delivery or installation.

WidLaser C500

Work Area: 500mm x 700mm



C500 Key Specifications

- Power: 60W
- Working Area: 700mmx500mm
- Max Object Thickness: 150mm
- Max Engrave Speed: 1,200mm/s

Optional Machine Upgrades

Rotary Attachment

WidLaser C700 Work Area: 700mm x 1000mm

C700 Key Specifications

- Power: 90W
- Working Area: 1000mmx700mm
- Max Object Thickness: 200mm
- Max Engrave Speed: 1,000mm/s

Optional Machine Upgrades

- CCD Camera System
- Lens: 2" | 4"

- Max Cutting Speed: 200mm/s
- Min Character Size: 2mm x 2mm
- Included Lens Size: 2.5"
- 1 Year UK Warranty

Rotary Attachment

Lifetime UK Technical Support

• Air Purification System

- Max Cutting Speed: 200mm/s • Min Character Size: Imm x Imm
- Included Lens Size: 2"
- 1 Year UK Warranty

• Air Purification System

- Lifetime UK Technical Support

GLASS TUBE CO2 LASER SYSTEMS

WidLaser C900

Work Area: 900mm x 1300mm

WidLaser Cl000

Work Area: 1000mm x 1600mm



C900 Key Specifications

- Options: 120W | 150W
- Working Area:
- 1300mmx900mm
- Max Object Thickness: 200mm
- Max Engrave Speed:
- 1,000mm/s

Optional Machine Upgrades

 CCD Camera System • Lens: 2" | 4"

- Max Cutting Speed: 200mm/s
- Min Character Size: 2mm x 2mm
- Included Lens Size: 2.5"
- 1Year UK Warranty

- Lifetime UK Technical Support

• Options: 120W | 150W | 180W • Working Area: 1600mmx1000mm

C1000 Key Specifications

- Max Object Thickness: 200mm
- Max Engrave Speed: 1,000mm/s

Optional Machine Upgrades

- CCD Camera System
- Lens: 2" | 4"

- Max Cutting Speed: 200mm/s
- Min Character Size: 2mm x 2mm
- Included Lens Size: 2.5"
- 1 Year UK Warranty
- Lifetime UK Technical Support
- Rotary Attachment
- Air Purification System
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• Air Purification System



Our range of WidLaser F Series Machines are designed and built by Premium Portuguese manufacturer, WidInovations.

Fiber Laser Systems are designed to mark onto a wide range of rigid and mailable materials.

Users of machines that utilise Fiber powered laser machines use them to mark materials only. This method is popular within industires that specialise in personalising promotion products or creating identification tags using metal plates.

Fiber Laser Systems

The machines equipped with high-end Fiber Laser Tubes and are specifically designed and manufactured around the needs of users who are focussed on personalisation and promotional products.

Who Are Fiber Laser Systems For?

Fiber Laser Machines are predominantly used to mark designs onto uncoated metals which means they are very popular with users who specialise in personalisation and promotion product production.

Due to the nature of how a fiber laser works, they are capable of marking any material but are unable to cut or engrave. Fiber laser are very popular for users who need to be able to mark onto uncoated metals such as steel, aluminium, brass and copper which is something CO2 or Ceramic lasers are unable to do unless a coating spray has been applied first of the materials has been anodised.

Fiber lasers are very popular within sectors such as trophy makers or industries that need to mark metals for identification tag creation.

Mark Onto Materials Such As

- Ceramic
 - Fabric

Leather

Tiles

Glass

Marble

Slate

- Cloth Porcelain
 - Felt
 - Aluminium
- Stone Steel
- Granite Brass
 - Copper

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Fiber Laser Marking System

With premium build and design straight out of Widlnovation's Portuguese facility the WidLaser F150 is perfect for users looking to mark onto a wealth of materials.

The WidLaser F150 Fiber Laser produces incredibly intricate & detailed designs whilst sporting a compact, desktop friendly frame. The F150 provides an active workspace of 150mm x 150mm whilst reaching speeds of upto 4000mm/sec with a resolution of 2000 DPIS.

For Marking Materials Only (Not For Cutting or Engraving)

Key Features:

- Fiber Laser Laser Tube Options: 20W
 1 30W | 50W
- Laser Type: Pulsed Fiber Laser
- Working Area: 150mm x 150mm
- Machine Dimensions: 615 x 600 x 1570mm (80KG)
- Max Object Thickness: 135mm
- Minimum Line Size: 0.1mm
- Max Speed: 4,000mm/s
- Resolution: Up To 2,000 DPI
- Connectivity: Direct USB

Package Includes:

- Air Cooler
- Extraction System
- Motorised Focus Head With Double Point
- Windows Software For: plt, dxf, ai, bmp, jpeg, png, tiff, gif Files
- 1 Year UK Warranty
- Lifetime UK Technical Support

Optional Upgrades:

- Auto Focus Head
- Adapter For Cylindrical Objects
- Support Cabinet
- Lens: 100mm x 100mm

All WidLaser Systems include the RD Works Design software package and are also fully compatible with popular software packages from companies such as Lightburn.

RD Works Design Software

RD Works software allows you to design, control and operate your WidLaser Cutting & Engraving System with absolute ease. The intuitive design software allows you to create lines, shapes bezier curves and add text as well as allowing you to import and customise popular file types such as:

- Al
- DST
- PLT
- BMP
- DXF

RD Works: Compatibility

RD Works Software is fully compatible with Windows operating systems from XP through to 10 and Apple OS. For experienced designers who may already experienced with other leading design softwares, RD Works is fully compatible with:

- CorelDraw
- Adobe Ilustrator
- AutoCAD
- Inkscape
- 2D Design

RD Works is a fantastic tool for both commercial users and educational environments. The software allows you to import files which enables the use of preferred software to design files, this is highly useful should a users or organisation decide to update of change their design software in the future.

RD Works: Functionality

- Control of the machines speed and power settings via the software interface
- Programming of independent layers for different speed and power settings
- Basic drawing functions
- Basic edit functions such as move, resize, mirror and offset
- Work simulation and preview
- Compatible with Windows XP 10. 32 and 64 bit
- Low CPU and RAM usage

Contact us:

If you wish to find out more about our WidLaser systems, please don't hesitate to contact us today for a tailored quote.

