

# Blu125

Laser cutting  
and engraving  
system



*Technology this good has  
never been so affordable*



[WWW.LOTUSLASER.COM](http://WWW.LOTUSLASER.COM)

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## What is Blu125?

With its huge 1250x900mm work area and up to 200w of CO2 laser power, Blu125 is the ideal laser cutter to ensure that almost no job is too large or too long in process time.

Blu125 maximises margins and gives the freedom to create more challenging designs as well as increasing the number of users that can gain access to the laser cutter during a single day.

Process times and the ability to cut larger format, thicker materials are key priorities for heavier users of laser cutting machines.

Blu125 is the largest of our enclosed (Class 2), plotter based, flying optic CO2 laser cutting and engraving systems. At 1250x900mm the working area of Blu125 is significantly larger than competing models in this class and careful consideration of the motion system design, the optical arrangement and the extraction efficiency make Blu125 a very reliable, low maintenance machine.



## Standard Features

### UK DESIGNED & MANUFACTURED

Most competing machines of this type and at this price point will be direct Chinese imports. All Lotus Laser Systems are designed, assembled and tested in the UK to ISO9001 quality standards. We design our own electronics and manufacture all of our wiring in house to ensure that our systems are built to the highest quality and can be relied upon to deliver years of trouble free service

### EXCELLENT CAD/CAM SOFTWARE

All Blu model laser cutters come with easy to use, feature enriched Lotus Cut CAD/CAM software. Unlike the alternative print driver type machines, using our software provides far greater compatibility with common industry artwork formats, extra functionality to alter drawings at the laser cutting machine without having to open an expensive graphics package and, best of all, powerful optimisation tools to minimise process times, reduce errors and enhance output quality



### ▲ UK GRADED DC LASER SOURCE

Some DC lasers have a reputation of being very unreliable, even when new. At Lotus Laser Systems we carefully select the suppliers and the technology that we use for DC lasers then in the UK we test all of the lasers that we receive before they are integrated, literally scrapping any that do not meet our high quality

standards. As a consequence this adds some time and cost to our process, however, we feel that this grading process is the main reason why DC lasers fitted to a Lotus Laser System often outperform and far outlast DC lasers from alternative providers.

## Standard Features

### AIR ASSISTED NOSECONE ▶

When users switch from other brands to ours one of the main comments made is that the lens in a Blu laser cutter requires far less frequency of cleaning and lasts a much longer time. This is primarily because of the extra large bore air assist tube that we use combined with a different sized nosecone for each of the lens options we provide. As a result, Blu lasers deliver far higher rates of air flow through the nosecone not only protecting the lens but in many cases, in combination with underside extraction our air assist also enhances the cut quality



### ◀ UNDERSIDE EXTRACTION

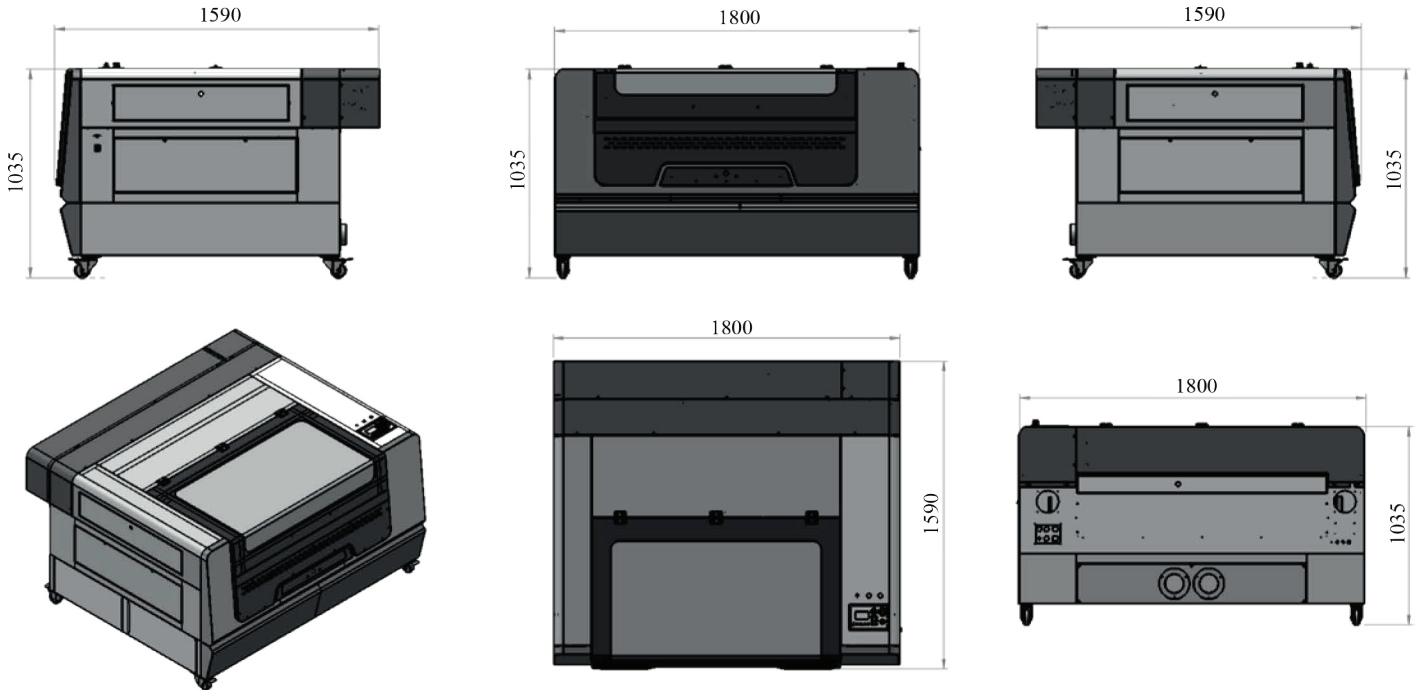
To maximise edge quality and speed of cutting, for most applications fumes should be extracted through the cut line from underneath the material. All Blu model laser cutters come with an underside extraction table designed to deliver a well balanced degree of vacuum and air flow. This underside extraction table can also be used to hold flat thin materials that might otherwise warp. Drawing fumes from underneath the material significantly reduces system maintenance, increasing component life while at the same time minimising the risk of flaming.

### LAMELLA BAR CUTTING TABLE ▶

All Blu model laser cutters are manufactured with a lamella bar cutting table. Cutting rigid sheet materials on lamella bars is far superior to using a honeycomb table. The lamellas can hold a far heavier weight, do not suffer distortion or cause as much flash back as a honeycomb table does; they can be removed, cleaned and very cheaply replaced if necessary.



## General Technical Data



### NET WEIGHT & DIMENSIONS

Width	1800mm
Depth	1590mm
Height	1035mm
Weight	325kg approx

### GROSS (CRATED) WEIGHT & DIMENSIONS

Width	1940mm
Depth	1710mm
Height	1350mm
Weight	470kg approx

### COOLING UNIT

Gross: 420mm W x 690mm D x 570mm H @ 25kg  
 Net: 280mm W x 580mm D x 430mm H @ 20kg

### LASER SOURCE

DC excited, water-cooled, minimum 100w or 200w output @ 10.6µm  
 Positioning (red dot) pointer 655mm

### POWER REQUIREMENT

All systems single phase 230v 50/60Hz

### COMPUTER

Operating System Windows  
 Connection USB max 3m

### EXHAUST REQUIREMENTS

It is mandatory to operate a correctly configured exhaust  
 Performance variable according to application - seek our advice  
 Number of exhaust ports: 2 Port OD Diameter: 100mm

### PERFORMANCE

Scanning mode: 1000mm/sec Vector mode: 50mm/sec

### SAFETY & SECURITY

Laser class 2 interlocked CE  
 Emergency stop RoHS

Keyswitch power on/off

### MISCELLANEOUS

LED cabinet lights Buffer with 99 file capacity  
 Controller with LCD display PC Connections by 3m USB cable  
 Direct connection by USB stick Coaxial air assist  
 Cutting nosecone (1 per lens) Air assist pump

### TABLE CONFIGURATION

89x lamella bar cutting table Lamellas at 15mm centres  
 Z axis max travel 100mm Centralised underside exhaust

### MAXIMUM PART LOAD

X 1250mm Y 900mm  
 Z 1.5" lens 165mm Weight 30kg  
 Z 2.0" lens 140mm Z 4.0" lens 90mm  
 Z 2.5" lens 125mm

### ENVIRONMENTAL REQUIREMENTS

Ambient temp. within 15-30c 300mm min clearance at sides  
 Do not store above or box in Rest on floor level within 3mm  
 Ventilate the room well Comply with local regulations  
 Do not power by a generator Direct data cable connection

Keep away from: vibration, high humidity, dampness, unstable power supply, direct sunlight, equipment making dust particles, drafts corrosive substances, combustible substances etc.

### WARRANTY (T&C APPLY)

Main system: 2 years Labour: Variable by territory  
 Laser source: 1 year Optics: 3 months  
 Warranty upgradable to 5 years at extra cost  
 Service contracts available at extra cost