

# Blu70

Laser cutting and engraving system



Technology this good has never been so affordable





# What is Blu70?

Blu70-DC is an enclosed (Class 2), plotter based, flying optic CO2 laser cutting and engraving system. This model is powered by a 60w DC excited, watercooled CO2 laser operating at the 10.6µm wavelength. A professional grade recirculating chiller unit is supplied as a part of the package. The laser source is further protected by a flow sensor that's not commonly found on alternative machines at this price point.

At 700x500mm the working area of Blu70-DC is considerably larger than a typical entry level machine and offers great value for money combining a high output power with a very low entry level price point.

Blu70-DC comes with a 2" f/I lens so it engraves with good quality but it is primarily designed as a cutting system for processing of sheet format materials. Blu70 is therefore one of our best systems where the user requires flexibility of application.























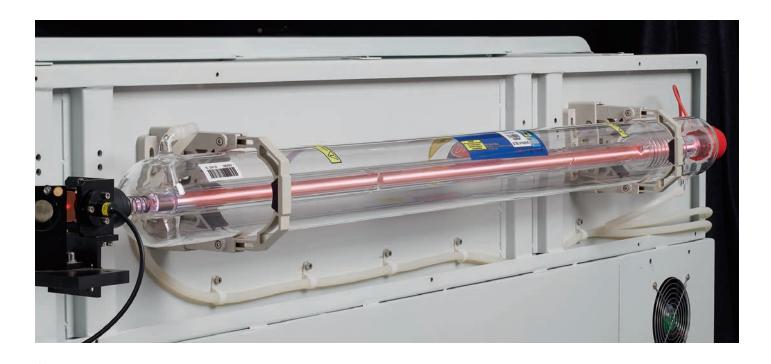
# **Standard Features**

## **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 scraping 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.













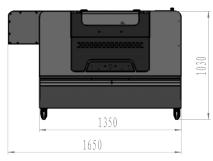


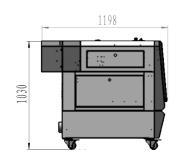




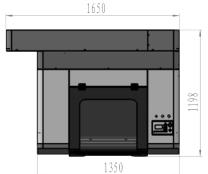
# **General Technical Data**

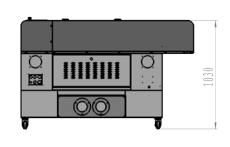












NET WEIGHT & DIMENSIONS		
Width	1350mm	
Depth	1200mm	
Height	1050mm	
Weight	248kg approx	
GROSS (CRATED) WEIGHT & DIMENSIONS		
Width	1810mm	
Depth	1440mm	
Height	1350mm	
Weight	350kg approx	
COOLING UNIT		
Gross: 420mm W x 690mm D x 570mm H @ 25kg		
Net: 280mm W x 580mm D x 430mm H @ 20kg		
LASER SOURCE		
DC excited, water-cooled, minimum 60w 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		
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	
48x lamella bar cutting table	Lamellas at 15mm centres
Z axis max travel 100mm	Centralised underside exhaust
MAXIMUM PART LOAD	
X 700mm	Y 500mm
Z 1.5" lens 165mm	Weight 12kg
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	