



LOTUS
LASER SYSTEMS

BLU100

LASER CUTTING & ENGRAVING SYSTEM

Technology this good has never been so affordable

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WHAT IS A BLU100

The combination of high power and large bed size makes Blu100 our most versatile laser cutter, well suited to the majority of sheet material cutting applications.

Acrylic is a perfect material for laser cutting. However, over recent years acrylic has become an expensive material. At 1000x600mm the working area of Blu100 is sized to minimise material waste. This is just one of the reasons why Blu100 is our best selling CO2 laser cutter.

Blu100 is powered by an 80w DC excited, water-cooled CO2 laser operating at the 10.6µm wavelength. This level of power is very good for most cutting applications but it's also good for power intensive engraving applications such as laser engraving wood.

LASER SYSTEMS

STANDARD FEATURES

What makes a Blu laser cutter so special?

Let us tell you...

UK DESIGNED & MANUFACTURED

Most competing machines at this price point will be direct Chinese imports.

All Lotus Laser Systems are designed, assembled and tested in the UK to ISO9001 standards. We design our own electronics and manufacture all wiring in house to ensure that our systems are built to the highest quality and can be relied upon for 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 alternative print driver type machines, our software provides far greater compatibility with common industry artwork formats, extra functionality to alter drawings at the laser machine without having to open an expensive graphics package and powerful optimisation tools to minimise process times, reduce errors and enhance output quality.



UK GRADED DC LASER SYSTEM

Lotus Laser Systems carefully select the suppliers and technology that we use for our DC lasers.

We test all of the lasers that we receive in the UK before they are integrated, 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.



AIR ASSISTED NOSECONE

When users switch from other brands to ours one of the main comments made is the lens in a Blu laser cutter requires far less cleaning and lasts much longer.

This is primarily because of the extra large bore air assist tube that we use combined with a different sized nosecone for each lens option we provide.

As a result, Blu lasers deliver far higher rates of air flow through the nosecone protecting the lens and in combination with underside extraction also enhances the cut quality.



UNDERSIDE EXTRACTION

To maximise edge quality and cutting speed fumes should be extracted underneath the material.

All Blu model laser cutters come with 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 minimising the risk of flaming.



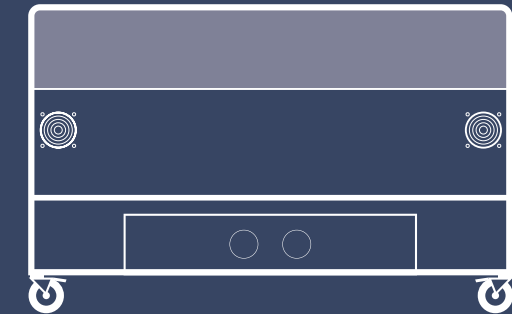
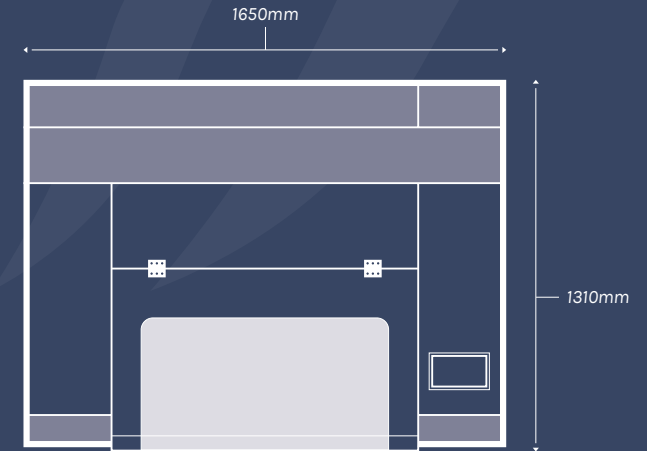
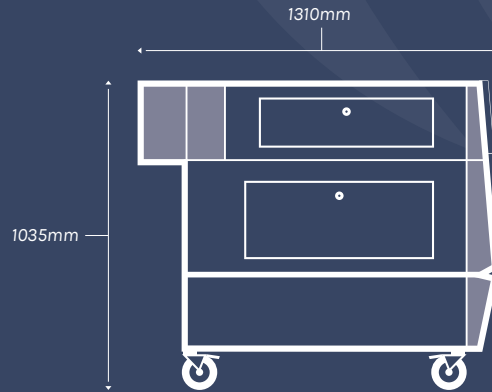
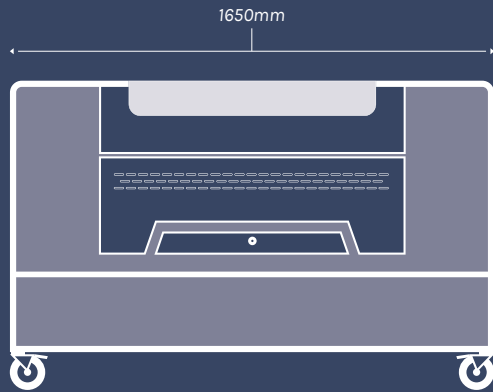
LAMELLA BAR CUTTING TABLE

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



Weight & Dimensions

| | |
|--------|--------------|
| Width | 1650mm |
| Depth | 1310mm |
| Height | 1035mm |
| Weight | 292kg approx |

Crated Weight & Dimensions

| | |
|--------|--------------|
| Width | 1790mm |
| Depth | 1420mm |
| Height | 1250mm |
| Weight | 440kg approx |

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: 100mm

Chiller Unit

| | |
|-------|------------------------------------|
| Gross | 420mm W x 690mm D x 570mm H @ 25kg |
| Net | 280mm W x 580mm D x 470mm H @ 20kg |

Computer

| | |
|------------------|------------|
| Operating System | Windows |
| Connection | USB max 3m |

Performance

| | |
|---------------|------------|
| Scanning mode | 1000mm/sec |
| Vector mode | 50mm/sec |

Table Configuration

| | |
|-------------------------------|-------------------------------|
| 67X lamella bar cutting table | Lamellas at 15mm centres |
| Z axis max travel 100mm | Centralised underside exhaust |

Safety & Security

| | |
|---------------------------|------|
| Laser class 2 interlocked | CE |
| Emergency stop | RoHS |
| Keystich power on/off | |

Power Requirement

All systems single phase 230v 50/60Hz

Miscellaneous

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

Maximum Part Load

| | | |
|-------------------|-------------------|-------------|
| X 1000mm | Y 600mm | |
| Z 1.5" lens 165mm | Z 2.0" lens 140mm | |
| Z 2.5" lens 125mm | Z 4.0" lens 90mm | Weight 20kg |

Laser Source

DC excited, water-cooled, minimum 80w output @ 10.6µm

Positioning (red dot) pointer 655mm

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: 2 year | Optics: 3 months |
| Warranty upgradable to 5 years at extra cost | |
| Service contracts available at extra cost | |