



Shaping better value

A range of CO2, Mixed Metal and Fibre Laser Engraving, Marking & Cutting systems built to Boxford specifications

Our laser systems are ideally suited to all training, hobbyist and professional applications.

Laser Engraving, Marking & Cutting

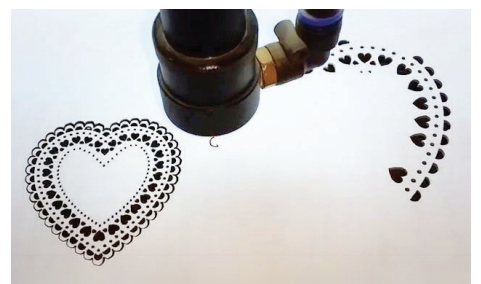
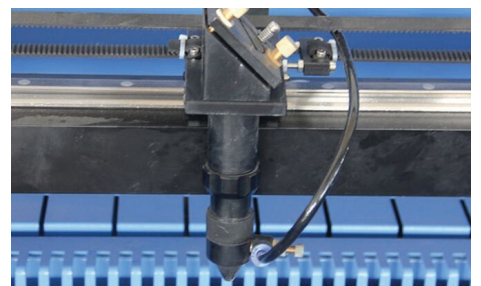
LASER

System features

- Integrated cooling systems which are chiller based on Models of 50 Watts and above laser tube powers.
- A rigid motion system incorporating high quality linear guide rails allows speeds up to 1000mm per second to be achieved.
- Standard auto Focus system automatically adjusts the focal length depending on the position of the material surface.
- Standard Air Assist prevents combustion of flammable materials.
- The integrated red dot beam pointer allows easy positioning of the laser prior to running a job.
- Superior glass Co2 laser tube offers up to 1,500 hours lifespan on models BGL350 & BGL460 and up to 10,000 hours on models BGL690, BGL1390 & BML1390. Fibre laser up to 100,000 hours lifespan.

What materials can be laser processed?

- | | |
|----------------------------|------------------------------|
| - Acrylic | - Marble |
| - Anodised Aluminium | - MDF |
| - Cardboard | - Nylon |
| - Coated Metals | - Paper |
| - Cork | - Plastics |
| - Fabrics | - Polycarbonate |
| - Foam | - Rubber |
| - Glass | - Stone |
| - Laminated Plastics | - Veneer |
| - Leather | - Wood |
| - Steel (BML & BFL models) | - Stainless (BML & BFL) |
| | - Aluminium (BFL 750W & 1kW) |



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Laser engraving, marking & cutting

	BGL350	BGL460	BGL690	BGL1390	BML1390	BFL1390 – 500	BFL1390 – 750
Engraving area (mm)	500 x 300	600x 400	900 x 600	1300 x 900	1300 x 900	1300 x 900	1300 x 900
Engraving area (in)	20 x 12	24 x 16	35 x 24	51 x 35	51 x 35	51 x 35	51 x 35
Z axis travel (mm)	250	250	250	250	250	100	100
Laser source power	50 watts	80 watts	80 watts	100 watts	150 watts	500 watts	750 watts
Laser type	Glass CO2	Glass CO2	Glass CO2	Glass CO2	Mixed (metal/ non metal)	Fibre (metal) 1070nm WL	Fibre (metal) 1070nm WL
Integrated laser cooling system	Water chiller	Water chiller	Water chiller	Water chiller	Water chiller	Water chiller	Water chiller
Table control	Electric	Electric	Electric	Electric	Electric	N/A	N/A
Cutting thickness (mm)	0–15	0–15	0–20	0–20	0–30 1.5mm steel ² 1.2mm SS ²	2mm steel ¹ 1mm SS ¹ 6mm steel ² 3mm SS ³	2.5mm steel ¹ 1.2mm SS ¹ 8mm steel ² 4mm SS ³ 2mm Aluminium ³
Max. cutting speed	600mm/sec	600mm/sec	600mm/sec	600mm/sec	400mm/sec	25m/min	25m/min
Max. engraving speed	1000mm/sec	1000mm/sec	1000mm/sec	1000mm/sec	200mm/sec	Vector only	Vector only
Machine weight	150kg	175kg	300kg	410kg	450kg	1250kg	1250kg
Dimensions (w x d x h mm)	1060 x 750 x 1020	1150 x 850 x 1020	1480 x 1010 x 1150	1860 x 1330 x 1150	2010 x 1550 x 1150	2300 x 2250 x 1850	2300 x 2250 x 1850
Mounting	Floor	Floor	Floor	Floor	Floor	Floor	Floor
Safety	Class 2 closed configuration	Class 2 closed configuration	Class 2 closed configuration	Class 2 closed configuration	Class 2 closed configuration	Class 2 closed configuration	Class 2 closed configuration
Operating modes	Raster engrave Vector engv/cut	Raster engrave Vector engv/cut	Raster engrave Vector engv/cut	Raster engrave Vector engv/cut	Vector cut Vector engrave ⁴ Raster Engrave ⁴	Vector engrave Vector cut	Vector engrave Vector cut
Location precision (mm)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Optics	50.8mm STD	63.5mm STD	63.5mm STD	63.5mm STD	63.5mm STD	<0.373mrad beam	<0.373mrad beam
Power requirements	220V 1ph @ 6A	220V 1ph @ 6A	220V 1ph @ 8A	220V 1ph @ 10A	220V 1ph @ 13A	220V 1ph @32A	220V 1ph @32A
Prices from (excl VAT)	£2,945	£3,945	£5,195	£6,195	£11,995	£44,945	£54,945

¹With Compressed air ²With Oxygen gas ³With Nitrogen gas ⁴Non metal cutting only

Included accessories

The Co2 Laser systems are packaged with the following accessories:

- Integrated Laser Source Cooling System.
- Honeycomb material cut-out table eliminating cut marks on the bottom side of the component by keeping the laser away from the machine table during vector cutting.
- Air assist including integrated compressor. This helps prevent combustion of flammable materials.
- Basic Extraction fan and hose for external venting.
- Windows Software & drivers. Design software supports DXF, JPEG, GIF, BMP, PLT, AI, CDR and other popular file formats.
- Warranty – 12 months on systems, 4 months on glass CO2 laser tubes fitted to BGL350 & 460 and 10 months on BGL690, 1390 and BML1390, parts and labour (excludes consumable items – lenses, mirrors, honeycomb table and extraction filters).

Optional accessories

- Automated tilting rotary device for engraving cylindrical objects.
- Filtered fume extraction/air filtration system*.
- The laser system's internal ventilation system is engineered with air exhaust paths that virtually eliminate mirror contamination.
- BFL Machines utilise an IFA certified extraction system with reverse jet pulse technology which meets the highest testing level (W3). Requires compressed air supply – 6.0 Bar@420 l/min.
- Set of replacement filters for extraction / air filtration system.
- 50.8 (2.0") 63.5 (2.5") focal length lenses.



* Laser systems can produce noxious fumes of varying levels depending on the material been processed. If exhausting internally, extraction must be to HEPA standards. Users may wish to consider a permanent external exhaust system, eliminating the need for continual filter replacement. Please ask for further details.