

CO2 laser cutting & engraving machines

Our range of non-metal laser cutting and engraving machines are built to Boxford specifications, giving customers easy to use and fully integrated laser cutting capabilities, to produce work of the highest standards.

All machines in our BGL laser range include **Lightburn laser software** and a **Lightburn ready 4K camera** for design positioning, image tracing and monitoring.



Materials which can be laser processed:

Acrylic
Wood
Card
Cork
Foam
Glass
Marble
MDF
Paper
Rubber
Stone
Slate
Laminated plastics
Anodised aluminium
and more...



Boxford CO2 lasers include as standard:

- Lightburn laser software (with 12 months of updates)
- Integrated 4K camera for design positioning & tracing
- Pre-configured & fully editable parameter library
- Auto-focus
- Red dot pointer
- Honeycomb and knife material bed
- Full motorised Z axis
- Integrated water cooling system for CO2 laser source
- Integrated compressor for air assist
- Auto start/stop extraction (when used with optional filtered extraction system)
- 12 months machine warranty
- Unlimited UK after sales and support



	BGL350	BGL460	BGL690	BGL1390
Engraving area (mm)	500x300	600x400	900x600	1300x900
Z axis travel (mm)	250	250	250	250
Laser power source	50w	80w	80w	100w
Laser type	Glass CO2	Glass CO2	Glass CO2	Glass CO2
Integrated laser cooling system	Water chiller	Water chiller	Water chiller	Water chiller
Table control	Electric	Electric	Electric	Electric
Cutting thickness (mm)	0-15	0-15	0-20	0-20
Max cutting speed	600mm/sec	600mm/sec	600mm/sec	600mm/sec
Max engraving speed	1000mm/sec	1000mm/sec	1000mm/sec	1000mm/sec
Location precision (mm)	<0.01	<0.01	<0.01	<0.01
Optics	50.8mm STD	63.5mm STD	63.5mm STD	63.5mm STD
Machine weight	150kg	175kg	300kg	410kg
Dimensions (w x d x h mm)	1060x750x1020	1450x850x1020	1480x1010x1150	1860x1330x1150
Mounting	Floor	Floor	Floor	Floor
Safety		Class 2 in a Class 1 Enclosure Closed Configuration		
Operating modes	Cutting, scan & vector engraving	Cutting, scan & vector engraving	Cutting, scan & vector engraving	Cutting, scan & vector engraving
Power requirements	220V 1ph @ 6A	220V 1ph @ 6A	220V 1ph @ 8A	220V 1ph @ 10A



Included accessories:

- Lightburn laser software, compatible with Windows, Mac and Linux OS, allowing easy import of AI, JPEG, BMP, DXF and more
- Integrated 4K camera for positioning and image tracing
- Integrated laser source cooling system (water chiller)
- Integrated compressor for air assist
- Honeycomb AND knife material beds
- Warranty: 12 month warranty on laser systems, parts and labour (excluding consumable items - lenses mirrors, honeycomb table and extraction filters. (4 months warranty on laser tubes fitted to BGL350 machines. 6 months warranty on BGL460 laser tubes. 10 months warranty on BGL690 and BGL1390 laser tubes).



Optional accessories:

- Automated tilting rotary device for engraving cylindrical objects
- Filtered fume extraction/air filtration system (with auto start/stop)
- Set of replacement filters for extraction/air filtration system
- 50.8 (2.0") and 63.5 (2.5") focal length lenses
- Lens and mirror cleaning kit
- On-site laser training



See our full range of manufacturing systems for education, design and industry on our website: www.boxford.co.uk or call us on +44 (0)1422 324810