

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 |
| Prices from (excl VAT) | £3,745 | £4,395 | £5,845 | £6,945 |



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

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).

