

BFL1390 Fibre Metal Cutting Laser

boxford

A range of metal cutting fibre laser systems built to Boxford specifications. Our high precision metal cutting fibre lasers are ideally suited to all kinds of training, prototyping and low to medium volume manufacturing applications.

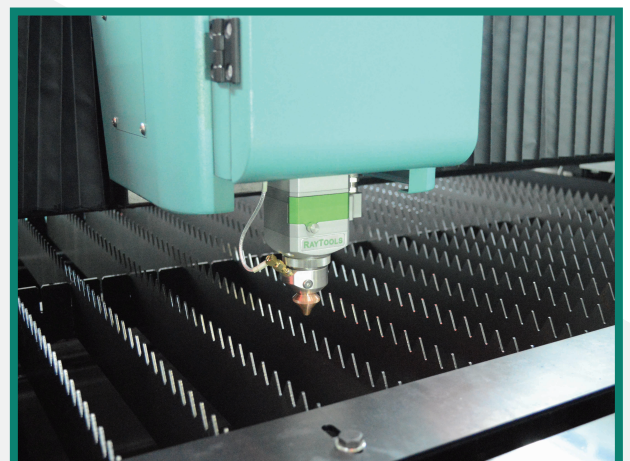


Materials which can be fibre laser processed:

Mild steel
Stainless steel
Aluminium
Anodised aluminium
Zintec
Galvanised steel
Brass
Shim steel
and more...

Boxford Fibre metal cutting lasers include:

- Fully enclosed system for optimal fume and debris management
- Rigid construction and motion system incorporating high quality Taiwanese linear guide rails and racks, together with Japanese servo drives, allowing speeds of up to 40 metres per minute to be achieved
- Integrated PC control system
- Automatic capacitive height control system for optimal cutting
- Integrated red dot beam pointer for plate location/orientation and program dry run
- Superior fibre laser with up to 100,000 hours life span
- Integrated cutting table with removable slats and material recovery tray
- Optional Boxford supplied extraction system, which is IFA certified and meets the highest testing level (W3), facilitating the extraction of fumes from high alloy steels with over 30% chromium and nickel content



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

| | BFL1390 500w | BFL1390 1kw | BFL1390 1.5kw | BFL1390 2kw |
|--|---|---|---|---|
| Cutting area (mm) | 1300x900 | 1300x900 | 1300x900 | 1300x900 |
| Z axis travel (mm) | 100 | 100 | 100 | 100 |
| Laser power source | 500w | 1kw | 1.5kw | 2kw |
| Laser type | Fibre 1070nm WL | Fibre 1070nm WL | Fibre 1070nm WL | Fibre 1070nm WL |
| Integrated laser cooling system | Water chiller | Water chiller | Water chiller | Water chiller |
| Focus system | Manual | Manual | Auto Focus | Auto Focus |
| Cutting thickness (mm) | 6mm mild steel ¹ 2mm stainless ² 2mm mild steel ³ 1mm stainless ³ | 10mm mild steel ¹ 4mm stainless ² 3mm mild steel ³ 1.5mm stainless ³ 3mm aluminium ² | 12mm mild steel ¹ 5mm stainless ² 3mm mild steel ³ 2mm stainless ³ 3mm aluminium ² | 15mm mild steel ¹ 6mm stainless ² 4mm mild steel ³ 3mm stainless ³ 4mm aluminium ² |
| Max cutting speed | 40m/min | 40m/min | 40m/min | 40m/min |
| Max acceleration | 0.5G | 0.5G | 0.5G | 0.5G |
| Location precision (mm) | <0.01 | <0.01 | <0.01 | <0.01 |
| Optics | <0.373mrad beam | <0.373mrad beam | <0.373mrad beam | <0.373mrad beam |
| Machine weight | 1250kg | 1300 kg | 1325 kg | 1500 kg |
| Dimensions (w x d x h mm) | 2300x2250x1850 | 2300x2250x1850 | 2300x2250x1850 | 2100x3400x1850 |
| Mounting | Floor | Floor | Floor | Floor |
| Safety | Class 2 closed configuration | Class 2 closed configuration | Class 2 closed configuration | Class 2 closed configuration |
| Operating modes | Cutting Surface etching | Cutting Surface etching | Cutting Surface etching | Cutting Surface etching |
| Compressed air requirements | Extractor only - 6.0 bar @ 420 l/min Low pressure compressed air cutting and extractor - 6.9 bar @ 650 l/min High pressure compressed air cutting and extractor - 18 bar @ 1100 l/min | | | |
| Overall footprint (with extract & ducting) | Extractor at side - 3200x2250mm Extractor at rear - 2300x3150mm | | | |
| Power requirements | 220V 1ph @ 32A | 380V 3ph @ 15A | 380V 3ph @ 32A | 380V 3ph @ 32A |
| Prices from (excl VAT) | £32,945 | £40,945 | £49,945 | £61,945 |

¹ with oxygen gas ² with nitrogen gas ³ with 6 bar compressed air



Included accessories:

- Wireless operator keypad
- Wireless keyboard and mouse
- Chiller based laser source cooling system
- Full day on-site UK mainland training
- Warranty - 2 years (excluding consumable items such as: cutting tips, lens protective glass, support slats and extraction filters)



Optional accessories:

- Bespoke downdraught fume extraction/ air filtration system
- Stand alone compressor for facilitating low pressure non-gas cutting and extraction
- High pressure compressor for non-gas cutting of thick materials
- Additional cutting head consumables (cutting tips, lens protective glass, etc)
- Set of replacement filters for extraction/ air filtration system