

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 head focus system for automatically adjusting focal length (1.5KW models and upwards)
 - 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
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- 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 1kw	BFL1390 1.5kw	BFL1390 2kw	BFL1390 3kw
Cutting area (mm)	1300x900	1300x900	1300x900	1300x900
Z axis travel (mm)	100	100	100	100
Laser power source	1kw	1.5kw	2kw	3kw
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	Auto Focus	Auto Focus	Auto Focus
Cutting thickness (mm)	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	18mm mild steel ¹ 8mm stainless ² 4mm mild steel ³ 3mm stainless ³ 6mm 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	1300 kg	1325 kg	1500 kg	1675 kg
Dimensions (w x d x h mm)	2300x2250x1850	2300x2250x1850	2100x3400x1850	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	380V 3ph @ 15A	380V 3ph @ 32A	380V 3ph @ 32A	380V 3ph @ 32A

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