

# 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.

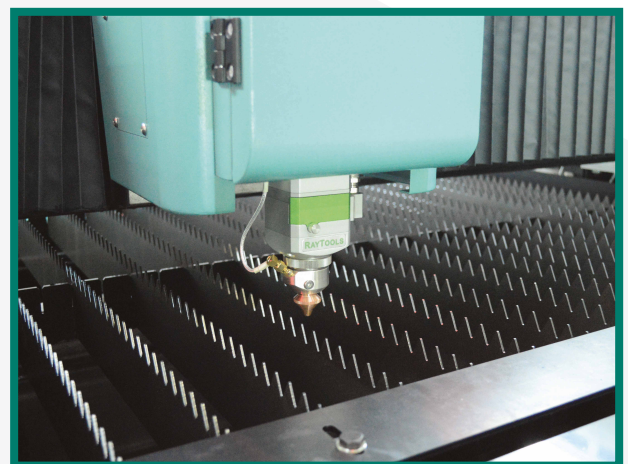
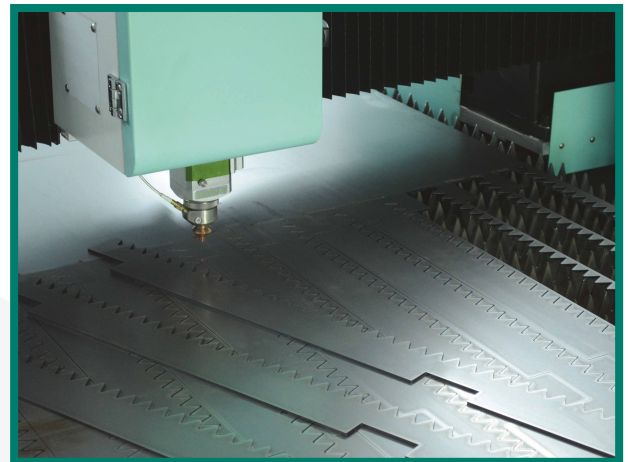


**Materials which can be fibre laser processed:**

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
- 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](http://www.boxford.co.uk) or call us on +44 (0)1422 324810

## BFL1390 1.0kw

## BFL1390 1.5kw

## BFL1390 2kw

## BFL1390 3kw

Cutting area (mm)	1300x900			
Z axis travel (mm)	100			
Laser power source	1.0kw	1.5kw	2kw	3kw
Laser type	Fibre 1070nm WL			
Integrated laser cooling system	Water chiller			
Focus system	Auto Focus	Auto Focus	Auto Focus	Auto Focus
Drive system	Servo motors			
Cutting thickness (mm)	12mm mild steel <sup>1</sup> 5mm stainless <sup>2</sup> 3mm mild steel <sup>3</sup> 2mm stainless <sup>3</sup> 3mm aluminium <sup>2</sup>	15mm mild steel <sup>1</sup> 6mm stainless <sup>2</sup> 4mm mild steel <sup>3</sup> 3mm stainless <sup>3</sup> 4mm aluminium <sup>2</sup>	18mm mild steel <sup>1</sup> 8mm stainless <sup>2</sup> 4mm mild steel <sup>3</sup> 3mm stainless <sup>3</sup> 6mm aluminium <sup>2</sup>	22mm mild steel <sup>1</sup> 10mm stainless <sup>2</sup> 4mm mild steel <sup>3</sup> 3mm stainless <sup>3</sup> 8mm aluminium <sup>2</sup>
Max cutting speed	40m/min			
Max acceleration	0.5G			
Location precision	<0.01			
Optics	<0.373mrad beam			
Machine weight	1500 kg			
Dimensions (w x d x h)	2350x2250x1900			
Mounting	Floor			
Safety	Class 2 closed configuration			
Operating modes	Cutting / Surface etching			
Compressed air requirements	6.0 bar @ 420 l/min Low pressure compressed air cutting - 6.9 bar @ 650 l/min High pressure compressed air cutting - 18 bar @ 1100 l/min			
Optional extraction				
Dimensions (w x d x h)	810mm x 940mm x 1350 mm			
Software	Cypcut			
Preferred file type	.dxf, .plt			
Power requirements	380V 3ph @ 32A			

<sup>1</sup> with oxygen gas    <sup>2</sup> with nitrogen gas    <sup>3</sup> with 6 bar compressed air

### Included as standard:

- Class 1 laser safety enclosure with CE marked safety switches
- Auto-focus laser head
- Intergrated Windows OS computer
- Programming & nesting software
- Wireless operator keypad
- Wireless keyboard and mouse
- Pull out table to assist with sheet loading
- Motorised up/down door
- Chiller based laser source cooling system
- Full day on-site UK mainland training
- **Warranty - 2 years** (excluding consumable items such as nozzles, lenses, 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
- Pneumatic clamps for securing thin materials



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