

# BFL2513

## 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 manufacturing, prototyping and training environments.

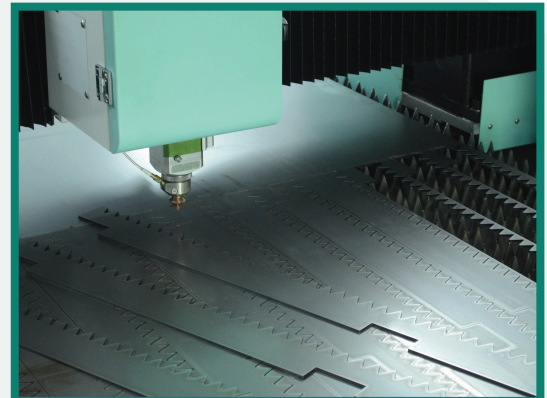
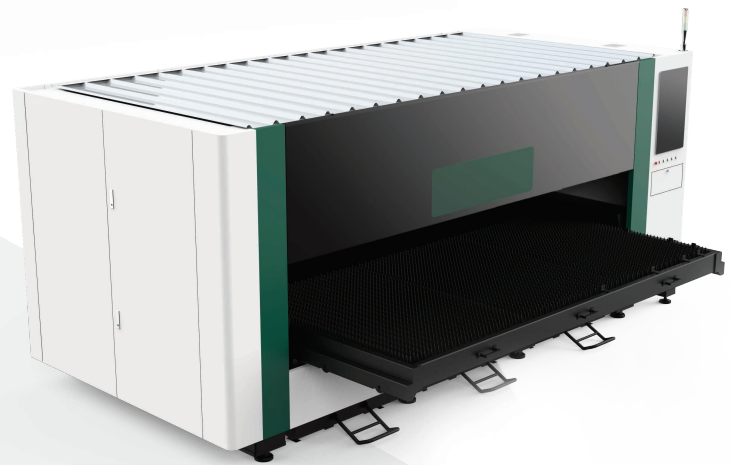
### Materials which can be fibre laser processed:

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

Laser Power	1.0kw	1.5kw	2kw	3kw	4kw	6kw
Cutting area (mm)			2500x1300			
Z axis travel (mm)			100			
Laser type	Fibre 1070nm WL					
Integrated laser cooling system	Water chiller					
Focus system	Auto Focus					
Drive system	Servo motors (Yaskawa, Japan)					
Cutting thickness						
Mild Steel <sup>1</sup>	12mm	14mm	18mm	22mm	25mm	25mm
Stainless Steel <sup>2</sup>	5mm	6mm	8mm	10mm	12mm	14mm
Mild Steel <sup>3</sup>	3mm	4mm	5mm	6mm	6mm	8mm
Stainless Steel <sup>3</sup>	2mm	3mm	4mm	4mm	4mm	5mm
Aluminium <sup>2</sup>	3mm	4mm	6mm	8mm	8mm	12mm
Max cutting speed	40m/min					
Max acceleration	0.5G					
Location precision	<0.01					
Optics	<0.373mrad beam					
Machine bed maximum load	700kg					
Machine weight	4115kg					
Dimensions (w x d x h)	4411mm x 2080mm x 2131mm (4360mm deep with table extended)					
Mounting	Floor					
Safety	Class 2 closed configuration					
Operating modes	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					
Optional extraction	1363mm x 1348mm x 2198mm					
Dimensions (w x d x h)						
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

