

Lightblade 6090



Laser cutting & engraving made simple & affordable

We have configured the lightblade range of machines to make laser cutting and engraving a truly great experience. From setup, through usage to after sales support you will find that we do things a little bit differently at thinklaser.

This flexible low cost machine provides both cutting and engraving operations within a laser Class I process environment. The design has created a "lightblade" which combines high speed processing with high beam placement accuracy resulting in high quality results generated economically.

As with all our machines in our range this version is available with a range of power outputs to suit your specific application, see listing next page.

The following information provides all

the technical details you should need, however if we have missed anything then please talk to our very responsive staff who will be happy to help.

The LB range is capable of cutting and engraving a wide range of materials due to the CO2 wavelength of the laser. The list includes acrylic, wood, paper, card, foam, synthetic materials, glass, leather etc. Please consult thinklaser if you have materials not listed here or send examples that we would be happy to evaluate, free of charge.



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Technical Information

If any of this information is unclear please contact technical support at Thinklaser who will be happy to answer any questions you may have.



Machine configuration and key feature information.

Model Number	TKL LB6090-60	TKL LB6090-80	TKL LB6090-100
Laser power	60 watts	80 watts	100 watts
Laser type	CO2		
Wavelength	10.6 um		
Laser format	Sealed laser glass tube		
Cooling type	Water (purified)		
Chassis Details			
Machine size	1360 x 950 x 1110 mm	1360 x 950 x 1110 mm	1560 x 950 x 1110 mm
Weight (nett)	230-240 kg		
Bed size (process area)	900 x 600 mm		
Z motion	250 mm		
Motion Control			
X-Y stage drives	DC Servo drive motors		
X-Y stage movement	900 x 600 mm		
Z stage drive	Standard stepper motor drive		
Z stage movement	250 mm		
Targeting laser	Class II Red Dot Visible laser (650 nm 0.4 - 0.5 mw output)		
Autofocus	Included		
Process Details			
Positional accuracy	< 0.01mm		
Highest scanning resolution	2500 dpi		
Recommended smallest character size	1mm height (this is material dependant)		
Scanning speed (engraving).	Up to 1.2 metre/sec. (ultimate speed is material dependant)		
Scanning speed (Cutting).	Up to .75 metres/sec. (ultimate speed is material dependant)		
Environmental Conditions			
Operating power	220- 240v 50 Hz		
Operating temperature	Ambient temperature: 10 - 30 degrees Celsius		
General environment	Dust free, clean area with reasonable ventilation		
Humidity	(relative) less than 70%		
Water cooling supply	Closed loop chiller supplied		
Air assist	Air Pump supplied		
Operating Details			
Operating software	Graphical interface package supplied with machine		
Communications interface	USB		
Compatible software	CorelDraw, Photoshop, AutoCAD		
Supported file formats	PLT, DXF, BMP, DST, Ai		