

Lightblade 1290



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,



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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 LB1290-60 | TKL LB1290-80 | TKL LB1290-100 | TKL LB1290-150 |
|--|--|-----------------------|-----------------------|-----------------------|
| Laser power | 60 watts | 80 watts | 100 watts | 150 watts |
| Laser type | CO2 | | | |
| Wavelength | 10.6 um | | | |
| Laser format | Sealed laser glass tube | | | |
| Cooling type | Water (purified) | | | |
| Chassis Details | | | | |
| Machine size | 1660 x 1310 x 1110 mm | 1660 x 1310 x 1110 mm | 1660 x 1310 x 1110 mm | 1810 x 1310 x 1110 mm |
| Weight (nett) | 360 kg | 360 kg | 360 kg | 370 kg |
| Bed size (process area) | 1200 x 900 mm | | | |
| Z motion | 200 mm | | | |
| Motion Control | | | | |
| X-Y stage drives | DC Servo drive motors | | | |
| X-Y stage movement | 1200 x 900 mm | | | |
| Z stage drive | Standard stepper motor drive | | | |
| Z stage movement | 200 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 material dependant) | 1mm height (this is | | | |
| 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 | | | |