

## LS1690 PRO

The LS1690 has a large capacity work area, capable of meeting high workload demands. It has a powerful 80W tube as standard with 130W and 150W upgrades available.

The class 1 laser enclosure ensures that the laser beam is safely contained during normal operation. With separately keyed on/off switch, unauthorised access and operation can be prevented. The machine is provided with a 12 month onsite warranty with option to extend up to 3 years.



### MACHINE FEATURES:

Class 1 laser system

80W tube as standard with 130W and 150W power upgrade options available

Red dot pointer system for easily and quickly lining up your work

Slatted non-reflective aluminium bar bed for supporting a wide range of materials and weights (honeycomb bed available upon request)

High quality optics provide high accuracy, reliability and long life

Pass-through panels front and rear allow larger items to be cut and engraved

Air assist to control heat and disperse smoke and debris around cutting nozzle

Water flow switch to provide protection against failure of cooling system

Available options include water chiller, fume filter and rotary attachment for engraving cylindrical items

Louved cabinet ventilation slots ensure maximum enclosure safety

CE marked Allen Bradley safety switches prevent operation of machine with lid or laser tube door open

### CUT AND ENGRAVE:

Paper, card and print media

Fabric

Leather

Acrylic, nylon and other non-PVC plastics

Plastic laminates

Latex and rubber

Plywood and MDF

Wood and wood veneers

### ENGRAVE ONLY:

Glass, granite, slate and marble

Anodised and coated metals

Uncoated metals\*

\*ceramic marking compound required



	LS1690-80	LS1690-130	LS1690-150
<b>Laser power</b>	80W (100W maximum)	130W (150W maximum)	150W (165W maximum)
<b>Maximum cutting thickness</b>	20mm Acrylic		
<b>Recommended maximum cutting thickness</b>	12mm acrylic	15mm acrylic	15mm acrylic
<b>Engraving speed</b>	400-800mm/sec* (400mm/sec recommended for best quality)		
<b>Mounting</b>	Free standing floor mounted on castors		
<b>Laser source</b>	Water cooled CO2 gas filled glass tube		
<b>Cutting area</b>	1600mm x 900mm (slightly reduced for engraving)		
<b>Z axis (table height) adjustment</b>	230mm motorised		
<b>Drive system</b>	Stepper motor		
<b>Location precision</b>	<0.01mm		
<b>Cooling method</b>	Closed circuit water cooling with flow protection switch		
<b>Cooling system</b>	Separate IP68 submersible pump and 35 litre water tank (supplied)** optional water chiller available		
<b>Fume extraction</b>	Separate air extraction unit (supplied) optional fume filter available		
<b>Extraction hose</b>	150mm flexible hose – 2 pieces 1500mm long each (supplied)		
<b>Air assist compressor</b>	Free standing oil-free diaphragm compressor (supplied)		
<b>Connectivity</b>	USB		
<b>Software</b>	RD Works (PC only), Lightburn (PC or Mac)		
<b>Typical design software</b>	Adobe Illustrator, AutoCAD, Corel Draw, 2D design		
<b>Preferred file types</b>	.dxf, .plt		
<b>Operating system support</b>	Windows XP, 7, 8, 10		
<b>Minimum character size</b>	1.5mm x 1.5mm		
<b>Power supply</b>	220V (or 110V) +/- 10% 50Hz (or 60Hz)		
<b>Machine dimensions (mm)</b>	2200 x 1500 x 1100	2200 x 1500 x 1100	2200 x 1500 x 1100
<b>Machine weight</b>	400kg		
<b>Machine interfaces</b>	1 x USB for PC (USB cable supplied)		
	1 x mains power socket (3-pin UK kettle type cable supplied)		
	1 x air extract connection to suit 150mm hose		
	1 x water inlet and 1 x water outlet port (to suit supplied 6mm I.D. silicon hose)		
	1 x air inlet port (to suit supplied 6mm I.D. silicon hose)		
	5 x UK/USA/EU electrical sockets for power connection of auxiliary devices		
<b>Cabinet safety</b>	Louvred cabinet doors, CE safety switches for lid and laser tube door, separately keyed main power switch for one-key operation		
<b>Cabinet pass through</b>	Front 1290mm x 2 stage 148mm / 345mm, rear 1290mm x 75mm (Machine becomes a class 4 laser device if operated with pass through panels removed)		
<b>Warranty</b>	12 months on site excluding consumables (laser tube and optics)		

\*higher speeds are achievable but engraving quality may be reduced \*\*Water tank not supplied if water chiller option is purchased

#### OPTIONAL EXTRAS:

130W and 150W laser tube upgrades

Laser fume filtration system for enclosed spaces

CW4000 water chiller unit

Sheet materials including acrylic, plywood, MDF veneers, engraving laminate

Laser machine compatible antifreeze