



# LightCELL

## Advanced Laser Machining Center



### Features

- High power and low operating cost sealed CO<sub>2</sub> laser
- Cuts and engraves metals, plastics, wood, paper, composites, fabric, rubber...
- Large format cutting area 1220 x 1220 mm (48.0 x 48.0 in.)
- High precision and reliability with optically read linear encoders in closed loop with brushless servo motors

- Gull wing, dual access doors
- Flying optics for high speed cutting

### Options

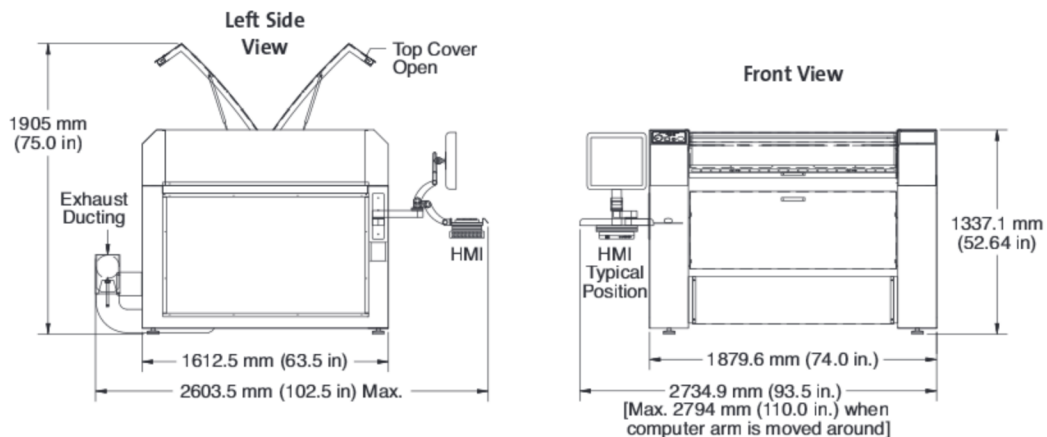
- Machine vision
- Pro-Panel control interface

### Power and Precision at your Fingertips

LightCELL is a versatile manufacturing tool for cutting and engraving a wide range of materials in a cost effective package.

Simple user interface and job loading software simplifies work set up and increases productivity. Class 1 safety enclosure reduces facility requirements.

### Mechanical Specifications



### Superior Reliability & Performance

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### System Specifications

	LightCELL 150
Laser Power/Peak Power (W)	150/375 <sup>1</sup>
Dimensions (L x W x H)	1630 x 1990 x 1320 mm (64.2 x 78.4 x 52.0 in.)
Weight	725 kg (1600 lbs.)
Cutting Height	1020 mm (40.0 in.)
Working Range	x = 1220 mm (48.0 in.) y = 1220 mm (48.0 in.) z = 100 mm (4.0 in.)
Maximum Speed	50,800 mm (2000 in.)/min. cutting 91,500 mm (3600 in.)/min. rapid positioning 91,500 mm (3600 in.)/min. raster engraving
Positioning	Linear encoders with 2 micron resolution in closed loop with brushless servo motors
Accuracy	25 µm (0.001 in.) positioning accuracy <sup>2</sup> 5 µm (0.0002 in.) repeatability
Contouring	Full look-ahead contouring capability
Materials	Metal, Plastics, Wood, Paper, Composites, Fabric, Rubber
Software Interface	LaserLink program including: Windows 7 support G-code support AI, DXF, HPGL, DWG, Gerber, JPG, BMP, TIF file import Full geometry editing editable database of laser parameters Job estimator software Job management software
Access to Cutting Area	Gull wing clear/smoke polycarbonate doors on pneumatic lifts
Laser Power Control	Digital laser power control Power proportional to velocity
Focusing	Programmable focus
Exhaust/Vacuum Bed	Vacuum material hold-down plenum External high pressure exhaust blower required
Cooling	External chiller required
PC/File Server	Requires Windows/Ethernet
Power (VAC)	208 to 240, 47 to 63 Hz, three-phase, 30 to 50A
Safety	Safety interlocks on all covers and enclosures Class I system (Complies with 21 CFR Chapter 1, Subchapter J)
User Controls	Touch Screen control panel Jog, Bed height controls Home, Park, Load buttons Exhaust, gas assist controls Editing of laser settings Networked HMI workstation Auto-restart

<sup>1</sup> These specifications are applicable as of December 2009 and are subject to change without notice.

<sup>2</sup> Accuracy quoted is under controlled conditions. Accuracy may vary depending on conditions in customer's facility.

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all LightCELL laser cutting machine tools. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.



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