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L A S E R   S Y S T E M S

ILS12.75
48" x 24" Work Area

Uniquely Universal Features

Laser Interface+™
Universal Laser Systems has developed the world's most advanced, powerful and flexible laser print driver.

1-Touch Laser Photo™
We developed this software to make any photographic image suitable for laser engraving.

Universal Laser Sources
Our exclusive line of patented CO2 Free-Space Gas Slab Lasers is designed specifically for the needs of laser cutting, engraving, graphic imaging and marking applications.

High Power Density Focusing Optics™
These optics allow the laser beam to be focused to a much smaller spot, producing sharper images at tighter tolerances.

Rapid Reconfiguration™
Every laser cartridge we produce is factory pre-aligned for easy integration into any of our laser platforms.

Dual Laser Configuration
Giving you the ability to merge two independent laser sources into a single beam for additional power and flexibility.

SuperSpeed™
This innovation pulses the two lasers independently, allowing for two lines of a raster image to be marked

Pass-Through Mode
Our versatile ILS platform is designed to accommodate laser processing of continuous materials, such as long sheet goods or rolled materials.

Platform Overview

The ILS12.75 is our largest and most versatile platform. Engineered specifically for manufacturing environments, it can handle applications ranging from prototyping to automated manufacturing. In addition to a spacious 48" x 24" x 12", 13,824 in3 (1219 x 610 x 305 mm, 226,795 cm3) material processing envelope, the ILS12.75 incorporates our Pass-Through feature, which allows both side doors to be opened to process materials of unlimited length. Universal's ILS platform is also the only CO2 laser system in the world that can be converted between CDRH Class 1 and CDRH Class 4.

The ILS12.75 is dual laser compatible and has a processing power range of 10 watts, when using our smallest laser cartridge, to 150 watts when using two of our 75-watt lasers. The massive processing power of the ILS12.75 allows it to function as a standalone production solution, but it can also be integrated into an automated assembly line. In addition to the basic capabilities of the machine, there are a number of patented Uniquely Universal features that are only available from Universal Laser Systems. Laser Interface+ and Rapid Reconfiguration are Uniquely Universal features which come standard on the ILS12.75. Dual Laser Configuration, Super Speed and Pass-Through functionality are optional features that will reduce downtime and increase productivity. All Universal platforms use interchangeable components, giving you the ability to tailor your system to fit your needs.

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ILS12.75
48" x 24" Work Area

System Specifications

Work Surface Area	48 x 24 in (1219 x 610mm)
Maximum Part Size	52.5 x 30 x 12 in (1334 x 762 x 305mm)
Dimensions	69 x 44 x 46 in (1753 x 1105 x 1168 mm)
Rotary Capacity	Max Diameter 10.25 in (260 mm)
Motorized Z Axis Lifting Capacity	60 lbs (27 kg)
Pass-Through™ Class 4 Mode Work Area	24 x ∞ in (610 x ∞ mm)
Pass-Through™ Class 4 Mode Clearance	23.75 x 8 in (603 x 203 mm)
Available Focus Lenses CO2	1.5 in (38 mm)
	2.0 in (51 mm) *standard
	3.0 in (76 mm)
Laser Platform Interface Panel	Keypad and LCD display shows current file name, laser power, engraving speed, PPI and run time.
Operating System Compatibility	Requires a dedicated PC to operate.
	Compatible with Windows XP/Vista/7 32/64 bit
PC Connection	USB 2.0
Optics Protection	Plumbed for compressed-air-based optics protection.
Cabinet Style	Floor-Standing
Laser Options	10, 25, 30, 40, 50, 60 and 75 Watts
	Dual Laser Configuration optional
Approximate Weight	430 lbs (215 kg)
Power Requirements	220V-240V/10A (1 laser) 220-240V/16A (2 lasers)
Exhaust Connection	Two 4 in (102 mm) ports
	1000 CFM @ 6 in static pressure (1700 m3/hr at 1.5 kPa)

System Features

Laminated Safety Glass
Over-temp Alarm (for fire safety)
Multiple Automatic Focusing Modes
Precision Digital Motors
LCD display
Wraparound Top and Front Door
Covered V-Groove Rail System
Multiple Language Support
Permanently Sealed Bearings
Proportional Pulse Control
Stretch-Free Kevlar® Belts

Laser Features

Laser Fan Control (to reduce noise)
Smart Lasers
Laser Pointer
Wide Selection of Power Levels
Air-Cooled Laser Cartridge
Patented Permalign™
No Optical Beam Alignment Required
Patented Cross-Platform Compatibility
Patented Free-Space Gas Slab Laser Design
High Reliability, Excellent Power Stability
Warranty Available Up To 5 Years

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