# **LXQ-3D VISION FIBER LASERS**

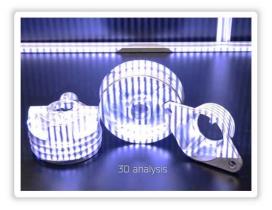
Autofocus fiber laser engraving system with 3D imaging.







Parts with curved or complex geometries can be marked without having to move the part.

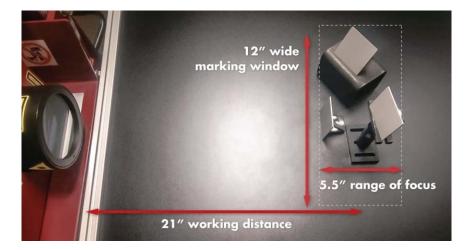


The integrated vision system scans and analyzes the position of parts within the marking window and automatically adjusts the marking job.

## **3D SCANNING & LASER MARKING**

The patent pending LXQ-3D Vision Series Lasers are the first adaptative traceability laser engravers to offer the joint benefits of laser engraving and 3D imaging.

- Auto-focusing system self-adjusts to each part's geometry and position within the laser's 5.5" deep range of focus
- 3D vision system scans and stores surface data for quality control analysis
- An integrated camera enables automated barcode validation
- Provides high definition and permanent identification
- The industrial-grade cabinets withstand the most challenging environments
- Capable of marking metal at high temperatures
- Additional capability to remove rust, paint, oxidation and other contaminants from metallic surfaces



Feature	LXQ3D-20	LXQ3D-30	LXQ3D-50	LXQ3D-100		LXQ3D-200	
Nominal Laser Output Power	20 W	30 W	50 W	100 W		200 W	
Power Consumption	350 W	400 W	500 W	650 W		1000 W	
Dimensions (W x H x D) and Weight	Laser Controlle Head	19" x 7" x er 19" x 7.25 14" x 9"*	5" x 19.5"	37 lb 35 lb 40 lb	Laser Controller Head	19" x 10.4" x 26.2" 19" x 5.5" x 19" 23" x 9"* x 7"	90 lb 18 lb 26 lb
Operating Environment	50°F to 95°F; non-condensing humidity				50°F to 120°F; non-condensing humidity Internal water cooled module: 64°F to 79°F		
Protection Class (Head)	IP67				IP65		
Supply Voltage	24 VDC				120 V or 240 V		

\* Height of the laser head may vary depending on lens used.

### **SPECIFICATIONS**

Wavelength	1,064 nm				
Mean Time Between Failures (MTBF)	100,000 hours				
Spot size	~ 50 µm to 100 µm, depending on configuration				
Communication	Ethernet, RS-232, USB, digital input/output, encoder signal				
Focal Distance** (distance from lens to marking surface)	18.1" to 23.6"; factory set to 21.5" 460 mm to 600 mm; factory set to 547 mm				
Marking Field Size**	10.2" x 10.2" to 12.8" x 12.8" (factory set to 11.8" x 11.8") 260 mm <sup>2</sup> to 324 mm <sup>2</sup> (factory set to 300 mm <sup>2</sup> )				
Mark on the Fly (MOTF)	No				
Stand-alone Operation	Yes				
Characters per second	Depends on application				
Line speed	Depends on application				



Control panels and enclosures for the laser source, controller, and optional cooling systems allows easy installation in all types of work environments.

\*\* With standard 420 mm focal length lens. Other lenses available.

### **COMPLETE SAFETY ENCLOSURE WORKSTATIONS**

The LXQ series' modular platform means systems can be created for each individual application to achieve optimum mark quality, production efficiency, and safety. A variety of automated safety enclosures can be supplied for use as stand-alone workstations or inline marking cells.







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#### INDUSTRIAL MARKING SYSTEMS SINCE 1899

Dot Peen Systems Ink Jet and Flexographic Printers Laser Marking Systems Steel Hand Stamps & Marking Dies Tags, Labels, and Printers