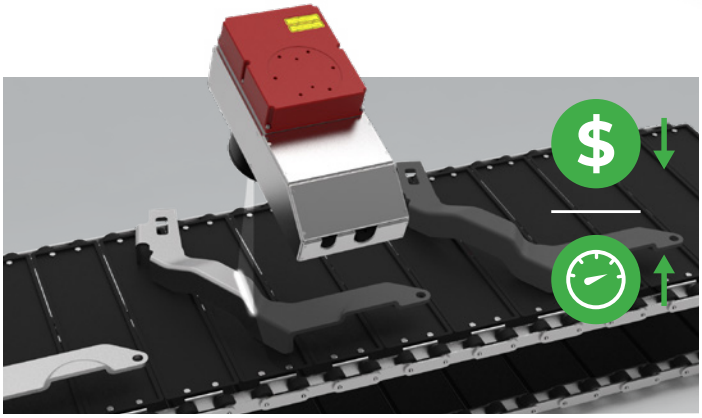
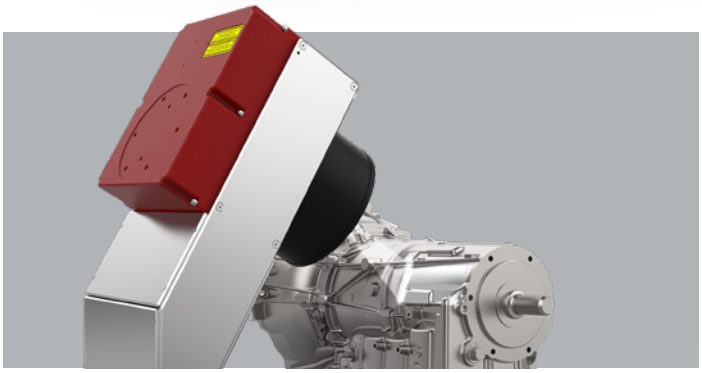
LASERAX

LXQ-UHP SERIES

ULTRA-HIGH-POWER FIBER LASER CLEANING SYSTEM

The LXQ-UHP is an ultra-high-power multimode pulsed fiber laser system designed for the most challenging industrial cleaning applications. With a larger spot size than single-mode lasers and up to 3kW of laser power, it is the ideal laser cleaning system to process large surfaces within short cycle times.



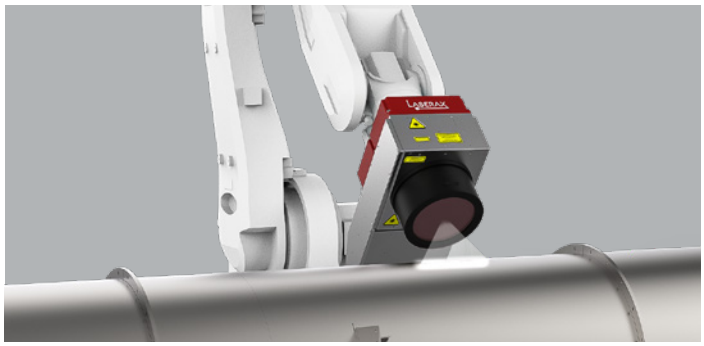


3KW OF PURE LASER CLEANING SPEED

Combining the most powerful pulsed laser power on the market, the world's fastest scanning speed, and a large spot size, the LXQ-UHP excels at laser cleaning. Its unrivaled cleaning speed makes it perfect for demanding inline applications.

LARGE TOLERANCE FOR COMPLEX APPLICATIONS

As a multimode laser, the LXQ-UHP can clean large parts and complex shapes. Its large depth of focus and spot size allows the automated cleaning of rough parts with various shapes, and this, without needing tight positioning precision.



OPTICS FOR YOUR SPECIFICS

Our experts select the optical components for your application. Benefiting from more than 200 possible configurations, they will propose the one that maximizes cycle time according to your process requirements and contaminants to remove.

ROBOT COMPATIBLE

With up to 100m of fiber cable and a long cleaning distance, the LXQ-UHP can be mounted on a robot to clean larges parts with maximum flexibility. The laser head can also be positioned in any orientation to clean any surfaces.

LASER SPECIFICATIONS

	LXQ-UHP-500	LXQ-UHP-1000	LXQ-UHP-2000	LXQ-UHP-3000
Nominal Laser Output Power	0.5 kW	1 kW	2 kW	3 kW
Nominal Pulse Repetition Rate	5 kHz	10 kHz	13.3 kHz	20 kHz
Total Power Consumption (with water chiller)	5.8 kVa	10 kVA	14 kVA	20.5 kVA
Laser Type	Ytterbium-doped fiber			
Supply Voltage	230-240VAC 50/60Hz 1P	3x 400-480 VAC 50/60Hz 3P + PE		
Pulse Energy	25 to 100 mJ	25 to 100 mJ	33.3 to 150 mJ	33.3 to 150 mJ
Pulse Width	Adjustable: 25 ns to 100 ns			
Wavelength	1064 nm			
Processing Fiber Core Geometry	Square, round			
Processing Fiber Core Size	400 microns			
Processing Fiber Length	10m included - 15 to 100m available			
Spot Size	0.8 to 2 mm typical			
Laser Safety Class	Class 4 laser product: CSA-E60825-1:15, 21 CFR 1040.10, IEC 60825-1			
Cooling	Water-cooled			
Fiber Cable Minimum Bending Radius	**Static:** 100 mm **Dynamic:** 200 mm			
Laser Source MTBF	100,000 hours			
Protection (EN 60529)	IP54			
Remote Access Security Protocol	OpenVPN (encrypted channel – OpenSSL)			
HMI Software	Web based, Allen-Bradley, Siemens			
I/O	Terminal Block I/O, M12-5 pins, Encoder Signal			
Communications	Ethernet/IP, PROFINET, RS - 232, OPC/UA, USB			
Dimensions (W x H x D)	**Laser source:** 600mm x 400mm x 1000mm **Control cabinet and chiller:** 772mm x 2000mm x 685mm **2D head:** 270mm x 397mm 623mm		**Laser Source**: 780mm x 558mm x 806mm **Control cabinet:** 772mm x 2000mm x 685mm **Chiller:** 815mm x 1660mm x 630mm **2D head:** 270mm x 397mm 623mm	
Weight	**Laser:** 120 kg **Control and chiller:** 300 kg **2D head:** 45 kg		**Laser:** 160 kg **Control:** 150 kg **Chiller:** 350kg **2D head:** 45 kg	
Environmental Conditions	**Temperature:** 10 °C to 40 °C **Humidity:** 10% to 90% (without condensation)			
Approvals	c UL us CE			

LASERAX

INDUSTRIAL LASER SOLUTIONS
VISIT LASERAX.COM

LASERAX HEADQUARTERS
101-2811 Watt Ave
Quebec, QC G1X 4S8
Canada
+1 418 780-7324

LASERAX USA
2401 Parkman Road NW
Warren, OH 44485
United States
+1 330 331-6607

LASERAX GmbH
Im Kleinfeld 17
79189 Bad Krozinger
Deutschland
+49 (0)7633-836-4935