

LASER-PAK S

ROBOTIC LASER SYSTEMS



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LASER-PAK S ROBOTIC LASER SYSTEM

The Laser-Pak[®] S system is a complete mini-factory designed for advanced laser welding technologies. Utilizing both a laser system and robotic arm, the laser welding process is programmable and integrated via the teach pendant. The Laser-Pak S system is an all-in-one laser welding cell complete with an autogenous laser process, fume extraction, water chiller, and laser optics.

SYSTEM INCLUDES

- Mobile cart, small footprint
- FANUC[®] ARC MATE[®] 50iD/7L robot and R30iB Mate Plus controller with iPendant[®] tablet
- Up to 4kW rack-mountable laser oscillator
- Fixed table
- Autogenous laser process
- Laser Mechanisms FiberMINI[®] 2.0 processing head
- SMC[®] Thermo-Chiller, compact type
- X-Tractor[®] Mini fume extractor
- Training in our automation/laser course

OPTIONS AVAILABLE

- FANUC ROBOGUIDE[®] WeldPRO[®] software plug-in package
- Precision Power Laser[™] waveform technology
- Camera & Monitor
- Cutting Package

IDEAL APPLICATIONS

- Steel, stainless steel, and other ferrous alloys
- Thin-walled aluminum and other non-ferrous alloys
- Dissimilar material joining applications
- Non-metallic materials

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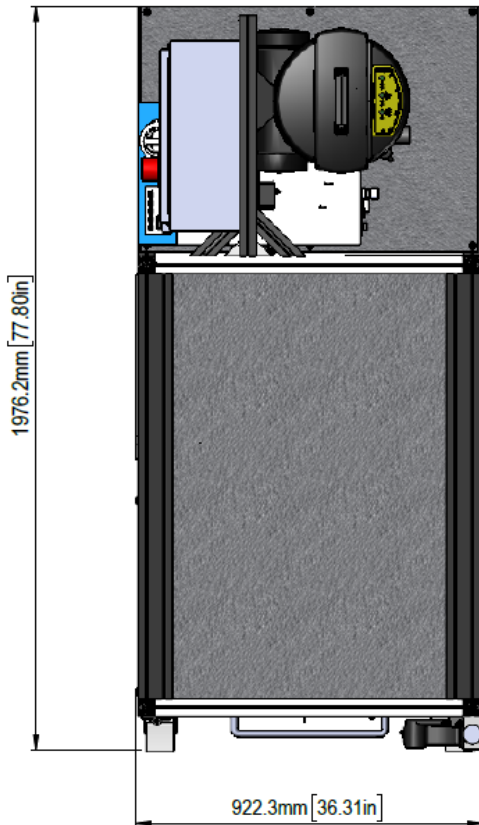
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PRODUCT DIAGRAM



OPTIONAL LASER PROCESS

LINCOLN ELECTRIC PRECISION POWER LASER PACKAGE

The Laser-Pak S system can be equipped with the Lincoln Electric Power Wave® R450 welding machine with Precision Power Laser™ waveform. This package is capable of providing the most preheat possible into a consumable before it enters the laser puddle without breaking into an arc. A closed-loop, arc-suppression routine helps process stability and maximize deposition rate. This single-point control offers accurate control of intermetallic dilution, helping to provide a higher-quality deposit than other controls.

LASERLINE LDM SERIES STANDALONE LASER TOWER

The innovative design of the compact, fiber-coupled Laserline® LDM diode laser makes it possible to integrate the modules into nearly any production area, making it very suitable for OEM applications.

- LDM 8000-100 diode laser (8kW process output power)
- Unit dimensions (W x D x H): 750 mm x 850 mm x 1500mm
- 1000um core feed fiber x 10m length
- Includes 12kW dual-cooling channel, thermal-chiller, integrated into tower rack

LASERLINE OTS LASER WELDING OPTICAL PROCESSING HEAD

The Laserline OTS optics are designed for industrial material processing and used in combination with Laserline's diode lasers. Because of their modular design and the great number of possible spot geometries, the optics can be flexibly configured and optimally adjusted to just about any process demands.

SINGLE-POINT DISCONNECT PANEL - SINGLE ARM

480 Volt 3-phase 100A disconnect panel capable of supplying power to all the equipment:

- Robot controller
- Laser controller
- Laser chiller
- Environmental gear (If purchased)

This panel greatly simplifies connection of power to the robotic system at the end-user facility. It requires a single power drop splitting the connection to each individual piece of equipment. The panel is constructed per NFPA-70 (NEC) Article 409 and is lockout/tagout (LOTO) ready.

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input	Output Range	Rated Output	Overall Footprint in (mm)	Fixed Table Work Envelope in (mm)	Payload per Zone lb (kg)
Laser-Pak S	AD2493-5	240 VAC, 1-Phase, 60Hz, 60A Single Disconnect 120 VAC Wall Outlet Supply 80 PSI Compressed Air Supply	Up to 4kW Maximum Average Power [5 - 100% Power Tunability]	Constant Wattage (CW): 4kW (at 0% to 100% Duty Cycle) Modulation (Pulse) Frequency: ≤ 100 kHz (with Rise and Fall Times ≤ 5µs)	35 x 78 (889 x 1981)	30 x 30 (762 x 762)	495 (225)

CUSTOMER ASSISTANCE POLICY

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