



## ◀ LP50

**The LP50 Laser Platform is designed to provide a flexible CDRH Class 1 laser platform for many of your laser processing needs. It takes the configurability of customized product fixturing and simplicity of no-code programming and wraps it into a more compact, tabletop package. The LP50 continues to be manufactured with proven industrial-grade components to deliver a robust and reliable solution.**

### **BENEFITS OF LP50**

- Configurable with 1-3 axes of motion
- LP50 can implement your recommended laser or we can help you select the right laser: we have experience with many top laser manufacturers for welding, cutting, ablating, marking, hole drilling, or other applications
- Optics can be fixed or galvo scanhead mounted
- Optional through-the-torch vision with vision guided click-to-move feature
- Graphical interface allows users to easily develop custom sequences for their process
- 28 configurable commands define product fixturing, manage motion profiles, prompt users for input, access vision tools, control laser output, and more
- Pulse Shaper allows the development of customized laser pulse profiles and emission sequences

## TECHNICAL INFORMATION

### Safety Features

- Laser window for safe process viewing
- CDRH Class 1 rated
- Front-mounted E-stop
- Keyed access to main electrical enclosure
- Safety interlock sensors on front door and overhead, removable access panels

### Physical Features

- Application-specific laser-filtered and tinted-acrylic window for safe process viewing
- Flexible mounting plate allows for fixturing and other customizations
- Tabletop or optional adjustable-height frame
- Automated vertical open front door
- 22" Touchscreen monitor
- Configurable axis orientations
- USB and Ethernet grace ports for programming and networking
- Barcode reader capability for recipe selection
- Delivered with calibration kit of power meter and NIST traceable glass calibration slide

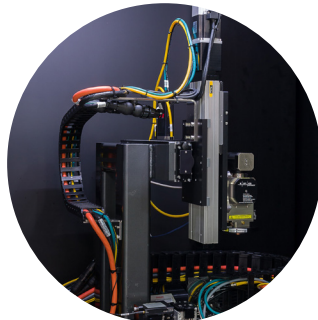
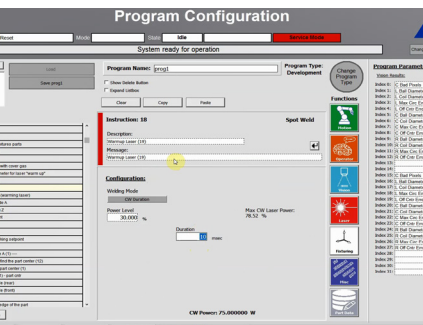
### Software Features

- EasyCode™ simple, drag-and-drop sequence and recipe editor
- Teach function for simple recipe creation
- Multiple operating modes for production and R&D environments: automatic, maintenance, engineering
- Explicit error messages and prompts
- Sensing of all actuation positions
- Access to historical data, with the ability to create, view, print and save logs
- Industrial PC controls

### Optional Vision Features

- Automated pre-inspection and location
- Operator click-to-move location
- Automated post-inspection
- Operator inspection

**FOR EVEN MORE BENEFITS,  
CHECK OUT THE LP500**



## INDUSTRIES SERVED



Research, prototyping & development



Medical Device



Consumer Goods



Aerospace



Automotive

## PROCESS CAPABILITIES

- Metal Welding
- Polymer Welding
- Cutting
- Ablating
- Marking
- Hole drilling

## COMPONENTS PROCESSED

- Cables
- Coils
- Connectors
- Insulator films
- Metallic films
- Pressure seals
- Tubes
- Wires

## LASER

- Fixed optics
- Fiber-delivery
- Galvo scanhead
- Laser Types
  - DPSS UV
  - Nd:YVO<sub>4</sub>
  - Nd:YAG
  - Fiber
  - Femto
  - CO<sub>2</sub>

## OPTIONS

- Adjustable motion axis count and configuration
- Adjustable-height frame
- Automated vision
- Exhaust fan and filter
- Laser and beam delivery
- Custom product fixture

## PROCESSED MATERIALS

- Alumina/Ceramic
- Biological
- ETFE
- Iridium
- Nickel alloys
- Nitinol
- PEEK
- PFA
- Palladium
- Platinum
- Polyethylene
- Polyimide
- Polypropylene
- Polyurethane
- PTFE/ePTFE
- Silicone
- Stainless Steel
- Steel alloys

## MOTION CONTROL WORKING ENVELOPE

- |          |             |
|----------|-------------|
| • X Axis | Up to 200mm |
| • Y Axis | Up to 200mm |
| • Z Axis | Up to 50mm  |

## ELECTRICAL/PNEUMATICS

- |                      |            |
|----------------------|------------|
| • Voltage            | 200-240VAC |
| • Frequency          | 50/60 Hz   |
| • Phases             | 1          |
| • Wires              | 3          |
| • Full-load current  | 20A        |
| • Air pressure       | 75psi      |
| • Cover gas pressure | >30psi     |

## DIMENSIONS

- |                         |                 |
|-------------------------|-----------------|
| • Height*, Width, Depth | 34" x 25" x 39" |
| • Weight                | 300 lbs         |

\*Not including optional lower frame



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