

## Cut complex designs with instant job changeover.

**Rethink your manufacturing.** Change “business as usual” print finishing with the LaserSharp STS laser processing system. This comprehensive system combines custom laser cutting, scoring and perforating with instant job changeover technology that eliminates the need for costly mechanical dies and expensive set-up times. Create affordable “Run of One” samples or prototypes or perform profitable short runs of ultra-complex processing of full-sheet papers, paperboard, plastics and acrylics at remarkable production speeds.

The STS features single- or dual-camera vision systems and patented material handling technology for precision cut-to-print registration and transfer of complete piece parts. The system can be integrated with commercial and packaging printers to create a complete digital workflow from start to finish. A variety of options are available to enhance functionality and optimize your initial equipment investment.



### Features

- Continuous “on-the-fly” sheet processing with instant order change via job queuing or 2-D barcode.
- Intuitive LightGuide® v5.0 software processes design files in .pdf, .dxf, .dwg, .jpg, .gif, .bmp, .png and .tif format.
- Precise cut-to-print registration with single- and dual-camera vision systems.
- Through-cut, kiss-cut, score, perforate and etch materials in a single system.
- LasX "RIP" engine automates file manipulation from art room to production.
- Patent-pending processing belt cleans parts and precisely secures sheets through processing area.
- Patented, 3rd-generation Proton laser control software processes large, complex die lines with ease.
- Process sheets up to 20" (508mm) wide and infinite length.
- Scalable to second laser module immediately or in the future.
- Easy-clean, low-maintenance design.
- Laser power levels from 250 to 1,000W for high-speed processing.
- Production class laser modules engineered for 24/7 operation; laser is rated at 20,000 minimum operating hours before refurbishing.

### Laser Processing Benefits

- Eliminate costly mechanical dies and set-up times.
- Reduce time to market.
- Eliminate make-ready waste.
- Instant job change capabilities.
- On-demand processing for profitable short runs or “Order-of-One” prototypes and samples.
- Ultra-complex processing of papers, paperboard, plastics and acrylics at remarkable production speeds. Create new revenue streams with eye-catching, intricate, or 3D designs that add visual interest.
- Complete digital workflow streamlines operations.
- Product personalization – ideal for custom orders.

## SPECIFICATIONS & OPTIONS

### Laser Technology

Laser Module Type:	Sealed CO <sub>2</sub>
Output Power:	250W/400W/1000W
Power Range:	10% of max – 250W/400W/1000W
Processing Area:	13.75" (350mm) and 19.7" (500mm) widths
Laser Life:	Rated output for minimum 20,000 operating hours before refurbishing
Number of Modules:	1-2 (option to add one or more lasers in the future)

### Material

Material Handling:	Patent-pending LasX vacuum conveyor
Material Type:	Paper, paperboard, PET, acrylics, polypropylene
Maximum Width/Length:	20"/unlimited

### Physical Specifications (400W)

Size (L x W x H):	101" x 82" x 80" (2600mm x 2070mm x 2037mm)
Weight:	2700lbs (1220kg)

### Typical System Requirements

400W:	208 to 240VAC, 3-phase, 50/60Hz, 55 FLA
1000W:	480VAC, 3-phase, 50/60Hz, 90 FLA
Chiller:	460VAC, 3-phase, 60Hz, 15 FLA; chiller provided by LasX.
Compressed Air Flow:	3.0 ft <sup>3</sup> /min (85L/min) at 550kPa
Exhaust Airflow:	1400 ft <sup>3</sup> /min (40m <sup>3</sup> /min) at 5" H <sub>2</sub> O (12 millibars); 8" (200mm) diameter connection

### Safety

Class I Safety Enclosure:	Per 21 CFR 1040.10; meets federal safety requirements
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### Options

- Sheet feeder and roll unwind
- Addition laser for greater functionality and/or faster throughput
- Secondary camera for automated skew correction
- In-line configuration for direct digital printing
- Robotic integration for automated sorting and stacking of finished parts (see LaserSharp STP)
- "Vision Trax" registration for cut-to-print accuracy and easy setup
- Barcode reader relays job parameters and triggers job changeover
- Sheet chute or conveyor to remove material
- Reverse-side sheet registration for processing opposite side of sheet
- LRE (LaserSharp Ripping Engine) prepares artwork for automated workflow
- Available with roll-fed option/combination

