



L-Star Laser Cutting & Engraving Systems



The L-Star is a reliable American-made machine with many customizable options.

The Laser Cutting Solution

CUTTING MARKETS & APPLICATIONS

- Plastic Fabrication
- Light Metal Fabrication
- POP/Store Fixture
- Large Format Print Finishing
- Automotive
- Textiles, Garment and Embroidery
- Identification and Serialization
- Shoes and Footwear
- Woodworking
- Composites and Space Age Materials
- Plastics and Rubber
- Electronics Industry
- Packaging Industry
- Aircraft
- And So Much More

The **Vytek L-Star** series is the best selling large format cutting and engraving system on the market. The L-Star boasts a host of available options, sizes, and laser powers. No other laser system is more flexible and cost effective than the L-Star series. The L-Star truly meets the needs of modern production shops.

Everyone "knows" that lasers do a great job cutting acrylic, and that they leave a highly

polished edge in one pass, far better than those "cut" by other methods. But what is not as well known is that lasers also produce quality work on many other materials for a variety of applications. In fact, by using the latest laser technology and intelligent engineering, Vytek laser machines can engrave, kiss cut, relief engrave, and cut a wide range of metals at a significantly lower operating cost than other methods. The L-Star is equipped with an impressive list of

standard features and a host of available options that allow just about any application to be cut or engraved. Contact Vytek to learn how an L-Star can help your business or visit us online at www.vy-tek.com.



◀ **Stencils:** Lasers can cut thin films and stencils with exacting precision, fine detail and high speed. From polyester to stainless steel to exotic films, lasers offer a superior cut quality.



▲ **Foam and Packaging:** When correctly configured, lasers can cut a range of foams and packaging materials up to 4"/100mm thick.

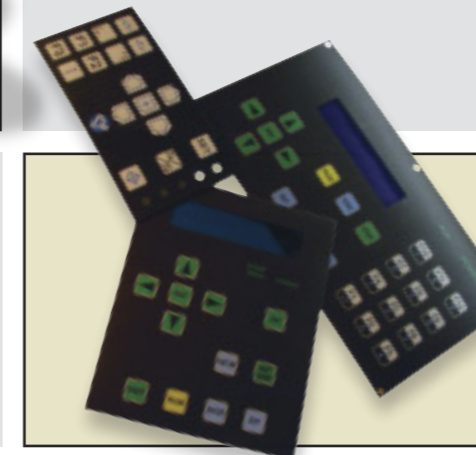
▶ **Thin Film:** There is no better way to precisely cut to a material backer and selectively cut multiple layers than with a laser. Lasers are the most reliable and quick non-contact way to kiss cut.



◀ **Rubber and Cushioning:** Lasers can contour cut a wide range of elastomers, EVAs, composites, lamination shoe and support products.

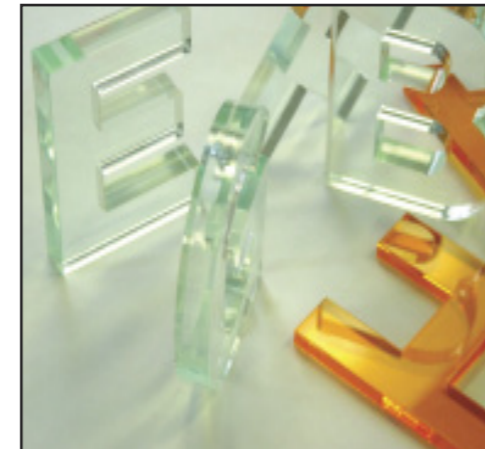


▼ **Matboard:** Matboard can easily be processed with exacting detail and without burning the edges in most types.



▶ **Membrane Switch and HMI:** Lasers are now the industry standard for processing components of membrane switch assemblies. When combined with the *I-Laser* vision alignment system, it is as easy as print and cut!

▼ **Wood:** Lasers are ideal for wood applications including cutting of veneers for inlay work, furniture, and automotive interiors as well as cutting parquetry and die board for steel rule dies.



▲ **Acrylic:** Cutting acrylic up to 1"/25mm thick with a laser is now the standard. Lasers also engrave complex images onto acrylic and can be used to create panels for LED light distribution.



Metal Cutting: When equipped with the metal cutting option, the Vytek L-Star series can easily cut a wide range of metals up to .25"/6mm while providing a smooth edge finish to a precise tolerance. The L-Star will make quick and easy work of many metal applications.

Whether your company processes prototypes or has production metal cutting needs, there is an L-Star configuration that is right for you. With laser power options up to 1500 watts, the L-Star can tackle just about any application. If you have high production requirements, add our "Stacker Material Loading System" and the L-Star is ready for your high production or multi-shift operation.



Scan code to watch video of the L-Star in action.
www.vy-tek.com/brochures/Lstar2013/1.html



LaserWorx Cutting & Engraving Software

LaserWorx is a comprehensive and feature-rich software package for vector cutting and raster engraving. *LaserWorx's* advanced optimized output sends files in "True ARC" mode ensuring that the smoothest possible cuts are made without the slowdown and rough arcs found in many print driver-based laser systems. When vector files are combined with raster files, *LaserWorx* automatically orders the engraving and cutting for the most efficient processing of your files. If you use Corel™ files, then our simple-to-use "Corel Bridge" allows drag and drop flexibility without the

hassle of importing. Our "True Nest" option allows for true shape nesting of your cut files to provide the best possible material utilization. With advanced features like grain control, and previously cut partial sheet utilization, "True Nest" can save you as much as 40% in material cost.

CAD/CAM Software for the Professional

Print drivers are for printers, not lasers. They limit your flexibility and capability as well as quality. High throughput and accuracy can only be achieved when the right sequence and cut order can be

controlled, and print drivers just cannot provide that. *LaserWorx* takes complete advantage of the laser system's capabilities, giving you more in less time with higher quality. Just say no to print drivers.

Software Features:

- Offset for beam diameter
- Inside from outside sorting
- Nesting of files
- Parametric shapes tool
- Contour ordering
- Contour cut
- Clip-art viewer
- Interactive kerning
- Arrays



▲ The L-Star series was carefully designed to ensure reliability while providing outstanding performance. Vytek offers the most comprehensive line of laser systems with five models from which to choose. Check us out at www.vy-tek.com



Substrate printed with vision system fiducials. Scan QR code to watch vision cutting video. www.vy-tek.com/brochures/Lstar2014/4.html



from there. The system finds, orients the part and cut file and automatically starts cutting with perfect alignment. It is that simple!

I-Laser Vision

Sign & Graphic companies, Fabricators, and Manufacturers are increasingly requiring the ability to align materials for cutting. The I-Laser Vision System is a straightforward process that enables all printing and cutting to work seamlessly together to significantly increase throughput. Job data such as cutting files, nesting, paneling, scaling, orientation and registration marks is shared directly with the laser cutting system, which minimizes the need for operator intervention. Integrated with a Vytek laser system, I-Laser Vision totally automates cutting and trimming for a wide range of flexible and rigid materials.

Simply open the cut file from the L-Star control panel, place the items to be cut on the table and the I-Laser Vision system takes it

Advantages of a Laser

- Non-contact cutting and engraving has no consumable costs for router bits, and provides for cleaner edges.
- More intricate cutting and engraving is possible on a wider range of materials achieving finer detail than with any other method.
- With no tooling width, the laser is able to achieve higher density cutting that can save 40% on materials with faster cutting times.
- Set-up time is reduced with the laser solution.
- Lasers can cut square corners without leaving a radius common to routers.
- The laser achieves one-step operation with polished edges. No flame polishing or secondary operation is required on cut pieces.
- Inlaid parts can be cut from the same file.
- Laser cutting does not produce chips or sawdust, offering a much cleaner operation.
- Lasers have a lower cost of operation compared to other commonly used methods.



Save up to 40% material cost by using lasers versus routers, giving the laser a faster payback with higher quality cuts.



A router uses a much wider kerf, resulting in wasted material and more debris to be extracted.



A laser system uses a much smaller kerf, resulting in material savings with no debris.

The L-Star is an Engraving Powerhouse

ENGRAVING MARKETS & APPLICATIONS

- Glass Engraving
- Granite Engraving
- Monument Industry
- 3-D Wood Engraving
- Wood Engraving
- Acrylic
- Leather
- Coated Metals
- Rubber
- Ceramic
- Melamine
- Paper
- Fiberglass
- Corian
- Fabric
- Woodworking



Scan code to watch video L-Star engraving glass.
www.vy-ek.com/brochures/Lstar2014/6.html

The **Vytek L-Star** is not only the best selling large format laser system, it is also the fastest engraving system, on the market. The L-Star when equipped with engraving accessories can efficiently process large areas at speeds and with a resolution equivalent to printing. No other system on the market is this flexible and offers more ways to get the job done than a Vytek L-Star.

The L-Star is more than just a big engraver though, the L-Star is the result of over 25 years of development. In fact, Vytek spends more on R&D than any of our competitors.

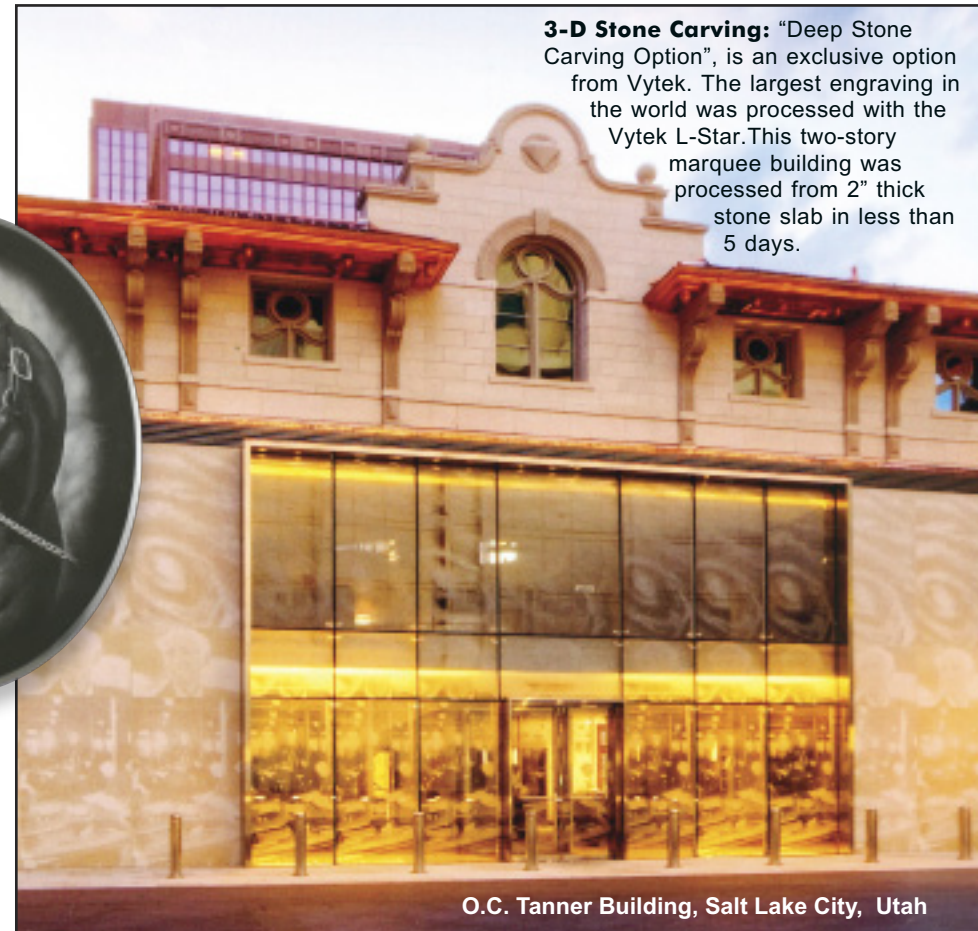
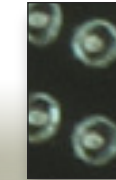
But what makes an L-Star even more valuable valuable to you is the support behind it. The difference is we show you how to make money with your L-Star not just how to use it. Vytek has been building laser

systems since 1989 and offers years of experience helping customers select, customize and operate machines for a variety of applications.

Contact Vytek to learn how an L-Star can help your business or visit us online at www.vy-tek.com. Vytek Lasers are designed, built and supported in the USA.



Glass Engraving: The L-Star is the only laser system on the market that can consistently engrave glass (both tempered and float) with clean and smooth surfaces. Years of effort went into developing a process and the technology that allows flawless processing of glass projects. The Vytek L-Star is truly a solution for replacing sandblasting with the added benefit of exacting photographic detail that even acid etch cannot provide.



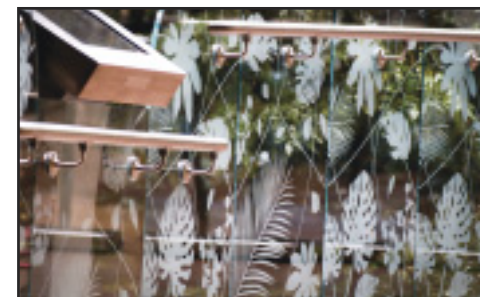
3-D Stone Carving: "Deep Stone Carving Option", is an exclusive option from Vytek. The largest engraving in the world was processed with the Vytek L-Star. This two-story marquee building was processed from 2" thick stone slab in less than 5 days.

O.C. Tanner Building, Salt Lake City, Utah



▲ **Tile:** Decoration of stone and tile is one of the strengths of the L-star. It is able to switch between large and small items as well as thick and thin projects. The L-Star is a money-making powerhouse.

▼ **Acrylic:** Two emerging trends in acrylic are edge-lit and light piping. The L-Star can engrave this material at high speeds with absolute precision.

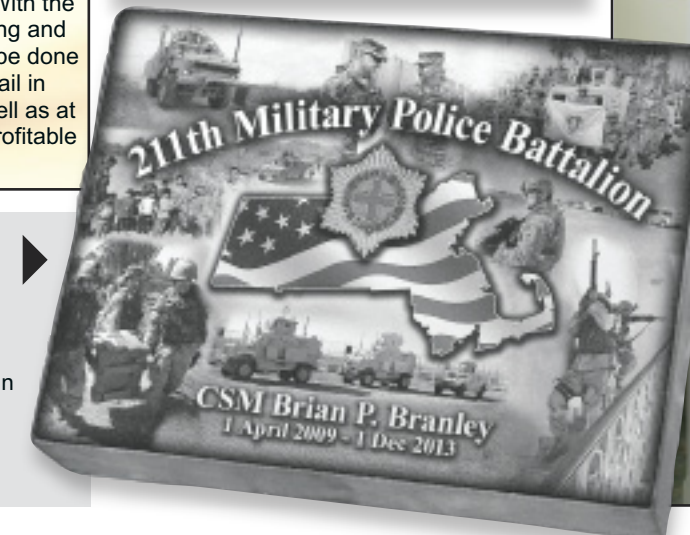


▶ **Slate:** Floor tile decoration is a common use for the L-Star and it makes quick work of materials like slate, granite and marble to mention a few. Vytek pioneered stone engraving and offers a host of features specifically designed to make your company productive when processing stone or tile.



▶ **Wood:** With the L-Star, carving and engraving can be done with exacting detail in 2-D and 3-D as well as at speeds that are profitable for your company.

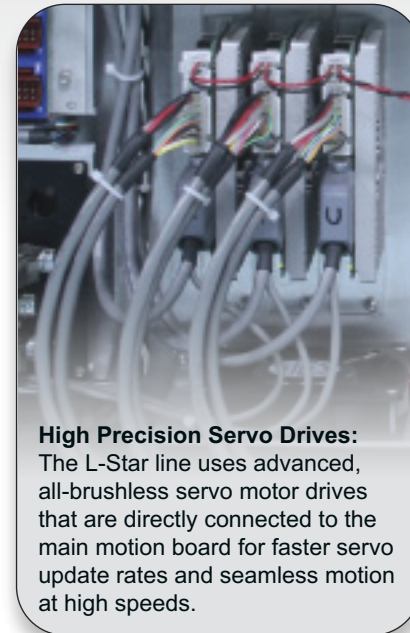
▶ **Granite:** With the L-Star, granite memorials are some of the easiest and most profitable ways you can use an L-Star. With an integrated hydraulic lift table, the L-Star can lift and position stones that weigh in excess of 4000 pounds. No other system on the market offers these features in a single system.



L-Star Features and Components



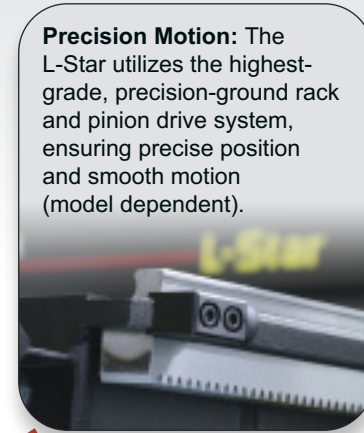
Adjustable Table Surface: The unique table system allows the table height to be adjusted in .5"/12 mm increments quickly and easily for fast job change over and maximum flexibility.



High Precision Servo Drives: The L-Star line uses advanced, all-brushless servo motor drives that are directly connected to the main motion board for faster servo update rates and seamless motion at high speeds.

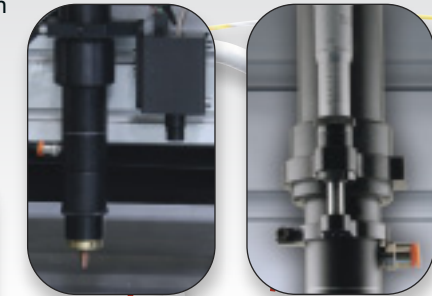
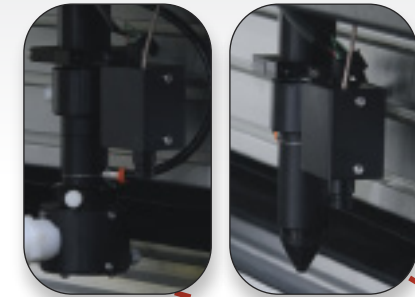
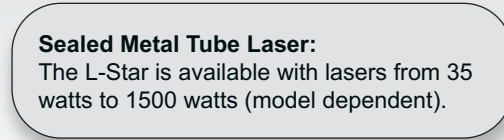


Remote Pendant: The remote pendant allows for full machine control anywhere around the laser. It provides full color graphics display and easy access to all your job files.




Precision Motion: The L-Star utilizes the highest-grade, precision-ground rack and pinion drive system, ensuring precise position and smooth motion (model dependent).

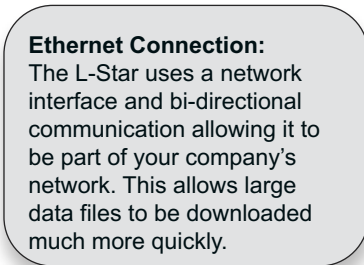
Cutting Head Options: The L-Star head assemblies are quick and easy to swap for any application you might have, from our standard head to our active height-following assembly. In addition, the L-Star head assemblies have a wide range of optic choices to suit any cutting or engraving requirement.

Sealed Metal Tube Laser: The L-Star is available with lasers from 35 watts to 1500 watts (model dependent).



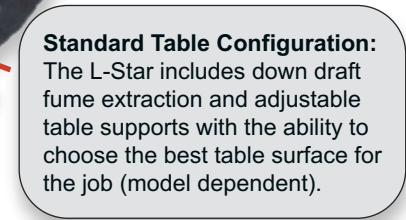
Hydraulic Lift Table: The hydraulic lift table system allows for quick and easy table adjustment for oversized and heavy object positioning.



Ethernet Connection: The L-Star uses a network interface and bi-directional communication allowing it to be part of your company's network. This allows large data files to be downloaded much more quickly.




Solid Steel Construction: The all-welded steel construction of the L-Star is stress relieved and precision machined to make the L-Star a robust and accurate system.



Standard Table Configuration: The L-Star includes down draft fume extraction and adjustable table supports with the ability to choose the best table surface for the job (model dependent).

Additional L-Star Options



◀ **Updraft Fume Extraction** allows for removal of cutting fumes right at the source and cutting of thicker materials with lower power lasers, which ensures clean edges.



◀ With the **I-Laser** option, the L-Star can quickly orient and align cut files for fast processing of printed materials.



▲ The optional integrated **PC Work Station** is ideal for on-the-fly program changes or when **I-Laser** is added to the L-Star.



▲ The unique **Adjustable Slat Table** supports are ideal for quick job changes. The slats adjust on 1.5"/35 mm centers and can easily be repositioned to allow cut parts to drop through. A second adjustment position allows for the honeycomb insert to be installed quickly and easily.

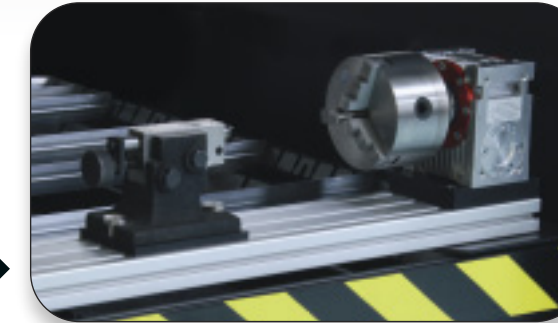
The **Rotary** option can be used for both cutting and engraving applications and comes standard with an adjustable tail stock.



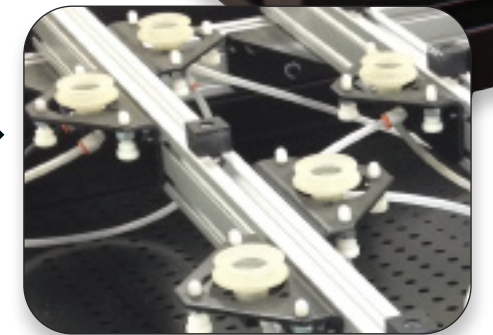
Scan code to watch video of L-Star in action.
www.vy-tek.com/brochures/Lstar2014/2.html
www.vy-tek.com/brochures/Lstar2014/3.html



▲ **Stacker Material Loading System** is a fully integrated material loading system designed to save time loading and unloading the table.



◀ With the **Glass Table** option the use of adjustable vacuum cups allows for quick and easy setup of glass projects while compensating for warped sheets.



◀ The optional **HoneyComb Table** insert is ideal for cutting flexible materials or small contour cuts.

The integrated **Roller Track** allows for heavy objects and is quick and easy to swap to other table options.



▲ The **Sliding Table** option allows for two complete work zones on one machine. It is ideal for fast thorough put jobs allowing the load and unload of the table while the laser is processing on the adjacent table. The slider table can double throughput on a single laser system.

Scan code to watch video of Sliding Table.
www.vy-tek.com/brochures/Lstar2014/5.html





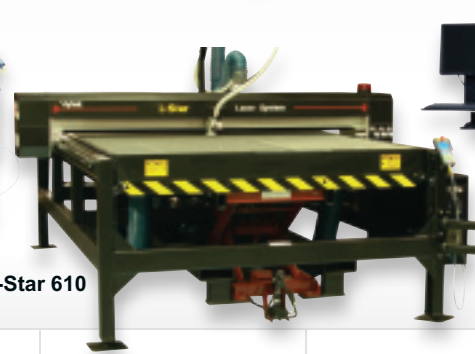
Vytek designs, builds and sells a complete line of laser-based equipment from its headquarters in Fitchburg, Massachusetts. For more than 20 years, Vytek has been mastering the use of laser technology so you don't have to. We bring you the broadest possible range of engraving, marking, and cutting solutions built to exacting standards with proven hardware and software components that provide reliable performance for many years of profitable operation. Check us out at www.vy-tek.com.



LST5050



LST4896



L-Star 610



L-Star 450



Model	LST5050	LST4896	LST610	L-Star 450	L-Star 450-510
Work Area	50" x 50" 1250 mm x 1250 mm	50" x 100" 1250 mm x 2500 mm	74" x 122" 1860 mm x 3000 mm	50" x 100" 1250 mm x 2500 mm	64" x 122" 1625 mm x 3000 mm
Available Laser Wattage	35, 90, 170	35, 90, 170	35, 90, 170	170, 250, 450, 1000, 1500	170, 250, 450, 1000, 1500



195 Industrial Road
Fitchburg, MA 01420
www.vy-tek.com 978-342-9800
sales@vy-tek.com



Built and Supported
in the USA

Note: Specifications for reference purposes only. Check with factory for current specifications. Specifications subject to change without notice. LSTAR121407