



EpilogLaser



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### Fusion Maker Comparison Checklist

To choose the right laser system for your application, we always suggest making a complete comparison between different models and manufacturers. The first step is setting up a demonstration and bringing the files you plan to run the most – this way you'll be able to see in real time how long your graphics will take to engrave and/or cut, and you'll also see first-hand the quality of results. We've created this handy checklist so you can compare different systems to determine which will best meet your needs.

Feature		Fusion Maker	Comparison Machine
Engraving Table vs Engraving Area	What is the engraving table size, and can you engrave across the entire table?	Table: 24" x 12" (610 x 305 mm) Engraving Area: 24" x 12" (610 x 305 mm)	
Material Height	How tall of a piece can you engrave inside the machine?	7" (178 mm)	
Camera Positioning	Camera positioning allows you to quickly place your artwork on a material.	The IRIS™ camera is located on top of the door of the laser and provides quick, accurate positioning of your artwork.	
X-Y Positioning	For engraving a table full of items, the ability to place items at the top-left corner of the table is essential for many projects.	Table rulers allow you to place your materials at the top-left corner of the machine for the most accurate positioning possible. Fill the entire table with your pieces, or place a jig from the corner of the table for easy recreation of your engraving jobs.	

Rotary Attachment Options	Will you be able to engrave wine bottles, glasses, mugs, and other cylindrical objects?	2 choices: Rim-Style for simple cylindrical objects, and 3-Jaw Chuck for more complicated shapes.	
Speed	The speed of the system determines the throughput you can achieve. Are you spending seconds engraving an image, or minutes, or even hours?	60 ips (1.5 m/s) top speed. 24" x 1" black box at 100% speed, 500 dpi: 3 minutes 58 seconds.	
Acceleration	How fast does the system get up to speed on each engraving pass?	3.5G	
Bearings/Wheels	The bearings or wheels drive the laser head back and forth for smooth, even engraving. The better quality, the less downtime and maintenance for you.	Ground and polished stainless steel, Teflon-coated, self-lubricating bearings.	
Belts	The belts on the system are crucial for keeping the highest-quality engraving at the highest speeds.	Kevlar double-wide belts. Less likely to fray and unbalance the engraving arm.	
Covered lens, x-axis, and sides?	Covered mechanics and circuit boards on your system ensure a long life for your machine.	Epilog's Safeguard™ features a fully covered x-axis, circuit boards, and side bellows to keep the mechanics clean and dust-free.	
Laser Class	The classification of the laser determines the laser safety. A class 2 laser system shuts off when the doors are open. A class 4 laser has openings from which the laser can escape and requires a laser safety officer on staff.	Class 2 – Completely safe to operate.	
Controls at the Machine	What controls are available at the machine?	A 7" touch screen display panel gives you full control of your laser system.	

Multiple Files at the Machine	Can you choose between multiple files that you have sent to your laser?	Choose between saved jobs on the display panel.	
Focus Adjustments at the Machine	Can you auto focus and adjust the table height at the machine?	Auto focus anywhere on the table and adjust table height from the display panel.	
Trace Jobs at the Machine	Can you create a red-dot trace of your job at the machine, showing you precisely where the file will engrave?	Preview job location with automatic job bounds tracing tool from the display panel.	
Rerun Jobs at the Machine	Can you quickly run the same job again without having to process it at your computer?	Jobs can be rerun at the touch of a button at the display panel.	
Memory in the Machine	Does the machine have permanent memory in the laser to save your most used jobs?	1 GB permanent storage. Permanently save your most popular files at the laser.	
Where Manufactured	Where is the system manufactured?	Designed, engineered, and built in the USA in Golden, CO.	
Focus Method	How can you focus the laser? Does the focus work on transparent materials like glass and acrylic?	Auto focus by plunger on the cone, material thickness, or manual focus gauge. Works on all materials.	
Connections to the computer	What are your options for connecting to the laser? Will you be down if your internet connection is?	1000 Base-T Ethernet, USB connection, and wireless connectivity.	
Materials	Are you limited to materials you have to buy from the company? Is the warranty affected by where you buy the materials?	Works with any laserable material. The warranty is not affected by where you purchase your materials.	
Technical Support	When you have an issue, how do you get help, and how long does it take to have them contact you?	Choose the way you prefer: phone, chat, and e-mail support, Monday – Friday, 6 am – 6 pm (MT).	

User Maintainable	If there is a part that needs to be replaced, can you do it, or does it need to be returned to the factory?	The system has been designed to be fully user maintainable. Follow along with videos on our training site to change out parts.	
Type of CO2 Laser	Does the system use a metal/ceramic or glass laser tube? Metal/ceramic tubes can be pulsed at much higher rates for much higher speed, longer life, and higher quality engraving.	Metal and ceramic laser source, manufactured by Epilog Laser. User replaceable when a recharge is needed. 2-year warranty on the laser tube.	
Air Cooled or Liquid Cooled Laser Source	An air-cooled laser does not require liquid to be run through the tube for cooling. They are safer and easier to maintain.	All Epilog Laser sources are air-cooled.	
Temperature Sensor	Are there temperature sensors to reduce the likelihood of a fire in the system?	The temperature sensor shuts down the laser system when a fire is detected within the machine.	
Integrated Exhaust Controller	Is there an integrated controller to turn your exhaust system on and off when the laser is running?	An integrated controller lets you control your exhaust system from the laser.	
Software Features All Included	Does the software include all features, or is there a subscription service to access features?	All features of the Epilog Laser Software suite are included with the system. No subscription is needed.	
Warranty	What is the warranty and life of the laser tube and machine?	A 2-year warranty covers all parts of the machine and laser source.	
BBB Rating	What are customers saying about the company?	A+	