

Tips for Laser Marking and Engraving

by Shannon L. Brown

Laser engraving a piece of jewelry can go far beyond hallmarking. Jewelry manufacturers and retailers can use laser-engraving technology to personalize a piece or add design details that are impossible or time-consuming to effect by hand. Whereas hand engraving pushes metal out of the pattern it traces, a laser pulverizes metal into powder that is pulled away by the machine's exhaust system and can later be sent for refining.

A laser can create virtually any shape, texture, pattern, or text—whatever the designer or the client can imagine. The following are tips and tricks for accurate and effective laser marking and engraving:

START WITH TRAINING. “I strongly recommend that everyone has training from the laser’s manufacturer from the start,” says Kathi Bogenschutz of Fable Designs in West Jordan, Utah, who says that her company experimented with its laser marker for four months, trying to figure it out through trial and error but coming up short. After a dedicated session with a trainer from the laser manufacturer, they were up and running in no time.

STOP REFLECTION. When you are trying to center a ring in preparation for laser engraving, all of the reflection coming off the metal can make this step tricky. To cut the metal’s reflectivity, Bogenschutz’s laser technician suggests placing a non-glossy piece of paper where you will be engraving. “We use a business card for this purpose and it works well every time,” she says.

In addition, reflected light from the laser can damage colored stones, so take care when engraving or marking a finished piece of gem-set jewelry. “For example, if you have a stone-set ring and someone wants to put a date inside the shank near the stone, protect the stone with basic poster putty,” suggests Dana Smith of Pieter Andries Jewelers in Southlake, Texas. “You can use the putty over and over again.”



TEST IN BRASS. If you’re going to invest in a laser engraver, add a bunch of brass blanks to your shopping list. “Sometimes we create different .jpg files and need to test them to make sure we have the correct power and that it will mark deeply enough,” says Smith. “Instead of practicing on the real thing—especially if it’s a customer’s piece—we test it on the blank to make sure it marks correctly.”

CONSIDER FUTURE SIZING. When laser marking your logo inside of a ring, think ahead so a future sizing won’t destroy it. “When I mark a logo, I make sure it’s in a spot that someone will never have an issue with it down the road,” says Patrick Scis of Mavito Fine Jewelry Design in New York City.



LEVEL UP. To make an even line of text or a pattern around the outside or inside of a ring, grab a mini-level to guarantee accuracy. “Place the level on top of the scan head

housing to make sure it’s level, then the ring will engrave correctly,” says Bogenschutz.

STEP INSIDE, CAREFULLY. When marking the inside of a ring, verify that the laser is focused, and then double check. “If it’s not in focus, it’s not going to mark it correctly,” says Smith. “The mark may have a doubling effect or be blurry.”

In addition, check the inside diameter of the ring in two or three spots before marking, as rings are seldom perfectly round. “If it’s a plain band, it’s generally the same all the way around,” says Smith. “But if it’s a very intricate ring, the diameter may vary. In that case, you should average the measurements and cut all marks at one time. If you try to make one mark, remove the ring, place it back, and then make another mark, they will not line up.” ♦





YOUR "HOT-LIGHT" POWER TOOLS!

PROFITABLE WORKSHOPS

The iWeld Laser Welding System is easy to use, simple to maintain and incredibly powerful. The iWeld fits neatly into any work environment and is available in two models the iWeld Benchtop and the iWeld Professional pedestal model. The iWeld is the highest peak powered machine in its class. This machine welds SILVER!

- Resize rings, retip prongs, repair bezel settings
- Assemble broken necklaces, bracelets and earrings
- Repair costume jewelry, eyeglass frames, watches
- Fill porosity and create made-to-order designs
- Ideal for all kiosks, studios, workshops, repair centers, pawn shops, discount outlets, optical and retail stores
- Lease-to-Own Financing Programs Available

Starting at \$15,225.⁰⁰

- ★ **Easy To Use...**
- ★ **Simple to Maintain...**
- ★ **Incredibly Powerful!**



FIBERCUBE[®]

- ★ **Easy To Use...**
- ★ **Simple To Maintain...**
- ★ **Very Low Cost of Ownership!**



LASER ENGRAVING SYSTEMS

The FiberCube[®] Laser Marking and Engraving System is a compact, turnkey marking, engraving and cutting system that offers the benefits of a non-contact, abrasion-resistant, permanent laser mark onto almost any type of material.

- All-in-One Turnkey Solution
- Simple to Use Laser Marking Software
- Quick & Easy Marking, Engraving or Cutting
- Custom Ring Engraving - Inside/Outside
- Quick, Auto-Align, Removable Rotary Chucks
- Available in 10, 20, 30, 40 & 50 Watt Models
- Multiple Class I Chamber Options

Starting at \$25,000.⁰⁰



Go to Our Laser Marking Application Video



LaserStar Technologies Corporation
One Industrial Court, Riverside, Rhode Island 02915 USA
Phone: 401-438-1500 • Fax: 866-516-3043
Email: sales@laserstar.net • www.laserstar.net

FOLLOW LASERSTAR.TV

