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# Laser FOCUS

2<sup>ND</sup> QUARTER 2011

**WEB UPDATES**

- **Sample Club: Laser Engraved Kindle:** [epiloglaser.com/sc\\_kindle.htm](http://epiloglaser.com/sc_kindle.htm)
- **Tech Library: Power Consumption and Your Laser:** [epiloglaser.com/tl\\_power\\_consumption.htm](http://epiloglaser.com/tl_power_consumption.htm)
- **News: High School Sophomore Wins Laser System for Most Innovative DIY Project:** [epiloglaser.com/news\\_epilog\\_challenge\\_winner3.htm](http://epiloglaser.com/news_epilog_challenge_winner3.htm)
- **Portfolio: Laser Engraved Portfolio:** [epiloglaser.com/sc\\_portfolio.htm](http://epiloglaser.com/sc_portfolio.htm)
- **News: LaserU Offers Free Seven-day Trial for New Epilog Laser Customers:** [epiloglaser.com/news\\_laseru.htm](http://epiloglaser.com/news_laseru.htm)

## Hobbyist-Turned-Business Owner Incorporates Laser into Dream Workshop

Laser technology helps create intricate one-of-a-kind wooden creations.

Doug Green's love for woodworking began in high school in his hometown of Austin, TX. Though his professional career didn't move in that direction, Doug's natural ability, coupled with the right equipment helped him successfully turn his hobby into job where he could bring his woodworking creations from concept to reality.

"I'm mainly a hobbyist, working in wood and metal, along with laser design and engraving," Doug tells us. "I'm fortunate to have a full wood and metal working shop – my dream shop in fact - and I started my company, Express Laser Service, in January 2009."

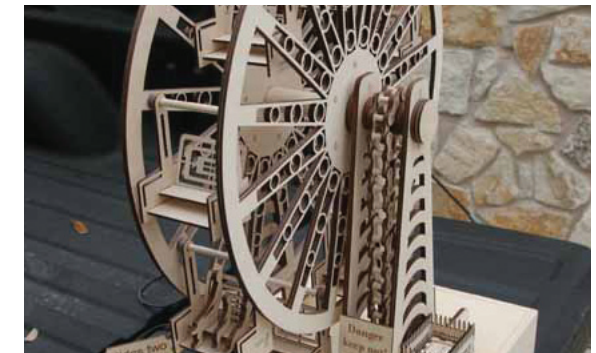
Having a fascination with lasers for nearly 20 years, Doug recalls the first time he was introduced to the technology. "A little over 20 years ago I bought some handmade wooden pens that were laser engraved with the name of the company I was working for at the time," Doug said. "Ever since then I wondered 'how'd they do that?'. A little over three years ago I was at a woodworking show in Austin, TX, where I was introduced to Engraving Concepts, and they were demonstrating an Epilog Laser system in their booth. A friend of mine had a wooden pen in his pocket and they laser engraved his name on it - that was all it took. I knew I had to have a laser! At the time I had no idea how it would change things in my shop."

Shortly after Doug saw the Epilog demonstration, he began the process of finding the right laser system for his needs.

"In a laser system, I was looking for a large bed size. In a manufacturer I was looking for the best after-sale service. I have found both with Epilog and Engraving Concepts. They're both first class in service after the sale. I'm three years into this adventure, and after going to all the shows and talking to other vendors I would still buy an Epilog again and again."

At first Doug used the laser system primarily to cut out patterns and prototypes. "I use a lot of quarter-inch, medium-density fiberboard (MDF) and the laser cuts through it like butter," Doug said.

(Continued Pg. 2)



Working Model Ferris Wheel by Doug Green

## 2011 Educational Clinics and Laser Seminars

Location	Sponsor	Venue	Phone	Date
Seattle, WA	Northwest Laser Systems	Northwest Laser Systems Hampton Inn & Suites Federal Way 31720 Gateway Center Blvd S   Federal Way WA 98003 P: 253-946-7000	P: 877-623-1342	July 15, 16
Kansas City, KS	Prism Sales	Hampton Inn Olathe 12081 S. Strang Line Road Olathe, KS 66062 P: 913-393-1111	P: 816-331-1206	August 5, 6
Orlando, FL	Jackson & Associates	TBD	P: 770-536-8300	October 21, 22
San Antonio, TX	Engraving Concepts	TBD	P: 817-460-8122	November 11, 12

We update our educational clinics regularly, so check [epiloglaser.com/educational\\_clinics.htm](http://epiloglaser.com/educational_clinics.htm) to find dates and venues for the coming year.



"I think my learning curve hit an apex last year when I saw a map of a lake that had two layers to give a topographical effect. I made one myself, using a photo of a map of our local lake. It took two days to create a design I was happy with, but after some test runs and multiple edits, I was off and running. My maps, which I create with the laser, are three layers: the land around the lake, the lake itself that is painted blue, and then the river bed painted a darker blue. I have made maps of different lakes, as well as the Texas coastline," Doug tells us.

Doug is a perfect example of how certain projects can turn into other profitable ideas. "From the lake maps, I developed a two-layer clock, and have made more than 100 of them – only 20 have been the same."

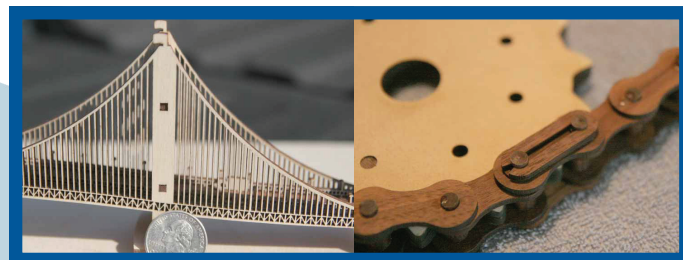
Always one to tackle new projects and explore new ideas, Doug tells us his work as of late has been of the model-making nature. "It began with a (working) model wood pipe wrench. Then I made an all wood chain, and wood sprockets. And since then I have been racking my brain to think of something to make that would use the chain. After many months I came up with an all wood Ferris wheel."

Doug tells us the Ferris wheel project took a total of about 30 to 40 hours and has been well worth the effort. "I just love drawing and creating something intricate - the sky is the limit and the laser can engrave or cut anything you can draw."

"In fact both the Ferris Wheel and the wood chain were made mostly with the laser. The only other tools I used were a small miter box, small back saw, random orbital sander and a wood lathe, and that was only to drill the 1/8" hole in the center of the 1/4" dowel for the pin and roller for the chain," Doug told us.

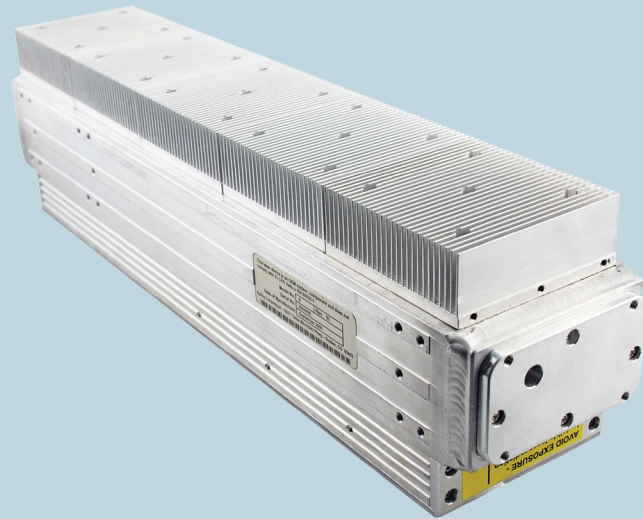
"Like I said before, the sky is the limit with the laser, and who knows what I will make next? I recently made a bridge based off someone else's drawing, and my next project will be making a model of our local bridge."

Materials list and a video for the ferris wheel are online at [epiloglaser.com/cs\\_doug\\_green.htm](http://epiloglaser.com/cs_doug_green.htm)



## Epilog Laser Awarded Second Patent for Waveguide™ Laser Tubes

Continuing innovation with patented Waveguide™ technology that improves engraving results



Epilog is excited to announce we have been awarded U.S. Patent No. 7,894,500 for our Waveguide™ laser tubes. This is the second patent we've received for Waveguide laser technology!

"The laser tube is really the core of the engraving system, and Epilog is continually seeking ways to improve this crucial component for the benefit of our customers," said Mike Dean, vice president of sales and marketing for Epilog Laser. "This patented technology greatly improves the beam quality, which will ultimately improve our customer's engraving results."

"The implementation of Epilog's Waveguide laser tubes is one of the primary reasons our standard system configuration has been recognized worldwide as producing the finest engraving detail in the industry," Dean said. "Our customers produce the highest quality results at the lowest possible cost, without the need for expensive lens options."

Laser tube design can produce drastic differences in the way a laser cuts and engraves. Issues such as oval-shaped beams, inconsistent power stability and slow switching rates all contribute to degradation in the quality of the laser beam, and therefore, in the quality of the engraving and cutting results; however, Epilog's Waveguide technology produces such high beam quality that users are able to achieve amazingly precise cuts and the most detailed engravings.

## Technical Library: Creating a Quick Bounding Box for the Red Dot Pointer

When we're running custom engraving jobs, there is nothing better than combining Red Dot Pointer and Center-Center Engraving to quickly position a graphic on a product. While at the MakerFaire in San Mateo we were providing custom engravings on cell phones and laptops and found ourselves repeatedly using a tip we learned from Foster Coburn at Graphics Unleashed. Foster was kind enough to agree to let us share the tip with our users. (And for many more tips, be sure to check out his website at <http://graphics-unleashed.unleash.com>.)

### Design Your File

To start, layout and resize your image however you want it to appear on the phone or other device you are engraving. Since we'll be using center/center engraving feature, you don't have to size the page exactly to the size of the device.

### Select the Image

Select everything you want to engrave using the Pick Tool.

### The Secret Bounding Box Method

Now here's the secret we learned from Foster. Hold down your Shift key and double click on the Rectangle Tool. It'll draw a box exactly the size you need to preview where your artwork will appear.

Instructions continued online...

For complete instructions visit [epiloglaser.com/tl\\_bounding\\_box.htm](http://epiloglaser.com/tl_bounding_box.htm)



## Sample Club: Laser Engraved and Cut Rulers

Rulers make excellent promotional or thank you gifts because they not only indicate the precise results Epilog systems can deliver, but they're extremely practical as well. Here we feature two ruler designs. Dick Reed provided the first design, which is a traditional ruler design and can be customized for you or your customers on wood, plastic, acrylic, or any number of materials. We added a second file design for a multi-functional ruler cut out of plastic that features traditional measuring tools, as well as common stencil shapes, borders, etc.

### You'll need:

- Wood sheets - anything larger than 12" x 1" will do. (We used 14.5" x 4.5" alder planks from Colorado Heirloom.)
- Or plastic/acrylic sheets at least 14" x 12" (optional - this will accommodate the more intricate ruler design.)

First, open the file `sc_ruler_wood.cdr` and customize the file with your company's contact information and logos. The machine used for this project was a 50-watt Epilog Helix and we used the following settings:

Instructions continued online...

For complete instructions and to download the sample file visit [epiloglaser.com/sc\\_rulers.htm](http://epiloglaser.com/sc_rulers.htm)



○ ENGRAVING | ○ CUTTING | ○ MARKING

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