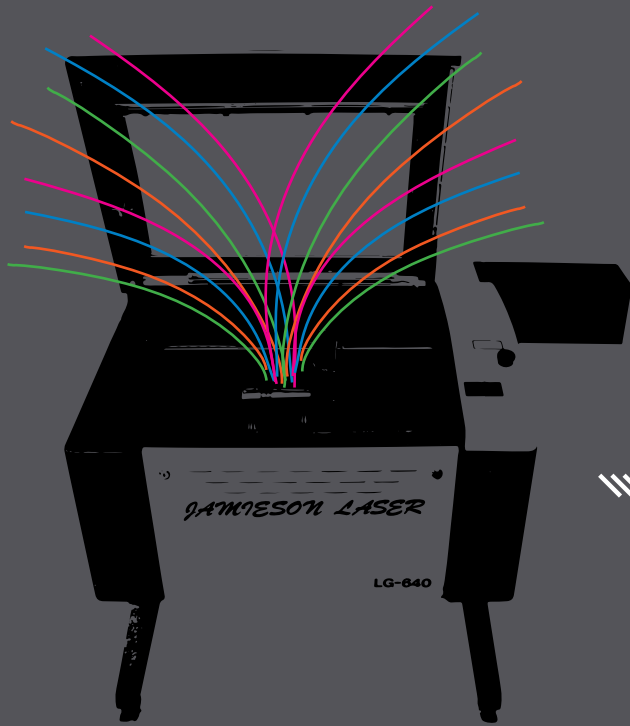


\*For Introductory Users

# Free Guide

## Top 3 Markets for your Laser Machine



What would you like to use your laser machine for?



Published by  
**Jamieson Laser**  
engraving, marking, cutting machines

# Top 3 Markets for your Laser Machine

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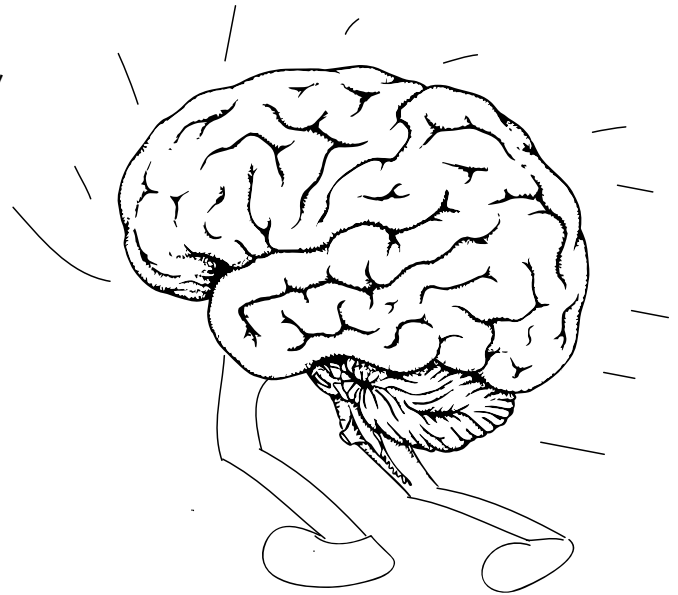
# Introduction

This Free Guide is designed for introductory or new laser machine users, or soon to be users who are also new to the industry and its different subjects.

Each one of our Jamieson Laser E-books, Guides, Videos, etc made for new users will feature images marks like the following to indicate its usability.

\*For Introductory Users

This guide includes small tips to explore new ideas for applications with a machine for laser engraving, laser marking and laser cutting. After reading this guide, you will be able to start thinking about expanding your markets or start a new one.



**do not rush for  
new ideas. take  
your time!**

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# Chapter 1

## Application #1: Signage

**“Name tags can cost just a few cents, and be sold for around \$8”**

Nowadays you can find plastic signs everywhere you go for any type of instructions such as “exit”, “restroom”, “closed”, “open”, etc just to mention some of the most common ones. The great thing about the signage industry, is that there is a lot of demand, but there is no communication between customers and retailers. I am sure a lot of people in need of engraved plastics signs do not know where to get them.

Different types of plastics like acrylics are perfect for laser engraving and laser cutting and can come in many colors and forms. They can all be used for hallway signs to informational poster type signs to

a company’s outdoor sign. There are even acrylics with two colors such as Rowmark, in which the laser burns through one color to reveal the second one.

The plastic engraving stock for laser engraving is available for a wide variety of sign applications, both interior and exterior. Plastics can also be used for name badges. It is very common to see name badges or tags on the personnel of grocery shops, fast food chains, hotel chains, or even hospitals. These tags can just cost a few cents and sell for around \$8 depending on your client.



## What laser machine suits you best to create signs?

Depending on the size of the materials you plan to use as well as the size of production, we would recommend the size of a machine determined by the customer's needs, which at the end keeps the cost down.

The following is a list of our great Jamieson Laser tubes that could work best with acrylics.

1. 60 Watts: These type of laser tubes can be installed in almost every machine to solve any sizing needs, but are usually offered on our CMA-640 and LG-640 machines. These laser

machines have working tables of 18" x 24".

Also, 60 Watt laser tubes can mark, engrave and grade engrave any kind of plastics, but can only cut up to a thickness of 0.5 inches acrylic.

For acrylics and other



plastics, we recommend to use any machine size, and the best part of all, is that a 60 Watt laser can run on as little as 17 cents per working hour on electricity.

2. 100 Watts: Tubes like these can only be installed in our larger machines. The advantage of these machines that start with sizes of 24"x 36" and go up to 5' x 10', is that can host large parts and in some machines the length does not matter since they have front and back openings to pass materials through.

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# Power consumption of these CO<sub>2</sub> laser tubes range from 17 to 25 cents/hour of work!

The 100 Watt laser tubes can also engrave many plastics, but would only cut up to 3/4" acrylics. Also, just like the 60 Watt tubes, you can engrave and cut rubber stamps, and if your raw material is too big to fit in a 18" x 24" table, then its recommended to look at a bigger machine that contains a 100 Watt laser tube, which consumes around 20 cents per hour on electricity.

3. 130 Watts: Laser tubes like these can be applied to the same machines with the same settings as the 100 Watt laser tubes, but would cut up to 1" acrylics, and would cost the same or 5 cents per hour more than the tubes mentioned before. If you are planning on using bigger parts of plastics, acrylics or rubber and would like to use these type of tubes, then you would have

to look for a machine bigger than 24" x 36".

At last, all CO<sub>2</sub> laser tubes carried by Jamieson Laser are hand-made glass round tubes that emit perfectly round beams, which at the end perform a very accurate laser cut, engrave and mark on the different plastics, acrylics, or rubber materials.

# Chapter 2

## Application #2: Wood Working

**“they become more valuable and could triple their prices”**

Most people that hear about engraving or etching with laser machines think that these machines are perfect for wood. And the truth is that they are. The most common application for laser machines is anything related to woodworking. Laser engraving, marking and laser cutting wood can yield very unique results because of the different varieties of wood available.

One of the ways woodworking with laser machines can be very profitable is in the creation of gifts. Many pre-finished items are available, like key fobs, jewelry, plaques, tags and awards; which you can easily customize with your laser machine to create

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amazing memories. In the process, your laser engraving machine allows you to increase the value of an item quickly and with little effort by adding text and pictures, as well as cutting or engraving within one file. After paying a couple of dollars for your item, and a few minutes of engraving, results of quality would increase the sale price of it.

The use of laser machines is limited only by the customer's imagination. Experimenting beyond pre-finished items opens up many possibilities from unfinished wood to products found at home improvement stores, dollar stores and others. Once you laser engrave these items, they become more valuable and could triple their prices.



## What laser machine suits you best to start wood working?

If you are starting a business you might be most interested in a small machine such as any of our table top models (12"x20 or 18"x24 work areas) as these are very affordable, starting at \$7,000. For larger parts, or heavy cutting jobs, we offer larger and more powerful machines, allowing you to cut wood to 1/2" thick, or work with sheets up to 5'x10'.

The following discussion on laser tubes will help you to understand which machine will serve your needs best for wood working.

1. 60 Watts: These tubes can be installed on any laser machine, but usually



come with our 12"x20" and 18" x 24" table top machines.

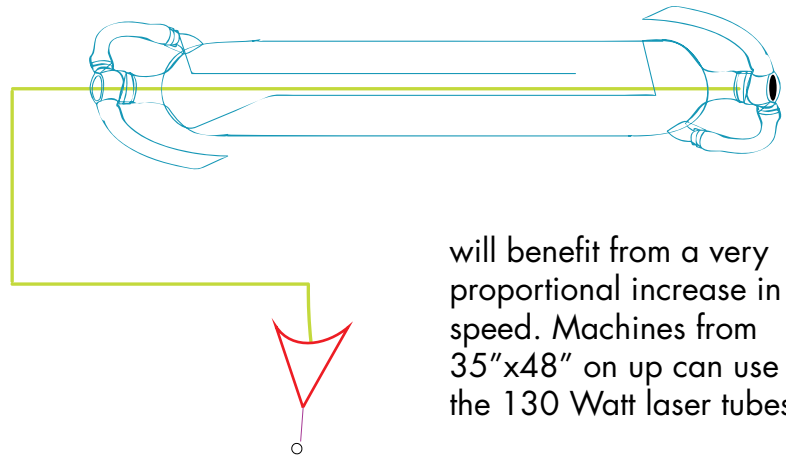
Our Jamieson Laser 60 Watt laser tubes can be used for laser marking and engraving different woods where the quality would change depending on the softness

or hardness of the material. These tubes can also cut hard wood up to 1/4" thick, but really light wood such as balsa can be cut up to 1/2" thick.

We suggest customers use our 60 Watt laser tubes mainly with small machines where they could laser engrave pre-finished materials such as plaques, wood frames, suitcase tags, etc.

Another use of our 60 Watt laser tubes is for cutting thin wood like for doll house furniture or model kits such as balsa wood airplanes.

# This is how our CO<sub>2</sub> lasertubes work!



2. 100 Watts: These tubes can be installed into 24"x36" laser machines and larger ones. They will cut soft wood to 1/2" thick and hard wood to 3/8". 100 Watt tubes are also excellent if you need to combine cutting and engraving. Please note that our full size machines (24"x36" and larger) feature material

pass through allowing the use of very long material to reduce waste. Many of our laser machines have an up/down table for high parts or for the use of our rotary engraving fixture.

3. 130 Watts: Laser tubes of this size are mostly for cutting. Hard wood up to 1/2" can be cut, but on thinner wood you

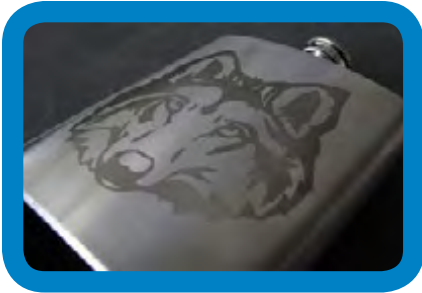
will benefit from a very proportional increase in speed. Machines from 35"x48" on up can use the 130 Watt laser tubes.

At the end, any of the laser tubes by Jamieson have a perfectly round beam that shows great quality of engraving and cutting on the different type of woods. You can always try pre-finished material, but in just a few weeks of full time practice you will be able to design and create great products which can triple their prices and create good profit for your business.

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# Chapter 3

## Application #3: Trophies and Beyond



There are many different applications for laser marking various metals on one of our CO<sub>2</sub> Jamieson Laser machines. Coated and uncoated metals such as aluminum, anodized aluminum, stainless steel, bronze and more could be used.

Coated metals (anodized, black oxidized, painted) are lasered without preparation. However, uncoated metals need to be coated with a specialized compound like Cermark. The CO<sub>2</sub> laser will burn the compound onto the metal surface and create a permanent mark. The excess is cleaned off with plain water.

An alternative would be the use of pre-coated material like Alumark, which

**“anodized aluminum tags can cost around \$10 for every 100-150 units”**

requires no preparation or cleanup, and is very reasonably priced.

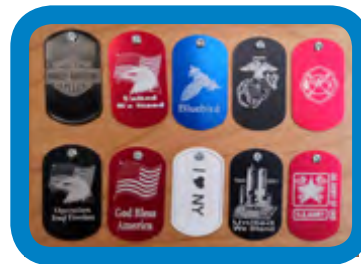
Besides trophies, metallic tags and labels are a really big market since every corporation in the food industry or even health care system need name tags, labels and identification cards.

For example, an order of anodized aluminum tags can cost around \$10 for every 100-150 units. Another option, especially to get into very industrial markets, is barcoding. Barcodes are required by many companies very often for machinery, on a label or on a specific product.

If you own a graphic design software such

as Adobe Photoshop, Adobe Illustrator or Corel Draw, you can design your own bar codes, or some times you can find templates online and customize them.

There are a many lasarable metals out there on the market. Brass, copper, chrome and steel are very popular, but anodized aluminum is definitely the most used because of its good price, and variety of forms and sizes for laser engraving and marking gift products.



**We** have a **YAG** laser designed to **DIRECTLY Mark** metals without the use of any **COATING** whatsoever!

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## What laser machine suits you best to mark metals?

So far I wrote about marking metal with an inexpensive CO<sub>2</sub> laser machine. The laser tubes usually are 60 Watt ones so machines starting at \$7,000 do a great job.

When the work is "massive", and of highly conductive material like a 1/4" aluminum plate or larger, the energy from a 60 Watt laser tube is absorbed too quick and a 100 Watt tube in a mid-sized machine (24"x36" or larger) needs to be used.

For medium and high quantity work, there is a more attractive solution. The Metmark-Y YAG laser



machine. With a much shorter wave length, the YAG laser couples easily into uncoated metals requiring no preparation of the metal and no clean up. In combination with a scan head, the Metmark-Y machine runs at speeds up to 280 inches per minute, much faster than a CO<sub>2</sub> laser machine.

Again, the machine reproduces anything from text to graphics, pictures, and bar codes. Its maximum engraving area is 2.8"x2.8" or 5.75"x5.75" at a cost of \$19,000.