Using Photographs for Laser Engraving

The engraving of photographs is one of the most popular uses of laser engraving systems. This can also be one of the more challenging and time-consuming projects you will encounter as well. There is definately a great deal of time spent experimenting with the right image preparation as well as laser system settings.

Fortunately with a little learning and some decent software it's possible to produce consistently great engravings. Below are some tips and tricks to assist in this learning process, so that the finished product will be one that meets your expectations.

I. Image Aquisition

Obviously this is where it all starts. Choosing an image that isn't suitable for laser engraving will make this entire effort futile. Images with poor contrast between features or deep shadows will result in very poor laser engraving results. The example below is a photo with high contrast and good definition and very few shadows. This image would provide very good laser engraving results.

This example has poor contrast between elements and deep shadows throughout the image. The laser engraving results from the image below would be very disappointing.

II. Working with Images:

Aquire (scan, or import) the image, keeping in mind that it should be sharp, detailed, well lighted with high contrast and resolution and with good definition. The first step in image preparation for laser engraving is to remove any color. This will also provide a good indication on the images suitability for laser engraving.

Note: You should not enlarge digital photos beyond their original size because they will get blurry and pixilated as the software tries to oversample the pixils as it scales up.

There are many software packages out that can perform advanced image processing. Not only resizing and cropping, but changing resolutions, sharpening, adjusting of curves and levels as well as applying lighting effects and removing unwanted areas of the image.

Using photo editing software enhance the image as needed. Save the image with different settings (taking note of the settings for each saved image is useful) and choose the one that looks the best, or bring it to PDX Lasers and we'll review the images and discuss the interdependencies.