**"Learning Engraving Software"** *Published by ARA (Recognition Review)*

Learning engraving software and using it to troubleshoot – Part 1

*Recognition Review* has ask me to write a series of articles that deal with troubleshooting and general information regarding the technical end of lasers, engravers, mills and routers. You need to have a little knowledge of the overall workings of equipment, and then some simple troubleshooting skills. We will begin with what you use the most -- the software, and this case engraving software. But these techniques apply to all software's whether it is SuperPro, D14 or CorelDraw.

Learning anything today, at first, just looks too hard! Well, as a teacher, and vocational trainer, I can finally tell you at the top of my lungs that those days are finally drifting away. You see, high tech today *has* to mean easier to use. Easier to use *must*mean easier to learn, and less steps from point A to B -- less steps from point A to B means less stuff to remember.

Usually, we are forced to learn software when we are put in a position of some pressure. Like when you have just purchased a new engraving machine (*and when doing so, had to push the limits of your checking account to get*). This is the toughest time to learn something. But -- do not worry -- feel good, no pressure, the professor is here. Running an engraving program is just a series of key-strokes memorized. If we break it down into small sections it is not too scary.

As I mentioned before, the situation that we are usually forced to learn new engraving software is after a new engraver purchase……and suddenly the big day is here, the salesman is here and he/she has installed the unit. Your manufacturing representative is ready, and he/she is ready to go from a salesperson to a trainer. Some sales people do this very well, some do not. The demo you got before you signed off on the machine may show you a bit of their ability in this area.

But no problem, good software is easy to train on. What the main goal of this short article is show you how to extract the data you need even from a rookie trainer. Remember, you are paying for this training, and it is as important as the design of the machine itself. Do not let your daily schedule interfere with training. If you do --you will regret it with all the phone calls and questions you will need to ask. So let the answering machine get the phone. Pay attention, because you know your paying for this learning time – if not, you will be frustrated and will burn up a lot of phone time trying to learn it later on.

So, a few things you may have wanted to do, in preparation for the big day. First get all the items the trainer/salesperson has requested -- like isolated lines, a good computer, and ample area to put the engraver into. The less time the salesman spends setting up, the more time they can spend with you as a trainer. A good training course should be 2-4 hours. After that, you'll go brain dead. So, the real point of this introduction to this new tool in your production arsenal is to get you operational and increasing profits quickly. To do that, learn the basics. This is done by getting an overall view of the potential of the program and a hard fast control of those basic functions that will get images from the screen to the engraving plate.

Now, if you have engraved before you already know 50 to 60 percent of your new program. A baseline is a baseline, is a baseline. If you do not know what a baseline is, it is the parameter that is measured from the top of the plate to the bottom of a letter. So each line will give you a different baseline. But my point is, the tasks are the same as your old program, but are laid out better, or you would not have purchased the program to begin with, learning the new bells and whistles will fall into place.

Now, you're sitting there ready to see your future. The first thing you should be shown is where to put in the **size of your plate**. Windows software will not, as a rule, ask for the number of lines. Most do, even if you're going to change the line heights it is nice to know what the software has calculated as the perfect letter height for your plate size. If the program does not provide a suggestion, then choose the most common character height, and just start typing your text. Get the text on the screen and spell check it, choose a case, that is upper or lower cased text for example. Now **choose your fonts** whether they be Engraving Digitized fonts or TrueType fonts filled or outlined -- get the text in the right font style. All Programs size the selection box, not the font style, so font selection is important if you're doing any re-sizing.

Next, you need to learn how to **resize the line(s),** then do an auto-layout of the plate. In what may have been as few as 10 major keystrokes (not counting text) your text layout is programmed in. Just note good programs allow you to change multiple lines at a time. Last, if needed, reposition the text where we list using toolkits, ??????Dockers or just visually with the mouse or nudge functions. Wow! for a simple plate layout we are ready to engrave. You need to know what button sends the data to the engraver. This screen should show speed defaults, power depth, etc. and gives that control at the engraver. The last thought before going on to the next section, logos are just fonts with only one letter designator and fonts are logos that for the most part look like the keystroke we are typing. So size and position them just like text. I will talk more on Logos in a bit.

At this point have the trainer show you how to control the master process unit or your serial controller. That's where you have just sent the plate data. Learn where the start, pause, spindle motor speed controls are, etc. Remember the trainer should have the information divided into sections. I divide my training into basic, intermediate and advanced. Basic, being that data you will use daily, intermediate is usually used weekly, the advanced stuff is used on a monthly schedule but, everyone is different. Some engravers use advanced items daily. At this point learn how to manipulate the position of line of text, justification, margins etc.

Once, you believe you can easily get a simple plate layout to the engraver, learn about logo's and where to retrieve them from, how to convert and import etc. Now, pick-up on and other types of line manipulation like arcing, underlining etc. This is where I draw the line on basic data, and go to intermediate training.

Intermediate data operation items would be things like importing and exporting different file types, special editing features, using offsets, and special effects. Special effects are things like hatch filling logos and fonts. A good trainer will let you keyboard the basic functions yourself. An engraver learns by doing, not just listening to an instructor. You should go through the intermediate functions you believe you'll use the most. I provide a list of these functions and show the high percentage use ones and the fun ones.

Advanced functions are bells and whistles like scanning, table defaults, diagnostic functions, and all those other cool functions that are left over. Learn the first three. Especially the diagnostics function for troubleshooting is always important. Table defaults are put in by the sales person -- ask about them just in case you have to re-install the software at some point in the future.

Next in my training course, I ask the client to go through a basic job again. Practice, practice makes Jack or Jill a rich kid. I end the training by discussing how to continue the training on your own -- because what I am really trying to teach is the ability to learn this information quickly on your own. Over the years I have always been dumfounded by engravers that have had engraving units for years and know less then one my of my trainee's that just got their machine. I leave videos that play on the PC and color manual that review and documents step by step what I have just trained on. In this way I left my skills with you to learn and control. I am also a big believer that engravers do not learn by lecture format alone -- you must be walked through the lesson step by step on your own keyboard. Then and only then does the learning begin.

So, to get back to this discussion, I always suggest go back through the manufactures tutorial. Briefly, I can not push the need for a strong hold on the power basic functions of your program. Those major phases are:

1. **Size of plate and number of lines**
2. **Add Text and Logos**
3. **Change Fonts**
4. **Re-Size select items**
5. **Position object and lines.**

After that the balance of the program will fall into place so quickly you'll think your 'e Bill Gates in no time. Now, I show how to pull-down menu selections, and attack each function. Do this left to right. The easy high use stuff is usually to the left. The low use functions are usually to the far right pull-downs. So, click file, read each function. You more than likely will find that you already know a large percentage of the items -- how to start a new job, how to open or save a job and so on. Write down the items you do not know. You will discover some of these items you are not going to use, so skip them. You can learn them when you need them. You can learn the function you wish from the help menu. Good help menu's leave nothing to chance. Check your help out. When you get to the last item on the far right pull-down menu, you are a

journeyman on the product. To go to the advanced level just learn the graphics icons and job examples and advanced tips. Do not set a schedule for this other than just one item a day. Most Sales operations have User Clinics for review and to show new Features once a year in a regional area or at major tradeshows like ARA-Las Vegas -- the Super Bowl of Engraving Events. Attend at least one a year.

This outline works, use it. Remember, to compete in today's market, you need to be operating with 21st century technology. If your competitors can push power graphics at twice the speed, they are going to win more than you. A better mouse trap has good software -- learn it and win. Next time, we will take this knowledge and learn some basic troubleshooting tools just using software and your own visual abilities. Remember with??????? I am help fix something over the phone you are my eyes and ear.