

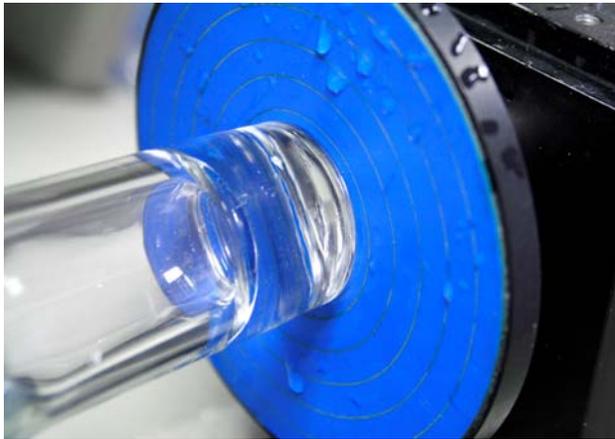
Glass Engraving

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Engraving glass can be a challenging and intricate process. However, it is also a highly profitable for those who have the right equipment and accessories. Here is a quick, step by step example of how to engrave a glass object using a Vision MaxPro Engraving System. We also used a paint fill after engraving to help enhance the look of the image on the glass.

For this project, we used the "measure" feature in our Vision Pro software to set up our engraving area and to set the engraving origin on the glass automatically. We then used our Vision Pro software to type our text. The cutting tool used was a Rotating Diamond with a .015" tip. We also attached an EZ rider burnishing adaptor to the tool to apply light pressure on the glass throughout the engraving process.

Step 1/Photo 1: We placed the glass on the machine using the cone and tail stock centering the bottom of the glass on the tail stock using the circular lines. Next, we adjusted the tilt of the object so that when lowering the cutter to the material we would have the most flat surface possible for engraving.



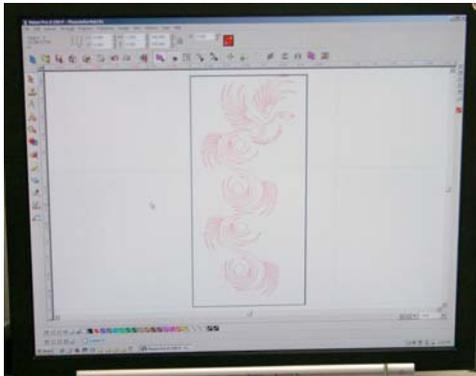
Step 2/Photo 2 & 3: Before sending the job over to the machine we used our hand held pendant to put our machine into rotary axis mode. In this mode we had to also enter the diameter of the glass into the pendant. Next we turned on our water feature mode. This allows for a consistent flow of water prior to engraving.



Step 3/Photo 4: We then set the engraving area using our "Measure" feature in the Vision Pro 8 software. This allowed us to set home over the center of the area to be engraved.



Step 4/Photo 5: We then sent the job to the engraver. To keep the image clear and concise, we used an XY feed rate of .4 inches per second, a Z feed rate of .6 inches per second, and a spindle speed of 12,000 RPM. Also, we used the MaxPro's recirculating water system to keep the area we engraved wet. This increases the quality of glass engraving and prolongs the tool life of the rotating diamond. Once finished, we cleaned the debris and water off of the glass material using a paper towel.



Step 5/Photos 6, 7 and 8 (Optional): To enhance the text and increase contrast, you can apply a small amount of Rub-N-Buff™ to the engraved area with a cotton tip applicator and let sit for approximately one minute. Using a paper towel, wipe back and forth across the engraved area to remove the excess paint.

