

# Exact Positioning on Rotary Objects

At the laser, lower the table so that the rotary will clear the lens carriage when it is sitting on the table. Then, turn off the laser. Put rotary on the table against the ruler, or in the bracket. Plug in the 9 pin rotary connector. Turn on the laser. Measure the diameter of the rotary object (across the mouth of the glass). Clamp the rotary object between the silver cones and clamp in position making sure it is as concentric as possible.

Press the X-Y button on the front panel. Use the 4 way direction buttons to move the red dot to the spot you want your graphic centered over. Write down the readings for the X and the Y position. Please note that the Y will be listed in degrees. For our example X = 19.5 and 102.2 degrees.

At the computer, prepare your layout in Corel Draw. File--Print--Properties. Click on the Engraving Tab. Click in the box for Rotary Installed. Type in the Diameter of the rotary object. Make note of the Engraving Field Height (this number changes based on the diameter, it is the circumference). Click OK and Click PRINT. This will not be the file that we use.

Back in Corel, change the page height to the Engraving Field Height from the Printer Driver. For instance, if the diameter of my glass is 2.5" the Engraving Field Height is 7.855. Double click on the edge of the page and it will allow you to change page size. Now you need to fix the ruler so 0,0 is in the top left corner. Double click in the ruler. Change the vertical origin to the page height, in this example to 7.855.

Calculate the Y position by multiplying the Engraving Field Height (or circumference) by the degree displayed on the front panel. For our example ( $7.855 \times 102.2 = 802.781$ ). Take the number and divide it by 360 (the number of degrees in a circle). This number is the Y position, in our example 2.229.

In Corel select your graphic and click on Arrange and Transform--Position. Click off the box for relative position. For H type in the X readout (our example 19.5) and for the Y type in a negative sign and the number calculated above (-2.229).

Click on File--Print--Properties. Type in the correct laser settings for the material you are using and click on the Set button. Click on Engraving Field Tab. Make sure that rotary installed is checked and the diameter is correct. Click OK and Print.

At the laser, click the next job button. Make sure you have focused on the object. Your graphic should laser centered over that spot. You can run the job with the lid open to double check your calculations by pressing Start. If it looks correct, close the lid turn on the exhaust and press start.