TIPS & TRICKS

Create A Two-Sided, Oval or Circle-Shaped Sign on a Router

STEP 1.

Design your sign and include the desired outside oval or circle shape as part of the design. (See Drawing #1)

STEP 2.

Select the entire job and do an Absolute Move so that the lower left corner of the sign lines up with the X= 0.0 & Y= 0.0 coordinates on the Composer screen.

STEP 3.

Select the outermost border of the sign and find its Absolute Size Dimensions. Divide these numbers by two to find the signs Centerline Coordinates.

STEP 4.

Place a horizontal and vertical guideline on these Centerline Coordinates. These guidelines should be projecting directly through the center of the sign in both axes. To check this, Select the outside shape. Red select centerlines appear and should line up with the guidelines.

STEP 5.

Snap a line using the line tool along each of the guidelines. The lines should travel through the center of the sign in both the X & Y axis and should be within approximately a 1/4" of the outside border (don't go past the outside border of the sign.) Make sure the Snap to Guideline feature is checked to assure the lines are exactly over the guidelines. (See Drawing # 2)
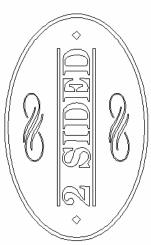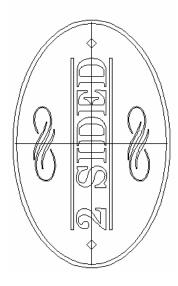
STEP 6.

Save the job as a .PLT file.

STEP 7.

Open the job in ARTPath. Go to the Setup pull down menu and choose the Material Size function. Specify the size of the material you will be using and click OK.

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STEP 8.

Nest the job into the material size lines.

STEP 9.

Select the lines that were created to indicate the centerlines of the sign in the X & Y-axis.

STEP 10.

Apply an engrave pass to these lines. This will enable you to pen plot the lines onto the surface of the desired material. Save the job as an .RTP file. Example: TEST_1.RTP. (You may want to apply masking paper to the surface of the material before pen plotting.)

STEP 11.

Apply the remaining toolpaths to the design. Include a male pass that will completely cut the outside shape from the material you are using.

STEP 12.

Save this job as an .RTP job. Example: TEST_2.RTP.

STEP 13.

Place the material on the router table so that it lines up with the preposition guidelines that have been engraved into the table surface.

STEP 14.

Open TEST_1.RTP and send to the router using the same preposition coordinates as the guidelines on to the table. Pen plot the two registration lines on the surface of the material.

*** ***Do not allow material to move after this operation*** ***

STEP 15.

Open TEST_2.RTP and send all the remaining toolpaths to finish the first side of the sign. Make sure that the male pass to cut the sign out from the material is also part of the job.

STEP 16.

Remove the sign and all the remaining material from the router table.

STEP 17.

Extend the lines that were pen plotted on the first side of the sign over and onto the return or edge of the sign by using a square and\or a straight edge of some kind.

STEP 18.

Measure from the corner of the engraved preposition guideline on the X-axis to the X-axis Centerline Coordinate from the .PLT job. Make a registration mark on the router table using a pen or pencil. Repeat this step to make a mark in the Y-axis at the Y-axis Centerline Coordinate.

STEP 19.

Place the sign; cut side down, on the router table. Align the left and bottom edges with the preposition guidelines on the router table. Align the on the sign with the marks that were made on the table. Make sure the two faces of the sign share the same top and bottom. (See Drawing #3 & #4)
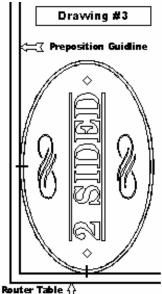
STEP 20.

Open the TEST_2.RTP job in ARTPath. Go to the Select pull down menu. Uncheck the Use Material function. This will turn it off. Delete the male toolpath that cut the sign out from the original material. Do not to delete the sign border itself, only the male toolpath that was applied to it.
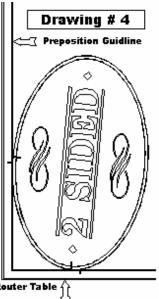
STEP 21.

Send the remaining toolpaths to the router to cut the second side of the sign.

Following these steps should result in a two-sided sign that is accurately registered on both sides. Be sure to follow all the procedures carefully. Missing one step will make the difference in your success.

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