

LESSON 6:

IMPORTED EPS LOGO DIAMOND DRAGGED ON BRASS

In this lesson we'll learn how to import an "eps" logo file, do some minor manipulation of it and diamond drag engrave it on a trophy brass plate. The finished job is shown in Figure 6-1. (For clarity, the line width in Figure 6-1 is shown wider than the actual job.)

Background Information - About Logos
Engravers generally deal with two kinds of artwork. They're called "bitmap" and "vector".
A bitmap image is made up of thousands of individual dots (they're also called "pixels"). Examples of this are the image on a newspaper page or the image on your PC monitor screen.
A vector image consists of a collection of continuous lines and curves, such as a sketch you would draw with a pencil.
Vector artwork has a distinct advantage in that a vector graphic can be enlarged without any loss of smoothness. Bitmap images lose resolution rapidly if we enlarge them.
When we engrave artwork on a rotary engraving machine the artwork must be in vector form, otherwise all the machine could do would be to continually bounce its cutter up and down at each point, and we would not achieve smooth engraving.
We'll import an eps logo for this job, but eps is just one of many vector file formats.

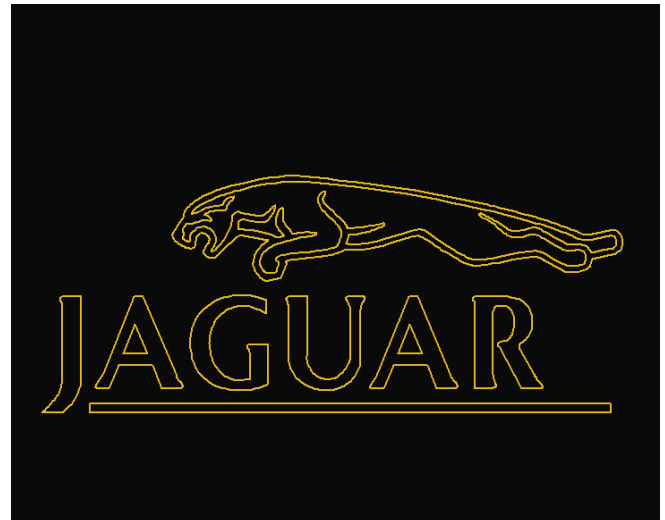


Figure 6-1 Finished Plate

The concepts we'll learn are how to:

- ... Import a vector logo
- ... Enlarge the logo
- ... Ungroup the contours (individual outlines) of the logo
- ... Select only part of the logo and rotate it.
- ... View the logo as it would be filled if we wished to 2D, or engrave it with a fill. (2D is an option to the Discovery level of GravoStyle.)
- ... Modify the logo so that it will fill correctly.

Our job's design specifications are:

- ... Filename: Jaguar Vector Logo.gnh
- ... Artwork File Name: Jaguar Logo.eps
- ... Plate: 10 inch wide by 8 inch high black trophy brass with a ½ inch border all around



... Logo Modification: Rotate the cat so that it is positioned flatter over the logo's text

Our job plan is to:

- ... Open a new job and define the material size
- ... Import the logo
- ... Break apart (ungroup) the grouped contours of the logo.
- ... Select only those contours of the logo which are part of the cat
- ... Rotate the cat
- ... Regroup the logo and enlarge it to the job's border
- ... Select a diamond drag cutter
- ... View our job in the WYSIWYRE screen

STEP 1: OPEN A NEW JOB AND SET THE MATERIAL DIMENSIONS

We'll open a new job and define the plate as 10 inches wide by 8 inches high. We'll give the plate a 1/2 inch margin all around.

STEP 2: IMPORT THE LOGO

The job opens in the automatic text entry mode. We'll click on the selection tool arrow to exit this mode.

We'll next click on "File" and then on "Import". A dialog window will open (Figure 6-2). We'll select "EPS" for the type of file that we wish to import and navigate, then navigate to the folder where our logo, "Jaguar Logo.eps" is. We'll select the logo and click on "Open".

A new dialog window will open (Figure 6-3) asking if we want to "combine and force autoconnection". For the purposes of this lesson, we'll elect not to do

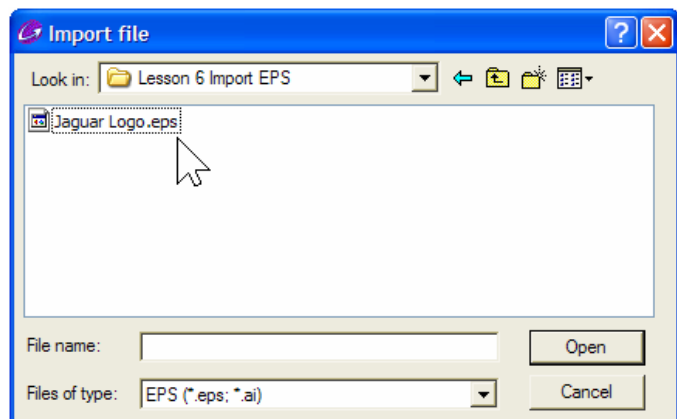


Figure 6-2 "Import file" Dialog Box

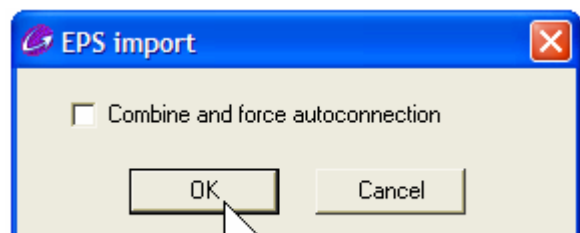


Figure 6-3



this and we'll click "OK".

Our logo will now open on the GravoStyle screen (Figure 6-4).

STEP 3: ENLARGE THE LOGO

We'll now click on the logo to select it and, when we do, we'll see filled-in squares around the graphic. These are called "handles" and they mark the places that we can click on to either re-size, move or rotate the selection with our mouse.

- ... The four handles at the corners of the selection let us enlarge or reduce the size of the select object(s). The size change will maintain the width and height of the original when we drag the cursor. When we click on a corner handle, the cursor changes to a line with an arrow at each end (Figure 6-5).
- ... The four handles in between the corner handles will let us stretch or shrink the selection, but not proportionally.
- ... The center handle is for moving the selection
- ... The small handle just below the "U" in Jaguar is for rotating the selection.

We'll click on the top-left corner handle and drag it up and toward the left to enlarge our selection, but we'll enlarge it only enough to make it easier to work on the logo. The amount we enlarge isn't critical, but we don't want to get too close to the job borders because we don't want to bump into one when we rotate the cat.

Figure 6-6 shows our job after we enlarge the logo.

STEP 4: UNGROUP THE LOGO

When we imported the logo, it "arrived" on to our screen with all of its individual contours grouped. That means that all of the contours are locked together and act as one for the purposes of moving, resizing or otherwise transforming them. We want to ungroup the logo's

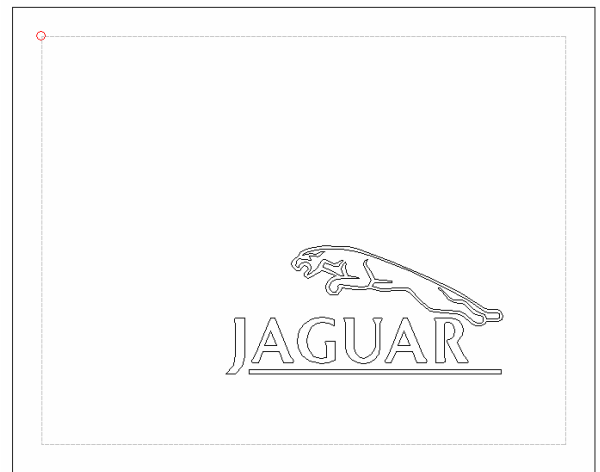


Figure 6-4 Logo Imported into GravoStyle



Figure 6-5 Enlarging the Logo

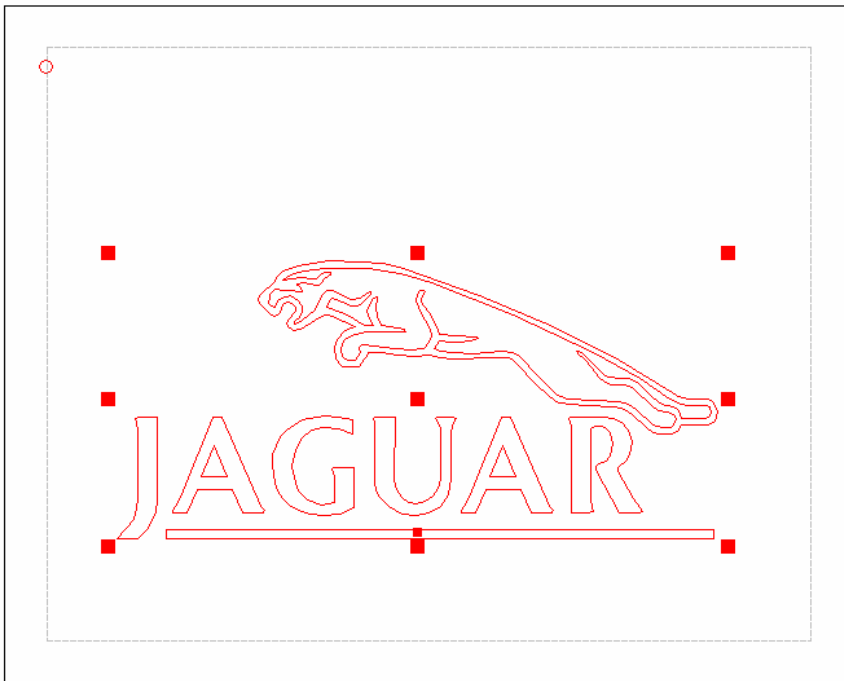


Figure 6-6 Logo Enlarged

contours so that we can select only the cat.

Figure 6-7 shows two related tools in GravoStyle's left toolbar. The right one of the two ungroups a selection. (In our case, the entire logo.) The left tool groups all selected contours.

With our logo still selected, we'll click on the "Ungroup" tool. The



Figure 6-7 Group and Ungroup Tools

logo will remain selected, but it will now be ungrouped.

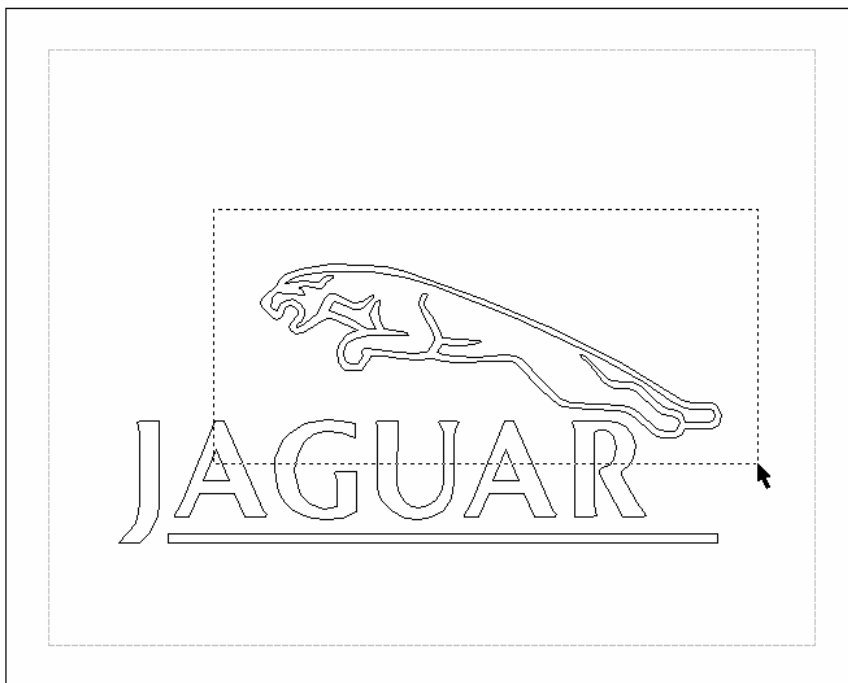


Figure 6-8 Selecting the Cat

STEP 5: ROTATE THE LOGO

We'll click anywhere outside of the selection to unselect the logo. Next, we'll drag the cursor around the cat to select only it (Figure 6-8).

Note that only everything *totally* enclosed by our selection rectangle will be selected; the letters in the logo which are *not* totally enclosed will be left out of the selection.

Figure 6-9 shows the selected cat with the selection handles around it. In this figure, the mouse cursor is positioned over the rotation handle. We'll click the mouse's left button here and move the mouse to rotate the cat.

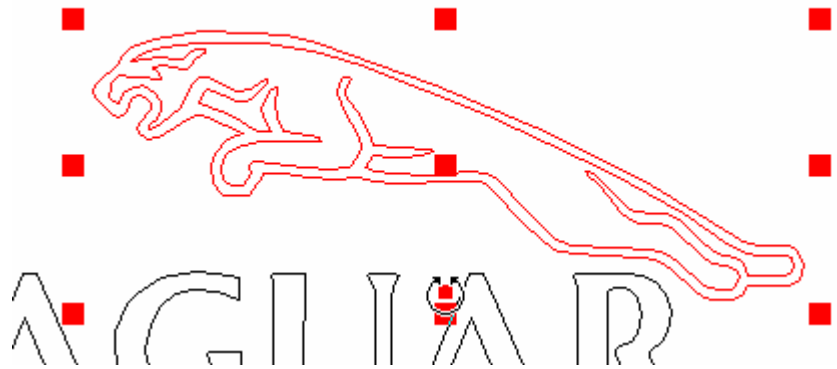


Figure 6-9 Rotating the Cat

Figure 6-10 shows the logo after the cat is rotated to our desired position.

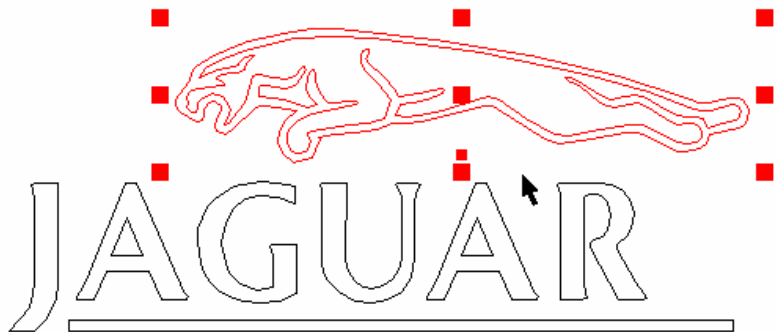


Figure 6-10 Cat Rotated

STEP 6: COMPLETE THE JOB

We'll now select the entire logo and we'll use a shortcut to do this. GravoStyle's shortcut for selecting everything in a job is Control-L - that is, holding down the keyboard's "Control" key while pressing the letter "L" key. We'll do this and grab a corner handle to enlarge the job to the left and right borders. Our completed job is shown in Figure 6-11.

We'll next use the "Colors" tool to select our cutter for this job. We'll use a 42037000 diamond drag tool, then enter the WYSIWYRE screen and choose a suitable material to view the job.

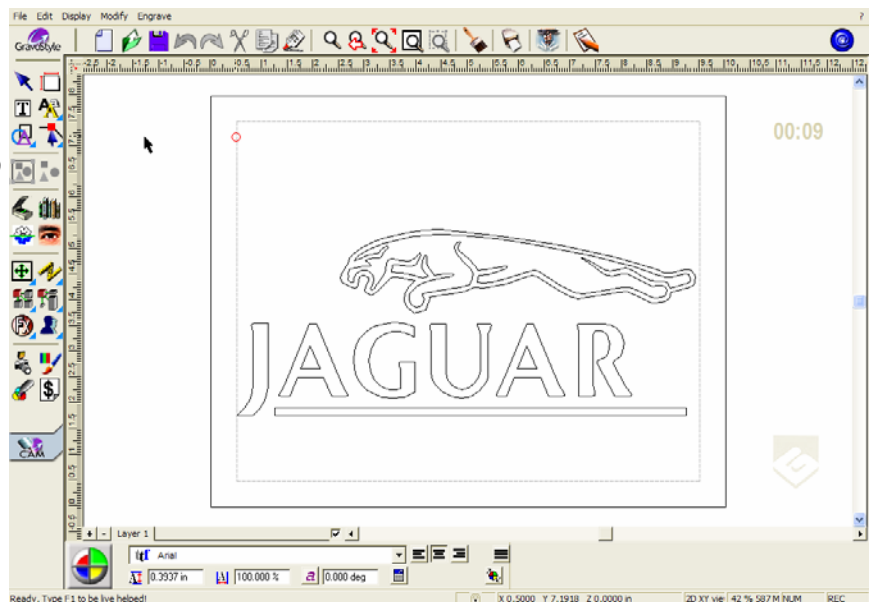


Figure 6-11 Completed Job



In the WYSIWYRE screen we'll click on the "Materials" menu, then "Brass/Gravometal" and then "Gravometal". We'll select "Gravometal gloss" #421 and see our finished plate as it will be engraved (Figure 6-1).

OF EXTRA INTEREST: FILLS

We're done with the design of this job, but let's look a little further. There is an option that can be provided with the Discovery level of GravoStyle that lets us engrave our jobs with closed shapes (graphics and text) filled in. This option is GravoStyle's 2D feature.

Let's take a look at how the Jaguar logo would look if we wanted to fill it. Figure 6-12 shows GravoStyle's "Display" menu with the mouse cursor's tip in an area of three choices of viewing contours.

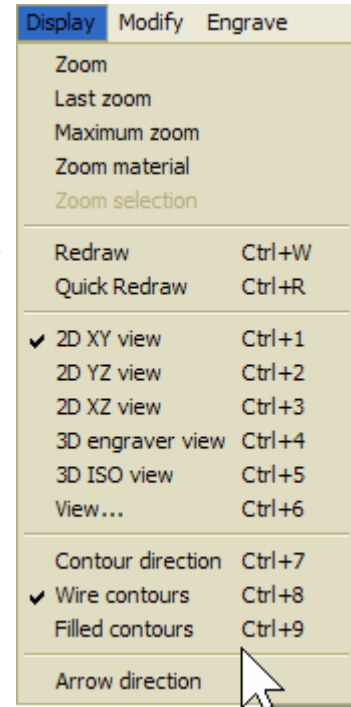


Figure 6-12 Display Menu

- ... The selected view is the middle one: "Wire contours" It's the default view and it shows a job in a plain wire-frame, or outline view.
- ... Above the "Wire contours" view is the "Contour direction" view. A job is also shown in outlines, but the color of each contour indicates whether the cutting tool will move clockwise or counterclockwise around the contour.
- ... The bottom view of the three, "Filled contours", shows us how the job will look if we engrave it in 2D mode.

We'll view our job in the "Filled contours" viewing mode, and our logo, still ungrouped, will look as shown in Figure 6-13.

Why is *everything* filled in? The problem is that in this raw state, graphic programs sometimes

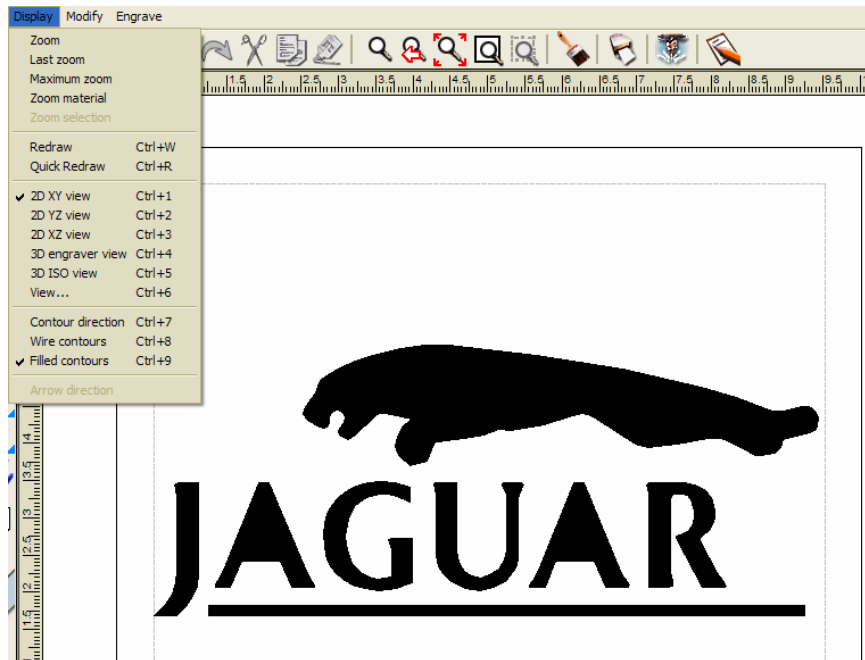


Figure 6-13 Filled Logo, Ungrouped

don't know which outlines to fill and which ones to keep empty. Fixing this in GravoStyle is simple:

- ... First, select the entire logo. (We'll use Control-L.)
- ... Next, click on the "Ungroup" tool to make *positively* sure that everything is ungrouped.
- ... Next, click on "Group"

The logo will be correctly filled as shown in Figure 6-15. When GravoStyle groups the contours, it automatically sequences them for a correct fill!

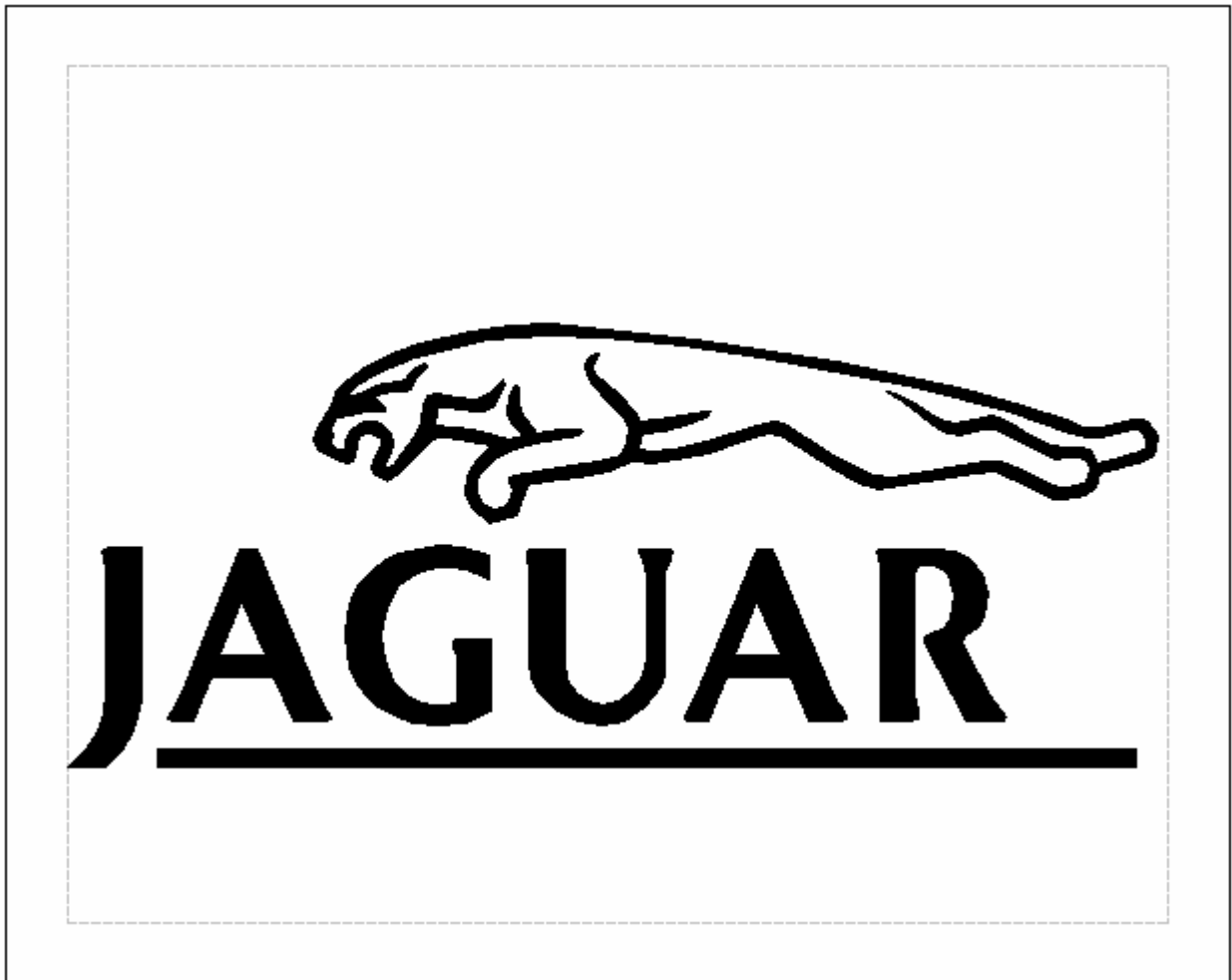


Figure 6-15 Logo Correctly Filled



WHAT WE'VE LEARNED

In this job, we've learned:

- ... The difference between vector and bitmapped graphics
- ... How to import a logo
- ... How to group and ungroup selections
- ... How to resize and rotate a selection by dragging the selection's handles
- ... How to select different viewing modes
- ... How to view a job as it will be 2D engraved, or filled
- ... How to correct a logo that doesn't fill properly