

¹CRAFT ROBO 103

Scanning and Tracing

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A. Why would I want to scan and trace?

- Learning to scan and trace enables you to:
 - o Re-create your die cuts in the ROBO Master Software
 - o Re-create your punches in the ROBO Master Software
 - o Re-create patterns and templates for fold-up projects
 - o Re-create ANY shape you find in your books and magazines
 - o Do Print and Cuts of any colored graphics you already own, buy, or download for free
 - o Cut photo silhouettes
- Note that the above suggestions are not meant to condone the scanning, tracing, and sharing of copyrighted files for the purpose of distributing to other individuals!
- Remember that once you have the tracing you can:
 - o Resize it as desired and cut multiple copies
 - o Save it for future use! It never has to be traced again!

B. Where do I start?

Open a new document.

- o If the image is already in a graphic format, then:
 1. Select Insert>File and then browse your hard drive to locate the file.
(Note that there are ~9 different formats which can be imported into

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the software. The most common file formats used are .jpg, .bmp, and .tif.)

2. Upon locating your graphics file, highlight it and then click on Open.
 3. A blue outline box will appear. Move this box to any place on the screen and then click once. The image should then appear in the box.
- If you need to scan the image, then:
 1. Make sure your scanner is connected as needed to your computer and place the item to be scanned on the bed.
 2. Select File>Acquire and then follow the scanner's automatic instructions.
 3. When the scanner is finished scanning your item, a blue outline box will appear. Move this box to any place on the screen and then click once. The image should then appear in the box.
 - In general, you will want to size the image to fill the entire screen to make tracing easier. To do this, hold down the Shift key and grab one of the corners with your mouse and drag to the desired size.

C. Selecting the Drawing Tools

The drawing tools along the left side are used for tracing the image. Refer back to Craft Robo 102 - Using the Drawing Tools for basic instructions on using. Note that you will want to look closely at the image to determine which parts will require which tools. You often need to use a combination.

Guidelines for selecting the best tools are:

- Polyline: Use when tracing connected straight lines, for example, a star, a picket fence, or fold-up box template.
- Spline: Use when tracing connect curved lines, for example, an animal, a rose, or fluffy clouds.
- Rectangle: Use when tracing a closed rectangular shape. Of course, using the Polyline can accomplish the same thing, but if the item is an actual square or rectangle, then sometimes it's quicker to use this tool.

- Circle: Watch for circular shapes and switch from the Spline tool to the Circle tool. This will result in a more accurate trace. Some examples are wheels, eyes, holes in tags
- Arc: Use when tracing circles or ovals that are short of being complete. While your initial arc will be rounded, the shape can then be modified to fit any part of an elliptical type line. Two examples are flower petals and an umbrella.
- Ellipse: Use when tracing complete ovals. One example is the top opening of a wine glass or coffee mug. Another is an olive.
- Closed Spline: A better alternative to the Spline when the entire shape needs to be traced in curved lines.” Don’t worry about the initial shape. Simply start by clicking the main extended parts of the outside.... Maybe 3 points, maybe 10. Then go back and add vector points and move to fit along the image. This is a great tool for minimizing the number of excess vector points used in a tracing!

D. Tracing the Image

- Zoom in as close as possible to the image so that you can move any vector points to closely align with the outside edge of the image.
- Again, change tools as needed to use the best tool for each part of the image. Look for those parts on the original image that might be better traced with a circle, an ellipse, or an arc.
- In general, it’s easier to see what you’re doing if you select your line color to be different from that of the image. Thus, if the image is black, consider using a bright blue, red, or yellow for the tracing line.
- Use different colors and line types as needed for fold lines and dashed lines (like those you see on Sizzix dies). Refer to notes in Craft Robo 102 for information on changing the line color.
- When using the Spline tool, click, click and click around the edge of the image. Don’t worry about being too precise in your first trace. Remember that vector points can be moved, added, and deleted afterwards.

- o Because you are zoomed in all the way you won't be able to see the entire image at once. That's fine. While in the middle of tracing, you can always move the scroll bars at the right and at the bottom without interfering with the trace. Try it!
- o While clicking around the edge, if you do make an error and want to delete the last click, just press the Esc key and the last point you added will be deleted. Continue to press the Esc key and each vector point will be deleted (i.e. you can back up to the last vector point which you want to keep).

E. Editing the image

- o To see the vector points, use Select to highlight a part of the tracing and then click on Edit Point to show the individual vector points.
- o Remember that too few vector points may fail to duplicate the image and result in a choppy outline. Too many vector points slow down the cutting. Try deleting any vector point that seems unnecessary and check out the change in alignment. If needed, add it back in.
- o Once the tracing seems to closely fit the image, either delete the original image or move it away from the main screen. Then go back and check how closely separate sections adjoin. Move vector points so that the ends meet. Again, this should be done while fully zoomed in so that you can be as accurate as possible.
- o When selecting individual parts of a tracing to edit, sometimes it's difficult to highlight the correct one. One tip is to highlight one part and then use the TAB key to cycle through the other parts until the correct one is selected.
- o When satisfied with your tracing, highlight the ENTIRE image and click on the Group icon at the top. This will help keep the parts together and avoid accidentally moving one part out of place.

F. What if I don't like to trace?

Some people find tracing fun. Some even find it relaxing. So, give it some time before deciding you really don't want to do it. In this case, there are several programs which will auto-trace for you: Adobe Illustrator, WinPC Sign, and Inkscape. The first two programs cost over \$100. Inkscape is free and instructions are provided in Wishblade 301.