DIFFERENCE BETWEEN STITCH FILE AND OUTLINE FILE

Similar to graphic files, which can come in myriad formats, including JPG, GIF and TIF, embroidery files are available in a variety of formats, including DST, EXP, CND, PES and HUS. Further, just as all graphic files are either vector or raster (also known as "bitmap"), embroidery designs are either stitch or outline files.

Stitch files. These encompass several different file types, such as DST and EXP, though most editing and digitizing software can easily convert from one type to another, depending on what your machine requires. All stitch files, regardless of type, contain the same three pieces of information: horizontal coordinates, vertical coordinates and machine function, including color changes, trims and jump stitches. The machine uses these bits of information to move the frame and plot each stitch.

Stitch files are more limiting than outline files, and they work best when you leave them as they are. However, with the stitch processing functions available in editing programs, embroiderers have more control over stitch files today than they did years ago. For instance, now embroiderers can make stitches within a stitch file thinner or thicker if need be. Such tools aren't perfect, but they're a big help when it comes to editing small design parts.

Outline files. The best file type for editing is an outline file. Outline files don't contain the stitches per se, but rather the recipe to make the stitches. You can edit the recipe to suit your needs, meaning you have more control to edit designs. Designs in outline files are made up of separate shapes, and each shape has its own outline, which is then filled with stitches. Shapes also contain information on stitch density, underlay and other variables, which are easy to adjust in outline files. The outline file is like electronic rubber band. We can give the effect, alter the size, and add more details etc. without distorting the image.

Outline files generally are software specific, meaning they don't work well in software other than their own. For instance, Wings produces MLS (NGS) files; Wilcom produces EMB files; Pulse produces POF files; and Compucon produces REF files.

The reason these files don't work in different programs is twofold. First, software manufacturers want you to buy their software if you want to use their type of outline files. Second, software systems handle variables such as stitch density and underlay differently and have different features, so features found in one system may not work on another.

Resizing is arguably the biggest challenge embroiderers face with stitch designs. Because most of the stitch files, you're dealing with relatively fixed sizes. For instance, when you shrink a stitch design, the software doesn't reduce the number of stitches; it just squeezes those stitches into a smaller space. When you enlarge a design, the program doesn't add more stitches; it places stitches farther apart. Therefore, if you resize a design more than 10% to 15% smaller or larger than its original size, the result won't look good.

Stitch processing. There are two ways to get around this problem. First, most editing and digitizing software systems have a feature that helps alleviate resizing issues through a function called stitch processing. When a program stitch processes a design, it adds or deletes stitches when they get either too far apart or too close together.

Don't assume that this feature will allow you to enlarge a left-chest logo for use on a full jacket back or vice versa. Stitch processing works best when you limit the resizing between 10% and 40% of the design's original size at the most.

Finishing Touches

Other issues that occur when editing stock designs include stray stitches and color changes, which usually happen when you're deleting a section. For instance, you may have an extra color change left over from the deleted section, or you may notice color changes that seem to appear out of nowhere. You can correct these problems with simple stitch editing tools available in any editing system. Just select the stray color change and delete it or move it to where it belongs.

If your design ends up with stray stitches or missed trims, go through each section stitch by stitch and find exactly where the problem occurs. Many times it's simply one stitch that gets out of place and needs to be moved. Specific instructions on doing such maneuvers vary among editing systems, so contact your software vendor if you're unsure how to move or edit stitches.

The best way to achieve good results when editing designs is to learn more about your editing or digitizing system. First, make sure you know what types of files it can open, and understand its features and functions. Second, don't expect to get perfect results when you significantly enlarge or shrink a design.