

We are going to create an open Italian lace.

Generations™ software products provide advanced image processing features allowing for the creation of stand-alone lace with just a few simple techniques.

### A Few Basics First

Creating lace can be done by scanning in a pattern from a book or one that you have traced.

If the pattern is clean enough then it can just be scanned in directly to the program.

If the pattern is not clear enough or the pattern is being created from a lace sample, you will want to trace the pattern. Tracing lightly in pencil first will allow you to correct any errors.

Once you have gotten the image traced in pencil, use a scrapbook marker with a width of 05. Scrapbook markers smudge less than regular markers.

Copying the pattern on to tracing paper is generally easier than white paper.

Both the tracing paper and the scrapbook marker can be purchased at a local craft or office supply store.

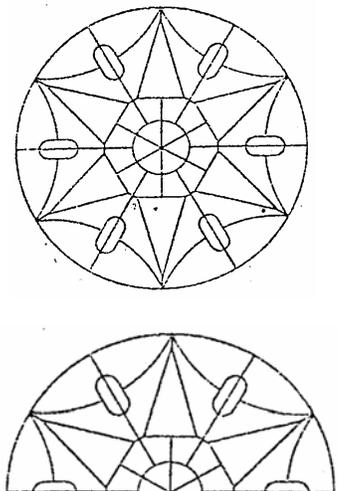
Look for Bienfang Tracing Paper and Zig Memory System markers.

If your image is clear, but has gaps in the lines, then you can scan and print the image and marker over the printed image. This option is preferable to tracing the entire design

### Think the Design Through Before You Scan

The pattern shown here for Reticella lace is geometric and can be created by tracing or scanning in only one half of the design. Some lace patterns are made up of repeating patterns in eights or quarters allowing for even less tracing or scanning time.

With **Generations™** software's aligning and merge capability, you can create the lace using only a portion of the actually pattern. This can cut the design time down as image creation or image prep time can be scaled down and the overall design will have a more even symmetry.



### Scanning Tips

In this lesson the lace is going to be one color so scanning at the proper resolution and color settings will help to speed up the design process.

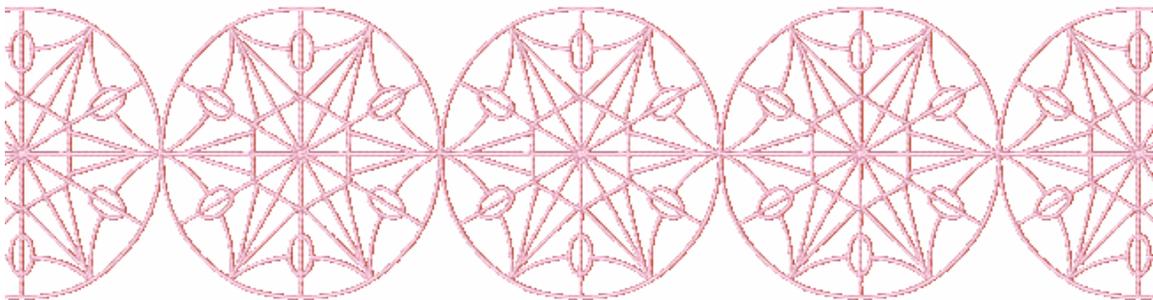
**Note:** *Since there are many different scanners on the market the following scanning section should be used as a guide and adapted for use with your brand of scanner.*

- Pre-scan or preview your image before inserting into the Generations™ program. Previewing allows you to see what the program will see before actually scanning the image.
- After previewing the image in your scanner software you have the option to select only the part of the image that you would like to have inserted into the program. In some cases, the scanner software will automatically place a box around an area. Size this box as needed to get only the portion of the image that you need.
- Set your scanner resolution or DPI (dots per inch) settings at the lowest possible setting, then pre-scan or preview the image to see if all the detail needed is showing in the preview. If you need more detail in the image, then increase your resolution or DPI in small increments and preview again. If you reach a resolution of 300 and still do not have the detail needed for the design, then you should reevaluate the image and see what may be needed to improve scanning such as tracing or marking the image.

*Note: Any scanned image from 600 DPI and up will be a large file size and possibly too large for your computer to handle effectively when automatically digitizing the design.*

- When scanning a black and white image, set your scanner output options to black and white or two-color.

**Now let's get ready to make some lace!**



### Getting Started:

Open the Generations™ full digitizing system or Quick Punch+ system by clicking on the icon located on your desktop.

The settings used in this lesson are in millimeters (mm). So that you may follow along more easily, please open your View Preferences and check that your Measure Unit is set to mm and not inches.

### Scanning Directly Into Generations™

Generations™ software systems have been designed to provide all the tools needed to handle difficult images in the program.

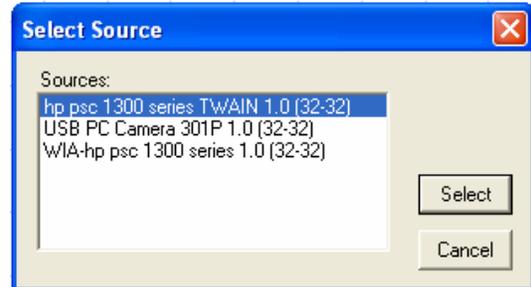
**Simply put** – there is no need to purchase a graphics program to edit your images which means that you can spend your time concentrating on learning to create designs rather than perfect images to create designs!

To insert a scanned image into Generations™ we need to make sure that you have your scanner selected as the Twain Source.

1. Click on the File option from your menu and choose the Select TWAIN Source option.

2. A small window will open displaying all the TWAIN sources located on your computer.

TWAIN drivers can be scanners, printer/scanner combinations and digital cameras.

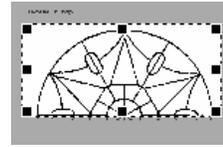


3. Click on the source you are going to use to scan the lace image and click on the Select Button. Your scanner has been selected as the TWAIN source that the Generations™ program will use for inserting the lace image.

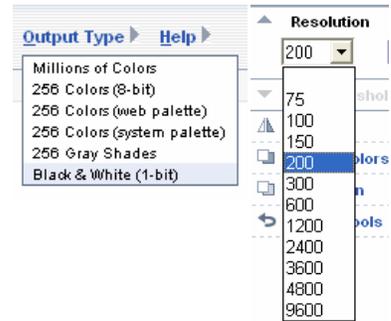
4. Place the lace half image from this lesson onto the scanner bed taking care to line up the edges of the paper correctly.

5. From the Create Toolbar, click on the Insert From TWAIN icon  and your scanner software will be automatically activated.

6. Pre-scan or preview your image and crop to the size needed for scanning.



7. Remember to select black and white as the output option and test the resolution or DPI settings by previewing the image.



8. When you are satisfied with the results, click the Scan button and the image will be scanned and automatically inserted into the Generations™ image processor.

### Intelligent Image Processing

When this image is inserted into the Generations™ program, the image will be seen as a Simple Artwork image even though it was scanned.

Since we were able to scan the image in black and white and not grayscale or full color, the image is one of the most simple graphic types that you can create – Generations™ sees that and marks the image accordingly.



Of course you can change that if you like to another image type such as a template for manual punching.

In our case we will leave it as a Simple Artwork image

The other settings in the Image Processing dialog box can also remain at the default settings.

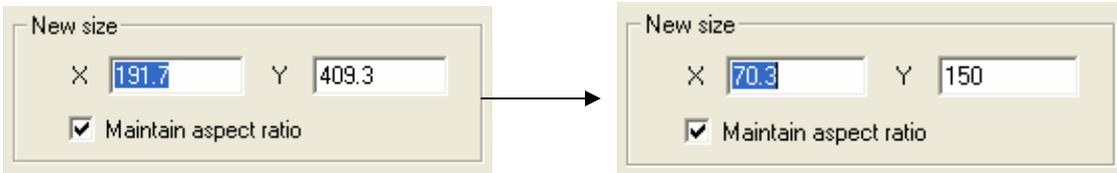
Click OK and we will let Generations™ exclusive stitch processor start to work!

Generations™ stitch processing is designed to cut your digitizing time down and do the work that doesn't require your skill or imagination – That way you are free to concentrate on making the design a work of art!

Generations™ will not automatically alter your image size because of program limitations – after all you may want the image that size – Instead Generations™ allows you to change the size before inserting or after inserting the image into the program.

When the image is inserted in to Generations™ a resize box will open. Since this is a scanned image, you may need to change the size depending on what resolution or DPI you scanned the image in at.

This example was scanned in at 300 DPI and was much larger than needed to create our design. If your image is larger than needed, try resizing as shown below:



Click OK to insert the image into the Generations™ program.

What Generations™ has already done is looked at the outline of all the areas in the design, cleaned up the edges of the image so that they are smooth and assigned stitch information based on the color of the areas and their size.

And that was all done with just a click of the mouse!

### Now to Make Lace

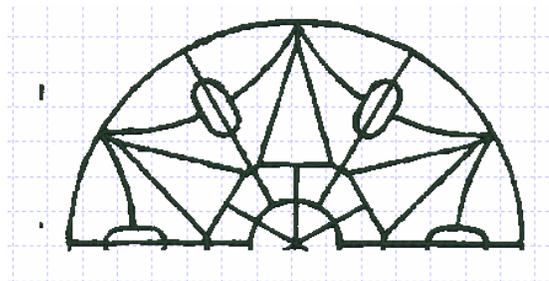
1. When the Image in inserted into the Generations™ work area, click the Generate Icon or press F9 on your keyboard.

*Stitches will be applied to the black outline areas – remember we have an Intelligent Image Processor © so the white areas in the background color will not generate unless we tell the program to do so. – Good thing, we really don't need all those stitches.*

2. Look over the lace pattern that has been generated. Are there areas that need smoothed, areas that need straightened. Use the Generations™ editing tools on Outline View  to adjust as needed.

**Tip:** Look in the help files or manual for adjust with an arc or line

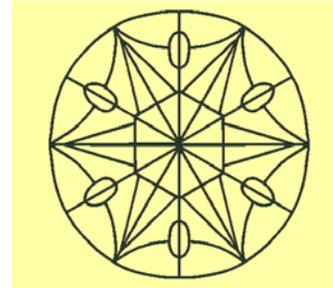
This is only one half of the lace.  
To create the other half, we can use Windows® commands and duplicate the pattern.



3. Left click on the lace half and the design will be surrounded by a black boundary box.

4. Click on the Copy icon  to place a copy of the half lace pattern on to the Windows® clipboard.

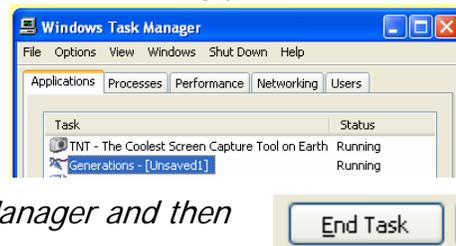
5. Click on the Paste icon  to paste a copy of the half lace pattern directly on top of the other design. **Save your design file in a location you will remember!**



*There are two ways to create the lace. You can merge the lace halves or you can cut with a line.*

***Depending on the resources on your personal computer, which include RAM and Video RAM as well as how many programs may be running in the background will determine which way you can complete the lace.***

*If any of you have been in my classes you have heard my story about the one design that took over a half an hour to finish generating – Well...with the lace, should you try to merge the halves together, don't worry if the computer or the program seems to be at a stand still. Set a time limit on how long you want to wait on the merging process – 10 minutes, 20 minutes....And take a break from the computer. If the design has not generated in the time you have set, press CTRL+ALT+DEL at the same time on your keyboard and select the Generations program from the Windows® Task Manager and then click on the End Task button at the bottom.*



*Follow the prompts to close the Generations program.*

*Reopen Generations and open the saved design file and use the instructions on using the two lace halves instead.*

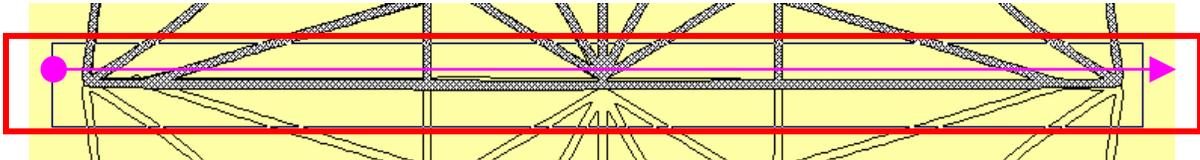
### Preparing the Lace Halves

1. Select one half of the lace pattern for editing. This should be the piece of the lace that is in the first stitching position.

2. Click on the **View Outline** icon  or select **View** and then **View Outline** from the menu.

3. Use your Zoom-In tool  and zoom in on the bottom section of the lace half so that we can remove a section.

**NOTE:** To zoom in all at one time, Press and Hold the left mouse button and drag a large square around the area.



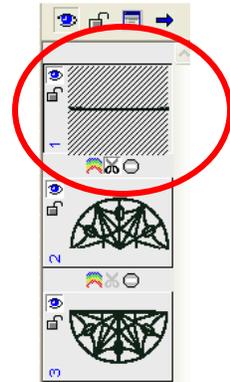
4. From the top menu, select Outline and then Divide with a Line.

5. Place the first left mouse as shown above. Then move the mouse over to the other side of the lace and place a second left click. A magenta line will display.

**Note:** If you make a mistake on the placement of the line, just press the Backspace key on your keyboard and place a new point.

6. Press enter to cut the section away from the lace.

7. Generate and you will see a new section in the Stitch Sequence Viewer. Left click on that cell to select the line and press the **CTRL+DEL** keys on your keyboard to delete the line for good.



8. Left click on the lace section that was just edited and use the arrow keys on your keyboard to nudge the lace half into place against the other half of the lace.

9. Save your Design file!

### Now We are Ready to Merge

1. Select both halves of the lace and click on your **View Outline** icon  to go into outline editing mode.

2. From the menu at the top of the screen, click on **Outline and select Merge**.

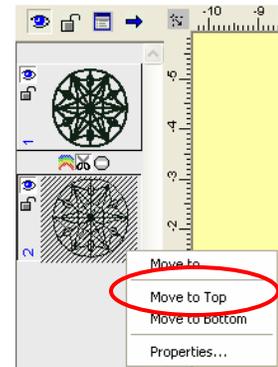
3. When the design is done merging, **Generate**.  
This may take a little bit of time to generate the two merged sections.

4. Once the design is merged together, save your design file again.
5. Select the merged lace (there should only be one section of lace now) and click on the View Outline icon to go to editing mode.
6. From the **Outline** menu, select the **Create Line from Area** option. This will create a double running line of the lace pattern.

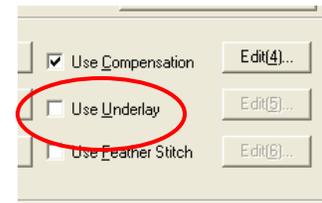
7. Select the newly create line from the stitch sequence strip and change the stitch type from a Double Running stitch to a Triple running Stitch using the Quick Toolbar located at the bottom of your screen – or you can use the stitch settings menu.



8. Then Right click on the Triple Running line cell on the Stitch Sequence Viewer and select the Move to the Top option from the menu. This will place the line lace pattern at the top of the sewing order.

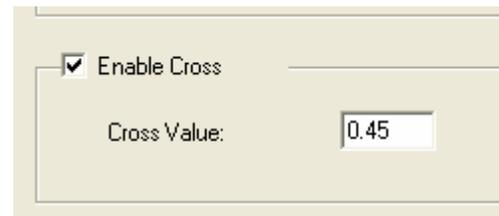


9. Click on the cell containing the merged satin lace and then press the space bar on your keyboard to open the Area Object Stitch Properties (stitch settings) and remove the check mark next to the Use Underlay option.



Since we have created a Triple Running line base, we do not need any underlay for the lace satin stitching.

10. Then click on the Pull Compensation tab at the top of the menu. We need to change the Cross Compensation setting – this is a satin compensation setting and will make sure that the satin stitching that meets in the lace design will lock together a little better.



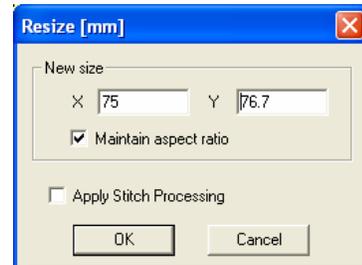
11. Change the Default Cross Compensation value from 0.30 to 0.45.
12. Click OK and your changes will automatically be generated in the design.

**Look at the lower right corner of the Generations window, what size is your lace?**

We need to size this to a smaller size for better stitching.

1. Click on the **Edit** menu option and choose Select and then Select All from the menu.

2. Click on the **Resize** icon  – or choose Resize from the Edit menu and change the lace size to X=75 and the Y value will automatically default to the correct size.



3. Click **OK**.

4. **Right click** off to the side of the design on a blank spot on the screen and then **Generate** the changes to the design.

5. Save your new lace design and then export in the format needed for your machine.

**For those that Cannot Merge**

1. Follow the Prepare the Lace Halves section.
2. Skip to step #5 – but select both sections of the lace.
3. Follow the directions on creating the Triple outline base.

**Try Merging the Triple Running Line Base**

1. Save your design file.
2. Select the two sections if the Running Line base.
3. Click on the View Outline  icon. Select Outline from the menu and then merge.
5. Generate.
6. Follow steps 7-12 of the Prepare the Lace Halves section.

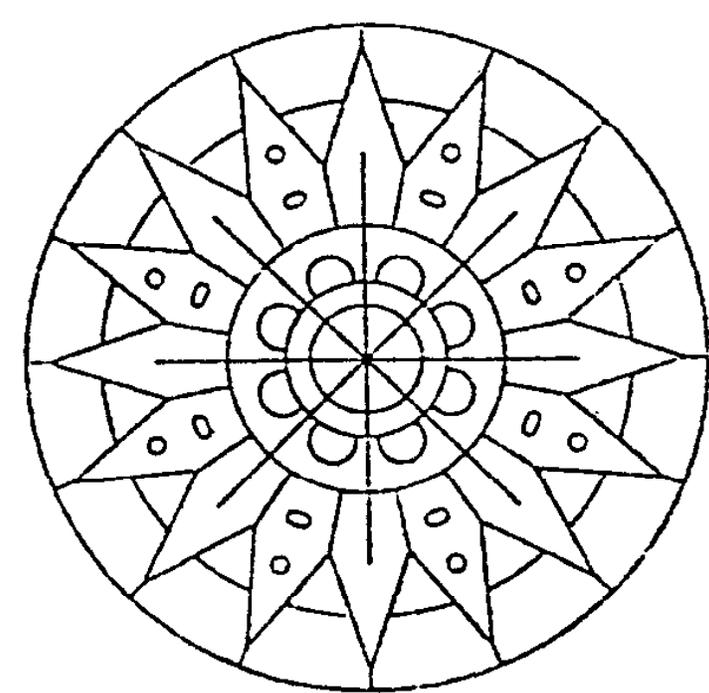
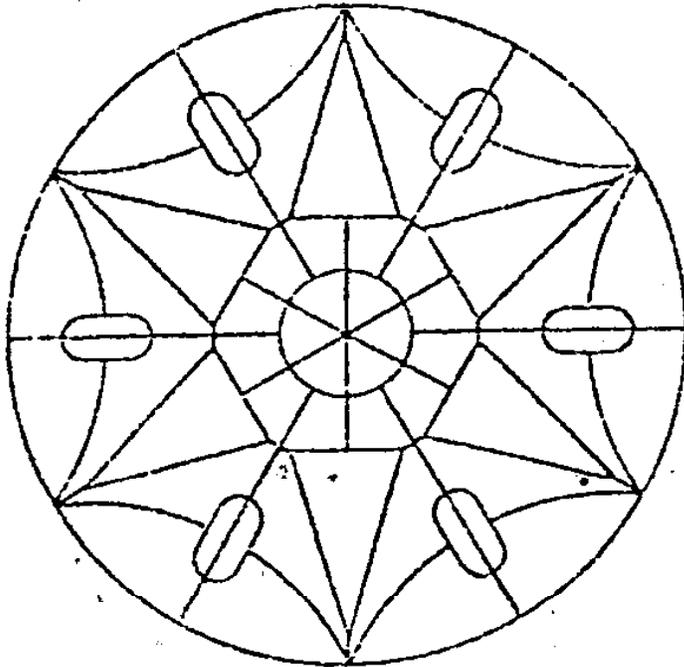
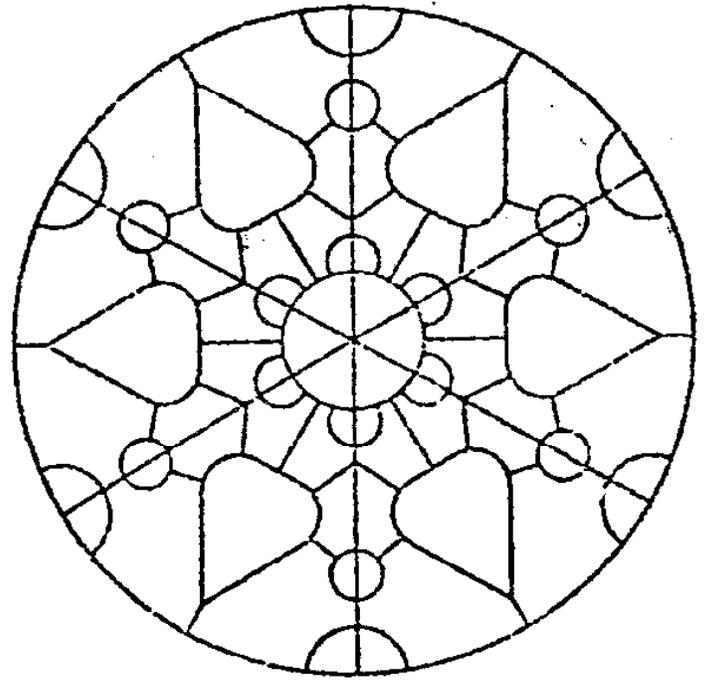
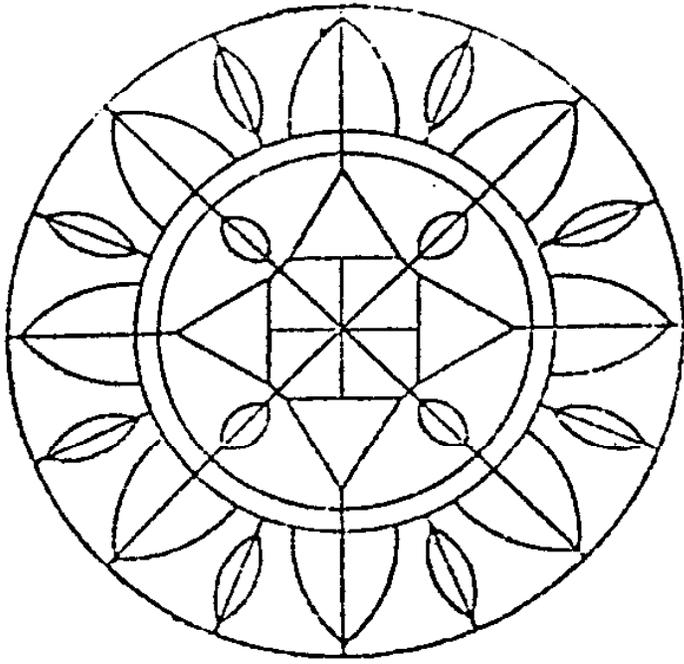


Figure 1

lacehalf.f.bmp

