



GENERATIONS™

Automatic Digitizing Software *V2.0*

V2.0 Manual



Windows®



Generations™ Automatic Digitizing Software

User's Guide

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Chapter 1

Installation and Introduction

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Overview

Welcome to the exciting new world of **Generations™** automatic digitizing home embroidery software! In just a short time, you'll be producing original works of embroidery art.

Generations™ is a Microsoft Windows® platform software program that combines advanced image processing using an object based system, advanced automatic stitch generation, powerful editing and fill tools, true 3D preview and much more, into one easy-to-use product.



Simply insert an image, select the generate icon, and create stitches.

- Your design is created automatically using the advanced image recognition and stitch generation system in Generations™.
- Since the results of **automatic digitizing** are based on the original image, starting with a good quality, reasonably sized image will give you a better quality design requiring less editing than a design created from a poor quality or small image.
- **Generations™** gives you the ability to make changes to a poor quality image using the built-in **Cartoon Edit** program. Some users also choose to enhance the image using a commercial image editing product before inserting into **Generations™**.
- **Generations™** automatic digitizing software will duplicate the image when you generate the stitches. Once you have generated the stitches, you may add to, or delete from your design file.
- You may also change the colors, change stitch properties and styles, use the editing tools to refine the design, or add lettering to the design using the tools built into the **Generations™** program.
- Within minutes you can have a design ready to stitch on your embroidery machine.
- The working format for a **Generations™** design is the .gen file extension. The **.gen** file contains outlines that the program created from the original image and filled with stitches. It is important to always save your files on the hard drive in .gen format and to use them when you want to make changes to an existing file.
- **Generations™** can import embroidery designs stored in other machine and software formats. Your editing abilities will be different when working with this type of design, as **Generations™** must recreate outlines from the stitch information. Refer to Chapter 2 for a complete list of these formats.

System Requirements

The minimum system requirements for your computer to run **Generations™** are:

- 200MB hard disk space to install **Generations™**
- Athlon (AMD) or Pentium processor or higher
- 4GB of RAM minimum (recommended 6GB)
- A monitor and video card capable of displaying 1024x768 resolution
- A Windows®-compatible mouse
- Microsoft Windows 7® or higher
- Open USB port for security dongle

To improve overall **Generations™** performance, you may want to consider upgrading your system hardware, e.g., 6GB or more for RAM, better graphics card, etc.

The **Generations™ Automatic Embroidery** system is not designed for use on Windows

3.x®, Windows 95®, Windows 98®, Windows XP® or Windows VISTA® operating systems.

Note: Generations™ may operate on a Windows XP® systems with SP3 and effective April 2017 Windows VISTA® systems. Due to discontinued support from Microsoft® support options may be limited.

Security

To prevent software piracy, **Generations™** software is enabled and protected from unauthorized duplication by a security device commonly called a "dongle". The security device is available for USB ports. The dongle plugs into the USB port on your computer.

Please be careful with the dongle. It proves that you have a legitimate copy of the software, and authorizes its use. If lost or stolen, it cannot be replaced. A new copy of Generations™ software must be purchased. **Generations™** will NOT run without the dongle in place. To protect your **Generations™** dongle, you can purchase dongle insurance for a replacement dongle. Please contact your **Generations™** reseller to learn more about the Dongle Protection Policies available.

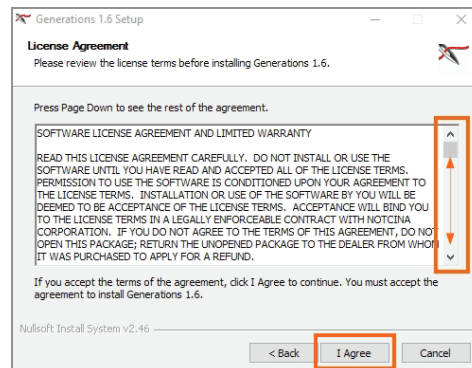
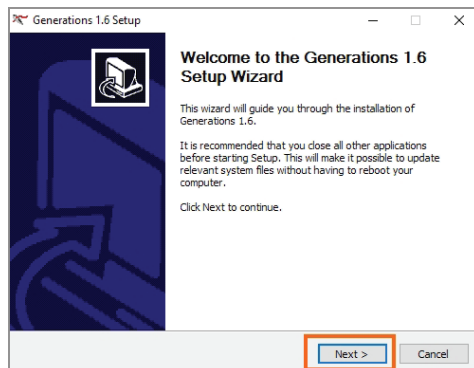
To avoid damage to the USB dongle, it **SHOULD NOT BE INSERTED IN A USB PORT** until **AFTER** the software is installed and the computer turned on. The USB dongle should not be inserted in a high-speed 3.0 port or USB hub that does not have an independent power supply. Please follow the installation directions below.

Installation

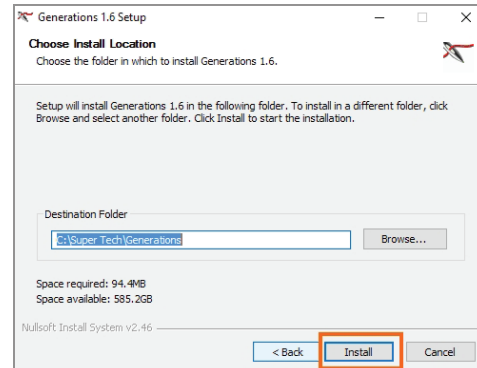
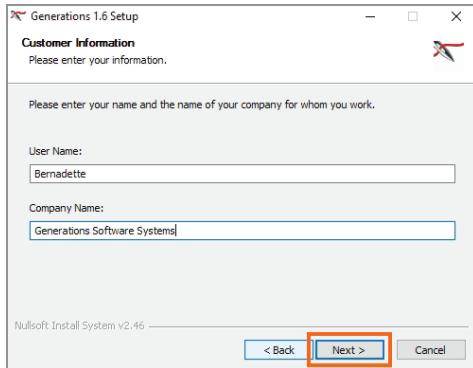
With your purchase of **Generations™** software, you will receive the Program Disk, a user manual, and a security device or dongle in one package. **Generations™** software is installed in the same manner as other Windows® based applications.

Installing the Software

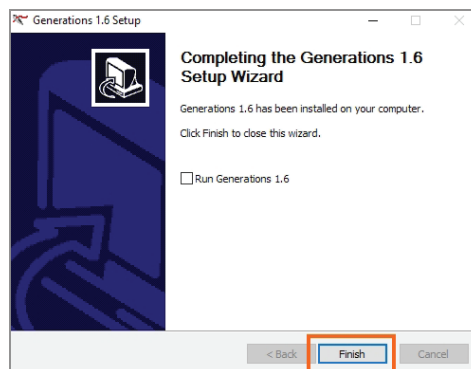
1. Close any other applications you have running.
2. Insert the CD in the CD-ROM drive.
3. The install program will **Auto Run** unless you have Auto Run disabled on your computer. If **Auto Run** is disabled, please locate your CD or DVD drive to run the install.
4. Follow the install program prompts for installing the program to your hard drive.



4. If desired, enter your user and company name in the dialog box, then click **Next** to continue.
5. If desired, click **Browse** to choose the destination folder if you want to make a change to the default installation folder for **Generations™** software. (The default folder is C:\Program Files\Super Tech) If you want to undo the last step please click Back.



6. Click **Next** to continue installation of **Generations™** onto your computer's hard drive.
7. Click **Finish** to complete program installation.



The install program will automatically create start menu references and a desktop icon.

8. Locate an open **USB** port on your computer. Insert the Generations™ security dongle carefully into the port.

***IMPORTANT:** When selecting a USB port on the computer, locate a gray, black or yellow USB port. Do not plug the USB dongle into a blue high speed port. Do not plug the dongle into an external USB expansion hub that does not have a dedicated power supply.*



9. A device installation notice will appear on your Windows® system bar indicating that the device is being installed. A dialog box will appear when the installation is complete.

Start Generations

After installation, you're ready to use **Generations™**. Use one of the following methods to start the **Generations™** program.

Starting the Program

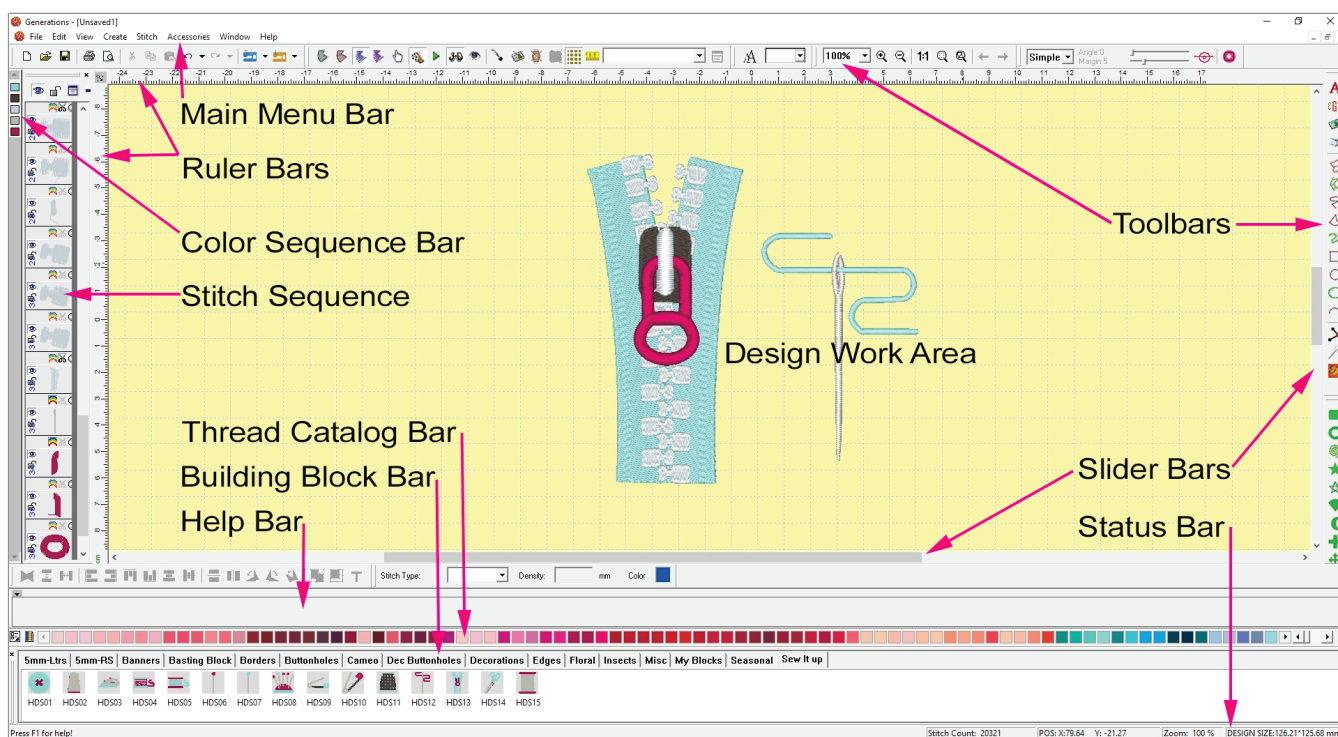
1. During the installation process, the **Generations™** program menu references are automatically installed in the Start Menu.
Click the **Start Menu** icon, and locate the **Generations™** sub-menu.
2. Place the cursor on it and then click **Generations™** .
Or

1. Double click on the **Generations™** icon  located on your desktop.

Screen Overview

When you open **Generations™**, a new design window displays. At the top of the window, you'll see the **Generations™** title bar and name of the current design. Names of other screen components follow Windows® conventions.

If you are unfamiliar with the various parts of a program window, refer to the illustration below.



PLEASE NOTE: If you have the Home V2.0 version of Generations some toolbars may not display or be available to display on your work area screen.

Close Generations

When finished working in **Generations™**, you should exit the program properly.

Closing the Program

1. Click the **close icon "X"** in the upper right corner of the Generations™ program window.

Or

Select **File**, then **Exit**.

Note: If you have any open design windows in which changes were made and not saved, you will be prompted to save the designs before the program closes. Refer to Chapter 2 for more information.

Technical Support

There are various means to obtain help in learning the program commands and capabilities of **Generations™** software.

- In the program, select the **Help** menu to access the **HELP** files or press **[F1]** on your keyboard.
- In the program, select the **Help** menu to access the on-board, interactive software manual.
- In the program, select the **Help** menu to access **video tutorials**.
- Activate the **Help Toolbar**, which will display at the bottom of your screen, giving tips and information appropriate to the command being used.
- Review the **Technique Videos** from the **Generations™** website: www.generationsemb.com/genstechniques.html.
- Review **Support FAQs** or contact technical support on the **Generations™** web site: www.generationsemb.com/supportfaq.html.
- Visit our **YouTube** page at: www.youtube.com/user/GensEmb.
- Like our **Facebook** page at: www.facebook.com/generationsembroiderysystems.
- Sign up for our **Newsletter** at: www.generationsemb.com/gensnewsletters.
- Additional lessons and projects can be located on the Generations™ website under **Creative Corner**. <https://www.generationsemb.com/creative-corner.html>.

Chapter 2

Design and File Management

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Overview

The file and window management tools in **Generations™** software are similar to those found in most other Windows® applications. There are also additional tools particular to embroidery.

New

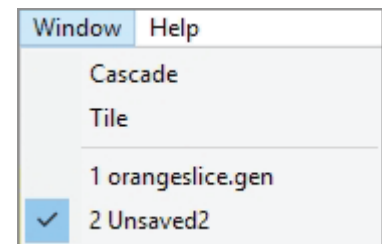
When you open **Generations™**, a new design window is always displayed. **Generations™** software can have multiple design windows open at one time, the maximum number is only limited by your computer resources. The **New** command in the **File** menu gives you another blank design window.

Opening a New Window

1. Select the **New Design** icon  from the **Standard Toolbar** that runs across the top of the screen.
Or
Select **File** then **New** from the menu.
Or
On the keyboard, press **[CTRL] + [N]**.
The previous open window is replaced with a new blank design window.

You can move between all open windows by clicking on **Window** from the main menu bar, then on the **design title** in the drop down menu.


You can also use the standard Windows® buttons to **Minimize**, **Maximize** or **Close** an individual design window.



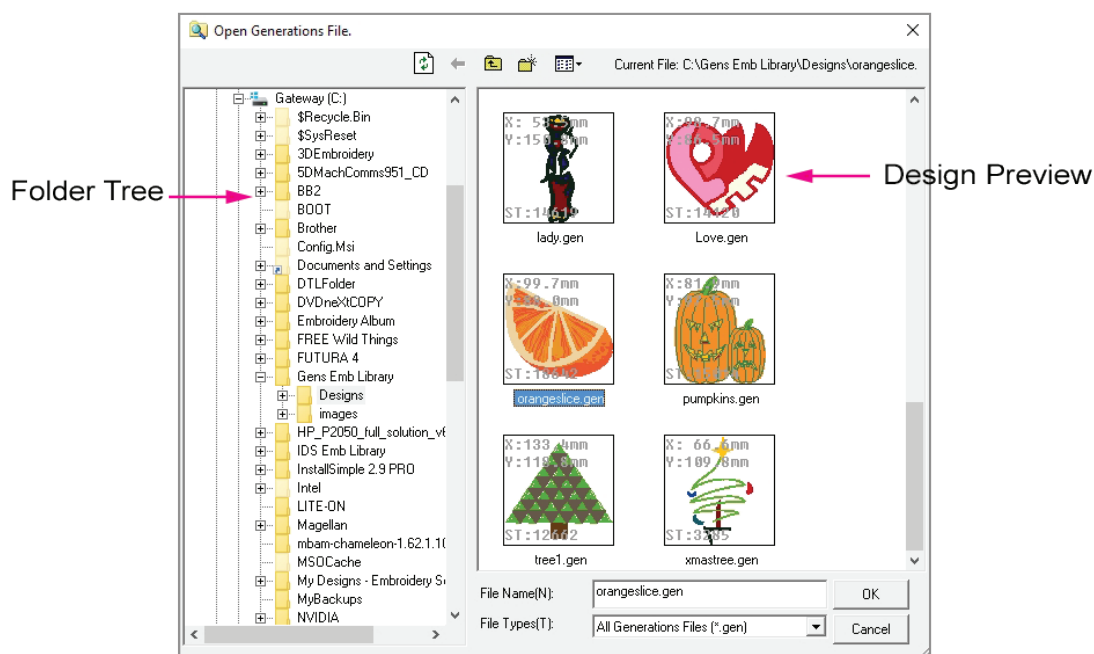
Open

Generations™ software allows you to open previously saved designs and make additional modifications. The Open command is used only for designs created and saved in **Generations™** .gen file format. If your design is stored only in a machine format, you will need to use the **Import** command.

Opening a Saved Generations Design

1. Select the **Open** icon  from the **Standard Toolbar** that runs across the top of the screen.
Or
Select **File** then **Open** from the menu.
Or
On the keyboard, press **[CTRL] + [O]**.
The **Open Generations File** dialog box displays.





2. The dialog box is split into left and right sides.



You will see the standard Windows® folder tree on the left side. Use this side to find the appropriate drive and folder where the **Generations™** file is stored.


The right side of the dialog box shows you a preview of the saved **Generations™** files stored in the selected folder. The design dimensions and stitch count are shown below each preview. To see the **design name**, place the mouse pointer over the design preview. You'll see the file name appear along with the dimensions and stitch count information.

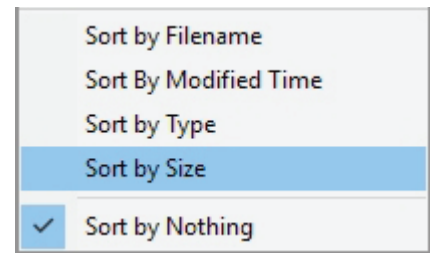
Additional icons at the top of the dialog box let you easily move through and control folders on the computer.

- Click on the **Refresh** icon  to refresh the view of files and folders on the computer, if you seem to be missing files or the thumbnails appear garbled.
- Click on the **Return** icon  to return to the last folder you had viewed.
- Click on the **Up One Level** icon  to move up one level in the folder tree.
- Click on the **New Folder** icon  if you would like to create and name a new folder.

Enter the desired folder name and click **OK** to create a new folder or **Cancel** to cancel the folder creation.



- Click on the **Sort Menu** icon  to control how the files are sorted in the preview window. From the pop-out menu, choose the desired sort method and the window will instantly refresh.



- When you have located the file you need, **double click** the left mouse button on the design preview to open it. If you know the desired file name, you can simply type it into the **File Name** text box.

The selected design will open in the **Generations™** screen.

Open to Current





Generations™ software allows you to open another previously saved design directly into the design currently in progress. The **Open to Current** command makes it easy for you to combine two or more designs without having to open them into separate design windows. Open to Current only works for designs saved in the **.gen** file format. If your design is stored in a machine format, you will need to use the **Import** command.

Opening a Design to the Current Design


- Select **File** then **Open to Current** from the menu.
The **Open Generations File** dialog box displays.
- On the **left side**, find the appropriate drive and folder where the **Generations™** file is stored.

The **right side** of the dialog box shows you a preview of the saved **Generations™** files stored in the selected folder. The design dimensions and stitch count are shown below each preview. To see the design name, place the mouse pointer over the design preview. You'll see the file name appear along with the dimensions and stitch count information.

Additional icons at the top of the dialog box let you easily move through and control folders on the computer.

- Click on the **Refresh** icon  to refresh the view of files and folders on the computer, if you seem to be missing files or the thumbnails appear garbled.
- Click on the **Return** icon  to return to the last folder you had viewed.
- Click on the **Up One Level** icon  to move up one level in the folder tree.
- Click on the **New Folder** icon  if you would like to create and name a new folder.

Enter the desired folder name and click **OK** to create the new folder or **Cancel** to cancel the folder creation.

- Click on the **Sort Menu** icon  to control how the files are sorted in the preview window. In the pop-out menu, choose the desired sort method and the window will instantly refresh.
- When you have located the file you need, **double click** the left mouse button on the design preview to open it. If you know the desired file name, you can simply type it into the **File Name** text box.

The selected design will open in the **Generations™** screen, in the center of the design window. You can now move, resize, rotate or otherwise edit it as desired.

Just remember to  **Generate** any changes.

Open Other

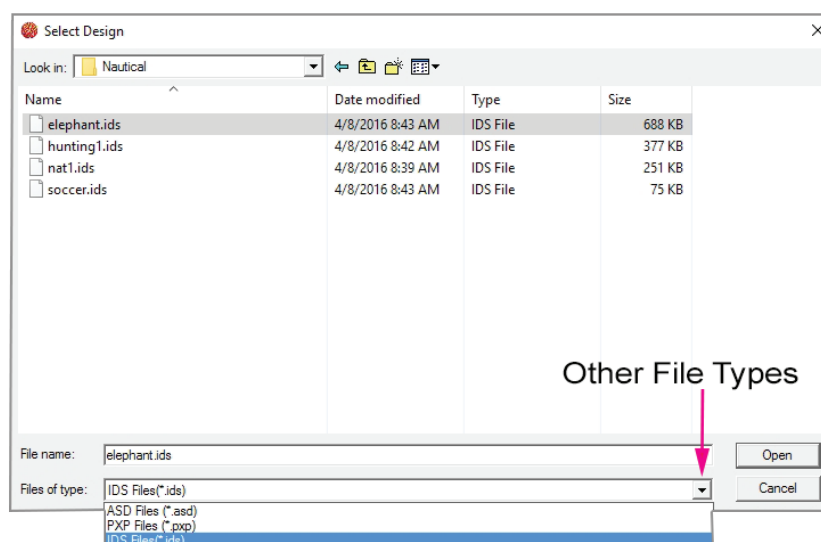
Generations™ software can open designs saved in the **.ASD**, **.IDS** or **.PXP** file formats used by other automatic digitizing software programs.

The **.ASD** and **.IDS** files contain the design outline and stitch information and once displayed on screen, you can use the full range of **Generations™** tools to make changes.

A **.PXP** file contains only stitch information, not true outline information, so you are somewhat limited in the changes that can be made.

Opening Saved .ASD .IDS or .PXP file

- Select **File** then **Open Other** from the menu. The **Select Design** dialog box displays.



- Under **Look In** change to the appropriate drive and folder where the .asd, .ids or .pxp file is stored. The designs in that folder will be listed in the large middle section of the window.
- Use the **Files of Type** drop down to choose the appropriate format, .asd, .ids or .pxp.

4. Select the design you want, then click **Open**.

Or

Double click on the design name to open it in one step.

The selected design will open into the **Generations™** program.

Close

Since **Generations™** can have multiple design windows open, you may want to close a design when you have finished with it, to conserve computer resources.

Closing a Design File

1. Select **File** then **Close**. If the design has not been saved, you will be prompted to save any changes before it disappears from the screen.
 - If only one design window was open when you used the **Close** command, **Generations™** will display only the menus and toolbars.
 - Use the **New** command to get a fresh design window.

Save Design Options

It is very important to save a new design shortly after you first generate stitches. **DO NOT WAIT UNTIL YOU ARE COMPLETELY FINISHED WITH A DESIGN TO SAVE IT!** This is particularly important if your computer meets only the minimum system requirements to run **Generations™**.

Simply opening a scanned or clipart graphic uses significant computer resources. **Generations™** performs sophisticated processing to convert the image to outlines and then stitches. Computers with only the minimum resources may process more slowly and experience system crashes.

There are two **Save** commands: **Save** and **Save As**.

When you use **Save As**, you can change the design name and folder location, basically creating a copy of the design. It is recommended that before making major changes to a design, you save a copy under a new name, in case you want to return to the original version.

As an added precaution, **Generations™** will save your design periodically while you are working if you have the **Auto Save** feature enabled.

In the **View Preferences** dialog box, you can choose the time interval at which your design is saved. A backup file is automatically created which can protect you from losing work in the event of a hardware problem or power failure. Refer to Chapter 2 for instructions on setting the **Auto Save** feature.

Backup files are for emergency use. It is still a good idea to save your design periodically with **Save** or **Save As**.

Saving a Design

1. Click on the **Save Design** icon  on the top toolbar.

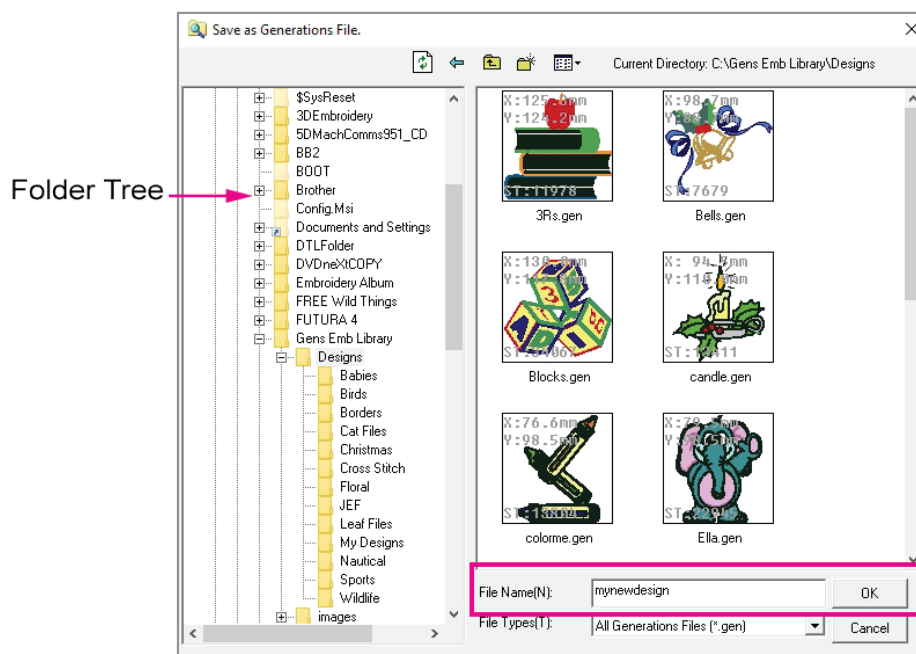
Or

Select **File** then **Save Design**.






Or

Press **[CTRL] + [S]** on the keyboard.

If saving the design for the first time, the **Save Generations File** dialog box opens.



Additional icons at the top of the dialog box let you easily move through and control folders on the computer.

- Click on the **Refresh** icon  to refresh the view of files and folders on the computer, if you seem to be missing files or the thumbnails appear garbled.
- Click on the **Return** icon  to return to the last folder you had viewed.
- Click on the **Up One Level** icon  to move up one level in the folder tree.
- Click on the **New Folder** icon  if you would like to create and name a new folder. Enter the desired folder name and click OK to create the new folder or Cancel to cancel the folder creation.
- Click on the **Sort Menu** icon  to control how the files are sorted in the preview window. In the pop-out menu, choose the desired sort method and the window will instantly refresh.

2. Click in the **File Name** box and type a name for your design. You do not need to enter a file extension, this is added automatically.

3. If desired, use the folder tree to change the drive and folder where your design will be stored.
4. Click on the **OK** button to save the design.

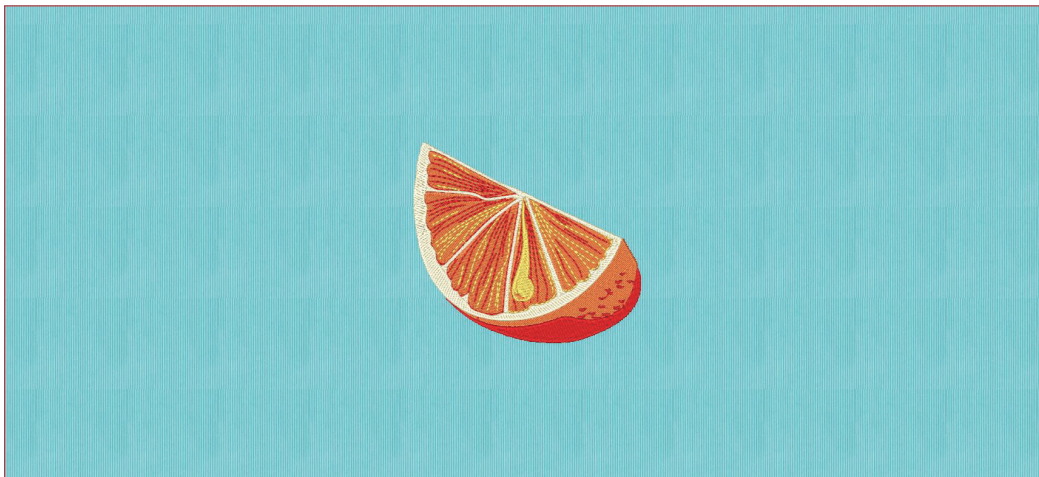
Save a JPG of the Embroidery Design

Email designs quickly and easily by saving a **Generations™** design as a **JPG**. Save the embroidery pattern as displayed on your design screen as a picture file so you can share it with all your friends.

1. To save the current embroidery pattern on your screen as a JPG, click to select **File** from the **Menu Bar** and scroll down to select **Save As**.
2. Once in the **Save As Dialog Box**, choose the desired folder to save the file in from the folder tree on the left hand side of the dialog box. Once the file folder is opened, click on the **Drop Down Arrow** next to the **File Types** and select JPEG files (•.jpg, •.jpeg).
3. Once the file type is selected, type in a file name in the **File Name** and then click **OK**.
4. The **.JPG image** will now be saved in the directory chosen.

Note: The JPG that is being saved is the design work area only. The program saves your design image as a JPG at the current zoom and view selected.

Image below shown with Canvas background in 3D view



Import and Export Design Formats

Generations™ software creates designs in its own format, **.gen**. In order to stitch a **Generations™** design, you must convert it to an embroidery machine format using the **Export** command. You may also have designs from other sources, stored in a machine format, that you wish to modify. To view and edit these designs in **Generations™** software you must convert them from machine format using the **Import** command.

Generations™ software can import and export the following formats:

- Bernina/Melco Premier (EXP)
- Bernina/Brother/Babylock (PEC)
- Elna (EMD)
- Bernina/Brother/Babylock (PES)
- Brother/Tajima (DST)
- Generations (VST)

- Janome (JEF)
- Husqvarna (HUS)
- Husqvarna/Pfaff (VP3)
- Singer (XXX)
- Simplicity/Simplicity by Brother (PES)
- Janome (SEW)
- Husqvarna/Pfaff (VIP)
- Pfaff (PCS)
- Singer EU/POEM 500 (CSD)
- Juki X09, X10, X12, X14

Additional software and/or hardware may be needed for transfer of design files to your specific embroidery machine model.

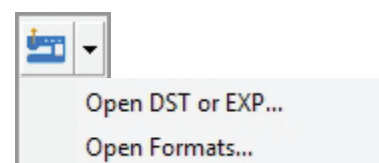
Importing a Design

1. Select **File** then **Import** and select **Open DST or EXP** for commercial formats, or **Open Formats** for home formats from the pop-out menu.

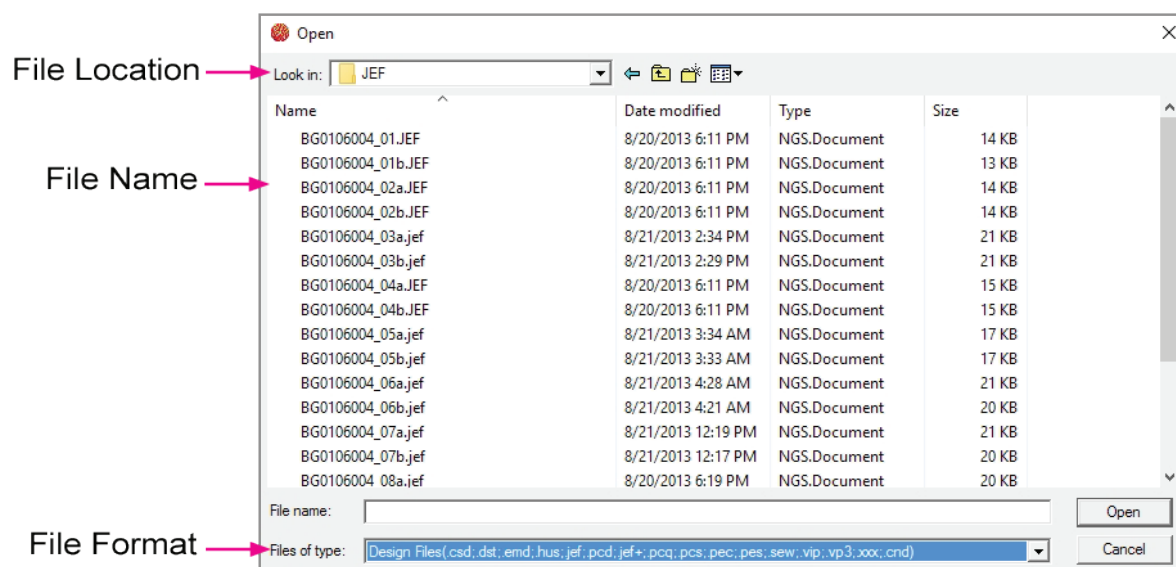
Or

Click on the **Import** icon in the top toolbar. The last selected format option will be used (Open DST or EXP or Open Formats) by default.

- If you need to change the **Import/Open** option click on the black arrow next to the icon and select from the drop-down menu.



2. The **Import/Open** dialog will display. This is a standard Windows® open dialog box.



Note: For home machine format files the default selection is to display all available formats. For DST and EXP, click on the black arrow and select the desired format.

3. Click on the formatted design you need to open or import into **Generations™**.
5. Click on the **OK** button. The selected design will open on the **Generations™** screen.

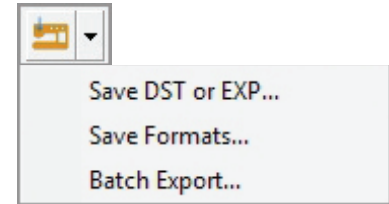
Tip: If desired, you can import multiple machine format designs - even those stored in different formats - into the same design to create a scene. Once the designs are all imported, you can change the display colors and sewing sequence to suit your needs.

Exporting a Design

1. **Open** the design so it is displayed on the **Generations™** screen (as explained in a previous section).
2. Select **File** then **Export** and select **Save DST or EXP** for commercial formats, or **Save Formats** for home formats from the pop-out menu.

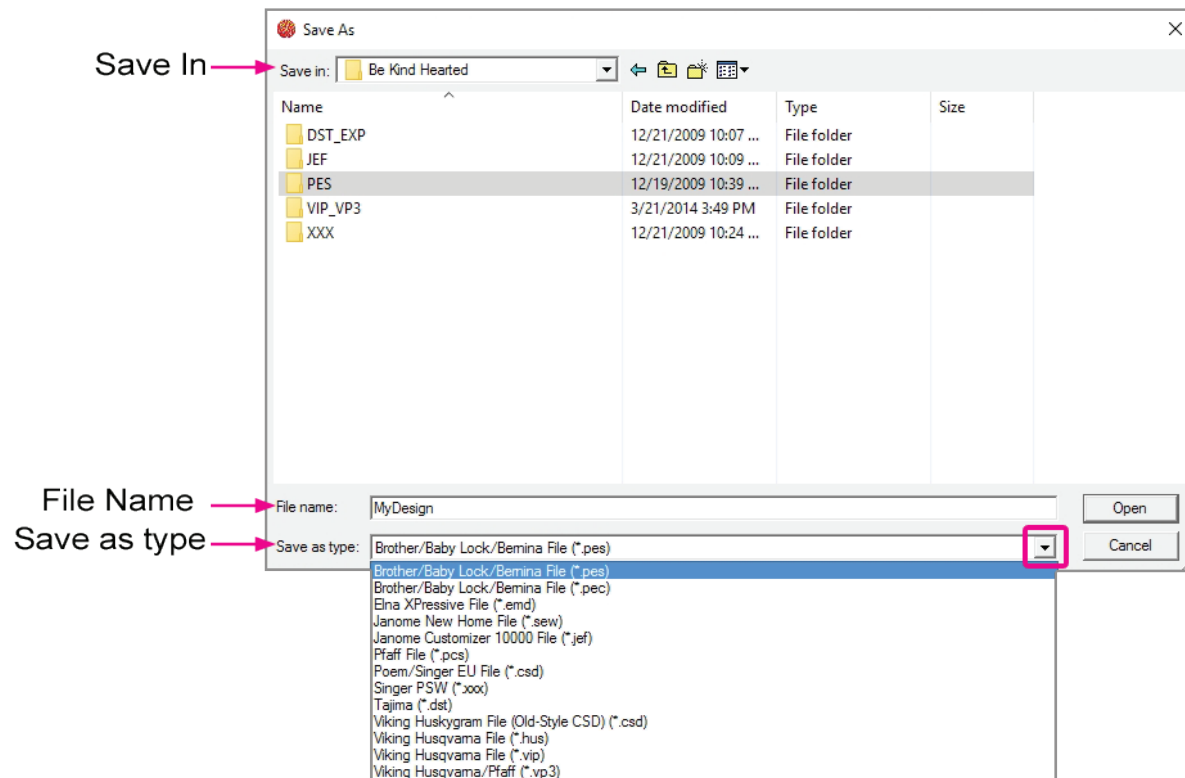
Or

Click on the **Export** icon in the top toolbar. The last selected format option will be used (Save DST or EXP or Save Formats) by default.



If you need to change the **Export/Save** option click on the black arrow next to the icon and select from the drop-down menu.

3. The **Export/Save** dialog will display. This is a standard Windows® save dialog box.



4. Click on the black arrow next to **Save In** to select the location where the design will be saved.
5. Enter a name for the file in the **File Name** box.
6. Click on the black arrow next to the **Save as type** option and select the desired machine format to save (export) the design.
7. Click **OK** to save the design in a machine format.

Note: Designs saved or exported in machine formats are stitch data files and may be more difficult to edit in Generations. To ensure that you will be able to edit the design remember to save the file in .GEN format using File, then select Save or Save As from the menu.

Batch Export

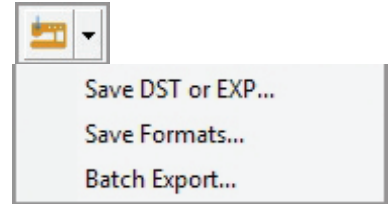
Generations™ has the ability to **Batch Export** multiple open files into a commercial format at the same time.

Batch Export

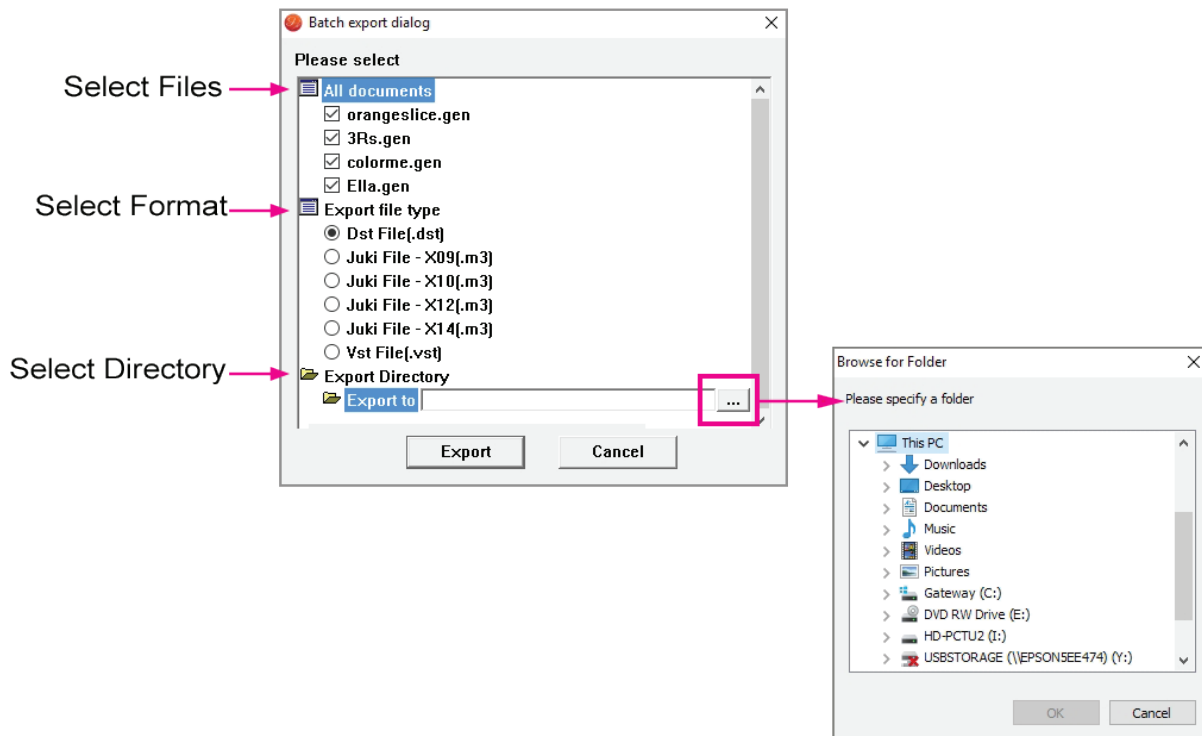
1. Open the design so it is displayed on the **Generations™** screen (as explained in a previous section).
2. Select **File** then **Export** and select **Batch Export** from the pop-out menu.

Or

Click on the black arrow on the right side of the **Export** icon in the top toolbar and select **Batch Export** from the drop-down menu.



3. The **Batch Export** dialog will display.



4. Select the files to be exported.
5. Select the desired machine format.
6. Click on the **Export To** and then click on the directory button **...** to select a location on the hard drive or external drive where the designs will be exported.
7. Click **OK** to export the selected files in the desired machine format.

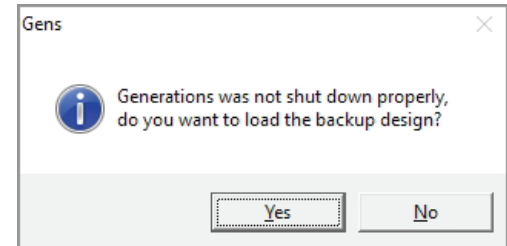
Recover an Auto Saved Design

If **Auto Save** is enabled, **Generations™** automatically creates a back up of your design in case of an unforeseen computer shutdown. The feature is enabled by default.

The normal time interval between each **Auto Save** is 5 minutes. You can change this time in the **View Preferences** dialog box (refer to Chapter 3).

If you did not shut down **Generations™** in the normal manner, either via the File/Exit command or using the Windows® Close icon in the top right corner, the next time the program is opened a dialog box appears asking if you want to recover the automatically saved design.

Simply click on the **Yes** button in the dialog box to bring back your design. Please note that if the last **Auto Save** had been some time earlier, all of the latest changes to the design may not have been saved.



Print Worksheet

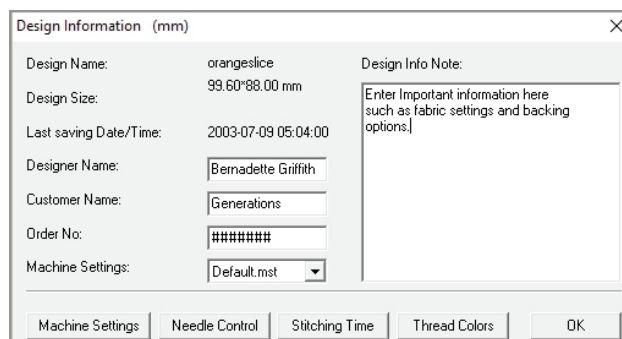
Generations™ software creates a printable worksheet of your design which you can use as a reference for the size, design placement and stitching color sequence.

In the **File** menu, the **Print Setup** options determine the paper source, size and other properties. The available options are determined by your particular printer brand and model. You should check that these settings are the way you want them before printing your first worksheet.

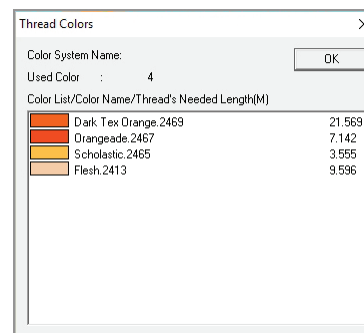
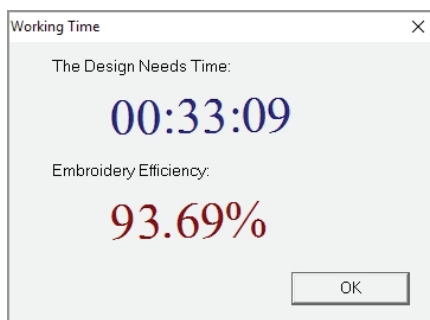
There are also worksheet options which let you decide exactly what information appears on the worksheet, such as the Design Name, Date Saved, and Design Notes. You can do an on-screen Print Preview to check that the worksheet will print with the options you want.

Setting up the Design Worksheet

1. Select **View** then **Design Information**. The **Design Information** dialog box displays.
 - In the **Design Information** dialog box you can define what information your printed worksheet will display. Information on the design, designer, customer, order number and machine setting can be entered or changed from here.



- You can check the design stitching efficiency by clicking on the **Stitching Time** button. Please note that actual stitching times may vary due to thread changes, machine problems, etc.



- Click on the **Thread Colors** button to view and customize the thread color numbers in the design.


Note: There are additional settings such as Machine Settings and Needle Control. These are advanced features and should be changed with caution. Home, Semi-Professional and many Commercial machine are not able to use these functions.

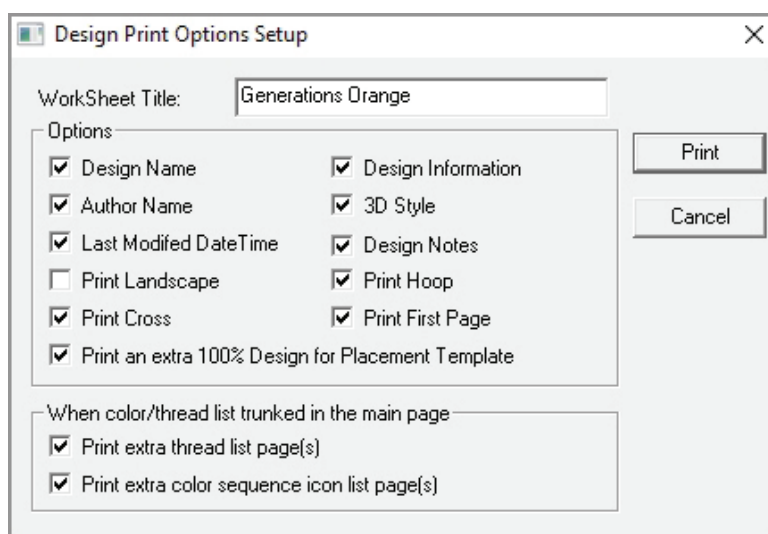
- When you are finished, click on **OK** to save the information. It will appear on the Print Worksheet for your design.

Printing a Design Worksheet

- Select **File** then **Print Preview**. The **Design Print Options Setup** dialog box displays.


Or

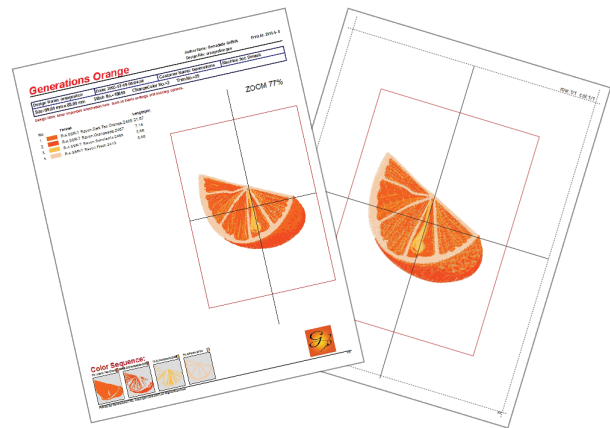
Click on the **Print Preview** icon  in the menu bar at the top of the screen.



- Left click** in the white box to activate or deactivate each of the options. A **check mark** in the box means the option is **active**.

- **Design Name:** Prints the name used when the design was saved.
- **Author Name:** Prints the name of the design's creator.
- **Last Modified Date/Time:** Prints a date and time stamp of when the design was last changed.
- **Print Landscape:** Prints the design turned 90 degrees. Use this option when your design is wider than it is tall and you want it printed at the largest possible size.
- **Print Cross:** Prints the horizontal and vertical cross hair guides that indicate the center of the design.
- **Print extra 100% Design for Placement Template:** Prints a second page with only a full size version of the design for you to use as a placement guideline when the design is stitched.
- **Design Information:** Prints the horizontal and vertical size, stitch count and color change information.
- **3D Style:** Prints the design in 3D realistic style. If you activate this option, it may take longer for your worksheet to print and if you are print spooling, please check that your printer has enough on board RAM to handle high resolution files.
- **Design Notes:** Prints any notes saved with the design (as entered in the View menu - Design Information).
- **Print Hoop:** Prints a red outline in the size and shape of the hoop selected in View Preferences.
- **Print First Page:** Prints the first page containing design information.
- **Print Extra Thread List Page(s):** Prints an additional page(s) of thread color information, as needed, for large multi-color designs.
- **Print Extra Color Sequence Icon List:** Prints an additional page(s) of design color section thumbnails, as needed, for large multi-color designs.

3. Click on the **Preview** button to see the **Print Preview** of your design.
4. Click on the **Print** button at the top of the preview window if you are happy with the options selected and want to print immediately.
Or, click on the **Close** button to return to the main **Generations™** screen.
5. You can also bypass the preview and print directly by selecting **File** then **Print Worksheet**, or by clicking on the  **Print** icon.



Recent File

Generations™ stores the last four design files that you had open in a quick access list right in the **File** menu. If you have just loaded your **Generations™** software and are using it for the first time, the list will be empty.

Opening Recently used Designs

1. Select **File** then **Recent Files**.
2. Select the desired design from the pop-out list.

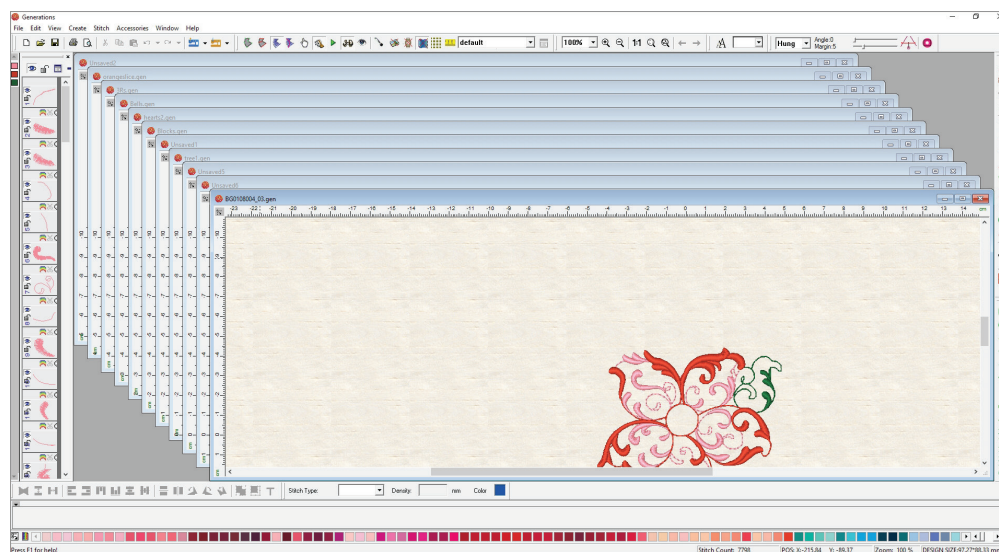
Multiple Designs Open

In **Generations™** software it is possible to have numerous design windows open simultaneously. Options in the **Window** menu let you control how open designs are displayed.

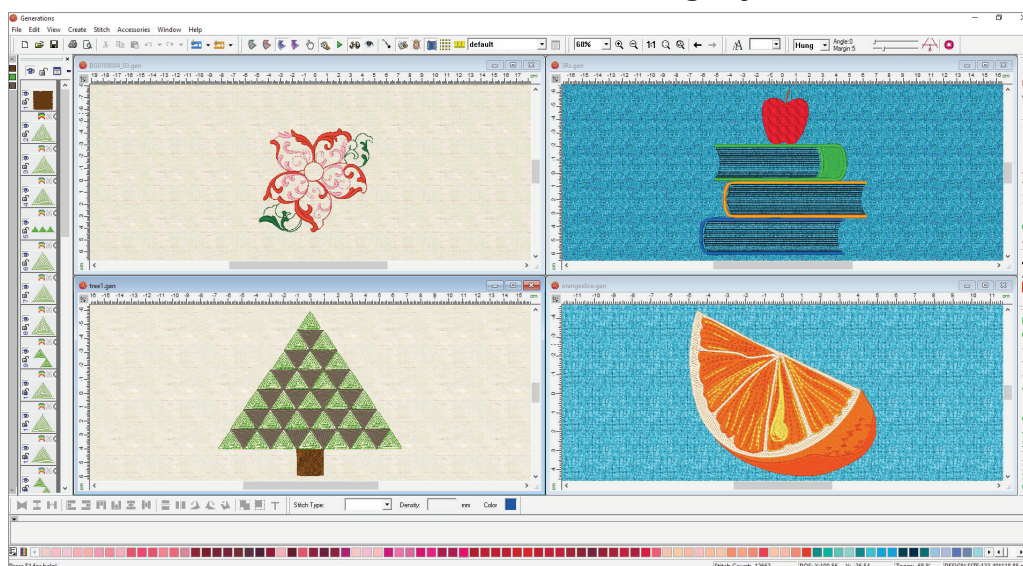
You can work in the normal view, showing only one of the open designs at a time. The **Window** menu contains a list of all designs currently open. Just click on the design name you want, and that design is displayed in the **Generations™** workspace.

You can also have all open designs display at once. This makes it easier to perform tasks like copying and pasting elements from one design to another. There are two ways to do this.

- **Cascade:** Select **Window** then **Cascade** to have all open designs stacked one behind the other. Initially, the active window displays in front. Its title bar is a darker shade than the others. To activate a different design, just click on its title bar. The selected design will move to the front.



- **Tile:** Select **Window** then **Tile** to have all open designs arranged like tiles alongside each other. The title bar of the active window will be a darker shade than the others. To activate a different design, just click on its title bar.



*You can move between all open windows by clicking on **Window**, then on the **design title** in the drop down menu.*

*Remember that you can also use the standard Windows® buttons to **Minimize**, **Maximize** or **Close** an individual design window.*

Chapter 3

Work Area and Design Navigation

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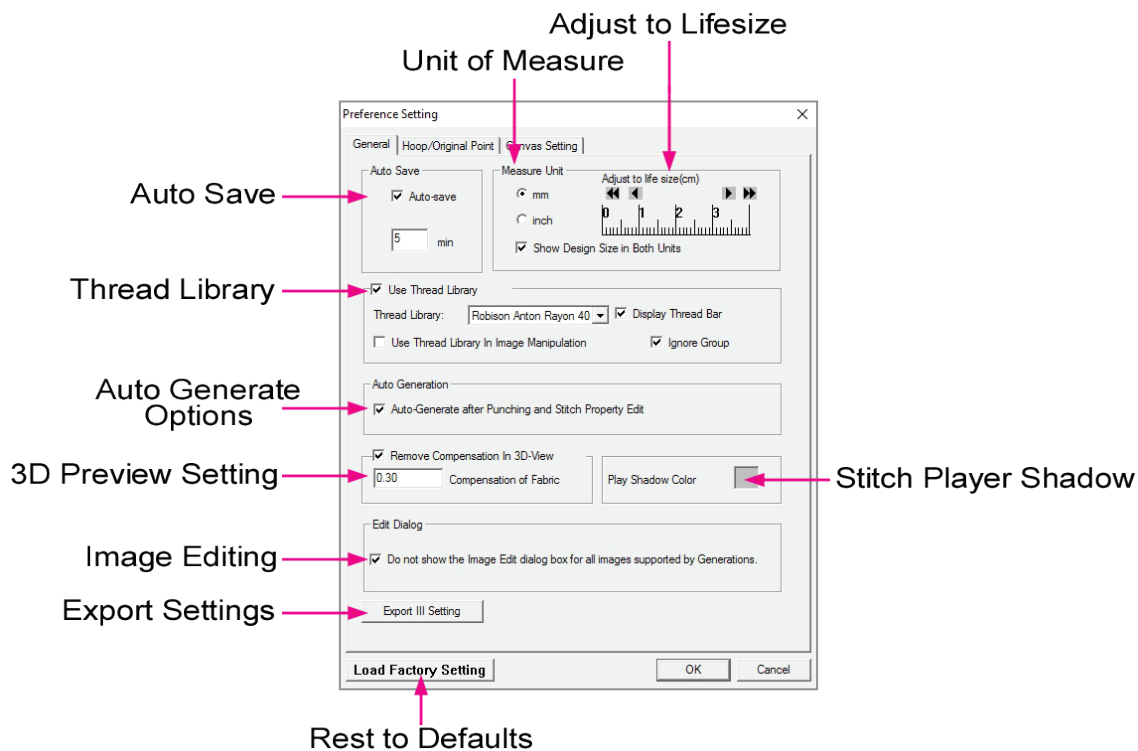
View Preferences

Generations™ has several options that allow the work area appearance to be changed to your personal preferences. You can change the settings for:

- Auto Save Settings
- Thread Library Usage
- Exporting Design Settings
- Hoops Size and Orientation
- Work Area Color and Grid and Canvas
- Stitch Setting Options
- Unit of Measurement
- Automatic Generation Features
- Compensation Settings in 3-D View
- Work Area Size and Centering Options
- Canvas Fabric Views

Changing the General View Preferences

1. Select **View** from the menu bar, then **View Preferences**. The **Preference Setting** dialog box will open.
2. There are three menu tabs where you may make changes or selections: **General** and **Hoop/Original Point** and **Canvas Setting**. The **General** tab displays by default.



2. The **Auto Save** section allows for automatic saving of your design file or files in the event of a computer shutdown. The number indicates the length of time, in minutes, between automatic saving of the design or designs.

To change the amount of time between **automatic saves**, enter a new number in the **min** (minutes) box.

- **Generations™** saves design files even when there is no stitch data placed in the design.

- If you have more than one design open in **Generations™**, **Auto Save** backs up all open files as you work.
- **Auto Saved** files are saved in the tempfile sub-folder in the **Generations™** program folder.
- If you have previously saved the design file with a name, the program will save the **Auto Saved** file as ~yourdesignname.gen.
- If the design was not saved with a design name, the program will save the file or files as ~Untitled1.gen, ~Untitled2.gen, saving all untitled files that were open in the program.
- You will be able to recover these files, in the event of a computer shutdown, the next time that **Generations™** is started. If you choose not to recover these files, upon opening the program, they will be deleted from the **Tempfile** folder when the program is closed.

Note: It is recommended that you enable the Auto Save option and set the time to no less than 5 minute save intervals.

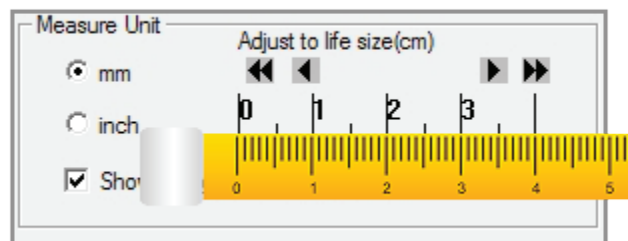
If you find it necessary to disable **Auto Save**, uncheck the box next to **Auto Save**.

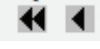

- The **Unit of Measure** setting allows you to choose **millimeters** (mm) or **inches**. The unit of measure selected here is used throughout the program for all measurements.
 - While many in the U.S.A. are more comfortable working in inches, there is a reason that the metric system is generally used in embroidery. It is much easier to work with and understand stitch values (densities, stitch lengths, underlay values, etc.) working in millimeters. If you use inches, the several decimal places required for these measurements can become quite confusing.
 - To work in millimeters and display the design size in both millimeters and inches check the **Show Design Size in Both Units** option.
 - For basic conversions, there are **25.4mm** in **one inch**.

Tip: If you are not familiar with the metric system, a good way to learn is to create designs using one unit of measurement, then change as you work to the other unit of measure, to compare the sizes or values.

- The **Adjust to Life Size** settings allows you to adjust the display ratio for your particular computer monitor.

- To **calibrate** your monitor, place a ruler against the screen, then use the arrows to adjust the measurement displayed. **Adjust to Life Size** measurements will correspond to the Unit of Measure selected in step 6, inches or millimeters.



- Use one of the **backward** arrows  to display a larger measurement area on screen.
- Use one of the **forward** arrows  to display a smaller measurement area on screen.

- Once the display is properly set in **Adjust to Life Size**, your designs will display in the proper proportion when using the **1:1** ratio display feature.
5. The **Use Thread Library** option allows you to match colors in the design to a particular thread catalog. Click on the arrow to display the list of available thread manufacturer's catalogs.
- Click on the option **Display Thread Bar** to activate the **Thread Palette** toolbar in the main display window.
 - Click on the option to **Use Thread Library in Image Manipulation** if you want to limit color recognition during image processing to the selected thread library, instead of the full Windows® palette of 16 million colors. This will make some similar colored areas, which would normally be recognized individually, merge together into one like colored area.
 - By default, thread colors are displayed by groups. Click on the option **Ignore Group** to ignore the grouping function of the thread names.

Note: Refer to the section on Thread Catalogs later in this chapter for more information on organizing your threads.

6. The **Auto Generate After Punching and Stitch Property Edit** option allows for manually digitized lines or areas to automatically generate after insertion and for changes made in the **Stitch Properties** dialog box to automatically generate after clicking **OK**.

Removing the check mark beside this option means that you have to generate **[F9]** any manually inserted area to place stitches in the design and manually generate after making changes in the **Stitch Properties** dialog box.

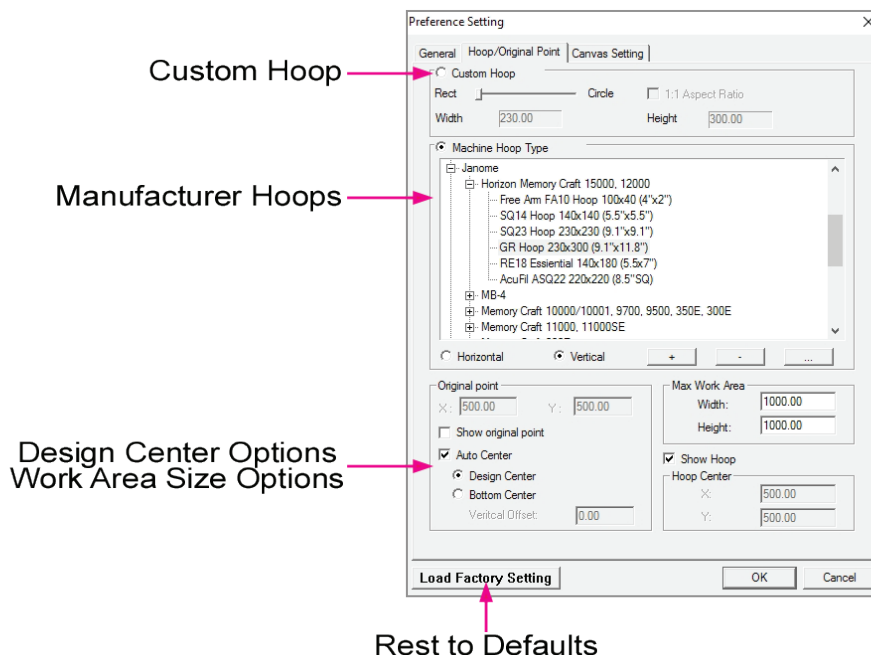
Note: This does not affect areas or lines auto digitized in the program from clipart or images.

7. The **Remove Compensation in 3D View** option allows you to see the 3D preview without pull compensation, to more realistically simulate the stitched effect.
- If desired, you can adjust the number in the **Compensation of Fabric** box to account for a fabric type in which there will be more pull. We recommend that you leave this at the default value of 0.4mm.
8. The **Play Shadow Color** option controls the display color used to represent the unfinished portions of the design in the **Stitch Player**. Refer to the **Stitch Player** section later in this chapter for details.
9. The **Load Factory Defaults** button resets all settings in the **View Preferences** dialog to the factory defaults. Use this option if you cannot remember what changes you made to the preferences and wish to restore all settings to their original installation default settings.
- If you wish to make additional changes to the **View Preferences** settings, click on the **Hoop/Original Point** or **Canvas Settings** tab to continue editing the preferences.

- If you have completed changes to the **View Preferences** settings click **OK** and save your settings. Close the **Generations™** program and reopen so that new preferences will become active in the program.

Hoop/Original Point View Preferences

10. Click on the **Hoop/Original Point** tab to access those settings.

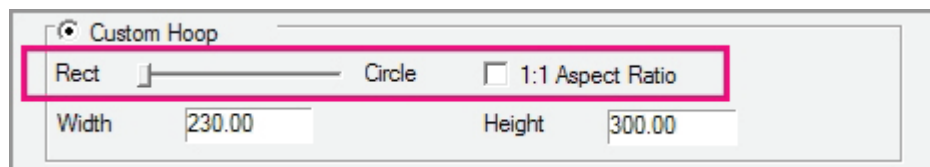


11. The **Show Hoop** option allows the selected hoop to be displayed in the work area.

Tip: If after checking Show Hoop you cannot see a hoop in the work area, select Zoom Out, then click in the center of the window until you see the hoop outline.

12. The **Custom Hoop** option allows for custom hoops sizes to be entered for the four basic hoop shapes: **Square, Rectangle, Circle** or **Ellipse**.

- For a **Rectangle** or **Ellipse** shaped hoop, a **width** size and a **height** size must be entered.
- If a **Square** or **Circle** shaped hoop is selected, place a checkmark in the **1:1 Aspect Ratio**. Enter a width size for the hoop.
- Use the **slider bar** to adjust the corners on the custom hoop. **Press and hold the left mouse button** and drag the slider to the right to curve the corner or to the left to square the corner.

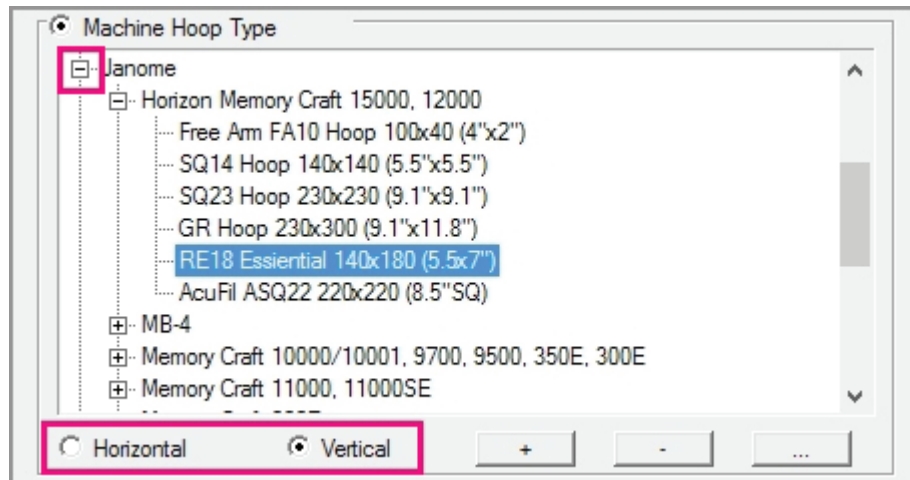


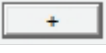
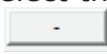


Note: This hoop information is not saved for future use. Use the Machine Hoop Type option to create and save custom hoops.

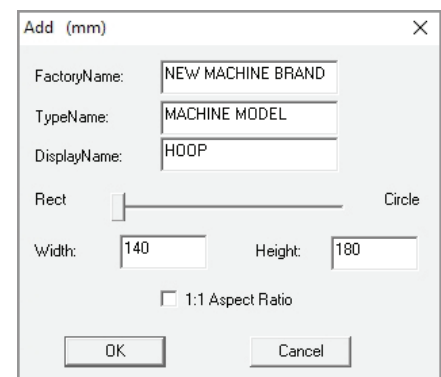
13. The **Machine Hoop Type** option contains pre-programmed hoop sizes for many commercial and home embroidery machines and allows for additional machine manufacturers, models or hoops to be added.

- To see the sizes available for each machine brand, select the **manufacturer** and **click** on the **[+]** to open a drop down menu containing the models and hoop sizes available.
- Once you have selected the machine brand and hoop size, you may select the orientation of the hoop. Choose **Horizontal** or **Vertical** from the menu.

Note: Generations™ will export to your machine format in the hoop orientation selected.



- Certain home machine formats require that the proper hoop be applied in order for the embroidery machine to read the file.
- Once the hoop is selected it will be applied to the design even when not displaying in the design work area screen.
- To display the hoop in the design work area place a checkmark in the **Show Hoop** Feature located below the Work Area Size section below.
- To **add** a new machine manufacturer or brand to the hoop options, click on the **[-]** symbol to collapse all hoop options.
- Click on the  button. Replace the current machine manufacturer in the **Factory Name**. Enter the machine model in **Type Name** and enter the hoop size or name in the **Display Name** option. Add the hoop size information and click **OK**.
- To add a new machine model to an existing machine manufacturer, click on the machine brand. Enter the machine model in **Type Name** and enter the hoop size or name in the **Display Name** option. Add the hoop size information and click **OK**.
- To **delete** any manufacturer, machine model or hoop, select the listing from the menu and then click on the  button.
- To **edit** a listing, select the listing and then click on the  button. The **Edit** dialog box will open and you may enter changes or corrections.
- To show or hide the hoop in the work area, click on the  **Show/Hide Hoop** in the **View Toolbar**.



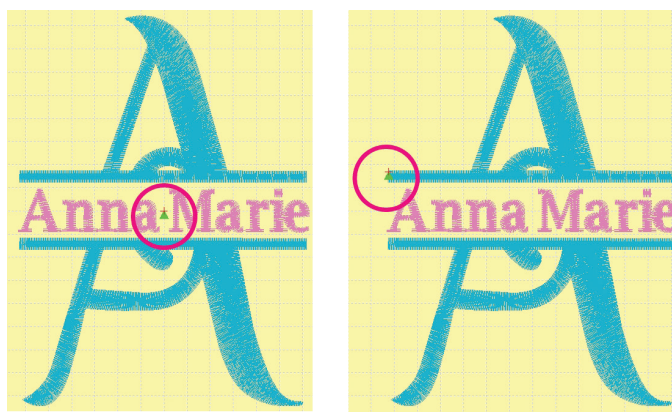
14. The **Auto Center** option is checked by default and will automatically identify the center point of the design. Your design will automatically be centered in the selected hoop size and style.
- In special situations where you turn the **Auto Center** option off, you may enter the X and Y coordinates to change the stitching start point.

Original point
X: 500.00 Y: 500.00
☐ Show original point
☒ Auto Center
☒ Design Center
☐ Bottom Center
Vertical Offset: 0.00

Max Work Area
Width: 1000.00
Height: 1000.00
☐ Show Hoop
Hoop Center
X: 500.00
Y: 500.00

Tip: It is recommended that you always enable this option.

15. The **Show Original Point Option** places a **small green triangle and red plus symbol** on the screen at the center of the stitch design file.
- The **green triangle** shows the **start point**. The **red plus symbol** represents the **end point**.
 - You may move the position of the points for the design if the **Auto Center** feature has been turned off by dragging the green triangle to a new position.



16. The **Max Work Area** values default to 1000mm by 1000mm. If necessary, you may make this work area larger or smaller by changing the values in the X and Y boxes.
- Remember to adjust the center point of the design either by dragging the **Original Point** to a new location or entering the information manually.

Original point
X: 500.00 Y: 500.00
☒ Show original point
☐ Auto Center
☐ Design Center
☐ Bottom Center
Vertical Offset: 0.00

Max Work Area
Width: 1000.00
Height: 1000.00
☐ Show Hoop
Hoop Center
X: 500.00
Y: 500.00


Canvas Setting

17. The **Background Color** setting changes the background color of the **Work Area** window. The **View Color** setting changes the color of the area beyond the Work Area Window.

- To change the **Background Color** and/or **View Color** click on the **Color** button to open the Color Palette. You may select from the standard palette colors or create a custom color for your grid.



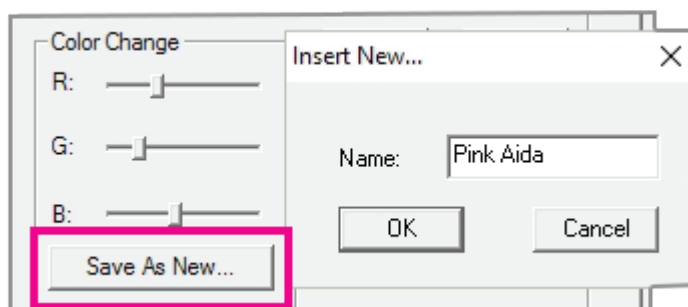
18. The **Grid Settings** allow for grid style, size and color to be changed. There are three options for the grid style:

- Select **None** to **remove the grid** from your display. You can also use the  **Show/Hide Grid** icon in the **View Toolbar**.
- Select **Dot** to display a **dotted grid** spaced according to the number in the **Spacing** box.
- Select **Line** to display a **dashed-line grid** spaced according to the number in the **Spacing** box.
- To change the size or spacing of the **grid**, enter a new number in the **Spacing** box.

Note: The default value of 10 mm or 0.39 inches matches the marking on most home embroidery placement templates.

- To change the **Grid Color** or **Guide Line** color click on the **Color** button to open the **Color Palette**. You may select from the standard palette colors or create a custom color for your grid.
- The **Snap To Grid** option is turned **off** by default. If you are working on a design that requires it be placed exactly on grid markings, with limited movement, you will want to turn this feature on by checking the box next to it.

19. Select the **Show Canvas** option to use a fabric image as the work area background instead of the basic **Background Color** from step 17.
 - Left click to select one of the pre-programmed **fabric images**. You can use the slider bar to display additional choices.
 - If desired, you can use the **R** (Red), **G** (Green), and **B** (Blue) **slider** bars to customize the selected fabric color. Left click and slide the bars to adjust the fabric sample color.



- Select the **Add** button to insert additional fabric images to the list. You must first have scanned in the desired fabric and saved it as an image file on your computer.
 - After selecting one of the fabric choices with a left click, you can remove it from the list by clicking the **Delete** button.
 - If desired, you can associate a saved group of stitch values with the selected fabric image. Left click on the drop down arrow to display saved settings, or click on the **Edit** button to open the **Stitch Properties** dialog box to create a custom group of values.
20. Use the **Load Factory Settings** option if you cannot remember what changes you made, and wish to return all settings to their factory defaults.
 21. When you have finished making the changes to your **View Preferences** settings, click on **OK** and the settings will be changed.

Tip: After changing the View Preferences you should exit the program and then reopen the program to set the changes for future use.

Toolbar Management

Generations™ software lets you place toolbars in locations convenient for your own work style or to remove them from view completely. There are 12 toolbars for Home 2.0 and 14 toolbars for PRO 2.0 that you can display in the work area. Most toolbars can be moved to a new location.

For each toolbar icon there is a corresponding menu item located at the top of the program window. For many icon functions there are also **Hot Key** commands that will achieve the same results. For a detailed **Icon/Hot Key** list, refer to the printable keyboard list in the **Generations™ Help** menu.

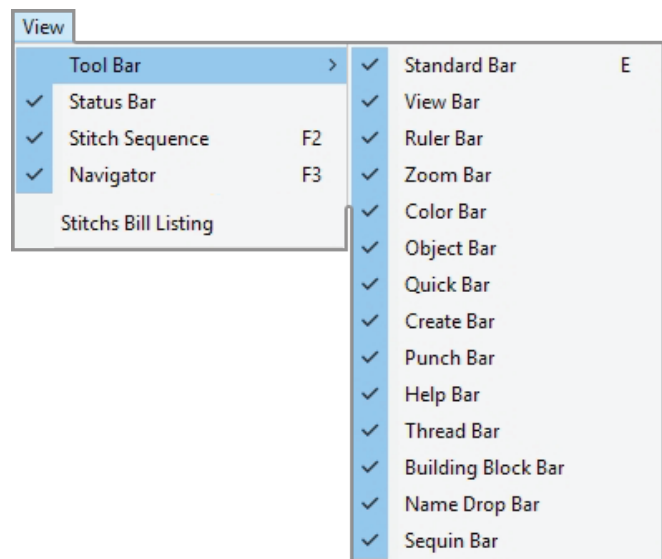
Moving a Toolbar

1. To move a toolbar to a new location, place the mouse pointer over the toolbar, **hold down** the **left mouse button** and **drag** it to the new location.
2. If you want a toolbar to appear on screen vertically, hold down **[Shift]** on the keyboard and drag it into place.

Opening and Closing Toolbars

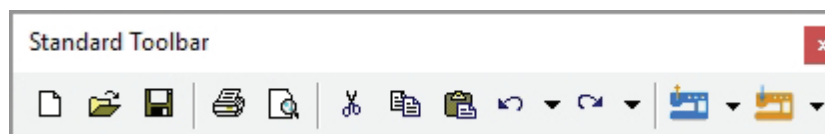
1. To **close** a toolbar, click on **View**, then **Toolbar** from the drop down menu. Locate the Toolbar name and click to remove the check mark. Only toolbars activated with a check mark are shown in the work area.
2. If you have dragged a Toolbar into a new position on the screen and wish to close it, you may also click on the **"X"** in the top right corner of the toolbar.
3. You can also turn toolbars on and off from the main menu.

- Click on **View** and then **Toolbars**. All available toolbars will display in the pop-up menu or in the first section of the View menu.
- Toolbars displayed on the screen will have a **checkmark** next to them.
- To close a toolbar, click on the menu option to remove the checkmark.
- To display a toolbar, click on the menu item to select it. A checkmark will appear next to the menu option and the toolbar will display on the screen.
- The **Status Bar**, **Stitch Sequence Viewer** and **Navigator** can be turned on or off from the View Menu also.



The Standard Toolbar

The **Standard Toolbar** contains standard Windows commands.



New Design File [CTRL + N]

Opens a new, blank design file in **Generations™**.



Open an Existing Design File [CTRL + O]

Opens an existing design. In the **Open Generations File** dialog box, select the design you want by double clicking on its image in the preview window.

**Save a Design File** [CTRL + S]

Re-saves a previously saved design file. The design is saved in the same location, with the same name.

**Print a Design Worksheet** [CTRL + P]

Prints a worksheet for the current design. In the **Design Print Options Setup** dialog box, select the information to be included in the printout then click on Print.

**Print Preview**

Gives a preview before printing. In the **Design Print Options Setup** dialog box, select the information to be included in the preview then click **Preview** to see the worksheet with the information you selected.

**Cut a Selected Object** [CTRL + X]

Removes the selected item from the design and stores it on the clipboard. It remains on the clipboard until you cut or copy another item.

**Copy to the Clipboard** [CTRL + C]

Makes a copy of the selected item and stores it on the clipboard. It does not remove the selected item from the design.

**Paste from the Clipboard** [CTRL + V]

Inserts an item that has been stored on the clipboard from the Cut or Copy command. You may paste several copies of a stored item from the clipboard.

**Undo a Function** [CTRL + Z]

Undo the last command that you entered by clicking on the **blue curved arrow**. To undo many functions, click on the **black arrow** to open a **drop down list**. **Generations™** can store up to 25 commands in the undo list.

**Redo a Function** [CTRL + Y]

Redo the last command that you undid by clicking on the **blue curved arrow**. To redo many functions, click on the **black arrow** to open a drop down list. **Generations™** can store up to 25 commands in the Redo list.

**Import/Open a Machine Format File**

Inserts a design file from one of the popular embroidery formats.

**Export/Save a Design File**

Exports a completed design file to a machine format.

Note: Please refer to Chapter 2 for a complete list of the machine formats you can Import/Export using Generations™.

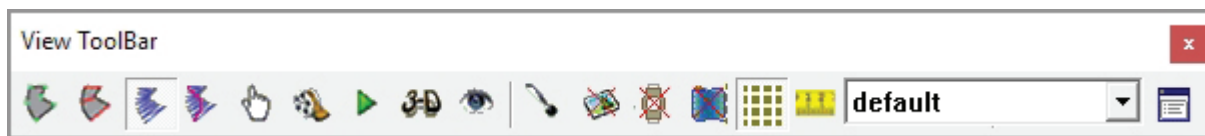
The View Toolbar

There are several ways to view a design created in the **Generations™** program: **View Outline, View Angle, View Stitch, View Embossed, 3D Stitch View** and **Quick View**.

You can change between views by selecting from the icons on the **View Toolbar**, using the menu, or using the Hot Key commands for each specific view.

Each view lets you edit the design in different ways or see the design in a different fashion. You will change frequently between views as you edit the design and check the effects of your work.

The **View Toolbar** also lets you preview the stitching process, hide the background image, quickly measure the design or areas of the design, select stitch settings and open the stitch settings for the design. Please refer to the chapters on basic digitizing and editing for more detailed instructions.



View Outline [F6]

The first view that you see after inserting an image file or lettering. It is the vector outline of the design file, from which **Generations™** will create stitches.



View Angle [F7]

Shows stitch angles for a satin stitch area. Satin stitches follow the shape of an area. To make changes to the flow of stitching, use the View Angle tools to move the angle lines to new positions.



View Stitch [F8]

The view you see after generating stitches. In this view stitches are not very detailed, they are more like color blocks. This should be considered more of a working view than a detailed or realistic view of the design.



View Embossed [F5]

Used to create, view and manipulate the carved special effect known as an embossing. You can emboss a line, shape, or text outline into a larger complex fill or satin stitch area.



Edit Mode [F4]

Allows you to select an individual stitch point in the design. Once selected, you may move the stitch, delete the stitch or travel through the stitches. Edit mode also works in conjunction with View Outline, allowing you to fine tune edit an area or line using node editing.



Stitch Sequence

Shows the sewing order of a design. Each area has its own block in the **Sequence Viewer**. You can use this tool to change sewing order, to quickly locate a particular area in the design, or to insert machine commands.



Stitch Player

The Stitch Player provides a way to view the stitching process of the design on your computer screen. The controls in Stitch Player are similar to VCR controls. You can play the stitches backwards and forwards.



3D Stitch View [T]

Gives you a realistic dimensional stitch view of the design.



Quick View

Gives you a vivid dimensional stitch view, including pull compensation. As a result, lines and areas may appear thicker or more extended than they will appear in an actual stitch-out of the design.



Needle Penetrations

Displays each stitch point or needle entry point in the design. This is helpful when you are editing and wish to select a specific stitch for moving or deleting.



Hide/View Image

Lets you display or hide the inserted image used to generate stitches or placed as a template in the work area.



Hide/View Hoop

Lets you display or hide the selected machine hoop.



Hide/View Canvas

Lets you display or hide a selected canvas (fabric) background.



Hide/View Grid

Lets you display or hide a selected grid.



Ruler [R]

The Ruler can be used to determine spacing between lettering, the actual height and width of an area or the length of an individual stitch.



Stitch Settings [Space bar]

Opens the Area or Line Stitch Properties dialog box so you can make changes to the type of fill or line, the underlay, compensation, stitch lengths and tie in stitches.




Stitch Property

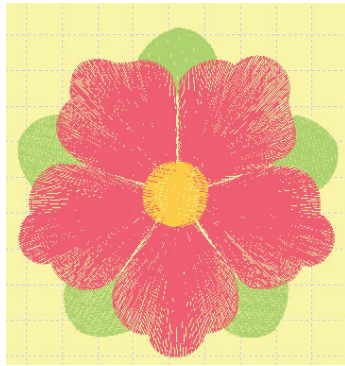
Lets you select a stitch property to be applied to the design or a selected area or line in the design.

Note: Please refer to chapters in the manual covering the Stitch Properties and changing stitch property settings for more detail.

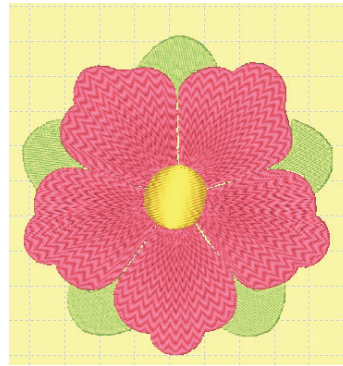
Understanding Design Views

Generations™ has four stitch views in which you may preview and work with the design file. Each view can be a valuable tool for checking the design before exporting to a machine format for stitching.


View Stitch  is the most commonly used view. It is generally the fastest working view since it is not a graphic intense presentation of the design.




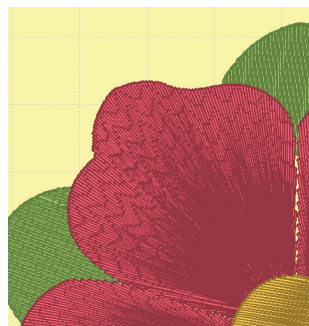
View Stitch



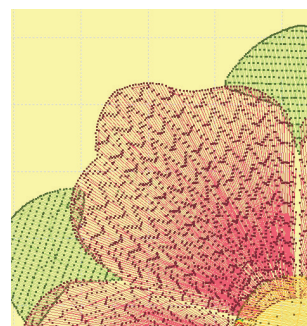
3D View

3-D View  provides a rendered realistic 3-dimensional stitch view of the design. You may edit in 3-D view but your program response may be slower, depending on your particular computer system.

Quick View  gives you a 3-dimensional stitch view of the design which includes pull compensation. It is not as realistic as the 3-D view, but Quick View provides a vivid realistic view of each stitch in the design.



Quick View



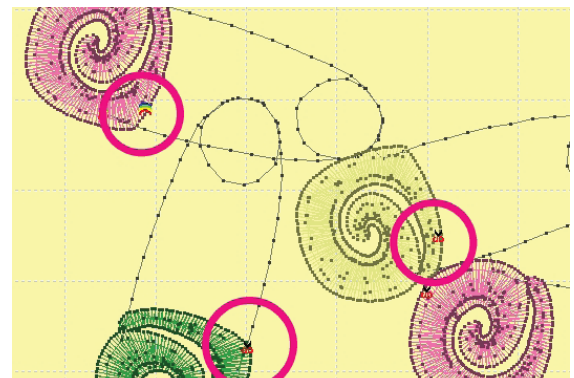
Needle Penetration View

View Needle Penetration  provides a stitch point view. It is helpful when you are editing and wish to select a specific stitch for moving, deleting or inserting.

View Needle Penetration will also display color change and trim placement throughout the design.

This view will allow you to replace stitches with machine commands, such as **Normal**, **Jump**, and **Trims**.

Pro 2.0 Owners can insert individual sequins commands using the Needle Penetration View.



The Create Toolbar

The **Create Toolbar** allows you to insert TrueType Font lettering, graphic images, shapes and lines that will become stitches in a design.



Insert Text [CTRL + T]

Lets you select from the True Type Fonts™ installed on your computer, and professionally digitized fonts to create lettering.



Insert Monogramming

Lets you select from the pre-programmed monogram frames to create custom monogram effects.



Insert Image

Lets you select a clipart or photo image from your hard drive, diskette, or CD and place it in the image processing menu for automatic stitch generation.



Acquire Image from TWAIN Source

Lets you insert an image from a digital camera or scanner installed on your computer.



Create Satin Side to Side

Used to insert an area of satin stitching by marking the two opposing sides to define an area.



Create Satin Side By Side

Used to insert an area of satin stitching by defining the area sides individually and then inputting the stitch direction angles.



Create Free Hand Line

Used to insert a run stitch line or uniform width column with straight and curved line segments.



Create Continuous Line

Used to insert a run stitch line or uniform width column by drawing a continuous freehand line, similar to drawing with a pen or pencil.



Create Free Hand Area

Used to create a filled-in, free-form shape.



Create Rectangle

Used to make an automatic square or rectangle.



Create Circle

Used to make an automatic circle or ellipse shape.



Create True Ellipse

Used to make an true ellipse using two units of measure.



Create True Arc

Used to create a perfectly arced line shape.



Insert Stitch

Used to insert new stitches between existing stitch points, at the end of the last stitch, or as a standalone design. Can also be used with editing options to select stitches for stitch-point editing.



Magic Wand

Used to automatically recognize and auto-trace an area in the image. This lets you pick up detailed areas not detected in the original automatic outline recognition, or digitize the image one area at a time without having to manually mark each area.



Generate

Creates stitches in the design based on the areas or outlines recognized during Image Processing. It also recreates the stitches after you make changes.

The Punch Toolbar

The **Punch Toolbar** allows you to insert predefined shapes and alter their appearance to round corners, add or extend rays and more.



Create Rounded Rectangle

Used to create rounded or squared rectangular shapes. Can be created as areas or running line shapes.



Create Punch Ring

Used to create open rings with smooth or sharp corners. Can be created as areas or running line shapes.



Create Spiral

Used to create spirals with variations to spacing and shape.



Create Poly Star

Used to create stars and polygons with variations in the points, rays and corners. Can be created as areas or running line shapes.



Create Poly Star Line

Used to create star/polygon lines with variations to the corners.



Create Arch/Sector

Used to create different arches or sectors with varying components. Can be created as areas or running line shapes.



Create Moon

Used to create Moon areas with variations in width. Can be created as areas or running line shapes.

**Create Cross**

Used to create Cross areas at any size with variations to the width and length. Can be created as areas or running line shapes.

**Create Cross Arrow**

Used to create Cross/Arrow areas at any size with variations to the width and length. Can be created as areas or running line shapes.

**Create Sun 0**

Used to create a sunburst shape with variations to size and length/width of rays. Can be created in area or running line shapes.

**Create Sun 1**

Used to create a sunburst shape with variations to size and length/width and arc of rays. Can be created in area or running line shapes.

**Create Sun 2**

Used to create a sunburst shape with variations to size and length/width and wave of rays. Can be created in area or running line shapes.

**Create Heart**

Used to create heart shapes with variations to size and shape of heart. Can be created in area or running line shapes.

The Quick Toolbar

The **Quick Toolbar** allows for stitch property changes without opening the **Stitch Properties** menu. On this toolbar you can make quick changes to the stitch type, density, length and color of the area or line you have selected.



The Object Toolbar

The **Object Toolbar** allows quick access to reshaping, aligning, grouping and resizing tools. These are similar to many popular graphic program commands.

**Reshape**

Lets you apply one of the pre-programmed shapes to an area, giving it a three dimensional effect. You can reshape a single area such as one letter, or you can reshape the whole design or line of text.

**Vertical Space**

Lets you place an even amount of vertical space between three or more selected elements.



Horizontal Space

Lets you place an even amount of horizontal space between three or more selected elements.



Align Left

Lets you line up two or more selected elements at their left edges.



Align Right

Lets you line up two or more selected items by their right edges.



Align Top

Lets you line up two or more selected items by their top edges.



Align Bottom

Lets you line up two or more selected objects by their bottom edges.

Tip: You may also align a selected area by using the arrow keys on your computer keyboard. Using the arrows lets you move (or nudge) the area in very small increments until it is in the desired position.



Align Vertical Center

Used to line up two or more selected objects at their common vertical center point. You can use this tool to easily center multiple lines of text on the screen.



Align Horizontal Center

Used to line up two or more selected objects at their common horizontal center point. You can use this tool to easily center items across the screen.

Tip: Using Align Vertical Center and Align Horizontal Center together will center items on top of each other on the screen, and so can be used to center two or more objects.



Mirror Horizontal

Used to quickly flip the object over the central horizontal line, resulting in a true mirror-image.



Mirror Vertical

Used to quickly flip the object over its central vertical line, resulting in a true mirror-image.



Rotate Left 90

Used to quickly rotate selected objects 90 degrees to the left.



Rotate Right 90

Used to quickly rotate selected objects 90 degrees to the right.



Manually

Used to rotate one or more selected objects to an exact angle that you enter into the dialog box. You can enter a positive or negative number to achieve the angle you want.



Group/Ungroup

Used to groups two or more selected items together as one selection. This lets you treat several items as one, making it easy to move them at once or resize. Clicking the icon again will ungroup the selected objects so you can select and manipulate them individually again.



Resize

Opens a dialog box which lets you type in a new size for the selected area. You can maintain the original height/width proportion, or you can choose to resize in only one direction.




Super Align

Lets you align two or more selected objects horizontally along a line, freehand line, arc, ellipse or existing outline while also vertically aligning either above, below, or centered on the baseline.

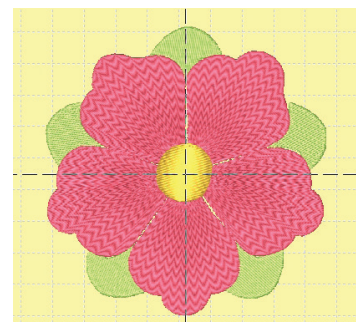
The Ruler Bars

The **Ruler** bars are located at the top and left hand sides of the work area window. They are displayed in the unit of measurement selected in the View Preferences menu. The Rulers Bars are a convenient reference for spacing pieces of a design or to size the design.

You may also check the location of a section of your design by moving the mouse to the desired area. The position of the mouse is displayed on the Ruler Bars as a dashed line. The lines move as you move the mouse around the work area screen.

If you click on the  icon in the upper left hand corner of the Ruler Bar you can drag dashed lines onto the work area.

When the mouse button is released the dashed lines disappear.

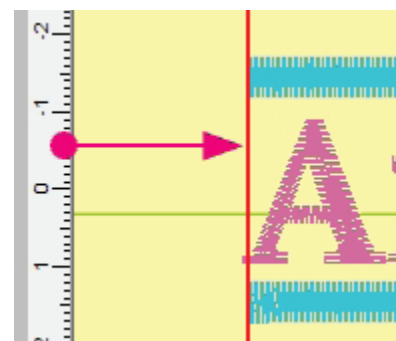


Guide Lines

The **Guide Lines**, can be created by moving the mouse cursor over one of the ruler bars on the top or side of the work area window and dragging the guideline onto the work area screen.

These guidelines can be used to align multiple items in a designs and are tied to the auto-centering of the design.

For better alignment options using the guide lines, remove the Auto Center option in View Preferences.



The Help Bar

The **Help Bar**, located at the bottom of the work area window, displays instructions about the function with which you are currently working.

The **Help Bar** can be turned on or off in the **View**, then **Toolbar** menu.

Esc : cancel right-click : cancel
Note: Select two end points on the outline, then click on the segment you want to adjust

The Status Bar

The **Status Bar** is located at the bottom of the work area window and displays the following information:

- Stitch count and size of the design or of a selected area.
- The X and Y coordinates of the mouse on the screen.
- The zoom percentage.
- The angle to which you are rotating an area or design.
- The fill direction of a selected area.
- The time and percentage completed during image insertion and stitch generation.

Stitch Count: 1587	POS: X:-6.29 Y: 86.05	Zoom: 100 %	DESIGN SIZE:19.96*51.61 mm
--------------------	-----------------------	-------------	----------------------------

Tip: There is an abundance of design information displayed on the Status Bar and the Help bar that will make learning and using the program easier.

Moving Around the Work Area

Generations™ software gives you several different ways to move around the work area.

- Window® Slider Bars
- Zoom Tools
- Navigator Window

Window Slider Bars

In the **Generations™** program you can easily move around the work area by using the **Slider** bars. You can use the **Slider** bars to quickly move across the design when the design is larger than the window or you have zoomed in on a certain area of the design.

- The **Slider bar** on the **right hand side of the screen** moves the work area window **up and down**.
- The **Slider bar** at the **bottom of the screen** moves the work area window **side to side**.

To use the **Slider Bar**, hold down the left mouse button and drag the bar until you see the portion of the design you are wanted to view. To move in a small increment only, click on the arrows at the ends of the Slider bars.

The Zoom Toolbar

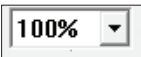
There are eight zoom tools available in **Generations™** that allow you to view any area of the design.



Zoom Percentage

You can use the **Zoom Percentage** numbers to select an exact zoom ratio.


Using Zoom Percentage

1. Place the cursor over the  **arrow** next to the current zoom percentage number, and **click** the **left mouse** button.
A list of the available zoom percentage numbers displays.
2. **Point** the cursor to the **desired zoom percentage** and **click** the **left mouse** button.
The design will display at the new zoom percentage.

Zoom In

Zoom In is used to enlarge or magnify an object or part of an object for detailed viewing.

Using Zoom In

1. Select the  **Zoom In** icon from the Zoom Toolbar.
Or
Select **View** from the menu, and then **Zoom**. When the sub-menu opens select **Zoom In**.
Or
Press the letter **[I]** on the keyboard.
2. To enlarge the design or an area of the design, place the **Zoom In** cursor over the area and **left click**.
Each time you click over the area the view of that area will be enlarged.
3. To target a specific area for viewing, **hold down** the **left mouse** button and **drag** a **square** over the area you want to enlarge. When you release the mouse button, the area that was covered by the square is shown in a larger size.

Note: The maximum view scale is 3200%. If the maximum value is reached the command will no longer work.

4. When finished using the **Zoom In** tool, it must be turned off.
Click the **right mouse** button anywhere on the work area to deactivate the **Zoom In** tool.
Or

Left click on the  **Zoom In** icon from the Zoom Toolbar.


Or

Press the letter **[I]** on the keyboard.

Zoom Out

Zoom Out is used to decrease the view of an object or part of an object.


Using Zoom Out

1. **Left click** on the  **Zoom Out** icon from the Zoom Toolbar.
Or
Select **View** then **Zoom**. When the sub-menu opens select **Zoom Out**.
Or
Press the letter **[O]** on your computer keyboard.
2. To decrease the view of a design or an area of the design, place the **Zoom Out** cursor over the area and **left click**. Each time you click, the view of that area will be decreased.

Note: *The minimum view scale is 3%. If the minimum value is reached the command will no longer work.*

3. When finished using the **Zoom Out** tool, it must be turned off.
Click the **right mouse** button anywhere on the work area to deactivate the zoom out tool.

Or

Left click on the  **Zoom Out** icon from the Zoom toolbar at the top of the work area.

Or


Press the letter **[O]** on the computer keyboard.

Tip: The Zoom In and Zoom Out tools do not change the actual sew out size of an object or area. They only change the view of the object or area.

1:1 View or Natural Size

1:1 View is used to show the design on the screen at the actual sew-out size. **1:1 View** or **Natural Size** act instantly and displays your design at the actual stitch out size. This tool is a one-time command so there is no need to deactivate it with a right click.


Displaying the Design at Natural Size

1. Left click on the  **1:1 icon** from the Zoom toolbar.
Or
Select **View** from the menu, then **Zoom**. When the sub-menu opens select **Zoom 1:1**.
Or
Press the letter **[N]** on the computer keyboard.

Zoom All Design

Zoom All Design is used to show the entire design in the maximum possible zoom size that will fit in the work area window. This tool is a one-time command so there is no need to deactivate it with a right click.


Using Zoom All Design

1. **Left click** on the  **Zoom All Design icon** from the Zoom toolbar.
Or
Select **View** then **Zoom**. When the sub-menu opens, select **Zoom Design**.
Or
Press the letter **[A]** on the computer keyboard.

Zoom Selected Object

Zoom Selected Object is used to quickly show the selected object at its maximum possible zoom size, making it easy for you to edit the area or line. This tool is a one-time command so there is no need to deactivate it with a right click.



Using Zoom Selected Object

1. **Left click** on the  **Zoom Selected** icon from the Zoom toolbar.
Or
Select **View** then **Zoom**. When the sub-menu opens, click on **Zoom Selected**.
Or
Press the letter **[Z]** on the computer keyboard.

Zoom Undo and Redo

Zoom Undo and Redo allow you to quickly move back and forth between the most recent zoom views of the design.

Using Zoom Undo and Redo

1. After using any of the previously explained zoom tools, **left click** on the  **Zoom Undo** icon to go back to the previous view of the design.
2. After using Zoom Undo in step 1 above, **left click** on the  **Zoom Redo** icon to return to the previous zoom view.

The Navigator Window

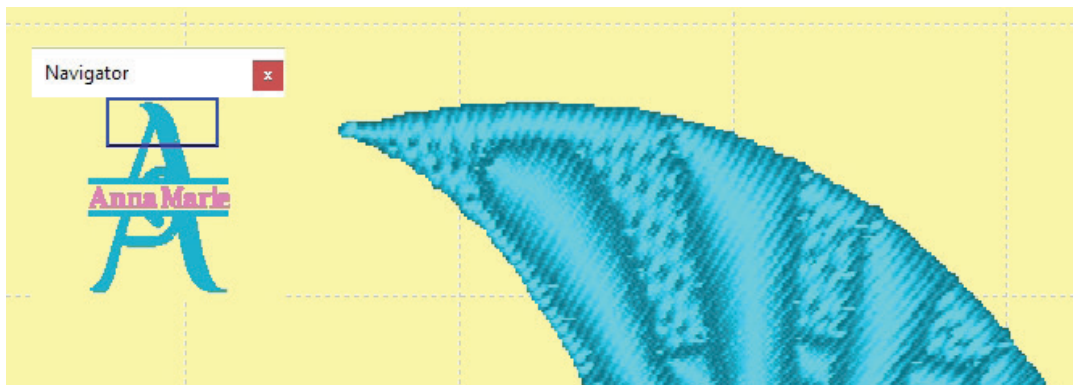
The **Navigator** window provides a visual display of the whole design at a reduced size. It's like having a 'picture in picture' view of the design and provides a complete view, even when your work area window is showing only part of the design.

You'll see a blue outlined box in the **Navigator** window. You can move the blue box around the image displayed in the **Navigator** window to view sections or areas of your design.

For example, if you are zoomed in on an area and wish to view another area of the design, you may move the blue box to the next area you wish to view. You will not need to **Zoom Out** and then **Zoom In** to view the next area.

Using the Navigator Window

1. To open the Navigator, select **View** then **Navigator**.
Or press **[F3]** on the keyboard.
The **Navigator** window opens, showing you the complete design.



2. To move the display to a new position, place the mouse cursor over the blue navigator box. **Hold down** the **left mouse** button while you drag the box over the desired area in the design.


Note: You can resize the Navigator window to take up less room on your desktop by dragging the window to the desired size, vertically and horizontally.

3. To **close** the Navigator, click on the  icon located in the upper right corner of the **Navigator** window.

The Stitch Player

The **Stitch Player** gives you a way to see the design sequence exactly as it will stitch out on your machine.

Using the Stitch Player

1. After you have generated stitches for a design, left click on the  **Stitch Player** icon.

Or

Select **View**, then **Stitch Player** from the menu bar at the top of the screen.

Note: When you open the Stitch Player, the design displays at the zoom ratio selected in the main work area window. Use any of the Zoom Toolbar options to change the zoom ratio while in the Stitch Player.

2. A new toolbar displays on the screen. This is the **Play** toolbar. The controls on the **Play** toolbar are similar to VCR Controls.



3. To Move Forward:



Play: moves forward through the design until it is released.



Fast Forward: moves forward based on the selected stitch increment count.



Stitch Increments: Fast forward by 10,100, or 1000 stitches.



Color: move through the design by color changes.



Unit: move through the design by unit or section even if they are the same color.



End: move instantly to the end of the design.



Auto Play One Stitch: automatically shows the design like a video at a steady speed.



Auto Play Stitches: plays the stitches at a faster speed, based on a selected stitch count. An increment of 10 stitches per second plays slower than 1000 stitches per second.

4. To **Pause** during play stitches, just click on the **Auto Play** icon in use. Clicking the icon a second time restarts the stitch player where it left off.

5. To Move Backward:



Reverse Play: moves backward through the design until the icon is released.



Fast Reverse Play: Moves backwards at the increment selected in the **Play** toolbar.



Stitch Increment: Fast reverse by 10,100, or 1000 stitches.




Color: move backward through the design by color changes.



Unit: move backward through the design by unit or section even if they are the same color.



Beginning: move instantly to the beginning of the design.

7. If desired, click the  **Show Shadow** icon to display a shadowed design view behind the stitches.

- A representation of the entire design is shown selected in **View Preferences**.
- As the stitches play, they are filled in with the appropriate color.

8. To Exit the Stitch Player:

Left Click on the  **Stitch Player** icon.

Or

Press **[Esc]** on the keyboard.

Design Information

The **Design Information** dialog box shows you details about the design and allows you to add custom information to be included on the Print Worksheet.

Viewing Design Information

1. In the menu bar, select **View** then **Design Information**.
The **Design Information** dialog box displays.

Design Information (mm)

Design Name: orangeslice

Design Size: 99.60*88.00 mm

Last saving Date/Time: 2003-07-09 05:04:00

Designer Name: Bernadette Griffith

Customer Name: Generations

Order No: #####

Machine Settings: Default.mst

Design Info Note:
Enter Important information here
such as fabric settings and backing
options.

Machine Settings Needle Control Stitching Time Thread Colors OK

- If you had previously saved the design, the name will appear in the dialog box along with the design dimensions and date it was last saved.
2. If desired, you can add additional information in the **Design Notes** section. Up to **120 characters** can be typed into the box.
 3. If desired, you can type the customer name and order number in the appropriate boxes.
 4. If desired, click on the **Machine Settings** button to custom configure the embroidery machine settings.

Machine Settings are used to calculate the **Stitching Time** estimate.

Machine Settings/Edit (mm)

Machine Settings File Default

Stitch Length

Maximum Move Length: 12.70

Minimum Move Length: 0.10

Maximum Jump Length: 12.70

Speed

Hi-Speed: 600.00 Circle/Minu

Low-Speed: 300.00 Circle/Minu

DelayTime

Stop: 60 Second

Needle Up: 3 Second

Trim: 3 Second

Change Color: 10 Second

Frame: 0 Second

OK Save As Cancel

- The default settings are based upon the average stitch lengths and speeds of home embroidery machines. You may adjust these numbers for your particular model.
5. If desired, left click on the **Stitching Time** button to view an estimate of the time needed to stitch the design.
 6. If desired, left click on the **Thread Colors** button to view the list of thread colors selected for this design.

- To the right of the color chips and description, you'll see an estimate of the amount of that color thread needed to complete the design.
7. When you are finished viewing or customizing the **Design Information**, left click on the **OK** icon to exit.

The Color Bar

The **Color Bar** is located on the left side of the work area window, beside the **Sequence Viewer**. This tool displays the thread colors in your design, in the order in which they will be stitched.

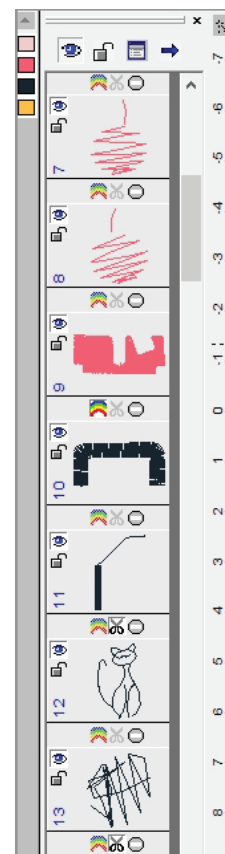
The **Color Bar** also allows for quick selection of design sections for editing, thread color changes and color sorting of the design.

You can also match thread colors. To select sections by color in the design, change the color of selected objects to an existing color on the **Color Bar**, simply **right click** on the color chip that you would like the objects to be changed to.

The Sequence View

The **Sequence View** bar is located on the left side of the work area window. This tool displays the area and lines in the design, in the order in which they will be stitched.

The **Sequence View** also allows for quick selection of one or multiple areas in the design for editing, stitch property settings or deletion. There are many more functions in this toolbar which will be covered in-depth throughout the manual.




The Thread Library Bar

If you activated the Thread Library option in View Preferences. The Thread Library bar is displayed at the bottom of the screen.




The Thread Library allows you to choose a color from the thread manufacturer's catalog for each section in the design. The thread number for the selected color will be included on the print out of the design.

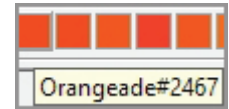
You can click on the thread manufacturer icon  to quickly change between the available manufacturers.

You can click on the thread catalog icon  to view the full catalog list, with color chips, reference numbers and color names for the current manufacturer.

Scroll slowly through the colors using the arrows on the right and left side of the Thread Library Bar.

Scroll quickly through the thread colors using the  slider bar to the right of the thread library, or pressing and holding the mouse button over the arrows on the sides of the slider bar.

Move the mouse over one of the **color chips** to see the thread name and color number.



Thread Catalogs


Generations™ software includes the catalogs of many popular thread manufacturers. If you are using a Thread Catalog, your design is shown in the colors available in the selected catalog as soon as you generate.

The colors found in a selected Thread Catalog are on the **Thread** bar at the bottom of the program window.

Using the Thread Catalogs

1. Before using a **Thread Catalog**, you'll want to select the catalog for the thread manufacturer you most frequently use. **Generations™** has 130+ thread manufacturer's thread catalogs included in the program.


Note: You can change catalogs at any time. The thread colors in your design will automatically change to match the closest color in the new catalog.

2. **Left click** on the  **Thread Catalog Selection icon**.
 - A pop-up menu opens on screen, displaying all included thread catalogs.
3. **Left click** on the **name** of the desired catalog in the list.
 - If necessary display more catalogs by using the arrows at the top and bottom of the thread list.
4. Select the area of the design that you want, using a **right click**.
 - To select a thread color, move the mouse over the color chips on the **Thread Library Bar**.
5. Click on the desired color chip and the The selected area of the design is instantly changed to the new color.
 - If your embroidery machine is capable of displaying a thread catalog, the colors on the machine screen should be similar to the colors in your design, but may not be an exact match due to machine firmware and the age of the installed thread catalogs.

Create a Custom Thread Catalog

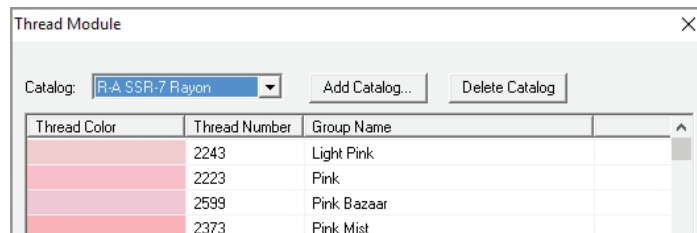
You may want to customize a particular **Thread Catalog**, or you may own threads from more than one manufacturer. **Generations™** software allows you to customize the **Thread Catalogs** to suit your own purposes.

Customizing a Thread Catalog

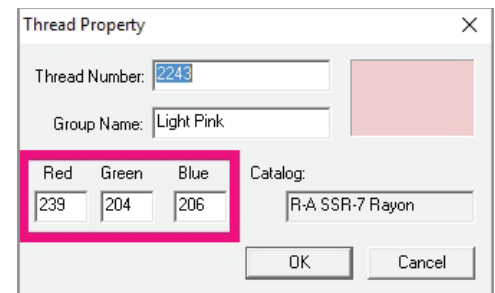
1. Left click on the  **Thread Library Options** icon at the far left side of the thread bar. The **Thread Module** dialog box opens, displaying the selected thread library.
2. To change to a **different catalog**, **left click** on the **black arrow** next to the current catalog name, then left click to choose a new catalog from the drop down list.

Note: This does NOT change the selected catalog in the program. The Thread Module is for editing and adding threads. To change the default thread catalog, use the View Preferences menu. To change to a different thread catalog for the current design, use the Thread Library icon as explained in the previous section.


3. You can **sort** a catalog by **Thread Color**, **Thread Number** or **Group Name**. The **Sort** option is controlled by the title bar headings.



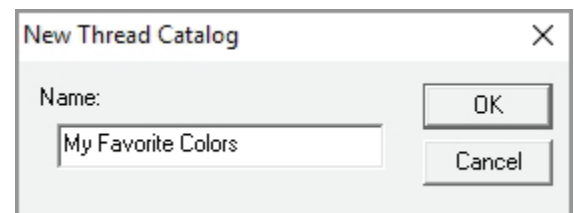
- If you **click** on the **Thread Number** title bar **once**, the list is sorted from lowest to highest number.
 - If you **click** on the **Thread Number** title bar a **second time**, the list is sorted from highest to lowest number.
4. To **edit an individual thread** color, **double click** on the thread listing line. The **Thread Property** dialog box displays.
 - If desired, you can type in new information for the thread number and **Group Name**. You can also change the thread color, using the Red, Green, and Blue numbers.



Creating a Personal Thread Catalog

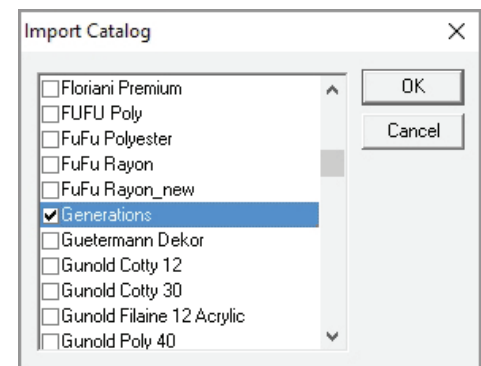
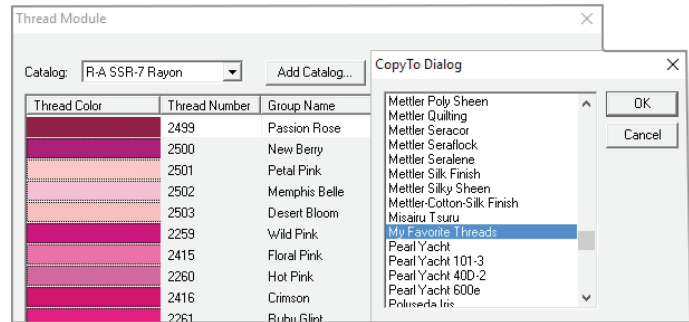
1. Left click on the  **Thread Library Options** icon at the far left side of the thread bar. The **Thread Module** dialog box opens, displaying the selected thread library.
2. Click on the **Add Catalog** button.

- The **New Thread Catalog** box opens. Type a name for your catalog on the text line, then click on **OK** to close the box.
- The **Thread Module** box now shows your new catalog name in the selected catalog box, and you'll notice that there are no threads listed. Your catalog is empty until you add some threads to it.



3. Click on the **black arrow** next to your **catalog name**. In the drop down list, left click to select a different catalog. It will open in the **Thread Module** window.

4. Select the thread colors that you want to add to the catalog created in step 2.
 - **Left click** on one of the thread color chips.
 - Then, **press and hold** the **[Shift]** key and **left click** on a second color chip a few lines below the first one.
 - All of the threads between the first and last are highlighted, showing that they are selected.
 - **Press and hold** the **[Control]** key, then left click on a color chip a few more lines down in the list. That line is also highlighted, showing that it is selected.
5. When you have selected the desired thread colors, click on the **Copy To** button.
 - The **Copy To** dialog box opens, displaying the available **Thread Catalogs**.
6. **Left click** on the **catalog name** you created in step 2, then click on **OK** to copy the threads to it.
7. Repeat steps 3 to 6 to add threads from various manufacturers to your custom catalog.
 - If desired, you can also copy a complete catalog into your custom thread catalog.
8. At the top of the **Thread Module** window, left click on the black arrow next to the catalog name, then select the custom catalog you created in step 2. If you followed steps 3-7, it should now contain some threads.
9. Click on the **Import** button. The **Import Catalog** dialog box displays.
10. Click to **place a check mark** in the box next to the thread catalog you want to import.
 - You may select as many catalogs as you need to import.
11. Click on **OK** to import the selected catalogs into your custom catalog.



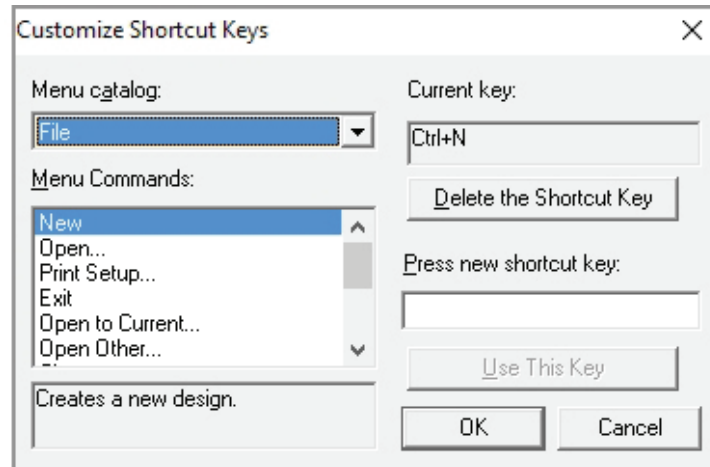
Customizing Keyboard Shortcuts

Generations™ software has many keyboard shortcuts for functions in the program. If desired, you can create your own customized keyboard shortcuts. Customizing the keyboard shortcuts allows you to set the keyboard commands to match a familiar set of commands from another program.

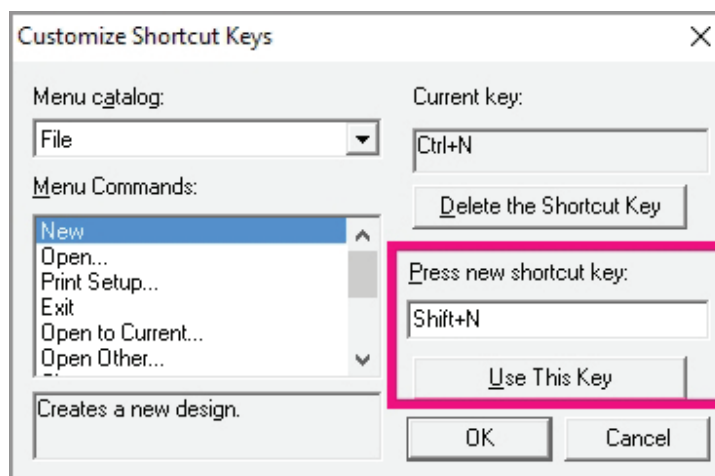
Keyboard Shortcuts

1. Click on **Help** on the **Menu Bar**.
2. Scroll down to select **Keyboard Shortcuts**, or press and hold the **CTRL** key and the **K** key.

- A new dialog box will appear on your screen called **Customize Shortcut Keys**.



3. The **Menu Catalog** will allow you to change between the different Menus available in Generations. Each Menu will have different **Menu Commands** to choose from.
4. To change the **Menu Catalog**, **Left Click** on the drop down arrow next to the **Menu** that is currently selected. A drop down box will appear with the different menus that you are able choose from. Click on the **Menu type** that you would like to change.
5. The **Menu Commands** box is associated with the **Menu type** that is selected.
 - The **Menu Commands box** has a scroll bar to scroll through the different commands available within the selected Menu type.



6. To choose a **Command** to customize (program), click on the appropriate command to highlight.
7. Once the command is highlighted, there is a quick description of what the command's function is below the Menu Commands box.
8. The **Current key** box displays what the current shortcut key is.
9. To **delete** this shortcut command and program your own, click on the **Delete Shortcut Key** button.
10. To input the new shortcut key, type in the new key. If you would like to use the **SHIFT**, **CTRL**, and/or **ALT** keys as part of the shortcut key, hold down the appropriate key(s) while pressing the desired letter key on the keyboard.

11. When you have input the desired new shortcut key, **Left Click** on the **Use This Key** button to program the new key.
12. Click **OK** to input all your changes. To cancel any changes, click on the **Cancel** button.

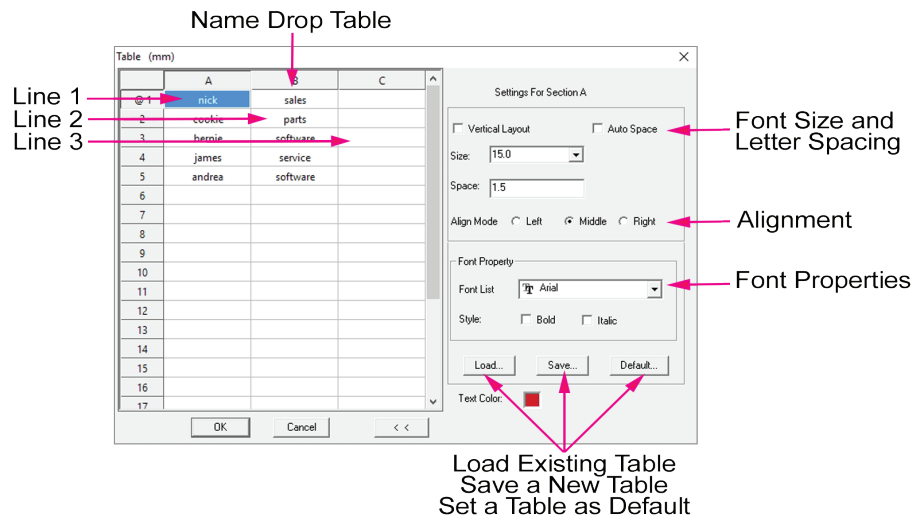
The Name Drop Toolbar


The **Name Drop** feature lets you open a design, such as a logo, and add multiple names, to the design at one time. This time saving option allows you to load one design into the embroidery machine for all names in the **Name Drop Table**. Embroider one item, then place the second item on the embroidery machine and embroider the second item. Repeat this process for all entries from the table.

The **Name Drop toolbar** has two sections.



The  **Name Drop** icon opens the Name Drop Table and Settings dialog box.



The  drop down box allows you to select one of the entries in the **Name Drop Table** for viewing in the work area window.

For instruction on using the Name Drop option, refer to Chapter 7 of the user manual.

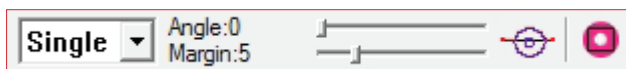




Note: Name Drop is only available in the PRO software version.

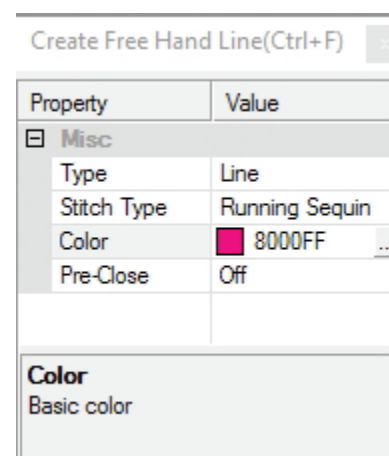
The Sequins Toolbar

Some commercial embroidery machines are equipped with a sequin device that drops sequins onto the fabric as it stitches. **Generations™** professional software allows you to digitize designs for compatible machines.

1. To use the **Sequin Toolbar** settings, a **Running Sequin Line** must be created using the **punch tools**.



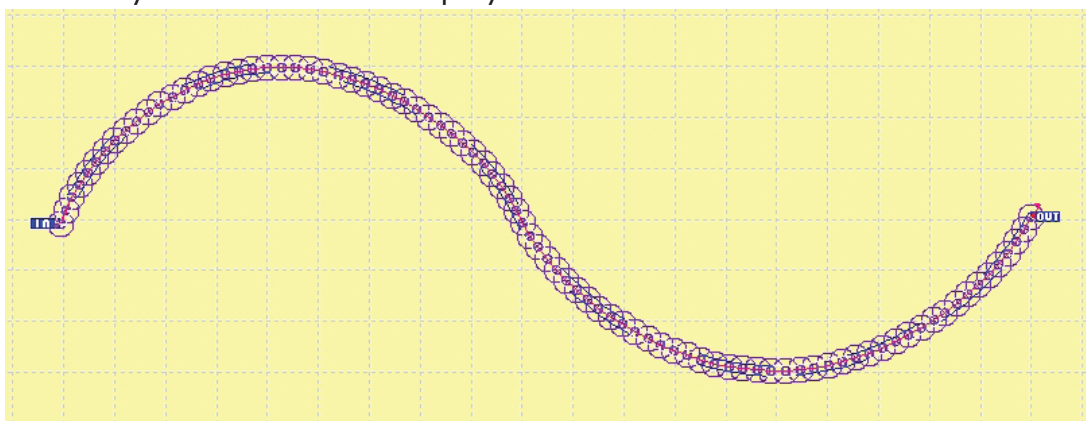
2. Select  **Create a Freehand Line** from the **Create toolbar**.
3. When the **Create a Freehand Line** punch properties open, click on the **Stitch Type** option.
4. Click on the **black arrow** next to the option and a drop-down menu will appear. Select the **Running Sequin** from the **Stitch Type** options.
5. Create the **Running Sequin** line in the work area.
6. Press **[ESC]** to turn off the inputting tool.
7. Click on the  **Generate** icon.




Or

Press **[F9]** on the keyboard.

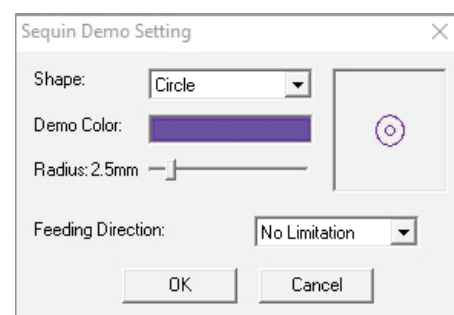
- The newly created line will display in the work area.



Click on the  **Sequins Demo Settings** to change the color and shape of the sequin display. A dialog box will open on the screen.

Click on the **black arrow** next to the **Shape** option to select a sequin shape.

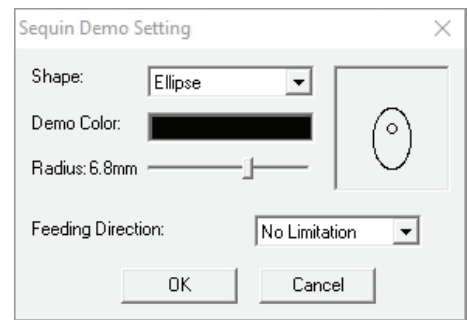
Included shapes: Circle, Rectangle, Triangle and Ellipse



Demo Color changes the color of the sequin for display on the work area screen.

The **Radius slider** scales the sequin size. This should be set to match the size of the sequin that will be attached to the garment or fabric.

- Stitch length and spacing settings can be set in **Object Properties**.



Feeding Direction is not important. This option generates the least number of fixing stitches at the start of the line, but may not be suitable for your machine. This should be used by experience digitizers only.

- When all option have been set, click **OK** to apply them to the line.

Click on the **black arrow** next to the **Lock Style** option. These options allow sequins to be attached or locked in various ways. Select the desired option and it will be applied to your **Running Sequin Line**.



The **Angle Slider** controls the angle of the attaching stitching.



The **Margin Sliders** ensures that the needle will not penetrate the sequin.

- If the margin is set to low the selected **Lock Style** will not be applied.
- Sequins can be hanging, overlapped or spaced on the line.
- For more control over the **Running Sequins Line**, use the settings in the **Object Stitch Properties**.



Note: Running Sequin Lines are only available in the PRO software version.

Chapter 4

Digitizing With Images

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Overview

Creating an embroidery design in **Generations™** begins with inserting an image. The image is the start point for the automatic digitized designs that you create. A higher quality image file results in a better automatically digitized design -- meaning you have to do less editing.

Generations™ has advanced image processing that recognizes areas and outlines for accurate reproduction when creating the design. **Generations™** also has optical color recognition, which will accurately match **all colors** in the image file. You can decrease the number of colors by selecting the colors or selecting a specific number of colors you want recognized.

You can insert images stored in any one of the following popular graphic formats:

- .BMP (Windows Bitmap)
- .JPG (JPEG Bitmap)
- .TIF (Tagged Image Format)
- .EMF (Enhanced Metafile)
- .GIF (CompuServe Bitmap)
- .PNG (Portable Network Graphic)
- .WMF (Windows Metafile)
- .PCX (ZSoft Paintbrush)

A bitmap image is made up of dots (called pixels) that represent the graphic, with each bit corresponding to a pixel in the image. Images stored in .bmp, .gif, and .jpg formats are all different types of bitmap files. Images stored in Windows Metafile and Enhanced Metafile formats will give the best results. These are both color vector images, which are comprised of lines that represent the objects.

Generations™ is capable of viewing additional vector formats, these formats need to be converted to .WMF or .EMF for vector image insertion.

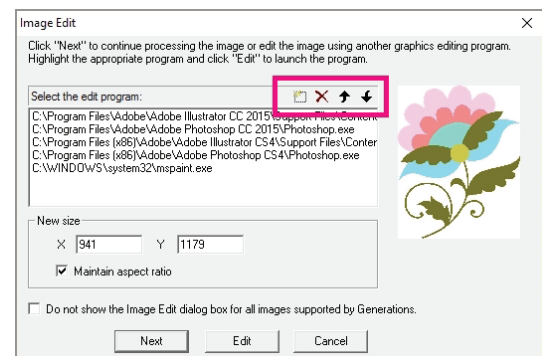
- Adobe .PDF
- All AIT Files (*.AIT)
- Autocad Files (*.dwg)
- CorelDraw Drawing (*.cdr)
- Imagaro Files (*.vec)
- Kodak Photo CD (*.pcd)
- Photoshop (*.psd)
- Tagged Image Format (*.tif, *.tiff)
- Windows/CompuServe (*.rle)
- CompuServe Graphics Interchange (*.cgm)
- Adobe Scalable Vector .SVG
- All PDD Files. PDD
- Autodesk Drawing Exchange (*.dxf)
- Encapsulated Postscript (*.eps, *.ai, *.ps)
- Kodak Digital Camera File (*.kdc)
- Paint Shop Pro (*.psp)
- Raw File Format (*.raw)
- Truevision Targa (*.tga)
- Windows or OS/2 DIB (*.dib)

Working With Vector Formats

When vector format images are opened into the Image Processing in **Generations™** the **Image Edit** dialog box will open automatically.

The **Image Edit** dialog box displays a list of graphic editing programs installed on your computer system.

Use the icon bar to add add or remove programs from this list. Use the Up and Down arrows to arrange the order in which these programs display.



To edit the image, click on a program in the list capable of editing the image format.

Click on the **EDIT** button and the image will open in the selected program.

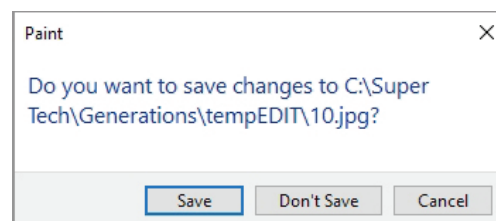
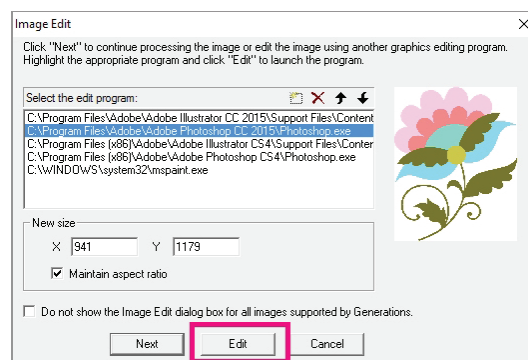
When editing is completed, click on the "X" at the top corner of the editing program or the image file to close the file.

Note: The original image will not be altered during editing. The edited image is saved in a tempfile and deleted when the program is closed.

You will receive a message asking if you would like to save the edited file to a temporary folder.

Click on the **YES** button and the edited file will be automatically inserted into the image processing.

If you are satisfied with the image after editing, click on the **NEXT** button and the image will be inserted into the Image Processing and ready for digitizing.



Insert an Image

Images can be inserted from three sources:

- From files stored on your computer hard drive, floppy diskette, CD-Rom or a removable hard drive.
- From a scanner
- From a digital camera

Inserting an Image

1. Click on the  **Insert Image icon** in the **Create toolbar**.

Or

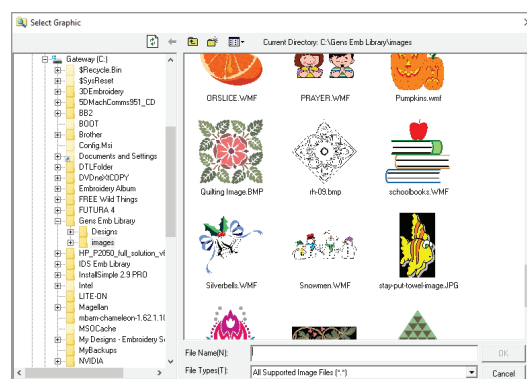
Select **Create** from the menu and then **Insert Image**.






Or

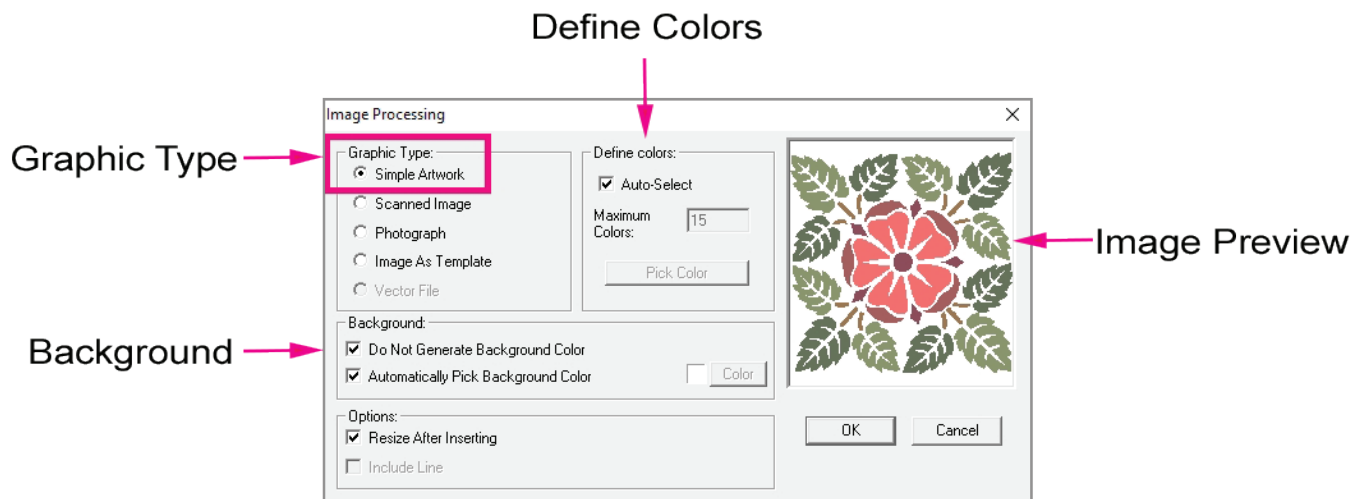
Press **[CTRL]+[I]** on the computer keyboard. The **Select Graphic** dialog box opens.

The folder tree displays on the left side of the dialog box. Thumbnail previews of the images from the selected folder display on the right side of the dialog box.

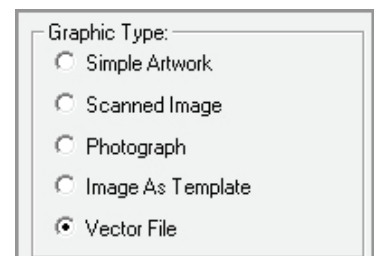
2. Additional icons at the top of the dialog box let you easily move through and control folders on the computer.



- Click on the **Refresh** icon  to refresh the view of files and folders on the computer, if you seem to be missing files or the thumbnails appear garbled.
 - Click on the **Return** icon  to return to the last folder you had viewed.
 - Click on the **Up One Level** icon  to move up one level in the folder tree.
 - Click on the **New Folder** icon  if you would like to create and name a new folder. Enter the desired folder name and click OK to create the new folder or Cancel to cancel the folder creation.
 - Click on the **Sort Menu** icon  to control how the files are sorted in the preview window. In the pop-out menu, choose the desired sort method and the window will instantly refresh.
3. To insert images located in a different drive or folder, select the desired drive and folder from the tree on the left. The thumbnail previews of the images stored in that folder will display on the right.
 4. Once you have located the image you want to insert, place the mouse pointer over its thumbnail, and quickly **double click** with the **left mouse** button to select it.
 - The **Image Processing** dialog box opens.
 - **Image Processing** in **Generations™** is automatic. The software automatically selects the best choice for the image inserted.

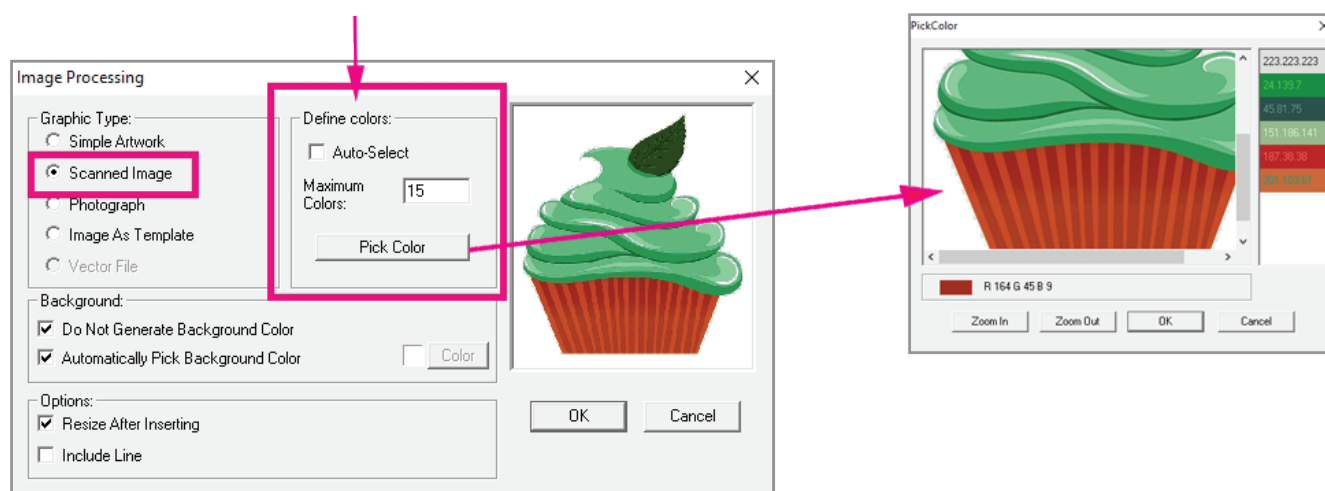


5. The **Graphic Type** option at the top left of the dialog box shows the selected image type. **Generations™** will normally detect if the source image is a **Simple Artwork** image, **Scanned Image**, **Photograph** or **Vector File**.
 - If you want to change the selected image type, just click in the **button** for the desired option.
 - If you want to bypass **Generations™** automatic image processing to manually digitize a design, select the option for **Image as Template**.



- The image is inserted but **Generations™** will not automatically **generate** stitches. You will need to use the **manual digitizing tools** in the **Create** toolbar or select areas with the **Magic Wand** to insert stitches in the design.
6. The section titled **Define Colors** determines the number of colors in the design.
- By default, **Auto-Select** is checked and the **Maximum Color** box is dimmed or inactive. This means that **Generations™** will automatically determine the proper number of colors for the design, based on the colors in the image.
 - In most cases, you should leave these settings at their default values.
 - In some cases you may wish to define the total number of colors that will be used in the design. In that case, **deselect** the **Auto-Select** option and **enter the number** in the **Maximum Colors**.
- The **minimum color number** is **2**.
 - The **maximum color number** is **254**.

Define Colors



Note: The background color is a color and should be selected when defining image colors. Defining colors means that similar colors will be matched, based on the colors selected, to the closest color match.

- Generally this option is selected when you wish to **reduce the number of colors** and thread changes in the design.
- If you wish to control the colors in the design you may select exactly what colors are needed using the **Pick Color** option.
- The **Pick Color** option opens a window where you use the **eyedropper** tool to click on and select the exact colors you wish to have in the design.
- If a color is selected in **error** you may **remove** it from the selected color list by **clicking on the color chip** and pressing **[Delete]** on the keyboard.
- When you have selected all the colors, click on **OK** to return to the **Image Processing** dialog box.

Tip: The Pick color option will only allow you to select the number of colors in the Maximum Colors box. If you wish to have more colors than the default setting of 15, change the Maximum Color number before using the Pick Color option. Generations will only select colors in the image file. You can not create colors.

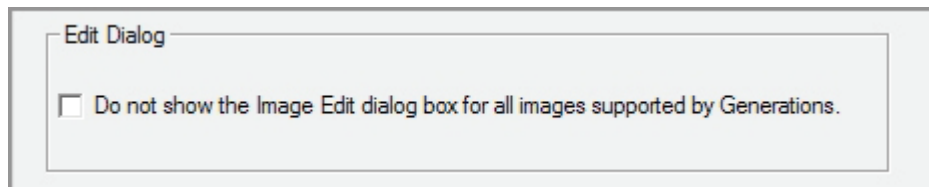
7. The section titled **Background** determines which color in the image file should be treated as the background color.

- The default value, **Automatically Pick the Background Color**, shows the color detected as the background in the color chip next to the option. In most cases this will be white.
- This option works in conjunction with the next option titled **Do not Generate Background Color**.
- The option **Do Not Generate Background Color** is selected by default and **will not produce stitches** for the color that is seen in the **Automatically Pick Background Color** section.



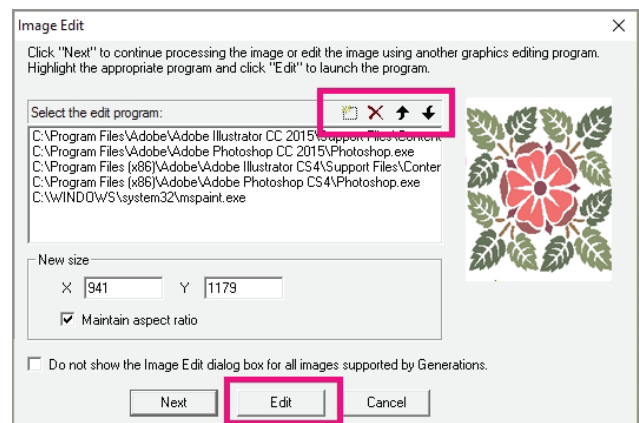
Tip: If there are areas in your design that did not generate because they are the same color as the background color, you can select the areas and generate them after inserting the image.

8. The section titled **Options** contains additional image processing choices. These Options are controlled by a setting in the **General tab** of the **View Preferences**.



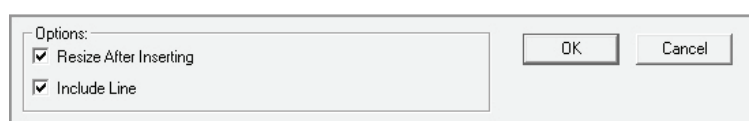
- **Edit Graphic Before Image Processing** lets you open the image into an external image editor before inserting in the program.
- If you wish to have the option to edit all images prior to insertion into the Image Processing, remove the checkmark in the **Edit Dialog** option.
- **Generations™** will automatically detect any external image editing software programs installed on your computer. Once you insert an image, the **Edit Image** dialog box will automatically open for all images.
- To edit the image, click on a program in the list that will be capable of editing the image format.
- Click on the **EDIT button** and the image will open in the selected program.
- When editing is completed, click on the **"X"** at the top corner of the editing program or the image file to close the file.

Note: The original image will not be altered during editing. The edited image is saved in a tempfile and deleted when the program is closed.



- You will receive a message asking if you would like to save the edited file to a temporary folder.
- Click on the **YES** button and the edited file will be automatically inserted into the image processing.
- If you are satisfied with the image after editing, click on the **NEXT** button and the image will be inserted into the **Image Processing** window and ready for digitizing.
- **Resize After Inserting:** The option is checked on by default, allowing you to change the size of the image before generating stitches.
- The **Resize** dialog box will open automatically after **Generations™** processes the image. You may enter a new size, or select **OK** to insert at the current size.

Tip: Deselecting this option will not prohibit you from being able to resize the image in the program.

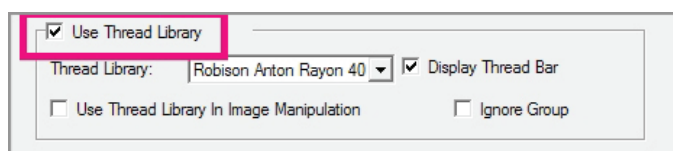


- **Include Line:** This option should be selected when using a graphic that will be processed as a scanned image. Selecting Include **Line** will improve **thin outline recognition**.

9. After you have set all options in the Image Processing window, click on the **OK** button. **Generations™** will complete image processing and convert the image to outlines.

Thread Colors for Auto-digitized Designs

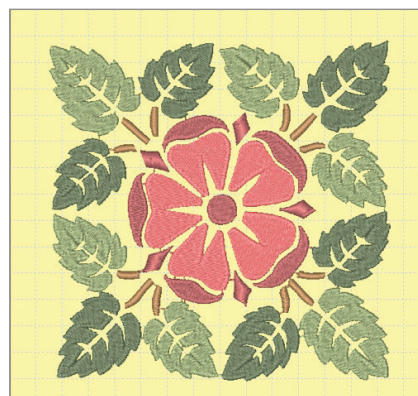
Thread color in the design is controlled by a setting in the **General tab** of the **View Preferences**. By enabling the **Use Thread Library** option, colors are limited to the number of thread colors in the selected thread catalog.



This selection can have a dramatic effect on the appearance of the design when automatic digitizing is completed.



Created with a Thread Catalog Enabled



Created with No Thread Catalog

Disabling the **Thread Catalog** will allow the design to be digitized in the **RGB** value of the image instead of matching the color to the closest RGB thread color in the Thread Catalog.

No matter which option you choose, you can always select different thread colors for your design, as desired, at any time.

Working with Scanned Images

Inserting an image directly from a scanner requires that a **TWAIN** driver be installed on your hard drive. If you have more than one scanner or you have additional TWAIN drivers on your system you will need to select the TWAIN source you wish to use from the File menu.


TWAIN drivers also include many digital cameras and all-in-one scanner/fax/printers. You may select one of the drivers for these devices and insert images from your digital camera.

Selecting the TWAIN Source

1. Click on **File** from the menu then **Select TWAIN Source**. A small dialog box opens, displaying all the TWAIN Drivers located on your system.
2. In the list, select the **TWAIN Driver** for the scanner to be used to insert the image.
3. Click on the Select button to set the TWAIN source to be used for scanning into the **Generations™** image processing.

Note: Twain sources, such as scanners, are only as good as their driver software. It is a good idea to visit your scanner or printer/scanner manufacturer's website and check for updated drivers. Keeping your drivers up to date will help ensure that your scanner will operate correctly with your Generations™ software.

Inserting a Scanned Image

1. Click on the  **Acquire Image From TWAIN source** icon in the **Create** toolbar
Or
Select the **Create** menu, then **From TWAIN Source**.
The scanner or camera manufacturer's interface opens on the screen.
2. Use the tools provided in your scanning software to select only the parts of the picture needed for the design. After using the **Preview** or **Prescan** feature crop any unnecessary areas to avoid scanning the entire page.
3. Click on the appropriate icon to produce the final scan (usually OK or Scan).
4. Once the image is scanned it is inserted in the **Image Processing** window.


Note: If you have scanned a two-color image, it may be seen as a Simple Artwork rather than a Scanned image. You can change this option or insert the image as Simple Artwork.

You may also select from previously scanned images stored on your hard drive, floppy, CD-Rom or removable hard drive.

Tip: Some of the more graphic clipart images may be viewed as a scanned image.

When **Scanned Image** is selected in the **Image Processing** dialog box, an additional image-processing window will open. Scanned image processing allows for more detailed editing of the image before inserting into the program.

Editing a Scanned Image in Cartoon Edit

1. Click on the  **Insert Image** icon in the **Creation toolbar** at the top of the work area.

Or

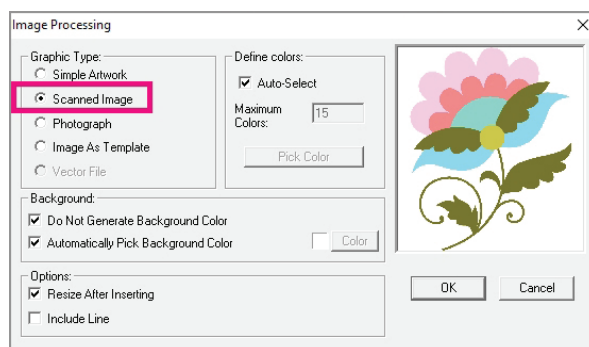
Select **Create** from the menu and then **Insert Image**.

Or

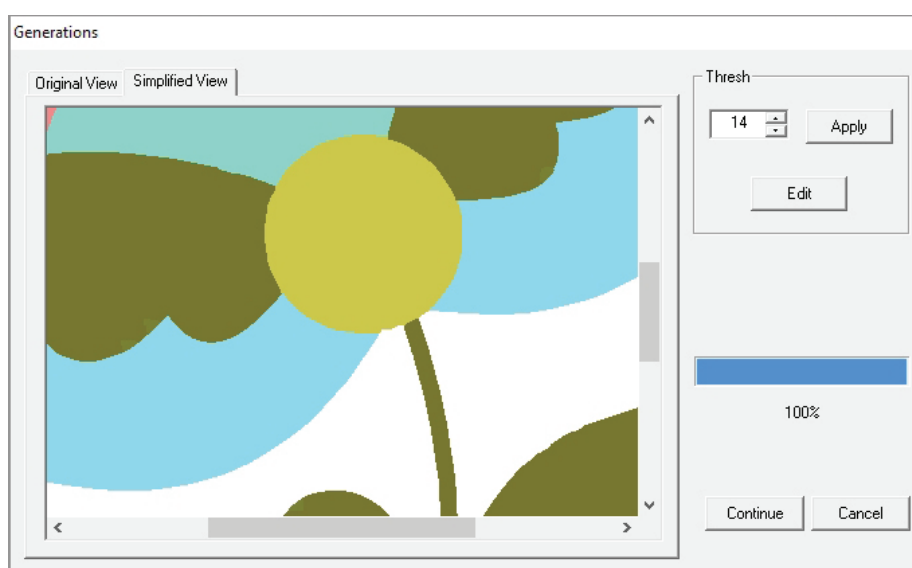
Press **[CTRL]+[I]** on the computer keyboard.

The **Select Graphic** dialog box opens.

2. Once you have located the image you want to insert, place the mouse pointer over its thumbnail, and quickly **double click** with the **left mouse** button to select it. The **Image Processing** dialog box opens.
 3. Make sure that **Scanned Image** is selected in the **Graphic Type** section at the top left of the dialog box.
- Set additional options as explained in the previous section.

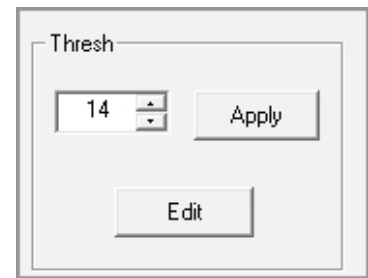


4. Click on **OK** to close the **Image Processing** dialog box.
- The **Scanned Image Preview** opens. The **Simplified View** window is active.



- At this point, **Generations™** has made an initial analysis of the image and detected its outlines based on the optimum color recognition percentage.
- If you would like to **compare** these results with the **original image**, just click on the **Original View** tab at the top left of the dialog box.

5. If necessary, you can increase or decrease the color recognition percentage.
 - In the **Thresh** box, use the arrows or type in a new number then click on **Apply** to see the results in the **Simplified View** window.

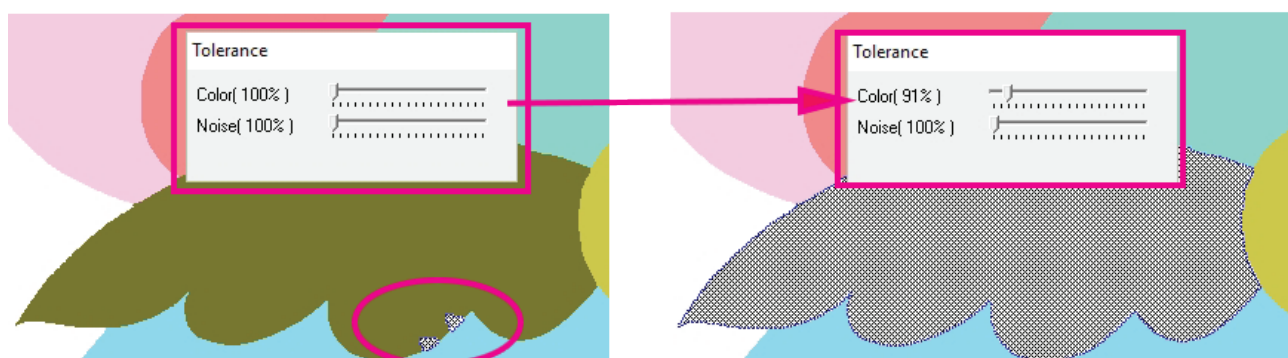



6. If you are unable to achieve the desired results using the **Thresh** Box, click on the **Edit** button to open the **Cartoon Edit** window.
 - The **Cartoon Edit** window has options similar to those in the **Image Processing** window and the other portions of **Generations™**, but offer more precise or detailed editing of the image.
 - The **Cartoon Edit** window is divided in two sections.
 - The **left** side contains the **Original View** of the image.
 - The **Simplified View** of the image is seen on the **right** side.

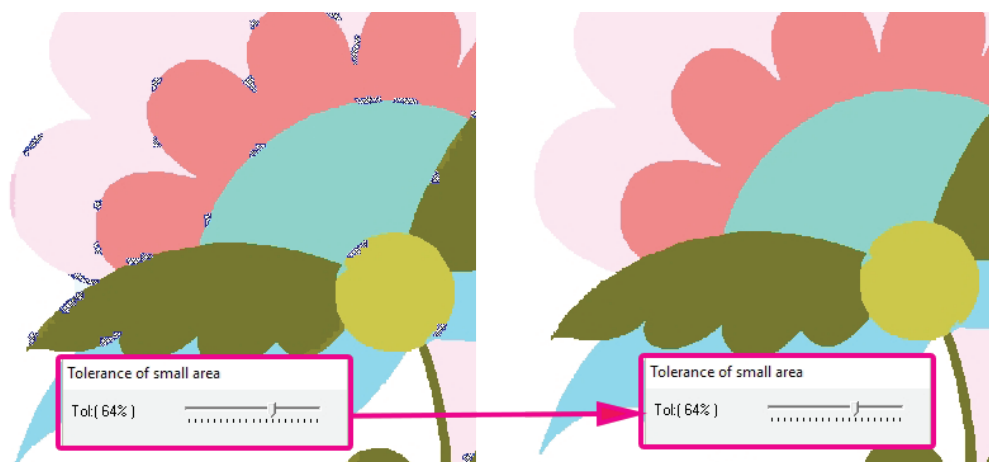


7. Select the area to edit. You may select an area from **either** the **Original Image** on the left side, or the **Simplified View** on the right side.
 - Simply place the mouse pointer over the area you want to select and **click** the **right mouse** button.
 - In the **Original Image** on the left side, the **selected area** is shown with **blue dashed lines**.
 - In the **Simplified View** on the right side, the **selected area** is shown in a **crosshatch gray** shade **surrounded by blue dashed lines**.
 - To select **multiple areas**, **press and hold the [CTRL]** on the keyboard while **right clicking** on each desired area.

- If you want to **select all areas** in a particular **color**, **left click** on the **color chip** in the **Color Strip**.
 - All areas in that color will be selected in both the original and simplified views. The editing tools can then be used to make changes to the selected areas.
8. You can also use the **Tolerance** boxes to select areas for editing. In the **Cartoon Edit** window you'll see two floating dialog boxes, the **Tolerance** box and **Tolerance of Small Areas** box.
- The **Tolerance** box allows you to specify more or less color recognition in a selected area. This can help define the areas where stitches will be placed. To use this tool, select an area as explained in step 7, then **slide** the **Color** and **Noise** bars as needed.
 - Slide the **Color** bar to the right to decrease the color recognition percentage. The program will see less division in the color areas. This may combine colors and increase the size of the selected area. The **default** setting is **100%**.



- The **Noise** bar adjusts how the image is seen. If the image you are inserting is not very clear, **slide** the **Noise** bar to the right to decrease the sensitivity of the how the program looks at the image pixels. The **default** setting is **100%**.
- Once the desired section of the image is highlighted use the  **Merge Selected Areas** to combine selected areas in the image into a single area. Areas to be merged **must be connected to each other**. Use of this tool helps decrease the number of areas created when the image is inserted and stitches are generated.
- The **Tolerance of Small Areas** box allows you select the smaller areas of color in the image. It will select all small color sections in the design.





- Use the **Merge to Closest Area** to combine selected areas with the larger area closest to them. Using this tool you would select only the areas that you want removed. They will automatically be merged to the areas that are closest to them. This tool helps reduce the areas that will be processed in the design.
- **Slide** the **Tolerance** bar to the **right** to **increase** the **percentage of color tolerance or sensitivity**. The program will detect the smaller areas of color that would produce very small stitches.

Color Management for Scanned Images

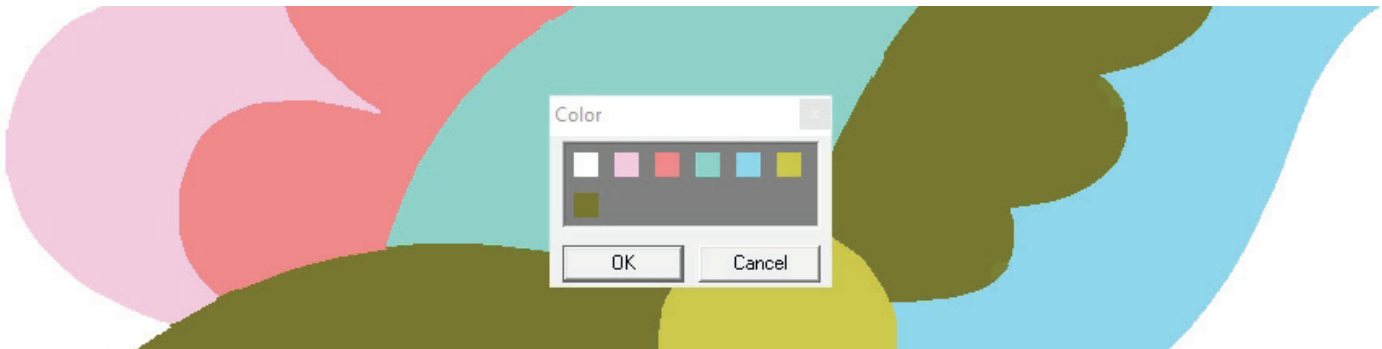
Scanned images often have more colors than needed to create a good quality machine embroidery design. This is due to the way the image is scanned and the capabilities of the scanner to see subtle differences in color shades in the image.

*The **Cartoon Image Editor** will allow you to merge colors together, but that option would be very time consuming for an image with many colors.*



9. Using the **Select Image Colors** icon allows you to control the total number of colors for the image quickly.
 - Click on the **Select Image Colors** icon to activate that tool. Move the mouse over to one of the desired colors in the image. Left click the mouse on the desired color to select it.

***TIP:** Remember to select the background color.*



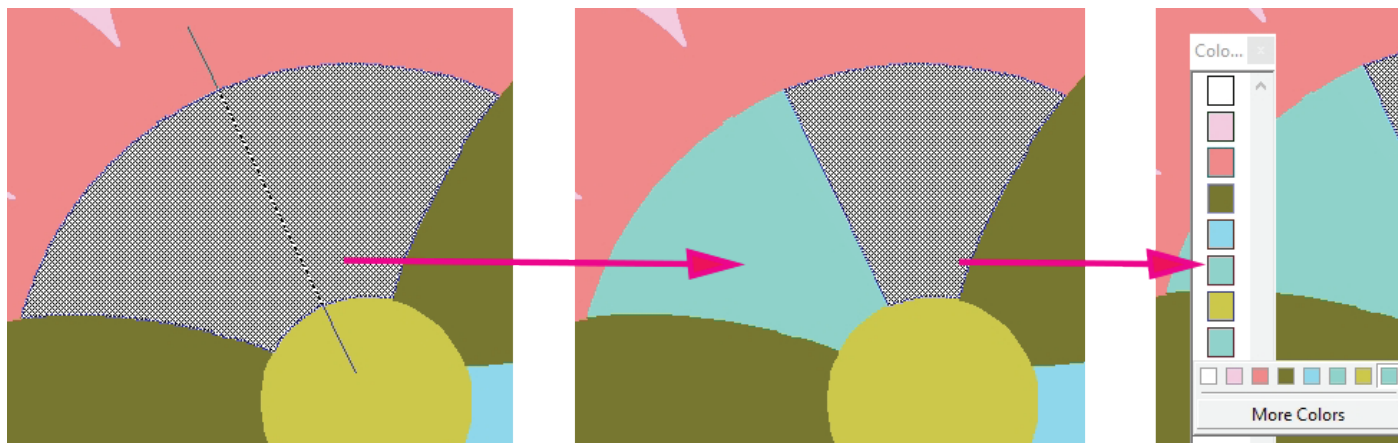
- When you are satisfied with your color selection click **OK** to apply to the image.
- If you are not happy with the color reduction, click on the **Undo** icon to undo the changes to the image.
- Want to reapply the editing, click on the **Redo** icon to redo any editing undone in the previous step.
- Use the **Zoom In** option to look more closely at the image.
- Use the **Zoom Out** option to see more of the image on the screen.

Divide Image Colors

The **Cartoon Image Editor** will allow you to divide areas in the image for better design creation. You can also add custom colors to the newly divided area.

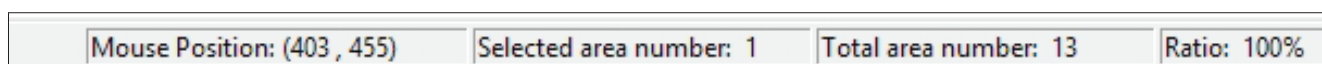
10. You can split areas apart using the  **Divide By a Line**.

- Similar to **Divide with a Line** in **View Outline mode**, this tool is used to split an area into two pieces. You can mark more than one point to place the dividing line and divide the area with more detail using this tool in the **Cartoon Edit** window.



- The new color can be selected from the colors already in the image or by right clicking on the color chip representing the selected area.
- To select one of the colors in the image, click on the color chips displayed. To add a new custom color, click on the **More Colors** button and select a new color from the Color dialog.

11. You may find it useful to refer to the **Status Bar** while you are working in the **Cartoon Edit** box. The **Status Bar** runs along the bottom of the screen.



- **Ratio** indicates the **zoom %** being used to view the image.
- The **Selected Area** number shows the total areas that you have selected.
- The **Total Area** number shows the total areas in the image that will be converted into embroidery areas or lines.

12. When all the editing changes are completed, **left click** on the  **Exit** icon at the bottom of the toolbar.

- The edited image is inserted in the **Scanned Image Editing** window.
- Click on the **Continue** button and the edited image is inserted into **Generations™** for stitch processing.

Note: If necessary, you can click on the Edit button again to return to the Cartoon Edit window and make additional changes.

13. The **Resize** dialog box opens. If desired, type in the new size value, then click on **OK**.
14. After inserting the image, **generate** stitches.

Click on the  **Generate** icon in the **Create** toolbar.

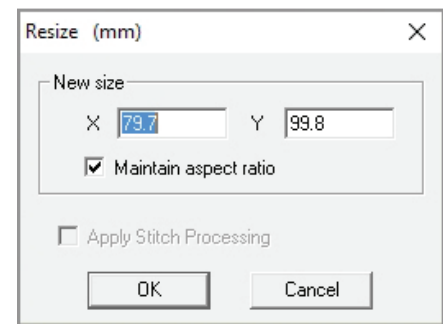
Or

Select **Accessories** from the menu and then **Generate**.

Or

Press **[F9]** on the computer keyboard.

- The **Resize** dialog box will display the Maintain Aspect Ratio option for the inserted image because **Generations™** has already defined the outlines of the areas for stitch creation.
- Once the stitches are generated, you may edit the design using the **Generations™** Editing tools. Then, save the design and export in your machine format for stitching.



Inserting an Image as a Template

If you want to bypass **Generations™** automatic image processing to manually digitize a design, select the option for **Image as Template**.

15. Click on the  **Insert Image icon** in the **Creation toolbar**.

Or

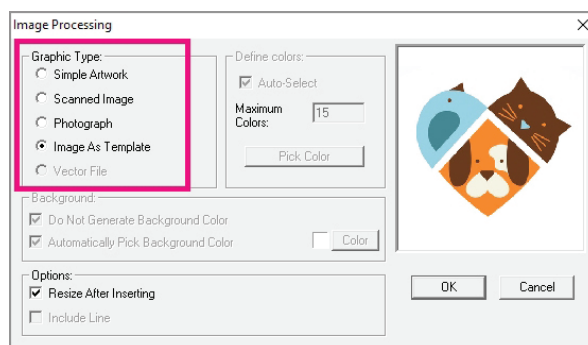
Select **Create** from the menu and then **Insert Image**.

Or

Press **[CTRL]+[I]** on the computer keyboard.

The **Select Graphic** dialog box opens.

16. Select the desired image from a location on your computer or external drive.
 - The **Image Processing** dialog will open. Select **Insert Image as Template** from the **Graphic Type**.



- Click **OK** to insert the image into the program.
- The **Resize** dialog box will open. Enter a new image size or click **OK** to insert the image into the work area.

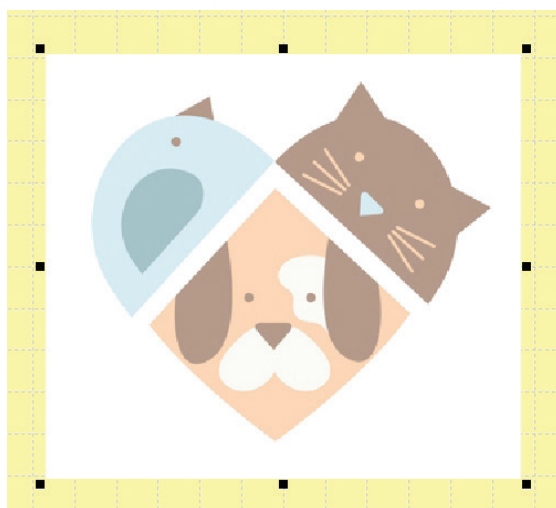
Background Image Options

When using an image as a template or viewing your image in the background, you can control the placement and intensity of the image in Generations™ Version 2.0.

Lock Image

You can **lock the image** into place on the design work area - this will prevent the image from accidental moving around on your design screen. This is great for any manual punch application.

When the image is first inserted into the work area it will be surrounded by **black bounding boxes** indicating that it is selected for editing.



- The image is inserted into the work area slightly faded to aid with manually area and line creation.
- With the image in selected mode, adjust the brightness using the plus **[+]** and minus **[-]** keys on your keyboard.
- To darken the image, use the plus **[+]** sign key. To fade the image use the **[-]** key.

Note: If you are using a laptop, you may have to use the Shift key in conjunction with the + key.

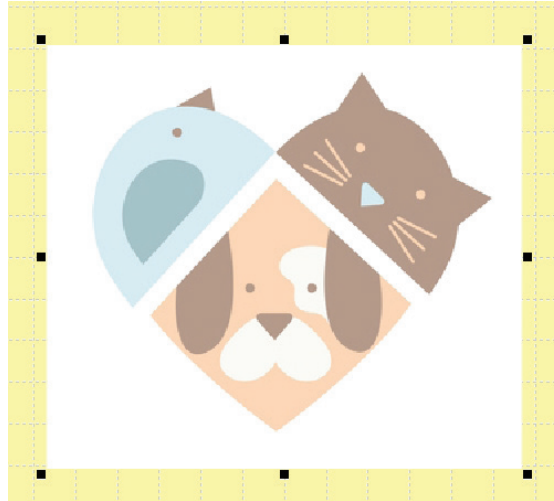
17. To **Lock** the image into place, click on the **Background Image** (image template) so that the image is surrounded by the **black bounding boxes** indicating that it is selected.
 - Select **Edit** from the **Menu Bar** and then select **Lock Image**.
 - The image is locked into place and cannot be moved around unless unlocked.
 - To **Unlock** the image, select **Edit** from the main menu and then **Unlock**.

Resize an Image

After inserting the image and setting its size, the image displays on screen with eight small black squares around the outside edges. These are called **bounding boxes**.

If you do not see the **bounding boxes**, left click on the image to select it. These bounding boxes or squares can be used to resize the image.


- The squares located on the corners of the image size the image proportionally.
- The middle squares on the sides of the box scale the image horizontally.
- The squares located to the top and bottom centers scale the image vertically.



Resizing an Image

1. To size using the squares, place the mouse cursor over the square, **hold down** the **left mouse** button and **drag** the square.
 - To **enlarge** the image, drag the square **outward**.
 - To **decrease** the **size** of the image, drag the square **inward**.

*Note: To scale the image proportionally from the center, larger or smaller, hold the **SHIFT** key as you drag the corner bounding boxes.*

- If your image has been automatically digitized and contains outlines or stitch information,  **Generate** the whole design to recalculate the stitch information for proper density and stitch settings.

Multiple Images

Inserting more than one image into the design is possible in **Generations™**. If you want to insert an image from a stored file or scanner, simply repeat the **Image Insertion Instructions** listed earlier in this chapter.

Chapter 5

Automatic Digitizing Basics

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Generate Stitches

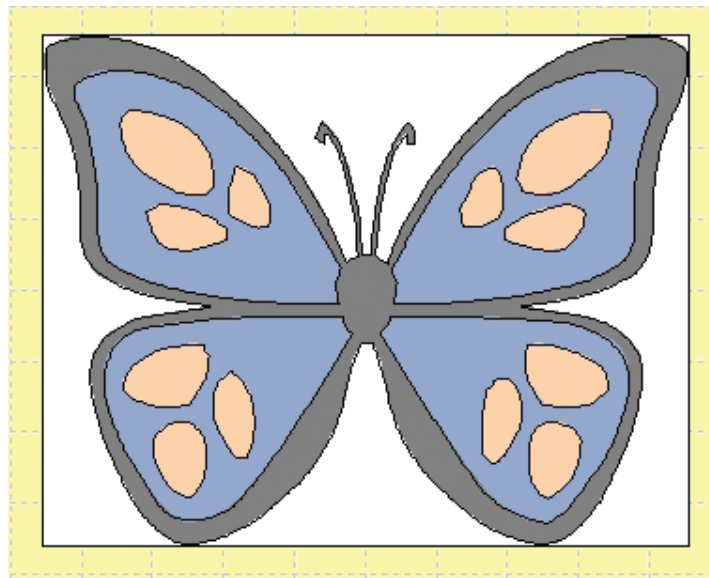
*Generate is the most important command in **Generations™** software. After an image or lettering is inserted, **Generations™** analyzes the outlines and uses them as the basis for stitches. The actual stitches are created with the **Generate** command.*

*Whenever a change is made to a section – whether it is to the stitch properties, the outlines, stitch angle, etc. – You must use **Generate** for the changes to take effect.*

Tip: Follow along by using the images in the C:\Gens Emb Library\images folder.

Generating Stitches

1. Insert the image file (as explained in Chapter 4). Only the image is displayed on screen with the wire frame box around it. There are no stitches at this point, only the image.



2. Select **Accessories**, then **Generate**.

Or

Click on the  **Generate** icon in the **Create** toolbar.

Or

Press **[F9]** on the keyboard.

- **Generations™** software begins to create stitches.
If you watch the **Status Bar** in the lower left corner of the screen, you will see the progress of stitch calculation.



- When the calculations are finished, the stitches display on screen. You can now make changes to color sequence, stitch values, stitch angles, outlines, etc., as explained in later sections of this manual.

Note: When a design is automatically digitized, the background color will not have stitches placed into the design. However the background color is technically an area in the design

- Remember that any time a section is changed, you must **Generate** again for the changes to be applied.

Tip: If you are making many changes to different sections in the design, you do not have to generate after each one. After making all changes, right click onto an empty area of the background so that nothing is selected. Then select the Generate icon. The entire design will be re-generated.

Area or Line Selection

Your embroidery design is composed of many different sections or objects. There are two types of objects: **Area** and **Line**. An **area** is a section defined by its **two opposite sides** (satin stitches) or by **points going completely around the section** (complex fill).



A **line** is a section defined by the **center line of the shape**, often created with the manual punch tool **Create Free Hand Line** or the commands **Create Outline from Area Edges** and **Create Line from Area**. A line can be filled with a single, double, or triple layer of running stitches, a satin stitch of uniform width, motif shapes, or a blanket stitch.

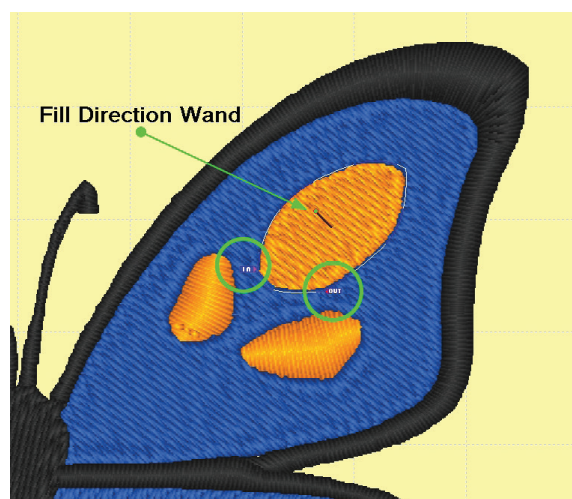
To make a change to any object, it is first necessary to select that object.

Select in Stitch View

The most common way to select an area is while in **View Stitch** or **3D Stitch View** mode.

Selecting an Area in View Stitch or 3D Stitch View Mode

- Make sure that you are looking at the design in  **View Stitch** or  **3D Stitch** **View** mode.
- Place the mouse cursor over the area or line that you want to select and **click** the **right mouse** button.



- You'll see a **blue and white flashing marquee line** going all the way around the area or line you click.
- This **blue and white line** indicates that the object is selected.
- You'll see the markers for the **In** and **Out** points of the section.

- If the area is a complex fill, you'll also see the **Stitch Direction Wand**.
- Now you are ready to make changes to that area, as explained in other sections of this manual.

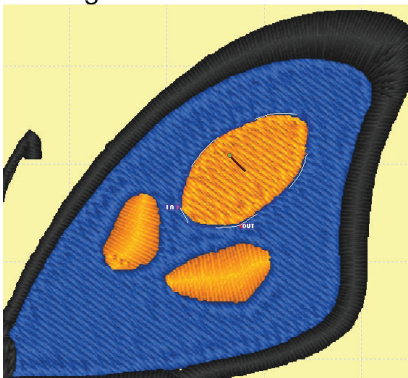
Multiple Area Selection

Often, you will want to make the same change to more than one area. Instead of selecting one section at a time, making the change, generating, then repeating the same process over again, you can select all of the areas and make changes all at once.

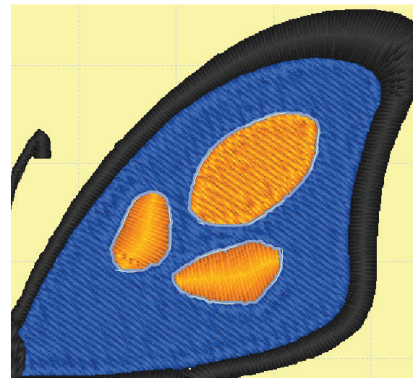
Selecting Multiple Areas

1. Follow the instructions in the previous section to **select the first area** or line. You should see the blue and white flashing marquee line around the selected area.
2. **Hold down [CTRL]** on the keyboard. Place the mouse pointer over the second area you want to select and **click the right mouse** button.
Now both objects should have the blue and white flashing marquee line around them.
3. Repeat step 2 to select as many areas as you need.

Right click on one section



Hold the **CTRL** key & **Right Click** on next sections to select.



Or

1. Place the mouse pointer slightly above and to the left of the areas you need to select.
2. **Hold down the right mouse** button while you **drag** a box around the areas you need. All areas that are completely enclosed by the box will be selected.

If an area is only partially covered by the box, it will not be selected.

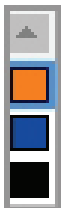
Select by Color

At times you will want to apply a change to all areas in a particular thread color.

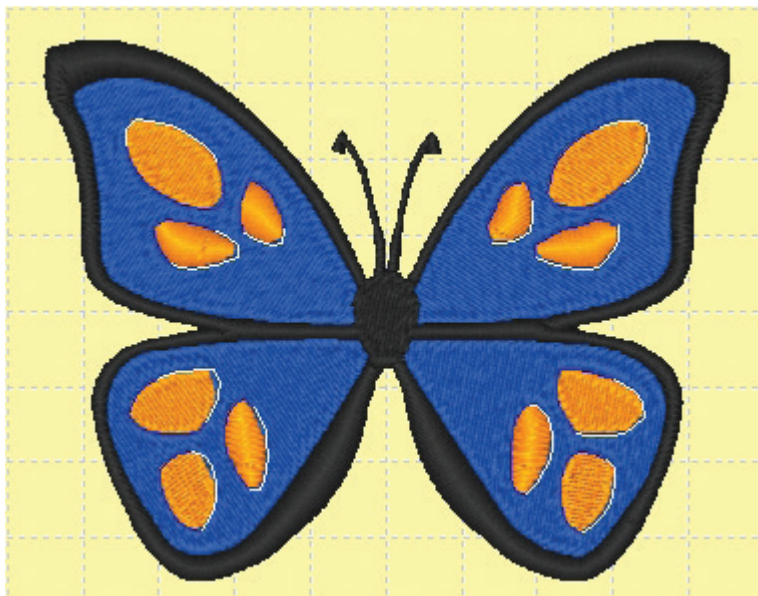
Generations™ makes it easy to select these areas all at once.

Selecting Like Colored Areas

1. On the left side of the **Generations™** design window, you'll see a **row of small boxes**. Each box represents a different thread color in the design.
2. Place the mouse pointer over the **color chip** you'd like to select and **click the left mouse** button.



All areas in that color are automatically selected. You'll see the flashing **blue and white marquee** line around them.



Select Menu

Generations™ software provides several easy menu tools that you can use to select areas in the design. There are three sections to the **Select Menu**.

The first section of the menu allows you to quickly select sections in the design by stitch type or by inverting the selection. The second and third sections of the menu allow you to select by a specific fill or line type.

- **Select All:** Quickly selects all areas in the design, both filled areas and lines.
- **Select Filled Areas:** Quickly selects only the filled areas in the design. This does not include any lines.
- **Select Lines:** Quickly selects only the lines in the design. This does not include any filled areas.
- **Remove Selection:** Quickly cancels all selections, so you can clearly see the design without any of the flashing marquee lines.
- **Invert Selection:** Quickly reverses the selection. This tool is useful when you want to change most of a design, with the exception of only a few areas. Instead of selecting the many areas you need to change, you can quickly select the few areas you don't want to change, then use Invert Selection to reverse it.

Selecting All Areas

1. Select **Edit**, then **Select**.
2. In the sub-menu, click on **Select Areas**.
 - All areas in the design, whether they are lines, columns or complex fill, are selected and surrounded by the **black bounding boxes** to be grouped, resized or deleted.

Selecting All Filled Areas

1. Select **Edit**, then **Select**.
2. In the sub-menu, click on **All Filled Areas**.
All column and complex fill areas are selected and are shown with the blue and white flashing marquee lines.

Selecting All Lines

1. Select **Edit**, then **Select**.
2. In the sub-menu, click on **Select All Lines**.
Only the line areas in the design are selected and are shown with the blue and white flashing marquee lines.

Removing the Selection

1. While some areas are selected, select **Edit** then **Select**.
2. In the sub-menu click on **Remove Selection**.
All previously selected areas are canceled. You'll no longer see any blue and white flashing marquee lines.

Invert Selection

1. Select areas in the design that you do not want to change. Refer to the previous section **Selecting Multiple Areas** for instructions.
2. Select **Edit**, then **Select**.
3. In the sub-menu, click on **Invert Selection**.
The areas you selected in step 1 are canceled. All other areas in the design are selected and are shown with the blue and white flashing marquee lines.

Selecting by Fill Type

The second section in the **Edit** and **Select** menu allows you to select areas or filled sections in the design based on fill types. This option is useful when you need to make changes to the color or fill settings throughout the whole design.

Selection options include: Autojudge, Complex Fill, Satin, Motif, Spiral, Radial, Appliqué, Cross Stitch, Fluid Contour and Arc.

Selecting by Line Type

The second section in the **Edit** and **Select** menu allows you to select lines in the design based on the line type. This option is useful when you need to make changes to the color or line stitch settings throughout the whole design.

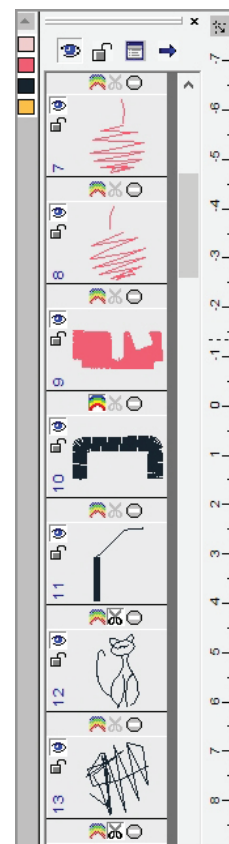
Selection options include: Running Line, Double Run Line, Triple Run Line, Satin Border, Motif Border, Running Cross Stitch, Blanket Stitch, Buttonhole and Running Sequin Lines (pro version only).

Stitch Sequence Viewer

The **Sequence View** bar is located on the left side of the work area window. This tool displays the area and lines in the design, in the order in which they will be stitched.

The **Sequence View** also allows for quick selection of one or multiple areas in the design for editing, stitch property settings or deletion. There are many more functions in this toolbar which will be covered in-depth throughout the manual.

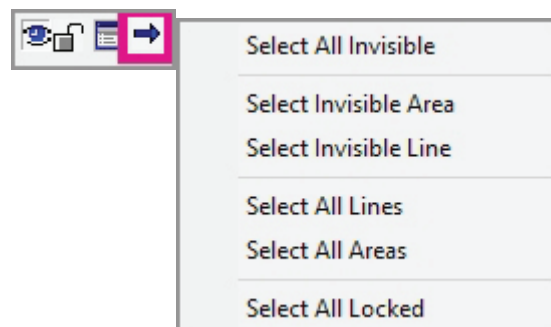
- To select one area or line, **left click** on the cell representing that area or line. The selected item will highlight on the work area screen with **blue and white flashing lines**, indicating that it has been selected.
- To select multiple items that are in a series, left click on the first cell in the series. Press and hold the **[SHIFT]** key on your keyboard and then left click on the last cell in the series. All items from the first item to the last item will be selected.
- To select items that are not in a series press and hold the **[CTRL]** key on your keyboard and left click on the first cell. Continue to hold the **[CTRL]** key and then left click on additional cells in the **Sequence View**. Only those area or line will be selected for editing.



There icons at the top of the **Sequence View** .

- Click on the **Blue Arrow** icon and a pop-up menu will open.
- Choose an option from the pop-up menu to select areas or lines in the design.

Note: We will cover the Locked and Invisible settings in the Sequence viewer later in this manual.



Area and Line Stitch Properties

Generations™ software creates stitches using the system default values for satin and complex fill stitches (set in **Accessories/Default Stitch Settings**). As you work on a design, you will often want to change some of these values.

There are many variables in embroidery which can affect the quality of the stitching: size of the section, the fabric on which you are stitching, the type and amount of stabilizer used, machine tensions, etc. You may want to change some values to account for these variables. You may also want to make changes to create artistic effects.

In **Generations™** software there are three ways to access the values for a selected section:

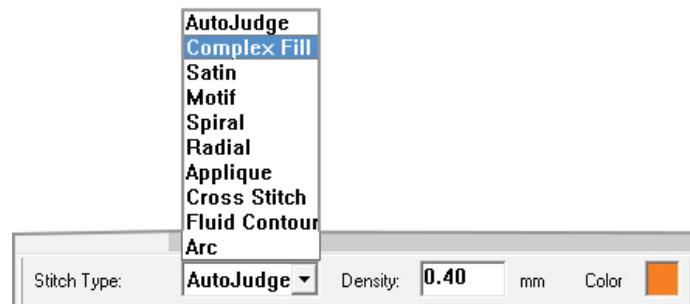
- Use the values in the **Quick Properties** toolbar at the bottom of the screen.
- Open the **Area Object Stitch Properties** dialog box for the selected section.
- Set stitch properties for selected areas or the whole design using **Select Fabric Settings**.

Quick Properties

The **Quick Properties** toolbar provides quick access to the most commonly changed stitch values. Use the **Quick Properties** to change the display color, stitch type and density setting for a selected section.

Using the Quick Properties Toolbar

1. Follow the instructions in the previous sections to **select** the **area** or areas that you want to change. You should see the blue and white flashing marquee line around the selected area.
2. If you would like to change the stitch type, click on the arrow next to **Auto Judge** in the **Quick Properties** toolbar at the bottom of the screen. All automatically generated areas (unless previously changed) are set to **Auto Judge** by default.

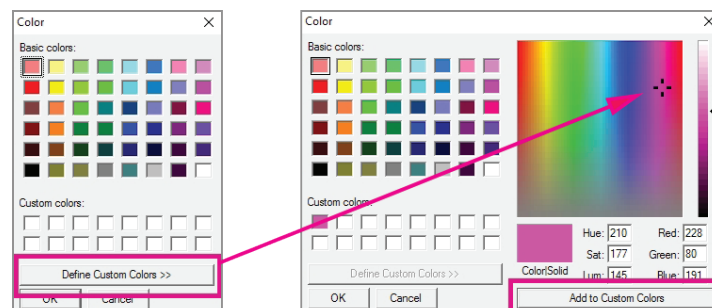


- When you click on the **arrow**, the list of available stitch types displays.
 - **Left click** on the **new stitch type** you want for this section. Refer to the next section for a basic description of all the stitch effects.
3. If you would like to change the **stitch density** for the area, **click** the **left mouse** button in the **Density** box.



Use **[Delete]** and/or **[Backspace]** on the keyboard to remove all or part of the existing value. Then **type a new number**. Refer to the Chapter 8 on **Basic Settings** and **Stitch Editing** for details on stitch density.

4. If you would like to change the **display color** of the selected area, **click** the **left mouse button** inside the **color chip** in the **Quick Properties** toolbar at the bottom of the screen. The **Color** dialog box is displayed.



5. Select the new color, or if desired, create a custom color and then click on **OK**.
6. Select **Accessories** then **Generate**.

Or

Click on the  **Generate** icon.

Or

Press **[F9]** on the keyboard.

Remember that the changes do not take effect until the section has been generated.

Area Object Stitch Properties Dialog Box

The **Area Object Stitch Properties** dialog box allows access to the full range of stitch effects and values in the software.

Using the Area Stitch Properties Dialog Box

1. Follow the instructions in the previous sections to **select** the area or areas that you want to change. You should see the blue and white flashing marquee line around the selected area.
2. Select **Stitch**, then **Stitch Settings**.

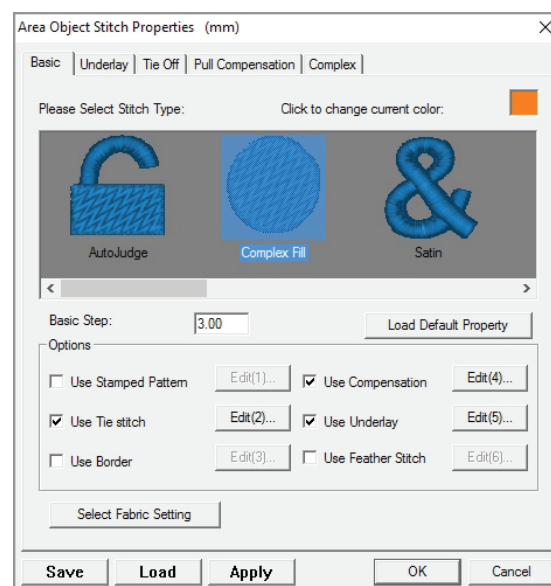
Or

Click on the  **Stitch Settings** icon.

Or

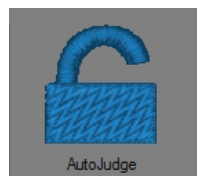
Press the **[Spacebar]** on the keyboard.

- The **Area Object Stitch Properties** dialog box opens.
- The box has a series of tabs along the top. The tabs displayed will change depending on the options and stitch type selected.

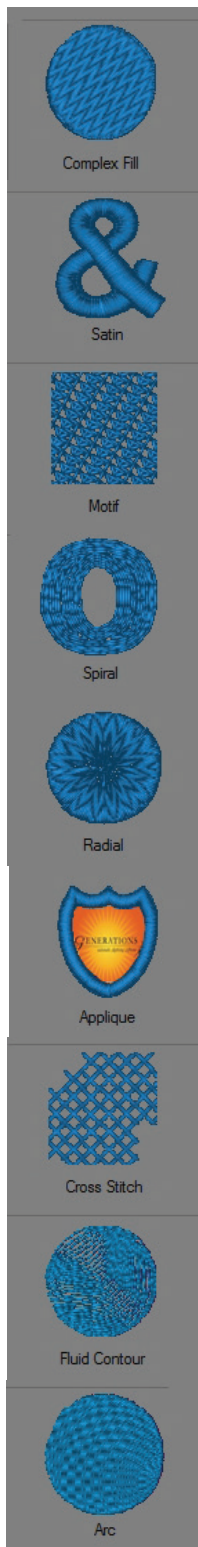


3. **Basic Tab:** Options in the **Basic** tab are used to select the display color and stitch type, and to enable various effects.
 - The **Click to Change Current Color** option lets you select a new display color for the area.
 - Click the **left mouse** button inside the **Color** box. Select a new color, then click on **OK** to return to the **Stitch Properties** dialog box.
 - The **Stitch Type illustrations** let you choose from standard or special stitch effects. Some of the stitch types are not visible in the dialog box. Use the slider bar to see all of the options.

Stitch Types - Fills



AutoJudge: This is the default stitch type. **Generations™** software automatically decides the appropriate stitch type for the area, based on the size.



Complex Fill: A fill stitch is generally used for large areas in the design. The area is broken into stitches of a regular length, all going in the same direction. You may have heard these stitches referred to as “tatami”, “ceeding” or just “fill” stitches.

Satin: A satin stitch is generally used for small areas in the design. Satin stitches go completely across an area without being broken into smaller stitches. The stitch angle turns to follow the shape.

Motif: A motif stitch resembles a decorative sewing machine stitch. It fills in the area, but leaves much of the background fabric showing through, resulting in an open fill. The values that control this effect are found in the **Motif** tab.

Spiral: The spiral effect creates a series of running stitches that spiral around an area which can create interesting dimensional effects. The **Spiral** tab only appears when this stitch type is selected.

Radial: The radial effect uses rows of stitching that emerge from a center point and continue to the edge of the area. You can use either satin or fill stitches with the radial effect.

Appliqué: The appliqué stitch type automatically converts the area into the three layers required to create a fabric appliqué. You can control each layer using the values in the **Appliqué** tab.

Cross Stitch: The cross stitch effect duplicates the appearance of traditional hand embroidered counted cross stitch. Values to control this effect are found in the **Cross Stitch** tab.

Fluid Contour: **Fluid Contour** uses a series of running stitches around the shape that flow or curve along user-defined guidelines. Contour stitches can give visual dimension and shape to an area. It can be used alone or as a second layer of stitches for shading.

Arc Fill: An **Arc Fill** uses fill stitches that arc around a center point placed outside the area to create interesting dimensional effects.

- The **Basic Step** value controls the standard **stitch length** used by the program for any travel stitches used to move between areas in the design. It is not recommended to use a value much smaller or larger than the default length of 2.0-2.5mm.

- The option to **Load Default Property** can be used when you want to return all settings in the dialog box to the program defaults. Just click on the button and **Generations™** automatically resets all the values.
- In the **Options** section in the lower part of the dialog box, there are six choices for additional stitch effects. A check mark in the white box indicates that the option is active. You will see a corresponding tab at the top of the dialog box or an **Edit** button alongside it, with further settings for any enabled options.
- **Use Stamped Pattern:** This option enables a special stitch effect, in which a pattern is carved into the background stitch. Other names for this effect are “pattern fill” and “program split fill”. When you click in the box to enable the effect, its setting tab opens automatically so you can select the pattern and layout.
- **Use Tie Stitch:** This option enables the use of “tie-down” or “locking” stitches, which secure the thread before and after a cut or color change. There is a tab at the top of the dialog box with **Tie Stitch** settings.
- **Use Border:** This option automatically applies a same color border to the selected area. The border is an added effect to the area, it is not a separate area in the design. Settings for the border effect can be changed using the Edit button alongside the option.
- **Use Compensation:** This option enables the use of **Pull Compensation** in the area. Pull Compensation makes stitches wider to compensate for the “give”, grain line and weave in the fabric which normally cause stitches to sink into the fabric when they are stitched. There is a tab at the top of the dialog box with **Pull Compensation** settings.
- **Use Underlay:** This option enables the use of **Underlay** in the area. Underlay is used to create a smooth surface and provide support for the cover stitching. There is a tab at the top of the dialog box with **Underlay** settings.
- **Use Feather Stitch:** Enables a special effect that can be used to blend edges together. Feathered edges can be applied to one or both sides of a satin column.

Select Fabric Settings

*If desired, you can select predefined stitch settings in **Generations™** based on fabric type. These settings can be applied to fill and line types in a number of ways.*

- After making changes in the dialog box, click on the **Save** button. In the **Save As** dialog box, type in a name for the setting.
- Use the **Select Fabric Settings** button to recall saved settings. When you click on the Select Fabric Settings button, the **Select Fabric** dialog box appears. Highlight the saved file, then click on **OK**. The settings will be applied to selected areas or lines.

Note: Refer to Chapter 9 for complete information on the Select Fabric Setting options you may select from the Area Object Stitch Properties dialog box.

4. If you would like to see the results of your changes without exiting the dialog box, click on the **Apply** button. Changes to the area will be generated, and the **Area Properties** dialog box will still be open so you can easily make further adjustments.
5. When you have made all necessary changes, click on **OK** to exit the **Area Object Stitch Properties** dialog box.
 - By default, changes made in the **Area Object Stitch Properties** dialog box are generated automatically.

- If you had turned off the option to **Auto-Generate after Punching and Stitch Edit** (located in View Preferences), continue to Step 6.

6. Select **Accessories**, then **Generate**.

Or

Click on the  **Generate** icon in the **Create** toolbar.

Or

Press **[F9]** on the keyboard.

Line Object Stitch Properties

Not all objects in your design will be areas. Line objects are created automatically for 1 pixel lines in images. You may have also created Line Objects manually, either using **Create Free Hand Line** from the **Create** toolbar or by using the **Outline** menu commands **Create Line from Area Borders** and **Create Line from Area**. Just as with an area, there are options and settings you can control for a line object in the design.

Tip: Follow along by using the images in the C:\Gens Emb Library\images folder. For the BabiesBlocks.wmf, change the image type from Vector to Simple Artwork

Using the Line Object Properties Dialog Box

1. Follow the instructions in the previous sections to **select** the line or lines that you want to change. You should see the blue and white flashing marquee line around the selected line.

2. Select **Stitch**, then **Stitch Settings**.

Or

Click on the  **Stitch Settings** icon.

Or

Press the **[Spacebar]** on the keyboard.

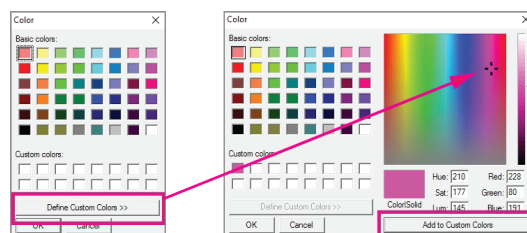
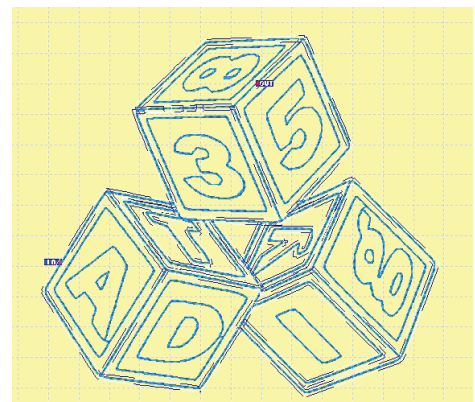
The **Line Object Stitch Properties** dialog box opens.

The box has a series of tabs along the top. The tabs displayed will change depending on the options and stitch type selected.

3. **Basic Tab**

Options in the **Basic** tab are used to select the display color and stitch type, and to enable various effects.

- The **Click to Change Current Color** option lets you select a new display color for the area.



- Click the **left mouse** button inside the **Color** box. Select a new color, then click on **OK** to return to the **Stitch Properties** dialog box.

- The **Stitch Type** illustrations let you choose from standard or special stitch effects. Some of the stitch types are not visible in the dialog box. Use the **Slider** bar to see all of the options.



Run: A single line of running stitches. The values that control run stitches are found in the **Line** tab.

Double Run: A double line of running stitches. The values that control double run stitches are found in the **Line** tab.

Triple Run: A triple line of running stitches, sometimes referred to as a “bean stitch”. The values that control triple run stitches are found in the **Line** tab.

Basting Line: A single line of long running stitches. The Basting stitch contains stitch lengths of 6-6.5mm and is used to secure fabric to backing into the hoop. It should be used as an outline around a design or area only to provide more stability when stitching in home embroidery machine hoops.

Satin Border: A satin column stitch that follows the line. This is the default stitch type for a line area. The values that control satin border stitches are found in the **Pull Compensation**, **Satin**, and **Underlay** tabs, which only appear when **Satin Border** is selected. The width of a **Satin Border** is controlled in the **Line** tab.

Motif Border: Repeated motif stitches that follow the path of the line. A motif stitch resembles a decorative sewing machine stitch. The values that control this effect are found in the **Motif** tab. The **Motif** tab only appears when this stitch type is selected.

Running Cross: Repeated cross stitches that follow the path of the line. The cross stitch effect duplicates the appearance of traditional hand embroidered counted cross stitch. Values to control this effect are found in the **Cross Stitch** tab, which appears only when this stitch type is selected.

Blanket Stitch: Running stitches in a repeated “E” pattern that branch to either or both sides of the center line. This effect duplicates the appearance of traditional hand stitching. Values to control this effect are found in the **Blanket Stitch** tab, which appears only when the stitch type is selected.

Running Sequins: **PRO VERSION ONLY** The Running Sequins stitch is used for attaching sequins of various shapes in sizes onto fabric. To use this feature, you must have an embroidery machine capable of feeding sequins from a reel.

- The **Basic Step** value controls the standard stitch length used by the program when one of the run stitch options is selected and for any travel stitches used to move between areas in the design. It is not recommended to use a value much smaller or larger than the default length of 2.0-3.0mm.


- The option to **Load Default Property** can be used when you want to return all settings in the dialog box to the program defaults. Just click on the button and **Generations™** automatically resets all the values.
- In the **Options** section in the lower part of the dialog box, there are three choices for additional stitch effects. A check mark in the white box indicates that the option is active. You will see a corresponding tab at the top of the dialog box or an **Edit** button alongside it, with further settings for any enabled options.
- **Use Stamped Pattern:** Enables a special effect, in which a pattern is carved into the background stitch. This option is only available with the **Satin Border**. When you click in the box to enable, its setting tab opens so you can select pattern and layout.
- **Use Tie Stitch:** This option enables the use of “tie-down” or “locking” stitches, which secure the thread before and after a cut or color change. There is a tab at the top of the dialog box with **Tie Stitch** settings.
- **Use Compensation:** This option enables the use of **Pull Compensation** in the area. **Pull Compensation** makes stitches wider to compensate for the “give”, grain line and weave in the fabric which normally cause stitches to sink into the fabric when they are stitched. There is a tab at the top of the dialog box with compensation settings.
- If desired, you can select predefined stitch settings in **Generations™** based on fabric type. These settings can be applied to fill and line types in a number of ways.

Note: Refer to Chapter 10 for complete information on the Select Fabric Setting options you may select from the Area Object Stitch Properties dialog box.

4. If you would like to see the results of your changes without exiting the dialog box, click on the **Apply** button. Changes to the area will be generated, and the **Area Properties** dialog box will still be open so you can easily make further adjustments.
5. When you have made all necessary changes, click on **OK** to exit the **Area Object Stitch Properties** dialog box.

By default, changes made in the **Area Object Stitch Properties** dialog box are generated automatically.

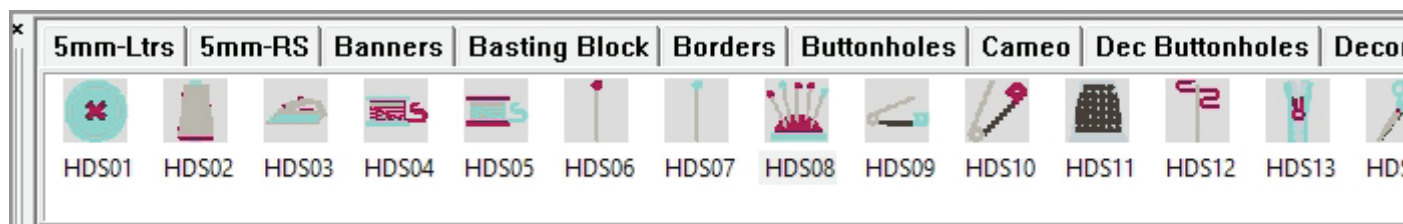
If you had turned off the option to **Auto-Generate after Punching and Stitch Edit** (located in View Preferences), continue to Step 6.


6. Click on the  **Generate** icon in the **Create** toolbar.
Or
Press **[F9]** on the keyboard.

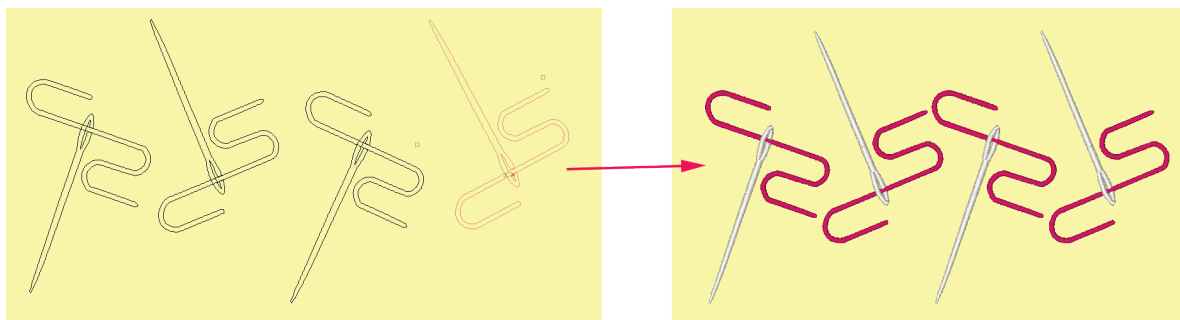
Building Blocks

The **Building Block Toolbar** allows you to select from any of the pre-digitized design pieces which include borders, edges and corners. **Generations™ Building Blocks** include several different categories including one for the Building Block items you create yourself.

You can also add more building block designs from the extensive **Generations™ Building Block** library. To learn more please visit our website at: www.generationsemb.com
To turn **Building Blocks** on or off, please select **View** and then **Toolbars** from the main menu.




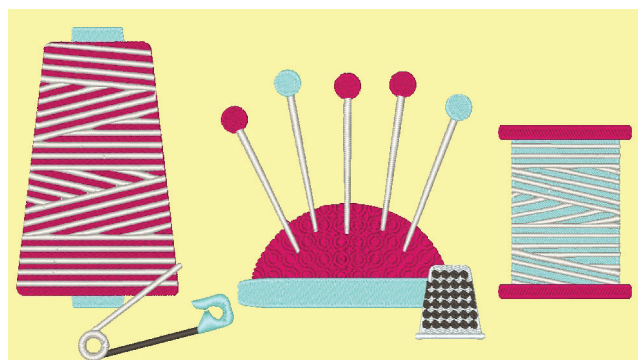
1. To insert **Building Blocks** with editing functions, just **double left click** on the desired building block to insert it onto your **Generations™** design screen.
2. Once this is on your design screen, you will see that the building block design on the **Generations™** work screen outlined in red.
3. To place the design, **left click** and the left side will now be an **Anchor Point** for the building block design.
4. To flip the element, **right click** and the design will **flip horizontally**.
5. You can **rotate** the design just by moving your mouse in a circular motion - this will rotate the design around the first anchor point. Place a **second left click** to anchor the right side. The element is now placed and a second red outline will appear.
6. When you are finished with this element, press **[ESC]** on your keyboard to turn the tool off.
7. The click on the **Generate**  icon or press **[F9]** on the keyboard to place stitches in the design.



8. Any building block design can also be used to build a design. To insert one individual file into the design **press and hold** the left mouse button over the design and then **drag** the design into the work area.

Note: You can combine as many designs as desired into the work area. Building Block designs can be customized using the fill, line and/or and editing tools in the program.

9. When completed, click on the **Generate**  icon or press **[F9]** on the keyboard to place stitches in the design.

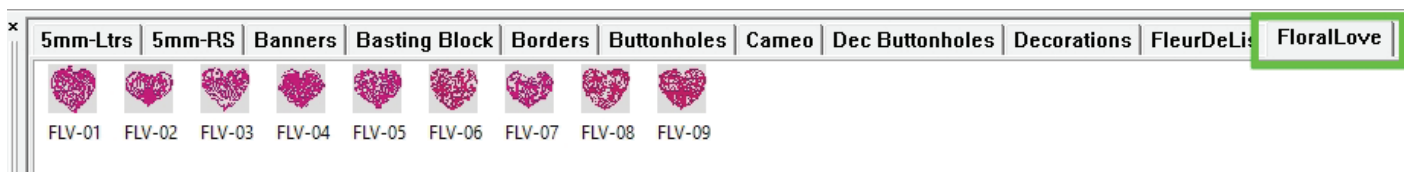
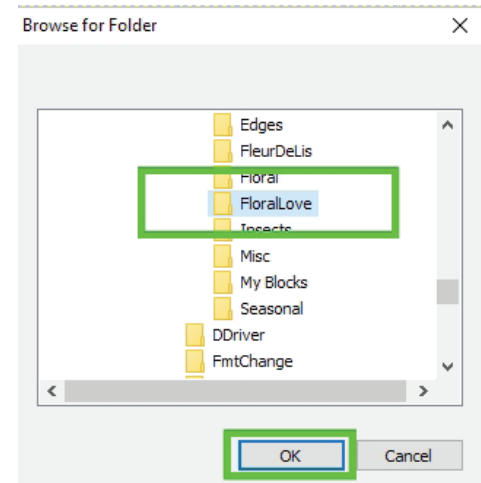
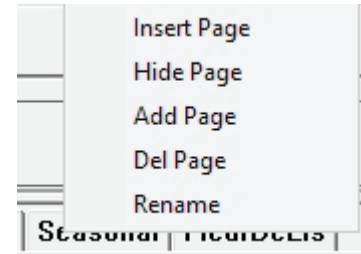


Managing Building Block Pages

Building Block pages can be added, inserted, deleted, hidden and renamed in the **Generations™** program.

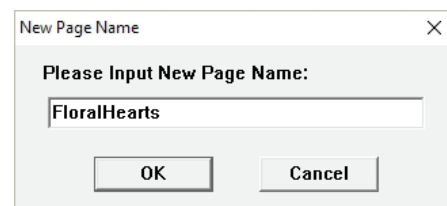
To access the page management features, make sure the Building Block Tool Bar is open in the **Generations™** work area.

1. To access the **Building Block page management menu**, move the mouse cursor over one of the open Building Block tabs.
2. **Right click** the mouse on the tab and a pop-up menu will open.
3. The first menu option is **Insert a Page**.
 - Insert a Page does not create a new page, it adds an existing folder to the tool bar.
 - If you have purchased a Building Block design set and installed the set, you can access that folder here.
4. Select this option and the **Browse for Folder** dialog box will open in the work area window.
 - The default location is the **Building Block** folder in the **Generations™** program.
5. To insert the new Tab on the **Building Block Tool Bar**, locate the desired folder on your hard drive.
6. Select the folder with a **left click**.
7. Click **OK** to add the new tab to the **Building Block** toolbar.
 - The new folder will display as a **new tab** on the **Building Block** toolbar.
 - To access the new building blocks, **left click** on the new tab.



8. To **Hide** a tab from view, right click on the tab you wish to hide and select **Hide** from the pop-up menu.
 - The folder associated with the tab is just hidden. To **unhide** the folder, right click on any tab and select **Insert Page**.
9. To add a new tab without a building block file association, **right click** on any tab and select **Add Page** from the pop-up menu.
10. To **delete** a page and the files, right click on the tab you wish to remove.
11. Select **Delete Page** from the pop-up menu.

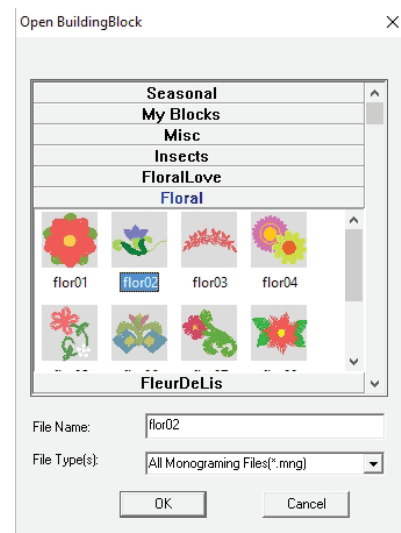
12. To **rename** a tab or page, right click on the desired tab.
13. Select **Rename** from the pop-up menu.
 - The **New Page Name** dialog box will open.
14. Enter the desired name and then click **OK** to complete the name change.
 - The **Building Block** tab will display the newly entered name.



Editing Building Blocks

Generations™ Building Block elements can be edited in the **Generations™** program.

1. To **Open and Edit** an existing building block element, select **Accessories** from the menu bar and scroll down and select **Building Block**.
2. From the **Building Block** pop-up menu, select **Open Building Block**.
 - The **Open Building Block** dialog Box will open.
3. Select the folder (category) where the building block element is stored and then left click on the desired element (design).
4. Click **OK** and the element will be opened into the **Generations™** program for editing.
 - When editing is completed, save the building block for future use.



Saving Building Blocks

Generations™ allows edited or newly created Building Block elements to be saved in to the Building Block Library.

5. Select **Accessories** from the menu bar and scroll down and select **Building Block**.
6. From the **Building Block** pop-up menu, select **Save Building Block**.
 - The **Save Building Block** dialog Box will open.
7. Select the folder (category) where you would like to store the element.
8. Name the element and then click **OK**.
 - Your new element is saved and will appear in the Building Block toolbar.
 - If the building block does not show in the folder immediately, click on a different folder tab and then click on the tab containing the new building block element.

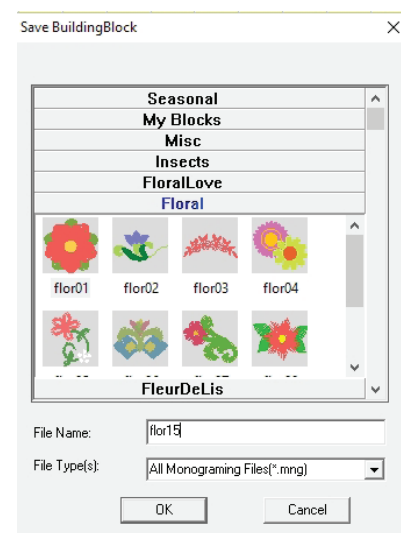


Photo Stitch and Cross Stitch

The Photo Stitch options will convert your favorite photographs to stitches in minutes. **Generations™** gives you the ability to create five different versions of **Photo Stitch**.

- **Photo Contour – 1 Color:** In **Photo Contour** the design will stitch the first layer (X axis) in a left to right direction, then stitch the second layer (Y axis) in the up and down direction. Stitching in the two layers is placed so that there is a contour outline of the photo placed in the stitching.
- **Photo Tapestry – 4 Color:** With **Photo Tapestry** you can create a tapestry appearance using 4 specific colors: cyan, magenta, yellow and black (**CMYK**). The stitching in each color layer is placed so that the layers blend the image in a tapestry effect. You can control the density of the tapestry and the detail seen in the design by controlling the pixel or cell size viewed in the **Photo Tapestry Image processing**. You may also experiment with color combinations and completely change the look of the Photo Tapestry.
- **Photo Pro – Multi Color:** With **Photo Pro** you can create a multi color embroidery design using the same fill types used in other parts of **Generations™** software. The full range of editing tools is available to make changes.
- **Photo Random – 1 Color:** With **Photo Random** you can create a lower density design. The stitching in the darker areas of the image will stitch in a linear pattern, becoming more random and less dense as the color lightens. In **Photo Random** you can use edit mode to remove single stitches or groups of stitches.
- **Cross Stitch - Multi Color:** You can easily create a cross stitch effect from the photo image, controlling the size and number of colors as needed.

The photo portion of **Generations™** can turn your personal photos into embroidery designs almost instantly. To insert photos, you may select from pictures saved to a file on your hard drive, floppy diskette, CD-Rom or removable hard drive. You may also choose to insert your pictured from a **TWAIN** source (see the image for more instruction) such as a scanner or digital camera.

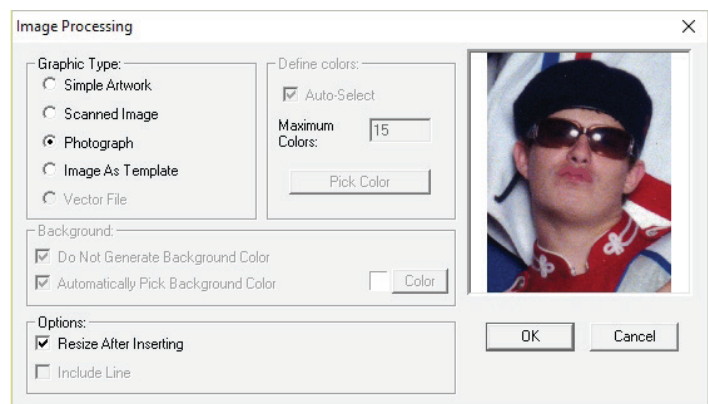
Using Photo Contour – 1 Color

1. Insert the photo into **Generations™** using **Create** and then **Insert Image** from the menu.

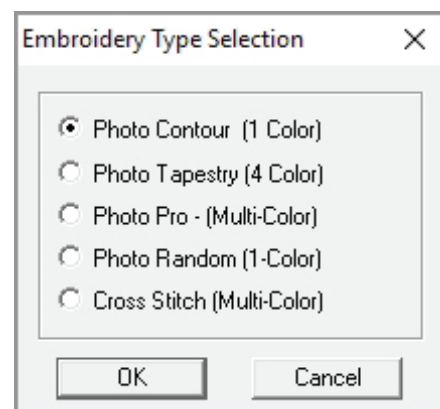
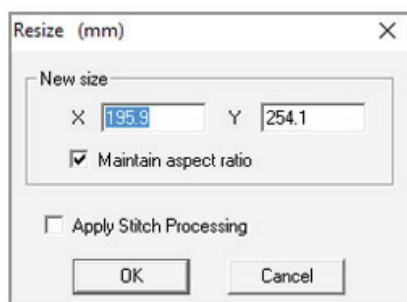
Or

Left click on the  **Insert Image icon** in the **Create** toolbar.

2. **Select** the **photo** or image you wish to insert from the **Select Graphic** window.
 - The image is inserted into the **Image Processor**.
3. In the image type, select **Photograph** then click on the **OK** button.
 - The **Embroidery Type** dialog box opens.



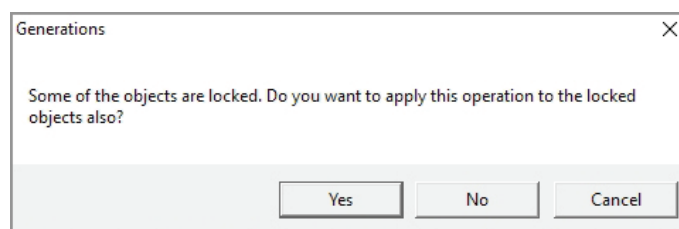
4. Select **Photo Contour** then click on **OK**.
The generated stitch file is inserted into **Generations™**.
5. The **Resize** dialog box opens on top of the design.



- You may adjust the size as needed.

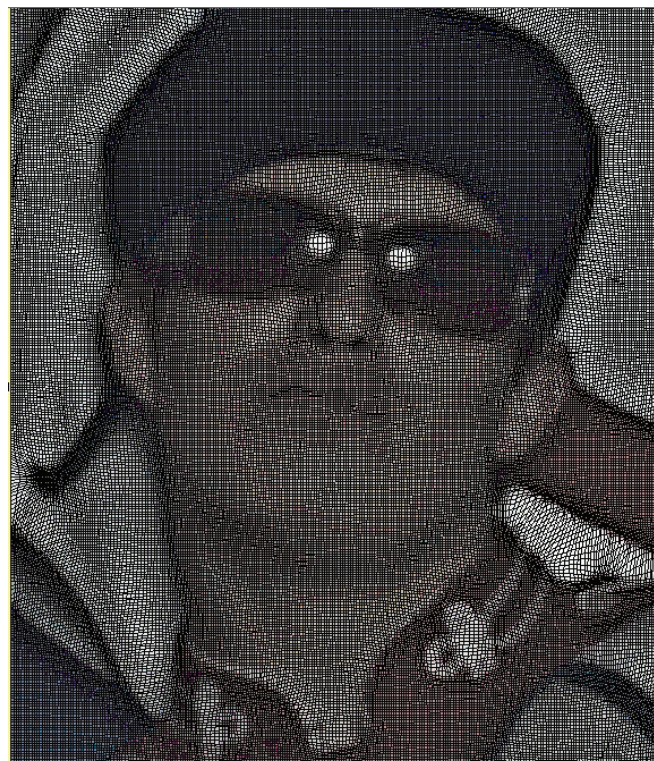
Tip: Resizing the design will change the density of the design. Making the image smaller will make the stitching denser in the design and making the design larger will make the stitching less dense in the design.

6. Due to the specialized fill type in the **Photo Contour**, stitch areas are locked when generated. Since the areas are locked you will receive a **Warning** box even if no change in the size is made.



- Select **Yes** to close the box.

7. The fill type in the **Photo Contour** allows for limited editing.
 - In **Edit Mode**, individual stitches or groups of stitches may be removed.
 - Using the **Stitch menu** a **border** or **outline** can be created from the area edges.
 - Using a **left click selection** the image may be **skewed** or **rotated**.
 - You may also use the **align** and **reshape** tools in the Object tool bar.
 - **Photo Contour** is a one color only design file.



Using Photo Tapestry – 4 Colors

1. Insert the photo into **Generations™** using **Create** and then **Insert Image** from the menu.

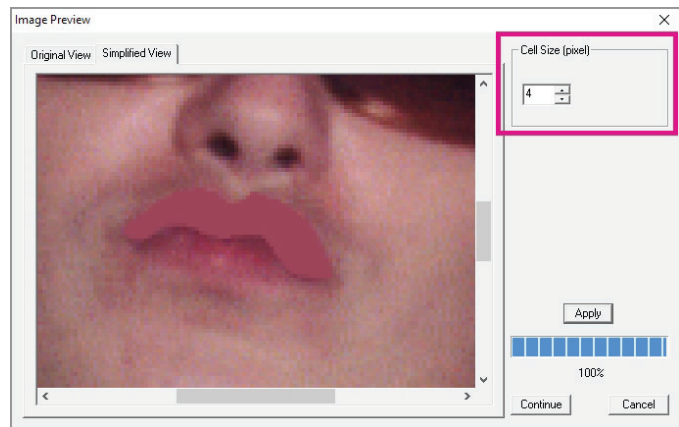
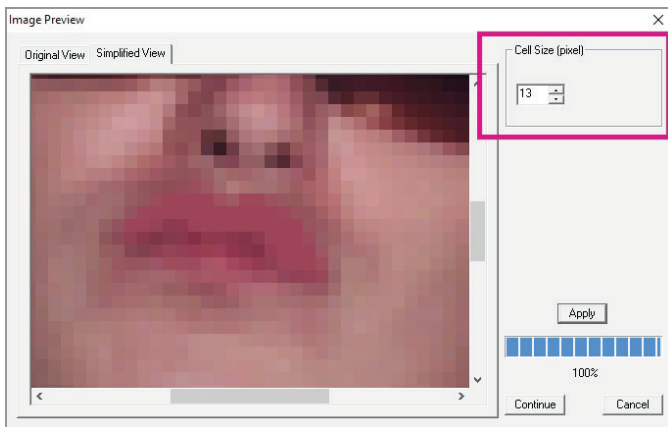
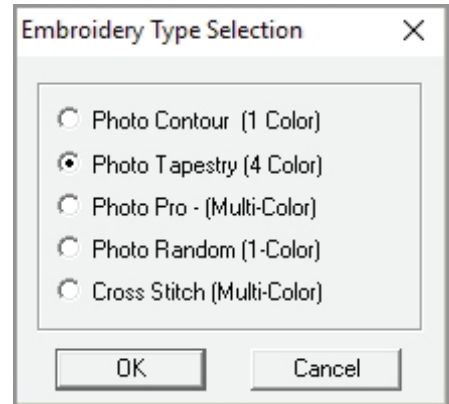
Or

Click on the  **Insert Image** icon in the **Create** toolbar.

2. **Select** the **photo** or image you wish to insert from the **Select Graphic** window.
3. In the image type, select **Photograph** then click on the **OK** button.
4. Select **Photo Tapestry** then click on **OK**.

The **Image Preview** window opens.

5. You may adjust the appearance of the image by changing the cell or pixel sizes.
 - **Increase** the pixel size to **remove some detail** from the image and decrease the density slightly. **Maximum pixel size is 20**.



- **Decrease** the pixel size to **add clarity** to the image, by slightly increasing the density. **Minimum pixel size is 2**.
 - If you need to compare the results with the original photo or image, select the **Original View** tab.
6. After you have adjusted the cell or pixel size select **Continue**.
 - The generated stitches are inserted into **Generations™**. The **Resize** dialog box opens. Adjust the size as needed or click Cancel to stop any re-sizing.


Tip: Resizing the design will change the density of the design. Making the image smaller will make the stitching denser in the design and making the design larger will make the stitching less dense in the design.

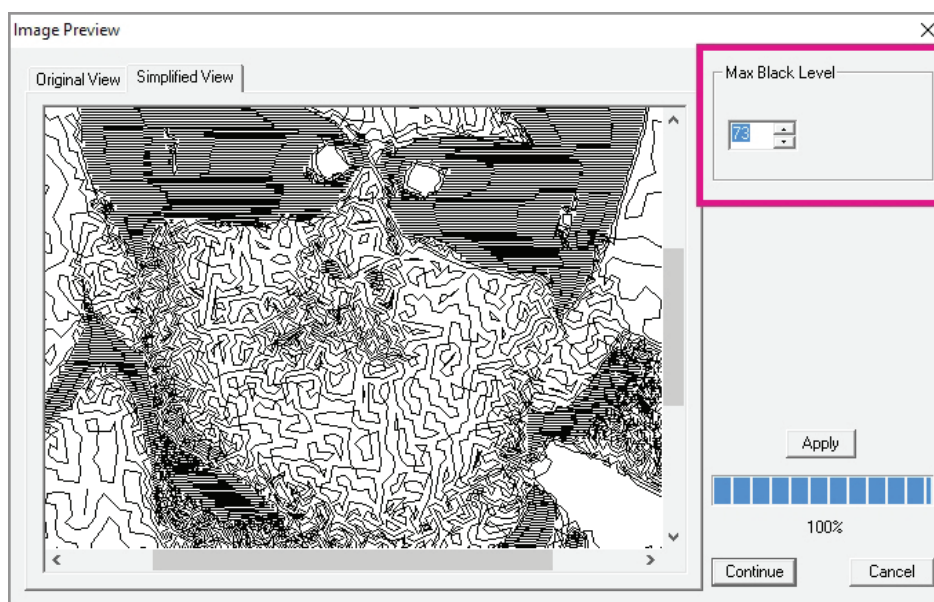


7. Due to the specialized fill type in the **Photo Tapestry**, stitch areas are locked when generated. Since the areas are locked you will receive a **Warning** box even if no change in the size is made. Select **Yes** to close the box.
 - The **Photo Tapestry** places **four color layers** of stitching that blend similar to the effect of tapestry threads when placed together.
 - The colors that are automatically selected by **Generations™** are **cyan, yellow, magenta** and **black** or **CMYK**. The color blending effect is similar to the way an ink jet printer would blend the four colors.

Tip: Of course, you are free to use the PYOC (pick your own colors) system to achieve the desire color blending effect.
8. The fill type in the **Photo Tapestry** allows for limited editing.
 - In **Edit Mode**, individual stitches or groups of stitches may be removed.
 - Using the **Stitch menu** a **border** or outline can be created from the area edges.
 - Using a **left click selection** the image may be **skewed** or **rotated**.
 - You may also use the **align** and **reshape** tools in the **Object Toolbar**.

Using Photo Random

1. Insert the photo into **Generations™** using **Create** and then **Insert Image** from the menu.
Or
Left click on the  **Insert Image** icon.
2. **Select** the **photo** or image you wish to insert from the **Select Graphic** window.
 - The image is inserted into the **Image Processor**.
3. In the image type, select **Photograph** then click on the **OK** button.
4. Select **Photo Random** then click on the **OK** button.
 - The **Image Preview** window opens.



- At this point, **Generations™** has made an initial analysis of the image and created a preview of the random photo effect.


- If desired, you can compare the results seen in the **Simplified View** window with the original photo in the **Original View** window.
 - 5. If necessary, you can increase or decrease the amount of stitching. In the **Max Black Level** box, use the arrows or type in a new number then click on **Apply** to see the results in the **Simplified View** window.
 - **Increase** the **Max Black** number for **darker** stitching.
 - If you want the image to be **lighter**, **decrease** the **Max Black** number.
 - 6. When you are happy with the results, click on **Continue** to insert the **Photo Random** design into the program.
- The **Resize** dialog box opens. You may adjust the size as needed.

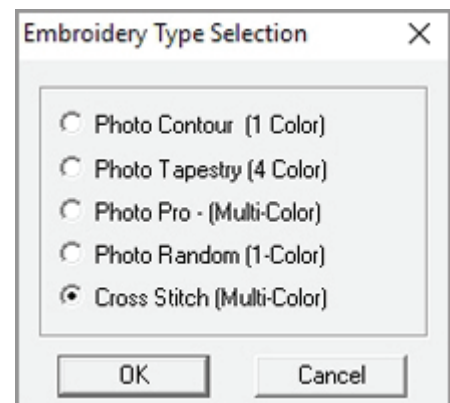
Tip: Resizing the design will change the density of the design. Making the image smaller will make the stitching denser in the design and making the design larger will make the stitching less dense in the design.

- 7. Due to the specialized fill type in the **Photo Random**, stitch areas are locked when generated. Since the areas are locked you will receive a **warning box** even if no change in the size is made.
- 8. Select **Yes** to close the box. The random stitch design opens in the program.
- 9. The fill type in **Photo Random** allows for limited editing.
 - In **Edit Mode**, individual stitches or groups of stitches may be removed.
 - Using the **Stitch menu** a **border** or **outline** can be created from the area edges.
 - Using a **left click selection** the image may be **skewed** or **rotated**.
 - You may also use the **align** and **reshape** tools in the **Object Toolbar**.
- 10. Once your are happy with the editing results, save the design and **export** in your machine format for stitching.

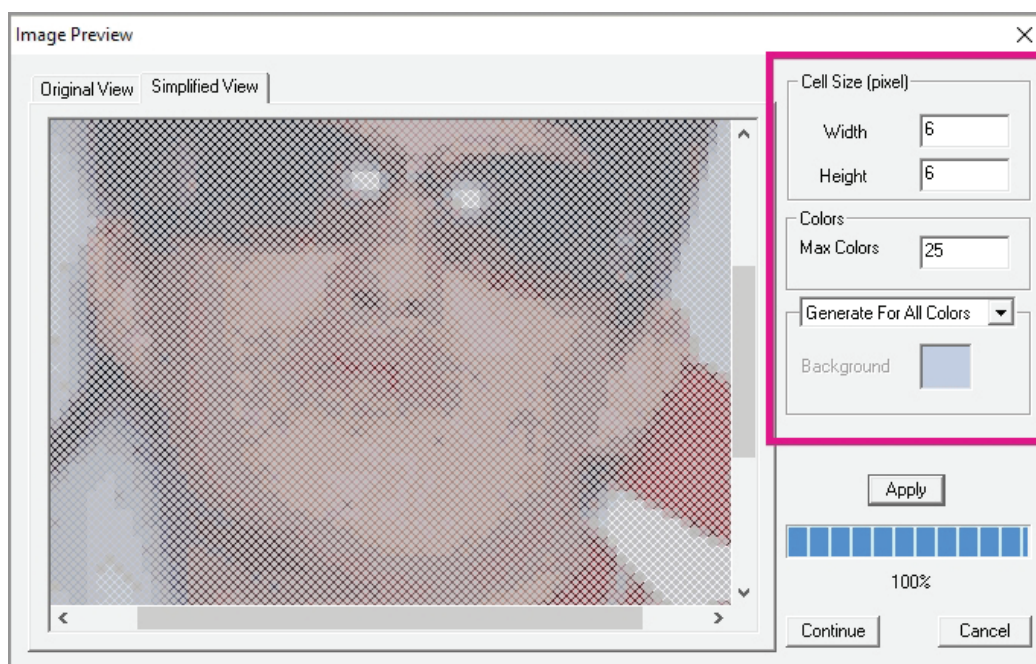


Using Cross Stitch For Photos and Images

- 1. Insert the photo into **Generations™** using **Create** and then **Insert Image** from the menu.
Or
Left click on the  **Insert Image** icon in the **Create** toolbar.
- 2. **Select** the **photo** or image you wish to insert from the
 - **Select Graphic** window.
- 3. In the image type, select **Photograph** then click on the **OK** button.
 - The **Embroidery Type** dialog box opens.



4. Select **Cross Stitch** then click on the **OK** button.
 - The **Image Preview** window opens.



- At this point, **Generations™** has made an initial analysis of the image and created a preview of the cross stitch photo effect.
 - If desired, you can compare the results seen in the **Simplified View** window with the original photo in the **Original View** window.
5. You may adjust the appearance of the image by changing the **Cell** or **Pixel** sizes.
 - **Increase** the pixel size to **remove some detail** from the image and decrease density slightly. **Maximum pixel size is 16.**
 - **Decrease** the pixel size to **add detail** to the image by increasing density slightly. The **minimum pixel size is 4.**
 - Click on the **Apply** button to preview the results of any changes made to pixel size, without exiting the **Image Preview** box.
 6. You can continue to make adjustments using the **Color Settings**. The default is set to 16 colors.
 - Use a **larger number** for the **Max Color** setting to capture more of the image if you seem to be missing areas in the design. **The maximum number is 64.**
 - Use a **smaller number** for the **Max Color** setting to reduce the number of colors and areas in the preview. **The minimum number of colors is 2.**
 - Click on the **Apply** button to preview the results of any changes made to the color setting, without exiting the **Image Preview** box.
 7. When you are satisfied with the preview results, click on **Continue**.
 - The generated stitches are inserted into **Generations™**. The **Resize** dialog box opens. You may adjust the size as needed.

8. Due to the special stitches used to create the **photo cross stitch effect**, stitch areas are locked when generated. Since the areas are locked you will receive a **Warning** box even if no change in the size is made. Select **Yes** to close the box.
9. The **Cross Stitch Photo** effect allows for limited editing. You can remove unwanted areas and stitches by using the editing tools. Please see other sections in this manual for information on editing.

Note: Due to the nature of cross stitch fills, you can expect more jump stitches in the design.

- You can use the **Cross Stitch** photo option to create cross stitch designs as well. Just insert the image into the **photo option** and select **Cross Stitch**.
- The more vivid the colors in the image, the more stunning the cross stitch will be.

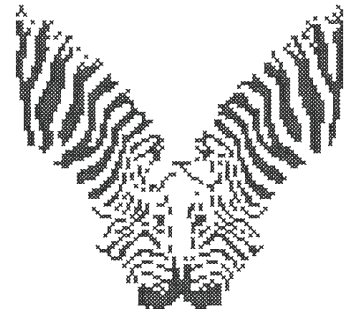
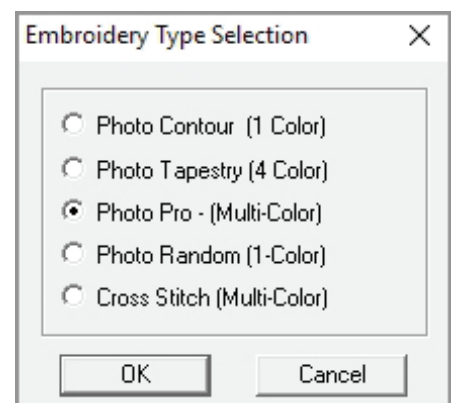


Photo Pro Multi Color

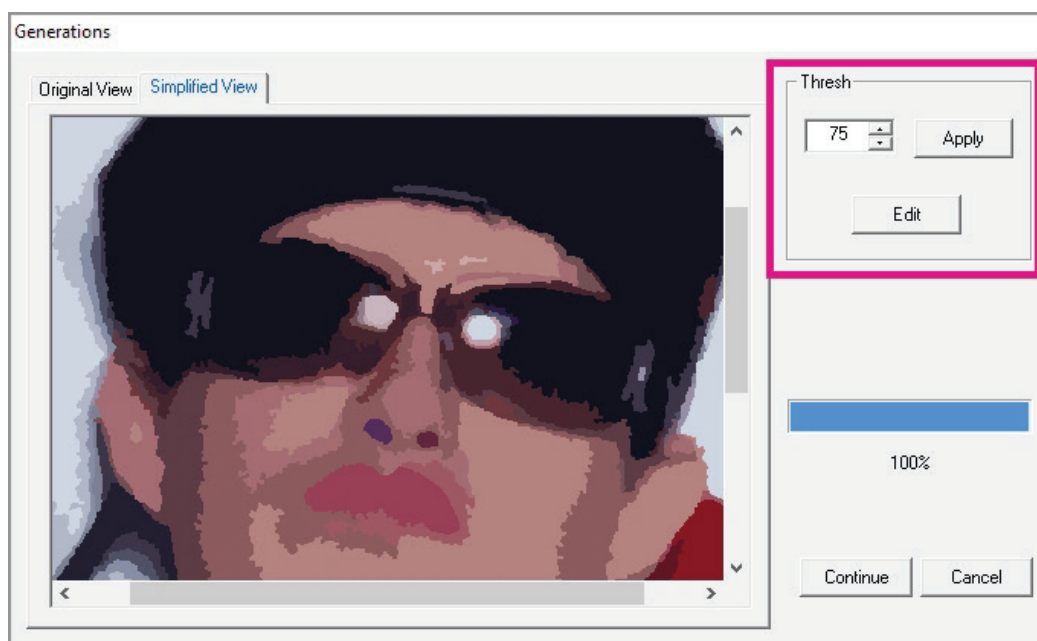
The Photo Pro option will digitize the areas in your photo by using regular embroidery fill and satin stitches in the design. You will have use of the full range of editing tools in **Generations™**.

Using Photo Pro Multi Color

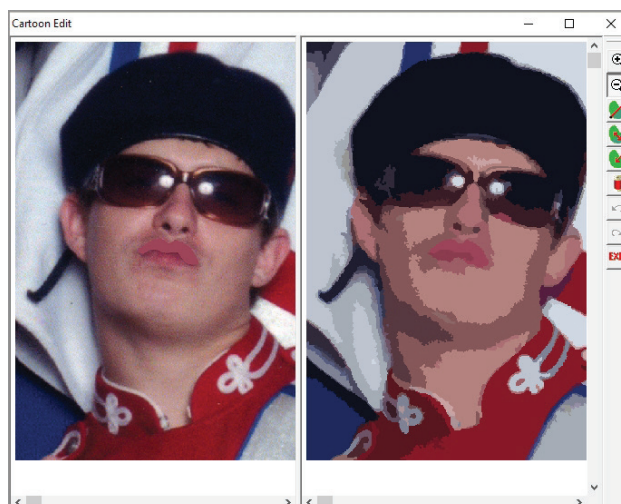
1. Insert the photo into **Generations™** using **Create** and then **Insert Image** from the menu.
Or
Left click on the  **Insert Image** icon in the **Create** toolbar.
2. **Select** the **photo** or image you wish to insert from the **Select Graphic** window.
3. In the image type, select **Photograph** then click on the **OK** button.
 - The **Embroidery Type** dialog box opens.



4. Select **Photo Pro** then click on the **OK** button.
 - The image opens in the **Photo Pro Image Processing** window.




- At this point, **Generations™** has made an initial analysis of the image and detected its outlines based on the optimum color recognition percentage.
5. If necessary, you can increase or decrease the color recognition percentage. In the **Thresh** box, use the arrows or type in a new number then click on **Apply** to see the results in the **Simplified View** window.
 6. If you are unable to achieve the desired results using the **Thresh Box**, click on the **Edit** button to open the **Cartoon Edit** window.
 - The **Cartoon Edit** window has options similar to those in the **Image Processing** window and the other portions of **Generations™**, but offer more precise or detailed editing of the image.
 - The **Cartoon Edit** window is divided in two sections.
 - The **left** side contains the **Original View** of the image.
 - The **Simplified View** of the image is seen on the **right** side.
 7. Select the area to edit. You may select an area from **either** the **Original Image** on the left side, or the **Simplified View** on the right side. Simply place the mouse pointer over the area you want to select and **click** the **right mouse** button.
 - In the **Original Image** on the left side, the **selected area** is shown with **blue dashed lines**.

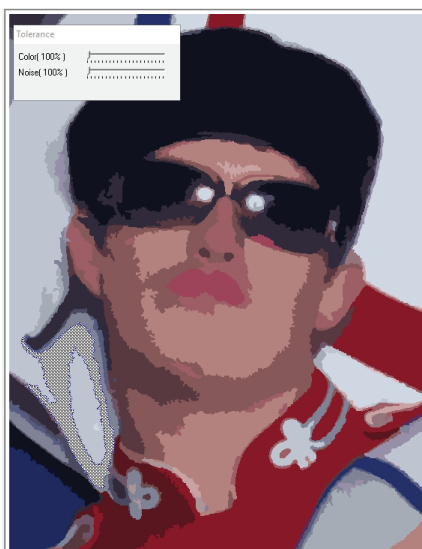




- In the **Simplified View** on the right side, the **selected area** is shown in a **crosshatch gray** shade **surrounded by blue dashed lines**.
- To select **multiple areas**, **hold down [CTRL]** on the keyboard while you **right click** on each desired area.
- If you want to **select all areas** in a particular **color**, **left click** on the **color chip** in the **Color Strip**. All areas in that color will be selected in both the original and simplified views. The editing tools can then be used to make changes to the selected areas.

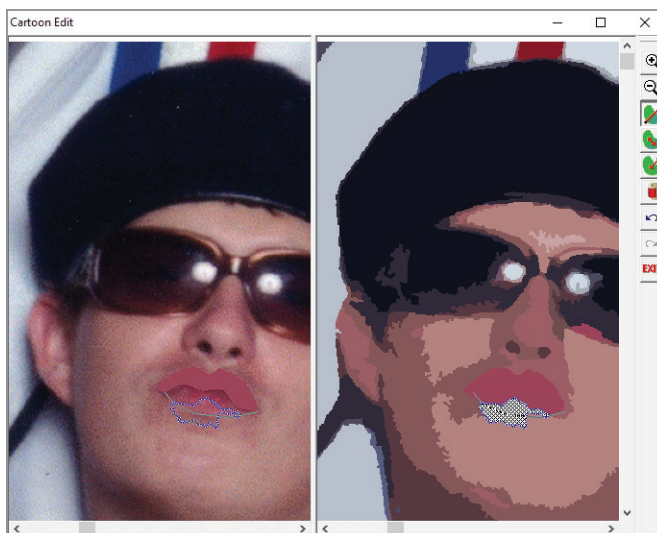


8. You can also use the **Tolerance** boxes to select areas for editing. In the Cartoon Edit window you'll see two floating dialog boxes, the **Tolerance** box and **Tolerance of Small Areas** box.
 - The **Tolerance of Small Areas** box allows you select the smaller areas of color in the image.
 - **Slide** the **Tolerance** bar to the **right** to **increase** the **percentage of color tolerance or sensitivity**. The program will detect the smaller areas of color that would produce very small stitches. You can then merge them into larger areas using the **merge tools** on the right hand tool bar.
 - The **Noise** bar adjusts how the image is seen. If the image you are inserting is not very clear, **slide** the **Noise bar** to the **right** to **decrease** the **sensitivity** of the how the program looks at the image pixels. The **default** setting is **100%**.
9. Use the  **Merge to Closest Area** tool to combine selected areas with the larger area closest to them. Using this tool you would select only the areas that you want removed. They will automatically be merged to the areas that are closest to them. This tool helps reduce the areas that will be processed in the design.

Tip: Merging the small area to the closest area may remove detail from the photo design.





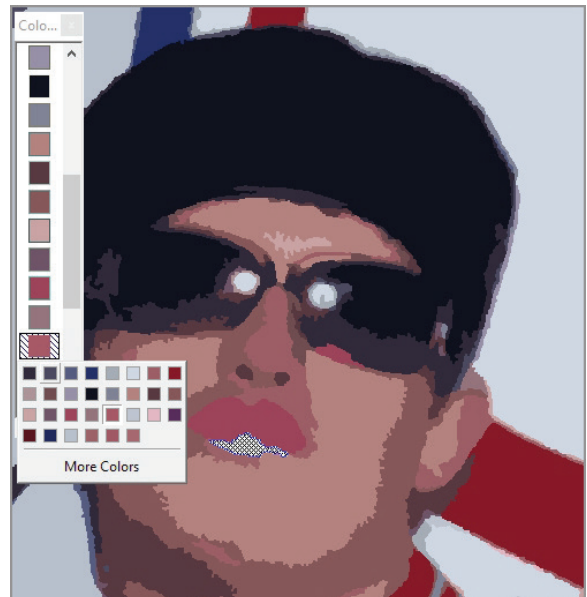
- The **Tolerance** box allows you to specify **more** or **less color recognition** in a selected area. This can help define the areas where stitches will be placed.
 - To use this tool, select an area as explained in step 7, then **slide** the **Color** and **Noise** bars as needed.
 - **Slide** the **Color** bar to the **right** to **decrease** the **color recognition percentage**. The program will see less division in the color areas. This may combine colors and increase the size of the selected area. The **default** setting is **100%**.
10. Use the  **Merge Selected Areas** tool to combine selected areas in the image into a single area. Areas to be merged **must be connected to each other**. Use of this tool helps decrease the number of areas created when the image is inserted and stitches are **generated**.
11. If desired, use **Editing tools** in the toolbar on the right side of the window to make further changes to the scanned image.
- To get more detail in certain parts of the photo use the  **Divide By a Line** tool. Similar to **Divide with a Line** in View Outline mode, this tool is used to split an area into two pieces. You can mark **more than one point** to divide the area.




- For example, in this photo we needed to have more definition in the mouth. The lower lip was divided out.
- Once editing is complete, right click on the new area and then locate the color chip that represents the area. Generally newly created area color chips are placed at the bottom of the **color chip bar**.
- Left click on the **color chip** and the area will highlight. Right click on the color chip and select a new color for the area.

- **Undo and Redo**

The next icons are  **Undo** and  **Redo**. You may undo and redo one action at a time.



12. When all editing changes are completed, **left click** on the  **Exit** icon at the bottom of the tool bar.
 - The edited image is inserted in the **Scanned Image Editing** window. If necessary, you can click on the **Edit** button again to return to the **Cartoon Edit** window and make additional changes.

13. Click on the **Continue** button. The edited image is inserted into **Generations™** for stitch processing. The **Resize** dialog box opens.
14. You may adjust the size as needed. Unlike other photo stitch options, the **Photo Pro** fills can be adjusted, edited, reshaped and merged using the editing tools in **Outline View**.
15. Click on **OK** to continue. The image outlines display in the work area.
16. You must now **generate** the stitches.

Click on the  **Generate** icon.

Or

Select **Accessories** from the menu and then **Generate**.

Or

Press **[F9]** on the computer keyboard.



Chapter 6

Manual Digitizing Basics












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Manual Digitizing Overview

Normally, an image is brought into **Generations™** and automatically digitized. However, for those times when you have a poor quality image or want more artistic freedom, **Generations™** provides you with manual digitizing tools. Use these to digitize an entire design, specific parts of a design, or to add elements that were not originally present in the scanned or clipart image.

There are ten tools available on the **Create Toolbar** manual digitizing:

-  **Create Satin:** Makes a satin stitch area where the stitch angle follows the shape.
-  **Create Satin:** Makes a satin stitch area where the stitch angle follows the shape.
-  **Create Free Hand Line:** Makes a run stitch line or uniform width column.
-  **Create Free Hand Shape:** Makes a filled in, free-form shape.
-  **Create Continuous Freehand Line:** Makes a continuous drawn running line.
-  **Create Rectangle:** Makes an automatic square or rectangle that is filled in with stitches.
-  **Create Circle:** Makes an automatic circle or oval that is filled in with stitches.
-  **Create Ellipse:** Makes an ellipse based on two measurements.
-  **Create True Arc:** Makes a perfectly arced line shape, to be filled with run stitches or a uniform width column.
-  **Insert Stitch:** Makes individual stitches, where the user controls the precise length and position of every stitch.
-  **Magic Wand area:** Autotraces an area of the image. This tool lets you pick up detailed areas not detected in the original automatic outline recognition, or digitize the image one area at a time without having to manually mark each area.

Once you have created the area or line, it can be changed in the same manner as an automatically generated area, using the **Area Properties**, **View Outline** and **View Angle** menus. Stitches can also be inserted, moved or deleted individually using the manual stitch editing tools.

Create Satin

A **satin area** is one in which the stitch angle follows the shape of the area. The area can be an irregular size – narrow in some places, wide in others.


The most important factor in creating a **satin area** is that you are marking the opposite sides of the area, so that the stitches form in between.

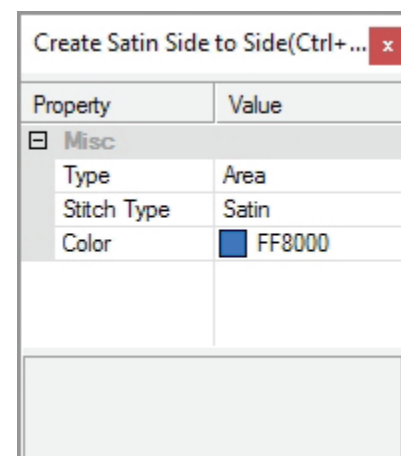
Creating a Satin to Side

1. Select the **Create Satin Side to Side** icon  from the **Create** toolbar.

Or

Select **Create**, then **Satin Side to Side** from the menu.

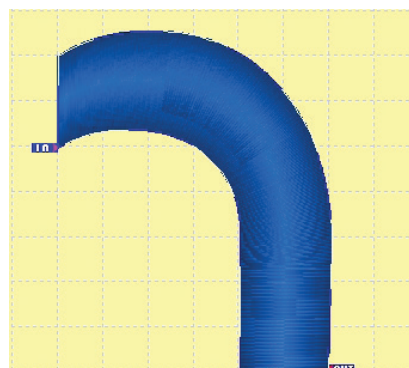
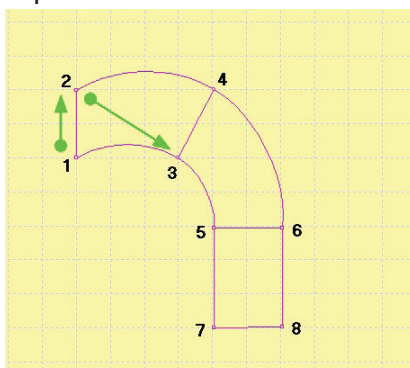
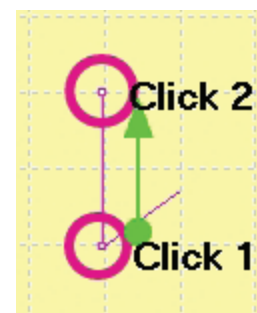
- The cursor becomes a circle with a cross hair. 
- The **Create Satin Side to Side Property Toolbar** opens. From this toolbar you can change setting, such as color, before you punch.
- To change the default color, **Left Click** on the Color option and then **Left Click** on the small button with 3 dots (right hand side of the Property box). This will bring you to the color palette.
- To select other colors other than a Basic Color, **Left Click** on the Define Custom Colors button. Once you have chosen your color, click **OK**. You will now have a new color for your input.



2. Move the cursor to the desired position and click for the first point in the satin area:
 - Use a **left click** for a **straight** or corner point.
 - Use a **right click** for a **smooth** or curved point.
3. Move the cursor to a new position, **opposite the first point**, and **click** for the second point in the area.

Note: You can make any combination of left and right mouse clicks.

4. Repeat steps 2 and 3 to define the entire satin area.
 - Each point you click is marked with a symbol:
A **square** represents a **left clicked straight point**.
A **circle** represents a **right clicked curve point**.
 - The red line connecting two opposite points indicates the stitch angle at that point in the satin area.
 - Remember to click opposite sides of the column.
 - If you make a mistake, press **[Backspace]** on the keyboard to delete the last point. Each subsequent time you press **[Backspace]**, the previous point is removed. Then just re-mark the points.



- When all points are marked, press **[Enter]** on the keyboard. The stitches are generated automatically.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

- Repeat steps 2 through 5 to create additional satin areas if desired.
- Press **[ESC]** on the keyboard to turn off the tool.


Create Satin Side by Side

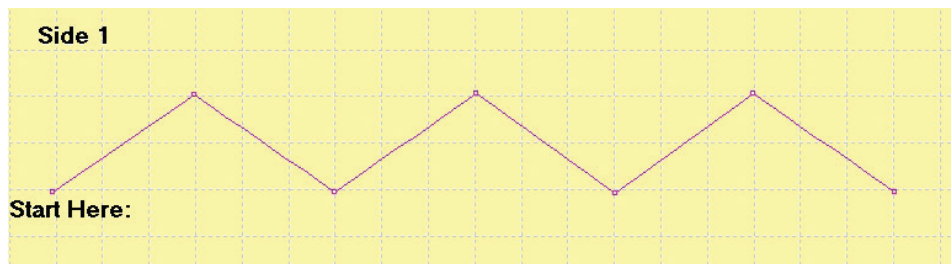
- To activate the tool, left click on the  **Create Satin Side By Side** icon on the **Creation Toolbar**.

- Your cursor will turn into a crosshair. 

- Once this is selected, the new **Punch Properties** bar will appear. Change the properties as desired.
- To start inputting the first side of the satin use left or right clicks for input points.

- If you make an error placing a point, press the **[Backspace]** key to remove the point.
- When you have completed the first side of the area, press **[Enter]** on the keyboard.

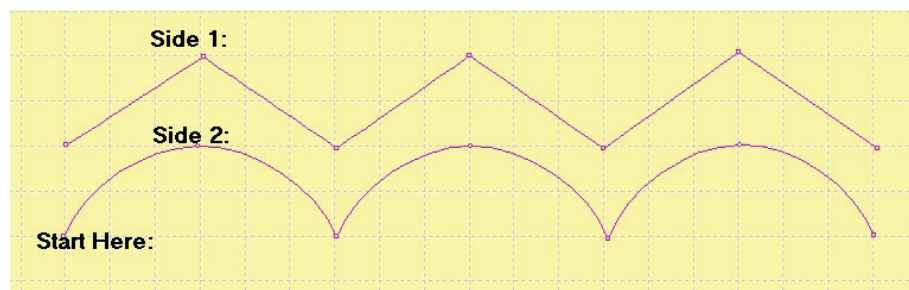
Property	Value
Create Satin Side by Side [X]	
<input checked="" type="checkbox"/> Misc	
Type	Area
Stitch Type	Satin
Color	 FF8000
Type AREA or LINE	



Side1:

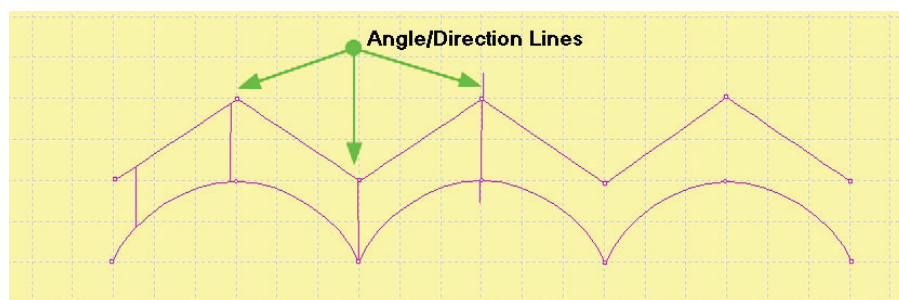
- Input the second side using **Left or Right** mouse clicks to create input points.
 - If you make an error placing a point, press the **[Backspace]** key to remove the point.
 - When you have completed the second side of the area, press **[Enter]** on the keyboard.

Hint: Make sure you start the second side from the same end as you did with the first side (ie: start both ends from the left)

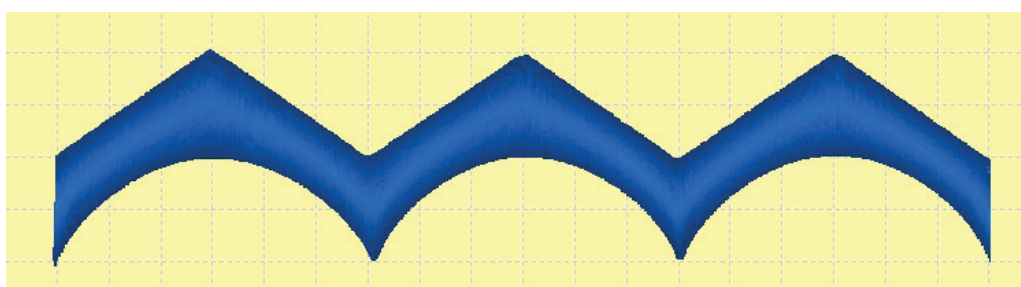


Side 2:

- Now it's time to create the stitch direction or angles for the satin stitching
- To input an angle, start on the outside of the area and press and hold the left mouse button and then drag the mouse to the opposite side.
 - If you make an error placing an Angle/Direction line, press the **[Backspace]** key to remove the line.
 - Release** the left mouse button when you are satisfied with the angle or direction line.



- When all angles lines are completed, press **[Enter]** on the keyboard to create the satin area.





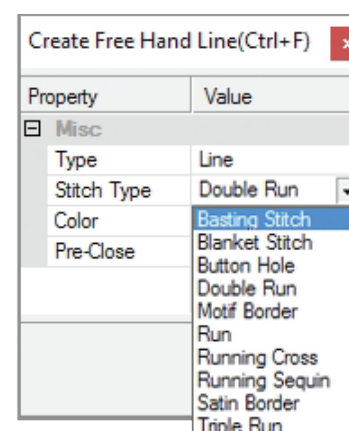
- When all **Satin Side by Side** areas have been completed, press **[ESC]** on the keyboard to turn off the inputting tool.

Create Free Hand Line

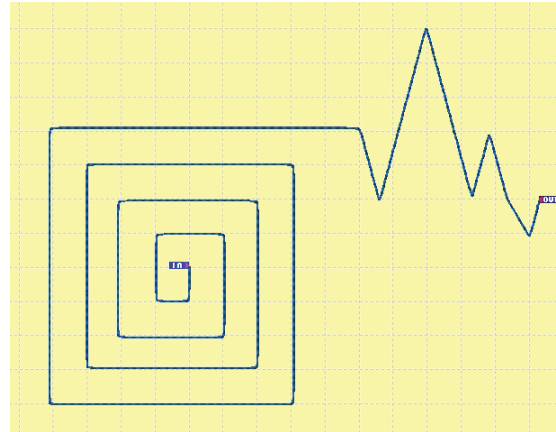
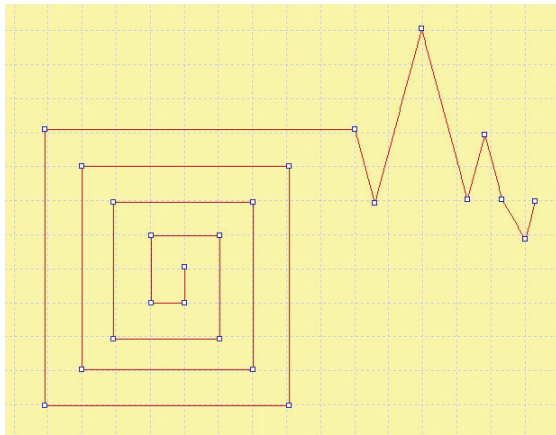
A *Free Hand Line* is a free form path that defines a line of running stitches, or the center line of a satin column, motif or cross stitch shapes. This tool can be used to add outlines to your design.

Creating a Free Hand Line

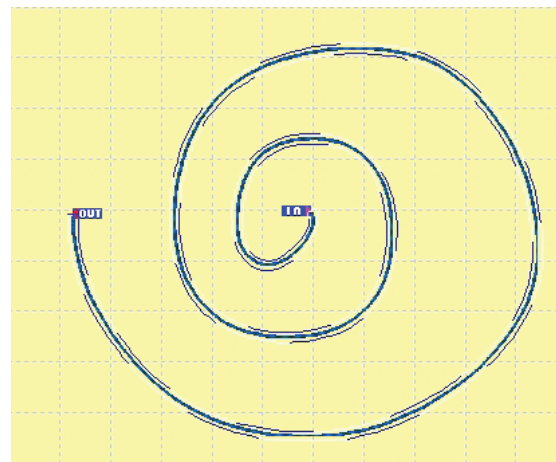
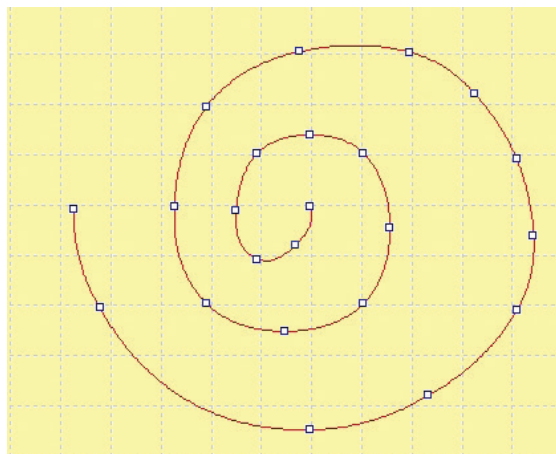
- Select the **Create Free Hand Line** icon  from the **Create** toolbar.
Or
Select **Create**, then **Free Hand Line** from the menu.
The cursor becomes a circle with a cross hair. 
- Move the cursor to the desired position and click for the first point in the free hand line:
 - Use a **left click** for a **straight** or corner point
 - Use a **right click** for a **smooth** or curved point.



- To create a **perfect straight line**, hold down **[CTRL]** on the keyboard while you **left click**. Holding the CTRL key and left clicking will create perfectly straight line segments at 0 or 90 degrees and straight angles in 15 degree increments.



- To get an **evenly arched** line segment, hold down **[CTRL]** on the keyboard while you **right click**.



- Each point you click is marked with a symbol:
A **square** represents a **left clicked straight point**.
A **circle** represents a **right clicked curve point**.
3. Continue clicking points to mark the entire **freehand** line.
 - If you make a mistake, press **[Backspace]** on the keyboard to delete the last point. Each subsequent time you press **[Backspace]**, the previous point is removed. Then just re-mark the points.
 4. When all points on the line are marked, press **[Enter]** on the keyboard to finish the freehand line. The stitches are generated automatically.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

5. Repeat steps 2 through 4 to create additional line areas as desired.
6. Press **[ESC]** on the keyboard to turn off the tool.

Create Free Hand Area

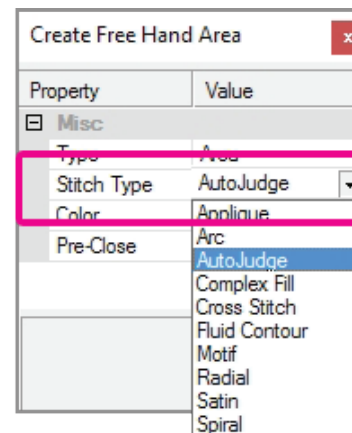
A free hand area is any irregular shape that is filled in with stitches.

Creating a Free Hand Area

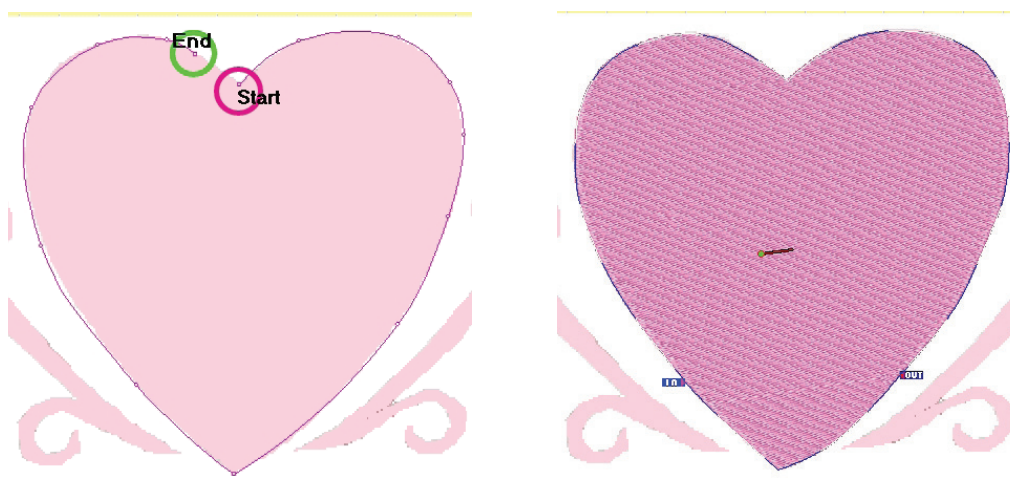
1. Select the **Create Free Hand Area** icon  from the **Create** toolbar.
Or
Select **Create**, then **Free Hand Area** from the menu.

The cursor becomes a circle with a cross hair. 

2. The new **Punch Properties bar** will appear. Change the properties as desired.
 - Click on the **Stitch Type** option and a **black arrow** will appear.
 - Click on the arrow and a pop-up menu will open with all fill types available.
 - Left click to select the desired fill type from the pop-up menu.



3. Move the cursor to the desired position and click to place the first point in the freehand shape:
 - Use a **left click** for a **straight** or corner point.
 - Use a **right click** for a **smooth** or curved point.
4. Continue clicking points to mark the entire shape.
If you make a mistake, press **[Backspace]** on the keyboard to delete the last point. Each subsequent time you press **[Backspace]**, the previous point is removed. Then just re-mark the points.
 - There is no need to match the start and end input points as the program will automatically close the area.



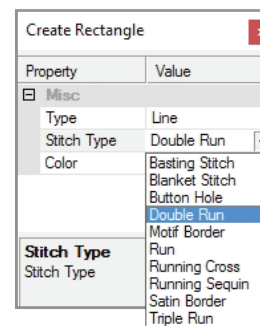
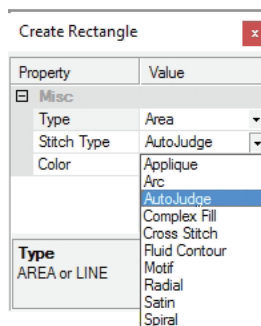
5. When all points in the shape are marked, press **[Enter]** on the keyboard to finish the freehand shape. The stitches are generated automatically.

TIP: You do not have to close the area for the program to create stitches. If you accidentally create an area with crossed lines, Generations will not close the area and you will be able to correct the overlapped points.

- If outlines or points overlap, the program will not create the area. If the overlap is severe, it will not allow the point to be placed.
 - Use the **[Backspace]** key to remove incorrect points and input new points.
5. Repeat steps 2 through 4 to create additional areas .
 6. Press **[ESC]** on the keyboard to turn off the tool.



Create Shapes

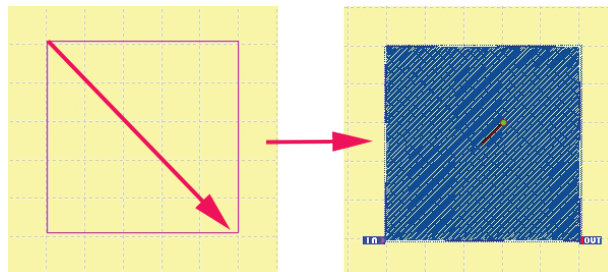
Generations™ provides shape tools so that you can create basic shapes quickly. When you select any of the shape input tools, the **Punch Property Toolbar** will display and offer several shape and/or fill options.



- Click on the **Type** and select **Area** or **Line** as the input type.
- Click on the **Stitch Type** and select one of the fill or line options available.

Creating a Rectangle

1. Select the **Create Rectangle** icon  from the **Create** toolbar.
Or
Select **Create**, then **Rectangle** from the menu.
The cursor becomes a circle with a cross hair. 
2. Move the mouse cursor into the desired position for one corner of the square or rectangle and **click** the **left mouse** button.
3. Drag the mouse cursor towards the opposite corner of the square, until it is the size you want.





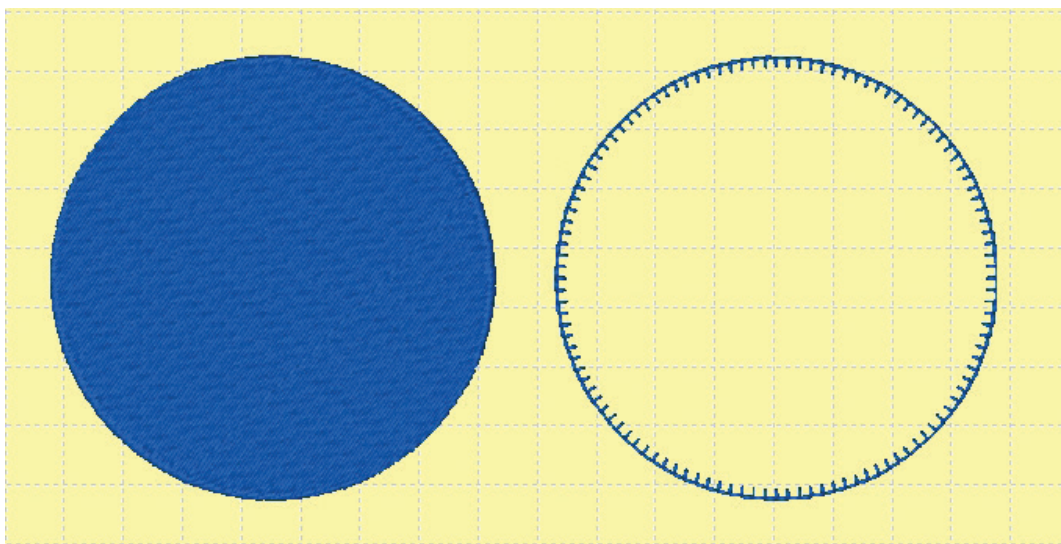
- If you want a **rectangle**, hold down **[CTRL]** on the keyboard.
4. **Click** the **left mouse** button **again**, to complete the square or rectangle. The stitches are generated automatically.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

5. Repeat steps 2 through 4 to create additional squares or rectangles.
6. Press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Creating a Circle

1. Select the **Create Circle** icon  from the **Create** toolbar.
Or
Select **Create**, then **Circle** from the menu.
The cursor becomes a circle with a cross hair. 
2. Move the mouse cursor into the desired position for one corner of the circle or oval and **click** the **left mouse** button.
3. Drag the mouse cursor towards the opposite corner of the circle, until it is the size you want.
 - If you want an **oval**, hold down **[CTRL]** on the keyboard.





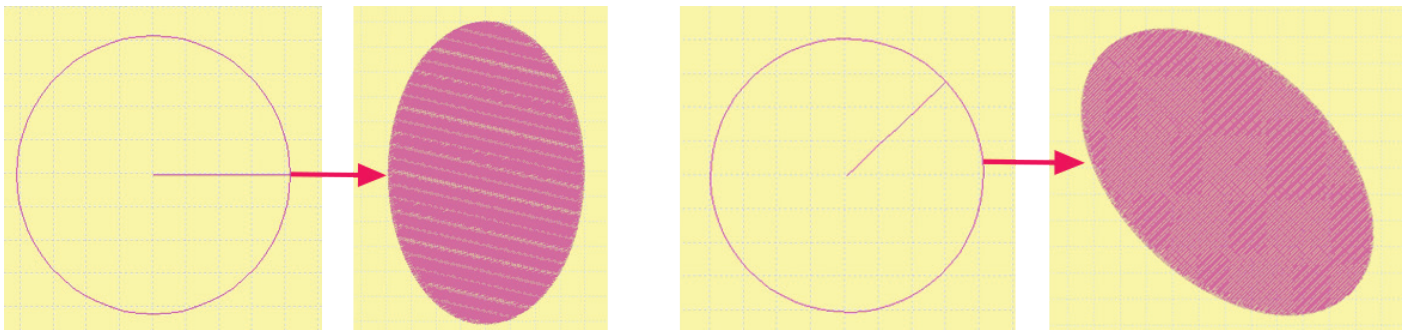
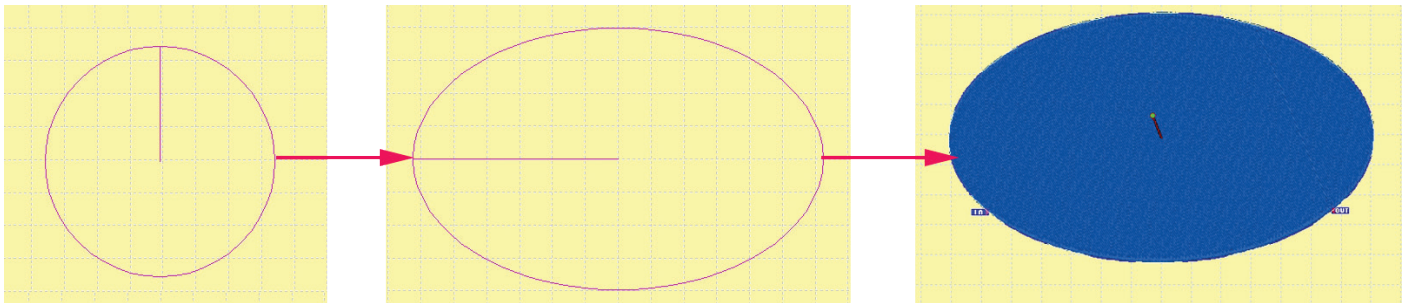
4. **Click** the **left mouse** button again, to complete the circle or oval. The stitches are generated automatically.
5. If desired, repeat steps 2 through 4 to create additional shapes.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

6. Press **[ESC]** on the keyboard or **click** the **right mouse** button to turn off the tool.

Creating a True Ellipse

1. Select the **Create True Ellipse** icon  from the **Create** toolbar.
Or
Select **Create**, then **True Ellipse** from the menu.
The cursor becomes a circle with a cross hair. 
2. Move the mouse cursor to the center of where the ellipse shape will be created.
3. Click the **left mouse** button to begin creating the shape.
4. **Drag** the mouse and a circle will appear on the screen with a direction line moving from the center of the shape.
 - The direction of the first line will determine the direction of the elliptical shape.





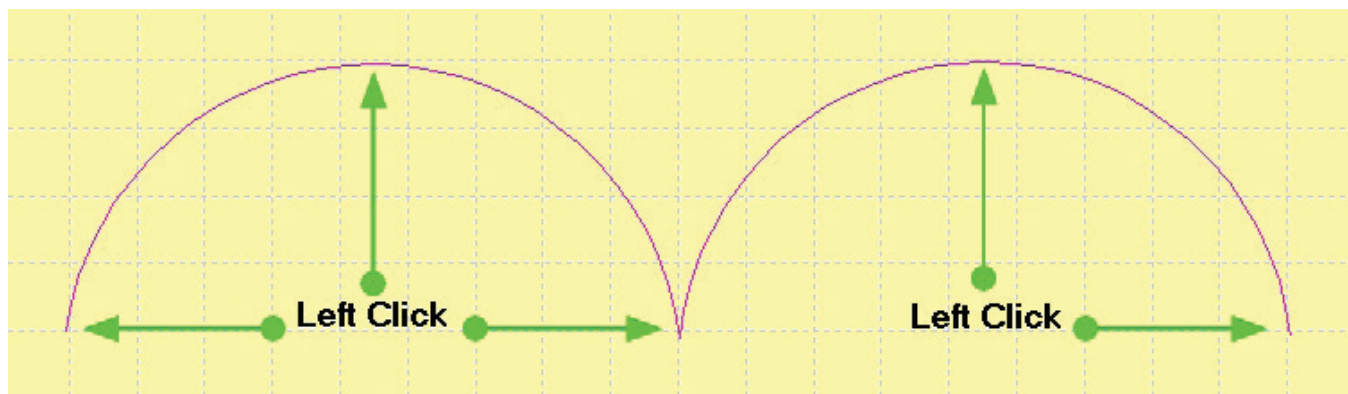
5. When the circle is the desired width, **left click** the mouse to begin creating the ellipse shape.
6. **Drag** the mouse to until the ellipse is at the desired size and shape.
7. **Left click** the mouse to create the shape.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

8. When you have created the desired number of ellipses, press **[ESC]** on the keyboard or **click** the **right mouse** button to turn off the tool.

Creating a TrueArc

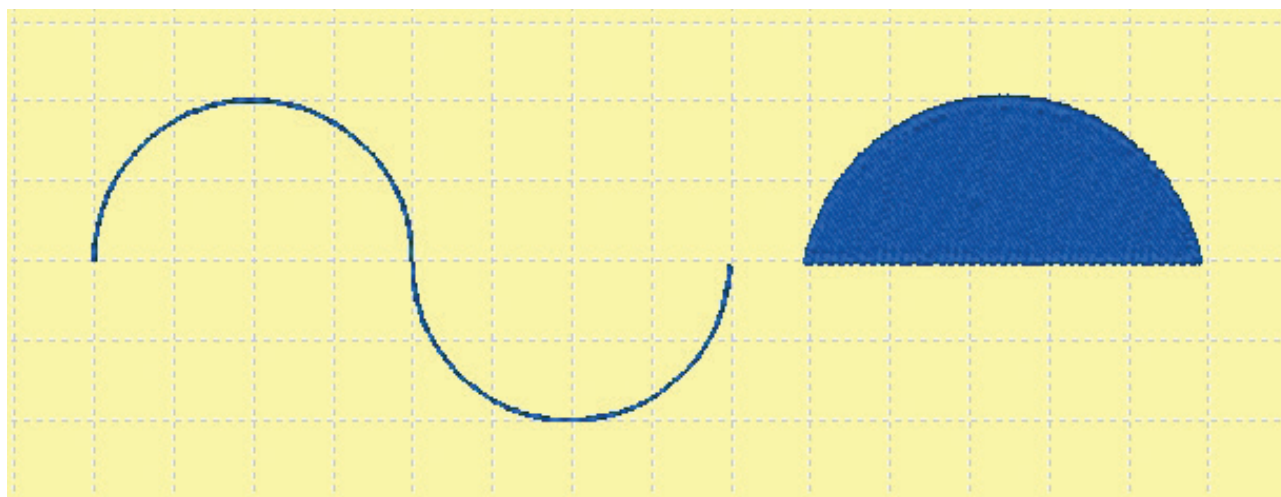
1. Select the **Create TrueArc** icon  from the **Create** toolbar.
Or
Select **Create**, then **TrueArc** from the menu.
The cursor becomes a circle with a cross hair. 
2. Move the mouse cursor into the desired position for the start point of the arced line and **click** the **left mouse** button.
3. Move the mouse cursor to the desired position for the center of the arc and **click** the **left mouse** button.
4. Move the cursor to the place where you want the arced line to end, and **click** the **left mouse** button.



5. When you have created the desired number of arcs, press **[Enter]** on the keyboard to create the line or area.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 6 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

- When creating lines with the **Perfect Arc** tool, you can create continuous arcs. When creating arcs using the Area tool, you can create one perfect Arc.





7. Press **[ESC]** on the keyboard to turn off the arc tool.

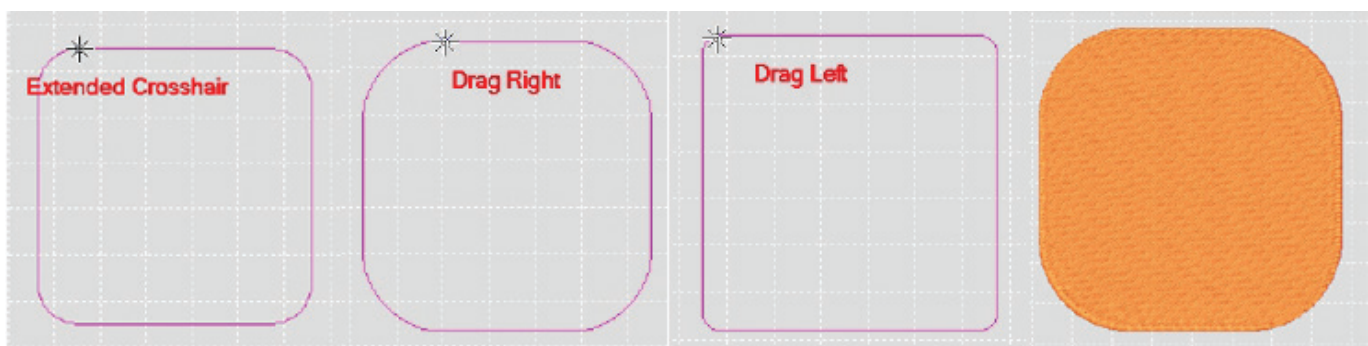
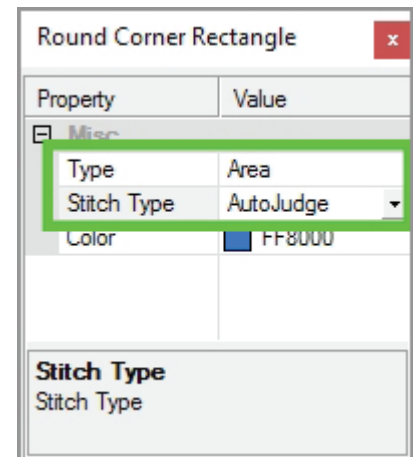
Punch Toolbar

The Punch Toolbar adds basic shapes that can be converted to more complicated shape using reshape nodes. These shapes can be created as an area or line using the options in the Punch Property toolbar.

Create Round Corner Rectangle

This new punch tool creates a rounded square or rectangle by drawing the area with the mouse.


1. Select the  **Round Corner Rectangle** icon on the **Punch Toolbar**.
 - The cursor becomes a circle with a cross hair. 
2. The **Punch Properties** toolbar will open. Change the properties as desired.
3. Move the mouse cursor into the desired position for one corner of the square or rectangle and **click the left mouse** button.
4. **Drag the mouse cursor** towards the opposite corner of the square, until it is the size you want.
 - This will create a rounded square.
 - To create a rounded rectangle, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the square/rectangle will be inserted.
 - There are no stitches yet in the shape. The rounded shape has a blue outlined node. This node will edit the round corners of the shape.
6. To alter the corners, place your cursor over the node. The cursor turn into an **extended crosshair cursor**. Press and hold the left mouse button and drag the node left or right.
 - Dragging the cursor left will make the corners more sharp.
 - Dragging the cursor to the right corners more rounded.
 - Release the left click when finished.

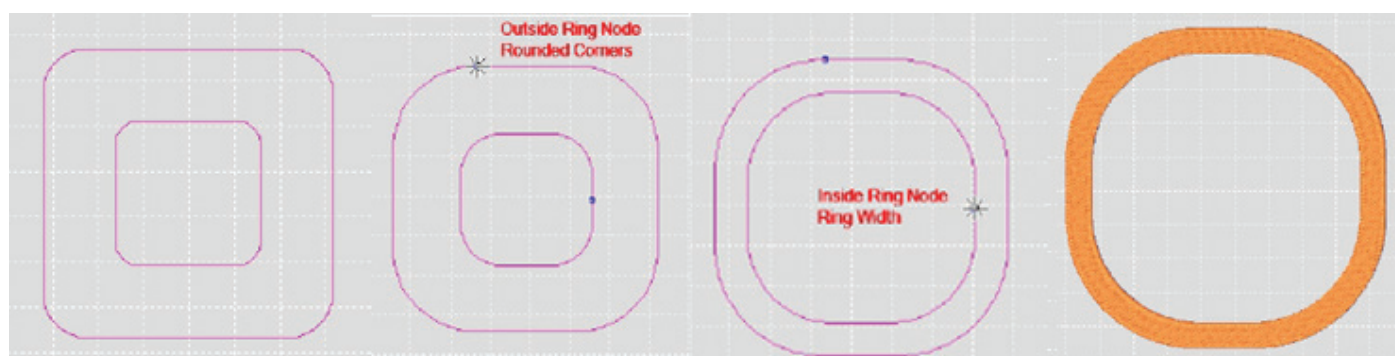
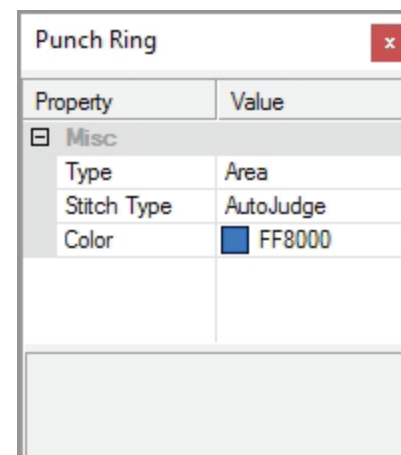


7. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching.
 - Continue inputting rounded rectangles or press **[ESC]** on your keyboard or **click the right mouse** button to turn off the tool.

Punch Ring

This new punch tool allows the user to make rings at any size with smooth or sharp corners.


1. To activate the tool, click on the  **Punch Ring** icon on the **Punch Toolbar**.
2. To input the Ring, place your cursor inside the design work space. Left click hold and drag your mouse.
3. If you want to create an oblong ring, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
4. **Release** the left click on the mouse and the ring will be inserted.
 - The node on the outside ring line controls the rounded corners of the ring.
 - The node on the inside ring line controls the width of the ring.
 - To alter these nodes, place your cursor over the desired node and the cursor will turn into an extended crosshair.




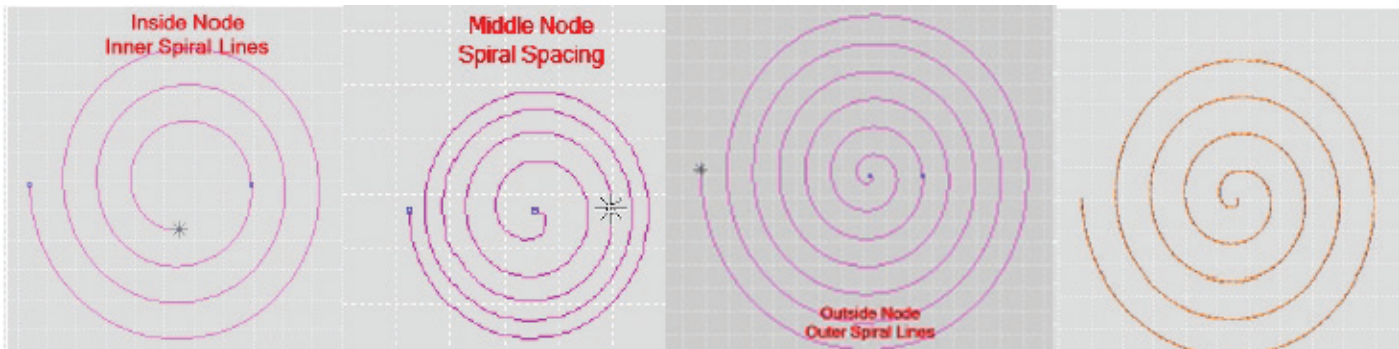
5. Once the extended crosshair appears, **left click hold and drag** the mouse accordingly.
 - For the outside ring line node, drag the mouse left to right.
 - For the inside ring line node, drag the mouse towards or away from the outside ring line.
6. **Release** the left mouse button when finished.
7. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Create Spiral

This new punch tool allows the user to make spirals at any size with variations in the spacing and shape.

- To activate the tool, click on the  **Punch Spiral** icon on the **Punch Toolbar**.
- Once this is selected, the new properties bar will appear. The **Spiral Properties Bar** has some additional properties than color.
 - The additional properties are **Expand and Start**.
 - To change the numbers, input the desired number on your keyboard. Change the properties as desired.
- To input the spiral, place your cursor inside the design work space. Once at the desired starting point, **press and hold** the left mouse button and drag the mouse on the design screen.
- If you wish to create an oblong spiral, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
- Release** the mouse button and the ring will be inserted.
 - There are no stitches in the shape yet. There are now three blue outlined nodes on the shape that you can alter.


Punch Spiral	
Property	Value
<div> <div></div> <div>Misc</div> </div>	
Type	Line
Stitch Type	Double Run
Color	 9E6BD3
Expand	1.00
Start	0.00
End	4.50




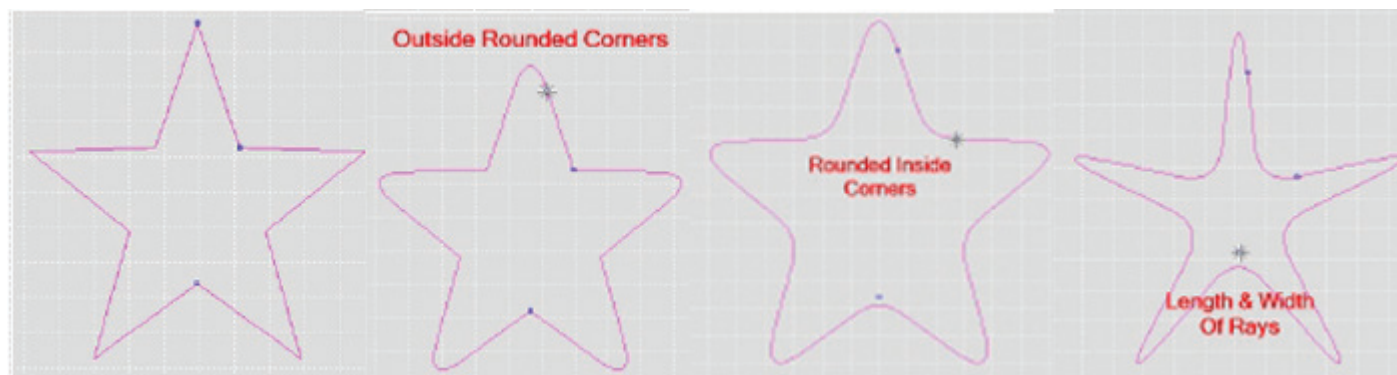
- The node on the start point on the inside of the spiral controls the number of lines on the inner part of the spiral.
 - The node on the middle of the spiral on the right controls the spacing of the spiral.
 - The node on the end point on the outside of the spiral controls the number of lines on the outer part of the spiral.
- To alter these nodes, place your cursor over the desired node and the cursor will turn into an **extended crosshair**. **Press and hold** the left mouse button and drag mouse accordingly.
 - For the start and end point nodes, drag the mouse left, right, or in a spiral fashion.
 - For the middle spiral node, drag the mouse to the left or right.
 - Release the left click when finished.
 - To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Create N Polygon/Star

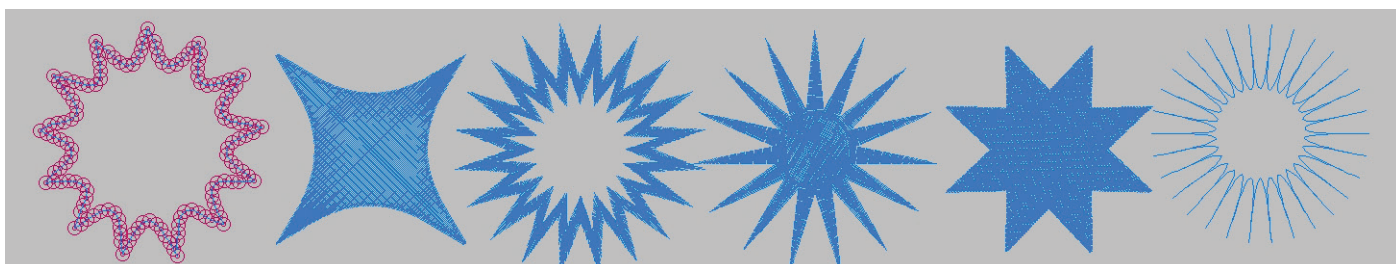
This new punch tool allows the user to make stars/polygons at any size with variations in the points, rays, and corners.

1. To activate the tool, left click on the  **N Polygon/Star** icon on the **Punch Toolbar**.
2. The **N Polygon/Star Properties Bar** has an additional property that allows the numbers of rays to be increased or decreased.
3. To change the number, left click on the number and then enter a new number in the dialog box.
 - The minimum number of rays allowed is 3.
4. To input the **N Polygon/Star**, place your cursor inside the design work space. Once at the desired starting point, **press and hold** the left mouse button and drag the mouse on the design screen.
 - To create an oblong polygon/star, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the polygon/star will be inserted.
 - There are no stitches in the shape yet. There are now three blue outlined nodes on the shape that you can alter.

N Polygon/Star	
Property	Value
☐ Misc	
Type	Auto
Stitch Type	AutoJudge
Color	 FF8000
N	5




- The node on the tip of the ray controls the rounded corners on the outside corners
- The node directly to the bottom right of the first node controls the rounded corners on the inside corners.
- The node on the other inside point of a ray controls the length and width of the rays.

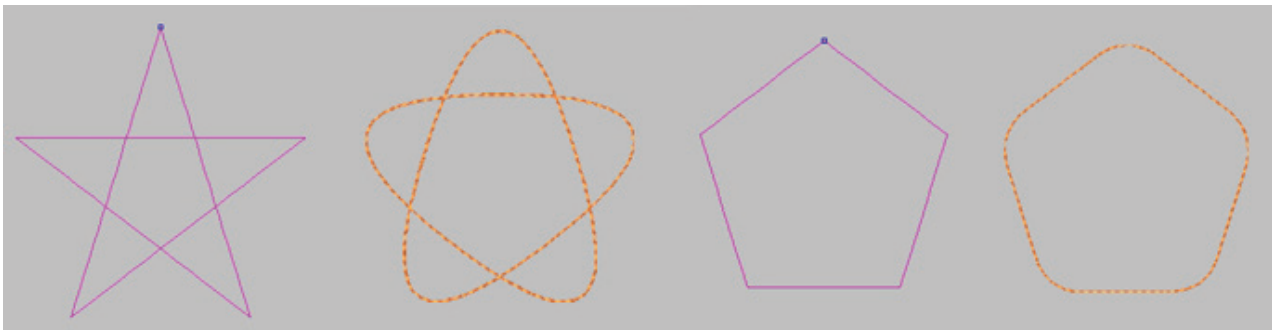
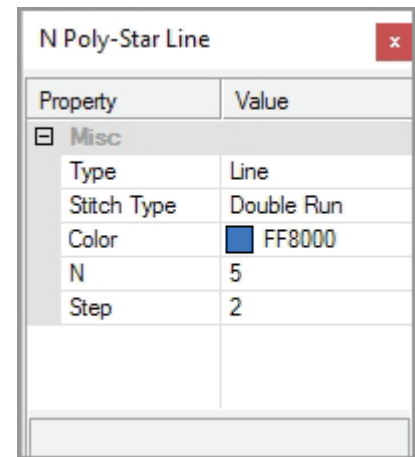


6. To alter these nodes, place your cursor over the desired node and the cursor will turn into an extended crosshair.
7. **Press and hold the left** mouse button and drag the mouse accordingly.
 - For the rounded corner control nodes, drag the mouse left, right, or up and down.
 - For the length and width ray control node, drag the mouse up and down.
8. **Release** the left click when finished.
9. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Create N Poly/Star Line

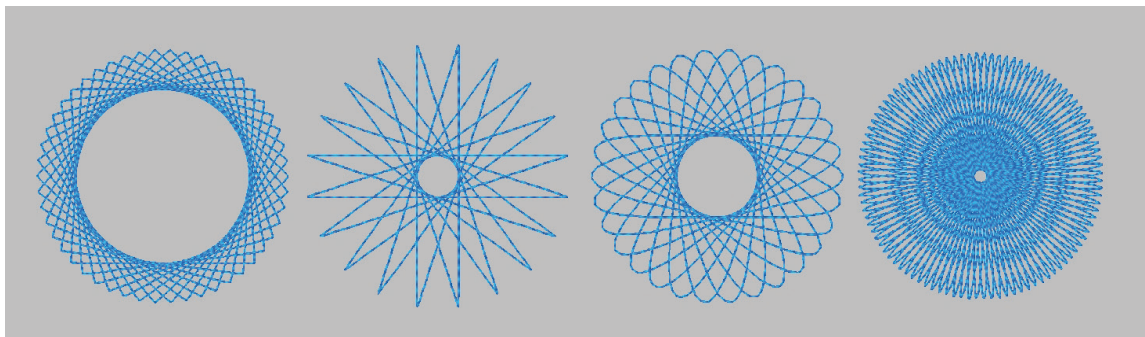
This new punch tool allows the user to make star/polygon lines at any size with variations in the corners.

1. To activate the tool, click on the  **N Poly-Star Line** icon on the **Punch Bar**.
2. The **N Poly-Star Line Properties Bar** has two additional properties.
 - N allows the numbers of rays to be increased or decreased.
 - Step determines if the shape is a polygon or a star.
 - Step 1 is a Polygon and Step 2 is a Star.
3. To change the number, left click on the number and then enter a new number in the dialog box.
 - The minimum number of rays allowed is 3.
4. To input the **N Poly-Star Line**, place your cursor inside the design work space. Once at the desired starting point, **press and hold** the left mouse button and drag the mouse on the design screen.
 - To create an oblong polygon/star line, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the polygon/star will be inserted.
 - There there is one blue outlined node on the shape that you can alter. This controls the curve of the rays.



- **Step** numbers are added as the number of rays are added.
- **Step** also controls the space in the center of the star. The **lower** the number in the **Step** option, the larger the center opening will be
- Change the properties as desired.


N	20
Step	2
	1
	3
	7
	9
Step	



- To alter the curve of the rays, place your mouse cursor over the node. The cursor will turn into an extended crosshair.
- Press and hold** the left mouse button and drag the mouse accordingly.
 - For the rounded corner control nodes, drag the mouse left, right, or up and down.
 - For the length and width ray control node, drag the mouse up and down. Release the left click when finished.
- To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Create Arch/Sector

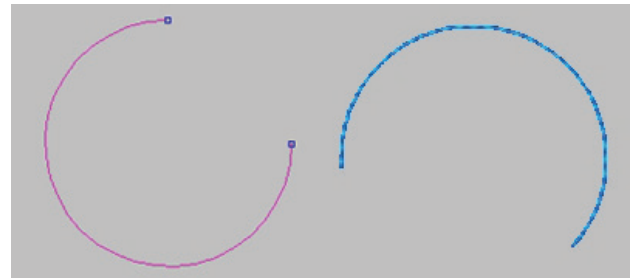
This new punch tool allows the user to create different arches or sectors with varying components.

- To activate the tool, left click on the  **Sector/Arch** icon on the **Punch Bar**.
- Once this is selected, the new properties bar will appear.
 - The **Sector/Arch Properties Bar** has another property than color. One additional property is Arch or Arc.
- To change the type of area or line, left click on the property and then left click on the drop down arrow.
 - There are 3 options to choose from - **Arc Line**, **Arch**, or **Sector**. We will go through all three since they all have different node properties.

Sector/Arch	
Property	Value
Misc	
Type	Area
Stitch Type	AutoJudge
Color	FF8000
Arch or Arc	Sector
	Arc Line
	Arch
	Sector
Arch or Arc	
The shape option of the arc/arch	

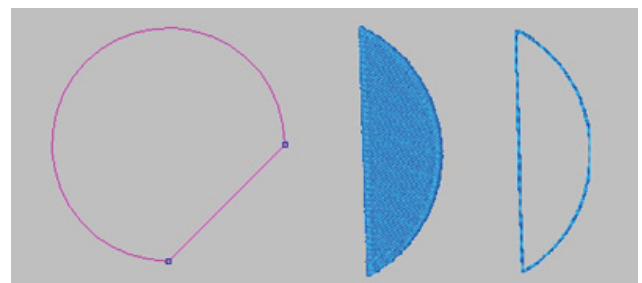
- To input the **Arc Line**, select **Line** from the **Type** and place your cursor inside the design work space.
- Once at the desired starting point, left click hold and drag your mouse on your design screen. This will create an **arc line**.

- To create an oblong arc line, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
6. **Release** the left click on the mouse and the arc line will be inserted.
 - There are no stitches in the shape yet. There are now two blue outlined nodes on the shape that you can alter.
 - These nodes control the size of the arc line.
 8. To alter these nodes, place your cursor over the desired node and the cursor will turn into an extended crosshair.
 9. **Press and hold the left** mouse button and drag mouse accordingly.
 - For the shape control nodes, drag the mouse in a circular or oval fashion.
 10. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click the right mouse** button to turn off the tool.



Let's look at the Arch Area or Line

11. Click on the **Arch** or **Arc property** on the **Properties Bar** and use the drop down arrow to choose Arch.
12. Place your cursor inside the design workspace. **Press and hold** the left mouse button and drag your mouse on the design screen. This will create an enclosed **Arch**.
 - To create an oblong arch, hold down the **[CTRL]** key on your keyboard while dragging the mouse. Release the left click when finished and the arch will be inserted.
 - There are two blue outlined nodes on the shape that you can change. These two nodes control the Arch's shape.
13. Place your cursor over the desired node and the cursor will turn into an extended crosshair. Once the extended crosshair appears, drag the mouse accordingly.
 - Drag the mouse in a circular or oval direction.
14. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard to end inputting.




Lets look at the Sector and sector line

15. To choose **Sector**, left click on the **Arch** or Arc property on the **Properties Bar** and use the drop down arrow to choose **Sector**.
16. To input the **Sector**, place your cursor inside the design workspace. **Press and hold** the left mouse button. Then drag the mouse on the design screen.
 - This will create a **Sector** - similar to a pie.
 - If you want to create an oblong sector, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
17. **Release** the left click and the sector will be inserted.
18. There are no stitches in the shape yet. There are two blue outlined nodes on the shape that you can change.
 - These two nodes control the **Sector's shape**.
 - To change these nodes, place your cursor over the desired node and the cursor will turn into an extended crosshair.
19. Once the extended crosshair appears, **press and hold** the left mouse button. Then drag the mouse accordingly.
 - For these nodes, drag the mouse in a circular or oval direction. Let go of the left click when finished.
20. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

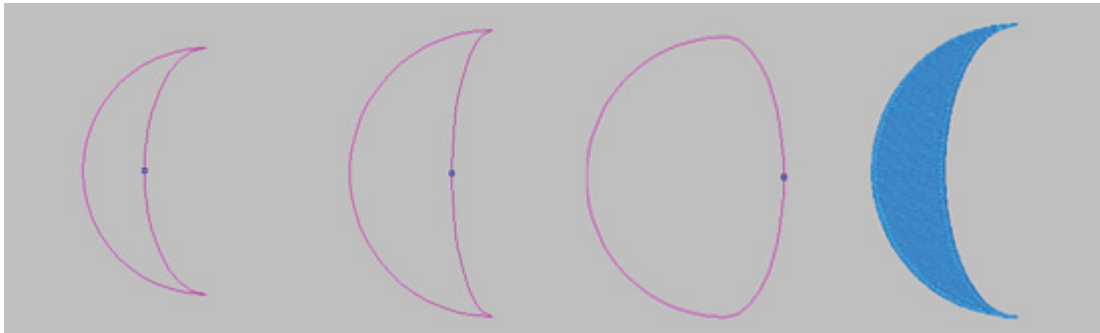


Create Moon

This new punch tool allows the user to make Moon areas at any size with variations in the width.

1. To activate the tool, click on the  **Punch Moon** icon on the **Punch Bar**.
2. The new properties bar will appear. Change the properties as desired.
3. To input the **Moon**, place your cursor inside the design work space. **Press and hold** the left mouse button and **drag** your mouse on the design screen.


- If you want to create an oblong moon, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
4. **Release** the left click on the mouse and the moon shape will be inserted.
 - There are no stitches in the shape yet.
 - There is now one blue outlined node on the shape that you can alter.
 5. This node controls the width of the moon. To alter this node, place your cursor over the node and the cursor will turn into an extended crosshair.
 6. Once the extended crosshair appears, **left click hold and drag** mouse left or right.

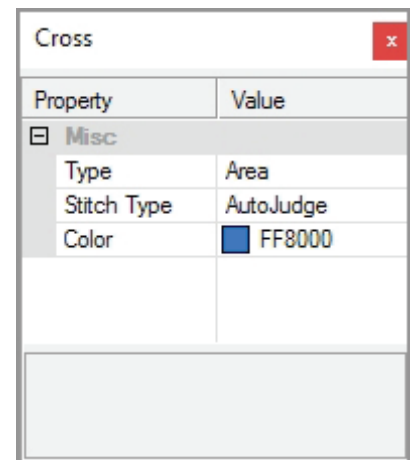


7. **Release** the left mouse button when finished.
8. To input stitches in the new area, press **[Enter]** on your keyboard and the new area will automatically fill with stitching. Continue inputting rings or press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

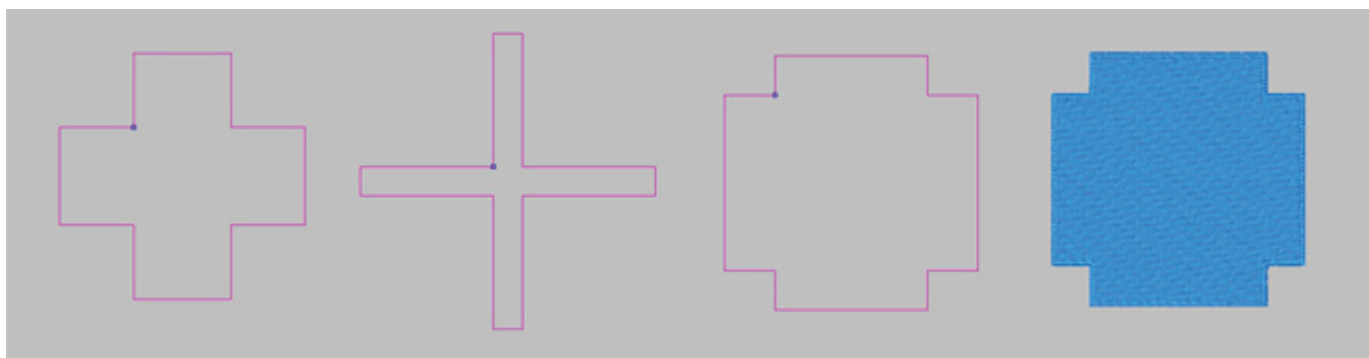
Create Cross

This new punch tool allows the user to make cross areas at any size with variations in the width and length.

1. Click on the  **Punch Cross** icon on the **Punch Bar**.
2. Place your cursor inside the design work space. Once at the desired starting point, **press and hold** the left mouse button and **drag** your mouse on the design screen.
3. This will create a cross
 - To create an oblong cross, hold down the hold down the **[CTRL]** key on your keyboard while dragging the mouse.
4. **Release** the left click on the mouse and the cross shape will be inserted.
 - There are no stitches in the shape yet.
 - There is now one blue outlined node on the shape that you can alter.
 - This node controls the width of the segments of the cross.



5. To alter this node, place your cursor over the node and the cursor will turn into an extended crosshair.
6. Once the extended crosshair appears, **left click hold and drag** mouse left or right.
7. **Release** the left click when finished.



8. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

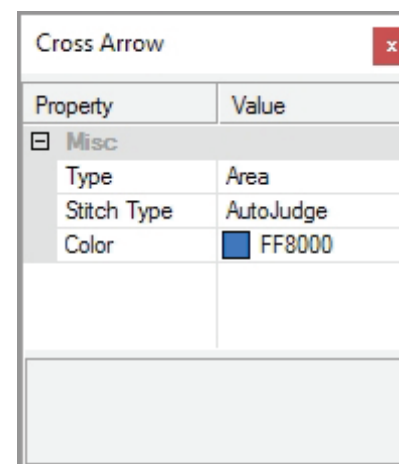
Create Cross Arrow

This new punch tool allows the user to make cross areas with arrow endcaps at any size with variations in the width and length and size of the arrow end cap.

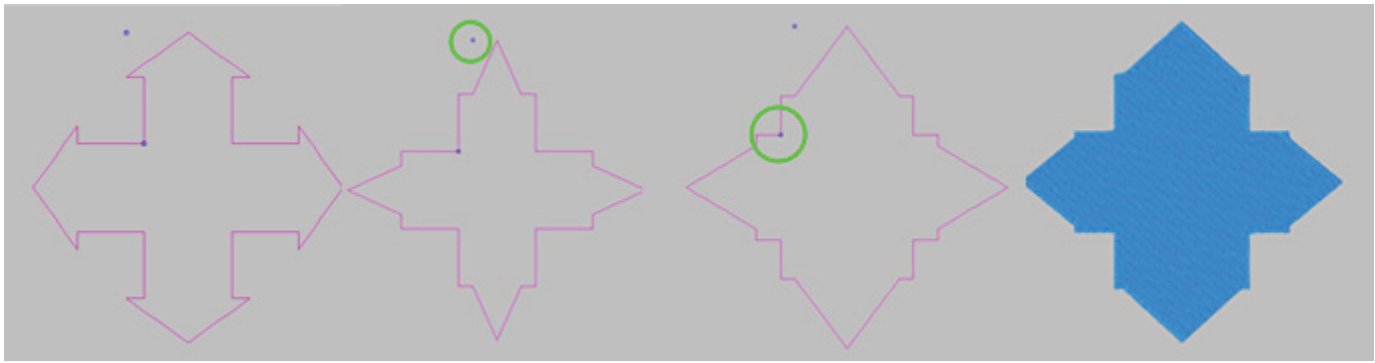
1. Click on the  **Punch Cross Arrow** icon on the **Punch Bar**.

2. Place your cursor inside the design work space. Once at the desired starting point, **press and hold** the left mouse button and drag your mouse on the design screen.

3. This will create a cross
 - To create an oblong cross, hold down the hold down the **[CTRL]** key on your keyboard while dragging the mouse.
4. **Release** the left click on the mouse and the cross shape will be inserted.
 - There are no stitches in the shape yet.
 - There is now one blue outlined node on the shape that you can alter.
 - This node controls the width of the segments of the cross.



5. To alter this node, place your cursor over the node and the cursor will turn into an extended crosshair.
6. Once the extended crosshair appears, **left click hold and drag** mouse left or right.
7. **Release** the left click when finished.




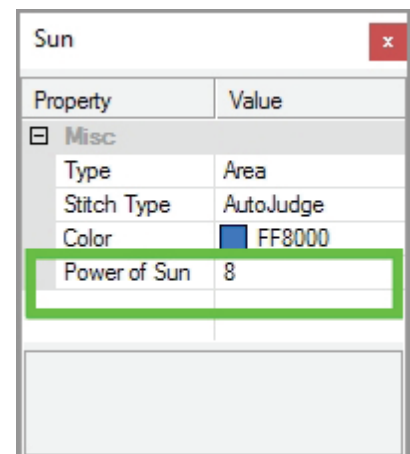
8. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click** the **right mouse** button to turn off the tool.

Create Sun: 3 Styles

Create Sun Style 0:

This new punch tool allows the user to make one sun style with control over the sun rays and the sun's center.

1. To activate the tool, left click on the  **Punch Sun 0** icon on the **Punch Bar**.
2. Once this is selected, the new properties bar will appear.
 - There is an additional property called **Power of Sun**.
 - This controls how many sun rays will appear on the Sun you input.
3. To change the **number of rays**, highlight the number in the properties box and input a new number by entering it on your keyboard.
 - Change the properties as desired.
4. To input the **Sun**, place your cursor inside the design work space. Once at the desired starting point, **left click hold and drag** your mouse on your design screen.
 - To create an oblong sun, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the sun will be inserted.
 - There are no stitches in the shape yet.
 - There are two blue outlined nodes on the shape that you can alter.
 - The node on the ray controls the width and length of the sun rays.
 - The node on the center of the sun controls the size of the center circle/oval.
6. To alter these nodes, place your cursor over the appropriate node and the cursor will turn into an extended crosshair.




7. Once the extended crosshair appears on the sun ray node, **left click hold and drag** mouse left, right, up and down.
 - For the sun center, move the node left or right.
 - Change the shapes with the nodes as desired.

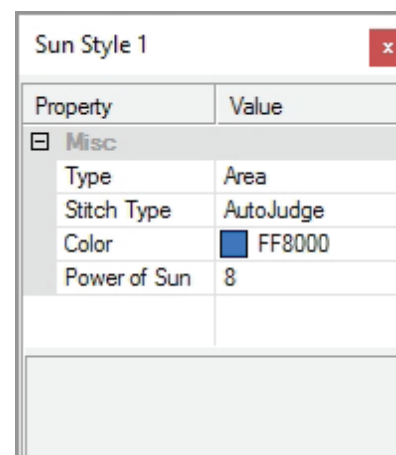


8. **Release the left click** when finished.
9. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click the right mouse** button to turn off the tool.

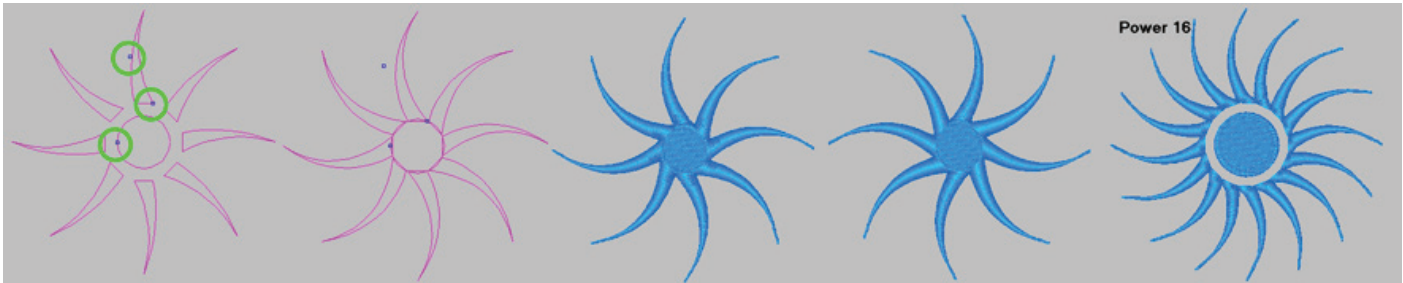
Create Sun Style 1:

This new punch tool allows the user to make another sun style with control over the sun rays and the sun's center.

1. To activate the tool, left click on the  **Punch Sun 1** icon on the **Punch Bar**.
2. Once this is selected, the new properties bar will appear.
 - There is an additional property called **Power of Sun**.
 - This controls how many sun rays will appear on the Sun you input.
3. To change the **number of rays**, highlight the number in the properties box and input a new number by entering it on your keyboard. Change the properties as desired.
4. To input the **Sun**, place your cursor inside the design work space. Once at the desired starting point, **left click hold and drag** your mouse on your design screen.
 - To create an oblong sun, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the sun will be inserted.
 - There are no stitches in the shape yet.
 - There are three blue outlined nodes on the shape that you can alter.
 - The node on the ray controls the width and length of the sun rays.
 - The node on the center of the sun controls the size of the center circle/oval.
 - The node on the side of the ray controls the arc of the ray.
6. To alter these nodes, place your cursor over the appropriate node and the cursor will turn into an extended crosshair.




7. Once the extended crosshair appears on the sun ray node, **left click hold and drag** mouse left, right, up and down.
 - The node on the ray controls the width and length of the sun rays.
 - The node on the center of the sun controls the size of the center circle/oval.
 - For the arc of the sun rays move the node left or right. Change the shapes with the nodes as desired.

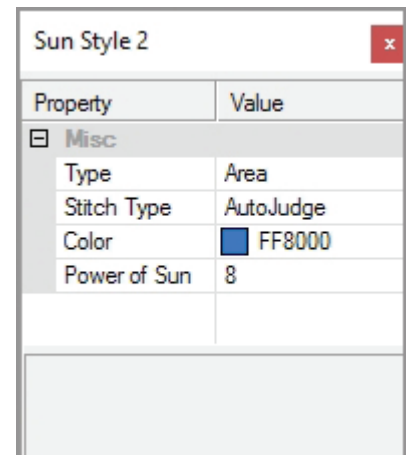


8. **Release the left click** when finished.
9. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click the right mouse button** to turn off the tool.

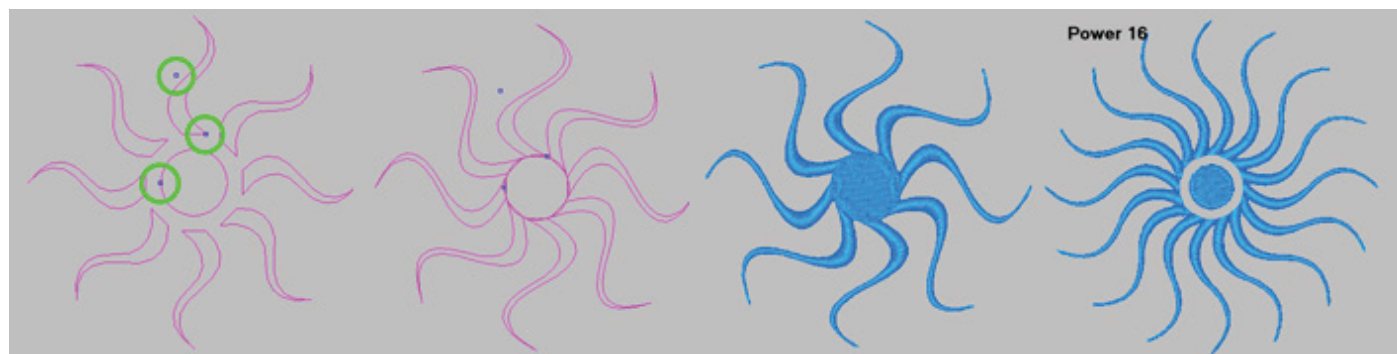
Create Sun Style 2:

This new punch tool allows the user to create a third sun style with control over the sun rays and the sun's center.

1. To activate the tool, left click on the  **Punch Sun 2** icon on the **Punch Bar**.
2. Once this is selected, the new properties bar will appear.
 - There is an additional property called **Power of Sun**.
 - This controls how many sun rays will appear on the Sun you input.
3. To change the **number of rays**, highlight the number in the properties box and input a new number by entering it on your keyboard.
4. To input the **Sun**, place your cursor inside the design work space. Once at the desired starting point, **left click hold and drag** your mouse on your design screen.
 - To create an oblong sun, hold down the **[CTRL]** key on your keyboard while dragging the mouse.
5. **Release** the left click on the mouse and the sun will be inserted.
 - There are no stitches in the shape yet.
 - There are two blue outlined nodes on the shape that you can alter.
 - The node on the ray controls the width and length of the sun rays.
 - The node on the center of the sun controls the size of the center circle/oval.
 - The node on the side of the ray controls the arc of the ray.




6. To alter these nodes, place your cursor over the appropriate node and the cursor will turn into an extended crosshair.
7. Once the extended crosshair appears on the sun ray node, **left click hold and drag** mouse left, right, up and down. Change the shapes with the nodes as desired.



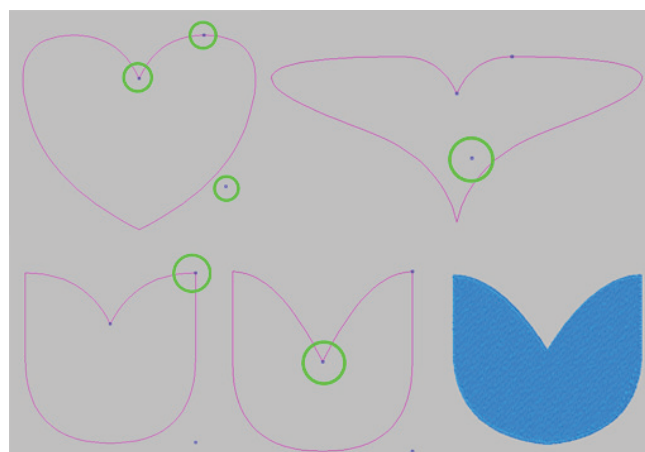
8. **Release the left click** when finished.
9. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click the right mouse button** to turn off the tool.

Create Heart

This new punch tool allows the user to create a heart with control over the shape and size.

1. To activate the tool, left click on the  **Heart** icon on the **Punch Bar**.
2. Once this is selected, the new properties bar will appear.
3. To input the heart, place your cursor inside the design work space. Once at the desired starting point, **left click hold and drag** your mouse on your design screen.
 - To create an oblong heart, hold down the **[CTRL]** key on your keyboard while dragging the mouse.

4. **Release** the left click on the mouse and the sun will be inserted.
 - There are no stitches in the shape yet.
 - There are three blue outlined nodes on the shape that you can alter.
 - The node in the crevice of the heart controls the depth of the heart's crevice.
 - The node on the upper side of the heart (on the outline) controls the upper portion of the heart.
 - The node on the outside of the heart controls the bottom portion of the heart.



5. To alter these nodes, place your cursor over the appropriate node and the cursor will turn into an extended crosshair.
6. Once the extended crosshair appears on the sun ray node, **left click hold and drag** mouse left, right, up and down.

7. **Release the left click** when finished.
8. Press **[ENTER]** on your keyboard to end inputting and press **[ESC]** on your keyboard or **click the right mouse** button to turn off the tool.


Create an Area with Magic Wand

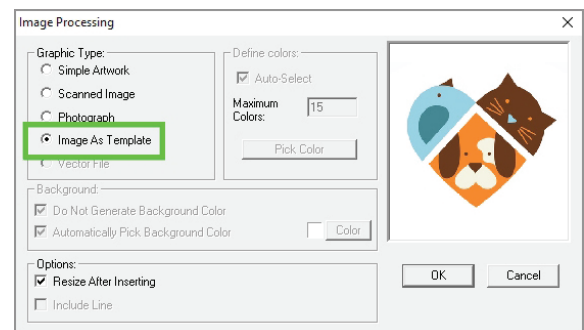
The **Magic Wand** tool combines the auto-shape recognition abilities of **Generations™** with the control of manual digitizing.

When inserting an image, if you select the option **Image as Template** no areas are automatically generated. You can digitize using the tools explained in the previous sections. Or, you can automatically generate some shapes using the **Magic Wand**.

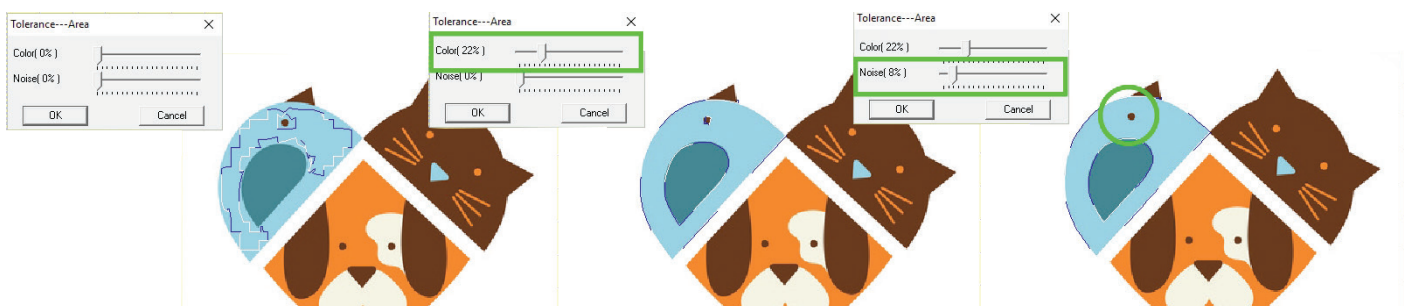
Creating an Area with the Magic Wand

1. Open the **image** you want to use (as explained in Chapter 4).
 - Activate the option for **Insert as Template for Manual Punching**.

2. Select the **Magic Wand** icon  in the **Create** toolbar.
 - A new dialog box will open in the upper left hand corner of the work area.
 - This is a **color tolerance tool** which will help select more or less of the color in an area.



3. Place the mouse pointer over the desired area click the **left mouse** button.
 - The area is selected with a flashing blue and white line, and the **Area Tolerance** dialog box displays.
4. Use the **Color and Noise slider bars** to control how much of the area is selected.
 - Slide the **Color** bar to a higher number if you need a larger area selected.
 - Slide the **Noise** bar to a higher number if too many smaller areas were recognized. A higher number reduces the amount of noise.



5. When you are satisfied with the area outline, click on the **OK** button in the **Tolerance** dialog box.

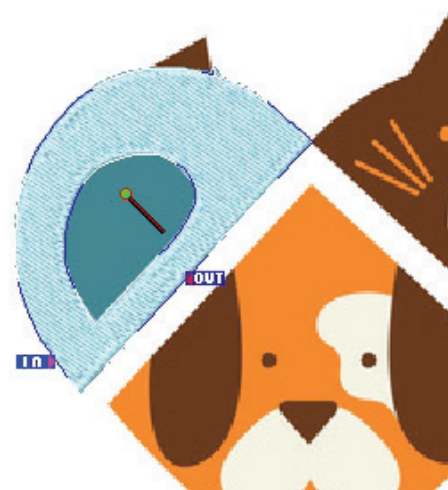
Or

Press **[Enter]** on the keyboard.

- The stitches are generated automatically.

Note: If stitches are not generated automatically, the default settings have been changed in View Preferences. You will need to Generate after Step 8 to create the stitches. Or, go to View, then View Preferences to activate the option Auto-Generate after Punching.

7. Repeat steps 3 through 6 to digitize additional areas with the **Magic Wand**.
8. Press **[ESC]** on the keyboard to turn off the **Magic Wand**.



Manipulation of Manually Digitized Sections

Sections created using the manual digitizing tools explained in the previous sections can be modified just like any other section automatically created in **Generations™** software.

When selected with a right mouse click, the area is selected the same as an automatically generated area, and all of the various properties can be changed. Likewise, you can use the tools in **Angle View** and **Outline View** to make changes.

In addition, manually digitized sections can be selected with a **left mouse click** and manipulated using the black sizing squares, the rotate/skew arrows, and command in the mirror, alignment and reshape commands found in the Edit menu. Refer to Chapter 11 for information on using these tools.

Group and Ungroup

Occasionally, you will need to group together manually digitized sections in order to work with them as a single area. By grouping several areas into one, you can size, move, copy and paste them as one unit.

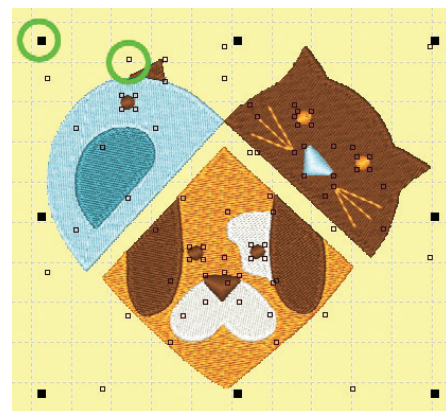
Grouping Manually Digitized Sections

1. Select the sections you would like to group. **Left click** on the first section. Hold down **[CTRL]** on the keyboard and **left click** on additional sections you want to include in the group.

Or

Place the mouse cursor outside area to be selected, hold down the **left mouse** button and **drag a square** around all of the sections you wish to group. When you let go of the left mouse button, **all sections completely enclosed by the square will be selected**.

- There is no limit on the number of sections you can select.
- You see the individual black selection boxes surrounding each section that was selected.



2. Select **Edit** then **Group/Ungroup**.

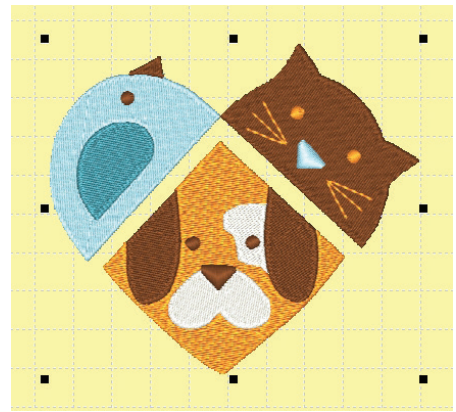
Or

Click on the **Group/Ungroup** icon  in the **Object** toolbar.

Or


On the keyboard, press **[CTRL] + [G]**.

- The black sizing boxes are now around the entire design, allowing you to treat it as one.



3. If, at a later time, you want to adjust an individual section, you can easily **Ungroup** them. **Left click** on the area and select **Edit** then **Group/Ungroup**.

Or

Click on the **Group/Ungroup** icon  in the **Object** toolbar.

Manual Stitch Editing

Generations™ software has many tools that allow you to make significant changes to a design. Normally, you want to use the tools provided in **View Outline** and **View Angle** modes to make changes to the area. These powerful tools work from the area outlines. Generating the area makes the changes take effect.




A **machine format** design that is imported into **Generations™** does not contain the original image or outline information. This is why all areas in the stitch sequence table are locked.

Generations™ provides manual editing tools to make changes to these designs on an individual stitch level.

Move Individual Stitches

Sometimes you will need to move an individual stitch - perhaps an underlay stitch that sticks out from the top stitching, to open a hole in a small area, or to correct a stitch angle. You can also select several stitches and move them all at once.

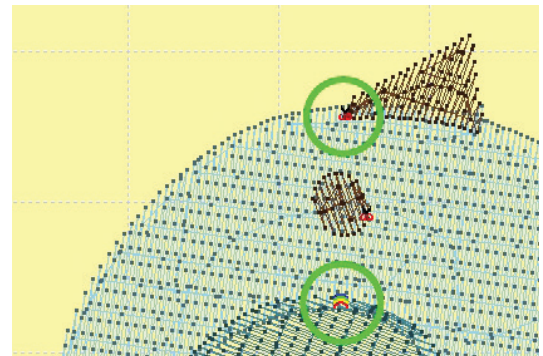
Moving a Stitch

1. Use the **Stitch Sequence**  table (refer to Chapter 8) to unlock the area containing the stitches you need to move.
2. Use the **Zoom In**  tool to enlarge the area where you need to move the stitch. Refer to Chapter 3 for instructions.
3. Select the **Needle Penetrations** icon  in the **View** toolbar.

Or

Select **View** then **Needle Penetrations**.

- This will allow you to better see the individual stitch points.
- This will allow you to see machine commands such as color changes and trims.




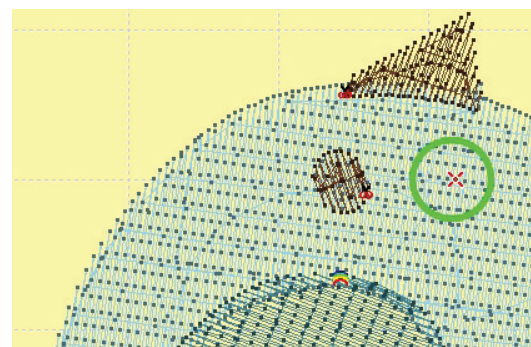
4. Select **Stitch** then **Edit Stitches Mode**.

Or


Click on the **Edit Mode** icon  in the **View** toolbar.

5. Place the mouse pointer over the stitch you want to move and click the **left mouse** button.

- You'll see a red  cursor on the stitch point you selected.



Tip: If you don't click on the correct stitch, but are near to it, you can use the keyboard arrows. The Up Arrow moves to the previous stitch. The Down Arrow moves to the next stitch. The display will automatically pan in the direction necessary to follow the stitch cursor.

6. Place the mouse pointer over the , **hold down** the **left** mouse button and **drag the red x to the new position**. Release the mouse button.
7. To move **several stitches** at once, hold down **[CTRL]** on the keyboard while you **left click** on the required stitches.

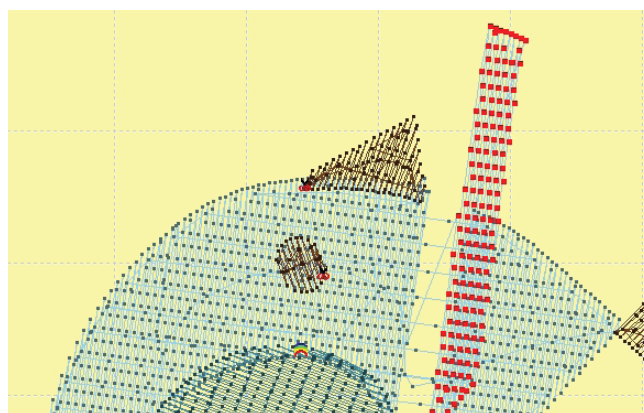
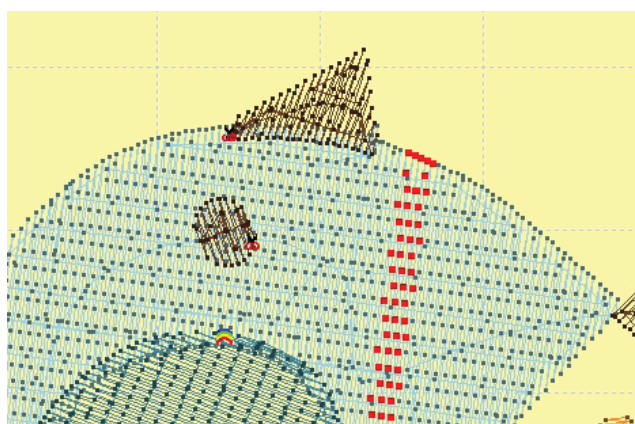
Or



Hold down **[CTRL]** on the keyboard while you use the up for down **arrow keys** on the computer keyboard to select multiple stitches.

Or

Place the mouse cursor slightly outside the stitches you need, hold down **[CTRL]** on the keyboard then **hold down** the **left mouse** button and **drag a box** around all the stitches you want to select. All stitches completely enclosed by the box will be selected.

- Each selected stitch will be marked with a **red dot**.








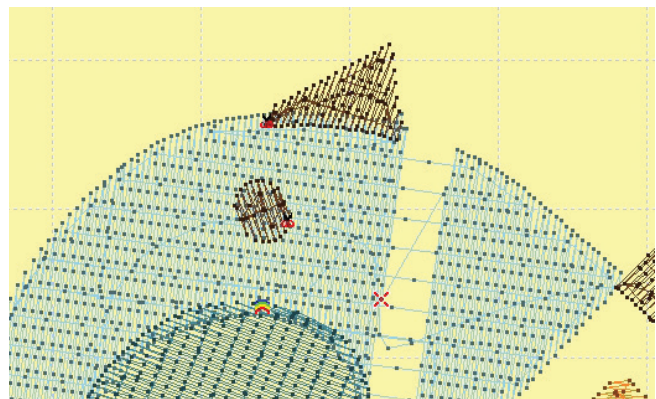
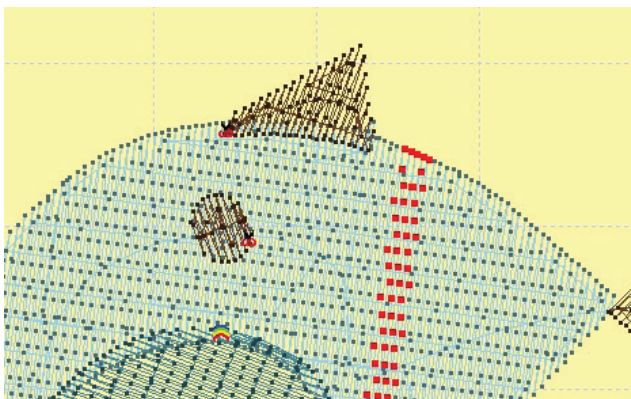
8. Repeat steps 5 through 7 to move as many stitches as necessary.
9. When finished moving stitches, click on the  **Needle Penetrations** icon in the **View** toolbar to turn off that view.
10. Click on the **Edit Mode** icon  in the **View** toolbar to end stitch editing.



Delete Individual Stitches

You may sometimes want to completely remove an individual stitch from the design. In Edit Stitch mode it is easy to select and delete unnecessary stitches in the design. In **Generations™** software you can delete stitches one at a time or select several stitches and delete them all at once.

Deleting Individual Stitches

1. Use the **Stitch Sequence**  table to unlock the area containing the stitches you need to delete.
2. Use the **Zoom In**  tool to enlarge the area where you need to remove the stitch. Refer to Chapter 3 for instructions.
3. Select the **Needle Penetrations** icon  in the **View** toolbar.
Or
Select **View** then **Needle Penetrations**.
This will allow you to better see the individual stitch points.
4. Select **Stitch** then **Edit Stitches Mode**.
Or
Click on the **Edit Mode** icon  in the **View** toolbar.
5. Place the mouse pointer over the stitch you want to delete and click the **left mouse** button. You'll see a  cursor on the stitch point you selected.
6. Press **[Delete]** on the keyboard.
Or
Select **Stitch** then **Delete Selected Stitches**.
7. To move **several stitches** at once, hold down **[CTRL]** on the keyboard while you **left click** on the required stitches.
Or
Hold down **[CTRL]** on the keyboard while you use the up for down **arrow keys** on the computer keyboard to select multiple stitches.
Or
Place the mouse cursor slightly outside the stitches you need, hold down **[CTRL]** on the keyboard then **hold down** the **left mouse** button and **drag a box** around all the stitches you want to select.
 - Each selected stitch will be marked with a **red dot**.







8. Repeat steps 5 through 7 to delete as many stitches as necessary.
9. When finished deleting stitches, click on the **Needle Penetrations** icon  in the **View** toolbar to turn off that view.
10. Click on the **Edit Mode** icon  in the **View** toolbar to end stitch editing.

Insert Manual Stitches

You may want to insert individual stitches to correct some small detail or to connect between sections. **Generations™** has a specific tool that lets you insert stitches one at a time, providing more control than using the manual digitizing tools explained earlier in this chapter.

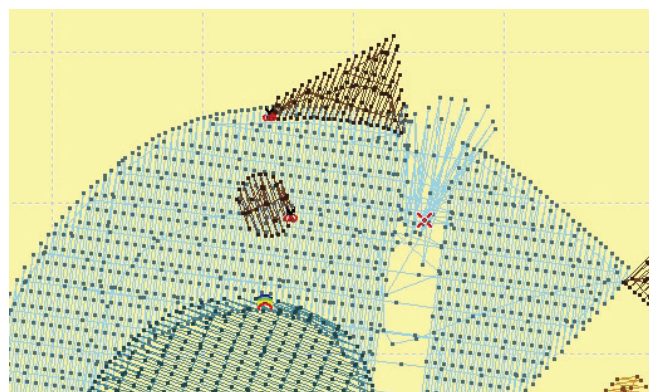
You can insert stitches freehand to create a completely new section, or select an existing stitch within an area and use it as the start point to insert additional stitches.

Inserting Stitches within an Area



1. Use the **Stitch Sequence**  table to unlock the area.
2. Use the **Zoom In**  tool to enlarge the area where you need to move the stitch. Refer to Chapter 3 for instructions.
3. Select the **Needle Penetrations** icon  in the **View** toolbar.
Or
Select **View** then **Needle Penetrations**.
 - This will allow you to better see the individual stitch points.
4. Now you need to locate the existing stitch in the design after which the new stitches will be inserted. Place the mouse pointer over the stitch you want and click the **left mouse** button. You'll see a  cursor on the stitch point you selected.

Tip: If you don't click on the correct stitch, but are near to it, you can use the keyboard arrows. The Up Arrow moves to the previous stitch. The Down Arrow moves to the next stitch. The display will automatically pan in the direction necessary to follow the stitch cursor.

5. Select **Stitch** then **Insert Stitch**.
Or
Click on the **Insert Stitch** icon  in the **Create** toolbar on the right side of the screen.
6. Move the line to the desired location and **left click** to set a new stitch.
7. Continue to move the cursor and left click for each additional stitch required. **Each time you click, one stitch is inserted.**
 - Be careful not to make too short or too long of a stitch. Check the length on the **Status Bar** at the bottom of the work area window.




Distance: 38.11 mm

- When finished inserting stitches, click on the **Needle Penetrations** icon  in the **View** toolbar to turn off that view.
- Click on the **Edit Mode** icon  in the **View** toolbar to end stitch editing.

Inserting Freehand Stitches

- Select **Stitch** then **Insert Stitch**.

Or

Click on the **Insert Stitch** icon  in the **Create** toolbar on the right side of the screen.

- Move the line to the desired location and **left click** to set a new stitch.
- Continue to move the cursor and left click for each additional stitch required. **Each time you click, one stitch is inserted.**


Be careful not to make too short or too long of a stitch.

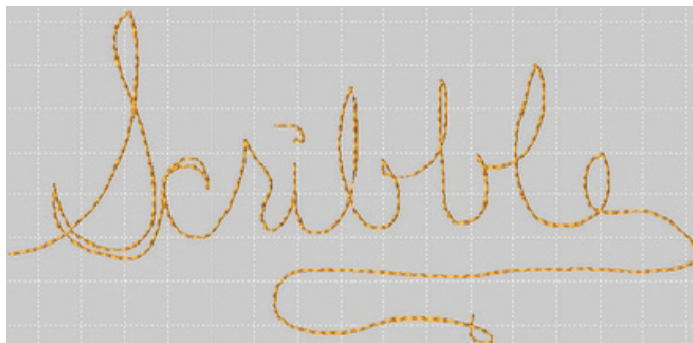
The **Status Bar** displays a **distance value** which tells you the stitch length of each inserted stitch.

- When finished inserting stitches, press **[Enter]** on the keyboard to complete the section and turn off **Insert Stitch** mode.

Create a Free-Motion Continuous Line

This punch tool creates a line by drawing a continuous freehand line.

- To activate the tool, click on the  **Create Continuous Line** icon on the **Creation Toolbar**. Your cursor will turn into a crosshair.
 - The new properties bar will appear.
- Select the line type and/or thread color from the **Create Continuous Line Properties Bar**.
- To begin inputting, **left click hold and drag** the mouse on the design workspace.
 - The **Continuous Line** tool is a sketch tool.
 - The inputting is created with a dragging motion.
- Once you are finished, release the left mouse button.
 - This will automatically generate the selected line stitch.



5. Continue inputting continuous freehand lines as desired.



6. Press **[ESC]** on your keyboard to deactivate the tool.

The **Create Continuous Line** tool can be used to enhance printed fabric for framing or printed fabric transfers.

Just insert the image as a template and sketch over areas you wish to highlight or enhance. If needed, insert the image and use the **Save As** option to save the background image for printing purposes prior to adding embroidery.

This tool can also be used to create the appearance of a free-motion embroidery design created on a sewing machine. Instead of moving the fabric under the sewing machine needle, you are moving the mouse on the screen.

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Chapter 7

Lettering and Monogramming

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Overview


Generations™ uses the **TrueType™** fonts loaded on your computer to produce outlines for lettering, from which stitches are created. **TrueType™** fonts are the same fonts used in other programs on your computer such as word processing and graphic programs. This gives you an enormous variety of text styles, putting no limit on your creative abilities with text. To increase your TrueType™ font (TTF) lettering options, you can purchase additional fonts for a small cost anywhere computer software is sold.

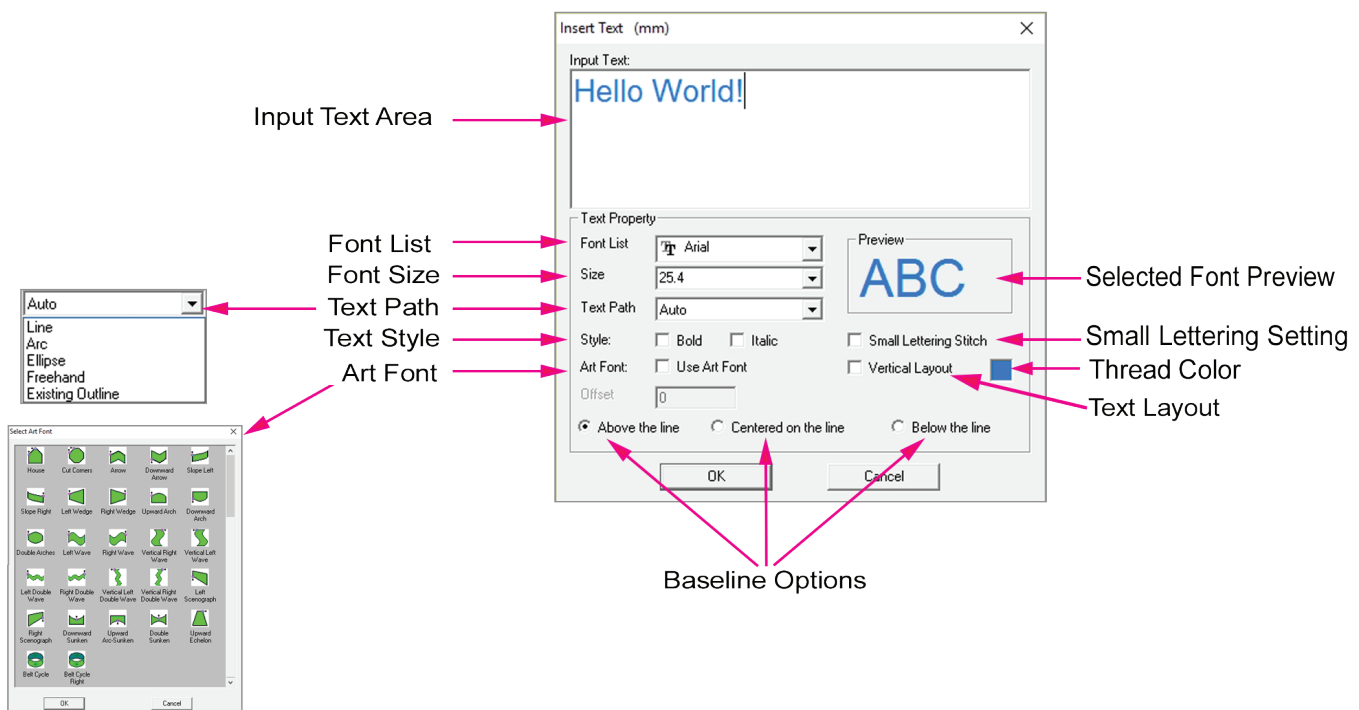
Generations™ also contains **23 professionally digitized fonts**. These fonts are created to ensure the best quality stitching for lettering and can be selected using the Text options.

Insert Text Dialog Box

The **Insert Text** dialog box contains tools to select the font style, letter size, color, shape and baseline.

Inserting Lettering

1. Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**. The **Insert Text** dialog box displays.
2. Use the options in the dialog box to type in and format your lettering.



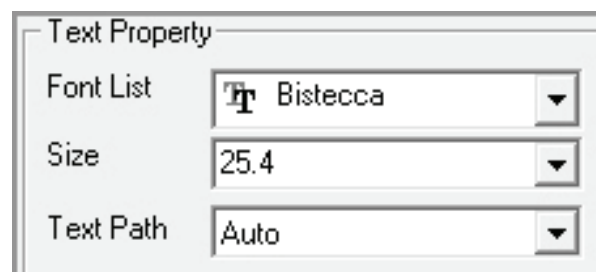
Input Text: Click in the large white box at the top of the dialog box to get the **flashing text cursor**.



- Type the text that you want. You can type any combination of TTF letters, pre-digitized letters, symbols, and foreign characters that are supported by your computer and available in the selected font.
- If desired, press **[Enter]** on the keyboard to start a new line of text. There is no limit on the number of lines that can be input at one time.

Font List: Shows the list of True Type fonts on your computer.

- Click on the **arrow** in the **Font List** drop down menu, scroll through the fonts available on your computer, and click to select the one you want to use.
- The **Preview** window will show you an example of each font style. The default font style is Ariel.



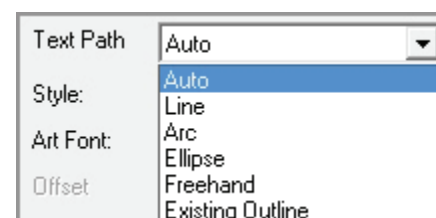
Tip: Once you have clicked on the arrow to activate the font list, you can use the up and down arrows on your keyboard to quickly move through the list and see each True Type font.

Font Size: Shows the list of font sizes. The default size is 25.4mm, which is equivalent to 1inch.

- Click on the **arrow** in the **Size** drop down menu then click to select the size you want.
- Size refers to the height of **lower case letters**, so if you are using all upper case letters, select a size slightly smaller than the desired letter height. You will also be able to change the size later if necessary.

Text Path: Shows the available baselines that text can follow.

- You can choose from **Auto, Line, Arc, Ellipse, Freehand** and **Existing Outline**.
- The **default** text path is **Auto**, which places the text on a straight line of the length appropriate for the text and size you have chosen.
- You can change the text path after inserting the text if necessary.



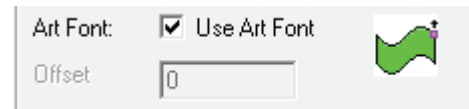
Text Style: The style options let you create **Bold** and/or **Italic** text.

- Click in the box in front of the effect to activate. It will show a check mark.

Tip: If the font you selected is very narrow, using the bold option can improve sewing quality.

Art Font: Art Font allows you to automatically reshape text based on pre-defined shapes.

- Only one Art Font shape may be applied to any line of text.
- **Art Font** can only be applied to the TrueType™ fonts installed on your computer.

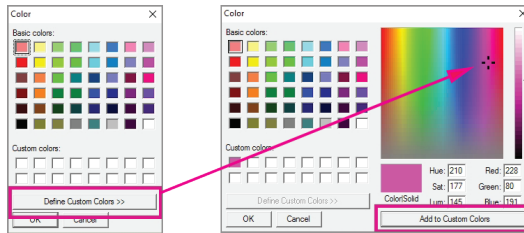


Small Lettering Stitch: The Small Lettering Stitch option allows you to automatically create stitch properties, such as underlay and density for lettering at 10.0 mm or less.

Text Layout: Allows you to create text in a vertical orientation.

Thread Color: Lets you choose the display and thread color for text, before the stitches are generated.

- If desired, click on the **Thread Color** button and choose the display color.



Baseline Options: Let you choose how the text should be positioned on the baseline. The default is **Above the Line**. You can select **Centered on the Line** or **Below the Line** to better line up text with other elements in the design.

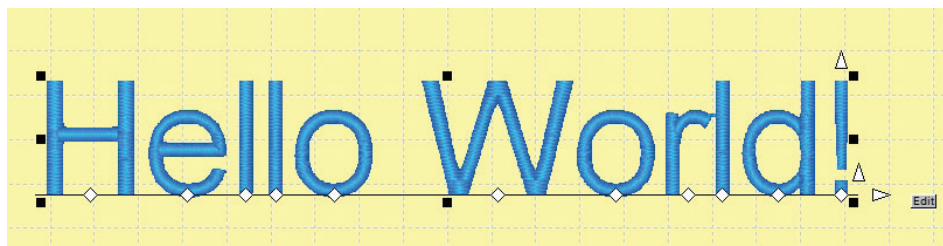
Tip: The Insert Text dialog box is very flexible. You do not have to select options in any particular order. If you select the Font before typing text, the letters will be shown in the selected font as you type them in. Or, if you prefer to type in the text first, highlight all the words before choosing the font. Your text will be shown in each font as you scroll through the list.

3. Click on **OK** to close the **Insert Text** dialog box. The text outline displays in the work area.

4. Click on the  **Generate** icon.

Or
Press **[F9]** on the keyboard.

Generations™ software will automatically create stitches from the text outlines.



Text Position


Once text outlines and stitches have been created you can manipulate them in many different ways.

After you insert lettering, you will see it on screen surrounded by a frame. The frame has various tools to control position, size, and character spacing. The frame displays automatically after you close the **Insert Text** dialog box.

Positioning Text

1. If the **Text frame** is not displayed, place the cursor over the text and **left click**.


2. Use the various text frame tools to manipulate the lettering.


Move: To move the text, place the cursor inside the text frame. The cursor changes to a four-headed arrow. 

- **Left click** and **hold down** the mouse button then **drag** the text to its new position.

Resize: Use the **black squares** on the edge of the frame to change the text size.

- Place the cursor over one of the black squares. It's in the correct place when you see it change to a **two-headed arrow**.

-  The two-headed arrows that appear at the corners of the selection box will size the lettering proportionally, larger or smaller.

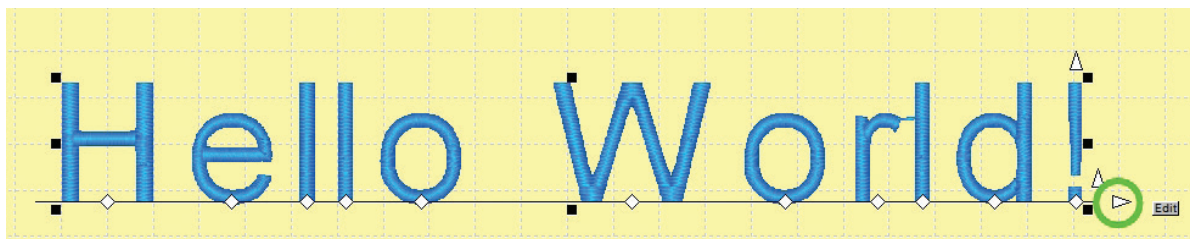
-  The two-headed arrows that appear at the sides of the selection box will size the letters disproportionately adjusting the width or height.

- **Left click** and **hold down** the mouse button then **drag in** to make the text smaller, or **drag out** for larger sized text.


Tip: To resize by the same distance on both sides of the text frame, hold down [Shift] on the keyboard while dragging with the mouse.

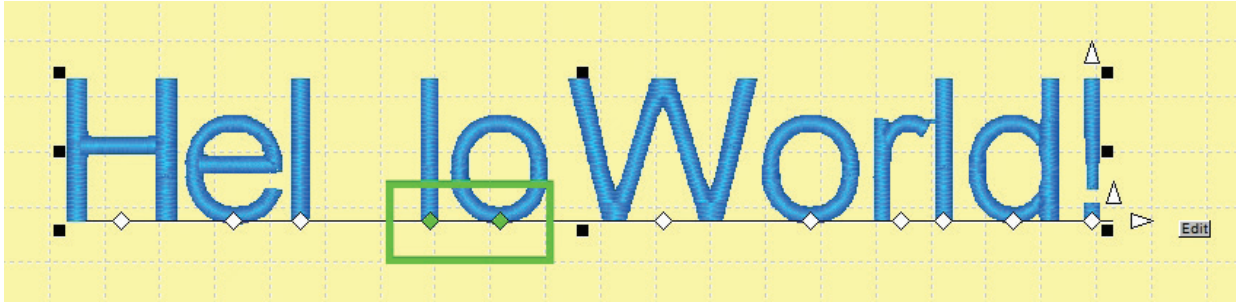
Kerning: You can easily control the space between all of the letters in the text string.

- Place the cursor over the **right-pointing white arrow** located in the lower right corner of the text frame, **hold down** the **left mouse** button and **drag** to the left or right to adjust the distance between characters.



Individual Letter Kerning: Sometimes, you only need to change the spacing for one letter in the text string. The **white diamonds** below each letter give you this ability.

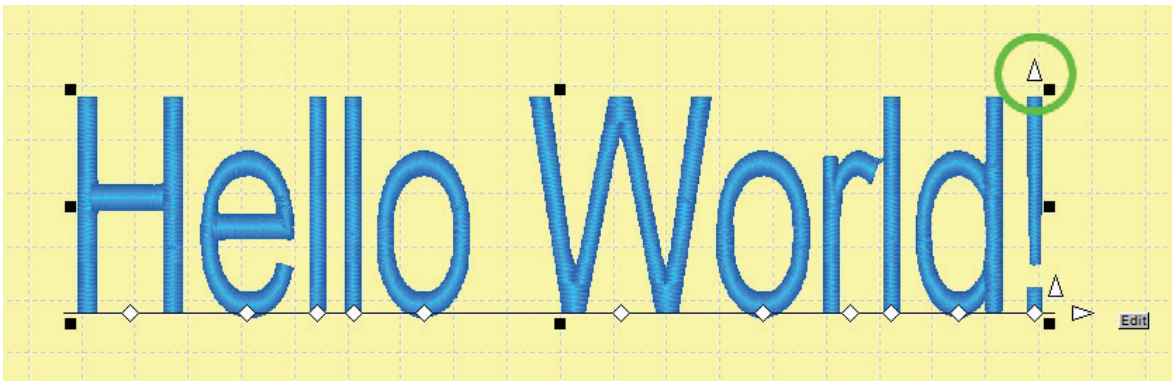
- **Left click** on one of the dots. It changes to a **green** color, indicating that it is now active. 
- Place the pointer over the green dot, **hold down** the **left mouse** button and **drag** the letter to the necessary position. It will move any distance, always staying on the baseline path.



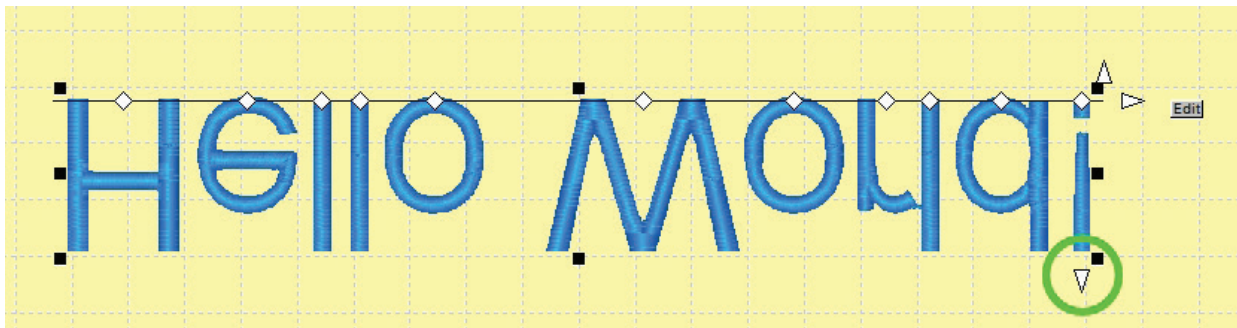
- You can select more than one letter by holding the **[CTRL]** key as you click on the diamond kerning nodes.

Lettering Height: You can change the height or the baseline orientation of the lettering.

- Place the cursor over the **arrow pointing upwards** located at the top right corner of the text frame. **Hold down** the **left mouse** button and **drag the arrow up**. The lettering height is changed.

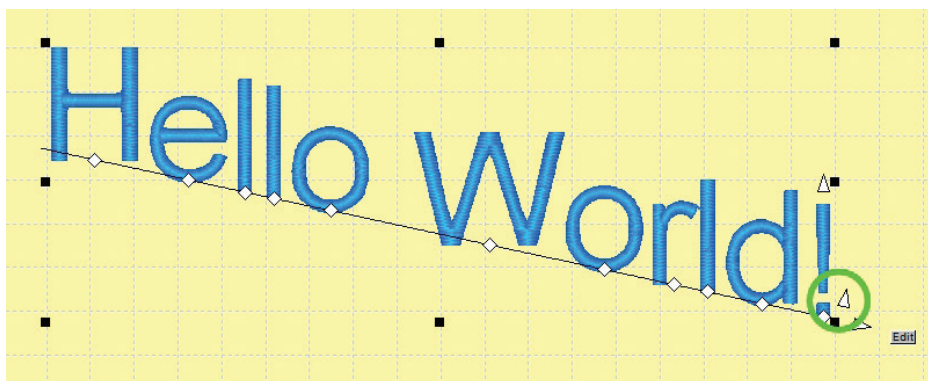


- Hold down the **left mouse** button and **drag** the arrow **downward** to make the letter height shorter. If you continue dragging the arrow past the baseline, the text will flip over to the other side of the baseline.



Stair-step Effect: If text is on the line or auto path, you can create a stair step effect.

- Place the cursor over the **upward pointing white arrow** located in the lower right corner of the text frame, **hold down** the left mouse button and **drag** up or down to adjust the baseline angle.




Change Text or Font: If you have typed a word incorrectly, or would like to make changes to the font style or text path, you can easily return to the **Insert Text** dialog box.

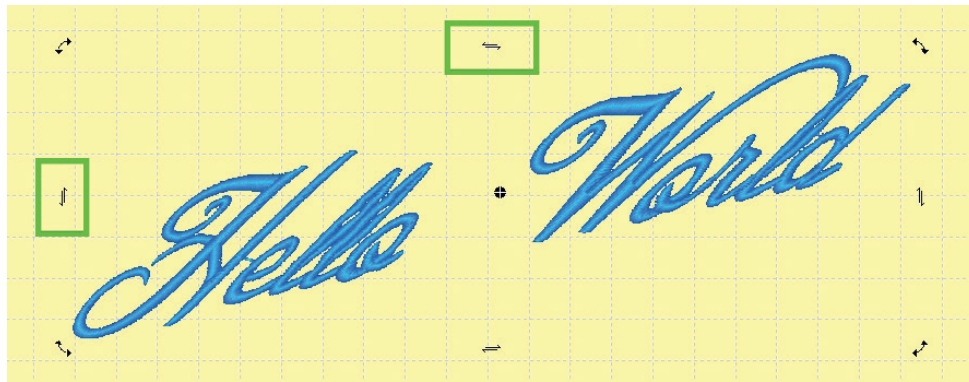
- Left click on the **gray Edit** box located at the **lower right corner** of the text frame. This opens the **Insert Text** dialog box so you can make changes to any of the options.




- Use the second set of text frame tools to make further changes.
 - Keeping the mouse pointer **inside the text frame**, click the **left mouse** button. The previous set of tools is replaced with new tools that can be used to rotate and skew the text.

Skew or Slant Text: You can easily skew the lettering to create an italicized look or other special effects. The  **Skew** or **Transfiguring** arrows are located on the sides of the selection box.


- The **top** and **bottom** arrows skew text **horizontally**.
- The **left** and **right** arrows skew text **vertically**.
- Place the mouse pointer over one of the **Skew** arrows. It is in the correct position when the mouse pointer also changes to a **Skew** arrow.
- **Hold down** the **left mouse** button and **drag** to create the desired effect.

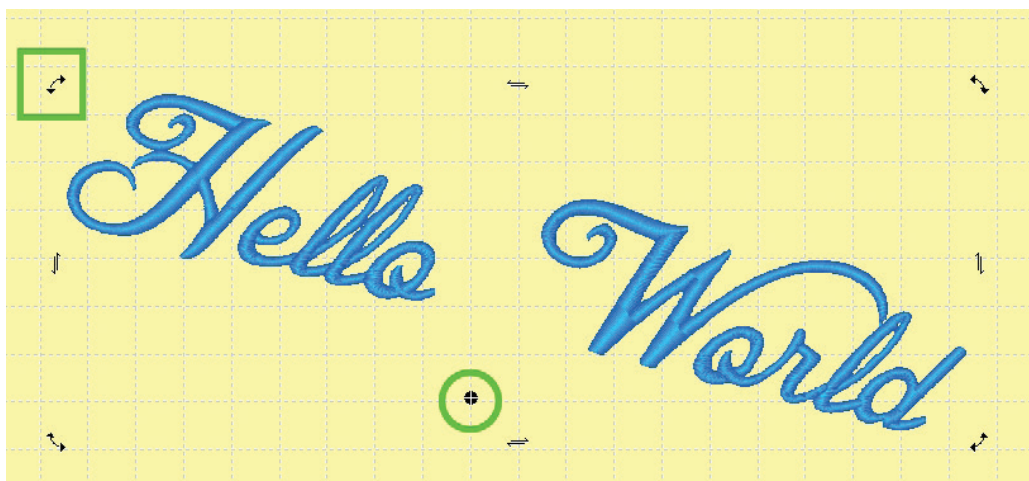


Rotate: You can easily place the lettering on an angle using one of the rotate arrows located in each corner of the text frame.

- Place the mouse pointer over one of the **rotate arrows**.  The arrow changes from a curved double arrow to a green curved double arrow.
- **Hold down** the **left mouse** button and **drag** the text to the new angle.



- The **Status Bar** at the bottom of the screen shows the **degree measurement** for the new angle.
- If desired, you can also change the axis (center point) of rotation. The **rotation axis point** is indicated by the  **black circle** in the center of the text frame. Place the mouse pointer over the black circle, hold down the left mouse button and drag it to a new position. Text will now rotate around the new axis point.



4. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.

Or



Click on the  **Generate** icon.

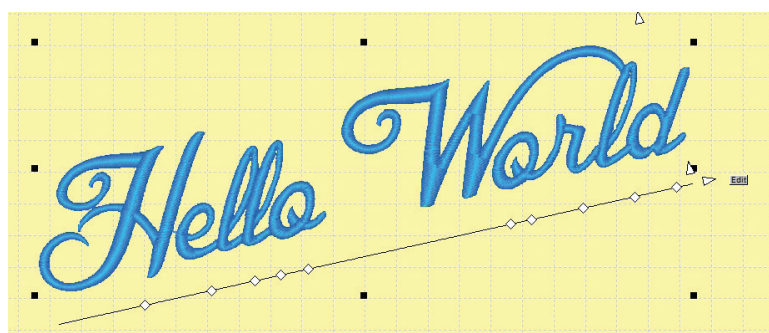
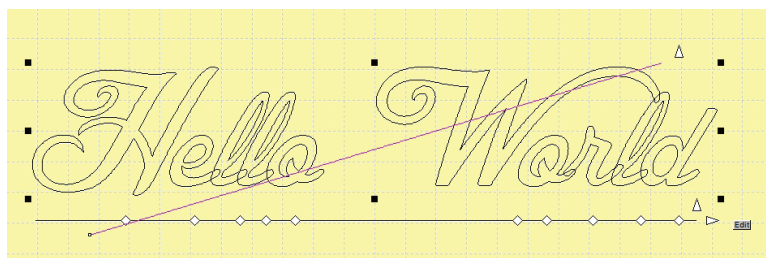
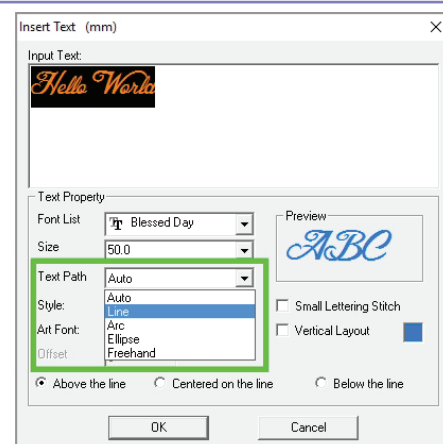
Text Paths

In **Generations™**, lettering is placed on a straight line using the **Auto Text Path**. If desired, you can create special effects by placing text on one of the other available text paths: **Line**, **Arc**, **Ellipse**, **Freehand**, or **Existing Outline**.

When lettering is placed on a line using the **Auto Text Path**, **Generations™** software automatically calculates the proper line length according to the selected font style and characters entered. You can use the **Line** text path when you want a specific line length.

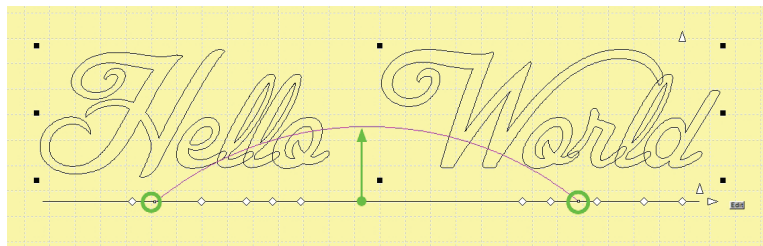
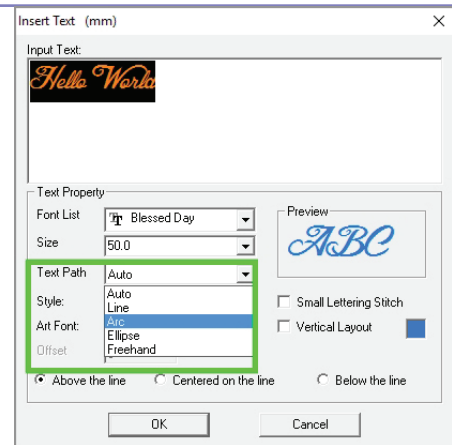
Placing Text On A Line

- Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**.
The **Insert Text** dialog box displays.
- Use the options in the dialog box to type in the desired text and set the character size and style as explained in a previous section of this chapter.
Make sure to set the **Text Path** to **Line**.
- Click on **OK** to close the dialog box.
 - The normal text frame is not displayed. Instead, you'll see a faded outline of your lettering. The software is waiting for you to draw the baseline.
- Place the mouse cursor at the **left most point** of the line and **click** the **left mouse** button.
- Move the mouse cursor to the **right most point** of the line and make another **left click**.
 - As you mark these points, you'll see a violet colored line showing the path being created.
 - As soon as you click the second point, the lettering will fill in the line you drew. The text frame and its manipulation tools display.
- If desired, continue to manipulate the text using the tools explained in the previous section.
- When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.
Or
Click on the  **Generate** icon.

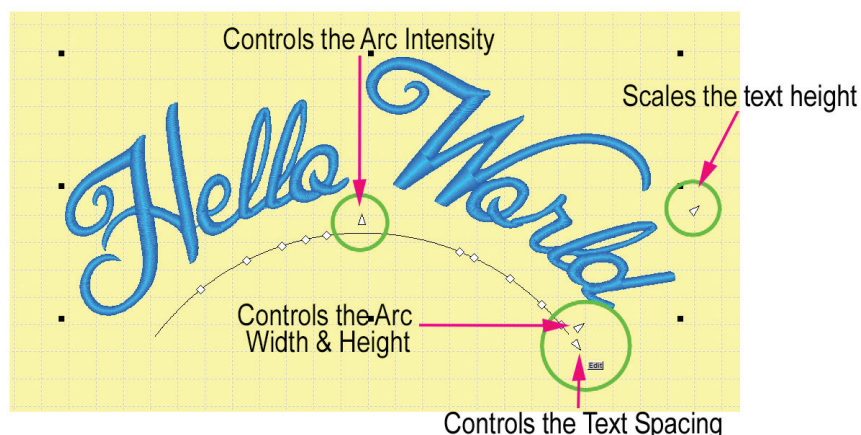


Placing Text On An Arc

- Click on the **A Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**.
The **Insert Text** dialog box displays.
- Use the options in the dialog box to type in the desired text and set the character size and style as explained in a previous section of this chapter.
Make sure to set the **text path** to **Arc**.
- Click on **OK** to close the dialog box.
The normal text frame is not displayed. Instead, you'll see a faded outline of your lettering. The software is waiting for you to draw the baseline and radius of the arc.
- Place the mouse cursor at the **left most point** of the arc baseline and **click the left mouse** button.
- Place the mouse cursor at the **right most point** of the arc baseline and **click the left mouse** button.
 - A violet colored line marks the baseline you just drew.



- Drag** the line **up** or **down** until it shows the arc that you want, then **click the left mouse** button.
 - The lettering will fill in along the arc that you drew. The text frame and its manipulation tools display.
 - To remove a point and replace a point on the line, press the **[BACKSPACE]** on the keyboard.
 - To redraw the arc, click on **Edit** and select **Arc** from the **Text Path** options.



7. If desired, continue to manipulate the text using the text tools.
8. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.

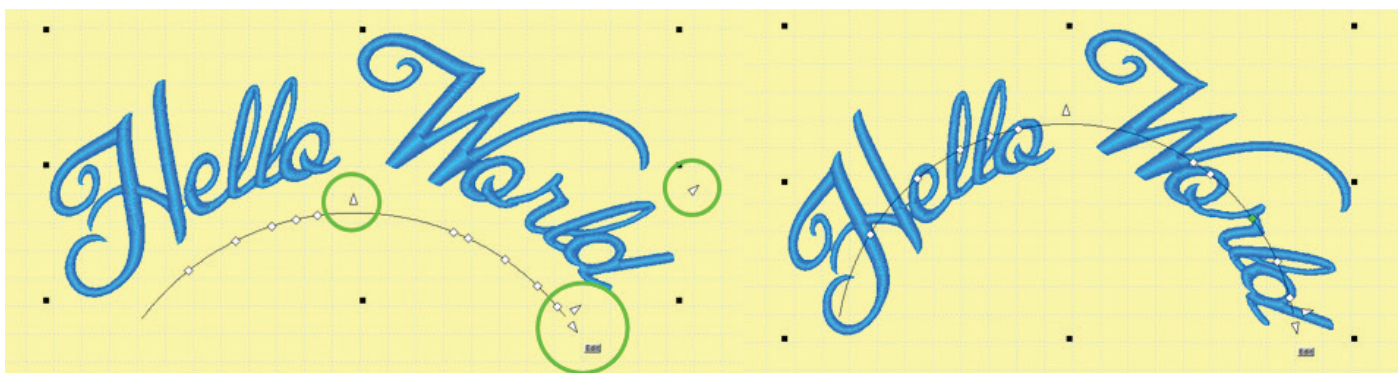
Or

Click on the  **Generate** icon.

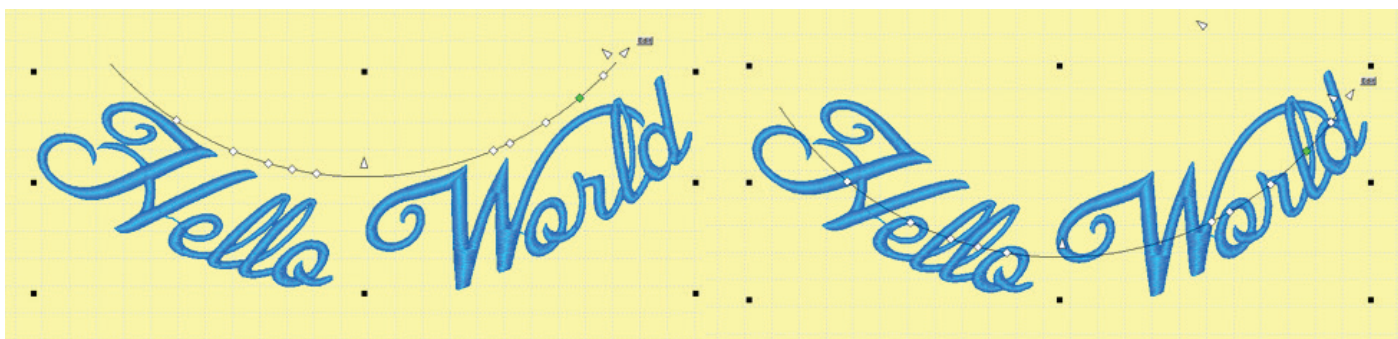
Baseline Text Placement and Spacing

Spacing text on a path with a curve, such as an arc or ellipse, can cause letters to bunch up. Using the Baseline Text options can provide better spacing and save editing time.

Lettering placed on an **upward arc** generally spaces better when placed **above the baseline** text path, or when **centered on the baseline** text path.




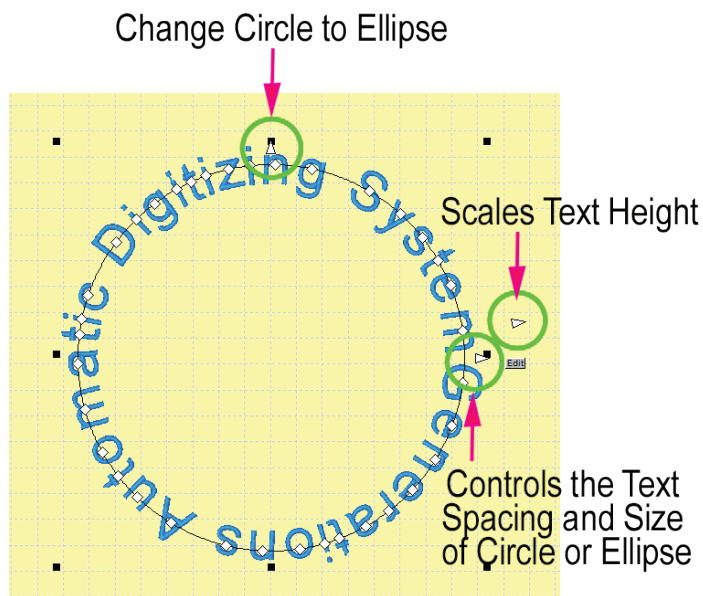
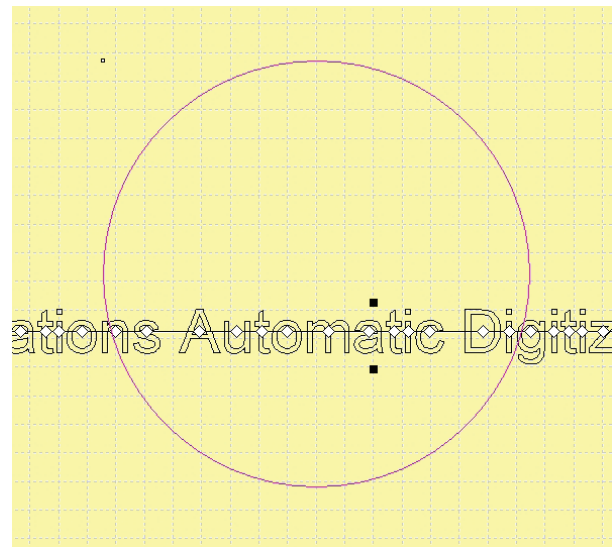
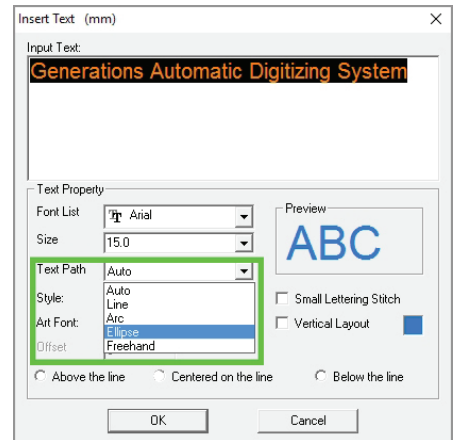
Letter placed on a downward arc generally spaces better when placed **below the baseline** text path, or when **centered on the baseline** text path.



If lettering is not spacing correctly on the text path, try using one of the other **Text Baseline** options.

Placing Text Around An Ellipse

- Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**.
The **Insert Text** dialog box displays.
- Use the options in the dialog box to type in the desired text and set the character size and style as explained in a previous section of this chapter.
Make sure to set the **Text Path** to **Ellipse**.
- Click on **OK** to close the dialog box.
 - The normal text frame is not displayed. Instead, you'll see a faded outline of your lettering. The software is waiting for you to draw the circle or ellipse.
- Left click** to mark the start point of the circle.
 - A violet colored circle displays.
- Move the mouse to **drag** the circle to the desired size.
 - If you want an **oval or ellipse** shape, hold down **[CTRL]** on the keyboard while you move the mouse.
- Left click** to mark the end point of the circle.
 - The lettering will fill in along the circle or ellipse that you drew. The text frame and its manipulation tools display.



7. If desired, continue to manipulate the text using the text tools.
8. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.

Or

Click on the  **Generate** icon.

Placing Text On A Freehand Path

1. Click on the  **Insert Text** icon.

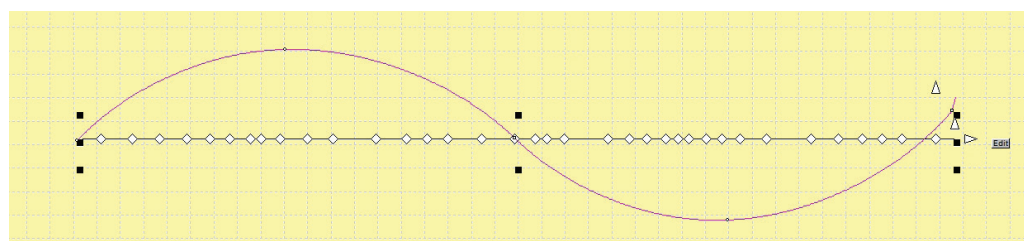
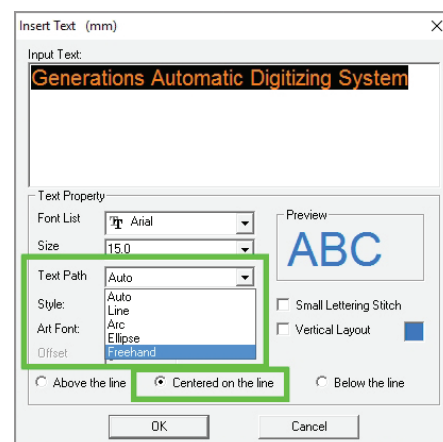
Or

Select **Create**, then **Insert Text**.

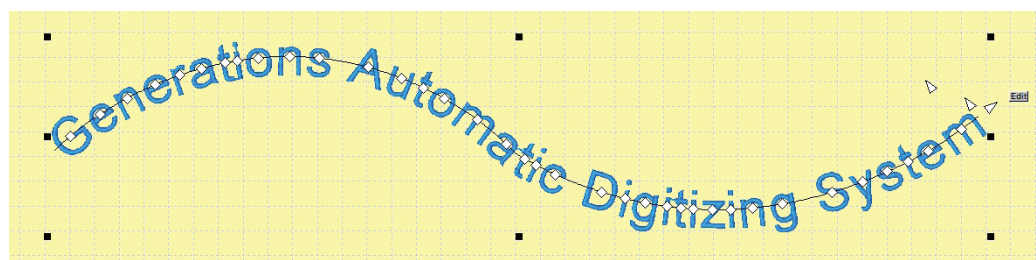
Or

On the keyboard hold down **[CTRL]** and press **[T]**.
The **Insert Text** dialog box displays.

2. Use the options in the dialog box to type in the desired text and set the character size and style.
 - Set the **Text Path** to **Freehand Path**.
 - Change the baseline option to **Centered on the Line** for best results.
3. Click on **OK** to close the dialog box.
 - The normal text frame is not displayed. Instead, you'll see a faded outline of your lettering. The software is waiting for you to draw the desired freehand path.
4. Position the mouse cursor at the left most point of the freehand path and **click** the **left mouse** button to indicate the start of the path.
5. Continue marking points along the path as desired.
 - A **left click** makes a **straight** (corner) point.
 - A **right click** makes a **smooth** (curve) point.
 - Use **[Backspace]** on the keyboard to remove the last point if you make a mistake.



6. Press **[Enter]** on the keyboard to complete the freehand path.



- The lettering will fill in along the **freehand path** that you drew. The text frame and its manipulation tools display.
7. If desired, continue to manipulate the text using the tools explained in the line text path section.
 8. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.

Or

Click on the  **Generate** icon.

Placing Text On An Existing Outline

1. Click on the  **Insert Text** icon.

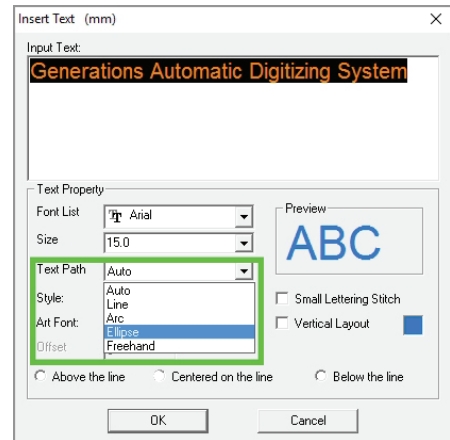
Or

Select **Create**, then **Insert Text**.

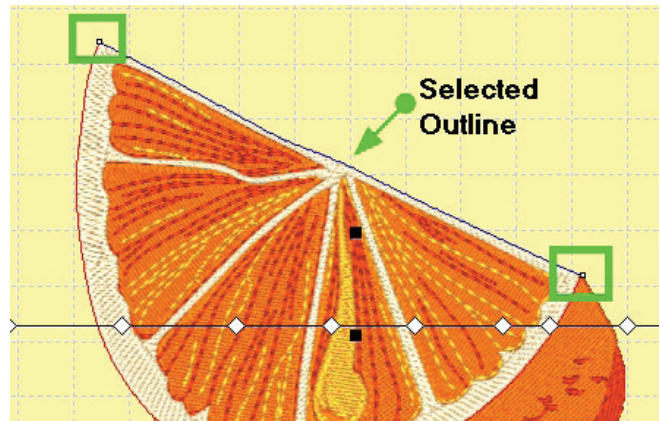
Or


On the keyboard hold down **[CTRL]** and press **[T]**. The **Insert Text** dialog box displays.

2. Use the options in the dialog box to type in the desired text and set the character size and style as explained in a previous section of this chapter. Make sure to set the **Text Path** to **Existing Outline**.



3. An extra option displays in the dialog box when the **Existing Outline** path is selected.
 - The **Offset** option lets you place the text slightly away from the existing outline, but still follow its shape.
 - If desired, type in a **number** for the distance you want the lettering offset from the outline.
4. Click on **OK** to close the dialog box.
 - The normal text frame is not displayed. Instead, you'll see a faded outline of your lettering. The software is waiting for you to indicate on which existing outline you want the lettering placed.
5. Place the cursor where you want the lettering to **start** and **click the left mouse button**.
 - The area will highlight red, showing it is selected and a small node is placed for the start point of the lettering.
6. Move the mouse cursor to the place on the outline where you want the lettering to stop. Place a left mouse click at that point. A second small node is placed where you clicked the stop point.
7. Move the mouse cursor over the portion of the line between the two points you clicked. When the line turns **blue**, **click the left mouse button**.




- The lettering will automatically fit to that portion of the outline. The text frame and its manipulation tools display.
8. If desired, continue to manipulate the text using the tools explained in the previous section.
 9. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.
- Or
- Click on the  **Generate** icon.

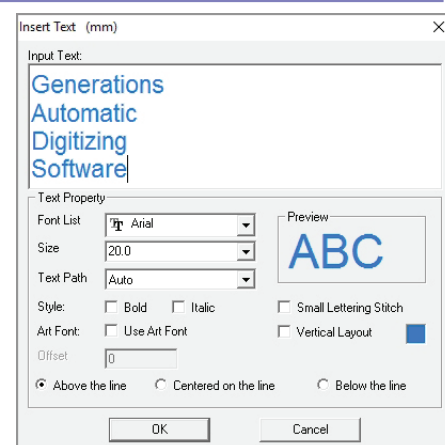


Multi-Line Lettering

Generations™ software allows for multiple lines of lettering to be entered at one time while using the **Insert Text** dialog box.

Creating Multi-Line Lettering

1. Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**.
The **Insert Text** dialog box displays.
2. Use the options in the dialog box to type in the desired text and set the character size and style.
3. To place a second line of lettering, press **[Enter]** on the keyboard to move to the next line, then continue typing.



4. Repeat step 3 to add as many lines as you like.

Tip: You can select a different font and size for each letter or each line of text as desired. Add dingbat or wingdings for a decorative effect.

5. Click on **OK** to close the dialog box. The text outlines will display in the work area.

Tip: Each line of lettering may be changed using the tools discussed earlier in this chapter.

6. When you are satisfied with the text effect, press **[F9]** on the keyboard to generate the stitches.

Or



Click on the  **Generate** icon.



Lettering Alignment

Lettering created in **Generations™** software can easily be centered and spaced.

Aligning Multiple Lines of Text

1. After inserting multi-line text as explained in the previous section, all lines are selected with the black boxes.
 - With all lines still selected, you can use the alignment tools located on the **Object** toolbar to center and vertically space the group of text.
2. Click on the  **Align Vertical Center** icon to align each row of text at their common center point.
3. Click on the  **Vertical Space** icon to evenly space the rows, based on the average spacing of all selected lines.



Stitch Properties for Lettering

The lettering you create in **Generations™** software is transformed into stitches using the system default values for satin stitches.

There are many variables in embroidery which affect the quality of your design -- the size of the letters, the fabric you're sewing on, the type and amount of stabilizer used, machine tensions, etc. You will need to use and understand the stitch properties in **Generations™** software to account for these variables and produce the highest quality work.


You will want to experiment with the settings and determine the best combinations for your most frequent embroidery applications.

Edit Corner

Edit Corner is used to modify how a satin stitch makes its way around a sharp corner. Generations will automatically place the satin stitches turning the corner at a gradual angle. You will use **Edit Corner** when you want a different treatment at the corners. This feature is most often used with lettering.

Editing Corners

1. Place the mouse cursor over the area to be edited, and **click** the **right mouse** button to select it. You'll see the flashing marquee line around the selected area.

Tip: You may want to use  Zoom In to enlarge the area you are working on. Refer to Chapter 3 for detailed instructions.

2. Select **View**, then **View Angle** from the menu.

Or

Click on the  **View Angle** icon in the **View** toolbar.

Or

Press **[F7]** on the keyboard.

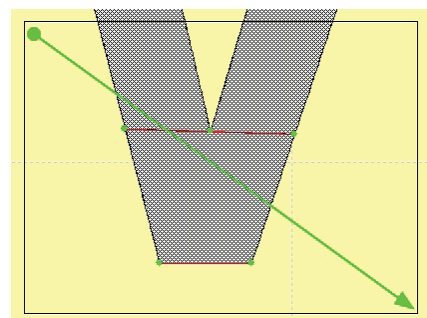
- Once in **View Angle** mode, the selected area is shown in a **crosshatch gray color** with a number of red lines. These are the stitch direction guidelines.

3. Select **Angle** then **Edit Corner** from the menu.

Or

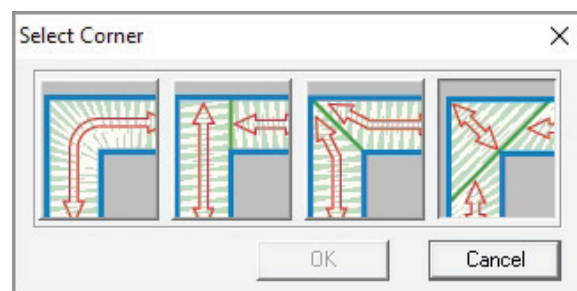
Keep the mouse pointer over the selected area then **click** the **right mouse** button. In the pop-out menu, select **Edit Corner**.

- The mouse pointer changes to the cross hair cursor.
- You must now indicate which corner you wish to edit.



4. Place the cross hair cursor slightly outside the corner, **hold down** the **left mouse button** and **drag** a box that **covers the corner** (similar to drawing a zoom box).

- The **Select Corner** dialog box opens.



5. Select the desired effect. **Left click** on the picture representing the corner type you want, then **click** on the **OK** button.

6. Repeat steps 4 and 5 to edit as many corners as necessary.

- When you are finished, **click** the **right mouse** button or press **[Esc]** on the keyboard to turn off Edit Corner tool.

7. You must Generate to make the changes take effect.

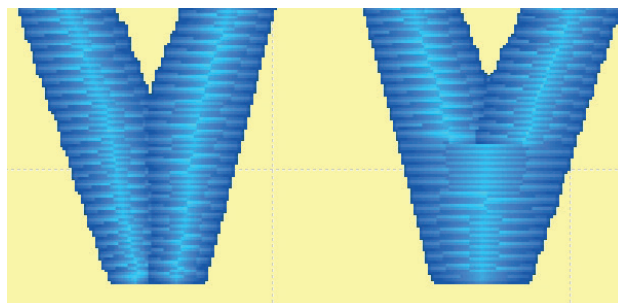
Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or


Click on the  **Generate** icon.

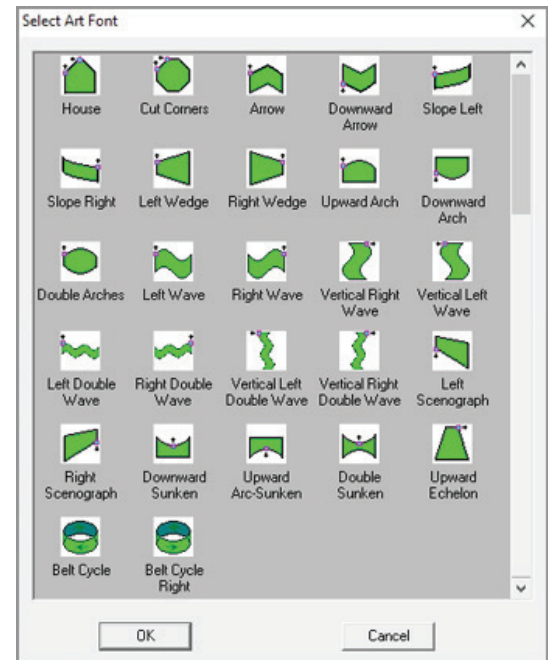



NOTE: Remember that changes do not take effect until you generate the section.

Art Font Option

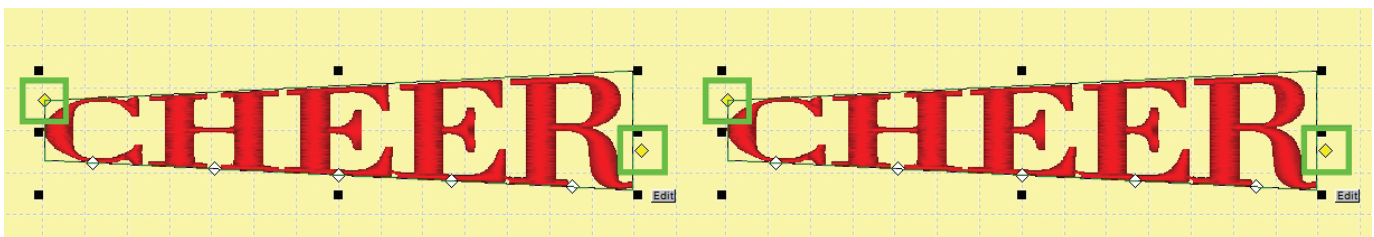
*Art Font allows you to automatically reshape text based on pre-defined shapes. These shapes control the shape and spacing of the text. Many of the **Art Font** styles create a 3D appearance to the lettering and can be used to create unique lettering designs.*

1. Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**. The **Insert Text** dialog box displays.
2. Use the options in the dialog box to type in and format your lettering.
3. Place a checkmark next to Use **Art Font** in the **Insert Text Dialog Box**.
 - The **Art Font Selection Box** will open and you may select from any of the 27 different Art Font Shapes.
4. When you have selected the desired **Art Font Shape**, click **OK** to return to the **Insert Text Dialog Box**.
5. To create the text, click **OK**.



6. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.

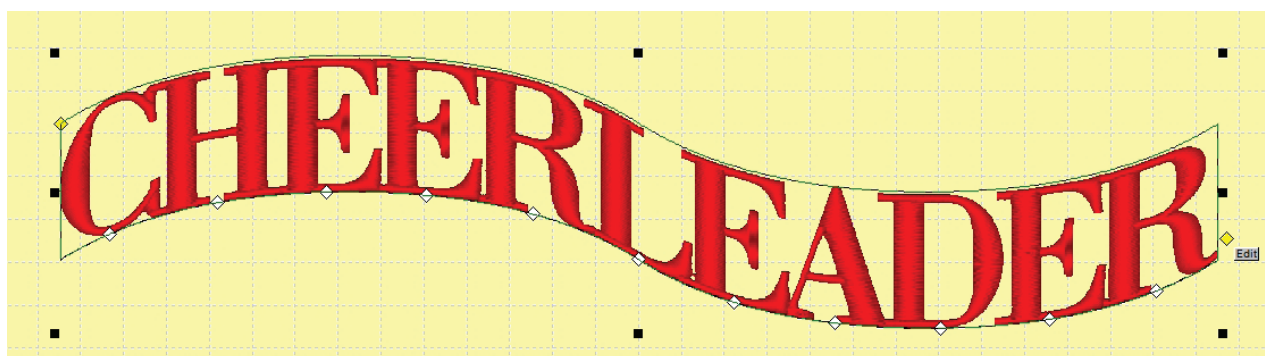
- The **text path spacing** or **kerning** is now controlled by the **yellow diamond** on the right side of the **Art Font** shape.
- The **intensity** of the shape is controlled by the **yellow diamond** on the left side of the Art Font shape.



7. To use these new tools, place your cursor over the **yellow diamond**. The cursor turns into a crosshair cursor.
8. **Press and hold** the left mouse button and then drag the diamond node to change the shape.
 - The text will automatically be reshaped based on any changes to the spacing of the text on the text path or kerning of any individual letter.

Art font shapes all have text path spacing or kerning control and shape intensity control nodes. Some Art Font shapes have additional nodes allowing for more precise lettering placement.

All Art Font shapes allow for individual lettering kerning to better align individual letters.



Pre-Digitized Lettering

Generations™ contains **23** professionally digitized lettering styles. You can select these fonts from the **Input Text** dialog box.

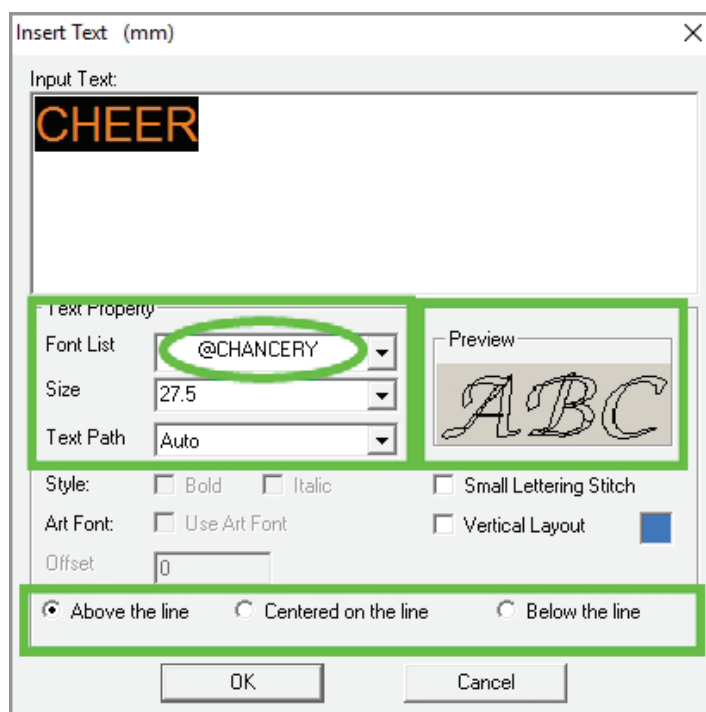
These fonts are marked with an **[@]** or **[@@]** symbol and not with a **T** or **Ⓜ** and **@** symbol.

The font style or **preview** will not display in the **Input Text** area. Instead the default font will display for all input text.


The preview of these fonts will be in outline form with outlined letters displayed.

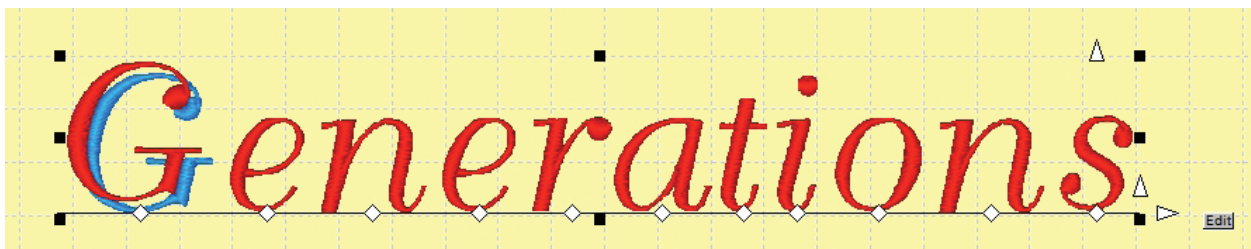
Due to the nature of these fonts, some options in the **Input Text** dialog will not be available for the font.


You cannot apply **Art Font** option to these fonts.



Creating with Pre-Digitized Lettering

1. Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**. The **Insert Text** dialog box displays.
2. Select one of the **pre-digitized fonts** from the **Font List**.
3. Enter your text into the Text Input box.
 - Change the **Font Size**, **Text Path** (if available) or **Baseline Position** as desired.
4. When you have finished setting the text options click **OK** to insert the text into the work area.



5. You must **Generate** to place stitches into the design.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.

Pre-Digitized Font List

<p>Duchess</p> <p>ABCDEF GHIJK LMN OPQ RSTUVW XYZ abcdefghijklmnopqrstuvwxyz</p>	<p>AvantGarde</p> <p>ABCDEFGHIJKLMNO PQRSTUBWXYZ abcdefghijklmno qrstuvwxyz ?!, " ' # & 1234567890</p>	<p>Freehand</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrs ?!, " ' # & tuvwxyz 1234567890</p>
<p>Copper</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ ABCDEFGHIJKLMNOPS TUVWXYZ 1234567890 ?!, " ' # &</p>	<p>BauHaus</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ 1234567890 ?!, " ' # &() abcdefghijklmno pqrstuvwxyz</p>	<p>Futura</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrs tuvwxyz 1234567890 ?!, " ' # &</p>
<p>Helvetica</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrs tuvwxyz 1234567890 ?!, " ' # &</p>	<p>Greek</p> <p>ΑΒΧΔΕΦΓΗΙΩΚΛΜΝ ΟΠΘΡΣΤΥΤηΩΞΨΖ αβχδεφγηιςκλμνοπθρσ τυαωξψζ 1234567890 ?!, " ' # &</p>	<p>Hobo</p> <p>ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrs tuvwxyz 1234567890 ?!, " ' # &</p>



Multi Color Lettering Options

Generations™ has the ability to create two or more colored lettering with ease. There is an automatic shadowing option which allows you to customize the shadow effect, color and position - similar to a drop shadow in a graphics program.

You can also add one or more outlines to lettering to create bold multi color text.

Automatic Shadowing

1. To create **Shadow(s)** for lettering or any other area(s), use the **Right Click** function(s) to select the area(s) of choice.

Hint: Hold the [CTRL] key on your keyboard while Right Clicking to select multiple areas.

2. Select **Accessories** from the **Menu Bar** and scroll down to select **Create Shadow(s)**.

3. The **Shadow Setting Dialog Box** will now appear on your **Generations™** work area.
4. If desired, change the **Direction of the Shadow(s)** by either inputting a number between 0 and 360 in the Direction Box or dragging the **Arrow** around the **Direction Wheel**.
5. Change the **Width of the Shadow(s)** by inputting the desired number in the Width Box.
 - This number's measurement is according to the measurement unit (mm or inches, as defined in the **View Preferences**).

Note: the Measurement Unit is in parentheses at the top of the Dialog Box.

6. Change the **Reverse Pull Compensation** of the Shadow(s) by inputting the desired number in the Reverse Compensation Box.
 - **Reverse Compensation** refers to the **Pull Compensation** that overlaps back into the area(s) you are applying the **Shadow** to.
 - This number's measurement is according to the measurement unit (mm or inches - as defined in the **View Preferences**).

Note: the Measurement Unit is in parentheses at the top of the Dialog Box.

7. Change the **Color of the Shadow(s)** by clicking on the **color chip**.

Note: The default stitch setting for any shadow created will be a Satin Stitch. The stitch type can be changed to any of the fill types in Generations™.

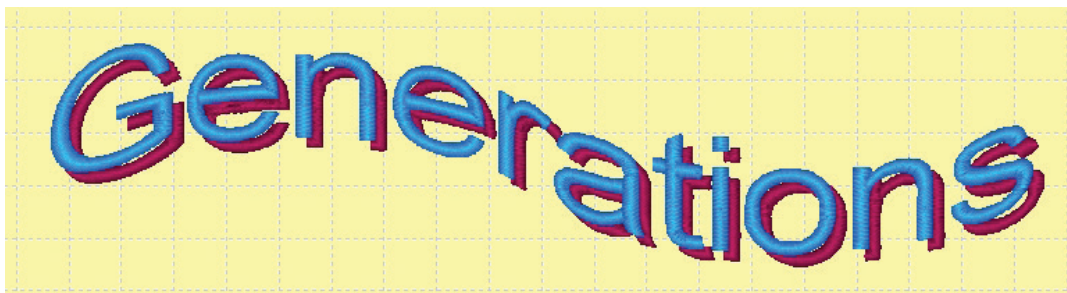
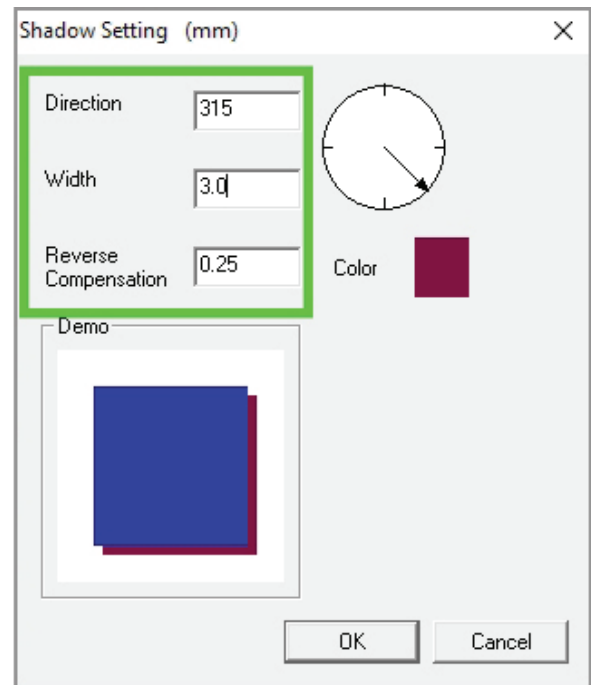
8. You must **Generate** to place stitches into the design.
Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.



Or

Click on the  **Generate** icon.



Tip: Combine Shadowing with Art Font and see what you can come up with.

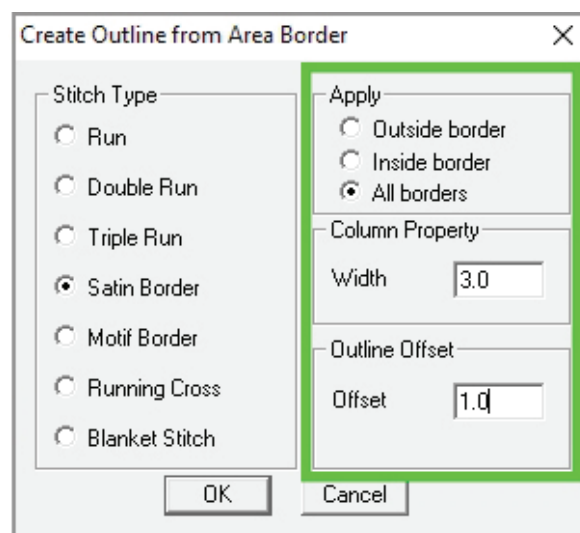
Multi-Color Outlined Lettering

- Click on the  **Insert Text** icon.
Or
Select **Create**, then **Insert Text**.
Or
On the keyboard hold down **[CTRL]** and press **[T]**. The **Insert Text** dialog box displays.
- Use the options in the dialog box to type in and format your lettering.
- Click on **OK** to close the **Insert Text** dialog box. The text outline displays in the work area.
- Click on the  **Generate** icon.
Or
Press **[F9]** on the keyboard.
Generations™ software will automatically create stitches from the text outlines.
- To create **Outlines** for lettering or any other area(s), use the **Right Click** function(s) to select the area(s) of choice.

*Hint: Hold the **[CTRL]** key on your keyboard while Right Clicking to select multiple areas.*

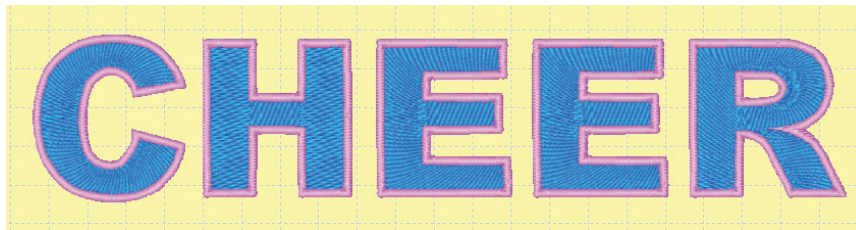
- Select **Stitch** from the **Menu Bar** and scroll down to select **Create Outline from Area Edges**.

- The **Create Outline from Area Border** dialog box opens.
- Select from the options in the dialog box to give the outline the appearance you want.
- The value in **Outline Offset** determines how far away from the original area the outline will be placed. Most often, you'll use the default value of 0 to place the outline exactly on the edge of the original area.
- If you do want the outline to be offset from the original, use a **positive** number to place the outline outside the original area. Use a **negative** number to place the outline inside the original area.
- The **Apply** section determines where the outline is placed.
- Use **Outside Border** to outline only the outside edge of the selected area.
- Use **Inside Borders** to outline only the inside edges of the selected area.
- Use **All Borders** to place the outline on both the outside and inside edges of the selected area.

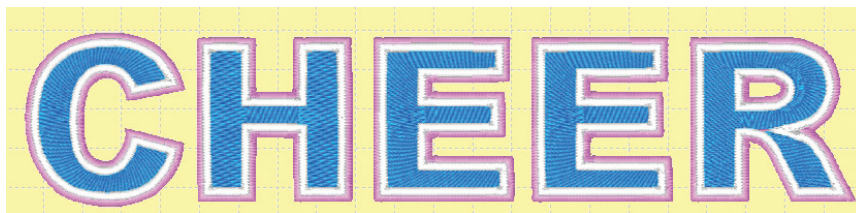



- In the **Stitch Type** section, choose the desired border effect:
 - Run:** one layer of running stitch outline.
 - Double Run:** two layers of running stitch outline.

- **Triple Run:** three layers of running stitch outline.
 - **Satin Border:** a uniform width column of satin stitches.
 - **Motif Border:** an outline composed of selected motif shapes.
8. In the **Column Property** section, choose the width of the border, ONLY if you have selected the Satin Border type. The other effects do not use the width value.
 9. Click **OK** to accept the outline choices and close the dialog box. The new outlines are created and automatically selected, shown with the crosshatch gray shading.



- If desired, select the lettering using the right click options, change the offset to a negative number and apply a second outline to the lettering.



6. If you would like to make additional changes to the values for the outline areas, press the **[SPACE BAR]** on the keyboard.
Or
Click on the  **Stitch Settings** icon in the **View** toolbar.
The Line Object Stitch Properties dialog box opens.
7. Make any changes to the values (refer to Chapter 8 for more information) then click on **OK** to close the dialog box.


Tip: It is often easier to change the outline thread color before generating the stitches, so you do not have difficulty in trying to select the outline area when it is the same color as the fill.

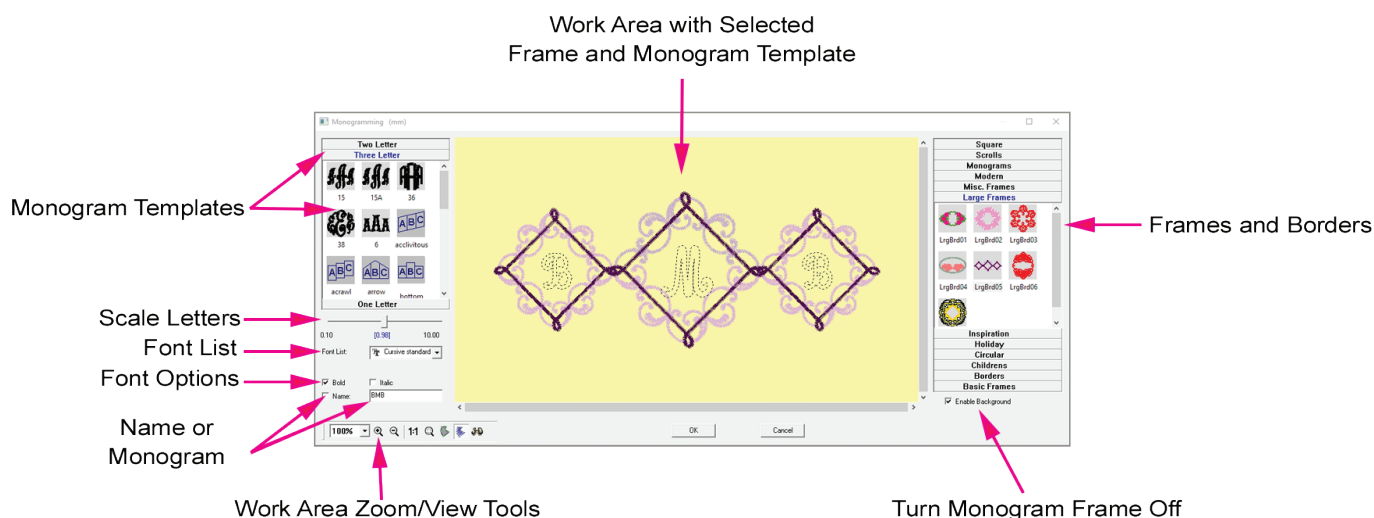
Monogramming


Generations™ Monograms is an advanced monogram creation program that allows for the use of **True Type Fonts™** to be used as monogram lettering styles using traditional and non-traditional monogram templates. The monogram lettering styles can be combined with build in borders and sized as needed.

Generations™ Monograms provides editing ability not found in most other monogramming software allowing you to customize your monogram designs and create monogram masterpieces that will be treasured for years to come.

Monogramming Screen Overview

1. Select the **Insert Monograms** icon  from the **Create** toolbar located on the right side of the screen.
Or
Select **Create** then **Insert Monogramming** from the menu.
- The **Monogramming** dialog box will display on the screen.



- **Monogram lettering templates**, font sizing and letter entry selections are located on the left side of the dialog box.
- **Decorative frame and border selections** are located on the right side of the dialog box.
- You may choose to turn off the border and frame display by removing the check mark next to the **Enable Background** option located below the selection menu.
- The **center screen** displays the selected frame or border in stitch view and monogram template and font in outline view.
- The first time that the **Monograms** dialog box opens the window will display in minimized mode and you may not be able to entirely view the monogram design.
- Click on the **Maximize** icon  in the upper right corner of the dialog box or use the zoom toolbar to display the entire monogram design.
- **Monograms** allows you to view the selected frame or border in three stitch views; **Outline View**, **Stitch View** or **3D Stitch View**.

2. Click on the desired **monogram frame** from the frames and borders.
 - The selected frame or border will display in the work area window.
 - To access more frames, click on the tab representing the style of border or frame.
 - There are 150 Monogram Frame options installed and you can create and add more frames for an almost unlimited selection.
 - Monogram frames sets can also be purchased at www.generationsemb.com.

*Note: If you do not desire to use a frame, remove the checkmark from the **Enable Background** option and no frame will be applied.*



3. Select the **desired monogram template** from the and the lettering will appear in outline form in the monogram frame.
 - Choose from **One, Two** or **Three** letter monogram templates when a shaped or specific layout is desired.
 - For **standard one, two or three letter monograms**, use the **Name** option and by-pass the monogram template settings for better results.
 - When entering a **Name**, you may enter up to **15 characters**.
 - Most of the **templates** can be applied to all frames.

- There are a few specialty templates and frames, such as **Spaced** and **Two Letter** templates that were created for specific frames.
 - When you have selected the **template style**, select the template font from the TrueType™ Font list and then enter the monogram letters desired.
4. **Automatic template spacing** may be altered depending on the TTF font selected. Use the **slider bar** to precisely place letters in the monogram frame or border.
- Pre-digitized fonts are not available in the monogram font list unless they display with the "@" symbol.

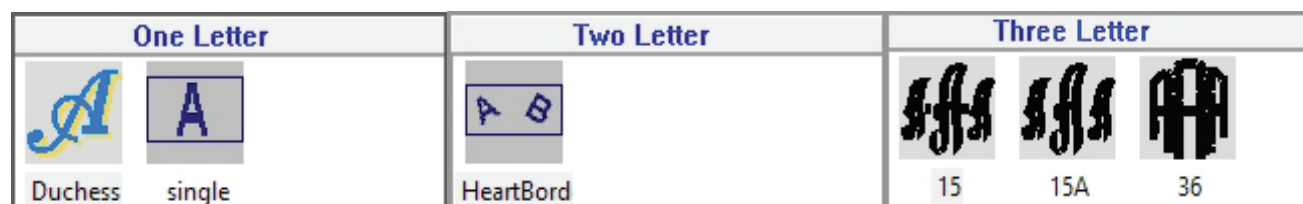


Understanding Monogram Templates

Generations™ Monograms allows for templates to be applied that space and shape the monogram lettering to fit certain frames or styles.

These templates are used when you desire a specific layout for the monogram. When inserting a standard 2 or 3 lettering monogram, use the **Name** option for better results.

There are three **monogram template** options: One Letter, Two Letter and Three Letter.



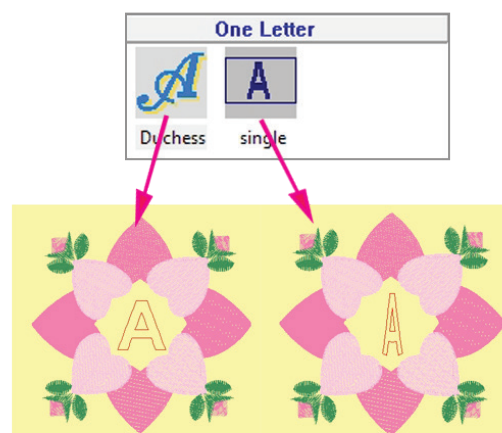
The templates in each of these options allow for fitting to specific monogram frames and may reshape or space the lettering to fit the frames.

If you do not want the lettering to be shaped, or spaced, use the **Name** option and enter the lettering. Select the desired font and use the **slider** to space and fit lettering to the frame.

One Letter templates allow for **two** options:
Using a font **with and without** shaping.

The **Duchess** option is designed to use your fonts without any reshaping to the letter or font selected.

The **Single** option applies a slight reshaping to the letter to better fit some of the monogram frames in the frame options.



Two Letter templates were designs to work with specific monogram frames and layouts.

This template works with the **Frame Misc03** in the Misc. frame options.

If you do not want the lettering to be reshaped, or spaced, use the **Name** option and enter the lettering. Select the desired font and use the **slider** to space and fit lettering to the frame.

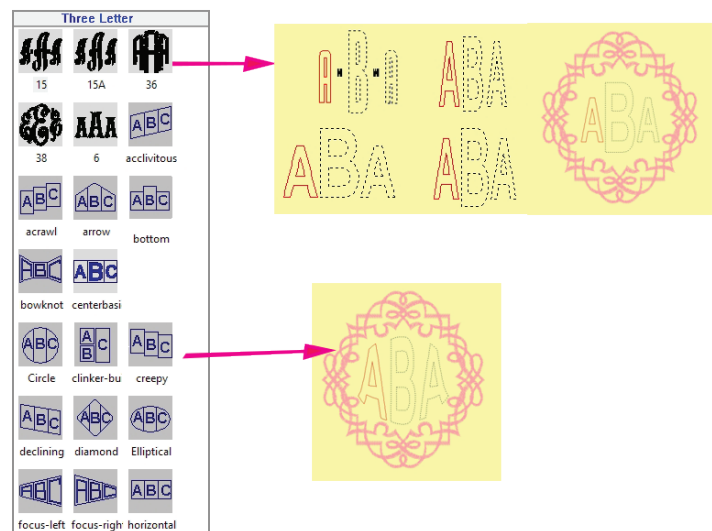
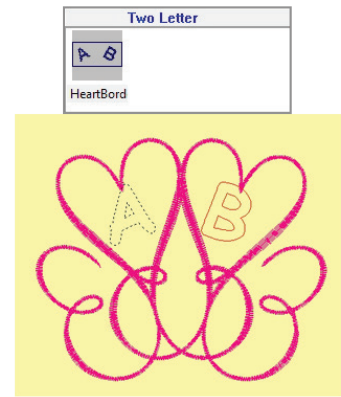
Three Letter templates have many more template options, but operate in the same manner as the **One Letter** templates.

Template styles showing in **black** are specific text layout without letter reshaping.

They have been designed for monograms where a frame is not desired. However, these templates may be placed into a frame as desired.

Template styles showing in **blue** create specific layouts and either reshape the font to fit the style or space the lettering to fit specific frames or combinations of frames.

If you do not want the lettering to be reshaped, or spaced, use the **Name** option and enter the lettering. Select the desired font and use the **slider** to space and fit lettering to the frame.

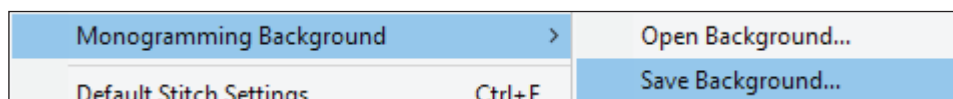



Editing And Saving Monogram Frames

Generations™ Monograms allows for editing and saving of existing monogram frames. You can also create your own monogram frames or import digitized monogram frames and save them in the Monogram Frames and Borders for future use.

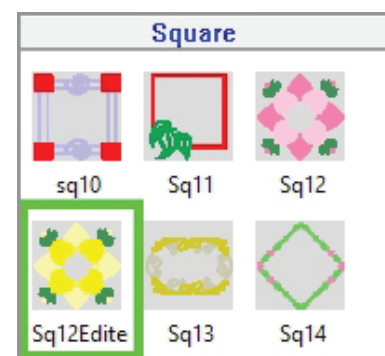
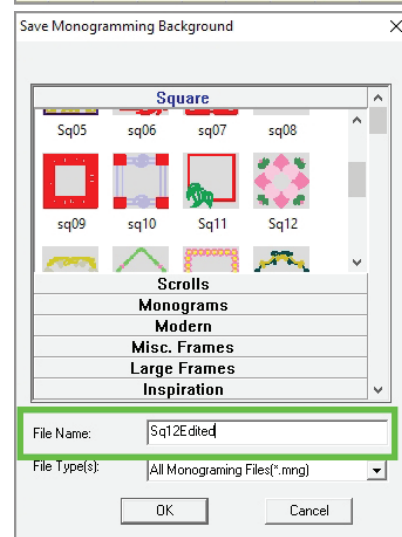
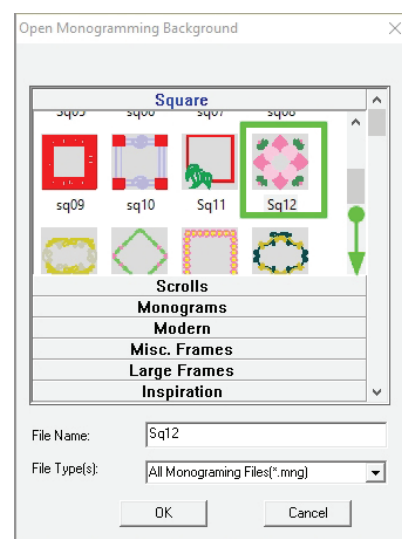
Let's Look at Editing a Frame

1. On the main menu, select **Accessories** and then locate the **Monogramming Background** menu. Select **Open Background**.



2. The **Open Monogramming Background** dialog box will open.
3. Click on the **frame category** and locate the frame you wish to edit.
 - In this example we selected the **Square** category and then selected the **Sq12** frame to edit.
4. Click **OK** to open the selected frame in the **Generations™** work area.
 - The monogram frame is now considered a .gen format design and can be edited using any of the tools in the software.
 - To learn more about editing options, please see the chapters in the manual covering those topics.
5. After editing of the frame is completed, the frame may be **saved** in the **Monogramming Backgrounds** for future use.
6. On the main menu, select **Accessories** and then locate the **Monogramming Background** menu. Select **Save Background**.
7. When the Save Monogramming Background dialog box opens, click on the **frame category** where you wish to save the edited monogram frame.
8. Locate the **File Name** and enter a new name for the frame.
9. Click **OK** and the frame will be saved in the **Monogramming Backgrounds**.
10. To locate your new frame, click on the **Insert Monograms** icon  from the **Create** toolbar.
 - Click on the frame category where the edited frame was saved.
 - The frame will display as a **thumbnail**. Click on the **thumbnail** to select the frame and create your monogram design as desired.

Generations™ Monograms can also save files created in the program or imported into the program from other sources.



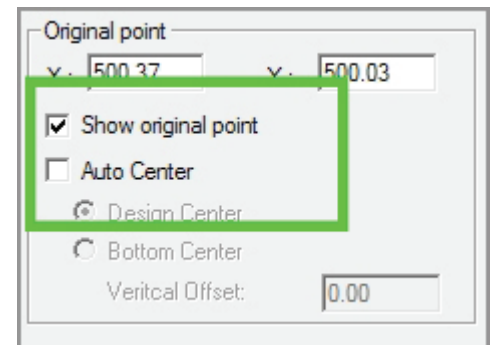
Setting Monogram Placement In New Frames

The default location for the lettering placement is the center of the created frame. There are some designs that are not created for the monogram or name to be centered in the frame.


In cases when the lettering will not align properly with a newly created frame **Generations™** allows to you better control the placement using the **Original Point** settings in the **View Preferences**.

When you save the frame in the **Monogramming Backgrounds**, the placement information will be save as well.

1. To **create** or **edit** a monogramming frame or border and **set lettering placement**, open the frame into the **Generations™** work area.
2. Determine where the lettering placement should be within the frame or around the border.
3. Select **View** and then **View Preferences** from the main menu.
4. Click on the **Hoop/Original Point** tab at the top of the dialog box.
5. Locate the **Original Point** controls towards the bottom of the dialog box.
6. Remove the checkmark next to **Auto Center** and place a checkmark in the **Show Original Point** option.
7. Click **OK** to save the settings.



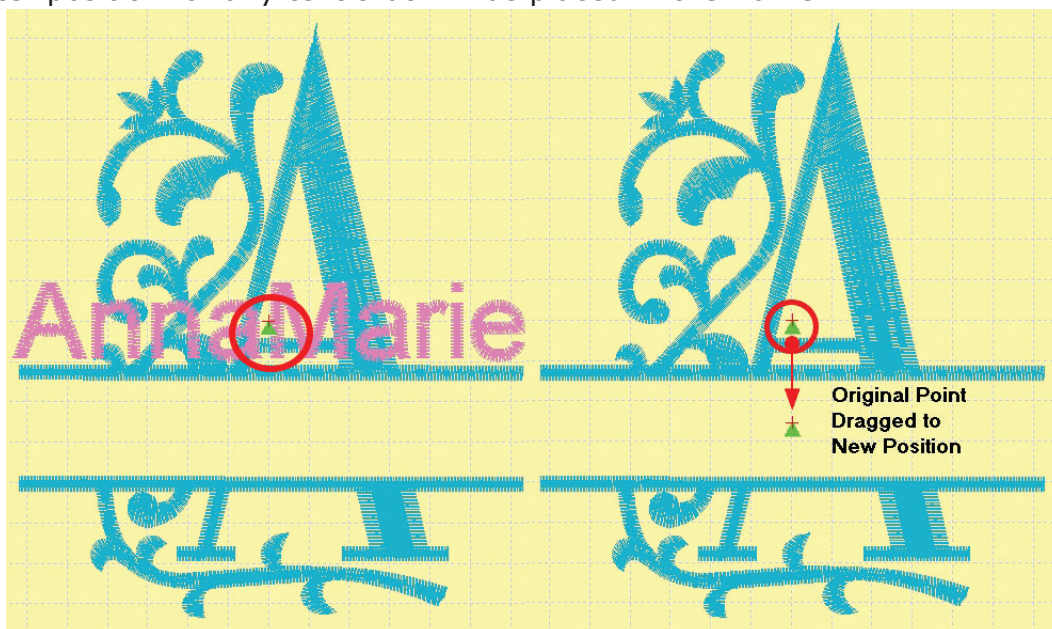
- If you are currently in the 3D View (where you see a preview of the embroidery stitching) click

on the  **3D** icon to turn off that view.

- Your design should be in **Stitch View** with the **Original Point** triangle and cross showing in the center of the design.

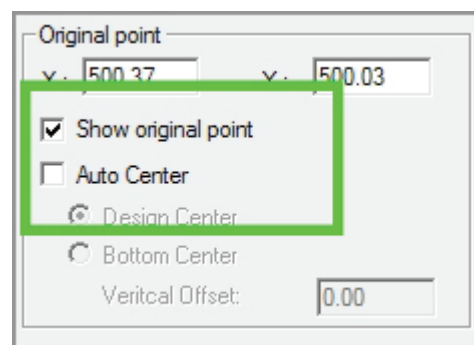



8. Move your mouse over the **green triangle**. The mouse cursor will turn into a **4-way arrow** cursor.
9. **Press and hold** the left mouse button and then **drag** the **green triangle** to the center position for any text that will be placed in the frame.



10. On the main menu, select **Accessories** and then locate the **Monogramming Background** menu. Select **Save Background**.
11. When the Save Monogramming Background dialog box opens, click on the **frame category** where you wish to save the edited monogram frame.
12. Locate the **File Name** and enter a new name for the frame.
13. Click **OK** and the frame will be saved in the **Monogramming Backgrounds**.

14. Select **View** and then **View Preferences** from the main menu.
15. Click on the **Hoop/Original Point** tab at the top of the dialog box.
16. Locate the **Original Point** controls towards the bottom of the dialog box.
17. Place a check mark in the **Auto Center** option and remove the checkmark in the **Show Original Point** option.
18. Click **OK** to save the settings.



19. To locate your new frame, click on the **Insert Monograms** icon  from the **Create** toolbar.
 - Click on the frame category where the edited frame was saved.
 - The frame will display as a **thumbnail**.
 - Click on the **thumbnail** to select the frame and create your monogram design as desired.
 - When the lettering is placed into edited and saved monogram frame the lettering will be placed in the desired location.

Use this technique to create unique monogram frames, borders and flourishes.



Name Drop Lettering

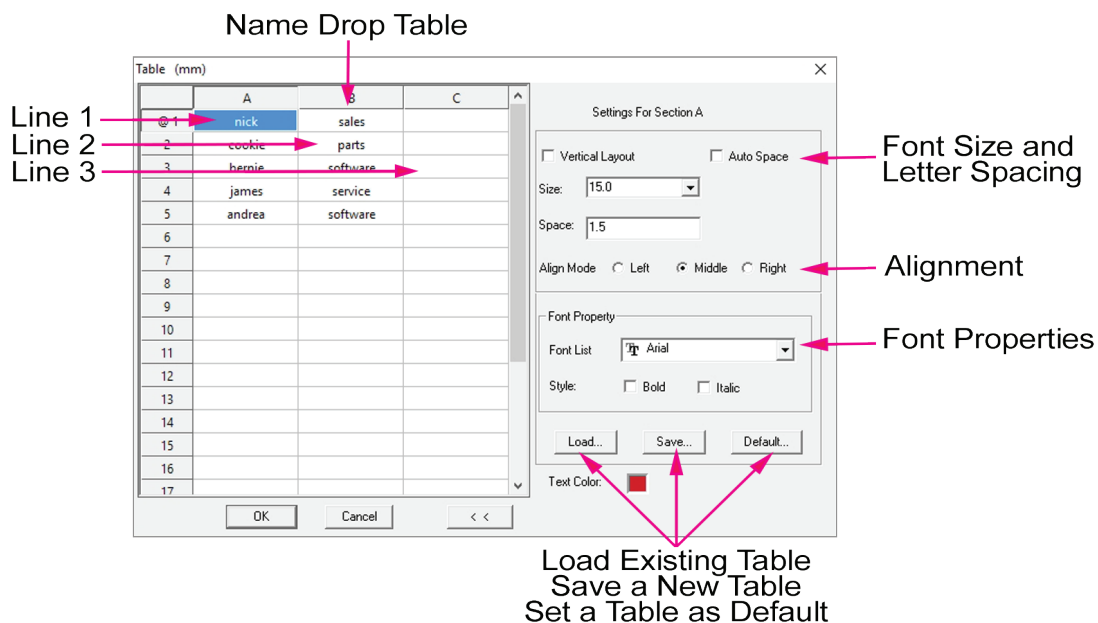
The **Name Drop** feature lets you open a design, such as a logo, and add multiple names, to the design at one time. This time saving option allows you to load one design into the embroidery machine for all names in the **Name Drop Table**. Embroider one item, then place the second item on the embroidery machine and embroider the second item. Repeat this process for all entries from the table.


Note: Name Drop is only available in the PRO software version.

Setting Up a Name Drop Table

To associate a list of names with the **Name Drop** feature, create a **Name Drop Table**. Once created, the table can be saved and edited at any time. You can add or remove names and edit the lettering settings at any time.

The table behaves similar to a **spreadsheet**. Each **column** represent a line of text.



- To open the **Name Drop** option, click on the  **Name Drop** icon from the **Name Drop toolbar**.

OR

Select **Accessories** from the main menu and then select **Name Drop**.

- When the **Name Drop dialog box** opens, enter the name (first or first and last) or other desired text into **column A**. Enter a title, tag line or other desired text into **column B** and **C**.


- Each column represents a line of lettering added to the design.

- Select the **font size** and **spacing** option. The default spacing is 1.5. The default font size is 17.5 mm.

- Font **spacing** is controlled by the **Name Drop Table**. You cannot adjust the kerning for individual letters in the **Name Drop** option.

4. Select the **Alignment** for all entries in each column.
 - This does not align the lettering with a logo. This aligns all the entries in each column.

For Example: All names entered into column A would be aligned by their centers.

5. Select the desired font and font style (bold or italic) in the **Font Properties**.
6. When the table is completed, click **OK** to create the designs.
7. Click on the  **Generate** icon.

Or

Press **[F9]** on the keyboard.

- **Generations™** software will automatically create stitches from the text outlines.
- The inserted text can only be edited in the **Name Drop Table**.
- Only one name displays on the work area screen. Other names are hidden from view.
- The name is centered over the design. You can use the **Hoop/Original Point** option discussed in the monogramming portion, if desired, to control text placement.



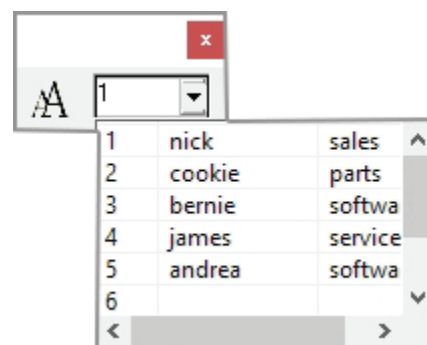
8. To move the text to a new position, move the mouse over the lettering. **Left click** on the lettering to select it. It will be surrounded by **black bounding boxes**.
9. **Press and hold** the left mouse button and left click on the text and then **drag** the text to a new position.
 - When one line of text is move, sized or edited, **all text in the same column** will automatically be edited.

For Example: The word Nick is in column A. If the work Nick is moved to a new location, all names in column A will automatically be moved to the new position.



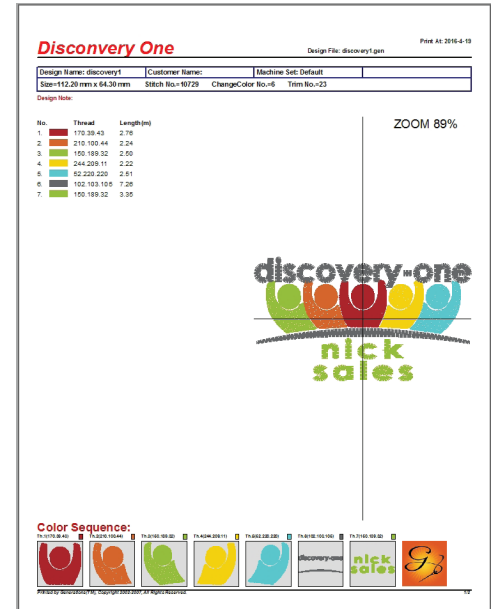
- The screen will always display one entry from the Name Drop Table at a time.

10. Click on the **black arrow** next to the number list.
11. Move the mouse cursor over the listing you wish to preview on the screen and **left click**.
 - The selected listing will display on the screen, replacing the previous display.



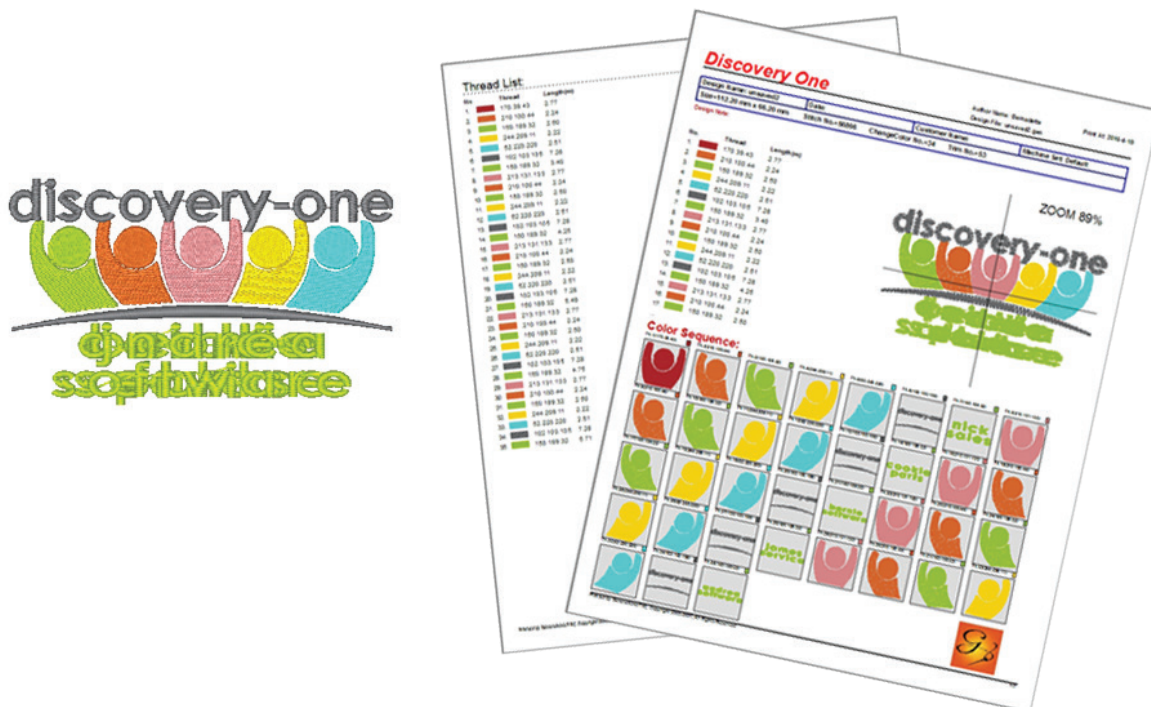
12. When you are satisfied with your **Name Drop** design,  **Export** the design in the design format required for your machine.

- It is recommended that you use the **File**, then **Print Worksheet**. This will aid you in setting the correct needle selections for multi-needle embroidery machines.
- This is the color stitching order list for one of the designs.
- We had 5 entries into the **Name Drop Table**, so the needle stitching order would be entered.
- If your machine is capable of setting a **needle sequence repeat**, then you only enter the needle number order once.
- If your machine is **not** capable of entering a needle sequence repeat, then you would enter this sequence for each of the entries in the **Name Drop Table**.



The display on the work area screen is showing only one of the entries on the name list. When you export the design to your machine format, all the entries will be contained in the design.

This is what your embroidery machine will see:



Cap Lettering Options

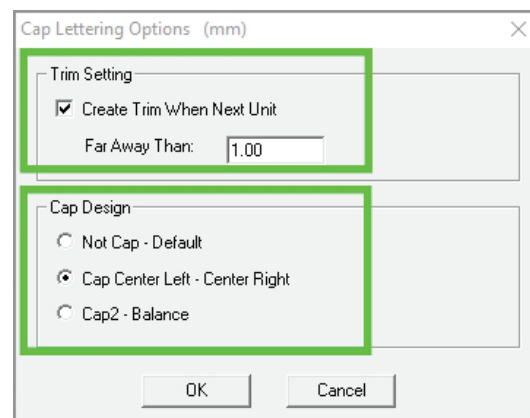
The **Cap Lettering** option allows for the stitching order of embroidery to be instantly controlled. This is particularly useful when embroidering on caps, but this option can be useful for lettering placed on high loft fabrics where sewing from the center out produces better stitch results.


The options for **Cap Lettering** include **Center Left - Center Right** and **Balanced**.

Note: Cap Lettering is only available in the PRO software version.

Cap Lettering Options: Center Left - Center Right

1. Select **Accessories** from the main menu and then **Cap Lettering Options**.
 - The Cap Lettering Options dialog box will open.
 - Control the trim between letters, if desired.
 - Select the stitching option. There are three options:
 - No Cap Stitching
 - Cap Center Left - Center Right
 - Cap 2 Balanced
- Select **Cap Center Left - Center Right** from the options.




2. Click on the  **Insert Text icon**.
3. Use the options in the dialog box to type in and format your lettering.
 - Use any of the font options: Font List, Styles, Text Path, etc. to create your lettering.
4. Click **OK** to insert the lettering into the work area.
5. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate icon**

The lettering created will stitch from the center to the left and then return to the center and stitch to the right.

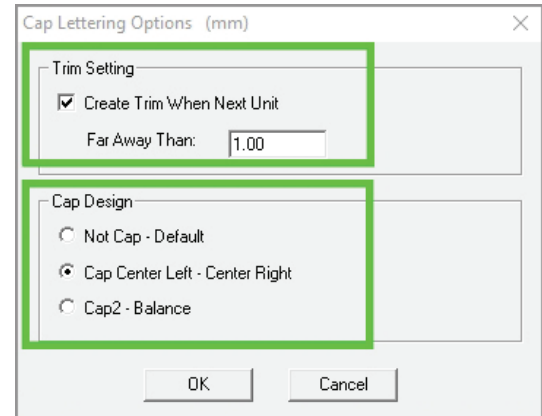
Note:


The Cap Lettering options must be selected prior to the text creation. You cannot use this option to change previously existing lettering.



Cap Lettering Options - Cap 2 Balanced

1. Select **Accessories** from the main menu and then **Cap Lettering Options**.
 - The Cap Lettering Options dialog box will open.
 - Control the trims between letters, if desired.
 - Select the stitching option. There are three options:
 - No Cap Stitching
 - Cap Center Left - Center Right
 - Cap 2 Balanced
- Select **Cap 2 Balanced** from the options.




2. Click on the  **Insert Text icon**.
3. Use the options in the dialog box to type in and format your lettering.
 - Use any of the font options: Font List, Styles, Text Path, etc. to create your lettering.
4. Click **OK** to insert the lettering into the work area.
5. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate icon**

The lettering create will stitch from the center, then to the right one letter and then to the letter left of center. This process will repeat until all letters have been stitched.

Note:

The Cap Lettering options must be selected prior to the text creation. You cannot use this option to change previously existing lettering.



Chapter 8

Modifying Designs

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Overview

The file and window management tools in **Generations™** software are similar to those found in most other Windows® Applications. There are also additional tools particular to embroidery.

New Files

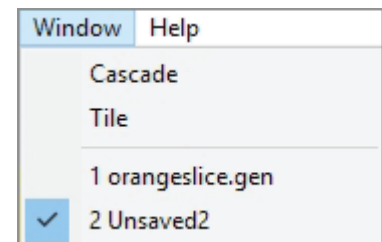
When you open **Generations™**, a new design window is always displayed. **Generations™** software can have multiple design windows open at one time, the maximum number is only limited by your computer resources. The **New** command in the **File** menu gives you another blank design window.

Opening a New Window

1. Select the **New Design** icon  from the **Standard Toolbar** that runs across the top of the screen.
Or
Select **File** then **New** from the menu.
Or
On the keyboard, press **[CTRL] + [N]**.
The previous open window is replaced with a new blank design window.

You can move between all open windows by clicking on **Window** from the main menu bar, then on the **design title** in the drop down menu.


You can also use the standard Windows® buttons to **Minimize**, **Maximize** or **Close** an individual design window.



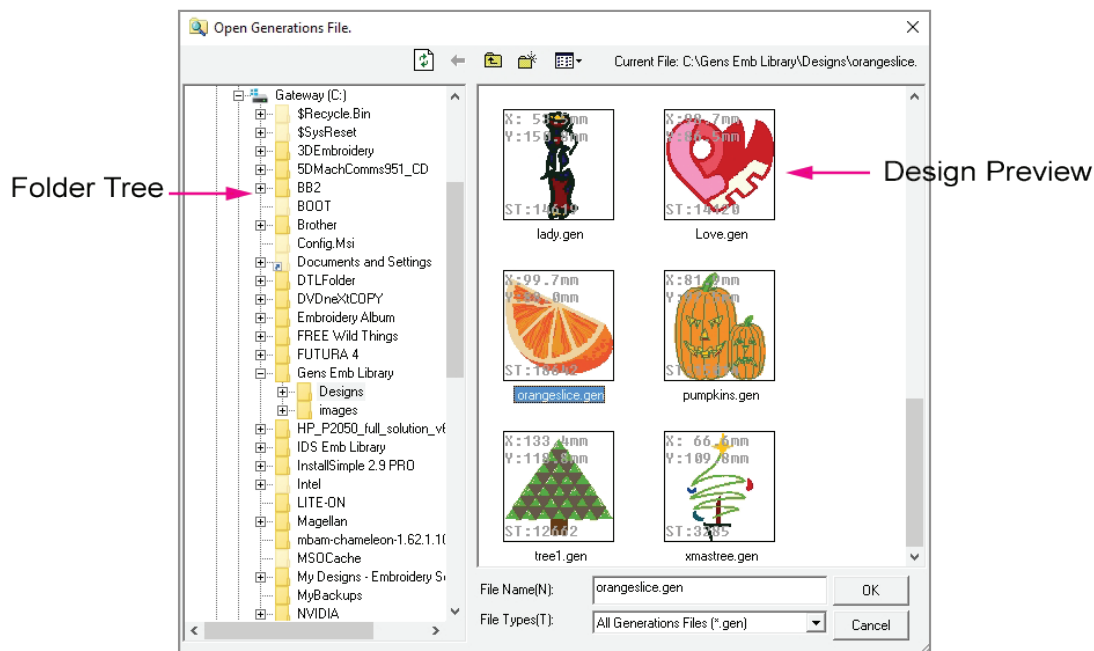
Open Files

Generations™ software allows you to open previously saved designs and make additional modifications. The **Open** command is used only for designs created and saved in **Generations™** .gen file format. If your design is stored only in a machine format, you will need to use the **Import** command.

Opening a Saved Generations Design

1. Select the **Open** icon  from the **Standard Toolbar** that runs across the top of the screen.
Or
Select **File** then **Open** from the menu.
Or
On the keyboard, press **[CTRL] + [O]**.
The **Open Generations File** dialog box displays.

- The dialog box is split into left and right sides.

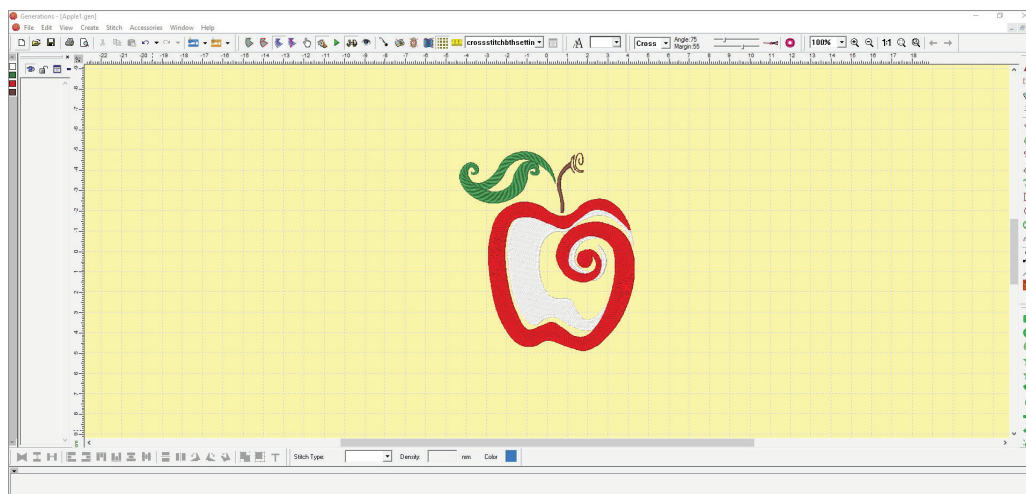


You will see the standard Windows® folder tree on the left side. Use this side to find the appropriate drive and folder where the **Generations™** file is stored.

The right side of the dialog box shows you a preview of the saved **Generations™** files stored in the selected folder. The design dimensions and stitch count are shown below each preview. To see the **design name**, place the mouse pointer over the design preview. You'll see the file name appear along with the dimensions and stitch count information.

- When you have located the file you need, **double click** the left mouse button on the design preview to open it. If you know the desired file name, you can simply type it into the **File Name** text box.

The selected design will open in the **Generations™** screen.



Combining Design Files

Generations™ software allows you to open another previously saved design directly into the design currently in progress. The **Open to Current** command makes it easy for you to combine two or more designs without having to open them into separate design windows. Open to Current only works for designs saved in the **.gen** file format. If your design is stored in a machine format, you will need to use the **Import** command.

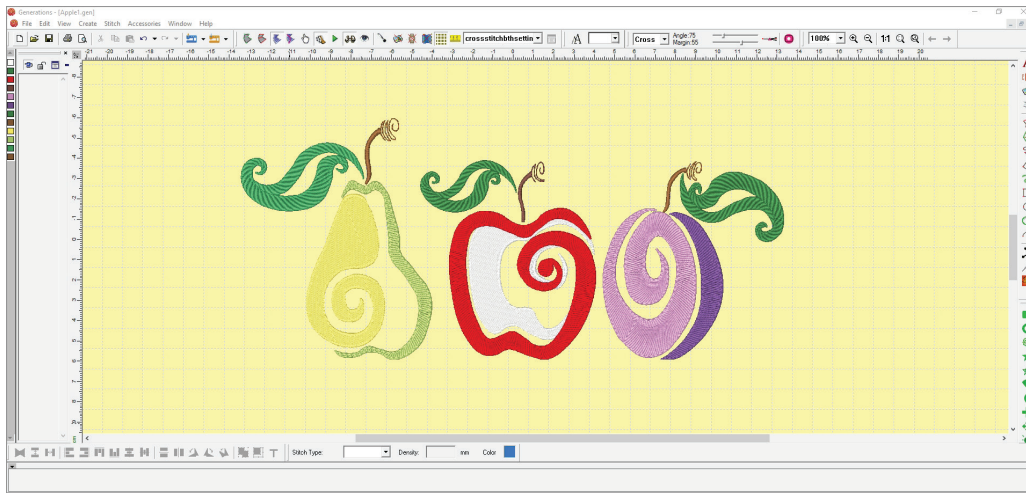
Opening a Design to the Current Design


1. Select **File** then **Open To Current** from the menu.
The **Open Generations File** dialog box displays.
2. On the **left side**, find the appropriate drive and folder where the **Generations™** file is stored.

The **right side** of the dialog box shows you a preview of the saved **Generations™** files stored in the selected folder. The design dimensions and stitch count are shown below each preview. To see the design name, place the mouse pointer over the design preview. You'll see the file name appear along with the dimensions and stitch count information.

3. When you have located the file you need, **double click** the left mouse button on the design preview to open it. If you know the desired file name, you can simply type it into the **File Name** text box.


The selected design will open in the **Generations™** screen, in the center of the design window. You can now move, resize, rotate or otherwise edit it as desired.

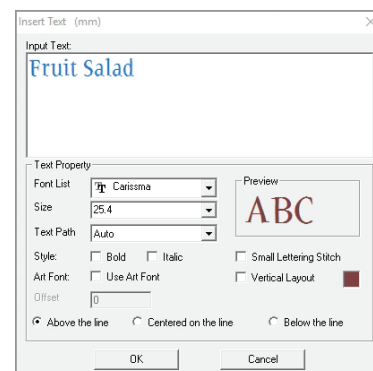



You can add as many designs to the current file as desired. Just remember to **Generate**  to allow the program to recalculate in and out points, traveling stitches or changes made to the designs.

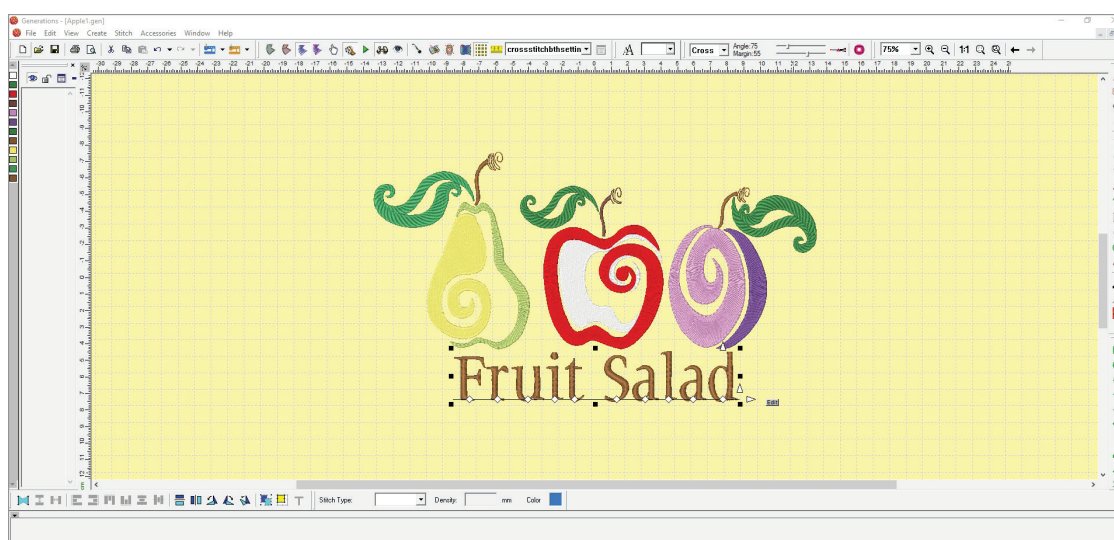
Combine Designs and Lettering

1. Open a ***.gen** or **Import** a format design file into **Generations™**.

2. Click on the  **Insert Text** icon.
3. Input the desired text and select text size, text path and/or style.
4. Click **OK** to create the text in the design work area.
 - Move, resize or edit text as desired.
 - Add more design or text to the design as desired.




5.  **Generate** to place stitches into the text or recalculate stitches after editing changes.



Combine New, Saved and Imported Designs

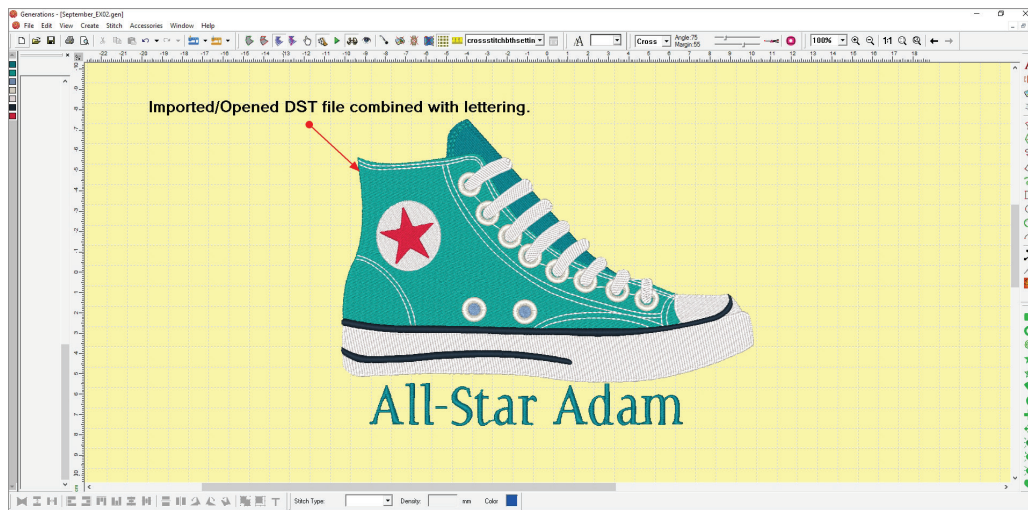
Generations™ new designs, saved designs and stitch files (format) designs can be combined in any combination.

1. Open a ***.gen** format design file into **Generations™** or use a newly digitized design in the work area.
2. Click on the  **Import Design** icon.
 - Your last **Import** selection will be remembered.

For Example: If you clicked on the black arrow next to the icon and selected Open Formats, the Open Formats option will be remembered. When you click on the icon to Open option default to that setting.

- To change between **Open DST or EXP** and **Open Formats**, click on the black arrow next to the icon.
3. Select the location where the design is stored on the computer hard drive or an external drive.


- Click on the desired design to select it.
- Click **Open** to place the format design into the work area.



- If the design is not centered in the work area click on the **1:1** icon on the **Zoom Toolbar** to center the design.
- Move the imported format design as desired.

Note: To edit a formatted design, please review the editing sections of this manual.

- Add additional design files or text as desired.

-  **Generate** to place stitches into or recalculate stitches after editing changes.

Organize and Scale Designs

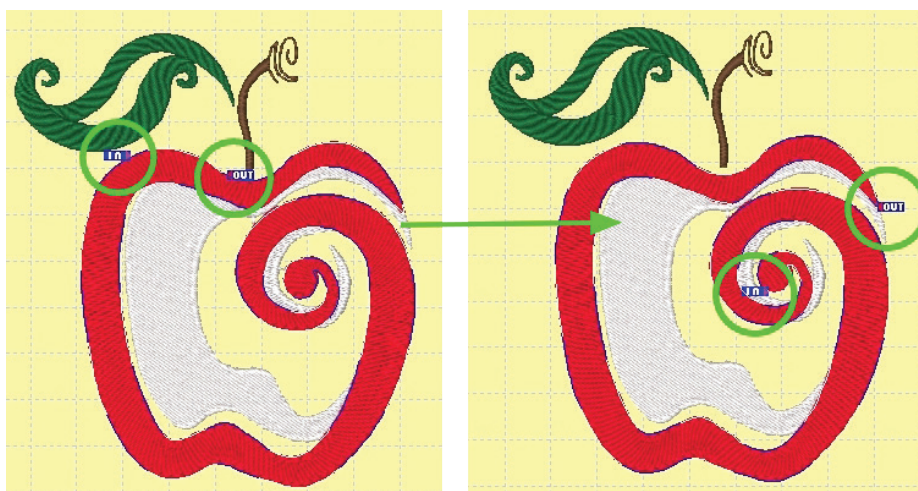
Generations™ provides basic editing tools that you can use to improve sewing efficiency, align objects or create special effects.


Area In/Out Points

When an area or line is selected on screen, you'll notice two small boxes with the words IN and OUT. These indicate where the stitching will enter and exit the area. For optimum sewing efficiency, the exit point of one area should be near the entry point of the next area in the sewing sequence. When a design is first generated, **Generations™** places the IN and OUT points in the best possible location.

Changing the In and Out Points

- Place the mouse pointer over an area and **click** the **right mouse button** to select it. You'll see the blue and white flashing marquee line around it, and the IN and OUT boxes.
- Place the mouse pointer **exactly over the IN** box. Its in the right position when you see the mouse pointer change to a **four-headed arrow**.
- Hold down** the **left mouse** button and **drag** the box to the desired position, then **let go** of the mouse button. The **IN** point is now moved to that place.



4. Repeat steps 2 and 3 to move the **OUT** box, if desired.
 5. **Right click** the mouse on a **blank space** on your work area screen to remove all items from selection.
 - No areas or lines should be surrounded by the blue and white flashing lines.
 6. Select **Accessories**, then **Generate**.
 - Or
 - Press **[F9]** on the keyboard.
 - Or
 - Click on the  **Generate** icon.
- Remember that changes do not take effect until you **generate** the section.

Delete an Area or Line

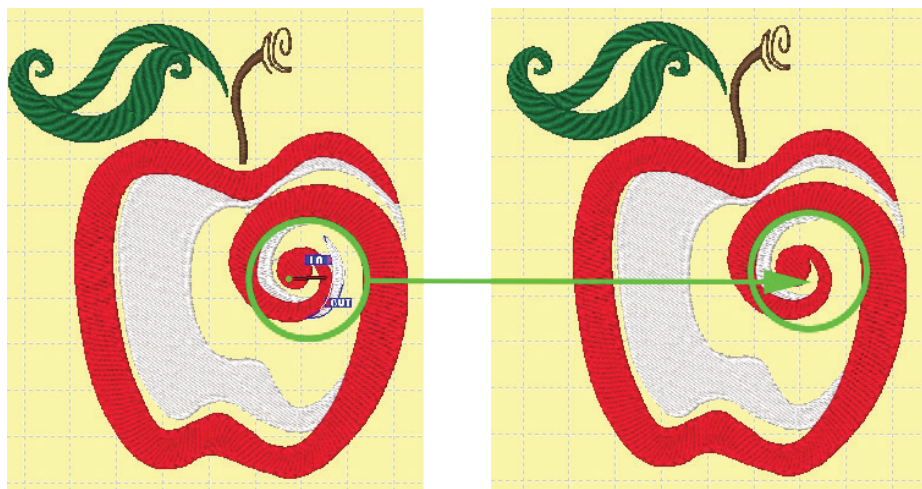
There are two ways to delete areas or lines from the design. You can completely remove the stitches and area outlines. Or, you can delete only the stitches, leaving the outline and stitch data intact for use at a later time.

Completely removing the stitches from the design means that you are removing the outline containing the stitch data.

Removing only the stitches means that you leaves the area outline intact. This is often used when editing lines or areas near the deleted stitches and allows you to recreate the stitches at any time in the design.

Deleting an Area from the Design

1. **Select** the **areas or lines** or areas in the design that you want to delete.
 - You'll see the blue and white flashing marquee line around it.
2. On the keyboard, hold down **[CTRL]** and press **[DELETE]**.




- The stitches and area outline are completely removed from the design.
- There are no blue and white flashing lines indicating an area or line exists.

3. Select **Accessories**, then **Generate**.

Or

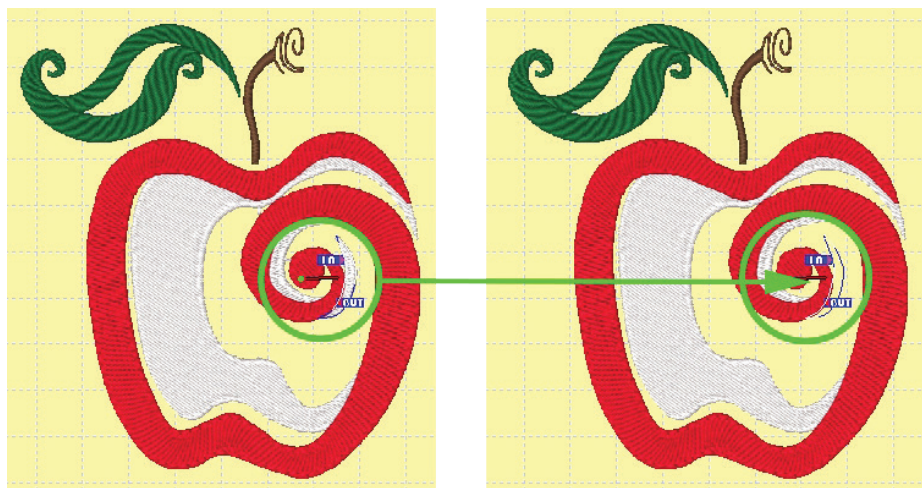
Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon to allow the program to recalculate in and out point or traveling stitches for the whole design.

Deleting Stitches from the Design

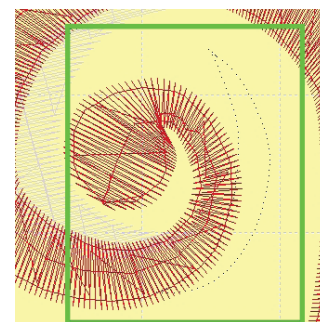
1. **Select** the area or areas in the design that you want to delete. You'll see the blue and white flashing marquee line around it.
2. Select **Edit** then **Delete**.
Or
On the keyboard, press **[DELETE]**.



- Only the stitches are deleted. You'll still see the outline of the shape on the screen surrounded by **blue and white flashing lines**. The items is still technically selected.
- If you are in **Stitch View**, the area representing the deleted stitches will show as a faint dashed outline indicating that there is an area or line object in the design.

Note: If you Generate stitches the deleted stitches will reappear in the design.

- When you are ready, **Generate** and the stitches will be recreated in the design.



Optimize Stitch Order

When you first generate a design, **Generations™** automatically places each area in the best possible position for an efficient stitching sequence, using the minimum number of color changes and jumps. However, after making changes such as splitting a section or changing colors, you may need to change the order.

You can do this manually using the **Stitch Sequence Viewer** or the **Set Stitching Order** menu command, as explained in the previous sections. Or, you can use the **Optimize Stitch Order** command to have **Generations™** restore an efficient stitch sequence.

Optimizing the Stitch Sequence

1. Select **Accessories**, then **Optimize Stitch Order**.
2. The individual areas of the design are placed in the most efficient sewing sequence, based on color.
3. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the design.

Set Stitching Order

In addition to manually moving areas using the **Stitch Sequence Viewer**, **Generations™** also provides a visual method of setting the sewing sequence.

Using Set Stitching Order

1. Select **Accessories**, then **Set Stitching Order**.
The mouse cursor changes to a white hand.
2. Place the cursor over the area you want to stitch first, and click the **left mouse** button. A **white box** with the **number 1** is placed inside it.
3. Repeat step 2, selecting each area of the design in the order you want it to be stitched, until you have marked all areas in the design.

- If you make a mistake, you can press **[Backspace]** on the keyboard to **undo the previous selection**.
- If you want to **cancel the entire command**, just click the right mouse button or press **[Esc]** on the keyboard.

4. When all areas have been marked, press **[Enter]** on the **keyboard** to confirm the new order. The areas of the design are placed in the new stitch sequence.

Note: For more complicated designs, use the View/Hide Tool on the Stitch Sequence Viewer.

5. Select **Accessories**, then **Generate**.

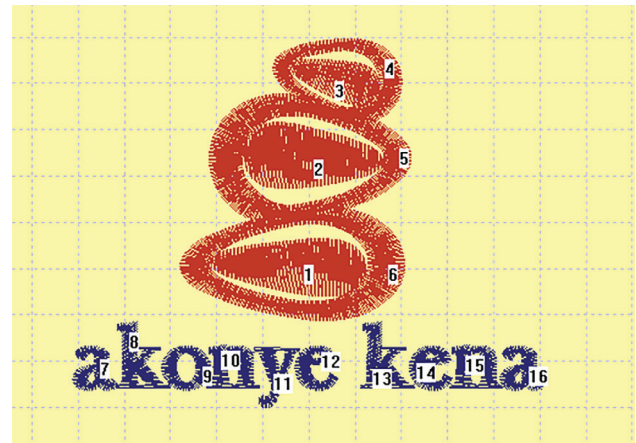
Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the design.



Stitch Sequence Viewer

The **Stitch Sequence Viewer** shows the sewing order of the design. Each area has its own block in the **Stitch Sequence Viewer**. You can use this tool to change sewing order, to quickly locate a particular area in the design, and to insert machine commands.

Using the Stitch Sequence Viewer

1. Select **View**, then **Stitch Sequence**.

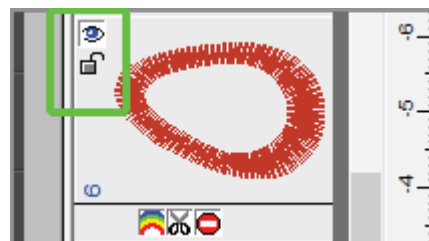
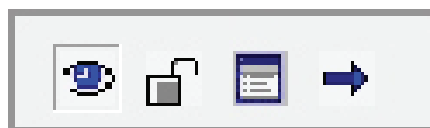
Or

Press **[F2]** on the keyboard.

Or

Click on the  **Stitch Sequence** icon in the **View** toolbar.

2. The **Stitch Sequence Viewer** opens. It is docked to the left side of the screen, next to the color chips.
3. There are small **icons** the top of the view and to the left of each block in the **Viewer**. These icons are similar and perform many of the same tasks.





Visible/Invisible: Determines if the block is **Visible** in the work area. Sometimes stitches that you'd like to change overlap another area, making it difficult to see what you are doing. Making a block invisible temporarily hides it from view. When you would like to see the area again, just click on **Visible/Invisible** a second time.

Simply click on the icon to toggle between the two modes. When an area is **Invisible**, the icon has a small **red x** over it.



Lock/Unlock: Determines if you can make changes to the block. Locking an area prevents accidental changes from being made. After stitches are generated, all areas are unlocked so you can make changes. You may want to **Lock** an area when you are happy with it, to prevent further changes from being made.

Simply **click** on the **icon** to toggle between the two modes. When **Unlocked**, the icon looks like an open key lock. The icon looks closed when the area is **Locked**.



Select: Allows you to select multiple areas and/lines quickly. You can select by All Invisible, All Invisible Lines, All Invisible Areas, All Lines, All Areas or All Locked so you can quickly make changes to those areas at one time.



Properties: Allows you to set the **Unit Stitch Properties**. You can set visibility, in and out point and trim preferences for one area or all areas selected.



Color Change: Indicates a change in thread color. You'll see the rainbow icon highlighted whenever the adjacent blocks are different colors.

To **remove** a **Color Change**, click on the highlighted icon. This makes the later area the same color as the previous area.

To **add** a **Color Change**, click on the dim rainbow icon between two blocks in the same color. The **Color** dialog box displays for you to select the new thread color.



Thread Trim: Indicates if the thread is cut between two areas in the design. When **not active**, the **Scissor** icon looks grayed out, or in the background. When **active** the **Scissor** icon will be brighter, and a darker color. To remove or insert a trim, just **click** on the **icon**.

Generations™ inserts trims automatically when it cannot find a way to travel between two adjacent blocks, and the distance between them is greater than 3mm. If you properly manage the design sequence and **IN and OUT points** for each area, **Generations™** efficiently manages thread trims.

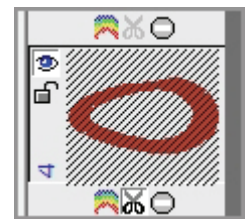


Stop: Indicates the use of a **Stop Command**, telling the machine to stop stitching between blocks. The **Stop Command** is not recognized by most home sewing machines, but is used by many commercial machines. If your machine does not recognize a stop, you can use a color change command to have the machine stop stitching.


4. When multiple areas are selected, you can use the **icons** along the top of the **Stitch Sequence Viewer** to change their properties all at once.
 - The blue arrow lets you quickly select all areas or lines, all locked areas, or areas you have made invisible, instead of having to search for them in the viewer frames.

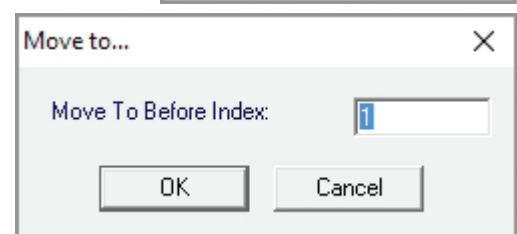
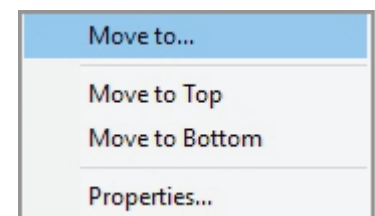
Selecting an Area in the Stitch Sequence Viewer

1. If an area had already been selected in the design when you opened the **Stitch Sequence Viewer**, the **Stitch Sequence Viewer** automatically opens to that place. That block will be **shaded** with a **diagonal stripe** darker gray color, indicating that it is the selected area.
2. To select a different area, just place the **mouse pointer** over the desired block in the Viewer and **click** the **left mouse** button. You'll see that area also selected in the larger view of the design, with the blue and white flashing marquee lines.
3. If desired you can use the Viewer to **select several areas** at once.
 - Hold down **[CTRL]** on the keyboard as you **left click** on each area. You can use this method to select **non-sequential units** in the Viewer]
 - You can also quickly **select sequential units**. **Left click** on the **first area** to be selected. **Hold down [SHIFT]** on the keyboard and **left click** on the **last area** to be selected. All areas between the two will be selected.

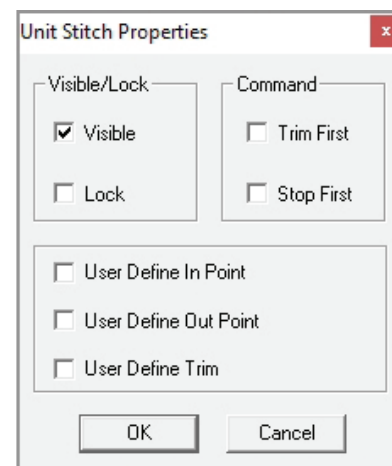


Changing Sewing Sequence with the Stitch Sequence Viewer

1. Open the  **Stitch Sequence Viewer**, as explained in the previous section. In the **Stitch Sequence Viewer**, you'll notice that **each area** has a **separate number** block. The numbers are located in the lower left corner of each block.
2. Place the **mouse pointer** over the **block** that you need to move and **click** the **left mouse** button to select it.
3. Keep the mouse pointer over the selected block and **click** the **right mouse** button. A pop-out menu gives you three choices:
 - Select **Move To** in the pop-out menu to move the selected block to a specific position in the sewing sequence. The **Move To** dialog box opens.
 - **Type** in the **block number** where you want to move the selected block, then click on **OK**.
 - Select **Move to Top** to move the selected block to the **first position in the sewing sequence**.



- Select **Move to Bottom** to move the selected block to the **last position in the sewing sequence**.
- You can also **drag** the selected block to a new position. Keep the mouse pointer over the selected block, **hold down** the **left mouse** button and **drag** to the new location. When you release the mouse, the block is moved to the new position.
- You can also access the **Unit Stitch Properties** from this menu. Unit Stitch Properties allow you to add or remove manually controlled trims, stops and in and out point control options.



4. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Using the Select Menu

The Stitch Sequence Viewer is a powerful tool for selecting areas and lines, but there is another options called **Select**. This menu will allow you to select by specific area or line stitch types throughout the designs when you need to make changes to all area or lines of one type.

Using the Select Menu

1. Click on **Edit** and then **Select** from the main menu.
 - A pop-out menu will appear on the screen.
2. **Select All** will select all areas or lines in the design work area with black bounding boxes.
 - This option is useful when you wish to group items in a design. *For Example: When you need to resize the design.*
3. All other select options select areas or lines for editing using **Outline View**, **Angle View** editing tools, or **stitch property** editing. *For Example: When you wish to change density, underlay, fill or line types*
 - These selected areas will be surrounded by the **blue and white flashing marquee lines**.
 - You can **Remove** areas or lines from the selection.
 - You can **Invert The Selection** or select everything opposite of what is currently selected in the design.

Select All	Ctrl+A
All Filled Areas	Ctrl+Shift+A
Select All Lines	Ctrl+Shift+L
Remove Selection	
Invert Selection	
Select AutoJudge	Ctrl+Shift+U
Select Complex Fill	Ctrl+Shift+F
Select Satin	Ctrl+Shift+T
Select Motif	Ctrl+Shift+M
Select Spiral	Ctrl+Shift+P
Select Radial	Ctrl+Shift+D
Select Applique	Ctrl+Shift+I
Select Cross Stitch	Ctrl+Shift+H
Select Fluid Contour	Ctrl+Shift+J
Select Arc	Ctrl+Shift+C
Select Run	Ctrl+Shift+N
Select Double Run	Ctrl+Shift+B
Select Triple Run	Ctrl+Shift+E
Select Satin Border	Ctrl+Shift+S
Select Motif Border	Ctrl+Shift+R
Select Running Cross	Ctrl+Shift+G
Select Blanket Stitch	Ctrl+Shift+K
Select Button Hole	Ctrl+Shift+O
Select Running Sequin	Ctrl+Shift+W


Undo/Redo

The actions you make in **Generations™** can be quickly undone. The **Undo** and **Redo** commands give you the ability to undo or redo each action. You can do this one action at a time, or jump all the way back to a specific action. **Generations™** remembers up to the last 25 actions that were performed.

Undoing or Redoing Individual Changes

1. Select **Edit** then **Undo**.

Or

Click on the  **Undo** icon.


Or

Press **[CTRL] + [Z]** on the **keyboard**.

The last action you had made is undone.

2. Select **Edit** then **Redo**.

Or

Click on the  **Redo** icon.

Or


Press **[CTRL] + [Y]** on the keyboard.

The last action you had made is re-done.

Undoing or Redoing Several Changes

1. **Click** the **left mouse button** on the **black arrow** to the right of the  **Undo** icon.

- A list of the actions performed opens on the screen.
- Locate the change to which point you want to return the design, position the mouse pointer over it and **click** the **left mouse button**.

2. **Click** the **left mouse button** on the **black arrow** to the right of the  **Redo** icon.

- A list of the actions performed opens on the screen.
- Locate the change to which point you want to return the design, position the mouse pointer over it and **click** the **left mouse button**.



Cut/Copy/Paste

Generations™ software incorporates the familiar Cut, Copy, and Paste commands that you may recognize from other Windows software applications. They work the exact same way in **Generations™**.

At times, you may want to exactly duplicate an existing area in the design. The easiest way to do this is with the **Copy** and **Paste** commands.

In general, you use **Cut** or **Copy** to place a temporary copy of the selection into the clipboard. You then Paste the clipboard contents back into the design – the same one, or a different design window. The **Cut** command places the area in the clipboard but also deletes it from the design. **Copy** leaves the original section intact. For embroidery purposes, Copy is most frequently used.

Using Copy and Paste

1. **Select** the **area** or areas in the design that you want to copy. You'll see the blue and white flashing marquee lines going around the area.
2. Select **Edit** then **Copy**.

Or

Click on the  **Copy** icon in the **Standard** toolbar.

Or

Press **[CTRL] + [C]** on the keyboard.

A copy of the selected areas is placed in the clipboard.

Tip: At this point you can change a different design window, if desired.

3. Select **Edit** then **Paste**.

Or

Click on the  **Paste** icon in the **Standard** toolbar.


Or

Press **[CTRL] + [V]** on the keyboard.

The area copied in step 2 is placed into the open design, exactly on top of the original.

The newly pasted area is displayed with the **selection frame** (eight black sizing squares) ready for you to move it to a new position, and otherwise manipulate it.

Tip: If you had selected, copied and pasted multiple sections it is a good idea to group, [CTRL] G on the keyboard, the areas immediately after using the paste command so that they can be moved and manipulated as a group.

4. Repeat step 3 to paste as many copies into the design as you like. The **copied area remains in the clipboard** until it is replaced with a different area or until you close the program.
5. Use the  **Stitch Sequence Viewer** to place the pasted areas into the desired position in the sewing sequence. All pasted sections are placed **last in the sewing sequence**. You will want to position them with other areas in the same thread color for maximum sewing efficiency.
6. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

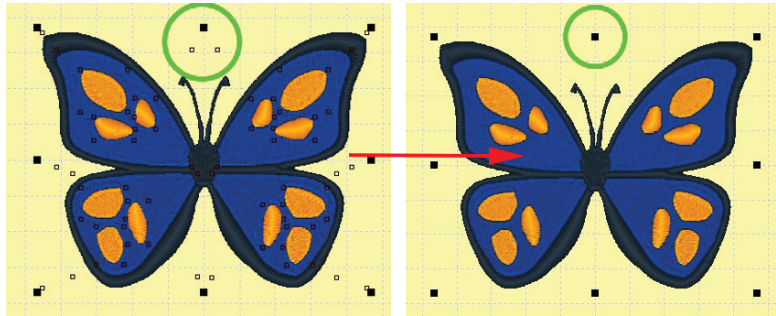
Click on the  **Generate** icon.


Remember that changes do not take effect until you **Generate** the section.


Group/Ungroup

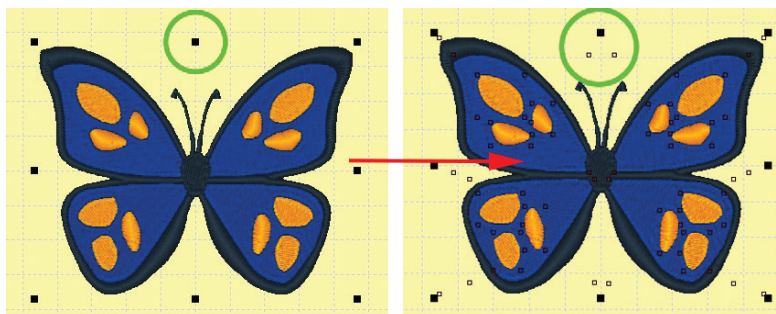
There are times when you will need to group or ungroup a design or sections of a design. Automatically digitized designs are grouped automatically in the program. Manually created designs are not grouped.

1. To **Ungroup** a design or sections of a design that are grouped together left click on the design or area(s) to select them.
 - The design will be surrounded by **black bounding boxes**. If there is a single bounding box frame, the design is grouped.



2. Click on the  **Group/UnGroup** icon on the **Align** toolbar.
OR
Press **[CTRL] G** on your keyboard to ungroup the design.
 - The ungrouped design will display the original black bounding boxes and open bounding boxes around all lines or area of the design.
3. To **Group** design segments together as one unit, select the desired sections of the design.
 - The design will be surrounded by **black bounding boxes** and the selected sections will be surrounded by **open bounding boxes** indicating that the areas or lines are not grouped.

4. Click on the  **Group/UnGroup** icon on the **Align** toolbar.
OR
Press **[CTRL] G** on your keyboard to ungroup the design.
 - The design will be surrounded by **black bounding boxes**. The selected sections of the design are grouped as one unit.



Resize and Rotate

There are two ways to resize and rotate elements in the design. You can use the **Edit** menu commands, or use the frame to visually resize or rotate.

Resize using the Edit Menu

1. **Select** the **area** that you would like to resize.
If you want to select all elements of the design, use **Select All** in the edit menu, then use **Group** in the **Edit** menu.

You can also **left click** on a **single area** to select it.

If you have automatically generated a design, you will first need to **Ungroup** it, using the **Group** command in the **Edit** menu, to be able to left click select individual areas.

2. Select **Edit** then **Resize**.

Or

Click on the  **Resize** icon in the Object **toolbar**.

The **Resize** dialog box opens.

3. Select either the **X** or **Y** box and type in the new size.
4. Click on **OK** to close the dialog box.
5. Select **Accessories**, then **Generate**.

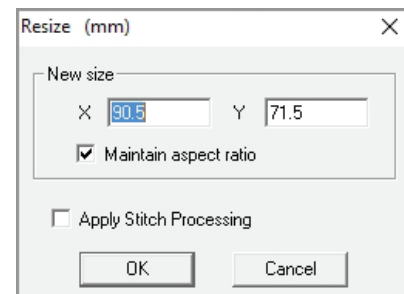
Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.



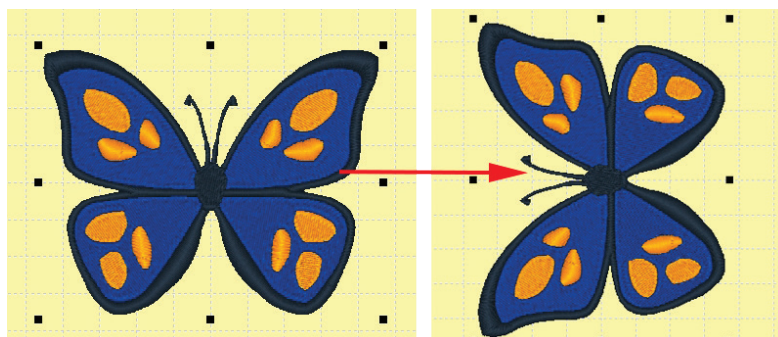
Rotate using the Edit Menu

1. **Select** the **area** that you would like to rotate.
If you want to select all elements of the design, use **Select All** in the **Edit** menu, then use **Group** in the edit menu. You can also **left click** on a **single area** to select it.
2. Select **Edit** then **Rotate**. A pop-out menu gives you three options.

Rotate Left 90 Degrees: Just **left click** on the option, to automatically rotate to the left.

Or

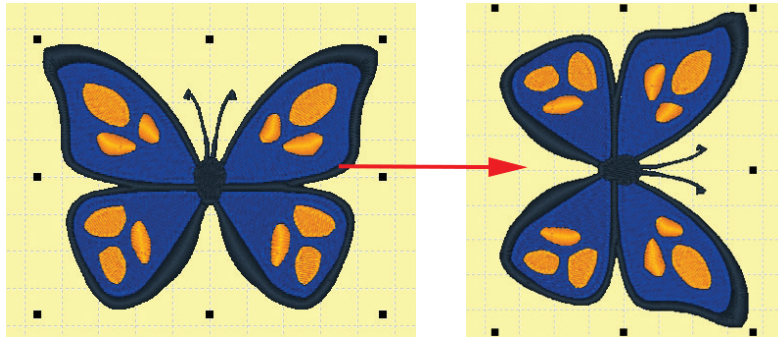
Click on the  **Rotate Left** icon in the **Object** toolbar.



Rotate Right 90 Degrees: Just left click on the option to automatically rotate to the right.


Or

Click on the  **Rotate Right** icon in the **Object** toolbar.



Rotate Manually: Left click on the option.

Or

Click on the  **Rotate Manually** icon in the **Object** toolbar. The **Free Rotate** dialog box opens.

Type in the increment, in degrees, by which you want to rotate the area. Click on **OK** to close the dialog box. You can enter positive number or negative numbers to rotate right or left.



3. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

NOTE: If you have automatically generated a design, you will first need to Ungroup it, using the Group command in the Edit menu, to be able to left click select individual areas.

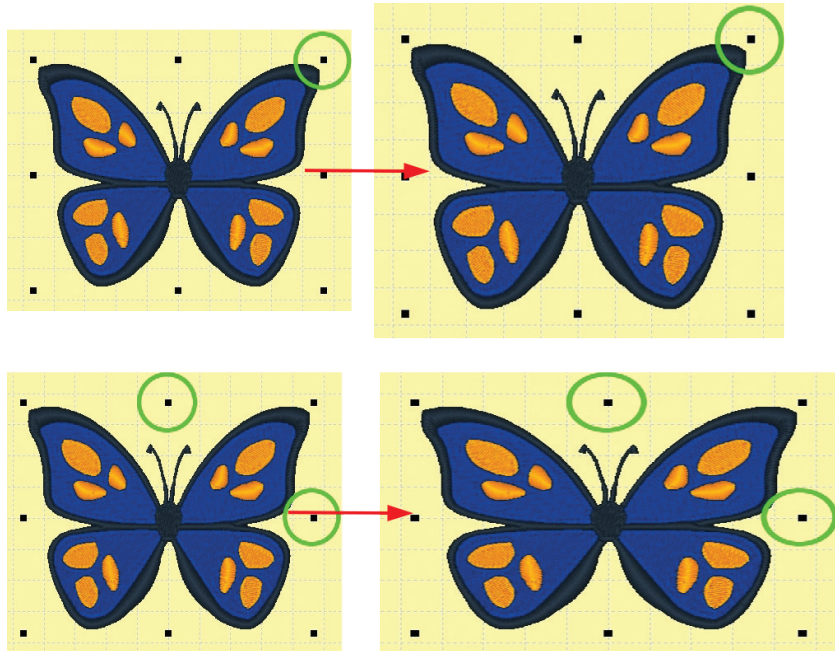
Resize, Rotate or Skew a Design using the Selection Frame

1. **Select** the **area** that you want to resize or rotate.

To select all elements of the design, use **Select All** in the edit menu, then use **Group** in the **Edit** menu.

- You can also **left click** on a **single area** to select it.
- If you have automatically generated a design, you will first need to **Ungroup** it, using the **Group** command in the **Edit** menu, to be able to left click select individual areas.
- The **selection frame**, with eight black squares, displays around the area.

2. Use the **black squares** on the edge of the bounding box frame to **resize**.
 - Place the cursor over one of the black squares. Its in the correct place when you see it change to a **two-headed arrow**.

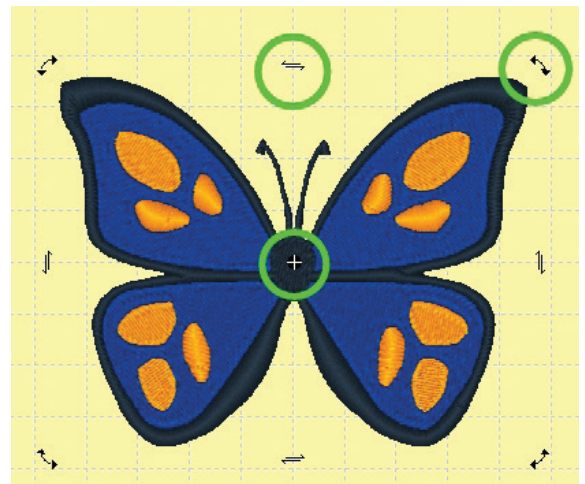


- **Click** and **hold down** the **left mouse** button then **drag in** to make the area **smaller**, or **drag out** for a **larger size**.

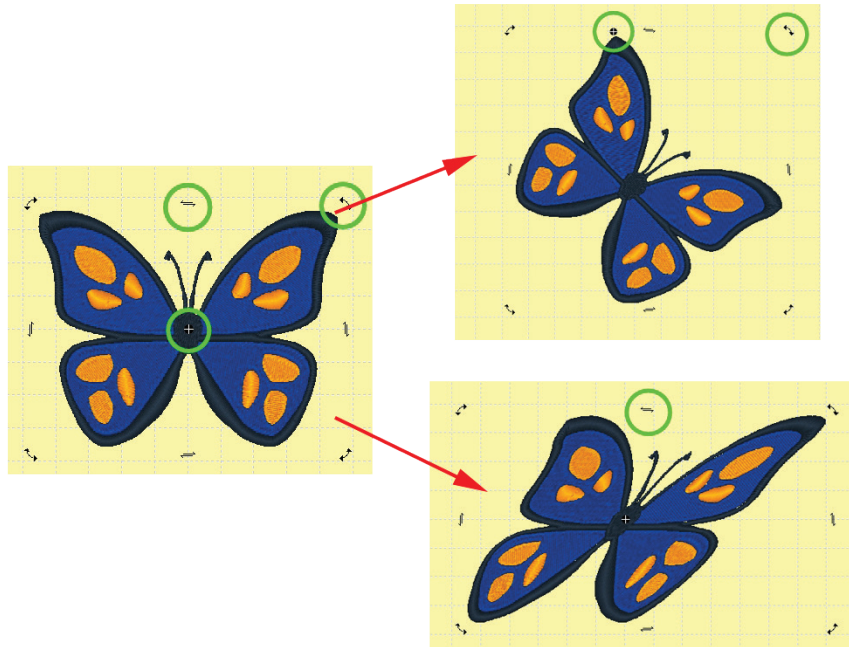
Tip: To resize the same distance from the Center outward or inward, hold down [Shift] on the keyboard while dragging with the mouse.


3. Use the **second set of frame tools** to make further changes.
Keeping the mouse pointer inside the frame, **click** the **left mouse** button. The previous set of frame tools is replaced with new tools that can be used to rotate and/or skew the area.

- **Rotate:** You can easily place the area at an angle by using one of the **Rotate Arrows** located in each **corner** of the frame.
- Place the mouse pointer over one of the **Rotate Arrows**. It is in the right position to use the tools when you see it change to a **bright green arrow**.
- **Hold down** the **left mouse** button and **drag** the selected area to a new angle.
- The **Status Bar** at the bottom of the screen shows the degree measurement of the new angle.
- If desired, you can also change the **axis** (center point) of rotation. The rotation axis point is indicated by the **black circle** in the center of the frame. Place the mouse pointer over the black circle, **hold down** the **left mouse** button and **drag** it to a



new location. The area will now rotate around the new axis point.



4. **Skew or Slant:** You can skew or slant an area to create special effects.
 - The **top and bottom arrows** skew **horizontally**.
 - The **left and right arrows** skew **vertically**.
 - Place the mouse pointer over one of the **Skew Arrows**. It is in the correct position when the mouse pointer also changes to a **Skew Arrow**.
 - **Hold down** the **left mouse** button and **drag** to create the desired effect.
5. Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

Mirror

You can use **Generations™** software to create a mirror image of the entire design, or a selected area.

Mirroring a Selected Area

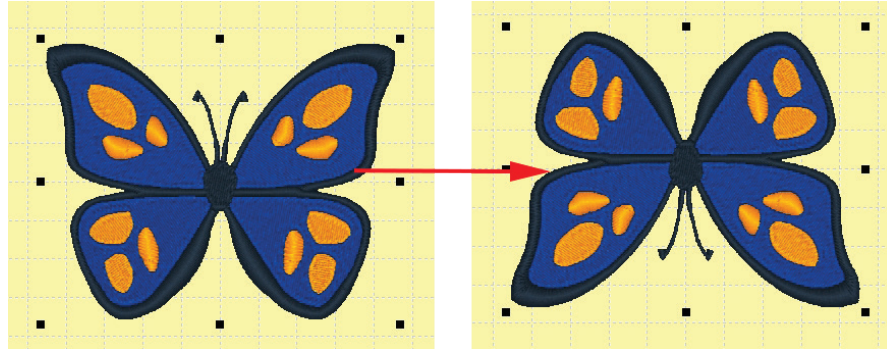
1. **Select** the **area** that you would like to mirror.
 - If you want to select all elements of the design, use **Select All** in the edit menu, then use **Group** in the **Edit** menu.
 - You can also **left click** on a **single area** to select it.
 - If you have automatically generated a design, you will first need to **Ungroup** it, using the **Group** command.
 - The **selection frame**, with eight black squares, displays around the area.

2. Select **Edit** then **Mirror**. A pop-out menu gives you three options.

Horizontal: Left click on this option to mirror the selected area vertically – flipping it over a horizontal axis line.

Or

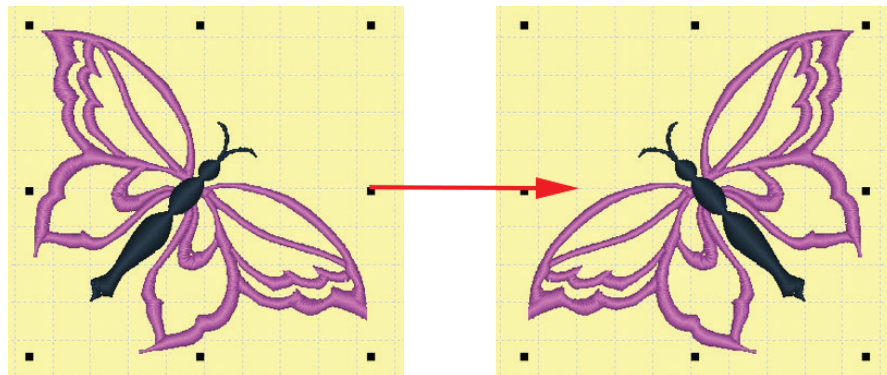
Click on the  **Horizontal Mirror** icon in the **Object** toolbar.



Vertical: Left click on this option to mirror the selected area horizontally – flipping it over a vertical axis line.

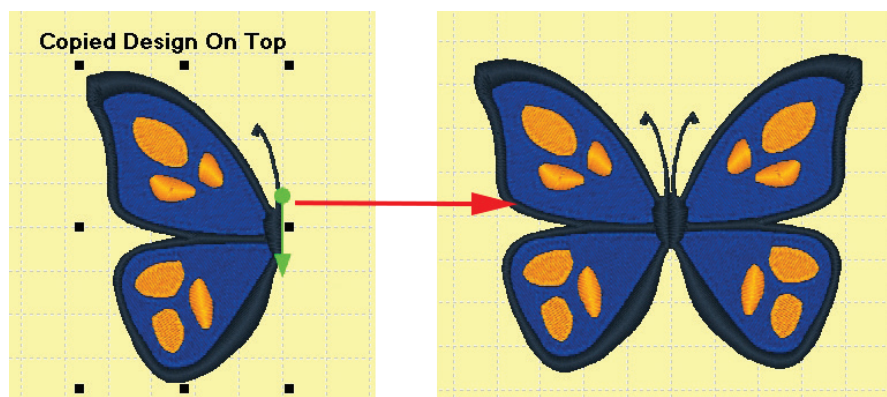
Or

Click on the  **Vertical Mirror** icon in the **Object** toolbar.



By a Line: Left click on this option to mirror the selected area across an axis line that you draw.

The mouse pointer becomes an **Arrow Cursor**. Position the cursor where you want to start the axis line, then **hold down** the **left mouse** button. **Drag** the line across the design in the desired position.



When you let go of the mouse button, the selected area is flipped over the axis line that you drew.

3. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Align Tools

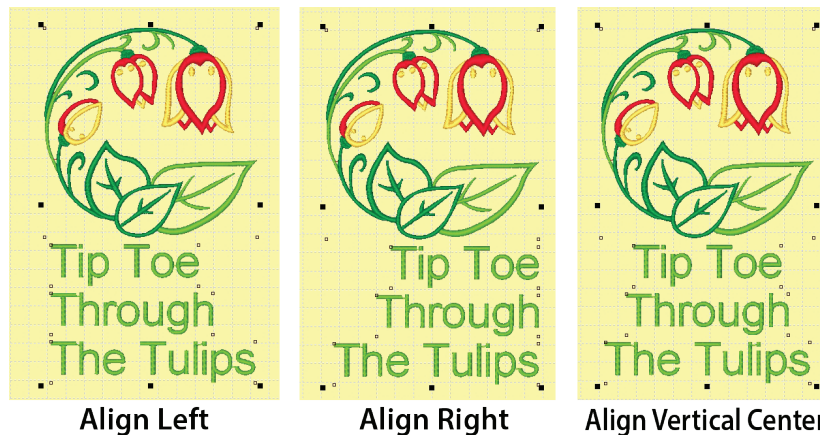
Generations™ software provides several tools which allow you automatically space or line up elements of the design.

Using the Alignment Tools

1. **Select** the **areas** that you would like to evenly space or line up. Continue to hold down **[CTRL]** on the keyboard until all areas you need to align have been selected.
 - If you have automatically generated a design, you will first need to **Ungroup** it, using the **Group** command in the **Edit** menu, to be able to left click select individual areas.
 - A separate **selection frame**, with eight black squares, displays around each area.

Note: If you do not have at least two areas selected, the align tools are not enabled.

2. Select the desired alignment tool from the menu.



- **Align Left:** Simply **left click** on the option to automatically line up the selected elements on the left side.

Or

Left click on the  **Align Left** icon in the **Object** toolbar.

- **Align Right:** Simply **left click** on the option to automatically line up the selected elements on the right side.

Or

Left click on the  **Align Right** icon in the **Object** toolbar.

- **Align Vertical Center:** Simply **left click** on the option to automatically line up the selected elements on the right side.

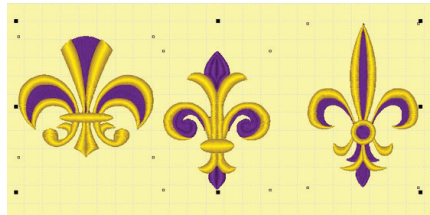
Or

Left click on the  **Align Vertical Center** icon in the **Object** toolbar.

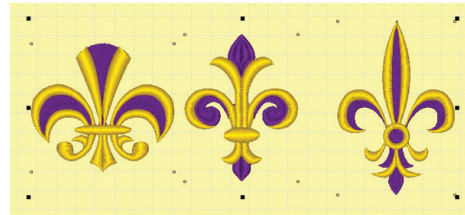
- **Align Horizontal Center:** Simply **left click** on the option to automatically line up the selected elements by their vertical centers.

Or

Left click on the  **Align Horizontal Center** icon in the **Object** toolbar.



Original



Align Horizontal Center

- **Align Top:** Simply **left click** on the option to automatically line up the selected elements at their **highest common point**.

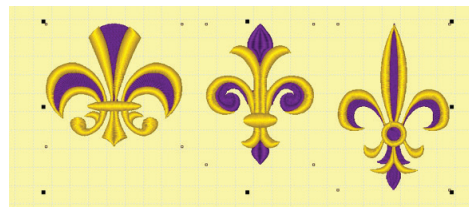
Or

Left click on the  **Align Top** icon in the **Object** toolbar.

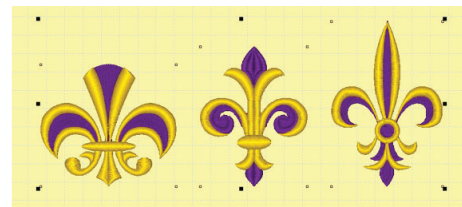
- **Align Bottom:** Simply **left click** on the option to automatically line up the selected elements at their **lowest common point**.

Or

Left click on the  **Align Bottom** icon in the **Object** toolbar.



Align By Tops



Align By Bottoms

- **Align Bottom:** Simply **left click** on the option to automatically line up the selected elements at their **lowest common point**.

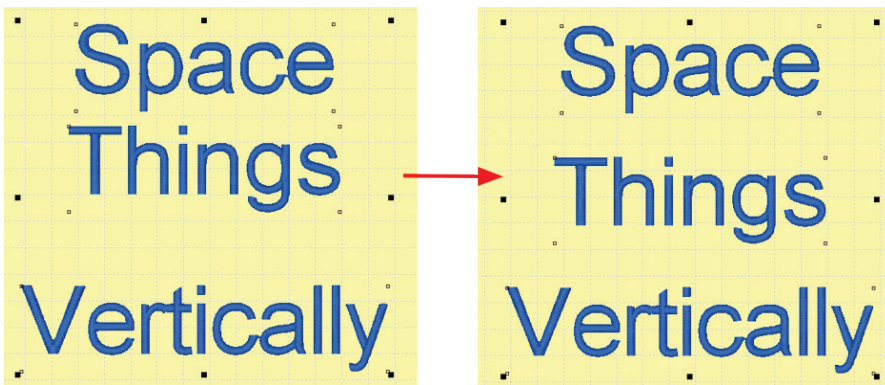
Or

Left click on the  **Align Bottom** icon in the **Object** toolbar.

- **Space Vertically:** Simply **left click** on the option to automatically space the selected elements vertically.

Or

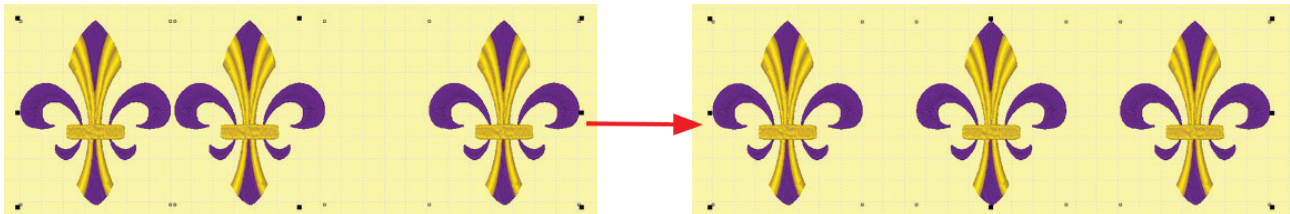
Left click on the  **Space Vertically** icon in the **Object** toolbar.



- **Space Horizontally:** Simply **left click** on the option to automatically space the selected elements horizontally.

Or

Left click on the  **Space Horizontally** icon in the **Object** toolbar.



3. Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

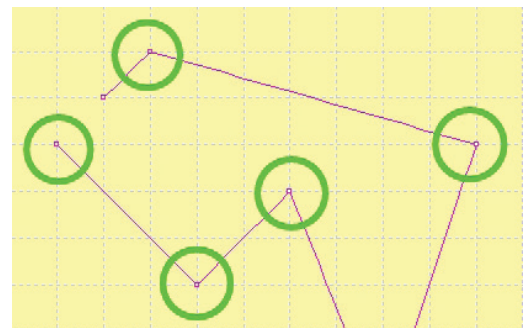
Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Grids and Guide Lines

Generations™ allows for a **Grid Snap** to be activated. The **Grid Snap** function allows precise alignment at consistent lengths and distances. When the **Grid Snap** function is active, the grid "pulls" the cursor and makes it snap to the grid nodes.

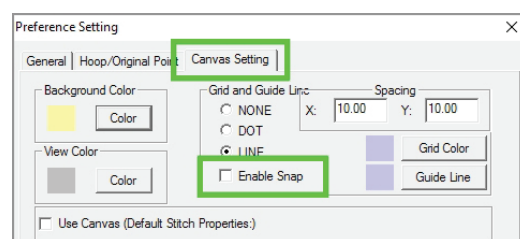
Notes: When grid snap is active, it restricts the movement of the cursor to the intersections of the Snap Grid for manually inserted areas or lines. Automatically digitized designs are only effected when editing or reshaping.



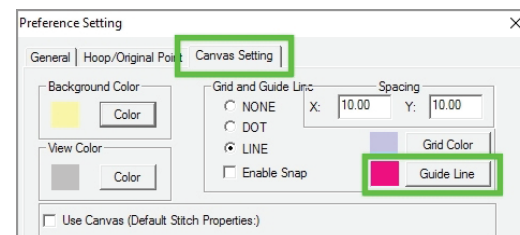
1. To define the parameters of **Grid Snap**, select **View** from the main menu. Then select **View Preferences**.
2. Click on the **Canvas tab** at the top of the dialog box.

- Click on the **Enable Snap** option to activate the **Grid Snap**.

*Note: To **disable** this feature select View from the main menu. Then select View Preferences. Click on the Canvas tab and remove the checkmark from Enable Snap.*



Show **Guide Lines** on the design work area to line up objects on screen. To better view the Guide Lines when the Grid is displayed, click on the color chip next to the Guide Line option in the **Canvas Tab** of the **View Preferences**.



- You must have the **ruler bar** turned on in the design work area.

*Note: The Guide Lines work better if you have the **AutoCenter Option** turned off. To turn off AutoCenter, click on the **Hoop/Original Point** tab and remove the checkmark next to the AutoCenter option.*

- To **add** a guide line, just place your cursor over the **top or side ruler bar** and left click hold and drag a guideline onto your screen.
 - If you drag the top ruler bar, a horizontal guide line will be created.
 - If you drag the side ruler bar, a vertical guide line will be created.
 - You can add as many as you want!
 - You can **move** guide lines by placing the mouse over the line, **pressing and holding** the left mouse button and dragging to a new location.
 - You can **remove** a guide line by **pressing and holding** the left mouse button and dragging the line back to the side (for vertical lines) or top (for horizontal lines) ruler bar.
 - Leaving the guide lines in the design will not cause problems with stitching the design.
- When you have aligned your design segments as desired remember to go to **View** and then **View Preferences**. Click on the **Hoop/Original Point** tab.
- Place a check mark in the **AutoCenter** design option.



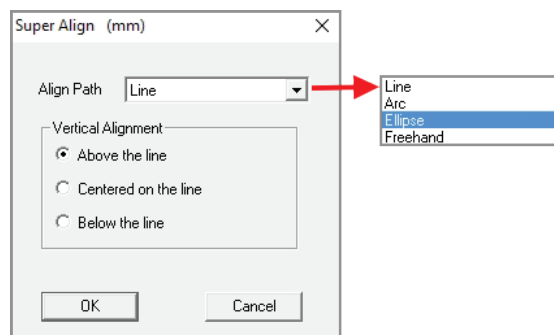
Array and Align Tools

The array and align tools allow you to arrange multiple items along a path, similar to a text path and with many of the same options.

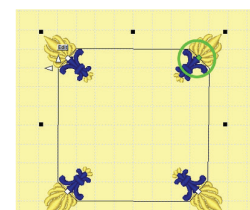
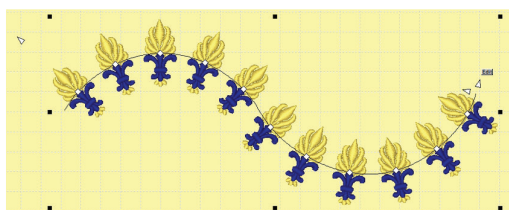
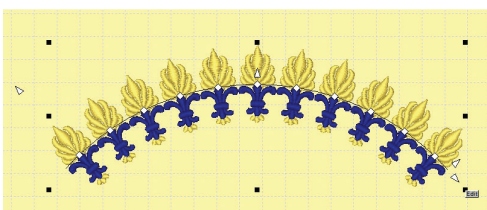
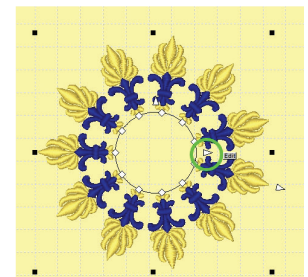
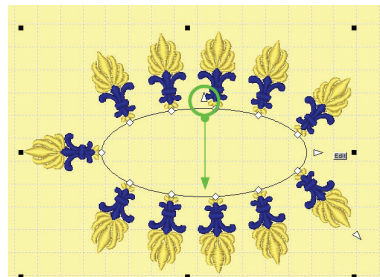
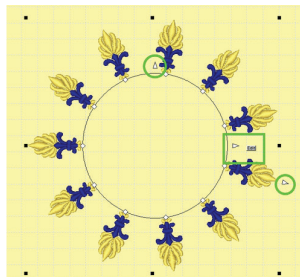
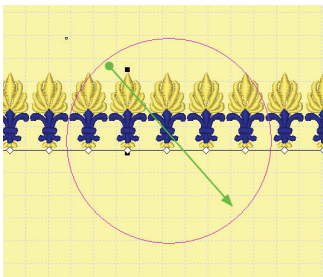
Using the Super Align Tool


The super align tool require that there are two or more items selected to align. When placing items on an array, you will achieve better results if you align and space them as desired, prior to placing them on the array path.

- **Super Align:** Left click on Super Align in the menu list or **Left click** on the **Super Align** icon in the **Object** toolbar to open the **Super Align** dialog box.



- Select the **horizontal** alignment option from the **drop down list**. This is similar to the options in the Text dialog.
- Select the **vertical** alignment option from the list in the lower part of the dialog box. This is similar to the options in the Text dialog.
- Use the mouse to draw a line, arc, ellipse or freehand path as you would with lettering. The selected areas will instantly align.
- Use the **Arrows** on the array path to adjust size, spacing or shape.
- Use the **Edit** button to change the array path.
- Use the **kerning nodes** to space the items along the array path.




- When happy with the array results, select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

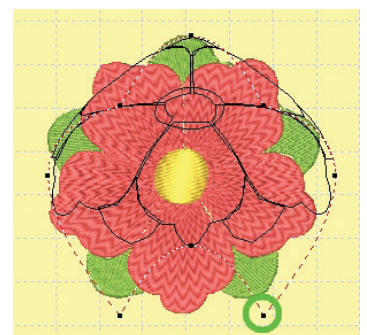
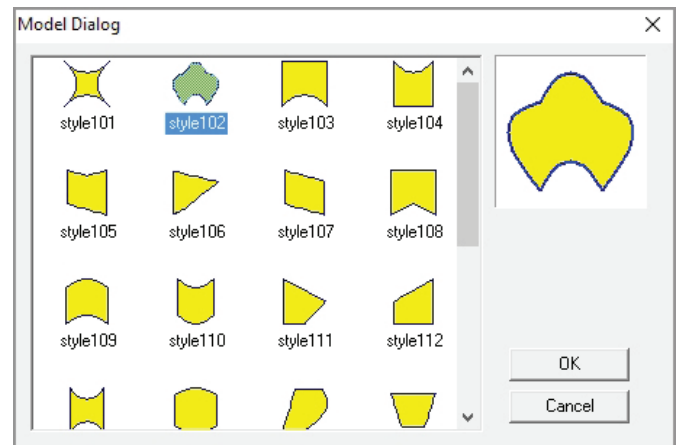
Reshape/Envelope

The **Reshape** tool lets you apply one or several of 28 pre-programmed shapes to any design element giving it a three dimensional effect. You will see the **Reshape** tool used most commonly with lettering, but it can be used with any element in the design.

Each of the pre-programmed shapes has at least one "control point" which you can use to further customize the end result. This possible effects that can be created in **Generations™** with **Reshape** are really endless, so let loose your imagination and experiment a bit.

Using the Reshape Tools

1. **Select** the **area** that you would like to reshape.
If you want to select all elements of the design, use **Select All** in the edit menu, then use **Group** in the **Edit** menu.
You can also **left click** on a **single area** to select it.
If you have automatically generated a design, you will first need to **Ungroup** it, using the **Group** command in the **Edit** menu, to be able to left click select individual areas.
2. Select **Edit** then **Reshape**.
Or
Click on the  **Reshape** icon in the **Object** toolbar.
 - The **Reshape Model** dialog box opens.
3. Select from one of the pre-programmed shapes. When you click on a shape, a preview is shown in the window at top right.
4. Click on the **OK** button to confirm the shape.
 - The reshape frame is now shown around the selected object.
5. Use the **control points** to further shape the area.
Place the mouse cursor over one of the control points. Its in the right place when it changes to a **four-headed arrow**.
6. **Click and hold down** the left mouse button, then **drag** the control point to a new position.
 - The change will take effect when you let go of the mouse button.



7. If desired, repeat step 5 as many times as you like, using the various control points to get the effect you want.
8. Press **[Enter]** on the keyboard to set the new shape.

Note: If desired, you can repeat steps 2 through 7 to apply additional pre-programmed shapes to the selected area.

9. Select **Accessories**, then **Generate**.

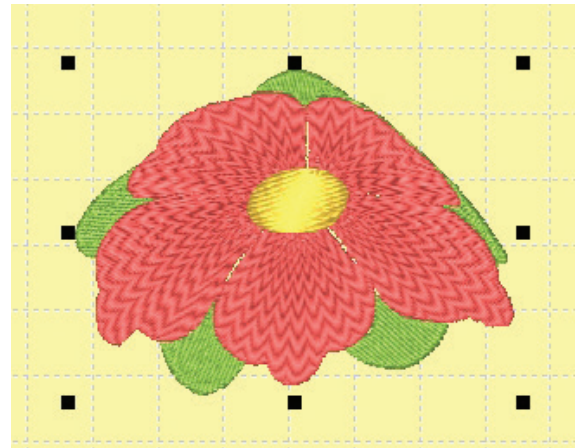
Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.




Fabric Stitch Settings

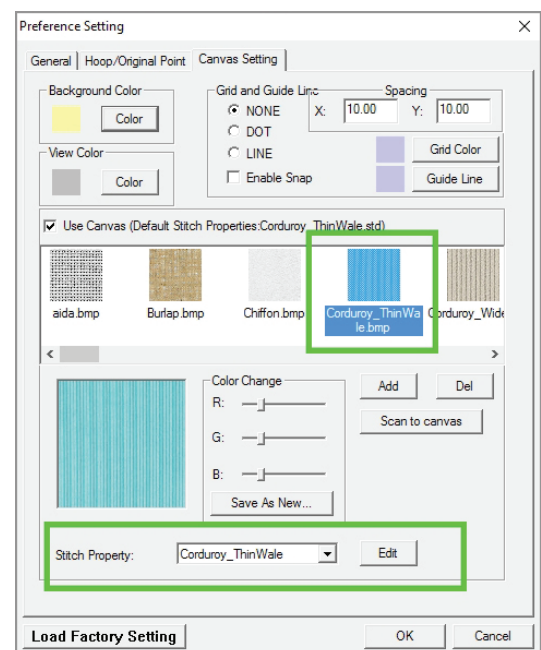
Generations™ provides the option of preset stitch setting for specific fabric types and the ability to create your own personalized settings in the program.

These settings can be selected and applied to the whole design, or applied to specific areas in the design. For Example when you need settings for small lettering in the design and cotton settings for the rest of the design.

Selecting Fabric Stitch Settings

There are many different ways to select **Fabric Stitch Settings**. The first option is to use the **Canvas Settings** in the **View Preferences**.

1. Select **View** from the main menu.
2. When the drop down menu opens, select **View Preferences**.
3. Click on the **Canvas Setting** tab.
 - Select the desired fabric canvas and **Fabric Stitch Settings** are automatically applied to the whole design.
 - If adding your own fabric, you can also associate a setting with your fabric swatch or create your own settings.
 - Use the  **Show/Hide Canvas** icon to turn the fabric canvas on or off
4. Click **OK** to apply the settings and then digitize the embroidery design.
 - The **View** toolbar will show the selected stitch settings.
 - To change the settings select the area and click on the **black arrow**. Select a new setting from the **Fabric Stitch Settings** menu.



Corduroy_ThinWale ▼

Another way to apply the **Fabric Stitch Settings** to the design is to use the **Fabric Settings Menu** from the **View toolbar**. To select a fabric setting click on the **black arrow** and select your settings from the drop-down menu.

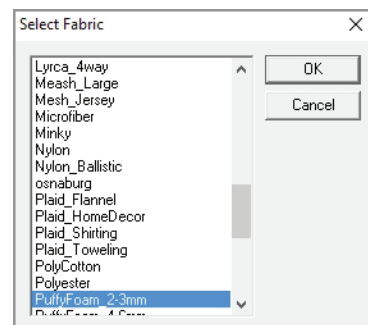
This does not require a canvas setting to be applied through the **View Preferences**.

1. From the **View toolbar**, click on the black arrow next to the **Fabric Stitch Settings** menu.
2. When the drop down menu opens, select the desired **Fabric Stitch Setting**.
 - The selected settings will be applied to areas and lines digitized in the program.
 - To apply setting to areas already created, select the areas with a right click and then select the setting from the **Fabric Stitch Settings** menu.



Fabric Stitch Settings can be applied using the main menu.

1. Select **Accessories** from the main menu and then **Select Fabric Settings** from the drop down menu.
2. The **Select Fabric Settings** dialog box will open.
3. Select the desired fabric setting and click **OK** to apply.



Fabric Stitch Settings can also be applied using the **Area Object Stitch Properties**.

When using this option, remember that only the areas or lines selected will have the selected settings applied to them.

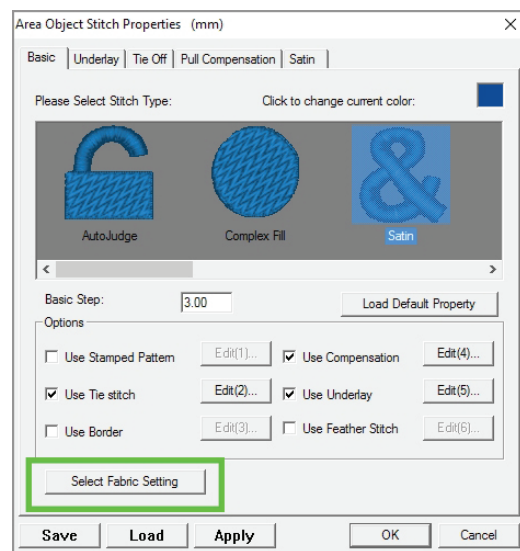
1. Select an area or line in the design with a **right mouse click**. The area will be surrounded by blue and white flashing marquee lines.
2. Press the **[SPACE]** bar on the computer keyboard OR

Click on the  **Properties icon** on the **View toolbar**

OR

Right click on the selected area and select **Stitch Settings** from the pop-up menu.

3. When the **Area Object Stitch Properties** dialog box opens, click on the **Select Fabric Setting** button.
4. Select the desired fabric or stitch settings from the pop-up menu.

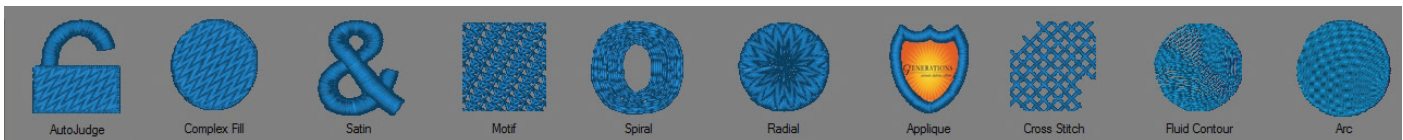
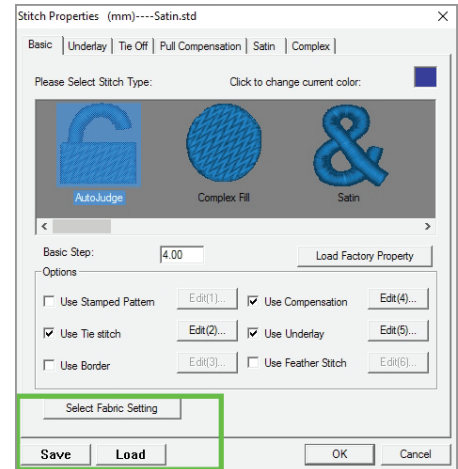
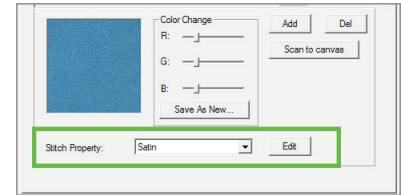


NOTE: When selecting Fabric or Stitch settings from the **Area Object Stitch Properties** dialog box, you can edit the settings only for the selected areas or lines, but the changes will not be saved for future use. To save any changes to the settings please use the **Manage Fabric Settings** options.

Managing Fabric Stitch Settings

You can edit current **Fabric Stitch Settings** or create new settings. When you are scanning or editing the fabric canvas backgrounds, you can select the Fabric Stitch Setting for editing from the Stitch Properties option in the Canvas tab.

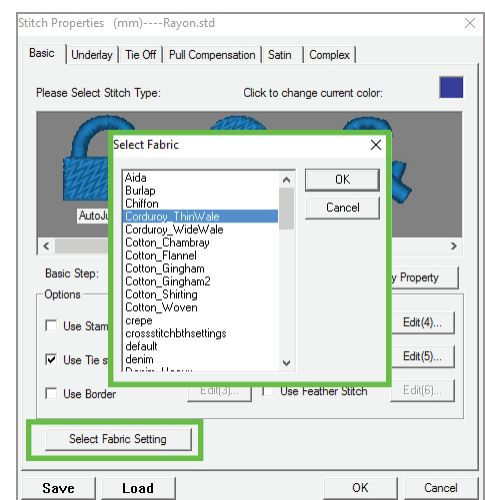
1. Select **View** from the main menu.
2. When the drop down menu opens, select **View Preferences**.
3. Click on the **Canvas Setting** tab.
4. Below the canvas preview is the **Stitch Property** menu. Click on the black arrow next to the menu to select a fabric setting you wish to edit.
5. Click on the **Edit** button to access the settings
6. The **Stitch Properties** dialog box will open. To change the settings, select the **fill** or **line type** you wish to edit.
7. Then select the tab you wish to edit, underlay, stitch type, compensation, etc.
 - To save the edited settings, **DO NOT** click on the save button. That will save only the edited settings.
8. To **save** edited settings, just click on another fill or line type in the **Please Select Stitch Type** section.



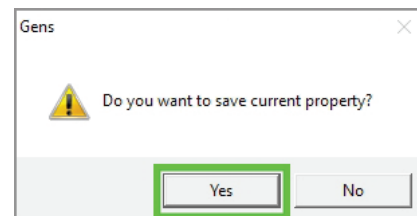
9. When the save dialog box appears, click **YES** to save the edited settings for the **Fabric Stitch Settings**.
 - This will save old and edited settings to the selected fabric stitch type.

Another option to edit or create **Fabric Stitch Settings** is through the **Accessories** menu.

1. Select **Accessories** from the main menu and then **Manage Fabric Settings** from the drop down menu.
2. The **Stitch Properties** dialog box will open.
3. Click on the **Select Fabric Setting** button and the **Select Fabric Settings** dialog box will open.
4. Select the desired fabric setting and click **OK**.
 - The settings for the selected fabric will be opened into the Stitch Properties.
 - The selected fabric settings name will appear at the top of the Stitch Properties box.



5. Then select the tab you wish to edit, underlay, stitch type, compensation, etc.
 - To save the edited settings, **DO NOT** click on the save button. That will save only the edited settings.
6. To **save** edited settings, just click on another fill or line type in the **Please Select Stitch Type** section.
7. When the save dialog box appears, click **YES** to save the edited settings for the **Fabric Stitch Settings**.
 - This will save old and edited settings to the selected fabric stitch type.

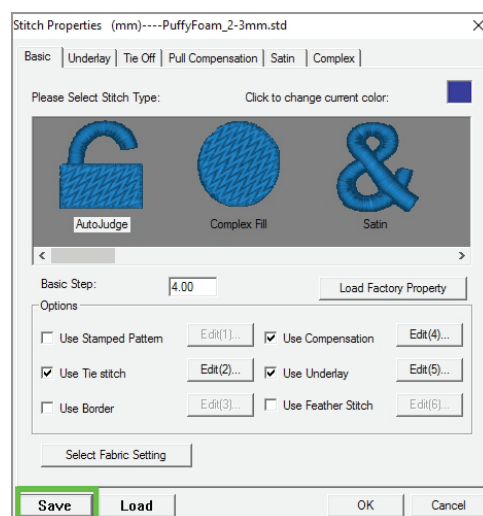
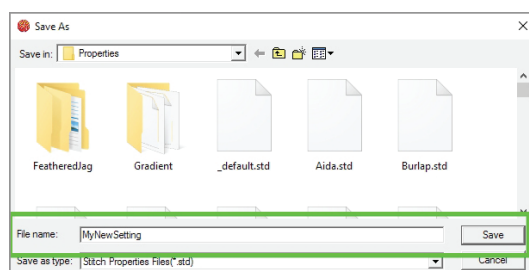


Creating New Fabric Stitch Settings

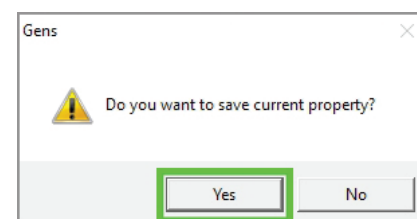
The new Fabric Stitch Settings feature can be used to create settings for items such as small lettering, large lettering as well as setting specific to a fabric type. To create a new setting use the **Accessories** and **Manage Fabric Settings** option.

NOTE: Be careful not to save over any pre-installed settings.

1. Select **Accessories** from the main menu and then **Manage Fabric Settings** from the drop down menu.
2. The **Stitch Properties** dialog box will open.
3. Click on the **SAVE** button and the **Save As** dialog box will open.



4. Enter a name for the settings in the **File Name** section and then click **Save** to save the setting.
5. Then select the tab you wish to edit, underlay, stitch type, compensation, etc.
 - To save the edited settings, **DO NOT** click on the save button. That will save only the edited settings.
 - To change settings for Satin, click on the Satin icon, to change settings for Appliqué, click on the Appliqué icon.
 - When you edit one fill type (i.e. satin) and then click on another fill type (i.e. appliqué) you will be asked if you wish to save the previously edited setting.
6. Click **YES** when asked to save a setting, this will automatically update the setting as you change various setting for each fill desired fill type.



Area Object Stitch Properties

Stitches are produced in **Generations™** software using default values for satin or fill stitches (Accessories/Default Stitch Settings). As you work on a design, you will often want to change some of these values.

There are many variables in embroidery which affect the stitch quality: size of the area, the fabric on which you are stitching, type and amount of stabilizer used, machine tensions, etc. You may want to change some values to account for these variables.

You may also want to make changes to create artistic effects. The possibilities are endless in **Generations™**. You can create interesting textures and patterns by changing **Stitch Properties** or create your own patterns.

You will need to experiment to find the best choices for your most frequent applications. In **Generations™**, you can use the Quick Properties toolbar at the bottom of the work area to access basic stitch types, thread color and density settings. The full range of stitch types and settings is found in the **Area Object Stitch Properties** dialog box.

Opening the Area Stitch Properties dialog box

1. Select the area(s) or line(s) you want to change. You should see the blue and white flashing marquee line around the selected area.

2. Select **Stitch**, then **Stitch Settings**.

Or

Click on the  **Stitch Properties** icon in the **View toolbar**.

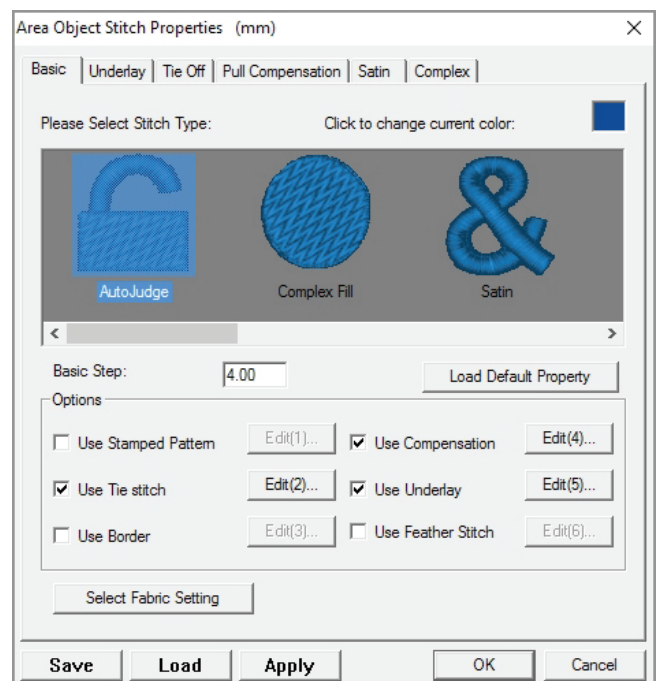
Or

Press the **[Spacebar]** on the keyboard.

OR

Right click the mouse on the selected area and click on **Stitch Settings** from the pop-up menu.

- The **Area Object Stitch** Properties dialog box opens.
- The box has a series of tabs along the top. The tabs displayed will change depending on the options and stitch type selected.

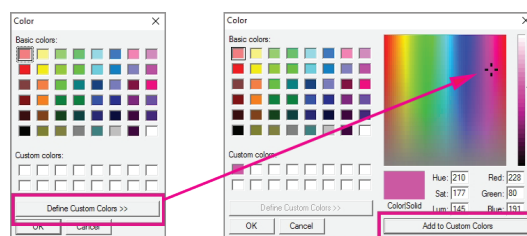


Basic Settings

Options in the **Basic tab** are used to select the display color and stitch type, and to enable various effects.

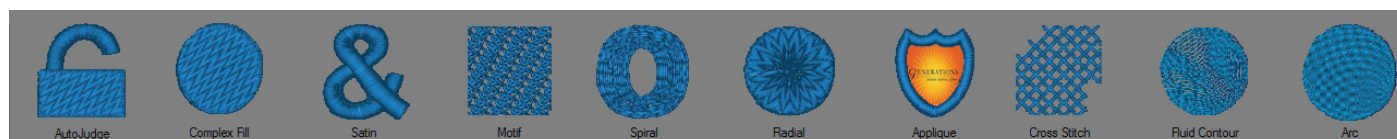
Changing the Basic Settings

1. The **Click to Change Current Color** option lets you select a new display color for the area. Click the left mouse button inside the **Color box**. Select a new color, then click on **OK** to return to the **Stitch Properties** dialog box.

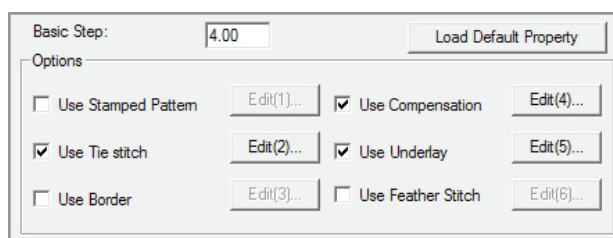


2. The **Stitch Type illustrations** let you choose from standard or special stitch effects. Some of the stitch types are not visible in the dialog box. Use the slider bar to see all of the options.


- AutoJudge
- Motif
- Radial
- Fluid Contour
- Complex Fill
- Contour
- Appliqué
- Arc Fill
- Satin
- Spiral
- Cross Stitch



- The default stitch type is **AutoJudge**. **Generations™** automatically decides the appropriate stitch type for the area, based on the size. The default stitch types, based on size, are Complex and Satin.
 - When you select one of the stitch types, its corresponding tab is enabled at the top of the dialog box. Each stitch type has specific settings you may change to control the effect.
3. The **Basic Step** setting controls the standard stitch length used by the program for any travel stitches used to move between areas in the design. It is not recommended to use a value much smaller or larger than the default length of 2.0mm.
 4. The option to **Load Default Values** can be used when you want to return all settings in the dialog box to the program defaults. Just left click on the button and **Generations™** automatically resets all the values.



5. The **Options** section in the lower part of the dialog box contains six choices for additional effects. A check mark in the white box indicates the option is active. You'll see a corresponding tab at the top of the dialog box or an **Edit button** alongside the option name, with further settings.

6. The **Select Fabric Setting** allows you to apply stitch properties based on fabric types, or stitch techniques such as small lettering or puffy foam.
7. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
8. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically Generate the stitches.
9. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Underlay Settings

The **Use Underlay** option enables the use of underlay stitches in the selected area. Underlay is used to create a smooth surface and provide support for the cover stitching.

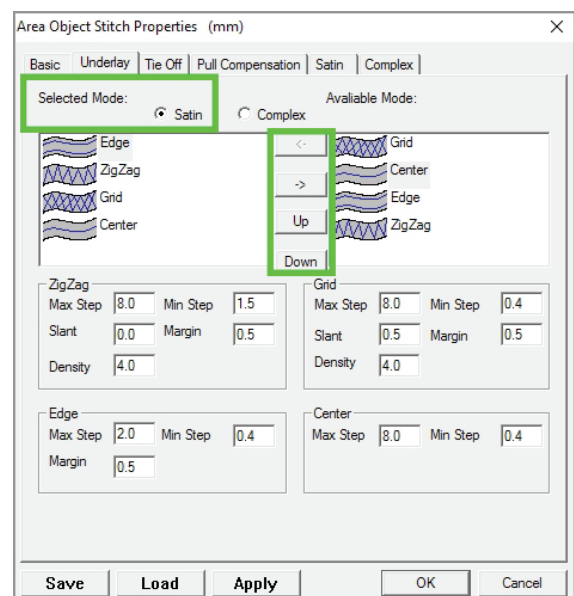
The settings in the **Underlay tab** determine the type of underlay used beneath the selected area.

1. To make changes to the underlay settings select the area with a right mouse click and open the **Stitch Properties** dialog box, as explained earlier.
2. Normally, the underlay option is checked by default.
 - If you do not see the **Underlay tab** at the top of the dialog box, click in the box next to the underlay option.
 - Click on the Underlay tab at the top of the dialog box, to display the underlay settings.

Note: If the stitch type for the selected area was set to Auto Judge, there is a button at the top of the dialog box for Satin stitch, and another for Complex. You will need to click on the appropriate stitch type for the selected area to set the underlay.

- If the stitch type was changed to **Satin** or **Complex Fill**, only the underlay options appropriate for that stitch type display.
- For a satin stitch section, there are four basic underlay choices: **Grid**, **Center**, **Edge** and **ZigZag**.
- The list on the right side of the dialog box shows the **available underlay modes**.
- The list on the left side of the dialog box shows the currently **selected underlay mode** or modes.

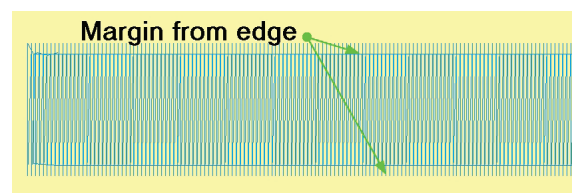
3. To change the selected underlay mode, **left click** on the underlay choice in the right side window. This enables the **Arrow and Up/Down** icons between the two lists.
 - Click on the **left arrow** button to move the selected underlay mode to the left side (active).



- To remove a selected mode, click on it in the left side list, then click on the **right arrow** button to move it back to the right side (available).
 - It is possible to use more than one underlay mode in a section. Use the **Up/Down** icons to control the order in which selected underlay modes are stitched.
4. When an **underlay** mode is moved to the list on the left side (activated), its corresponding values are enabled in the lower portion of the dialog box. Make changes to the values as necessary.

- **Max Step:** sets the longest stitch that can be made. In the Center and Edge underlay types, determines that length of all the stitches.
- **Min Step:** sets the smallest stitch that can be made.
- **Slant:** controls the angle of the zig zag stitching. This setting is found only in the ZigZag and Grid underlay modes.
- **Margin:** controls how far from the edge of the top layer of stitching the underlay is placed.
- This setting is not found in the Center underlay mode. The default value is 0.5mm.
- If this value is set too big in a very narrow section, you may only see a center line of underlay even if zigzag was selected. In this case, decrease the margin.
- If you set a very small value that places the underlay too close to the edge of the stitches, you may find that the underlay sticks out from the top layer of stitching when it is sewn.
- **Density:** controls the space between the zigzag stitches in the underlay. This setting is found only in the ZigZag and Grid underlay modes. In most cases, the default value of 4.0mm works fine. If you are sewing on a fabric with a heavy pile, you may want to decrease this value to provide a better base.

ZigZag				Grid			
Max Step	8.0	Min Step	1.5	Max Step	8.0	Min Step	0.4
Slant	0.0	Margin	0.5	Slant	0.5	Margin	0.5
Density	4.0			Density	4.0		
Edge				Center			
Max Step	2.0	Min Step	0.4	Max Step	8.0	Min Step	0.4
Margin	0.5						



5. If the selected area is a complex fill area, click on the Complex circle to change to complex fill underlay settings.
- For a complex fill section, there are three basic underlay choices: **Complex Grid**, **Tatami**, and **Complex Edge**.
 - The list on the right side of the dialog box shows the available underlay modes.
 - The list on the left side of the dialog box shows the currently selected underlay mode or modes.
6. To change the selected underlay mode, left click on the underlay choice in the right side window. This enables the **Arrow and Up/Down** icons between the two lists.

Area Object Stitch Properties (mm)

Basic | Underlay | Tie Off | Pull Compensation | **Complex**

Selected Mode: Complex Edge

Available Mode: Complex Grid, Tatami, Complex Edge

Complex Edge settings:

Max Step	4.0	Min Step	0.2
Density	3.6	Margin	0.5


Complex Grid settings:

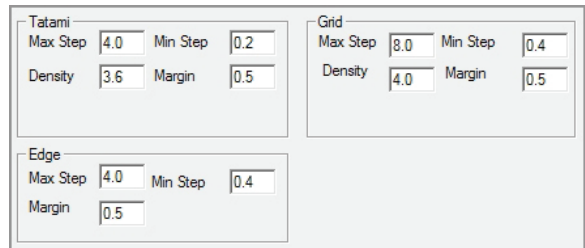
Max Step	8.0	Min Step	0.4
Density	4.0	Margin	0.5

Edge settings:

Max Step	4.0	Min Step	0.4
Margin	0.5		

Buttons: Save, Load, Apply, OK, Cancel

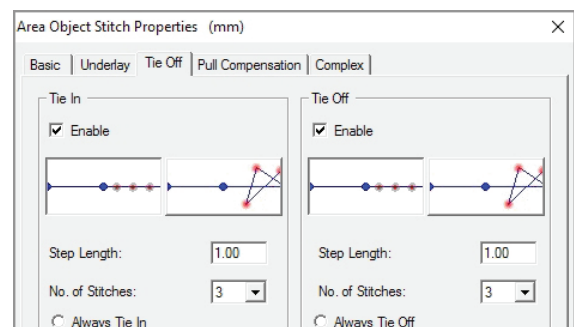
- Click on the **left arrow** button to move the selected underlay mode to the left side (active).
 - To remove a selected mode, click on it in the left side list, then click on the **right arrow** button to move it back to the right side (available).
 - It is possible to use more than one underlay mode in a section. Use the **Up/Down** icons to control the order in which selected underlay modes are stitched.
7. When an underlay mode is moved to the left side (activated), its corresponding values are enabled in the lower part of the dialog box. Make changes to the values as necessary.
- Max Step:** sets the longest stitch that can be made. In the underlay type, controls the length of all stitches.
 - Min Step:** sets the smallest stitch that can be made.
 - Margin:** controls how far from the edge of the top layer of stitching the underlay is placed.
 - Density:** controls the space between the zigzag stitches in the underlay. This setting is found only in the Tatami and Grid underlay modes. In most cases, the default value of 4.0mm works fine. If you are sewing on a fabric with a heavy pile, you may want to decrease this value to provide a better base.
8. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
9. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically **Generate** the stitches.
10. If you had de-activated automatic stitch generation in the View Preferences menu, you will need to  **Generate** the stitches.




Tie In and Off Settings

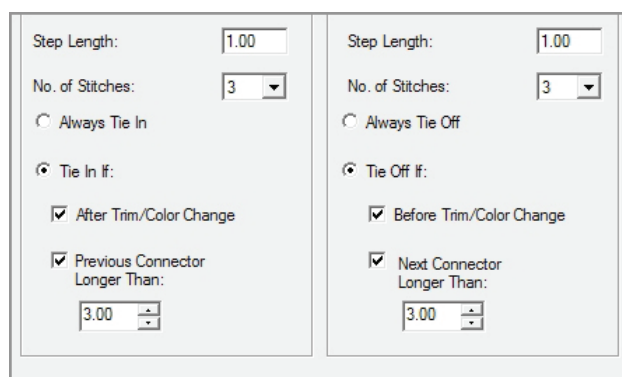
Tie in and Off stitches secure the thread before and after a trim or thread change, preventing the thread from pulling out. In most cases, you'll find that the default tie off settings do not need to be changed.

- To change **Tie In or Off** settings select the area and open the **Stitch Properties** dialog box, as explained earlier.
- Normally, the **Tie Off** option is checked by default.
 - If you do not see the **Tie Off tab** at the top of the dialog box, click in the box next to the Use Tie Stitch option.
 - Click on the Tie Off tab at the top of the dialog box, to display the settings.
- The dialog box has two identical rows of settings.




- The left side controls **Tie In** stitches, which are at the beginning of a section, sewing before the underlay and top stitching.
- The right side controls **Tie Off** stitches, which are at the end of a section, sewing after all the top stitching.
- Both Tie In and Tie Off stitches are enabled by default.

- Use the pictures to select the type of **Tie In** or **Tie Off** stitch to be used. 
 - Use the first picture to place tie-in stitches in a row.
 - Use the second picture to place the tie-in stitches in a small triangle. This method is more secure, but may also be more noticeable in a small section.
- The **Step Length** value controls the length of the tie-down stitches. The default value of 1.0mm should work fine in most cases. For very small sections, you may want to use a smaller stitch length.
- The **No. of Stitches** value controls how many tie-down stitches are used. It is only active for stitches in a row. The default value is three, although you may select up to six Tie Down stitches.
- Use the options at the bottom of the dialog box to determine the conditions under which **Tie Down** stitches are inserted.
 - Use **After Trim/Color Change** to insert **Tie Down** stitches any time the thread color is changed or cut. This setting is ON by default.
 - Use **Previous Connector Longer Than** to insert **Tie Down** stitches any time the distance from the previous section is larger than the stitch length indicated in the value box below the setting.
 - The default value is 3.0, which means that Tie Downs are placed when the jump distance between two sections is larger than 3.0mm.



Tie In Settings	Tie Off Settings
Step Length: 1.00	Step Length: 1.00
No. of Stitches: 3	No. of Stitches: 3
<input type="radio"/> Always Tie In	<input type="radio"/> Always Tie Off
<input checked="" type="radio"/> Tie In If:	<input checked="" type="radio"/> Tie Off If:
<input checked="" type="checkbox"/> After Trim/Color Change	<input checked="" type="checkbox"/> Before Trim/Color Change
<input checked="" type="checkbox"/> Previous Connector Longer Than:	<input checked="" type="checkbox"/> Next Connector Longer Than:
3.00	3.00

- If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
- After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically Generate the stitches.
- If you had de-activated automatic stitch generation in the View Preferences menu, you will need to  **Generate** the stitches.

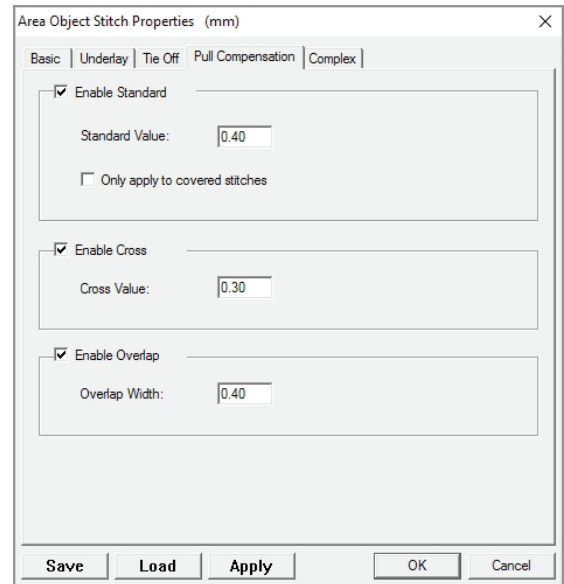
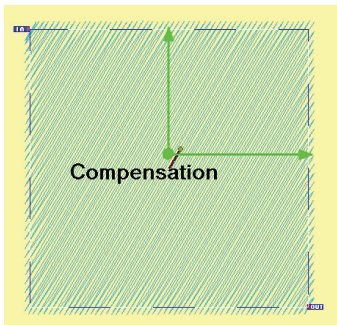
Pull Compensation Settings

Compensation determines how far beyond the actual outline of the section the stitches are extended. **Compensation** values help make up for the fact that stitches sink into the fabric when sewn. This is why a design that lines up perfectly on your screen sometimes has gaps in it after being stitched.

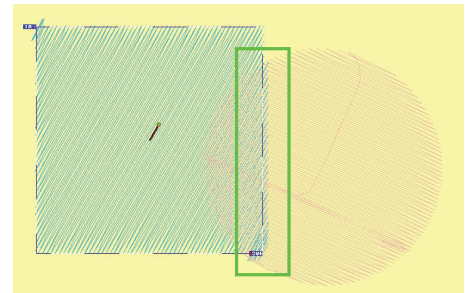
The default compensation settings should produce acceptable results in most cases. However because of the variations in embroidery, especially the fabric you are stitching on and the stabilizer being used, you may need to make changes.

1. To make changes to the **Pull Compensation** select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. Normally, the **Compensation** option is checked by default.
 - If you do not see the tie Compensation tab at the top of the dialog box, click in the box next to the **Use Compensation** option.
 - Click on the **Compensation tab** at the top of the dialog box, to display the settings.

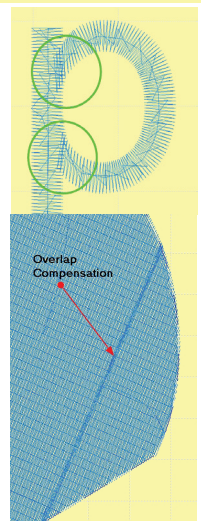
3. The top setting **Enable Standard** is the basic compensation value applied to all stitches. The default setting of 0.4mm makes each stitch extend 0.4mm beyond the area outline.




- If you choose to enable the option **Only Apply to Covered Stitches**, compensation is only used in places where the selected area overlaps another area of stitching.



4. The middle setting **Enable Cross** controls the amount of overlap within a section where the stitches meet and change directions, usually a satin outline or letter.
 - The default value of 0.3mm generally works well.
5. The lower setting **Enable Overlap** controls how many stitches (or rows of stitches in a complex fill) will be over-sewn inside the section.
 - Generally you will only need to activate Overlap compensation for a large size Complex Fill section. In this case, the default value of 0.4mm will usually prevent any gaps in the fill.
6. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.

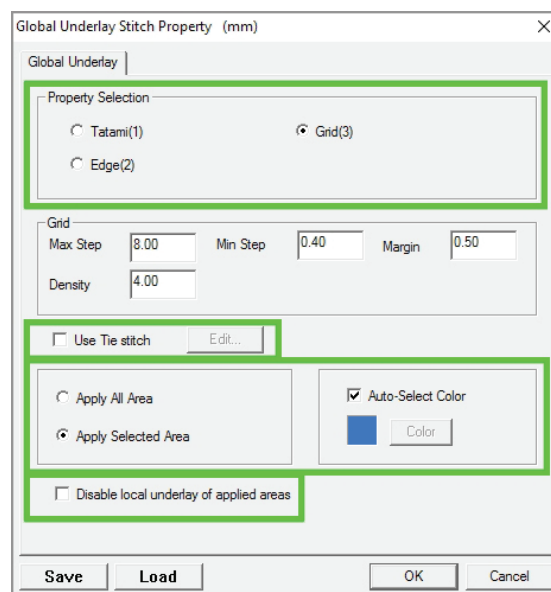


7. After making changes in the various tabs, click on **OK** to exit the dialog box and automatically Generate the stitches.
8. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Global Underlay

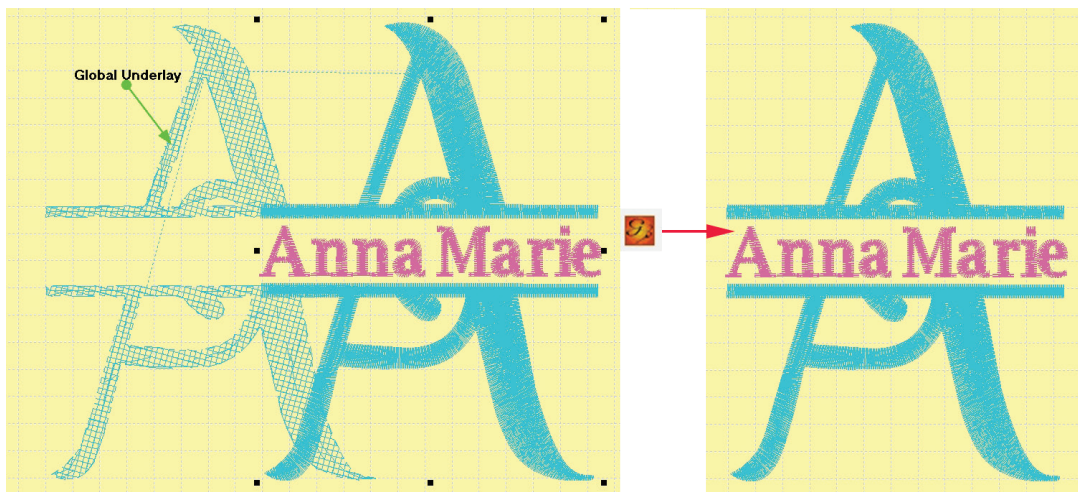
Normally, **Generations™** automatically creates underlay stitching for each area in the design. In some situations, such as a very stretchy fabric, for large design files or fabrics with loft, you may prefer to have a layer of underlay stitch first over the entire area to better stabilize the area for stitching.

1. **Select** the areas in the design to which you want to apply a global underlay.
 - To select an area, **right click** the mouse button on the area.
 - To select multiple areas, **press and hold the [CTRL]** key and **right click** on the areas.
 - You can also use the **Stitch Sequence Viewer** or the **Select Menu** to select all areas or multiple areas.
2. Select **Accessories**, then **Create Global Underlay**.
 - The **Global Underlay Stitch Property** dialog box displays.
3. Choose from the available settings to create the global underlay you need.
 - In the **Property Selection** area, select the type of underlay desired: **Tatami**, **Grid** or **Edge** run.
 - In the **Grid** section, the settings control how the underlay is made.
 - Max Step:** longest stitch length.
 - Min Step:** shortest stitch length.
 - Margin:** distance from the edge of the area.
 - Density:** distance between rows of underlay stitching.
 - Click in the **Use Tie Stitch** box to activate tie-in and tie-out stitches for the global underlay area. Once activated, the **Edit** button lets you control exactly how the tie stitches are made.
 - In the next section, select whether the global underlay should be applied to **All Areas** in the design or **Selected Areas** only.
 - By default, the **Auto-Select Color** option is activated, which will create the **global underlay** area in the same thread color as the first selected area. If desired, you can de-activate the option and use the color box to select the global underlay thread color.
 - Use the option **Disable Local Underlay** of Selected Areas to have **Generations™**



automatically remove the underlay from the individual areas, and use only the global underlay. If you leave the option de-activated, you will have both a global underlay area and underlay for each selected area.

4. Click on the **OK** button to exit the dialog box and create the global **underlay area**.
 - The selected **Global Underlay** is placed at the top of the stitching order.
 - If you edit or move the areas associated with the **Global Underlay** you will need to **Generate** to allow the underlay to **associate** with the areas and **recreate** itself.
 - **Global Underlay cannot be edited**. If you desire to change the underlay style, **left click** on the cell or cells containing the global underlay and press the **[DELETE]** key on your keyboard.



View Outline and Edit Outline Mode

When you first create a design, **Generations™** will exactly follow the original image outlines to produce stitches. Depending on the quality of your original image, you may be happy with this first result. Or, you may need to edit. You may also want to make changes to the outlines for purely artistic reasons.

For either reason, **Generations™** software provides a full range of tools, in many ways similar to those found in commercial graphics programs, which allow you to make changes to the outlines. Remember that outlines are the basis for stitches, so once you make changes, you will Generate the section or design again to see them take effect.

View Outline mode provides tools to make changes to the **outlines** in a design:


- Edit Outline Mode
- Adjust with a Line
- Create Outline from Area Edges
- Create Area from Line
- Fill a Void
- Divide with a Line
- Adjust with New Points
- Adjust with an Arc
- Create Line from Area
- Merge
- Create a Void
- Divide with a Curve

Edit Outline Mode

The most basic way in which to change an outline is to work with the individual **nodes** (or points) which define the shape. You will be able to **move** the nodes, **smooth** the nodes, **delete** unnecessary nodes, and **insert** new nodes.

Working with Nodes in Edit Outline Mode

1. Place the cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.

Tip: You may want to use  Zoom In to enlarge the area you are working on. Refer to Chapter 3 for detailed instructions.

2. Select View, then **View Outline** from the menu.

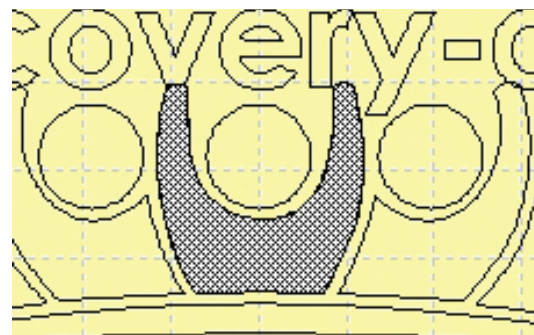
Or

Click on the  **View Outline** icon in the View toolbar.

Or

Press **[F6]** on the keyboard.

- Once in **View Outline** mode, the selected area is shown in a **crosshatch** gray color.



3. Select **Outline**, then **Edit Outline** Mode from the menu.

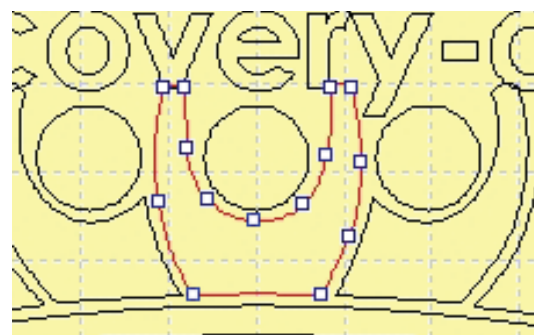
Or

Click on the  **Edit Mode** icon in the **View** toolbar.

Or


Press **[F4]** on the keyboard.

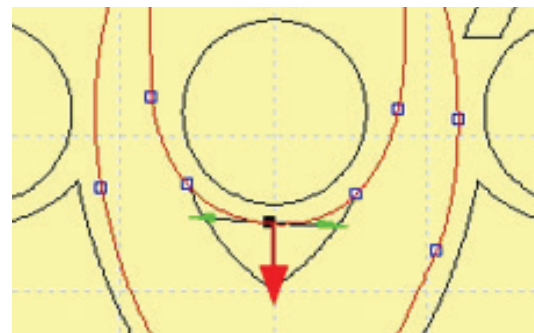
- The selected area is now shown as a red outline, with squares indicating the nodes.



Tip: You can use all of the other View Outline editing commands while in Edit Mode. You may find it easier to work with outlines in this node view rather than in regular View Outline Mode which shows selected areas in a shaded crosshatch gray color.

4. To **move** a node:

- Place the mouse pointer over one of the squares. It's in the correct position when you see the mouse cursor change to the **Crosshair cursor**. 
- **Hold down the left mouse button and drag** the node to the new position, then release the mouse button.



5. To **delete** a node:

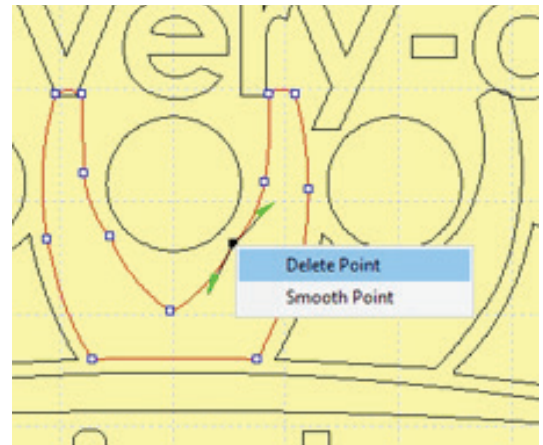
- **Left click** on the node you wish to delete. The square is now shown in a black color, indicating that it is selected. Press **[Delete]** on the keyboard to remove the node.

Or

- Place the mouse cursor over the node you want to delete and **click the right** mouse button. Select **Delete** in the pop-up menu to remove the node.

6. To **smooth** a node:

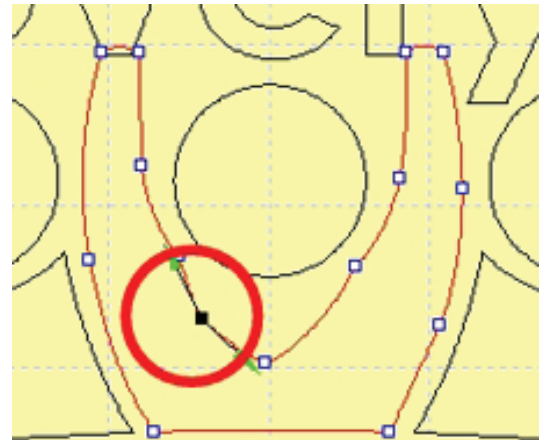
- Place the mouse cursor over the node you want to smooth and **click the right mouse button**.
- Select **Smooth** in the pop-up menu. The line is converted to a curve, with additional nodes added as necessary.



7. To **insert** a node:

- Place the mouse pointer at a place on the **red outline** where there is not an existing node, then **click the left mouse button**. The new node is inserted.
- You must now **immediately move** the node to a new position, changing the shape of the line; otherwise it is removed as unnecessary.

Tip: If the distance between existing nodes is very small, the program will not let you insert a new node.

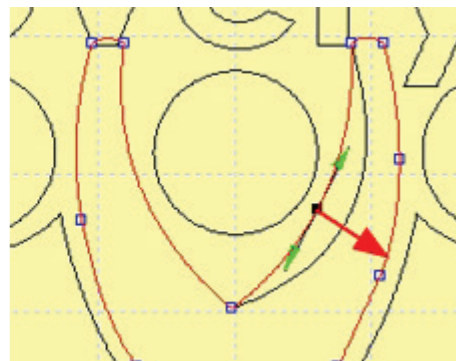
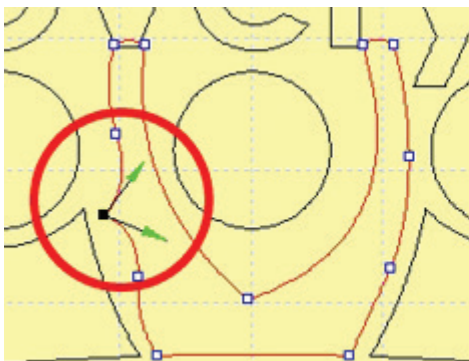


8. To **adjust the curve** of a line:

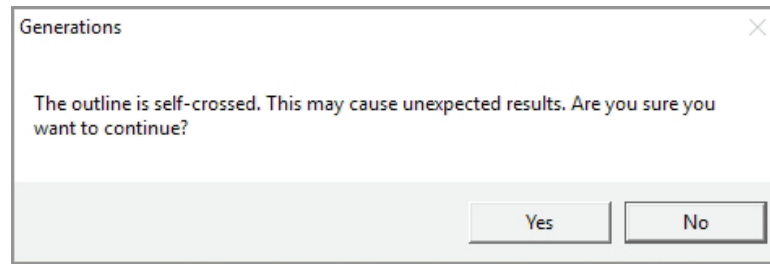
- Left click** on the node at one side of where you want to adjust the curve. The square is now shown in a black color, indicating that it is selected. On either side, you'll see a **bright green arrow**. The arrow controls the curvature of the line on either side of the selected node (similar to bezier curves in a graphics program).
- Place the mouse pointer over one of the green arrows. **Hold down the left mouse button and drag** the arrow until the line curves in the desired shape.
- Release the left mouse button when the line is in the desired shape.


Or

- Place the mouse cursor over the segment of the outline that you wish to curve (not on an existing node, but in between two of them). **Hold down the right mouse button while you drag** the red outline to the desired position, then **release** the right mouse button.



- When making changes as described in steps 4 through 8 (particularly adjusting the curve), be careful not to allow the outline to **cross over itself**. If this occurs, the following message displays.





- Select **Yes** to leave the outline crossed, if this is the desired result. It is possible to use crossed outlines to create some interesting artistic effects.
 - Select **No** to return the outline to its original position, canceling whatever change had caused the crossed outline to occur.
9. You must **Generate** to make the changes take effect.
 Select **Accessories**, then **Generate**.
 Or
 Press **[F9]** on the keyboard.
 Or
 Click on the  **Generate** icon.
 Remember that changes do not take effect until you **Generate** the section.

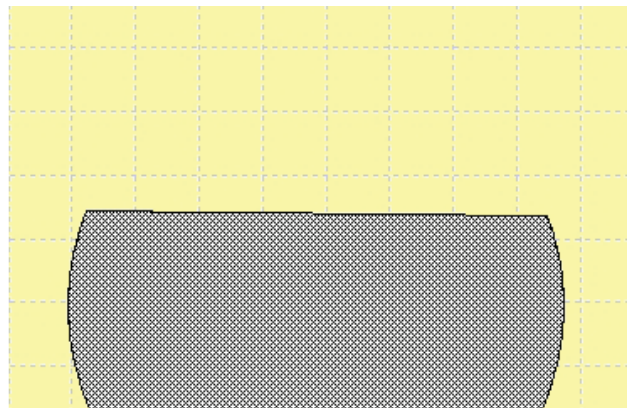
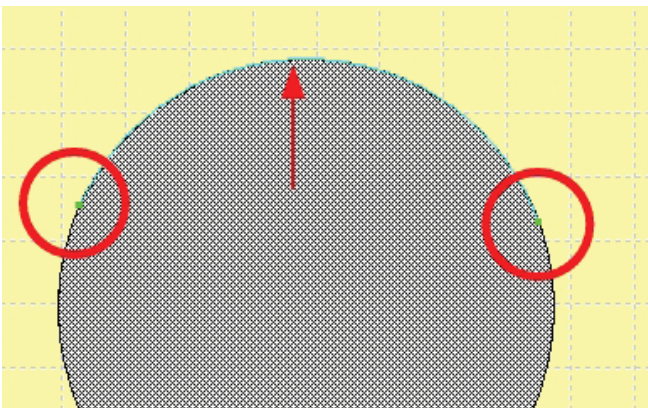
Adjust With New Points


Adjust with New Points is used to give a completely different shape to an outline. After defining the segment that you want to change, you will use left and right mouse clicks to mark a completely new path.

Using Adjust With New Points

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.
Tip: You may want to use  Zoom In to enlarge the area you are working on.
2. Select **View**, then **View Outline** from the menu.
 Or
 Click on the  **View Outline** icon in the View toolbar.
 Or
 Press **[F6]** on the keyboard.
 - Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select **Outline**, then **Adjust With New Points** from the menu.
 Or
 Keep the mouse pointer over the selected area and **click the right mouse** button.
 Select **Adjust With New Points** from the pop-up menu.

4. Move the cursor to one end of the outline section you want to adjust and **click the left mouse button**.
 - A **green square** marks that point.
5. Move to the other side of the section you want to adjust and **click the left mouse button again**.
 - Another **green square** marks the second point.
6. Place the pointer on the edge of the line in between the two points you just marked.
 - The line displays in turquoise blue.
7. **Left click** on the line.
 - The line changes to a **red color**, and is attached to the mouse cursor.
8. You can now begin marking new points in the desired shape.
 - * Use a **left mouse** click to mark a **straight or corner** point.
 - * Use a **right mouse** click to mark a **smooth or curved** point.
9. Press **[Enter]** on the keyboard to accept the new shape.



10. The tool is still active, waiting for you to mark additional segments of the outline to be **Adjusted with New Points**.
 - If desired, repeat Steps 4 through 8 to adjust additional areas.
 - When finished, click the right mouse button or press **[Esc]** on the keyboard to turn off the editing tool.
11. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

Adjust With a Line

Adjust with a Line is used to quickly straighten out an irregular line. It is very useful to smooth out the sometimes jagged edges of a highly pixelized scanned image.

Using Adjust With a Line

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the area.

Tip: You may want to use  Zoom In to enlarge the area you are working on.

2. Select **View**, then **View Outline** from the menu.

Or

Click on the  **View Outline** icon in the **View** toolbar.

Or

Press **[F6]** on the keyboard.

- Once in **View Outline Mode**, the selected area is shown in a crosshatch gray color.

3. Select Outline, then **Adjust With a Line** from the menu.

Or

Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Adjust With a Line** from the pop-up menu.

4. Move the cursor to one end of the outline section you want to adjust and **click the left mouse button**.

- A green square marks that point.

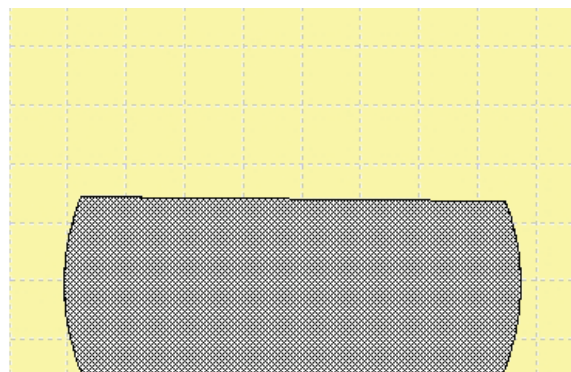
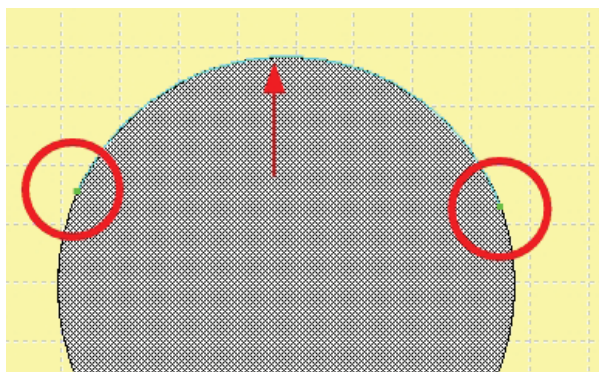
5. Move to the other side of the section you want to adjust and **click the left mouse button** again.


- Another green square marks the second point.

6. Place the pointer on the edge of the line in between the two points you just marked.

- The line displays in turquoise blue.

7. While you still see the turquoise line, **click the left mouse button**. The area between the two reference points snaps to a straight line.





8. The tool is still active, waiting for you to mark additional segments of the outline to be **Adjusted With A Line**.
 - When finished, click the right mouse button or press [Esc] on the keyboard to turn off the editing tool.
9. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

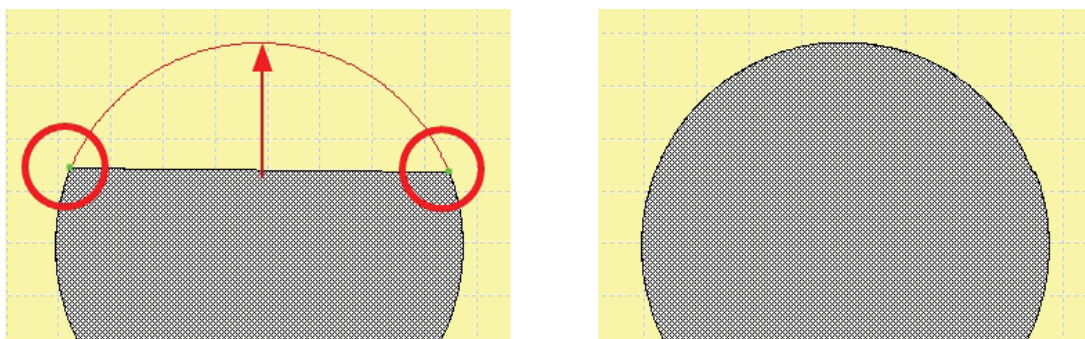
Adjust with an Arc

Adjust with an Arc is used to quickly smooth out or change the curve of an outline.

Using Adjust with an Arc

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.

*Tip: You may want to use  **Zoom In** to enlarge the area you are working on.*
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the top toolbar.
Or
Press **[F6]** on the keyboard.
 - Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select Outline, then **Adjust With an Arc** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**.
Select **Adjust With an Arc** from the pop-up menu.
4. Move the cursor to one end of the outline section you want to adjust and click the left mouse button. A **green square** marks that point.
5. Move to the other side of the section you want to adjust and click the left mouse button again. Another **green square** marks the second point.
6. Place the pointer on the edge of the line in between the two points you just marked.
 - The line displays in **turquoise blue**.
7. While you still see the turquoise line, **click the left mouse button**.
The line changes to a red color, and is attached to the mouse cursor.
8. Move the mouse to position the line at the new arc position. When it is in the right place, **click the left mouse button** to set the outline.




9. The tool is still active, waiting for you to mark additional segments of the outline to be **Adjusted With a Curve**.
 - When finished, click the right mouse button or press [Esc] on the keyboard to turn off the editing tool.
10. You must **Generate** to make the changes take effect.

Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.


Remember that changes do not take effect until you **Generate** the section.

Create Borders, Outlines and Echo Stitches


Create Outline from Area Edges is used to create a border around the selected area. This command is frequently used to create a two-color effect for lettering.

Creating an Outline from Area Edges

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.

Tip: You may want to use  Zoom In to enlarge the area you are working on.
2. Select View, then **View Outline** from the menu.

Or

Click on the  **View Outline** icon in the **View** toolbar.

Or

Press **[F6]** on the keyboard.

 - Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select Outline, then **Create Outline from Area Edges** from the menu.

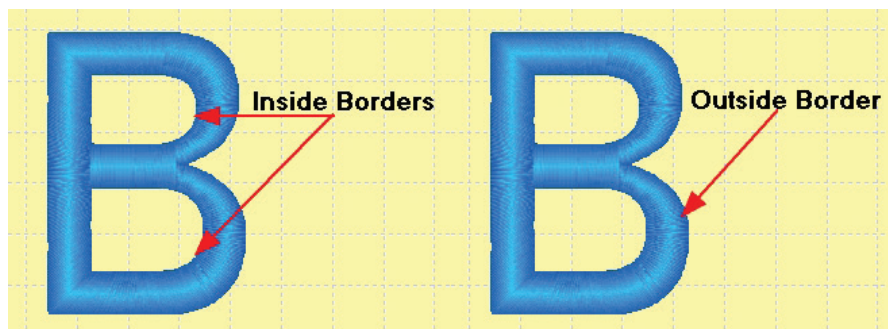
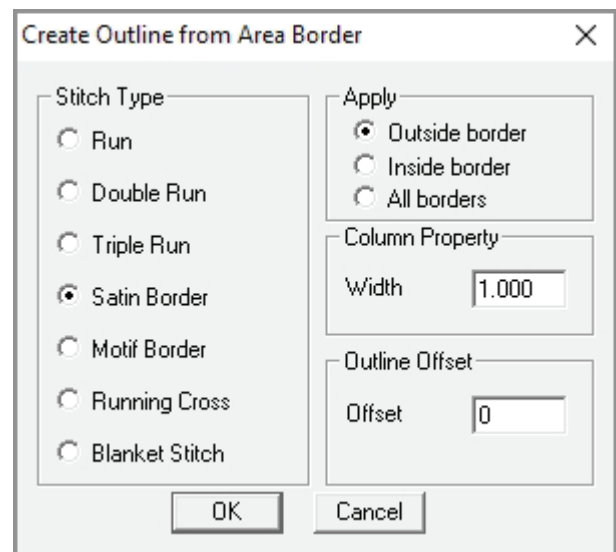
Or

Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Create Outline from Area Edges** from the pop-up menu.

 - The **Create Outline from Area Border** dialog box opens.

4. Select from the options in the dialog box to give the outline the appearance you want.

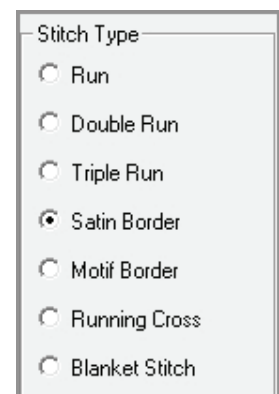
- The value in **Outline Offset** determines how far away from the original area the outline will be placed.
- Most often, you'll use the default value of 0 to place the outline exactly on the edge of the original area.
- If you do want the outline to be offset from the original, use a **positive number** to place the outline outside the original area. Use a **negative number** to place the outline inside the original area.
- The **Apply** section determines where the outline is placed.
- Use **Outside Border** to outline only the outside edge of the selected area.
- Use **Inside Borders** to outline only the inside edges of the selected area.
- Use **All Borders** to place the outline on both the outside and inside edges of the selected area.



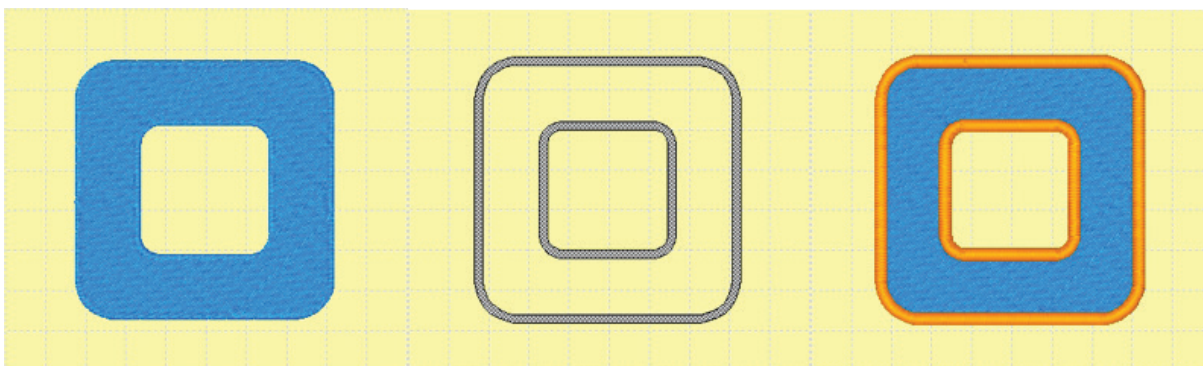
Tip: When outlining areas in a design, you most often use the Outside Border option. When outlining letters, you will normally want to select All Borders, as letters like A, B, D, etc., have both an inside and outside edge.

In the **Stitch Type** section, choose the desired **border/line** effect:

- **Run**: one layer of running stitch outline.
- **Double Run**: two layers of running stitch outline.
- **Triple Run**: three layers of running stitch outline.
- **Satin Border**: a uniform width column of satin stitches.
- **Motif Border**: an outline composed of selected motif shapes.
- **Running Cross**: a run of cross stitches.
- **Blanket Stitch**: a run or blanket stitches (sometimes called E-stitch).
- In the **Column Property** section, choose the width of the border, **ONLY** if you have selected the **Satin Border** type. The default value is 1mm. The other effects do not use the width value.



- Click on **OK** to accept the outline choices and close the dialog box. The new outlines are created and automatically selected, shown with the crosshatch gray shading.



Tip: It is often easier to change the outline thread color before generating the stitches, so you do not have difficulty in trying to select the outline area when it is the same color as the fill.

Tip: If you are using the Satin Border type, it is better to start with a narrow column width such as 1 mm. If your original area has very sharp curves or corners, it may be impossible for a wider column to follow these curves or corners.

- If you would like to make additional changes to the values for the outline areas, press the **[Spacebar]** on the keyboard.

Or

Click on the  **Stitch Settings** icon in the top toolbar.

The **Line Object Stitch Properties** box opens.

- Make any changes to the values then click **OK** to close the dialog box.
- You must **Generate** to make the changes take effect.

Select Accessories, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Using An Outline Offset

There are time when using the **Outline Offset** option for an outline is beneficial, such as for decorative effects or double outline effects.

- Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.

*Tip: You may want to use  **Zoom In** to enlarge the area you are working on.*

- Select View, then **View Outline** from the menu.

Or

Click on the  **View Outline** icon in the **View** toolbar.

Or

Press **[F6]** on the keyboard.

- Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.

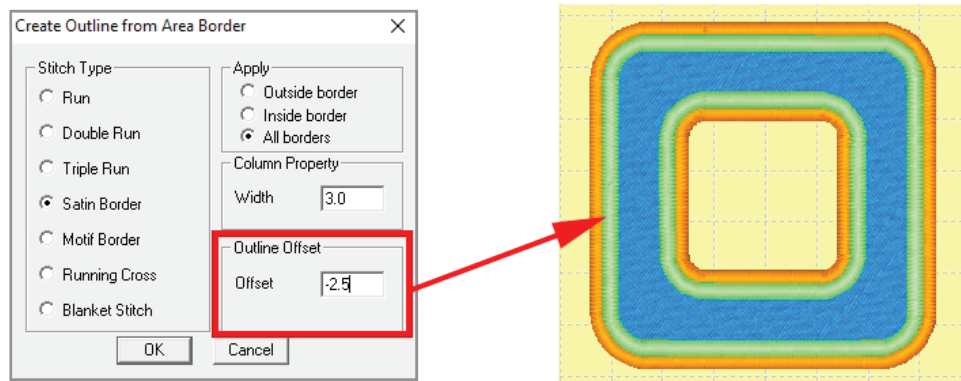
3. Select Outline, then **Create Outline from Area Edges** from the menu.

Or

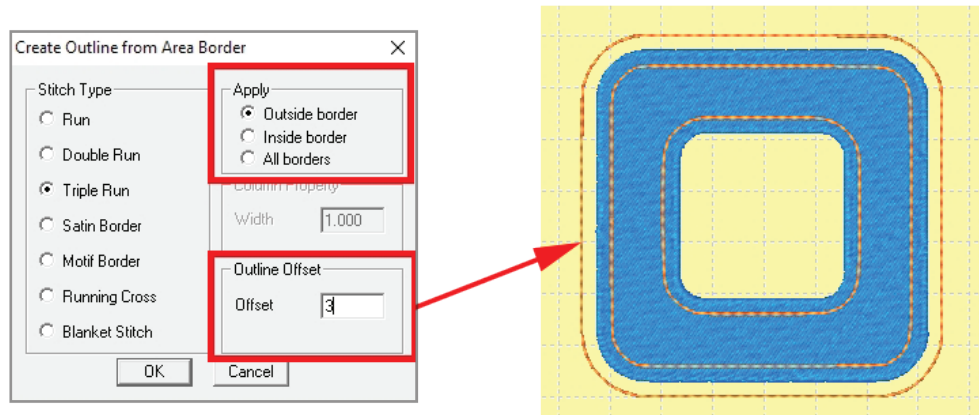
Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Create Outline from Area Edges** from the pop-up menu.

- The **Create Outline from Area Border** dialog box opens.

4. Select from the options in the dialog box to give the outline the appearance you want.
 - For inside outlines, use a **negative offset** value. That will cause the border to go **inside** the selected area.



- For outside outlines, such as for Echo Quilting, use a **positive offset** value. That will cause the border to go **outside** of the selected area.



Tip: Don't forget to select the Outside, Inside or All Borders option.

Create an Outline

You can create an instant border for an area using the options in the **Area Object Stitch Properties**.

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected area.
 2. Select **Stitch**, then **Stitch Settings**.
- Or

Click on the  **Stitch Properties** icon in the **View toolbar**.

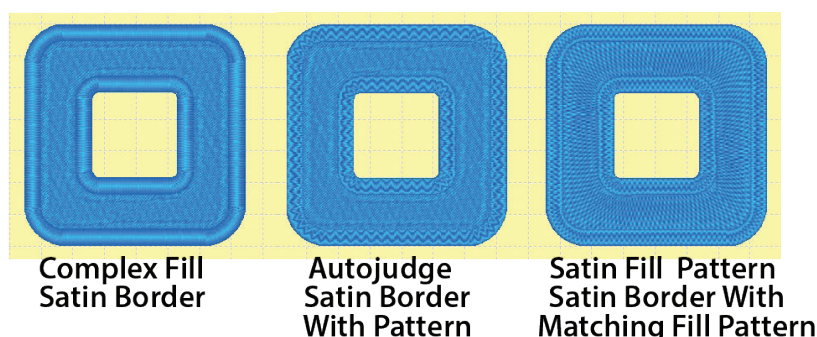
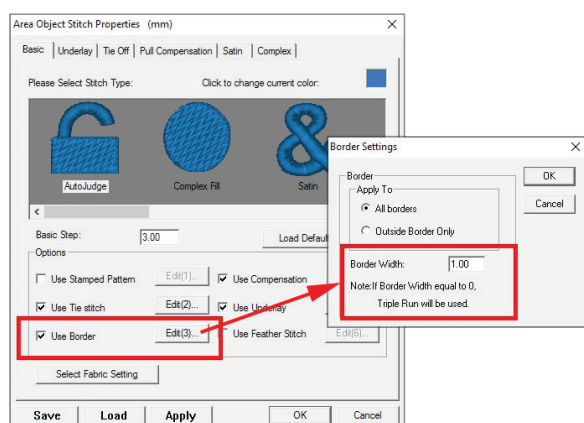
Or

Press the **[Spacebar]** on the keyboard.


OR

Right click the mouse on the selected are and click on **Stitch Settings** from the pop-up menu.

- The **Area Object Stitch** Properties dialog box opens.



3. Place a checkmark in the **Use Border** option and then click on the **Edit button** next to that option.
 - The options for this type of border are similar to borders creates using the **Create Outline from Area Edges** option, but have some limitations.
 - Borders created using this option will be the same color as the area they are created from.
 - When creating an outline for a **Complex** area, the border can be satin or triple running (bean) stitching only.
 - When creating an outline for an **Autojudge** area large enough to be created in a complex will, the border can be satin stitch, satin will a fill pattern or triple running (bean) stitching.
 - When creating an outline for a **Satin** area satin stitch, satin will a fill pattern matching the original fill pattern or triple running (bean) stitching.

4. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
5. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically **Generate** the stitches.
6. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Create Line from Area

Create Line from Area is used to convert an area shape (defined by its outside edges, or two opposite sides) to a line shape, which is defined by a center line. Once an area has been converted to a line, you can access the **Stitch Settings** to determine what type of line it will be.

When an image has an outline of 1 pixel or less, **Generations™** will see that outline as a line. Most images have outlines wider than 1 pixel causing the line to be detected as an area. Other than using **Create Line from Area**, the only way to change the outline width is to move individual nodes on the outline.

Creating a Line from an Area

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the area.

If you want to create lines from more than one area, hold down **[CTRL]** on the keyboard while you **right click** to select additional areas in the design.

2. Select View, then **View Outline** from the menu.

Or

Click on the  **View Outline** icon in the View toolbar.

Or

Press **[F6]** on the keyboard.

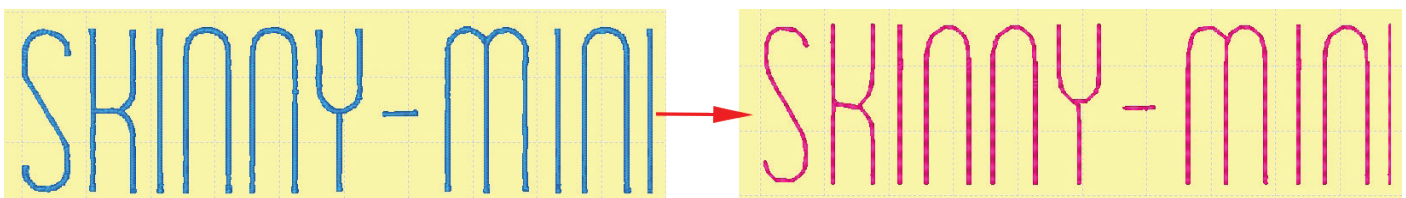
Once in View Outline mode, the selected area is shown in a crosshatch gray color.

3. Select Outline, then **Create Line from Area** from the menu.

Or

Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Create Line from Area** from the pop-up menu.

- The new outlines are created and automatically selected, shown with the crosshatch gray shading.



- Creating a line from an area works best with thin outlines, such as the example shown here.

- If you would like to make changes to the values for the outline areas, press the **[Spacebar]** on the keyboard.
Or

Click on the  **Stitch Settings** icon in the View toolbar.
The **Line Object Stitch Properties** dialog box opens.

- Make any changes to the values then click on **OK** to close the dialog box.

Tip: It is often easier to change thread color before generating stitches, so you do not have difficulty trying to select the outline when it's the same color as the fill.

- You must **Generate** to create the new stitches.

Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.


Remember that changes do not take effect until you **Generate** the section.

Create Area from Line

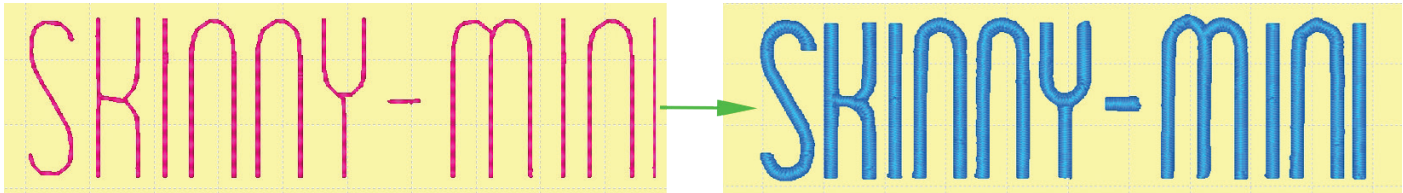
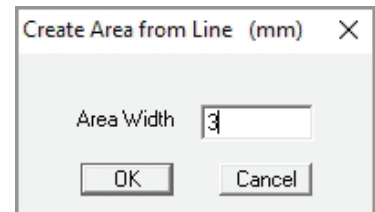
Create Area from Line is used to convert a line (defined by a center line) into an area that is defined by its edges, or two opposite sides. Once a line is converted to an area shape, you can access all of the various stitch settings, such as spiral, radial, stamped pattern, etc., to create special effects.

After you create the area, the original line remains in the design. You will need to select and delete it if you only want the new area to be used.

Creating an Area from a Line

- Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected area.
If you want to create areas from more than one line, hold down **[CTRL]** on the keyboard while you **right click** to select additional areas in the design.
- Select View, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
 - Once in View Outline mode, the selected area is shown in a crosshatch gray color.
- Select Outline, then **Create Area from Line** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**.
Select Create Area from Line from the pop-up menu.
 - The **Create Area from Line** dialog box opens.

4. The **Area Width** setting determines how large the newly created area will be. 2mm is the default value.
 - If desired, change the width, then click on **OK** to close the dialog box.
 - The new outlines are created and automatically selected, shown with the crosshatch gray shading.



5. If you would like to make changes to the values for the outline areas, press the **[Spacebar]** on the keyboard.

Or

Click on the  **Stitch Settings** icon in the **View** toolbar.

The **Area Object Stitch Properties** box opens.

6. Make any changes to the values then click on **OK** to close the box.

Tip: It is often easier to change thread color before generating stitches, so you do not have difficulty trying to select the new area when it's the same color as the original line.

7. You must **Generate** to create the new stitches.

Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.


Merge Areas or Lines

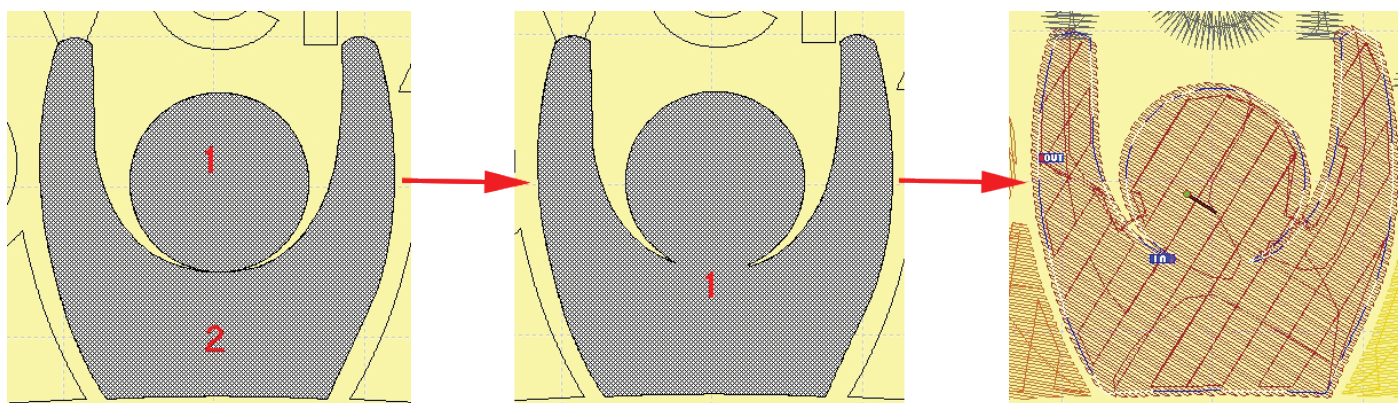
The **Merge** command is used to join together two or more sections in the design. Often when a large background section was broken into several pieces, you'll want to merge the pieces to have just one section. **Merge** is also frequently used to combine all the small pieces of a design outline, so that in the *Sequence Viewer* the design outline is seen as just one piece.


You can merge either areas or lines.

Merging Areas

1. Place the mouse cursor over the first area to be merged, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected area.
Hold down **[CTRL]** on the keyboard while you right click to select the other areas that will be merged.

2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the top toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected areas are shown in a crosshatch gray color.
3. Select **Outline**, then **Merge** from the menu.
Or
Keep the mouse pointer over the selected area and click the right mouse button.
Select **Merge** from the pop-up menu.
The new area is created and automatically selected, shown with the crosshatch gray shading.




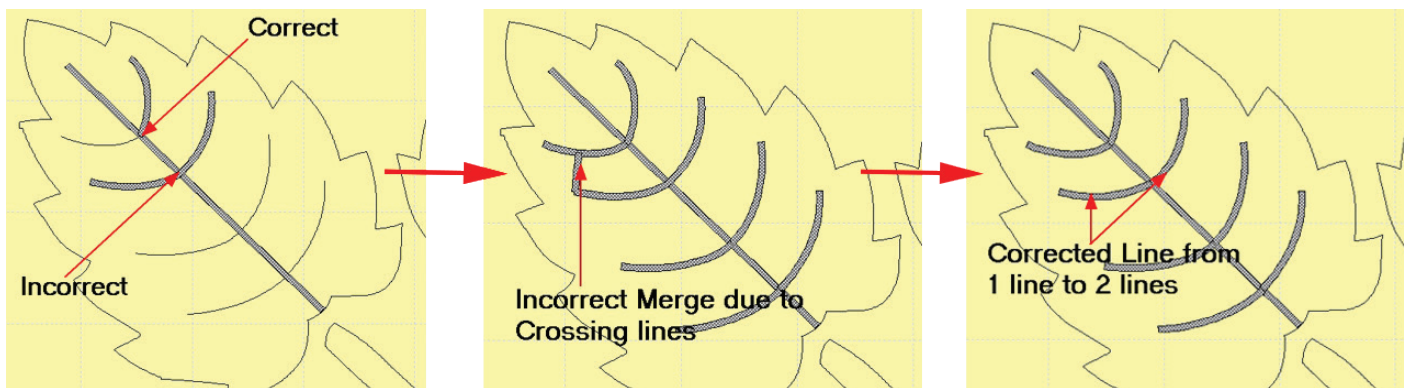
4. You must **Generate** to create the new stitches.
Select Accessories, then Generate.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.


Tip: When merging lines together, consider the natural stitching direction of the lines from one end to the other. Lines that will cross over each other should be created so that each half of the line is an individual line with logical in and out points.

5. Place the mouse cursor over the first line to be merged, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected line.
Hold down **[CTRL]** on the keyboard while you right click to select the other lines that will be merged.

Tip: It may be easier to use the Stitch Sequence Viewer to select the lines for merging than right clicking on the lines in the work area. Remember to hold the [CTRL] key to select multiple items from the Stitch Sequence Viewer with a LEFT click.

2. Select View, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the top toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected lines are shown in a crosshatch gray color.
3. Select **Outline**, then **Merge** from the menu.
Or
Keep the mouse pointer over the selected area and click the right mouse button.
Select **Merge** from the pop-up menu.
The new line is created and automatically selected, shown with the crosshatch gray shading.




4. You must **Generate** to create the new stitches.
Select Accessories, then Generate.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.

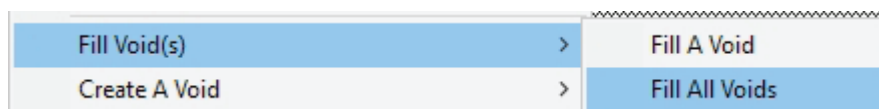
Fill Voids or Holes

Fill a Void is used to fill in an empty area of stitches that is enclosed by another area. Many times, an area of stitches is located over another. Depending on the size of the interior area, **Generations™** may leave that part of the exterior area empty of stitches, so that your embroidery is not too thick with many layers of stitching on top of one another. At times however, you will want the hole filled in, if it is very small and you are concerned about proper registration, or, if you completely removed the detail area and want to fill in the hole left behind.

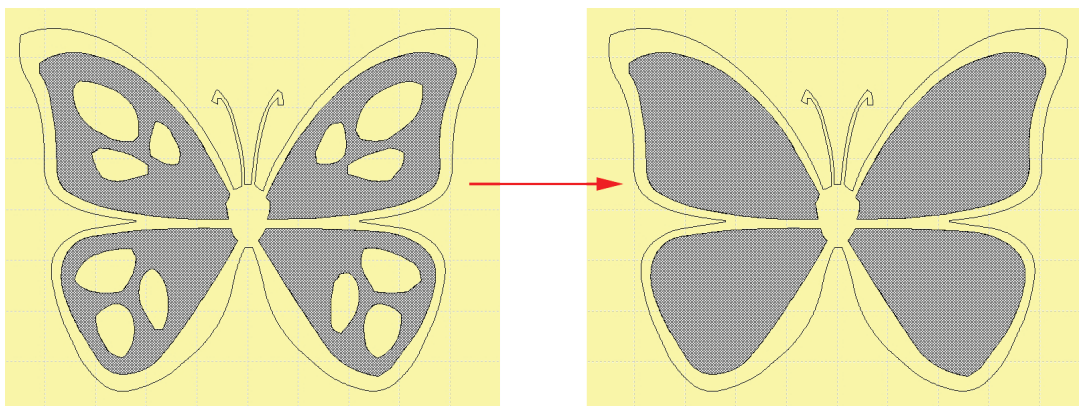
If the exterior area has several overlapping interior areas, you can choose to select the areas to be filled individually, or to quickly fill in all areas.

Filling in a Void

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the **View** toolbar.
Or
Press **[F6]** on the keyboard.
 - Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select **Outline**, then **Fill a Void** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**.
Select **Fill a Void** from the pop-up menu.
4. A sub-menu appears with two choices, **Fill a Void** and **Fill All Voids**.



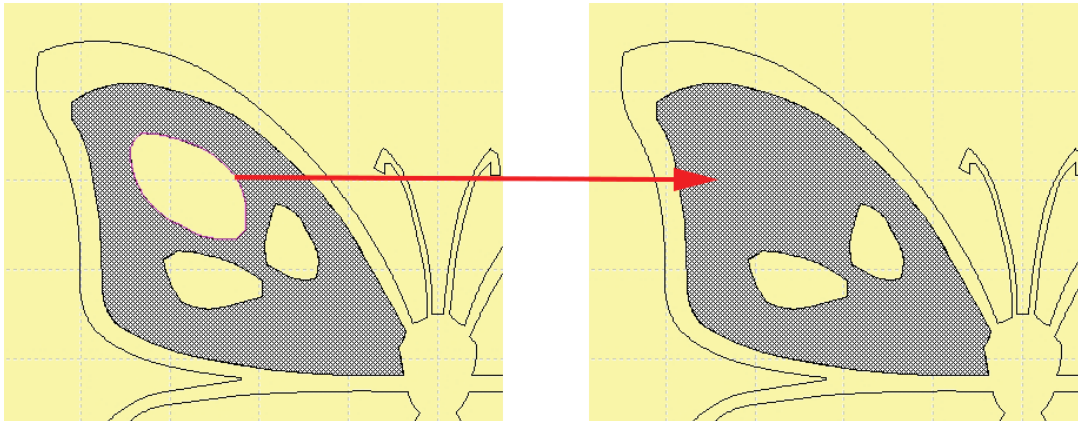
- To quickly fill in all internal void areas, just left click on **Fill All Voids** in the menu. **Generations™** automatically fills all the internal areas.




- If you only want to fill in some of the internal void areas, left click on **Fill A Void** in the menu, then continue with Step 5.
5. The cursor changes to a pointing hand. Place the cursor over the **outline of the void** you want to fill in.
 - The outline will change to a **pink** color.

Tip: If you mistakenly selected an area without any voids to fill in, just press [Esc] on the keyboard or click the right mouse button to cancel the command.

6. While the outline is shown in pink, **click the left mouse button**. The void is immediately filled in.




7. Repeat steps 4 and 5 to fill in any **additional holes** in the selected area.
8. Click the right mouse button or press **[Esc]** on the keyboard to turn off the editing tool.
9. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

Create a Void

Create a Void is used to create an empty area within a section, most often because you do not want too many layers of stitching in the same place.

You can quickly create a void by using the existing outline of another section. Additional options in the **Create a Void** menu let you draw a freehand shape, or use an automatic circle or rectangle to create the void where no other outline exists.

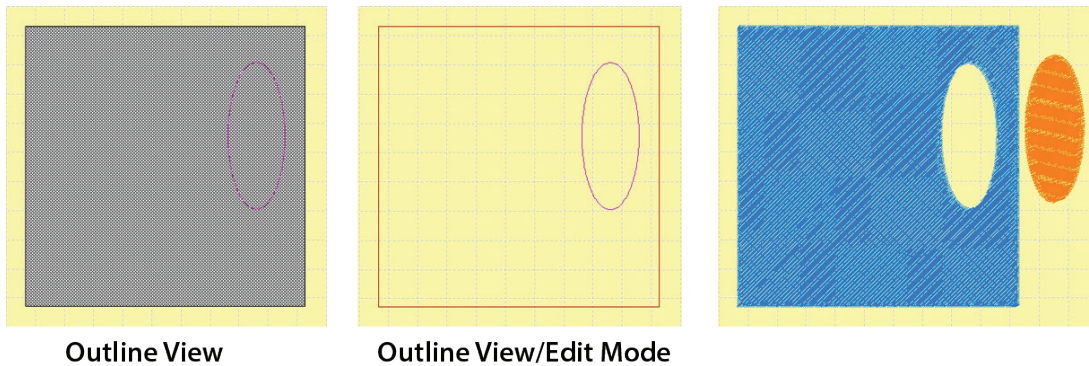
Creating a Void Using Existing Area


1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.

3. Select **Outline**, then **Create a Void** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Create a Void** from the pop-up menu.
4. Select **Create a Void Using Existing Area** from the sub-menu.
5. The cursor changes to a pointing hand. Place the cursor over the outline of the area you want to use to create a void.

*Tip: Seeing areas that will be used to create a void can be difficult in **Outline View**.*



*Click on the  **Edit Mode** icon to display the selected areas in node form. All of the Outline View tools are active when both **Outline View** and **Edit Mode** are selected.*

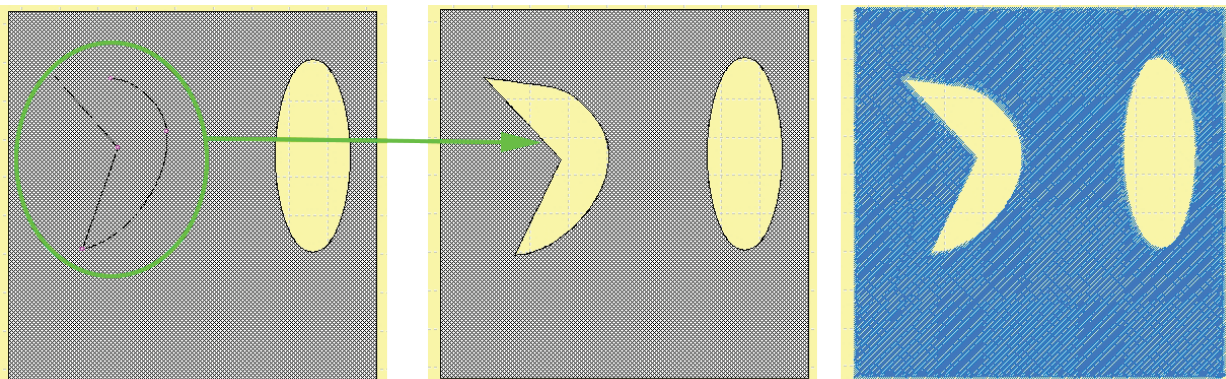


- The outline will change to a **pink** color.
6. While the outline is shown in pink, **click the left mouse button**. A **void** is immediately created.
Tip: If you mistakenly selected an area without any voids to fill in, just press [Esc] on the keyboard or click the right mouse button to cancel the command.
 7. Repeat steps 5 and 6 to create any additional voids in the selected area.
 8. Click the right mouse button or press **[Esc]** on the keyboard to turn off the editing tool.
 9. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

Creating a Void by Drawing Freely

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the area.

2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select Outline, then **Create a Void** from the menu.
Or
Keep the mouse pointer over the selected area and click the right mouse button.
Select **Create a Void** from the pop-up menu.
4. Select **Create a Void by Drawing Freely** from the sub-menu.
The cursor becomes a circle with a cross hair. 
5. Move the cursor to the desired position and click for the first point in the void area:
 - Use a left click for a straight or corner point
 - Use a right click for a smooth or curved point.
 - Each point you click is marked with a symbol:
A square represents a left clicked straight point.
A circle represents a right clicked curve point.
6. Continue clicking points to mark the entire void.
 - If you make a mistake, press **[Backspace]** on the keyboard to delete the last point. Each subsequent time you press **[Backspace]**, the previous point is removed. Then just re-mark the points.
7. When all points in the void are marked, press **[Enter]** on the keyboard to complete the void.
 - The void is created automatically.
 - You do not have to close the area to create a void.



- 8 Repeat steps 5 through 7 to create additional void areas.
9. Press **[Esc]** on the keyboard to turn off the tool.
10. You must **Generate** to make the changes take effect.
Select **Accessories**, then **Generate**.
Or



Press **[F9]** on the keyboard.

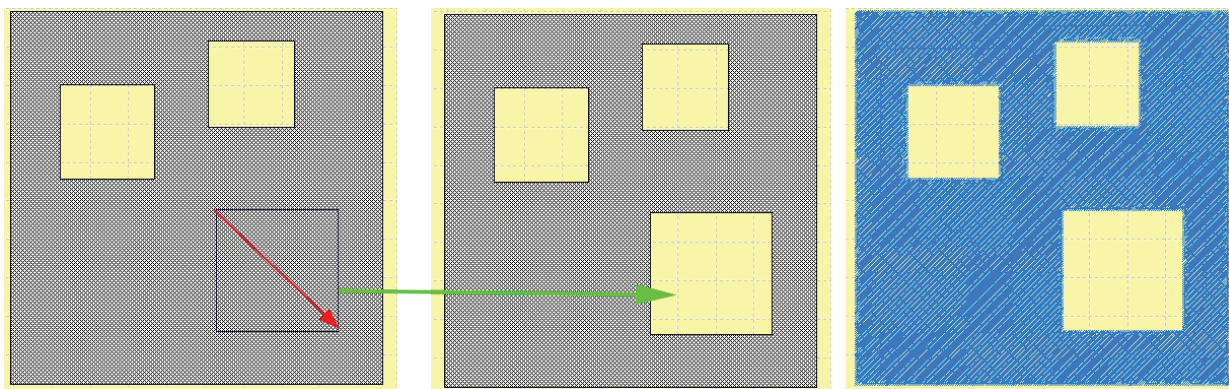
Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Creating a Void by Drawing a Rectangle

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select **Outline**, then **Create a Void** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**.
Select **Create a Void** from the pop-up menu.
4. Select **Create a Void by Drawing a Rectangle** from the sub-menu.
The cursor becomes a circle with a cross hair. 
5. Move the mouse cursor into the desired position for one corner of the square or rectangle and **click the left mouse button**.
6. **Drag the mouse** cursor towards the opposite corner of the square, until it is the size you want.
 - If you want a rectangle, hold down **[CTRL]** on the keyboard.



7. **Click the left mouse button** again, to complete the square or rectangle. The void is created automatically.
8. Repeat steps 5 through 7 to create additional square or rectangle shaped voids.
9. Click the right mouse button or press **[Esc]** on the keyboard to turn off the rectangle void tool.
10. You must **Generate** to make the changes take effect.
Select Accessories, then **Generate**.

Or



Press **[F9]** on the keyboard.

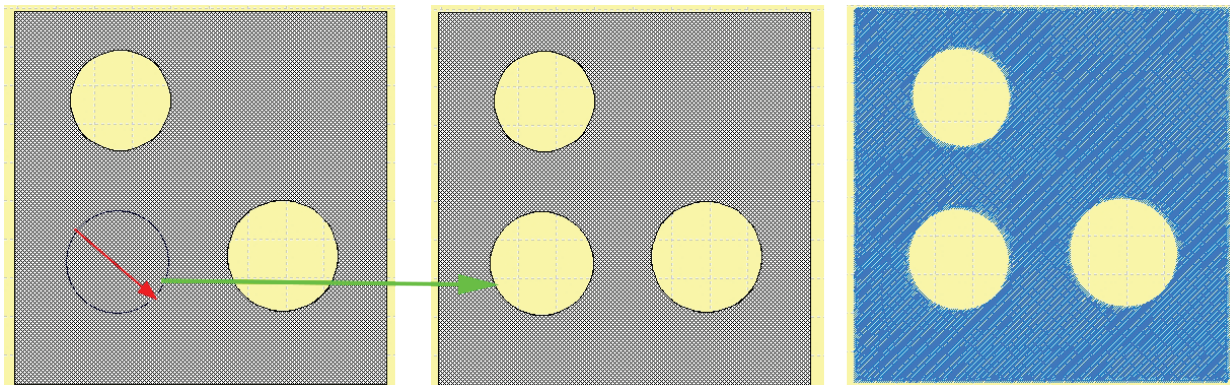
Or

Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Creating a Void by Drawing a Circle

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the **View** toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select Outline, then **Create a Void** from the menu.
Or
Keep the mouse pointer over the selected area and click the right mouse button. Select **Create a Void** from the pop-up menu.
4. Select **Create a Void by Drawing a Circle** from the sub-menu.
The cursor becomes a circle with a cross hair. 
5. Move the mouse cursor into the desired position for one corner of the circle or oval and click the left mouse button.
6. **Drag** the mouse cursor towards the opposite corner of the circle, until it is the size you want.
 - If you want an oval, hold down **[CTRL]** on the keyboard while you drag the mouse.



7. **Click the left mouse button** again, to complete the square or rectangle. The void is created automatically.
8. Repeat steps 5 through 7 to create additional square or rectangle shaped voids.
9. Click the right mouse button or press **[Esc]** on the keyboard to turn off the rectangle void tool.

10. You must **Generate** to make the changes take effect.

Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or


Click on the  **Generate** icon.

Remember that changes do not take effect until you **Generate** the section.

Divide or Split Areas

Divide with a Line is used to split an area into two or more pieces, using a straight edge for the dividing lines. Once divided, these become separate sections. You can then apply different colors or stitch effects to each.

Dividing an Area with a Line

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select Outline, then **Divide with Line** from the menu.
Or
Keep the mouse pointer over the selected area and click the right mouse button.
Select **Divide with Line** from the pop-up menu.
The mouse cursor changes to the cross hair cursor.
4. Place the cross hair cursor at a position slightly outside of the area you want to divide then **click the left mouse** button.
 - A **white square** marks the point you clicked.
 - A **pink** colored line is now attached to the cursor.



5. Move the mouse to position the line where you want to split the selected area. **Click the left mouse button** to mark the end of the dividing line.
6. Repeat steps 4 and 5 to mark any additional dividing lines in the selected area.

Tip: There is no limit on where you place dividing lines, they may cross over each other in several places if this is the effect that you wish to create.

7. Press **[Esc]** on the keyboard to turn off the editing tool.
8. You must **Generate** to make the changes take effect.

Select **Accessories**, then **Generate**.

Or

Press **[F9]** on the keyboard.

Or

Click on the  **Generate** icon.


Remember that changes do not take effect until you **Generate** the section.

9. Once the area has been divided, each new section can be individually selected. You can then apply a different thread color or special effect.

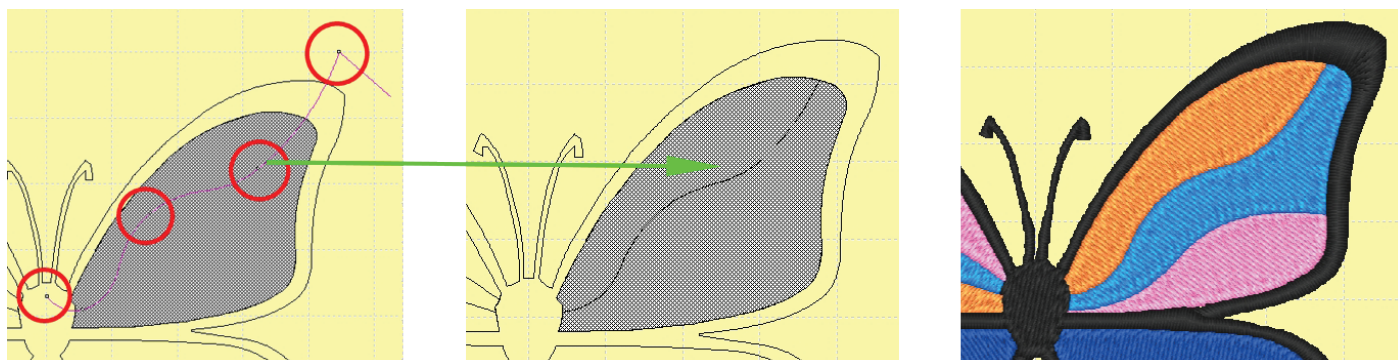
Divide with a Curve


Divide with a Curve is similar to Divide with Line above. It is used to split an area into two or more pieces, allowing you to mark a custom path for the split lines, using a combination of curve and straight points if desired. Once divided, these become separate sections. You can then apply different colors or stitch effects to each.

Dividing an Area with a Curve

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the area.
2. Select **View**, then **View Outline** from the menu.
Or
Click on the  **View Outline** icon in the View toolbar.
Or
Press **[F6]** on the keyboard.
 - Once in **View Outline** mode, the selected area is shown in a crosshatch gray color.
3. Select **Outline**, then **Divide with a Curve** from the menu.
Or
Keep the mouse pointer over the selected area and **click the right mouse button**. Select **Divide with a Curve** from the pop-up menu.
 - The mouse cursor changes to the cross hair cursor.
4. Place the cross hair cursor at a position slightly outside of the area you want to divide then **click the left mouse button**.
 - A **white square** marks the point you clicked.
 - A **pink** colored line is now attached to the cursor.

5. Move the cursor into the selected area and place **additional points** to mark the dividing path.
 - Use a **left click** to mark a straight or corner point.
 - Use a **right click** to mark a smooth or curve point.
 - The **last point** in the dividing path should be outside of the selected area.



6. Press **[Enter]** on the keyboard to complete the dividing curve. It is now shown as a solid black line along the points that you marked.
7. Repeat steps 4 and 6 to mark any additional dividing lines in the selected area.
8. Press **[Esc]** on the keyboard to turn off the editing tool.
9. You must **Generate** to make the changes take effect. Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.
10. Once the area has been divided, each new section can be individually selected. You can then apply a different thread color or special effect.

View Angle Mode

View Angle Mode is used to work with the satin stitch areas in a design. It is never used to edit a complex fill area, since the stitches in a complex fill all go in the same direction, following the angle set with the **Stitch Angle Wand**, or in the **Stitch Properties** dialog box.

As a satin stitch curves and turns around a shape, the stitch angle follows this path. In most cases, **Generations™** calculates the appropriate stitch angle for each part of a shape. However there will be times when you wish to change these angles.

Stitch Direction Guidelines

The lines that indicate the stitch angle in a satin area are called **Stitch Direction Guidelines**. You may move the position of guidelines, delete unnecessary guidelines, and add new guidelines to the satin stitch area.

Working with Stitch Direction Guidelines

1. Place the mouse cursor over the area to be edited, and click the right mouse button to select it. You'll see the blue and white flashing marquee line around the selected area.

Tip: You may want to use  **Zoom In** to enlarge the area you are working on.


2. Select **View**, then **View Angle** from the menu.

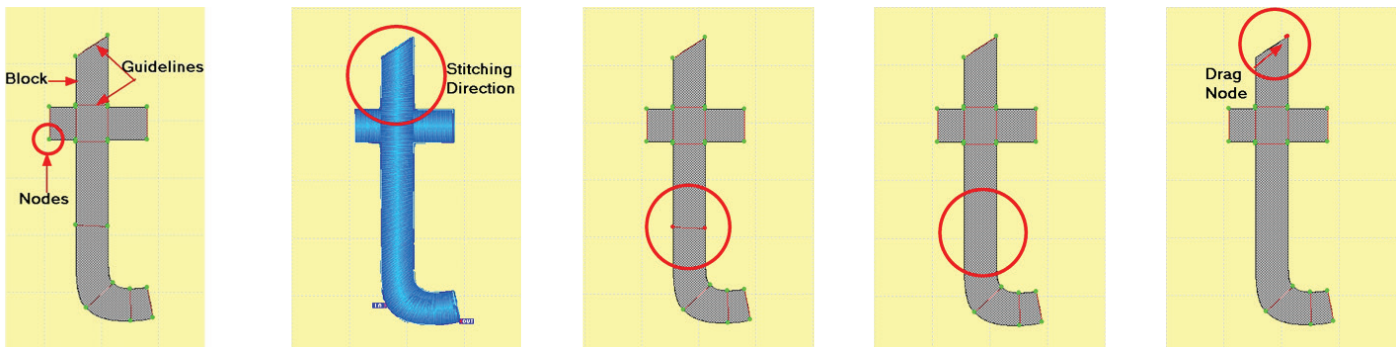
Or


Click on the  **View Angle** icon in the View toolbar.

Or

Press **[F7]** on the keyboard.

- Once in **View Angle** mode, the selected area is shown in a crosshatch gray color with a number of red lines. These are the **Stitch Direction Guidelines**.
- The  **Edit Mode** icon is engaged automatically when you selected View Angle mode.
- At the end of each guideline, along the edge of the selected area you'll see green circles. These are the nodes that control the stitch angle.
- The space between two sets of nodes is called a **Block**. Each block consists of 2 guidelines and 4 nodes.
- The two guidelines control the stitch of the block.



3. If you would like to change a **stitch angle**, place the mouse pointer over the **green circle**. It's in the right place when you see the cross hair cursor. 

Hold down the left mouse button and **drag** the circle to a new position along the area outline. The red line will reflect the new stitch angle.

4. To **delete a guideline**, place the mouse pointer over the red line and click the left mouse button. The green circles are now shown in red.

- Press **[Delete]** on the keyboard. The guideline is removed.

5. To add a new guideline, select **Angle** then **Add Stitch Direction Guideline**.

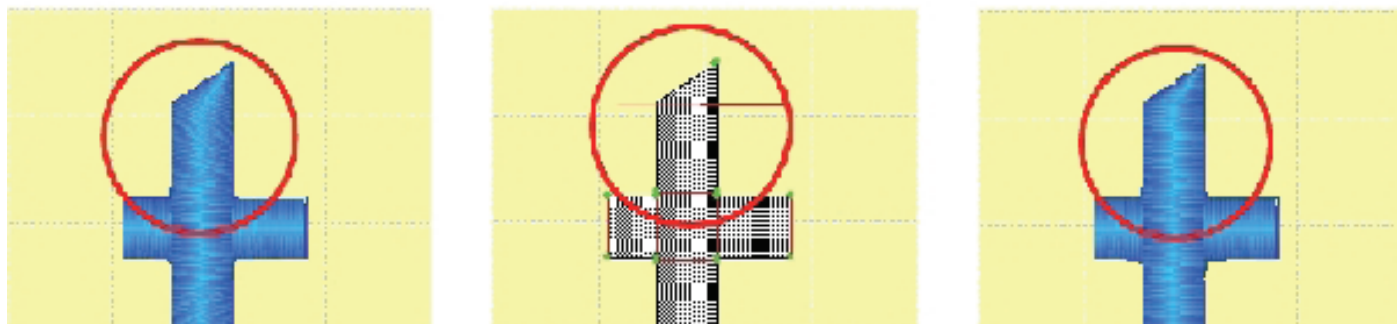
Or


Keep the mouse pointer over the selected area then **click the right mouse button**. In the pop-out menu, select **Add Stitch Direction Guideline**.

- The pointer changes to the cross hair cursor.
- Place the cross hair cursor slightly outside the selected area. **Hold down the left mouse button and drag** a line across the area to the opposite side at the desired

stitch angle. When you release the mouse button, the new **guideline** is added.

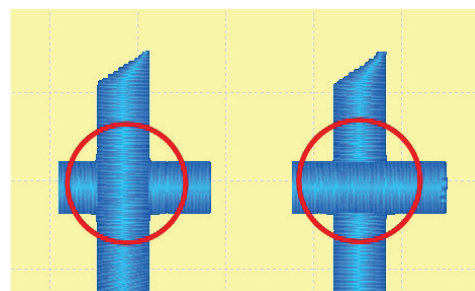
Note: The new guideline must go all the way across the selected area. It also must not intersect with any of the existing guidelines. If you do not mark the guideline correctly, it is not added to the area.



- Repeat to add as many new guidelines as are necessary.
 - When you are finished, click the right mouse button or press **[Esc]** on the keyboard to turn off the tool.
6. You must **Generate** to make the changes take effect. Select **Accessories**, then **Generate**.
Or
Press **[F9]** on the keyboard.
Or
Click on the  **Generate** icon.
Remember that changes do not take effect until you **Generate** the section.

Set Blocking Direction

In a satin stitch area, there may be places where the column must cross over itself. This occurs frequently in lettering. **Generations™** automatically calculates which direction appears on top (in a complete line of stitching), and which direction appears on the bottom (with its line of stitching broken). A good example of this is the lower case letter "t".



At times you may wish to change how the column crosses over itself. This is known as blocking. You can add new blocking lines or delete existing blocking lines.

Set Blocking Direction only works on columns within the same area, not where satin stitches from two separate areas overlap each other.

Changing the Blocking Direction

1. Place the mouse cursor over the area to be edited, and **click the right mouse button** to select it. You'll see the blue and white flashing marquee line around the selected area.

Tip: You may want to use  Zoom In to enlarge the area you are working on.

2. Select View, then **View Angle** from the menu.

Or

Click on the  View Angle icon in the View toolbar.

Or

Press **[F7]** on the keyboard.

Once in **View Angle** mode, the selected area is shown in a crosshatch gray color with a number of red lines. These are the **Stitch Direction Guidelines**.

3. To add a blocking guideline, select **Angle** then **Set Blocking Direction**, then **Add Guideline** from the menu.

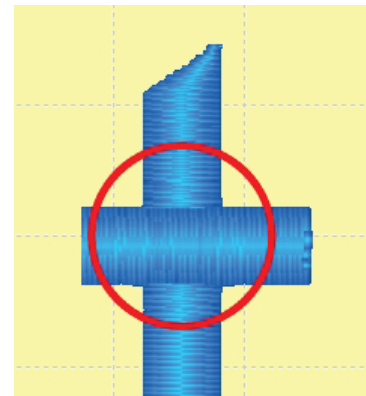
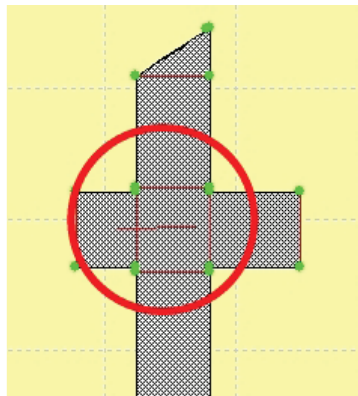
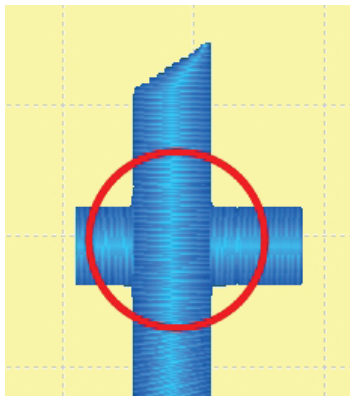
Or

Keep the mouse pointer over the selected area then **click the right mouse button**.


In the pop-out menu, select **Set Blocking Direction**, then **Add Guideline**.

The pointer changes to the cross hair cursor.

4. Keeping the cursor inside the selected area, **hold down the left mouse button** and **drag** a line across the place where the satin stitches intersect.
 - You should draw the line in the direction that you want the top layer of stitching to follow.
 - The line is added once you release the mouse button. It is shown as a solid red line.



5. Repeat step 4 to add as many new blocking lines as are necessary.
When you are finished, click the right mouse button or press **[Esc]** on the keyboard to turn off add guideline tool.
6. To remove a blocking guideline, select **Angle** then **Set Blocking Direction**, then **Delete Guideline** from the menu.
Or
Keep the mouse pointer over the selected area then click the right mouse button. In the pop-out menu, select **Set Blocking Direction**, then **Delete Guideline**.
The mouse pointer changes to a pointing hand.
7. Place the hand on the **blocking guideline** you want to remove and click the left mouse button. The guideline is immediately deleted.
8. Repeat step 7 to delete as many blocking guidelines as necessary.
When you are finished, click the right mouse button or press **[Esc]** on the keyboard to turn off delete guideline tool.


9. You must **Generate** to make the changes take effect.
 Select **Accessories**, then **Generate**.
 Or
 Press **[F9]** on the keyboard.
 Or
 Click on the  **Generate** icon.
 Remember that changes do not take effect until you **Generate** the section.

Edit Corner

Edit Corner is used to modify how a satin stitch makes its way around a sharp corner. Generations will automatically place the satin stitches turning the corner at a gradual angle. You will use **Edit Corner** when you want a different treatment at the corners. This feature is most often used with lettering.

Editing Corners

1. Place the mouse cursor over the area to be edited, and **click** the **right mouse** button to select it. You'll see the flashing marquee line around the selected area.

Tip: You may want to use  Zoom In to enlarge the area you are working on. Refer to Chapter 3 for detailed instructions.

2. Select **View**, then **View Angle** from the menu.

Or

Click on the  **View Angle** icon in the **View** toolbar.

Or

Press **[F7]** on the keyboard.

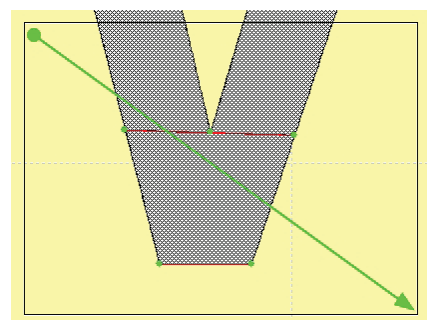
- Once in **View Angle** mode, the selected area is shown in a **crosshatch gray color** with a number of red lines. These are the stitch direction guidelines.

3. Select **Angle** then **Edit Corner** from the menu.

Or

Keep the mouse pointer over the selected area then **click** the **right mouse** button. In the pop-out menu, select **Edit Corner**.

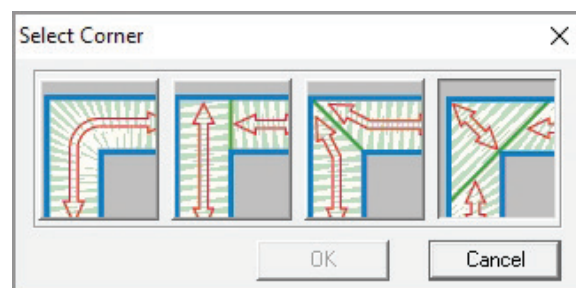
- The mouse pointer changes to the cross hair cursor.
- You must now indicate which corner you wish to edit.




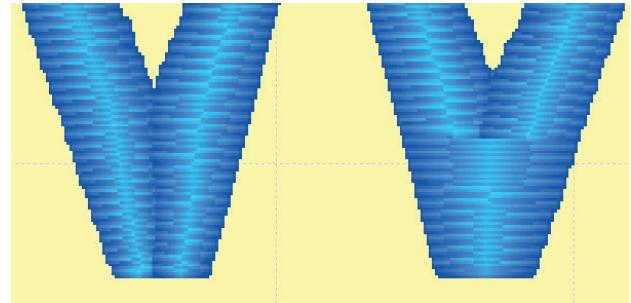
4. Place the cross hair cursor slightly outside the corner, **hold down** the **left mouse button** and **drag** a box that **covers the corner** (similar to drawing a zoom box).

- The **Select Corner** dialog box opens.

5. Select the desired effect. **Left click** on the picture representing the corner type you want, then **click** on the **OK** button.



6. Repeat steps 4 and 5 to edit as many corners as necessary.
 - When you are finished, **click the right mouse button** or press **[Esc]** on the keyboard to turn off Edit Corner tool.
7. You must Generate to make the changes take effect.
 Select **Accessories**, then **Generate**.
 Or
 Press **[F9]** on the keyboard.
 Or
 Click on the  **Generate** icon.



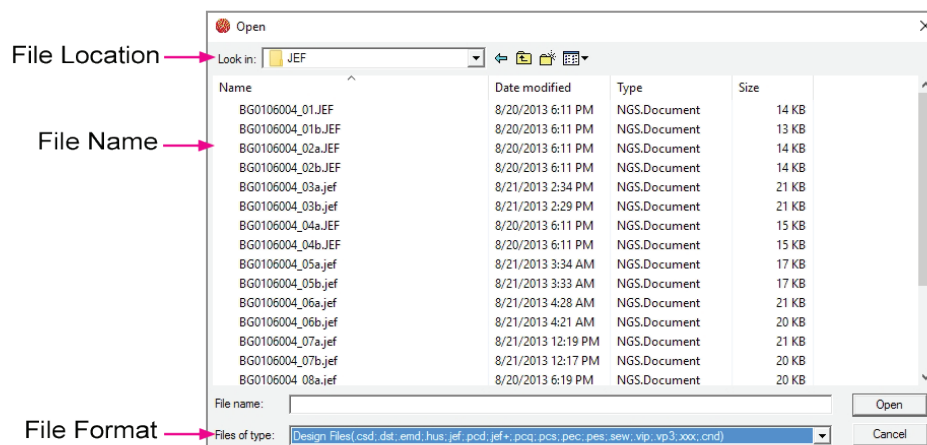
NOTE: Remember that changes do not take effect until you generate the section.

Working with Stitch Files

Generations allows for the **Importing** (opening) of stitch format files. **Stitch format files** are files that have stitch data and do not contain outline information as .gen format files do.

Importing Stitch Files

1. Select **File** then **Import** and select **Open DST or EXP** for commercial formats, or **Open Formats** for home formats from the pop-out menu.
 Or
 Click on the **Import** icon in the top toolbar. The last selected format option will be used (Open DST or EXP or Open Formats) by default.
 - If you need to change the **Import/Open** option click on the black arrow next to the icon and select from the drop-down menu.
2. The **Import/Open** dialog will display. This is a standard Windows® open dialog box.



Note: For home machine format files the default selection is to display all available formats. For DST and EXP, click on the black arrow and select the desired format.

3. Click on the formatted design you need to open or import into **Generations™**.
5. Click on the **OK** button. The selected design will open on the **Generations™** screen.


Tip: If desired, you can import multiple machine format designs - even those stored in different formats - into the same design to create a scene. Once the designs are all imported, you can change the display colors and sewing sequence to suit your needs.

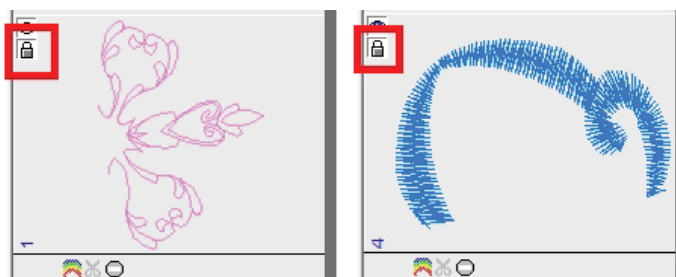
Editing Stitch File Areas and Lines

When viewing lines and areas in a design, some designs may break into sections or merge filled sections together for certain filled area or lines. Because the information in the design file is stitch data and not outline data, those areas may be more difficult to edit.

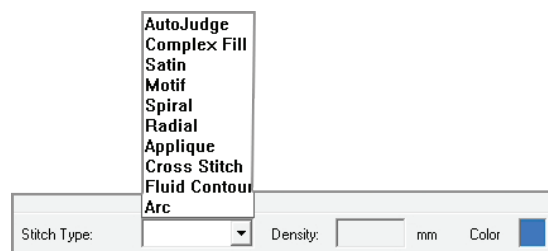
This is normal for all digitizing and editing programs, as the way the filled area is viewed is dependent on how the design stitch information was saved from the program it was originally created in.

Satin fills and lines may be more editable in many designs, as technically filled areas are a series of running stitch lines placed into a pattern to create the fill.

1. If the **Stitch Sequence View** is not open on the screen, click on the  icon to display it on the screen. You will need to be able to access the tools in this toolbar for editing.
 - Stitch format files display sections in the **Sequence Viewer** as locked areas.



- To edit the areas or lines, click on the **Lock icon** to **unlock** the area and allow for changes to be **generated**.
2. Assign a fill or line type to the selected and unlocked area from the **Quick Toolbar**.
 - Lines and areas in stitch format files do not have an associated fill or line type. They are stitch data and technically are a series of stitches - not a particular line of fill type.




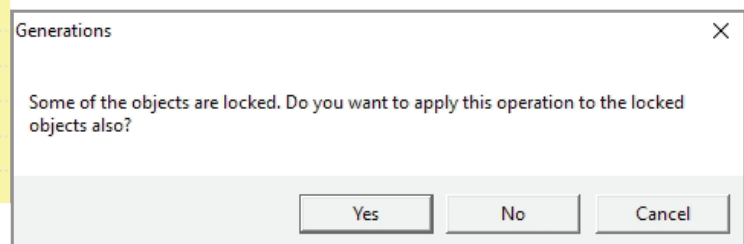
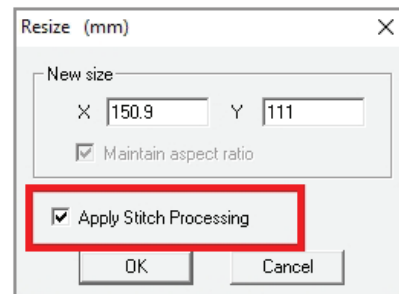
3. Once a line or fill type is assigned, you can edit the area using the **Outline Editing** tools, change the fill patterns in the **Stitch Properties** or resize the area as desired.

TIP: Since areas in the design were created with Pull Compensation, you may wish to disable that option in the Stitch Properties to avoid expanding the area.

Resizing Stitch Format Files

There are times when you will need to increase or decrease the size of a stitch file design. You can use the **Stitch Processing** option in **Generations™** to add or reduce the design and adjust the density of the design for better stitching results.

1. **Left click** on the imported stitch file. The design will be surrounded by black bounding boxes.
 - Check the **Status Bar** for the current stitch count. **Stitch Count: 17563**
 - Click on the  Resize icon on the Align Toolbar.
 - When the **Resize dialog** box open, enter the desired size and then place a checkmark in **Use Stitch Processing**.
 - Click **OK** to apply the size changes.
 - Because the areas in the design are locked you will receive a message asking if you would like to continue. Click **OK** to apply the changes.
 - Check the stitch count on the **Status Bar**. **Stitch Count: 14991**



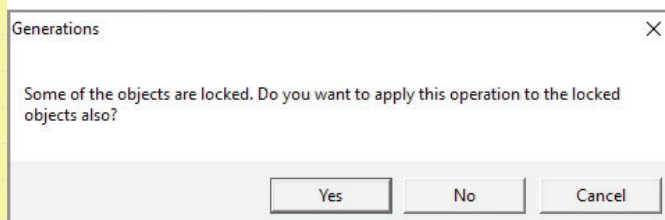
- Even though the areas are locked, the **Stitch Processing** will increase or decrease the density as needed.

Deleting Area or Lines

Deleting an area or line for a stitch format design is the same as with an object based .gen format file.

1. **Select** the **areas or lines** in the design that you want to delete.
 - To select multiple areas or lines, hold the **[CTRL]** key on the keyboard. **Right click** on the areas or lines.
 - OR
 - **Left click** on the areas and lines in the **Stitch Sequence Viewer**. and right click on the areas. You'll see the blue and white flashing marquee line around it.

2. On the keyboard, hold down **[CTRL]** and press **[DELETE]**.
 - Because the areas in the design are locked you will receive a message asking if you would like to continue. Click **OK** to apply the changes.
 - The stitches will be deleted from the design.



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Chapter 9

Fill and Line Pattern Creation


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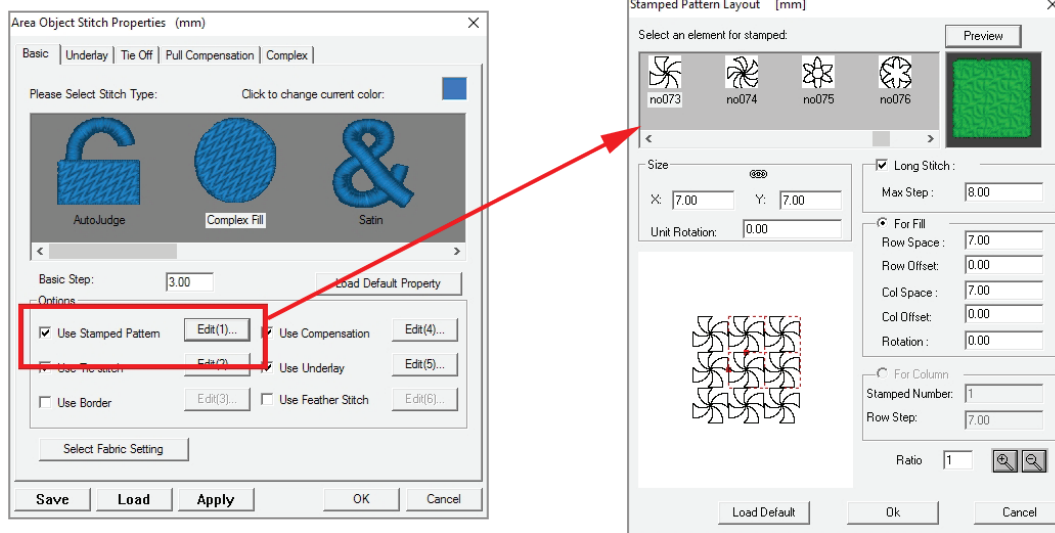
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Stamped Patterns

A **Stamped Pattern** is a special stitch effect in which a pattern is carved into the background stitch. Other names for this effect are "**pattern fill**" and "**program split fill**". When you click in the box to enable the effect, its setting tab opens automatically so you can select the pattern and layout. You can add a stamped pattern to a complex or satin fill.

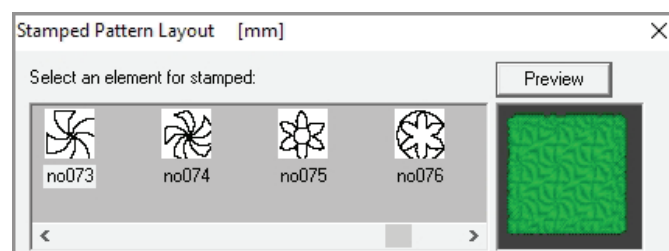
Selecting the Stamped Pattern

1. Select the area and open the  **Stitch Properties dialog box**.
2. **Click in the box next to Use Stamped Pattern so that a check mark is displayed.**
 - The **Stamped Pattern Layout** box opens automatically.



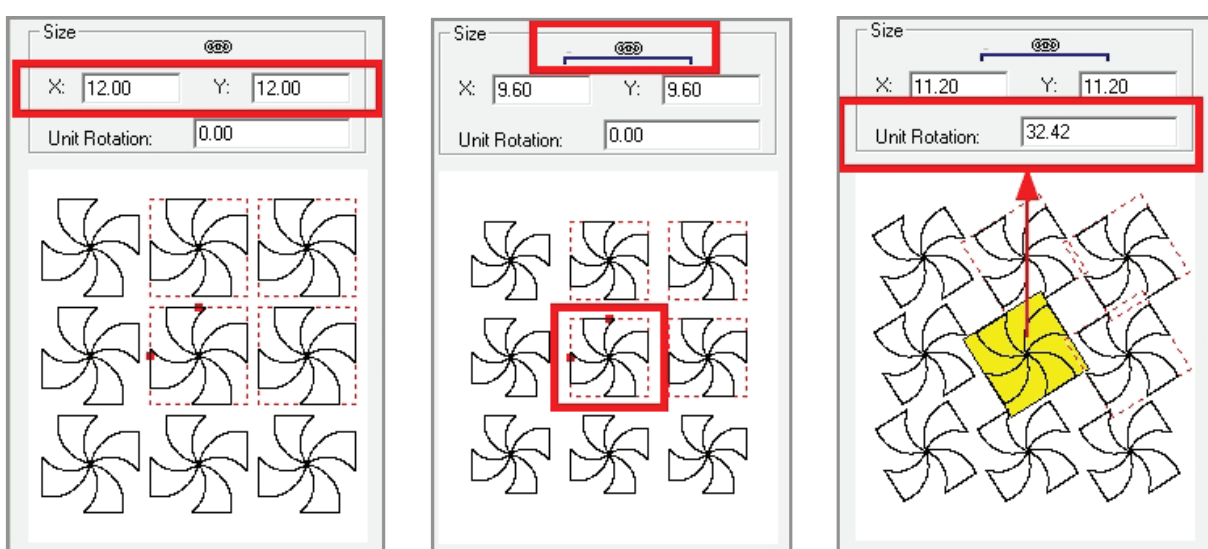
Note: If you need to make changes to the stamped pattern type and layout at a later time, just click on the Edit button next to Use Stamped Pattern to open this dialog box.

3. In the top portion of the dialog box, you can view and select from the **available patterns**.
 - If desired, after selecting a pattern you can click on the **Preview** button to see the results in the preview window.

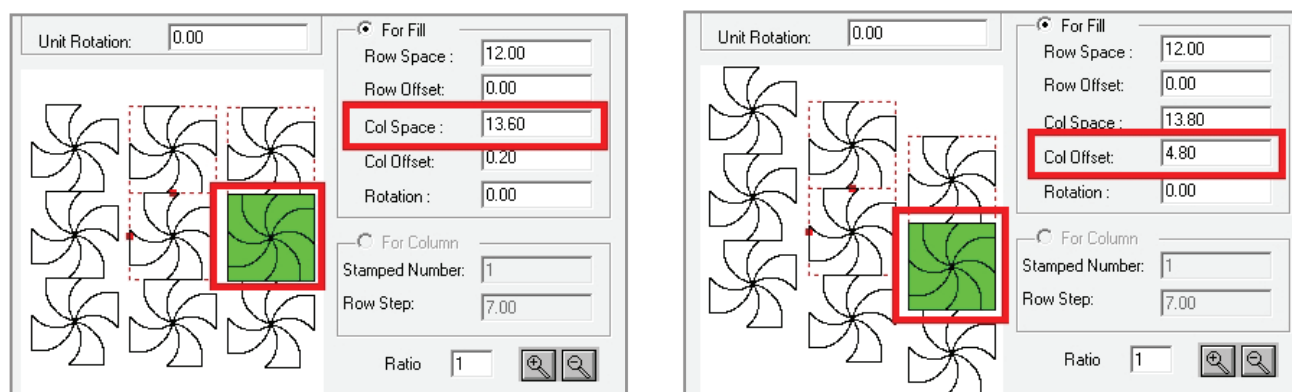


4. If desired, you can make changes to the pattern using the boxes in the **pattern layout** display, or by placing values in the **Size**, **Offset** and **Rotation** fields.

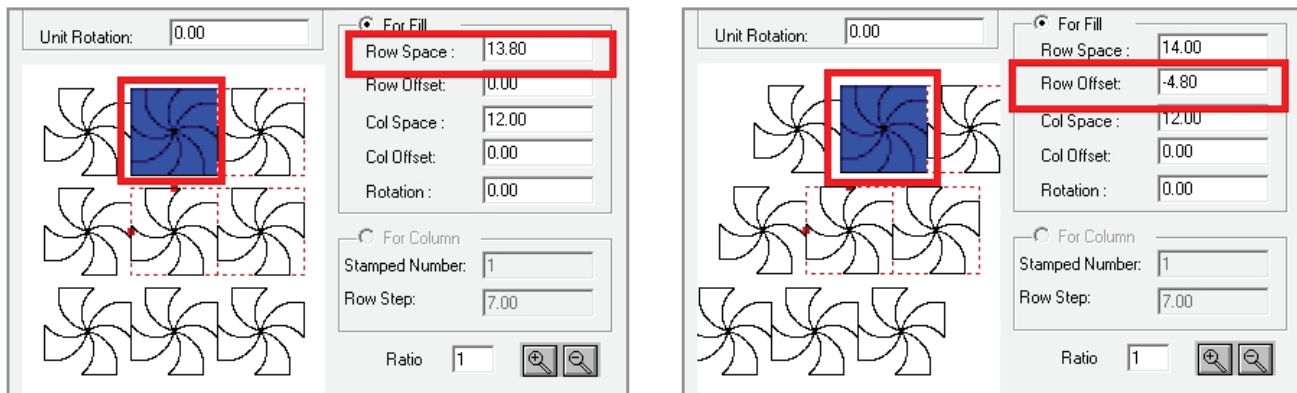
- It is usually easiest to change the pattern using the **Layout** box. The pattern can be changed in **six different ways** using the boxes or nodes in the window.
- The box in the center of the **Pattern Layout** window will size and rotate the pattern.
- If you want to size evenly, with no distortion to the pattern, click on the **Chain** icon to lock the height and width sizes together.
- When the chain is **unlocked**, you can change the height and width independently.
- You can enter a new size in the X and Y boxes to size or you can use the two small **red squares** on the center box in the pattern layout window. One square controls the **height** and one square controls the **width** of the pattern. Left click on the red square and **drag** to the new size.
- To **rotate** the pattern, left click in the center of the box and it will highlight in yellow.
- **Drag** the box in the direction you want to rotate the pattern.



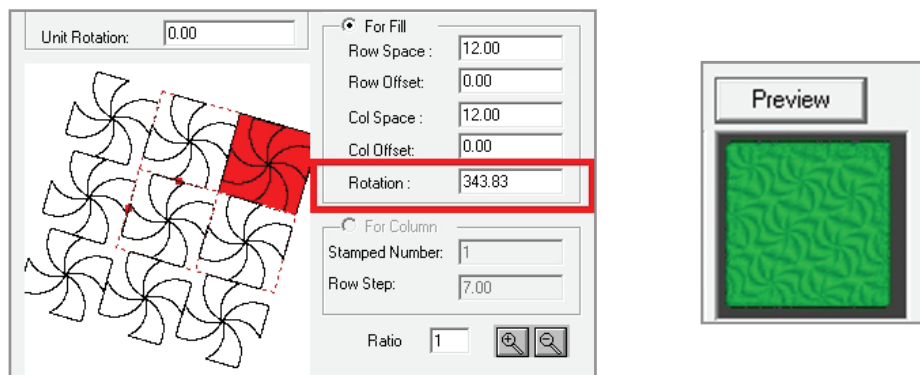
- The box located at the **right middle** will space the column repeats of the pattern.
- When you left click and drag the square it will highlight in green. **Hold** down the left mouse button and drag the column to the new position.
- You can move the column up, down, right, or left.



- The box located at the **top middle** position controls the pattern row spacing. When you **left click and drag** on the square it will highlight in blue. Hold down the left mouse button and **drag** the row to the new position.
- You can move the row up, down, right or left.



- The box located on the **upper right corner** will rotate the stitching direction for the fill. When you click on the box it will highlight in red. Hold down the left mouse button and **drag** the fill in the direction you want.
- After changing the pattern layout, size and rotation, you can preview the results in the **Preview window**.

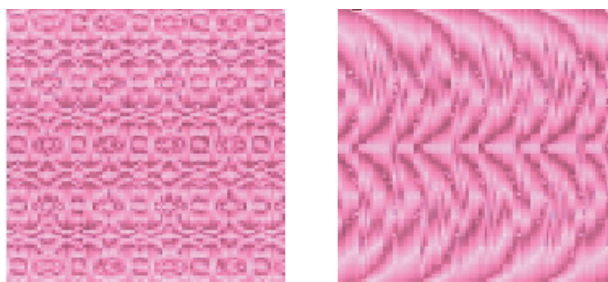



- There is another feature in the **Stamped Pattern** menu. If you have edited the layout so that the patterns are no longer touching, Generations™ provides a way for you to control the length of the stitching between the patterns. Select the **Long Stitch** option to control the length of the stitches between the stamps in the fill.
 - Make sure that the box next to **Long Stitch** is checked, then enter the stitch length you would like between patterns.



- If you are using a stamped pattern fill for a Satin area, there is another option you can select.

- The **For Fill option** will fill the satin area with the pattern as though it were a complex area.
- The **For Satin option** creates a stretched pattern across the satin fill area, and can be used to create some stunning textural effects.
- To change the filled effect in the **For Satin option**, you can enter new numbers in the values for **Stamped Number** and **Row Step**.
- **Stamped Number** controls how many stamped patterns are in the fill.
- **Row Step** controls how many vertical rows there will be in the filled area.
- If you have selected only **one pattern** and seven rows, the results are that one stamp will be stretched across the length and width of seven vertical rows.
- If you increase the number to **two patterns** and seven rows, then two patterns will be stretched across the seven vertical rows in the filled pattern.



7. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
8. After making changes click on **OK** to exit the dialog box and automatically **Generate** the stitches.
9. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Creating a Stamped Pattern

There are eighty pre-programmed **Stamped Patterns** in *Generations™*. You can also easily create **your own stamped patterns**.

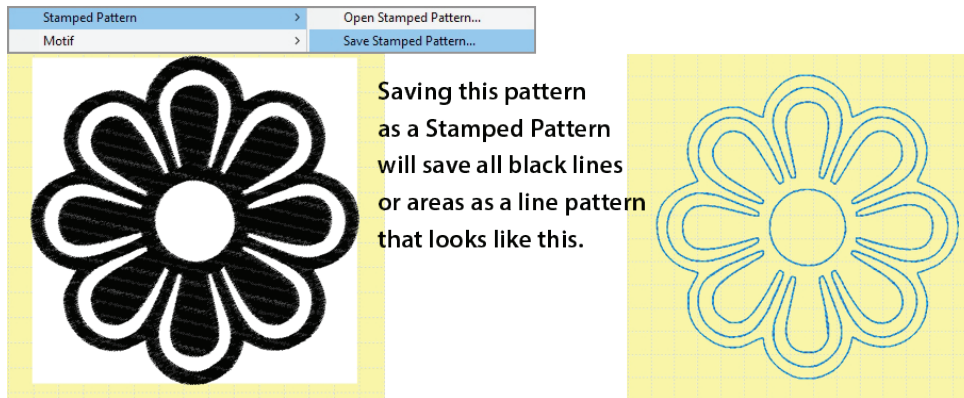
Stamped patterns can be created by anything you have generated stitches for in the work area. A design file, a line, an area - these can all be saved as stamped patterns for future use.

Creating a New Stamped Pattern

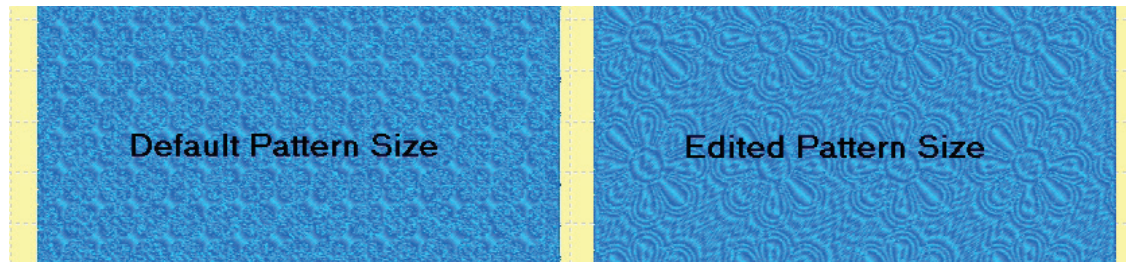
1. With the design open on screen, select **Edit**, then **Select All Filled Areas** or **All Lines**.

Tip: If you want to save both the lines and areas in the stamped pattern, then select the whole design by right clicking and dragging a box around the entire design.

2. Select **Accessories**, then **Stamped Pattern**. In the sub-menu, select **Save Stamped Pattern**.



- You have just saved a stamped pattern that can be used for fills.
- When creating Stamped Patterns, bear in mind the size at which the pattern will be stitched in the filled area.
- Small detailed patterns may cause too many short stitch lengths to allow the pattern to stitch properly.



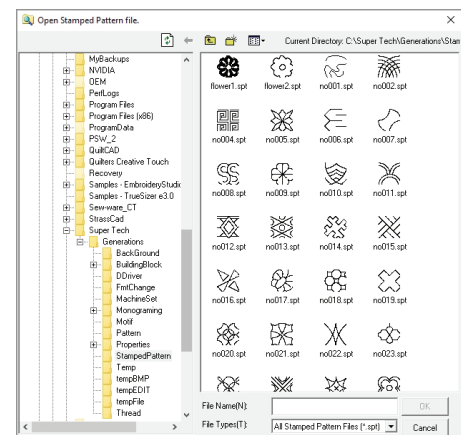
- When you have a detailed pattern, you should increase the motif size to allow it to stitch properly, or edit the pattern to remove detail from the pattern.

Editing a Stamped Pattern

In Generations™, Stamped Fill Patterns may be edited then saved to create new patterns, used as an element in the design, or turned into a motif pattern.

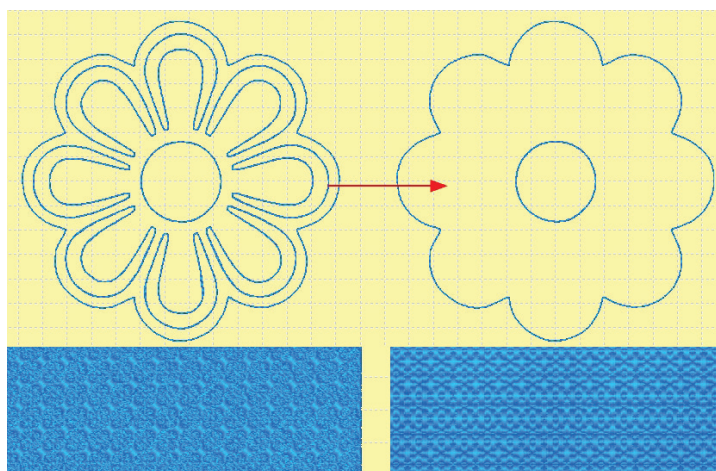
Editing a Stamped Pattern

1. Select **Accessories**, **Stamped Pattern**, then **Open Stamped Pattern** from the menu. The **Open Stamped Pattern** dialog box displays.
2. Select from the **saved stamped** patterns located in the default folder in the program, or select another location from the folder tree on the left where stamped pattern files have been stored.
3. Once you have located the pattern you wish to edit, **double click** on the thumbnail image and it will be inserted into the program.
 - You may edit the shape of the pattern by **right clicking** on the line to select the line and then



using the editing tools available using the **View Outline** editing.

- You can also **right click** on an area or line to **delete** it from the pattern.



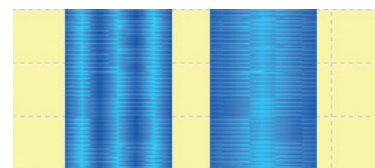
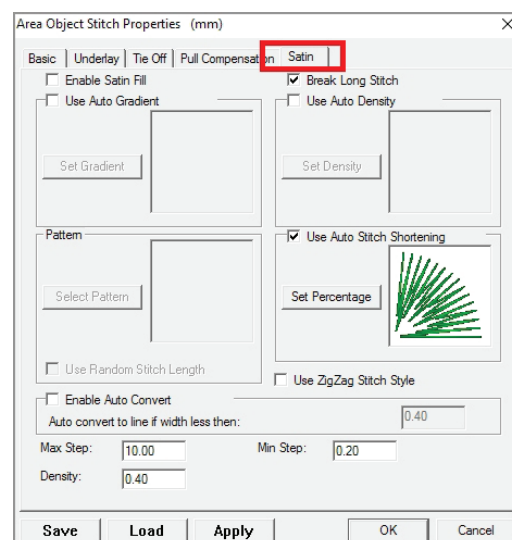
- The **Stamped Patterns** may also be saved as a **Motif Pattern** or used in as an element in the design.

Satin Stitch Settings

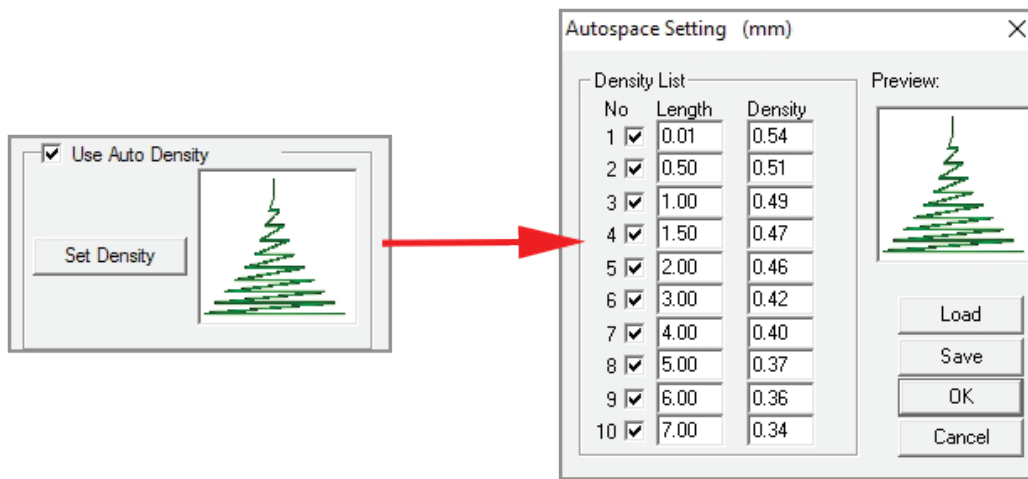
Satin stitches are generally used in the smaller areas of a design. A satin stitch goes completely across the area, without being broken into smaller stitches. The values that control the appearance of these stitches are found in the Satin tab.

Changing Satin Stitch Settings

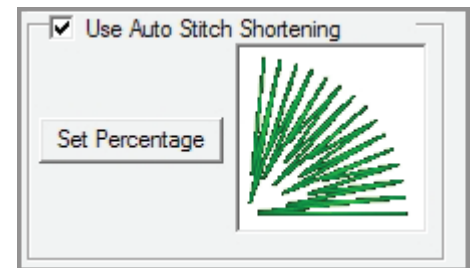
1. Select the area and open the **Stitch Settings** dialog box.
2. Click on the **Satin tab** at the top of the dialog box to display the settings.
3. The option to **Enable Satin Fill** is a special effect, not generally used for normal column areas. When you check the box, this automatically enables the **Pattern** section in the middle of the dialog box.
 - Clicking on the **Select Pattern** tab opens a second dialog box containing the complex fill patterns. This allows you to create a section that has **turning stitch** angles like a column, but is filled in with a **Complex Fill** pattern (complex fill stitches normally all follow the same angle).
4. The option to **Break Long Stitch** is active by default, preventing the software from making a satin stitch longer than the maximum length of 10mm.
 - If you do not want split satin stitches in the area, you can click in the box to deactivate this option.



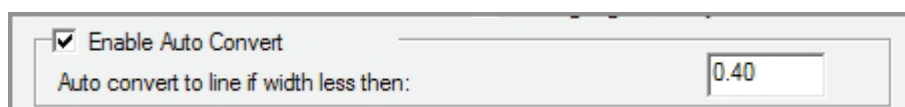
5. The **Auto Density** options should only be used if the selected area is very narrow at some points, and gets much wider at other places.
 - Click in the box next to **Auto Density** to activate it. When you click on the Settings button, the **AutoSpace** Setting dialog box opens.



- The table determines how the spacing is varied, depending on the stitch length. When stitches are very small, a higher density is used, putting more space between small stitches to prevent thread breaks.
 - As the stitch length gets longer, the spacing value decreases. In most cases, the default table of **autospace** values will produce good results.
6. The setting for Use **Auto Stitch Shortening** should always be activated (checked). This allows the software to automatically shorten some stitches when there is a tight curve or corner, preventing too many stitches from sewing in the same spot, causing a hole in the fabric.
 - Clicking on the **Set Percentage** button opens a dialog box with the values for Auto Stitch Shortening.
 - In most cases, the default settings -- use 80% of the original stitch length if density is less than 55% of the basic value -- provide good stitch shortening and prevent problems.




7. The setting **Enable Auto Convert** will automatically convert the satin stitch to a running stitch if the distance between the two sides of the area is smaller than the value listed.
 - The **default** value is 0.4mm.



- It is because of this setting that you will sometimes see run stitches within a larger satin stitch area. Those are the places where it is too narrow for a satin to be sewn, so a run stitch is substituted.

8. The values for **Max Step** and **Min Step** control the largest and smallest stitch that can be created within the section.

Max Step:	<input type="text" value="10.00"/>	Min Step:	<input type="text" value="0.20"/>
Density:	<input type="text" value="0.40"/>		

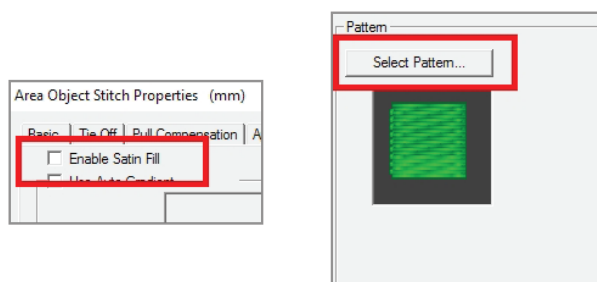
9. The **Density** value controls how much **space** is between each stitch.
- The **default density** value is 0.4mm, which means that there is exactly that much space between the points in a satin stitch.
 - A **smaller value**, such as 0.35mm, puts **less space** between each stitch, giving you more stitches.
 - A **larger value**, such as 0.5mm, puts **more space** between each stitch, giving you fewer stitches.
10. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
11. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically **Generate** the stitches.
12. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Pattern Editor

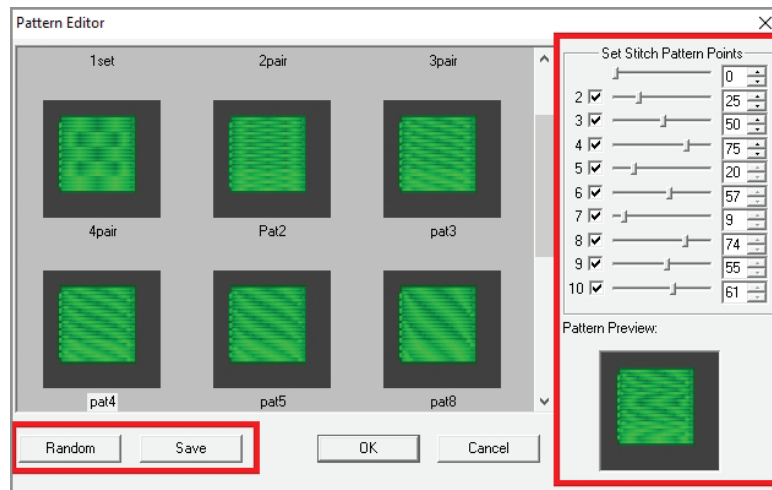
In **Generations™** you can create personalized fill patterns using the **Pattern Editor**. The Pattern editor can be accessed through the **Area Object Stitch Properties** dialog box or through the **Accessories** and then **Pattern Editor** menu option.

*These patterns are subtle when compared to the **Stamped Pattern** option, but allow for texture to be added to filled area in the design. Patterns created using the **Pattern Editor** can be applied to Complex, Satin, Radial, Appliqué, and Arc fill patterns.*

1. Select the area and open the **Stitch Settings** dialog box, or click on **Accessories** and then **Pattern Editor** from the main menu.
2. Click on the Satin, Complex, Radial, Appliqué or Arc fill tab at the top of the dialog box, depending on the fill type applied to the area, to display the settings.
3. The option apply or create a fill pattern is available for all of these fill patterns.
 - Place a checkmark in **Enable Satin Fill** or **Use Fill** for Satin, Radial or Appliqué Satin settings.
 - Click on the **Select** button for Complex, and Arc fills.



4. Click on **Select Pattern** to open the Pattern Editor window.
 - Select from the pre-programmed patterns, or use the **Stitch Pattern Point** bars on the right side to create a new pattern.



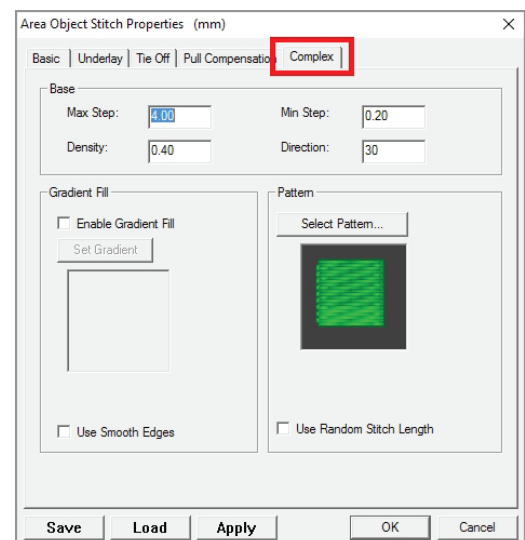
- A **fill pattern** is simply composed of staggered rows of stitching.
- If you would like to save a pattern you create, click on the **Save** button then type in a name.
- Clicking on the **Random** button at lower left, will randomly set the stitch pattern points. You can create interesting textural effects for animal fur or tree bark using a random effect.

Complex Fill Settings

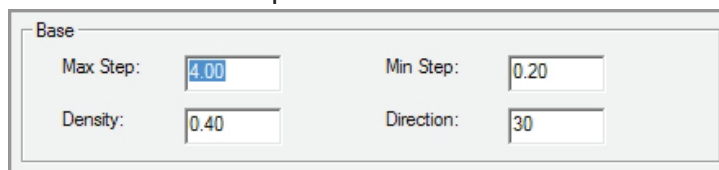
Complex fill stitches are generally used for large areas in the design. You may also hear a **complex** fill stitch called a **tatami** or **ceeding** stitch.

Changing Complex Fill Settings

1. Select the area and open the **Stitch Settings** dialog box, as explained earlier.
2. Click on the **Complex** tab at the top of the dialog box to display the settings.
 - The values in the **Base** section at the top of the box control the basic stitch settings.
3. The **Max Step** value controls the length of each individual stitch in the complex fill area. The default value of 4.0mm is generally fine. If you are trying to reduce the stitch count in a design, try making this value slightly larger.
4. The **Min Step** value controls the smallest stitch that will be used in the fill, preventing too many tiny stitches that can cause thread or needle breakage. The default value of 0.2mm is recommended.

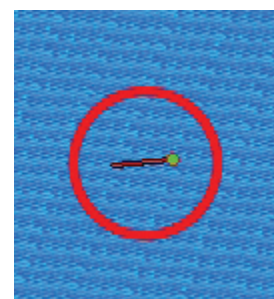


5. The **Density** value controls the amount of space between each row of stitches in the fill.
 - In most cases, the normal value of 0.4mm is used to produce an evenly spaced fill. The normal range of values is between 0.3mm and 0.6mm.
 - A **lower** number means less space between the rows, and more stitches.
 - A **bigger** number means more space between the rows and fewer stitches.

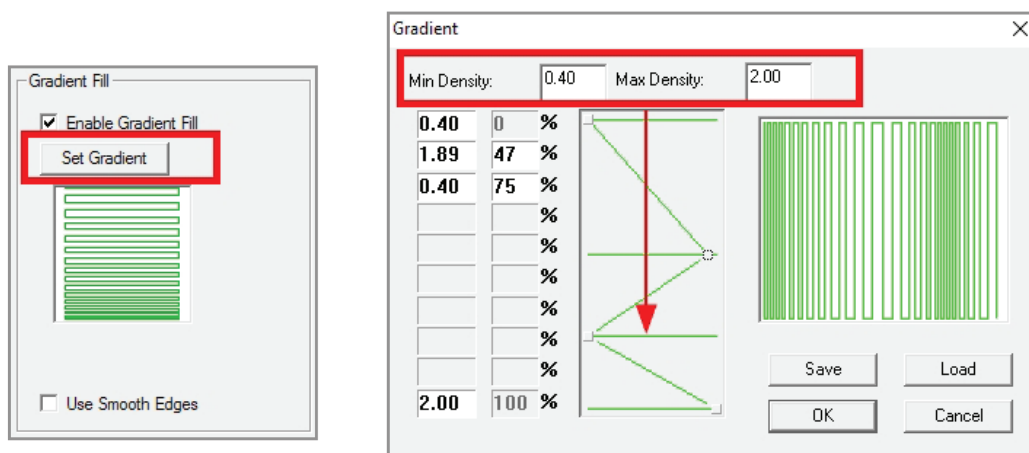


6. The **Direction** value controls the angle of the fill pattern. The measurement is in degrees.

- The direction is also shown by the red and green wand (**Stitch Angle Indicator**) that sits on top of a selected section in the main work area.
- Change the **stitch angle** by moving the mouse cursor over the green ball on the wand. When you see a 4-way arrow press and hold the left mouse button and **drag** the wand to a new direction or angle.
- Or, type in a new value in the **Direction** field.



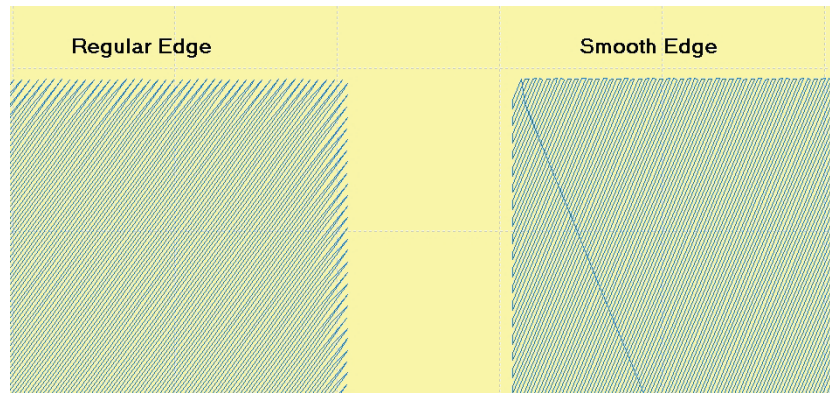
7. The **Gradient Fill** option produces a special effect where the spacing goes from tight to loose in a specific pattern. It can be used to create a blended color effect or as an overlay.
 - When you click on the **Set Gradient** button, a dialog box opens with the default settings.
 - Click on the **Load** button to select from one of the pre-programmed gradient effects.
 - If desired, use the **density** and **percentage** settings to adjust the pre-programmed effects to your satisfaction.
 - Click on **OK** to close the dialog box and accept the new settings.




8. The **Use Smooth Edge** option creates a crisp edge to the outside of the fill. Place a checkmark in the option to activate it.

☐ Use Smooth Edge

- Using the **Smooth Edge** option creates a crisp edge to the fill which can be used to make specific areas in the design stand out.
- It is also a useful option when an outline is not applied to the area or design to provide a clean edge.
- The **Smooth Edge** creates small stitches in the designs.




9. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
10. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically Generate the stitches.
11. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

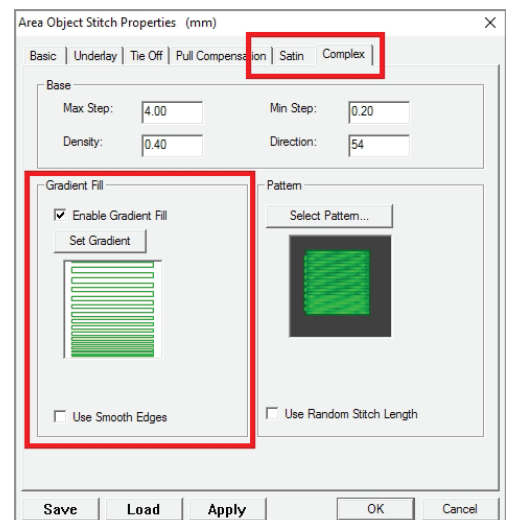
Gradient Shading Effects

In **Generations™** you can apply gradient shading to Complex, Satin, Radial, Appliqué, and Arc fill patterns. **Gradient Shading** allows you to add texture and subtle shading to your designs using the **Gradient Wizard**.

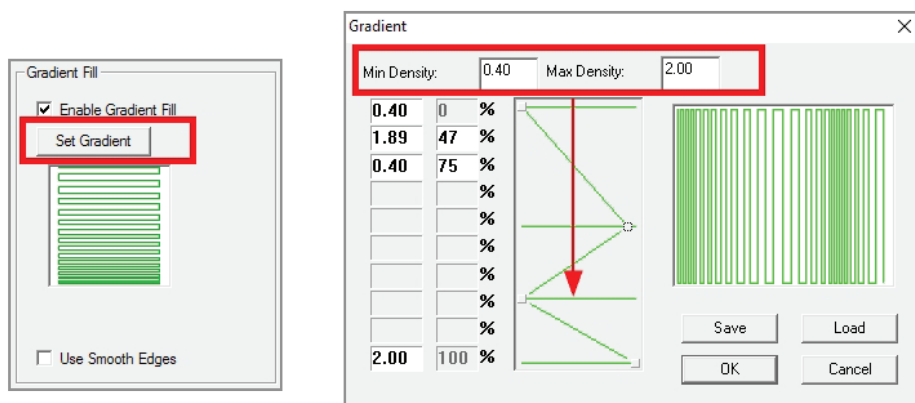
Gradient Shading can be created in as a single or double layer through the **Accessories** and then **Create Gradient Shading** menu option.

Creating One Layer Gradient Shading

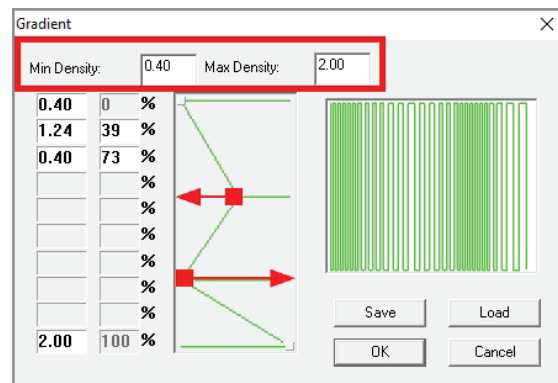
1. Select the area where you wish to place the shading with a **right click**. The area will show selected with the blue flashing marquee lines.
2. Select **Stitch** then **Stitch Settings** from the menu to open the **Stitch Properties** dialog box.
Or
Press the **[Spacebar]** on the keyboard.
Or
Click on the  **Stitch Settings** icon from the toolbar.
3. When the stitch setting window opens, select the appropriate tab for the stitch type generated.



- If the stitch setting is on **Auto Judge**, but the area fills with a complex fill, select the **Complex Fill** tab.
 - If the area fills with a satin stitch, then select the **Satin** tab at the top of the **Stitch Properties** dialog box.
4. In the **Stitch Properties** dialog box, place a check mark next to **Enable Gradient Shading** and then click on the **Set Gradient** button to open the **Gradient Wizard**.
 - With the **Gradient Wizard** you can create patterns and save them for future use or you may choose patterns in the program by selecting the **Load** button.




5. To create a pattern, **left click and drag** the green line at the top or bottom of the **Gradient** window into the desired position.
6. The second **Min Density** field will become active and display a density setting of 0.40 or 2.0 in millimeters.
 - If working in inches you will have different measurements.
 - The **location percentage** will become active and display the position where the new density for the gradient fill will change.
7. To activate additional settings, **drag** from the top or bottom and add more lines as needed.
8. To change the **Density** settings on the new lines, **left click** on the small square located on the bar and **drag** it to the right or left, depending on the effect you wish to create.
 - The Preview window will display the effect as each change is made.
 - Density for the Gradient area is controlled by the Max and Min values and the values assigned through out the fill.

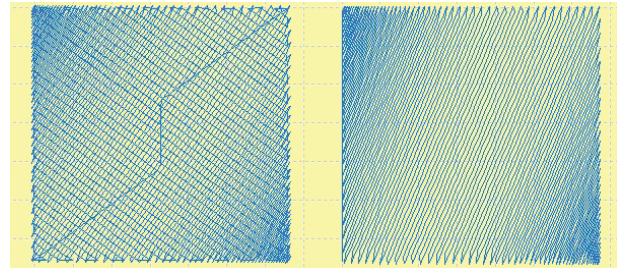
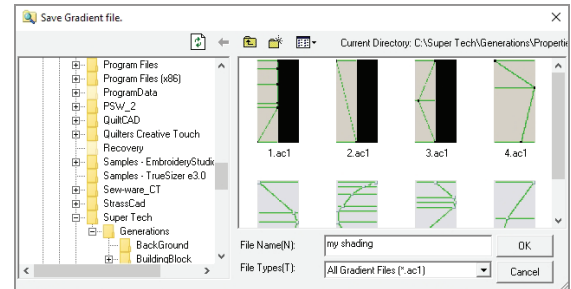


9. When you are satisfied with the created gradient pattern, select **OK** to return to the **Stitch Properties** dialog box.
10. Or, you can choose to save the **Gradient pattern** you just created. Select **Save** to save the pattern you have created for future use. The **Save Gradient File** dialog box will open and default to the **Gradient** folder.

Note: You may save the pattern files in any folder you like by selecting a new location from the folder tree.

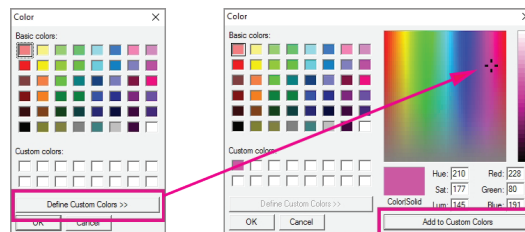
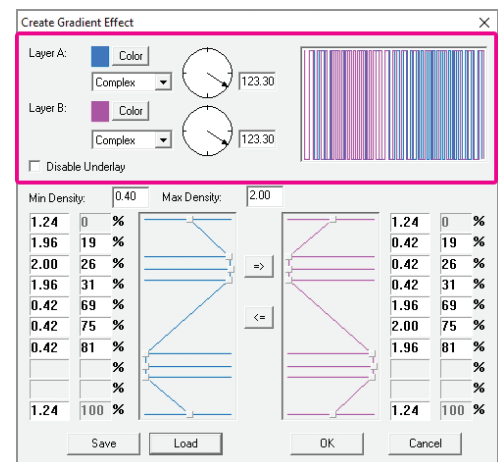
11. Enter a **pattern name** in the floating dialog box and press enter, then select **OK** to return to the **Stitch Properties** dialog box.
12. Click on **OK** to exit the dialog box and automatically Generate the stitches.
13. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

TIP: To create better Gradient shading, disable the Underlay option from the Stitch Properties Basic tab and if necessary move your In and Out points to remove any travel stitches when possible.



Creating Two Layer Gradient Shading

1. **Select the area** where you wish to place the shading with a **right click**. The area will show selected with the blue flashing marquee lines.
2. Select **Accessories** then **Create Gradient Shading** from the menu. The Two Color Gradient Shading Wizard opens.
 - **Layer A** is the original layer and **Layer B** is the layer that will be created.
 - The layer color chips show the color of the area you have selected and the color of the second layer that will be created.
3. To change the **color selection** for one or both colors, click on the **Color** button next to the color chip to open the Windows® Color Palette. You may select from the standard colors or create your own custom color.



4. The **Stitch Direction** settings allow you to change the stitch angle by **dragging** on the arrows or entering an exact number for one or both layers of fill.
 - The **Two layer Pattern Preview** will show the two colors and the pattern as changes are made.

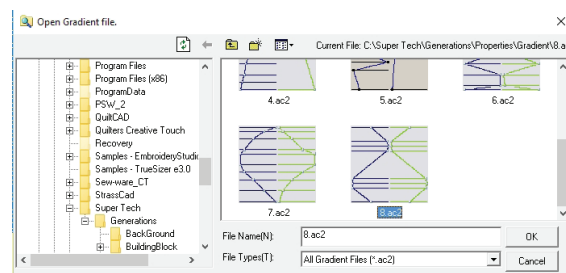
5. **Disable Underlay**, if selected, will disable the underlay on the first layer of stitching.
 - The second layer has no underlay unless underlay is added through the Stitch Properties.

6. The **Pattern Settings** allow you to create the patterns in one or both areas that you desire for the two color gradient shading.

Or,

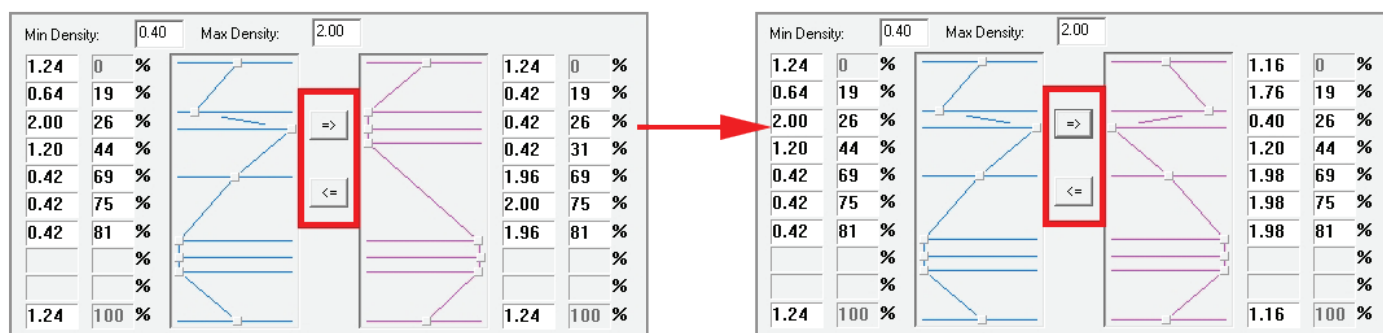
You may choose to use one of the patterns included in the Generations™ program by selecting Load.

- The Open Gradient File dialog box will open and thumbnail images of the saved patterns will display.



Note: Refer to the previous section on Creating One Layer Gradient Shading for instructions on setting the pattern density and location.

- Select the desired pattern by double clicking on the thumbnail and the pattern will be inserted into the **Gradient Shading Wizard**.
7. The **Create Reverse Pattern** button will create the opposite gradient pattern needed to compliment the selected pattern.
 - You may create a pattern for **Layer A** and **reverse** the pattern for **Layer B**, or create a pattern in **Layer B** and **reverse** it for **Layer A**.



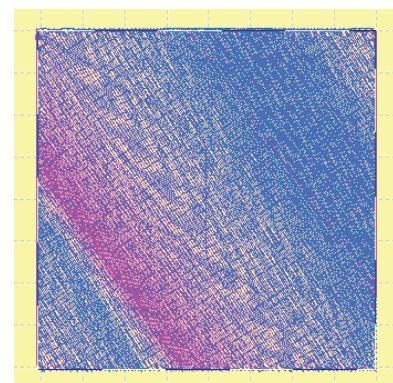
8. If desired, you can choose to save the **Gradient** pattern you just created.

Select **Save** to save the pattern you have created for future use.

- The **Save Gradient File** dialog box will open and default to the Gradient folder.
- Enter a pattern name in the floating dialog box and press enter, then select **OK** to return to the Stitch Properties dialog box.

9. When you are satisfied with the created gradient patterns, click on **OK** to exit the dialog box.

10. You must  **Generate** to create the two layers of gradient shading.



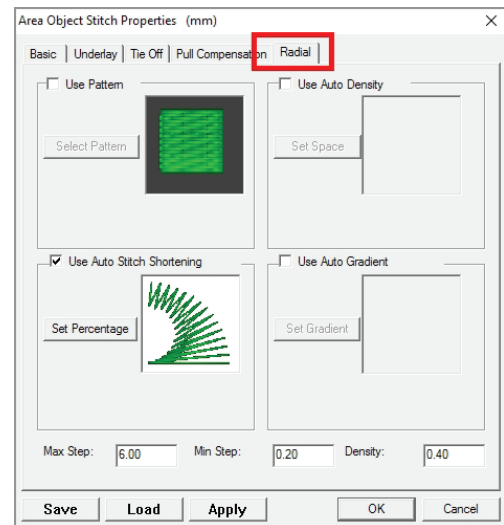
Radial Settings

A **Radial Fill** is a pattern that radiates the stitching from a central point. In **Generations™**, you can create radial fills that use a feathered edge, and that contain a fill pattern or a stamped pattern for texture and to add interest to the area.

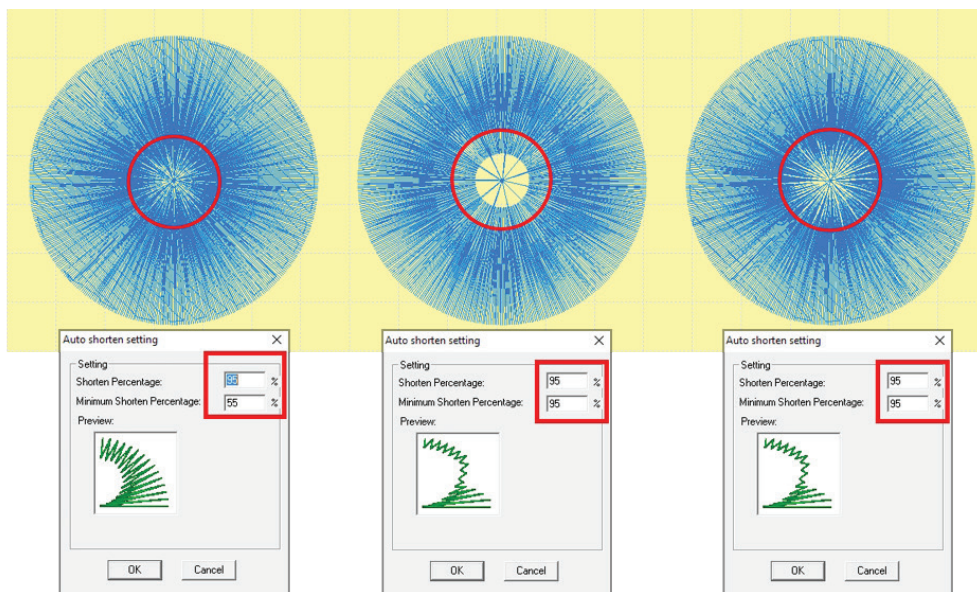
Changing the Radial Settings

1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic tab**, move the Slider bar over until you see the **Radial** thumbnail. Click on the thumbnail to select the fill type.
3. Click on the **Radial tab** at the top of the dialog box to display the settings.
4. If desired, you can click on the **Select Pattern** button and choose one of the pre-programmed fill effects, or create one of your own.
5. You can create some interesting effects by playing with the **Auto Stitch Shortening** settings.


Tip: If you make changes to the settings in AutoShorten and cannot remember what they should be, select Load Default Settings from the Basic tab.

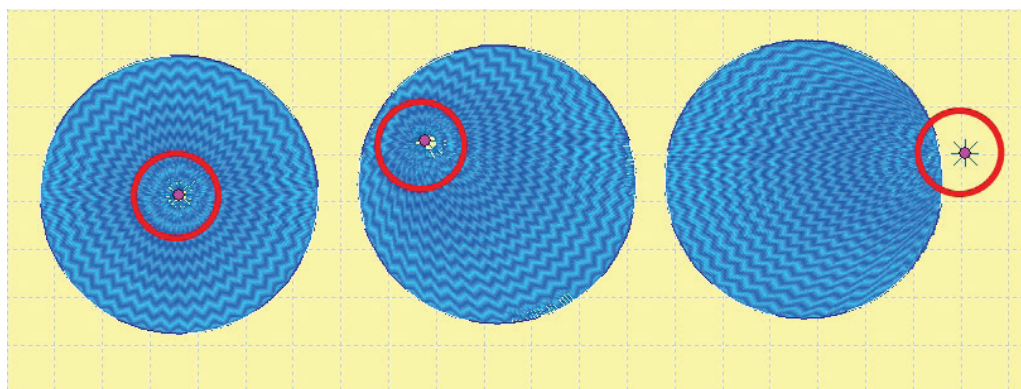


- Auto Stitch Shortening can be used to control the amount of stitching that is created at the radial point.



- The **Shorten Percentage** controls how far from the **radial point** the stitches will be shortened. The lower the percentage the further away from the **radial point** the stitches will be. 100% means that all stitches will meet at the **radial point**.
- The **Min Shorten Percentage** controls the minimum percentage of the stitches which will be shortened from the **radial point**. The higher the percentage the more stitches at the radial point will have shortening applied to them.

6. If you would like to add a **Stamped Pattern** to the fill, in the **Basic tab** click in the box for **Stamped Pattern** to activate it.
7. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
8. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically Generate the stitches.
9. If you had de-activated automatic stitch generation in the View Preferences menu, you will need to  **Generate** the stitches.
10. If you would like the pattern to radiate from another location, **left click on the pink dot** in the center of the radial area and **drag** it to a new location.
 - You can even drag the dot outside of the area for a unique effect.



Feathered Edge Effects

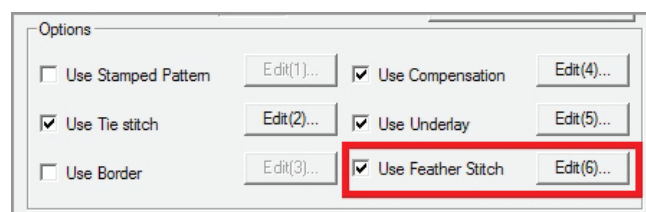
In Generations™, you may feather the edges of Complex, Satin, and Radial filled areas in several different ways. Feathered edge effects can be created using the basic feathered edge settings or by placing a new or saved pattern to the edges of the area.

Working with Feathered Edge Settings

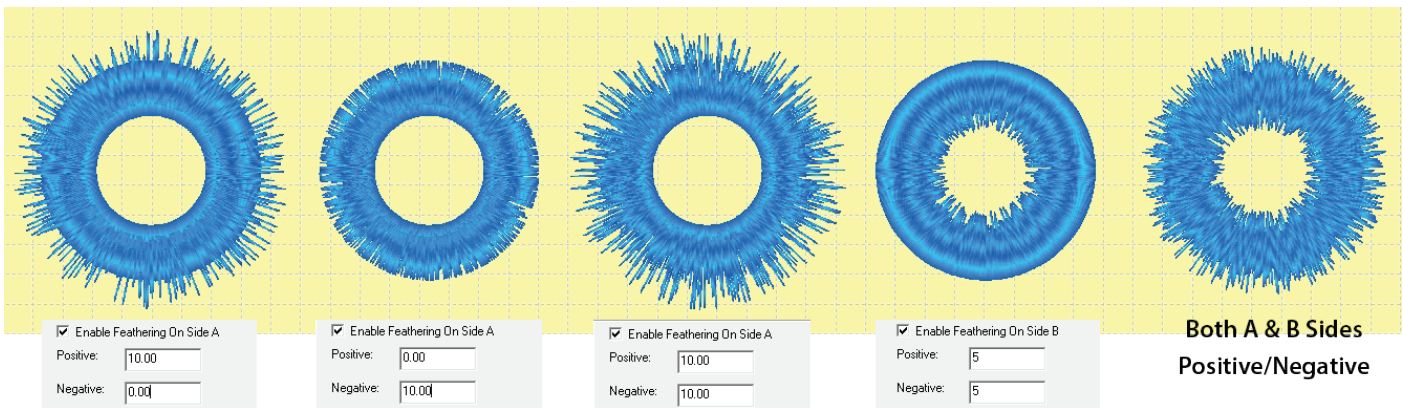
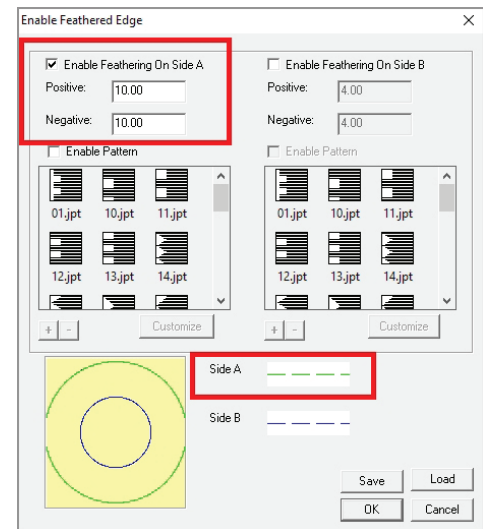
1. Select the desired area for the feathered effect.
 2. Select **Stitch** then **Stitch Settings** from the menu to open the **Stitch Properties** dialog box.
- Or
- Press the **[Spacebar]** on the keyboard.
- Or

Click on the  **Stitch Settings** icon from the toolbar.

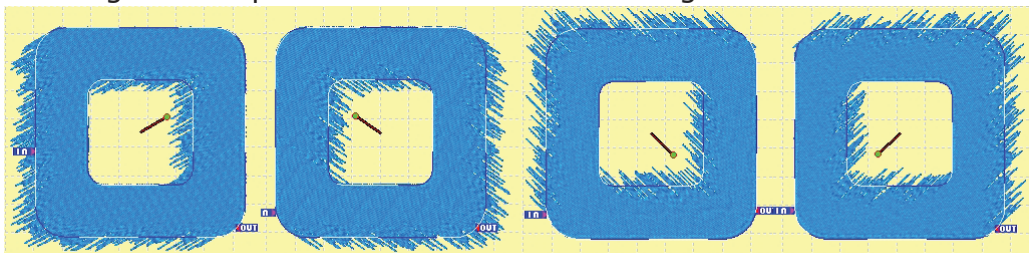
3. Place a check mark in the **Use Feathered Edge** option, then click on the **Edit** button which is now active to open the **Feathered Edge** dialog box.



4. Selecting the **A or B side** depends on the type of fill the **Feathered Edge** is being applied to.
 - For **Satin Fill** areas, use the **Color Key** in the lower left of the dialog box to determine which side of the area is being feathered.
 - Place a check mark in the **Side A** or **Side B** option at the top of the dialog box to enable the effect.
 - You may select **Side A**, **Side B** or both **Side A & Side B** to create feathered edges.
5. Set the **Positive** and **Negative** values for the desired amount of feathering.
 - The **Positive** value creates feathering outside the area.
 - The **Negative** value creates feathering inside the area.



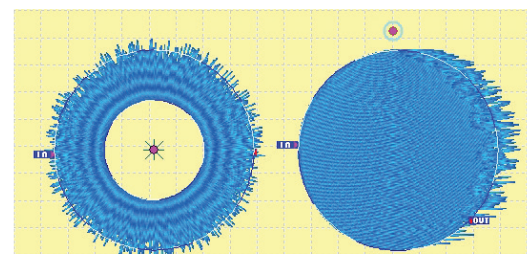
6. Side assignments for Complex, Arc, and Radial fills are based on the stitch direction or placement of the Radial or Arc dot.
 - Feathering for Complex fills are based on the angle or direction of the fill pattern.




Complex Fills - Side A Positive and Negative Settings Enabled

- Feathering for Radial and Arc fills is based on the position of the Radial or Arc Dot.

7. Click on **OK** to exit the **Feathered Edge** dialog box.





Side A Positive and Negative Settings Enabled

- Click on **OK** to exit the **Stitch Properties** dialog box and automatically **Generate** the stitches.
- If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Using Feathered Edge Patterns

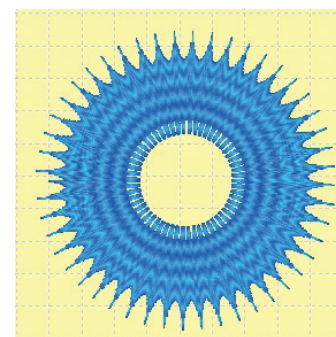
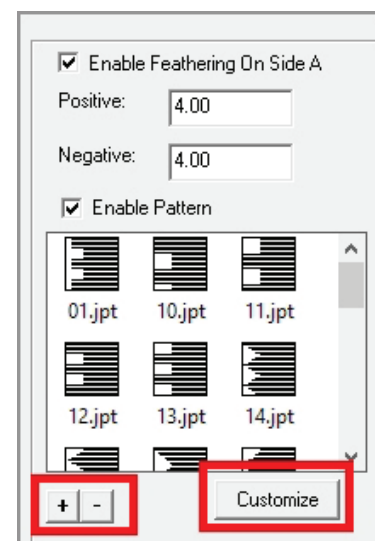
- Select the area, open the **Stitch Properties** dialog box, activate the **Feathered Edge** effect and click on the **Edit** button to open the **Feathered Edge** dialog box, as explained in the previous section.
- Place a checkmark next to the **Enable Pattern** option.
- Select the desired **feathered edge pattern** from the window.

If you have **created** and saved feathered edge patterns in another folder, click on the  icon to access your hard drive and **load** the pattern in to the window.

- To **remove patterns** from the display window (not the hard drive) click on the  icon and the pattern will be removed from the window.
- Feather Edge Patterns** may have positive or negative only settings, depending the pattern selected. You can increase those settings as explained in the previous section.

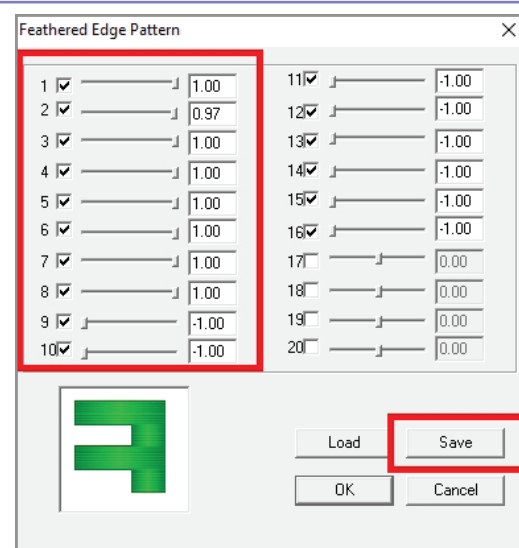
- Feather Edge Patterns can be applied to both Side A and Side B.
- You can use different patterns for each side is desired to create unique feathered effects.



- Click on **OK** to exit the **Feathered Edge** dialog box.
- Click on **OK** to exit the **Stitch Properties** dialog box and automatically **Generate** the stitches.

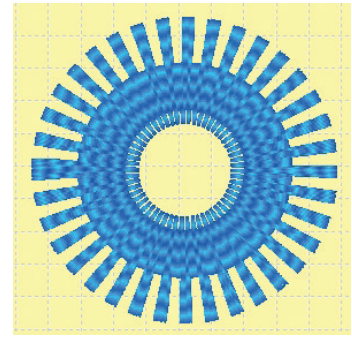


Creating Feathered Edge Patterns

- Select the area, open the **Stitch Properties** dialog box, activate the **Feathered Edge effect** and click on the **Edit** button to open the **Feathered Edge** dialog box, as explained in the previous section.
- Place a check mark next to the **Enable Pattern** option.
- Click on the **Customize** button to open the **Feathered Edge Pattern Editor** dialog box.
- Place a checkmark next to the number of **slider bars** you wish to make active.
- Move the slider bar by **left clicking and dragging** on the button, You will see the new pattern in the **preview window**.



6. When you have created the desired pattern, click on **Save** button to save the pattern.
7. Click OK to close the pattern editor window.
8. Click on the  icon to access your hard drive and **load** the pattern into the desired (A or B) pattern window.
9. Click on the newly added pattern and then click **OK** to exit the **Feathered Edge Pattern** dialog box.
8. Click on **OK** to exit the **Stitch Properties** dialog box and automatically **Generate** the stitches.
9. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

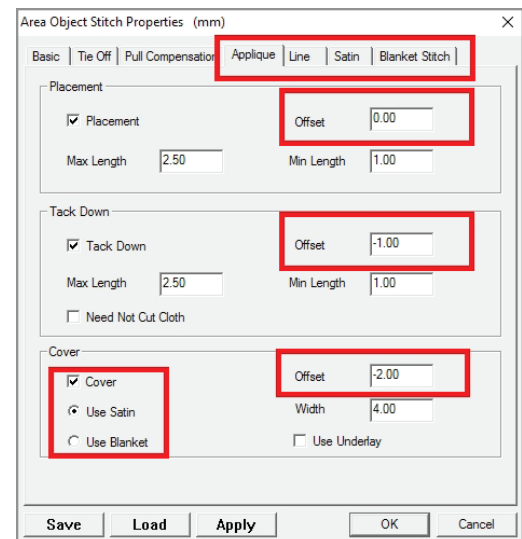


Appliqué Settings

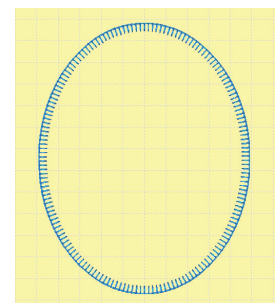
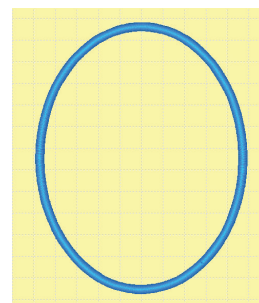
Creating an **appliqué** in **Generations™** is very fast. When you select this option, the program creates the running placement stitching so you can accurately position the appliqué fabric, the tack down stitch to hold the fabric in place, and the cover stitch to give the appliqué a finished edge.

Changing Appliqué Settings


1. **Select** the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic** tab, move the slider bar over until you see the **Appliqué thumbnail**. Click on it to activate the **Appliqué Settings** tab.
3. Click on the **Appliqué** tab at the top of the dialog box to display the settings.
 - There are controls for three lines. The **Placement line**, which indicates where the appliqué fabric should be placed on the garment.
 - The **Tackdown line** which will stitch the appliqué fabric to the garment.
 - The **Cover stitch** which will cover the tackdown stitching and the raw edges of the fabric for the design.
 - There are two styles of cover stitching: **Satin** and **Blanket**.



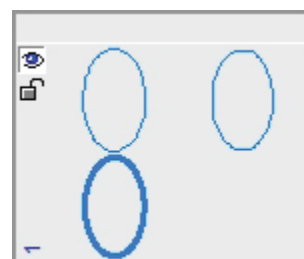
4. If desired, you can use a **negative number** in the placement option to move the line inside the area edge. Use a positive number to move the line outside the area edges.
 - In the **Appliqué Settings**, you can change the setting and placement of all three lines, or deactivate them to remove them from the stitch sequence.



- Use a value of 0 to place the line directly on the area edge. This setting should be used when creating a **Blanket Stitch** cover stitch.

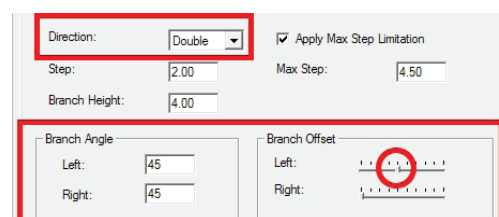
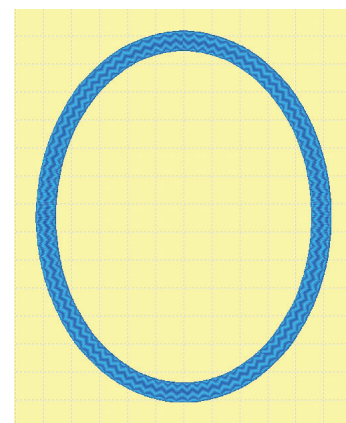
5. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
6. After making changes in the various tabs, click on **OK** to exit the dialog box and automatically **Generate** the stitches.
7. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.


Note: In the Stitch Sequence Viewer, an appliqué area will show as a three stitch thumbnail section, so that it is easy to pick out from other areas in the design.

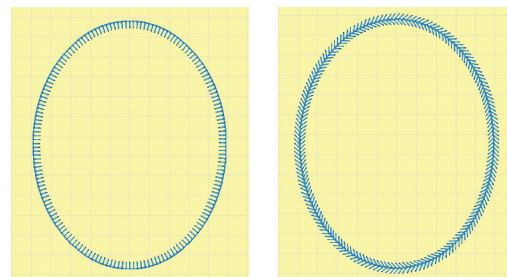


8. When **Appliqué** is selected, several additional tab appear at the top of the **Stitch Properties** dialog box.

- The **Satin** tab allows you to control the satin settings of the line. You can add a stitch pattern or create a **pattern** and apply it to the satin stitching of the appliqué cover stitch.
- You can control the **stitch spacing** or density of the satin stitching.
- The **Break Long Stitch** option can be applied for wide satin cover stitching.
- If the **Blanket Stitch** is selected, you can access the **Blanket Stitch** controls and setting. Click on the **Blanket Stitch** tab.
- **Direction** controls the branches or "E" portion of the blanket stitching.
- **Step** controls the stitch length between the branches.
- **Apply Max Step Limitation** restricts the Step stitch length, but can be edited to increase the length as desired.
- **Branch Height** controls the height of the "E" stitching.
- **Branch Angle** controls the angle of the branch or branches.
- **Branch Offset** controls the placement of the Right and Left branches on the line.



9. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
10. After making changes in the various tabs, click on **OK** to exit the dialog box and automatically **Generate** the stitches.
11. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

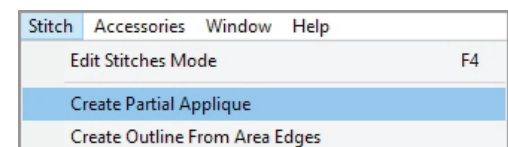
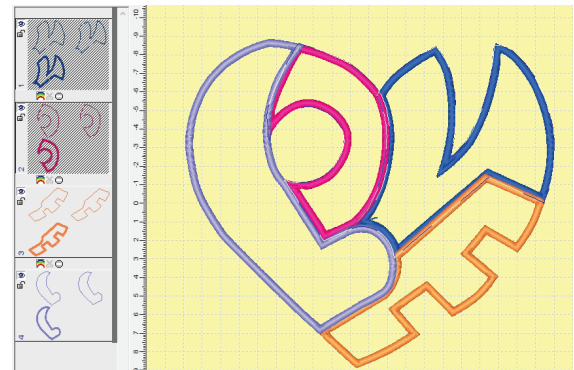


Partial Appliqué

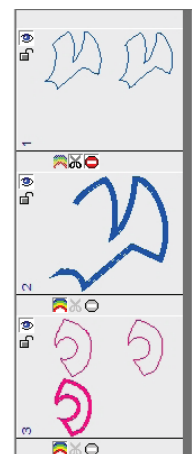
Creating a multi layer **appliqué** in **Generations™** is very easy. When you have two or more areas in a design with the Appliqué setting, you can quickly convert the bottom appliqué layers into a partial appliqué and avoid double or overlapped satin stitching where areas meet or overlap.

Creating Partial Appliqué

1. To create **Partial Appliqué** objects digitize or create the appliqué shapes or convert automatically digitized areas to **Appliqué** using the **Stitch Properties**.
2. Press and hold the **[CTRL]** key and **right click** the mouse on the first and then the second area you desire to create **Partial Appliqué** from.
OR
Press and hold the **[CTRL]** key and left click on the first cell and then the second cell in the **Stitch Sequence Viewer** containing the areas you wish to create **Partial Appliqué** from.
 - The areas will be surrounded by **blue and white flashing** marquee lines indicating that they are selected for editing.



3. Click on **Stitch** from the **main menu** and then select **Create Partial Appliqué** from the drop down menu.
 - You can create as many **Partial Appliqué** sections as needed for the design, but only two sections can be selected at one time.
 - Once the option is selected from the menu, the appliqué area that is on the bottom layer will be converted into a **partial appliqué**.
 - The first cell for the partial appliqué area is controlled by the **Appliqué Settings** in the **Stitch Properties**. This is the placement and tackdown line option.
 - The **cover stitch** is not converted into a line and may be edited as needed, or converted to an area using the **Outline Editing** tools.



4. Repeat the process for any additional appliqué sections in the design. Edit the appliqué sections as needed to smooth joined appliqué sections.

Motif Fills

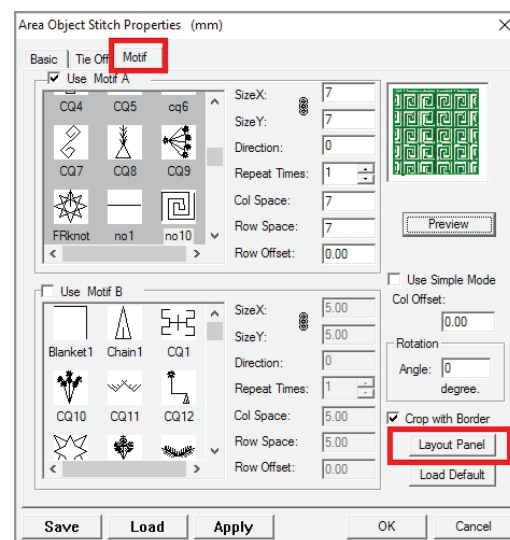
Another way to create interesting texture and effects in **Generations™** is to use **Motif fills**. A motif is an open, lacy fill used to cover an area.

In **Generations™**, the in and out points of a motif fill section are controlled by the program in order to optimize stitch sequence for that motif pattern. Due to this, you will see some motif settings with values already loaded, particularly the direction setting. You can change this number and the program will recalculate the in and out points to avoid jumps in the motif fill.

Changing Motif Fill Settings

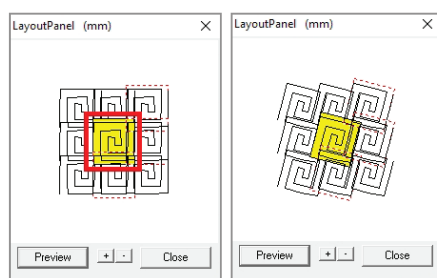
1. **Select** the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the Basic tab, move the slider bar over until you see the **Motif** thumbnail. Click on it to activate the **Motif Settings** tab.
3. Click on the **Motif** tab at the top of the dialog box to display the settings.
4. Select from the pre-programmed motif fills in the windows on the left side of the dialog box.
 - To use **two motif patterns**, check the option Use Motif B at lower left (Use Motif A is on by default).
5. If desired, you can make changes to the size, direction, stitch repeats, column spacing, row spacing and row offsets, by changing the numerical values in either the **Motif A** or **Motif B** sections.

Or, you can use the **layout panel** to make these changes.

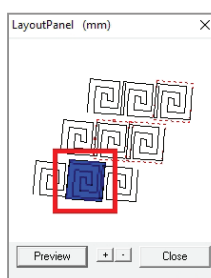


Tip: If you want the patterns to resize so that there is no distortion to the pattern, click on the Lock icon next to the X and Y value boxes. If you are going to edit the motifs in the layout panel, lock the sizes first before opening that window.

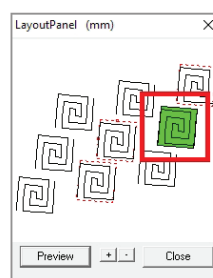
- Click on the **Layout Panel** button in the lower right of the menu. You can change the size and layout of both motif patterns using tools similar to those found in the stamped pattern menu.



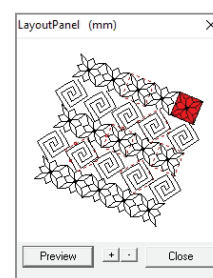
Center Square
Resize and Rotate



Blue Square
Row Space & Offset



Green Square
Col. Space & Offset

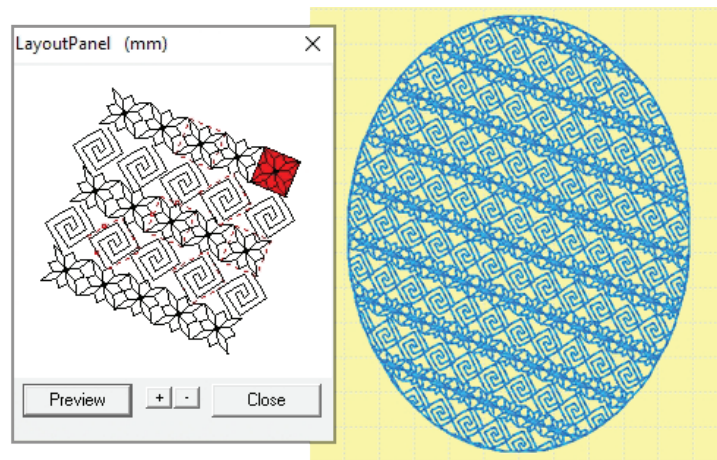


Red Square
Rotate Fill Direction

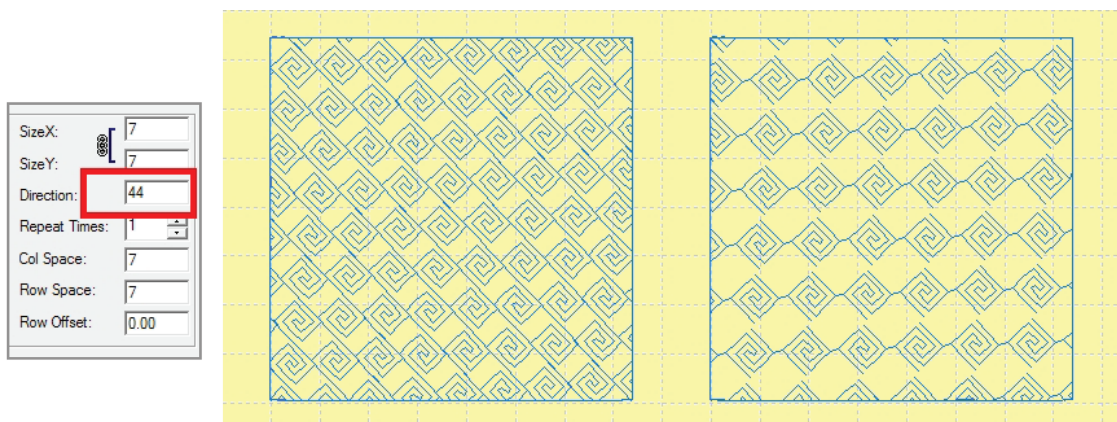
- To **resize**, select the square in the individual motif pattern and pull the **red node** until the motif is the size you want. You can change the height and width of the motif. **This square will also rotate the motif pattern.**
- To **rotate**, left click on the center square so that it highlights in yellow. Drag the

motif to the orientation you want.

- To **space** the rows, click on the bottom square in the patterns so that it highlights in blue. **Drag** the row apart to the desired distance.
- To space the **columns**, click on the square on the right side of the patterns so that it highlights in green. **Drag** the column apart to the desired distance.
- To **rotate** both motif patterns and stitching direction, click on the square in the upper right corner and drag the square until the fills are in the direction you want.
- When done editing, you can **preview** the results before closing the layout panel by clicking on the **Preview button**. A preview of the patterns shows in the main motif window preview section.
- When using two motifs, there are two sets of sizing, spacing and rotate controls. One set for Motif A and Motif B.

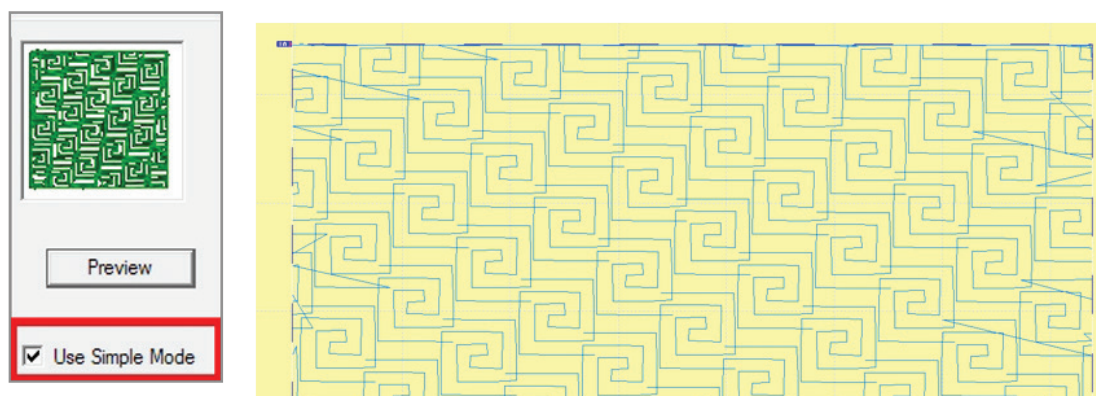



- When a motif is selected, the default settings for the motif are displayed. There is one setting that shows the best direction for the motif to be placed is called **Direction**.
 - The direction is determined by how the motif was created with regards to the in and out points in the motif.
 - To avoid jump stitches in the fill motifs should be touching. You can check your layout changes in Preview Window and on your work area screen.



- When changing the **Direction** of the motif fill, the program will attempt to route the stitching and may stitch over some of the previous fill, similar to travel stitching. This helps eliminate jump stitching within the filled area.

- Select **Use Simple Mode** to force the program to use only the motif in and out points if you wish to avoid travel stitching with in the motif. This may cause jumps to be placed into the fill.



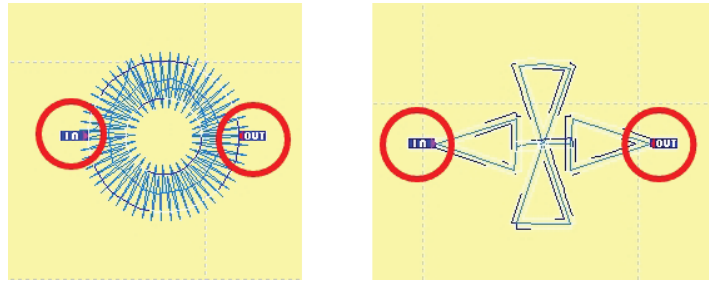
7. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
8. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically Generate the stitches.
9. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Tip: If you want to return to the original values for the motifs after editing, but you cannot remember what they were, open the Stitch Properties dialog box and on the Basic tab select the Load Default Properties option. This will load all default settings back into the program.

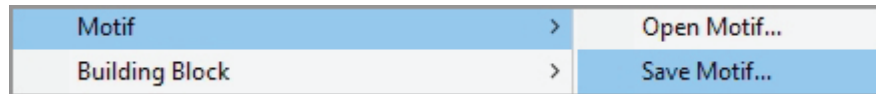
Creating New Motifs

Custom Motifs can be created in a similar manner as Stamped Patterns. They can be filled patterns or open patterns. Unlike Stamped Patterns, Motif Patterns must be one continuous piece to be saved.

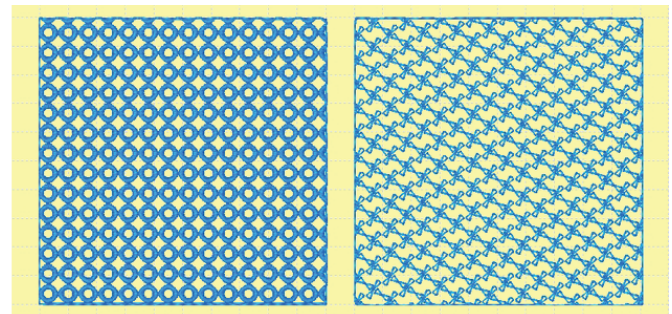
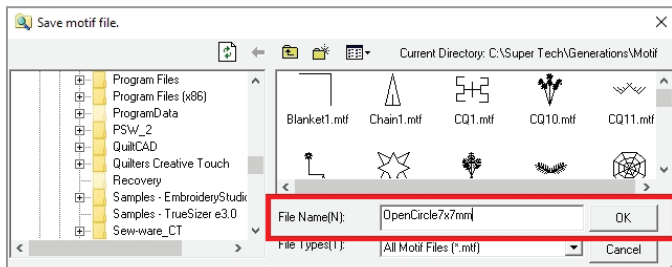
1. Create your motif file using automatic digitizing or manual digitizing.
 - Motif files are generally created to be small fills. Remember to resize your design prior to saving the file.
 - When a motif is created to be used at a larger size it is a good idea to place the desired sized into the name of the motif. For example: motif10mmx15mm. This will aid in changing the size when using the motif in a fill.
 - It is a good idea to use the **Stitch Properties** to remove the **Tie In** and **Tie Out** stitches and **Underlay** for motifs. The motif line or fill will automatically create the Tie in and Out stitching and underlay settings for small areas are not always necessary.
 - If you are creating a satin area motif and wish to have underlay, select **Center Run** as the underlay option for small motifs.
 - When creating running stitch or open motifs, change the line properties to **Running Stitch** and increase the **stitch length** using the **Stitch Properties**.
 - Remember to control the **In** and **Out** stitching points for better motif fills or lines.



- Motifs must be **one continuous** line or area in order to be saved in the **Motif Pattern** folder. If necessary, merge area and lines using the **Outline Editing** tools.
2. Select the design with a **right mouse click** or selecting the design from the **Sequence Viewer**. The area or line will be surrounded by blue and white flashing marquee lines.
 3. Select **Accessories** from the main menu and then **Motif**. Select **Save Motif** from the pop-put menu.



4. When the **Save Motif** dialog box opens, enter the motif name in the **File Name(s)** portion and then click OK to save the motif for future use.




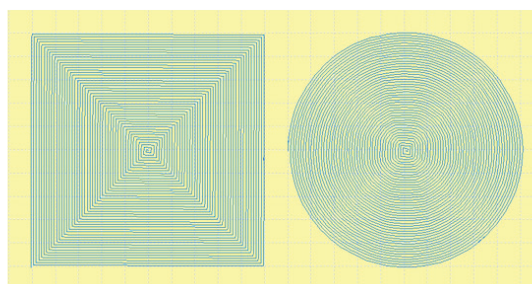
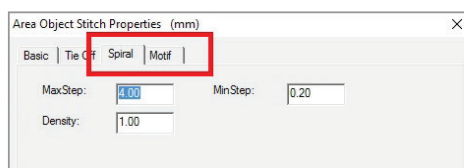
Spiral Settings

The *Spiral stitch* type creates a spiraling effect from the center to the outside edge of the area.

Changing Spiral Settings

1. **Select** the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic tab**, move the slider bar over until you see the **Spiral** thumbnail. Click on it to activate the **Spiral Settings tab**.
3. Click on the **Spiral tab** at the top of the dialog box to display the settings.
4. If desired, increase the **density** value to create a more open pattern.
5. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
6. Click on **OK** to exit the dialog box and automatically Generate the stitches.

7. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.



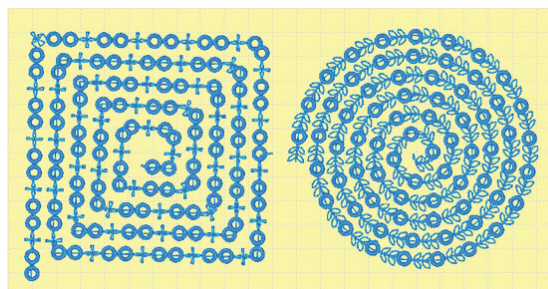
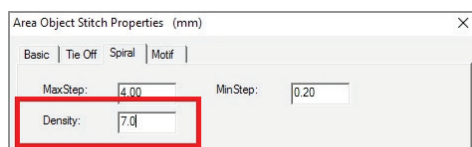
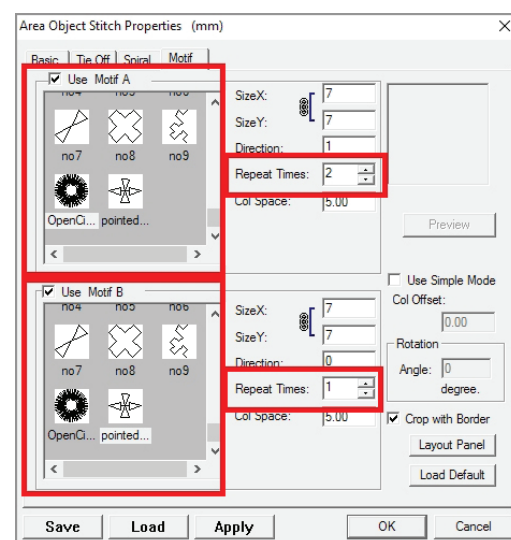
Spiral Fill with Motifs


Spiral fills in Generations™ can be created with a double running stitch (the default setting) or with one or more motif pattern stitches.

Creating a Motif Spiral

1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic** tab, move the slider bar over until you see the **Spiral** thumbnail. Click on it to activate the **Spiral Settings** tab.
3. Click on the **Motif** tab at the top of the dialog box to display the **motif settings**.
4. In the **Motif** menu, select a motif and lay out the motif as desired. Refer to the **Motif Settings** section for directions.
 - To change the setting in the **Spiral Density** or spacing, click on the Spiral Tab and enter a new density setting.

Note: You can also add two motif fills to the spiral fill and repeat each pattern up to three times.



5. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
6. Click on **OK** to exit the dialog box and automatically **Generate** the stitches.
7. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

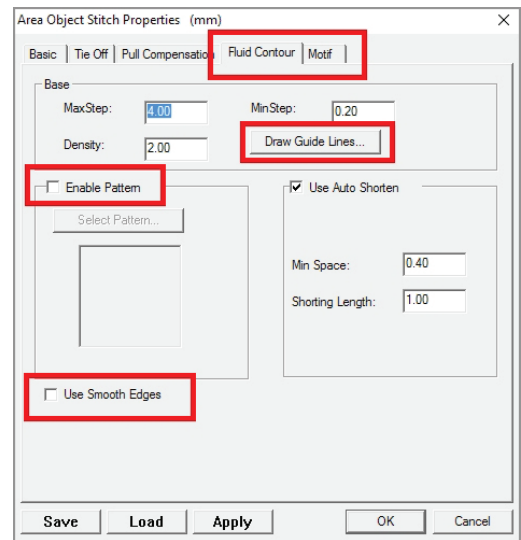
Fluid Contour Settings




The **Fluid Contour** effect creates a series of running stitches that follow the edges of an area to create an open fill. It is used to give dimension and shape to an area. **Contour** uses varied stitch lengths and spacing between rows to achieve the effect.

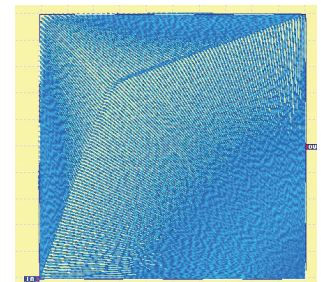
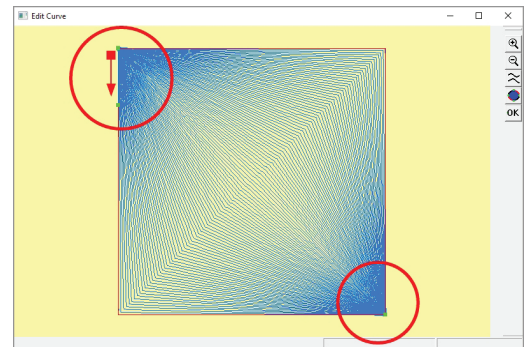
Contour fills in **Generations™** can be created with a running stitch (the default setting) or with one or more motif pattern stitches.

Changing Contour Settings

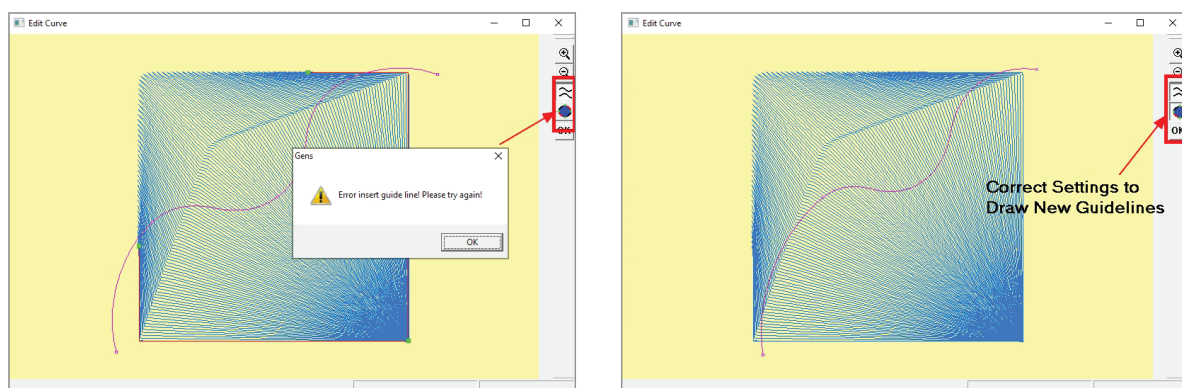
1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic** tab, move the slider bar over until you see the **Fluid Contour** thumbnail. Click on it to activate the **Fluid Contour Settings** tab.
3. Click on the **Fluid Contour** tab at the top of the dialog box to display the settings.
4. If desired, you can change the **Density** setting. A larger number will produce a more open fill.
5. If desired, activate the option **Enable Pattern** then click on the **Select Pattern** button to select from the pre-programmed fill patterns.
 - Using a **fill with contour stitching** can create a very textural effect.




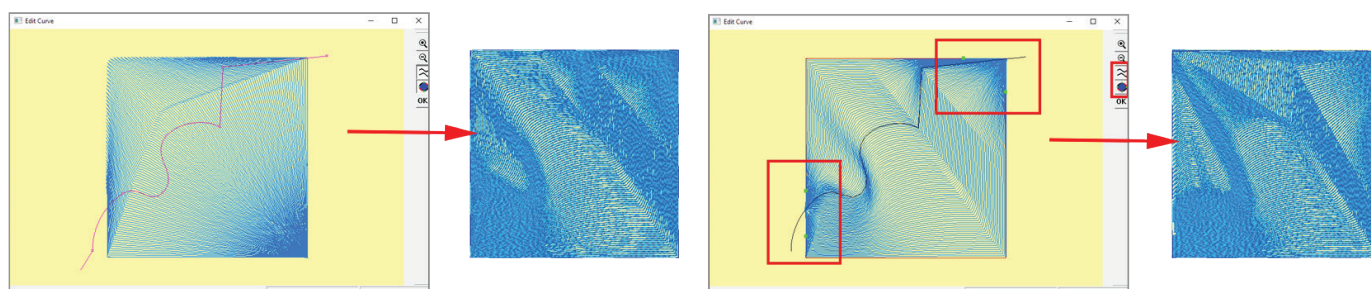
6. If desired, click on the  icon to activate view of the **Stitch Direction Guidelines**.
 - If necessary, use the **Zoom In** or **Zoom Out** icons in the toolbar at the right side of the box to adjust the view of the selected area.
7. **Drag** the green guideline handles to adjust the flow of stitching.
8. Click on the **OK** icon to accept changes and exit the **Edit Curve** window.
9. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
10. Click on **OK** to exit the dialog box and automatically **Generate** the stitches.
11. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.
12. If desired, click on the  **Draw Guidelines** button to precisely control the flow of the fill. The **Edit Curve** dialog box opens.




- You must click on the  **Show Guidelines** icon to de-activate that in order to create new Guidelines.



- If necessary, use the **Zoom In** or **Zoom Out** icons in the toolbar at the right side of the box to adjust the view of the selected area.
- Draw** the first guideline across the area. Place the cursor outside the area and click to insert points.
 - A **left click** creates a straight or sharp point.
 - A **right click** creates a curve or smooth point.
 - Press **[Enter]** on the keyboard to complete the guideline.
 - The **guideline** must begin and end outside of the area. If you create an invalid guideline, the following error message displays.
 - Repeat Steps 8 and 9 to create additional guidelines if desired.
 - A **guideline** can not cross over a previously drawn guideline. If you draw a line that does, the error shown above will display and you will need to re-draw the line.
 - If desired, click on the  icon to activate view and editing of the **Stitch Direction Guidelines**.
 - Drag the green **guideline handles** to adjust the flow of stitching.
 - Click on the **OK** to accept the new guidelines and exit the **Edit Curve** window.

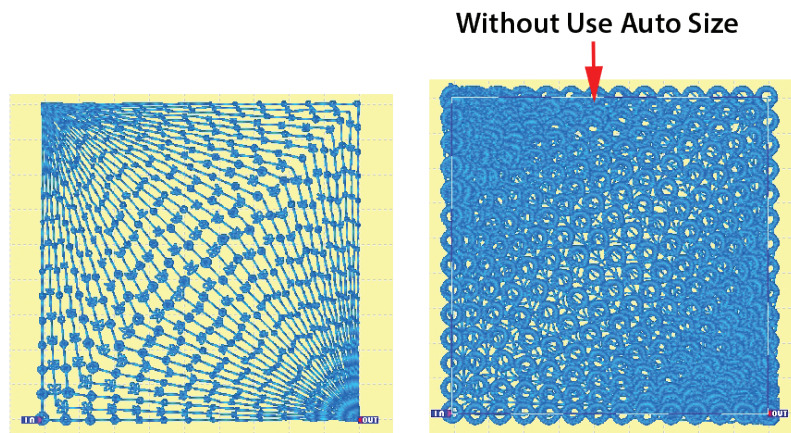
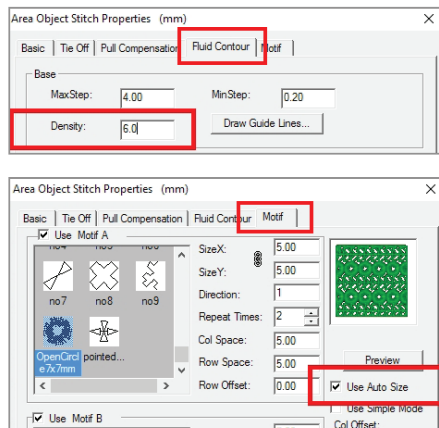



19. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
20. Click on OK to exit the dialog box and automatically **Generate** the stitches.
21. If you had de-activated automatic stitch generation in the **View Preferences** menu, you will need to  **Generate** the stitches.

Creating a Motif Fluid Contour

1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the Basic tab, move the slider bar over until you see the **Fluid Contour** thumbnail. Click on it to activate the **Fluid Contour Settings** tab.
3. Click on the **Motif tab** at the top of the dialog box to display the motif settings.
4. In the **Motif** menu, select a motif and lay out the motif as desired. *Refer to the Motif Settings section later in this chapter for directions.*
 - * If desired, select the **Auto Size** option

Note: You can also add two motif fills to the fluid contour fill and repeat each pattern up to three times.
5. If desired, click on the **Fluid Contour** tab at the top of the dialog box to adjust the settings and draw guidelines as explained in the previous section.
6. You may want to change the **density** setting to control the space between the motifs.
 - A number that is smaller than the motif size will have the motif repeats overlap one another. Use a larger number to create more space between motifs.





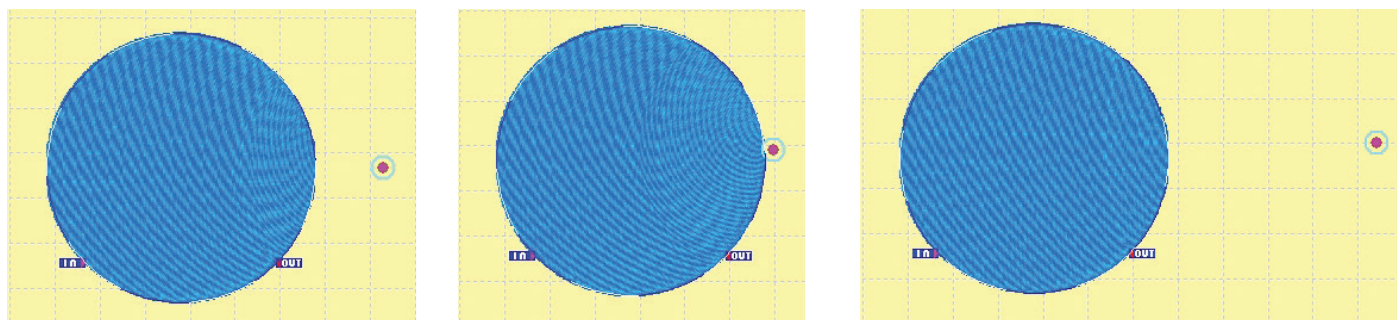
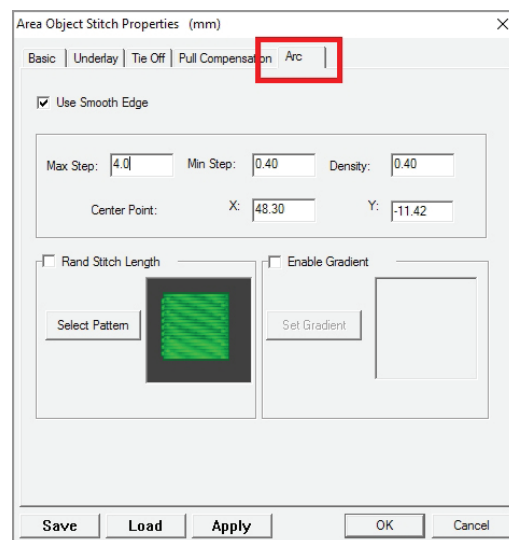
7. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
8. Click on **OK** to exit the dialog box and automatically **Generate** the stitches.
9. If you had de-activated automatic stitch generation in **View Preferences**, you will need to  **Generate** the stitches.

Arc Fill Settings

The **Arc fill** lets you arc the stitching in the design. You can also add split patterns, embossing and feathered edges to an **Arc fill** to add texture and flow in your designs.

Changing Arc Fill Settings

1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic** tab, move the slider bar over until you see the **Arc Fill** picture. Click on it to activate the **Arc Settings** tab.
3. Click on the **Arc Fill** tab at the top of the dialog box to display the settings.
4. In the **Arc Stitch** settings you can choose to apply a fill pattern, gradient shading, smoother edges or change some of the stitch property settings.
 - Refer to earlier sections in this chapter for information on these effects.
5. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
6. When you have finished making your selections, click on the **OK** button to exit the dialog box and automatically **Generate** the stitches with the **Arc Fill**.
7. If you had de-activated automatic stitch generation in **View Preferences**, you will need to  **Generate** the stitches.
8. To change the arc in the area, click on and **drag** the  **dot** to a new location.
 - The **further** the dot is from the area edge, the less severe the arc fill will be.
 - Placing the dot inside of the area will cause the arc effect to be flattened.
 - For best results, place the **dot** at the edge of the area.



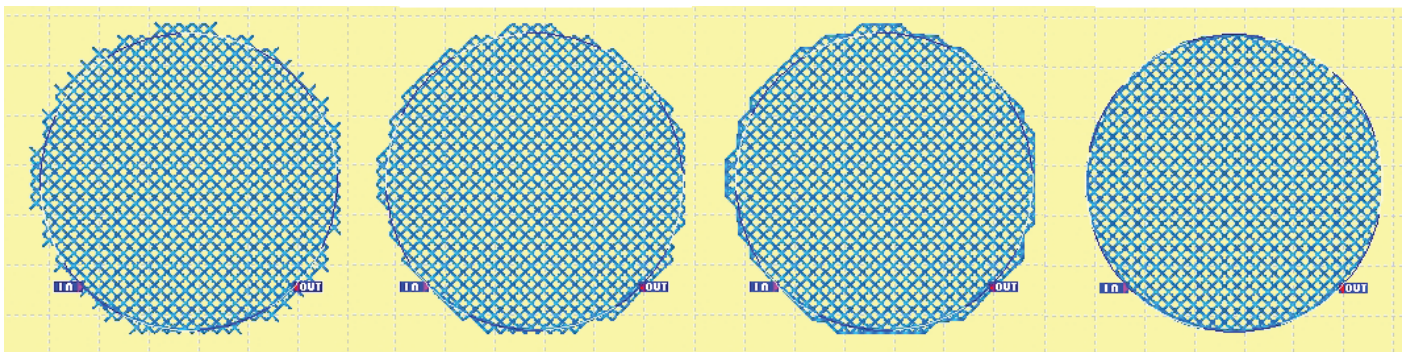
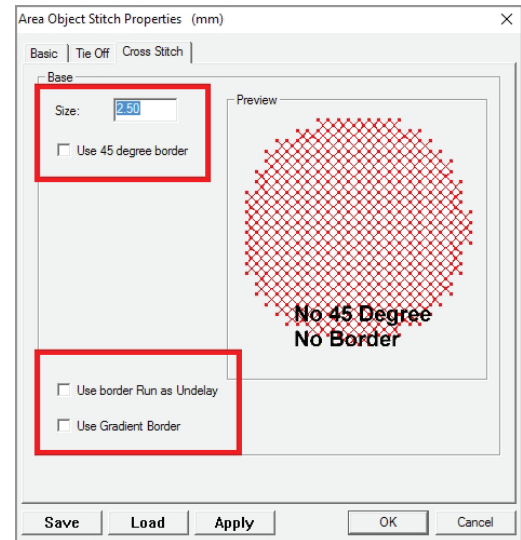
9. Remember to  **Generate** the stitches after moving the dot.

Cross Stitch Settings

The cross stitch duplicates the appearance of traditional hand embroidered counted cross stitch. Values to control the effect are found in the **Cross Stitch** tab, which appears only when this stitch type is selected.

Changing Cross Stitch Settings


1. Select the area and open the **Stitch Properties** dialog box, as explained earlier.
2. In the **Basic** tab, move the slider bar over until you see the **Cross Stitch** thumbnail. Click on it to activate the Cross Stitch Settings tab.
3. Click on the **Cross Stitch** tab at the top of the dialog box to display the settings.
4. If desired, change the number in the **Size** box to create smaller or larger cross stitches.
5. You can check the option to **Use 45-Degree Border** to have the program create a mock half cross stitch effect at the edges of the shape.
6. If you select **Use Border Run as Underlay**, the program will place underlay around the outline of the cross stitch that follows the edge angles.
7. If you select **Use Gradient Border**, the program will cut the cross stitches off at the area edges and contain the fill completely within the borders of the shape.



45 degree Border

Border Run as Underlay

Gradient Border

8. If you would like to see the changes take effect without exiting the dialog box, click on the **Apply** button to preview the settings.
9. After making changes in the various tabs (as explained in the following sections), click on **OK** to exit the dialog box and automatically **Generate** the stitches.
10. If you had de-activated automatic stitch generation in **View Preferences**, you will need to  **Generate** the stitches.




Embossed Effects

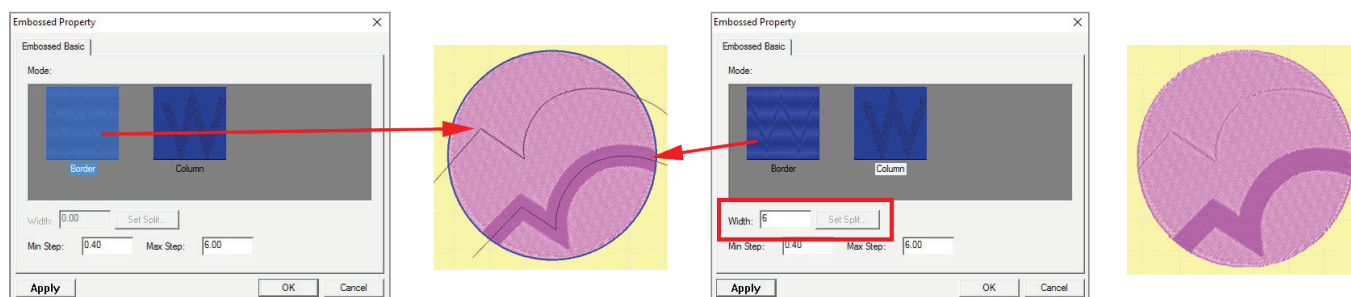
Generations™ software lets you create a custom effect known as embossing, in which shapes or lines are carved into an area in the design. You can also emboss over multiple areas.



Embossing can be applied to Satin Fills, Complex Fills and Radial Fills while using other texture options at the same time. Embossing options include Stamped Patterns, recessed, raised and border emboss effects.

The **Generations™** emboss interface uses the same familiar tools used for digitizing. You can also use the Copy and Paste commands between stitch view and emboss view to quickly manipulate emboss or outlining options. Embossed effects will automatically adjust when you make changes to the shape of the area or changes to fill type, fill pattern or stitch direction.


Embossing with Lines

1. In the main **Generations™** design window, use a **right click** to select the area(s) in which would like to place **embossed lines**.
2. Select **View** then **View Embossed** from the menu.
Or,
Click on the  **View Embossed** icon on the View toolbar.
3. Click on the **Create Freehand Line** icon in the **Create** toolbar.
4. Use **left** or **right mouse clicks** to draw a line that goes all the way across the area.
5. Press **[Enter]** on the keyboard to place the line.
6. If desired, repeat Steps 4 and 5 to insert additional lines.
7. Press **[Esc]** or **[Escape]** on the keyboard to end inputting of lines.
8. If the **Emboss Sequence Viewer** is not open in the program, click on the  **Stitch Sequence** icon to open it in the work area.
 - The line or lines you created are displayed in the **Emboss Sequence Viewer**.
9. **Left click** on the cell in the **Emboss Sequence Viewer** to select the line you created.
10. Click on the  **Stitch Setting** icon or press **[Spacebar]** on the keyboard to open the **Emboss Property** box.



- There are two **emboss** options for a line:
 - Border:** Border settings do not allow for width changes to be made to the lines.
 - Column:** Column is a recessed stitch type that will allow for width setting and maximum and minimum stitch lengths to be set for the stitching.
11. Select an **Emboss Type** from the options.
 12. Click on the **OK** button to exit the dialog box.
 13. You must  **Generate** the stitches to create the embossed effect.
 14. If you cannot see the embossed effect, click on the  **3D** icon to view the results.

Note: Even in Emboss View, you can see the 3D results of the embossing. You also will see the emboss areas or lines that were used to create the fill in this view.

15. If you want to leave the **emboss view** to better see the results in **3D stitch view**, just click on the  **View Emboss** icon to return to the main **Generations™** screen.

Embossing with Areas

1. In the main Generations™ design window, use a **right click** to select the area(s) in which would like to place embossed lines.
 2. Select View then **View Embossed** from the menu.
- Or,

Click on the  **View Embossed** icon on the toolbar.

3. You can use any of the following to create the area for embossing:



 **Insert Text**

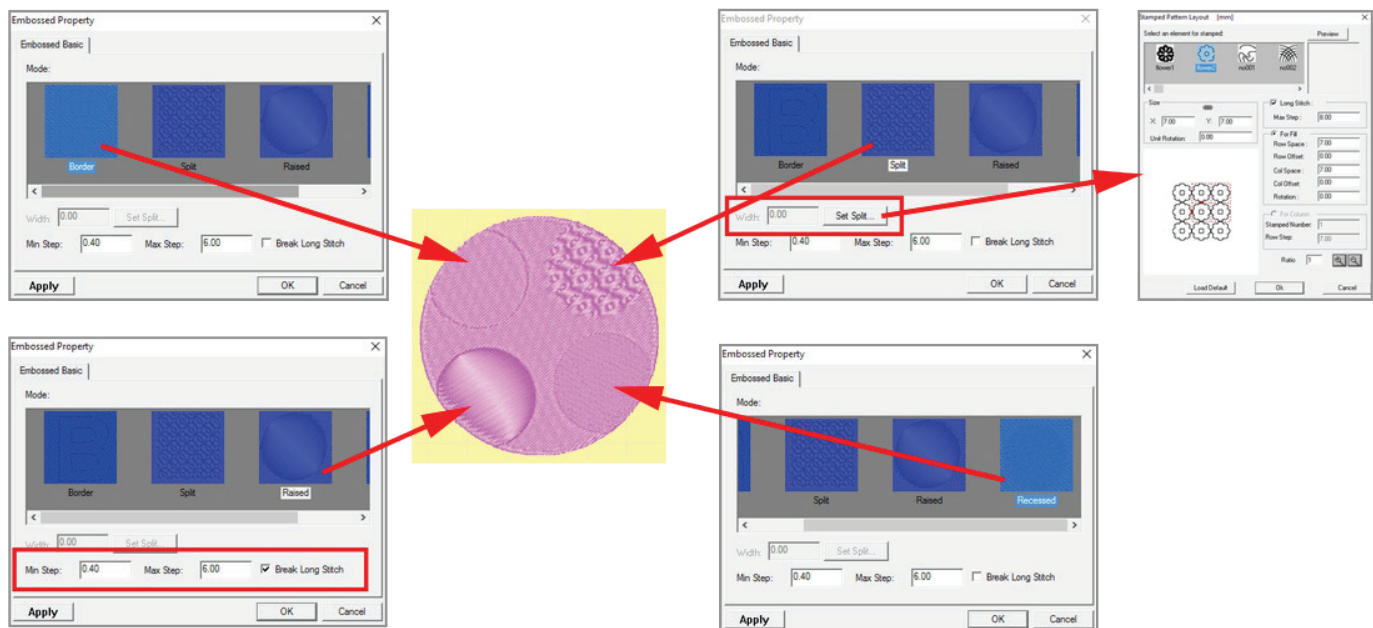
 **Create Freehand Area**

 **Create Rectangle**

 **Create Circle**

- Use these tools in the same way you would to insert lettering or manually digitize.

4. If the **Emboss Sequence Viewer** is not open in the program, click on the  **Stitch Sequence** icon to open it in the work area.
The area or areas you created are displayed in the Emboss Sequence Viewer.
5. Left click on the cell in the **Emboss Sequence Viewer** to select the area you created.
6. Left click on the cell in the **Emboss Sequence Viewer** to select the area you created.
7. Click on the  **Stitch Setting** icon or press **[Spacebar]** on the keyboard to open the **Emboss Property** box.



- There are four emboss options for an area:

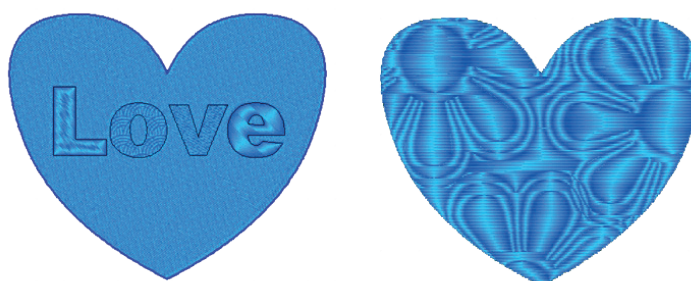
Border: the Border option traces an outline of the area created for the emboss effect. This option does not allow for width changes to the outline.

Split: the Split option lets you use the stamped patterns in the program to fill in the emboss area. Click on the Set Split button to open the Stamped Pattern menu where you can select the desired pattern and use the layout tools.

Raised: the Raised option fills the emboss area with satin stitching. With this emboss effect, the user can control the satin stitch length.


Recessed: The Recessed option fills the area with complex fill stitching. It uses a fill with a shorter than normal stitch length in the emboss area to create a different texture and pattern.

8. Select one of the **Emboss Type** options from the dialog box.
9. Click on the **OK** button to exit the property box.
 - These four options can be used as embossed fills for lettering patterns as well.
 - You can copy and pasted lines and areas from the main work area into the embossed and apply them as embossed stamps to any selected area.



10. You must  **Generate** the stitches to create the embossed effect.

Note: Even in Emboss View, you can see the 3D results of the embossing. You also will see the emboss areas or lines that were used to create the fill in this view.

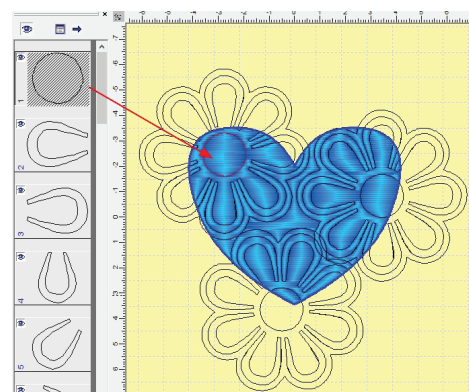
11. If you want to leave the emboss view to better see the results in **3D Stitch View**, just click on the  **View Emboss** icon to return to the main **Generations™** screen.



Editing Embossed Settings


1. Select View then **View Embossed** from the menu.
Or,

Click on the  **View Embossed** icon on the toolbar.

2. The **Embossed (Mask)** work area will open.
 - To apply an embossed pattern or mask to an area, the area needs to be selected from the main work area.
 - To edit an embossed area or line, the area does not have to be selected. When you select the embossed line or area from the **Stitch Sequence Viewer** the area that emboss setting is associated with will automatically be selected.



3. Click on the  **Stitch Setting** icon or press **[Spacebar]** on the keyboard to open the **Emboss Property** box.
 - If the selected emboss item is a line, only emboss line options will be available
 - If the selected emboss items is an area, only the emboss area options will be available.
 - To remove or delete the emboss item, select the item and press the **[CTRL] + [DEL]** key to remove it from the design.
10. You must  **Generate** the stitches to create the embossed effect.

Note: Even in Emboss View, you can see the 3D results of the embossing. You also will see the emboss areas or lines that were used to create the fill in this view.
11. If you want to leave the emboss view to better see the results in **3D Stitch View**, just click on the  **View Emboss** icon to return to the main **Generations™** screen.

Line Settings

Not all objects in your design will be areas. **Line Objects** are created automatically for very small sections in the design. You may have also created Line Objects manually, either using **Create Free Hand Line** from the Create toolbar or by using the **Outline** or **Stitch** Menu.

Just as with an area, there are options and settings you can control for a **Line Object** in the design.

Changing Line Properties

1. Select the line or lines that you want to change. You should see the **blue and white flashing marquee line** around the selected area.
2. Select **Stitch**, then **Stitch Settings**.

Or

Click on the  **Stitch Settings** icon in the top toolbar.

Or

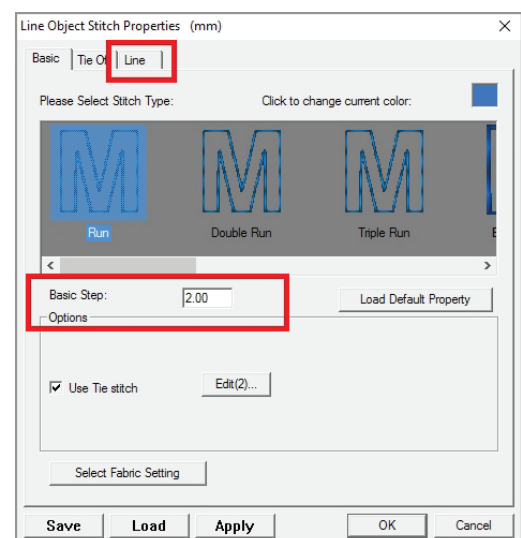
Press the **[Spacebar]** on the keyboard.

The **Line Object Stitch Properties** dialog box opens.

3. The **Stitch Type** thumbnails let you choose from standard or special stitch effects.
 - Some of the stitch types are not visible in the dialog box. Use the slider bar to see all of the options.

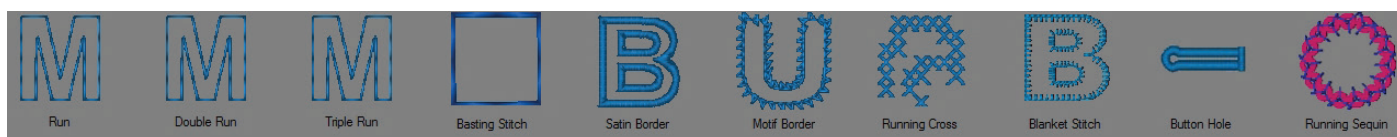
Run: A single line of running stitches. The values that control run stitches are found in the Line tab.

Double Run: A double line of running stitches. The values that control double run stitches are found in the Line tab.



Triple Run: A triple line of running stitches, sometimes referred to as a “bean stitch”. The values that control triple run stitches are found in the Line tab.

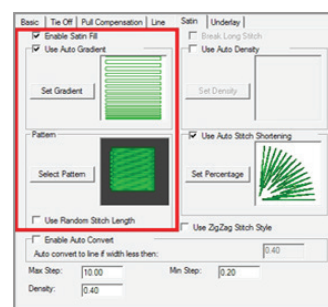
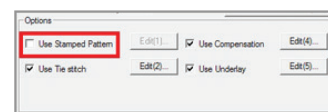
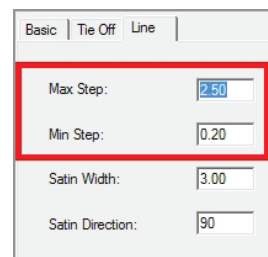
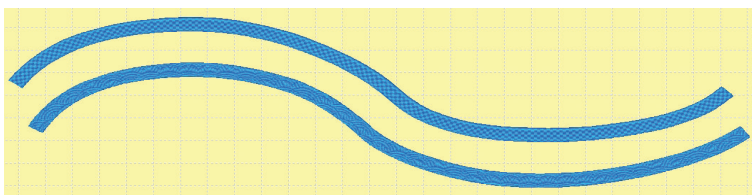
Baste: A running stitch line with a long stitch length design to hold layers together. This stitch can be easily removed after embroidery has been completed.



- Click on the **Line tab** at the top of the dialog box to control line settings. You can control the **minimum and maximum stitch lengths**, as well as the **width** for a satin border line.

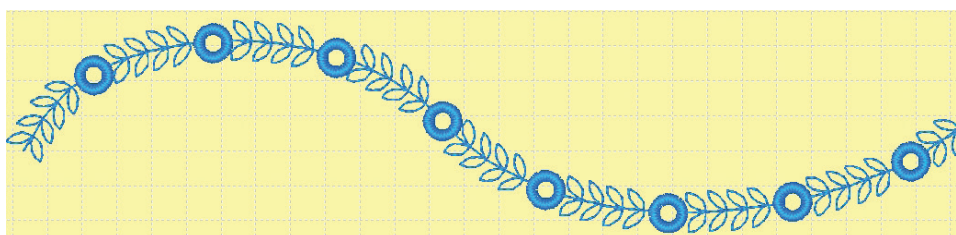
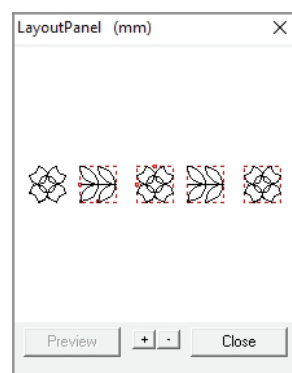
Satin Border: A satin column stitch that follows the line. This is the default stitch type for a line area.

- The values that control **satin border stitches** are found in the **Pull Compensation**, **Satin**, and **Underlay** tabs, which only appear when **Satin Border** is selected. The width of a Satin Border is controlled in the Line tab.
- Satin Borders** can have a **pattern**, **stamped pattern**, or **gradient** fill added to the line.



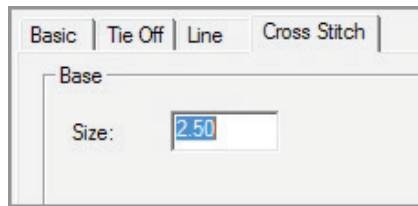
Motif Border: Repeated motif stitches that follow the path of the line. A motif stitch resembles a decorative sewing machine stitch. The values that control this effect are found in the **Motif tab**.

- The Motif tab only appears when this stitch type is selected.
- You can use **one or two** motifs in a line, repeating each up to three times. Use the **Layout Panel** to control spacing for the motifs.
- The **Layout Panel** for **Motif Lines** is similar, but you can only space along a line. If one motif used only set of controls will be available. If two motifs are used, two sets of controls will be available.



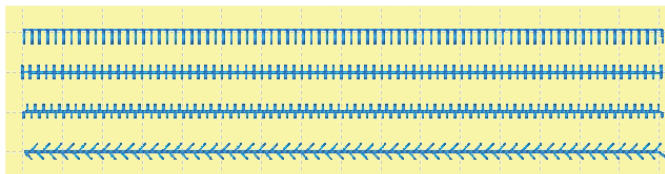
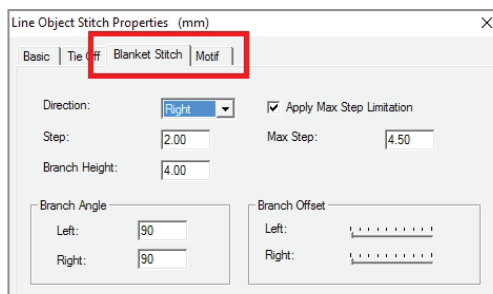
Running Cross: Repeated cross stitches that follow the path of the line. The cross stitch effect duplicates the appearance of traditional hand embroidered counted cross stitch.

- Values to control this effect are found in the **Cross Stitch tab**, which appears only when this stitch type is selected.



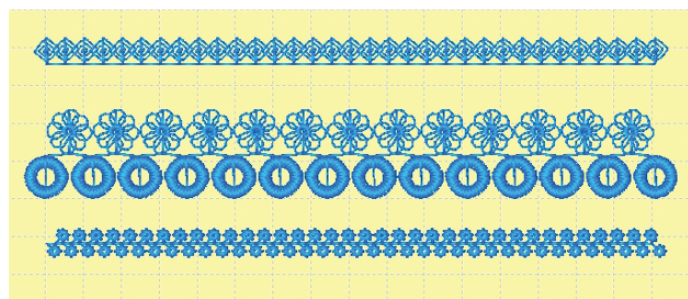
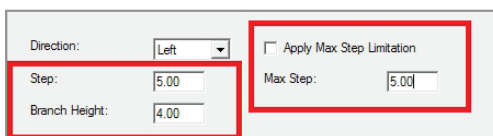
Blanket Stitch: Running stitches in a repeated “E” pattern that branch to either or both sides of the center line.

- This effect duplicates the appearance of traditional hand stitching. Values to control this effect are found in the **Blanket Stitch tab**, which appears only when the stitch type is selected.
- **Direction** controls the branches or “E” portion of the blanket stitching.
- **Step** controls the stitch length between the branches.
- **Apply Max Step Limitation** restricts the Step stitch length, but can be edited to increase the length as desired.
- **Branch Height** controls the height of the “E” stitching.
- **Branch Angle** controls the angle of the branch or branches.
- **Branch Offset** controls the placement of the **Right and Left** branches on the line.



- You can add **motifs** to the **Right or Left** branches for a unique effect. Click on the **Motif Tab** at the top of the Line Properties settings.

Note: When adding motifs to the branches, it is a good idea to change the Step and adjust the Apply Max Step Limitation settings if you do not want the motifs to overlap. The Branch Height will control the spacing of the motifs with regard to the center of the line. If the motif is 12mm, the minimum branch would be 6mm to avoid overlapping right or left branch motifs.

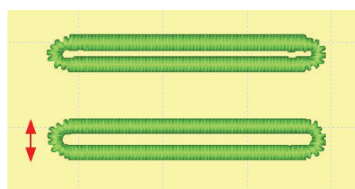
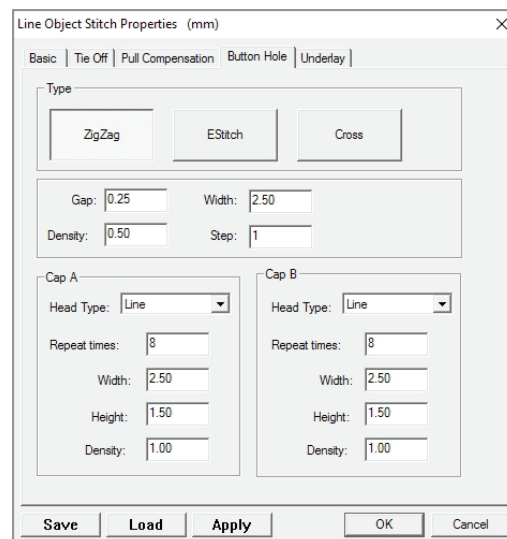


Buttonhole Stitch: Can only be applied to Line(s) in a design.

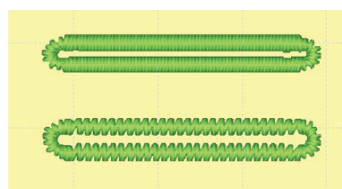
- **Right Click** on the line(s) that you would like to add the **Buttonhole Stitch Settings** to.
- Left click on your **Properties** icon on the View Toolbar - or - press the **[Spacebar]** on your keyboard to access the **Line Stitch Properties**.
- Scroll over to select the **Buttonhole Line Option** from the Line Object Stitch Properties box and select the **Buttonhole** option from the line types.
- Customize the buttonhole with the different options under the **Buttonhole Tab** at the top of the **Line Properties** dialog box.

Type: This allows you to choose from the different Stitch Types you would like to fall on the Buttonhole.

- **Zig Zag** is a stitch type similar to Satin Stitch - the stitch needle penetrations run in a Zig Zag sewing action forming a column.
- **E-Stitch** is a stitch type similar to Blanket Stitch - the stitches are perpendicular to each other to simulate a hand sewing technique.
- **Cross Stitch** is a special stitch fill type where two lines cross over one another resembling an X.

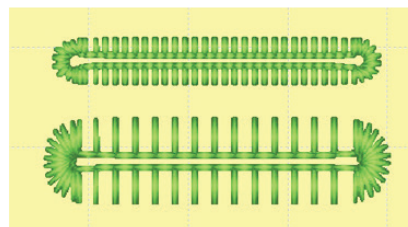
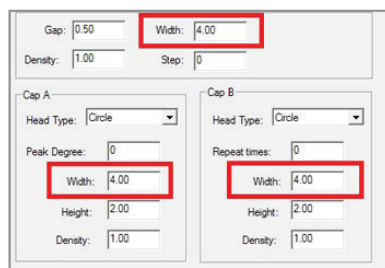


Gap Changes

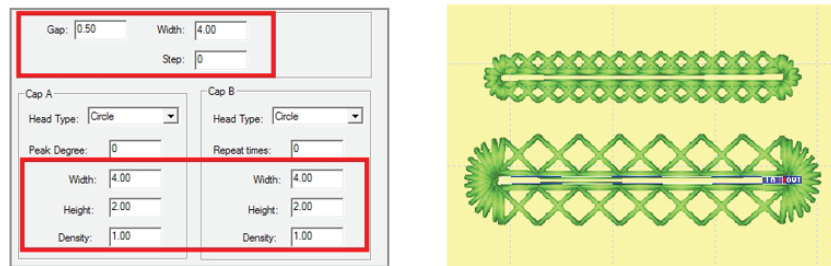


Density Settings

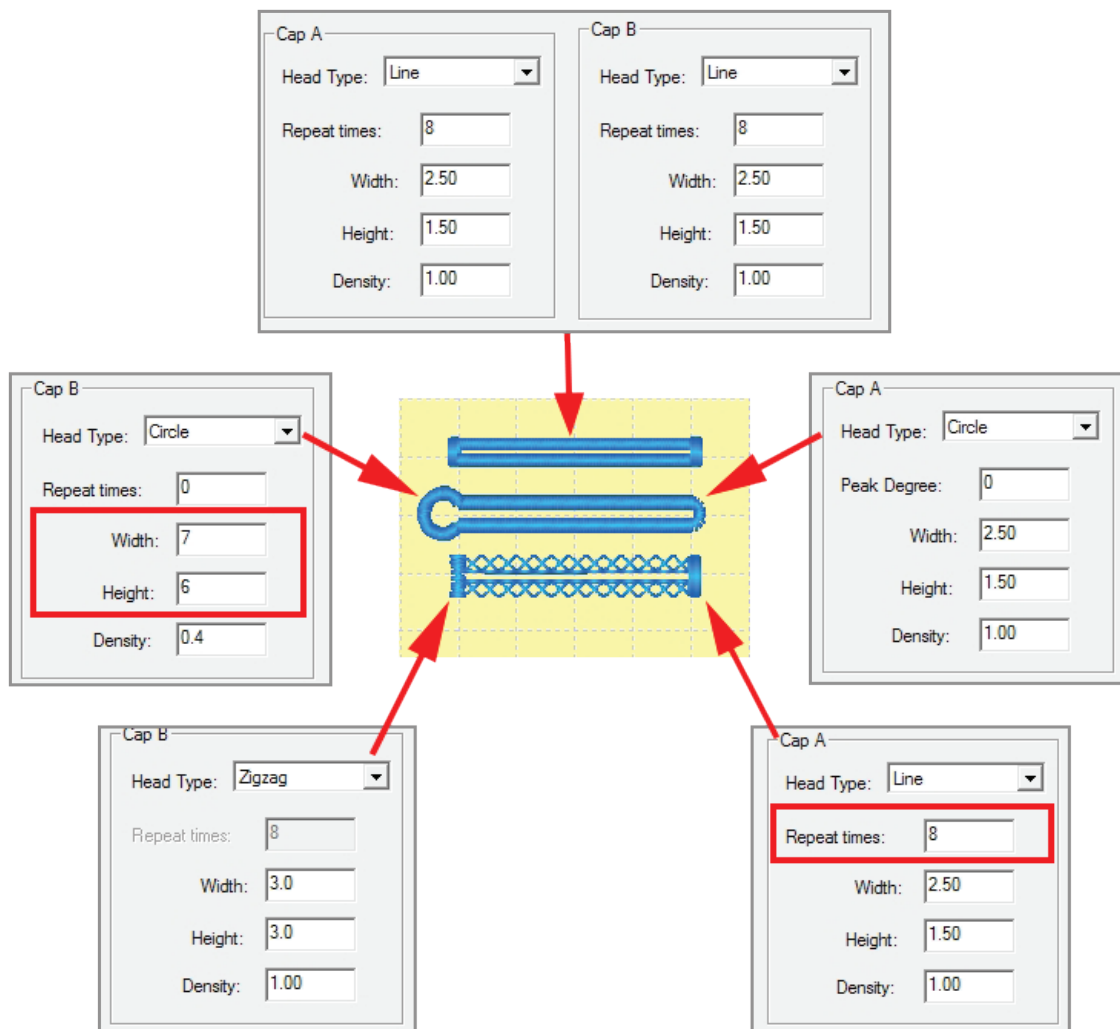
- **Gap** will change the size of the Opening where the button will be placed.
- **Density** controls the density of the **Buttonhole Sides** (not the heads) and can be changed as needed for different effects.
- **Width** controls the width of the Satin, Blanket and Cross Stitch Lines.



Cross Stitch Buttonholes are only controlled by the Width and Gap settings, but may have different head styles.



Head Type: Controls the type of buttonhole head or stop point. Various settings control the **Peak Degree** (the distance the stitch is extended from the head), Repeat Times, Width, Height, and Density of the Head Type. You can also have different head styles within one buttonhole.



Peak Degree: Controls the tip of the **Circle Head Type**. This will place an extension on the Circle head type if the size is greater than 0. The number also defines the number of stitch lines on the peak of the Circle Head Type.

Repeat Times: Controls the number of lines for the **Line Head**. It will place the user input number of lines according to the height. This should be set to 0 for all other head styles.

Width: Controls the up and down size of the head. This should be close to the width settings for the buttonhole.

Height: Controls the side to side measurement of the head.

Density: Controls the spacing of the stitches on the head for the **Circle** and **Zig Zag** head types only.

4. If you would like to see the results of your changes without exiting the dialog box, click on the **Apply** button. Changes to the area will be generated, and the dialog box will still be open so you can easily make further adjustments.

5. Click on **OK** to exit the dialog box.

By default, changes are generated automatically.

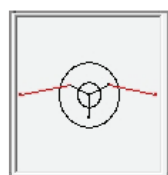
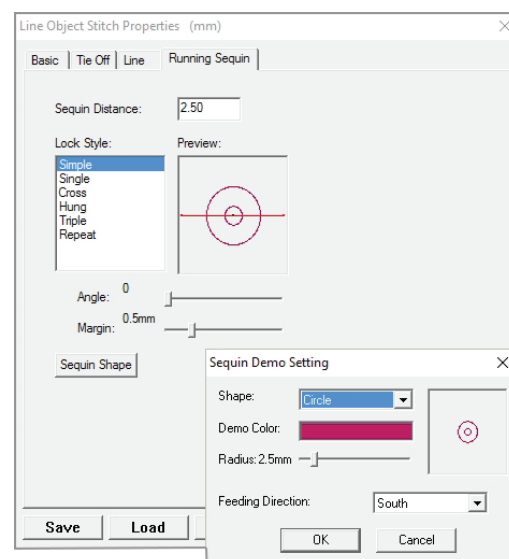
If you had turned off the option to **Auto Generate** after Punching (located in **View Preferences**), continue to Step 6.

6. Select **Accessories**, then **Generate**.

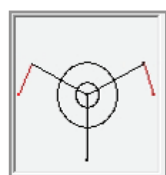
Or click on the  **Generate** icon in the Create toolbar.

Sequins Running Stitch: Some commercial embroidery machines are equipped with a sequin device that drops sequins onto the fabric as it stitches. Generations™ professional software allows you to digitize designs for compatible machines.

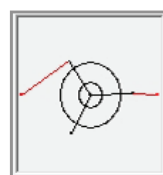
- Click on the **Sequins Settings** to change the color and shape of the sequin display. A dialog box will open on the screen.
- Click on the **black arrow** next to the **Shape** option to select a sequin shape.
Included shapes: Circle, Rectangle, Triangle and Ellipse
- **Demo Color** changes the color of the sequin for display on the work area screen.
- The **Radius slider** scales the sequin size. This should be set to match the size of the sequin that will be attached to the garment or fabric.
- **Feeding Direction** is not important. This option generates the least number of fixing stitches at the start of the line, but may not be suitable for your machine. This should be used by experience digitizers only.
- When all option have been set, click **OK** to apply them to the line.
- Click on the **black arrow** next to the **Lock Style** option. These options allow sequins to be attached or locked in various ways. Select the desired option and it will be applied to your **Running Sequin Line**.
- The **Angle Slider** controls the angle of the attaching stitching.



Margin Too Small

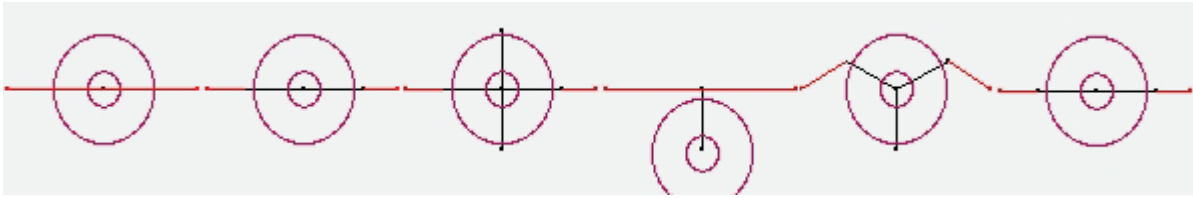


Margin Adjusted



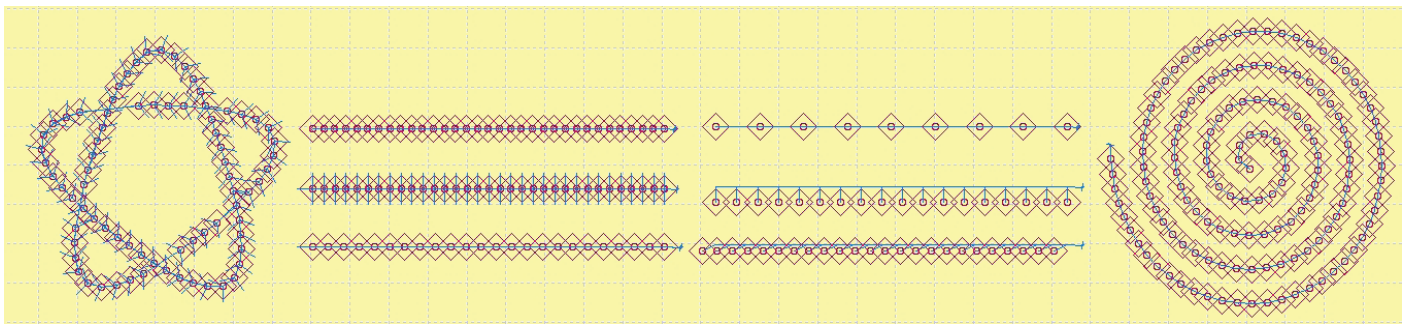
Angle Adjusted

- The **Margin Sliders** ensures that the needle will not penetrate the sequin.
 - If the margin is set to low the selected **Lock Style** will not be applied.







- Sequins can be hanging, overlapped or spaced on the line.

Note: Running Sequin Lines are only available in the PRO software version.

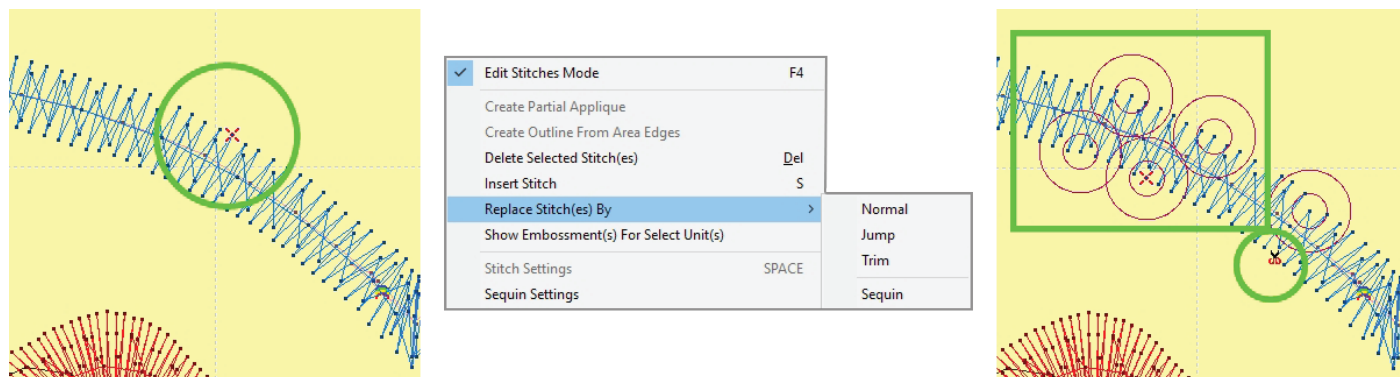


Insert Stitches or Commands

Insert Stitch is used to insert new stitches or commands between existing stitch points, at the end of the last stitch, or as a standalone design. Can also be used with editing options to select stitches for stitch-point editing.

1. Open or import a design or stitch file in to the works area.
2. If you are are in 3D view, click on the  **3D icon** to turn off that view.
3. Click on the  **Needle Penetration View** icon. You will see the needle drops or points in the design.
4. Click on the  **Edit Mode** icon then move the mouse over the desired stitch in the design.
5. **Left click** on the stitch to select it and it will display with a **red x**. 
 - If this is not the stitch you desire, just move the mouse and left click on the correct stitch.
 - If you are close to the desired stitch, use the **Up or Down arrow** on the computer keyboard to move to the correct stitch.

6. To access the **Insert/Delete Stitches** Or **Replace Stitches** menu **right click** on the red x or select **Stitches from the main menu** and the desired option from the drop-down menu.
 - You can insert new stitches, delete the selected stitch or choose to replace the stitching with a command.



- To select multiple stitch points to edit, **press the [CTRL] key** on the keyboard and then **left click** on the desired points.
- To select multiple stitch points in a series, **left click** on the first stitch point. Press and hold the **[CTRL] key** on the keyboard and then press the **up or down arrow keys** on the keyboard.

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GENERATIONS™

Automatic Digitizing Software *V2.0*

V2.0 Manual



Windows®



Generations™ Automatic Digitizing Software

User's Guide

The software to which this User's Guide relates is subject to change without notice. All efforts have been made to ensure the accuracy of the contents of this User's Guide.

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