

# Mastering Your **BERNINA<sup>+</sup>** Embroidery Software V6.0



## *Owner's Workbook - Part 2*

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## Class 5 - Digitizing Class Overview

Digitizing Tutorial

*Quick Start Guide, Chapter 9, page 127*

Blackwork Run

*For more information on Blackwork Run, refer to Chapter 20, page 207*

This class is formatted for owners of  
the following levels of BERNINA  
Embroidery Software, V6

- DesignerPlus

## Class 5 - Digitizing Tutorial



### Notes:

OPEN the Quick Start Guide  
Help > Quick Start Guide

*Access Chapter 9 page 127 for the step-by-step instructions to create the motif shown above.*

The Auto-Digitizing Tutorial will introduce the basics of automatically digitizing a design as well how to enhance embroidery that was automatically generated  
Learn how to adjust the stitching sequence as well as optimize the stitch-out.

Upon completion of the Tutorial, be sure to Save the design file (File>Save As).

The design is ready to send to the machine of choice for stitching.

*Review Chapters 29 and 30, beginning on page 344 of the On-screen Manual.*

These chapters outline information for printing design templates/worksheets as well as sending the design to the embroidery machine.

- Review and Print your design worksheet
- Send design to the embroidery machine to be stitched

### Software level

DesignerPlus. . . yes

## Class 5 - Blackwork Run

An outline can make or break an embroidery design - a GREAT outline just adds the perfect finishing touch!

The software offers the Blackwork Run feature to assist in creating GREAT outlines. As described in the Onscreen manual . . . . Blackwork Run is designed to join selected outlines to form a single grouped, reinforced outline, correctly sequenced for efficient stitch-out.

Important notes regarding Blackwork Run - - -

1. Always follows the color of the first object in the sequence.
2. Works with Open and Closed Objects, Circle/Oval and Rectangle Objects.
3. Works with the following outline types: Single, Triple, Backstitch, Stemstitch, Satin, and Blanket.

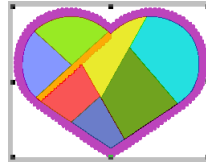
Select Art Canvas Mode



Load Picture > My Designs > Artwork folder > BERNINA heart folder.

Select Files of type > All Picture Files > Multicolored Heart w straight edges.wmf

Press the Enter key to place the artwork on the workspace.



Select the Embroidery Canvas.



Show All



Select Closed Object tool

Select Outline Stitch > Single

Digitize the outline of the heart (within the lace border-purple area) with a series of right and left clicks.

Touch <Enter> key to confirm



Select Open Object tool

Digitize the various separate straight lines within the heart. Be sure the lines are touching either the heart outline or another interior line.

Remember to press <Enter> after each separate line.



Hide Picture.

Select View > Slow Redraw. Notice all of the jump stitches resulting from each of the separate outline stitches. This will not be a very professionally sewn design!



Select Edit > Select All

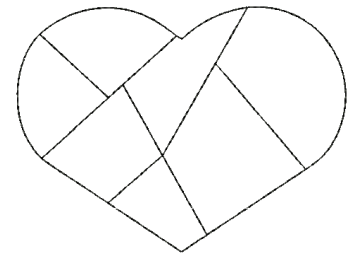
Select Blackwork Run tool; follow the prompts in the Status line to Enter Entry point; the software automatically re-sequences the stitching to eliminate jump stitches.

Select View > Slow Redraw and notice the changes!

Save design file.

File>Save As

Blackwork Run.ART



### Notes:

*For more information on Blackwork Run, refer to Chapter 20, page 207*

### Software level

DesignerPlus. . . .yes

## Class 6 - Special Effects

### Class Overview

#### TrueType Fonts

*For more information on TrueType fonts, refer to Chapter 27, beginning on page 317*

#### Elastic Lettering

*For more information on Elastic Lettering, refer to Chapter 27, beginning on page 325*

#### Buttonholes

*For more information on Buttonholes, refer to Chapter 20, beginning on page 213*

#### Gradient Fills

*For more information on Gradient Fills, refer to Chapter 21, beginning on page 227*

#### Color blending

*For more information on Color Blending, refer to Chapter 21, beginning on page 229*

#### Craft Stitches

*For more information on Craft Stitches, refer to Chapter 23, beginning on page 255*

#### Pattern Run Stitches

*For more information on Pattern Run Stitches, refer to Chapter 22, beginning on page 234*

#### Create a Pattern

*For more information on Creating Pattern, refer to Chapter 22, beginning on page 243*

#### Pattern Stamps

*For more information on Pattern Stamps, refer to Chapter 22 beginning on page 234*

This class is formatted for owners of the following levels of BERNINA<sup>®</sup> Embroidery Software, V6:

- DesignerPlus

## Class 6 - TrueType Fonts

The DesignerPlus level incorporates the ability to create embroidered lettering from fonts that are installed on your computer. These are known as TrueType fonts.

**IMPORTANT TIP:** Remember that some TrueType fonts may not be suitable for embroidery. Experiment with the fonts and settings to find one that works for your creation.



File > New

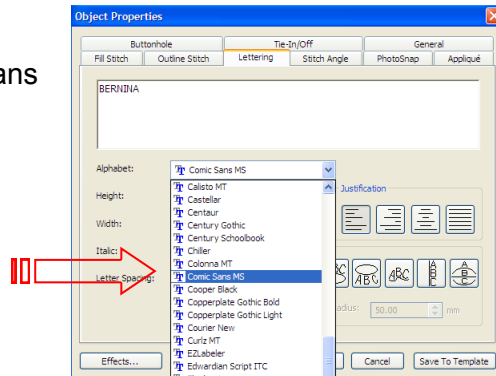
Press <A> key on the keyboard to open the Lettering Object Properties box.

Type <BERNINA> in the text box.



Scroll through the alphabets to find True Type fonts.

Select Comic Sans



Change Height to 20mm

Click **OK**; left click on screen to generate the lettering

Change the lettering color to Color C3 - Red

Experiment with at least 2 additional fonts.

Save design file.

File > Save As

TrueType fonts.ART

BERNINA

Font: Comic

BERNINA

Font: Jokerman

BERNINA

Font: Harrington

### Notes:

*For more information on TrueType fonts, refer to Chapter 27, beginning on page 317*

### Software level

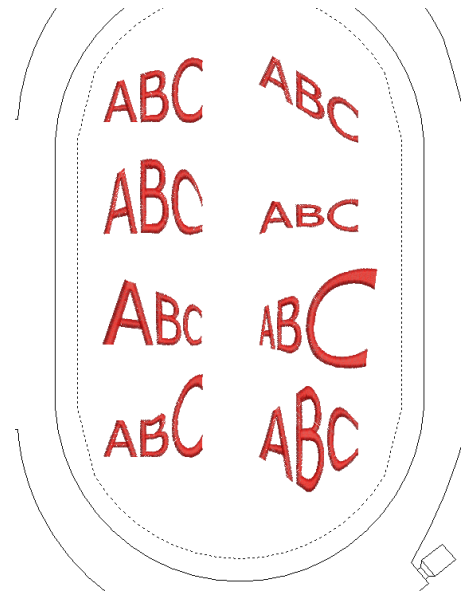
DesignerPlus. . . .yes

## Class 6 - Elastic Lettering

Using Elastic Lettering features is a great way to add personality to lettering creations!

DesignerPlus software offers the ability to Bulge, Arch, Stretch, or Compress your lettering.

In the Elastic Lettering menu, there are 4 options available - - -  
Straight, Curved, Perspective, Diamond



### Notes:

*For more information on Elastic Lettering, refer to Chapter 27, Special Lettering Effects beginning on page 325.*



File > New

Press <A> key on the keyboard to open the Lettering Object Properties box.

Type <ABC> into the text box

Select Veranda Alphabet

Change the height to 16mm

Click **OK**; left click on screen to generate the lettering

Change the lettering color to Color C3 - Red

Quick Clone 7 more copies for a total of 8 - "ABC"s on the screen.

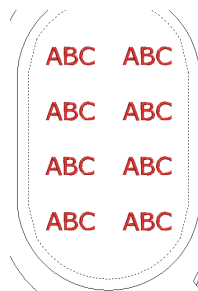
Select the first copy of <ABC>

Edit > Elastic Lettering > Straight

The selected lettering is now in a box with 4 yellow corner handles. The handles can be dragged independently or as pairs using either the <Ctrl> or <Shift> keys.



*(For specific information, refer to page 325 of the manual)*



Change each of the "ABC" lettering groups to reflect the 4 elastic lettering options; one with a single handle being moved and one with a pair of handles being moved.

Save design file.

File > Save As

Elastic Lettering.ART

### Software level

DesignerPlus. . . .yes



## Class 6 - Buttonholes

DesignerPlus software gives you the freedom to incorporate buttonholes as a functional or decorative feature in your embroidery creations. Adding a buttonhole and merging it into your embroidery motif couldn't be any easier!



### Open Design

File>Open>My Designs folder > Borders folder > FM902.ART



### Select the design

Right click 1x on Rotate 45 deg CCW / CW



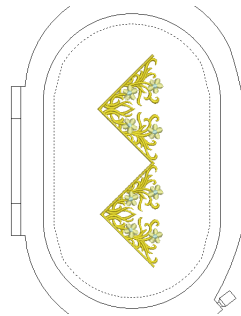
Left click on Scale by 20% Down / Up



### Quick Clone a second copy of the motif.

Align the motifs vertically, with the corner points just touching.

Envision a garment front with these embroidery motifs stitched down the front with buttonholes in each one.



### Arrange > Add Buttonhole

A shadow of a buttonhole is now attached to the cursor.

Click on the screen to place a buttonhole.

Click in the corner area of each lace motif to add a buttonhole.

Touch Esc on the keyboard to deactivate the buttonhole tool.



### Select a buttonhole

Right mouse click to open Object Properties box; there are 9 buttonhole styles to choose from. It is also possible to change the angle of the buttonhole and buttonhole size.

Select Round buttonhole.

Change the buttonhole to Horizontal orientation; Slit length > 18mm.

Click **OK**.

Move the buttonhole into a pleasing position.

Repeat the above process with the second buttonhole

To align both buttonholes perfectly, hold down the <Ctrl> key and select both buttonholes; use one of the vertical alignment tools.

To remove the stitches from under the buttonhole:

Select the buttonhole.



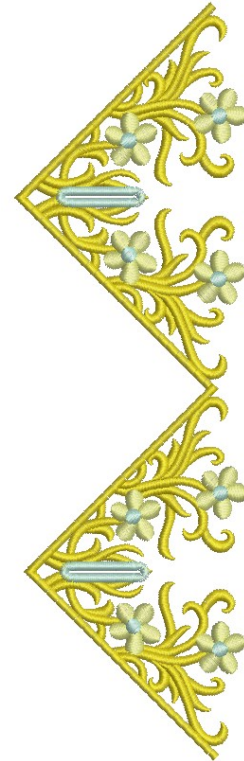
Select the Remove Overlaps tool; stitches are automatically removed.

Repeat the process for the remaining buttonhole.

Save the design file.

File > Save As

Buttonholes.ART



### Notes:

For more information on Buttonholes, refer to Chapter 20, Specialized Digitizing Techniques beginning on page 213.

### Software level

DesignerPlus. . . yes

## Class 6 - Craft Stitch Borders

The DesignerPlus software level provides an entire category of Craft Stitches to design and create with. These stitches are designed to “mimic” hand-worked embroidery. The Craft Stitch category includes the following: Blackwork, Candlewicking, Lacework, Stipple, Backstitch, and Stemstitch.

Craft stitches can be used to create borders and/or fills.



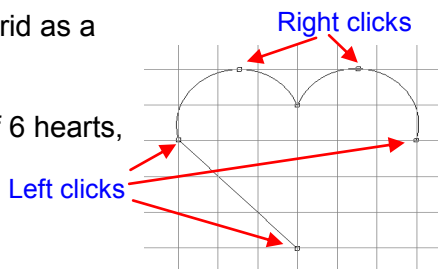
Let's start with creating Craft Stitch borders.

Select the Closed Object tool

Select Outline > Single

Digitize a heart shape, using the Grid as a guide; touch <Enter> key to generate the stitches.

Create 5 more copies, for a total of 6 hearts, arranged two across and three down.



Select top hearts; change the outlines to a Blackwork Border.

Select middle hearts; change the outline to a Candlewicking Border.

Select bottom left heart; change the outline to a Stemstitch.

Select bottom right heart; change the outline to a Backstitch.

Select top right heart; right click to open Object Properties box.

Select from different patterns to apply as well as changing both the size and spacing of the selected pattern.

Choose pattern B0027a; select the **Apply** button to view; notice the pattern is very large on the heart.

Change the Size and Spacing to 6mm; **Apply** to view changes; click **OK** to accept changes.

Select middle right heart; open Object Properties box.

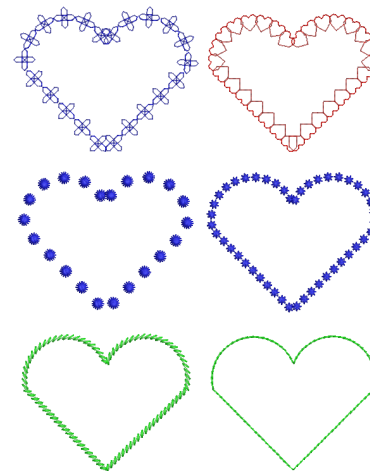
Choose pattern Half Knot-3-5mm; **Apply**.

Change Spacing to 4mm; **Apply** to view changes; click **OK**.

Save design file.

File > Save As

Craft Stitch Borders.ART



### Notes:

For more information on Craft Stitches, refer to Chapter 23, Craft Stitch Borders and Fills beginning on page 255.



Blackwork Run

Blackwork Border

Blackwork Fill

Candlewicking Bor-

Candlewicking Fill

Lacework

Stipple

Stemstitch

Backstitch

### Software level

DesignerPlus. . . yes

## Class 6 - Gradient Fills

Using Gradient Fills to add perspective or shading to embroidery creations. Gradient fills vary the stitch spacing between dense and open fills. The software offers several different Gradient Fill effects to choose from.



File > New



Begin by digitizing several square shapes using the Rectangle tool. Create a total of 6 squares; to create a perfect square with the Rectangle tool, hold down the <Ctrl> key.



To highlight the gradient effect, turn off Underlay when creating the squares. (*Note: The boxes have been numbered for easy identification.*)



Select Box 1

Right click to open Object Properties box.

Select the **Effects** button > Gradient Fill tab.

Click in the Gradient Fill box to turn the feature on, select the First Profile.

Go to the Others tab, notice the **Travel on Edges** option is selected.

Click on **OK**.

Select Box 2; repeat the above process, selecting Second Profile.

Select Box 3; repeat the above process, selecting Third Profile.

Select Box 4; repeat the above process, selecting Fourth Profile.

Select Box 5; repeat the above process, selecting the first Profile again.

Adjust the Maximum Spacing value to 0.1mm

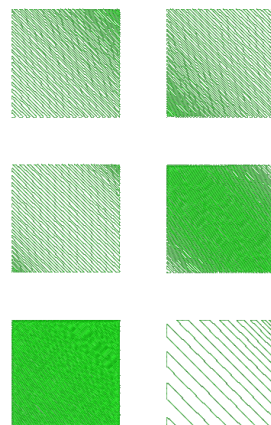
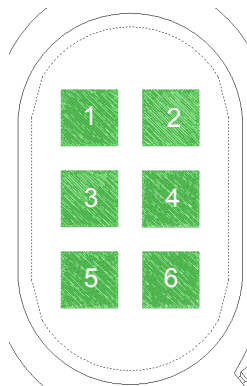
Select Box 6; repeat the above process, selecting the first Profile again.

Adjust the Maximum Spacing value to 10mm.

Save the design file.

File > Save As

Gradient Fills.ART



### Notes:

For more information on Gradient Fills, refer to Chapter 21, Artistic Stitch Effects beginning on page 227

### Software level

DesignerPlus. . . yes

## Class 6 - Color Blending

Color Blending is another way in which to add shading, perspective, three-dimensional looks and interesting color effects to embroidery creations. The DesignerPlus level of software offers several Color Blending options to choose from.



File > New



Begin by digitizing six circle shapes using the Circle / Oval tool



To highlight the color blending effect, deactivate auto Underlay turned off when creating the circle. *(Note: The circles have been numbered for easy identification.)*



Select Circle 1



Select the Color Blending tool.

Select Profile 1; leaving Maximum Spacing at default settings.

Adjust the Colors as follows - - -

Bottom Layer - C5; Top Layer - C11

Click **OK** and click away from the circle to view the changes.

Select Circle 2; select Color Blending tool

Select Profile 2; leaving Max. Spacing and Colors at the new default; Click **OK**.

Select Circle 3; select Color Blending tool

Select Profile 3; leaving Max. Spacing and Colors at the new Default; Click **OK**.

Select Circle 4; select Color Blending tool

Select Profile 4; leaving Max. Spacing and Colors at the new Default; Click **OK**.

Select Circle 5; select Color Blending tool

Select Profile 1; change Maximum Spacing for both Bottom / Top layers to 5mm; Click **OK**.

Select Circle 6; select Color Blending tool

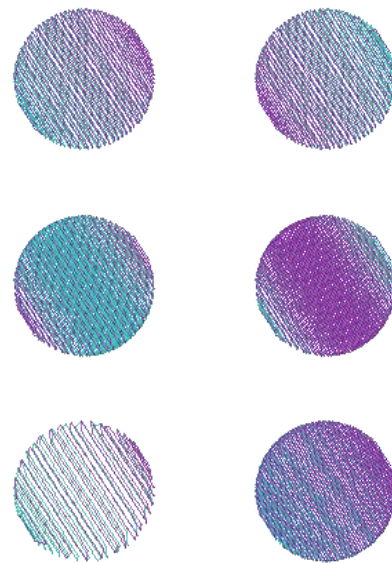
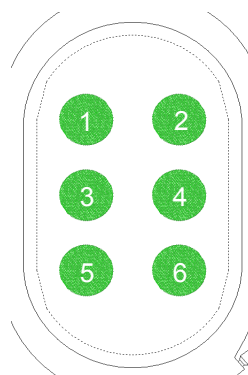
Select Profile 1; change Maximum Spacing for both Bottom / Top layers to 1mm; Click **OK**.

Select Artistic View mode to see the various profile combinations.

Save design file:

File > Save As

Color Blending.ART



### Notes:

For more information on Color Blending, refer to Chapter 21, Artistic Stitch Effects beginning on page 229.

### Software level

DesignerPlus. . . yes

## Class 6 - Craft Stitch Fills

We've created Craft Stitch borders, now let's create some unique fills using the Craft Stitches



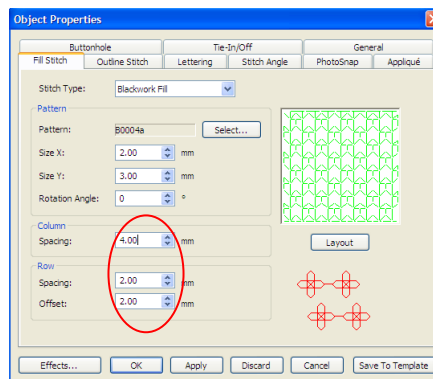
Open the previous file > Craft Stitch Borders.ART  
Select top left heart; change the outline to a Blackwork Fill.  
Select top right heart; change the outline to a Candlewicking Fill.  
Select middle left heart; change the outline to Lacework.  
Select middle right heart; change the outline to Stipple Fill; accept the default settings by clicking on **OK**.

As with Craft Stitch borders, Object Properties can be changed on Craft Stitch fills.



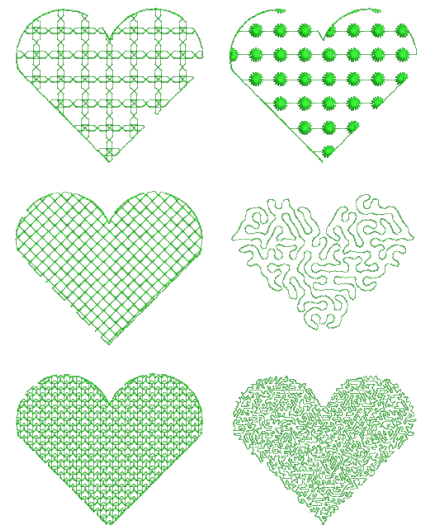
Select bottom left heart; change the outline to a Blackwork Fill.  
Right click to open the Object Properties box; select Fill Stitch tab.  
Choose pattern B0004a; select the **Apply** button to view; this is a fairly small pattern and fills the shape nicely.  
Let's make some changes - - -

Change Column Spacing > 4mm  
Change Row Spacing > 2mm  
Change Row Offset > 2mm  
Select the **Apply** button between each change to view the motif  
When complete, click **OK**.



Select bottom right heart; change the outline to Stipple Fill; open Object Properties to adjust the Stitch Length and Loop Spacing.  
Change the Stitch Length > 1mm  
Change the Loop Spacing > 1mm  
Select **OK**.

Save design file.  
File > Save As  
Craft Stitch Fills.ART



### Notes:

For more information on Craft Stitches, refer to Chapter 23, Craft Stitch Borders and Fills beginning on page 255.



Blackwork Run

Blackwork Border

Blackwork Fill

Candlewicking Bor-

Candlewicking Fill

Lacework

Stipple

Stemstitch

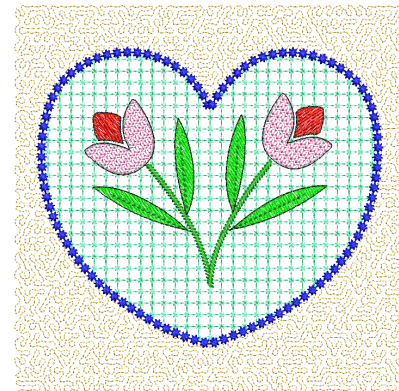
Backstitch

### Software level

DesignerPlus. . . .yes












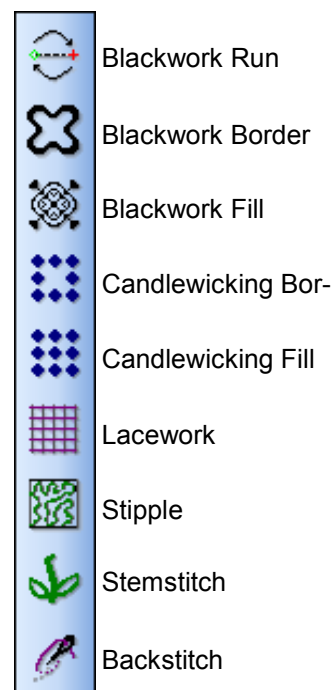
## Class 6 - Craft Stitch Sampler



### Notes:

For more information on Craft Stitches, refer to Chapter 23, Craft Stitch Borders and Fills beginning on page 255.

-  File > New  
Select the Art Canvas Tab
-  Load Picture > My Designs folder > Artwork folder > Tulip Heart.bmp>import  
Press the Enter key on the keyboard.
-  Select the Embroidery Canvas  
Select Show 1:1
-  Select the Rectangle tool > Fill Stitch > Step > Color(C45); digitize a square around the heart, larger than white area of graphic. Be sure to center the square over the graphic.
-  Select Closed Object tool; Fill > Step; Color (C3); digitize heart.  
  
Duplicate Heart > change to Outline > Candlewicking Border  
Right click > select Candlewick Pattern > Half Knot 3-5mm
-  Select Magic Wand; process the artwork.  
Digitize flower centers(C7); flower petals(C5)  
and digitize leaves(C3)  
Touch Ecs.  
  
Select the flower centers and leaves; select Object Properties.  
Select Effects>Others and adjust the pull compensation to .4;  
OK.  
  
Remove the underlying stitches of the square and heart where the heart lies over the square and then where the flower petals lie over the heart. Use the Remove Overlaps tool to do this.
-  Select the Heart > Remove Overlaps tool; this cuts a heart shaped hole in the Square  
Select the flower petals(C5) and centers(C7); select the Remove Overlaps tool again; the underlying stitches on the heart are removed.
-  Open Object Properties  
Select Outline Stitch tab > Stitch Type > Backstitch; change the stem thickness to 0.25mm > **OK**.
-  Select Open Object tool; Color(C3); digitize center vein in each leaf.  
Open Object Properties > Outline Stitch > Stitch Type > Stemstitch;  
change spacing to 1mm; change stitch angle to 55° > **OK**.  
Select Open Object tool; Color(C3); digitize flower stems.  
  
Open Object Properties > Outline Stitch > Stitch Type > Single > **OK**.  
Outline flower center, petal and leaves by selecting Color Film sections; Duplicate; change fills to Outline stitch > Single;  
Color(C13)



### Software level

DesignerPlus. . . yes

## Class 6 - Craft Stitch Sampler (cont'd)



Select a flower petal.



Open Object Properties > Fill Stitch tab > Blackwork Fill > select B0004a > change Rotation angle to 35° > **OK**.

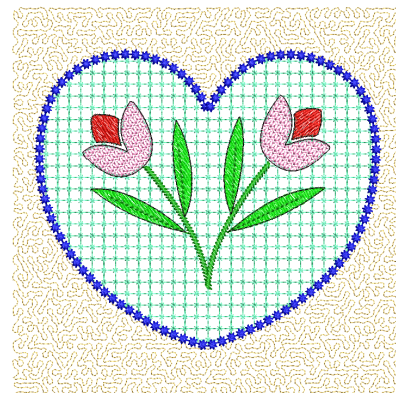
Repeat for other petal, using a Rotation angle value of -35° > **OK**.

Select Heart

Open Object Properties > Fill Stitch tab > Stitch Type > Lacework.  
Select lace pattern L0003a > **OK**.

Select background square > Stipple . Open Object Properties to change Stitch Length and Loop Spacing to 2mm > **OK**.

Save design file. (File>Save As)



### Notes:

*For more information on Craft Stitches, refer to Chapter 23, Craft Stitch Borders and Fills beginning on page 255.*



Blackwork Run

Blackwork Border

Blackwork Fill

Candlewicking Bor-

Candlewicking Fill

Lacework

Stipple

Stemstitch

Backstitch


### Software level


DesignerPlus. . . yes

## Class 6 - Pattern Run Outlines

Pattern Run stitches are pre-defined simple design elements that can be applied to outlines, fills and even used as “stamps”.

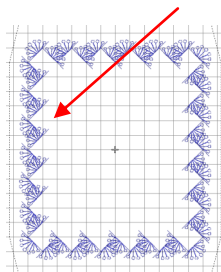
 File > New  
Settings > Options > Grid tab > Snap to Grid > **OK**.

 Open Object Properties box > Outline stitch > Pattern Run > NP005a pattern set > 660a

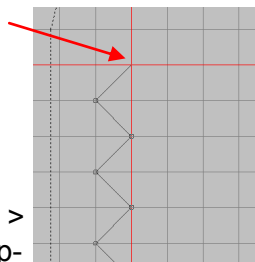
 Select Open Object tool > Outline stitch > Pattern Run  
Digitize from left to right in a zigzag pattern forming a rectangle. Note the grid lines turning red when placing a mouse click directly at the intersecting lines.

Press the <Enter> key.

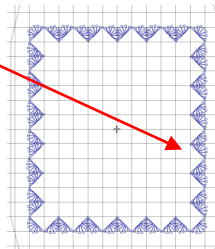
The resulting image shows the selected Pattern Run stitch not fitting the digitized line very well.




Select the Pattern Run frame > right click to open Object Properties box > change Size of Pattern to 15mm > **OK**.



The Pattern now fits the digitized line much better.



 Select the Rectangle tool; drag a box inside the first rectangle. Notice the size of this pattern is the original size that was set in the Object Properties box originally.

File > Insert Design > My Designs folder > Florals folder > FI940.ART

Rotate design into a pleasing position within the Pattern Run Frames.

Save the design file.

File > Save As

Pattern Run frame.ART



### Notes:

*For more information on Pattern Run Stitches, refer to Chapter 22, Pattern Stamps, Runs and Fills, beginning on page 234.*

### Software level

DesignerPlus. . . .yes



## Class 6 - Pattern Run Fills

Let's take a look at Pattern Run fills.



File > New

Settings menu > Options > Grid tab > deselect Snap to Grid > **OK**.



Open Object Properties box > Fill Stitch tab > Stitch Type: Pattern Fill > BerninaV5 pattern set > NP005-15 > **Apply** > **OK**.

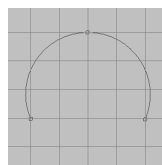


Select Closed Object tool > Pattern Fill

Digitize a circle with 3 right mouse clicks as shown. Press the <Enter> key.

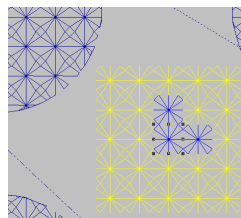
Duplicate or Quick Clone 5 more circles and arrange in design area.

Select the Top left circle; right click to open Object Properties > select Fill Stitch tab > select Layout button



Within the Object Properties box numerical changes to the pattern fill may be entered to change the look of the pattern fill. The Layout option provides a visual method to make pattern changes.

*(For specific details on the functions of the guide pattern stitches (blue stitches) refer to Onscreen manual, page 241.)*



To close the layout view, simply touch the <Esc> key. The Object Properties box reappears.

Make the following changes to the circles -

Top left circle - no changes

Top right circle - Size X and Size Y: 10mm

Middle left circle - Rotate 45°

Middle right circle - Column Spacing: 10mm

Bottom left circle - Row Offset: 3mm

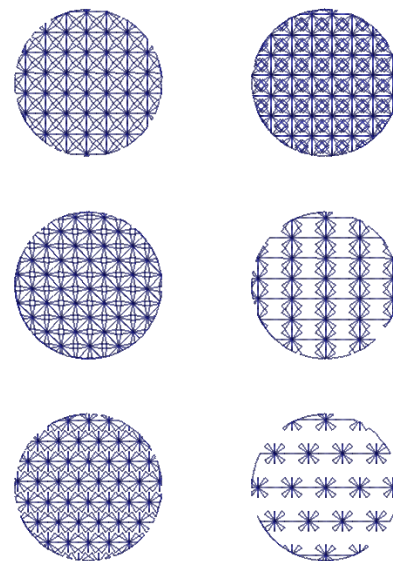
Bottom right circle - Column Spacing: 10mm; Row Spacing: 10mm; Row Offset: 5mm

Click OK to close the Object Properties box.

Save the design file.

File > Save As

Pattern Run Fills.ART



### Notes:


*For more information on Pattern Run Stitches, refer to Chapter 22, Pattern Stamps, Runs and Fills, beginning on page 234.*


### Software level

DesignerPlus. . . yes


## Class 6 - Create a Pattern

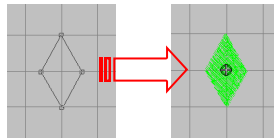
DesignerPlus software offers unlimited create options; including the ability to create custom patterns!

 File > New

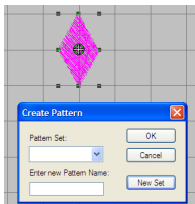
 Select the Closed Object tool.

Digitize a small diamond shape as shown press the <Enter> key to generate stitches.

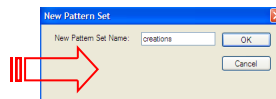
 Select the diamond  
Settings > Create Pattern; a series of dialog boxes will appear.



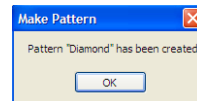
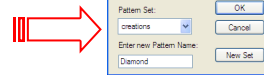
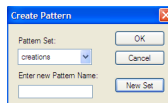
Name the new pattern, or create a new Pattern Set to save it in.



Create the new Pattern Set > enter new Pattern Name > OK.




After giving the Pattern a name > OK, the software will ask for digitized reference points at the beginning and end of the pattern to determine the direction of the stitch out. Follow the prompts in the Status line. Once completed, the following dialog box appear.

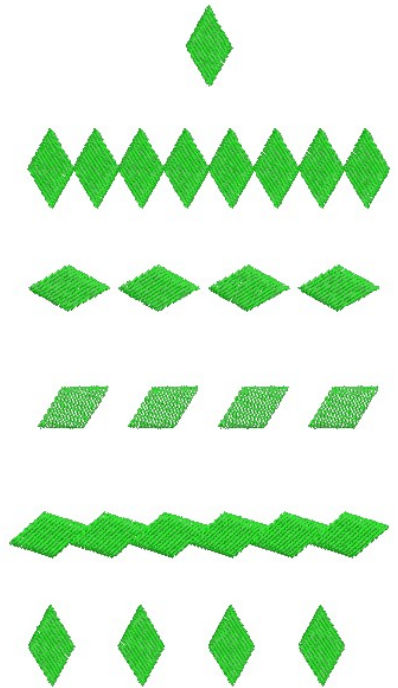


Each stitch within the Pattern will connect with the next based on where the reference points were placed. *(Refer to page 243 in the Onscreen manual)*

Create several different connection options for the same diamond shape. Each pattern variation will require a different name. Repeat the above listed process for each new pattern.

 After creating a different pattern, select the Open Object tool > Outline > Pattern Run; digitize a row of stitching

Save the design file.  
File > Save As  
Create Pattern.ART



### Notes:

*For more information on Creating Patterns, refer to Chapter 22, Pattern Stamps, Runs and Fills, beginning on page 243.*

### Software level

DesignerPlus. . . yes

## Class 6 - Pattern Stamps

Place individual pattern stitches anywhere on the design composition!



File>Open > My Designs folder > Children folder > Cj406.ART

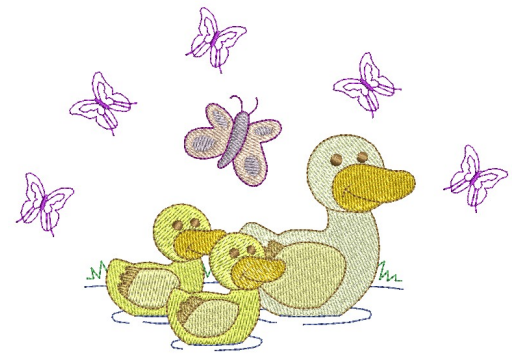
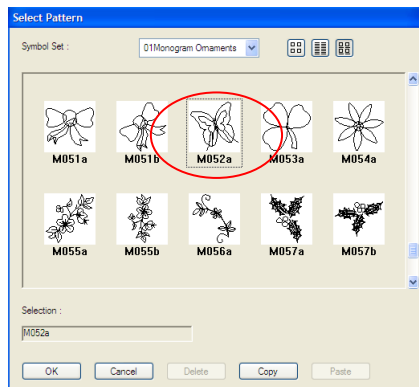
Arrange > Pattern Stamp; the Select Pattern dialog box opens.  
Select Symbol Set: 01Monogram Ornaments > pattern M052a > **OK**.

The dialog box closes; the pattern is now attached to the cursor.  
Move the cursor to place the pattern; left click 1x.  
The stamp is connected to a rotating anchor point. Click a second time to set the stamp.

Place several butterfly patterns around the “duck family” as desired.  
These patterns can also be scaled and rotated.

When pleased with the design, touch the <Esc> key to deactivate the Pattern Stamp feature.

Save the design file:  
File > Save As  
Pattern Stamps.ART



### Notes:

*For more information on Pattern Stamps, refer to Chapter 22, Pattern Stamps, Runs and Fills, beginning on page 234.*

### Software level

DesignerPlus. . . yes