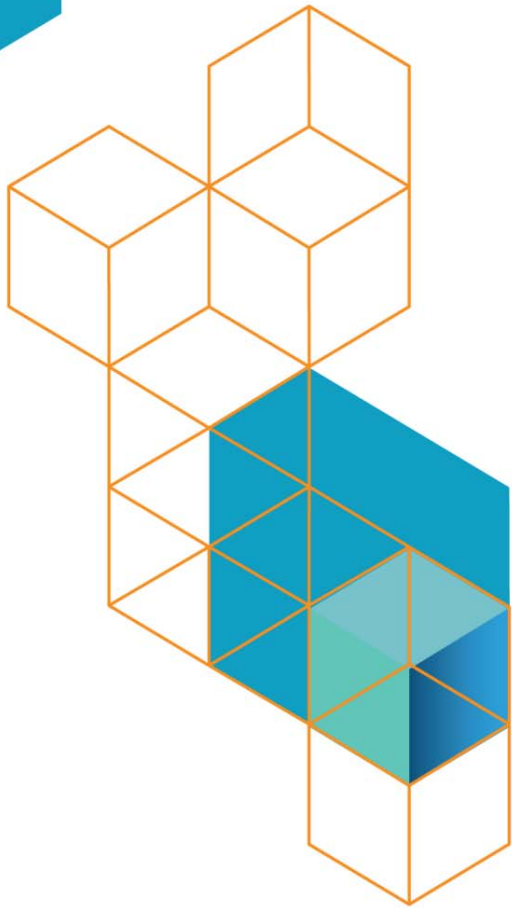




## Reference Manual



TRUE SIZER **E3** Pro

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The Product Differentiation Table which appears in the appendices of this manual indicates which features are relevant to each level of product. While every effort has been made to maintain this table up to the current release, late changes may not be exactly reflected. For further advice, refer to your Wilcom sales representative.

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# Wilcom TrueSizer Pro e3

Wilcom **TrueSizer Pro e3** is a universal embroidery file conversion utility offering full compatibility between industrial and domestic file formats, as well as full design scalability. It allows you to view, modify, read and convert, and output high quality embroidery through its easy-to-use commands and tools. It also lets you recolor designs and create multiple colorways for different fabrics. Based on the same core software as Wilcom's acclaimed professional embroidery design software, **TrueSizer Pro** provides the same unique advantages of the 'all-in-one' EMB file format.



## Who is it for?

Customers may include a range of embroidery specialists, ranging from domestic to commercial, as well as their staff and customers. It is especially intended for sales and customer service staff for the purposes of recoloring existing designs. Wilcom **TrueSizer** itself is also intended for customers of Wilcom customers allowing them to view and manipulate EMB design files directly.

## What does it do?

**TrueSizer Pro** includes all the capabilities of Wilcom **TrueSizer**. Both can be used to open, view and scale Wilcom EMB, Bernina ART, and Janome JAN object-based embroidery designs. They can both convert designs to many machine formats as well as generate production worksheets. They can also be used to share designs and design images. In addition to these capabilities, **TrueSizer Pro** allows you to create and save multiple colorways in EMB format. Designs can be visualized on garment images as well as production hoops. Unlike Wilcom **TrueSizer**, multiple designs can be opened simultaneously. Customer approval sheets can also be quickly generated.



**Tip** If you want to do more with your EMB designs, you can easily upgrade. Just register your copy of **TrueSizer Pro** online and order upgrades for Wilcom's professional range of embroidery design products.

### **The EMB advantage**

Do you receive designs from digitizing centers or embroiderers? Do you send designs to embroiderers or production houses? If so, Wilcom EMB is the ideal embroidery file format for your day-to-day needs. More professional designs are created in EMB than any other.

Because EMB format combines original outlines (condensed data) with the full original stitch data, customers will receive designs exactly as they were created – complete with any fine-tuning stitch edits that may be included. They can still resize the design from the original outlines with guaranteed rescaling. No confusion switching between multiple expanded and condensed files.

### **Product keys & activation**

When a customer purchases **TrueSizer Pro** from the website store, they receive a product key (serial number) which must be entered when the product is first run. The installation program will automatically try to activate the product via internet.

# OBJECT-BASED EMBROIDERY

**TrueSizer Pro** can be used to open, view and scale Wilcom EMB, Bernina ART, and Janome JAN object-based embroidery designs. Convert designs to many machine formats. Customer approval sheets and production worksheets can be quickly generated. In addition, **TrueSizer Pro** lets you create and save multiple colorways in EMB format. Designs can be visualized on garment images as well as production hoops.

## Basic procedures

This section describes how to open **TrueSizer Pro** and start using the commands and tools. It also explains how to open designs as well as create new ones. It describes how to display the grid and rulers, and measure distances on screen. And it also summarizes shortcut keys available in **TrueSizer Pro**. See [Basics](#) for details.

## Viewing designs

This section explains the various design viewing settings, including design colorways. Techniques for viewing the stitching sequence are described as well as how to selectively view and name design color blocks. Viewing design information, including production worksheets, is also covered. See [Viewing Designs](#) for details.

## Threads & colorways

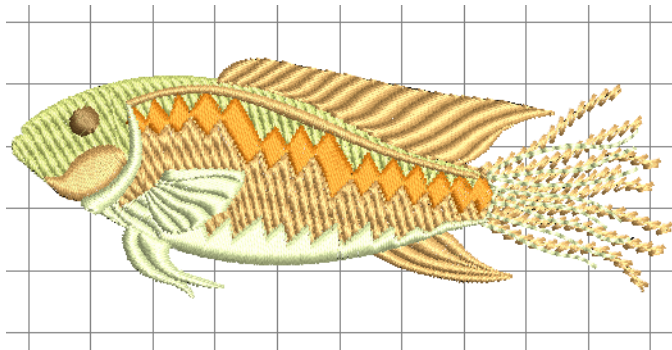
This section describes how to set up multiple colorways. For each colorway you define, you can select colors from commercial thread charts or define your own. It also describes how to change backgrounds, including colors, fabrics, or products, as well as display elements such as unsewn and sewn stitching to suit different colorways. See [Threads & Colorways](#) for details.

## Modifying designs

This section covers the selection and transformation of designs, including scaling, rotating, skewing, and mirroring. It also covers fine-tuning of designs with automatic start and end points and removal of small stitches. See [Modifying Designs](#) for details.

# Basics

Based on the same core software as Wilcom's acclaimed professional embroidery design software, Wilcom **TrueSizer Pro e3** provides the same unique advantages of the 'all-in-one' EMB file format. **TrueSizer Pro** is a universal file conversion tool offering full compatibility between industrial and domestic embroidery file formats, as well as full design scalability. It allows you to view, modify, read and convert, and output high quality embroidery through its easy-to-use commands and tools.



## Opening designs



Use Standard > Open to open an existing design.

**TrueSizer Pro** opens a comprehensive range of both 'outline' and 'stitch' files. You can also open designs from proprietary embroidery disks. See [Supported file formats](#). See also [Reading designs from embroidery disk](#).

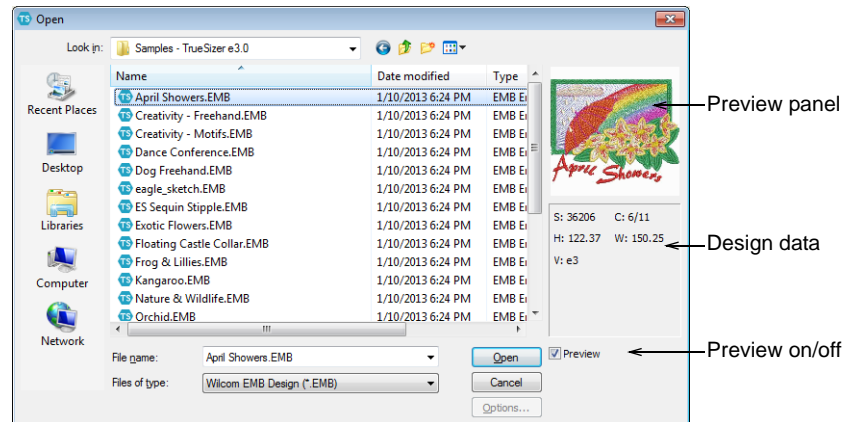


**Caution** You cannot open EMB files created with a later version of the software to the one you are running.

### To open a design

- 1 Click the **Open** icon.

The **Open** dialog opens.



- 2 Select a folder from the **Look In** list.
- 3 If the design is not in EMB format, select a file type from the **Files of Type** list.
- 4 Select a design.
- 5 Select the **Preview** checkbox to preview the design (for supported file formats) together with design data. This includes stitch and color numbers, color changes, design height and width, and software version number (V6.0 onwards).

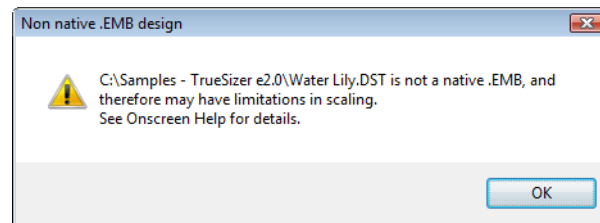


**Tip** For more information about a selected file, right-click and select **Properties** from the popup menu. See [Viewing design information](#).

- 6 For file types other than EMB or ESD, click **Options** to change the file recognition options. See [Supported file formats](#).
- 7 Click **Open**.



**Note** If you open a design which is not a native EMB, you will receive the following warning. See [File sources & EMB format](#) for details.



## Grids, rulers & guides

TrueSizer Pro provides a set of grid lines to help accurately align or size embroidery designs.

### Displaying the grid



Click **View > Show Grid** to show or hide the grid. Right-click to change the Grid settings.

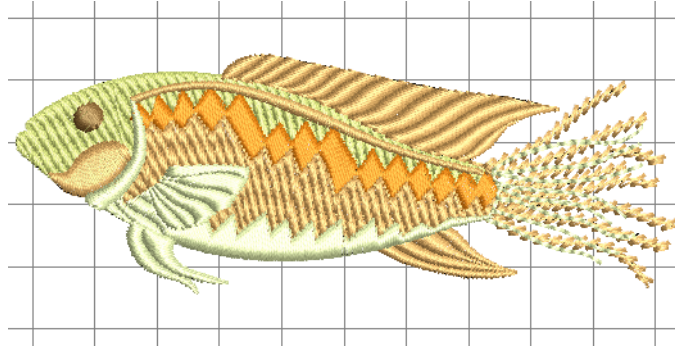
Use grid lines to help accurately align or size embroidery designs. Default grid spacing is 10 mm x 10 mm.

---

### To display the grid

- ◀ Click the **Show Grid** icon or press **Shift+G**.
- ◀ Click again to toggle off.
- ◀ Right-click for settings.

You can change grid spacing, select a reference point and turn **Snap to Grid** on or off in the **Options** dialog. See also [Setting grid display](#).



**Tip** You can also change the color of the grid lines. See [Changing display colors](#) for details.

### Displaying rulers & guides



Click **View > Show Rulers and Guides** to show or hide rulers and guides. Right-click for settings.



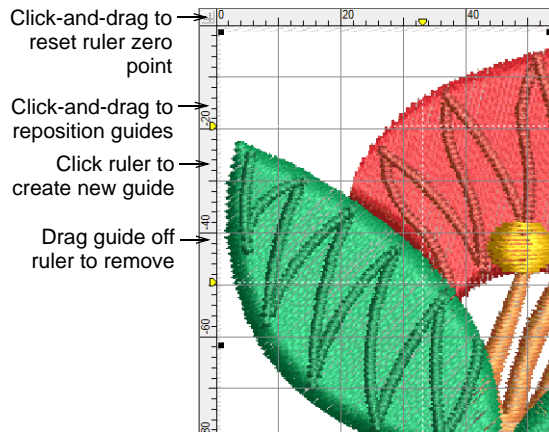
Drag the **Ruler Zero Point** to reset a new ruler zero point.

Rulers are located to the top and left side of the design window. These make it possible to accurately position and size designs. The unit of measurement – mm or inches – defaults to the regional settings in the MS Windows® Control Panel. See also [Setting measurement units](#).

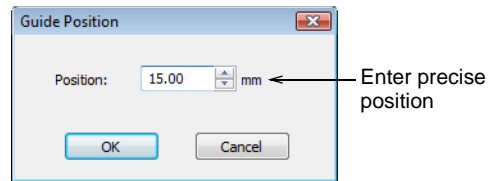


## To display rulers & guides

- ◀ Click the **Show Rulers & Guides** icon or press **Ctrl+R**.



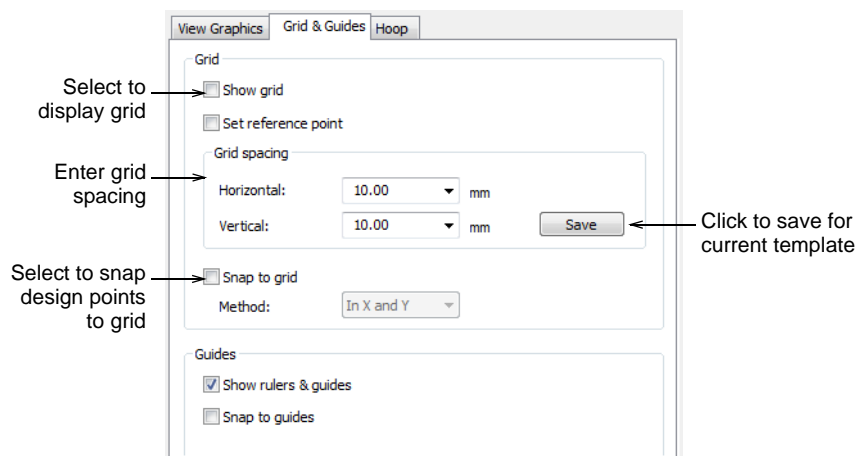
- ◀ Reset the ruler zero point by clicking and dragging the box in the top left-hand corner to the required point in the design.
- ◀ To create a guide, click on either ruler – horizontal or vertical – and click-and-drag it into position. Multiple guides can be created and just as easily removed.
- ◀ For more accurate positioning of guides, double-click the yellow handle. In the **Guide Position** dialog, enter a precise distance from the zero point, and click **OK**.



- ◀ To remove a guide, drag the yellow guide handle off the design window.



**Tip** You can turn **Snap to Grid** and **Snap to Guide** on or off in the **Options** dialog. See also [Setting grid display options](#).





**Tip** You can also change the color of grid and guidelines. See [Changing display colors](#) for details.

## Measuring distances on-screen

Measure the distance between two points on screen using the **Measure** command. This command displays coordinates, distance and angle of the mouse pointer from a point corresponding to the center of a hoop in an empty design. View the measurements in the Status bar or in a tooltip. See also [Setting measurement units](#).

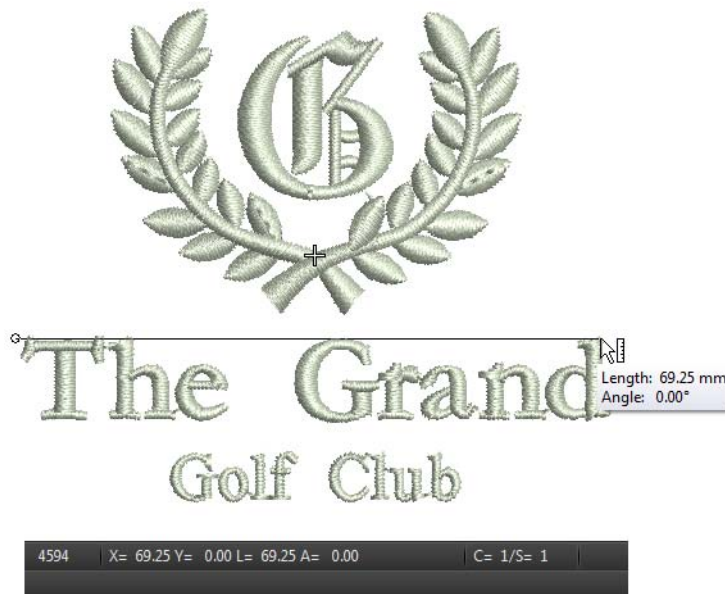


**Tip** For more accurate results, zoom in before you measure. The measurement is always the actual size, and is not affected by the zoom factor.

---

### To measure a distance on-screen

- 1 Select **View > Measure**.
- 2 Click the start point.
- 3 Move the pointer to the end point and hold the mouse still.  
The information displays in both the **Status Bar** and tooltip:
  - ◀ Length of the measured line (L=)
  - ◀ Angle of the line relative to the horizontal (A=)
  - ◀ Position coordinates of the end point (X=, Y=) – **Status Bar** only.



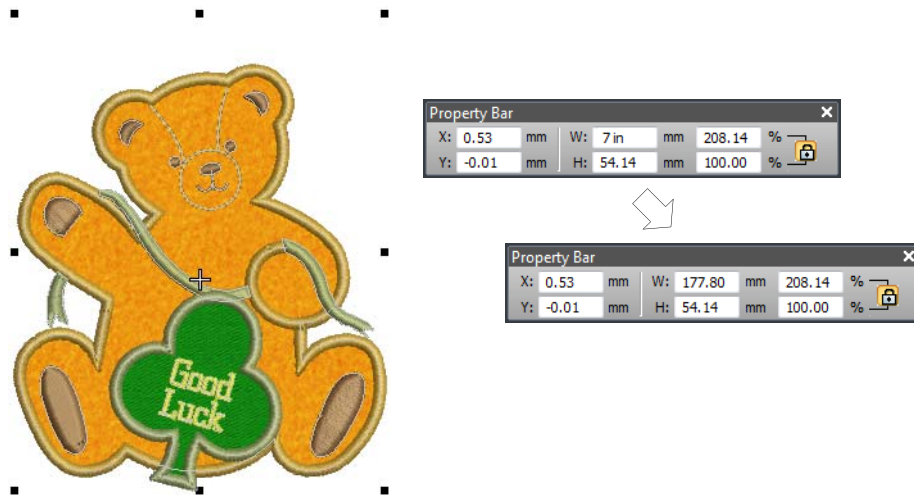
**Note** Measurements are shown in millimeters or inches according to selection. See also [Setting measurement units](#).

- 4 Press **Esc** to finish.

## Specifying measurements on-the-fly

As an alternative to changing the overall measurement system used in **TrueSizer Pro**, you can specify units of measurement when typing values into a measurement control. When you include the unit of measurement, the software

automatically converts the entered value into the units of the control. See also [Setting measurement units](#).



Say, for example, you are using the metric measurement system so your heights are in mm. And say you need to resize in inches. Simply specify the measurement in inches as shown, press **Tab**, and the value is automatically converted to metric. Press **Enter** to confirm. See also [Scaling designs numerically](#).



**Note** TrueSizer Pro supports both proper and improper fractions – e.g. '1 1/3' as well as '4/3'. It does not, however, support mixed units – e.g. '1'3"'. Nor does it display values as fractions **after** they are entered, only during.

### Supported units

Supported units include:


- ◀ millimeters, mm
- ◀ inches, in
- ◀ feet, ft
- ◀ yards, yd
- ◀ centimeters, cm
- ◀ meters, m



**Tip** TrueSizer Pro also allows entering units in text form, both English and the language the software is currently running in.

## Saving designs

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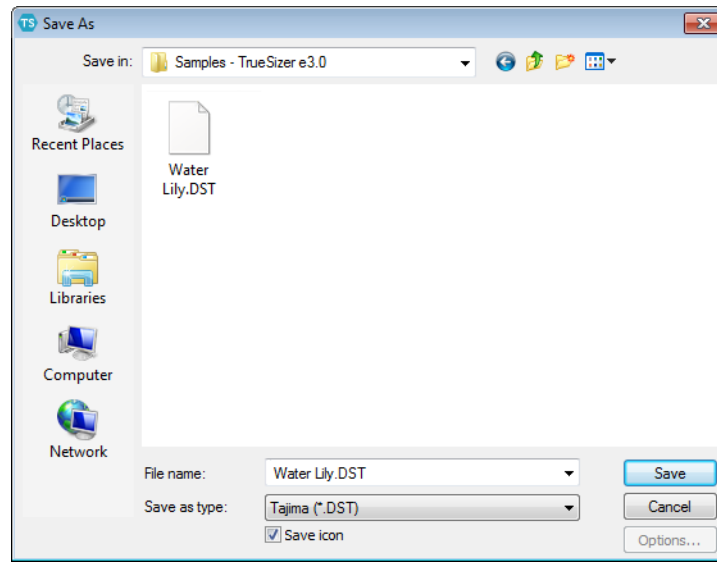
 Use Standard > Save to save the current design.

---

Saving a design records its file name, location and format, and updates it with any changes you make. When you save a design under a new name, to a different location or format, you create a copy of the original. TrueSizer Pro lets you save designs in native EMB as well as other outline and stitch file formats. You can also save designs to proprietary embroidery disks. See also [Supported file formats](#) and [Saving designs to embroidery disk](#).

## To save a design

- 1 Click the **Save** icon or select **File > Save As**.



**Tip** To save changes to an existing file but preserve the original, use **Save As**.

- 2 Select the folder where you want to save the design from the **Save In** list.
- 3 Enter a name for the design in the **File Name** field.
- 4 Select a file format from the **Save as type** list. See also [Supported file formats](#).



**Note** For backwards compatibility, you have the option of saving in previous EMB formats.



**Caution** If a design feature is not available in the file type you select, it will be converted – e.g. **Flexi Split** stitching may be changed to plain Tatami.

- 5 If available, select the **Save Icon** checkbox to include a thumbnail image of the design with design file.

This icon appears in the machine control panel during stitch-out. It also appears in the preview panel of the **Open** dialog. See also [Opening designs](#).

- 6 Click **Save**.



**Tip** Files saved in EMB format are automatically compressed when saved and decompressed when re-opened. This reduces the storage space required, and makes it possible to save large files to floppy disk, or send them as email attachments. See also [Sending designs as email attachments](#).

## Shortcut keys

The following shortcut keys can be used to make your TrueSizer Pro jobs faster to perform.

Function	Shortcut
<b>File</b>	
Exit	Alt+F4
Open	Ctrl+O
Print	Ctrl+P
Save	Ctrl+S
<b>Edit</b>	
Deselect all	X or Esc
Nudge	Arrow keys
Redo	Ctrl+Y
Select all	Ctrl+A
Undo	Ctrl+Z
<b>View</b>	
Measure	M
Pan	P
Redraw	R or F4
Refresh screen	R
Show all	0 (zero) or F2
Show bitmaps	D
Show bling	Ctrl+B
Show functions	Shift+F
Show grid	Shift+G
Show hoop	Shift+P
Show needle points	· (period)
Show outlines	L
Show rulers & guides	Ctrl+R
Show stitches	S
Show vectors	Shift+D
Slow redraw	Shft+R
TrueView	T
Zoom 1:1	1
Zoom box	B or F8
Zoom factor	F
Zoom in 2X	Z or F9
Zoom out 2X	Shft+Z or F10
Zoom to fit	0
Zoom to hoop	Alt+0
Zoom to product	Ctrl+0

# Viewing Designs

TrueSizer Pro provides many viewing features to make it easier to work with your design. Zoom in on an area to see more detail or view the design at actual size. Pan the design to move it across the design window instead of scrolling, and quickly change between one view and the last. You can show or hide various design elements with the available display settings. Show or hide design outlines, or needle penetration points, as well as a 'trueview' of the stitch-ready design.



In TrueSizer Pro, you can preview an existing design in different colors on different fabrics by selecting from among any number of pre-defined 'colorways'. TrueSizer Pro also provides information about designs in a variety of ways and formats. Approval and production reports also provide essential information, including design previews, size, color sequence information and any special instructions.

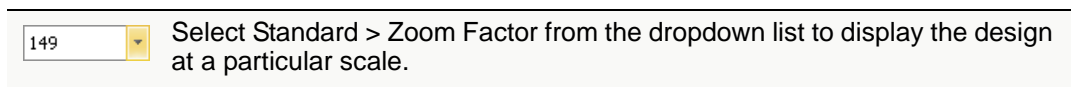
## Viewing embroidery designs

TrueSizer Pro provides many viewing modes to make it easier to work with your design. View a design at actual size or zoom in for more details. Pan across the design instead of scrolling, or quickly change between one view and the last.



**Tip** To make sure your design is being displayed at the correct size, you might need to calibrate your monitor. See [Calibrating the monitor](#) for details.

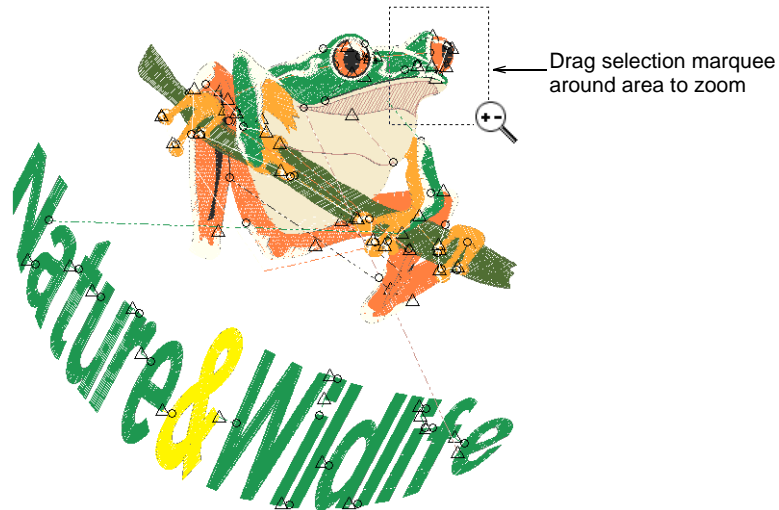
## Zooming & panning designs



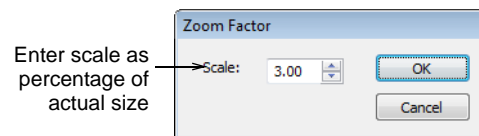
**Zoom** tools allow you to magnify your view of the design by zooming in on individual stitches or details, or zoom out to view more of the design.

## To zoom in and out

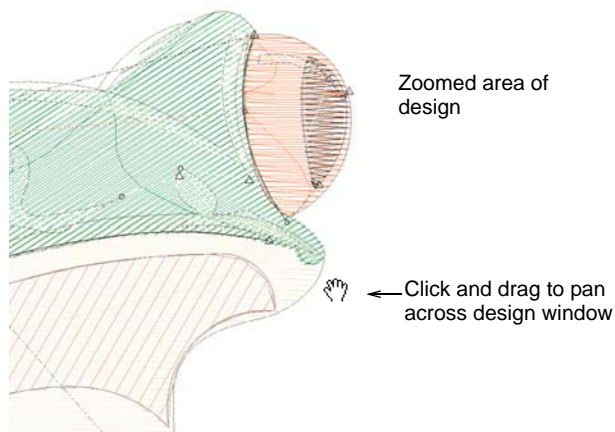
- ◀ To display the whole design in the design window, select **View > Zoom to Fit** or press **O**.
- ◀ To zoom in on a section of a design, select **View > Zoom** (or press **B**) and drag a selection marquee around the zoom area.



- ◀ To display a design at its actual size, select **View > Zoom 1:1** or press **1**.
- ◀ To display stitches at a particular scale, select **View > Zoom Factor**. Alternatively, press **F** on the keyboard. In the **Zoom Factor** dialog, enter a scale as a percentage of the actual size, and click **OK**.



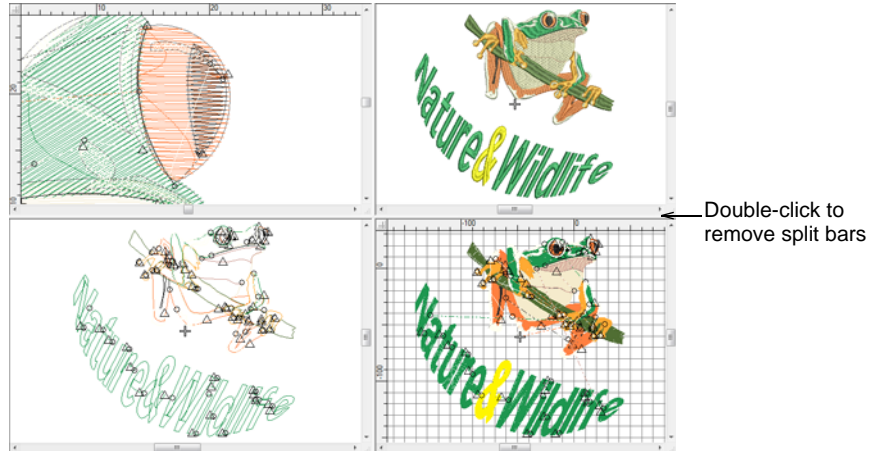
- ◀ To display a design at twice its current size, select **View > Zoom In 2X** or press **Z**.
- ◀ To display a design at half its current size, select **View > Zoom Out 2X** or press **Shift + Z**.





**Note** To make sure your design is being displayed at the correct size, you might need to calibrate your monitor. See [Calibrating the monitor](#) for details..

- ◀ To pan across a design in the design window, use the scroll bars. Alternatively, select **View > Pan** or press **P** and use the 'grabbing hand' tool. Click to 'hold' the design window and drag it around.
- ◀ To view a design in multiple views, select **Window > Split Window**. Zoom, pan, and adjust viewing options in each window pane as required.



## Refreshing the screen

After certain operations, such as editing thread colors, you may need to refresh the screen for a clearer display.



**Note** To view the stitching sequence, use **Slow Redraw**. See [Viewing colorways](#) for details.

### To refresh the screen

- ◀ Select **View > Refresh Screen** or press **R**.  
The design display is refreshed.

## Viewing embroidery components

**TrueSizer Pro** allows you to show or hide embroidery design elements. Show or hide design outlines, needle penetration points, machine function symbols and stitches themselves. Show or hide any graphical elements which may be part of the design.

### Viewing stitches & outlines



Use **View > TrueView** to change between normal view and TrueView.



Click **View > Show Stitches** to show or hide stitches.



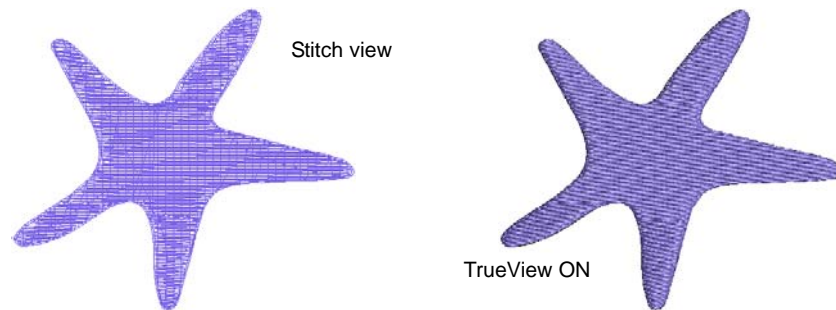
Click **View > Show Outlines** to show or hide design outlines.



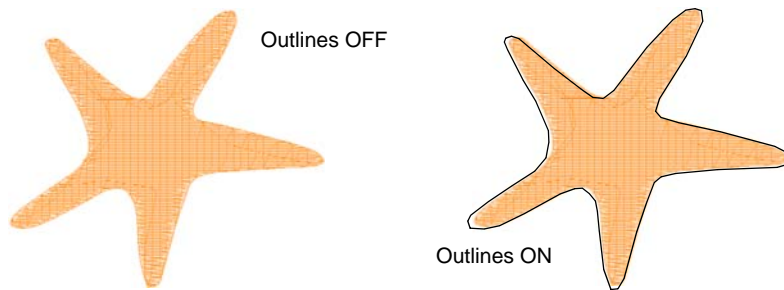
Show or hide design elements with a variety of display settings. View designs in TrueView for realistic presentations.

### To view outlines and stitches

- ◀ Click the **TrueView** icon to switch between TrueView and stitch view.

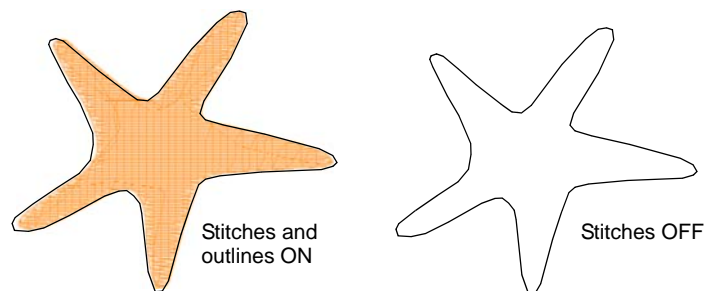


- ◀ In stitch view, click the **Show Outlines** icon to turn outlines on or off.



**Note** **Show Outlines** will not work with 'stitch' files that have been read without stitch recognition. See also [Opening stitch files](#).

- ◀ Click the **Show Stitches** icon (or press **S**) to turn stitches on or off.



### Viewing needle points & machine functions



Click View > Show Needle Points to show or hide the needle points in a design.



Click View > Show Functions to show or hide the function symbols and any sequin elements in a design.

You can show or hide design elements such as needle points and machine function symbols in your design.

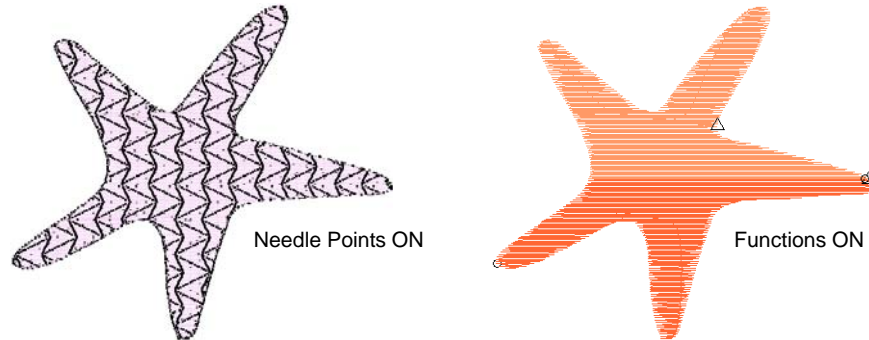


**Note** You can display or hide design elements in any combination. None, however, displays while viewing in TrueView.

---

### To view needle points and machine functions

- ◀ To show or hide needle points, click the **Show Needle Points** icon.



- ◀ To show or hide machine functions, click the **Show Functions** icon.



**Tip** Use **Show Functions** to visualize any sequin elements which may be included in a design.

## Viewing graphical components



Use View > Show Bitmaps to show and hide bitmap images. Right-click for settings.



Use View > Show Vectors to show and hide vector graphics. Right-click for settings.



Click View > Show Appliqué Fabric to toggle appliqué fabric display.



Use View > Show Bling to toggle bling display on/off.

Artwork can be included in EMB files as digitizing templates or 'backdrops'. A design may include artwork, usually in the form of vector graphics, as an element in multi-decoration designs. **TrueSizer Pro** also lets you display background appliqué fabrics for more realistic previews. Some multi-decoration designs include bling elements. **TrueSizer Pro** lets you visualize graphical elements singly or in combination with other design elements.

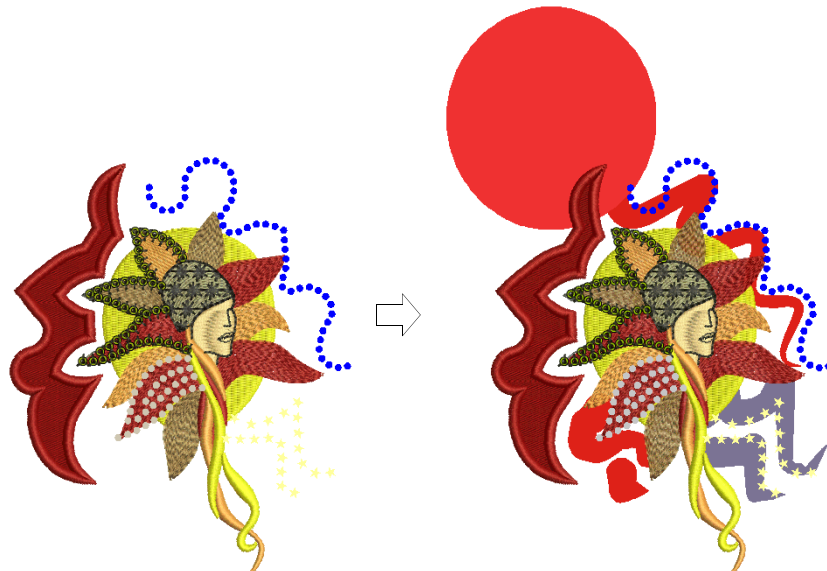
## To view graphical components

- ◀ Click the **Show Appliqué Fabric** icon to toggle display of appliqué fabric on/off.



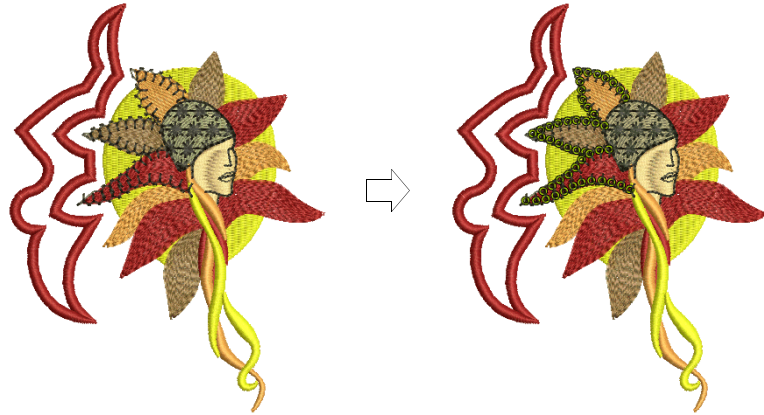
**Tip** You can also print appliqué fabrics with the production worksheet. See also [Setting design print options](#).

- ◀ Click the **Show Bling** icon to toggle on/off display of any bling elements in a design.
- ◀ Toggle the **Show Bitmaps** and/or **Show Vectors** icons to selectively view backdrops or graphic design elements.



**Tip** Depending on the view options set up in the **Options** dialog, images display in full color, or dimmed. See also [Setting image viewing options](#).

- ◀ Use **Show Functions** to visualize any sequin elements which may be included in a design.



## Viewing & naming color blocks



Use Color > Colorway Editor to view and name elements in a design.

A color block or 'element' corresponds to a color change in the design. It may be comprised of one or more same-color embroidery objects. Each block can be given a descriptive name for easy identification. Named color blocks are known as design 'elements'.

### To view color blocks

- ◀ Click the **Colorway Editor** icon to view or edit an existing colorway. The **Colorway Editor** opens with the current colorway selected.

Colorway Editor

Colorways - Teal

Color #	Teal	Gray	Red
BKG	R255 G255 B255	Kids\Sweat Shirt\Hooded	Kids\Sweat Shirt\Hooded
1*	0311 Canary	1106 Orange	4113 Alexis Blue
2*	1375 Dark Charcoal	0020 Black	13 Black
3*	0017 Paper White	0015 White	15 White
4*	4074 Dimgray	4074 Dimgray	4074 Dimgray

Stop# - Element

2 - Text - highlights

6 - Bear nose - body

My threads

Click to view current colorway details

Select color

Enter descriptive name for selected element

Click and hold to locate selected color block

- ◀ Select a color from the colorways list.
- ◀ Select an item in the element list, and click and hold the **Locate** button. Only the selected color block will appear in the design window.
- ◀ To name a design element, double-click the corresponding field and key in a descriptive name – e.g. 'bear nose - body'.

- ◀ To check the naming of all design elements, select **Design > Design Properties > Stop Sequence**. See also [Viewing design elements](#).

Named design elements listed here

Stop #	Color #	Element	Stitches	Length	Code	Name
1	2	Text - background	9756	59.82m	13	Black
2	1	Text - highlights	2290	12.56m	0311	Canary
3	3	Text - outline	6563	37.28m	15	White
4	2	Bear head - background	6903	45.77m	13	Black
5	4	Bear head - highlights	611	3.85m	4074	Dimgray
6	1	Bear nose - body	1082	6.70m	0311	Canary
7	3	Bear head - outline	3818	17.01m	15	White




**Tip** Element names should make sense to a production operator as they appear on the production worksheet. The operator generally refers to these to make sure correct colors are used. See [Creating design reports](#) for details.


## Viewing colorways

In **TrueSizer Pro**, you can define multiple colorways for the one design. This means you can preview or stitch out the same design in different colors to different fabrics.



## Switching colorways

 Use **Color > Current Colorway** dropdown to select a new color scheme for design.

 Use **Color > Colorway Editor** to view and modify colorway details.

A 'colorway' is a color scheme or palette of thread colors. It may also include a background color or fabric sample. This means you can preview or stitch out the same design in different colors to different fabrics. In **TrueSizer Pro**, you can also print multiple colorways, icons of color blocks, and design backgrounds with the production worksheet.

## To switch colorways

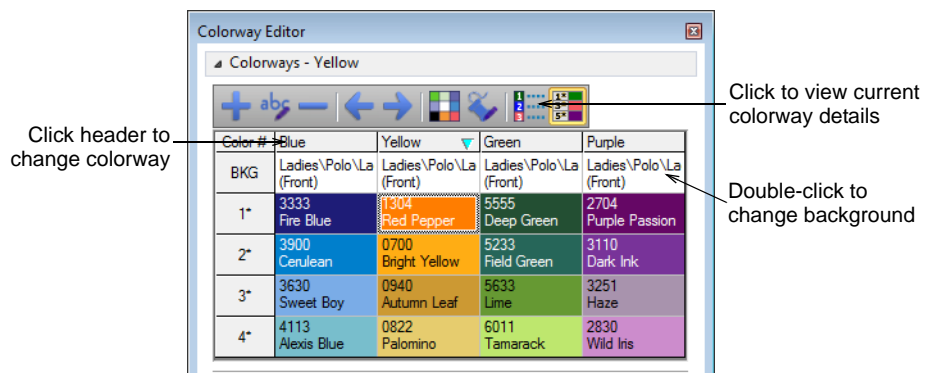
- ◀ Open a design with multiple colorways. See also [Setting up colorways](#).



- ◀ Select a colorway from the **Colorways** dropdown list.



- ◀ Alternatively, click the **Colorway Editor** icon. The **Colorway Editor** dialog opens.






- ◀ Select a colorway by clicking the associated column header or anywhere within the column.



**Tip** Change colorway background by double-clicking the **BKG** switch. See also [Setting backgrounds](#).

## Viewing backgrounds

-  Click Colorway Editor > Background & Display Colors to change the background of the current colorway.
-  Click View > Show Background Image to display selected background image – fabric or product. Right-click for settings.
-  Click View > Show Hoop to turn hoop display on or off. Right-click for settings.

TrueSizer Pro lets you set the background color, fabric, or product of the current colorway for more realistic previews and presentations.

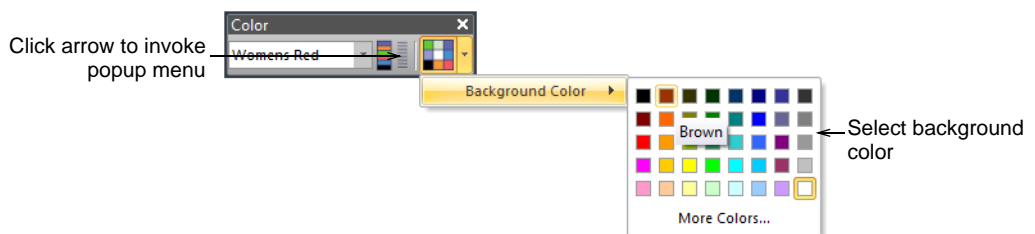


### To view the background

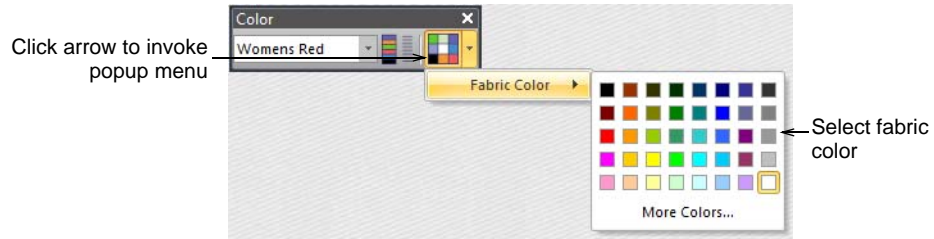
- ◀ Open the design and select the desired colorway. See also [Viewing colorways](#).



- ◀ Click the split arrow next to the **Background & Display Colors** icon on the **Color** toolbar.
- ◀ Choose a popout color menu:
  - ◀ The **Background Color** menu is available if activated in the **Background & Display Colors** dialog.



- ◀ The **Fabric Color** menu is available if activated in the **Background & Display Colors** dialog.



- ◀ The **Product Color** menu is available if activated in the **Background & Display Colors** dialog.



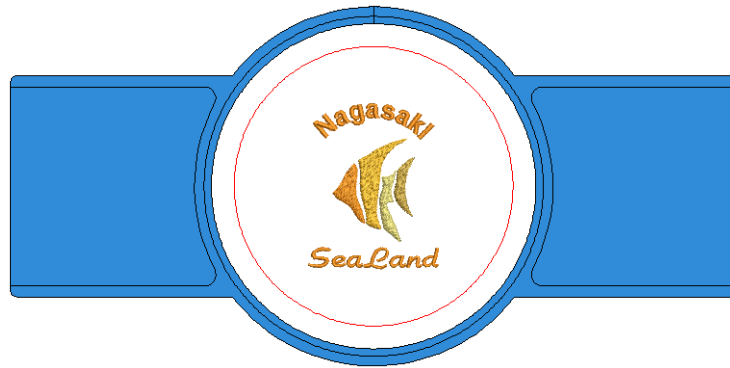
**Tip** To preset any of these options, click the **Background & Display Colors** icon. See [Setting backgrounds](#) for details.

- ◀ Click **More Colors** in the popout menu to select from a greater range.
- ◀ To turn off background fabric or product altogether, toggle off the **Show Background Image** icon.





**Tip** Use the **Show Hoop** and **Zoom to Hoop** tools to display the currently selected hoop. See [Selecting & centering hoops](#) for details.

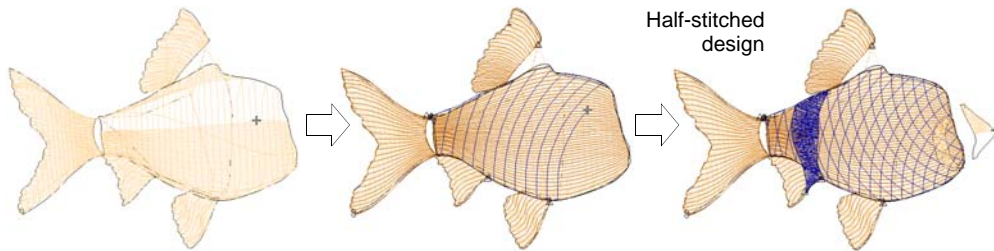


## Simulating design stitchouts



Use **View > Slow Redraw** to simulate embroidery design stitchout on screen.

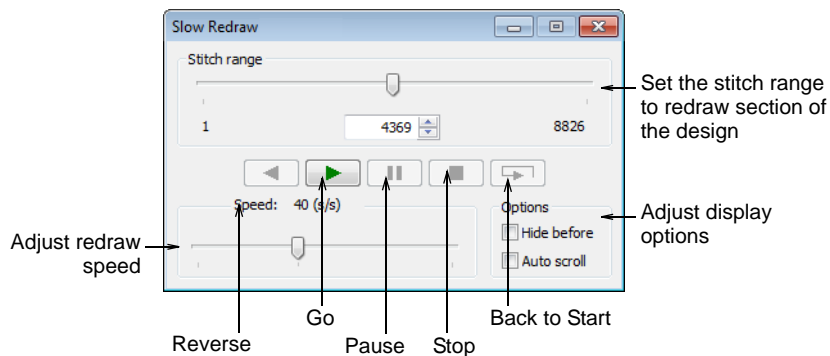
**Slow Redraw** lets you view the stitching and color sequence of a design in slow motion. Redrawing can be started from any stitch in the design. Hide previously stitched parts of the design as required. With larger designs, you can choose to scroll automatically so that the area being stitched remains on-screen. It can be run in both TrueView and stitch view.



### To simulating the design stitchout

- 1 Click **Slow Redraw** or select **View > Slow Redraw**.

The **Slow Redraw** dialog opens.



- 2 Use the slider bar to adjust the redraw speed.
- 3 Select the options as required:

- ◀ **Hide Before:** Hide all sections of the design prior to the current cursor position.
  - ◀ **Auto Scroll:** With larger designs, scrolls automatically so that the area being stitched remains on-screen.
- 4 To redraw only a section of the design, specify a start point for either forward or backward stitching in the **Stitch Range** field or via the slider control.
  - 5 Click **Go**.  
The design is redrawn on-screen according to the stitching sequence and selected speed.

## Viewing design information

TrueSizer Pro provides information about designs in a variety of ways and formats. Before even opening TrueSizer Pro or your design, you can check the software version number and other design information for EMB files directly from Windows Explorer. You can view stitching details in the **Design Properties** dialog.

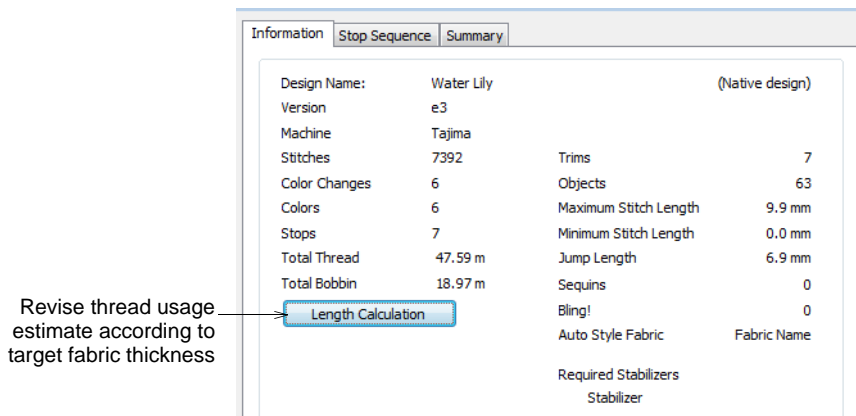
### Viewing design information

You can check software version number and other design information through the **Design Properties** dialog. This dialog provides stitching details as well as important information about the file source – Native Design, Imported Outlines, Processed Stitches, or Imported Stitches. See also [Processing Design Files](#).

#### To view design information

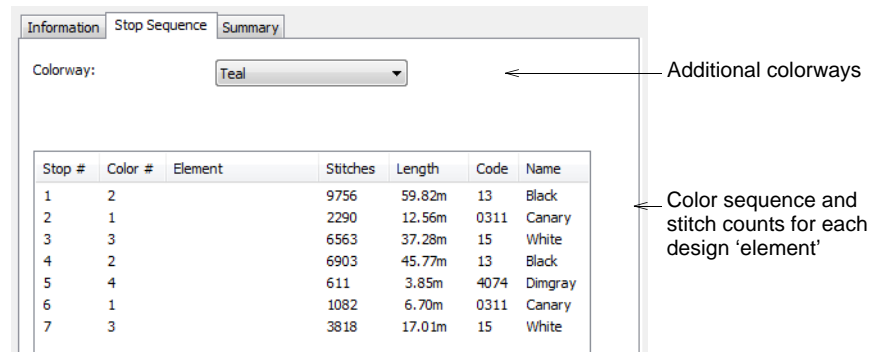
- 1 Select **Design > Design Properties**.

The **Design Properties > Information** tab opens. This tab contains information about the design source as well as height and width and stitch count and colors. The data is extracted from the design and, except for stitch count, cannot be modified.

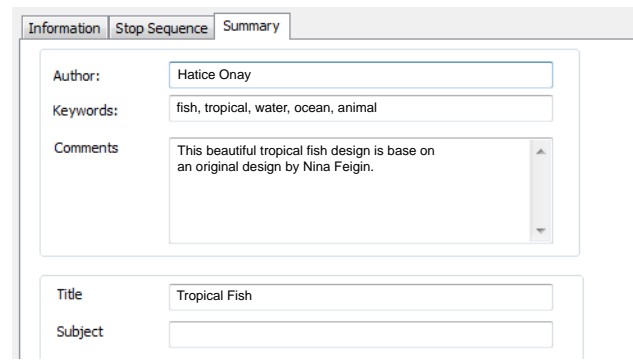


- 2 Click **Length Calculation** to revise thread usage estimate according to target fabric thickness. See [Estimating total thread usage](#).
- 3 Select the **Stop Sequence** tab to view the color sequence and stitch counts for each design 'element'. See also [Viewing design elements](#).

The data in this tab is extracted from the design and, except for **Element**, cannot be modified. Any additional colorways associated with the design are listed in the dropdown. See also [Printing multiple colorways](#).



- 4 Select the **Summary** tab to view or enter summary information about the design.



- 5 Click a field and enter any text which will help you identify the design at a later date.



**Note** Information from this tab is included on the Production Worksheet as well as the **Summary** tab of the Windows **Properties** dialog. See [Viewing design information](#) and [Previewing reports](#).

- 6 Click **OK**.

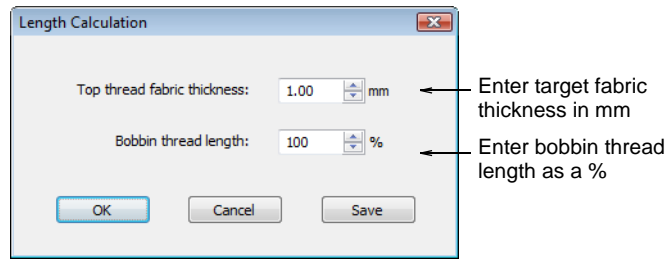
## Estimating total thread usage

In order to get more precise thread usage estimates, you can adjust the fabric thickness setting to suit the target fabric.

### To estimate total thread usage

- 1 Select **Design > Design Properties**.  
The **Design Properties > Information** tab opens.
- 2 Click **Length Calculation**.

The **Length Calculation** dialog opens.



- 3 Enter the thickness of the target fabric in millimeters.
- 4 Adjust the bobbin thread length according to the mixture of thread types in the design.
- 5 Click **OK**.

The **Total Thread** and **Total Bobbin** values are adjusted to take into account fabric thickness on total thread requirement.



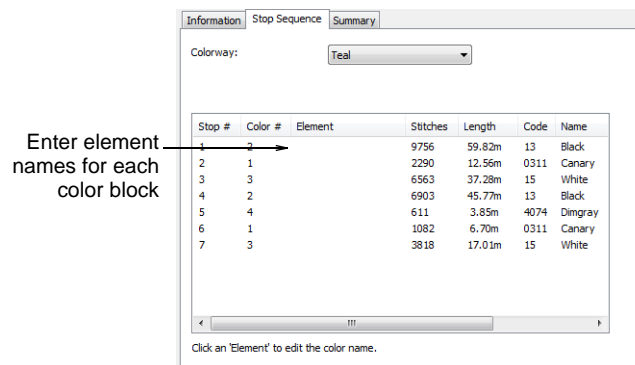
**Tip** Click **Save** to save the revised settings to the current template.

## Viewing design elements

You can assign names to blocks of sequential, same-color embroidery objects, known as 'elements'. Each color block can be given a descriptive name for easy identification. Element names appear on the production worksheet. See [Creating design reports](#) for details.

### To view design elements

- 1 Select **Design > Design Properties**.
- The **Design Properties > Information** dialog opens.
- 2 Select the **Stop Sequence** tab.



- 3 In the **Element** fields, enter names for each color block as required. To do so, click the field, type the name, and press **Enter**. See also [Viewing & naming color blocks](#).



**Tip** This information may be included on the Production Worksheet. See [Customizing report information](#) for details.

- 4 Click **OK**.

## Previewing reports



Click Print Preview to preview the Production Worksheet on-screen.

The production worksheet is the link between the designer and the embroidery machine operator. It contains a design preview and essential production information, including the size of the design, color sequence and any special instructions. The approval sheet is intended for the customer, not production staff. Its function is to display designs in TrueView with or without a product or fabric background. Customers can see what they are ordering and approve accordingly. See also [Printing custom reports](#).

### To preview a report

- 1 Click the **Print Preview** icon.

By default, a production worksheet displays in a preview window.

The screenshot shows the 'Production Worksheet' interface. It features a central design preview of a fish, surrounded by technical data. On the right side, there are two tables: the 'Design Info table' and the 'Stop Sequence summary table'. The 'Design Info table' lists machine format, color changes, stops, trims, hoop, auto fabric, and required stabilizer. The 'Stop Sequence summary table' lists stitch codes, names, and chart references. The interface also includes a barcode, design name, and various status indicators.

Production Worksheet		Stitches: 23309	
Wilcom TrueSizer Pro		Colors: 5	
		Height: 79.1 mm	
		Width: 150.6 mm	
		Zoom: 1.1	
Design: Tropical Fish			
Colorway: Colorway 1			
Machine format: Tajima			
Color changes: 8			
Stops: 9			
Trims: 13			
Hoop: Tajima 21 cm			
Auto fabric: Pure Cotton			
Required stabilizer: Topping			
Backing: Tear Away x 2			
Left: 75.3 mm			
Right: 75.3 mm			
Up: 39.5 mm			
Down: 39.5 mm			
EndX: 0.0 mm			
EndY: 0.0 mm			
Area: 11916.4 mm <sup>2</sup>			
Max Stitch: 9.3 mm			
Min Stitch: 0.0 mm			
Max jump: 6.9 mm			
Total Thread: 120.83m			
Total bobbin: 43.29m			
#	St. Code	Name	Chart
1	64	Black	
2	30	15 White	Wilcom
3	515	24 Ocean Green	Wilcom
4	7932	30 Ghost Green	Wilcom
5	5916	24 Ocean Green	Wilcom
6	482	30 Ghost Green	Wilcom
7	4421	24 Ocean Green	Wilcom
8	1390	30 Ghost Green	Wilcom
9	2629	42 Pale Yellow	Wilcom

- 2 To change the information that displays, and set printing/plotting preferences, click **Options**. See [Printing custom reports](#).
- 3 Adjust the view as required:
  - ◀ To change the orientation of the paper, click **Landscape** or **Portrait**.
  - ◀ To print the design, click **Print**.
  - ◀ To close the preview, click **Close**.



**Tip** Zoom to read information or view the design preview more closely. Large designs may be displayed over a number of pages. See also [Zooming & panning designs](#).

## Chapter 1

# Threads & Colorways

In **TrueSizer Pro**, you can choose from a selection of colors tailored to each design or color scheme. The particular 'colorway' represents the actual thread colors in which a design will be stitched. In fact you can define multiple color schemes and switch between them.



For each colorway you define, you can select colors from commercial thread charts or define your own. Search for particular threads by specific code. Automatic thread color helps you locate thread colors based on closest match across one or several thread charts. You can also match thread colors from imported graphics – vector or bitmap.

**TrueSizer Pro** also lets you set the background color, fabric, or product of the current colorway for more realistic previews and presentations. The background is saved with the colorway.



**Tip** You can also print multiple colorways, design backgrounds, and icons of color blocks in the production worksheet. See [Creating design reports](#) for details.

This section describes how to adjust colors as well as how to set up colorways, including matching image colors to threads. It explains how to name elements within color blocks as well as how to split them across multiple colorways. It also explains how to customize and mix your own thread colors. It describes how to change backgrounds, including colors, fabrics, or products, as well as the display of display elements such as unsewn and sewn stitching to suit different colorways.

## Setting up colorways

**TrueSizer Pro** lets you define your own color schemes, or 'colorways', for a single design. Change them to preview an existing design in different colors on different fabrics. Colorways are saved automatically with the design when saving

in EMB format. Colorways cannot, however, be saved with stitch files. See also [Viewing colorways](#).



**Tip** Certain other settings are included as part of the colorway definition – background color or fabric, as well as display colors for borer symbols, unsewn stitches, selected objects, object outlines and the grid.

## Adding colorways

---

	Use Color > Colorway Editor to add or edit colorways.
	Use Colorway Editor > Create Colorway to create a new colorway definition for the design.
	Use Colorway Editor > Delete Colorway to remove the selected colorway from the design.

---

When you open a design, it will contain at least one colorway called by default, 'Colorway 1'. You can define up to 100 colorways for any design.

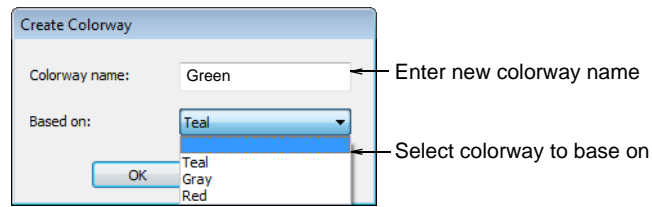
### To add a colorway

- 1 Open a design.
- 2 Click the **Colorway Editor** icon.  
The **Colorway Editor** dialog opens.

Color #	Teal	Gray	Red
BKG	R255 G255 B255	Kids\Sweat Shirt\Hooded	Kids\Sweat Shirt\Hooded
1*	0311 Canary	1106 Orange	4113 Alexis Blue
2*	1375 Dark Charcoal	0020 Black	13 Black
3*	0017 Paper White	0015 White	15 White
4*	4074 Dimgray	4074 Dimgray	4074 Dimgray

- 3 Click the **Create Colorway** icon.

The **Create Colorway** dialog opens.



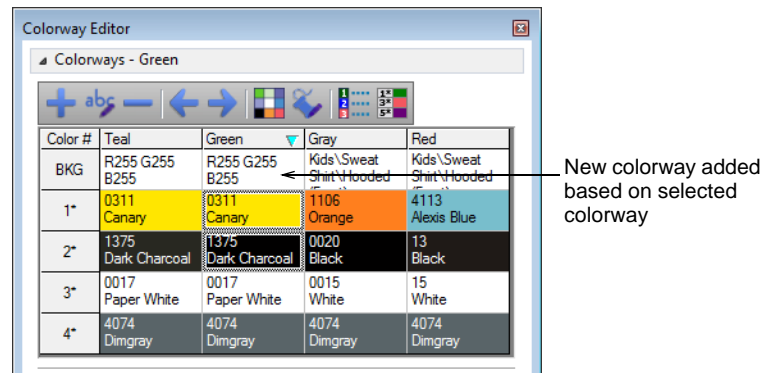
- 4 Select a colorway to base on and enter a new colorway name.



**Tip** By default, the **Based on** field contains the current colorway. If you want to base the new colorway on default settings, select the blank entry.

- 5 Click **OK**.

The new colorway is added.



- 6 Assign threads from the available chart/s to selected colors. See [Assigning threads to colorways](#) for details.



**Note** To delete a colorway, select it and click the **Delete Colorway** icon.

## Editing colorways

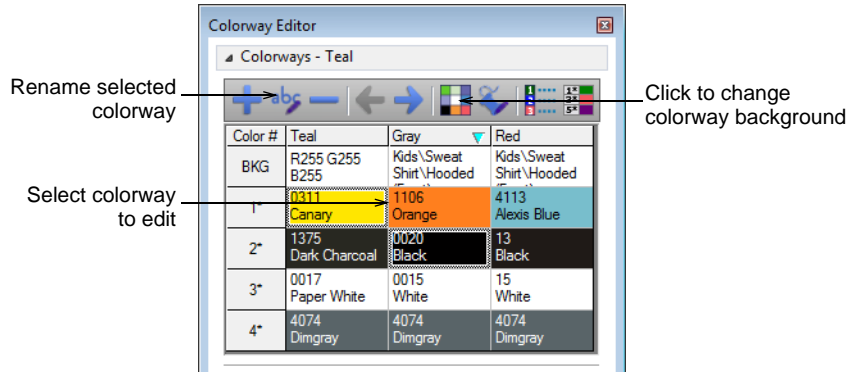
	Use <b>Color &gt; Colorway Editor</b> to add or edit colorways.
	Use <b>Colorway Editor &gt; Rename Colorway</b> to rename the selected colorway.
	Use <b>Colorway Editor &gt; Delete Colorway</b> to remove the selected colorway from the design.
	Use <b>Colorway Editor &gt; Background &amp; Display Colors (or Color toolbar)</b> to change design background presets for the current colorway.
	Use <b>Colorway Editor &gt; Edit Color</b> to modify thread information about the color currently selected in the colorway.
	Click <b>Colorway Editor &gt; Show Used Colors Only</b> to show only those colors that are used by objects in the design.



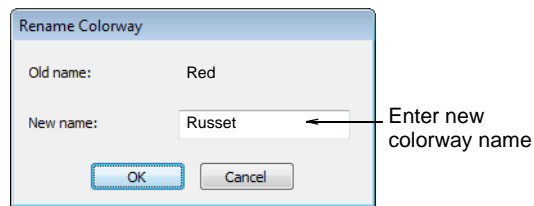
You can modify colorways by renaming or deleting them. You can add or change colors within colorways, or change colorway backgrounds. New colors can be selected from any associated thread chart.

### To edit colorways

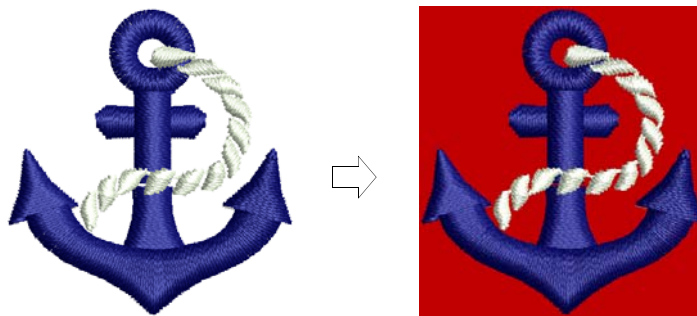
- ◀ With a design open, click the **Colorway Editor** icon.  
The **Colorway Editor** dialog opens.



- ◀ Select the colorway you want to edit.
- ◀ To edit the colorway name, click the **Rename Colorway** icon.

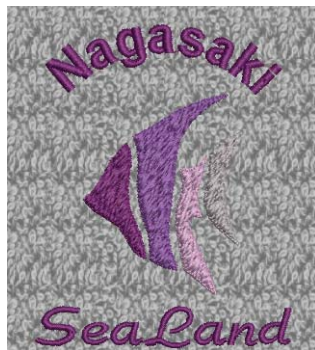


- ◀ To delete a colorway, select it and click the **Delete Colorway** icon.
- ◀ To modify a thread color, click **Edit Color** icon. See [Editing colors](#) for details.
- ◀ To change the colorway background, click **Background & Display Colors**. See [Viewing backgrounds](#) for details.



## Customizing backgrounds

TrueSizer Pro lets you set background color, fabric, or product backdrop for more realistic previews and presentations. The background is saved with the colorway. See also [Viewing backgrounds](#).



**Note** While you can change background colors, fabrics, and even products, this does not automatically affect fabric settings. Colorways and colorway editing in TrueSizer Pro is really intended for visualization purposes. The design file may not be production ready if the end use is for a fabric different to original settings.

## Setting backgrounds



Use Color > Background & Display Colors (or Colorway Editor dialog) to change design background presets for the current colorway.



Click View > Show Background Image to display selected background image – fabric or product. Right-click for settings.

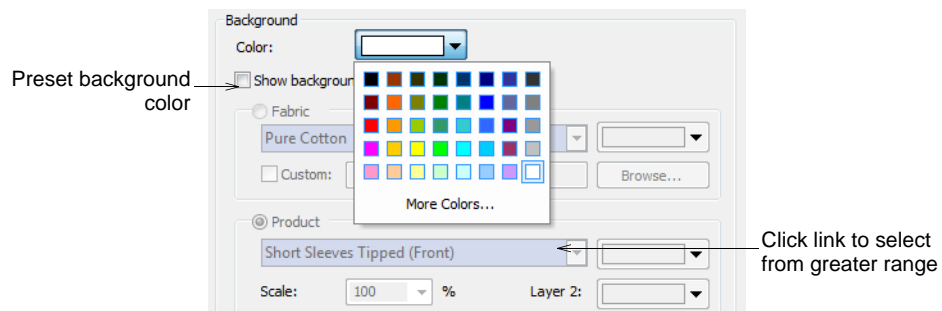
TrueSizer Pro lets you set the background color of the current colorway for more realistic previews and presentations. Choose from an assortment of swatches, or if you have your own, import them into your design. Almost any artwork can be used – photos, magazine pictures, clipart images, and even fabric samples. The background is saved with the colorway.

## To set the background

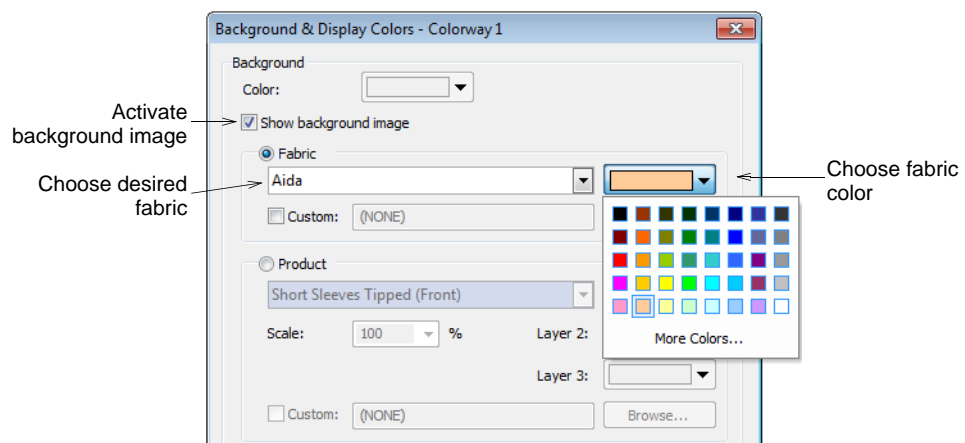
- ◀ Open the design.



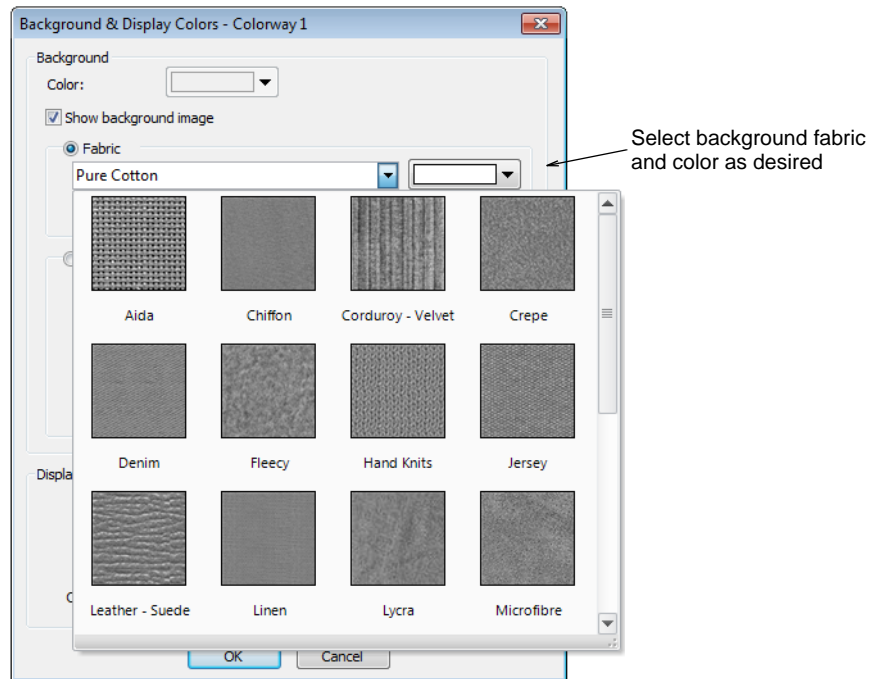
- ◀ Click the **Background & Display Colors** or right-click the **Show Background Image** icon.  
The **Background & Display Colors** dialog opens for the selected colorway.



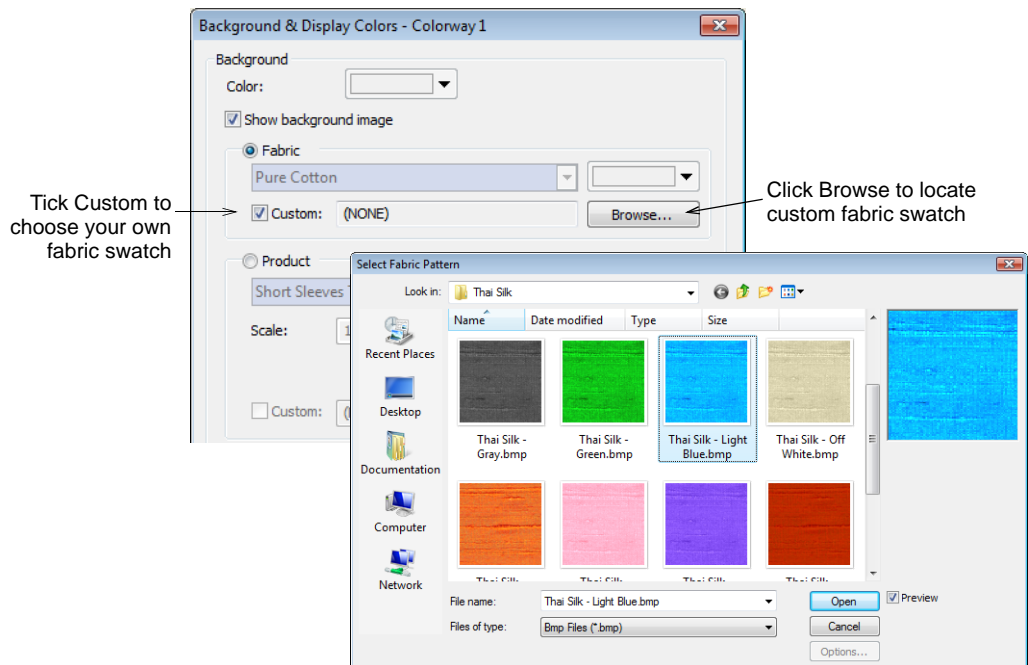
- ◀ Use the dropdown color menu to preset the background color for the current colorway. Click **More Colors** to select from a greater range.
- ◀ To select a background fabric for the current colorway, tick **Show Background Image** and the **Fabric** option.



- ◀ Click the **Fabric** droplist for a swatch of fabrics to choose from.



- ◀ To choose from a custom swatch, tick **Custom** and use the **Browse** button to locate.



- ◀ Alternatively, click the **Product** droplist for a library of products to choose from. See [Visualizing products](#) for details.

◀ Click **OK**.



## Visualizing products



Use Color > Background & Display Colors (or Colorway Editor dialog) to change design background presets for the current colorway.



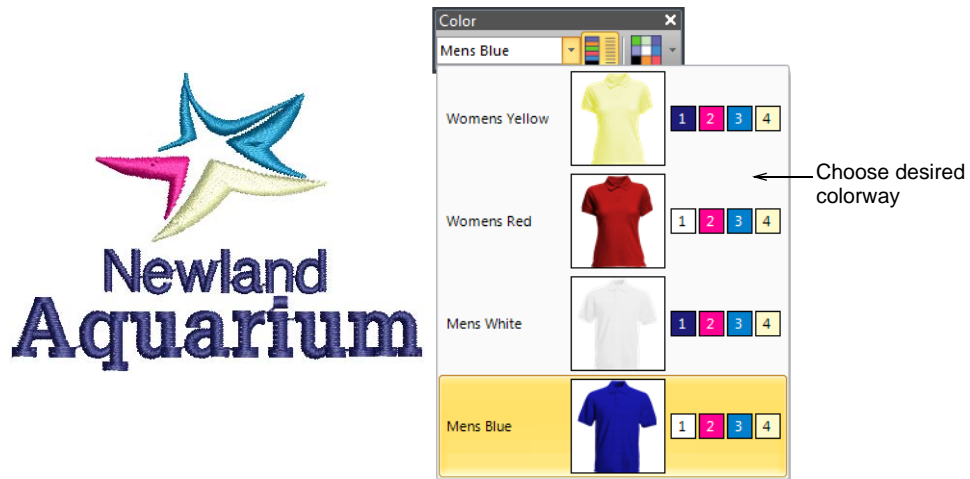
Click View > Show Background Image to display selected background image – fabric or product. Right-click for settings.

TrueSizer Pro lets you choose a garment or product backdrop on which to position your decoration. Use it to display location, size and overall appearance for visualization and approval purposes. The software provides a library of garments of common brands and styles. Choose colors for each product type, including multi-color garments. Even use different garments for different colorways within the same design. Print options allows you to print approval sheets and production worksheets with or without backdrops. See also [Creating design reports](#).

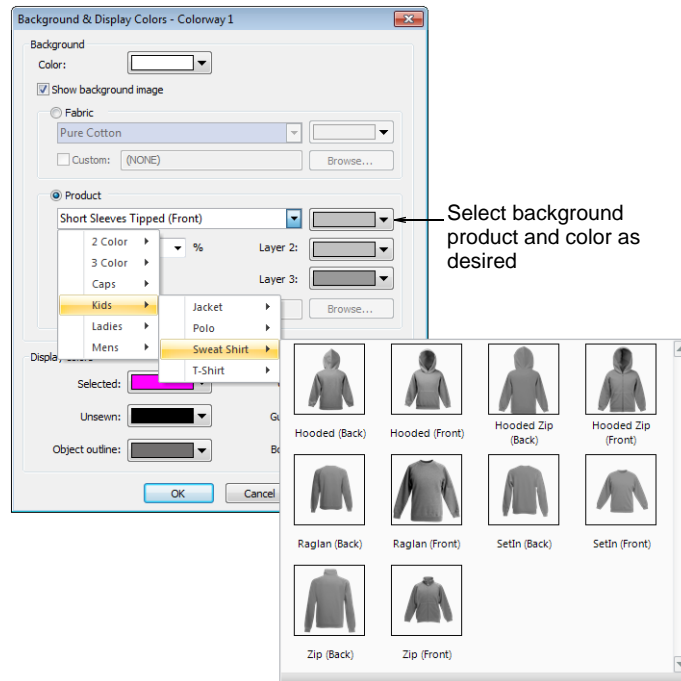


## To visualize a product

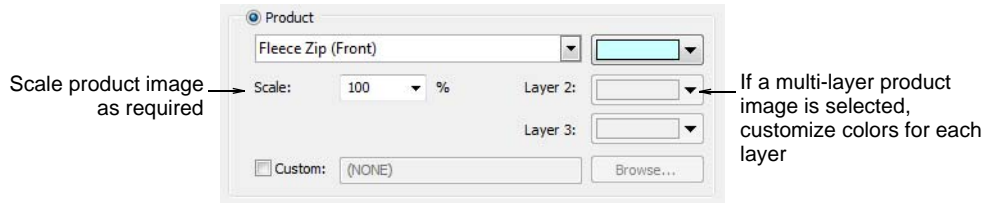
- ◀ Open the design and select the desired colorway (if available) from the **Color** droplist. See also [Viewing colorways](#).



- ◀ Click the **Background & Display Colors** or right-click the **Show Background Image** icon.  
The **Background & Display Colors** dialog opens for the selected colorway.
- ◀ To select a product, tick **Show Background Image** and **Product**.



- ◀ Choose product and color from the dropdown menus. For custom product images, click **Browse**.

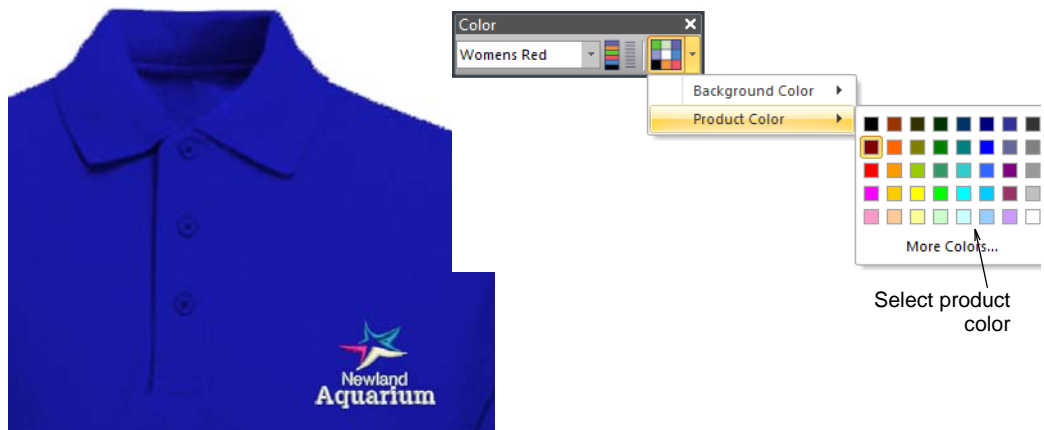


- ◀ Scale the product as required.  
Scale should be adjusted according to garment size – XS, S, M, L, XL, or XXL. For example, for a small size garment, scale down to approximately 70%. Rule of thumb: L = 100%.

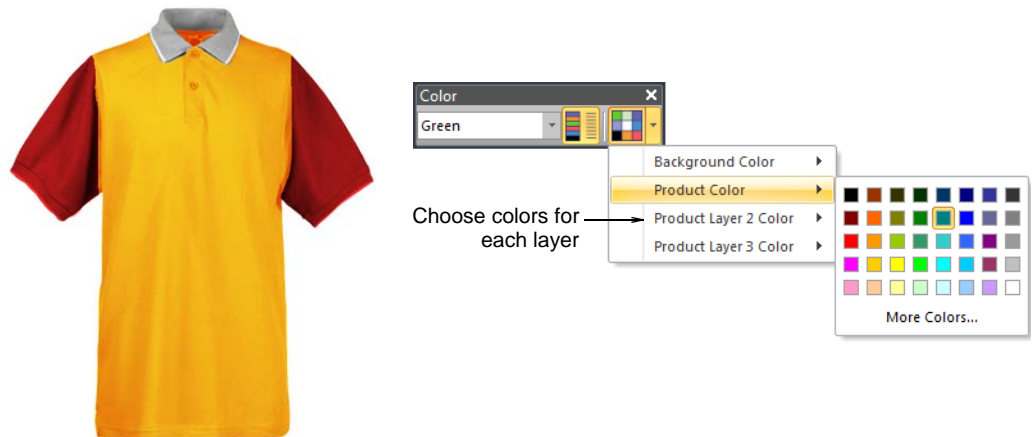


**Tip** Measure the garment using the **Measure** command. See [Measuring distances on-screen](#) for details.

- ◀ Click **OK**.  
The product image is centered in the design window at the selected scale.
- ◀ To toggle the product background on/off, click the **Show Background Image** icon.



- ◀ If a multi-layer product image is selected, additional **Product Layer** submenus become available.









## Setting up colorway threads

For each colorway you define, you can select colors from commercial thread charts or define your own. Search for particular threads by specific code. Automatic color matching helps you locate threads across one or several thread charts. You can edit display colors and details of your threads at any stage.



## Assigning threads to colorways

-  Use Color > Colorway Editor to assign threads to colors in the colorway.
-  Use Colorway Editor > My Thread Charts to assign a thread chart/s to the design.
-  Use Colorway Editor > Find Thread to search for exact color codes or names in the current thread chart.
-  Use Colorway Editor > Assign Thread to assign a thread to the selected color.
-  Use Colorway Editor > Match All to assign automatically matched threads from the selected chart/s to the current colorway.
-  Use Colorway Editor > Show Thread Details to expand thread details for current thread chart.

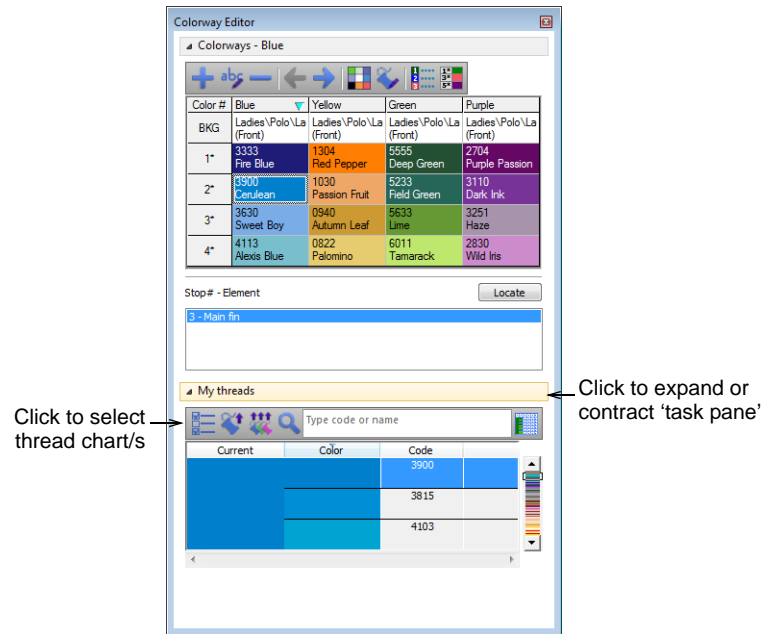
When a design is opened, it includes at least one colorway. This may contain specific thread colors or default colors, unassigned to any thread chart. The **Colorway Editor** lets you edit these colors and assign threads from preferred thread charts. You can also use it to set up additional colorways. See also [Viewing & naming color blocks](#).

### To assign threads to a colorway

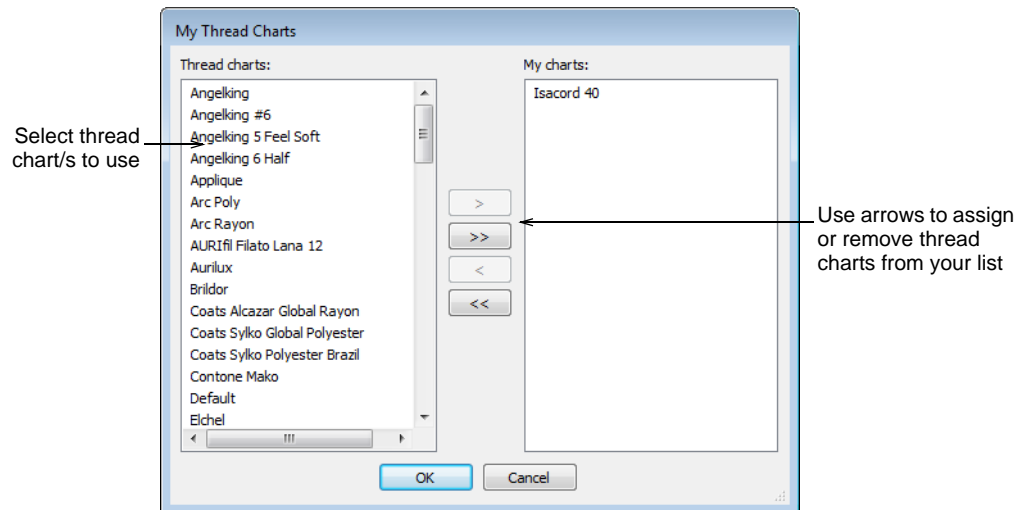
- 1 Open a design.
- 2 Click the **Colorway Editor** icon.



The **Colorway Editor** opens. The Isacord 40 thread chart is selected by default.



- 3 Click the **My Thread Charts** button.  
The **My Thread Charts** dialog opens.



- 4 Select the thread chart/s to add and double-click to assign to your charts list. Remove any unwanted charts with the reverse arrow buttons.
- 5 Click **OK**.

All definitions from the selected chart/s are transferred to the **Colorway Editor**.

Select color for visual comparison with nearest matching thread colors

Click to assign selected thread to selected color

Click column header to sort by category

Currently selected color

Click to toggle thread details

Enter exact color code or name if known

Browse color list manually for desired colors

Color #	Blue	Yellow	Green	Purple
BKG	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)
1*	3333 Fire Blue	1304 Red Pepper	5555 Deep Green	2704 Purple Passion
2*	3900 Cerulean	1030 Passion Fruit	5233 Field Green	3110 Dark Ink
3*	3630 Sweet Boy	0940 Autumn Leaf	5633 Lime	3251 Haze
4*	4113 Alexis Blue	0822 Palomino	6011 Tamarack	2830 Wild Iris

Current	Color	Code	Name	Chart	Thickness
		1176	Madeira Classic 40	A	
		1295	Madeira Classic 40	A	
		1177	Madeira Classic 40	A	
		1095	Madeira Classic 40	A	
		1297	Madeira Classic 40	A	
		1133	Madeira Classic 40	A	
		1294	Madeira Classic 40	A	
		1096	Madeira Classic 40	A	

- 6 Select the colorway you want to assign threads to. See also [Setting up colorways](#).
- 7 Sort the **My Threads** list as desired:
  - ◀ Sort the threads list by clicking a column header. Default sorting is by closest matching color. Color can only be sorted in descending order. Click Code, Name, Chart and Thickness to sort in either ascending or descending order.
  - ◀ Click the **Show Thread Details** button to expand thread details for current thread chart.
- 8 If unsatisfied with the automatic selection:
  - ◀ Enter an exact color code or name in the **Find Thread** field and click the search button.
  - ◀ Scroll down the color list to locate a suitable a color.
- 9 Click the **Assign Thread** button to assign your selection to the current color.

- Repeat for all other colors. Alternatively, use the **Match All** tool to assign automatically matched threads to the selected colorway.

Colorways - Yellow

Color #	Blue	Yellow	Green	Purple
BKG	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)
1*	3333 Fire Blue	1304 Red Pepper	5555 Deep Green	2704 Purple Passion
2*	3900 Cerulean	0700 Bright Yellow	5233 Field Green	3110 Dark Ink
3*	3630 Sweet Boy	0940 Autumn Leaf	5633 Lime	3251 Haze
4*	4113 Alexis Blue	0822 Palomino	6011 Tamarack	2830 Wild Iris

Actual thread colors assigned to colors



**Note** Assigned threads are printed to the production worksheet for easy reference. See [Creating design reports](#) for details.

## Editing colors



Use Color > Colorway Editor to modify threads in existing charts.



Use Colorway Editor > Edit Color to modify information about the current color selection in the colorway list.

You can always change the code, name, chart, thickness or display color of existing colors by means of the **Colorway Editor**. These labels appear on the production worksheet both in the **Stop sequence** and **Color Film** printout. See also [Creating design reports](#).

### To edit colors

- Click the **Colorway Editor** icon.  
The **Colorway Editor** dialog opens.

Colorways - Yellow

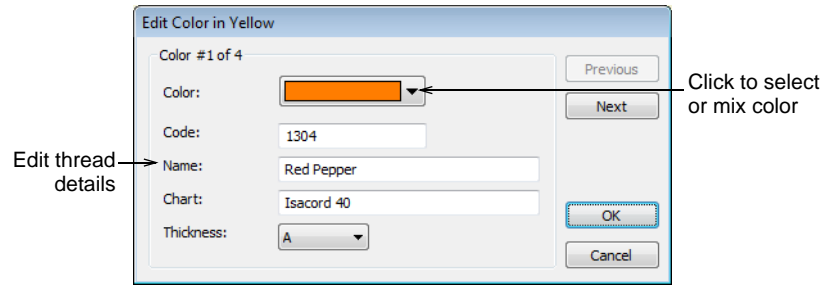
Color #	Blue	Yellow	Green
BKG	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)	Ladies\Polo\La (Front)
1*	3333 Fire Blue	1304 Red Pepper	5555 Deep Green
2*	3900 Cerulean	0700 Bright Yellow	5233 Field Green
3*	3630 Sweet Boy	0940 Autumn Leaf	5633 Lime
4*	4113 Alexis Blue	0822 Palomino	6011 Tamarack

Click to edit color details

Select a color to edit

- Select a colorway. See also [Setting up colorways](#).
- Assign thread charts and threads as desired. See [Assigning threads to colorways](#) for details.

4 Double-click a color or click the **Edit Color** button.



5 Edit details as required:

- ◀ Click **Color** droplist to see more colors or mix your own.
- ◀ Enter code, name, and chart details for the new color. Code is the identification number of a thread color in a chart.
- ◀ Select an appropriate thread thickness:

Thickness	Description	Default
A	Normal embroidery thread (approx. denier 40)	0.01
B	Thicker than normal (approx. denier 30)	0.03
C	Finer than normal (approx. denier 80)	-0.03
D	Very fine (approx. denier 100)	-0.06



**Tip** Lighter weight threads do not run so well in a production environment as the machines need to be slowed down in order to avoid thread breaks. However, lighter weight threads are good for very small lettering and fine-detail designs.

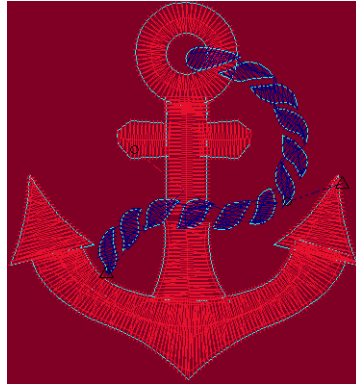
## Changing display colors



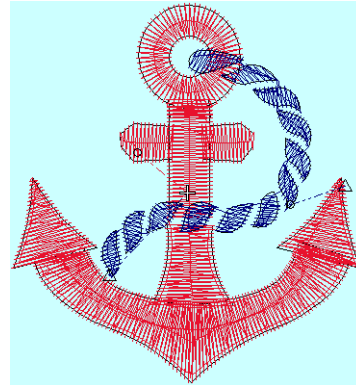
Use **Color > Background & Display Colors** (or **Colorway Editor**) to change design background presets for the current colorway.

In addition to background color or fabric, display colors for borer holes, unsewn and selected stitches, design outlines and grid are part of the colorway

definition. Change them if the default display color is not visible against the current colorway.



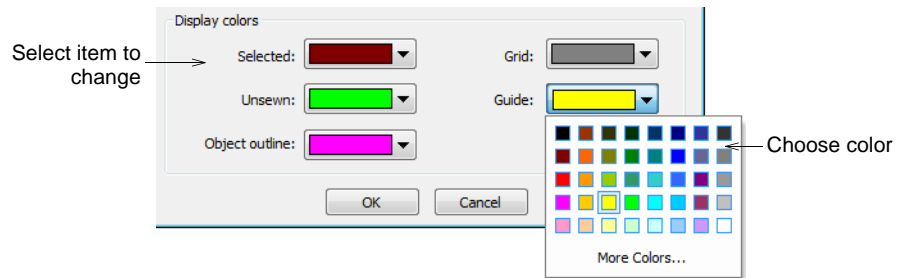
Cyan outline against burgundy background



Black outline against blue background

### To change display colors

- 1 Select a colorway and click the **Background & Display Colors** icon. The **Display** dialog opens for the selected colorway.

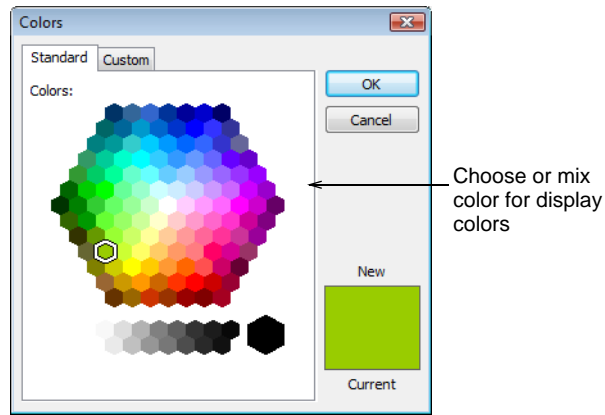


- 2 Select an item from the **Selection** list:

Display item	Description
Selected	Selected objects or stitches.
Unsewn	Unsewn stitches as they appear when traveling through the design.
Object outline	Object outlines as they appear when Show Outlines is activated. See <a href="#">Viewing stitches &amp; outlines</a> for details.
Grid	Depending on the colorway, you may need to adjust grid display colors in order to view them against the background color. See also <a href="#">Grids, rulers &amp; guides</a> .
Guide	Depending on the colorway, you may need to adjust guide display colors in order to view them against the background color. See also <a href="#">Grids, rulers &amp; guides</a> .

- 3 Select a suitable color for the current colorway from the popout color menu.

- 4 Click **More Colors** in the dropdown menu to select or mix a new display color.



- 5 Click **OK** to close.  
The display colors will be saved with the colorway.



**Tip** You can save colorways as an EMT template file for use in future designs.

# Modifying Designs

Wilcom TrueSizer Pro e3 lets you scale and transform (mirror, rotate, skew) both outline and stitch formats. After modification, you can choose to save your design to the native EMB format, or to a different format altogether. See also [Supported file formats](#).



The scalability and stitching quality of a design ultimately depend on its original source – Native Design, Imported Outlines, Processed Stitches, or Imported Stitches. See also [Viewing design information](#).



**Note** Only native EMB designs contain the complete set of design information required for 100% perfect scaling and transformation.

## Selecting designs

In order to scale, move or transform a design, you must first select it. When you have finished making changes, deselect the design to see the effects.

---

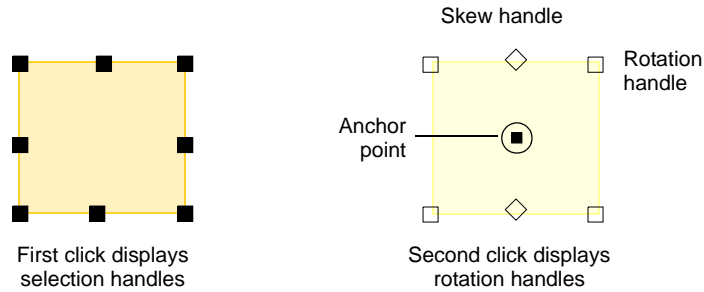
### To select a design

Select **Edit > Select All** or press **Ctrl + A**.

Eight selection handles appear around the design. These are used for positioning and scaling operations. See also [Positioning designs](#) and [Scaling designs](#).

- ◀ Click the design a second time.

Eight rotation handles appear around the design. These are used for rotation and skewing operations. See also [To scale a design numerically](#) and [Skewing designs](#).



- ◀ To deselect a design, use one of the following methods:
  - ◀ Click a point outside the design.
  - ◀ Select **Edit > Deselect All**.
  - ◀ Press **X** or **Esc**.

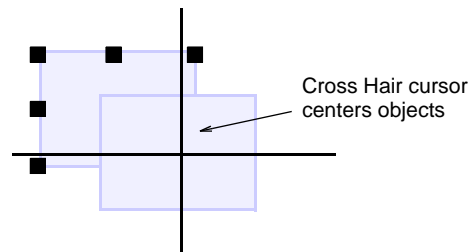
## Positioning designs

The simplest way to move a design is to click and drag it to a new position. See [Scaling designs numerically](#).

---

### To position a design

- 1 Select the design. See [Selecting designs](#).
- 2 Click and drag it to a new position.



- 3 For more accurate positioning, press the arrow keys to 'nudge' the object into the required position.



**Tip** Zoom in to make small adjustments. The distance the object moves depends on the current zoom factor. The greater the zoom factor, the smaller the distance moved.

## Scaling designs

You can scale whole designs by dragging selection handles, specifying the exact dimensions in the **Property** bar, or by setting the distance between reference points on the design. As design is scaled, the stitch count changes to preserve the current stitch spacing.





**Note** After any transformation, stitches are regenerated and the original stitch density preserved. Only native EMB designs contain the complete set of design information required for 100% perfect scaling and transformation. See [Processing Design Files](#) for details.

## Scaling designs interactively

You can change design height and width or scale proportionally using selection handles. Strictly speaking, it is not possible to select objects individually in TrueSizer Pro. However, it is possible to select certain types of objects by hiding object types. For example, in a design containing embroidery, bitmaps, vectors, and bling:

- ◀ All embroidery objects in the design can be selected by hiding bling, vectors, and bitmaps.
- ◀ All vector objects can be selected by hiding bitmaps, bling, and embroidery objects.

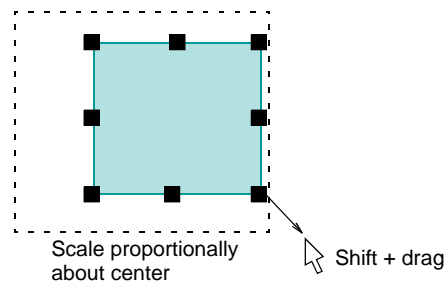
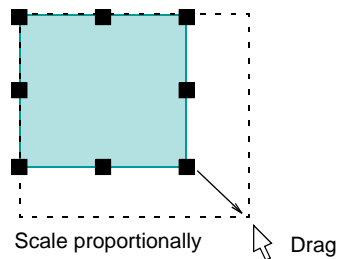


**Tip** To hide embroidery objects, TrueView, stitches, outlines, needle points, and functions all need to be turned off. See [Viewing embroidery components](#) for details.

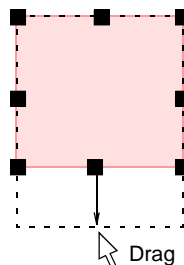
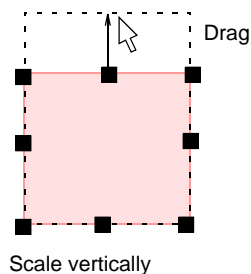
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### To scale a design interactively

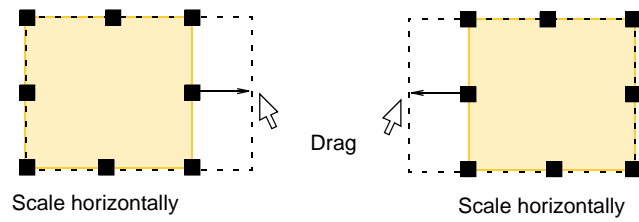
- 1 Select the design. See [Selecting designs](#).
- 2 Click and drag a selection handle to resize.
  - ◀ To scale height and width proportionally, use a corner handle.



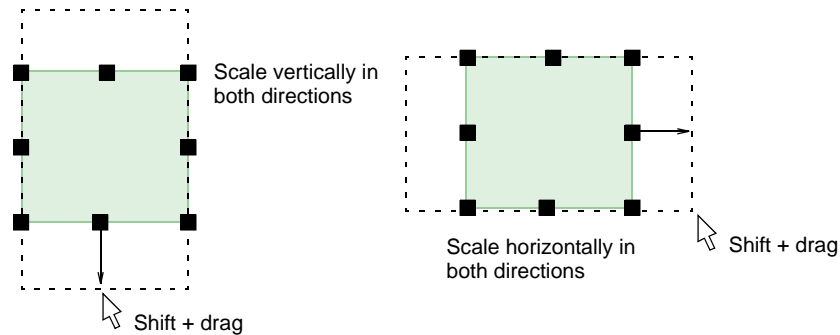
- ◀ To change the height, use the handles at the center-top or center-bottom.



- ◀ To change the width, use the handles at the center-sides.



- ◀ To resize proportionally around a central anchor point, hold down **Shift** as you drag.



**Tip** Use the tooltip as a guide to object scale.



## Scaling designs numerically

You can scale artwork or embroidery by means of 'properties'. With outline files (EMB), stitches are regenerated while preserving stitch density. An exact size may not be achieved due to pull compensation being added after scaling operations.

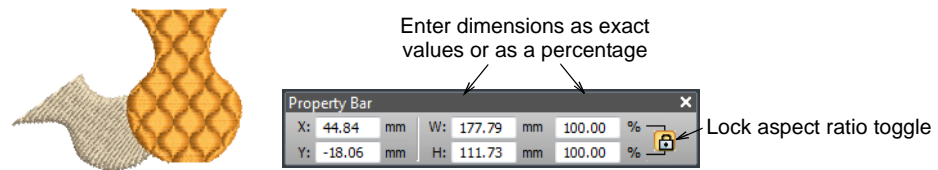


**Caution** If you scale a stitch file by more than 5%, however, changes to stitch density will affect the design quality. See [Processing Design Files](#) for details.

### To scale a design numerically

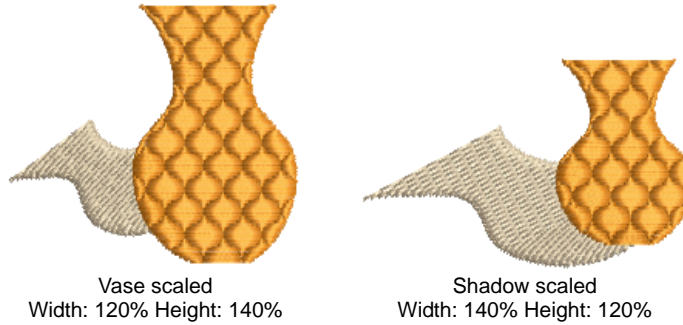
- 1 Select the design to scale.
- 2 In the **Property Bar**, either:
  - ◀ Enter exact height and width values.

- ◀ Enter the new height and width as a percentage of the current dimensions.



**Tip** Toggle on the **Lock Aspect Ratio** toggle to preserve aspect ratio.

- 3 Press **Enter** to apply.



**Note** After scaling, the new size is reset to 100%.

## Scaling designs by reference line

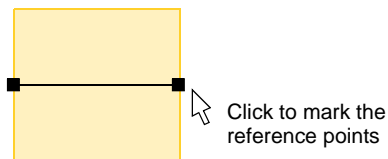


Use **Transform > Transform by Reference Line Numerically** to transform designs using a combination of reference points and numeric values.

You can scale a design by marking reference points and specifying the required length of line between them. For example, to resize a specific width, mark reference points across the design width.

### To scale a design by reference line

- 1 Select the design to scale.
- 2 Select **Transform > Transform by Reference Line Numerically**.  
You are prompted to enter start and end points of the reference line. You will have already decided which two points will form it.

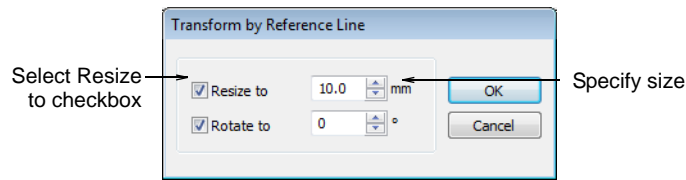


- 3 Click to mark reference points on the design.



**Tip** Press **Ctrl** to constrain the angle of the axis to 15° increments. Press **Enter** twice to use the default reference line.

The **Transform by Reference Line** dialog opens.



- 4 Select the **Resize to** checkbox, and enter the required distance between the reference points.
- 5 Click **OK**.

## Rotating designs

You can rotate designs directly on screen or by setting an exact rotation angle.



### Rotating designs interactively

When you select a design, selection handles display at its extremities. When you click again, they change to rotation handles. See [Scaling designs interactively](#).



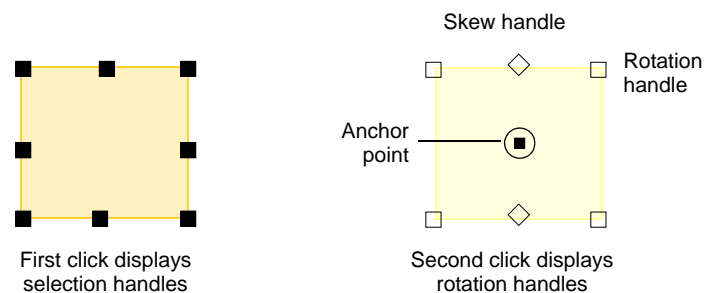
**Note** After any transformation, stitches are regenerated and the original stitch density preserved. Only native EMB designs contain the complete set of design information required for 100% perfect scaling and transformation. See [Processing Design Files](#) for details.

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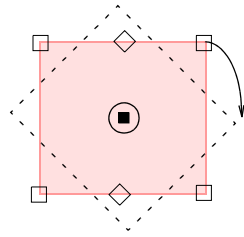
### To rotate a design

- 1 Double-click the design.

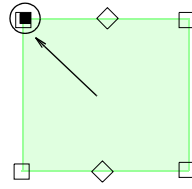
Rotation handles appear at the corners and an anchor point displays at the design center.



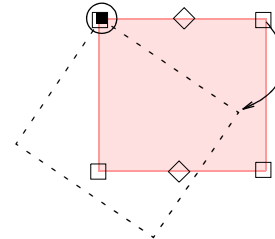
- 2 If required, drag the rotation anchor from the center to a new position.
- 3 Click a rotation handle, and drag it clockwise or anti-clockwise. An outline and cross-hairs display as you rotate.



Drag a corner to rotate about the anchor point



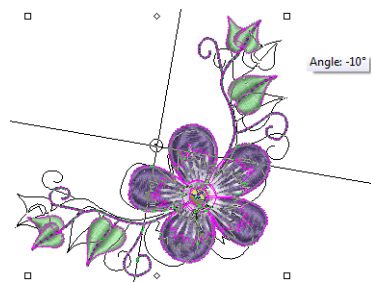
Drag the anchor point



Drag a corner to rotate about the anchor point



**Tip** Use the tooltip as a guide to rotation angle.



## Rotating designs numerically



Click Transform > Rotate 45° CW to rotate selected objects by 45° in a clockwise direction.



Click Transform > Rotate 45° CCW to rotate selected objects by 45° in a counter-clockwise direction.

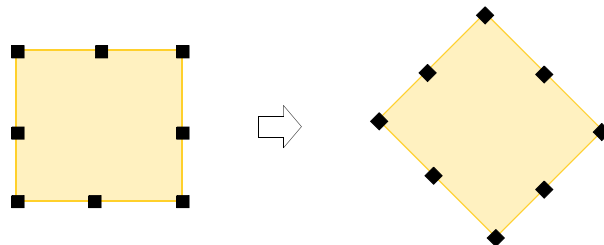


Use Transform > Rotate to rotate selected objects by an exact amount (in degrees).

You can rotate selected designs in 45° increments or by entering an exact value using the **Transform** toolbar.

### To rotate a design numerically

- ◀ Select the design.
- ◀ To rotate in 45° increments, click one of the **Rotate 45** icons.



- ◀ To rotate by an exact amount, enter the exact angle in the **Rotate** field and press **Enter**.

## Rotating designs by reference line

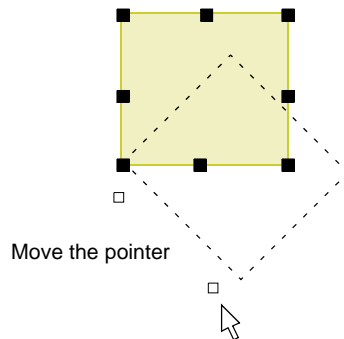


Use Transform > Transform by Reference Line Freely to rotate selected objects with the aid of reference points alone.

The **Transform by Reference Line Freely** tool lets you rotate selected designs with the aid of reference points alone. This technique is useful to duplicate and rotate designs around an anchor point.

### To rotate a design by reference line

- 1 Select the design.
- 2 Select **Transform > Transform by Reference Line Freely**.
- 3 Follow the instruction in the prompt line:
  - ◀ Click the first reference point. This becomes the anchor point for the rotation.
  - ◀ Click a second reference point. An outline attaches to the pointer.



**Tip** Press **Ctrl** to constrain the angle of the axis to 15° increments.

- ◀ Click the anchor point. The pointer then aligns itself with the second reference point.
- ◀ Click a guide point for the required rotation position. Use the coordinates on the **Status** bar for exact alignment.

## Rotating designs by reference line & angle



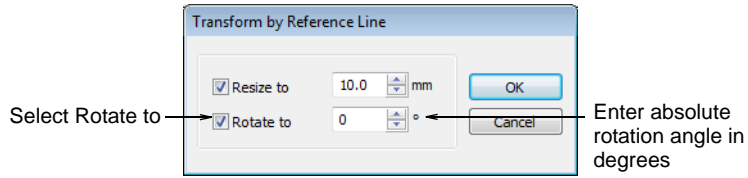
Use Transform > Transform by Reference Line Numerically to transform designs using a combination of reference points and numeric values.

The **Transform** tool provides another method for transforming selected designs using a combination of reference points and numeric values. This provides a very accurate technique for rotating selected designs.

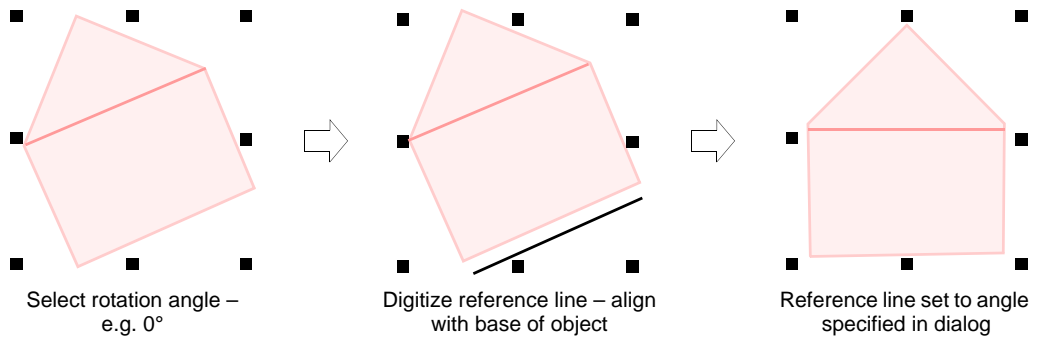
### To rotate designs by reference line and angle

- 1 Select the design.
- 2 Decide which two points will form the reference line. This should be a significant line – e.g. one which must be perfectly horizontal or vertical in the final design.

- 3 Select **Transform > Transform by Reference Line Numerically**.  
The **Transform by Reference Line** dialog opens.



- 4 Select the **Rotate to** checkbox, and enter the rotation angle of the reference line.  
For example, to rotate the image so that it aligns with the horizontal axis, enter a value of 0°.



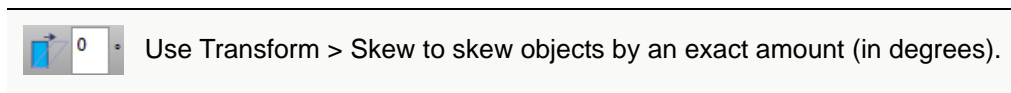
**Note** The **Angle** field accepts angles from 0 to  $\pm 180$  degrees.

- 5 Click **OK**.
- 6 Click to mark the start and end points of the reference line.

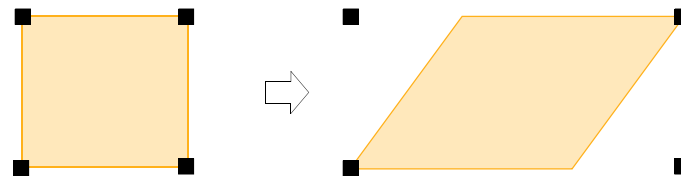


**Tip** Press **Ctrl** to constrain the angle of the axis to 15° increments. Press **Enter** twice to use a horizontal reference line by default.

## Skewing designs



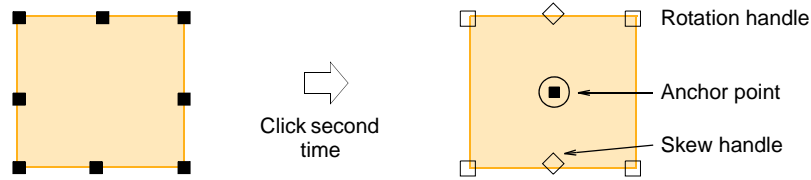
You can skew designs directly on screen or by setting an exact skew angle.



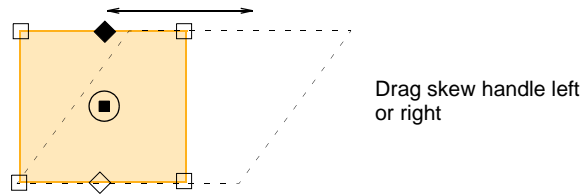
### To skew a design

- 1 Select the design and click a second time.

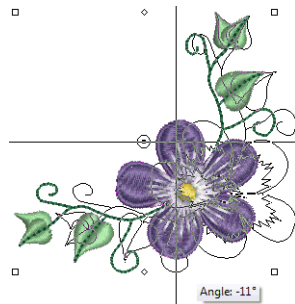
Rotation and skew handles appear. Selection handles are diamond-shaped and appear at center-top and bottom.



- 2 Drag the skew handles left or right.  
The object skews along the horizontal plane.





**Tip** To skew by an exact amount, enter the exact angle in the **Skew** field on the **Transform** toolbar and press **Enter**. Alternatively, use the tooltip as a guide.



## Mirroring designs

In **TrueSizer Pro** you can mirror designs horizontally or vertically by means of the **Transform** toolbar. You can also mirror around a defined axis using a reference line.

## Flipping designs

	Click Transform > Mirror Horizontally to flip objects in the horizontal plane.
	Click Transform > Mirror Vertically to flip objects in the vertical plane.

You can mirror selected designs horizontally or vertically using the **Mirror** tools.



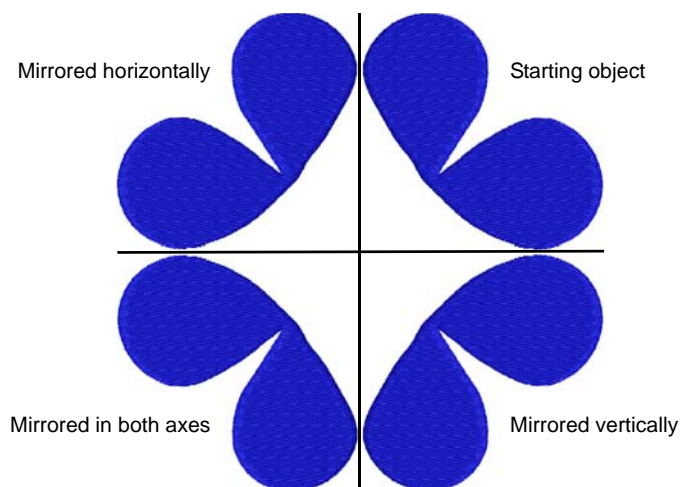
**Note** After any transformation, stitches are regenerated and the original stitch density preserved. Only native EMB designs contain the complete set of design information required for 100% perfect scaling and transformation.



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## To mirror a design

- ◀ Select the design and click a **Mirror** icon.



## Mirroring designs around an axis



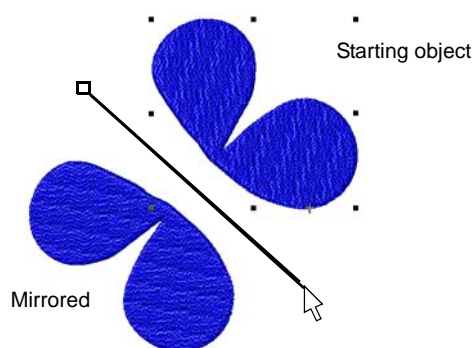
Use **Transform > Mirror by Reference Line** to mirror objects around a defined axis using a reference line.

Use **Mirror by Reference Line** to mirror designs around a defined axis using a reference line.

---

## To mirror a design around an axis

- 1 Select the design.
- 2 Click the **Mirror by Reference Line** icon or select **Edit > Mirror by Reference Line**.



- 3 Click to mark the reference points of the mirror axis.  
After the second click, the selected object is mirrored in the reference line.



**Tip** Press **Ctrl** to constrain the angle of the axis to 15° increments. If you just want to mirror your selection around a **horizontal** axis, press **Enter** twice. The mirror axis defaults to zero.

## Fine-tuning designs

To improve the quality of your embroidery and make stitching easier, use the fine-tuning commands **TrueSizer Pro** provides.

### Setting automatic start & end points



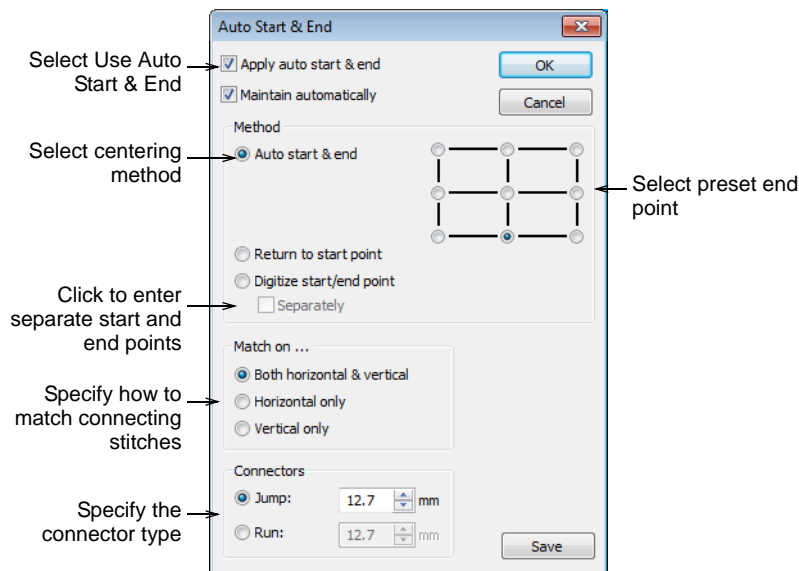
Use **View > Auto Start & End** to toggle the Auto Start & End function on/off according to the current settings. Right-click to adjust settings.

The **Auto Start & End** feature is not an object property, but it is a quality setting that affects the design stitchout. Before stitching, some embroidery machines require you to position the starting needle exactly above the first needle penetration point. Use **Auto Start & End** to connect the first and last stitches in the design. This makes it easy to position the needle before stitching, and reduces the chance of the needle hitting the side of the frame.

#### To set automatic start and end points

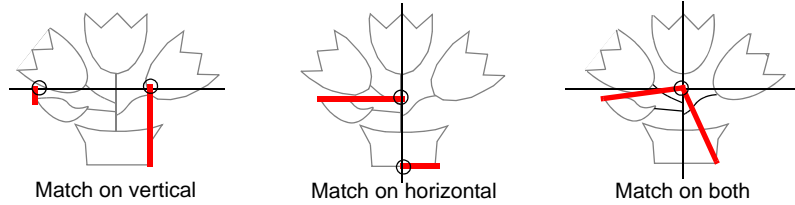
##### 1 Right-click **Auto Start & End**.

The **Auto Start & End** dialog opens.



- 2 Select the **Apply Auto Start & End** checkbox to connect the first and last stitches in the design.
- 3 Select the **Maintain Automatically** checkbox to maintain the design center after modifying the design.
- 4 Select a centering method: Auto Start & End, Return to Start Point, or Digitize Auto Start/End Point.

- 5 Select to match connecting stitches on the **Horizontal** plane, **Vertical** plane or both in the **Match On** panel.



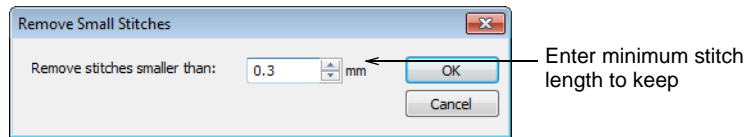
- 6 Select the type and length of the connecting stitches in the **Connectors** panel. Choose between Run or Jump stitch.
- 7 Click **OK**.  
Connecting stitches will be inserted as required before the first and after the last stitch of the design.

## Removing small stitches automatically

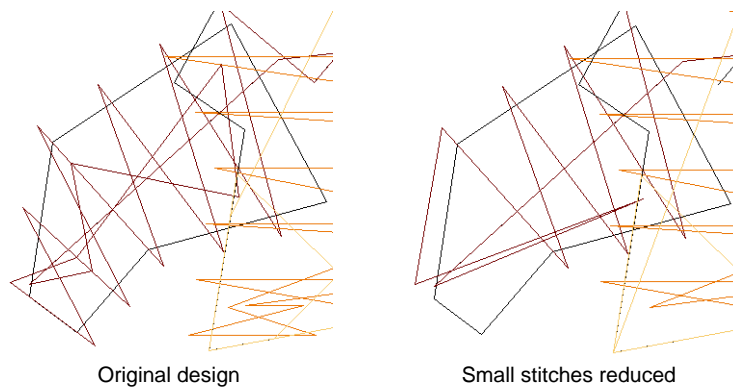
Very small stitches can damage the fabric and cause thread or needle breakage. Before you stitch out a design, you can remove unwanted small stitches automatically.

### To remove small stitches automatically

- 1 Select **Design > Remove Small Stitches**.  
The **Remove Small Stitches** dialog opens.



- 2 Enter the minimum stitch length you want to keep.
- 3 Click **OK**.  
All stitches shorter than the specified length will be removed from the design.



**Tip** Check the **Status** bar for the new stitch count.

# DESIGN PROCESSING & PRODUCTION

Design processing and encoding involve all the important, back-end operations of embroidery design and manufacture. This is where you actually output your designs to machine, disk, printer, cutter, and so on. For this, you will need an understanding of embroidery file types as well as different machine formats. Depending on your setup, you will also need an understanding of traditional storage media such as embroidery disks.

## Printing designs

This section describes how to create production worksheets and approval sheets. It also explains how to send designs as email attachments, as well as how to output designs as images. Sending appliqué shapes to printer and cutter are also covered. See [Printing Designs](#) for details.

## Processing design files

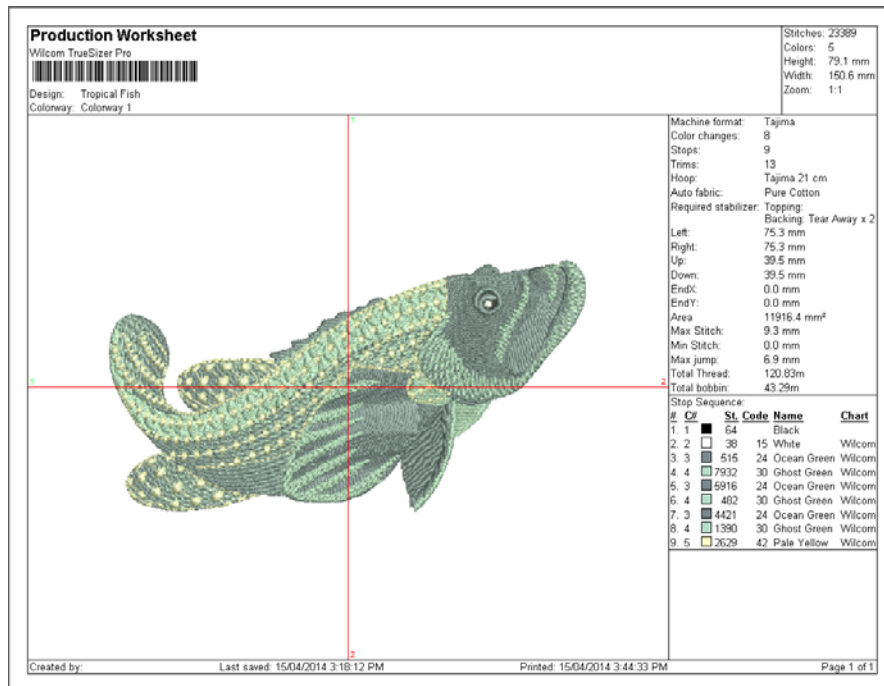
This section describes different file sources and native EMB format files. It also covers opening stitch files as well as working with CND format. It covers saving designs in CSD format and lists supported file formats. See [Processing Design Files](#) for details.

## Hooping designs

This section deals with selecting and centering hoops, both manually and automatically. It also covers setting up and editing custom hoop lists. See [Hooping Designs](#) for details.

# Printing Designs

You can output embroidery designs in a variety of ways – as design files or stitch files. From the same EMB design file, you can also output production worksheets or approval sheets for machine operators or customers respectively. Designers frequently want to distribute their designs so that they can be seen in real colors, in TrueView or otherwise. In TrueSizer Pro you can save both design images and production worksheets to disk or email them direct. Optionally, email production worksheets in PDF format with the embroidery file as an attachment in a specified format – e.g. EMB or DST, etc.



**Production Worksheet**

Wilcom TrueSizer Pro

Design: Tropical Fish  
Colorway: Colorway 1

Stitches: 23389  
Colors: 5  
Height: 79.1 mm  
Width: 150.6 mm  
Zoom: 1:1

Machine format: Tajima  
Color changes: 8  
Steps: 9  
Trims: 13  
Hoops: Tajima 21 cm  
Auto fabric: Pure Cotton  
Required stabilizer: Topping  
Backing: Tear Away x.2

Left: 75.3 mm  
Right: 75.3 mm  
Up: 39.5 mm  
Down: 39.5 mm  
EndX: 0.0 mm  
EndY: 0.0 mm  
Area: 11916.4 mm<sup>2</sup>  
Max Stitch: 9.3 mm  
Min Stitch: 0.0 mm  
Max jump: 6.9 mm  
Total Thread: 120.83m  
Total bobbin: 43.29m

#	Co	St. Code	Name	Chart
1	1	64	Black	
2	2	38	15 White	Wilcom
3	3	515	24 Ocean Green	Wilcom
4	4	7932	30 Ghost Green	Wilcom
5	3	5916	24 Ocean Green	Wilcom
6	4	482	30 Ghost Green	Wilcom
7	3	4421	24 Ocean Green	Wilcom
8	4	1390	30 Ghost Green	Wilcom
9	5	2629	42 Pale Yellow	Wilcom

Created by: Last saved: 15/04/2014 3:18:12 PM Printed: 15/04/2014 3:44:33 PM Page 1 of 1

## Creating design reports

The production worksheet is the link between designer and embroidery machine operator. It contains a design preview as well as essential production information, including the design size, the color sequence and any special instructions. You can customize production worksheets before printing. You can also print multiple colorways, icons of color blocks, and backgrounds.

## Report types



In addition to production worksheets, TrueSizer Pro allows you to create a variety of other report types:

Option	Purpose
Approval sheet	This report is intended for the customer, not production staff. Its function is to display designs in TrueView with or without a product or fabric background. Customers can see what they are ordering and approve accordingly.
Product summary	This report provides two summary tables of the design and associated colorways – a Colorway Summary table together with a Design Summary table. You can also include color blocks in the Colorway Summary table by selecting the Show Colors in Summary option in the Stop Sequence tab. See also <a href="#">Customizing report information</a> .
Color film	This report provides color block information so that production staff can see each stitch color in separate blocks according to the sequence they will be stitched out.
Appliqué patterns	This report shows appliqué patterns – cutter information – isolated from the design. This tells the operator which appliqué pieces are to be included in design. See also <a href="#">Printing appliqué patterns</a> .



**Note** If certain thread colors are not available on your printer, they may be mapped to a different color, including white. If a color is mapped to white, it will be invisible on the worksheet. Print the design in TrueView color, or black and white, or turn off color mapping. See your printer manual for more information.

## Printing custom reports

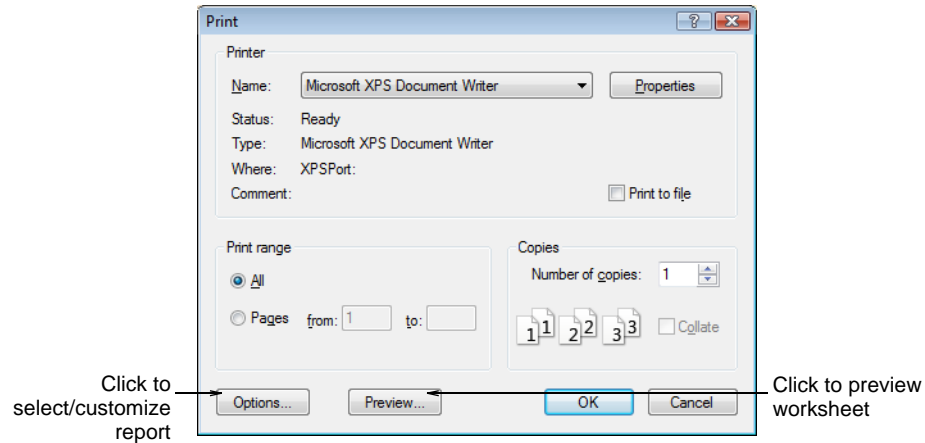
	Click Standard > Print to print Production Worksheets for the current design using the current settings.
	Click Standard > Print Preview to preview the production worksheet on screen.

Create a hard copy of your design report using a printer or plotter. Preview the report before printing as required. See [Previewing reports](#) for details.

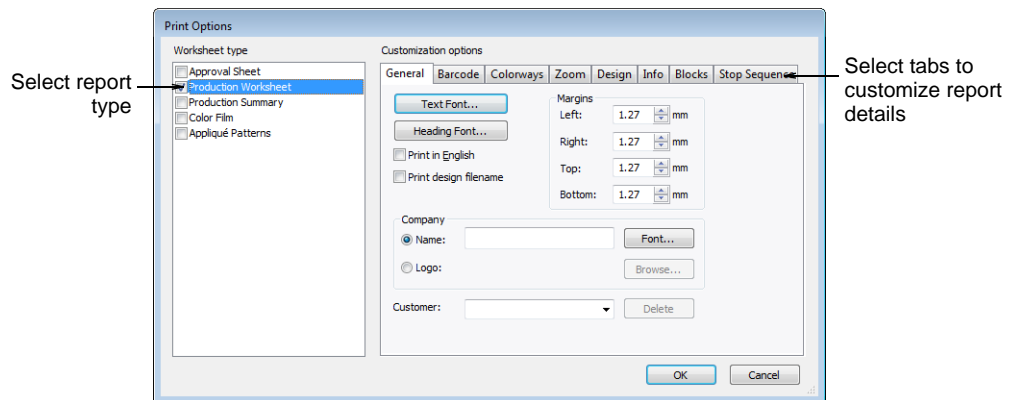
### To print a custom report

- 1 Select **File > Print**.

The **Print** dialog opens.



- 2 Select the printer or plotter you want to use, and enter the number of copies of the worksheet you require.
- 3 To select a report type, click the **Options** button.  
The **Print Options** dialog opens.



- 4 Select a report type in the **Print** panel.  
Multiple reports can be batched as part of the same print run. Tick the checkbox next to each report type you require.
- 5 Select associated tabs and change default settings as required. Tabs vary with selected report type. Options include:

Tab	Purpose
General	Click to access report layout settings.
Colorways	Click to access colorway settings for the current design.
Zoom	Click to set the zoom factor for the design preview and physical printout.
Design	Click to set design appearance on the printout, including multi-decoration components.
Info	Click to further filter information included on product worksheets.
Blocks	Click to select production information available on the Design Properties > Information tab for inclusion in the printout.

Tab	Purpose
Stop Sequence	Click to select production information available on the Design Properties > Stop Sequence tab for inclusion in the printout.



**Note** The **Production Worksheet** actually provides a superset of all options available on these tabs. See [Customizing print options](#) for details.

6 Click **OK** to close the **Print Options** dialog.

7 If you are using a plotter, click **Properties**, and set pen colors to correspond with the thread colors in the design.



**Note** Refer to your plotter's manual for information on setting up pen colors.

8 Click **Preview** if you want to inspect the document before sending to print.

Created by: Last saved: 10/04/2014 6:15:44 PM Printed: 15/04/2014 3:08:14 PM Page 1 of 1

9 Click **OK** to proceed.

## Customizing print options



Use **Standard > Print** to print Production Worksheets for the current design using the current settings.



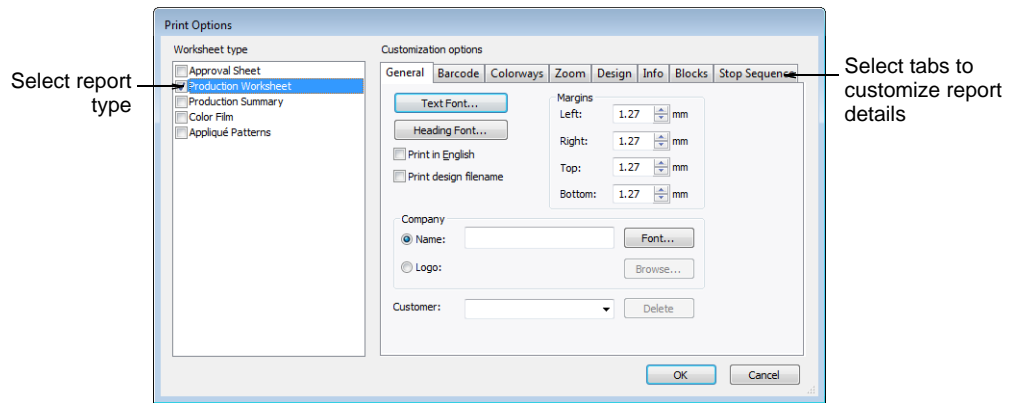
Use **Standard > Print Preview** to preview Production Worksheets and access print options.

The production worksheet is the link between designer and embroidery machine operator. It contains a design preview as well as essential production information, including the design size, the color sequence and any special instructions. You can customize production worksheets before printing. You can also print multiple colorways, icons of color blocks, and backgrounds.



## To customize print options

- 1 To access the **Print Options** dialog, select **File > Print Preview**.
- 2 Click **Options**.  
The **Print Options** dialog opens.

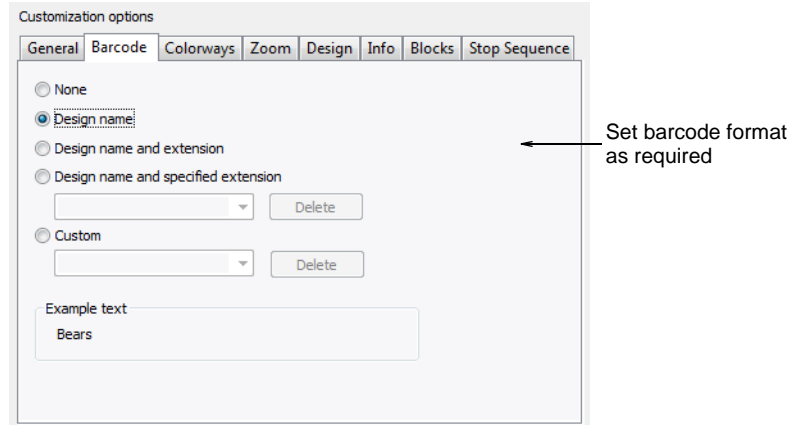


- 3 Select **Production Worksheet** or other report type as required. See also [Printing custom reports](#).  
The **Production Worksheet** actually provides a superset of options available for all report types.
- 4 Click the **General** tab to access report layout settings.  
Customizable options include:

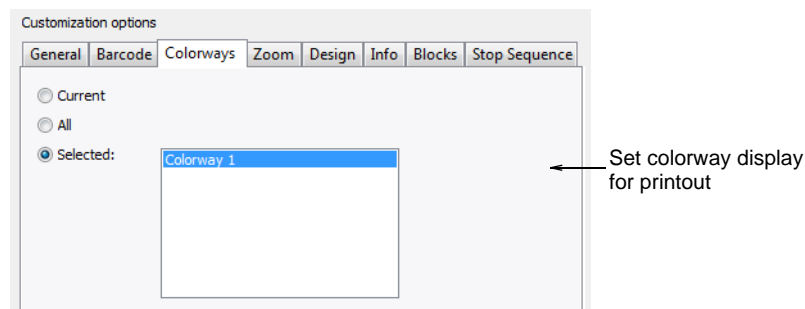
Option	Purpose
Text / heading font	Use to access the system font dialog. Set parameters for all text and headings appearing in the report – e.g. Arial for print, Verdana for online reports.
Print in English	Useful when printing to plotters where the device driver does not support the character set you require. Deselecting the checkbox prints the report in the language of the operating system.
Print design filename	Include the filename of the current design in the header of the product report.
Margins	Add a margin between the edge of the page and the content of the report. The page size itself is set via the Print dialog. See also <a href="#">Printing custom reports</a> .
Company	Includes your company name on the report. Key in the name and/or attach a company logo.
Customer	Key in the customer name. The name is recorded for future use. Access it via the dropdown list. Note that the customer name is not saved with the design. Reverting to factory defaults will clear customer names on a particular PC.

- 5 Click the **Barcode** tab to access barcode settings and include or exclude barcode from the report as required.

The tab allows you to specify a standard format for the barcode – based design name with or without file extension – or a custom format as required.



6 Click the **Colorways** tab to access colorway settings for the current design.



Customizable options include:

Option	Purpose
Current	Prints the design in the current colorway only.
All	Scales the design to fill the available space on the worksheet.
Selected	Prints multiple colorways. When selected, available colorways are selectable from the list. See <a href="#">Printing multiple colorways</a> for details.

7 Click the **Zoom** tab to set the zoom factor for the design preview and physical printout.

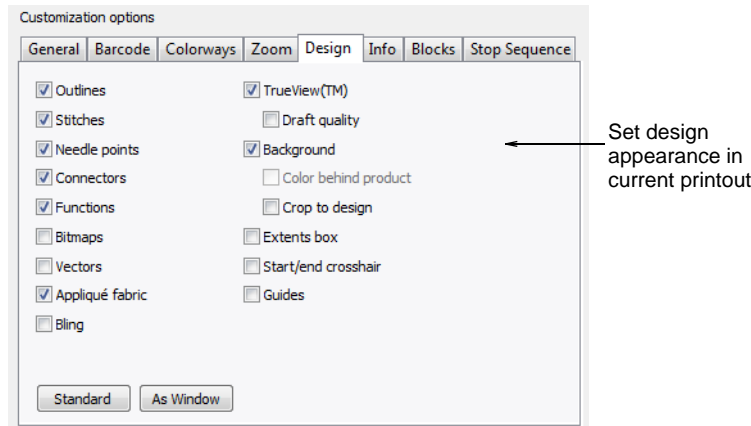


Customizable options include:

Option	Purpose
Zoom 1.1	Shows design at actual size.

Option	Purpose
Zoom to fit	Scales design to fill available space on the printout.
Custom	Sets a specific zoom factor.

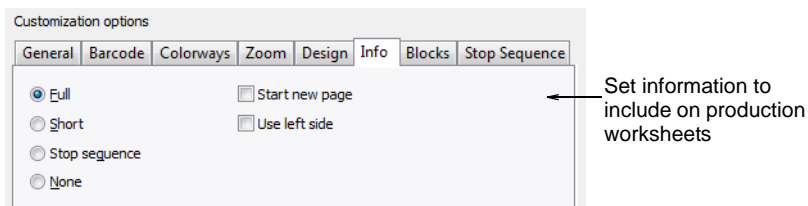
8 Click the **Design** tab to set design appearance on the printout.



Customizable options include:

Option	Purpose
Outlines	Include design outlines. See also <a href="#">Viewing stitches &amp; outlines.</a>
Needle points	Include needle points. See also <a href="#">Viewing needle points &amp; machine functions.</a>
TrueView	Print design in TrueView. When selected, the Draft Quality option becomes available.
Background	Prints design with colored background or fabric color. Color behind product: Include background color behind selected product. Crop to design: Crop any background to the extends of the design, rather than the full page.
Extents box	Places an outline around the design to delineate its full extents.
Start/end crosshair	Prints a cross hair across the design indicating design start and end points. See also <a href="#">Setting automatic start &amp; end points.</a>
Standard	Resets printing options to default values.
As Window	Sets printing options as per current settings in the design window.

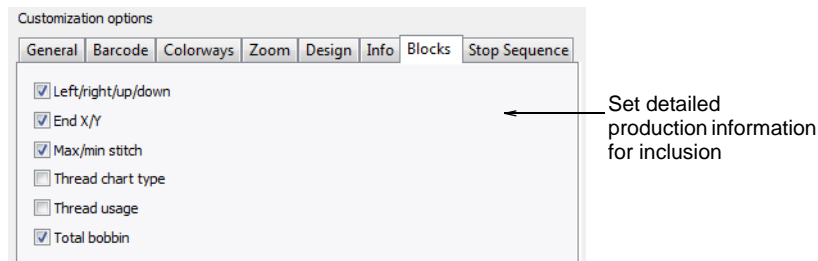
9 Click the **Info** tab to further filter information included on product worksheets. See also [Customizing report information.](#)



Customizable options include:

Option	Purpose
Full	Invokes further tabs allowing a full printout of available design and production information.
Short	Includes only default header and footer information – usually used in conjunction with full size design in order to visualize on garment. See also Zoom tab.
Stop sequence	Invokes Stop Sequence tab and includes stop sequence information on the worksheet. See Stop Sequence below.
None	Eliminates design information altogether and suppresses display of default header and footer information – again, can be used in conjunction with full size design in order to visualize on garment. See also Zoom tab.
Use left side	Displays the information column on the left side of the page (rather than the default right-hand side).

- 10** Click the **Blocks** tab to select production information available on the **Design Properties > Information** tab for inclusion in the printout. See [Viewing design information](#) for details. See also [Customizing report information](#).



- 11** Click the **Stop Sequence** tab to select production information available on the **Design Properties > Stop Sequence** tab for inclusion in the printout. See [Viewing design information](#) for details. See also [Customizing report information](#).

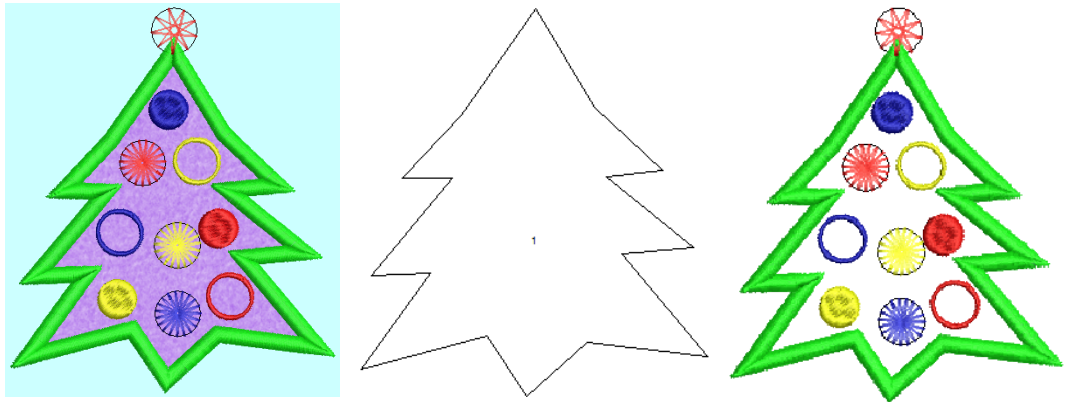


**Tip** Tick **Show Colors in Summary** option to include actual color samples in the production colorway summary table. See also [Printing multiple colorways](#).

- 12** Click **OK**.

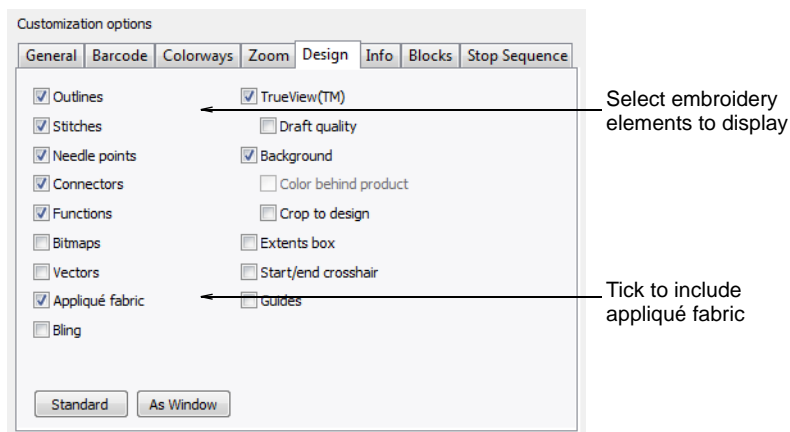
## Setting design print options

The **Print Options** dialog allows you to print all design files supported by TrueSizer Pro.



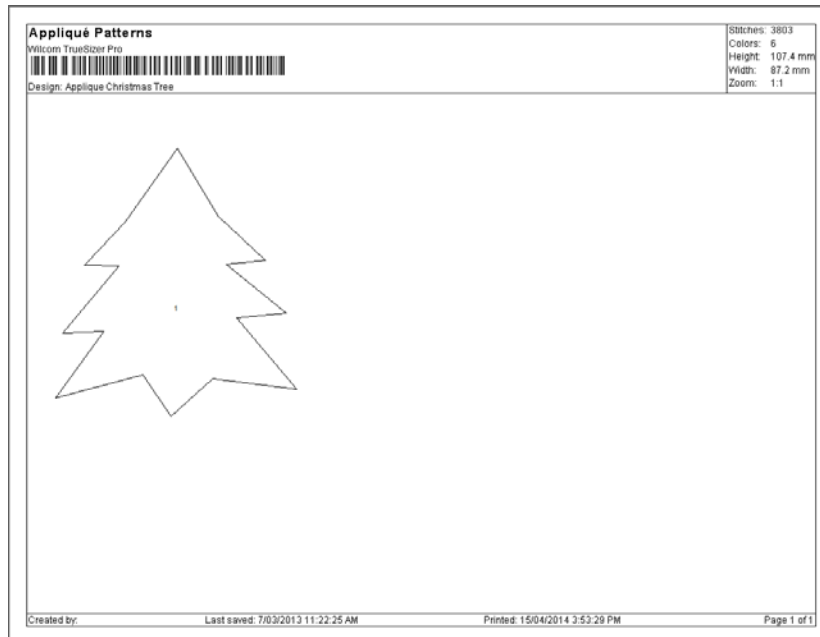
## Design components

Options for selectively showing/hiding design components can be found under the **Design** tab. These include embroidery components as well as appliqué fabric.



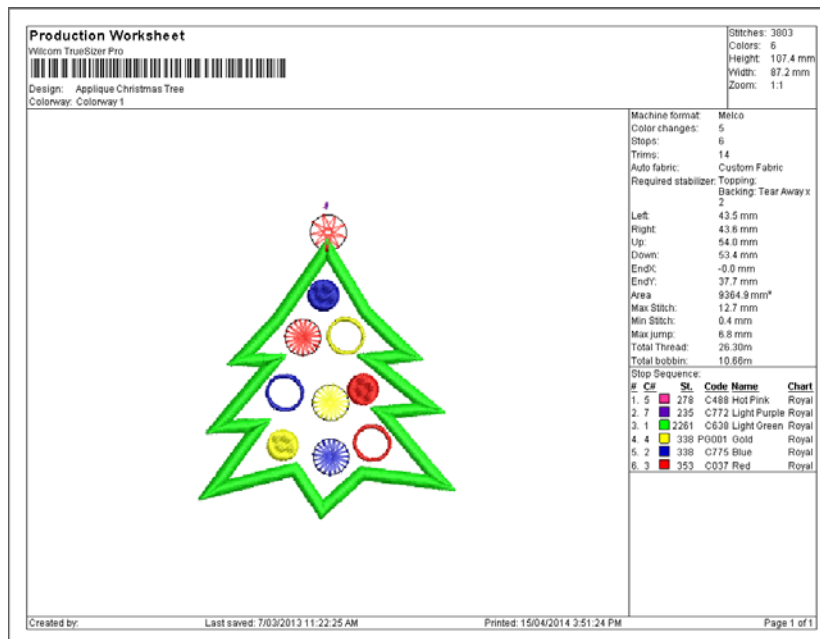
## Appliqué patterns

A specific report type exists for selectively showing/hiding appliqué patterns. See [Printing appliqué patterns](#) for details.



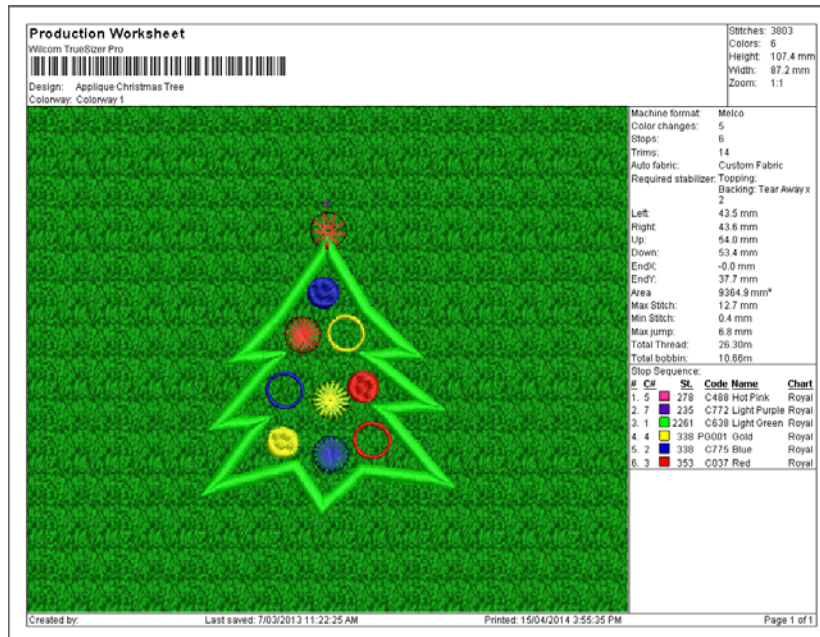
## Embroidery components

To display embroidery components, select from amongst **Outlines**, **Needle Points**, **TrueView** in the **Design** tab.



## Design backgrounds

The **Design** tab also provides options to display design backgrounds – i.e. colors or fabrics.



## Customizing report information

You can further customize production worksheet information when the **Full Information** option is the selected. See also [Customizing print options](#).

### To customize report information

- 1 To access the **Print Options** dialog, select **File > Print Preview**.
- 2 Click **Options**.  
The **Print Options** dialog opens.
- 3 In the **Info** tab, select **Full**.
- 4 Click the **Info** tab to further filter information included on product worksheets. See also [Customizing report information](#).



- 5 In the **Blocks** tab, select the design statistics to include on the worksheet:

Option	Purpose
Left / right / up / down	Depending on where the design start/end point has been set, these figures indicate the distance from that point.
End X / Y	The coordinates of the last stitch. See also <a href="#">Setting automatic start &amp; end points</a> .

Option	Purpose
Max / min stitch	The maximum and minimum stitch lengths, and maximum jump stitch length in the design.
Thread chart type	The name of the thread chart used in the design.
Thread usage	Meterage of thread required per color.
Total bobbin	Total meterage of bottom (bobbin) thread required to stitch out the design.

Here is a sample production worksheet with all options selected:

Machine format:	Tajima			
Color changes:	3			
Stops:	4			
Trims:	8			
Auto fabric:	Pure Cotton			
Required stabilizer:	Topping:			
	Backing: Tear Away x 2			
Left:	28.8 mm	← Left / right / up / down		
Right:	28.8 mm			
Up:	36.4 mm			
Down:	36.4 mm			
EndX:	0.0 mm			
EndY:	0.0 mm	← End X / Y		
Area:	4203.3 mm <sup>2</sup>			
Max Stitch:	6.5 mm			
Min Stitch:	0.3 mm	← Max / min stitch		
Max jump:	6.5 mm			
Thread Chart:	Isacord 40			
Total Thread:	17.80m	← Thread usage		
Total bobbin:	5.57m	← Total bobbin		
Stop Sequence:				
#	C#	St. Code Name	Chart	Element
1.	3	316 3630 Sweet Boy	Isacord 40	Fish tail

## 6 In the **Stop Sequence** tab, select the statistics for each color block:

Option	Purpose
Stitch count	Number of stitches per color.
Needle number	The needle number corresponding to each color block.
Chart	Name of thread chart used.
Element name	User-defined name to identify each color block. See <a href="#">Viewing design elements</a> for details.
Show colors in summary	Includes color samples in a colorway summary table. See also <a href="#">Printing multiple colorways</a> .

Here is a sample production worksheet with all options selected:

Stop Sequence:				
#	C#	St. Code Name	Chart	Element
1.	3	316 3630 Sweet Boy	Isacord 40	Fish tail
2.	4	430 4113 Alexis Blue	Isacord 40	Lower fin
3.	2	718 3900 Cerulean	Isacord 40	Main fin
4.	1	2484 3333 Fire Blue	Isacord 40	Text and head

Stitch count ←

← Element name

← Chart





**Note** The **Show Colors in Summary** option works in conjunction with the **Production Summary** option. This option prints color blocks in a summary table. See [Customizing print options](#) for details.

Colorway				Blue	Yellow	Green	Purple
Background							
Stop	Color #	Element	Stitches				
1	3		316	3630 Sweet Boy Isacord 40	0940 Autumn Leaf Isacord 40	5633 Lime Isacord 40	3251 Haze Isacord 40
2	4		430	4113 Alexis Blue Isacord 40	0822 Palomino Isacord 40	6011 Tamarack Isacord 40	2830 Wild Iris Isacord 40
3	2		718	3900 Carulean Isacord 40	0700 Bright Yellow Isacord 40	5233 Field Green Isacord 40	3110 Dark Ink Isacord 40
4	1		2484	3333 Fire Blue Isacord 40	1304 Red Pepper Isacord 40	5555 Deep Green Isacord 40	2704 Purple Passion Isacord 40

Colors displayed in colorway summary table

**7** Select the **Use Left Side** checkbox in **Info** tab to include the full information column on the left side.

By default, this column displays on the right of the page.

**8** Click **OK**.

## Printing multiple colorways

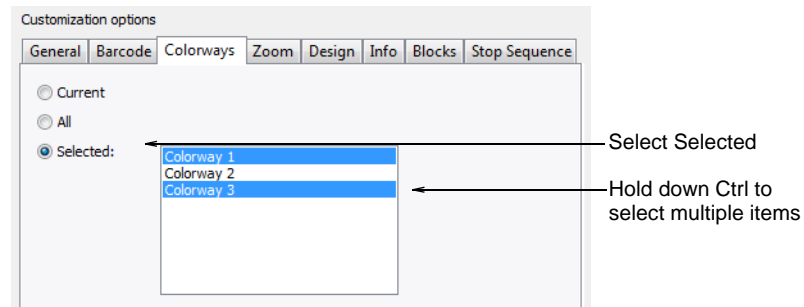
You can print your design in the current or multiple colorways.

### To print multiple colorways

**1** To access the **Print Options** dialog, select **File > Print Preview**.

**2** Click **Options**.

The **Print Options** dialog opens.



**3** Select **Selected** to print multiple colorways.

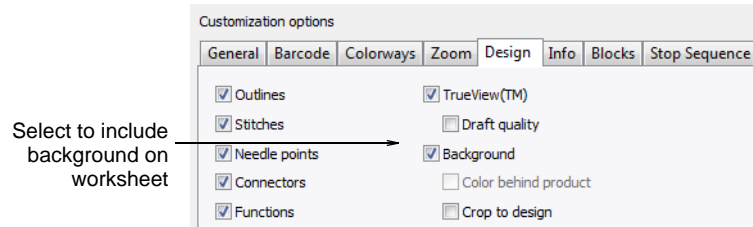
**4** Select one or more colorways from the list.

◀ To select a range of items, hold down **Shift** as you select.

◀ To select multiple items, hold down **Ctrl** as you select.

Alternatively, select **All** to print out all the colorways in the design.

- In the **Design** tab, select **Background** if you want to include the background or fabric color with the colorway.



**Tip** Select **Crop to Design** to crop the space around the design.

- Click **OK**.

- Click **OK** in the **Print** dialog or **Print Now** in the **Print Preview** dialog.



**Tip** If the **Production Summary** option in the **Print Options** dialog is selected, a colorway summary table is printed together with design details. You can also print color blocks in the **Colorway Summary** table by selecting the **Show Colors in Summary** option in the **Stop Sequence** tab. See also [Customizing report information](#).

Production Summary					Stitches: 3950
Walcorn TrueSizer Pro					Colors: 4
Design: SeaLand					Height: 72.9 mm
					Width: 57.7 mm
Machine format: Tajima		Left: 28.0 mm		Right: 28.9 mm	
Color changes: 3		Up: 26.4 mm		Down: 26.4 mm	
Staps: 4		EndX: 0.0 mm		EndY: 0.0 mm	
Trims: 8		Area: 4202.3 mm <sup>2</sup>		Thread Chart: Isacord 40	
Max Stitch: 6.5 mm		Total Thread: 17.60m		Total bobbin: 5.57m	
Min Stitch: 0.3 mm					
Max jump: 6.5 mm					
Auto fabric: Pure Cotton					
Required stabilizer: Topping					
Backing: Tear Away 2					
Colorway	Blue	Yellow	Green	Purple	
Background					
Stop	Color #	Element	Stitches		
1	3		316	3630 Dweed Boy Isacord 40	0940 Adjuna Leaf Isacord 40
				4113 Alexis Blue Isacord 40	0022 Palomino Isacord 40
2	4		430	3900 Cerulean Isacord 40	0700 Bright Yellow Isacord 40
				3333 Fire Blue Isacord 40	1704 Red Pepper Isacord 40
3	2		718	5233 Field Green Isacord 40	5233 Field Green Isacord 40
				3110 Dark Ink Isacord 40	2204 Purple Passion Isacord 40
4	1		2484	5554 Deep Green Isacord 40	5554 Deep Green Isacord 40

Design summary table

Colorway summary table

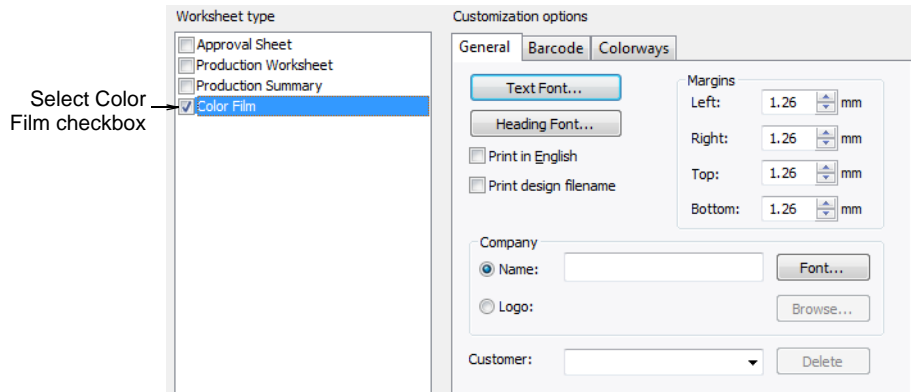
## Printing color film

The **Color Film** report option lets you print color blocks in the design as they appear in the Color-Object List. Consecutive objects of the same color form a single 'color block'.

### To print a color film

- To access the **Print Options** dialog, select **File > Print Preview**.
- Click **Options**.

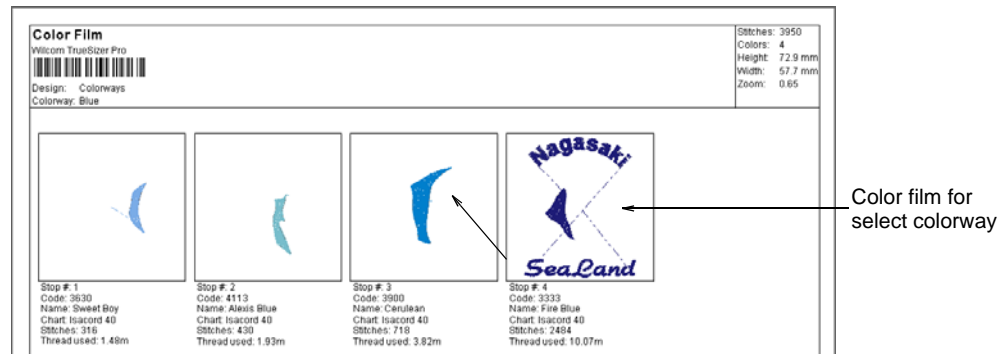
The **Print Options** dialog opens.



3 Select the **Color Film** checkbox.

4 Click **OK**.

Separate color films are printed for selected colorways on the last page of the worksheet. See also [Printing multiple colorways](#).



## Sending designs as email attachments



Use **Standard > Open** to send a design as an email attachment.

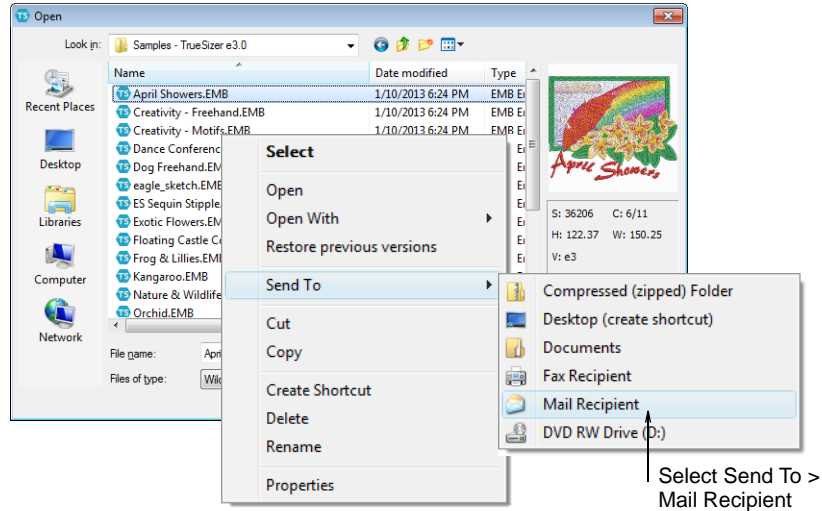
You can attach designs to emails from the design window or via the **Open** dialog.

### To send designs as email attachments

1 Do one of the following:

- ◀ With the design open in the design window, select **File > Send via Email**, or
- ◀ Click the **Open** icon to display the **Open** dialog. Select the file to send, then right-click it. The popup menu appears. Select **Send To > Mail Recipient**.

Your default email system is launched and a new email created with the design file attached.



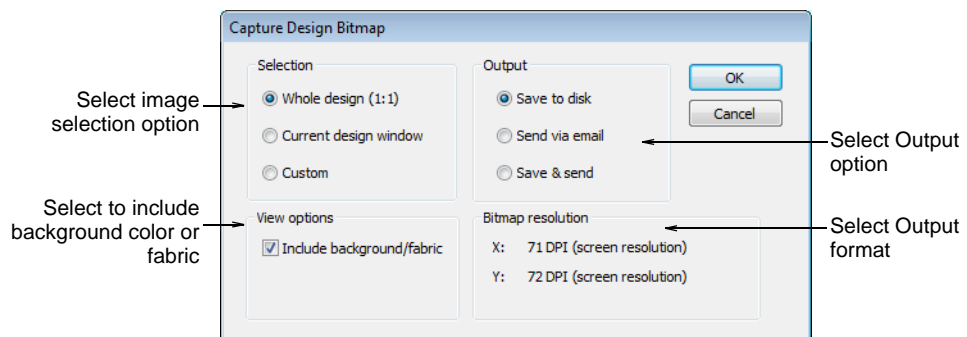
- 2 Enter mailing details and send.

## Outputting designs as images

Designers frequently want to distribute their designs for viewing in real colors, in TrueView or otherwise, with or without fabric backgrounds. This might be for stock design sales purposes, for approval of digitized designs, or for presentation on the web or in catalogs. TrueSizer Pro lets you save both design images and production worksheets to disk or email them direct. See also [Sending designs as email attachments](#).

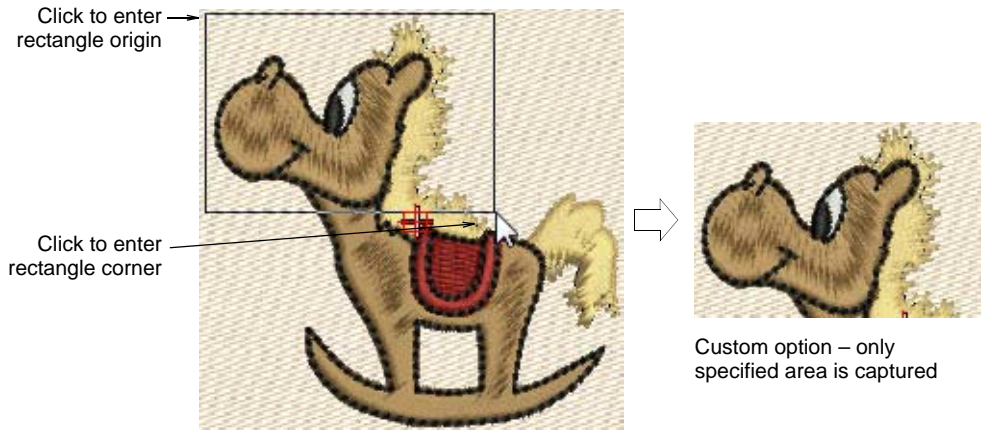
### To output a design as an image

- 1 Open the embroidery design.
- 2 Select **File > Capture Design Bitmap**.  
The **Capture Design Bitmap** dialog opens.



3 Select a **Selection** option:

Option	Purpose
Whole Design (1:1)	Captures the screen image in a ratio of 1:1.
Current design window	Captures the screen image at the currently selected zoom factor.
Custom	Lets you specify a capture area. After clicking OK, you are prompted to enter a 'rectangle origin' and 'rectangle corner' to define the area to capture.



4 Select an **Output** option:

Option	Purpose
Save to Disk	Lets you save the screen capture to disk. After clicking OK, the Save Capture Screen dialog opens, allowing you to select a location, name and format for the captured design image.
Send via Email	Lets you send the screen capture as email. After clicking OK, a new email message opens with the image attached.
Save & Send	Lets you both save to hard disk and send as an email attachment.

5 Select an output format for the screen image from the dropdown list – BMP, JPG, etc.

6 Select **Include Background/Fabric** to include the background color or fabric with the screen capture.

7 Click **OK**.



Image captured as Whole Design (1:1) with background fabric

## Printing appliqué patterns

Print a copy of appliqué patterns to use in cutting out fabric pieces. Each appliqué pattern piece is numbered according to the stitching sequence. One copy of the placement outlines is printed to show how their positions relate to each other. This copy is printed to fit one page. A second copy of the placement outlines is printed at 100% scaling, with each outline separated for use in cutting the fabric.



**Note** Automatically create all the stitching you need for appliqué using the **Auto Appliqué** tool.



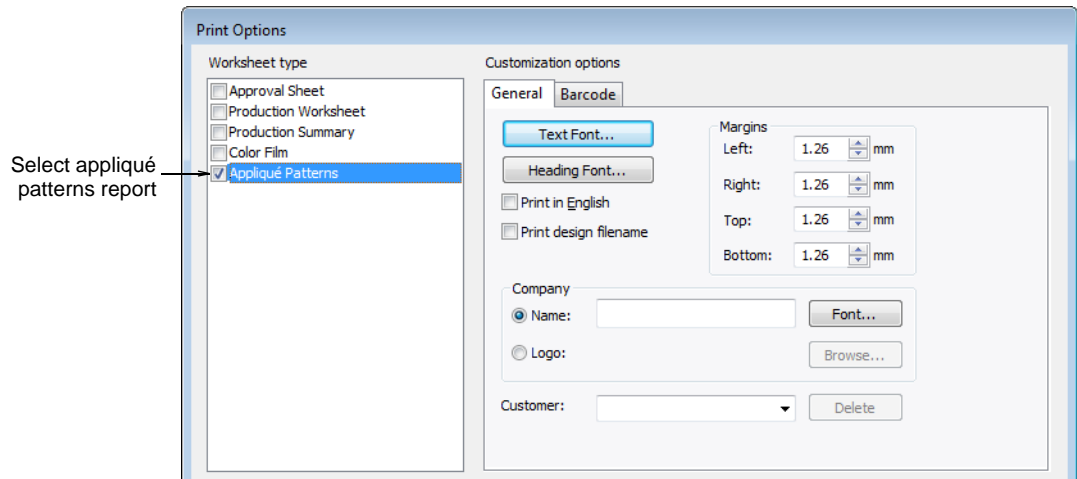
**Tip** You can also extract appliqué shapes from a design to output to a cutter or to a separate file.

---

### To print an appliqué pattern

- 1 Select **File > Print Preview**.
- 2 Click **Options** icon.

Print Options dialog opens.



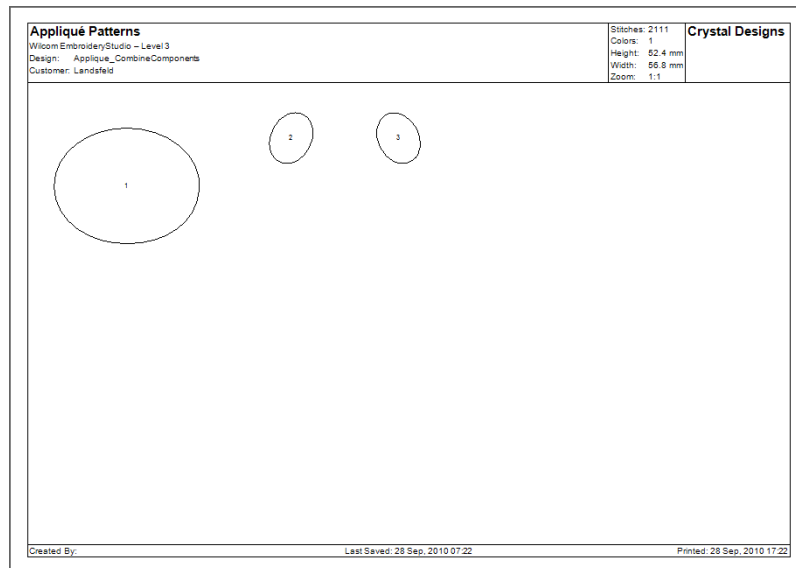
**3** Select **Appliqué Patterns** report type.

A specific report type exists for selectively showing/hiding appliqué patterns. This shows fabric, fabric name, and yardage. It also shows a summary on the first page.

**4** Set **General** options as required. See [Customizing print options](#) for details.

**5** Click **OK**.

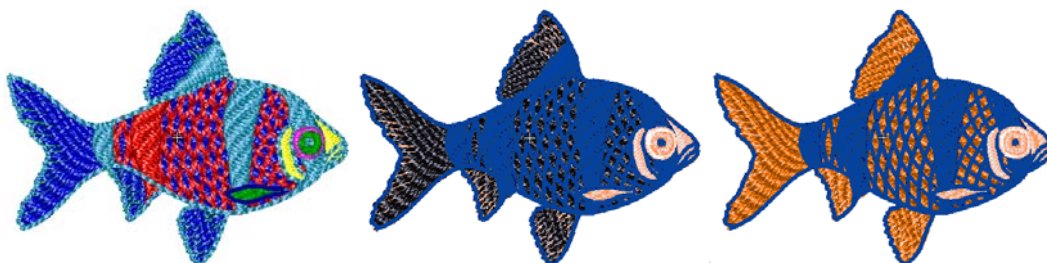
Each appliqué pattern is numbered according to the stitching sequence.



**6** Click **Print Now**.

# Processing Design Files

Embroidery designs are saved in one of two formats – ‘outline file’ format or ‘stitch file’ format. Outline or ‘condensed’ files are high-level formats which contain object outlines, object properties and stitch data. When you open an outline file in TrueSizer Pro, corresponding stitch types, input methods and effects are applied. Outline files can be scaled, transformed and reshaped without affecting stitch density or quality. After modification, they can be saved to EMB format, or to a different format altogether. See also [Supported file formats](#).



Stitch or ‘expanded’ files are low-level formats for direct use by embroidery machines. They contain only stitch coordinates and machine functions. They are generally created ‘on the fly’ when sending designs to machine. They can also be output to embroidery disk or paper tape. Stitch designs are generally not suited to modification because stitches are not regenerated.



**Note** TrueSizer Pro also supports a number of proprietary embroidery disk formats. See [Supported embroidery disk formats](#) for details.

## File sources & EMB format

The ‘all-in-one’ EMB file format contains a complete set of design information in a single file – object outlines and properties, actual stitches and machine functions, thread colors, a picture icon and comments. Even the original design bitmap image can be included in EMB format. Only native EMB files provide 100% perfect scaling and transformation. See also [The EMB advantage](#).

### File source

While embroidery files are broadly classified as outline or stitch formats, TrueSizer Pro internally tags files as belonging to one of four types – **Native Design**, **Imported Outlines**, **Processed Stitches**, or **Imported Stitches**. For information about the source of a design file, refer to the **Design Properties** dialog. See [Viewing design information](#).

File source	Description
Native Design	Designs created in Wilcom professional embroidery design software (or equivalent).



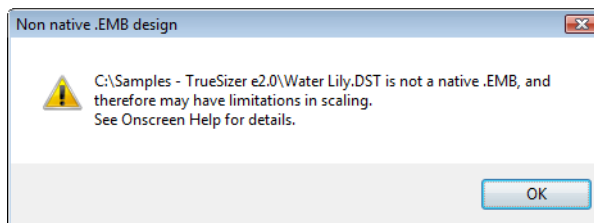
File source	Description
Imported Outlines	Designs read from non-EMB outline – CND or PCH – where stitches have been generated in TrueSizer Pro (or equivalent) from original outlines and stitching data.
Processed Stitches	Designs read from stitch files where stitches have been processed and regenerated with a Wilcom digitizing system such as EmbroideryStudio or DecoStudio.
Imported Stitches	Designs read from stitch files, where outlines may or may not have been recognized, but stitches have not been regenerated through stitch processing. Note, however, that if you change a stitch design – e.g. add a lettering object – the status changes to ‘Processed Stitches’ even though the imported stitches may not have been regenerated.



**Note** Because EMB files can store stitches **and/or** design outlines, you can actually save stitch design files in EMB format **without** object outlines. However, TrueSizer Pro itself is not able to process and ‘recognize’ stitch files.

### Opening non-native formats

If you open a design which is not a native EMB, you will receive the following warning:



If you have an EMB file which is comprised of processed stitches, you will be able to resize this design and the software will recalculate the stitches for objects which were successfully ‘recognized’. The calculation will preserve the stitch density of the recognized objects. However, not all objects (or parts of objects) can be recognized. Therefore resizing will not be perfect as it would if you using a true native EMB file.

If you have an EMB file which is comprised only of imported stitches, or if you have opened a stitch file such as DST or EXP into TrueSizer Pro, the software will **not** recalculate the stitches. It is recommended that you do not scale this design more than  $\pm 5\%$ . Enlarging the design too much may cause ugly gaps in the fills, while shrinking it too much may result in excessive stitching and thread breaks. See [Opening stitch files](#) for details.

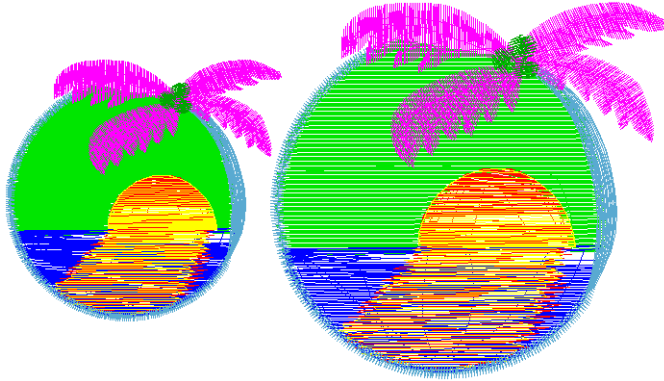


**Note** You can toggle on and off the non-native design warning using **Help > Show Design Warning**.

## Opening stitch files

Stitch or ‘expanded’ designs are low-level formats for direct use by embroidery machines. They contain only stitch coordinates and machine functions. When you open stitch files, you can set decoding options to determine how to convert

the design. Options vary with the type of stitch file you select. See also [Supported file formats](#).



You can scale a stitch design just like a normal design. However, because the stitch count does not change, the density increases or decreases with the design size. Thus you should not scale stitch designs by more than  $\pm 5\%$  or some areas may be too thickly or too thinly covered.

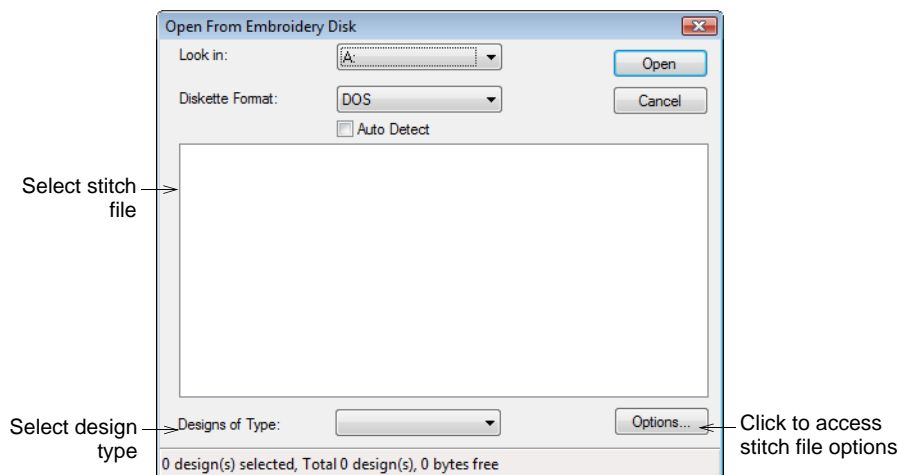


**Note** Because EMB files can store both stitches **and/or** design outlines, you can actually save stitch files in EMB format **without** object outlines. In other words, depending on its source, an EMB file may in fact be a stitch file. See also [File sources & EMB format](#).

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## To open stitch files

- 1 Access the **Open** or **Open From Embroidery Disk** dialog. See [Opening designs](#) or [Reading designs from embroidery disk](#) for details.



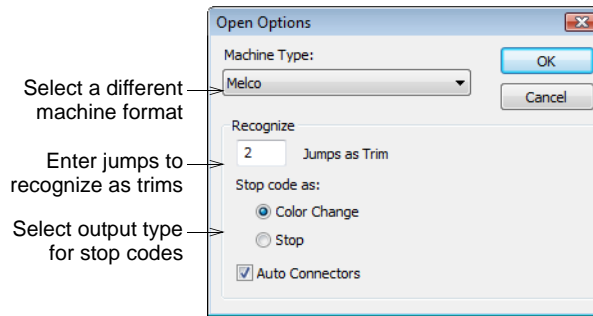
- 2 Select the stitch file to open. See [Supported file formats](#) for details. The **Options** button is activated.



**Tip** Limit the file listing by selecting a format from the **Files/Designs of Type** dropdown list – e.g. Melco (EXP).

- 3 Click **Options**.

The **Open Options** dialog opens.



**Note** Options vary with the type of stitch file you select. When opening CND designs, **TrueSizer Pro** gives you a completely different set of options. See [Opening Melco CND outline files](#).

**4** Select a different machine format from the **Machine Type** list as required.

**5** Enter the number of jumps to recognize as trims.

When **TrueSizer Pro** encounters this number of consecutive jumps, it will convert them to a trim function.



**Caution** If this value is different from the original design, trim functions will be not be inserted correctly.

**6** Use the Stop Code As options to select the output type for stop codes. Options may include Color Change, Stops, Custom. See also [Manually reassigning colors to CND files](#).

**7** Click **OK** and then **Open**.



**Note** Only EMB designs contain the complete set of design information required for 100% perfect scaling and transformation.

## Working with CND format

Melco Condensed (CND) is the native file format of the Melco embroidery digitizing software. CND files store only digitized outlines and stitch values. When you open CND designs in **TrueSizer Pro**, these outlines are scaled and stitches recalculated to preserve density.

**TrueSizer Pro** recognizes all Melco machine functions and stitch types, including Partition Lines and Complex Fill, and automatically converts them to EMB format. However, CND files do not contain quality features such as Pull Compensation or Auto Spacing, nor do they include actual stitches, thread colors, or design icons.

There are several versions of CND, all of which can be read by **TrueSizer Pro**. While these designs scale accurately, the number and placement of stitches may differ somewhat from the original design. You may notice some difference ( $\pm 5\%$ ) in the stitch counts between original and converted files. This is because of differences in the software methods used to calculate stitches.

**TrueSizer Pro** cannot interpret certain specialty features of CND design objects because there is no direct equivalent. However, stock designs do not normally use these features and will generally convert without problem.



**Tip** Before CND designs are stitched out, an EXP format file is created. The EXP stores the actual stitches and can be stitched directly. This file too can be opened in TrueSizer Pro. See [Opening stitch files](#) for details.

## Opening Melco CND outline files

Melco Condensed (CND) is the native file format of the Melco embroidery digitizing software. CND files store only digitized outlines and stitch values. When you open CND designs in TrueSizer Pro, these outlines are scaled and stitches recalculated to preserve density.

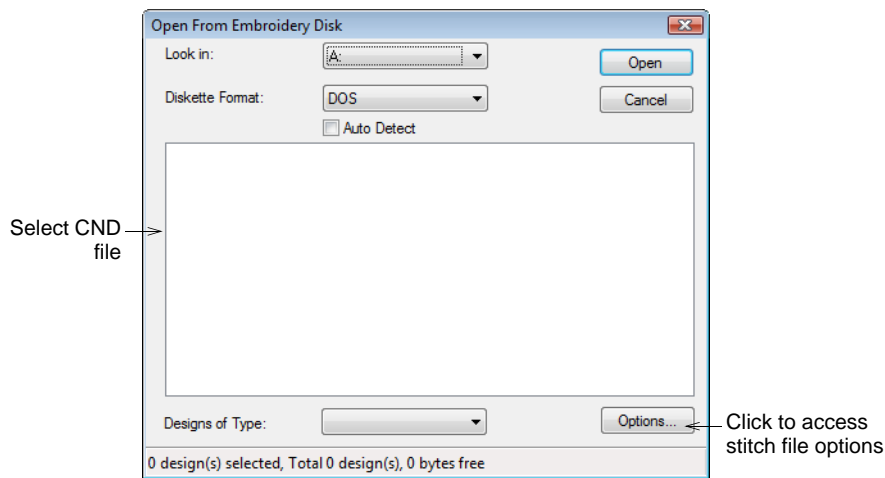


**Note** TrueSizer Pro cannot interpret certain specialty features of CND design objects because there is no direct equivalent. However, stock designs do not normally use these features and will generally convert without problem.

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### To open a Melco CND outline file

- 1 Access the **Open** or **Open From Embroidery Disk** dialog. See [Opening designs](#) or [Reading designs from embroidery disk](#) for details.



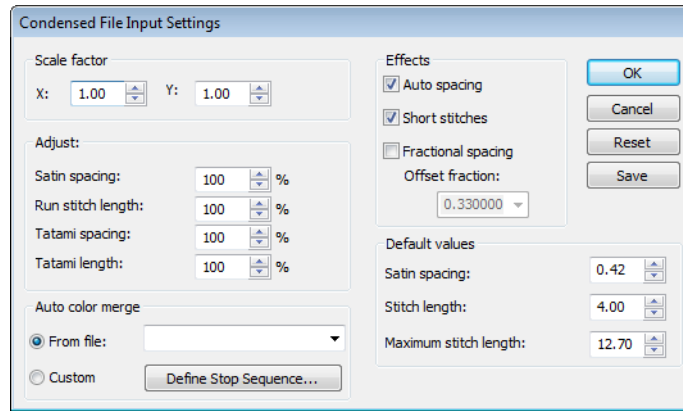
- 2 Select the CND file to open. See [Supported file formats](#) for details. The **Options** button is activated.



**Tip** Limit the file listing by selecting CND format from the **Files/Designs of Type** dropdown list.

- 3 Click **Options**.

The **Condensed File Input Settings** dialog opens.



- 4 In the **Scale Factor** panel, enter the scale at which you want to open the design.
- 5 In the **Adjust** panel, enter the spacing values to apply to the design as a percentage of the original values.  
You can adjust Satin spacing, Run stitch length as well as Tatami spacing and length.
- 6 In the **Auto Color Merge** panel, choose whether you want to read thread color information from CND files.  
This ensures that stitches are displayed in the correct colors when converted to EMB. See [Color merging Melco CND files](#) and [Manually reassigning colors to CND files](#).
- 7 In the **Effects** panel, select the effects you want to apply to the design.  
These allow you to apply Auto Spacing, Stitch Shortening, Fractional Spacing and Fractional Spacing Offset.
- 8 In the **Default Values** panel, adjust the default values for Stitch Spacing, Stitch Length and Maximum Stitch Length as required.  
If the CND design was created with values different to the factory settings, you can override them in these fields.
  - ◀ To save new settings as defaults, click **Save**.
  - ◀ To revert to the Melco factory settings, click **Reset**.
- 9 Click **OK**.  
The selected design opens in the design window. You can scale the design directly on screen, or via the **General Properties** panel. You can also rotate, mirror and skew the design. See [Modifying Designs](#).

## Color merging Melco CND files

The **Auto Color Merge** feature reads thread color information for CND files from an associated TXT file so that stitches are displayed in the correct colors when they are converted to EMB. You can create this text file with a text editor such as MS Notepad. The text file must have the same file name as the CND file – e.g. Fish.TXT and Fish.CND. Both files must also reside in the same folder. For the **Auto Color Merge** function to work correctly, information in the text file must be entered in a certain format.

### Example text file: Fish

A typical text file might look like this:

```

Fish
Uses curve effects
File: Fish
55.9mmW X 74.5mmH
ST: 6,780
Colors: 8
1. Tropical Sunset
2. Saffron
3. Pale powder Blue
4. Tropical Sunset
5. Pale powder Blue
Curve effect
6. Tropical White
7. Tropical Sunset
8. Pale powder Blue

```

### Text file structure

All text files contain some or all of the following elements.

Text file element	Mandatory	Description	Example
Design name		This is the name of the design as it appears in File > Design Properties > Summary > Subject	Fish
Comments		Lines inserted here appear under File > Design Properties > Summary > Comments.	Uses curve effects
File name	●	This is the file name of the CND design file. The file extension should not be included.	File: Fish
Design size		Enter the expected design size for the design. The actual design size is derived from the software.	55.9mmW X 74.5mmH
Stitch count		Enter the expected stitch count for the design. The actual stitch count is derived from the software.	ST: 6,780
Number of colors	●	States the total number of colors in the design.	Colors: 8
Thread name 1	●	Enter the first thread name. The name of the thread is searched against the Thread Chart. The thread name is shown in the File > Design Properties > Stop Sequence tab.	1. Tropical Sunset
Thread name 2	●	Enter the second thread name.	2. Saffron
Thread name 3	●	Enter the third thread name.	3. Pale Powder Blue
Thread name 4	●	Enter the fourth thread name.	4. Tropical Sunset
Thread name 5	●	Add any extra threads to this list.	5. Pale Powder Blue
Thread comments		Place comments below the relevant thread number	Curve effect
Thread name 6	●		6. Tropical White
Thread name 7	●		7. Tropical Sunset
Thread name 8	●		8. Pale Powder Blue

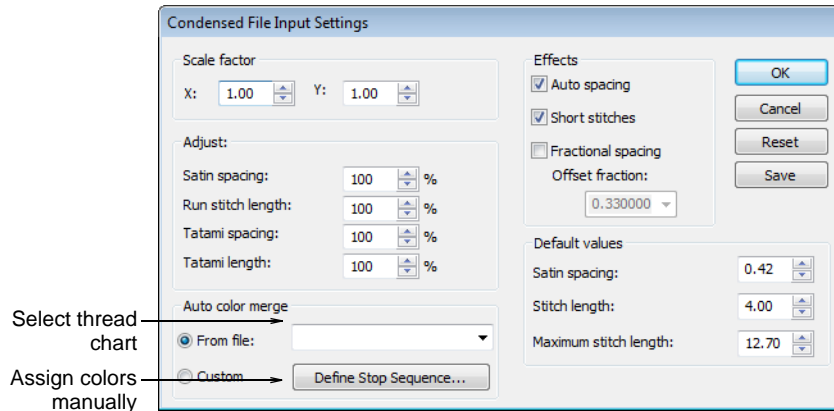
### Reading Melco CND files with Auto Color Merge

When opening a CND file which has a TXT file associated with it, you must specify the thread chart used when the design was originally created in EDS (or other design software). The thread colors nominated in the text file will correspond to the selected thread chart. Alternatively, you can assign colors

manually to every Color Stop code in the file. See also [Manually reassigning colors to CND files](#).

## To read Melco CND files with Auto Color Merge

- 1 Access the **Open** or **Open From Embroidery Disk** dialog and select the CND file to open. See [Opening Melco CND outline files](#) for details.
- 2 Click **Options**.  
The **Condensed File Input Settings** dialog opens.

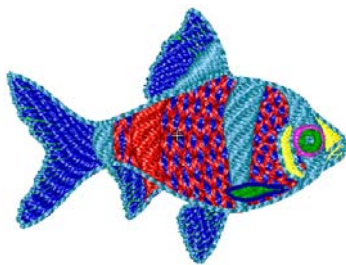


- 3 Select a color merge option from the **Auto Color Merge** panel.
  - ◀ If you want to read thread color information for the selected CND file from an associated TXT file, select **From File** and follow the steps below.
  - ◀ If you want to assign colors manually to every Color Stop code in the file, select **Custom** and click **Define Stop Sequence**. See [Manually reassigning colors to CND files](#) for details.
- 4 If you are using **Auto Color Merge** from an associated text file, select a thread chart from the dropdown list.

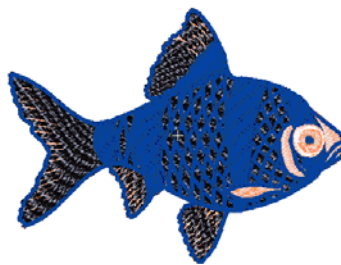


**Note** The thread colors nominated in the text file will correspond to the selected thread chart. If the color name does not correspond, it will default to black.

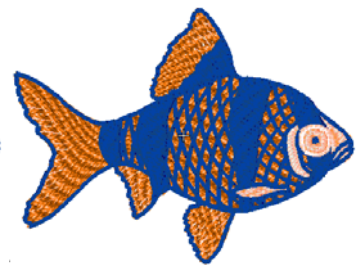
- 5 Click **OK**.



No chart selected – default colors assigned



One color not correctly matched – defaults to black

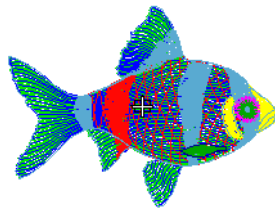


Original colors correctly assigned from text file

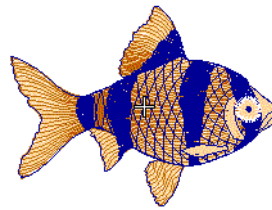
The design opens, the stitches appear in the correct thread colors, and the palette displays the selected thread chart.

## Manually reassigning colors to CND files

When you open a CND file, a design **without** color code assignment uses default colors. You can, however, map thread colors to every Color Stop code in the file. This means you can color code stitch file designs which do not contain needle addressing information **before** opening the file.



Without color code assignment



With color code assignment



**Note** In order to assign colors correctly, you need to consult a Production Worksheet for the necessary color sequence information.

### To manually reassign colors to a CND file

- 1 Check the existing CND file Production Worksheet.

Thread chart for → Thread Chart: Default  
selected file

#	C	St.	Descr. Code
1.	1	2626	Sand 16
2.	2	1181	Orange 10
3.	3	692	Dark Blue 8
4.	1	265	Sand 16
5.	3	1696	Dark Blue 8
6.	4	104	White 13
7.	1	152	Sand 16
8.	3	51	Dark Blue 8

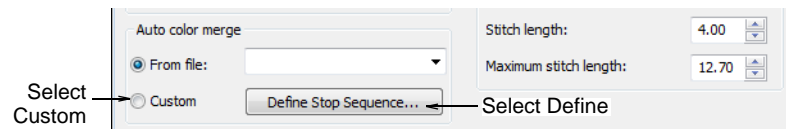
Number of color changes in design → 8. (e.g. 8)

1. Sand	16.37m
2. Orange	5.88m
3. Dark Blue	9.34m
4. White	0.35m
Total Bobbin:	15.97m

- 2 Access the **Open** or **Open From Embroidery Disk** dialog and select the CND file to open. See [Opening Melco CND outline files](#) for details.

- 3 Click **Options**.

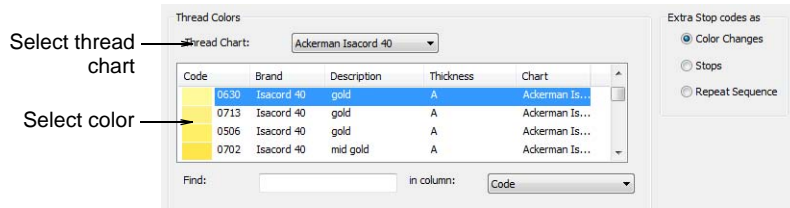
The **Condensed File Input Settings** dialog opens.



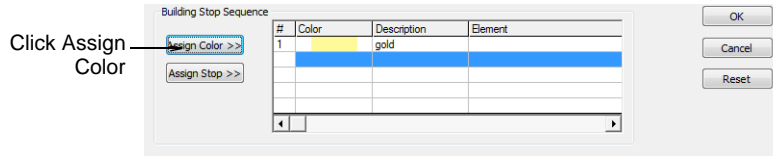
- 4 Select **Custom** and click **Define Stop Sequence**.



The **Define Stop Sequence** dialog opens. Initially the **Building Stop Sequence** grid is empty.



5 Select a thread chart and first color.



6 Click **Assign Color**.

The color and the description are entered at the current Stop in the **Building Stop Sequence** grid.

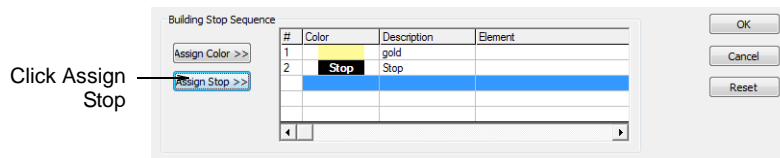
The selection moves to the next color in the thread chart. Two consecutive same colors are not allowed and **Assign Color** is disabled.



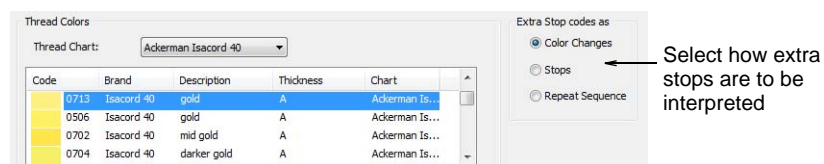
**Note** Assigning a redundant Color function may trigger an error message. Use the **Delete** key to delete a selected entry in the stop sequence. Click **Reset** to reset all entries.

7 Click **Assign Stop** to enter an explicit Stop code.

**Stop** is entered in the **Description** field.



8 Use the **Extra Stop Codes As** panel to select the output type for extra stop codes. Options include Color Change, Stops, Repeat Sequence.



9 Repeat the operation as many times as indicated by the Production Worksheet.

10 Click **OK**.

The design will have the desired colors and the correct number of color changes.



**Tip** You can convert color changes to an explicit Stop Code. You can also remove Color Stops by assigning the same color number to consecutive color blocks.

## Saving designs in CSD format

The **CSD Save Options** allow you to select between CSD Type I and Type II. Type II was introduced in CS 1.2B software for the POEM machine. It is also used by the Singer EU software for the POEM machine. Type II CSD files additionally store the thread color RGB values and also an icon of the design.

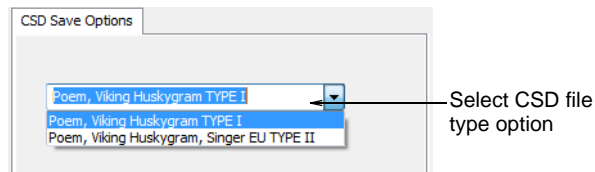
### To save designs in CSD format

- 1 Select **File > Save As**.

The **Save As** dialog opens.

- 2 Select **CSD** from the **Files of Type** list.
- 3 In the **File Name** field, enter a name for the design.
- 4 Click **Options**.

The **Save Options** dialog opens.



- 5 Select the required CSD file type option.
- 6 Click **OK** and then **Save**.

## Supported file formats

The table below lists the 'outline' and 'stitch' file formats supported by TrueSizer Pro.

File Type	Manufacturer	Format	Open	Save As
100	Toyota	Stitch	●	●
AMT60	Bernina ES Templates (V6.0)	Outline	●	
ART60	Bernina ES Designs (V6.0)	Outline	●	
AMT50	Bernina ES Templates (V5.0)	Outline	●	
ART50	Bernina ES Designs (V5.0)	Outline	●	
ART	artista (V4.0)	Outline	●	
AMT	artista Template	Outline	●	
ART42	Exploration Project	Outline	●	
ARX	artista Cross Stitch	Stitch	●	
BRO	Bits & Volts	Stitch	●	●
CND	Melco	Outline	●	
CSD	Poem, Huskygram, Singer EU	Stitch	●	●
DSB	Barudan	Stitch	●	●
DSN	Nova	Stitch	●	
DST	Tajima	Stitch	●	●

\* For reasons of compatibility, TrueSizer Pro lets you save in both current and previous versions of EMB including DecoStudio.

File Type	Manufacturer	Format	Open	Save As
DSZ	ZSK	Stitch	●	●
EMB *	Wilcom	Outline	●	●
EMT	Wilcom	Outline	●	●
EMX	Wilcom	Stitch	●	
ESD	Wilcom	Stitch	●	
EXP	Melco	Stitch	●	●
EXP	Bernina	Stitch	●	
JAN	Janome	Stitch	●	
JEF	Janome, Elna, Kenmore	Stitch	●	●
JMT	Digitizer Template	Outline	●	
GNC	Great Notions	Stitch	●	
HUS	Husqvarna, Viking	Stitch	●	●
INB	Inbro Files	Stitch	●	●
INP	Wilcom condensed format	Outline	●	
KSM	Pfaff	Stitch	●	●
PCD	Pfaff	Stitch	●	●
PCH	Gunold APS	Outline	●	
PCQ	Pfaff	Stitch	●	●
PCS	Pfaff	Stitch	●	●
PEC	Deco, Brother, Babylock	Stitch	●	●
PES	Deco, Brother, Babylock	Stitch	●	●
PMU	Proel	Stitch	●	●
PUM	Proel DOS	Stitch	●	●
SEW	Janome, Elna, Kenmore	Stitch	●	●
SHV	Husqvarna/Viking	Stitch	●	●
STC	Gunold APS	Stitch	●	
STX	Datastitch	Stitch	●	●
TAP	Happy	Stitch	●	●
TBF	Tajima	Stitch	●	●
U??	Barudan	Stitch	●	●
VIP	Husqvarna/Viking/Pfaff	Stitch	●	●
VP3	Husqvarna/Viking/Pfaff	Stitch	●	●
XXX	Compucon	Stitch	●	●
XXX	Singer	Stitch	●	●
Z??	ZSK TC	Stitch	●	●

\* For reasons of compatibility, TrueSizer Pro lets you save in both current and previous versions of EMB including DecoStudio.



**Tip** For information about the source of a design file, refer to the **Design Properties** dialog. See [Viewing design information](#).

## Chapter 2

# Hooping Designs

Devices made from wood, plastic, or steel, hoops are used to tightly grip fabric and stabilizer between an inner and outer ring. Designed to hold fabric taut against the machine bed for embroidering, they attach to the machine's frame. Fabrics must be hooped before stitching out on the machine. **TrueSizer Pro** allows you to select from a wide range of standard factory-supplied hoops.



This section deals with selecting and centering hoops, both manually and automatically. It also covers setting up and editing hoop lists.

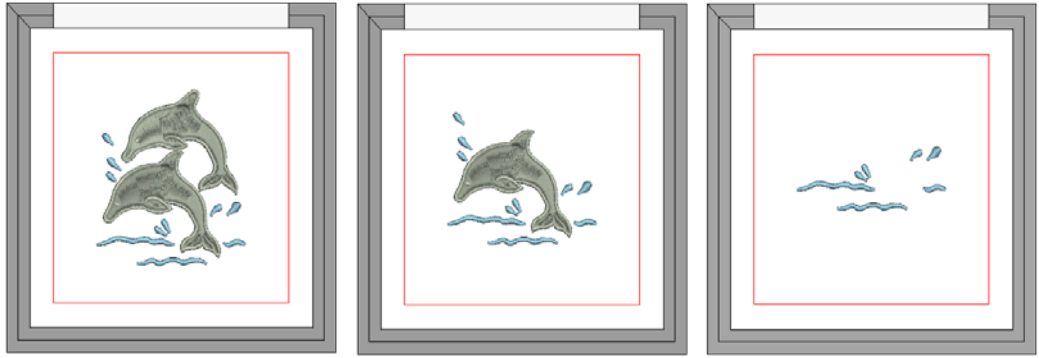
### Selecting & centering hoops



Click View > Show Hoop to turn hoop display on or off. Right-click to change hoop settings.

The **Show Hoop** tool allows you to toggle hoop display on or off. When activated, a hoop template representing the embroidery hoop you connect to your embroidery machine appears in the middle of the design window. The hoop

can either be centered automatically at the design center or at a fixed position – i.e. center of the design window (default) or a user-defined center point.



A range of hoop sizes is available for a wide variety of design types. From the hoop sizes available, select the smallest hoop which will accommodate your design. This will hold the fabric tight while stitching.



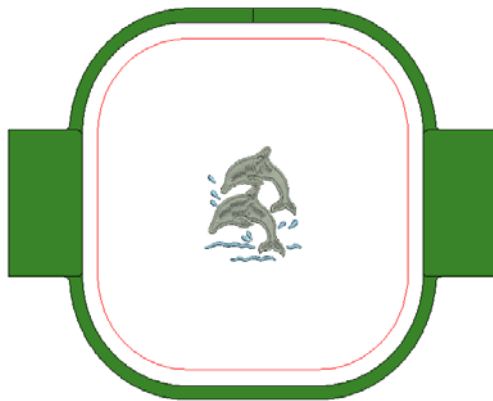
**Note** These settings are digitizing functions only as the embroidery machine itself will always center the design. See also [Setting automatic start & end points](#).

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### To select and center a hoop

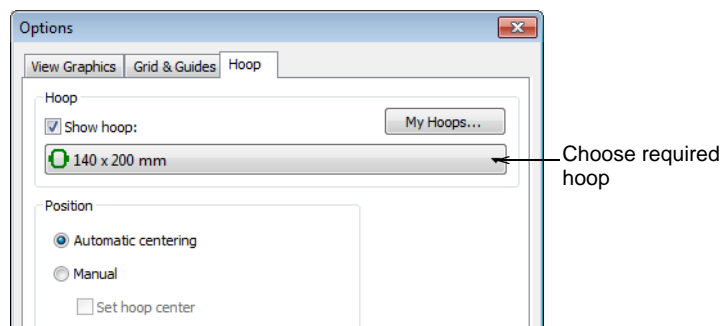
- 1 Open your design and click the **Show Hoop** icon.

The current hoop is displayed. It may be too big or too small for your design.



- 2 Right-click the **Show Hoop** icon.

The **Options > Hoop** dialog opens.



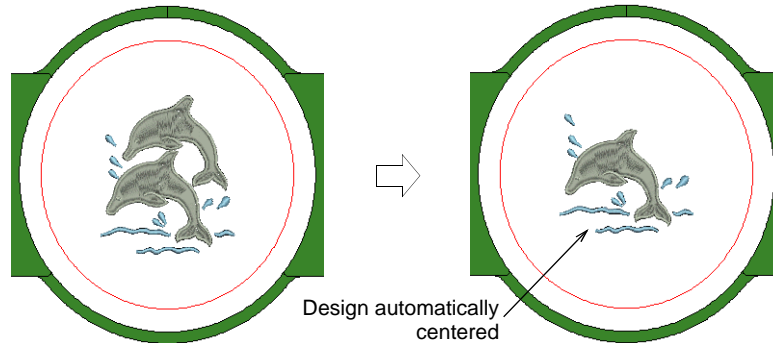
- 3 Select a hoop from the droplist.



**Note** Configure the hoop list via the **My Hoops** function to include only the ones you have available. See [Setting up or editing a hoop list](#) for details.

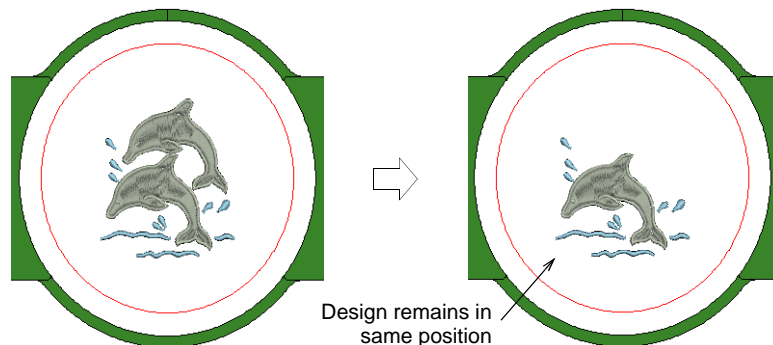
- 4 In the **Position** panel, choose how you want the hoop to be positioned.

◀ **Automatic Centering:** Ensure that design is always centered in the hoop.



◀ **Manual:** Use the manual option to make sure the hoop display does not move from its original position. This means it won't automatically center while you're digitizing.

◀ **Manual > Set Hoop Center:** Digitize a point on the design that the hoop will center around. See [Selecting & centering hoops](#) for details.



**Tip** Always turn auto-centering back on to check that the design will fit within the hoop when it gets to the machine.

- 5 Click **OK**.

If you selected **Set Hoop Center**, click the point on the design or design window where you want to center the hoop.



**Note** Whenever you choose a new hoop, it becomes the 'current' hoop until changed in the present or a future session.

- 6 Optionally, click the **Zoom to Hoop** icon, select **View > Zoom > Zoom to Hoop** or press **Alt+0** to view the entire hoop in the design window.



**Note** The production worksheet will state the selected/recommended hoop. See [Customizing print options](#) for details.

## Setting up or editing a hoop list

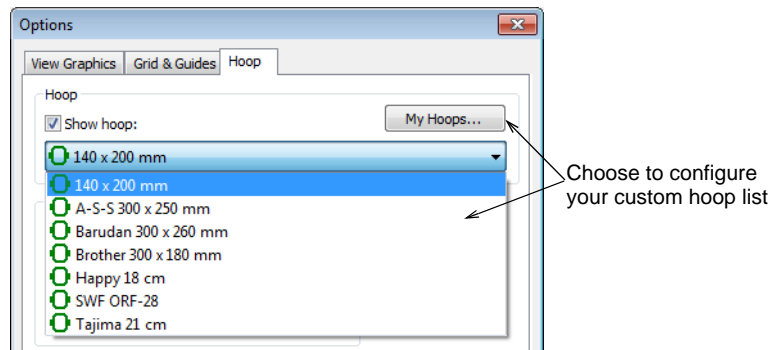


Click **View > Show Hoop** to turn hoop display on or off. Right-click to change hoop settings.

Configure the hoop list to include only those you currently have available for use. The list can be selected from a wide range of commercial brands.

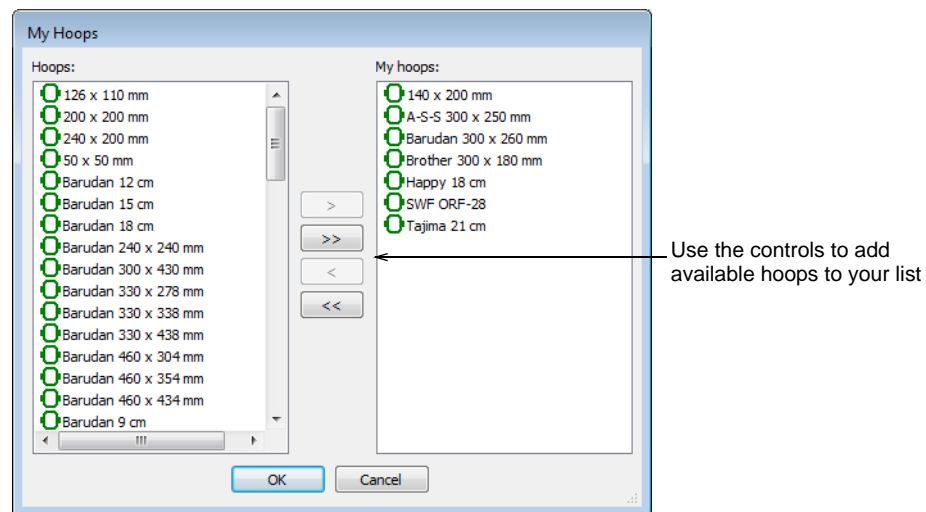
### To set up or edit a hoop list

- 1 Right-click the **Show Hoop** icon.  
The **Options > Hoop** dialog opens.



**Tip** This and the **My Hoops** dialogs will display the very first time you click the **Show Hoop** icon if there are no hoops currently set up.

- 2 Click the **My Hoops** button or select from the droplist itself.  
The **My Hoops** dialog opens.



**Tip** You can access this dialog directly via the **Setup > My Hoops** function.

- 3 Double-click or use arrow buttons to:
  - ◀ Add available hoops to the **My Hoops** list.
  - ◀ Remove hoops if for any reason they are redundant or unavailable.
- 4 Click **OK**.

Only these hoops will be available for selection. See also [Selecting & centering hoops](#).



## HARDWARE & SOFTWARE SETUP

In order to work with your particular equipment, **TrueSizer Pro** needs to be properly configured. You may also want to configure the software to your particular design requirements.

### **Using embroidery disks**

This section describes the use of embroidery disks supported by **TrueSizer Pro**. It covers the formatting of embroidery disks, as well as reading and writing designs to them. It also deals with adjusting standard machine format settings to meet your machine's specific requirements. See [Using Embroidery Disks](#) for details.

### **Changing system settings**

This section describes how to change the TrueView display, grid spacing and positioning, and design window scrolling options. It also describes how to save designs automatically as you work. There is also information about how to adjust the pointer position display, paste position options, and other general options. See [Changing System Settings](#) for details.

# Using Embroidery Disks

Embroidery disks are specially formatted floppy disks used to transfer designs from computer to embroidery machine. You can format embroidery disks and save designs to them from within Wilcom **TrueSizer Pro e3**. The format you use will depend on the selected embroidery machine. You can also open designs from embroidery disk directly into **TrueSizer Pro**.

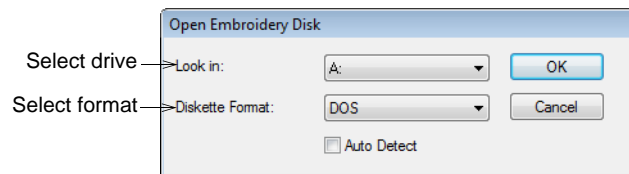
## Reading designs from embroidery disk

You can open designs of other formats from specially formatted embroidery disks. See also [Supported embroidery disk formats](#).

### To read designs from embroidery disk

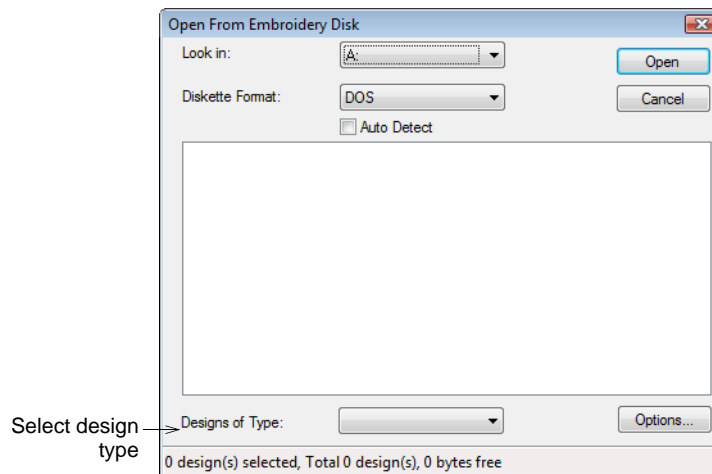
- 1 Insert the embroidery disk in your computer's floppy disk drive.
- 2 Select **File > Embroidery Disk > Open**.

The **Open Embroidery Disk** dialog opens.



- 3 From the **Look In** list, select the floppy disk drive.
- 4 Select the disk format. Either:
  - ◀ Select the format from the **Diskette Format** list.
  - ◀ Select the **Auto Detect** checkbox and let **TrueSizer Pro** automatically determine the format. This generally takes longer.
- 5 Click **OK**.

The **Open From Embroidery Disk** dialog opens.



- From the **Designs of Type** list, select a design type.

Any designs saved on disk are listed in the panel. If no designs are listed, make sure that the correct drive and disk format are selected.



**Note** If the **Options** button is available, you can set recognition options for the design. See [Processing Design Files](#).

- Click **Open**.

## Choosing floppy disks

Most embroidery machines are equipped with the same floppy disk drives as those used in PCs. So that you can transfer your embroidery designs, make sure that the floppy disk drive in your computer can read, write and format floppy disks that you can use with your embroidery machine.

If you want to stitch out a design, you must write it to a disk that is formatted for your embroidery machine. When formatting an embroidery disk on your computer, make sure you use the correct density of disk. For example, if your machine requires a Double Density (DD) disk, you must use one even if your computer has a High Density (HD) floppy disk drive.

### Floppy disk types

Different types of floppy disk can store different amounts of data:

Capacity	Density	Code
360Kb	Single-Sided Single-Density	SS/SD
720Kb	Double-Sided Double-Density	DS/DD
1.44Mb	Double-Sided High-Density	DS/HD
2.88Mb	also called Double-Sided High-Density	DS/HD



**Caution** Use the disk type required by the embroidery machine, not the computer. For example, if a machine requires DD disks, you must use DD disks even though your computer may have an HD drive. If your machine can only read Single Density disks you may need to install a special floppy disk controller card in your computer. See [Supported embroidery disk formats](#) for more details.

### Disk drives and floppy disks

Different types of floppy disk drive can read and write only certain capacity floppy disks:

Computer Disk Drive	SS/SD	DS/DD	DS/HD	DS/HD
Single Density	●			
Double Density		●		
High Density 1.44 Mb		●	●	
High Density 2.88 Mb		●	●	●

Most computers have a High Density 1.44 Mb drive which can read both Double Density 720 Kb and High Density 1.44 Mb floppy disks. Most embroidery

machines use Double Density or High Density disks so there is usually no problem with transferring designs.



**Note** If your embroidery machine can only read Single Density disks, you need to install a special floppy disk controller card in your computer. Only a few special floppy disk controller cards can read Single Density disks. See also [Supported embroidery disk formats](#).

## Formatting embroidery disks

Embroidery disks must be formatted to suit the embroidery machine you intend to use or the machine will not be able to read the design. Most computers have a High Density 1.44 Mb drive which can read both Double Density 720 Kb and High Density 1.44 Mb floppy disks. Most embroidery machines use Double Density or High Density disks so there is usually no problem with transferring designs. See your embroidery machine's manual for details of the appropriate disk type.

---

### To format embroidery disks

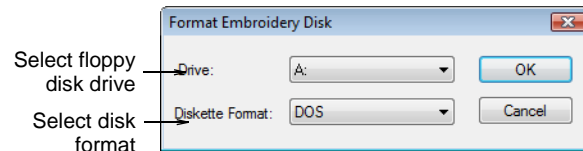
- 1 Insert a 3.5" floppy disk of the correct density in your computer's floppy disk drive.



**Note** Use the disk type required by the embroidery machine, not the computer. For example, if a machine requires DD disks, you must use DD disks even though your computer may have an HD drive. If your machine can only read Single Density disks you may need to install a special floppy disk controller card in your computer. See [Choosing floppy disks](#).

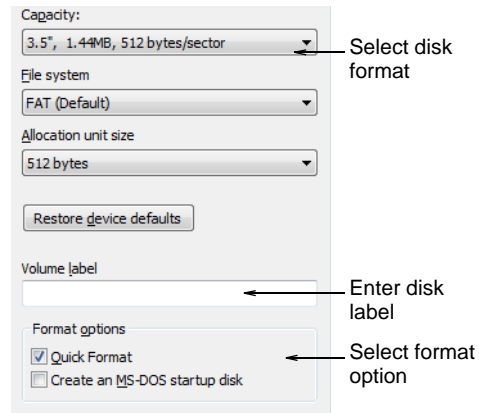
- 2 Select **File > Embroidery Disk > Format**.

The **Format Embroidery Disk** dialog opens.



- 3 From the **Drive** list, select the floppy disk drive.
- 4 From the **Diskette Format** list, select the required disk format.
- 5 Click **OK**.  
A confirmation message appears.
- 6 Click **OK** to confirm.

The **Format** dialog opens.



- 7 From the **Capacity** list, select the disk storage capacity.
- 8 In the **Format Type** panel, select the format option you require. Options may include Full, Quick, or Copy system files only.
- 9 In the **Other Options** panel, select the options you require. These may include No Label, Display Summary when Finished, and Copy system files.
- 10 Click **Start**.  
A progress bar appears. You are prompted when formatting is complete.
- 11 Click **OK** to format another disk or **Cancel** to finish.



**Note** If you have trouble with formatting a Melco embroidery disk, check if your floppy disk drive can read and write single density (SS/SD) floppy disks.

## Saving designs to embroidery disk

Save designs to embroidery disk to stitch out on a specific machine. When you save to a new format, the design is converted to encode the machine functions and commands supported by the particular machine.



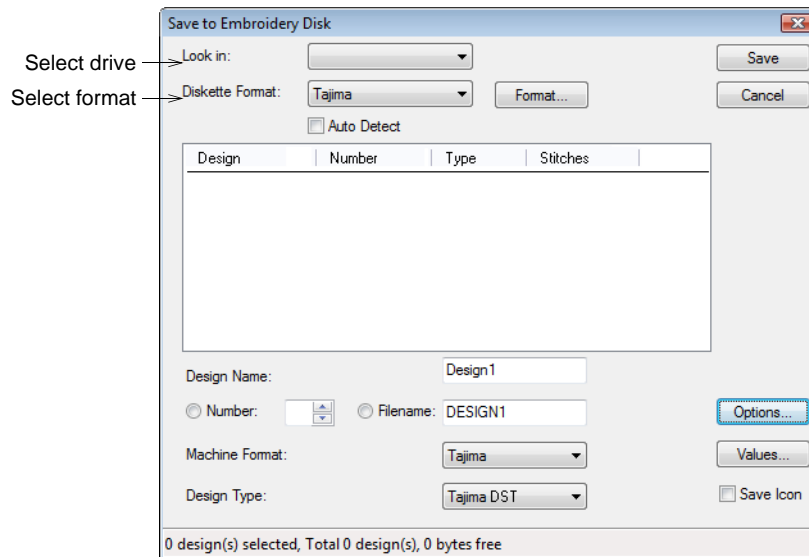
**Note** Embroidery disks must be correctly formatted before you save designs to them. See [Formatting embroidery disks](#).

---

### To save designs to embroidery disk

- 1 Insert the embroidery disk in your computer's floppy disk drive.
- 2 Select **File > Embroidery Disk > Save As**.

The **Save to Embroidery Disk** dialog opens.



- 3 From the **Look In** list, select the floppy disk drive.
- 4 Select the disk format. Either:
  - ◀ Select the format from the **Diskette Format** list.
  - ◀ Select the **Auto Detect** checkbox and let TrueSizer Pro automatically determine the format.

Any designs already saved on disk are listed in the panel.



**Note** If the disk is not formatted, or its format is not correct, click **Format**. See [Formatting embroidery disks](#).

- 5 If the **File Number** field is enabled, enter the file number.  
Not all machine formats require this information.
- 6 In the **File Name** field, enter a name for the design.
- 7 From the **Machine Format** list, select the format for the design.  
Some machines can read different formats. For example, some Tajima machines can read Barudan as well as Tajima formats.
- 8 From the **Design Type** list, select the file type to save to embroidery disk.  
Only one file type is generally available.
- 9 If available, select the **Save Icon** checkbox to include a thumbnail image of the design with the design file.  
This icon appears in the machine control panel during stitch-out.
- 10 Click **Save**.



**Caution** Wait until the light on the floppy disk drive stops flashing before removing the disk.

## Supported embroidery disk formats

Embroidery machine manufacturers have selected different capacity disk drives and floppy disks to suit their requirements. The floppy disk drive in your embroidery machine may be different from the one in your computer. The table

below lists the embroidery disk formats supported by TrueSizer Pro. See also [Choosing floppy disks](#).

Embroidery Disk	Density	Open	Save As
Barudan 2HD	DS/HD	●	●
Barudan FDR	DS/DD	●	●
Barudan FMC	DS/DD	●	●
DOS	DS/HD	●	●
Happy	DS/HD	●	●
Tajima	DS/HD	●	●
Toyota	DS/HD	●	●
ZSK	DS/DD	●	●
ZSK TC	DS/HD	●	●



**Note** Embroidery machine manufacturers constantly improve their models so use this table as a guide only. If you are in doubt as to which type of floppy disk to use, consult the manual for your embroidery machine.

# Changing System Settings

Different peripheral devices and system settings are set up in different ways – some in Windows, via the Control Panel, others within Wilcom **TrueSizer Pro e3** itself.

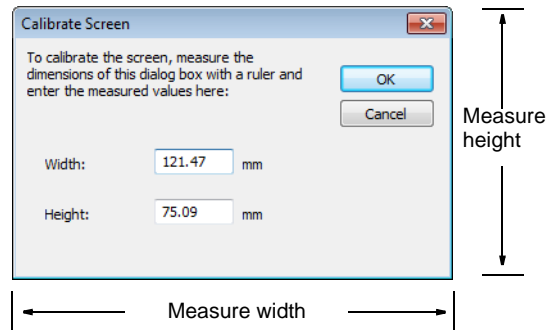
## Calibrating the monitor

You need to calibrate your monitor so that designs at 1:1 scale appear at real size. Do this when you first install **TrueSizer Pro** or whenever you change your monitor.

### To calibrate the monitor

- 1 Select **Setup > Calibrate Screen**.

The **Calibrate Screen** dialog opens.



- 2 Measure the height and width of the dialog box.
- 3 Enter the measurement in the **Width** and **Height** fields.
- 4 Click **OK** to return to the design window.

## Setting up printers

Printers are added to the system through the Windows Printers panel and then selected for use through the **Print** option in the **File** menu.

### To set up printers

- 1 Switch off the power to the PC and all attached equipment.
- 2 Set up the printer.  
Use the documentation supplied with the printer to set up toner and ink cartridges, etc.
- 3 Connect the printer cable to a parallel port on the PC.
- 4 Switch on the power to all equipment.
- 5 Set up the printer through the Windows Printers panel using the **Add Printer** icon.



The printer will have installation instructions and software. Refer to the printer installation instructions and the Microsoft Windows documentation.

The printer can be set up as the default printer through the **Printer** icon in the Windows Control panel. Once it is set up, it can be selected through **TrueSizer Pro**.

**6** Start **TrueSizer Pro**.

**7** Select **File > Print**.

The **Print** dialog opens.

**8** Select a printer from the **Name** list.

The currently selected printing device details appear below the **Name** list. The information indicates the current status, type of printer, location of the printer driver, and a comment.

**9** Click **Properties** to adjust printer options.

The **Printer Properties** dialog opens. Refer to the documentation supplied with the printer for details.

**10** Click **OK** in the **Printer Properties** dialog to save changes to printer settings.

**11** Click **Options** to adjust Production Worksheet print options. See [Customizing print options](#) for details.

## Setting measurement units



Use **View > Design Measurement System** to change measurement units within software without changing system settings.

The first time you run **TrueSizer Pro**, the measurement system will default to whatever the operating system is using. You can use different measurement units within **TrueSizer Pro** without having to exit and change system settings. This is useful, for example, if you receive orders from places that use a different measurement system. The most common scenario is where a US customer orders lettering in inches – say  $\frac{3}{4}$ " – and the digitizing is to be done in metric. The digitizer can then easily enter ' $\frac{3}{4}$ " without having to first do any mathematical conversion to mm.

### Accessing the feature

The measurement system may be changed via a droplist on the **View** toolbar:



Select desired measurement unit



**Note** Technically, when you select 'U.S.', you will get the imperial measurement system – inches, feet, and yards.

## Setting image viewing options



Use **View > Show Bitmaps** to show and hide bitmap images. Right-click to set image display options.

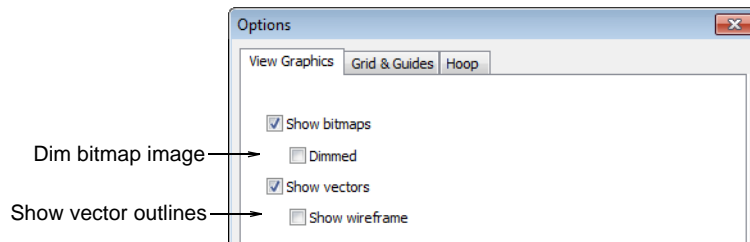


Use **View > Show Vectors** to show and hide vector graphics. Right-click to set image display options.

You can dim bitmap image backdrops on screen to make it easier to view stitches when they are the same color as the image. You can also show colored vector graphics as outlines only. Dimming, however, only applies to bitmap images – you cannot dim vector graphics. Similarly, you can't show bitmap images as outlines only.

### To set image viewing options

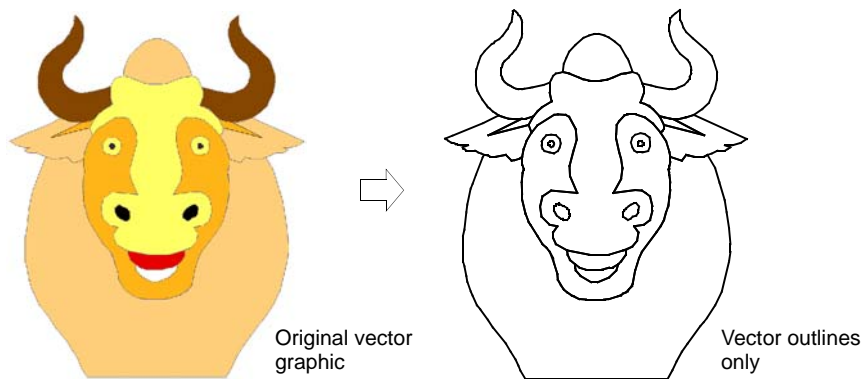
- 1 Right-click either the **Show Bitmap** or **Show Vectors** icon.  
The **Options > View Graphics** dialog opens.



- 2 To dim a bitmap image backdrop, select the **Dimmed** checkbox.



- 3 To view a colored vector graphic as outlines, select the **Show Wireframe** checkbox.



- 4 Click **OK**.

### Setting grid display options

**TrueSizer Pro** provides a set of grid lines to help accurately align or size embroidery objects. The **Show Rulers & Guides** feature improves usability by allowing you to accurately position stitches and align objects in a design. By

default, rulers and guides are switched on. When they are switched off, guides are hidden but are stored in the design and will reappear when switched back on.



**Note** Each design has its own set of guides and its own zero point for the rulers. When a design is saved, the ruler zero point and positions of the guides, if any, are saved with it.

## Setting grid display



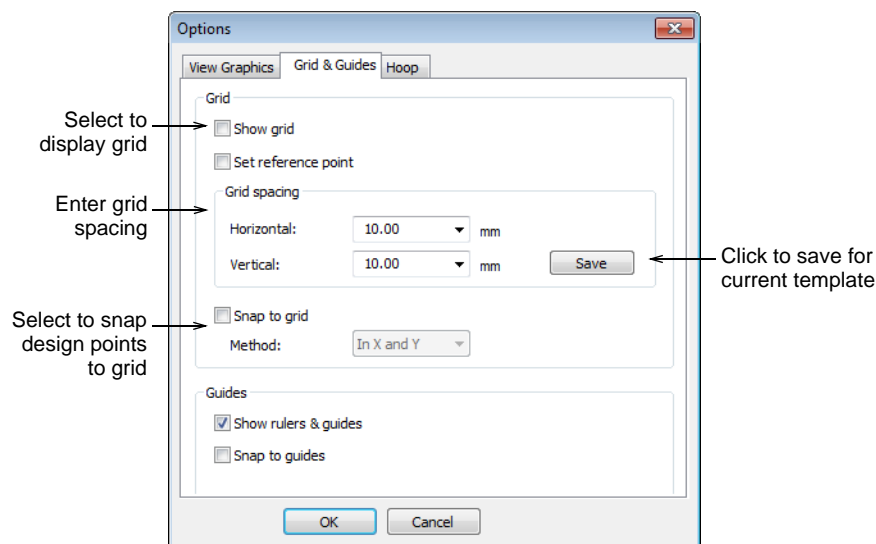
Right-click View > Show Grid to set grid reference point and spacing.

You can change grid spacing, select a reference point and turn **Snap to Grid** on or off in the **Options** dialog. By default, rulers and guides are switched on. When they are switched off, guides are hidden but are stored in the design and will reappear when switched back on.

### To set the grid display

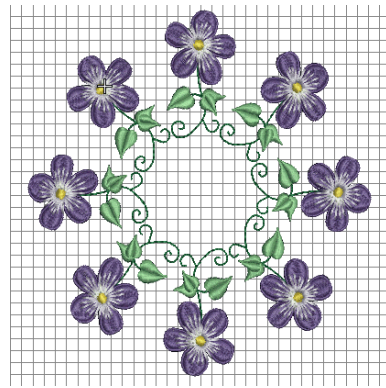
1 Right-click the **Show Grid** icon.

The **Options > Grid & Guide** dialog opens.

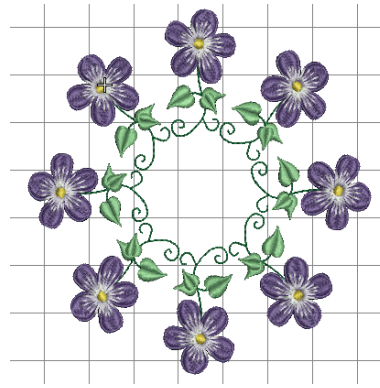


2 Select the **Show Grid** checkbox to turn the grid on if not already activated.

**3** Enter **Grid Spacing** values for horizontal and vertical grid lines.



Grid spacing: 5 mm



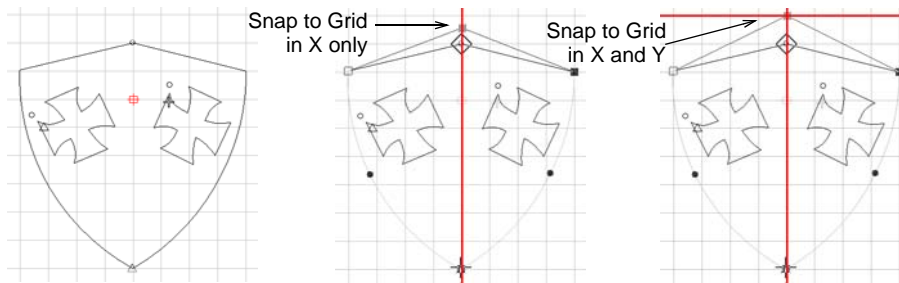
Grid spacing: 20 mm



**Tip** To use these settings as defaults for the current template, click **Save**.

**4** Select the **Snap to Grid** checkbox as required.

Reference points, control points or leading edges of objects snap to grid during digitizing, sizing, reshaping, or positioning operations. When any of these operations is taking place, grid lines change color temporarily to indicate that 'snap to' is active.



**5** Choose a snap method in the **Method** list:

Option	Purpose
In X and Y	Snaps objects to the nearest horizontal and vertical grid line intersection.
In X	Snaps objects to the nearest horizontal grid line.
In Y	Snaps objects to the nearest vertical grid line.



**Tip** To temporarily disable **Snap to Grid** as you digitize, hold down **Alt**.

**6** Select the **Set Reference Point** checkbox to align a significant point of the design with a grid line or grid point.

For example, you can set the grid reference point to the design center. This is easier and faster than moving the whole design.

**7** Click **OK**.

If you selected **Set Reference Point**, mark the reference point on your design. The grid aligns so that horizontal and vertical grid lines intersect at this point.

## Setting ruler & guides display



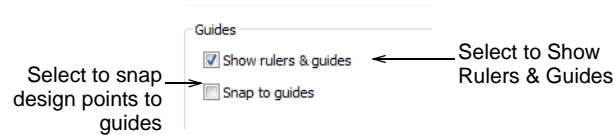
Right-click View > Show Rulers & Guides to set the Snap to Grid and Snap to Guides options.

Rulers are located to the top and left side of the design window. The unit of measurement – mm or inches – depends on the regional settings in the MS Windows® **Control Panel**. The ruler scale, illustrated with numbers and ticks, depends on the zoom setting. Guides are dotted vertical and horizontal lines placed across the design window to help you align objects. Rulers must be displayed before a guide can be created.

### To set the ruler & guides display

- 1 Right-click **Show Grid** or **Show Rulers & Guides**.

The **Options > Grid & Guides** dialog opens.



- 2 Select the **Show Rulers & Guides** checkbox if not already activated.

- 3 Select the **Snap to Guides** checkbox as required.

Reference points, control points or leading edges of objects snap to guides during sizing, reshaping, or positioning operations.

- 4 Click **OK**.



**Tip** To temporarily disable **Snap to Guides** as you digitize, hold down **Alt**.

# PART IV

# APPENDICES

# Troubleshooting

This section provides help for solving problems in Wilcom **TrueSizer Pro e3**. It includes procedures for checking your system's requirements and settings, reverting to original values, and testing disks and connections. It also describes how to log errors, and lists causes for common error messages and problems.



**Note** **TrueSizer Pro** creates a number of dump files that contain information on where the software failed, in order to quickly identify and correct any recurring problems. These are located by default in the **C:\Program Files\Wilcom\TrueSizerPro\_e3.0\Recover** folder. A backup of currently open designs is stored by default in the **..\Backup** folder.

For further Technical Support, please contact us through the links provided at the bottom of the page.

## Color printing limitations

Standard color printing of designs may result in stitches being printed in colors other than those used in the design. Dithered colors used in your designs may be mapped to the primary colors provided by your printer driver. This limitation is dependent on the behavior of individual printer drivers. At worst this can result in the incomplete print out of the stitches. In this instance a color in your design has been mapped to white by the printer driver which is then printed as white-on-white.

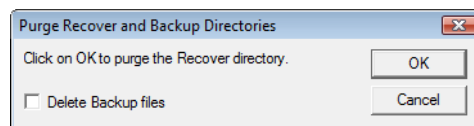
If this problem appears, you may alternatively print the design in **3D View** color or black and white. Turning off mapping for your printer is another way to overcome the problem. Refer to your printer's user manual for details.

## Deleting files with Purge Recovery

On rare occasions, a corrupted design may prevent **TrueSizer Pro** from starting up. Delete corrupt files using the **Purge Recovery** utility. **Purge Recovery** deletes files in the **Recover** and **Backup** folders.

### To use Purge Recovery

- 1 Exit **TrueSizer Pro**.
- 2 On the Windows taskbar, click the **Start** button and select **Programs > Wilcom TrueSizer Pro e3 > Wilcom Tools > Purge Recovery**.  
The **Purge Recover and Backup Directories** dialog opens.



**Tip** To delete backup files as well, select **Delete Backup** files.

- 3 Click **OK**.

If some files cannot be deleted, a message will display. Using Windows Explorer, delete these files from the **C:\Program Files\Wilcom\TrueSizerPro\_e3.0\Recover** and **..\Backup** folders manually.



**Tip** If the errors persist, try reverting to factory settings. See [Reverting to factory settings](#).

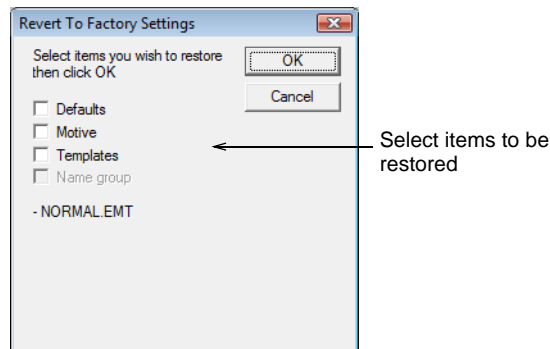
## Reverting to factory settings

If you have made changes to the default settings in your software and you want to revert back to the factory settings, use the **Revert** utility.

### To revert to factory settings

- 1 Exit TrueSizer Pro.
- 2 On the Windows taskbar, click the **Start** button and select **Programs > Wilcom TrueSizer Pro e3 > Wilcom Tools > Revert**.

The **Revert to Factory Settings** dialog opens.



- 3 Select the items you want restored to factory defaults.



**Caution** Reverting to the original settings removes any changes you have made to styles, templates and hardware settings. New styles, templates and hardware settings are unaffected as they are saved separately.

- 4 Click **OK**.

The selected items are restored to factory settings.



**Note** There is no confirmation message.

## Recommended PC specifications

Check that your PC meets the system requirements. Check CPU/RAM as well as hard disk space. The table below provides minimum system requirements.

Hardware item	Minimum requirements
CPU	Intel® Pentium® 4, AMD Athlon™ 64 or AMD Opteron™ or higher
* All with latest service packs installed	



Hardware item	Minimum requirements
Operating system *	<ul style="list-style-type: none"> <li>• MS Windows® 8.1 (32-bit or 64-bit editions)</li> <li>• MS Windows® 7 (32-bit or 64-bit editions)</li> <li>• MS Windows Vista® (32-bit or 64-bit editions)</li> </ul>
Memory	Support for Highest Color (32bit) and resolution (1024 X 768) or higher
Monitor	15" at 1024 x 768 resolution
HDD	2 GB free space
Internet	Required for product activation
* All with latest service packs installed	

## Checking CPU/RAM specifications

Check your CPU and RAM specifications, and the version of Windows you are running to ensure they meet **TrueSizer Pro** requirements. See also [Recommended PC specifications](#).

### To check CPU/RAM specifications

- 1 On the Windows desktop, right-click the **My Computer** icon and select **Properties**.  
The **System Properties > General** tab opens.
- 2 Check the Windows version, the CPU and the amount of RAM.

## Checking your hard disk space

Check that your hard disk has enough space to run **TrueSizer Pro** effectively. See also [Recommended PC specifications](#).

### To check your hard disk space

- 1 Double-click the **My Computer** icon on your Windows Desktop.  
The **My Computer** window opens.
- 2 Right-click the hard-disk drive icon (usually C:) and select **Properties**.  
The **Properties > General** tab opens.  
This tab shows the hard-disk capacity as well as any free space. This must be greater than 100 MB or 10% of your total hard drive space, whichever is the greater amount.

# Glossary

## The EMB advantage

**Read and convert many popular file formats:** TrueSizer Pro lets you read designs of other formats so you don't have to switch back and forth between programs. Read and scale Melco Condensed (CND) and APS condensed designs (PCH). Read and convert all popular machine stitch formats. All designs can be saved to Wilcom EMB format.

**Resize your EMB designs:** With TrueSizer Pro you can resize native EMB designs maintaining all special effects and fills. TrueSizer Pro perfectly re-calculates stitches from original outlines.

**Create multiple colorways for different fabrics:** Create and save multiple colorways in EMB format. Designs can be visualized on fabric swatches, garment images as well as production hoops.

**Print out production worksheets:** Create production worksheets – color of course – and you don't have to wait for faxed printouts from your supplier. All the color sequence information is saved in the EMB file. With TrueSizer Pro's colorways feature, you can print multiple colorways, design backgrounds, and icons of color blocks with the production worksheet. Customer approval sheets can also be quickly generated.

**Make sales presentations and printouts:** Using TrueSizer Pro and EMB format designs, you can make sales presentations of your designs. Display and print designs in TrueView with or without background fabrics. Make sales printouts or save designs as bitmap files for use in other software.

**Email your EMB files direct:** Send designs to customers or partners in original EMB format. Send by email and nothing else is required. Everything is saved in the one file – stitches, colors, production instructions, design outlines.

**Output to embroidery disk format:** Using TrueSizer Pro, output designs to whatever machine disk format you require.

**Guarantee quality of final stitchout:** Because EMB format combines original outlines (condensed data) with the full stitch data, customers will receive the design exactly as you created it, complete with any stitch edits you may have included. And they can still re-size the design from original outlines if they want to, with guaranteed re-scaling. No confusion switching between multiple expanded and condensed files.

## FAQs

**What's different about Wilcom's 'all-in-one' EMB native file format?** EMB designs are created in Wilcom's professional embroidery software. EMB format is like having CND and EXP together in the same file. All design information – outlines, stitches, thread colors and more – is saved in one file. This means designs can be scaled perfectly in TrueSizer Pro, even those with Wilcom's modern fancy fills.

**How do condensed 'outline' files differ from expanded 'stitch' files?** Stitch or 'expanded' designs are low-level formats for direct use by embroidery machines. They contain only stitch coordinates and machine functions. These designs are generally not suited to modification. Because the stitch count does not change, the density increases

or decreases with design size. Thus you should not scale stitch designs by more than  $\pm 5\%$  or some areas may be too thickly or too thinly covered.

**How do Wilcom EMB files differ from Melco CND?** Melco Condensed (CND) is the native file format of Melco embroidery digitizing software. CND files store only outlines and stitch values. TrueSizer Pro recognizes all Melco machine functions and stitch types, including Partition Lines and Complex Fill, and automatically converts them to EMB format. However, CND files do not contain specialty features such as Pull Compensation or Auto Spacing, nor do they include actual stitches, thread colors, or design icons.

**Can I permanently convert my other designs to EMB?** Yes. TrueSizer Pro can read any of the popular embroidery machine formats, including Melco CND and EXP, Tajima DST, Barudan, Toyota, ZSK and Happy disks. You can then output to any expanded stitch format for stitching. Note, however, that TrueSizer Pro does not output to Melco CND.

## Design window

Design window – displays designs for viewing and modification.

**Backdrop:** An electronic image used as a guide for digitizing designs on screen. Two types are used – vector or bitmap. Insert them from various file sources, or copy and paste them via the MS Windows® clipboard.

**Background:** Use to change the background color of the design window to match fabric color. Or display a background fabric for more realistic previews and presentations. The background is saved with the current colorway.

**Capture design bitmap:** Capture designs as a bitmap image with or without background color or fabric.

**Colors:** Show the number of colors (C) and stops (S) in whole design. See also Design Properties.

**Colorways:** Preview a design in different colors on different fabrics by selecting from among pre-defined color schemes.

**Design properties:** Check software version number and other design information. This **Design Properties** dialog provides stitching details as well as information about the file source – Native Design, Imported Outlines, Processed Stitches, or Imported Stitches.

**Embroidery disk open:** Open designs of other formats from specially formatted embroidery disks. Save designs to embroidery disk for stitching on certain machines.

**Mirror horizontally/vertically:** flips a design left or right, up or down.

**Position:** Shows position of the design (X, Y) in the design window. See also General Properties.

**Print:** Print production worksheets. These contain production information necessary for the machine operator to stitch the design correctly.

**Print preview:** Use to preview a design and design information before printing worksheets or approval sheets.

**Send:** Send the open design as an email attachment for approval or production purposes.

**Show grid:** Turn grid lines on or off. Grid lines help you accurately place a design. Exact position coordinates are given at the bottom of the design window.

**Slow redraw:** Redraw your design slowly. Slow Redraw lets you view the stitching and color sequence of a design at slow speed.

**Small stitches:** Remove unwanted small stitches from a design automatically.

**Status bar:** Provides information about the whole design – current stitch, design dimensions, number of colors (C) and stops (S), background settings. Note that the current stitch value changes when you drag the indicator in the Slow Redraw dialog and also when Slow Redraw is running.

**Prompt bar:** Provides information about the currently selected tool. Also indicates currently selected hoop.

**Stitch count:** View stitch count for whole design. See also Design Properties.

**Zoom factor:** Check current zoom factor in relation to actual design size.

**Zoom 1:1:** Display the design at its actual size.

**TrueView:** See a 3D preview of your stitch-ready design.

## File formats

**100:** Stitch Design file format native to Toyota machines.

**CND:** Melco Condensed (CND) is the native file format of the Melco embroidery digitizing software. CND files store only digitized outlines and stitch values.

**DSB:** Basically the same as the T03 tape file but with a 'header' in front so that it can be written to floppy disk – i.e. it is the floppy disk version of the T03 file.

**DST:** Stitch Design file format native to Tajima machines.

**DSZ:** SK Stitch Design or 'expanded' file format.

**EMB:** EMB is the outline file format native to Wilcom software. EMB designs contain a complete set of design information in a single 'all-in-one' file – object outlines and properties, actual stitches and machine functions, thread colors, a picture icon and comments. Even the original design bitmap image can be included in EMB format. Only native EMB files provide 100% perfect scaling and transformation.

**ESD:** Native DOS format of Wilcom DOS ES – contains stitch data, like stitch types and densities, which permits better processing. ESD in later versions contains lettering objects with outlines.

**EXP:** Stitch Design or 'expanded' file format native to Melco machines.

**KSM:** Pfaff Stitch Design or 'expanded' file format.

**PCH:** Gunold Outline Design or 'condensed' file format.

**PMU:** Proel Stitch Design or 'expanded' file format.

**STC:** Gunold Stitch Design or 'expanded' file format.

**STX:** Datastitch Stitch Design or 'expanded' file format.

**T03:** 'Tape' (old paper tape) version of Barudan file.

**U??** Stitch Design file format native to Barudan machines.

**XXX:** Compucon Stitch Design or 'expanded' file format in the professional market.

**ZSK:** Strictly speaking, ZSK is an embroidery disk format. There are three ZSK encoding types – Zangs, ZSK1 and ZSK2. ZSK1 format is for older ZSK machines, generally those older than 1991. ZSK2 is for newer ZSK machines, those characterized by a single top thread trimmer. The trim is the most significant differentiating factor between the two types.

**ZSK TC:** This format is for ZSK machines that accepts Transport Code Disks (DOS format disks).

## Design properties

**Bobbin thread length:** This factor provides a simple mechanism for a more accurate bobbin thread length estimate. The default value (100%) is suitable for a design with a mixture of stitch types. If the design is all run stitches or all tatami, more bobbin thread will be used and the factor can be increased say to 125%. If the design is all satin stitch, the factor can be reduced to say 65%.

**Color block:** A color block or 'element' corresponds to a color change in the design. It may be comprised of one or more same-color embroidery objects. These may form a single group – e.g. 'ropes' – or more – e.g. 'ropes and birds'. Each color block, or element, can be given a descriptive name for easy identification. These then appear on the production worksheet. The operator generally uses them to ensure correct colors are used during production.

**Design source:** While embroidery files are broadly classified as 'outline' (condensed) or 'stitch' (expanded), TrueSizer Pro internally tags files as belonging to one of four types – Native Design, Imported Outlines, Processed Stitches, or Imported Stitches.

**Element name:** An 'element' is a block of sequential, same-color embroidery objects. You can enter names for them. The operator generally uses these to make sure colors are correct when stitching.

**Imported outlines:** Designs read from non-EMB outline – CND or PCH – where stitches have been generated in TrueSizer Pro (or equivalent) from original outlines and stitching data.

**Imported stitches:** Designs read from stitch files, where outlines may or may not have been recognized, but stitches have not been regenerated through stitch processing. Note, however, that if you change a stitch design – e.g. add a lettering object – the status changes to Processed Stitches even though the imported stitches may not have been regenerated.

**Machine function:** Machine functions are commands for a specific embroidery machine. These include color changes, thread trims, jumps, machine stops, needles in/out, and boring begin/end. Schiffl makes a distinction between 'logical' and 'physical' machine functions.

**Native design:** Designs created in Wilcom professional embroidery design software (or equivalent).

**Processed stitches:** Designs read from stitch files where stitches have been regenerated by processing.

## File recognition

**Adjust:** Adjust: CND files use Melco stitch types which have their own spacing and length parameters. When loaded into TrueSizer Pro they are converted to native stitch types (Satin, Run, Tatami). The options in the Adjust panel let you adjust stitch density values to other than a one-to-one correspondence. For example, you might want Satin Spacing to be -10% with respect to the CND settings – i.e. 90%.

**Color change:** Stop codes are interpreted as Next Color commands. The next color is selected from the default color palette.

**Custom:** Lets you map thread colors to every stop code in the file. This means you can color code stitch file designs which do not contain needle addressing information, before opening the file.

**Effects:** This set of options specifies which stitch effects should be active when you load a CND design. CND files do not contain information about these effects; setting these options instructs the software to apply the effects automatically to converted designs.

**Outline design:** Outline or 'condensed' files are high-level formats which contain object outlines, object properties and stitch data. When you open an outline file in TrueSizer Pro, corresponding stitch types, input methods and effects are applied. Outline files can be scaled, transformed and reshaped without affecting stitch density or quality.

**Outline recognition:** When you convert a stitch file to outline format, TrueSizer Pro reads the data stitch-by-stitch according to the needle penetration points. The software then 'recognizes' stitch types, spacing and length values, stitch effects, and can determine object outlines.

**Repeat sequence:** If you select fewer colors than the design requires, the selected colors are repeated. For example, if your design requires four colors and you've only selected two in the Building Stop Sequence list, colors 3 and 4 will be the same as original colors 1 and 2.

**Scale factor:** This allows you to automatically scale CND designs as you load them. New dimensions are expressed as a ratio of the original design size. For example, to scale to 120% of the original, enter a scale factor of 1.2 in each field.

**Stitch design:** Stitch or 'expanded' designs are low-level formats for direct use by embroidery machines. They contain only stitch coordinates and machine functions. Stitch designs are generally not suited to modification. Because the stitch count does not change, the density increases or decreases with the design size. Thus you should not scale stitch designs by more than  $\pm 5\%$  or some areas may be too thickly or too thinly covered.

**Stop code as:** If there are stops in the design, these can be read as either a Color Change function or as a Stop function.

**Stops:** Stop codes are interpreted as Explicit Stops. The machine stops stitching.

## Printing reports

**Production worksheet:** The production worksheet is the link between the designer and the embroidery machine operator. It contains a design preview as well as essential production information, including the design size, the color sequence and any special instructions.

**Approval sheet:** The approval sheet is intended for the customer, not production staff. Its function is to display designs in TrueView with or without a product or fabric background. Customers can see what they are ordering and approve accordingly.

### Information to print

The Information to Print options determine whether you want Full, Short, Only Stop Sequence or No Information on your worksheet. If you choose the Full option, you have the further option of customizing Blocks to Print and Columns in Stop Sequence.

**Full information:** shows details specified in the Customize Worksheet dialog.

**Short information:** shows summary information about the design. This and the previous option include information provided in the Summary tab of the Design Properties dialog.

**Stop sequence:** lists all stops in the design together with the stitch number at which they occur, color number, and thread color name and brand.

**None:** shows the design preview only.

**Current colorway:** prints the design in the current colorway only.

**Selected colorways:** prints multiple colorways.

## Graphics

Graphics options determine the design print options. The default (Standard) includes Outlines, Stitches, Connectors, and Machine Functions. When you print a design in TrueView, it will be printed by default in high resolution. (High resolution uses the printer resolution as opposed to the screen resolution.) If you select TrueView, the Draft Quality checkbox becomes available. Select this checkbox for quicker printing at lower resolution.

**Backdrop:** An electronic image used as a guide for digitizing designs on screen. Two types are used – vector or bitmap. Insert them from various file sources, or copy and paste them via the MS Windows® clipboard.

**Vector graphic:** Unlike raster images, vector graphics contain vector data. This is a collection of geometric shapes and lines that combine to make an image. Rather than pixels, such data is recorded as a set of mathematical formulas defining shapes such as rectangles, ellipses, curves, polygon stars, etc. These are created using vector graphics programs such as CorelDRAW® Graphics Suite. Vector graphics are scalable without distortion, and are usually much smaller than bitmap images.

## Zoom options

Zoom options: these determine the zoom factor used for printing. This can be different from the zoom factor at which the design is currently displayed.

**1.0:** Shows the design at its actual size.

**Show all:** Scales the design to fill the available space on the worksheet.

**Custom:** Lets you set a specific zoom factor.

## General options

**Print in English:** Deselecting this checkbox prints worksheets in the same language as the Windows operating system. This feature is useful when printing to plotters where the device driver does not support the character set you require.

**Extents box around design:** Places an outline around the design.

**Company name:** Prints a specified company name on the worksheet. Select a company name from the list, or enter a new one.

## Customize worksheet

**Blocks to print:** Left/Right/Up/Down: the margins between the edges of the design and the edges of the design area.

**End X/Y:** Coordinates of the last stitch.

**Max/min stitch:** Maximum and minimum stitch lengths in the design.

**Thread chart type:** Thread chart name used in the design.

**Thread usage:** Thread usage statistics by color.

**Total bobbin:** Total bobbin thread length.

**Columns in stop sequence:** Stitch Count: number of stitches per color.

**Needle number:** Needle number corresponding to each color block.

**Chart:** Name of thread chart.

**Element name:** User-defined name to identify each color block.

**Show colors in summary:** Includes actual color samples in the colorways summary table/s.

## Capture design bitmap

**Selection options:** Whole Design (1:1): captures the screen image in a ratio of 1:1.  
Current Design Window: captures the screen image at the currently selected zoom factor.  
Custom: lets you specify a capture area. After clicking OK, you are prompted to enter a 'rectangle origin' and 'rectangle corner' to define it.

**Output options:** Save to Disk: lets you save the screen capture to hard disk. After clicking OK, the Save Capture Screen dialog opens, allowing you to select a location, name and format for the design image.

Send via Email: lets you send the screen capture as email. After clicking OK, a new email message opens with the image attached.

Both Save and Send: lets you both save to hard disk and send as an email attachment.

## Embroidery disks

**Embroidery disk:** Embroidery disks are specially formatted floppy disks used to store designs in stitch data format. They are primarily used to transfer designs from computer to embroidery machine. You can open designs from embroidery disks of various formats directly into TrueSizer Pro. Once a design is read, you can output it without change, modify it and output it in its original format, or save it as an EMB file. You can also format embroidery disks and save designs to them from TrueSizer Pro. The format you use will depend on the selected embroidery machine.

**Design type:** The type of file saved to embroidery disk – usually only one type is available.

**Format type panel:** Full: formats a blank disk or changes the disk format.

Quick: erases all data from the disk but does not reformat it.

Copy System Files only: copies system files without formatting the disk.

**Other options panel:** To label the disk, deselect the No Label checkbox and enter the label name.

Select the Display Summary when Finished to view a summary dialog after formatting.

Select the Copy system files checkbox to copy system files to the disk. This makes the disk 'bootable' in DOS. See your Windows manual for details.

**FDR:** An embroidery disk format native to Barudan machines.

**FMC:** An embroidery disk format native to Barudan machines.

**TFD:** An embroidery disk format native to Tajima machines.

**ZSK:** ZSK1 format is for older ZSK machines, generally those older than 1991. ZSK2 is for newer ZSK machines, those characterized by a single top thread trimmer. The trim is the most significant differentiating factor between the two types.

## Auto start & end

**Auto start & end:** By default, connecting stitches are created from the start and end points to the center of the design. Select one of the nine preset end points.

**Return to start point:** This option creates a connecting stitch from the end point to the start point.

**Digitize auto start/end point:** This option creates connecting stitches from the start and end points to a point you define. If you select this, you are prompted to select the point after you click **OK**. Click the **Separately** checkbox to enter separate start and end points.



**Stitch spacing:** Stitch Spacing is the spacing between two consecutive needle penetrations on the same side of a column. The smaller the value, the greater the stitch density. For more open stitching, use larger values.

**Tatami:** Tatami stitch is used to cover large, irregular design shapes. It is composed of specially arranged Run stitches. The stitches are laid in vertical rows going back and forth across the shape. The vertical rows can be parallel or slightly turning. The stitches are laid with an offset in each row to eliminate horizontal split lines and are close enough to give the appearance of a solid field of stitching.

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