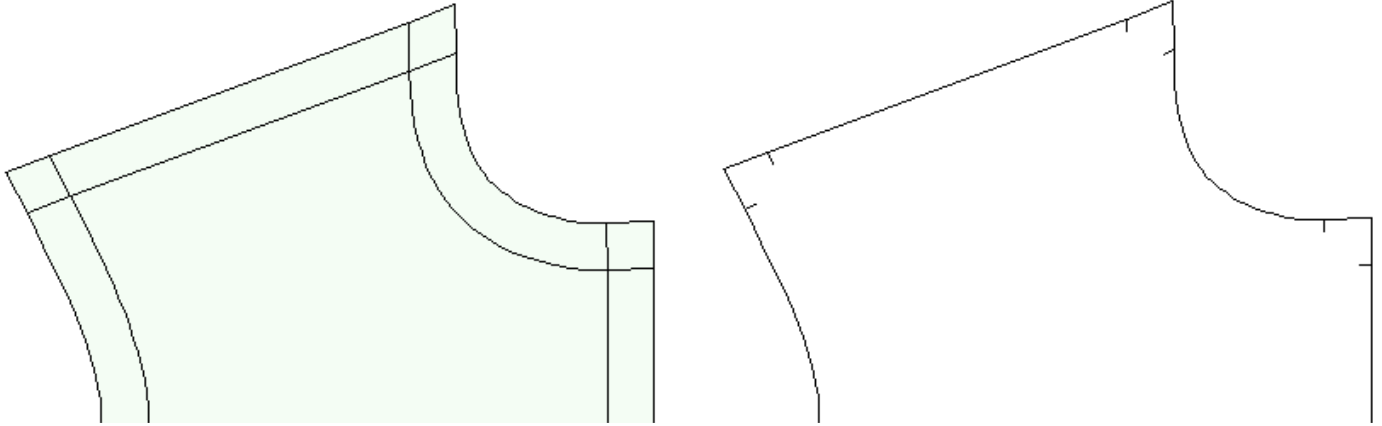


New Features in Fittingly Sew 3

1. Improved seam allowance lines.



(a) The seam allowances are now drawn with a continuous line joining each segment.

(b) The option to print only the cut lines now works with fabric cutter plotters, with small notches being included as sewing guides.

2. Annotations, including automatic construction lines.

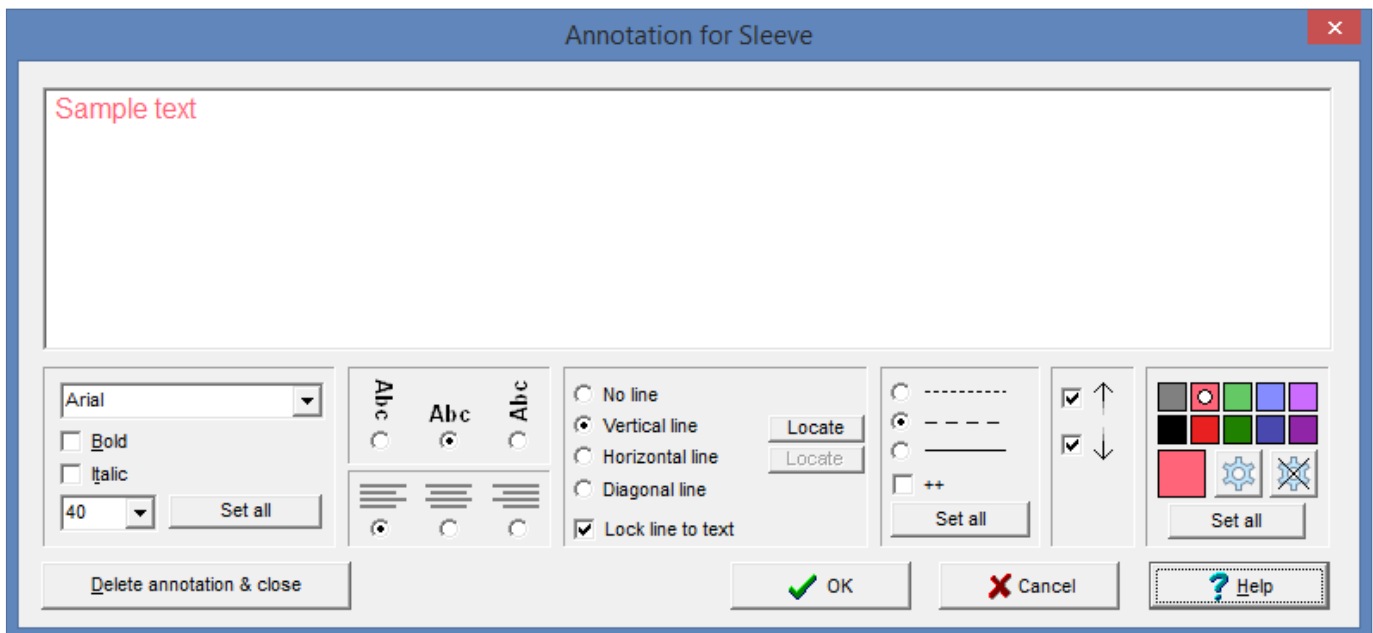
Each garment piece may contain up to 50 annotations. Each annotation may be some text, or a line, or both text and line.

Annotations with construction lines are added automatically to slopers, and the positions of the construction lines are automatically adjusted when any change is made to the body measurements. Construction lines in slopers are an illustration of the measurements, so it isn't possible for the user to alter them independently of the measurements.

Annotations and construction lines are added automatically to new pattern pieces that are added as templates or as sloper pieces. Changing the sizing data later does not change the position of the construction lines.

Pattern pieces added using Pattern / New Piece start with a vertical midline.

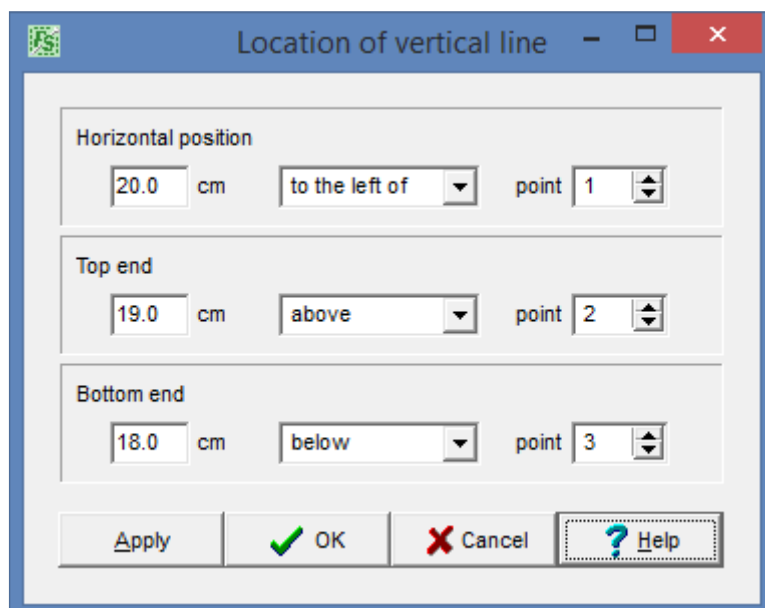
Pattern pieces that had been created by any method using an earlier version of Fittingly Sew don't have any automatic annotations or construction lines, but these can be added manually. Annotations can be added to the active pattern piece by selecting Piece / Add Annotation. The Annotation Properties window appears...



The annotation text is entered in the top part of the window. The other features are as follows from left to right:

1. The font used for the annotation text, and its properties. The Set all button applies this font and its properties to every existing annotation in each garment piece in the currently open pattern file.
2. The font orientation and justification. There is no option for applying these to other existing annotations.
3. Whether the annotation includes a vertical, horizontal, or diagonal line. If any of these are selected, there is also the option of locking the annotation line to the annotation text so that when either of them is later dragged in the main pattern window, both elements are dragged together.

For vertical and horizontal lines, there are Locate buttons. These bring up the Location window that enables the line to be positioned relative to points on the current piece.



The above screen shot shows how the form looks for a vertical line. The horizontal position of a vertical line may be entered as a distance to the left or right of a specified point number. The vertical position of its top and bottom ends can similarly be entered as a distance above or below a specified point number. The wording in the window varies with the orientation of the line.

When this window appears, point numbering is automatically turned on in the current pattern window.

The position of the line may be entered using this window, or it may be adjusted by dragging the line tags in the pattern window after the Annotation window has been closed. Dragging the referenced point numbers will not update the distances etc shown in the Location window. Returning to that window and clicking Apply will update the annotation line to match the new position of the points, restoring the relationship between the annotation line and its referenced points.

4. Line style: dotted, dashed, or continuous. The ++ option makes the line extra heavy (including for printouts). For a vertical line, the first arrowhead option attaches an arrowhead to the upper end of the line, and the second one to the lower end. For a horizontal line, the arrowheads are drawn differently and the first arrowhead option attaches an arrow head to the left end of the line, and the second one to the right end. The Set all button applies this line style and weight to every existing annotation line in each garment piece in the currently open pattern file.
5. The current annotation colour, shown as the larger coloured square, can be set up here, either by selecting one of the ten colours or by clicking the larger colour square and editing the RGB values. If one of the ten colours matches the currently selected colour, it is marked with a small white circle.

Each of the ten colours may also be edited by clicking it and then using the settings (cog wheel) button to edit the RGB values. The settings button (marked with a black cross) asks for confirmation and then restores the set of 10 colours to the program default colours (which are shown above). These 10 colours are saved as part of FS3's default settings and may also be edited using *Edit / Default Preferences*.

If an annotation colour is set up here, either by editing its RGB values or by selecting one of the set of 10 colours, it is not affected if the set of 10 colours are changed later. So for example if the annotation colour is set to colour 2 and is red, and then colour 2 is changed to a different colour, the annotation remains red.

In the main pattern window, annotations in the active garment piece are shown in the specified colours, while annotations in inactive garment pieces are usually shown in pale grey. It's similar to how the blue Piece Information text box behaves. However, if the garment piece outlines are not all the same colour, the annotations are shown in their chosen colours. (This is so that patterns containing different sizes stacked on top of each other can be displayed clearly, with each piece using the same colour coding for its outline and annotations.)

It isn't possible to select different colours for the annotation text and the annotation line.

The Set all button applies the selected colour to every existing annotation in each garment piece in the currently open pattern file.

The new annotation is shown in the pattern window and is updated as each option in the Annotation Properties window is selected.

A newly added annotation is placed by default in the centre of a garment piece. After the Annotation Properties window has closed, any new or existing annotations can be dragged into position. When the mouse is moved over the centre of some annotation text, a small tag appears, like the tag that is used to move the Piece Info. The text can be moved by dragging the tag.

Similarly, when the mouse is moved over either end of an annotation line, or over its centre, a tag appears and can be used to adjust the line.

The position of a line may be adjusted by dragging its centre tag, and its length may be adjusted by dragging an end tag. For a horizontal line, the end tags can be moved only horizontally, and for a vertical line, the end tags can be moved only vertically. For diagonal lines, the ends can be moved in any direction. While the length of a line is being adjusted, or even if the mouse cursor is moved over one of its tags, the length is displayed in the currently selected units in the status area in the main toolbar.

If a line is to be placed an exact distance from one of the garment piece's endpoints, the endpoint should be selected before the line is dragged. While the middle tag of a horizontal line is being dragged, the vertical distance of the line from the selected endpoint is shown in the status area. When the middle tag of a vertical line is dragged, the horizontal distance of the line from the selected endpoint is shown. It may be necessary to zoom in to get the necessary degree of accuracy to be shown in the status area.

Vertical and horizontal lines may be positioned by dragging the tags or by using the Locate buttons in the Annotation window. Diagonal lines can be positioned only by dragging.

When the Control key is held down, and the text tag or the central line tag is dragged, the original annotation is left in place and a copy of it is dragged.

Annotation text can be dragged to another garment piece using the text tag, and an annotation line can be dragged to another garment piece using the central line tag. The annotation then becomes fixed to the other piece and moves with it when the other piece is moved. If the annotation text and line are both to be moved to another piece, they should first be locked together in the original piece, otherwise they will form unconnected annotations that cannot be locked together later.

A tag can also be moved by placing the mouse pointer over it, and then using the keyboard arrow keys.

One or more annotations can be temporarily linked to a single endpoint, curve control point, or to a dart or tuck apex point. Moving the point then moves the linked annotation by the same amount. The procedure is to move the mouse pointer over the required annotation, so that any of its tags appears briefly. The linked endpoint (or other type of point) can then be dragged with the Shift key held down, and the annotation will then automatically move in step with the point. If the Shift key is not down, the point will move but the annotation will stay in the same place.

Double clicking any of the tabs opens the Annotation Properties window and enables any of the features to be altered.

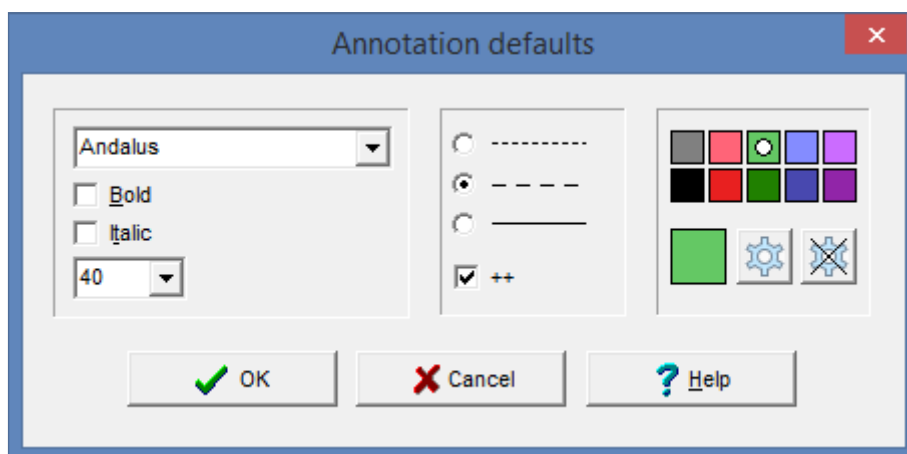
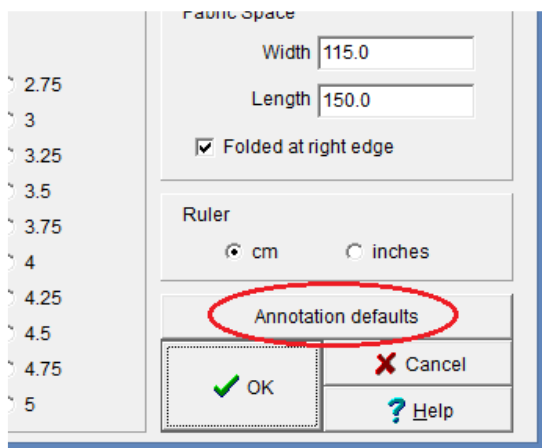
Construction Lines

Construction lines are special cases of annotations that are automatically created on slopers and on sloper pieces that are added to patterns, as follows.

- (a) The waist level is placed at the centre waist point on the front and back bodices.
- (b) The shoulder level is placed at the shoulder point on the back bodice (but not on the front bodice).
- (c) The bust level is placed on the front and back bodices at the bust point. On the back bodice, the bust level is placed at the same distance from the back bodice waist level as the bust point is from the front bodice waist level.
- (d) The chest level is placed on the back bodice sloper, half-way between the bust level and the shoulder level.
- (e) The chest level is drawn on the front bodice sloper, $1 / 2.1666$ of the way from the bust level to the neck edge of the shoulder.
- (f) The vertical bust line is placed on the front bodice sloper.

Annotation Defaults in Default Preferences

The Default Preferences window now allows defaults for font and line properties to be entered. These will be used for new annotations added to a pattern, and also for all sloper construction lines.



The set of ten colours is the same set that is shown in the Annotation window, and they may be edited in either window. The default colour, shown as the larger coloured square, can be set up here, either by selecting one of the ten colours or by clicking the larger colour square and editing the RGB values. If a default colour is set up here by either method, it is not affected if the set of

10 colours are later changed. Each pattern piece also stores its own assigned colour which is retained indefinitely. Each of the ten colours may also be edited by clicking the colour and then using the settings (cog wheel) button to edit the RGB values. And in the same way for annotation colours, the button marked with the black cross restores the set of 10 colours to the program default colours (which are shown above).

3. User-definable notches.

Each garment piece may contain up to 50 user-defineable notches. Each notch is a specified distance along the sewing line, proceeding either clockwise or anticlockwise from a specified segment start point. A notch can consist of a single, double, or triple stroke.

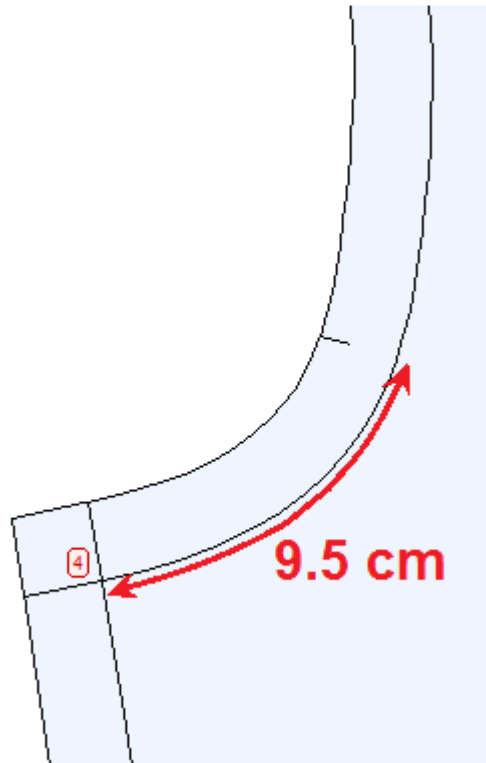
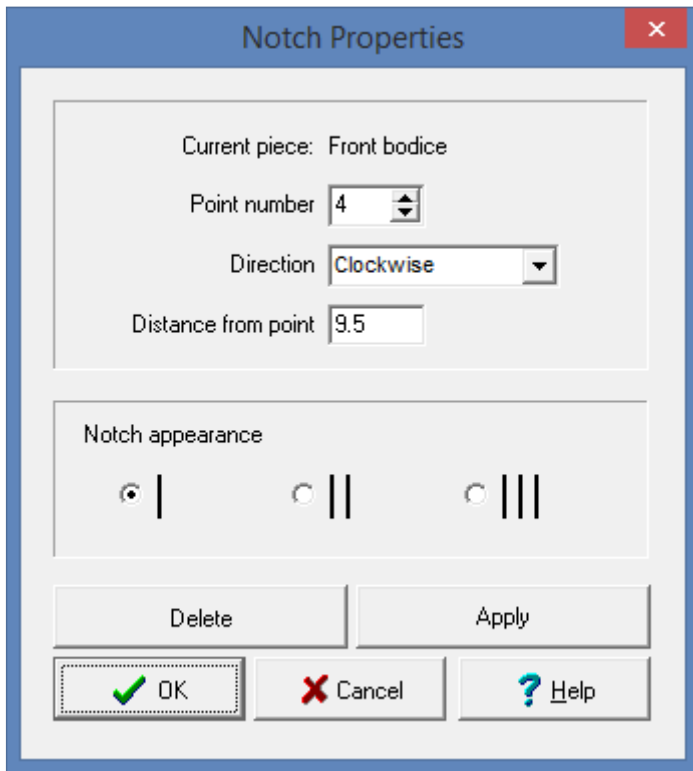
Notches are automatically drawn on slopers (created using any version of Fittingly Sew). They are also drawn on the bodice and sleeve pieces when a blouse template is added, or when those sloper pieces are added to a pattern.

The arm hole of the front bodice and the front edge of the sleeve cap are marked with single stroke notches, while the arm hole of the back bodice and the back edge of the cap are marked with double notches.

The sleeve cap has a slightly larger perimeter than the arm hole, and Fittingly Sew assumes that the extra fabric on the sleeve cap will be taken up on the shoulder. The notches on the arm hole and sleeve cap are therefore exactly the same distance from the underarm point without any extra distance being added for the enlarged sleeve cap.

Pattern pieces that had been created by any method using an earlier version of Fittingly Sew don't have any automatically added notches, but these can be added manually using the following option.

A notch can be added to the active pattern piece by selecting Piece / Add Notch. The Notch Properties window appears...



When this window appears, point numbering is automatically turned on in the current pattern window.

In the above example, a single-stroke notch is anchored to the start point of segment number 4. When Apply or OK is selected, a measurement of 9.5 cm is made from point 4 in a clockwise direction along the **sewing line**, and the notch is drawn at the nearest point on the **cut line**.

It might happen that the specified measurement extends beyond the current segment and takes the notch into a different segment from the original start point. There is no limit to the number of segments that the measurement can extend over.

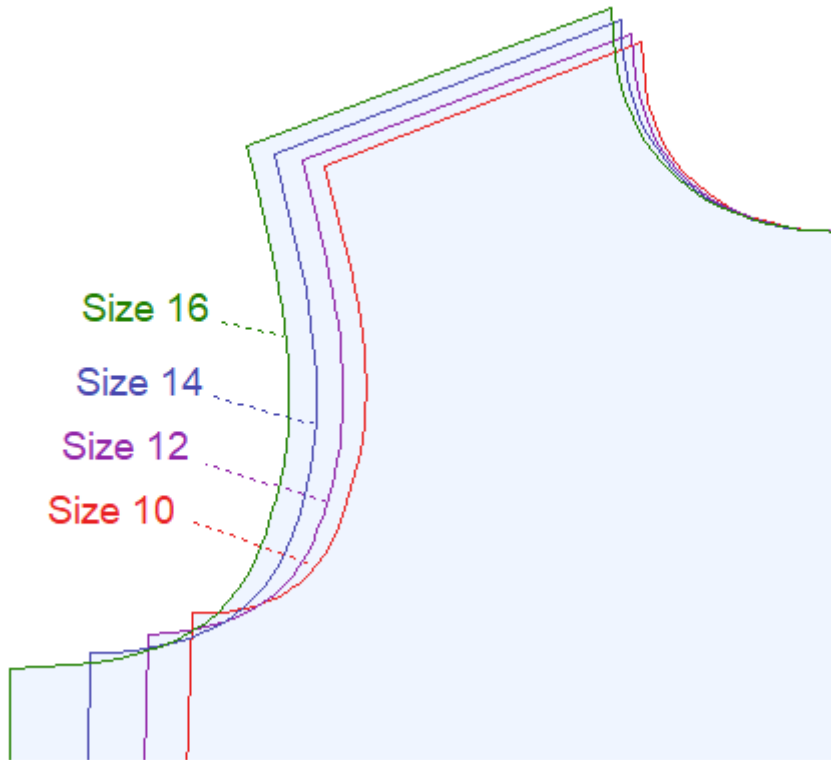
When a double notch is drawn, it is drawn so that the midpoint of the two notch strokes marks the end of the measured length. Similarly, a triple notch is drawn with the central notch at the end of the measured length.

When the Notch Properties window has closed, existing notches can be edited or deleted for patterns (but not for slopers). Placing the cursor over a user-defined notch in the main pattern window makes a tag appear. Clicking the tag reopens the Notch Properties window and enables the notch to be edited or deleted. The Notch Properties window can be opened for a sloper so that the data can be viewed, but it isn't possible to make changes to it.

When a piece is rescaled using Piece / Rescale Piece, the positions of any notches are also rescaled.

4. Coloured piece outlines.

This is especially useful when garment pieces of different sizes are stacked together...



Here, the coloured pieces have annotations with matching colours. All colours are user-definable.

The Piece Properties dialogue now includes the option of selecting an outline colour that is used for the edges and seam allowance lines of pieces, both on screen and printouts. The set of ten colours work in a similar way to the set that is shown in the Annotation window and the Default Settings window, but they can be changed independently of the annotation colours.



The current outline colour, shown as the larger coloured square, can be set up here, either by selecting one of the ten colours or by clicking the larger colour square and editing the RGB values. If one of the ten colours matches the currently selected colour, it is marked with a small white circle.

If an outline colour is set up here by either method, either by editing its RGB values or by selecting one of the set of 10 colours, it is not affected if the set of 10 colours are later changed. So for example if the annotation colour is set to colour 1 and is grey, and then colour 1 is changed to a different colour, the annotation remains grey.

Each of the ten colours may also be edited by clicking it and then using the settings (cog wheel) button to edit the RGB values. And in the same way for annotation colours, the settings button with a black cross asks for confirmation and then restores the set of 10 colours to the program

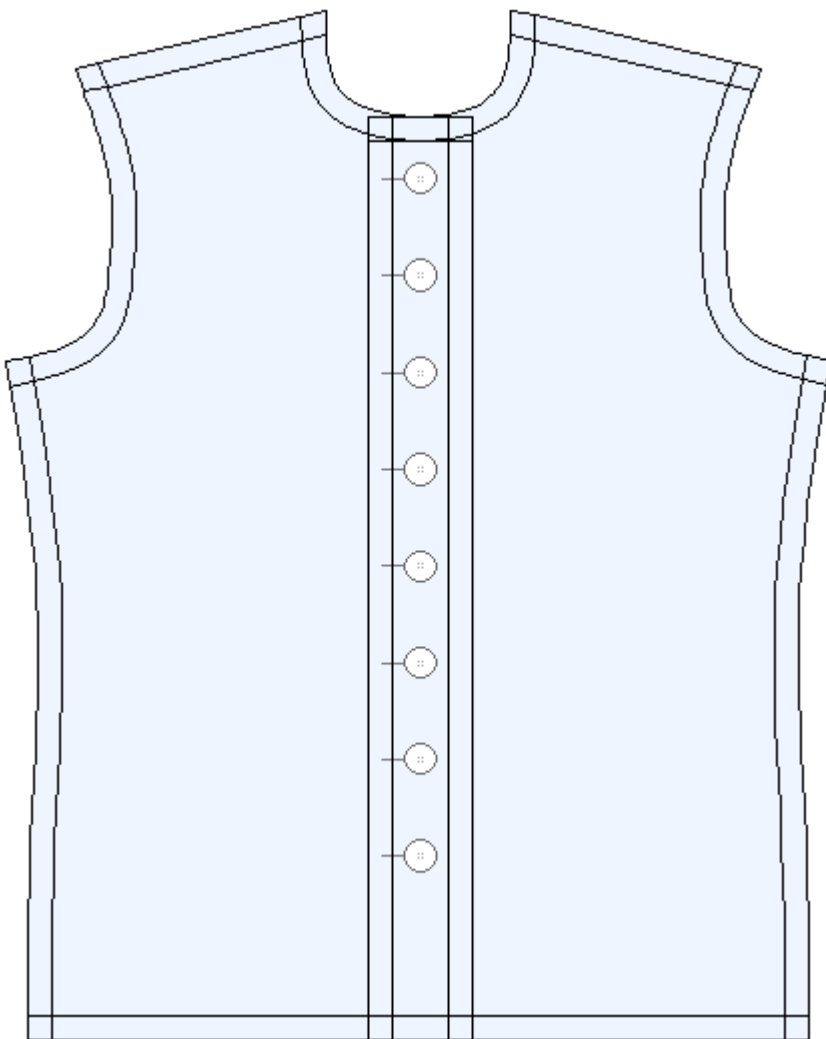
default colours (which are shown above). These 10 colours are saved as part of FS3's default settings.

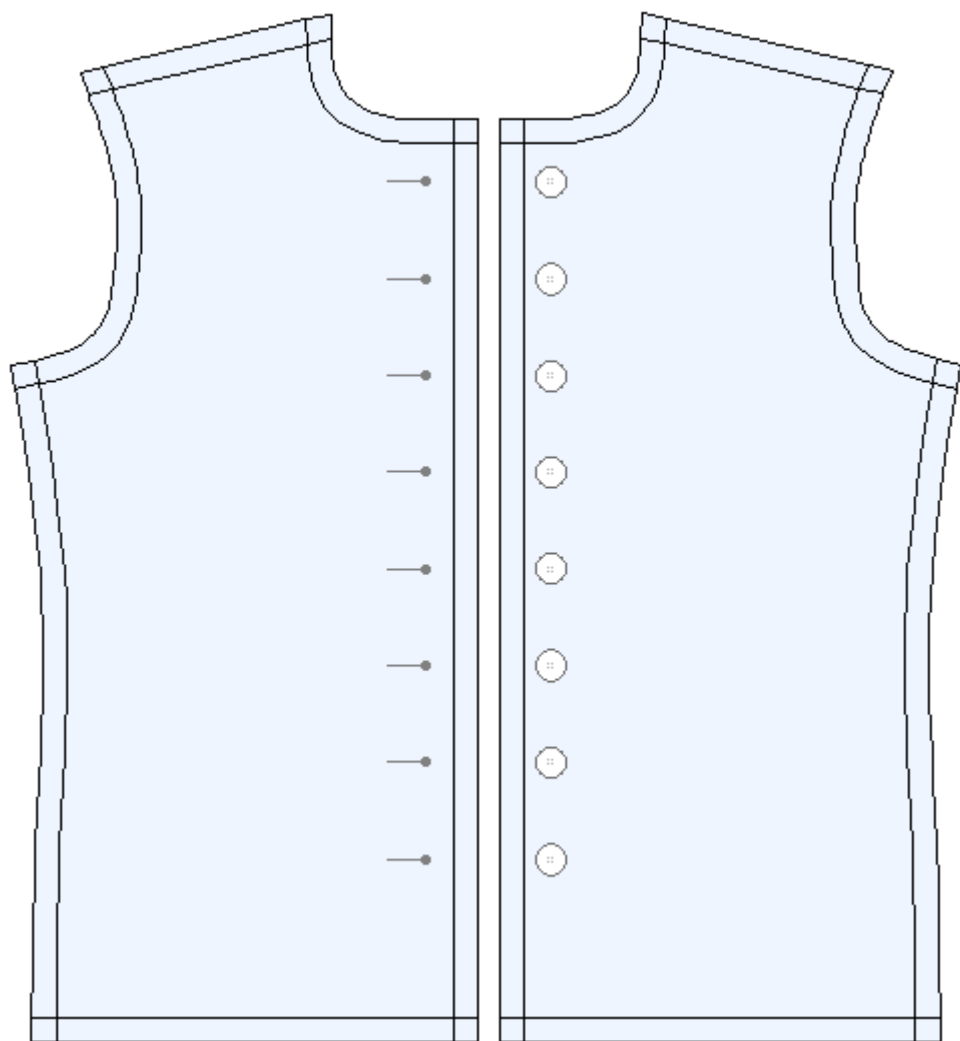
The *Set all* button applies the selected colour to every existing garment piece in the currently open pattern file.

Colour number 6 is black in the standard set of colours. It is used for all sloper pieces and for new pattern pieces.

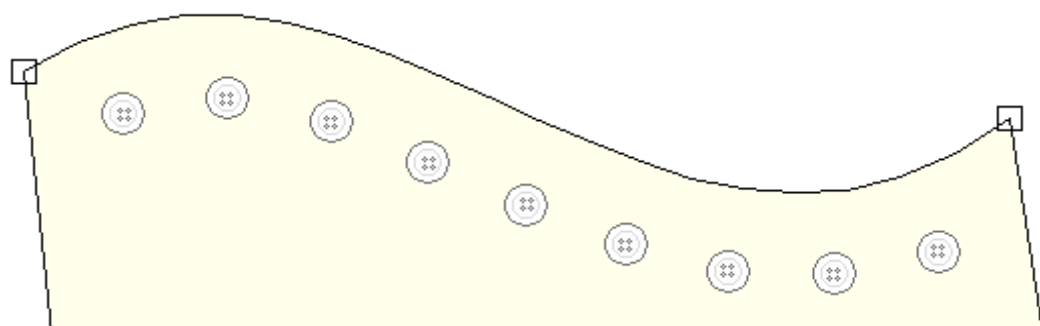
When different pieces have different outline colours, and graded pieces are placed on a 'stack', it is easier to distinguish the lines that belong to each piece. When pieces have different coloured outlines, any annotations they have are also shown in their different colours - whether the piece is active or not.

5. Buttons & Buttonholes.





A line of buttons or buttonholes follows the slope of the straight or curved segment that they are attached to, and can be at any angle...



In order to add a set of buttons or buttonholes for a segment, it is necessary to highlight that one segment and select Piece / Buttons and Buttonholes. The following window then appears:

Buttons and Buttonholes

Match buttons or holes in another piece?

Select Piece

☒ Buttons ☐ Buttonholes

Number of buttons 8

Diameter 1.5

Distance from edge 1.8

Spacing 6.3

Start from which end of segment?

☒ From top end ☐ From bottom end

Start at 2.0

OK Cancel Help

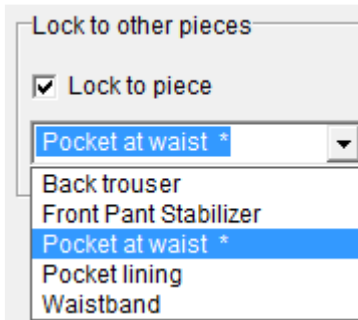
If one piece is to button up with another piece, the *Select Piece* button may be used to specify the other piece that this piece is to match. If the other piece contains a set of buttons, a set of buttonholes will then be added to the active piece, with their position, size, and number matching the other piece. Similarly, if the other piece contains a set of buttonholes, a set of buttons will be added to the active piece.

A mainly vertical set of buttons or buttonholes may be placed at the specified distance from either the top or bottom of the segment, using the option *Start from which end of segment?* Similarly, for segments that are mainly horizontal, the wording is “*From left end*” and “*From right end*”.

When buttons or buttonholes have already been placed on a piece, they can be altered by clicking on any of the buttons or buttonholes. They become highlighted in pink to show which set of buttons or buttonholes has been selected.

6. Locking pieces together

The *Piece / Properties* dialogue now includes an option to lock the current piece to other pieces. For example, a small piece representing a pocket may be fixed to a larger garment piece, or a diamond-shaped piece may be used to represent an internal dart.



At the bottom of that dialogue is a drop-down list of garment pieces. If the pattern contains other pieces, one of them can be selected from the list, and the *Lock to piece* option locks or unlocks the selected piece to the current one. In the list, any pieces that are locked to the current piece are marked with an asterisk.

It doesn't matter whether piece A is locked to piece B or vice versa: the result is the same: there is no hierarchy in which one piece owns other pieces.

When two or more pieces are locked together, dragging either piece using the mouse or arrow keys moves the pieces together. If a piece that is locked to other pieces is flipped or rotated, all the locked pieces are flipped or rotated together. When a piece that is locked to other pieces is deleted, imported, or pasted, only that one piece is deleted, imported, or pasted.

Small pieces that are behind a large piece can be selected with one or more Control clicks, whether the pieces are locked together or not.

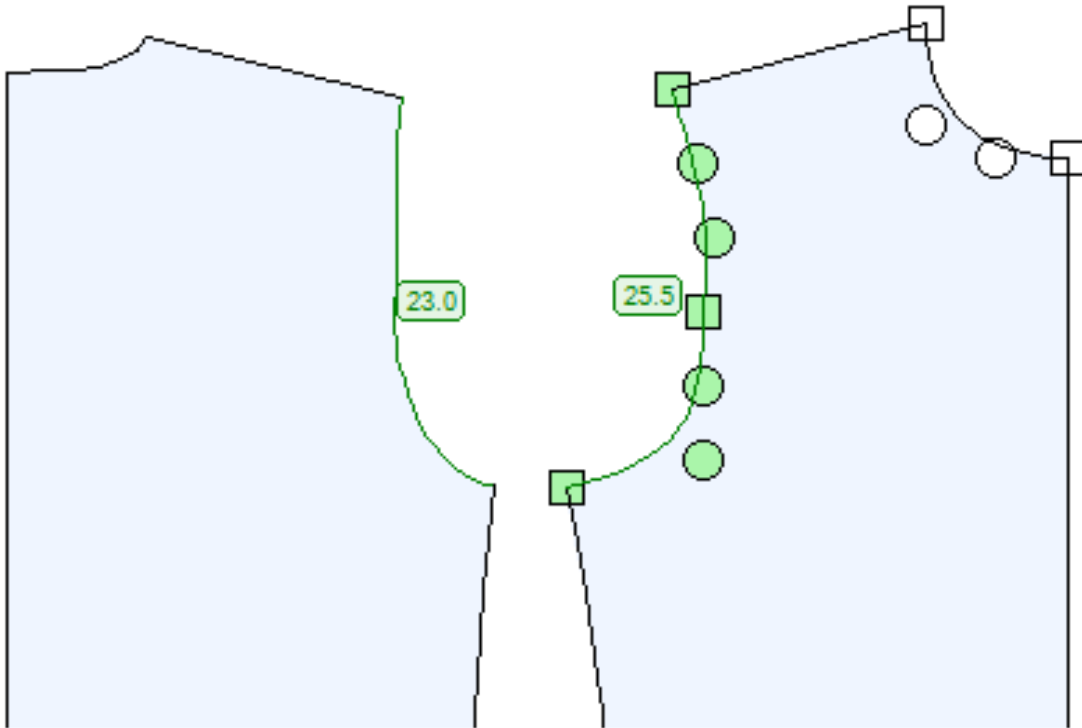
The locking can temporarily be broken by holding down the Alt key; a selected piece can then be dragged using the mouse or arrow keys independently from the pieces that it is normally locked to. (The Alt key was chosen instead of the Control or Shift keys as the latter already have a function when moving a piece using the arrow keys.)

If the Alt key is held down and a piece that is locked to a second piece is dragged off the second piece and onto a third piece, it becomes locked to the third piece instead of to the second one.

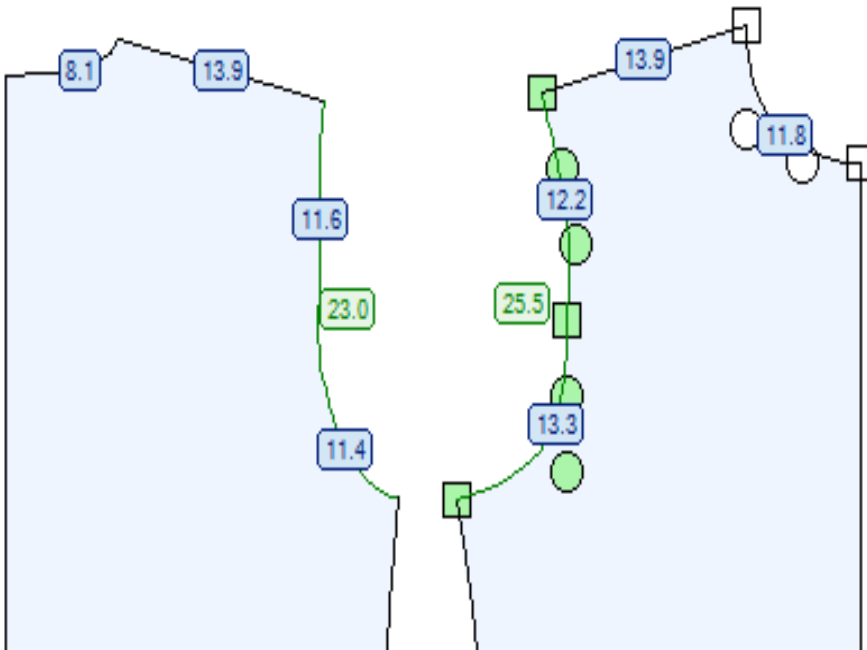
If the locked pieces have different colours, the user may prefer to use *Piece / Piece Ordering* to put a small piece to the back of (or underneath) the main piece it is locked to, so that its different colour is not visible (unless the user selects it). Alternatively, the piece's colour code could be changed to match that of the main piece (in the *Piece / Properties* dialogue).

7. New option on the View menu: Combined Segment Lengths.

When this option is selected, selected segment outlines are drawn in green and the combined lengths of any adjacent selected segments are shown...



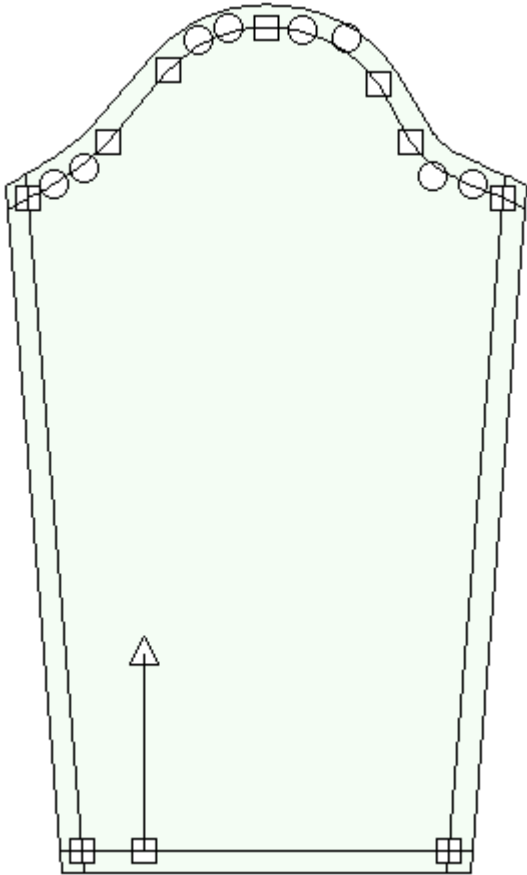
In order to distinguish the combined segment lengths from the lengths shown by the menu option *View / Segment Lengths*, the latter are now shown in blue instead of green...



Because of this new option, the Piece menu option *Display Segment Length* doesn't offer anything extra and has therefore been removed.

8. New option on the Piece menu : Toggle Placket

This new option is enabled when the endpoint of at least one segment is selected, or at least one placket apex is selected. The apex tag is visually the same as a tuck or dart apex tag, and it can be highlighted and dragged in the same way. Each segment start point can have only one placket.



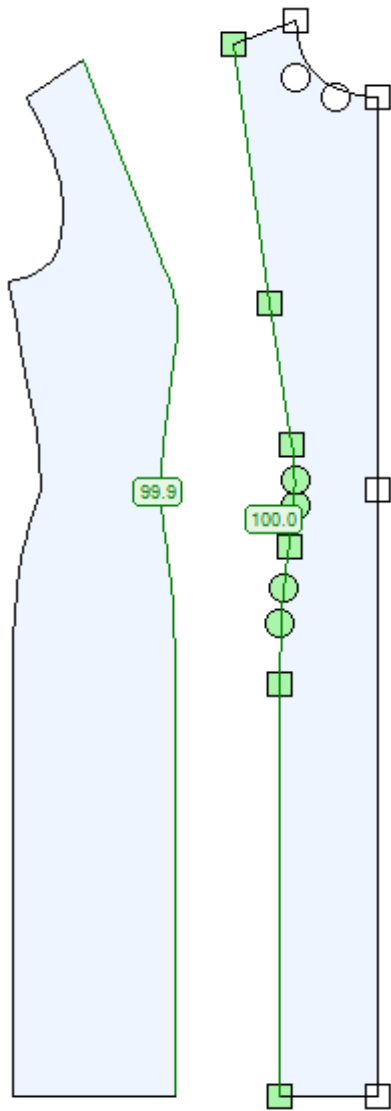
Any pattern files that contained zero-width darts or tucks are now opened with the dart or tuck segment automatically replaced by a placket.

9. Ensuring pieces fit together – a new dragging option

Sometimes it is desirable to make adjustments to a single point while the combined segment lengths are still visible. Normally a group of selected points can only be dragged together as a set, but now if the Shift key is held down, a single selected point can be dragged with the mouse. The new combined length is continuously displayed in the status box at the right-hand end of the toolbar while the point is being dragged.

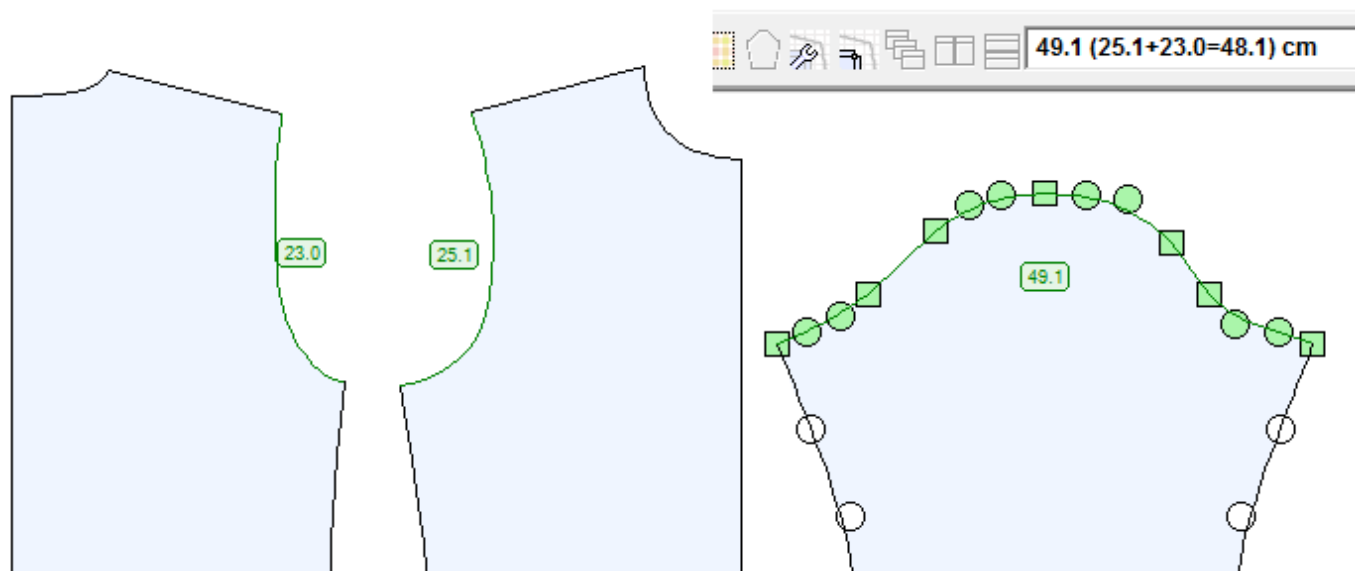
If two pieces are to be sewn together, a check can now be made that they will fit together. The segments along which they join should be selected in both pieces. While any single point in the active piece is being dragged, the status box shows the new combined length of the selected seam, which the user may compare with the combined length in the inactive piece...



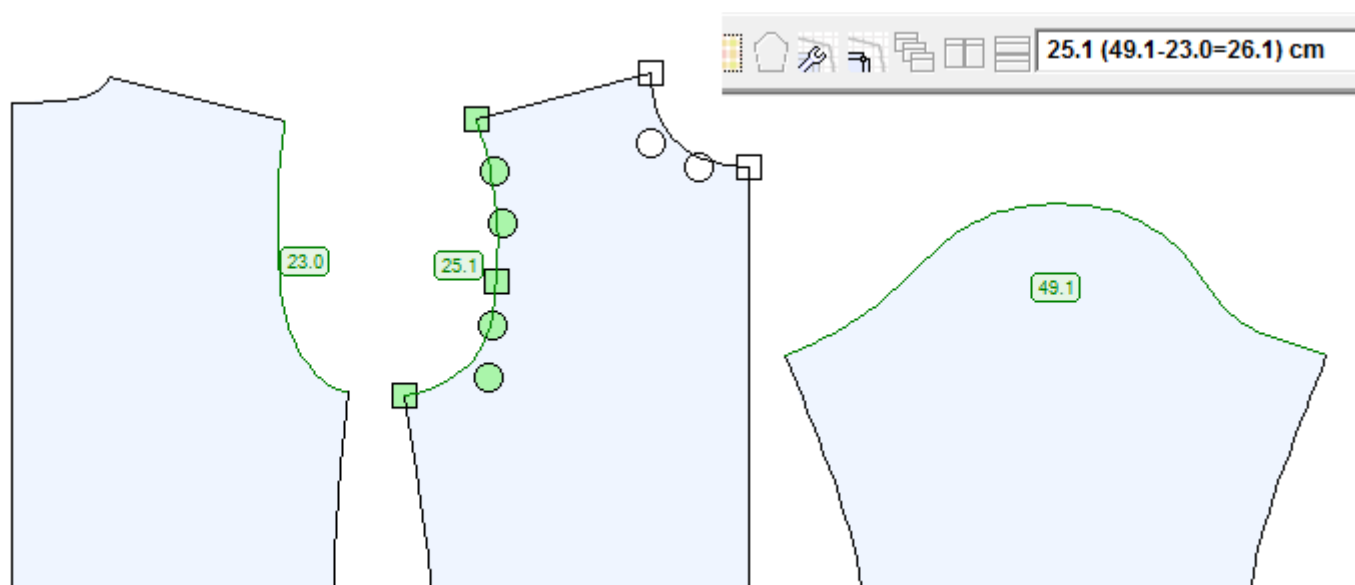


When there is a set of adjacent selected segments on each of 3 garment pieces, the status box shows additional information. If the combined length of the selected seams on the active piece is longer than on the inactive pieces, Fittingly Sew also shows the sum of the combined lengths of the inactive pieces. Otherwise it shows the difference between the two inactive pieces.

The purpose of that is to provide a target measurement for the user to aim at while adjusting the active piece. For example if the arm holes are selected in the front and back bodices, and the sleeve head is being adjusted, the status box shows the varying current sleeve head perimeter (49.1) and also the sum of the arm holes. In this example the value to aim at is 48.1 for an exact fit. However, an exact fit is not necessarily ideal. For example, a sleeve cap should be a little larger than the arm hole, and when constructing slopers and templates Fittingly Sew makes the sleeve cap perimeter 2% larger than the arm hole. The cap perimeter of the blouse template shown below is therefore 1.02×48.1 , or 49.1.



While adjusting an arm hole, the status box shows the varying current arm hole perimeter (25.1 in the example below) and also the difference between the sleeve head and the arm hole of the other bodice piece. Here the value to aim at is 26.1 for an exact fit, or 25.1 if the 2% figure is to be included in the calculation.



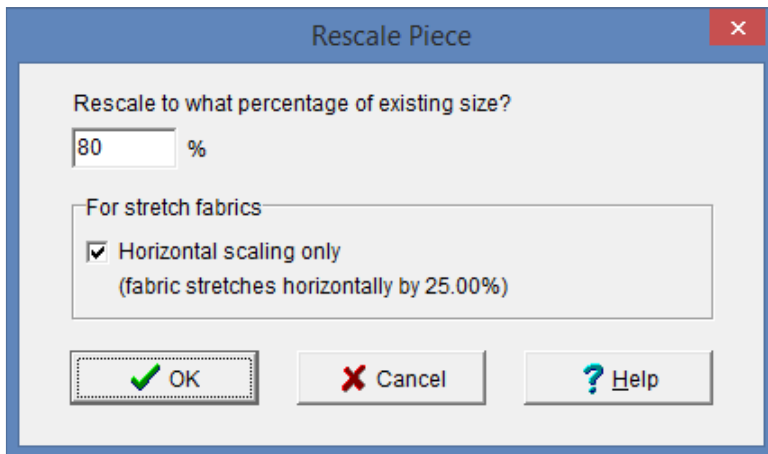
In order to make the Shift key available for this special dragging feature, Shift is no longer used to make curves symmetrical. The Alt key is now used for that feature: selecting a single curve control point and dragging it with the Alt key held down makes the unselected control point move in a mirror image to the selected one, so that the curve becomes symmetrical.

10. Adjusting pieces for stretchable fabrics

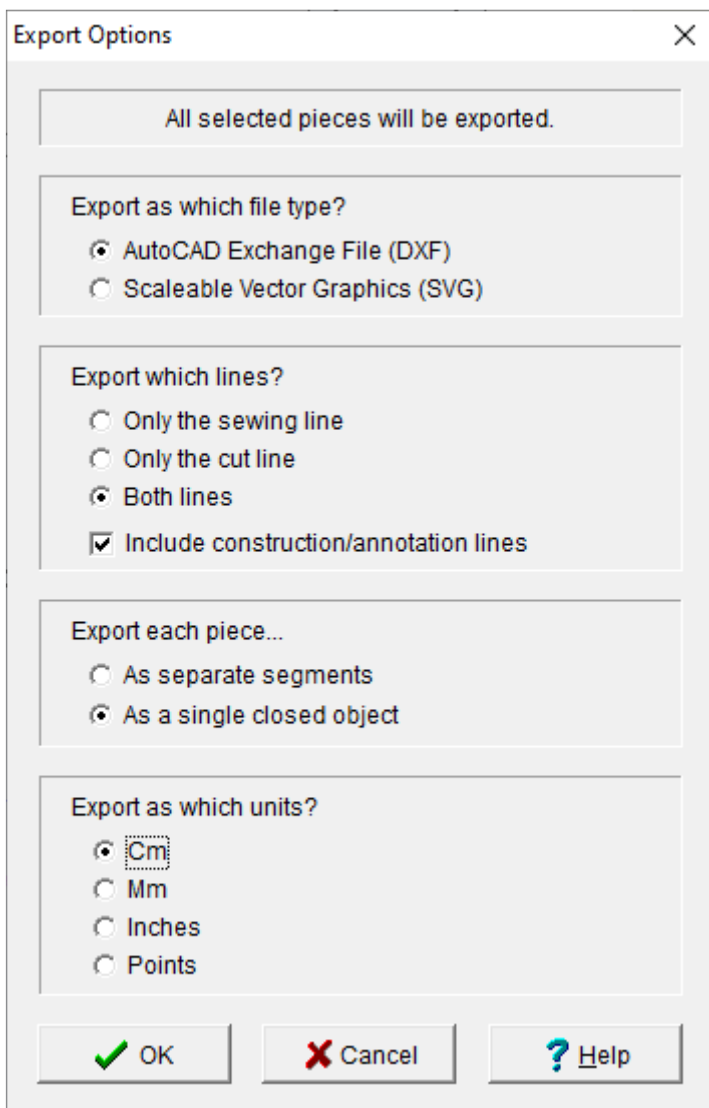
The *Rescale Piece* window has had some changes. It is now possible to compress pieces horizontally without also compressing vertically, so that they are suitable for horizontally stretchable fabrics.

The amount of rescaling is now entered as a percentage, and a value of 100 represents no change. (Previously a proportion was entered with 1.000 representing no change.)

Annotation lines are now scaled in the same proportions as the garment piece outline.



11. Exporting to other file formats

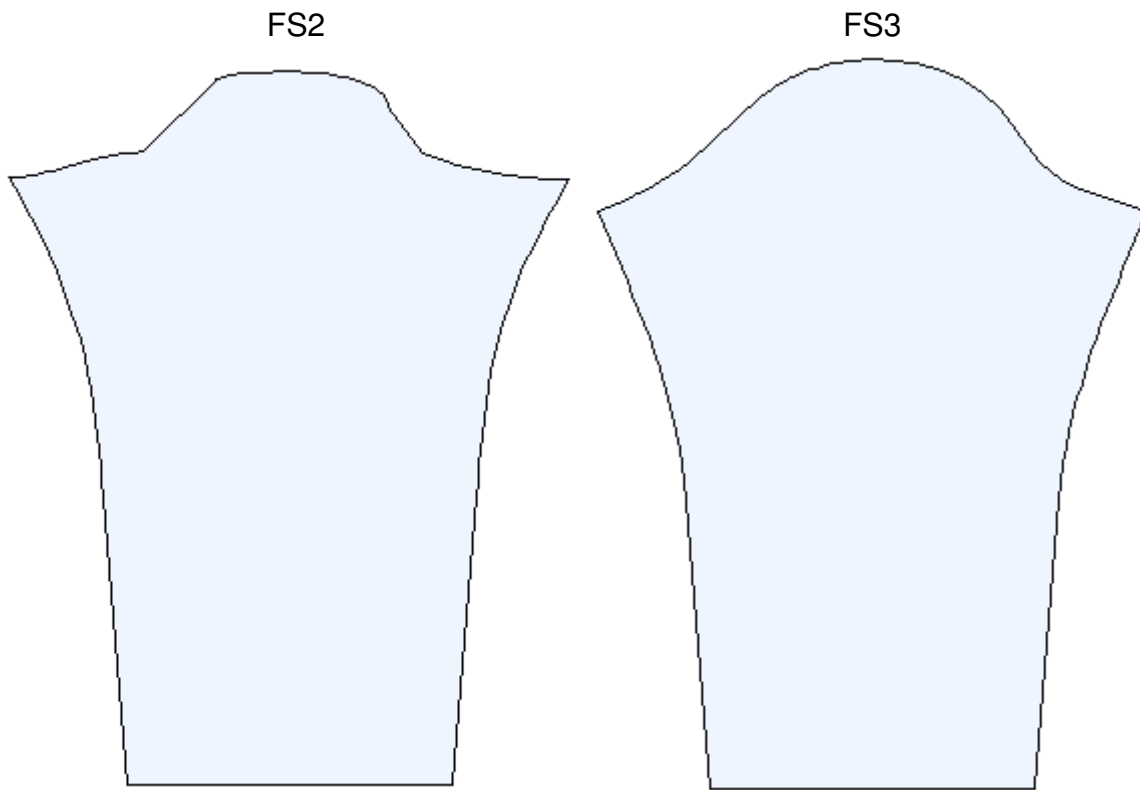


The File menu now has a new Export option, which shows the above window and then a file save dialogue.

12. Other changes

(a) Numeric data is now displayed with decimal commas instead of decimal points for German, French, and Russian language versions. Numeric data can be entered with either decimal commas or decimal points in any language version.

(b) The blouse template has been improved, with a smoother sleeve cap that fits the arm hole more closely. The shape of the front bodice's arm hole has also been made more rounded.



(c) The front piece pleated trousers template

(c) The main pattern window now shows sizing data in its title bar as either a standard size or the filename of the sloper.

(d) The option View / Segment Lengths now also shows the lengths of dart legs.

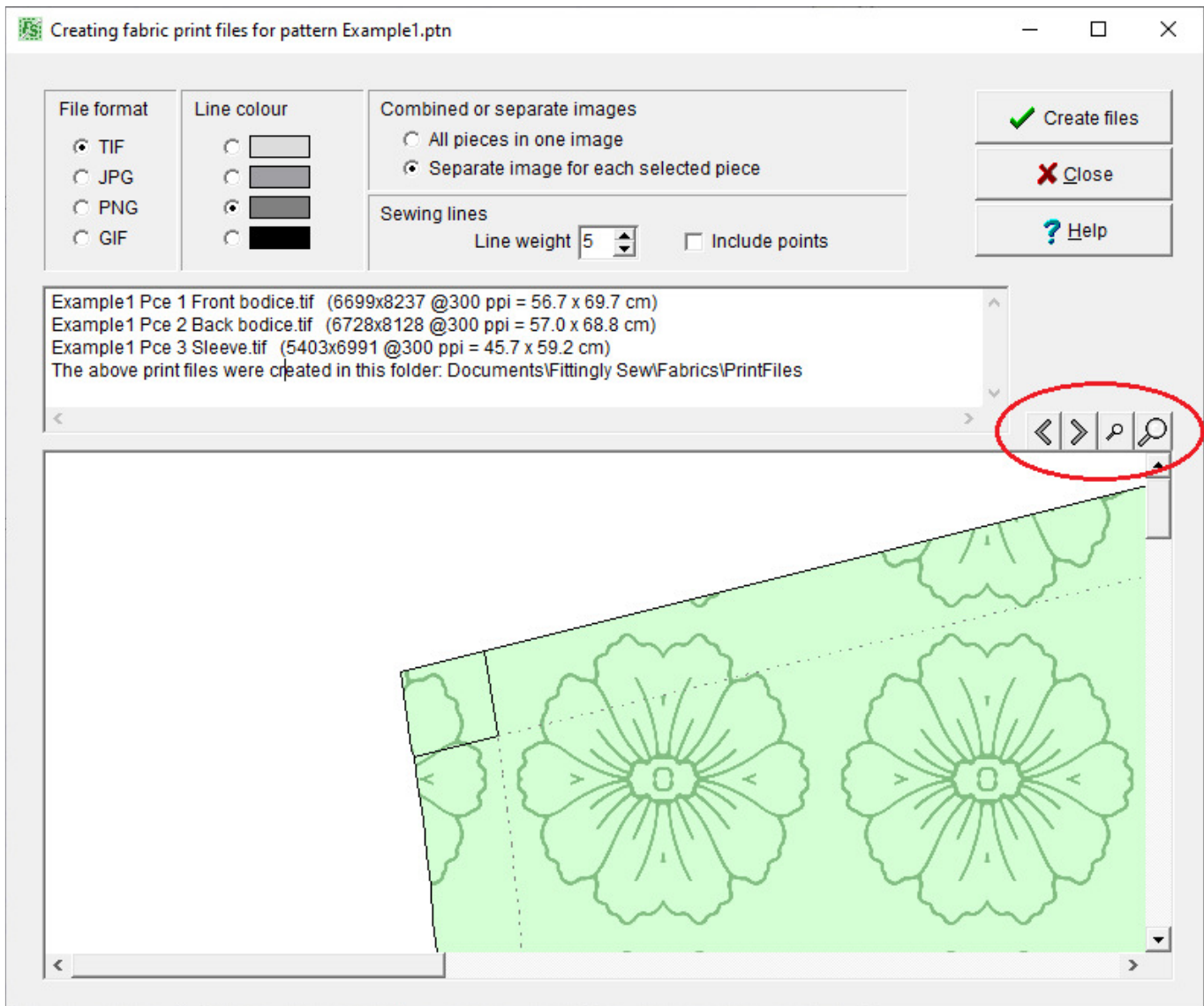
(e) If a pattern contains multiple pieces that have the same piece name, the duplicated names are now given a suffix; for example two pieces called front bodice become front bodice and front bodice-a. (This was necessary in order for the locking pieces feature to work correctly.)

(f) When an object is dragged, or the tape measure is used, the distance is shown in the status box at the right-hand end of the toolbar. In FS2 the box was immediately cleared as soon as the mouse button was released. In FS3 the figures remain until the box is used again. Clicking in the box or pressing the Esc key clears the box.

(g) Zooming using either the mouse wheel or the drop-down list in the toolbar now adjusts the zoom level around the centre of the pattern or sloper window, instead of around its top-left corner. Also... if the Control key is held down while the mouse wheel is used, the view zooms to

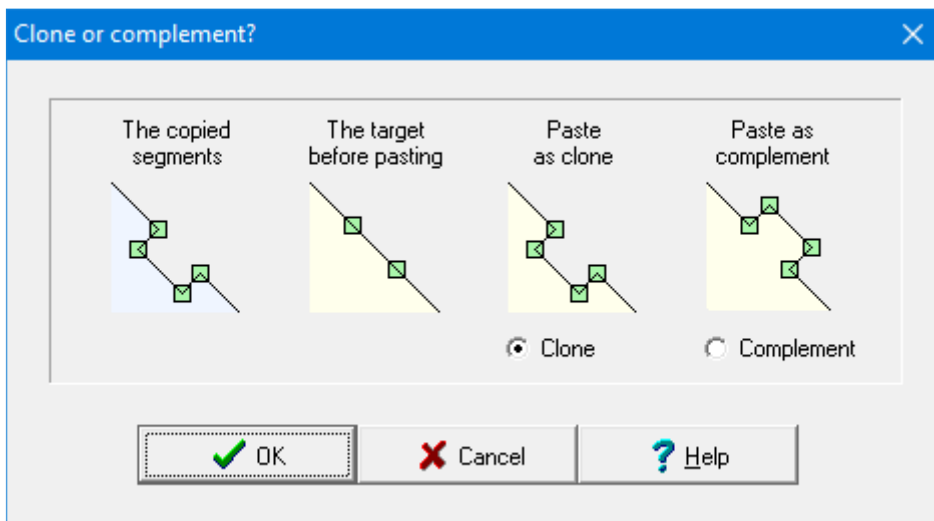
the current position of the mouse pointer, making it easy to zoom into a particular area of the pattern or sloper.

(h) The Fabric Print window has been improved. When multiple garment pieces have been selected, and the option has been taken to create a separate image for each piece, then after the print files have been created it is now possible to scroll through them using the tool buttons that are highlighted in red:



(i) Undo has been improved when garment pieces or points are dragged by keeping a keyboard arrow key held down. Previously, a separate undo point was created for each microscopic adjustment of position, and the limit of 20 undo operations was quickly reached. Now, an undo point is created only when the arrow key is first held down. When the key is released and Undo is then used, the pattern reverts completely in one Undo operation. A side effect of this change is that dragging pieces or points has become faster.

(j) Pasting points as clone or compliment has become less cryptic, and this new window is presented on pasting:



Previously, selecting Complement was done by holding down the Shift key while pasting.