

BasePac 10 Thread usage calculation

How works Thread usage calculation in BasePac 10

Background:

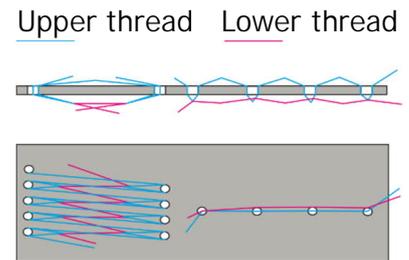
In BasePac Design info as well as in print application there is the possibility to create a thread usage list.

The thread usage is calculated based on the given stitches.

To do so, the net length of all stitches is calculated, while every stitch is weighted according to the direction to the neighbored stitches.

Normally embroidery machines are set up, so the upper thread is pulled to the backside and at satin stitches the lower thread is visible only at 1/3 of the width.

This is show in the drawing beneath.

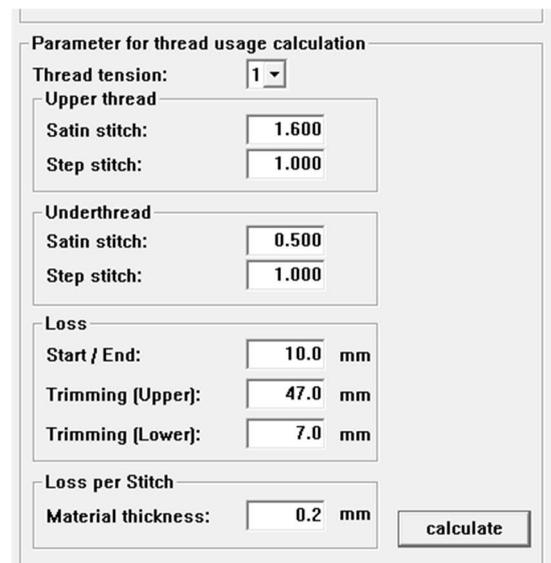


Herein up to 7 settings for different thread tension are set up, which can be selected as needed.

For each thread tension the calculation factors for upper and lower thread are separated for step stitch and satin stitch.

The setting on the right shows factors usable at stitching as above.

Additionally also the material thickness is used for the thread usage calculation because at thicker material more thread is needed to go through the material. The material thickness is added to the upper thread length for each stitch with the doubled value, because the lower thread should always be kept below the material.



The additional values for Loss at Start/End and at Trimming reflect the additional thread usage at each tread trimming resp. at Start and End of the design.

These values have to be found dependent on the machine setup.

Of course, the thread usage calculation is only to be used as an estimation and should not be used as absolute value for the thread usage.

To get best results test stitching should be made with the embroidery machine setup with pure satin or fill stitches where the real thread usage can be measured.