



## Useful tips using Serafil 120/2 and 200/2 as embroidery thread

Following the below mentioned tips, Serafil 120/2 and 200/2 can be used well for extremely fine and filigree embroideries.

### Basic requirements:

- **The material has to be fine and dense enough.** By chunky structures of the fabric it might happen, that several stitches drop into the same weave. This causes improper appearance. Fine details of a motif can get lost on a tough ground fabric. An analogue imagination is the display of a picture of high resolution on a screen. The screen sets the possible maximum, even if the picture itself is more detailed.
- **The fabric has to be put into the frame as tight as possible.**
- **The backing has to be fixed to the fabric.** The use of temporary glue is possible, better is a permanent fusing.
- **The needle has to be fine enough** (our tests have been successful with a needle #8 (Nm 60, system DBxK5) for Serafil 120/2 or needle #7 (Nm 55, system DBx1) for Serafil 200/2. Besides needle holes in the fabric, displaced weaves and skip stitches might appear, if a bigger needle size is used. The maximum needle size for Serafil 120/2 is #10 (Nm 70).
- The smallest possible mechanical resolution of the embroidery machine ought to be kept in mind. If the actual punch is more detailed, misaligned stitches can appear due to the recalculation (interpolation) of stitch details. Against our knowledge, the actual resolutions of the machines are about 0,1 to 0,2 mm.
- The use of a staple fibre yarn or core spun thread (such as ISA 150 or Saba<sup>C</sup> 150) as bobbin thread is advisable. During the use of endless filaments as bobbin thread it might happen at the first stitches, that the bobbin thread slips out of the needle thread loop, before the loop is tightened.

### Machine adjustments:

- **The tensions of needle and bobbin thread must be tightened** as to the tensions during the use of the usual 40s embroidery thread. This is due to the finer and sloppier character of Serafil 200/2.
- We suggest 600 rpm as maximum speed for embroideries with Serafil 200/2
- Tack stitches should not be done punctual. A small stitch length of 1 to 2 mm is advisable.



### Note for digitizing:

- Satin stitches with a width less than 1 mm are possible.
- Keep in mind the concrete size of the stitches during the digitizing. It is advisable to work with simple and defined shapes. In most cases all stitches of less than 0,5 mm can be cancelled.
- For small letters special attention is necessary, hence our eye does not tolerate any discrepancies. Test runs and following hints will help you to achieve a convincing and proper result at small wordings quickly:
  - o All arcs and curves (i.e. "O" or "d") should be digitized a little bit bigger, than the draft.
  - o The width of satin stitches if possible not below 1 mm
    - § rows of satin stitches (i.e. "I" or "H") should be digitized a little shorter, than the draft.
    - § for this kind of small satin stitches, use a centric underlay stitch or cancel underlay stitches completely.
    - § gaps within one letter (i.e. the dot of the "i" or the bottom tail of the "e") should be made larger, than the draft. Otherwise the "i" will read as "l" and the "e" will read as "o".
- For first trials a pattern digitized for a "standard" ticket no.40 embroidery thread can be used. The size should be reduced to 55% – 65% of its original size (without recalculating the stitches!). This size reduction is usually possible even in the embroidery machines operation unit without doing any changes to the program. The results might be that proper, that they can be used without any further digitizing. Otherwise, small alterations at the digitizing will be sufficient to make the design suitable for Serafil 200/2.

**Serafil 120/2 corresponds to an embroidery ticket no. 60 = tex 16.**

**Serafil 200/2 corresponds to an embroidery thread ticket no. 75 = tex 10**

For further assistance and technical advise please contact our hotline under +49 7143 277 219 or via e-mail: [msg@amann.com](mailto:msg@amann.com) .