

Machine Embroidery Threads

17.110

Page 1



SEW-lutions Guidelines

Your Guide
to
Successful
Sewing

© 2008 Sewing & Craft Alliance
Permission is granted to
educators and retailers to
reproduce these publications
as-is as a handout for
educational purposes only.
They may not be altered,
changed or added to in any
manner. No commercial or other
use, distribution, or
reproduction is permitted.

Get free projects and
more SEW-lutions
Guidelines at
www.sewing.org



With all the threads available for machine embroidery, how do you know which one to choose? Consider the thread's size and fiber content as well as color, and for variety and fun, investigate specialty threads from metallic to glow-in-the-dark.

Thread Sizes

Most machine embroidery and sewing threads are numbered from size 100 to 12, with a



larger number indicating a smaller thread size. Sewing threads used for garment construction are usually size 50, while embroidery designs are almost always digitized for size 40 thread. This means that the stitches in most embroidery designs are spaced so size 40 thread fills the design adequately without gaps or overlapping threads.

When test-stitching reveals a design with stitches so tightly packed it feels stiff, stitching with a finer size 50 or 60 thread is one way to soften the design. On the other hand, larger thread (size 30) can be used to increase coverage in a motif. For example, a white snowman stitched on black fabric may appear gray because the fabric is visible between threads; switching to a larger thread results in a more complete fill and whiter appearance.

Threads larger than size 30 are not suitable for most embroidery designs, unless the design size is increased to accommodate the larger size, or the digitizer specifically recommends it.

Fiber Content

Machine embroidery threads are widely available in rayon, polyester and cotton fibers. In deciding which to use, consider cost and availability as well as the end use and care requirements of the project.

Rayon

Rayon was developed as an alternative to natural silk. Rayon threads have the soft sheen of silk and are available in an incredible range of colors, usually in size 40 or 30. Because rayon is made from cellulose, it accepts dyes readily for color brilliance; unfortunately, it is also subject to fading with exposure to light or frequent laundering. Choose rayon for projects where elegant appearance is the aim and gentle care is appropriate. Rayon thread is also a good choice for machine embroidered quilting motifs.

Polyester

Polyester fibers are strong and durable. Their color range is similar to rayon threads, and they are easily substituted for rayon. Colorfastness and durability make polyester an excellent choice for children's garments or other items that will be worn hard and/or washed often.

Cotton

Cotton machine embroidery thread is ideal for reproducing the appearance of hand embroidery stitched with stranded floss. Cotton machine embroidery threads are usually size 50, but the thread's slightly fuzzy finish compensates for its smaller size. Choose cotton threads for household linens, heirloom and cross stitch motifs, or any design where a matte finish is desirable.

Combining and Substituting

Embroidery designs are usually accompanied by lists of the hues the digitizer envisioned for the designs. These are guidelines, not requirements, and it is perfectly acceptable to use different colors to suit your taste or the needs of a particular project.

Many color change lists are keyed to a specific thread brand, with color numbers or brand-specific color names for each step in the design. If you want to duplicate the original design appearance and have the same thread brand, choose the exact threads specified by the digitizer. Using the specified colors can provide an education in shading and combining colors.

As your embroidery thread collection grows, you may combine thread brands or types within a single design to achieve subtle shading or an ideal color match. Because polyester and rayon threads have similar characteristics, they can be used interchangeably.

Thread charts from various manufacturers that provide small swatches of each color are useful when selecting alternate threads. Charts with printed color samples are not as reliable as those with actual thread samples. Printed charts are usually free while charts with swatches must be purchased, but the difference is worth the cost.

In browsing embroidery Web sites, you'll find conversion charts that list equivalent colors in several thread brands. These can provide a starting point for color substitutions, but be aware that the charts vary widely in quality. Do not hesitate to make your own choices if a listed match seems inappropriate.

Computer software can be purchased to keep track of your threads, and to provide color-matching options across brand name boundaries. Software also can be programmed to select threads already available in your stash, or used to produce a shopping.

Specialty Threads

Variegated

In addition to solid-color embroidery threads, there are variegated and multi-color versions in rayon, polyester and cotton. These threads change to a different color value or completely different hue every few inches. Stitching with variegated threads usually creates a striped fill or blocks of different colors along a row of satin stitches.

Other multi-hued threads are twisted from two different color strands; for example, light brown with dark brown or black twisted with white. These threads stitch into a heathery, blended fill. They are wonderful for adding dimension and texture to large areas stitched with a

single thread. One variety, twisted from a solid-color strand and a variegated strand, produces satin stitches with a blended appearance rather than the stripes of color produced by a variegated strand alone.

Metallic

Metallic thread is a category that encompasses iridescent and flat threads as well as yarns and core filaments wrapped with metallic fiber. Different brands and constructions create a variety of finished appearances that flow through the machine's tensioning and thread delivery apparatus differently. For best results, experiment with different metallic threads and always stitch a sample with the thread, fabric, stabilizer and needle you will use in the project. Embroidery, topstitching and metallic needles can be used, with the latter often yielding the best stitching. Try lowering the tension setting and reducing the machine speed so the metallic thread stretches less as it follows the thread path to the fabric. Using a vertical spool pin reduces the twist added to the thread for better results on some machines.

Miscellaneous fibers

Special yarns for machine embroidery, combining wool and acrylic or other fibers, are used to stitch soft, fuzzy motifs. Because the yarn is thicker than size 40 embroidery thread, it requires specially digitized motifs or designs that have been altered to allow room for the yarn. Try using the yarn for some design areas and regular embroidery threads for accents or details. After embroidering, the yarn can be combed with a wire brush or toothbrush to create a furry finish for teddy bears and similar motifs.

Other specialty threads for embroidery include glow-in-the-dark and solar-reactive threads. Glow-in-the-dark threads absorb light energy and glow when the lights are off, while solar-reactive threads change color in direct sunlight. Both thread types may appear white or very pale in ordinary lighting; for a design with appeal under any lighting conditions, use color-changing threads only in selected design areas. Some changeable threads are thicker than size 40 embroidery thread, so be sure to stitch a sample. Follow manufacturer's care instructions to prolong the special characteristics of novelty threads. 🧵