

Types of Threads by: Wendy Foster Birch 2016

The higher the quality of the thread, the less special handling will be required. Poor quality thread has much lint and breaks easily and can take the joy out of any sewing project. Threads are either made of a natural fiber (cotton, wool, silk, linen) or synthetic fibers (rayon, polyester, nylon).

Thread construction methods

Spun thread Cotton or polyester staple fibers are spun into single yarns and then twisted together. Less strong and linty.

Core thread Spun cotton or polyester staple fibers are wrapped around polyester fibers.

Filament shiny thread made of strands of polyester, rayon, or nylon.

Monofilament A single nylon or polyester filament. Polyester is highly preferred. Example Monopoly

Thread Types

Polyester Synthetically produced from polymer resins. There are three types of polyester thread:

- * **spun poly**: fiber staples spun together. Looks like cotton. Weaker and usually made with leftover thread and spun to other leftover, s and over dyed. Very linty.
- * **Filament poly**: continuous fiber , medium sheen
- * **Trilobal poly**: high-sheen continuous fiber. Looks like rayon or silk.

Advantages

- * Durable. Designed for heavy duty use
- * Strength. More tensile strength than rayon or cotton.
- * Colorfast
- * Retains shape
- * Recovers stretch
- * Can be made with a matte finish to look like cotton, with a medium sheen, or high sheen finish to look like rayon or silk
- * Trilobal poly is a higher quality polyester with a sheen equal to rayon and is lint free.

Rayon Unlike cotton thread which is made from a natural source and unlike polyester which is made from man-made polymers, rayon (commonly referred to as viscose rayon) is a mixture of nature and manufacturing

Advantages

- * high sheen
- * soft
- * relatively heat resistant
- * inexpensive

Disadvantages

- * often not colorfast
- * not as strong as polyester
- * less durable than polyester

Nylon A synthetic thread often used in the form of a monofilament clear thread or as a textured fuzzy (woollie-like) thread. The negatives far outweigh the positives of nylon. Not recommended. Similar threads in polyester are available.

Advantage

- * used for fusible thread (for its melting qualities) Les

Disadvantages

- * Low melting temperature. Not heat resistant.
- * Not colorfast. Will yellow over time.
- * Becomes brittle through laundering and exposure

Cotton Thread

There is a wide range in the quality of cotton threads. Quality is determined by two factors:

1. the quality of the cotton fibers, and
2. the method of processing.

Cotton is classified by the length of the staple, or fibers. We often hear the term 'long-staple cotton' but we never hear the term 'regular-staple cotton' although the majority of cotton thread is regular staple. There are three classifications of cotton:

1. Regular staple. The average length of the fiber is an inch and one-eighth (1.125 inches). Which are most spools of thread
2. Long staple. The average length of the fiber is an inch and a quarter (1.25 inches).
3. Extra-long staple (ELS). The length of the fiber is an inch and three-eighths (1.375 inches) or greater. Some extra-long staple cotton fibers are as long as two inches. Egyptian-grown extra-long staple cotton is subject to unique handling and treatment.

A long-staple cotton thread may cost 50% more than a regular-staple thread. Likewise, an ELS cotton thread may cost 50% more than a long-staple thread but it is worth it because you get a much stronger thread with less lint. Processing also contributes to the quality of the thread. Some inexpensive regular-staple cotton is not mercerized, almost all long staple and extra-long staple thread is mercerized. Mercerizing is a process of treating cotton thread, causing the fibers to swell. This process allows the dye to better penetrate the fibers, thereby increasing the luster and strengthening the thread. Even if a thread is not labeled 'mercerized' if it is a long or extra-long staple, it probably is mercerized. If the thread has a hard and shiny coating or wire-like stiffness, it is probably a glazed thread. Glazing involves heating the thread and then coating it with waxes, starches, and other chemicals, resulting in a glossy thread with a hard finish. Most professionals do not recommend glazed threads for machine work because the glaze rubs off and gums up the machine.

Metallics The quality of metallic thread ranges from very high to very low. A good metallic thread does not require a lubricant. Quality metallic thread has the following components:

1. Nylon core. A nylon core offers the most strength and resists tangling. Polyester and rayon cores are inferior.
2. Rice paper construction. This adds strength and cohesiveness and makes the thread more soft and supple, reducing the wiry feel. It also reduces tangling.
3. Outer coating. Lower-quality Metallics have no outer coating. This means the metal foil rubs against the needle, creating friction and heat, resulting in discoloring and shredding. A good metallic has an outer coating which reduces friction and acts as a protective layer.

Laminate or Flat thread Produced by bonding layers of polyester together and slicing to a desired width. Available in either 2-ply (weak) or 4-ply (strong) construction.

Characteristics

- * Colorfast
- * Brilliant, reflective, colors. Can be produced in a hologram effect.
- * Heat resistant. Can be ironed on low/medium heat

Threads Available

<u>Product</u>	<u>Project</u>	<u>Bobbin Thread</u>	<u>Needle</u>	<u>Top Tension</u>	<u>Other</u>
<u>Superior Threads</u>					
Bottom Line™	embroidery, quilting, binding	Bottom Line	Topstitch #80/12 or #70/10	4.0 to 5.0	60 wt. poly. use as top thread or bobbin thread
MonoPoly™	quilting & applique	Bottom Line, Polyneon	Topstitch #80/12 or #70/10	1.5 to 3.0	.004 poly. position spool so thread unwinds from side
Rainbows™	quilting & embroidery	Bottom Line, Polyneon	Topstitch #90/14	2.0 to 3.0	40 wt. high sheen trilobal variegated polyester
MasterPiece	machine piecing Cotton	MasterPiece	Quilting 9 or 11		50wt Egyptian cotton Alex Anderson
<u>Madeira</u>					
Polyneon	embroidery, quilting, applique	Polyneon, Bottom Line	Topstitch #90/14	2.0 to 3.5	40 wt high sheen trilobal polyester
Supertwist	quilting, applique, hand work	Bottom Line, Polyneon	Topstitch #90/14 or 100/16	1.0 to 3.0	30 wt Metallic thread high sheen
FS/20	quilting, applique, topstiching	Bottom Line, Polyneon	Topstitch #90/14	1.5 to 3.5	40 wt Metallic foil wrapped around rayon core
<u>Yenmet</u>					
Yenmet	embroidery, quilting, applique	Bottom Line, Polyneon	Topstitch #90/14	1.5 to 3.5	High sheen metallic, gold, silver

Trouble Shooting

95% can be corrected

- 50% Quality of Thread
- 20% Needles. Topstitch needles work best
- 20% Tension. Loosen top tension
- 5% Delivery System. Make sure thread spools off properly
- 5% Unknown.

Above are suggestions only,
do what works best for you.

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www.madeiraisa.com
www.superiorthreads.com