



# Soft and Secure Seams



## Introduction

The achievement of softer, flatter and more secure seams is the goal of technologists as they develop active wear, intimates and other apparel in an ever increasing array of high tech fabrics.

To ensure that a garment will be fit for purpose and can withstand the strain from repeated wear throughout its life cycle, the designer must consider seam strength, appearance, required stretch, bulkiness and softness. Seams that come into direct contact with the skin should be secure and yet soft to avoid potential irritation to the skin.

The correct choice of sewing thread has an important bearing on this. Thread tenacity combined with the required elongation and stretch must be optimum to ensure secure well balanced seams. **Seamsoft 120 (Tex 16)** is particularly suitable for use in both needles and loopers, delivering the ultimate softness with one thread choice.

## Coats thread recommendations for soft and secure seams

**Options using Seamsoft** - Soft microfilament textured polyester

Stitchtype		Soft low coverage	Soft high coverage	PSS 140 / 160	PSS 120 / 160	Flat Soft 120 / 120	Stretch Soft
<b>Coverseams 406</b>	Needle Looper	Epic 120 Seamsoft 160	Epic 120 Seamsoft 80	Seamsoft 140 Seamsoft 160	Seamsoft 120 Seamsoft 160	Seamsoft 120 Seamsoft 120	Eloflex 120 Seamsoft 120
<b>Overlock 504 or 514</b>	Needle Looper	Epic 120 Seamsoft 160	Epic 120 Seamsoft 80	Seamsoft 140 Seamsoft 160	Seamsoft 120 Seamsoft 160	Seamsoft 120 Seamsoft 120	Eloflex 120 Seamsoft 120
<b>Flatseams 605 or 607</b>	Needle Looper Spreader	Epic 120 Seamsoft 160 Gramax 160	Epic 120 Seamsoft 80 Gramax 80	Seamsoft 140 Seamsoft 160 Seamsoft 160	Seamsoft 120 Seamsoft 160 Seamsoft 160	Seamsoft 120 Seamsoft 120 Seamsoft 120	Eloflex 120 Seamsoft 120 Gramax 160

\* PSS is Premium Super Soft

**Options using Surfilor** - Soft texturised nylon

Stitchtype		Bulky Soft	Flat Soft	Soft
<b>Coverseams 406</b>	Needle Looper	Epic 120 Surfilor 120	Surfilor FS 180 Surfilor FS 180	Epic 120 Surfilor 180
<b>Overlock 504 or 514</b>	Needle Looper	Epic 120 Surfilor 120	Surfilor FS 180 Surfilor FS 180	Epic 120 Surfilor 180
<b>Flatseams 605 or 607</b>	Needle Looper Spreader	Epic 120 Surfilor 120 Surfilor 120	Surfilor FS 180 Surfilor FS 180 Surfilor FS 180	Epic 120 Surfilor 180 Surfilor 180

**Options using Eloflex** - Soft and high in elasticity

Stitchtype		Stretch Soft	
		Option 1	Option 2
<b>Lockstitch 301</b>	Needle Bobbin	Eloflex 120 Eloflex 120	Eloflex 120 Eloflex 120
<b>Coverseams 406</b>	Needle Looper	Eloflex 120 Gramax 160	Eloflex 120 Seamsoft 160
<b>Overlock 504 or 514</b>	Needle Looper	Eloflex 120 Gramax 160	Eloflex 120 Seamsoft 160
<b>Flatseams 605 or 607</b>	Needle Looper Spreader	Eloflex 120 Gramax 160 Gramax 160	Eloflex 120 Seamsoft 160 Gramax 160







- For intimates / lingerie next-to-skin lockstitch operations use same thread recommendation as for coverseams
- For sportswear knit lockstitch construction seams use Epic 120 in the needle and bobbin
- For sportswear knit lockstitch construction "Stretch Soft" seams use Eloflex 120 in the needle and bobbin
- For decorative seams, use Sylko 120 in top spreader of flatseams

## Seam definitions:

- **Bulky Soft:** Surfilor used for high bulk seam coverage
- **Flat Soft:** Recommended to give flatter, smoother, neater seam where a bulk seam appearance is undesirable
- **Premium Super Soft:** Luxurious seams, e.g. intimate apparel
- **Soft:** Next-to-skin

The thread ticket sizes shown are representative only. Different fabrics and garment constructions may require specific threads to be used. For example, heavier fabrics or fabrics that require additional strength in the seam may require thicker/stronger threads. The user should always ensure for themselves that the thread meets the desired functionality. Please contact your nearest Coats representative for further information.

Brand	Image	Description
<p><b>COATS</b> <i>seamsoft</i></p> 		<p>A microfilament textured polyester thread that offers exceptional softness and comfort, especially in 'next-to-skin' seams.</p> <p>It offers excellent seam covering properties and extensibility for knitted and stretch fabrics.</p>
<p><b>COATS</b> <i>gramax</i></p> 		<p>A continuous filament textured polyester thread. It is used on overlocking and cover seaming machine needle and looper threads to provide softness and comfort.</p>
<p><b>COATS</b> <i>epic</i></p> 		<p>A versatile polyester-wrapped corespun needle thread with a polyester filament core where the fibre and filament combine to provide high tensile strength.</p>
<p><b>COATS</b> <i>eloflex</i></p> 		<p>Eloflex has good tenacity and is high in elasticity. Its ideal for use in seams on garments made from fabrics with high extension properties.</p>
<p><b>COATS</b> <i>surfilor</i></p> 		<p>Coats Surfilor is an exceptionally soft texturised nylon sewing thread which produces flatter, smoother, neater seams with a luxurious feel.</p> <p>It is especially suitable for "next-to-skin" seams where a nylon thread is preferred.</p>
<p><b>COATS</b> <i>surfilor fs</i></p> 		<p>Surfilor FS has been specifically engineered for flatseam operations and is suitable for use both in the needle and in the looper.</p>



## Seam strength

Normally the strength of the thread used to stitch a seam should match the seam strength. However, in seams that stretch a safety factor should be built in to allow for the variation in seam extension during normal wear. It is also important that the needle thread grips the fabric and yet provides the softness required.

## Seam bulkiness and softness

The softness of a seam will depend on the choice of sewing thread and the fabric that is being sewn. For fabrics that are compressible and contain elastane or Lycra, it is important that there is enough thread cover on the seam to allow it to stretch and yet retain its softness. The volume of thread cover is referred to as bulkiness of the seam.

Seams sewn in the warp direction of some fabrics will have a different feel to those sewn in the weft direction. In the vertical warp direction the needle thread will bed into the fabric and the seam will be flatter whereas across the weft the stitch may sit on the surface and be easier to feel.

To ensure the sewn stitch does not stand out in the seam the sewing thread needs to be fine. A thicker thread can leave an impression on the fabric during pressing and ironing for example. However strength and security of the seam must be maintained.



## Learn more about Coats products for soft and secure seams

Seamsoft <http://coatsindustrial.com/en/seamsoft>

Gramax <http://coatsindustrial.com/en/gramax>

Epic <http://coatsindustrial.com/en/epic>

Eloflex <http://coatsindustrial.com/en/eloflex>

Surfilor <http://coatsindustrial.com/en/surfilor>

Surfilor FS <http://coatsindustrial.com/en/surfilor-fs>