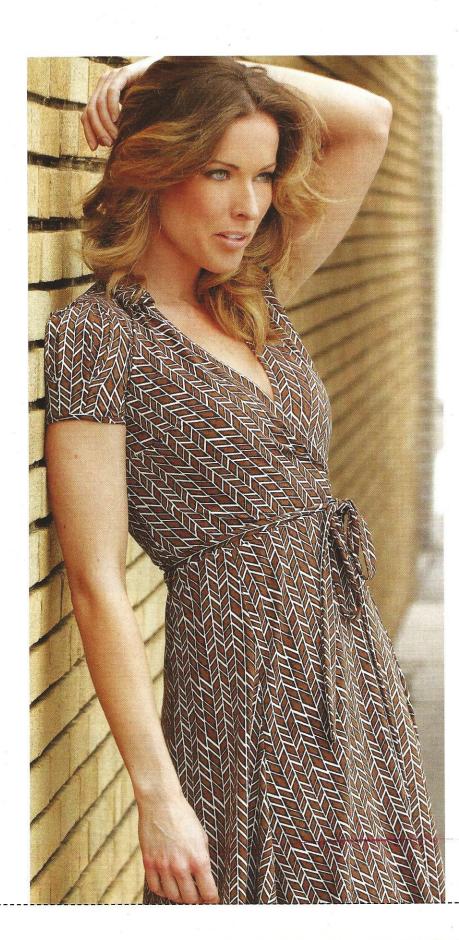
# Knit Fabrics

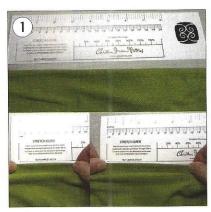
{ by Christine Jonson

Knit fabrics, especially spandex blends, are both comfortable and ideal for making many casual garments. However, the stretch factor of these fabrics can pose fitting issues that seem difficult to resolve. Learn techniques that take the guesswork out of fitting and sewing knits.

# Spectacular Spandex

Although spandex may bring to mind outdated skintight fashions of the '80s and early '90s, modern spandex-blend fabrics bring today's knit garment patterns to their full potential. Spandex no longer means tight-fitting; instead, it allows for comfort and simplicity of construction. This lightweight, smooth and supple fiber was originally introduced in 1958 by DuPont under the brand name









Lycra. Spandex's most significant characteristic is its ability to stretch up to 500 times its length and continually recover to its original shape. Spandex cannot stand alone and must be blended with other fibers. Host fibers such as cotton, rayon, wool or bamboo allow the spandex fiber to create stable, resilient, versatile fabrics with excellent shape retention.

Many knit fabrics get their wonderful stretch and recovery properties from the addition of spandex. A great-fitting knit garment begins with recognizing and understanding the qualities of a stretch fabric and what it offers the garment. The correct combination of stretch, recovery and hand of a knit makes great fit happen.

# Stretch Types

Spandex-blend knit fabrics offer stretch in a variety of ways, including one-way stretch, two-way stretch and four-way stretch. Understanding the difference between these varieties is an important factor when choosing the correct size.

- One-way stretch means that the fabric has maximum stretch crosswise and little to no stretch lengthwise or parallel to the selvage.
- Two-way stretch means the fabric has maximum stretch crosswise and less stretch lengthwise.
- Four-way stretch fabric usually offers equal stretch in all directions.

## Stretch Percentage

To determine the percentage of stretch a fabric offers, fold a 4" crosswise fabric section.

Hold one section end down securely on a ruler, and then stretch the other end until you feel resistance; record the ending measurement (1).

If the 4" section stretches to 8", the fabric has 100% stretch. If the 4" stretches to 6", the fabric has 50% stretch and so on. Repeat to test the lengthwise grain; record.

# Stretch Recovery

The ability of a knit fabric to recover to its original shape, length and size is an important factor when planning a garment. Recovery can be described in terms of "soft," "good" and "snappy."

- Soft recovery fabric slowly returns to its original shape.
- Good recovery fabric returns to its shape quickly, but without a "snap."
- Snappy recovery fabric snaps back to shape very quickly. In simple terms, fabric with snappy recovery will fit more tightly than a fabric with soft recovery.

#### Fabric Hand

The hand of a fabric describes how it feels, drapes and "pools." A soft fabric that feels light to the touch will provide extra ease but not much drape (2). A fabric with a heavier hand may have less ease but will drape well (3).

The less a fabric pools when lowered slowly onto a flat surface, the better it will drape on the body (4).

## Ease Explained

Negative ease is the term used when the ease in a pattern (or a specific area of a pattern) is less than the corresponding body measurements. Garments designed entirely for negative ease, such as body shapers, conform to and hug the body's curves. Many patterns intended for stretch fabrics make use of negative ease to fit certain areas, such as waistbands, cuffs and necklines. This often eliminates the need for waistband elastic or zippers, making close-fitting pants or skirts more comfortable.

Wearing ease refers to an increase in the pattern size in addition to the needed body measurements for a specific size, which allows freedom of movement. As a rule, a pattern's wearing ease shouldn't be eliminated or altered when fitting with woven fabrics. However, it's acceptable to use the stretch and recovery properties of a spandex-blend knit fabric for fitting rather than the utilizing the additional wearing ease added for woven fabrics.

Design ease refers to a garment's ease beyond the wearing ease. Design ease, sometimes called "fashion ease," is the addition to a pattern that creates the intended silhouette. The terms "closely-fitted," "fitted," "semi-fitted," and "loosely fitted," refer to the garment's design ease. These



**Tip:** For more information on ease, visit sewnews.com/web\_extras to download a handy sizing and ease worksheet.

terms refer to the silhouette after the wearing ease has been established.

All three ease types can be combined in a perfectly fitting garment to create "flattering ease." For example, a flattering knit top may have negative ease in the shoulders, neckline and across the bust; wearing ease across the back, armhole and upper sleeve; and design ease at the sleeve and bodice hems.

#### **Patterns for Knits**

Patterns designed specifically for knit fabrics are the best choice for your first knit garment. These patterns are designed, sized and drafted for stretch fabrics, eliminating the guesswork of using a pattern designed for woven fabrics. Pay attention to the features of knit patterns, such as the fabric stretch guide, suggested fabric list and finished garment measurements. Once you've gained experience in sewing and fitting with spandex-blend fabrics, you'll be better informed to choose alternative patterns.

Choose a fabric with the stretch percentage that the pattern stretch

guide suggests. This percentage is the amount of stretch used for the original fitting of the pattern. Choosing a different percentage of stretch will result in a different fit.

Use the pattern's finished garment measurements to choose the needed size. Compare your body measurements with the finished garment measurements. Note the differences in the amount of ease in the pattern at the bust, waist and hips. If the finished garment measurements aren't provided, take the time to measure them yourself.

Use the body measurement chart on the pattern envelope as a yardage guide only. These measurements don't tell you where or how much ease the pattern has in specific areas. Only the finished garment measurements provide that information.

# Fabric Recovery for Fitting

In general, the snappier the recovery of a knit, the more ease you'll need in the pattern. The softer the recovery, the less ease you'll need in the pattern.

If your body measurements fall between the finished garment measurements, choose the smaller size and add the needed amount to the side seams before pin-fitting. It's almost always problematic to use the larger size when fitting spandex-blend fabrics because armholes, necklines, shoulder seams and design details don't need to be larger. Choosing the next largest size makes the entire garment larger, when usually all that's needed is extra ease around the body. Adding 1" to the front and back side seams and sleeve seams gives the option of deciding the desired amount of ease through the body and arm.

# **Knit Sewing Success**

Stretch fabrics need stitches that stretch and recover along with the fabric stretch and recovery. A serger is an excellent choice to construct a spandex-blend knit garment. If you don't have a serger, use a stretch stitch or zigzag stitch on a sewing machine. If a seam isn't going to be stressed by wearing or movement, use a standard straight stitch for construction.

For successful topstitching, use a stretch stitch, zigzag stitch, or a twin needle for stressed seams, such as narrow legging hems and jewel necklines. A standard single-needle topstitch is ideal for non-stressed seams, such as full skirt and wide pant hems.

Make a test sample of the stitching to check the tension and length.

Remember to backstitch to secure each stitching line.

For best fitting results, stitch a sample garment to serve as a tool that allows you to make pattern changes prior to cutting the fashion fabric. Purchase a few yards of a similar knit fabric from the clearance or remnant section at the fabric store to use for a sample garment. There's no need to stitch the facings, collars, and other details, so the sample can be as simple as the front, back and sleeve of a top or jacket. Pin-fit the sample garment and make note of any necessary fitting changes.

To eliminate the need for topstitching armholes, necklines and hems, line a spandex-blend with self fabric or use a made-for-knits lining. A lining also adds body, stability and a clean edge finish.

Tip: Corded buttonholes, created by stitching over filler cord, embroidery floss or crochet thread, work well on spandexblend knit fabrics. Check the machine manual to find out if your machine has the ability to make corded buttonholes.

