

Knitted fabric

Knitted fabrics are the third major class of fabric, after woven and nonwoven fabrics.

Elasticity, thickness and warmth

Compared to the other two classes, knitted fabrics are much more elastic, which accounts for their historical use in stockings and other clothing that requires changes in shape. Hence, dresses and lingerie made from knitted fabrics can be more form-fitting than counterparts made from a woven fabric. Knit fabrics can stretch from 0 to 500%, depending on their material and knitting pattern. Lace knitting generally produces the most flexible fabric, since it has large holes that can deform in shape; by contrast, cable knitting generally produces the least flexible fabric, since the stitches are crossed under tension, which inhibits deformation. Knitted fabrics that do not deform much are called stable knits. For comparison, woven fabrics typically deform only along their bias direction — i.e., at 45° to the warp and weft directions — and only by a small amount; however, a woven fabric made with a stretchable material such as Lycra may deform more than a stable knit.

The elasticity of knitted fabrics gives them an excellent drape, but this is opposed somewhat by their generally greater thickness compared to wovens. Thus, the turn of the cloth (i.e., the maximum curvature of a fold of the fabric) is generally finer in woven fabrics than in knitted fabrics. For this reason, knitted fabrics resist wrinkles better than wovens, but do not generally take a crease.

Knitted fabrics are generally warmer and more comfortable than woven fabrics, which is why they are worn closer to the body. Moreover, knitted fabrics are often made from wool, which stays warm even when wet; wool is preferred since it is more elastic than most fibers and produces more even, beautiful knits. In general, elasticity and warmth are opposing qualities in a knitted fabric, since the most elastic knitted fabrics, such as lace, have the largest holes and are thus less insulating.

Structure of knitted fabrics

Knitted fabrics are divided into two basic types: warp-knit fabrics such as tricot and weft-knit fabrics such as a hand-knit sweater. Weft-knit items have the drawback that they run when cut. Warp-knit fabrics are often used in lingerie.

- knits shrink
- knits have nap
- ribs/wales versus courses
- generally more elasticity along the course than along the wale

Knitting stitches

Over the long history of knitting across the world, hundreds of different knitting stitches have been created.

The basic building blocks of all hand knitting are the following stitches: knit, purl, cast on, cast off, increase and decrease stitches. Use of a combination of these methods can provide a vast number of different textures to knitted fabrics.

In order to save space in knitting patterns, the names of stitches are normally abbreviated Knitting abbreviations.

Styles of knitted fabrics

Boiled wool, Bunting, Double knits, Four-way stretch knits, Interlock knits, Jersey, Milanese, Power net, Raschel knits, Rib knits, Single knits, Stable knits, Stretch knits, Stretch velour, Sweater knits, Sweatshirt knits, Tricot, Two-way stretch knits.

History of knitwear

Coco Chanel's 1916 use of jersey in her hugely influential suits was a turning point for knitwear, which became associated with the liberated woman.[1] Shortly afterwards, Jean Patou's cubist-inspired, color-blocked knits were the sportswear of choice.[1]

In the 1940s came the iconic wearing of body-skimming sweaters by sex symbols like Lana Turner and Jane Russell, though the 1950s were dominated by conservative popcorn knits.[1] The swinging 1960s were famously manifested in Missoni's colorful zigzag knitwear.[1] This era also saw the rise both of Sonia Rykiel, dubbed the "Queen of Knitwear" for her vibrant striped sweaters and her clingy dresses, and of Kennedy-inspired preppy sweaters.[1]

In the 1980s, knitwear emerged from the realm of sportswear to dominate high fashion; notable designs included Romeo Gigli's "haute-bohemian cocoon coats" and Ralph Lauren's floor-length cashmere turtlenecks.[1]

Contemporary knitwear designers include Diane von Furstenberg[2] and James Perse.