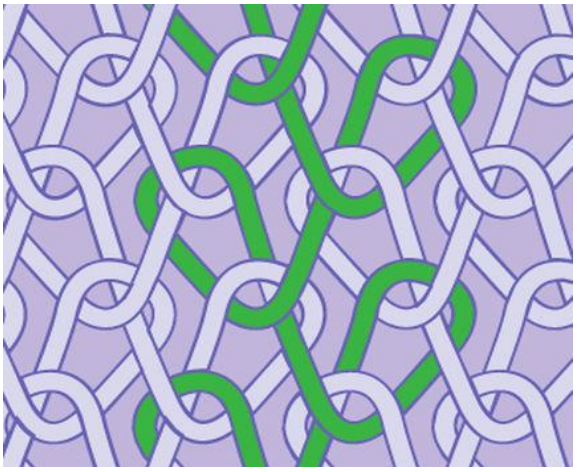
Warp Knitting

In a warp knitted structure, each loop in the horizontal direction is made from different thread. Sweater is made by this warp knitting technique.

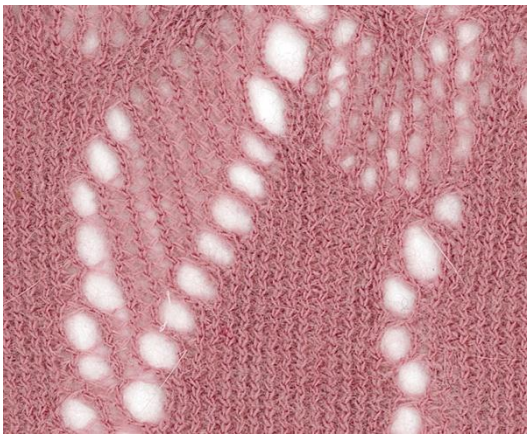


Because of the multi needle configuration of warp knitting machines, the warp knitted fabrics produced can be very complex and intricate in structure and they don't fall neatly into groups or categories as weft knits do.

Some good examples of warp knits are as follows:

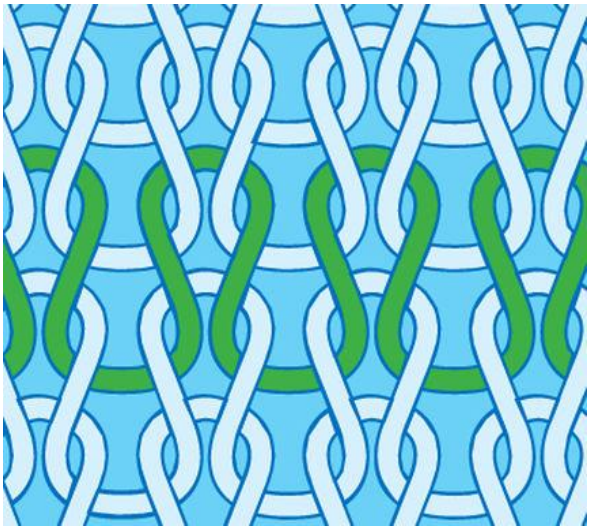
Milanese which is made from two sets of yarns knitted diagonally. Face has fine vertical rib and reverse has diagonal structure.

Raschel is done on Raschel knitting machines. These machines can produce wide variety of fabrics and can incorporate conventional or novelty yarns, thereby creating interesting textures and surface designs. Knits can be fine and lacey, highly patterned and even piled.



Weft Knitting

In a weft knitted structure a horizontal row of loops can be made using one thread and the thread runs in the horizontal direction. Most of the knitted fabrics are produced by weft knitting.

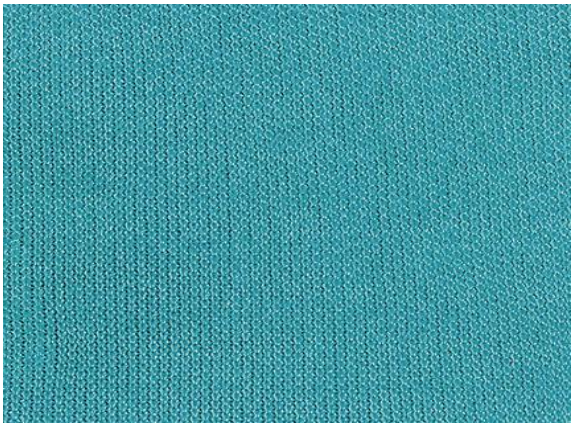


All weft knits fabrics fall into three basic categories i.e.:

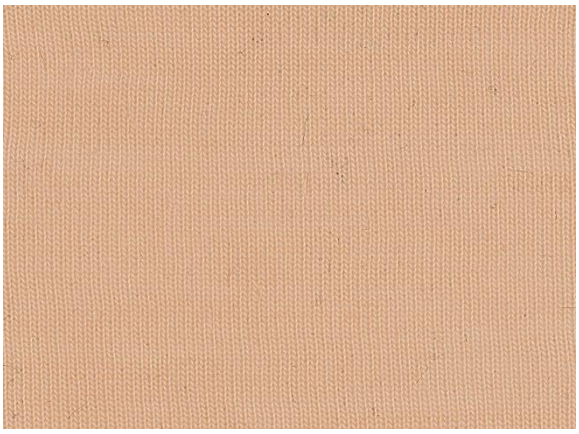
a) Rib Knits
b) Purl Knits
c) Jersey Knits

Rib knits are a combination of knit and purl stitches, purl knits are made of purl stitches alone and jersey knits are made of knits stitches on the front and purl stitches on the reverse.

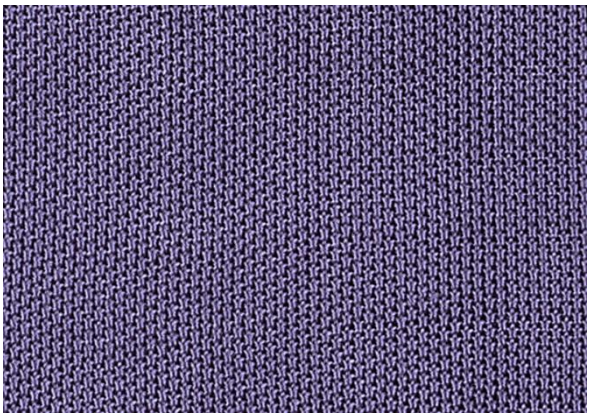
Some of the popular weft knits fabrics are:



INTERLOCK



SINGLE JERSEY



REVERSIBLE KNIT

RIB KNIT

Difference between warp and weft knitting

Basically warp and weft knitting process are totally different from one another. Following are the main differences:

a) LOOPS

In warp knitting, the loops are produced to the length of the fabric

In weft knitting, the loops are produced to the width of the fabric

b) ELASTIC

The warp knitting is elastic to the length

The weft knitting is elastic to the width

c) ELASTICITY

Elasticity of the warp knitted fabrics is less than weft knitted fabrics

Elasticity of the weft knitted fabrics is more than warp knitted fabrics

d) SHRINKAGE

Warp knitted fabrics has less shrinkage properties than weft knitted fabrics

Weft knitted fabrics has higher shrinkage properties as compared to warp knitted fabrics

e) COURSES

In the warp knitting, the courses are needed for each pattern row

In the weft knitting, the courses are equal to the pattern

f) YARN

In warp knitting, the yarns are supplied from beam

In weft knitting, the yarns are supplied from cone

g) WASHING

In the warp knitting, the fabrics created are suitable to dry wash

In the weft knitting, the fabrics created are suitable for hand wash

h) DESIGNING

In warp knitting, any design is done easily

In weft knitting, all types of design are complex

i) TYPE OF FABRICS

Warp knitting is suitable for producing coarse fabrics

Weft knitting is suitable for producing thin fabrics