



# KNOWLEDGE OF TEXTILE GOODS

LECTURER:

ING. MARIE HAVLOVÁ, PH.D.

## Lecture No. 7:

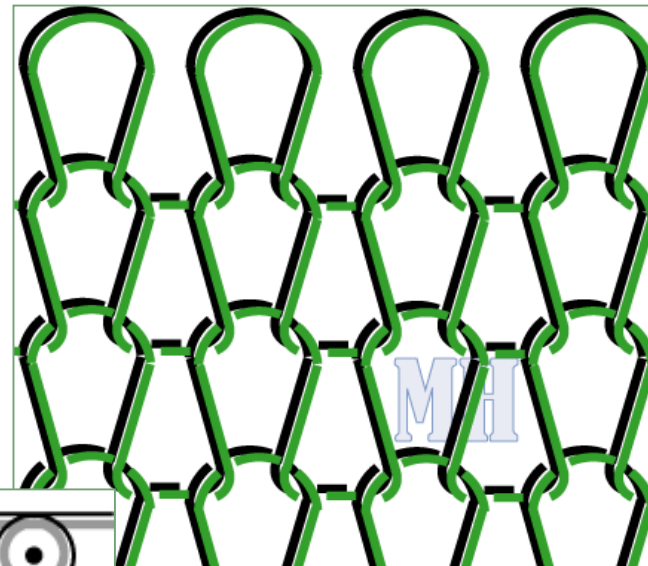
- Weft-knitted fabrics – selected types

# PLATED JERSEY FABRIC

- Weft-knitted **jersey-based** fabric in which one yarn is visible on that surface that exhibits the face side of the stitches, whilst the other yarn is visible on that surface that exhibits the reverse side of the stitches.
- Plating usually involves the knitting of two yarns of different colour, different lustre, different structure or different composition.

## Note:

The **plated fabric** is generic name applied to weft-knitted fabrics involving the controlled knitting of two ends of yarn such that each yarn takes up a definite position within the stitch.





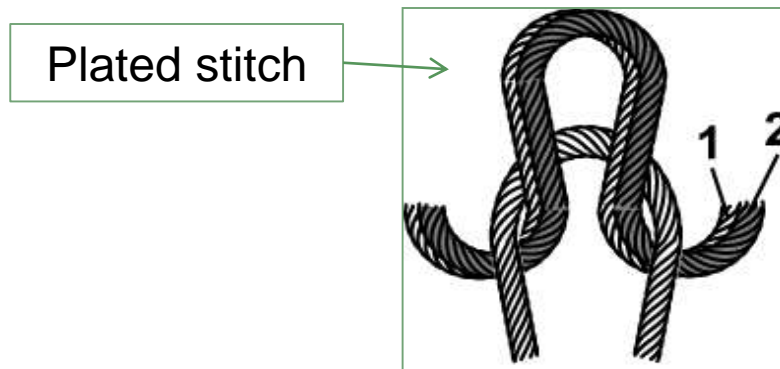
*Plated jersey fabric  
– technical face*



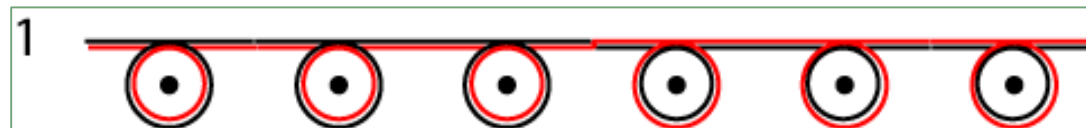
*Plated jersey fabric  
– technical back*

# REVERSE-PLATED FABRIC

- Weft-knitted jersey-based fabric in which the normal plating relationship between the yarns is reversed in certain stitches within the same course to give a patterned or fancy effect.



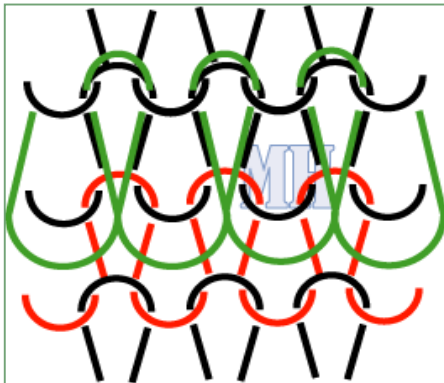
1 – back yarn  
2 – plating yarn



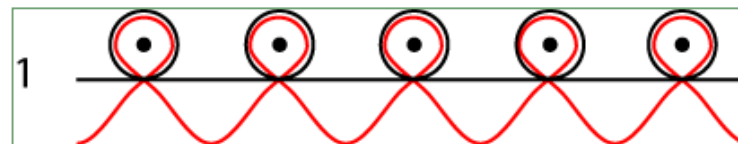
# TERRY FABRIC

## PLUSH FABRIC

- Weft-knitted jersey-based plated fabric in which the ground yarn forms normal sinker loops and the pile yarn forms elongated sinker loops protruding from the technical back of the fabric.

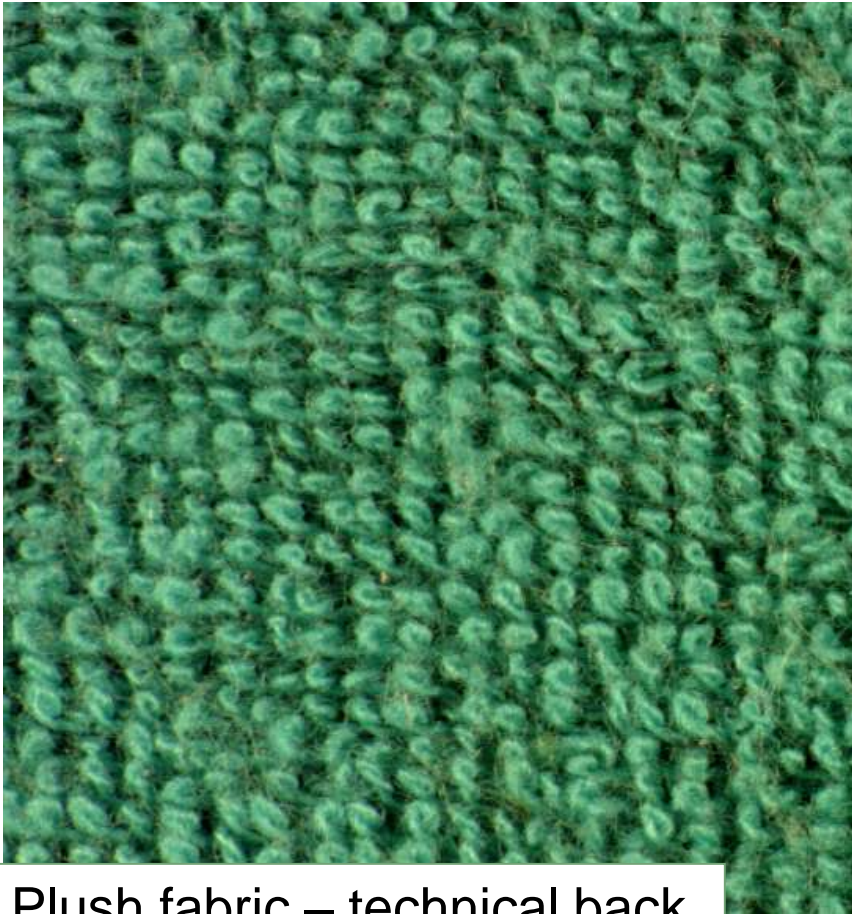
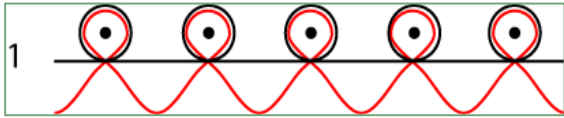


*Terry loops*



*Yarn path notation*

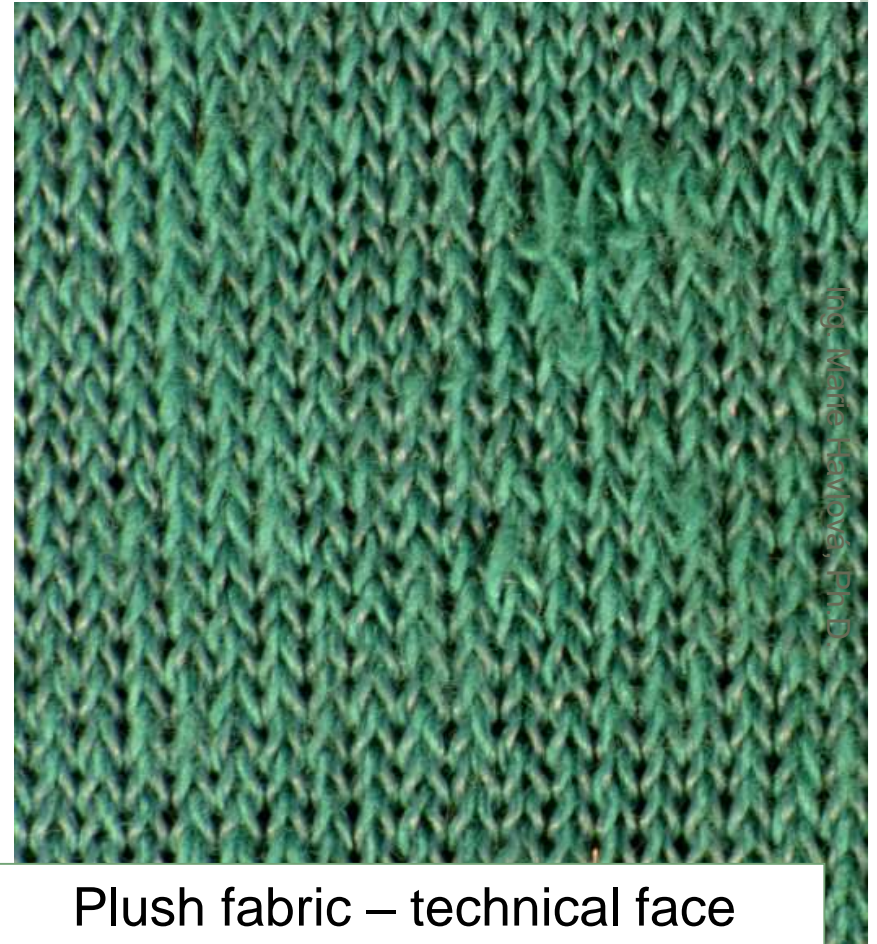




Plush fabric – technical back



Usually effect side of the fabric



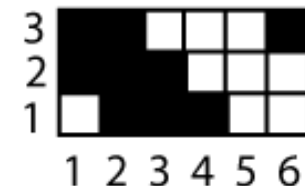
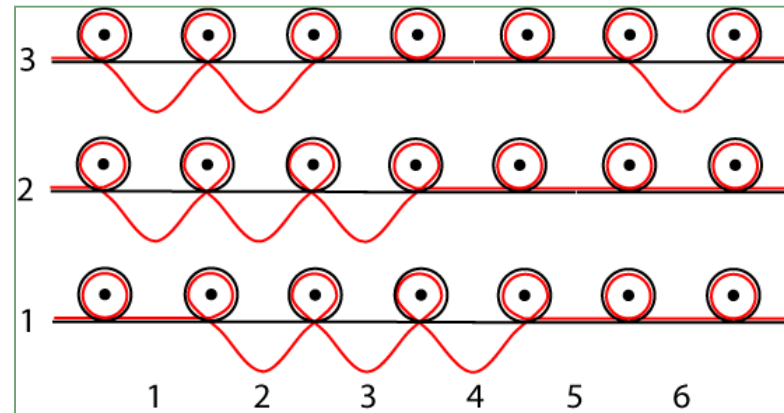
Plush fabric – technical face



Usually reverse side of the fabric

# DESIGN MOTIFS

- The plush loops may be of different length → **figured terry**.
- The plush loops may be knitted in different colours → **two-colour terry**.



*Schema of  
pattern repeat –  
for example*



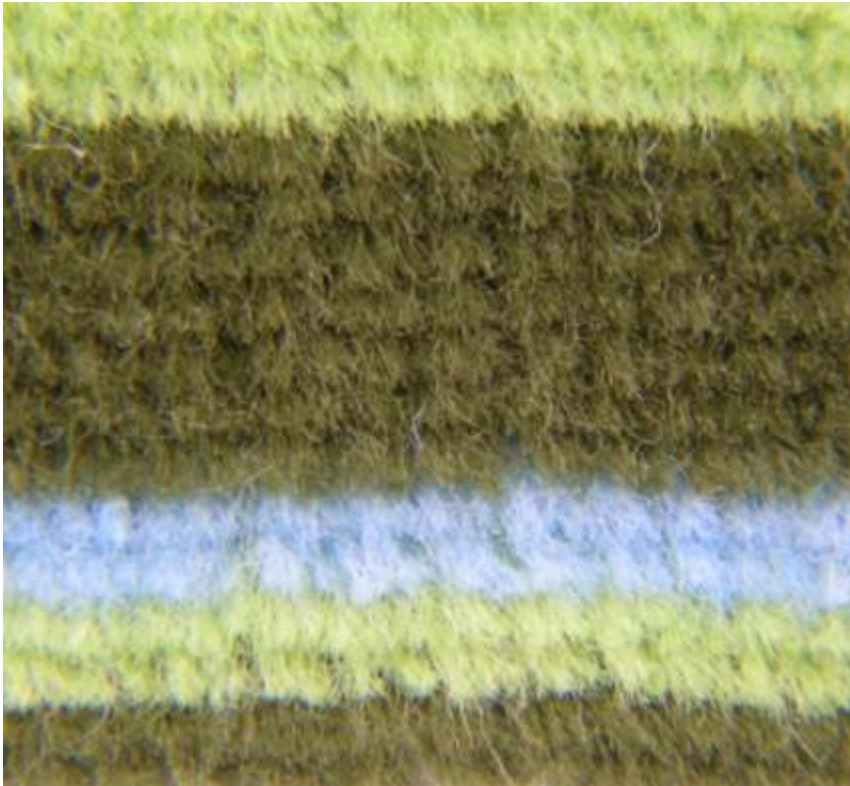


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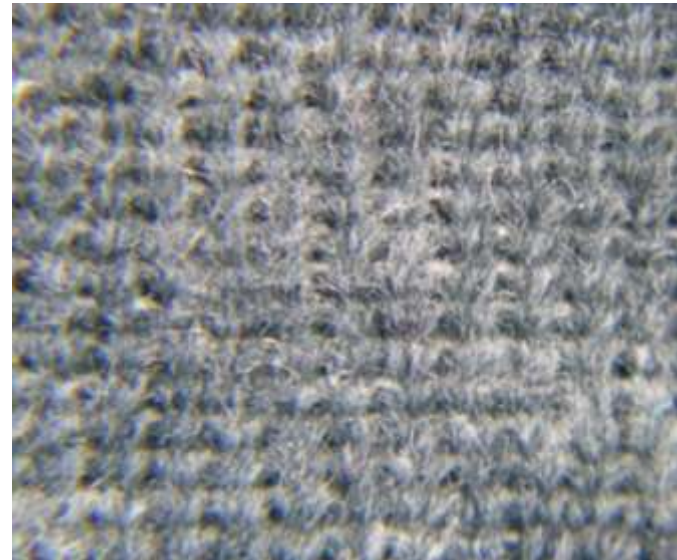


# PILE FABRIC

- When the elongated sinker loops are uncut, the terms „plush fabric“ or „terry fabric“ are used. When they are cut, the term pile fabric is used.

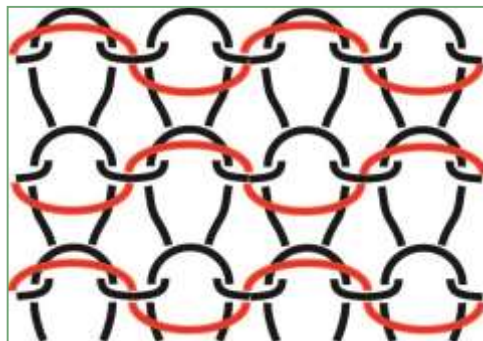


Note: A **high-pile fabric** has a pile length of more than 10 mm.



# LAID-IN JERSEY FABRIC

- Generic name applied to weft-knitted **jersey-based** fabrics that contain non-knitted yarns incorporated into the ground fabric on a **tuck-and-miss basis** evolving in either coursewise or coursewise/walewise direction.
- The **laid-in yarns** are often of **low twist** in order to facilitate **subsequent brushing** of the fabric.
- **Two-thread fleecy fabrics** – weft knitted jersey-based fabrics incorporating coursewise laid-in yarns that are usually of a higher linear density than the ground yarns.
- Two-thread fleecy fabric 1x1, is known as **knitted hopsack**.



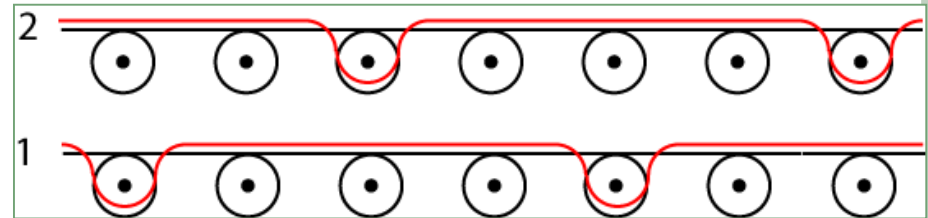
*Knitted hopsack*



# ORDINARY LAID-IN FABRIC

It is two-thread fleecy fabric

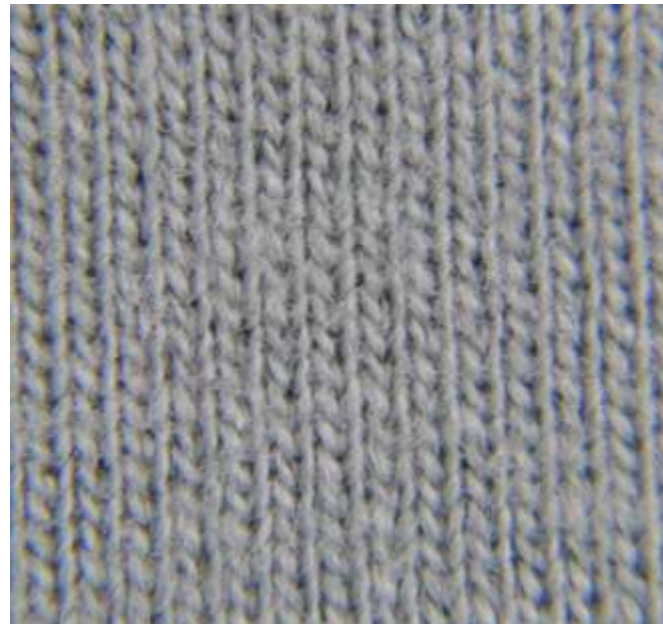
- When the laid-in yarn is incorporated on a 1 x 3 tuck-and-miss basis, the fabric is known as ordinary laid-in fabric.



*Yarn path notation*



Technical back



Technical face – usually effect side of a garment



# 1 X 1 TUCK

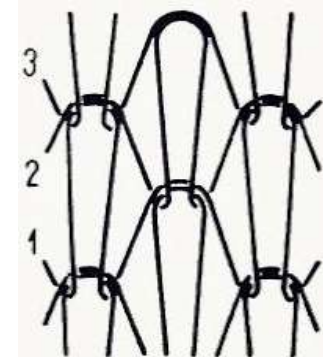
TUCK RIPPLE

SINGLE CROSS TUCK

- Weft-knitted **jersey-based** fabric consisting in each repeat of a knit-tuck course with tucking on alternate needles followed by another knit-tuck course with tucking on the intervening needles.

Note: 1 x 1 tuck shows a honey-combed effect on the technical reverse side.

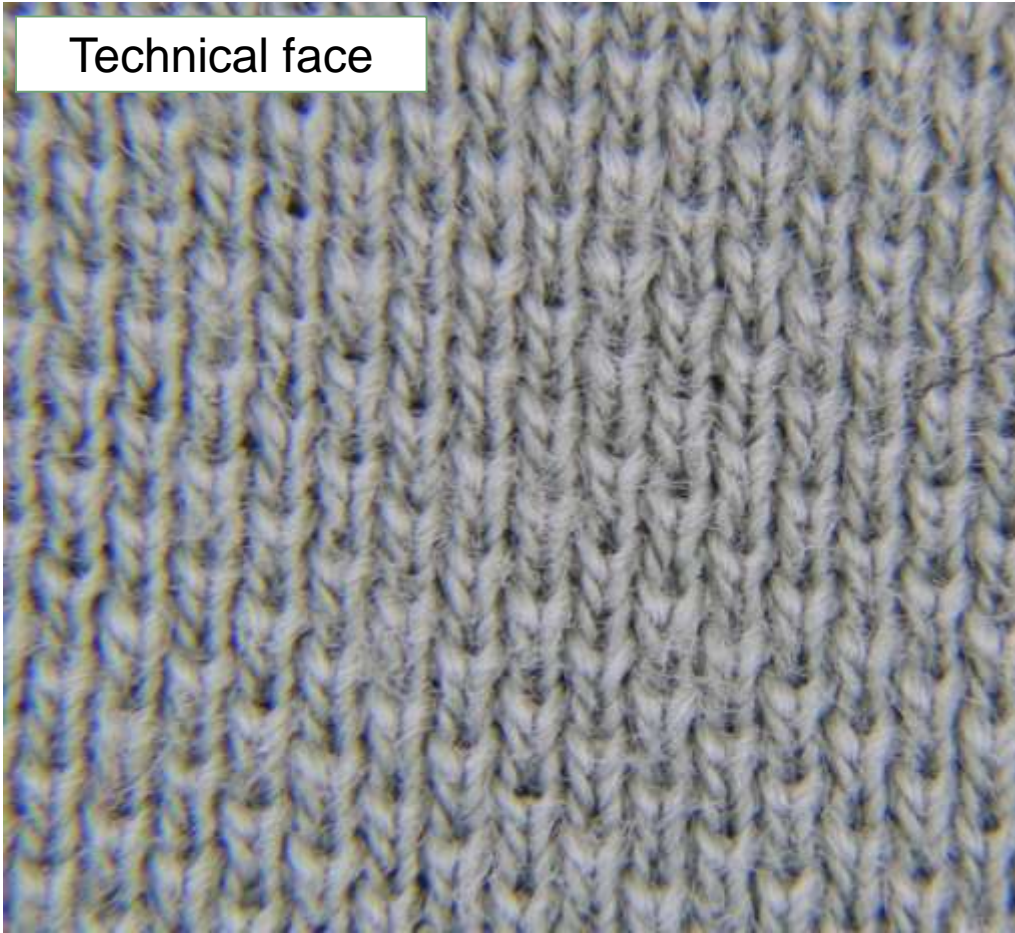
4	.	V	.	V
3	V	.	V	.
2	.	V	.	V
1	V	.	V	.
	1	2	3	4



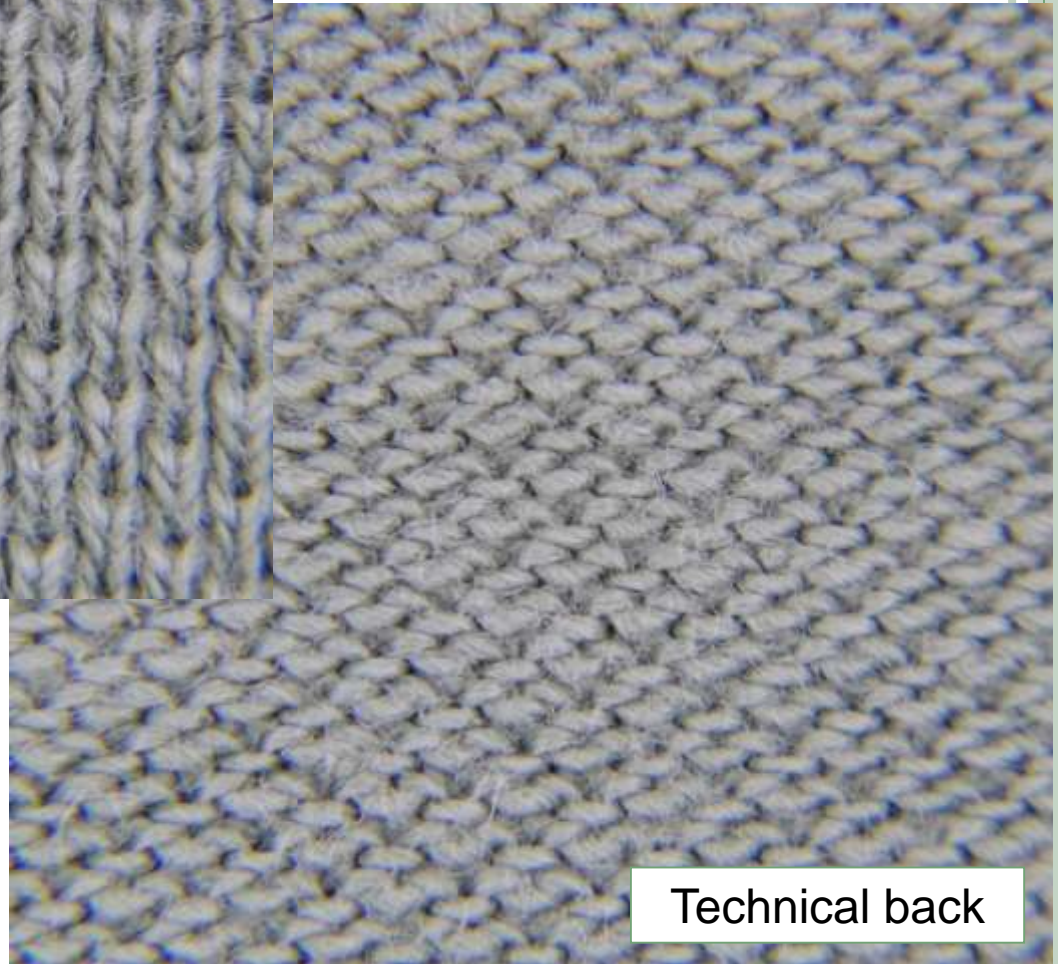
1 x 1 tuck



Technical face



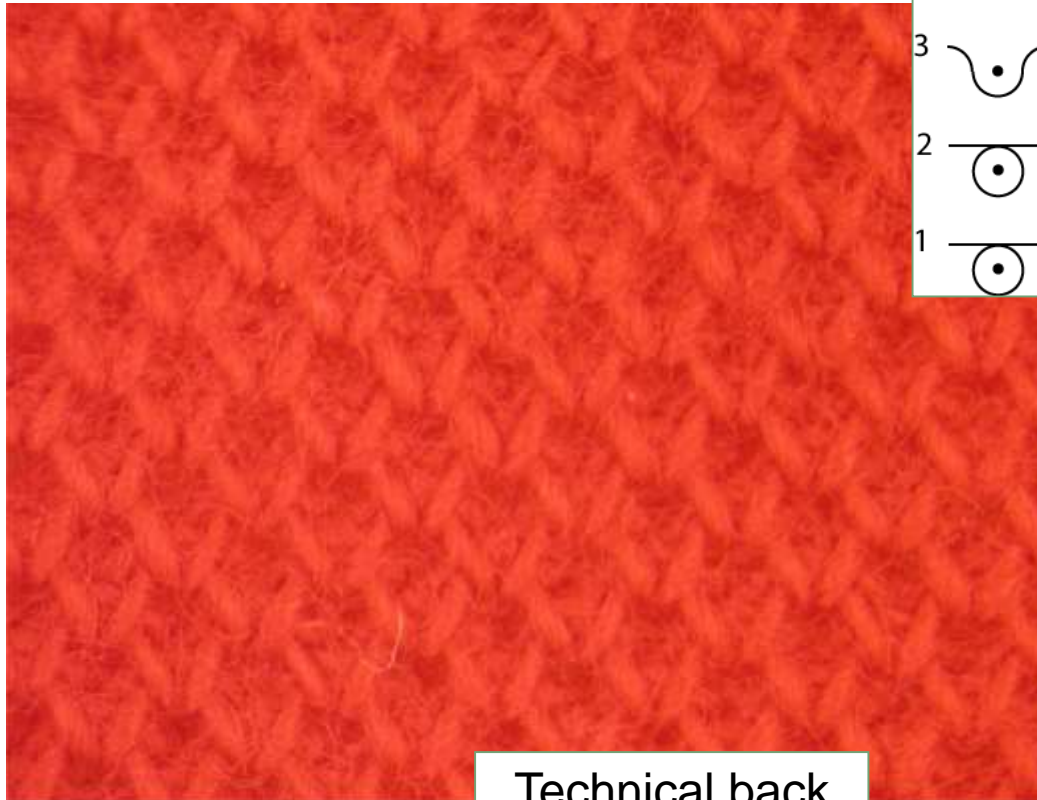
1x1 tuck



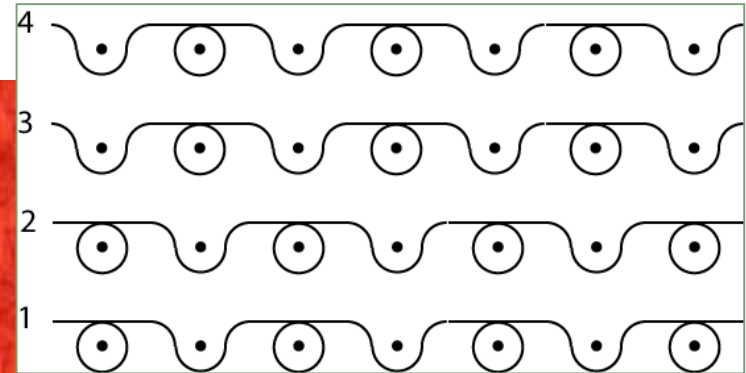
Technical back

# DOUBLE 1 X 1 TUCK

- Two knit-tuck courses knitted on alternate needles are followed by two knit-tuck courses knitted on the intervening needles in each repeat.



Technical back

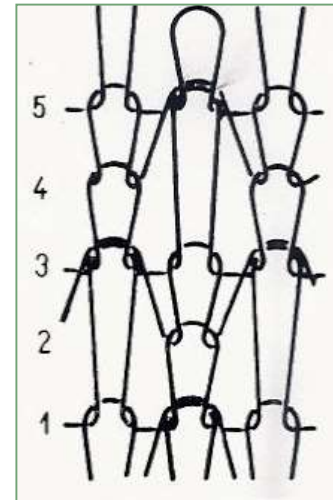
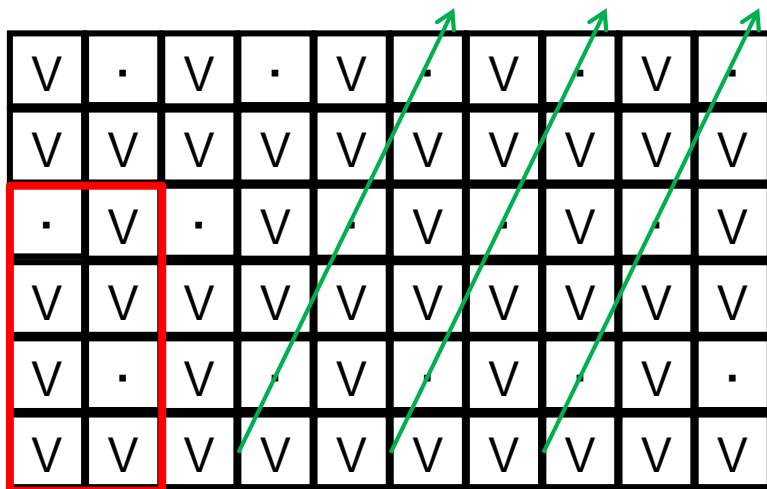


4	.	V
3	.	V
2	V	.
1	V	.
	1	2



# CROSS TUCK 1 X 1

- Weft-knitted **jersey-based** fabric consisting in each repeat of a knit-tuck course knitted on alternate needles in the first course, of a knit-tuck course knitted on the intervening needles in the third course, and of **plain jersey course** knitted in the second and fourth courses.

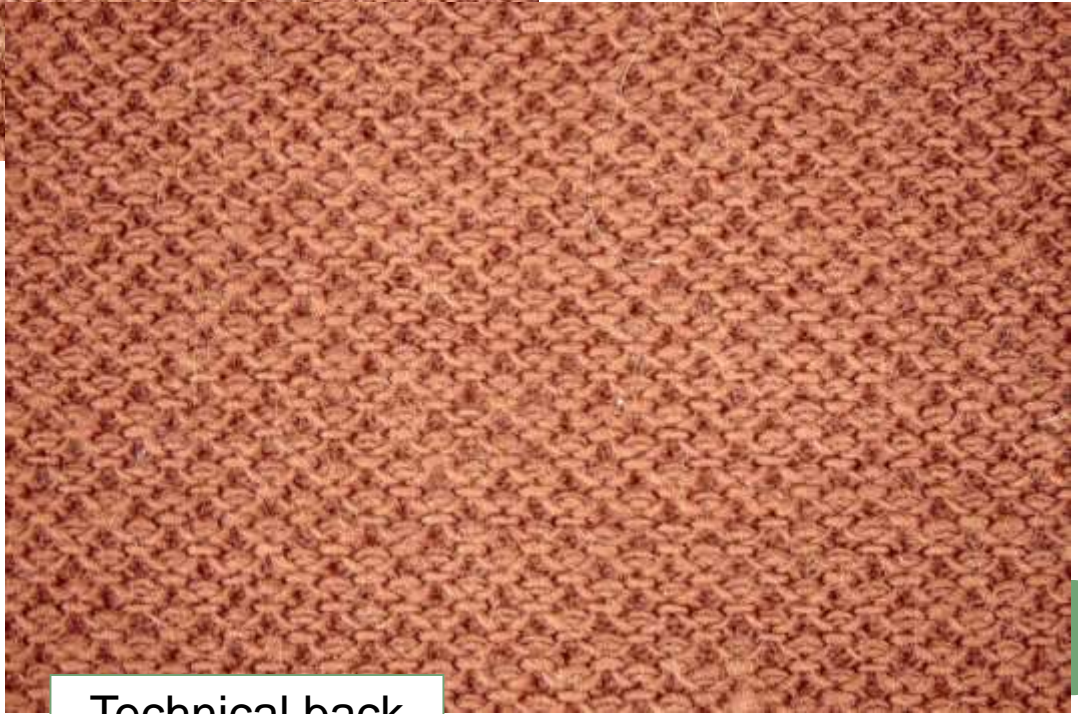


- This fabric shows a cellular effect on the technical face side and is sometimes (erroneously) designated as „single pique“.





Technical face



Technical back

.	V
V	V
V	.
V	V



# SINGLE RIB FABRIC

- Weft-knitted **rib-based** fabric in which stitches of single wales intermeshed in one direction are separated by stitches of one or more wales inter-meshed in the other direction.
- Common examples are 1x1, 2x1, 3x1, 4x1, 6x1 rib.



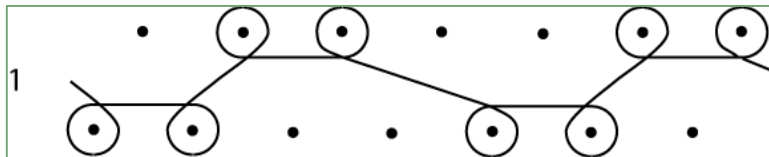
Single rib fabric 4x1



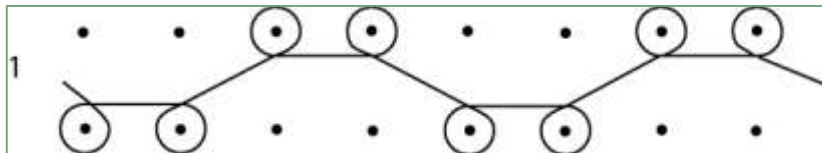
# 2 X 2 RIB (WITH 2X2 NEEDLE SET OUT)

## TWO-BY-TWO RIB FABRIC

- Weft-knitted **rib-based** fabric in which two adjacent wales of face stitches alternate with two adjacent wales of reverse stitches within the repeat.

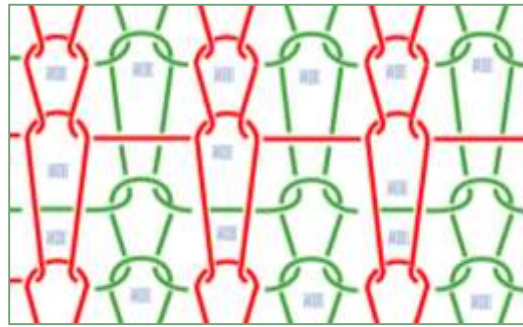


- 2x2 rib is usually knitted with interlock gating.

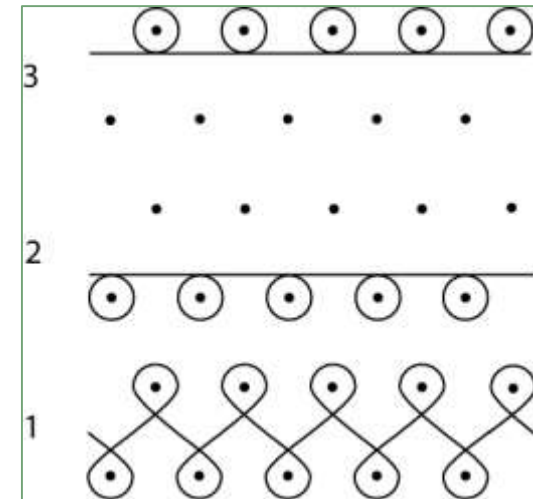


# MILANO RIB

## FULL MILANO



- Weft-knitted **rib-based** fabric in which a 1x1 rib course is followed by a plain jersey course knitted on one side of the fabric, followed by a plain jersey course knitted on the other side of the fabric in a **three-course repeat cycle**.
- This fabric shows on both fabric sides courses having small stitches that alternate with courses having somewhat bigger stitches whereby the top arcs of adjacent stitches are perfectly in line as in 1x1 rib fabric.



*the yarn path notation*

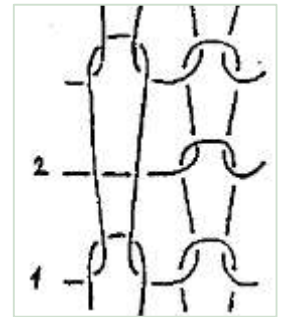




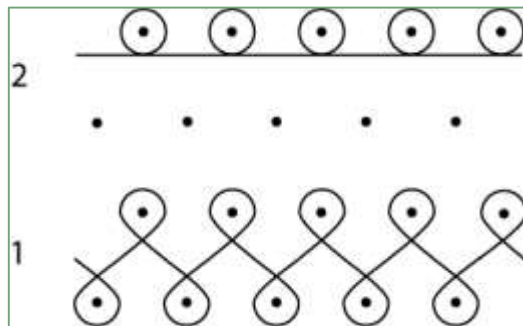
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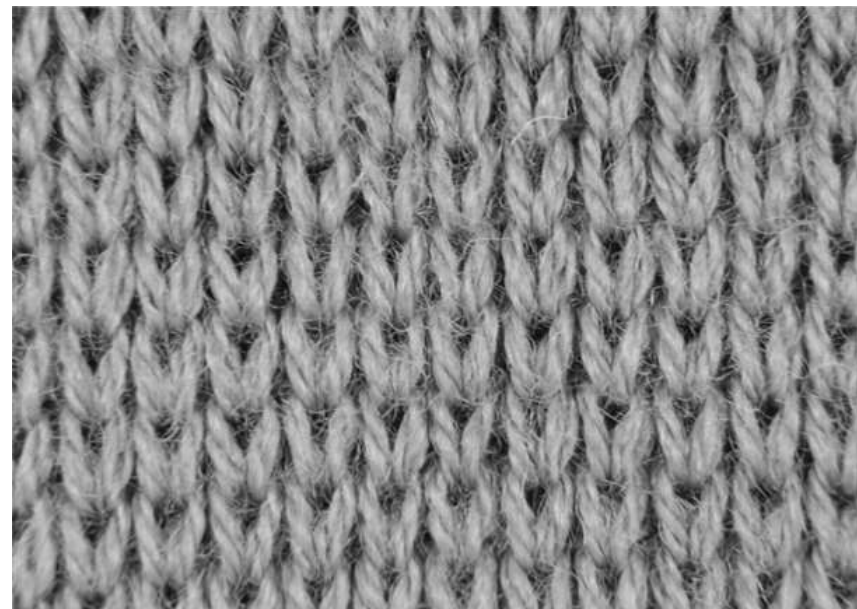
# HALF-MILANO RIB



- Weft-knitted **rib-based** fabric in which a 1x1 rib course is followed by a plain jersey course in a **two-course repeat cycle**.
- This fabric shows on one fabric side **double the number** of courses than on the other, has **less elasticity than 1x1 rib** fabric and has a tendency to curl towards that fabric side which shows fewer courses.

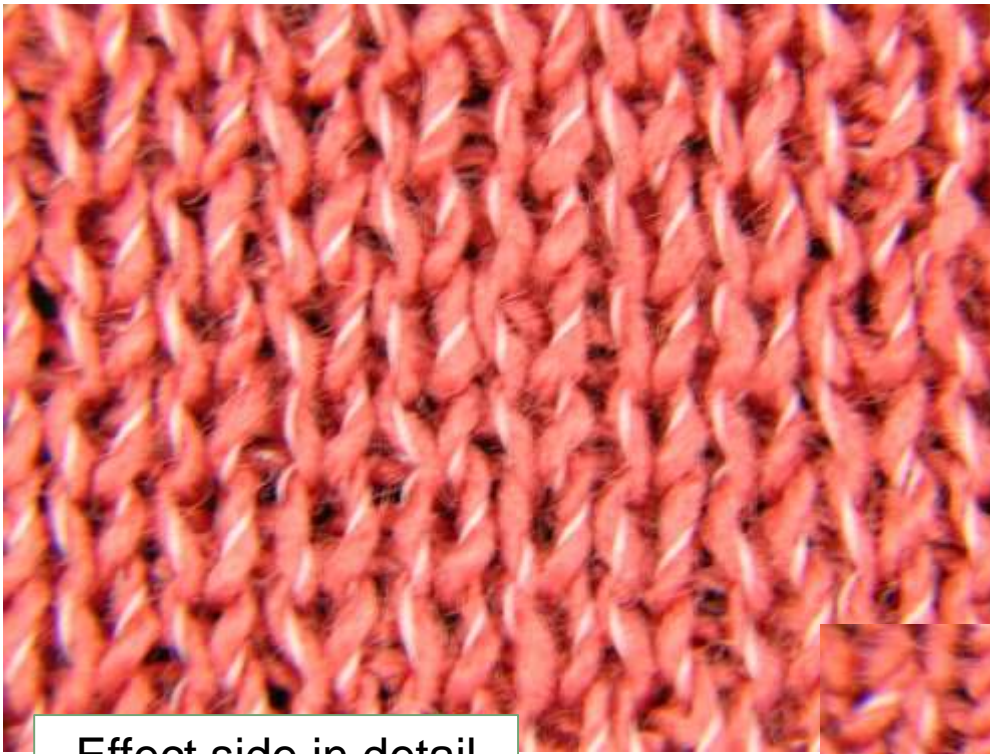


*The yarn path notation*



## Half-Milano rib

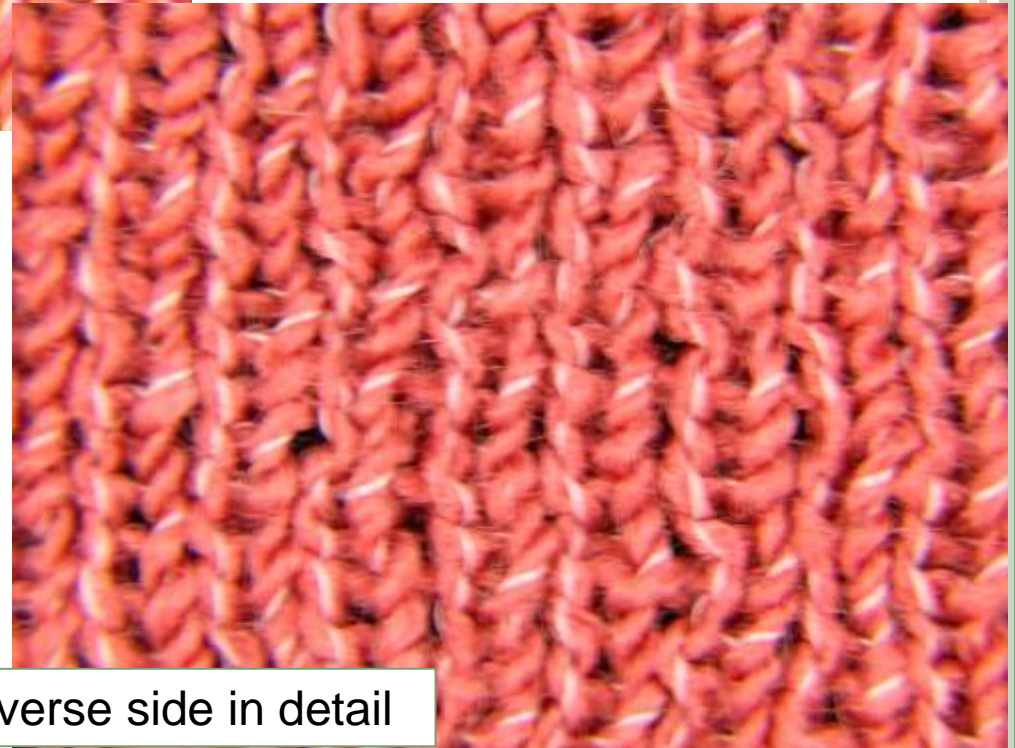
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Effect side in detail



On the effect side the face stitches are **extended over the course.**

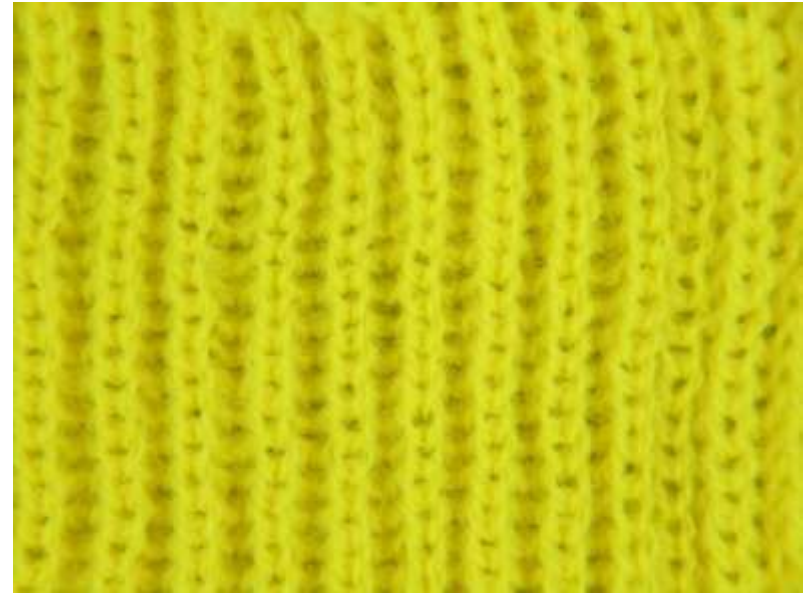


Reverse side in detail

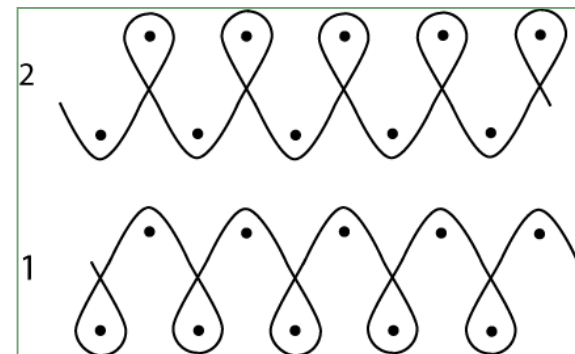
# FULL CARDIGAN RIB

## POLKA RIB

- Weft-knitted **rib-based** fabric every stitch of which consists of a tuck stitch.
- To produce this fabric, all needles tuck on one set and knit on the other, while in the second course of the repeat **the order of knitting and tucking is reversed**.
- In **full cardigan shot rib** two yarn of different colour alternate in consecutive courses so that one colour appears on the face and the other on the reverse side of the fabric.



Fabric has the same appearance on the both – effect and reverse side.

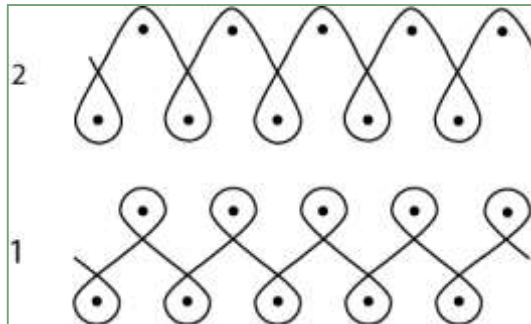


*The yarn path notation*

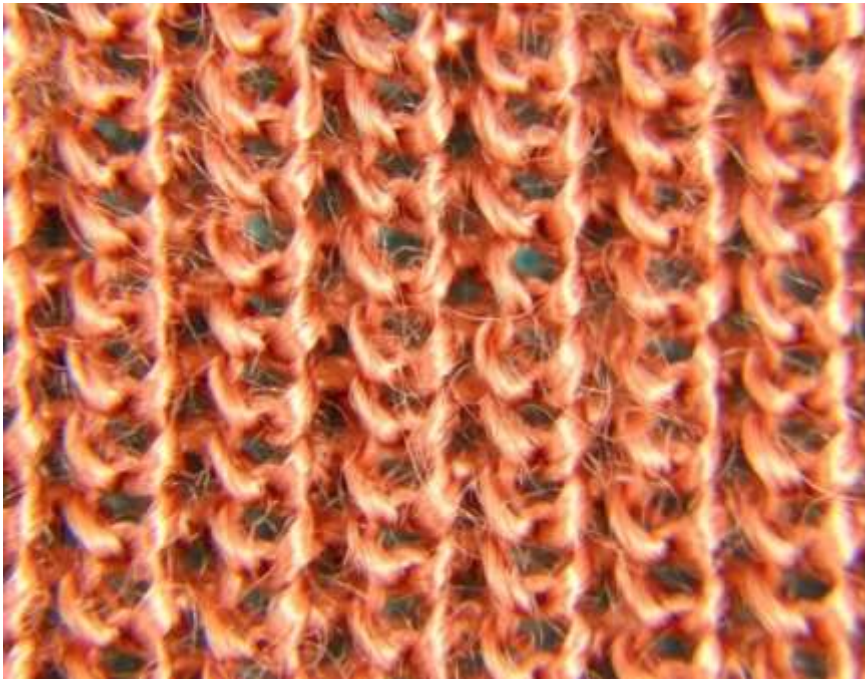
# HALF CARDIGAN RIB

## ROYAL RIB

- Weft-knitted **rib-based** fabric in which alternate wales consist of knitted stitches and the intervening wales consist of tuck stitches.
- To produce this fabric, in the first course all needles tuck on one set and knit on the other, while in the second course of the repeat, all needles of both sets are in operation.



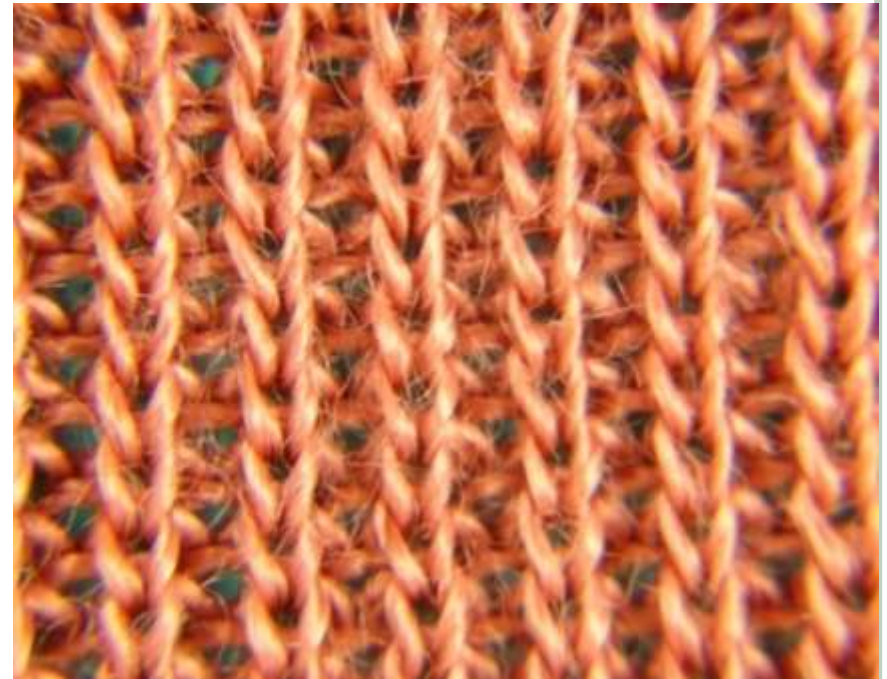




*Effect side of fabric*

On the effect side the stitches are enlarged into a round shape of „pearls“.

Pearl stitch



*Reverse side of fabric*

# MOSS-STITCH FABRIC

- Weft-knitted **purl-based** fabric in which face and reverse stitches are knitted alternately in one course and in which this order is reversed in the following course.
- In a **double-moss-stitch fabric**, face and reverse stitches are knitted alternately in two consecutive courses.



V	O	V	O
O	V	O	V

*Moss-stitch fabric*





V	O	V	O
V	O	V	O
O	V	O	V
O	V	O	V

*Double moss-  
stitch fabric*



# BASKET PURL FABRIC

- Weft-knitted **purl-based** fabric that shows a design effect obtained by the difference in texture between areas comprising plain and purl stitches respectively, giving the impression of one structure being superimposed on the other.
- Basket purl fabrics may have a 4x3, 5x3 or 7x3 selection of face and reverse stitches.



O	O	O	O	V	V	V	V
O	O	O	O	V	V	V	V
O	O	O	O	V	V	V	V
V	V	V	V	V	V	V	V
V	V	V	V	O	O	O	O
V	V	V	V	O	O	O	O
V	V	V	V	O	O	O	O
V	V	V	V	V	V	V	V

*Basket purl fabric 4x3*

