Woven Fabric Defects and Their Images:

In the textile industry, woven fabric is produced by interlacing warp and weft yarn. Faulty woven fabrics hamper the total quality of woven garments such as shirts, pants, trousers, jackets, etc. As a textile engineer, you should know about the major woven fabric faults produced during woven fabric manufacturing. As its importance, this article has shown those woven fabric faults with their images.

Major Defects Found in Woven Fabrics:

Various types of faults found in woven fabrics have mentioned below:

1. Bad selvage,
2. Broken ends or warp,
3. Broken picks or weft,
4. Loose warp,
5. Loose weft or snarl,
6. Double-end,
7. Tight end,
8. The float of warp,
9. Wrong end color,
10. Miss pick,
11. Double pick,
12. Weft bar,
13. Ball,
14. Hole,
15. Oil spot,
16. Tails out,
17. Temple mark,
18. Reed mark,
19. Slub,
20. A thick and thin place.

All the above-woven fabrics faults have explained in the following:

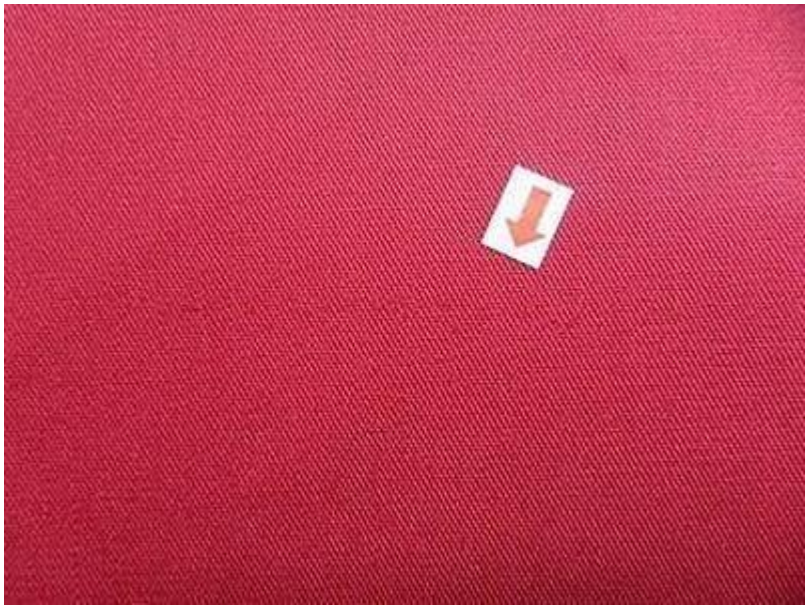
1. Bad or defective selvage:

Bad selvage in woven fabrics due to faulty weaving. Here, the warp ends being set too far apart for the thickness of the yarn or in the finished fabric.

Defective selvage in fabric

2. Broken ends or warp:

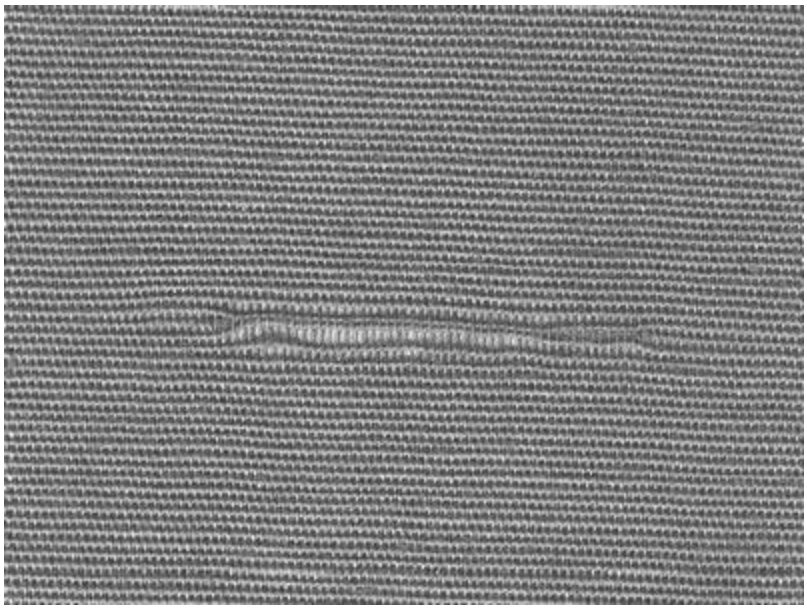
A defect in the woven fabrics caused by a warp yarn that was broken during weaving or finishing.



Broken ends

3. Broken picks or weft:

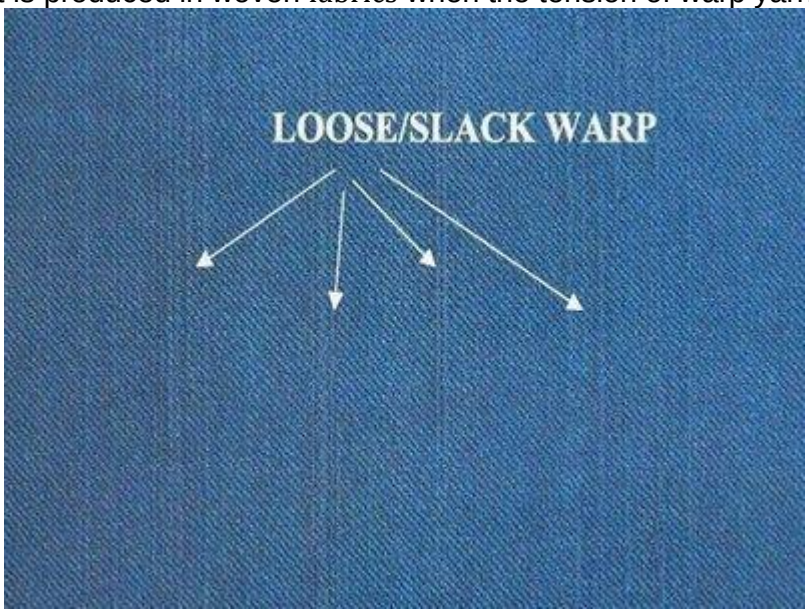
A filling yarn that is broken in the weaving of fabric.



Broken picks

4. Loose warp:

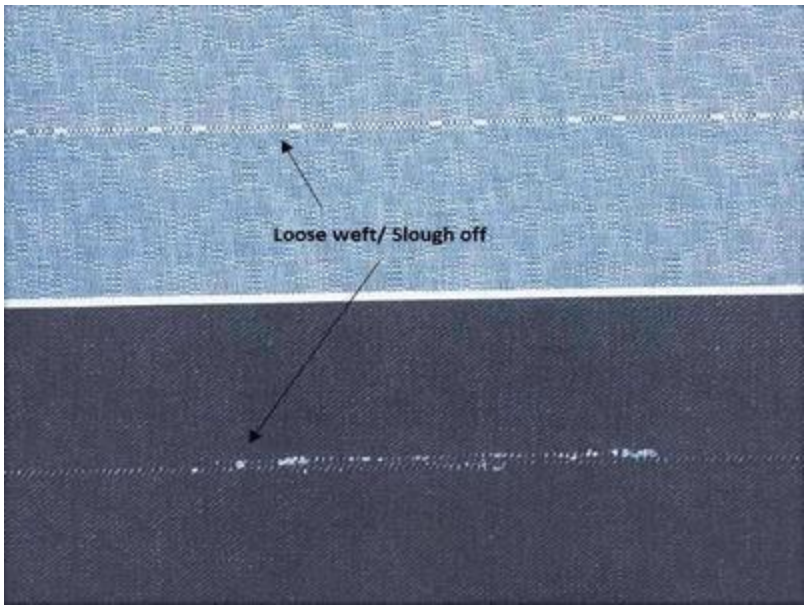
This type of fault is produced in woven fabrics when the tension of warp yarn is slow.



Loose-warp

5. Loose weft or snarl:

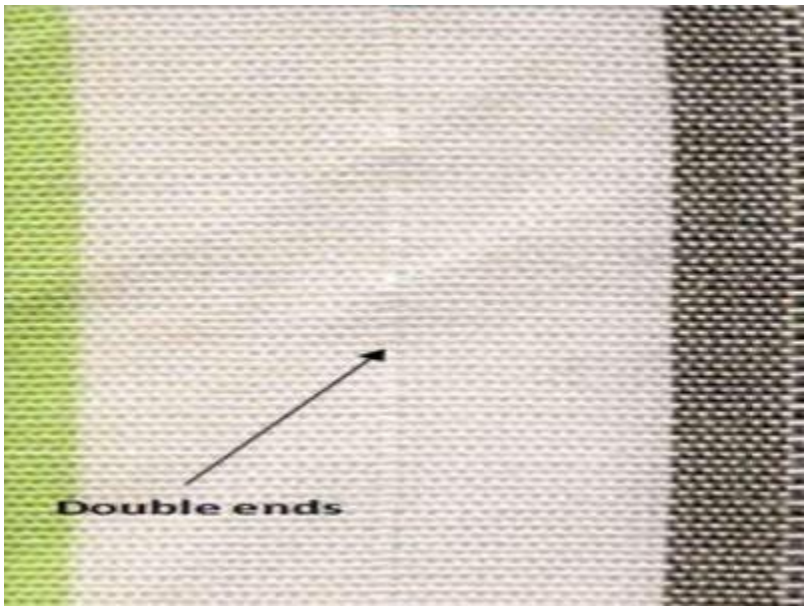
It is produced in woven fabrics due to the looseness of filling yarn.



Loose weft or snarl

6. Double ends:

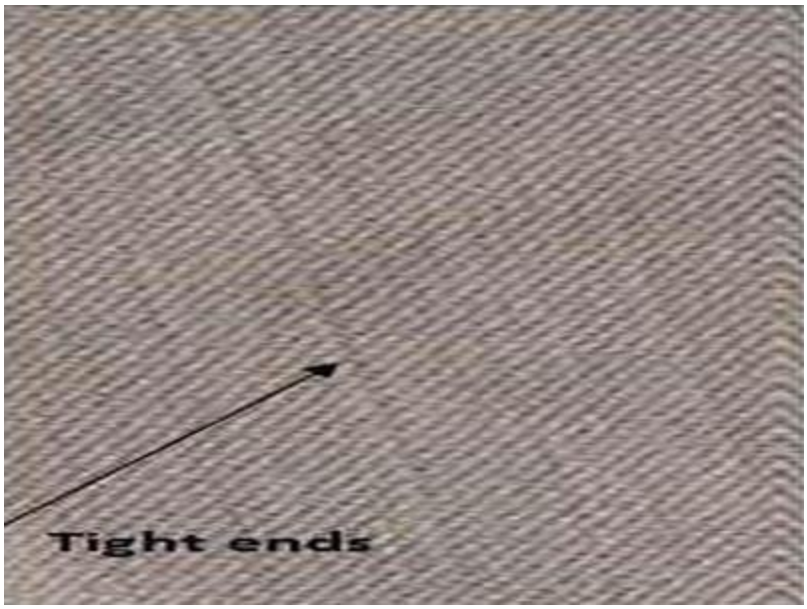
This kind of fault is produced in woven fabrics when the two ends of warp sticks get together after sizing.



Double ends

7. Tight ends:

If the tension of warp yarn is more than the other ends present in the loom then this type of fault is produced in woven fabrics.



Tight ends

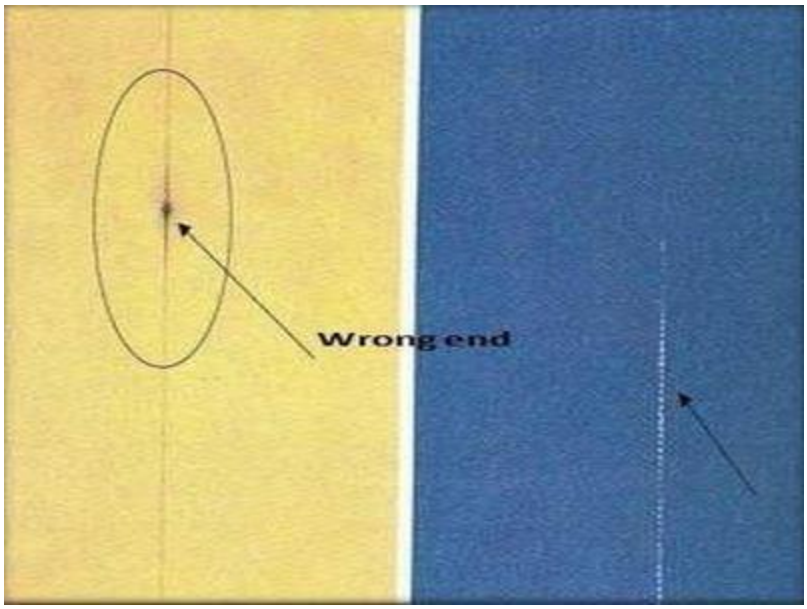
8. Float of warp:

If someone pulls the fabric together with the cloth roller intentionally or unintentionally then this kind of defect is produced in woven fabrics.

Float of warp

9. Wrong end color:

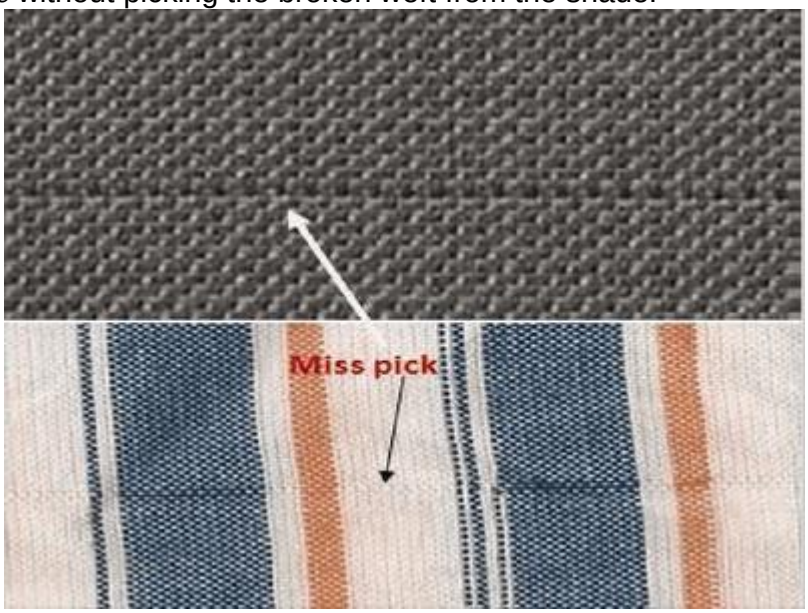
It is produced in the woven fabric due to the wrong drawing of colored yarn.



Wrong end color

10. Miss pick:

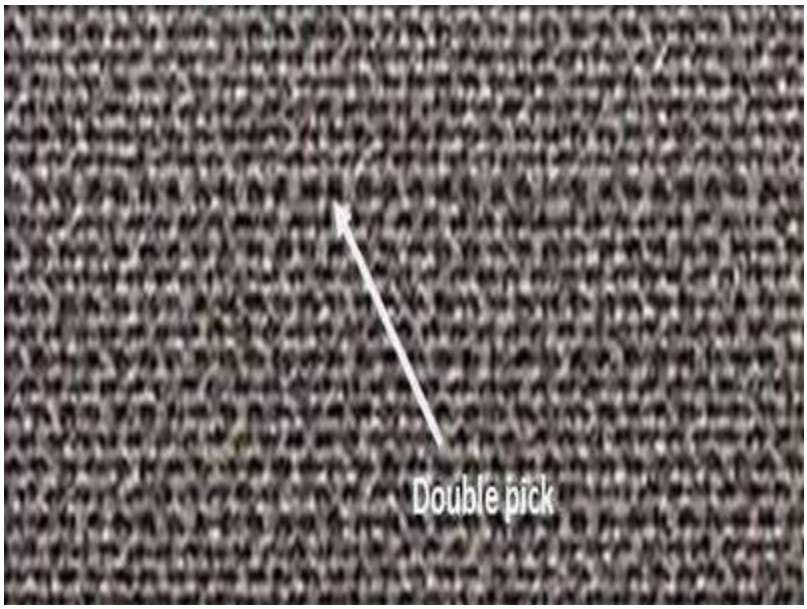
This kind of defect is produced in the woven fabric when the operator starts a stopped machine without picking the broken weft from the shade.



Miss pick

11. Double pick:

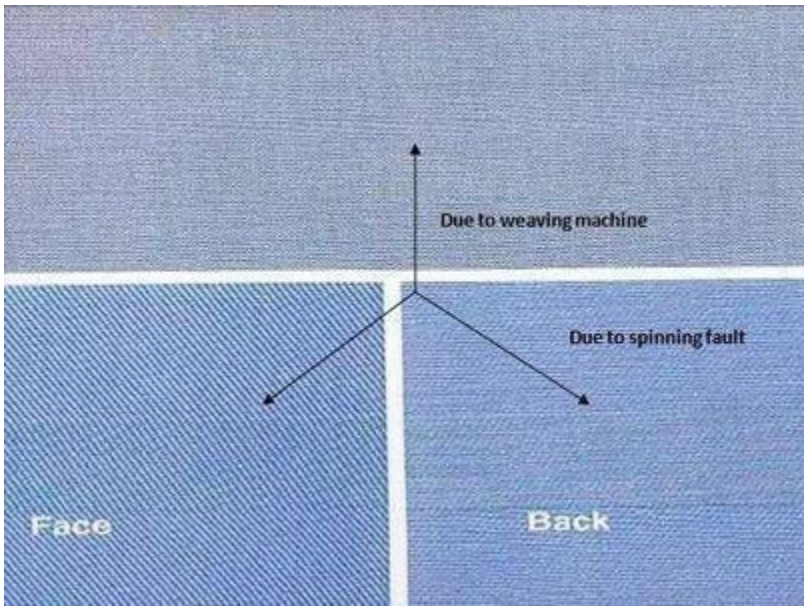
It is produced in the woven fabric when the cutter doesn't work properly.



Double picks

12. Weft bar:

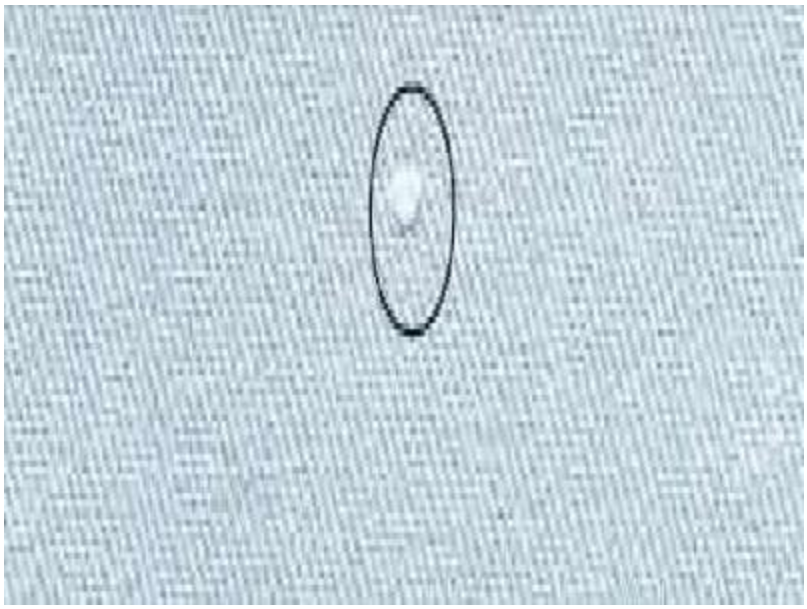
When the count of yarn varies from one cone to another cone then a bar of weft will be appeared in the fabric after weaving.



Weft bar

13. Ball:

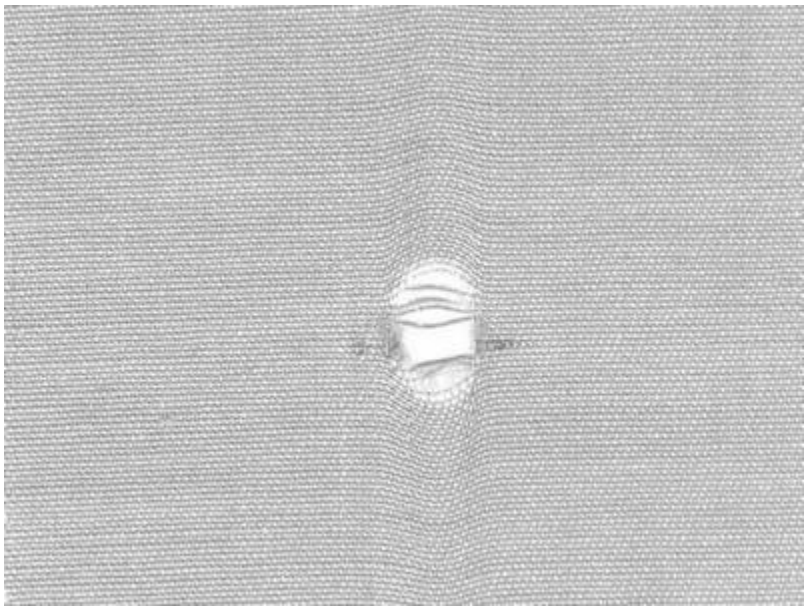
If the warp is too hairy then the reed will create a ball in warp yarn in between the reed and heald shaft. If the ball is small enough to pass through the dent of reed then those will form the ball in fabric.



Ball

14. Hole:

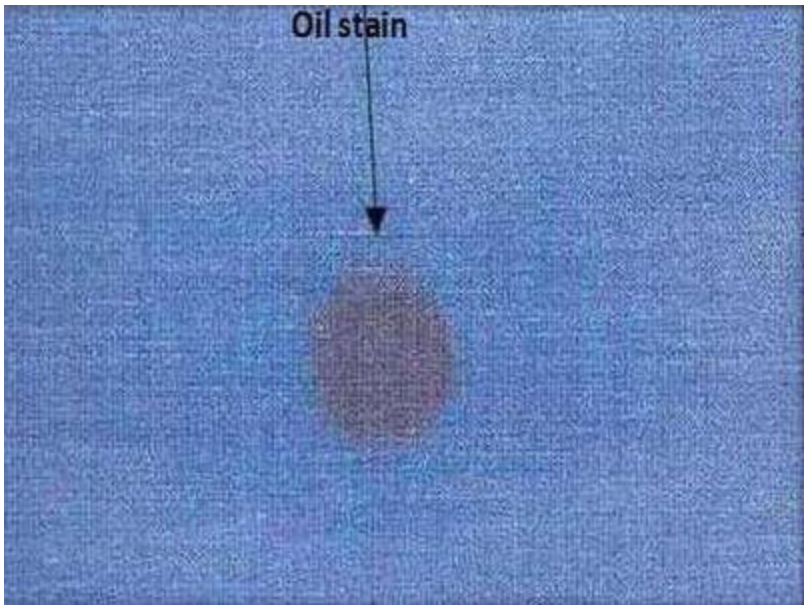
A fabric imperfection in which one or several yarns are sufficiently damaged to create an opening.



Hole

15. Oil spot or stain:

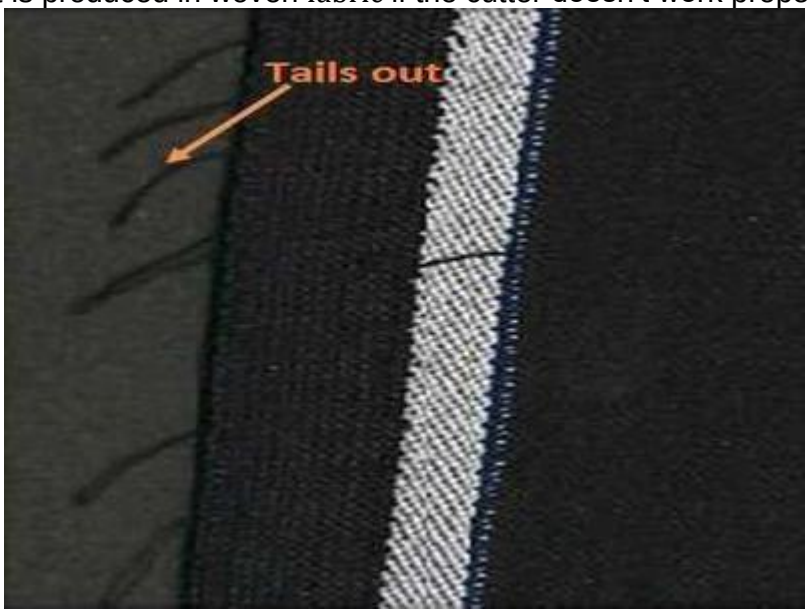
Discoloration on a local area of a substrate that may be resistant to removal by laundering or dry cleaning. It occurs during spinning, weaving, or finishing. It is also often seen in the woven fabric. It is also produced in woven fabric if too much oiling has been done on the loom parts.



Oil spot

16. Tails out:

This kind of fault is produced in woven fabric if the cutter doesn't work properly.



Tails out

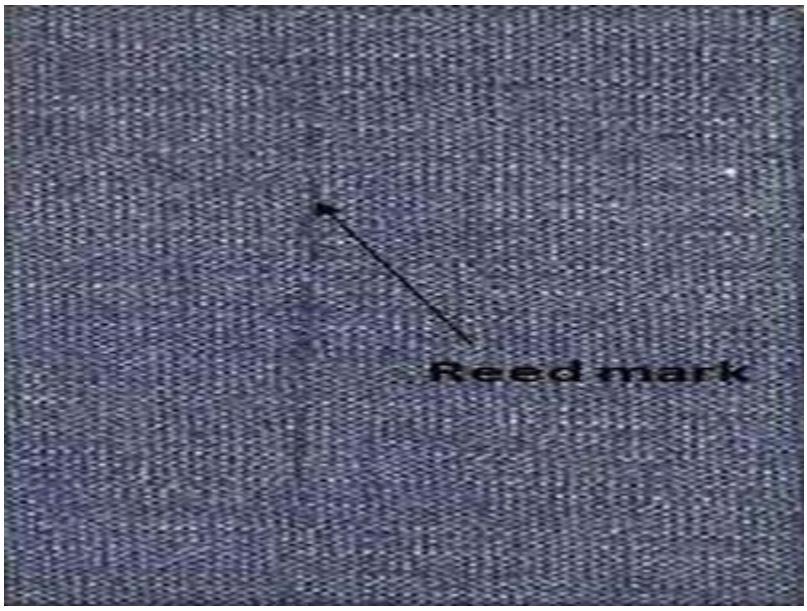
17. Temple mark:

If the placement of the ring in the temple bar is wrong or the pressure of the temple to the fabrics is too high then this type of fault is produced.

Temple mark

18. Reed mark:

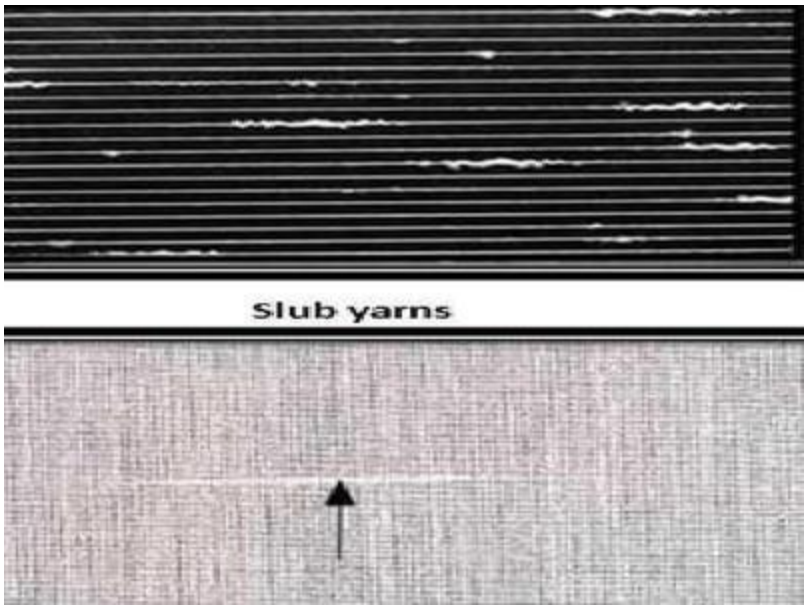
In woven fabric, a crack between the groups of warp ends either continuous or at intervals. It's maybe caused by the wrong drawing-in of the warp or damage to the reed wires.



Reed mark in woven fabric

19. Slub:

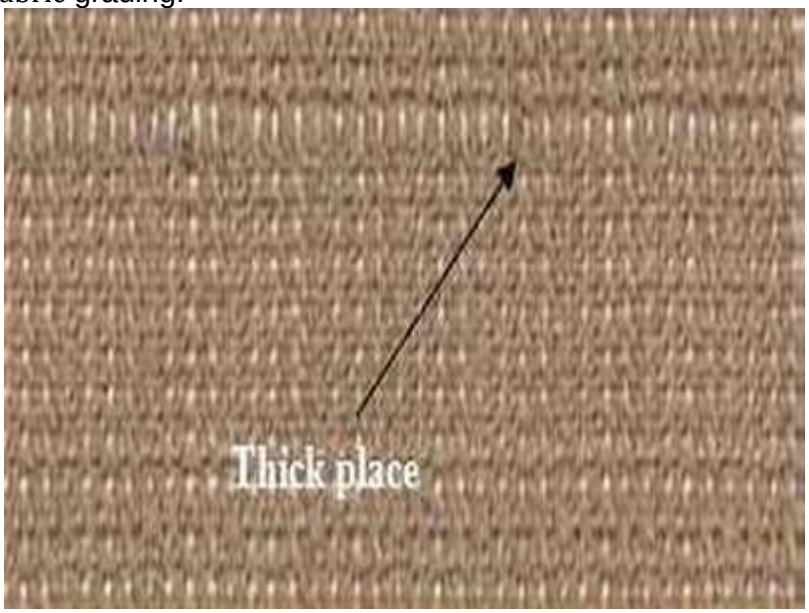
If the yarn contains an unexpected slub in it then that slub will appear in the fabric as a fault.



Slub

20. Thick and thin place:

Fabric defect in which fabric count varies more than a specified percentage from the intended count. If the thick or thin place is more than one inch (2.54cm) wide then it is considered a major defect in fabric grading.



A thick and thin place

A segment of yarn at least ¼ inch (0.6cm) long that is noticeably thicker than adjacent portions of yarn is called the thick place. A segment of yarn at least 25% smaller in diameter than adjacent portions of yarn is called the thin place.