4 Point System Fabric Quality

In 4-point system fabric quality is evaluated by unit points/100 sq. yds. Normally fabric roll containing 40 points per 100 square yard are acceptable. Example: A fabric roll 120 yards long and 46 inch wide contains following defects.

HomeFabric

How to use 4 Point System in Fabric Inspection?

How to use the 4 point system for fabric inspection? Provide me an example with calculation. ...

Fabric inspection machine

Answer:

4 Point system for fabric inspection is widely used in apparel industry for fabric quality inspection. To use this system you have to know following things.

1. Fabric inspection method or preparation

2. Criteria of giving penalty points based on defects and defect length.

3. Calculation method of total penalty points for total defects found in a fabric roll or thān

4. A Check sheet or format for recording data

5. Knowledge of different types of defects (how a defect looks and its appearance)

Fabric inspection method or preparation

[Essential Fabric Quality Reports for Bulk Cutting Approval of Fabrics](#)

Criteria for giving penalty points

In the following table the penalty evaluation points has been given for different length of fabric defect and dimension of holes.

Table -1

Size of Defect	Penalty Points
Length of defects in fabric (either length or width)	
Defects up to 3 inches	1
Defects > 3 inches ≤ 6 inches	2
Defects > 6 inches ≤ 9 inches	3
Defects > 9 inches	4
Holes and openings(largest dimension)	
1 inch or less	2
Over 1 inch	4

Calculation of total points per yards

In 4 point system fabric quality is evaluated by unit **points/100 sq. yds**.

Points / 100 sq. yd. = (Total points in roll * 36 * 100)/ (Fabric length in yards * Fabric width in inches)
Normally fabric roll containing 40 points per 100 square yard are acceptable.

Also Read: 4 Point System - Acceptable Level

Example: A fabric roll 120 yards long and 46 inch wide contains following defects.

4 defects up to 3 inch length	4 x 1	4 points
3 defects from 3 to 6 inch length	3 X 2	6 points
2 defects from 6 to 9 inch length	2 X 3	6 points
1 defect over 9 inch length	1 X 4	4 points
1 hole over 1 inch	1 X 4	4 points
Total defect points		24 Points
Therefore,	= (24 X 3600)/(120 X 46)	
Points/ 100 sq. yards	= 15.652 points	

Acceptable level (Points per 100 square yards) in 4-point system

Check sheet or Inspection Format

To record or to collects defects during inspection you must use a simple check sheet. A check sheet includes general details, details of fabric lot, fabric defects according their sizes, summary of fabric

defects, quantity inspected and total penalty points and result of the fabric lot after inspection. Use tally marking for recording of number of defects. A sample 4 point system fabric inspection format has been attached at the bottom.

Types of defects found in fabric

Fabric checker should know common defects found in fabrics and he must recognize defects on the fabric at the time of fabric inspection. A detailed list of fabric defects has been posted earlier. Open the link to read the post for your reference.

Sample 4 Point System Inspection Format

Fabric Description				Supplier Name				Fabric Received Date			Checker:		
Colour				Process Type				Total Fabric Rcvd.			Date:		

S.No.	Lot No.	Length (yds)		Width (in inches)		Defect Categories																		Total Points Found	Points per hundred sq. yards	Status & Remarks
		On Tag	Actual	On Tag	Actual	Defect-1				Defect-2				Defect-2				Hole		Others						
						0-3"	3"-6"	6"-9"	>9"	0-3"	3"-6"	6"-9"	>9"	0-3"	3"-6"	6"-9"	>9"	0-1"	Above 1"	0-3"	3"-6"	6"-9"	>9"			
						1	2	3	4	1	2	3	4	1	2	3	4	2	4	1	2	3	4			
Total																										

Signature of the Quality Manager   Signature of the Checker