Faculty of Engineering

Department of Textile Engineering

Thesis Title: Study on Quality Issues in Cutting Section.

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A thesis submitted in partial fulfillment of the requirements for the degree of **Masters of Science in Textile Engineering**.

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At first I am thankful to the Almighty who gave me the strength and determination to carry on. It has been a great experience for me and I belief that this project will surely help us for Study on cutting section in quality issues.

I would like to express my special thanks of gratitude to my respected and supervising teacher Prof. Dr. Md. Mahbubul Haque, PhD (UK) CText FTI, for his exemplary guidance, constant encouragement and support in completing my project. He has enriched me with necessary ideas and concept for incessant improvement of the report.

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I thank you all from the core of my heart.

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DECLARATION

I hereby declare that, this project has been done by me under the supervision of Prof. Dr. Md. Mahbubul Haque, Professor, Department of Textile Engineering, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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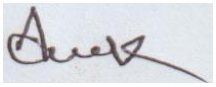

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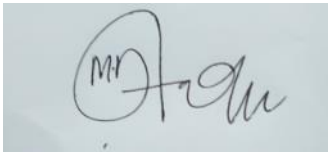

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ABSTRACT

My Thesis Topic is Study On "Quality on quality issues in cutting section" for the collecting Fabric inspection data of Meghna executive Holding ltd. In this project I prepared based Fabric Cutting procedure, Fabric Inspection, fabric relaxation Manually or steam relaxation machine. According to plan send to cutting table, table preparation, then ratio chart Marker Making, Marker placing all body and parts on the laying , shade and batch wise laying confirm by quality, fabric cutting, Sorting & bundling, then cut panel inspection found the fabric falt,there are different types of fault and their remedies which is done before assembled into a completed a product. Here is I what on the three buyer. Buyer M&S, Stanley stella, Matalan. Buyer M&S Total check goods 55216 pcs & ok goods 53650 pcs , panel check 189125 ok panel 183628.total defect goods,1566 pcs. Buyer Stanley stella check goods 87632 pcs, ok goods 84731 pcs & panel check 322818 ok panel 32049, total defective goods 2900 pcs, buyer Matalan check goods 65223 pcs ok goods 93853 pcs, & panel check 259168 ok panel 368351.

The main point of garments industry is that the fabric cutting section, all types of defects in the fabric must be identified, Otherwise production cost would be rise which causes a great damage for the industry

To produce a quality product, the fabric must be first be properly inspected. Proper Cutting could be save more production damage.

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CHAPTER- 01

INTTRODUCTION

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1.1 Introduction:

The topic that I have chosen for my thesis is that of a study on cutting section quality issues. One first learns how to make a quality garment by inspecting fabric and receiving cutting, relaxation, test cutting panel measurement, marker measurement, and finish garment measurements. After bulk cutting, fabric spreading, cutting sorting and bundling, and final cut panel inspection, these operations are in the cutting section of Meghna Group Industries, a 100% export-oriented garments company. How to defect fabric and cut panel defects is discussed in the cutting section. A skilled cutter is required to cut the cloth. It is cut manually and automatically. No matter how the cloth is cut, the quality must be taken care of. First of all, check if the table is right, and according to the length of the fabric, if there is any problem, Then the length of the marker measurement The length of the table is measured according to the length in markers, fast thin paper laid, and fabric laid, one by one quality check. During automatic laying, you must pay attention to the spreading machine speed of the machine is not too low or too high, and you must pay attention to the machine tension according to the fabric, otherwise wrinkling may occur. A study on the quality of the cutting section has shown that to make a garment, one should know what quality to look for and how to find out the cutting defects and control them in the cutting section to produce a good-quality garment. If so, what aspects have to be considered are highlighted through this research. the cutting section's point-to-point quality reaches.

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CHAPTER: 02

Literature Review

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2.1- Cutting

Cutting is one off the major department of garments section. Garments section main work has been cutting section Fabric received from to cutting and fabric cutting, If the fabric is not properly in the cutting, then the quality of the fabric not to be good. is called the main point of the garments department. A study on the quality of the cutting section has shown that to make a garment one should know what a quality to look for a how to find out the cutting defects and control them from the cutting Section to procedure a good quality Garments. if so, what aspects have to be considered are highlighted through this research. the cutting section point to point quality reaches.

2.2 The following are the main objective of cutting quality section.

i. Must have good knowledge Cutting Quality.
ii. Must have good knowledge marker CAD.
iii. Must have good knowledge Fabric GSM and spreading Quality.

2.3 Types of quality control cutting section

i. Fabric Inspection
ii. Fabric GSM & Shrinkage test.
iii. Relaxation for fabric as per fabric composition.
iv. Style Buyer Po check.
v. Marker check.
vi. Shade band check

2.4 Objective of cutting.

i. Fast the cloth will be brought from the to the cutting section.
ii. Then style buyer color should be separately kept the rack.
iii. The fabric should be relaxed according to plan.
iv. Before fabric cutting, have to fabric test shrinkage, GSM.
v. To make the fabric to the marker and check that the layout is correct.
vi. To make garments according the shape and the required design.
vii. At fast fabric up to cutting from store Then keep it separate.
viii. Then according to the consumption of the fabric, you have to relax and separate put in the tolly.
ix. To make the fabric according to the marker and check that the layout is correct.
x. To make garments according the shape and the required design.
xi. After cutting, the cutting parts & body properly numbering bundling and checked.

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2.5 Fabric cutting:

After the fabric Spreading done, Marker paper is laid on the fabric and marker checked by quality and prepared by cutting Manual or Auto cutter selected the. machine speed should be control. fabric cutting is very important things of cutting section. Cutting is first working department of the garments.

2.6 Quality control of the cutting section mainly divided into four points. Those are:

i. Marker Inspection
ii. Spreading Control
iii. Cutting Quality control
iv. Spreading Machine tension check.
v. Piece Goods Inspect

2.7 marker Inspection Following are inspected

i. Marker Length
ii. Marker width
iii. Lay quantity
iv. Style/Lot
v. Ratio
vi. The measure of all individual parts marked in marker.

2.8 Following work in Spreading Quality control

i. Buyer, style
ii. Ends bits Roll or Shade wise.
iii. Machine Tension
iv. Machine Speed
v. Machine sensor check minimum 2 meter.
vi. Fabric wise ply height
vii. Fabric Fault

2.9 Cutting Quality Control.

i. Number of parts
ii. Miss cut
iii. Ragged cutting
iv. Notches
v. Matching plies

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CHAPTER- 03

Methodology

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3.1 Methodology:

Methodology is the conceptual and systematic evaluation of the method applied to a research field. This involves the systematic study of the body of knowledge related approaches and concepts. This typically includes terms such as theory, theoretical model, stage, and techniques of quantitative nature.

3.2 It can be also defined as below:

The analysis of the principle of method, rules, and condition employed a discipline the systematic study of methods that are can be or have been applied within a discipline. The study or description method.

3.3 Fabric Relaxation:

Rolling And Folding Fabric Comes from Cutting Section Relaxation Area. Generally, Steam is used for fabric relaxation. Any fabric relaxation for steam relaxation machine. Single jersey fabric After relaxation and cutting, viscose fabric steam relaxation after 4- 6 cutting, Viscose fabric generally Shrinkage and GSM are control by relaxation. No need of any steam.

3.4 Fabric relaxation procedure:

i. 100% cotton has to relaxed Time -12 hours
ii. 50% cotton & 50% spandex has to relaxed -24 hours.
iii. 95 % above spandex has to be relaxed -48 hours.
iv. 100% maintain roll to roll & batch to batch. date & time insure relaxation paper.

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Figure: 5.1 Fabric Relaxation Trolley

EXECUTIVE GREENTEX LTD.
FABRIC RELAXATION REPORT
CUTTING SECTION

Start date: 3-2-22
End date : 3-2-22

SL NO:	Buyer	Style	Supplier	Fab. Type	GSM	Color	Batch No	Roll No	Shade	Qty(Mtr)/KG	Start Time	End Time	Remarks
1	M&S	1210	M KCL	100% ctn	150	Blonde	27366	26	A	23	11.20A	11.24P	
2	"	"	"	"	"	"	"	27	A	20	11.26A	11.29P	
3	"	"	"	"	"	"	"	28	A	06	11.30A	11.34P	
4	"	"	"	"	"	"	"	29	A	20	11.35A	11.39P	
5	"	"	"	"	"	"	"	30	A	32	11.40A	11.44P	
6	"	"	"	"	"	"	"	31	A	11	11.46A	11.49P	
7	"	"	"	"	"	"	"	32	A	22	11.50A	11.54P	
8	"	"	"	"	"	"	"	33	A	23	11.55A	11.59P	= 12 H
9													
10													
11													
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16													
17													
18													
19													
20													
21													

SUPERVISOR EXECUTIVE IE Manager

Figure: 5.2 Fabric relaxation chart

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3.5 Fabric Relaxation:

After fabric relaxation completed keeping the relaxation trolley, according to fabric composition It keep the trolley according to the fabric section time. Keeping trolley. Single jersey fabric on time cutting, others fabric minimum 6 to 12 hour keep the trolley after steam relaxation machine used. Without Steam relaxation machine, Manually Fabric relaxation as per fabric composition.

Figur: 5.3 Finish Garments Test Meaurments Analysis Report.

STUDY ON MEASURMENT OF THE TEST FINISH SAMPLE GARMENTS.

A finished garments is basically atthahed the body , that is buyer requirement all garments parts are measured. All parts of the garments are measured then when order is made a sample garments is attached the garments with measurments .then when fabric quality is done the , 15 to 20 pieces of garments made, first pattern is measured then the cut panel measurd , then the cut panel making a garments.then they complete garments and part with measurment sheet.

3.6 Marker Making.

Marker making is an important issue to ensure maximum utilization of fabric is ready made garments industry. Marker & spreading Quality Control. Executive Greentex Ltd, Markers are created through Garber Software. The marker Efficiency maximum 85% to 87%. One important thing is that the marker is created by properly utilized the fabric wastage. The marker is usually a thin piece of paper on which all parts of a Garment are placed in such a way to make completed using the least amount of fabric which is done through HARBER SOFTWARE So the marker Efficiency is to be 85 % TO 87%.

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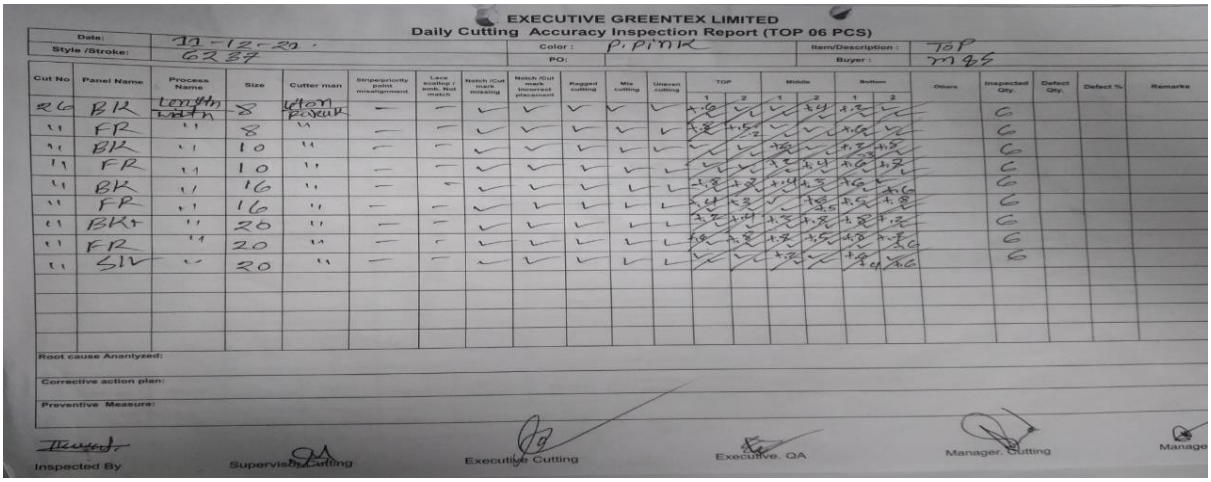
3.7 Marker accuracy Inspection:

After cutting complete then marker accuracy Check, put the patten cutting cake, all body and parts check, (TBM) top bottom middle check, Put the pattern cutting panel, measurement check, Quality insure. top 6 pcs panel check. Marker accuracy check is very important for garment industry in cutting section so cutting section is major point of garments industry.


EXECUTIVE GREENTEX LIMITED
Daily Cutting Accuracy Inspection Report (TOP 06 PCS)

Date: 11-12-20
Style /Stroke: 6287
Color : PINK
PO:
Item/Description : TOP
Buyer : M&S

Cut No	Panel Name	Process Name	Size	Cutter man	Stripe/plicity pnint misalignment	Lace sequin / emb. Not match	Notch /Cut mark missing	Notch /Cut mark incorrect placement	Ragged cutting	Mix cutting	Uneven cutting	TOP 1	TOP 2	Middle 1	Middle 2	Bottom 1	Bottom 2	Others	Inspected Qty.	Defect Qty.	Defect %	Remarks
26	BK	Length Width	8	Uttam Pervez	—	—	✓	✓	✓	✓	✓	+1/2	✓	✓	✓	+1/2	✓		6			
"	FR	"	8	"	—	—	✓	✓	✓	✓	✓	+1/2	-1/2	✓	✓	+1/2	✓		6			
"	BK	"	10	"	—	—	✓	✓	✓	✓	✓	✓	✓	+1/2	+1/2	+1/2	+1/2		6			
"	FR	"	10	"	—	—	✓	✓	✓	✓	✓	✓	✓	+1/2	+1/2	+1/2	+1/2		6			
"	BK	"	16	"	—	—	✓	✓	✓	✓	✓	-1/2	-1/2	+1/2	+1/2	+1/2	+1/2		6			
"	FR	"	16	"	—	—	✓	✓	✓	✓	✓	-1/2	-1/2	✓	✓	+1/2	+1/2		6			
"	BK+	"	20	"	—	—	✓	✓	✓	✓	✓	-1/2	-1/2	+1/2	+1/2	+1/2	+1/2		6			
"	FR	"	20	"	—	—	✓	✓	✓	✓	✓	-1/2	-1/2	+1/2	+1/2	+1/2	+1/2		6			
"	SIV	"	20	"	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	+1/2	+1/2		6			

Root cause Ananlyzed:
Corrective action plan:
Preventive Measure:

Inspected By | Supervisor, Cutting | Executive Cutting | Executive, QA | Manager, Cutting | Manage

Figure: 5.4 Marker Accuracy Check Quality.

3.9 Arrangements of Marker Making:

i. **Marking Grain Line:** After a garment is made, the Construction is checked to verify that the garment fits correctly grain line in the middle of the garment.
ii. **Garments Measurement:** Before making a Garments, the length and width of the fabric must be well measured.
iii. **Fabric Faults:** Must be the fabric roll there are various types of defects, otherwise there will be problem after marker making.
iv. **Cutting Table:** After Making the Marker, the length and width of the cutting table should be taken care of and the height should also be taken of cutting table.

3.10 Advantage and Disadvantage of marker making.

Advantages:

i. Marker can be made quickly with this method
ii. Waste of clothes is reduced.
iii. Wrong marker making can be solved quickly.

Disadvantages:

i. Initial investment is higher than manual.
ii. More skilled operator is needed than manual. I think everything has its positive and negative sides. But in comparison, the advantages of computerized marker are more than the manual. It increases the efficiency, workability and production of the factory. It saves valuable time and least fabric wastage. Thus, saves money too. Moreover, it attracts buyers with its modern facilities. So, I think, it would be better to use computerized marker making system i.e., Computer Aided Design (CAD) instead of manual method. So, the factory can think about it.

3.11 Numbering:

After Cutting the Fabrics, each pat of different style fabric should be numbered to avoid mixing with the other color and fabric parts. Mainly number code maintain and style maintain size (e.q .small, medium, large, xl ,xxl etc) Marker and layer number sequence . this is also called as layer making by numbering. If there is layer number n each component then at the time of stitching only correct component will be stitched together.

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Figure: 5.5 Panel Numbering

3.12 Bundling:

After cutting the fabrics numbering then bundling must be serial wise bundle, bundle quantity 20 pcs to 30 pcs, should be style, po , flow up after bundle, basically flowered by garments size(eq, small ,medium, large, xl,) actually marker and ply sequence accurate , all number parts make by formed by worker, buyer, style, size, color, quantity all process.

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Figure: 5.6 Panel Bundling

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Figure: 5.7 Cut Panel Inspection (CPI)

According to CPI (cut panel inspection) system Make through, growing bundle or one-piece flow system. Check all part for CPI and found the defect , such as shedding, hole, spot Yarn missing knot ,slub, pin hole, measurement missing, Cush mark, line mark etc. Cut component are inspection is very important. Before send sewing section all component check ,there is every cut panel is checked thoroughly.100% defect part of the Check.

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Executive Greentex Ltd							
Fabric Relaxation Chart							
							Date: 12-11-2022
S.N	Buyer	Style	Fabric Type	GSM	Batch No	Relaxation Time	Qty.Meter
1	M&S	4193	95% Poly-5% Ctn	210	27828	48	12
2	M&S	7877	75%Ctn 20% Spandex 5 % Elastic	250	30278	48	21
3	M&S	3110	85% Spandex 15 % Ctn	200	27828	48	9
4	Stanley Stella	Stsu-868	95% Elastic 5%ctn	360	P0T22-0253	48	18
5	M&S	7035	50%ctn 50 % Spandex	180	22680	24	41
6	M&S	2046	100% Ctn	140	22867	12	28

Table: 6.1 Fabric Relaxation Chart.

3.14 Table observation:

This Relaxation is an important factor after receiving the fabric in the cutting section, different types of fabric are relaxed in different ways. Here is the fabric relaxation time, batch no, GSM, Qty meter, is shown. Its fabric relaxation is not done correctly then the fabric measurement after cutting will be not be correct. Here is the 95% polyester 5% cotton relaxation time 48 hour, 75% cotton 20% spandex 5% elastic relaxation time 48-hour, 85% spandex 15% cotton relaxation time 48 hours, 95% elastic 5% cotton relaxation time 48 hours, 59% cotton 50% spandex relaxation time 24 hour, and 100% cotton relaxation time 12 hour, so fabric relaxation time is very important, if we without relaxation fabric cutting after garments making but garments measurement not be correct.

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Study on Frist cutting cut panel, pattern & finish sample garments measurement.

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Cut Panel Measurment for size set (Frist cutting or test Cutting)

Measurement Point	Size	10				Size			12		Size				14
1/2 WAIST LENGTH	BACK PAART	FRONNT PART	√	√	√	BACK PAART	0.6	0.6		FRONNT PART	BACK PAART	√	√	√	FRONNT PART
BODY LENGTH CHEST			√	√	√		√	√	√			√	0.5	0.5	
CENTRE FRONT BOTTM			-0.5	-0.5	-0.5		√	√	√			√	√	√	
Jr. Supervisor QA		DPM/APM									Manager QA				

Table: 6.2 Pattern Check for First Cutting

Table observation: 3.15

Before Cutting the Big Cutting in The Garment Section. Small cuttings are cut for testing and each size has to be measured. It Has been seen that, body size 10, Measurement point, 1/2Waist Length Back & Front part measured is ok, and size 12 Back part plus (+.6) and front part ok. Size 14 back and front part also ok. Body Length Chest size 10 & 12 back & Front part measured ok but size 14 front part measured paus (+.5). Center fronts bottom size 10 back part measured ok, but front part measured minis (-.05) Size 12 & 14 back & front part measured are ok. The main reason of 1st cutting, if the fabric relaxation is not proper, if the Fabric spreading machine tension is too low during fabric trial.

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Executive Greentex Ltd Finisshed Garments Measurments Veriation chart												
Measurment point	SIZE											
	XS	1	S	1	M	1	L	1	XL	1	XXL	1
Sholder Point to point	37.8	.-1.5	38.4	-0.5	39.2	-0.5	40.0	.+5	40.8	.-8	41.6	.-1.5
Front Neck Drop-HPS	8.7	√	8.8	.+5	8.9	.+2	9.0	√	9.4	√	9.8	√
Back Neck Drop-Hps	3.0	√	3.0	√	3.0	-0.5	3.0	√	3.0	.-1.3	3.0	√
Back Neck Width -Seam to Seam	33.8	-1.0	34.4	-0.5	35.2	-0.5	36.0	.-1	36.8	.-1.5	37.6	.-1.5
across Front 13cm down From SNP	35.8	-1.0	36.4	-0.6	37.2	√	38.0	-0.2	39.0	√	40.0	.-2
across Back 13cm down From SNP	61.4	-3.0	62.2	-0.8	63.1	-0.5	64.0	-0.5	64.9	√	65.8	.-1
Back Length -SnP To Hem	87.0	-1.0	91.0	√	96.0	-1.5	101.0	-0.6	107.0	.-2	113.0	.-5
Bust clrcumference -2.5 cm Down from	92.0	√	96.0	-0.1	101.0	-0.2	106.0	-0.8	112.0	.-2	118.0	.-2
Hem Clrcumference -Measured Straght Acrose	22.9	-2.0	23.1	-0.1	23.3	-2.5	23.5	√	23.7	.+1	23.9	.1.5
Sleeve Length Overarm	20.5	√	21.0	.+8	21.5	√	22.0	-0.1	22.6	√	23.2	.+8
Armhole Straght	31.6	√	32.8	√	34.4	-0.5	36.0	-0.1	38.2	.-5	40.4	√
Blcep Chcumference	28.4	-6.0	29.6	-0.8	30.8	-0.1	32.0	.+8	33.6	.+5	35.2	.-1.5
Cuff Clrcumference Short Sleeve	1.8	-5.0	1.8	-0.1	1.8	.+5	1.8	√	1.8	√	1.8	.-8
Neck rib Height	2.0	√	2.0	√	2.0	√	2.0	-0.8	2.0	√	2.0	√
Hem /cuff Depth	63.4	√	64.2	√	65.1	√	66.0	.+5	66.9	√	67.8	√
Back Wearling Length from SNP to hem	62.0	√	62.0	√	62.0	√	62.0	-0.2	62.0	√	62.0	√
Jr. Supervisor QA	Executive QA							DPM/APM				

Table: 6.3 Finished Garments Measurements

3.16 Observation of Finish Garments Measurement.

Finish Garments Measurement Show Garments Measurement, Some Size Garments Measurements are, X Small, Small, Medium, Large, Extra Large, etc. In most cases it was found that the Measurement was plus. X small Garment Actual Measurement of Shoulder punt 37.8 But Make a Sample Finish garments Measurement (- 1.5) and (-0.8) Front Neck Drop. 8.7 ok, Back Neck Drop 3.o Is ok, Back Neck Width Seam To Seam (33.8) and (-.10) Across Front 13 cm down from SNP (38.8) (-1.0) Across Back 13 cm down from SNP Actual measurement 61.4 cm after (-3.0) Back length (87.0) after (-1.0) Hem (22.9) after (-2.0) Sleeve , Bust, Neck rib high, Armhole , measurement is ok , thus ach measurement is shown through the table.

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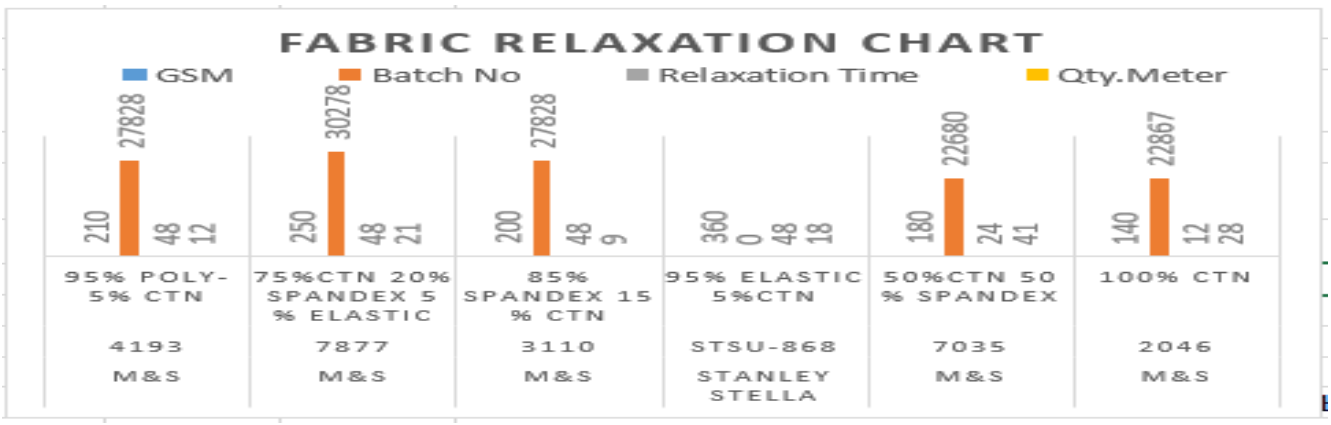

Figure: 5.8 Fabric relaxation Chart.

3.17 Table observation:

I am an IE Executive of Executive Greentex Ltd, Here Fabric Relaxation Various Categories of fabric and informed the qualities of the here I will discuss them. Here 100% cotton fabric relaxation time 12-hour, 95% polyester 5 % cotton fabric relaxation time 48 hour, if the fabric is not relaxed properly, the measurements will not be accurate after cutting the fabric and the garments measurement will not be accurate even after making the garment with the fabric. Fabric Relaxation is an important factor. Here is a discussion about the relaxation of different types of fabrics, from this learned that if the fabric is not relaxed then the measurement of the garment will never be correct if the fabric s not relaxed

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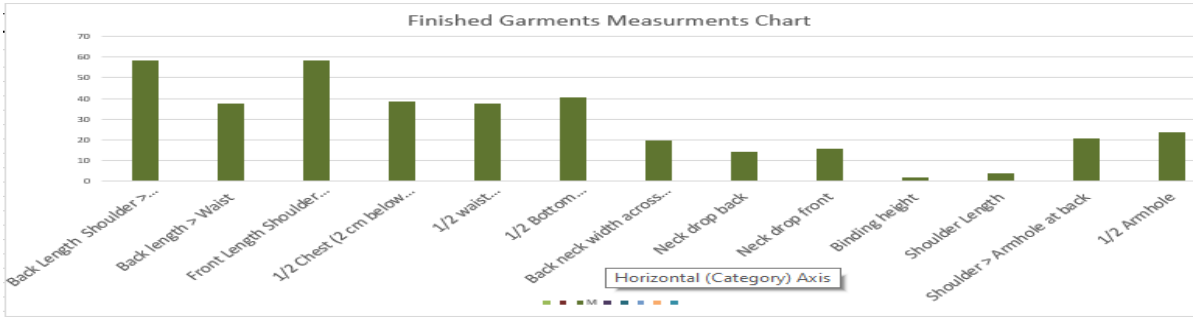

Figure: 5.9 Finished Garments Measurement Chart.

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Empirical Details

3 days Cut panel Inspection Report.

Buyer -M&S

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Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer : M&S

Style	Colour	Total Parts	Cut Qty	Goods qua.pcs	Check Qty, Panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Patta	Dyeing Mark	Dirty Spot	G. total Rejection	Reject %
9895	Khaki	4	3209	3160	12836	12640	18	5	7		3	10	6	49	1.53%
9895	Blue	4	1820	1744	7280	6976	21	5	7	21	7	10	5	76	4.18%
6380	ivory	2	2432	2350	4864	4700	9	3	5	25	10	25	5	82	3.37%
4193	White	6	910	844	5460	5064	1	7	5	31	10	0	12	66	7.25%
6133	navy	4	2145	2089	8580	8356	18	7	12	1	8	8	2	56	2.61%
6134	dk.blue	2	2700	2658	5400	5316	11	5	7	12	2	3	2	42	1.56%
3893	Grey	4	1267	1247	5068	4988	3	1	2	5	3	1	5	20	1.58%
5419	Indigo	3	1062	1044	3186	3132	5	1	2	1	4	3	2	18	1.69%
			15545	15136	52674	51172	86	34	47	96	47	60	39	409	2.63%

Must Be Check 100 Cut Panal inspection(CPI)

Table- 6.4 Cut panel Inspection (1st Day)

3.18 Table observation:

Here checked by M&S Buyer, m&s Total goods quantity 15545pcs ,ok quantity 15135pcs, & total panel 52675 pcs, good panel 51172pcs, the name of defects Yarn missing 49, ok quantity Needle mark 22,Slub 34, hole 78, patta35, total defect found 261, Most defect found fabric hole, and yarn missing 49. Such a defects mainly originate from where the fabric is made.

Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer:M&S — Date::24.09.2022

Style	Colour	Total Parts	Cut Qty	Goods qua.pcs	Check Qty, Panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Patta	Cress Mark	Shine Mark	Dyeing Mark	Dirty Spot	cut mark	Rejection	Reject %
4731	Khaki	4	3209	3108	12836	12432	0	26	9	12	9	45	9	0	9	9	101	3.15%
1265	Blue	4	3978	3884	15912	15536	12	5	3	32	12	20	5	12	22	0	94	2.36%
3312	Grey	4	1267	1208	5068	4832	19	1	0	25	56	2	9	2	12	6	59	4.66%
5419	Indigo	3	4523	4476	13569	13428	5	0	23	2	2	5	7	20	12	4	47	1.04%
5466	Navy	3	2839	2678	8517	8034	0	56	0	5	19	96	8	21	4		161	5.67%
4198	Black	2	1263	1169	2526	2338	0	3	13	9	20	6	55	12	63		94	7.44%
6133	Blue	4	2145	2084	8580	8336	9	0	0	12	54	8	9	21	32		61	2.84%
9890	Grey	4	3546	3483	14184	13932	19	3	3	20	13	9	6	39	9		63	1.78%
			22770	22090	81192	78868	64	94	51	117	185	191	108	127	163	19	1119	4.91%

Table- 6.5 Cut panel Inspection (2nd Day)

Here checked by M&S Buyer, m&s Total goods quantity 15545pcs ,ok quantity 15135pcs, & total panel 52675 pcs, good panel 51172pcs, the name of defects Yarn missing 49, ok quantity Needle mark 22,Slub 34, hole 78, patta35, total defect found 261, Most defect found fabric hole, and yarn missing 49. Such a defects mainly originate from where the fabric is made.

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Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer: M&S												Date: 23.09-2022						
Style	Colour	Part no	Cut Qty	Goods qua.pcs	Total qty panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Patta	Cress Mark	Shine Mark	Dyeing Mark	Dirty Spot	Over cut	G. total Rejecti	Reject %
6380	ivory	2	2432	2346	4864	4692	8	12	12	25	12	23	2	25	6		86	3.54%
4193	White	6	910	836	5460	5016	9	9	14	31	3	2	5	0	9	8	74	8.13%
6133	navy	4	2145	2106	8580	8424	7	6	15	1	5	5	20	8	5	2	39	1.82%
6134	dk.blue	2	2700	2649	5400	5298	12	2	9	12	9	9	32	3	7	1	51	1.89%
3893	Grey	4	1267	1204	5068	4816	5	12	21	5	8	8	2	1	12	6	63	4.97%
5419	Indigo	3	1062	999	3186	2997	19	21	6	1	2	12	5	3	4	4	63	5.93%
5466	Navy	3	2839	2791	8517	8373	5	21	8	7	12	2	9	10	5		48	1.69%
9890	Grey	4	3546	3493	14184	13972	19	3	8	5	13	9	6	10	9		53	1.49%
			16901	16424	55259	53588	84	86	93	87	64	70	81	60	57	21	703	4.16%

Must Be Check 100 Cut Panal inspection(CPI)

Table- 6.6 Cut panel Inspection (3rd Day)

3.19 Table observation:

Here checked by M&s Buyer, total goods check 16901pcs,ok goods 16424 pcs & total panel 55259 total good panel 53588pcs.the name of defects Yarn missing 41, Needle mark 54, Slub,53, hole 62,patta 25, Dyeing mark 29, total defect found 340, Most defect found fabric Needle mark,54 and yarn hole 62.and others defects are explained, such defects mainly originate from where the fabric is made.

3.20 Cumulative Observation:

The cut Parts of the Fabric must be checked before sewing. The cut pieces of fabric required by M&S buyer are checked on the first day, second day and third day. total goods Check quantity 55216 pcs & ok quantity goods 53650pcs,total panel 189125. ok panel 183628 the defect found 703 pcs, 2nd day Goods check 22770 pcs, panel 181192. found the defects. 1119. and 3rd day total goods check 15545, and panel check 52674, found the defects 491. Average of Defects 3 days, slub,is 65,pieces, hole is 182pieces , shine marks is 73pieces, dirty spot is 57pieces, cress mark is 118 pieces,3 days total Average defect found .All Defects found finally 4.17%

Formula of defects %

Defects %= Total Defects Quantity/Total goods Quantity*100

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3 days Cut panel Inspection Report.

Buyer – Stanley Stella

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Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer: Stanley Stella

Style	Colour	Part no	Cut Qty	Goods qua.pcs	Check Qty, Panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Cress Mark	Dirty Spot	Print Problem	Over cut mark	G. total Rejection	Reject %
823	Black	4	3209	3020	12836	12080	24	10	15	120	10	10		9	189	5.89%
868	Grey	4	3978	3934	15912	15912	14	5	5	10	0	10		0	44	1.11%
918	Green	2	5641	5548	11282	11282	17	10	6	40	10	10	5	1	93	1.65%
822	Black	6	4512	4407	27072	27072	15	10	10	40	20	10		9	105	2.33%
913	F.navy	4	5212	5123	20848	20848	17	0	0	60	0	12		2	89	1.71%
828	Black	2	1263	1091	2526	2526	36	6	20	50	40	20	9		172	13.62%
928	Green	4	2145	2032	8580	8580	28	15	10	30	10	20			113	5.27%
913	White	2	3546	3451	7092	7092	25	10	10	20	10	20			95	2.68%
			29506	28606	106148	105392	176	66	76	370	100	112	14	21	935	3.17%

Table: 6.7 Cut panel Inspection (1st Day)

3.21 Table Observation:

Here checked by Stanley Stela Buyer, 29506 pcs & ok goods 28606 pcs & total panel 106148, ok panel 105392,the name of defects ,Hole 220, Yarn missing 113, Ceases mark70, total defect found 569, Most defect found fabric Hole 220, Yarn missing 113 .and Dirty spot 70 others defects are explain ,Such a defects mainly originate from where the fabric is made.

Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer: Steenley Steela 23-11-2022

Style	Colour	Part no	Cut Qty	Goods qua.pcs	Check Qty, Panel	Ok qty panel	YarnMissing	Needle mark	Knot	Slub	Hole	Patta	Cress Mark	Shine Mark	Dirty Spot	Over cut mark	G. total Rejection	Reject %
823	Black	4	2363	2315	9452	9260	5	3			20		10		10	9	48	2.03%
868	Grey	4	2145	2074	8580	8580	5	2	11	29	25	8	0		10	0	71	3.31%
918	Green	2	3689	3549	7378	7378	20	8			92		10	9	10	1	140	3.80%
822	Black	6	4520	4481	27120	27120	3	1			5		20		10	9	39	0.86%
558	Blue	4	3565	3408	14260	14260	25				90		30		12		157	4.40%
828	Black	2	2159	1934	4318	4318	55				110	19	40	29	20		225	10.42%
928	Green	4	4523	4471	18092	18092	6				16		10		20		52	1.15%
913	White	4	3546	3486	14184	14184	20				10		10		20		60	1.69%
			26510	25718	103384	103192	139	14	11	29	368	27	130	38	112	19	887	3.35%

Table: 6.8 Cut panel Inspection (2nd Day)

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Executive Greentex Ltd																		
Gilarchala , Sreepur Gazipur																		
Quality Assurance Department																		
100 % Cut Panal Check Report Summary																		
Buyer: Steenly Steela												13-11-2022						
Style	Colour	Parts no	Cut Qty	Goods qua.pcs	Check Qty. Panel	Ok qty panel	YarnMissing	Needle mark	Knot	Slub	Hole	Yarn Contamina	Cress Mark	Shine Mark	Dirty Spot	Over cut mark	G. total Rejection	Reject %
828	Green	6	3645	3416	21870	20496	24	20	13	15	120		40		10	9	229	6.28%
822	Grey	3	3215	3155	9645	9645	14	1		5	10		10		20	0	60	1.87%
478	F.Navy	4	7854	7755	31416	31416	18	0	3	11	50	29	10		10	6	99	1.26%
125	White	2	4563	4463	9126	9126	24	0		6	30		20	1	20	4	100	2.19%
868	Blue	3	4785	4593	14355	14355	26	10	9	6	120		10	2	20		192	4.01%
868	Green	2	4521	4323	9042	9042	79	9		20	20		50	1	20		198	4.38%
822	Blue	6	1520	1353	9120	9120	20	15		52	40	1	30		10		167	10.99%
913	White	6	1452	1349	8712	8712	12	6	5	15	20		20		30		103	7.09%
			31555	30407	113286	111912	217	61	30	130	410	30	190	4	140	19	1231	3.90%

Table: 6.9 Cut panel Inspection (3rd Day

3.22 Observation Summary:

Here checked by Stanley Stela Buyer, 26510 pcs , ok total panel 25718pcs & total panel 103192 ok panel 103192,the name of defects ,Fabric hole 320, Yarn missing 161, Cress mark 150,Slub 108 ,Dirty spot 90 total defect found 829, Most defect found fabric Yarn hole 320,yarn missing 161 and cress mark 150, others defects are explain ,Such a defects mainly originate from where the fabric is made.

3.28 Cumulative Observation:

The cut Parts of the Fabric must be checked before sewing. The cut pieces of fabric required by Stanley Stela buyer are checked on the first day, second day and third day. total goods Check quantity 1st day 29506 pcs & ok 28606pcs,panel 105392 & ok panel 105392 the defect found 935 pcs, 2nd day Goods check 26510pcs,ok goods 25718pcs. Panel 103384 & panel 103192 found the defects. 910. and 3rd day total goods check 31555pcs, ok goods 30407pcs & panel 111912 ok panel 111912.3days total goods check 87631pcs, ok goods 84731pcs & total panel 322818 ok panel 320496 ok. found the Defects 1201. Average Defects 3 days, Yarn missing 177 pieces, hole is 382 pieces, shine marks is 73pieces, dirty spot is 121 pieces, cress mark is 140 pieces,3 days total Average defect found. All Defects found finally 3.57%

Formula of defects %

Defects %= Total Defects Quantity/Total goods Quantity*100

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3 days Cut panel Inspection Report.

Buyer – Matalan

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Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary
Buyer: Matalan

Style	Colour	Part no	Cut Qty	Goods qua.pcs	Check Qty. Panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Yarn Contamina	Cress Mark	Shine Mark	Dirty Spot	Over cut mark	G. total Reject	Reject %
Tp-552	Green	4	3645	3567	14580	14268	35	15	25	1	5	2	5		1	78	2.14%
Hs-225	White	2	3215	3058	6430	6430	25	42	32	55	6	3	6		1	157	4.88%
Hs-001	Navy	2	4523	4426	9046	9046	1	5	23	5	23	63	9		1	97	2.14%
Hs-225	Navy	4	4785	4748	19140	19140	2	5	23	5	2	2	12		1	37	0.77%
Hs-002	Black	4	1263	1092	5052	5052	12	25	63	69	1	2	5		1	171	13.54%
Hs-001	White	4	4521	4439	18084	18084	55	5	15	1		2		4		82	1.81%
Hs-094	White	4	1520	1464	6080	6080	21	15	11	2		2		5		56	3.68%
Hs-112	White	4	1452	1405	5808	5808	2	6	5	1		3		30		47	3.24%
			24924	24199	84220	83908	153	118	197	139	37	79	37	39	5	804	3.23%

Table: 6.10 Cut panel Inspection (1st Day

3.24 Observation Summary:

Here checked by Matalan Buyer,1st Day goods check 24914pcs,ok goods 24199pcs & panel 84220 ok panel 83908 ,the name of defects found, Fabric, slub,154, Yarn hole 132, Needle mark 102, yarn missing 94, Cress mark 72, total defect found 554, Most defect found fabric Slub,154, yarn Hole 132, Needle mark 102, others defects are explained, such defects mainly originate from where the fabric is made.

Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary
Buyer: Matalan

Style	Colour	Part no	Cut Qty	Goods qua.pcs	Check Qty. Panel	Ok qty panel	Yarn Missing	Needle mark	Knot	Slub	Hole	Patta	Yarn Contamina	Cress Mark	Dirty Spot	G. total Rejection	Reject %
Tp-552	Green	4	3645	3580	14580	14320	14	30	4	5	1	1	5	5	10	65	1.78%
Hs-225	White	2	3215	3083	6430	6430	3	20		32	55	2	6	10	12	132	4.11%
Hs-001	Navy	2	4523	4470	9046	9046	3	1	21	36	5	3	23	3	5	53	1.17%
Hs-225	Navy	4	4785	4658	19140	19140	10	2	8	52	5	11	2	30	28	127	2.65%
Hs-002	Black	4	1263	1099	5052	5052	3	30		52	69	15		5	5	164	12.98%
Hs-004	Navy	4	4562	4504	18248	18248	3	21	3	12	9			5	8	58	1.27%
Hs-001	White	4	7854	7809	31416	31416	30	5	7	2	2		11	3	3	45	0.57%
Hs-125	Olive	4	4563	4498	18252	18252	30	23		1	5			3	3	65	1.42%
			34410	33579	122164	121904	96	132	43	192	151	32	47	64	74	831	2.41%

Table: 6.11 Cut panel Inspection (2nd Day

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3.25 Observation Summary:

Here checked by Matalan Buyer, goods check 34410pcs & ok goods 33579 pcs & panel 12164 ok panel 121904 & total the name of defects found, Fabric Slub,148, Yarn hole 138, Needle mark 73, Dirty spot 53, yarn missing 19, Cress mark 35, total defect found 516, Most defect found fabric Slub,148, yarn Hole 138, others defects are explained, such defects mainly originate from where the fabric is made.

Executive Greentex Ltd
Gilarchala , Sreepur Gazipur
Quality Assurance Department
100 % Cut Panal Check Report Summary

Buyer: Matalan — Date: 09.11.2022

Style	Colour	Part no	Cut Qty	Goods qua.pcs	Check Qty. Panel	Ok qty panel	YarnMissing	Needle mark	Slub	Hole	Patta	Yarn Contamina	Cress Mark	Shine Mark	Dirty Spot	G. total Rejecti on	Reject %
Tp-552	Green	3	4585	4520	13755	13560	14	30	5	1	1	5	5	7	10	65	1.42%
Hs-225	White	5	6320	6188	31600	31600	3	20	32	55	2	6	10	5	12	132	2.09%
Hs-001	Navy	6	7850	7797	47100	47100	3	1	36	5	3	23	3	2	5	53	0.68%
Hs-225	Navy	4	1252	1078	5008	5008	10	49	52	5	11	2	30	20	28	174	13.90%
Hs-002	Black	4	1203	1039	4812	4812	3	30	52	69			5	3	5	164	13.63%
Hs-004	Navy	4	4563	4505	18252	18252	3	21	12	9			5	7	8	58	1.27%
Hs-001	White	4	8952	8880	35808	35808	30	5	2	29		11	3	2	3	72	0.80%
Hs-125	Olive	3	2133	2068	6399	6399	30	23	1	5			3	2	3	65	3.05%
			36858	36075	162734	162539	96	179	192	178	17	47	64	48	74	895	2.43%

Table: 6.12 Cut panel Inspection (3rd Day

3.26 Observation Summary:

Here checked by Matalan Buyer, goods 36858 pcs & goods 36075pcs total panel 162734 & ok panel 162539. the name of defects found, Fabric slub 137, yarn hole 134, needle mark 122, dirty spot 48, cress mark 48, total defect found 535, Most defects found were fabric slub, 137, fabric hole, 134, and needle mark, 122; other defects are explained. Such defects mainly originate from where the fabric is made.

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3.27 Cumulative Observation.

The cut parts of the fabric must be checked before sewing. The cut pieces of fabric required by the M&S buyer are checked on the first day, second day, and third day. total goods Check quantity 65223pcs & ok goods 93853pcs and panel 259168& ok panel 368351,The defect was found in 804 ,the defect in 890. the defects at 897. Average defect of 3 days. Slub is 135 pieces, hole is 149 pieces, shine marks are 48 pieces, dirty spot is 62 pieces, cress mark is 69 pieces, and 3 days total Average defect found. All defects were finally found at 2.78%.

Formula of defects %

Defects %= Total Defects Quantity/Total goods Quantity*100

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Buyer: M&S

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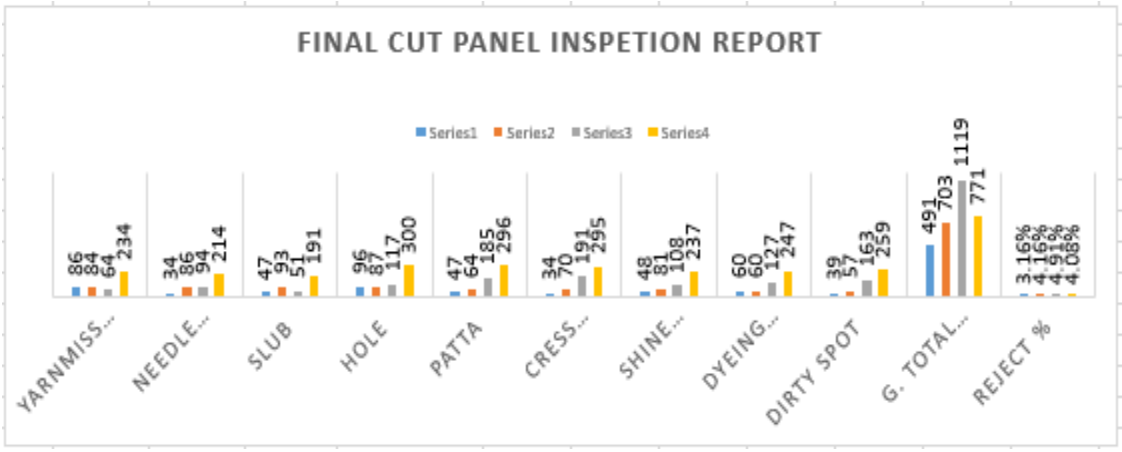
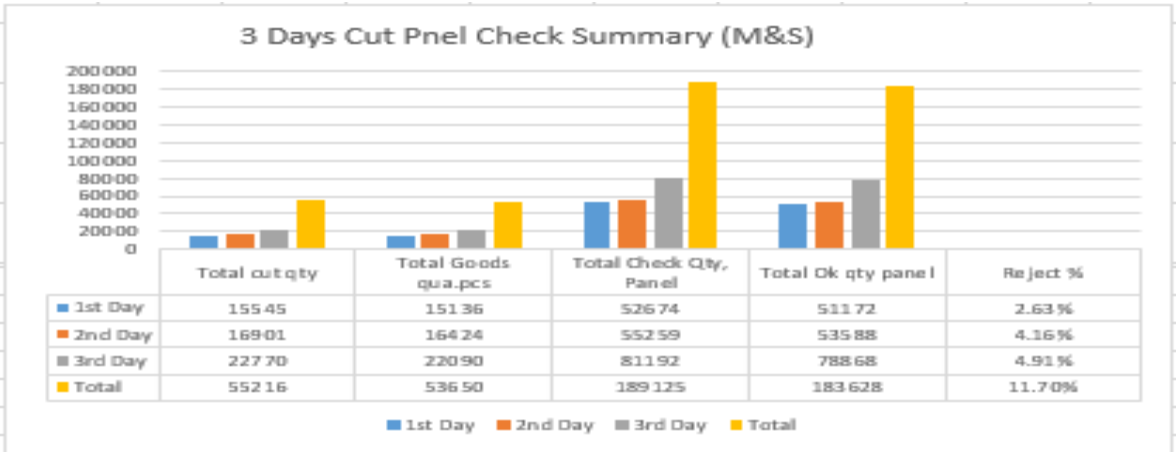


Figure: 5.10 Cut panel Defect chart



	Total cut qty	Total Goods qua.pcs	Total Check Qty, Panel	Total Ok qty panel	Reject %
1st Day	15545	15136	52674	51172	2.63%
2nd Day	16901	16424	55259	53588	4.16%
3rd Day	22770	22090	81192	78868	4.91%
Total	55216	53650	189125	183628	11.70%

Figure: 5.11 Cut panel Defect chart

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Buyer: Stanley stella

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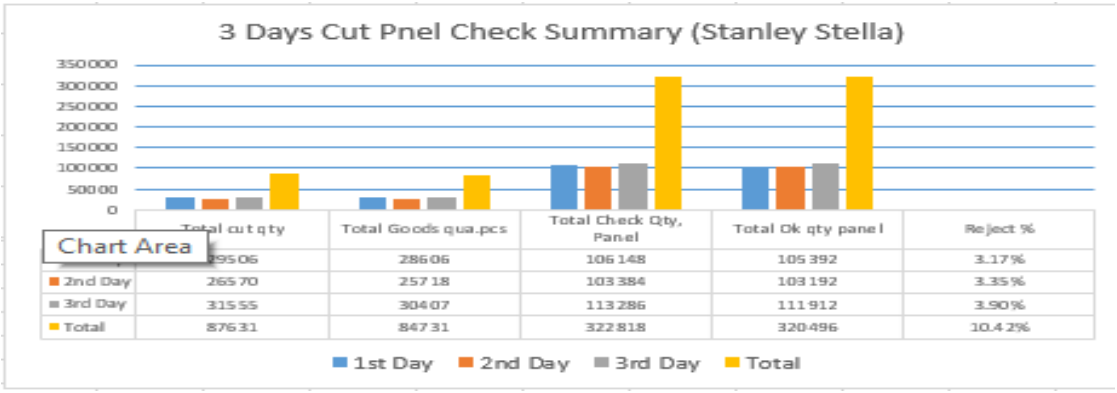

	Total cut qty	Total Goods qua.pcs	Total Check Qty, Panel	Total Ok qty panel	Reject %
	29506	28606	106148	105392	3.17%
2nd Day	26570	25718	103384	103192	3.35%
3rd Day	31555	30407	113286	111912	3.90%
Total	87631	84731	322818	320496	10.42%

Figure 5.12 Cut panel Defect chart

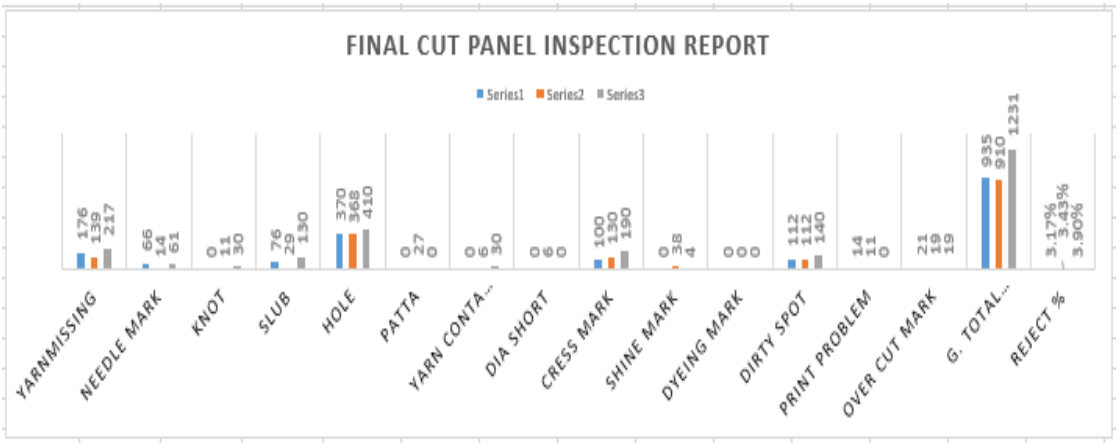

Figure: 5.13 Cut panel Defect chart

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Buyer: Matalan

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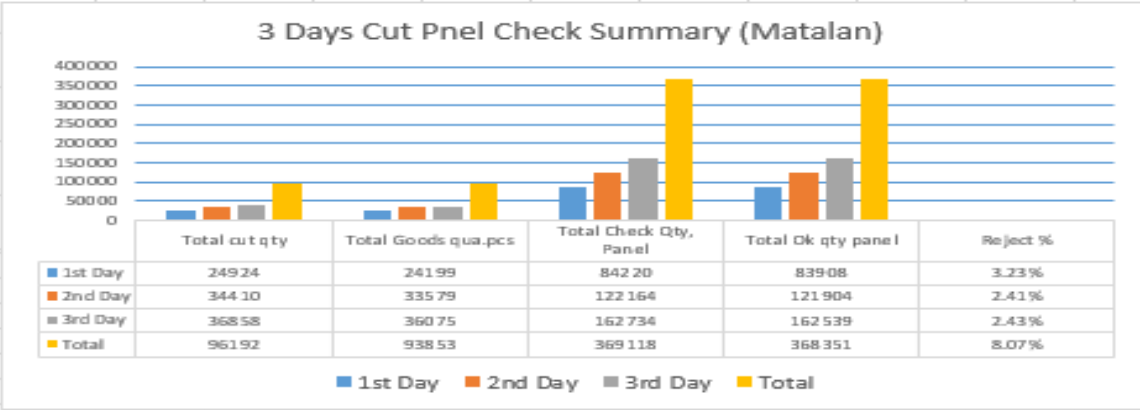

	Total cut qty	Total Goods qua.pcs	Total Check Qty, Panel	Total Ok qty panel	Reject %
1st Day	24924	24199	84220	83908	3.23%
2nd Day	34410	33579	122164	121904	2.41%
3rd Day	36858	36075	162734	162539	2.43%
Total	96192	93853	369118	368351	8.07%

Figure: 5.14 Cut panel Defect chart

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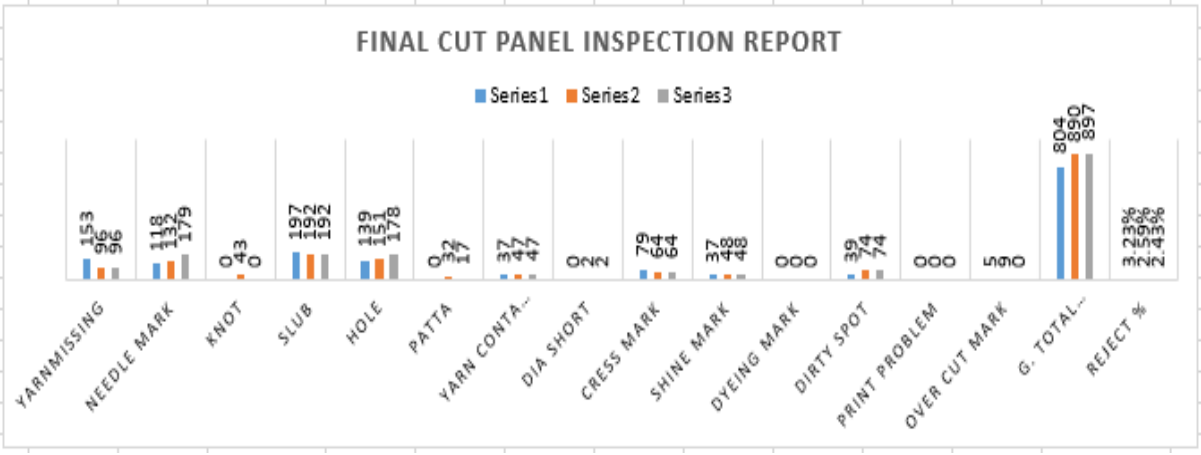

Figure: 5.15 Cut panel Defect chart.

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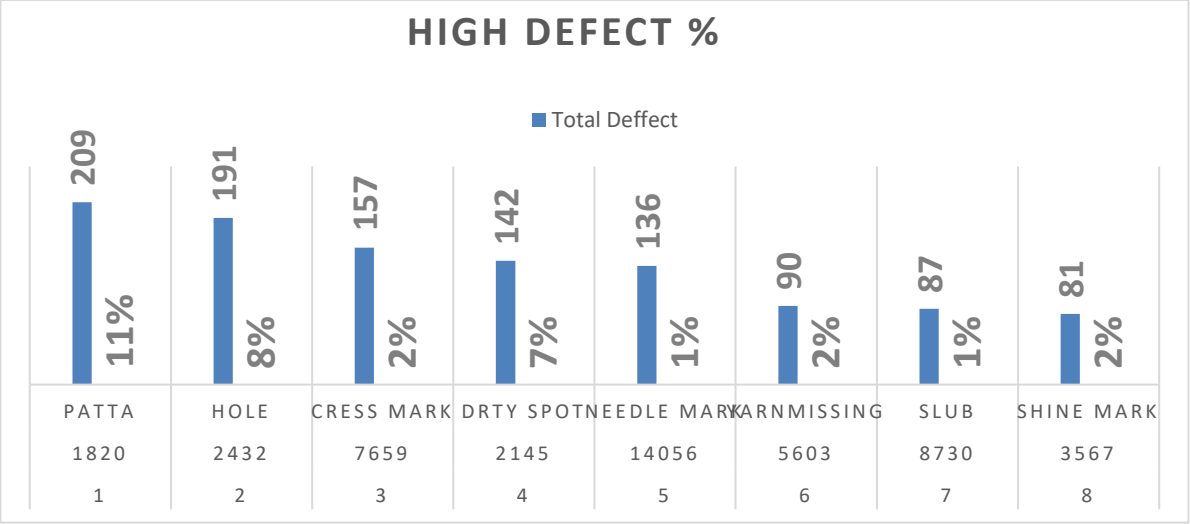

Figure: 5.16 High Defect %

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Cumulative Observation.

Some problem in Cutting Section I found the highest defect fabric Patta,209,11%. And second fabric hole 191, present 8%, third Crush mark defect 157 present 2%. Dirty spot 142, Needle mark 136, Yarn missing 90, Fabric slob 87, Shine mark 81. Another cutting fault is no followed in cutting panel.

This Cutting is done Executive Green tex Ltd. Meghna Holding Ltd. Quality control in cutting section is very important in garments sector. Otherwise, cannot be help to increase sewing and finishing production or it's also a costly project but it maintains the standard of cutting section. its increase the sewing finishing production quality is bring the belief of the ultimate user on their product. I am very much thankful to our honorable teacher who has supervised us and help me to take a thesis topic loke Investigation on quality problem in cutting section, to do the job I have seen that major defect in finished fabric fabric Hole, Patta, crash mark, Dirty Spot, Needle mark, Yarn missing, Shine Mark. cutting section, I have found uneven marker making, and Cut panel measurement, Finished Garments Measurements (+-) Fabric spreading ply to ply Check, after cutting numbering, Bundling And 100% Cut panel check, I found major defect. So I am very much happy that I made the thesis on the STUDY ON QUALITY ISSUE CUTTING SETION. And I wish our work will be beneficiary to the garments cutting and they will be taking more care on their product to maintain Quality.

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Chapter-4

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