Faculty of Engineering

Department of Textile Engineering

# Title:
# Study on Cutting and Sewing defects in Knit Garments.

REPORT ON

Course Title: Project (Thesis)

Course Code: TE-4214

## ***Submitted By***

Md. Salman khan Fahim

ID:182-23-507

Md.Mahamudul Hasan

ID: 182-23-477

## ***Supervised By***

**Mst. Murshida khatun**

**Assistant Professor**

This Project Presented in partial fulfillment of the Requirement for The Degree of Bachelor of Science in Textile Engineering

**Advance in Apparel Manufacturing Technology**

# DECLARATION

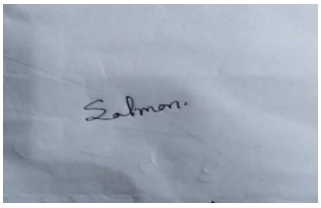
Thus, we proclaim that the work introduced in this proposal is named "Study on Sewing and cutting Faults. "We have finished it under the management of Mst. Murshida Khatun

It has not been introduced for a level of some other college, and all the asset of materials utilizes for this proposition has been appropriately recognized.

This is to affirm that the above affirmation made by us is suitable to the best of my knowledge and concern.

**Submitted By:**

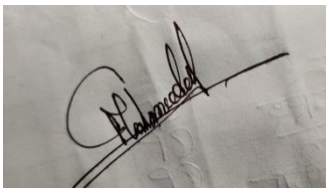
Md. Salman khan Fahim
ID:182-23-507



Signature

Md.Mahamudul Hasan

ID: 182-23-477



Signature

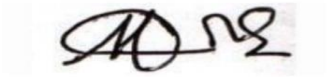
# LETTER OF APPROVAL

This venture report arranged by Md. Salman khan Fahim bearing Id: 182-23-507 and

Md. Mahamudul Hasan bearing Id: 182-23-477, is endorsed in Partial Fulfillment of the necessity for the Degree of BACHELOR OF SCIENCE IN TEXTILE ENGINEERING.

The said understudies have finished their task work under my watch. During the examination time frame, I discovered them genuine, dedicated, and excited.

**Mst.Murshida Khatun**



Assistant Professor
Department of Textile Engineering
Faculty of Engineering
Daffodil International University

# ACKNOWLEDGEMENT

At First, we express our heartiest thanks and thankfulness to God-like Allah for His approval makes us conceivable to finish this task effectively.

We finished the complete theory work at GMS composite sewing Ind. Ltd.

We feel thankful to our Supervisor, Mohammad Abdul Baste, Daffodil International University, Dhaka, Bangladesh. Profound knowledge and unmistakable fascination of our administrator in the field advancement impacted us to do this venture. His perpetual tolerance, academic direction, continuous and vigorous oversight, significant guidance, and adjusting them at all stages have made it conceivable to finish this undertaking. We might want to offer our heartiest thanks to other employees of the TE division of Daffodil International University. Particularly much gratitude goes to one of our senior brothers Md. Rafizfrom to gather the example and data. We might want to thank our whole coursemate in Daffodil International University, Who took part in this talk while finishing the course work.

At last, we should recognize with due regard to our folks who were the principal wellspring of our energy.

# ABSTRACT

I have visited a few Garments Industry and realized that sewing and cutting are vital to making a Garment. Sewing and cutting issues have a very follow the impact on Garments quality. A few flaws show significant imperfections, and a few show minor. So controlling the flaws during cutting and sewing is vital. I need to dispose of those flaws however much as could be expected. However, it is practically difficult to kill all flaws like a minor shortcoming.

I found the greater part of the minor flaws during our Internship period contrast with Major blames such as(Missing yarn, thick dainty line, Slub , open crease, size botch, texture opening, texture conceal, down fasten, without tack ) Cutting Major blames, for example, (Crease mark, oil sport, missing yarn, opening, thick yarn, uneven coloring, running shade). Minor issues can be dispensed with by various cycles after sewing or cutting. Two or three minor deficiencies get punishment as Major shortcomings by the 4 Inspection framework. At the long following, seven days end line assessment auditor investigated all out 10813 computers of articles of clothing 9031pcs quality pass 50 laptops reject 1450 computers surrender and adjust 1348 laptops. Here QC passed rate 87%, deformity rate 13%, Reject rate 0.43%. We discover diverse kinds of imperfections found in the sewing and cutting area, for example, Skip join, Broken line, oil marks, open crease, name skewed. The most extreme number of shortcomings are skipped join 30%; broken fasten 8%, needle cut 9%, uncut string 25%, and others 30% imperfection.

# Contents

**DECLARATION** ..... ii
**LETTER OF APPROVAL** ..... iii
**Mohammad Abdul Baset** ..... iii
**ACKNOWLEDGEMENT** ..... iv
**ABSTRACT** ..... v
**1.0 INTRODUCTION** ..... 1
**1.1** Objective ..... 2
**1.2** Methodology ..... 2
**2.0 Literature review** ..... 3
**2.1 What is cutting?** ..... 4
2.1.1 Flow chart of Cutting section: ..... 4
2.1.2 Types of Cutting knife: ..... 5
2.1.3 Marker Making ..... 5
2.1.4 Fabric cutting ..... 5
2.1.5 Numbering ..... 5
2.1.6 100% checking and replacing if needed: ..... 5
2.1.7 Cutting faults ..... 5
2.1.8 Quality cut panel: ..... 6
2.1.9 Replacement ..... 7
2.1.10 Different types of Cutting Faults Picture: ..... 7
**2.2.0 What is sewing?** ..... 9
**2.2.1** Flow Chart of Sewing Section: ..... 9
**2.2.2** Generally Using Sewing Machine: ..... 10
**2.2.3** Machine Brand: ..... 10
**2.2.4** Types of sewing needle: ..... 10
**2.2.5** Sewing faults, causes and their remedies: ..... 10
**2.2.6** Different Types of Sewing Faults Picture: ..... 12
**3.0 Inspection in cutting section** ..... 18
**3.1 Experiment Data- marker lay chart cutting** ..... 18
**3.2 Experiment Data-Cutting Quality Inspection Report** ..... 21
**3.3 Experiment Data-Cutting quality Control** ..... 23

**3.4 Experimental Data-Daily Cut Panel Rejection Monitoring List** ..... 25
**3.5 Experimental Data- In-Line Sewing Inspection Report** ..... 28
**3.6 Experimental Data-Hourly QC Pass Production Report –Sewing** ..... 31
**4.2 Analysis Report from Data** ..... 33
**4.3 Cutting Section Inspection** ..... 35
**4.3 Cut panel Inspection Report Analysis:** ..... 35
**4.4 Sewing Inspection Report Analysis:** ..... 36
**Conclusion** ..... 41
**Reference** ..... 42

## List of Figure



| Figure Number | Figure Name | Page Number |
|---|---|---|
| 2.1 | Different Type of Cutting Faults | 07 |
| 2.2 | Different Type of Cutting Faults | 08 |
| 2.3 | Dirty Mark | 13 |
| 2.4 | Skipped Stitch | 13 |
| 2.5 | Armhole Point Updown | 14 |
| 2.6 | Raw edge | 14 |
| 2.7 | Pleat | 15 |
| 2.8 | Size Mistake | 15 |
| 2.9 | Armhole Shade Off | 16 |
| 2.10 | Slub | 16 |
| 3.1 | Marker lay chart cutting Report. | 19 |
| 3.2 | Cutting Quality inspection Report | 21 |
| 3.3 | Cutting Quality Control | 23 |
| 3.4 | Daily Cut Panel monitoring List | 25 |
| 3.5 | In-Line Sewing Inspection Report | 28 |
| 3.6 | Hourly QC Pass Production Report –Sewing | 31 |
| 3.7 | After 1 hour inspection | 34 |
| 3.8 | Cutting Section Inspection | 35 |
| 3.10 | Defect Measurement | 36 |

# List of Figure


| Table Number | Table Name | Page Number |
|---|---|---|
| 3.1 | Marker lay cutting report | 19 |
| 3.2 | Cutting Quality Inspection Report | 21 |
| 3.3 | Cutting quality Control | 23 |
| 3.4 | Daily Cut panel report | 25 |
| 3.5 | In-Line Sewing Inspection Report | 28 |
| 3.6 | Hourly QC Pass Production Report –Sewing | 31 |
| | | |

# CHAPTER-1
# INTRODUCTION

# 1.0 INTRODUCTION:

Material is a word that comes from the Latin word surface, which signifies "to weave", "to mesh", or "to development" the least complicated material craftsmanship is felting in which creature filaments are tangled together utilizing that and dampness. The most significant number of material expressions being with winding or turning and employing strands to make yarn. The Most of time, yarn interlaced, circled, tied, or woven to make a dress. The entirety of this time bombed yarn, texture, and completed items.

## 1.1 Objective:

To think about the articles of the clothing production line

To think about the articles of clothing wastage

To think about the functioning system to increment profitability.

## 1.2 Methodology

- Textile industry
- Internet
- Book
- Teacher lecture sheet
- Garments factory

# CHAPTER-2
# LITERATURE REVIEW

# 2.0 Literature review:

## 2.1 What is cutting?

The primary job of a slicing interaction is to cut a piece of clothing parts from texture rolls or texture than according to style details and send slice segments to the sewing office in a pack**.**

## 2.1.1 Flow chart of Cutting section:

**FLOW SEQUENCE OF CUTTING**

Fabric Receive from dyeing section.
⇓
Fabric Relax
⇓
Original sample receive
⇓
Marker Making
⇓
Fabric spreading
⇓
Placing marker paper onto the lay
⇓
Fabric cutting
⇓
Numbering
⇓
100% checking and replacing if needed
⇓
Storing and bundling
⇓
Print and embroidery send if needed.
⇓
Print and embroidery receive
⇓
Sewing input

### 2.1.2 Types of Cutting knife:

- Die cutter
- Drill cutter
- Straight knife cutter
- Round knife

### 2.1.3 Marker Making:

During clothing-producing measures, marker making is the most valuable interaction to draw the example pieces over a thin marker paper. This marker paper is put on the texture layer to limit texture wastage.

### 2.1.4 Fabric cutting:

Texture lay is cutting by straight blade cutting machine at that point isolated cutting part.

### 2.1.5 Numbering:

In this stage, a sticker is appended with all pieces of cutting part for conceal coordinating. The sticker number keeps up cutting number, size number, chronic number.

### 2.1.6 100% checking and replacing if needed:

After cutting, the lay of the texture assessment is finished. Assuming any piece of the cutting texture gets deformity or needs a substitution, supplanting is finished.

### 2.1.7 Cutting faults:

- Crease mark
- Contamination
- Oil spot

- Snagging
- Missing yarn
- Un-even dyeing
- Running shade
- Thick yarn
- Hole
- Dirty sport
- SLUB
- NEPS
- Spoilsport
- Thin yarn
- Needle mark
- Knot
- Join
- PATTA
- Missing line
- Needle line
- Miss print
- Shinning mark

### 2.1.9 Quality cut panel:

Quality imperfection,

If the amount of clothing parts is missing, the amount (assume +1, - 1) the amount then substitution by quality or move those control board.

### 2.1.10 Replacement:

After the quality check, if parts are a botch, then a substitution of value manual cutting framework.

### 2.1.11 Different types of Cutting Faults Picture:

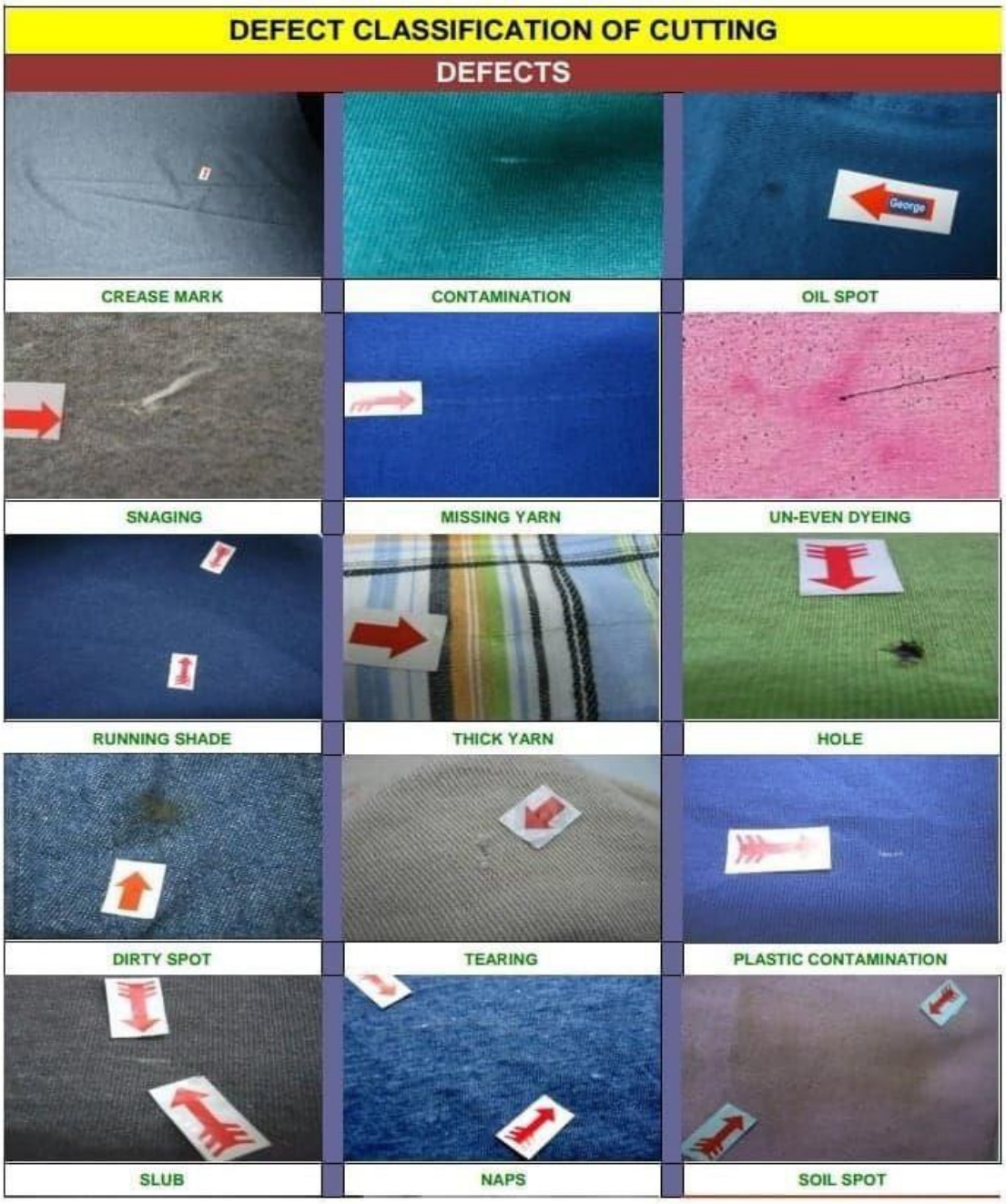



Figure: 2.1 Different Type of Cutting Faults


Figure:2. 2 Different Type of Cutting Faults

### 2.2.0 What is sewing?

Sewing is the specialty of affixing or connecting objects utilizing join made with a needle and string.

### 2.2.1 Flow Chart of Sewing Section:

- Cutting dept. Will PO, size, and shading (with %) shrewd info.
- Yield will be just thinking about QC pass(PO, Size, and Color)
- Change should be amended day by day; No modify at the day end.
- Dismissal PO, Size, and shading shrewd should be recorded and told the cutting dept. So they can supplant likewise.
- Sewing dept. Is mindful of telling cutting both sewing and Finishing dismissals.
- Sewing to completing development should be gone through by actual checking, and both gatherings should sign in the register book.
- Completing modify development will likewise be gone through with the register book, and both gatherings should sign.
- When sewing, got to cut the board from cutting and marked any missing pieces of clothing, Sewing dept. Will be capable.
- When completing got QC passed products from sewing and marked, any lost of articles of clothing, Finishing dept. I will be mindful.
- Floor PM should screen register book each day.
- AGM should arbitrarily review the register book week by week.

### 2.2.2 Generally Using Sewing Machine:

Overlock

•Flat Lock

•Plain M/C

•Bartack M/C

•Button Hole M/C

•Punch M/C

• Eyelet M/C

A feed of the arm

•Button join M/C

•Fusing M/C

•Piping M/C

•Iron M/C

•Logo join M/C

### 2.2.3 Machine Brand:

- Pegasus
- Juki
- Brothers
- Kansai

### 2.2.4 Types of sewing needle:

- Sharps
- Short darners
- Long darners
- Yarn darners
- Curved repair
- Leather needle
- Cross stitch

### 2.2.5 Sewing faults, causes, and their remedies:

❖ **Variable stitch density**: variable fasten thickness should have a similar measure of join per unit length. It is not. Then, it is called variable fasten thickness.

❖ **Causes:**

- Twisting of string in the string guide.
- More pressure in the string.
- Twisting of needle string in the lower part of the string bundle.
- Fraying of string in the needle.
- Snarling of string before pressure plate.

**Remedies:**

- Proper stringing of sewing string during sewing.
- The strain of string ought to be less or utilization of high strength string.
- Check spring to be changed.
- Winding of more strings in the string guide and to be held less strain to the tensioning circle.
- The edge should be smooth, and the needle should be changed depending on the situation.
- High-quality needles should be utilized.

❖ **Frequent thread breakage**: Continuous string breakage of string again during sewing, and there needs an additional time and unsafe for creation. When there needs to open out sewing to take care of the issue.

**Causes**:

- Wrong fitting of the bobbin case.
- Wrong twisting of string onto the bobbin.
- More pressure to the bobbin string or more pivoting of the bobbin.

**Remedies**:

- Proper twisting of string onto the bobbin.
- pre-wound bobbin might be utilized
- The edge to be smooth.

### 2.2.6 Different Types of Sewing Faults Picture:


Fig 2.3: DIRTY MARK

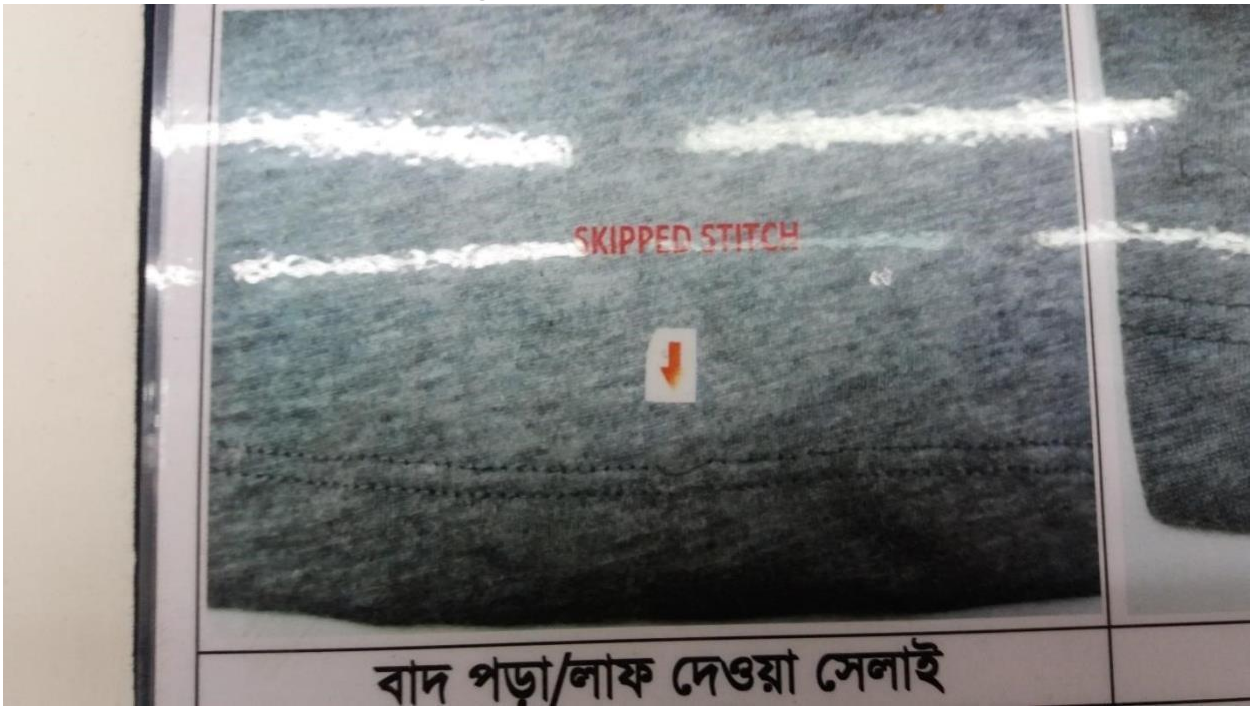



**Fig 2.4: SKIPPED STITCH**

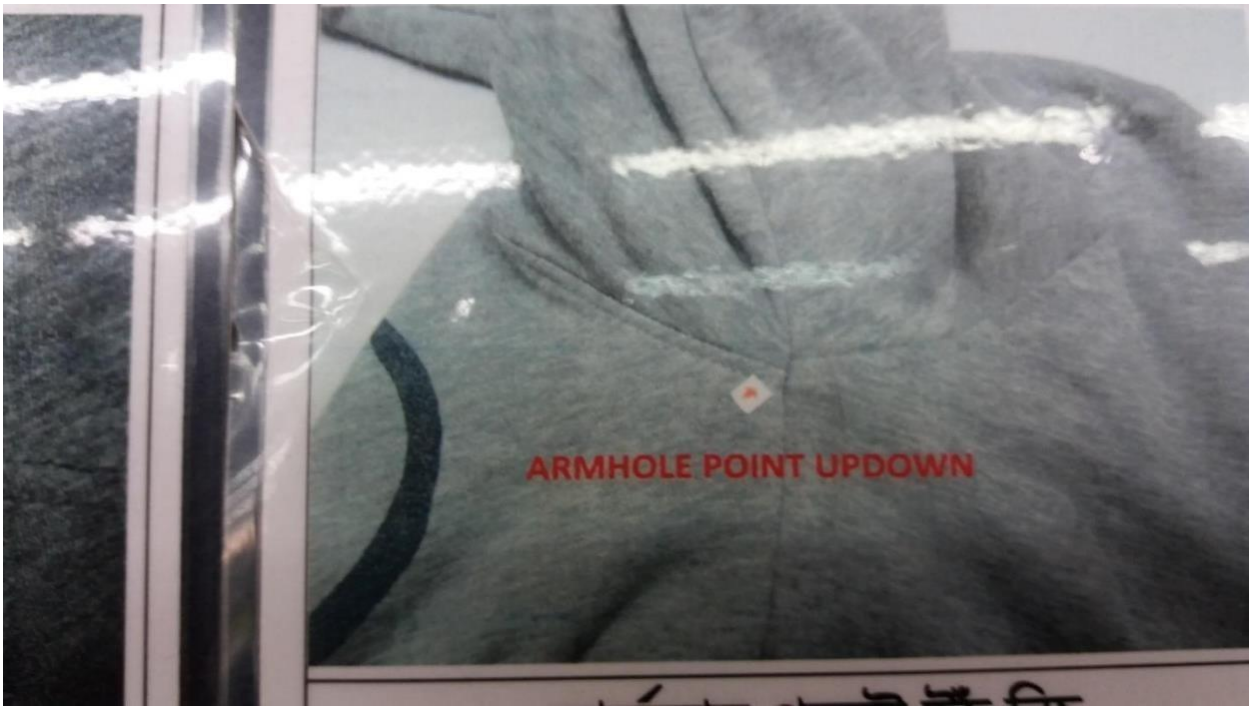



**Fig 2.5: ARMHOLE POIN UPDOWN**

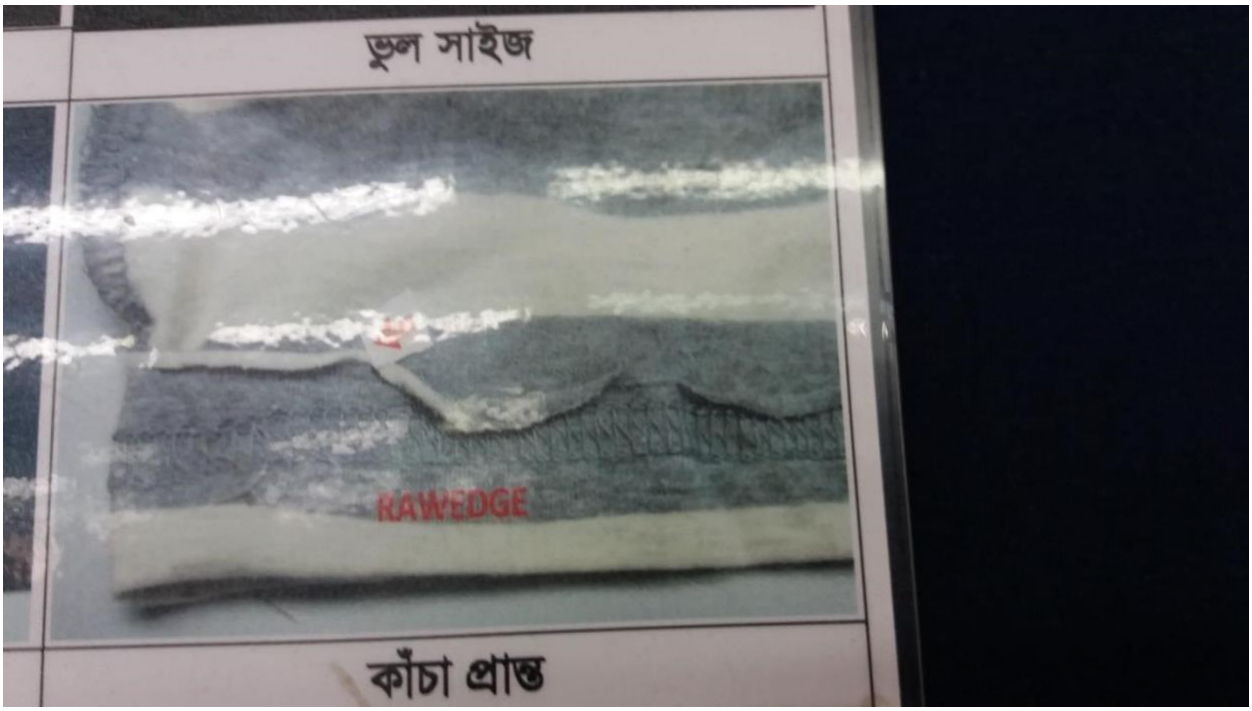



**Fig 2.6: RAW EDGE**


**Fig 2.7: PLEAT**


**Fig 2.8: SIZE MISTAKE**

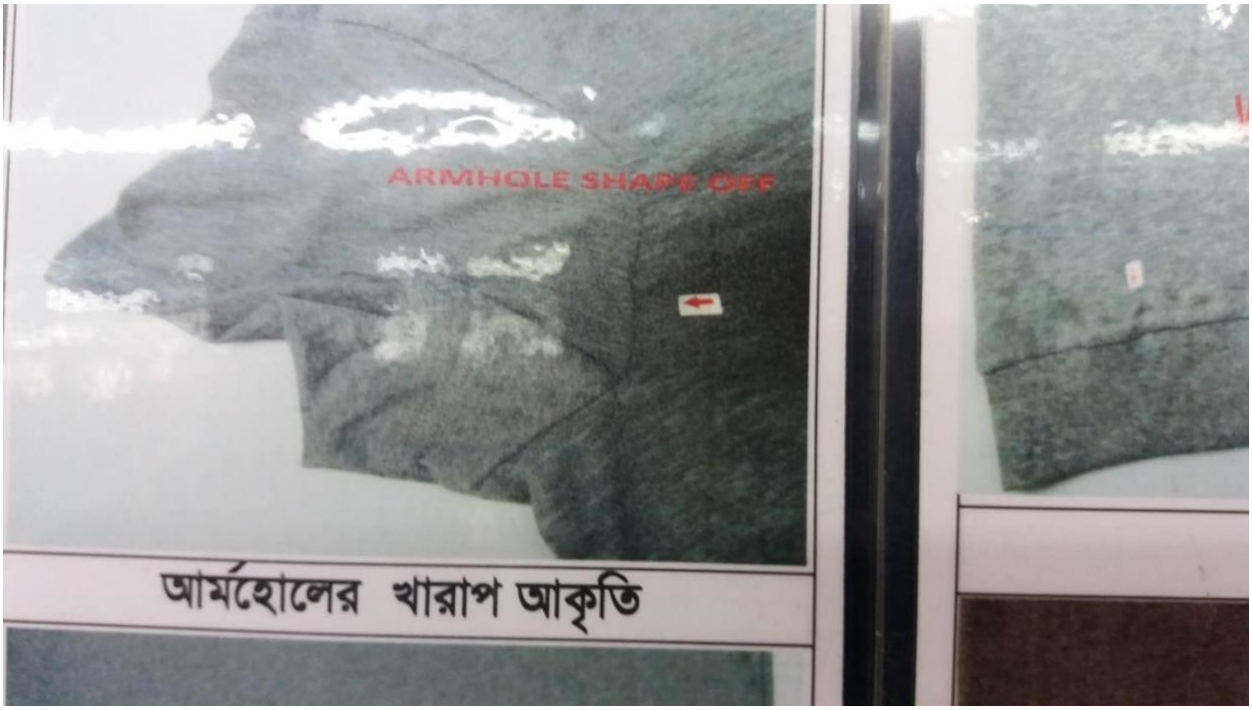



**Fig 2.9: ARMHOLE SHADE OFF**


**Fig 2.10: SLUB**

# CHAPTER-3
# EXPRIMENTAL DETAILS

## 3.0 Inspection in cutting section:

This interaction texture is being cut into parts. In large-scale manufacturing, numerous layers of texture are praises on the table, and an enormous number of articles of clothing being cut at a time. The cutting cycle incorporates several sub-interaction, and the stream of the interaction is an after.

## 3.1 Experiment Data- marker lay chart cutting:

Marker lay chart cutting report of GMS Composite knitting Ind. Ltd.

Buyer Name: jack and jones

Style No: JJE CHEST logo

P.O/NO: 722

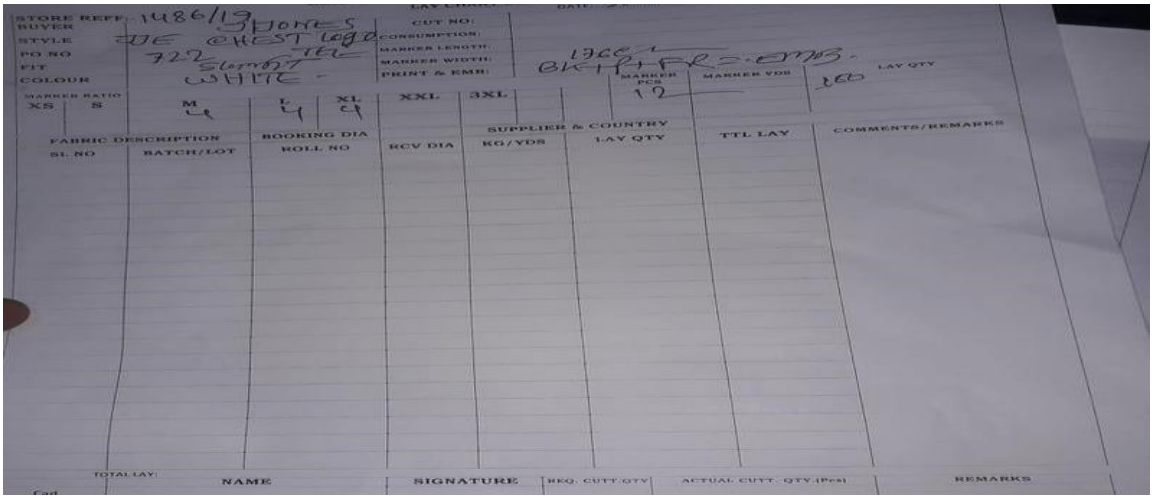



**Fig No 3.1: Marker lay chart cutting Report.**

## GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**
**QUALITY DEPARTMENT**
**Marker Lay chart cutting**

| | | | |
|---|---|---|---|
| **STORE REFF** | **1486/19** | | |
| **BUYER NAME** | **J/JONESS** | **CUT NO** | |
| **STYLE NO** | **JJE CHEST LOGO** | **CONSUMPTION** | |
| **PO NO** | **722 TG** | **MARKER LENGTH** | |
| **FIT** | **SLEMFIT** | **MARKER WIDTH** | **176C** |
| **COLOR** | **WHITE** | **PRINT AND EMB** | **BK+P+RR=EMB** |

| **MARKER RATIO** | | | | | | | | | **MARKER PCS** | **MARKER YDS** | **LAY QTY** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **XS** | **S** | **M** | **L** | **XL** | **XXL** | **3XL** | | | | | |
| | | **4** | **4** | **4** | | | | | **12** | | **100** |
| | | | | | | | | | | | |

| **FABRIC DESCRIPTIO** N | **BOOKIN** G **DIA** | | **SUUPPLIE R** | **AND COUNTR Y** | | | |
|---|---|---|---|---|---|---|---|

| SL NO | BATCH LOT | ROLL NO | RCV DIA | KG/YD | LAY QTY | TTL LAY | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

**TOTAL LAY:**

| CAD | NAME | SINGATURE | REQ.CUTT,QTY | ACTUAL.CUTT.QTY(Pcs) | REMARKS |
|---|---|---|---|---|---|
| **LAY SUPERVISOR** | | | | | |
| **QI** | | | **LAY START TIME** | **LAY FINISH TIME** | |
| **NAME OF LAY OPERATO**R | | | | | |
| **NAME OF LAYMAN** | | | | | |
| | | | | | |

**Table No 3.1: Marker lay cutting report**

❖ Marker type: 1. One waymarker

2. Tow waymarker
3. Group marker
4. Block marker

## 3.2 Experiment Data-Cutting Quality Inspection Report:

Cutting Quality Inspection report of GMS Composite knitting Ind. Ltd.

Buyer Name: Jules

Style No: 7/3824

S/R: 1109

C/No: 2

Fabric Type: SJ

Color: D-Red

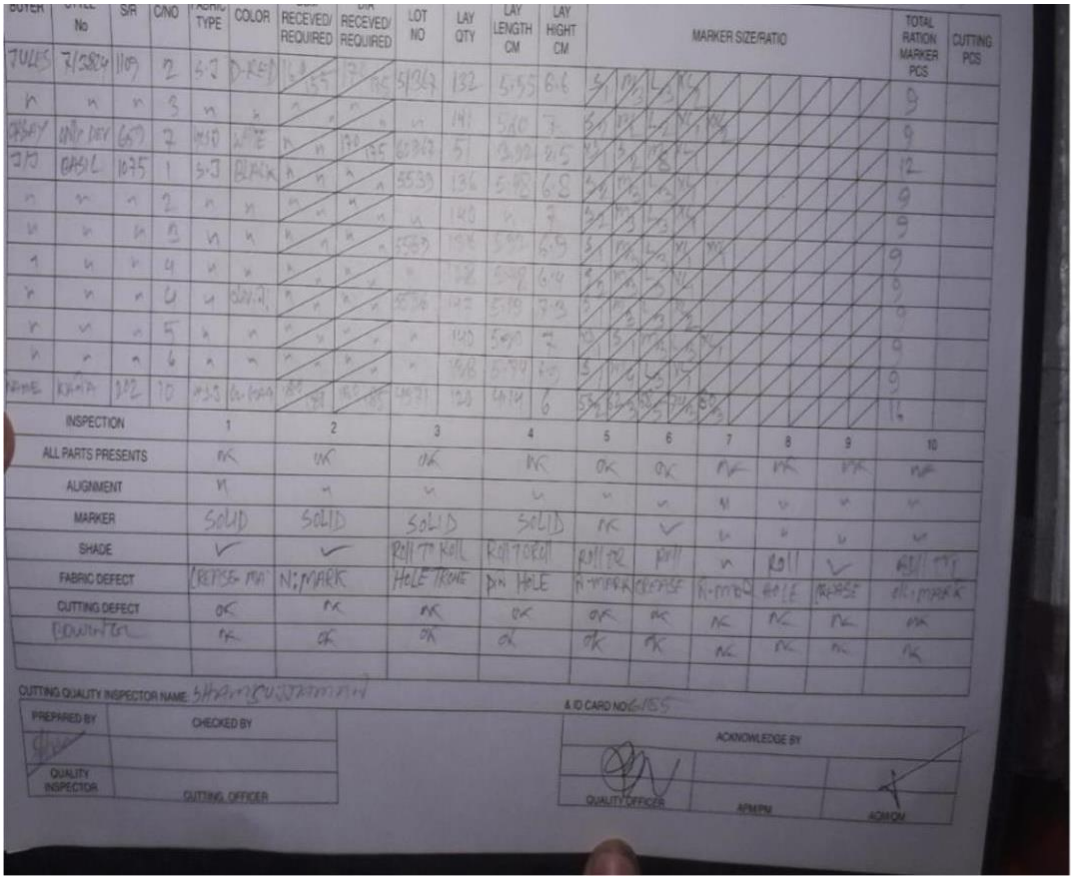



**Fig 3.2: Cutting Quality inspection Report**

## GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**

**QUALITY DEPARTMENT**

**Cutting Quality Inspection Report**

**Buyer: Jules, Style No: 713824**

| Buyer | Style No | S/R | C/No | Fab Ric type | Color | GSM | DIA | LOT No | Lay Qty | Lay length CM | Lay high CM | Ratio | Total Pcs | Cutting pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jules | 713824 | 1109 | 2 | SJ | D-Red | 160-165 | 17017 5 | 51367 | 132 | 5.55 | 6.66 | S/1 | 9 | |
| Orsay | Only dsv | 659 | 7 | Ly.S.J | White | ” | ” | 60967 | 51 | 3.92 | 2.5 | S/2 | 12 | |
| J/J | Basic | 1075 | 1 | S.J | Black | ” | ” | 5539 | 136 | 5/78 | 6.8 | S/2 | 9 | |
| J/J | ” | ” | 2 | SJ | ” | ” | ” | 5539 | 140 | 5.92 | 7 | S/2 | 9 | |
| J/J | ” | ” | 3 | SJ | ” | ” | ” | 5569 | 138 | 5.78 | 6.9 | S/1 | 9 | |
| J/J | ” | ” | 4 | SJ | ” | ” | ” | ” | 140 | 5.90 | 6 | S/1 | 9 | |
| J/J | ” | ” | 4 | SJ | ” | ” | ” | 5536 | 138 | 5.74 | 7.3 | S/2 | 9 | |
| Rame | kana | 202 | 10 | Ly.S.J | G.G Ab | ” | ” | 4571 | 120 | 4.14 | 6.9 | 56/2 | 16 | |

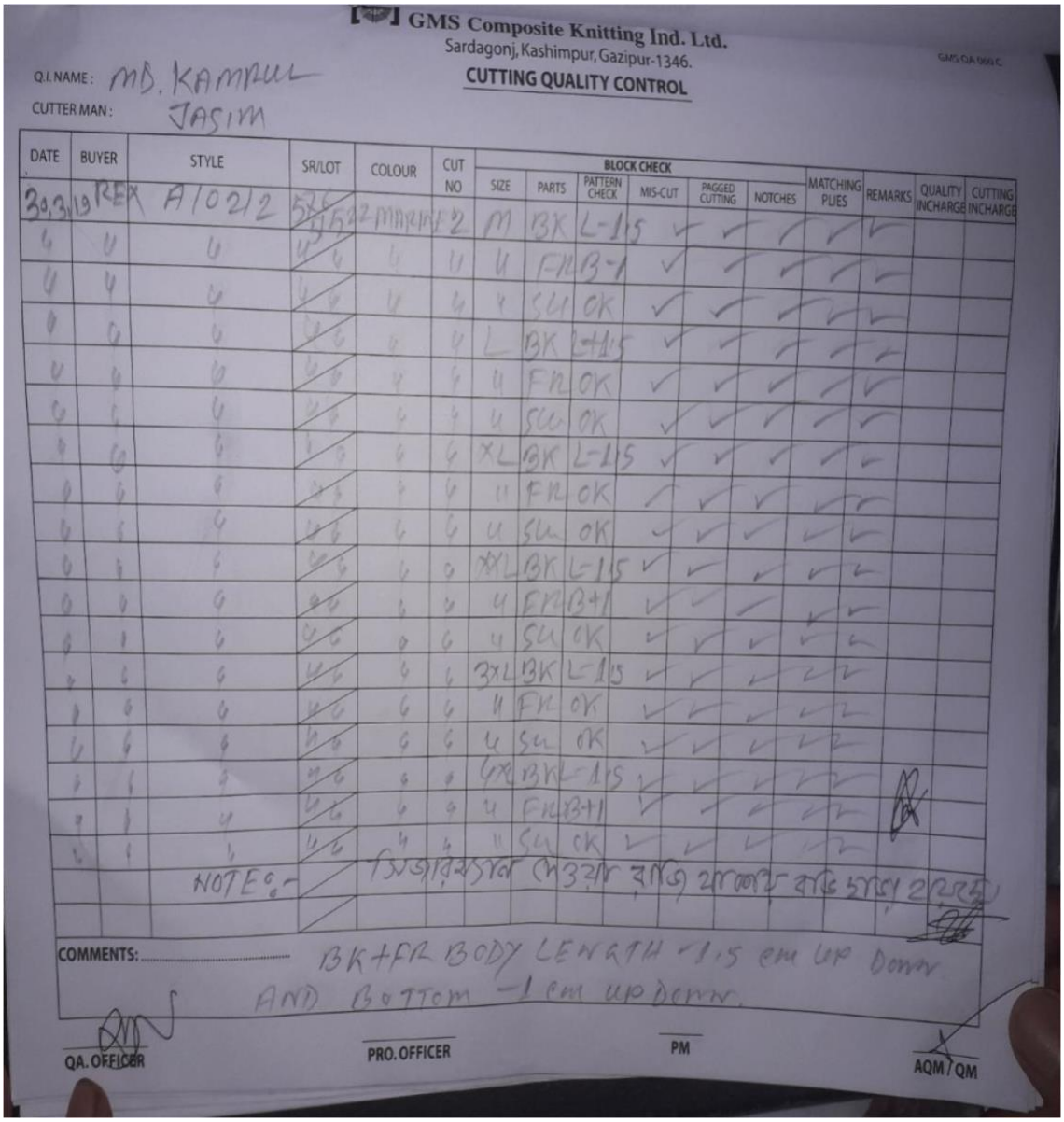
**Table 3.2: Cutting Quality Inspection Report**

## 3.3 Experiment Data-Cutting Quality Control:

Cutting Quality control report of GMS Composite knitting Ind. Ltd.

Buyer Name: REX

Style No: A/0212



GMS Composite Knitting Ind. Ltd.
Sardagonj, Kashimpur, Gazipur-1346.
CUTTING QUALITY CONTROL

Q.I. NAME: MD. KAMRUL
CUTTER MAN: JASIM

| DATE | BUYER | STYLE | SR/LOT | COLOUR | CUT NO | BLOCK CHECK: SIZE | PARTS | PATTERN CHECK | MIS-CUT | PAGGED CUTTING | NOTCHES | MATCHING PLIES | REMARKS | QUALITY INCHARGE | CUTTING INCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.3.19 | REX | A/0212 | 5526 5527 | MARINE | 2 | M | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | B-1 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | L | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | XL | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | XXL | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | B+1 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 3XL | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 4XL | BK | L-1/5 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | FR | B+1 | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | SL | OK | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | | NOTE:- | | | | | | | | | | | | | |

COMMENTS: BK+FR BODY LENGTH -1.5 cm UP Down AND BOTTOM -1 cm UP DOWN.

QA. OFFICER | PRO. OFFICER | PM | AQM / QM

**Fig 3.3: Cutting Quality Control**

## GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**

**QUALITY DEPARTMENT**

**Cutting Quality Control**

| Buyer | Style No | SR/ LOT | Color | Cut No | Size | Parts | Pattern check | Misscut | Pagged cutting | Notches | Plies | Remareks | Quality inch arge | Cutting inch arge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REX | A/0212 | 576/515 | Marine | 2 | M | 3K | L-1.5 | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | FX | 3-1 | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | 3k | Ok | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | Fx | L+1.5 | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | 3k | Ok | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | Su | Ok | Ok | Ok | Ok | Ok | Ok | | |
| | A/0212 | 576/515 | Marine | 2 | M | 3k | 1.5 | Ok | Ok | Ok | Ok | Ok | | |

**Table 3.3: Cutting quality Control**

NOTE: Bk + Fx body Length-1.5 cm up Downand bottom -1 cm up Down.

## 3.4Experimental Data-Daily Cut Panel Rejection Monitoring List:

Daily cut panel rejection monitoring List of GMS Composite knitting Ind. Ltd.

Buyer Name: REX

Style No: 525

Color: LT-Blue

DIA: 210

GSM: 220

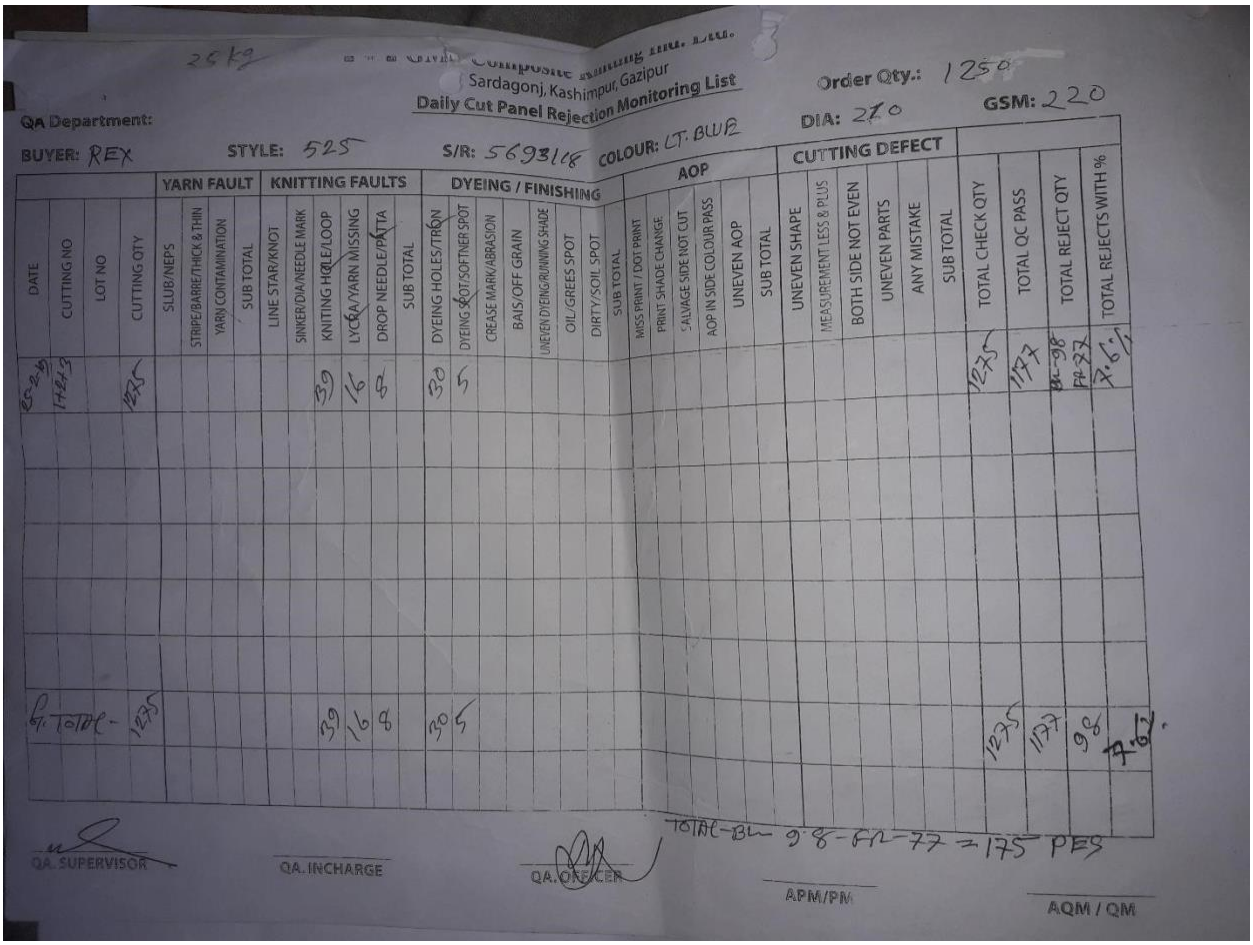



**Fig 3. 4: Daily Cut Panel monitoring List**

## GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**

**QUALITY DEPARTMENT**

**Daily Cut Panel Monitoring List**

Buyer Name: REX
Style No: 525
Color: LT-Blue
GSM: 220

| **Date** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cutting No** | **1+2+3** | | | | | | | | |
| **Lot No** | | | | | | | | | |
| **Cutting QTY** | **1275** | | | | | | | | |
| **SLUB /NEPS** | | | | | | | | | |
| **THICK and THIN** | | | | | | | | | |
| **YARN CONTAMINATION** | | | | | | | | | |
| **SUBTOTAL** | | | | | | | | | |
| **LINE STAR/KNOT** | | | | | | | | | |
| **NEEDLE MARK** | | | | | | | | | |
| **KNITTING HOLE** | **39** | | | | | | | **39** | |
| **LYCRA MISSING** | **16** | | | | | | | **16** | |
| **PATTA** | **8** | | | | | | | **8** | |
| **SUB TOTAL** | | | | | | | | | |
| **TRON** | **30** | | | | | | | **30** | |
| **DYING SPOT** | **5** | | | | | | | **5** | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **UNEVEN SHAPE** | | | | | | | | | |
| **MEASUREMENT LESS** | | | | | | | | | |
| **BOTH SIDE NOT EVEN** | | | | | | | | | |
| **UNEVEN PARTS** | | | | | | | | | |
| **ANY MISTAKE** | | | | | | | | | |
| **SUBTOTAL** | | | | | | | | | |
| **TOTAL CHECK QTY** | **1275** | | | | | | | **1275** | |
| **TOTAL QC PASS** | **1177** | | | | | | | **1177** | |
| **TOTAL REJECT QTY** | **BX-98 FX-77** | | | | | | | **98** | |
| **TOTAL REJECT WITH %** | **7.6** | | | | | | | **7.6** | |

**Table 3.4: Daily Cut panel report**

TOTAC-BX 9.8-FX-77=175 PCE

## Sewing section Inspection:

In measure quality control in sewing segment examination.

Sewing is the most significant in articles of the clothing industry. In measure quality control in wrapped up by the line QC through 9 computers assessment system. For fundamental undertaking, 100% cycle assessment are finished. Checked around there, texture pressure, SPI checking, needle checking investigation checking.

## 3.5Experimental Data- In-Line Sewing Inspection Report:

Inline Sewing Inspection Report of GMS Composite Knitting Ind. Ltd.

Buyer Name: ORSAY

Style No: JULE 5540

Order QTY:2300 pcs

Styling: MAIN LABEL

Fabrication: 95% cotton,5%Elastic

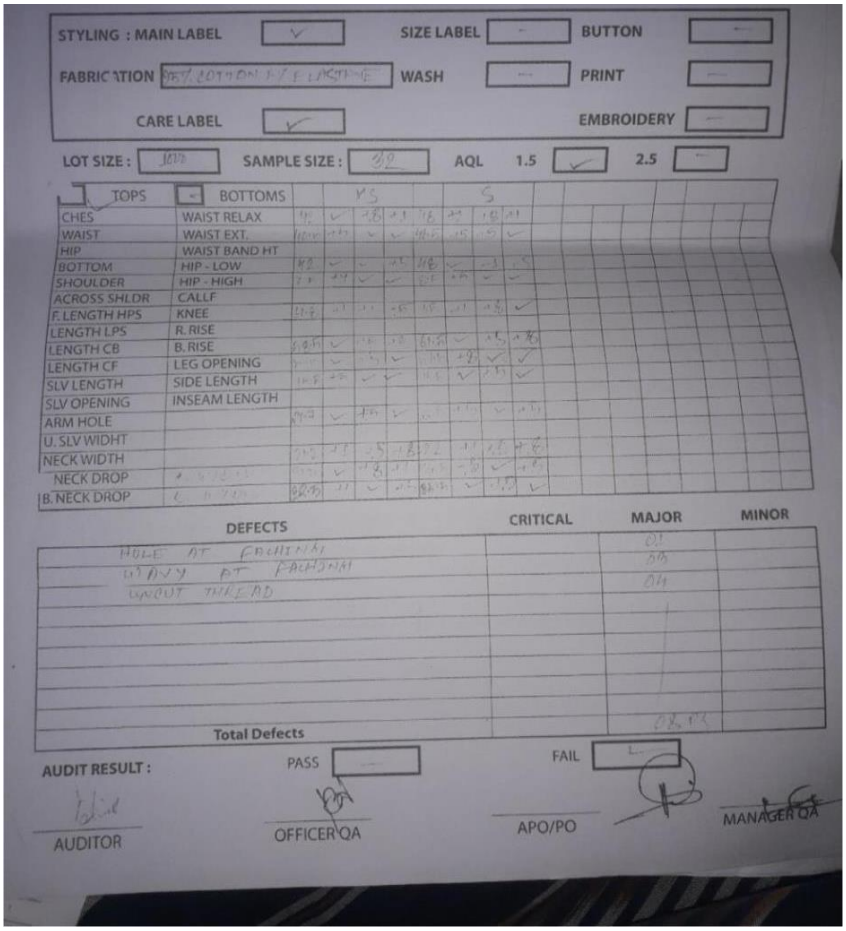



**Fig 3. 5: In-Line Sewing Inspection Report**

# GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**

**Sewing Department**

**In-line Sewing Inspection Report**

**LOT SIZE: 1000, SAMPLE SIZE: 32, AQL: 1.5.**

| TOPS | BOTTOMS | | | XS | | | S | | |
|---|---|---|---|---|---|---|---|---|---|
| CHES | WAIST RELAX | 42 | 42 | +8 | +1 | 48 | +1 | +8 | +1 |
| WAIST | WAIST EXT | 40.5 | +5 | +8 | +1 | 41.5 | +5 | +5 | +1 |
| HIP | WAIST BAND HT | | | | | | | | |
| BOTTOM | HIP-LOW | 42 | 42 | 42 | +5 | 48 | 48 | +1 | +5 |
| SHOULDER | HIP HIGH | 7.5 | +4 | +4 | +4 | 8.5 | +5 | 65 | +1 |
| ACROSS SHLDR | CALLF | | | | | | | | |
| F.LENGTH HPS | KNEE | 4.8 | +1 | +1 | +5 | 65 | +1 | +8 | +8 |
| LENGTH LPS | R.RISE | 14.5 | 14.5 | +5 | +5 | 61.5 | 61.5 | +5 | +8 |
| LENGTH CB | LEG OPENING | | | | | | | | |
| LENGTH CF | SIDE LENGTH | 58.5 | 58.5 | +5 | +2 | 61.5 | 61.5 | 61.5 | +8 |
| SLV OPENING | SIDE LENGTH | | | | | | | | |
| SLV LENGTH | INSEAM LENGTH | | | | | | | | |
| ARM HOLE | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NECK WIDTH** | | **21.2** | **+1** | **+5** | **+8** | **22** | **+1** | **+2** | **+8** |
| **NECK DROP** | | **31.5** | **31.5** | **+8** | **+1** | **24.5** | **+5** | **+5** | **+5** |
| **B.NECK DROP** | | **32.5** | **+1** | **+1** | **+5** | **35.5** | **35.5** | **35.5** | **+5** |

| **DEFECTS** | **CRITICAL** | **MAJOR** | **MINOR** |
|---|---|---|---|
| **HOLE** | | **01** | |
| **WAVY AT FACHING** | | **03** | |
| **LYCUT** | | **04** | |
| **TOTAL DEFECT** | | **08pcs** | |

**Table 3.5: In-Line Sewing Inspection Report**

## Description:

We found and streaming issue underneath.

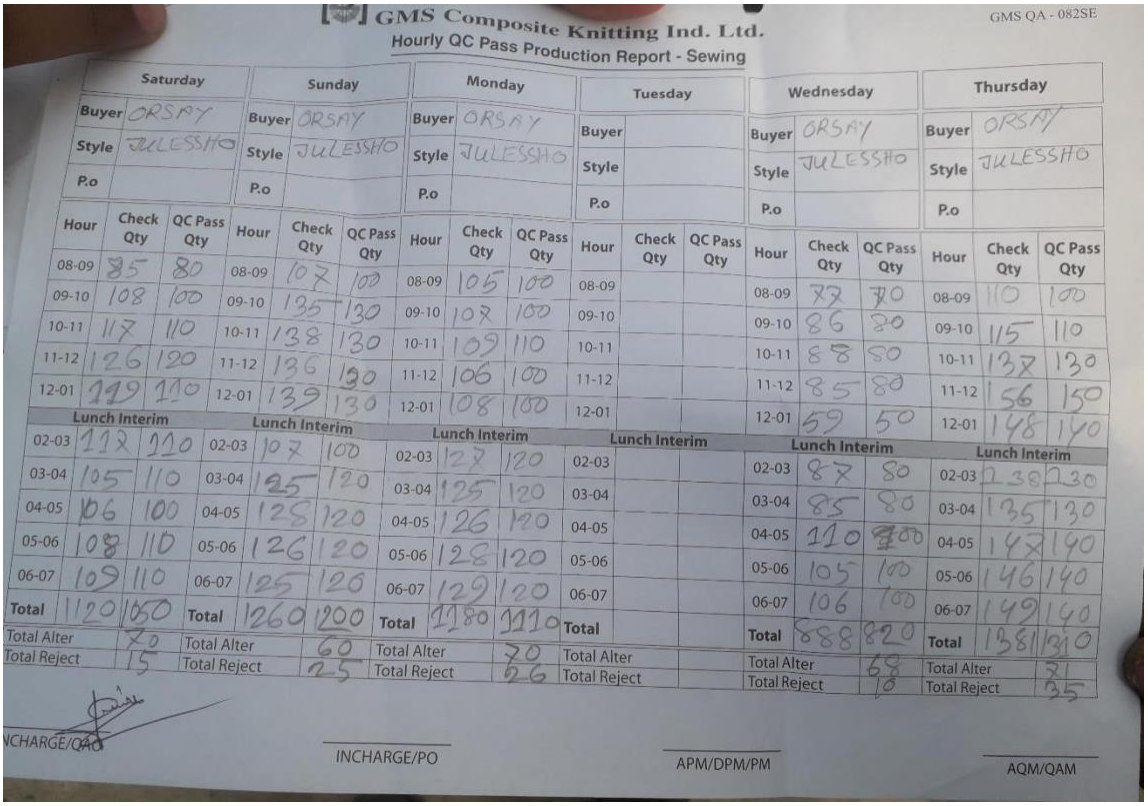
- Fabric shading some deferent from our unique Swatch fixing Sample.
- Print is looking sparkly less.
- Dirty sport
- Hole
- Neck rib free
- Crease sign of the front

## 3.6Experimental Data-Hourly QC Pass Production Report –Sewing:

Hourly QC Pass Production Report of GMS Composite Knitting Ind. Ltd.

Buyer Name: ORSAY

Style No: JULESSHO



GMS Composite Knitting Ind. Ltd.

GMS QA - 082SE

Hourly QC Pass Production Report - Sewing

| Saturday | | | Sunday | | | Monday | | | Tuesday | | | Wednesday | | | Thursday | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Buyer | ORSAY | | Buyer | ORSAY | | Buyer | ORSAY | | Buyer | | | Buyer | ORSAY | | Buyer | ORSAY | |
| Style | JULESSHO | | Style | JULESSHO | | Style | JULESSHO | | Style | | | Style | JULESSHO | | Style | JULESSHO | |
| P.o | | | P.o | | | P.o | | | P.o | | | P.o | | | P.o | | |
| Hour | Check Qty | QC Pass Qty | Hour | Check Qty | QC Pass Qty | Hour | Check Qty | QC Pass Qty | Hour | Check Qty | QC Pass Qty | Hour | Check Qty | QC Pass Qty | Hour | Check Qty | QC Pass Qty |
| 08-09 | 85 | 80 | 08-09 | 107 | 100 | 08-09 | 105 | 100 | 08-09 | | | 08-09 | 77 | 70 | 08-09 | 110 | 100 |
| 09-10 | 108 | 100 | 09-10 | 135 | 130 | 09-10 | 102 | 100 | 09-10 | | | 09-10 | 86 | 80 | 09-10 | 115 | 110 |
| 10-11 | 117 | 110 | 10-11 | 138 | 130 | 10-11 | 109 | 110 | 10-11 | | | 10-11 | 88 | 80 | 10-11 | 137 | 130 |
| 11-12 | 126 | 120 | 11-12 | 136 | 130 | 11-12 | 106 | 100 | 11-12 | | | 11-12 | 85 | 80 | 11-12 | 156 | 150 |
| 12-01 | 119 | 110 | 12-01 | 139 | 130 | 12-01 | 108 | 100 | 12-01 | | | 12-01 | 59 | 50 | 12-01 | 148 | 140 |
| Lunch Interim | | | Lunch Interim | | | Lunch Interim | | | Lunch Interim | | | Lunch Interim | | | Lunch Interim | | |
| 02-03 | 112 | 110 | 02-03 | 107 | 100 | 02-03 | 127 | 120 | 02-03 | | | 02-03 | 87 | 80 | 02-03 | 138 | 130 |
| 03-04 | 105 | 110 | 03-04 | 125 | 120 | 03-04 | 125 | 120 | 03-04 | | | 03-04 | 85 | 80 | 03-04 | 135 | 130 |
| 04-05 | 106 | 100 | 04-05 | 128 | 120 | 04-05 | 126 | 120 | 04-05 | | | 04-05 | 110 | 100 | 04-05 | 147 | 140 |
| 05-06 | 108 | 110 | 05-06 | 126 | 120 | 05-06 | 128 | 120 | 05-06 | | | 05-06 | 105 | 100 | 05-06 | 146 | 140 |
| 06-07 | 109 | 110 | 06-07 | 125 | 120 | 06-07 | 129 | 120 | 06-07 | | | 06-07 | 106 | 100 | 06-07 | 149 | 140 |
| Total | 1120 | 1050 | Total | 1260 | 1200 | Total | 1180 | 1110 | Total | | | Total | 888 | 820 | Total | 1381 | 1310 |
| Total Alter | | 70 | Total Alter | | 60 | Total Alter | | 70 | Total Alter | | | Total Alter | | 68 | Total Alter | | 71 |
| Total Reject | | 15 | Total Reject | | 25 | Total Reject | | 66 | Total Reject | | | Total Reject | | 18 | Total Reject | | 35 |

INCHARGE/QAM

INCHARGE/PO

APM/DPM/PM

AQM/QAM

**Fig 3.6: - Hourly QC Pass Production Report –Sewing**

## GMS COMPOSITE KNITTING IND.LTD.

**Sardagonj, Kashimpur, Gazipur-1346**

**Sewing Department**

**Hourly QC Pass Production Report**

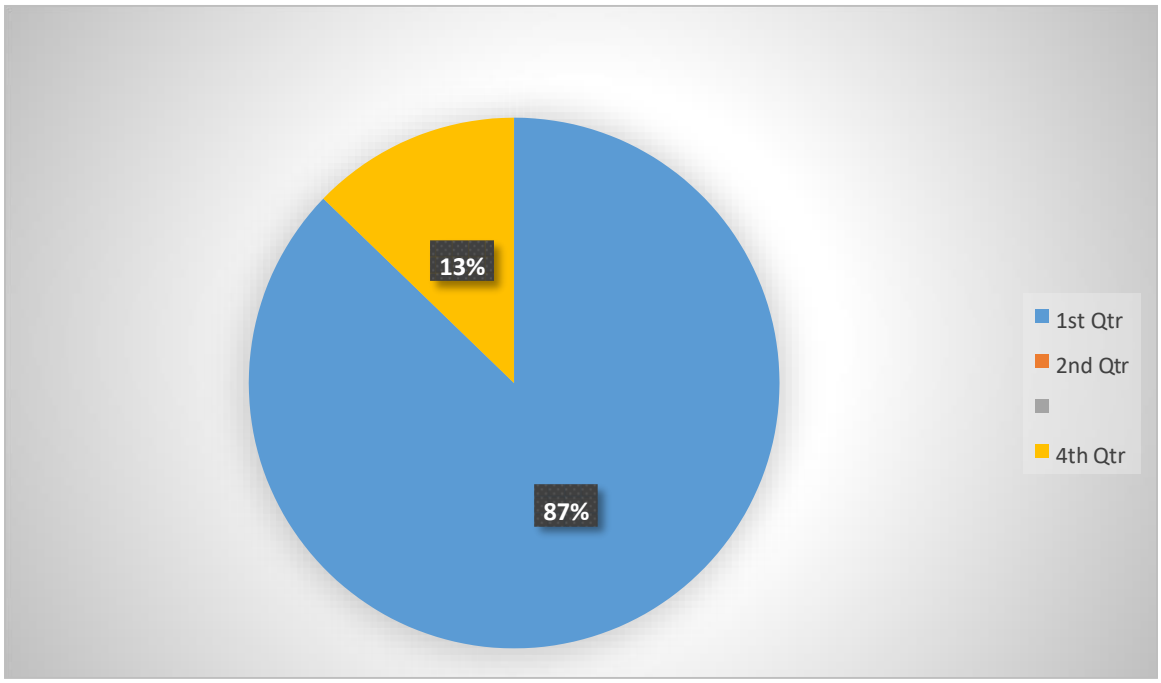
| | Saturday | | Sunday | | Monday | | Tuesday | | Wednesday | | Thursday |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Buyer | ORSAY | Buyer | ORSAY | Buyer | ORSAY | Buyer | ORSAY | Buyer | ORSAY | Buyer | ORSAY |
| Style | JULES SHO | Style | JULES SHO | Style | JULES SHO | Style | JULES SHO | Style | JULES SHO | Style | JULES SHO |
| PO | | PO | | PO | | PO | | PO | | PO | |
| | | | | | | | | | | | |

| Hour | Check Qty | Qc pass Qty | Hour | Check Qty | Qc pass Qty | Hour | Check Qty | Qc pass Qty | Hour | Check Qty | Qc pass Qty | Hour | Check Qty | Qc pass Qty | Hour | Check Qty | Qc pass Qty |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-9 | 85 | 80 | 8-9 | 85 | 80 | 8-9 | 85 | 80 | 8-9 | 85 | 80 | 8-9 | 85 | 80 | 8-9 | 85 | 80 |
| 9-10 | 108 | 100 | 9-10 | 108 | 100 | 9-10 | 108 | 100 | 9-10 | 108 | 100 | 9-10 | 108 | 100 | 9-10 | 108 | 100 |

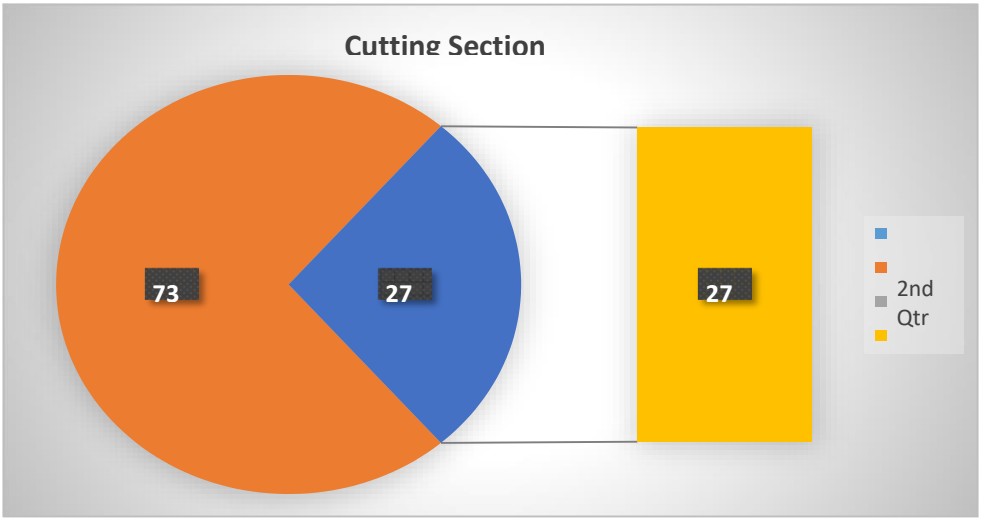
| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-11 | 117 | 110 | 10-11 | 117 | 110 | 10-11 | 117 | 110 | 1011 | 117 | 110 | 10-11 | 117 | 110 | 1011 | 117 | 110 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11-12 | 12 | 1 | 11- | 12 | 1 | 11- | 12 | 1 | 11 | 12 | 1 | 11- | 12 | 1 | 11 | 12 | 1 |
| | 6 | 20 | 12 | 6 | 20 | 12 | 6 | 20 | -12 | 6 | 20 | 12 | 6 | 20 | -12 | 6 | 20 |
| 12-01 | 119 | 110 | 12-01 | 119 | 110 | 12-01 | 119 | 110 | 1201 | 119 | 110 | 12-01 | 119 | 110 | 1201 | 119 | 110 |
| Lunch Interim | | | Lunch Interim | | | Lunch Interim | | | | | | Lunch Interim | | | | | |

**Table 3.6: Hourly QC Pass Production Report –Sewing**




**Graph No: 3.7 After 1-hour inspection**




**Graph No: 3.8 Cutting Section Inspection**

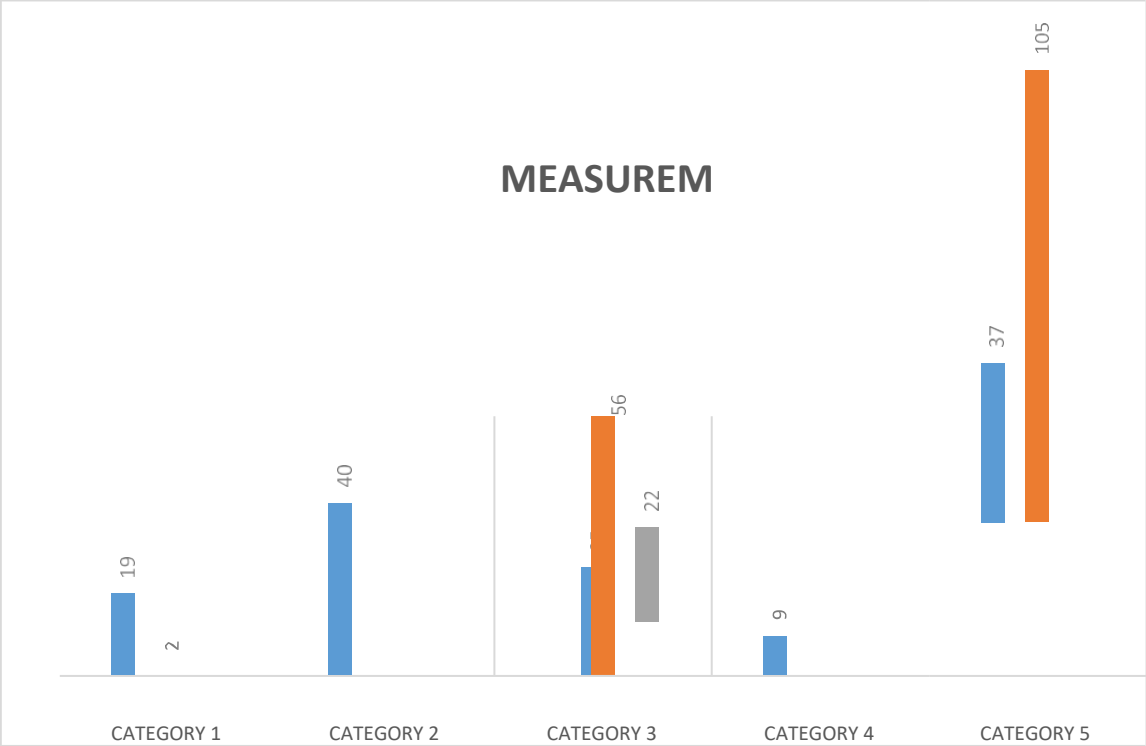



**Figure 3.10 Defect Measurement**

# CHAPTER-4
# DISCUSSION OF RESULT

## 4.1 After 1-hour inspection

Following a 1-hour cutting example examination, the final 100 laptops pieces of clothing design 87 of them quality passed.
Reject 13 of them—absolute checked computers in rate 87% and all-out deformity 13%.

In the beginning, my industry got order 1000 clothing design of laptops. Then started work on it. After one hour industry completed 100 pieces of them.87% or pieces of them are quality passed and other 13 pieces are rejected. This 13% or pieces are rejected during manufacturing the garments. And due to few reasons such as skip stitch, broken stitch, puckering, raw edge and other factor. This rejection can be reduced by taking some steps. Industry have to be very careful during sewing the garments. Expert operator is required to sewing the garments.

## 4.2Cut panel Inspection Report Analysis:

Cut board's examination report from GMS Composite Knitting Ind. Ltd. It appeared in figure 3. This is an output duplicate of their unique cut board. In this report production line taken care of the job for the cut board group chronic number. All out assessment 450 example laptops. Absolute oddball 18 laptops. QC supplant the imperfection segment from the part from the equilibrium texture. Which texture QC records the number of layers that have total from one another roll. Here discover three imperfection at three packs and recuperation this deformity. They showed deformity in this report.

## 4.3 Sewing Inspection Report Analysis:

Sewing investigation report from GMS Composite Knitting Ind. Ltd. As shown this figure 5 is a sweep duplicate of their examination report. In this report. This report appeared and checked boundaries given reviewed articles of clothing; two here investigate Qty 100 and imperfection 7. Here part concealing deformity 5 avoids one and string cut 1. In

## 4.4 Reason of Rejection in cutting section

There are very reasons are responsible behind the cut panel rejection. Those are reject for knitting hole, AOP problem, reject for the needle hole, reject for the yarn contamination, reject for spot, GSM cut, cutting problem. In cutting panel rejection is nearly 2%. Most rejection have occurred for GSM cut and knitting hole problem. Basically we are not able to reduce all this problem. But taking some important steps we can minimize this problems then the wastage percentage will be lower. So company will can earn much profit.

## 4.5 Discussion of reduce fabric rejection in cutting section

-If we make a good marker fabric then wastage can be reduce.
-If we can able to reduce the amount of defect which came from dyeing section then automatically fabric wastage will reduce.
-By using well fabric spreading and well marker placement then automatically fabric wastage will be reduce.

There are another important thing we have to maintain that after bring the fabric from store to cutting section fabric should have relax 2 or 3 day. For this fabric become prepare properly for cut. After giving relax fabric then it should cut it by skilled cutter man. It is much important to get a good result.

Following 10 hours end line examination assessor investigator review the absolute 124 imperfections found.

Here, the first most elevated deformity is Neck Shape 19 imperfections found.

Second most elevated Oil Mark 9 deformities found.

The third highest deformity is concealing 22 imperfections found.

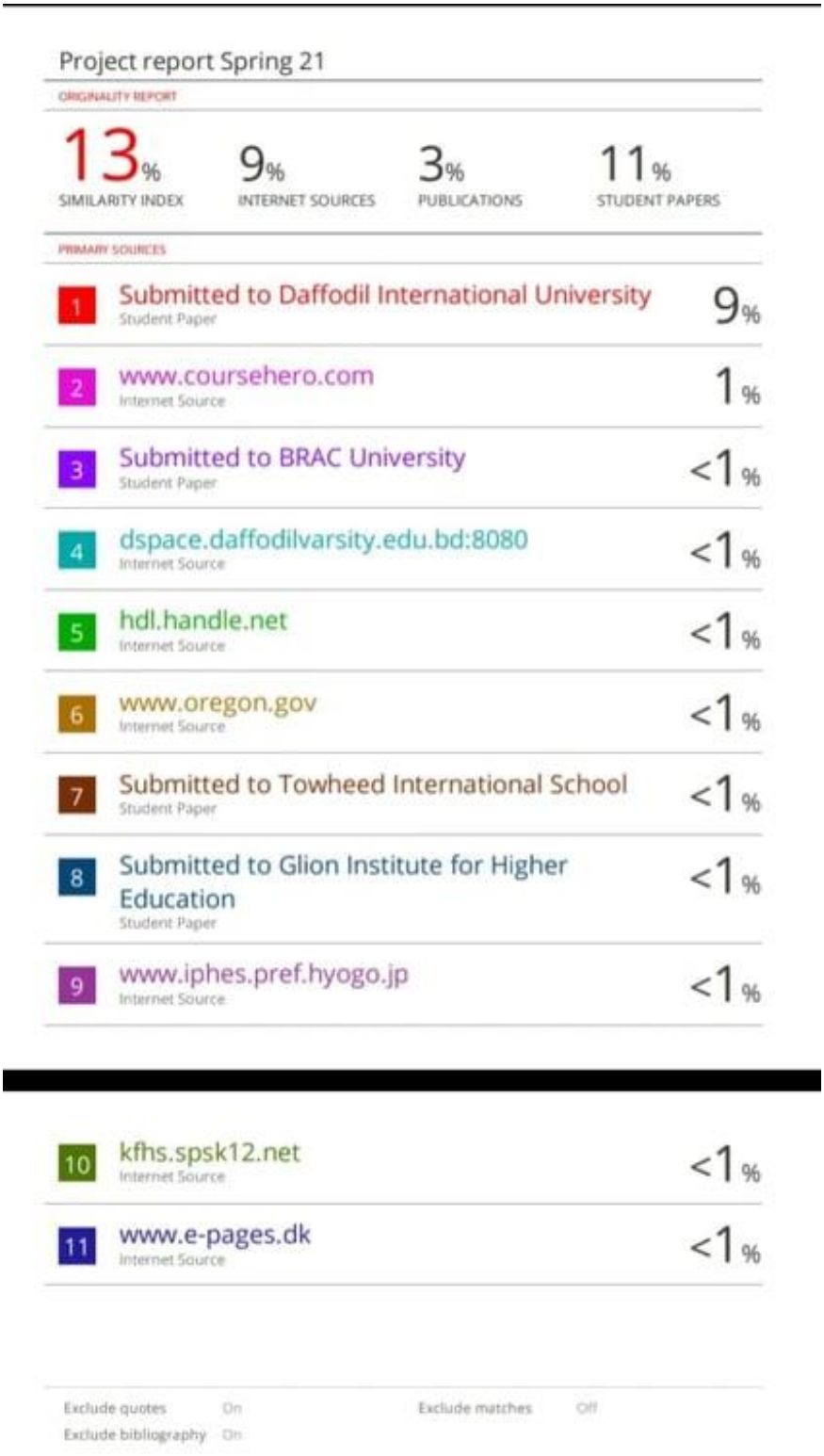
# CHAPTER-5
# CONCLUSION

## Conclusion:

We finished our undertaking by gathered by the examination from GMS Composite Knitting Ltd. This undertaking is vital for us, it additionally assists us to know the assessment technique, and we likewise know the sewing and cutting flaws. We take in numerous sorts of data from this project; it will assist us with fostering our vocation .so from the start to fulfill the audit technique of the surface. Regarding the appraisals in the surface, trims, and additional territories, the surface is the principal material in the creation, so its surface is extraordinary and made incredible quality pieces of clothing. The cutting region made model in adjust shrinkage at the point made marker from the plan from the outset. Handling plant takes offer acceptable unmistakable audits in review sections here buyer gave everyday thing, so all thing takes after this standard worth. Five driver examinations give insights into this report. Presently we can guarantee our efficiency and discover our serious issues, sewing and cutting shortcomings. However, it is a critical issue for the pieces of the clothing industry; that is the reason it additionally gives insights about esteem. Here all things keep up the standard necessities of things. Along these lines here modern office keeps as pieces of clothing examination report and last QA computation report.

## Reference


- http://www.garmentsmerchandising.com/8-sewing -faults-with-causes-and-remedies/
- http://www.google.com
- http://www.fashion.com
- http://www.wikipedia.com
- www.gmsbd.com



Project report Spring 21

ORIGINALITY REPORT

| 13% | 9% | 3% | 11% |
|---|---|---|---|
| SIMILARITY INDEX | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |

PRIMARY SOURCES

| | | |
|---|---|---|
| 1 | Submitted to Daffodil International University<br>Student Paper | 9% |
| 2 | www.coursehero.com<br>Internet Source | 1% |
| 3 | Submitted to BRAC University<br>Student Paper | <1% |
| 4 | dspace.daffodilvarsity.edu.bd:8080<br>Internet Source | <1% |
| 5 | hdl.handle.net<br>Internet Source | <1% |
| 6 | www.oregon.gov<br>Internet Source | <1% |
| 7 | Submitted to Towheed International School<br>Student Paper | <1% |
| 8 | Submitted to Glion Institute for Higher Education<br>Student Paper | <1% |
| 9 | www.iphes.pref.hyogo.jp<br>Internet Source | <1% |
| 10 | kfhs.spsk12.net<br>Internet Source | <1% |
| 11 | www.e-pages.dk<br>Internet Source | <1% |

Exclude quotes On
Exclude bibliography On
Exclude matches Off