Faculty of Engineering

Department of Textile Engineering

Study on Garments Inspection

Course Code: TE-4214 Course Title: Project (Thesis)

Submitted By

1. Shohel Mia	ID.152-23-4433
2. S.M. Aman Ullah	ID.152-23-4421
3. Md. Masnur Rahman	ID.152-23-4426

Supervised By

Mohammad Abdul Baset

Assistant Professor

Department of Textile Engineering

Daffodil International University

This Report Presented in Partial Fulfillment of the Requirements for the Degree of **Bachelor of Science in Textile Engineering**

Advance in Apparel Manufacturing Technology

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LETTER OF APPROVAL

To,

The Head

Department of Textile Engineering

Daffodil International University

102, Shukrabad, Mirpur Road, Dhaka 1207

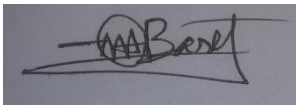
Subject: Approval of Project Report of B.Sc. in TE Program

Dear Sir

We are just writing to let you know that this project report titled as “Study on Garments Inspection” has been prepared by the students S.M. Aman Ullah bearing ID.152-23-4421, Md. Masnur Rahman ID.152-23-4426 and Shohel Mia ID.152-23-4433 is completed for final evaluation. The whole report is prepared based on the proper investigation and interruption through critical analysis empirical data with required belongings. The students were directly involved in their project activities and the report become vital to spark of much valuable information for the readers.

Therefore, it will highly appreciate if you kindly accept this project report and consider it for final evaluation.

Yours sincerely



Engr. Mohammad Abdul Baset

Assistant Professor,

Department of Textile Engineering

Daffodil International University

ACKNOWLEDGEMENT

At first, we like to express our heart-felt thanks to Almighty Allah for his kind blessing for completion of this Process successfully.

We would like to thank the people, who have made a significant contribution to make this Project. Their guide lines, suggestion & inspiration helped me a lot. We would like to express our deepest appreciation to our respected teacher and academic supervisor Engr**. Mohammad Abdul Baset**, Assistant Professor, Dept. of Textile Engineering (DIU). Deep knowledge and keen interest of him helps and assists us much to carry out this project on Garments inspection. His endless patience, scholar guidance, constant encouragement, energetic supervision, constructive criticism, valuable advice, checking many raw data and correcting them at all stage have made it possible to complete this project.

We would like to express my heartiest gratitude **Prof. Dr. Mahbubul Haque** Head, Dept. of textile engineering for his kind suggestion and also the other faculty members and the stuff of TE department of Daffodil International University.

We are also very much glad to **Active Composite Mills Ltd**. Authority for giving us opportunity to do our project work in their factory. We also thankful to Md. Rafiqul Islam (Manik),Sr. Merchandising of **Active Composite Ltd**. for our project assistance.

We would like to thank my entire course mate of Daffodil International University, who took part in effective discussion and suggestion to make this project as well.

At last but not the least, thanks go to all the worker, supervisor, line chief and floor in charge who have assisted, helped and inspired us to complete this task in various stage.

DECLARATION

We hereby declare that, this project has been done by us under the supervision of Engr. Mohammad Abdul Baset, Assistant Professor, Department of TE, and Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

Submitted By:

Name of Students	ID	Signature
S.M. Aman Ullah	152-23-4421	
Md. Masnur Rahman	152-23-4426	
Shohel Mia	152-23-4433	

ABSTRACT

We completed my thesis project on Study on Garments Inspection. This paper clearly explains the hourly feed inspection report. Daily garments alter (%) report. In-line garments inspection report, pre final garments inspection report, Final garments inspection report. This project based on the different types of sewing defects and their remedies. In the textile industry, Inspection is basically done, before the shipment. This Project is done by Active Composite Limited. In this industry sewing section has 2nd and 3rd. Monthly production capacity 950000 Pcs/month, number of line 17, number of M/C 499, number of manpower 1260. Floor production capacity 1600 pcs/day, number of line 17, number of M/C 499, number of manpower 590. In my study, I am focus on important of sewing defects, how to control sewing defect in garment industry, how to work pre-final and final and final inspection and I am trying to identify that problem, reason and their remedies. In my project, I have investigated 24 sewing defect reports from sewing input to output of finishing section. From the analysis of the reports, I find different types of defect that are found in sewing and finishing section. Such as: Broken stitch, oil mark, reject/hole, open seam, label slanted, dirty mark, oil mark, slanted seam, uncut thread, twisting placket slanted, embroidery hole, tension problem, raw age, stripe miss-match, part shading, print problem, foreign yarn, needle mark, connecting thread, pleat, puckering, uneven joint stitch, needle damage etc. Maximum numbers of faults are Skip stitch 6%, Broken stitch 5%, Needle cut 7%, Uncut thread 20%, Sport 10% etc.

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Introduction

1.0 Background of the study:

Readymade garments are produced in bulk production in textile industry. People got their desire dress according their demand in very easy way. People select their garments from different types of fabric with very beautiful design. Readymade garments production is start by sourcing the perfect raw material. From raw material collection to shipment the production a garment go through some several steps. Sewing section is the place where the desire product gets the final shape. During sewing and after sewing the garments go through some vital inspection.

The inspection is taken by manufactures, Buyer and various third-party inspection organizations. The main target of inspection is to achieve the buyer requirements. In factory the inspection is done by several steps.

1.1 Objective of the study:

- To know the way of minimizing garments wastage.
- To archive buyer requirement.
- Follow up the working procedure as well as increase the productivity.
- To make a lead against the competition with a neutral audit seal.

1.2 Methodology

- Textile factory
- Book
- Internet
- Practical information from factory

1.3 Limitations

- Time constraint
- Lack of experience
- Lack of sufficient guide from factory

Chapter: 02

Literature review

2.1 Garment Inspection

All garment retailers expect to sell high quality products from manufactures. The quality of the garments any vary depends on the price market they are being made for so therefore buyers expect manufacturers expect manufacturers to follow various methods of inspection techniques all through the production and prior to shipment release from factory. Following correct inspection procedures, inspection systems and eventually shipment release gives the clear judgment of the quality of the garment.

2.2 Types of Inspection

Pre-Production Inspection: This is done before creation begins. It is done to crosscheck for definite check of Bulk texture and trims materials, styling cutting way, fabricating subtle elements and workmanship of the piece of clothing or pre-generation test according to the client necessity.

1st inline production inspection: This examination is done toward the beginning of creation when first generation yield of specific style of articles of clothing is reviewed; to recognize conceivable disparities or variety and to do fundamental remedies to be made mass creation. This kind of assessment is done at preparatory phase of assembling of a style covering chiefly style detail, outward presentation, workmanship, estimations, texture quality, Trims and parts, Lot shading, Printing, embellishments and washing quality

2nd line Production Inspection: This inspection is done during production to ensure initial discrepancies have been corrected and rectified. This examination is a follow-up of the first inline creation investigation and is for the most part done after first line review when errors have been distinguished around then.

Final Random Inspection: This inspection is carried out when the production of the total quantity of an order or partial delivery is completed. An example part will be chosen from the request and a level of the articles of clothing will be examined, this rate for the most part being stipulated by the purchaser. The AQL testing examination framework as indicated by the purchaser.

2.3 Flow Chart of Garments Inspection:

Confirmation of Quantity

↓

Confirmation of accessories

↓

Size spec inspection

↓

In side Inspection

↓

Outside Inspection

↓

Final Inspection

↓

Packing

2.4 Inspection Procedure of Garments:

2.4.1 Confirmation of Quantity:

First step of garments inspection start with confirmation of Quantity with the vendors packing list by counting all Pieces of each box. If Quantity is not matching to the packing list and written in the box, then this discrepancy is informed to the vendor.

2.4.2 Confirmation of Accessories:

Subsequent stage is the affirmation of extras; here we affirm mark labels, bad mark labels, Price labels, or different labels, wash mind names, woven names, or different names and embellishments as required by the purchaser.

2.4.3 Size Spec Inspection:

After affirmation of embellishments all pieces are checked according to estimate spec in light of the direction sheet which is given by the purchaser side. On the off chance that any estimation issue is seen, at that point we check the first example and educate the purchaser same time.

2.4.4 In Side Inspection:

At this stage piece of clothing is checked from switch side to guarantee that there is no texture imperfection, poor sewing, and stains and so on in article of clothing.

2.4.5 Out Side Inspection:

At this stage piece of clothing is checked from outside to guarantee that there is no shading variety, weaving deformity, texture imperfection, printing deformity, openings, poor sewing, terrible stench, passing on imperfection and stains and so forth in the article of clothing.

2.4.6 Final Inspection:

Last Inspection organize is the most vital piece of assessment process, here article of clothing is rechecked to affirm that investigation is done appropriately without missing any checking venture if any deformity is seen we place it into dismissal canister or send if for reimburse.

2.4.7 Packing:

All "Review A" merchandise is returned to poly sacks according to the first bundling and afterward they are sending for needle investigation.

Along these lines, contingent upon the nature of deformity a few pieces of clothing are send for repair and some are rejected.

2.5 AQL:

'AQL' remains for 'Acknowledgment Quality Limit' and is characterized as the "quality level that is the Worst bearable" in **ISO 2859-1**. It speaks to the most extreme number of imperfect units, past which a cluster is rejected. Merchants generally set diverse AQLs for basic, major, and minor Defects. Most Asian exporters know about this kind of setting.

2.5.1 AQL Defects Classification

Once the examples are chosen, each article is to be separately examined. Deformities identified amid a review are purchaser particular so in this manner fluctuate starting with one purchaser then onto the next. Imperfections are grouped inside the accompanying classifications.

Basic Defects: A genuine imperfection that can make mischief or damage the client as well as result in a perilous condition.

Major defects: A deformity that tumbles to meet the required controls straightforwardly influencing the convenience, attractiveness, wellbeing and estimation of the stock or as determined by client purchaser are considered as real imperfections and are for the most part non-repairable for instance texture gap, shading among board, wrong estimation, outside yarn, color patches and so on. The estimation endure level may fluctuate from client to client.

Minor Defects: An imperfection that does not antagonistically influence the convenience of the item but rather does comprise of a deviation from the first example, and may influence the offer of the item. Some of these imperfections are because of workmanship and some can be repairable yet at the same time can break down the serviceability of the stock for instance recolor, skip line, wavy base trim and so on.

2.5.2 AQL Chart:

AQL Chart for Garments inspection is given below

Lot Size or Quantity Audited	Acceptable Quality Level (AQL) Level							
	1.5		2.5		4		6.5	
	Inspect	Accept	Inspect	Accept	Inspect	Accept	Inspect	Accept
Less than 150	20	1	20	1	20	2	20	3
151-280	32	1	32	2	32	3	32	5
281-500	50	2	50	3	50	5	50	7
501-1200	80	3	80	5	80	7	80	10
1201-3200	125	5	125	7	125	10	125	14
3201-10000	200	7	200	10	200	14	200	21
10001-35000	315	10	315	14	315	21	315	21
35001-150000	500	14	500	21	500	21	500	21
150001-500000	800	21	800	21	800	21	800	21
500001&Over	1250	21	1250	21	1250	21	1250	21

Fig: 01 AQL Chart

2.5.3 DEFECT CLASSIFICATION – ZONES

When inspecting garments for cleanliness and fabric flaws, the location of the defect and its effect on the appearance and performance of a garment must be taken into consideration. Size and seriousness additionally affect the worthiness. Deformities which are discernible on piece of clothing yet are not in the central territory of the article of clothing may not be a reason for article of clothing dismissal if the piece of clothing's execution, fit or outward presentation isn't weakened. Our standard imperfection arrangement for all marketing classifications; Fabric, Appearance, Color, Shade, Workmanship and Construction, Cleanliness and pressing is grouped utilizing zones.

Zero Tolerance –

Zero Tolerance covers the whole article of clothing and applies to any sharp questions or a synthetic item that represents a well being danger to the clients. (Example: broken needles, sharp burrs/equipment, cruel synthetic response to the end client). Zero resilience will be characterized under **CRITICAL** imperfection.

CRITICAL DEFECT:

A defect likely to result in a hazardous or unsafe condition for an individual using the product or fails to meet Government mandatory regulations. One Critical Defect found amid the investigation would cause the last QA review to fall flat. The disappointment will bring about a 100% examination by manufacturing plant to evacuate all basic deformity things preceding re-review again by a third.

party auditor or QA Manager.

Zone A –

Where the visual appearance of the garment is considered a **MAJOR** area of critical importance

MAJOR DEFECT:

Anything that adversely affects the appearance, performance including fit or customer satisfaction to a degree that would provide a discerning customer with justification for no purchase, a return or complaint .

Zone B –

Where the visual appearance of the piece of clothing is viewed as a **MINOR** zone of significance yet not basic. This isn't as perceptible to the individual wearing the article of clothing or to a spectator at first look.

MINOR DEFECT:

Any variety from the standard that isn't adequate in degree to be delegated major and that would not furnish a recognizing client with support for non-buy, an arrival or grumbling.

COUNTING OF DEFECT:

When the number of defects is being recorded, a single defect is considered. For each situation it will be the most genuine deformity experienced by the individual example being investigated paying little respect to the trademark. Illustration, when an article of clothing being assessed contains both a Major deformity and a Minor imperfection the most extreme deformity (Major imperfection) will be characterized an imperfection on the investigation report. Minor imperfections will be counted toward the finish of the investigation by utilizing the recipe:

3 minor defects = 1 major defect

E.g. If the inspectors totaled 10 minor defects on the visual report, the minors will be calculated using the formula above. In this case 10 minors = 3 majors. All major defects will be added to the major defects list. Exceeding the allowed amount of major defects will results in a failed inspection and must be 100% screen for all major defects encountered.

2.5.4 Stage of Apparel Inspection:

Various stages of garments inspection are mentioned in below:

1. Raw material inspection,
2. During production inspection,
3. Finishing inspection,
4. Final inspection.

All the stages have discussed in the following:

1. Raw material inspection:

A quality inspection should check various matters according to buyer's instruction in Raw material inspection stage of garments. Those are –

- Yarn defects such as thick and thin,
- Knitting defects,
- Fabric construction,
- Fabric **GSM (Grams per square meter),**
- Fabrics shade matching,
- Fabric holes,
- **Fabric defects,**
- Sewing thread,
- Zipper,
- Fabric softness,
- Fabric width,
- Vertical stripes,
- Horizontal stripes,
- Fabric shrinkage,

- Defective printing,
- Defective buttons,
- Defective embroidery,
- Dirt and stains in fabric.

2. During production inspection:

A quality inspector should ensure different matters according to buyer's instruction in production stage of garments. Those are

- Collars & Cuffs matching,
- Sewing threads matching,
- Cutting patterns,
- Stitching,
- Absence of stitching,
- Needle holes & marks,
- Unbalanced sleeve edge'
- Unbalanced placket,
- Open seam,
- Puckering,
- Garments length
- Shoulder length,
- Body width
- Placket width,
- Placket length
- Arm hole,
- Arm Opening,
- Sleeve length,
- Rib or Collar width,

- Hemming width,
- Neck width,
- Neck opening,
- Incorrect side shape,
- Broken & Missing stitch,
- Bottom hem bowing,
- Uneven neck shape,
- Cutting shapes,
- Stitching defects,
- Measurements,
- Buttons,
- Trims & Accessories,

3. Finishing inspection:

A quality inspector should check different issues according to buyer's instruction in finishing stage of garments. Those are –

- Poor Ironing,
- Dirt's & stains,
- Back Board,
- Collar Stay,
- Butterfly,
- Neck Board,
- Carton,
- Draw cord,
- Size strip,
- Pocket flasher,
- Hang tag,
- Photo-in-lay,

- Price ticket,
- Poly bag,
- Tissue paper.

4. Final inspection:

A quality inspection should confirm various matters according to buyer's instruction in final inspection stage of garments. Those Ares-

- Shade variation from one part to another part of garments,
- Garments measurement with allowance from buyers provided measurement chart,
- Collar and sleeves balanced,
- Pockets correct,
- Absence of fabric faults and stains,
- Appearance correct,
- Patterns matching,
- Absence of miss stitching,
- Seams finished correctly,
- Accessories correctly applied and working,
- Correct labeling.

2.5.5 Inspection in Fabric, Trims and Accessories

1. Inspection of fabric:

Fabric is the main raw material of garments. So it is basic to guarantee texture quality before it achieves store of articles of clothing processing plant, generally flawed texture may bring about disturbance of generation and conveyance of pieces of clothing on time. Articles of clothing created with flawed texture may prompt enormous cost to the organization and may cause generation of stock parcels. It is a decent practice to assess texture in the preface of the texture maker. This empowers speedy substitution of flawed texture. Still re-examination of texture at the conveyance point to the store of an article of clothing production line is critical.

2. Types of fabric inspection:

After inspection of fabric the results should be analyzed to assess acceptability of fabric. There are different four grading or inspection systems, such as

1. 10-Point System
2. Graniteville "78" system.
3. Dallas system.
4. 4- Point system.

3. Ten Point System:

It was developed in the 1950's. This system assigns penalty points to each defect, depending on the length of the defect.

Penalty points are assigned as per the following:

Warp defect	**Penalty points**
10-36 inches	10 points
5-10 inches	5 points
1-5 inches	3 points
Up to 1 inch	1 points

Filling defects	**Penalty points**
Full width	10 points
5” to half the width of fabric	5 points
1-5 inches	3 points
Up to 1”	1 points

Under the Ten-Point System, a piece is graded a "first" if the total penalty points do not exceed the total yardage of the piece. A piece is graded a "second" if the total penalty points exceed the total yardage of the piece.

The following points are noteworthy

- This system is bit complicated because points per length are different for warp and weft defects.
- It is difficult in practical use.

4. Graniteville "78" system:

This system was introduced in 1975 for the field of fabric grading. The framework separates abandons into major and minor composes .The real imperfection is one, which is extremely evident and drives the products to second quality. The minor deformity is one, which might possibly have made article of clothing second, contingent upon its area at last utilize thing. Penalty Points are assigned as per the following:

Defect length	Penalty points
9”	1
9-18”	2
18-27”	3
27-36	4

The following points are noteworthy in this system:

- The principle was established in garment cutting piece, in which, the short length defects (less than 9") will normally be removed.
- The system tries to balance the importance of longer defects (over 9") and put less weight on 1-10" defects such as slobs.
- The system also suggests the viewing distance of 9 foot instead of normal 3-foot viewing distance.
- The system tends to eliminate very small defects from the total penalty score.
- This is mostly recommended for use, where larger garments are to be cut with fabrics of wider widths.

5. Dallas System:

This system was developed in 1970s specifically for knits. It was endorsed by Dallas Manufacturers Association. As per this framework, if any deformity was found on a completed article of clothing, the piece of clothing would then be named as a "moment". For textures, this framework characterizes a moment as "in excess of one imperfection for every ten straight yards, computed to the closest ten yards". For instance, one piece 60 yards in length would be permitted to have six imperfections.

6. 4-Point System:

The 4-Point System, also called the American Apparel Manufacturers (AAMA) point-grading system for determining fabric quality, is widely used by producers of apparel fabrics and is endorsed by the AAMA as well as the ASQC (American Society or Quality Control). The 4-Point System relegates 1, 2, 3 and 4 punishment indicates agreeing the size and essentials of the imperfection. Close to 4 punishment focuses can be appointed for any single deformity. Deformity can be in either length or width course, the framework continues as before. Just real deformities are considered. No punishment indicates are relegated minor deformities. In this system, one should inspect at least 10 per cent of the total rolls in the shipment and make sure to select at least one roll of each color way.

Fabric defects are assigned points based on the following:

Length of defect	Penalty points Allotted
Up to 3 inches	1 points
3-6 inches	2 points
6-9 inches	3 points
Over 9 inches	4 points
Holes and Opening (1 inch or less)	2 points
Holes and Opening over 1 inch	4 points

Total defect points per 100 square yards of fabric are calculated and the acceptance criteria are generally not more than 40 penalty points. Fabric rolls containing more than 40 points are considered "seconds".

The formula to calculate penalty points per 100 square yards is given by:

$$\frac{\text{Total points scored in the roll} \times 3600}{\text{Fabric width in inches} \times \text{Total yards inspected}}$$

2.5.5 Example of Some Defects According To Different Section:

Defect During To Knitting:

- Hole-**Major**
- Spot-**Minor**

Defect During To Dyeing:

- Dia – **Minor**/**Major**
- Gsm – **Major**

Defect During To Cutting:

- Fabric Color Shade – **Major**/**Minor**
- Fabric Damage – **Major**/**Minor**

Defect During To Print/EMB/Sequence:

- Print/EMB Placement Mistake – **Critical**
- Print/EMB – Measurement Fault –**Major**

Defect During To Sewing:

- Broken stitch-**Major**
- Skip stitch / Drop stitch-**Major**

Defect During To Sewing:

- Broken stitch-**Major**
- Skip stitch / Drop stitch-**Major**

Chapter-3

EXPERIMENTAL DETAILS

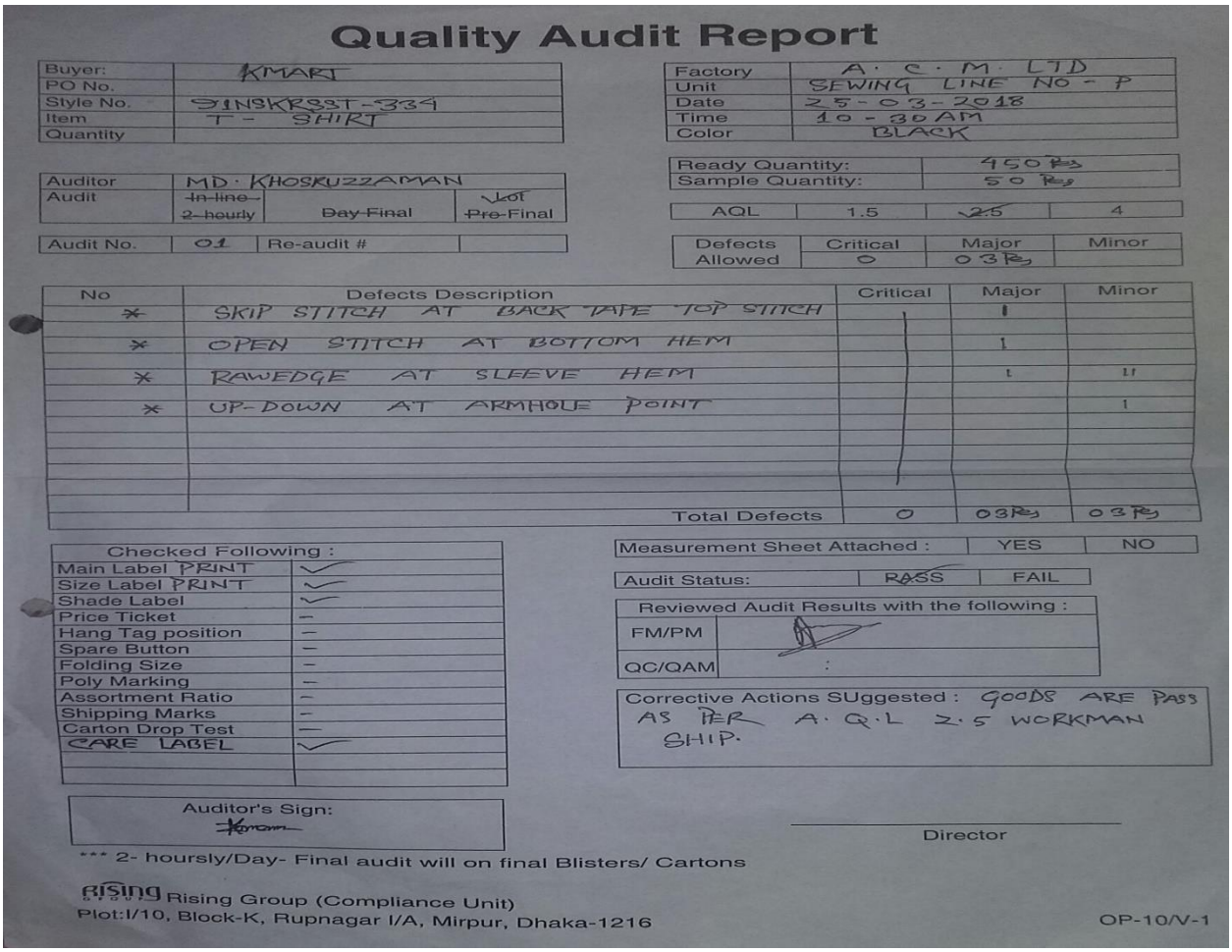
3.0 Experimental Details

For completing thesis, we have visited garments factory Active composite Mills LTD. We collected information from the factory. We completed this inspection report by following several steps and they are in line inspection, end line inspection, finishing inspection Report. Defect garments inspection with their remedy.

3.1 Experimental Data in line inspection Certificate:

Buyer Name: KMART

Style: 91NSKRSST-334



Quality Audit Report

Buyer:	KMART
PO No.	
Style No.	91NSKRSST-334
Item	T - SHIRT
Quantity	

Factory	A. C. M. LTD
Unit	SEWING LINE NO - P
Date	25-03-2018
Time	10-30 AM
Color	BLACK

Ready Quantity:	450 Pcs
Sample Quantity:	50 Pcs

Auditor	MD. KHOSRUZZAMAN		
Audit	~~In-line~~ 2-hourly	Day-Final	~~Pre~~-Final

AQL	1.5	2.5	4

Audit No.	01	Re-audit #	

Defects Allowed	Critical	Major	Minor
	0	03 Pcs	

No	Defects Description	Critical	Major	Minor
*	SKIP STITCH AT BACK TAPE TOP STITCH		1	
*	OPEN STITCH AT BOTTOM HEM		1	
*	RAWEDGE AT SLEEVE HEM		1	1
*	UP-DOWN AT ARMHOLE POINT			1
	Total Defects	0	03 Pcs	03 Pcs

Checked Following :	
Main Label PRINT	✓
Size Label PRINT	✓
Shade Label	✓
Price Ticket	–
Hang Tag position	–
Spare Button	–
Folding Size	–
Poly Marking	–
Assortment Ratio	–
Shipping Marks	–
Carton Drop Test	–
CARE LABEL	✓

Measurement Sheet Attached :	YES	NO
Audit Status:	~~RASS~~	FAIL

Reviewed Audit Results with the following :

FM/PM	
QC/QAM	

Corrective Actions SUggested : GOODS ARE PASS AS PER A.Q.L 2.5 WORKMAN SHIP.

Auditor's Sign:

Director

*** 2- hoursly/Day- Final audit will on final Blisters/ Cartons

Rising Group (Compliance Unit)
Plot:I/10, Block-K, Rupnagar I/A, Mirpur, Dhaka-1216

OP-10/V-1

Fig 3.1: Quality Audit report

Active Composite Mills LTD.

Quality Audit Report

Buyer: KMART

Style: 91NSKRSST-334

Line: P

Date: 25-03-2018

Buyer	KMART
PO No.	
Style	91NSKRSST-334
Item	T-Shirt
Quantity	

Factory	A.C.M.LTD
Unit	Sewing Line No-p
Date	25-03-2018
Time	10-30 AM
Color	Black

Ready Quantity	450Pcs
Sample Quantity	50Pcs

Auditor	Khosruzzaman
Audit	Lot Final
Audit no.	01

AQL	1.5	2.5	4

Defects Allowed	Critical	Major	Minor
	0	03	

No	Defects Description	Critical	Major	Minor
1	Skip Stitch at Back Tape Top Stitch		I	
2	Open Stitch at Bottom Hem		I	
3	Raw edge at Sleeve Hem		I	II
4	Up-Down at Arm Hole point			I
	Total Defects	0	03Pcs	03Pcs

Checked Following:	
Main Label	Yes
Size Label	Yes
Shade Label	Yes
Price Ticket	
Spare Button	
Folding Size	
Poly Marking	
Assortment Ratio	
Shipping Marks	
Carton Drop Test	
Care Label	Yes

Measurement Sheet Attached	YES	NO

Audit Status:	Pass	Fail

Reviewed Audit Results with the following	
QC/QAM	

Corrective Actions Suggested: Goods Are Pass As Per A.Q.L 2.5 Workman Ship.

Table 3.1 Quality Audit report

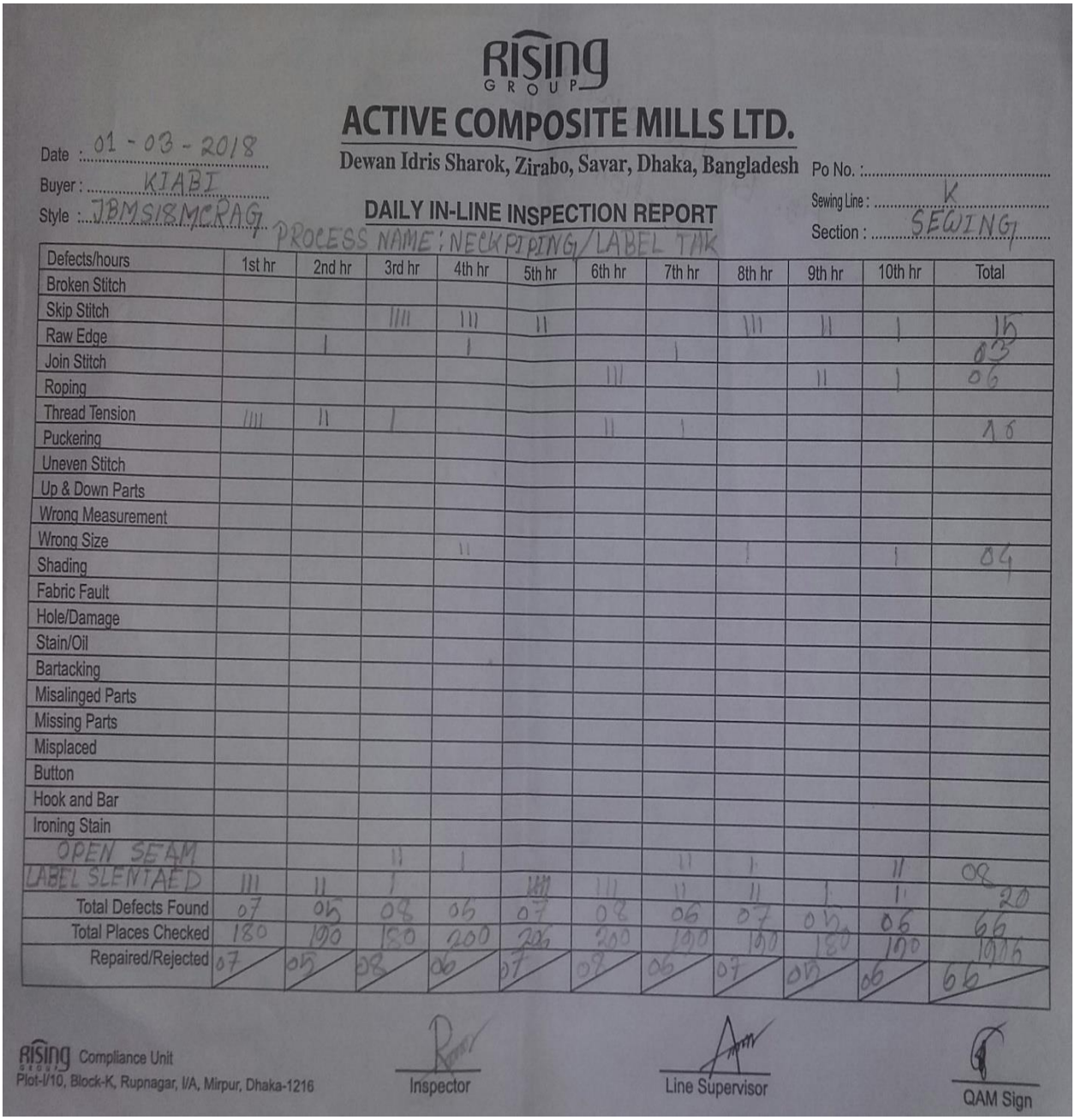
Description:

This is the first in line inspection which is inspected by Active Composite Mills LTD. This inspection report contains a garments product which is inspected by inspector. Measurement of garments, sewing machine tension balance and needle sharpness of sewing machine is checked by QC inspector. If any fault found there then take the necessary, step to rectify the fault.

The in-line inspections take place in every 10 minutes. The inspection for a line stars at 8.10 am and end at 6.00 pm. By this time inspector calculate total inspection quantity, defect quantity as well as defect percentage.

3.2 Experimental Data End Line Quality Inspection Report 1:

Buyer: KMART
Style: 91NSKRSST-334
Date: 25-03-2018
Line: P



RISING GROUP

ACTIVE COMPOSITE MILLS LTD.

Dewan Idris Sharok, Zirabo, Savar, Dhaka, Bangladesh

Date : 01-03-2018 Po No. :

Buyer : KIABI Sewing Line : K

Style : JBMS18MCRAG **DAILY IN-LINE INSPECTION REPORT** Section : SEWING

PROCESS NAME: NECK PIPING / LABEL TAK

Defects/hours	1st hr	2nd hr	3rd hr	4th hr	5th hr	6th hr	7th hr	8th hr	9th hr	10th hr	Total
Broken Stitch											
Skip Stitch			IIII	III	II			III	II	I	15
Raw Edge		I		I			I				03
Join Stitch						III			II	I	06
Roping											
Thread Tension	IIII	II	I			II	I				13
Puckering											
Uneven Stitch											
Up & Down Parts											
Wrong Measurement											
Wrong Size				II				I		I	04
Shading											
Fabric Fault											
Hole/Damage											
Stain/Oil											
Bartacking											
Misalinged Parts											
Missing Parts											
Misplaced											
Button											
Hook and Bar											
Ironing Stain											
OPEN SEAM			II	I			II	I		II	08
LABEL SLENTAED	III	II	I		IIII	III	II	II	I	I	20
Total Defects Found	07	05	08	06	07	08	06	07	05	06	66
Total Places Checked	180	100	180	200	200	200	100	100	180	100	1016
Repaired/Rejected	07	05	08	06	07	07	06	07	05	06	66

RISING Compliance Unit
Plot-I/10, Block-K, Rupnagar, I/A, Mirpur, Dhaka-1216

Inspector Line Supervisor QAM Sign

Fig 3.2: Daily in-line Inspection Report

Active Composite Mills LTD.

Buyer: KIABI

Sewing Line: k

Style: JBMSI8MCRAG

Date: 01-03-2018

Daily in-line Inspection Report

Defects/Hours	1st hr	2nd hr	3rd hr	4th hr	5th hr	6th hr	7th hr	8th hr	9th hr	10th hr	Total
Broken Stitch											
Skip Stitch			IIII	III	II			III	II	I	15
Raw Edge		I		I			I				03
Joint Stitch											
Roping	IIII	II	I			II	I				10
Thread Tension											
Puckering											
Uneven Stitch											
Up & Down Parts											
Wrong Measurement											
Wrong Size				II				I		I	04

Hole											
Oil											
Bar tacking											
Misplaced											
Button											
Open Seam			II	I			II	I		II	08
Label Slanted	III	II	I		IIIII	III	II	II	I	I	20
Total Defect	07	05	08	06	07	08	06	07	05	06	66
Total Checked	180	190	180	200	206	200	190	190	180	190	1906
Rejected	07	05	08	06	07	08	06	07	05	06	66

Table 3.2: Daily in-line Inspection Report

Description:

This is the first in line inspection which is inspected by Active Composite Mills LTD. This inspection report contains a garments product which is inspected by inspector. Measurement of garments, sewing, machine tension balance, needle, Sharpness of sewing machine is checked by QC inspector. If any fault found there then take the necessary, step to rectify the fault.

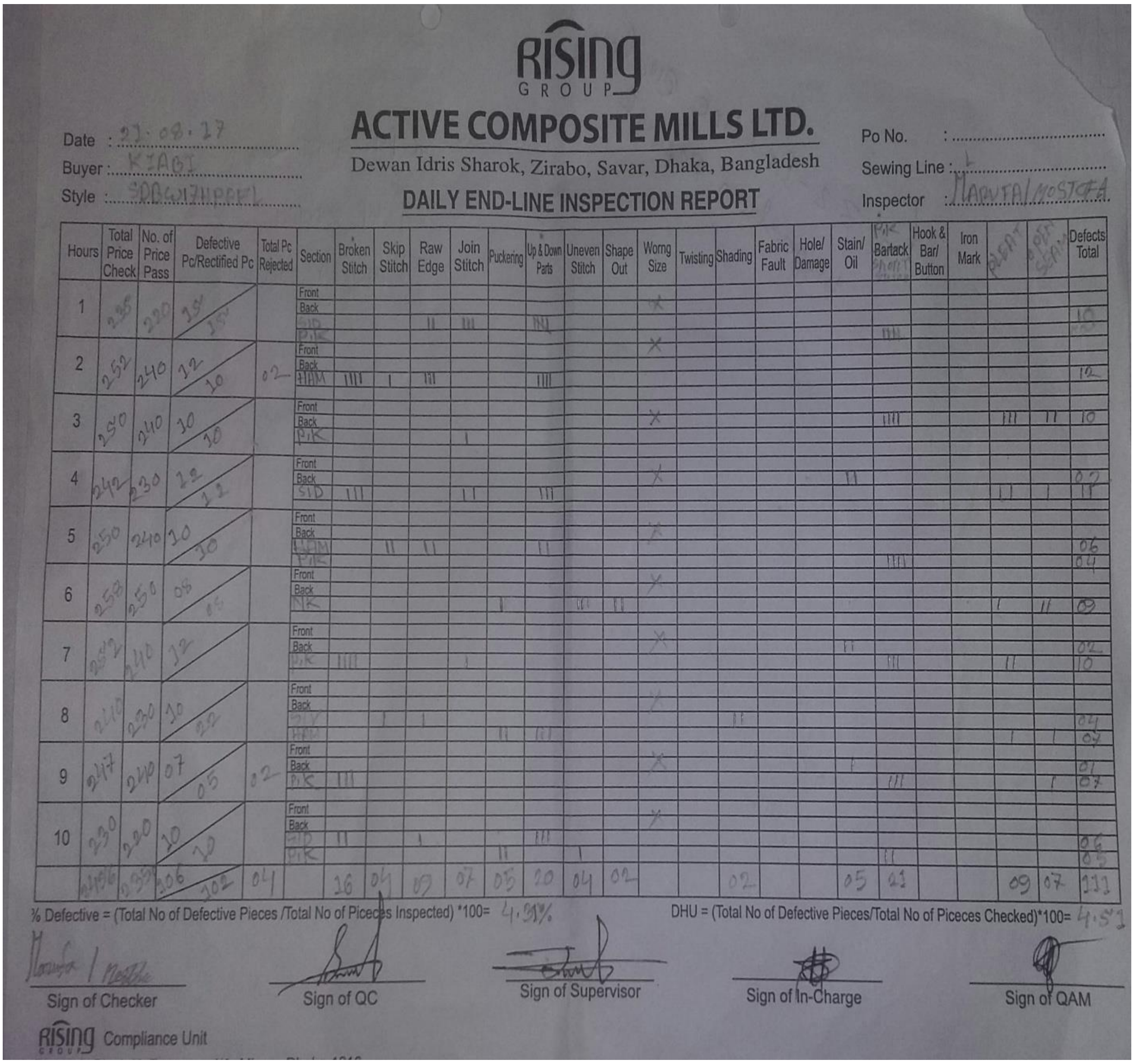
The End-line inspections take place in every 10 minutes. The inspection for a line stars at 8.10 am and end at 6.00 pm. By this time inspections calculate total inspection quantity, defect quantity as well as defect percentage.

3.3 Experiment Data End Line Quality Inspection Report 2:

Buyer: KIABI

Style: SDBW17HPPFL

Line: L


RISING GROUP

ACTIVE COMPOSITE MILLS LTD.

Dewan Idris Sharok, Zirabo, Savar, Dhaka, Bangladesh

DAILY END-LINE INSPECTION REPORT

Date: 21.08.17

Buyer: KIABI

Style: SDBW17HPPFL

Po No.:

Sewing Line: L

Inspector: Marufa/Mostofa

Hours	Total Price Check	No. of Price Pass	Defective Pc/Rectified Pc	Total Pc Rejected	Defects Total
1	235	220	15 / 15		15
2	252	240	12 / 10	02	12
3	250	240	10 / 10		10
4	242	230	12 / 12		02 / 12
5	250	240	10 / 10		06 / 04
6	258	250	08 / 08		09
7	252	240	12		02 / 10
8	240	230	10 / 10		04 / 07
9	247	240	07 / 05	02	01 / 07
10	230	220	10 / 10		06 / 05
Total	2496	2350	106 / 102	04	111

Section: Front, Back. Defect types: Broken Stitch, Skip Stitch, Raw Edge, Join Stitch, Puckering, Up & Down Parts, Uneven Stitch, Shape Out, Worng Size, Twisting, Shading, Fabric Fault, Hole/ Damage, Stain/ Oil, Bartack, Hook & Bar/ Button, Iron Mark, Pleat, Open Seam.

% Defective = (Total No of Defective Pieces /Total No of Piceces Inspected) *100= 4.31%

DHU = (Total No of Defective Pieces/Total No of Piceces Checked)*100= 4.51

Sign of Checker — Sign of QC — Sign of Supervisor — Sign of In-Charge — Sign of QAM

RISING Compliance Unit

Fig 3.3: End Line quality Inspection Report

Active Composite Mills LTD.

Style: SDBW17HPPFL Line: L

Date: 21-08-17 **Daily End-Line Inspection Report** Buyer: KIABI

Inspector: Mostofa

Hours	Total Price	No. of Prices	Defective Pc	Total Pc	Section	Broken Stitch	Skip Stitch	Raw Edge	Join Stitch	Puckering	Up & Down Parts	Uneven Stitch	Shape Out	Shading	Oil	P.K	Pleat	Open Seam		Total
1	235	220	15/15		Front															
					Back															
					Sid			II	III		IIIII									10
					P.K											IIIII				05
2	252	240	12/10	02	Front															
					Back															
					Ham	IIII	I	III			IIII									12
3	250	240	10/10		Front															
					Back											IIII	III	II		09
					P.K				I											01
4	242	230	12/12		Front															
					Back										II					02
					Sid	III			II		III						II	I		
5	250	240	10/10		Front															
					Back															
					Ham		II	II			II									06
					P.K											IIII				04
6	258	250	08/08		Front															
					Back															
					NK					I		III	II				I	II		09

7	252	240	12		Front														
					Back										II				02
					P.K	IIII			I							III	II		10
8	240	230	10		Front														
			22		Back														
					Sid		I	I						II					04
					Ham					II	III						I	I	07
9	247	240	07	02	Front														
					Back										I				01
			05		P.K	III										III		I	07
10	230	220	10		Front														
					Back														
			10		Sid	II		I			III								06
					P.K					II		I				II			05
	2456	235	106	04		16	04	09	07	05	20	04	02	02	05	21	09	07	111
			102																
						16	04	09	07	05	20	04	02	02	05	21	09	07	111

% Defective = (Total No of Defective Pieces/Total No of Pieces Inspected)*100=4.31%

DHU= (Total No of Defective Pieces/Total No of Pieces Checked)*100=4.51

Table 3.3 End Line quality Inspection Report

Description:

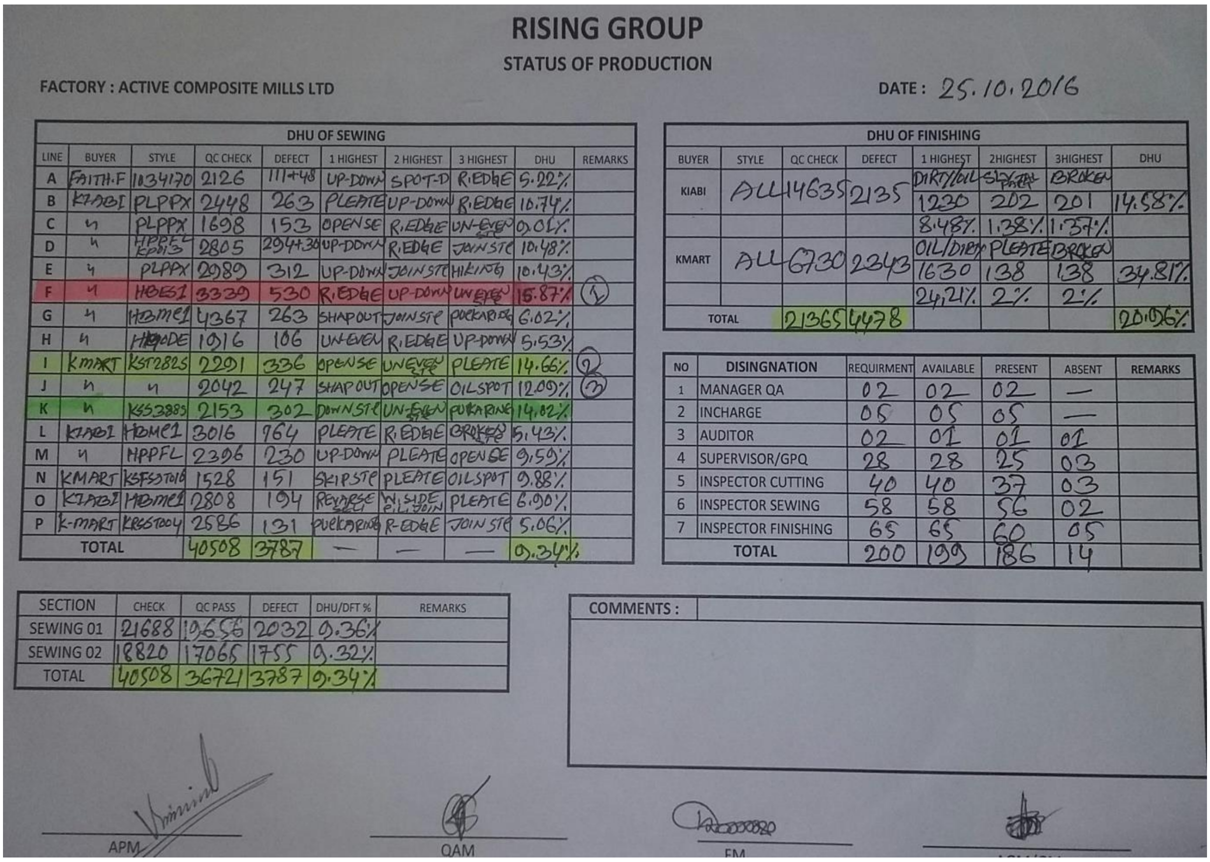
This is the first in line inspection which is inspected by Active Composite Mills LTD. This inspection report contains a garments product which is inspected by inspector. Measurement of garments, sewing, machine tension balance, needle, Sharpness of sewing machine is checked by QC inspector. If any fault found there then take the necessary, step to rectify the fault.

3.4 Experimental Data Pre-Final Inspection:

Date: 25-10-2016

Buyer: KIABI

Style: PLPPX



RISING GROUP

STATUS OF PRODUCTION

FACTORY : ACTIVE COMPOSITE MILLS LTD

DATE : 25.10.2016

DHU OF SEWING

LINE	BUYER	STYLE	QC CHECK	DEFECT	1 HIGHEST	2 HIGHEST	3 HIGHEST	DHU	REMARKS
A	FAITH.F	1034170	2126	111+48	UP-DOWN	SPOT-D	R.EDGE	5.22%	
B	KIABI	PLPPX	2448	263	PLEATE	UP-DOWN	R.EDGE	10.74%	
C	"	PLPPX	1698	153	OPEN SE	R.EDGE	UN-EVEN STC	9.01%	
D	"	HPPFL KP013	2805	294+30	UP-DOWN	R.EDGE	JOIN STC	10.48%	
E	"	PLPPX	2989	312	UP-DOWN	JOIN STC	HIKING	10.43%	
F	"	HBES1	3339	530	R.EDGE	UP-DOWN	UNEVEN STC	15.87%	(1)
G	"	HBME1	4367	263	SHAP OUT	JOIN STC	PUCKARING	6.02%	
H	"	HBODE	1916	106	UN-EVEN	R.EDGE	UP-DOWN	5.53%	
I	KMART	KST2825	2291	336	OPEN SE	UNEVEN STC	PLEATE	14.66%	(2)
J	"	"	2042	247	SHAP OUT	OPEN SE	OIL SPOT	12.09%	(3)
K	"	KSS3885	2153	302	DOWN STC	UN-EVEN STC	PUKARING	14.02%	
L	KIABI	HBME1	3016	164	PLEATE	R.EDGE	BROKEN STC	5.43%	
M	"	HPPFL	2396	230	UP-DOWN	PLEATE	OPEN SE	9.59%	
N	KMART	KSFS5T010	1528	151	SKIP STC	PLEATE	OIL SPOT	9.88%	
O	KIABI	HBME1	2808	194	REVERSE SELF	W.SIDE FIL.JOIN	PLEATE	6.90%	
P	K-MART	KRSST004	2586	131	PUCKARING	R-EDGE	JOIN STC	5.06%	
TOTAL			40508	3787	—	—	—	9.34%	

DHU OF FINISHING

BUYER	STYLE	QC CHECK	DEFECT	1 HIGHEST	2HIGHEST	3HIGHEST	DHU
KIABI	ALL	14635	2135	DIRTY/OIL	SLANTED [illegible]	BROKEN	
				1230	202	201	14.58%
				8.48%	1.38%	1.37%	
KMART	ALL	6730	2343	OIL/DIRTY	PLEATE	BROKEN	
				1630	138	138	34.81%
				24.21%	2%	2%	
TOTAL		21365	4478				20.06%

NO	DISINGNATION	REQUIRMENT	AVAILABLE	PRESENT	ABSENT	REMARKS
1	MANAGER QA	02	02	02	—	
2	INCHARGE	05	05	05	—	
3	AUDITOR	02	01	01	01	
4	SUPERVISOR/GPQ	28	28	25	03	
5	INSPECTOR CUTTING	40	40	37	03	
6	INSPECTOR SEWING	58	58	56	02	
7	INSPECTOR FINISHING	65	65	60	05	
TOTAL		200	199	186	14	

SECTION	CHECK	QC PASS	DEFECT	DHU/DFT %	REMARKS
SEWING 01	21688	19656	2032	9.36%	
SEWING 02	18820	17065	1755	9.32%	
TOTAL	40508	36721	3787	9.34%	

COMMENTS :

APM

QAM

FM

[illegible]

Fig 3.4: Pre-final Inspection Report

Active Composite Mills LTD.

Status of Production

Date: 25-10-2016

Line	Buyer	Style	QC Check	Defect	1 Highest	2 Highest	3 Highest	DHU	Remarks
A	Faith Fabric	1034170	2126	159	Up-Down	Sport-D	R. Edge	5.22%	
B	KIABI	PLPPX	2448	263	Pleat	Up-Down	R. Edge	10.74%	
C	KIABI	PLPPX	1698	153	Open seam	R. Edge	UN-Even STC	9.01%	
D	KIABI	PLPPX	2805	324	Up-Down	R. Edge	Join STC	10.48%	
E	KIABI	PLPPX	2989	312	Up-Down	Joint STC	Hiking	10.43%	
F	KIABI	HBES1	3339	530	R. Edge	Up-Down	UN-Even STC	15.87%	
G	KIABI	HBMC1	4367	263	Shape out	R. Edge	Puckering	6.02%	
H	KIABI	HMODE	1916	106	Un-Even	Shape out	Up-Down	5.53%	
I	K-MART	KST2825	2291	336	Open Seam	Un-Even	Pleat	14.66%	
J	K-MART	KST2825	2042	247	Shape out	Open Seam	Oil Spot	12.09%	
K	K-MART	KSS3885	2153	302	Down STC	Shape out	Puckering	14.02%	
L	KIABI	HBMC1	3016	164	Pleat	Down STC	Broken STC	5.43%	
M	KIABI	HPPFL	2396	230	Skip STC	Pleated	Open Seam	9.59%	
N	K-MART	KSFSSTO16	1528	151	Up-Down	Up-Down	Oil Spot	9.88%	
O	KIABI	HBMC1	2808	194	Open Seam	R. Edge	Pleat	6.90%	
P	K-Mart	KRSST004	2586	131	Puckering	Pleat	Joint STC	5.06%	
Total			40508	3787				9.34%	

DHU of Finishing							
Buyer	Style	QC Check	Defect	1 Highest	2 Highest	3 Highest	DHU
KIABI	All	14635	2135	Dirty/Oil	SLV Tappet	Broken	
				1230	202	201	14.58%
				8.48%	1.38%	1.37%	
K-MART	All	6730	2343	Oil Sport	Pleat	Broken	
				1630	138	138	34.81%
				24.21%	2%	2%	
Total		21365	4478				20.96%

No	**Designation**	Requirement	Available	Present	Absent	Remarks
1	Manager QA	02	02	02		
2	In charge	05	05	05		
3	Auditor	02	01	01	01	
4	Supervisor	28	28	25	03	
5	Inspector Cutting	40	40	37	03	
6	Inspector Sewing	58	58	56	02	
7	Inspector Finishing	65	65	60	05	
Total		200	199	186	14	

Section	Check	QC Pass	Defect	DHU	Remarks
Sewing 01	21688	19656	2032	9.36%	
Sewing 02	18820	17065	1755	9.32%	
Total	40508	36721	3787	9.345	

Description:

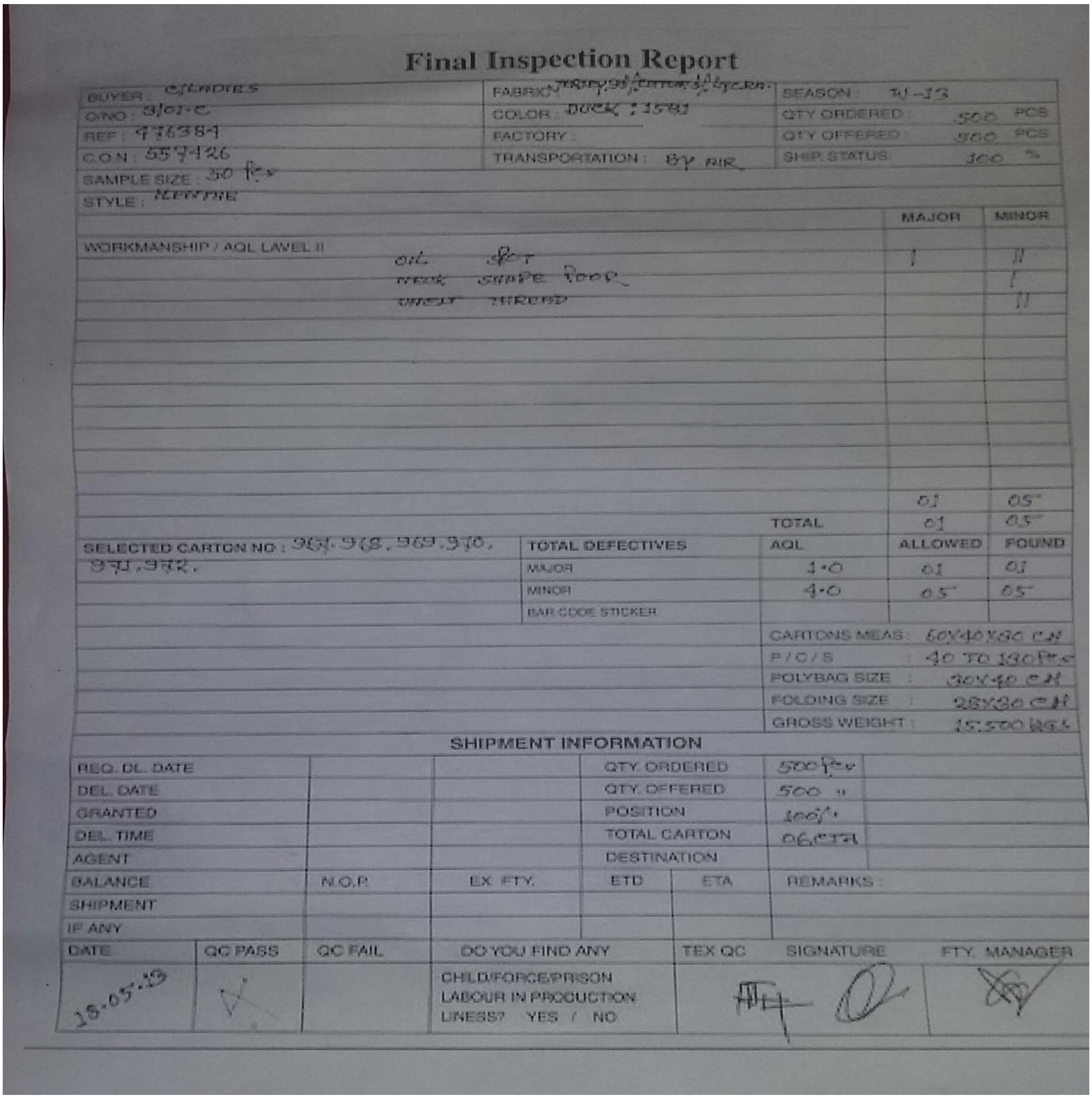
In Pre- Final inspection inspector inspect the product in every one hour respectively. Inspector fined the defective point of the product and rectifies it. Broken Stitch, drop stitch, in correct leveling, stitch up down, uneven stitch, open seam, joint stitch, un even shade are mainly found in this inspection.

3.5 Experimental Data Final inspection Report:

Date: 18-05-13

Style: MPWTAE

Color: Duck



Final Inspection Report

BUYER : C/LADIES
O/NO : 3/01-C
REF : 476384
C.O.N : 557426
SAMPLE SIZE : 50 Pcs
STYLE :
FABRIC :
COLOR : DUCK : 1581
FACTORY :
TRANSPORTATION : BY AIR
SEASON : W-13
QTY ORDERED : 500 PCS
QTY OFFERED : 500 PCS
SHIP. STATUS : 100 %

WORKMANSHIP / AQL LAVEL II	MAJOR	MINOR
OIL SPOT	I	II
NECK SHAPE POOR		I
UNCUT THREAD		II
	01	05
TOTAL	01	05

SELECTED CARTON NO :

TOTAL DEFECTIVES	AQL	ALLOWED	FOUND
MAJOR	1.0	01	01
MINOR	4.0	05	05
BAR CODE STICKER			

CARTONS MEAS : 60X40X30 CM
P/C/S : 40 TO 130 Pcs
POLYBAG SIZE : 30X40 CM
FOLDING SIZE : 28X30 CM
GROSS WEIGHT : 15.500 KGS

SHIPMENT INFORMATION

REQ. DL. DATE — QTY. ORDERED: 500 Pcs
DEL. DATE — QTY. OFFERED: 500 "
GRANTED — POSITION: 100%
DEL. TIME — TOTAL CARTON: 06 CTN
AGENT — DESTINATION:
BALANCE SHIPMENT IF ANY — N.O.P — EX. FTY. — ETD — ETA — REMARKS :

DATE	QC PASS	QC FAIL	DO YOU FIND ANY CHILD/FORCE/PRISON LABOUR IN PRODUCTION LINES? YES / NO	TEX QC	SIGNATURE	FTY. MANAGER
18-05-13	√					

Fig 3.5: Final Inspection Report

Final Inspection Report

Buyer: CILADTES	FABRIC:		SEASON: V-13	
ONO: 3/01.C	COLOR: DUCK: 1581		QTY ORDEAED: 500 PCS	
REF: 476384	FACTORY:		QTY OFFERED: 500 PCS	
C.O.N: 557426	TRANSPORATION: BY AIR		SHIP. STATUS: 100%	
BAMPLE SIZE: 50				
STYLE: MPWTAE				
			Major	Minor
Workmanship/AQL lavel ll				
Oil sport			I	ll
Stitch Up-Down				I
Uncut thread				ll
Total			01	05
Selected Carton No: 967,968,969,970	Total Defectives	AQL	Allowed	Found
	Major	1.0	01	01
	Minor	4.0	05	05
Bar Code Sticker			Cartons Meas: 60X40X30	
			P/O/S: 40 to 130 PCS	
			Polybag Size: 30X40 CH	
			Folding Size: 38X30 CH	
			Ghoss Weight: 15.500	

Shipment Information				
Red. Dl. Date		QTY. ORDEAED		500 PCS
DEL. DATE		QTY OFFERED		500 PCS
Granted		POSITION		100%
DEL. Time		Total Carton		06C
Agent		Destination		
Balance	N.O.P	EX FTY	ETA	REMARKS

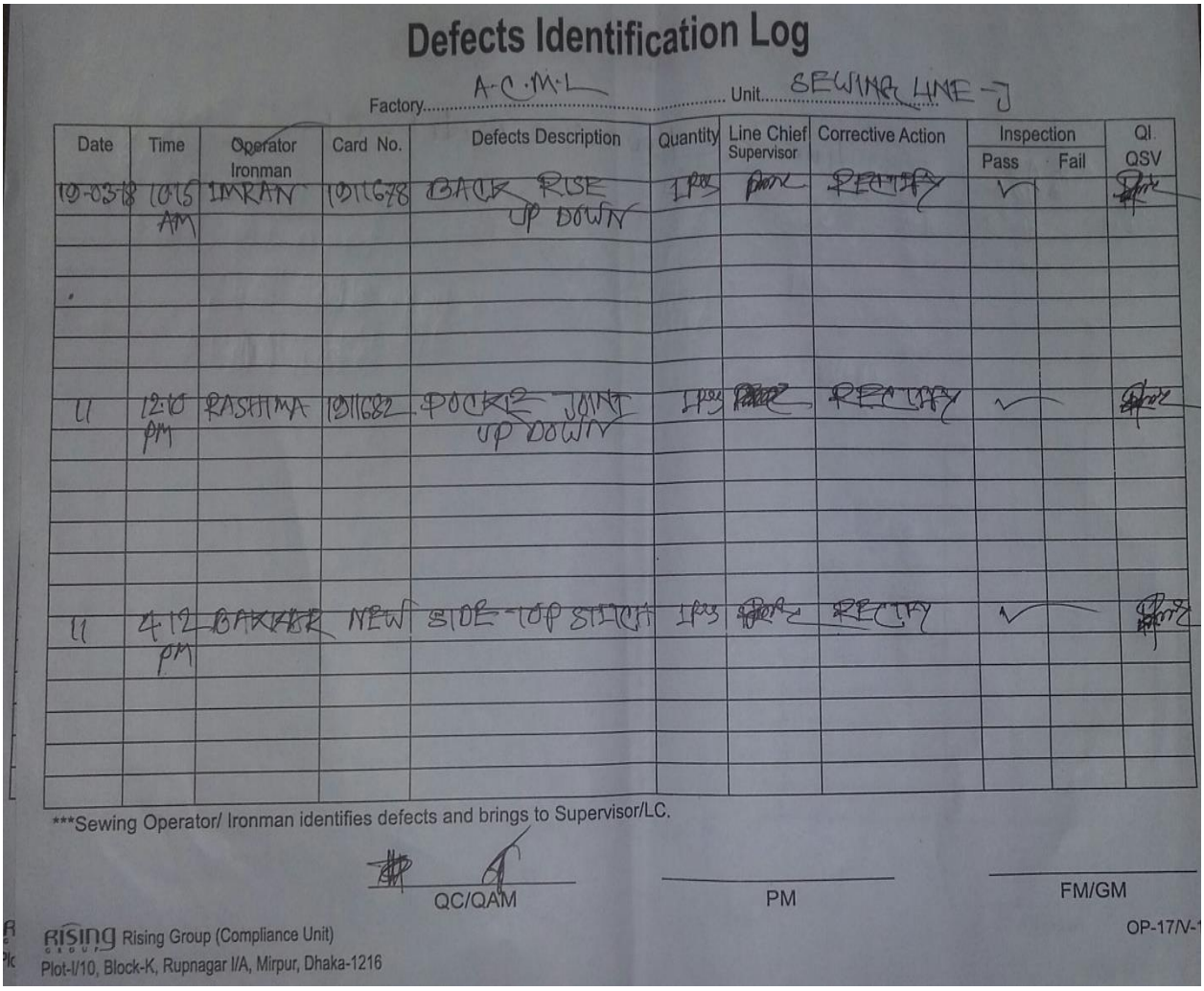
Fig 3.5: Final Inspection Report

Description:

In Pre- Final inspection inspector inspect the product in every one hour respectively. Inspector fined the defective point of the product and rectifies it. Broken Stitch, drop stitch, in correct leveling, stitch up down, uneven stitch, open seam, joint stitch, un even shade are mainly found in this inspection.

3.6 LINE QC HOURWISE AUDIT: 01

Buyer: K-MART
Line: J
Style: SDBW17HPPFL



Defects Identification Log

Factory: A-C-M-L Unit: SEWING LINE-J

Date	Time	Operator Ironman	Card No.	Defects Description	Quantity	Line Chief Supervisor	Corrective Action	Inspection Pass	Inspection Fail	QI. QSV
19-03-18	10:15 AM	IMRAN	1911678	BACK RISE UP DOWN	1PCS		RECTIFY	✓		
11	12:10 PM	RASHIMA	1911682	POCKET JOINT UP DOWN	1PCS		RECTIFY	✓		
11	4:12 PM			SIDE TOP STITCH	1PCS		RECTIFY	✓		

***Sewing Operator/ Ironman identifies defects and brings to Supervisor/LC.

QC/QAM PM FM/GM

Rising Group (Compliance Unit)
Plot-I/10, Block-K, Rupnagar I/A, Mirpur, Dhaka-1216

OP-17/V-

Fig 3.6: Line QC Hour wise Audit: 01

Active Composite Mills LTD.

Buyer: K-MART **Line QC Hour Wise Audit** Line: J

Date: 19-03-18

Date	Time	Operator Ironman	Card No.	Defects Description	Quantity	Line Chief Supervisor	Corrective Action	Inspection		Ql. QSV
								Pass	Fall	
19-03-18	10.15 am	Imran	1911678	Back Rise Up Down	01Pcs		Rectify			
19-03-18	12.10 pm	Rashma	1911682	Pocket Joint Up Down	01Pcs		Rectify			
19-03-18	4.12	Bakkar	New	Side Top Stitch	01Pcs		Rectify			

Table 3.6 Line QC Hour Wise Audit: 01

Description:

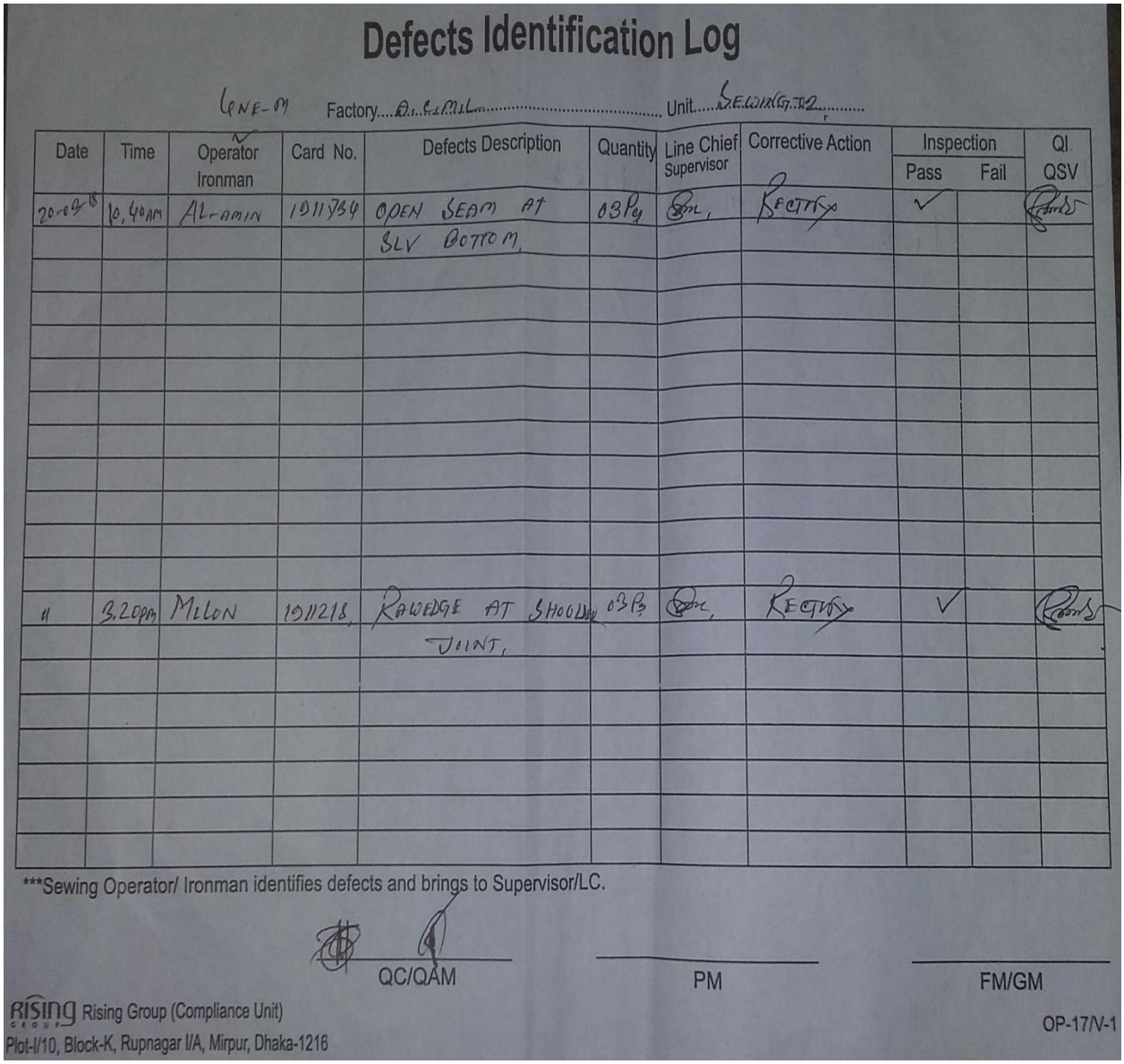
This is the hour wise line inspection which is inspected by Active Composite Mills LTD. This inspection report contains a garments product which is inspected by inspector. Measurement of garments, sewing, machine tension balance, needle etc .

3.7 LINE QC HOUR WISE AUDIT: 02

Buyer: KIABI

Line: M

Date: 20-03-18



Defects Identification Log

LINE-M Factory.....A.L.M.L..... Unit.....SEWING-02.....

Date	Time	Operator Ironman	Card No.	Defects Description	Quantity	Line Chief Supervisor	Corrective Action	Inspection Pass	Inspection Fail	QI QSV
20-03-18	10.40AM	AL-AMIN	1011734	OPEN SEAM AT SLV BOTTOM	03Pcs		RECTIFY	✓		
11	3.20PM	MILON	1011218	RAWEDGE AT SHOULDER JOINT	03Pcs		RECTIFY	✓		

***Sewing Operator/ Ironman identifies defects and brings to Supervisor/LC.

QC/QAM PM FM/GM

Rising Group (Compliance Unit)
Plot-I/10, Block-K, Rupnagar I/A, Mirpur, Dhaka-1216

OP-17/V-1

Fig 3.7: Line QC Hour Wise Audit: 02

Active Composite Mills LTD.

Buyer: KIABI **Line QC Hour Wise Audit** Line: M

Date: 20-03-18 Unit: Sewing

Factory: A.C.M.L

Date	Time	Operator Ironman	Card No.	Defects Description	Quantity	Line Chief Supervisor	Corrective Action	Inspection		QI. QS V
20-03-18	10.40 am	AL-Amin	1911734	Open Seam at Sleeve Bottom	03Pcs		Rectify			
20-03-18	3.20 Pm	Milon	1911218	Raw edge at Shoulder Joint	03Pcs		Rectify			

Table 3.7: Line QC Hour Wise Audit: 02

Description:

This is the hour wise line inspection which is inspected by Active Composite Mills LTD. This inspection report contains a garments product which is inspected by inspector. Measurement of garments, sewing, machine tension balance, needle etc .

Sharpness of sewing machine is checked by QC inspector. If any fault found there then take the necessary, step to rectify the fault.

These inspections take place in every hour. The inspection for a line stars at 8.10 am end at 6.00 pm. By this time inspector calculate total inspection Quantity, defect quantity as well as defect percentage.

3.8 Some defects that we seen during in our inspection:

Skip Stitch:

Fig: Skip Stitch

Causes:

- It appears due to improper handling of cut pieces or machine usage.
- Incorrect sewing tension in needle or under thread.
- Poor loop formation.

Remedies:

- Examine the setting and timing between needle and hook or looped.
- Placing of needle properly.

- The tension of thread should be adjusted.
- Needle size & thread size must be adjusted.
- The pressure of pressure foot must be adjusted accurately.

Shade Variation:

Fig: Shade Variation

Causes:

- It arises due to improper cutting, bundling and numbering.
- Uneven to batch missing shade.
- Different Batch mixing for same garment.

Remedies:

- After cutting the garments parts must be kept in proper bundle with number.
- One batch fabric shade is used for same garments in every part.
- Shade is marking each part due to fabric cutting.

Broken Stitch:

Fig: Broken Stitch

Causes:

- It appears due to improper trimming or machine usage.

Remedies:

- Needle plate, presser foot and feed dog should be checked periodically for damages.
- Proper machine usage.
- Proper trimming.
- Tension and threading should not be fiddled with much.
- Washing parameters should be strictly followed.
- Good quality or D-core thread should be used.
- Needle thread fabric combination should be well judged.
- Needle alignment should be right.

Dust:

Fig: Dust

Causes:

- Dirt, dust & other impurities is the cause the dirty sport.

Remedies:

- E_2R + Lad quest + KRCP $-90^0 \times 60^0$

  1 g/L 1 g/L 1 g/L

Hole:

Broken holes in the fabric where you are able to see through the fabric to other side.

Fig: Hole in garment

Causes:

- Holes can come from fabric or it could be caused by the production side, either by improper trimming or broken needle puncturing the fabric.
- Very stiff & dry yarn.
- Fluff.
- Improper cleaning.

Remedies:

- Better inspection of fabric and cut piece.
- Use a fabric fault detector.
- Air humidification.
- Use of yarn having lower hairiness.

Open Seam or broken seam:

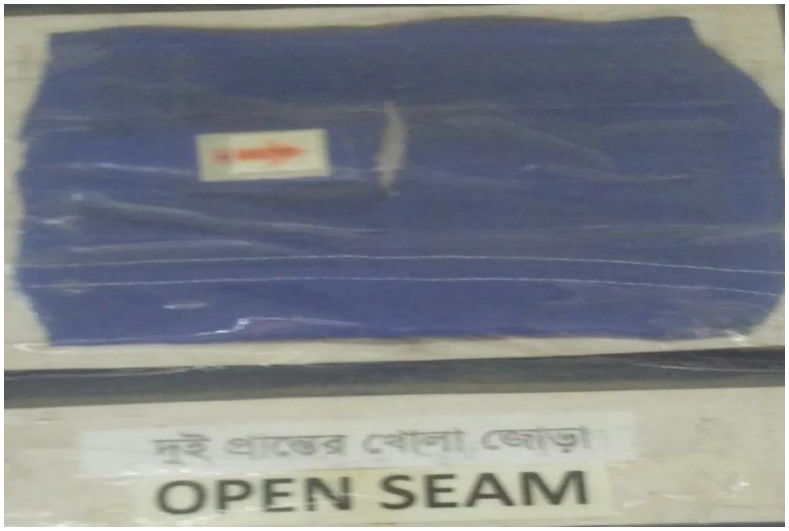


Fig: Open seam in garment

Causes:

- This happens due to improper handling of the parts of garments, improper setting and timing between needle and lopper or hook etc.

Remedies:

- Pattern needs to be correct.
- Clear markings for stitch line.
- Good quality or D-core thread should be used.
- Proper setting and timing between needle and lopper or hook.
- Worker training.
- Threading, SPI and backtrack setting should be checked often.
- Proper handling of the parts of garments.
- Tension should be quantifiable.
- Feed dog and hook set timing should be checked periodically.

Seam Puckering:

Fig: Seam Puckering

Causes:

This problem arises due to uneven stretching on to plies of fabric during sewing, improper thread tension, wrong sewing thread selection, dimensional instability of the plies of fabric etc.

Remedies:

- Feed dog, eyelets and treads guides should be checked periodically for damages.
- Machine feed mechanism must be better quality.
- Operator training.
- Tension, SPI and presser foot pressure should not be fiddled with much.
- UBT/trimmer should be used instead of pulling and breaking thread.
- Needle-thread-fabric combination should be well judged.
- Sewing thread must be selected properly.

Chapter-04

Result and Discussion

4.1 In line inspection from data 3.1 and 3.2

Comments:

- Seven parts of garments check
- Measurement of garments, sewing and machine tension balance are respectively checking.

4.2 End line inspection Report for data 3.3:

Line	Total pcs checked	QC pass	Defect piece	Rectified piece	Rejected
1st	1698	1540	153	153	05
2nd	1916	1805	106	106	05
3rd	2153	1848	302	302	03
4th	1528	1376	151	151	01

Comments:

Total piece checked: 1698

QC Passed at first time: 1540

Defect piece: 153

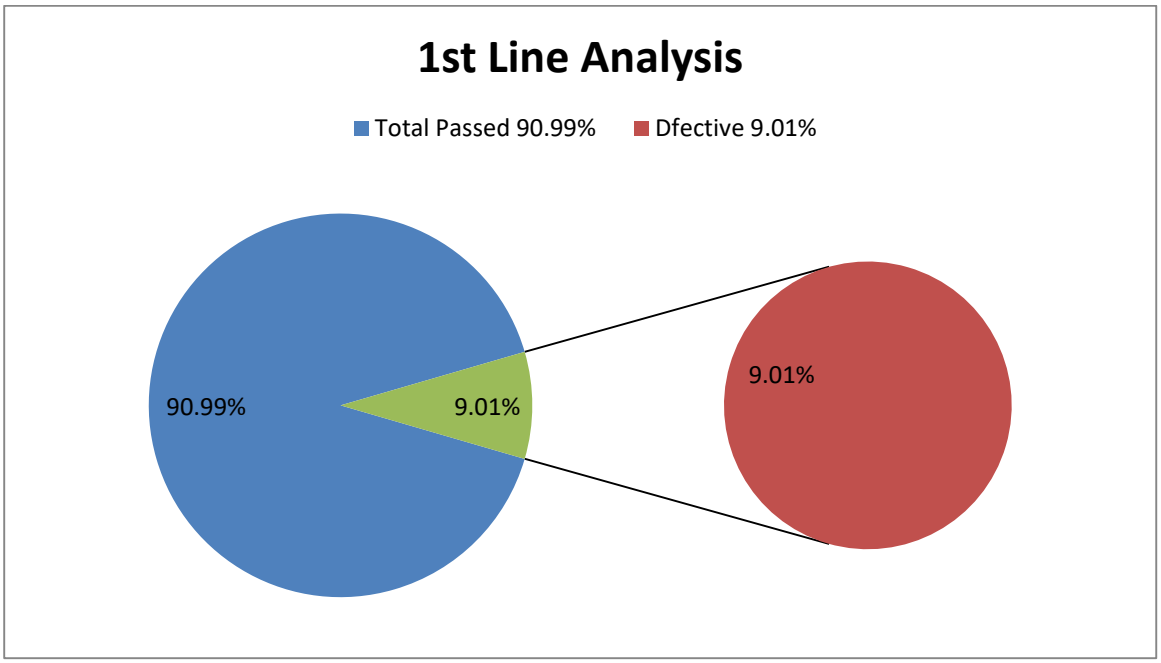
Reject piece: 05

Major defects:

A. Skip stitch

B. Joint stitch

4.2.1 Analysis Report from data 3.3



Graph 4.2.1: Graphical view of 1st line inspection

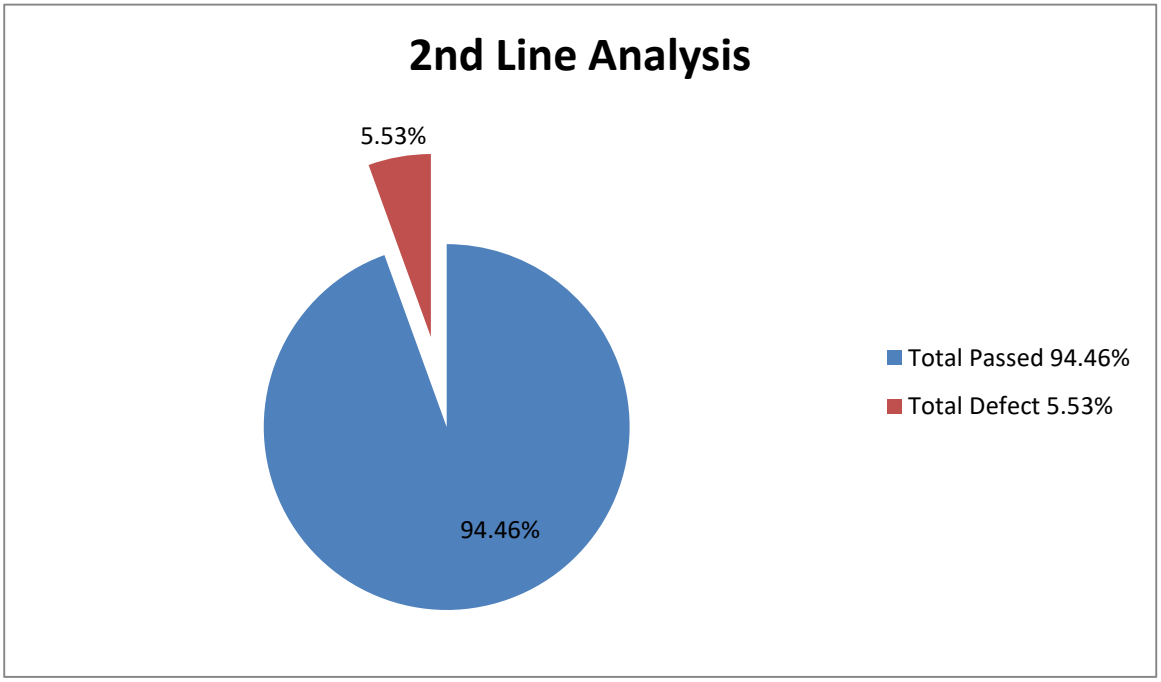
Description:

After one-hour end line inspection inspector inspect total 1698 pieces of garments and 1540 pieces of them are quality passed. Altering done 153 of them and 05 pieces got reject. Total checked garments 90.99% and total defect found 9.01%.

Main defect:

- Drop stitch: 03
- Joint stitch: 02
- Skip stitch: 01

4.2.2: 2nd Line Analysis:



Graph 4.2.2: Graphical view of 2nd Line inspection

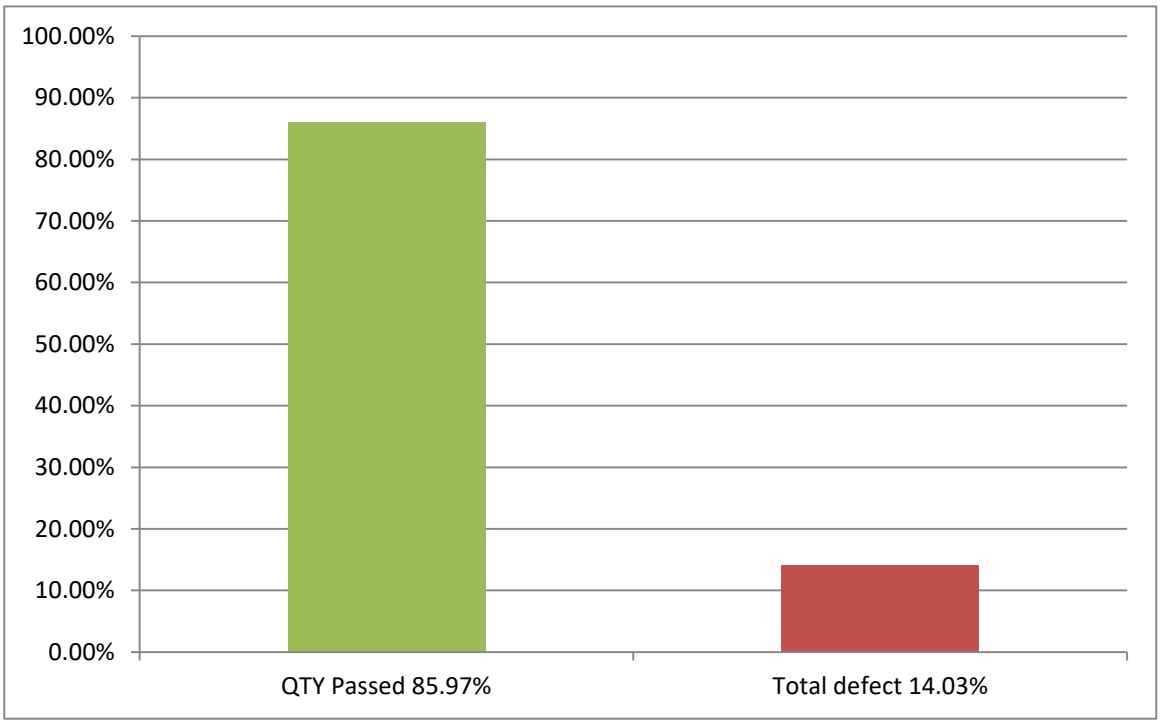
Description:

After 2nd Line end line inspection inspector inspect total 1916 pieces of garments and 1805 pieces of them are quality passed. Altering got 106 done of them and 05 pieces got reject. Total checked pieces in percentages are 94.46% and total fault in percentages is 5.53%.

Main defect:

- Drop stitch: 03
- Joint stitch: 01
- Pleat: 01

4.2.3 Graphical view 3rd line inspection:



Graph 4.2.3 Graphical view 3rd line inspection

Description:

After 8th hour end line inspection inspector inspect total 2153 pieces of garments and 1848 pieces of them are quality passed. Altering done 302 of them and 03 piece got reject.

Main defect:

- Drop stitch: 05
- Pleat: 02
- Broken stitch: 01

4.3 End line inspection Report for data 3.4:

Hours	Total pcs Checked	QC pass	Defect Piece	Alter	Rejected
1st	140	135	5	05	
2nd	140	137	3	03	
3rd	140	136	4	04	
4th	140	138	2	02	
5th	140	136	4	04	
6th	140	134	6	06	
7th	140	132	8	08	
8th	140	139	1	01	

Table 3.4: End line Inspection

Comments:

Total piece checked: 1120

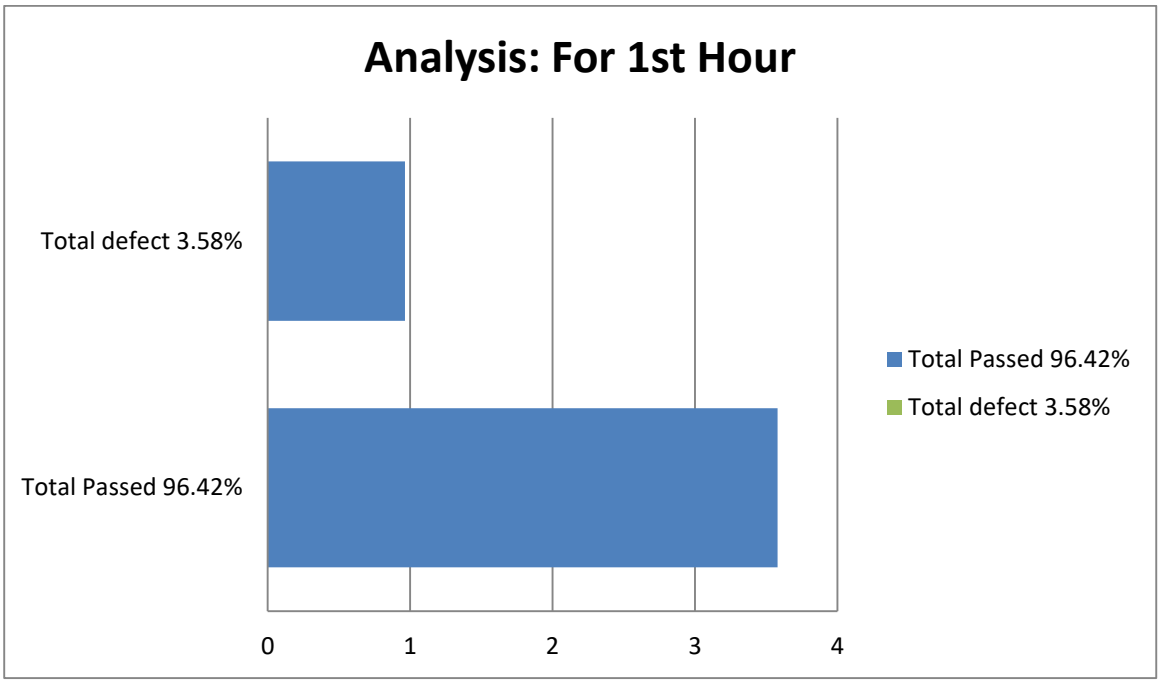
QC Passed at first time: 1087

Defect Piece: 33

Reject Piece: 00

Total Check percentage for 1st hour, 136

4.3.1 Analysis for data 3.4:



Graph 4.3.1: Graphical view of 1st hour inspection

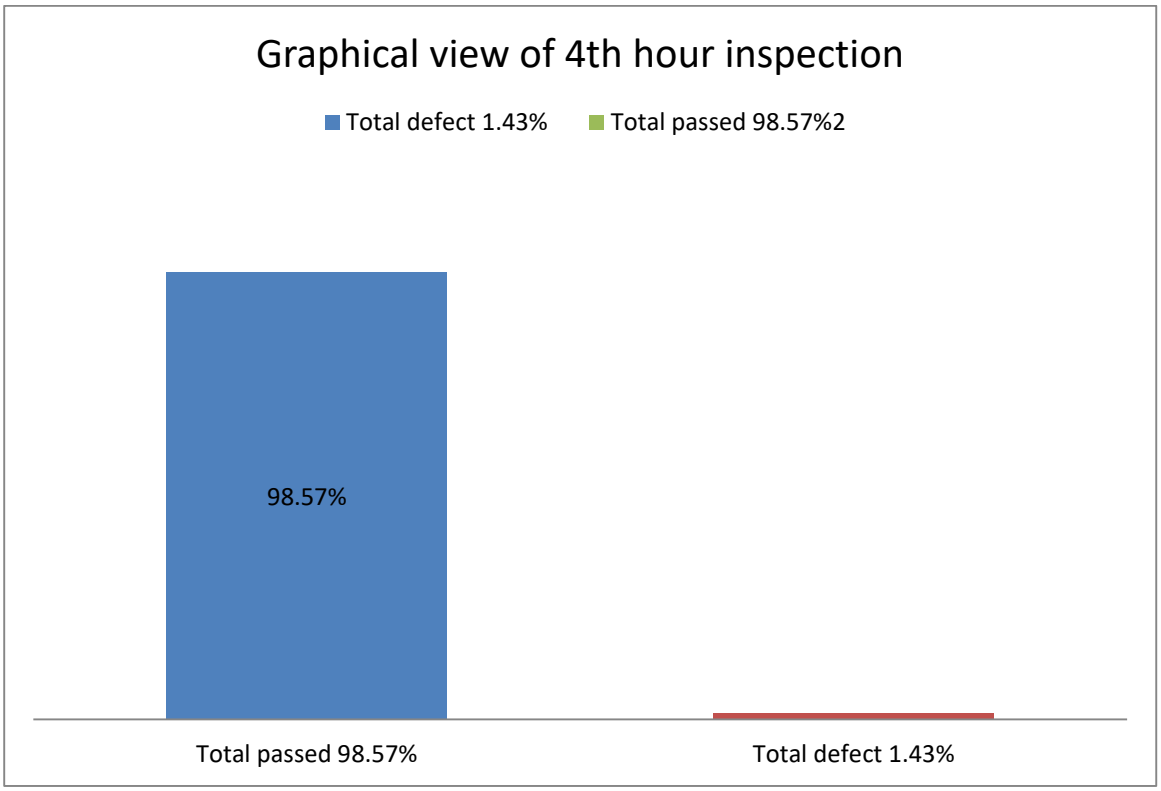
Description:

After 1st hour end line inspection inspector inspect total 140 pieces of garments and 135 pieces of them are quality passed. Altering done 5 of them and there is nothing reject. Total checked pieces in percentages are 96.42% and total fault in percentages is 3.58%.

Main Defect:

- Broken Stitch: 05pcs
- Skip stitch: 01pcs

4.3.2 Graphical view of 4th hour inspection:



Graph 4.3.2: Graphical view of 4th hour inspection

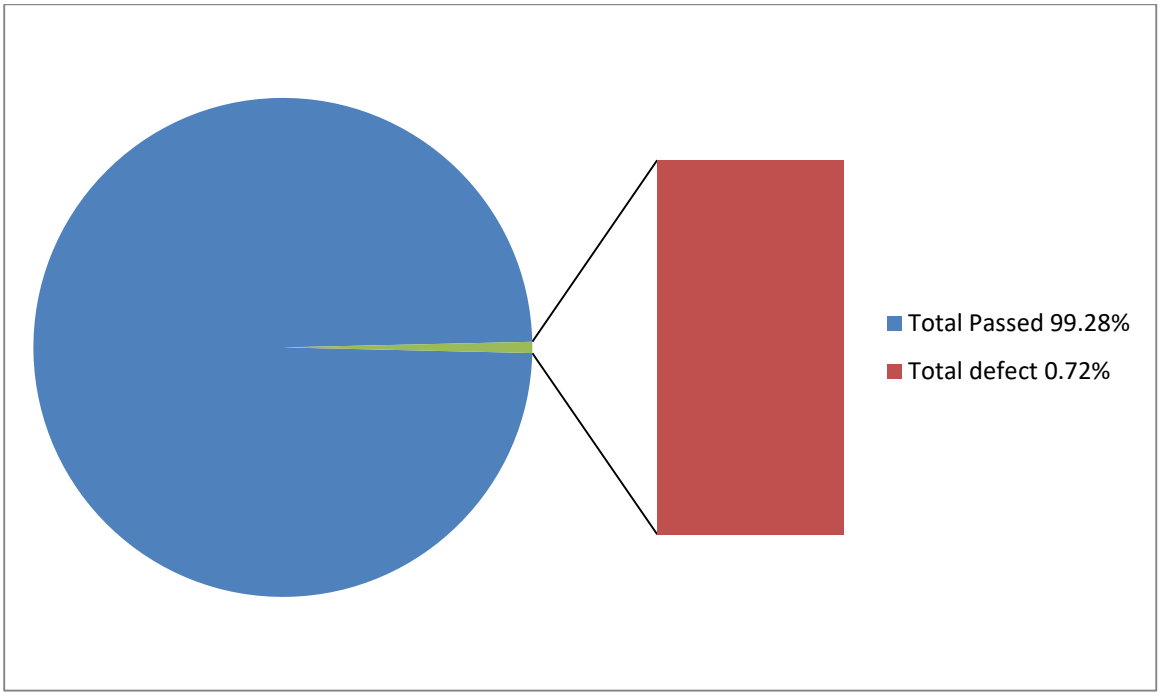
Description:

After 4st hour end line inspection inspector inspect total 140 pieces of garments and 138 pieces of them are quality passed. Altering done 2 of them and there is nothing reject. Total checked pieces in percentages are 98.57% and total fault in percentages is 1.43%.

Main Defect:

Broken stitch: 3

4.3.3 After 8th hour Analysis:



Graph 4.3.3 Graphical view of 8th hour inspection

Description:

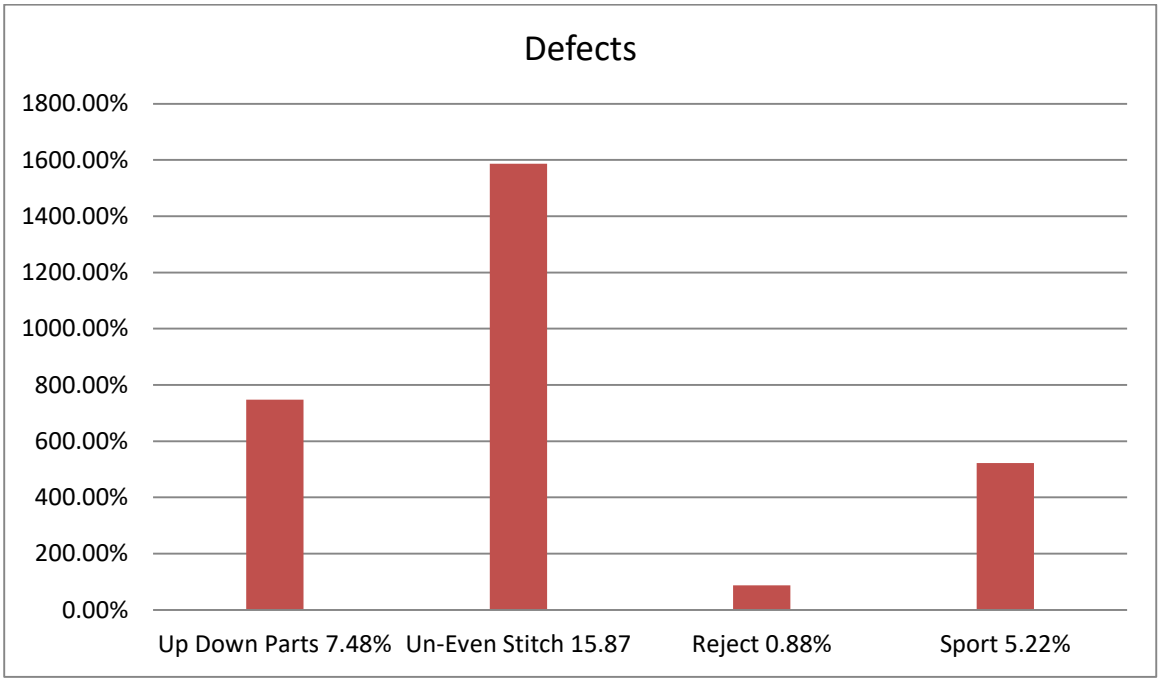
After 4st hour end line inspection inspector inspect total 140 pieces of garments and 139 pieces of them are quality passed. Altering done 1 of them and there is nothing reject. Total checked pieces in percentages are 99.28% and total fault in percentages is 0.72%.

Main Defect:

Broken stitch: 02

Skip stitch: 01

4.3.4 Some defect analysis from table 3.4:

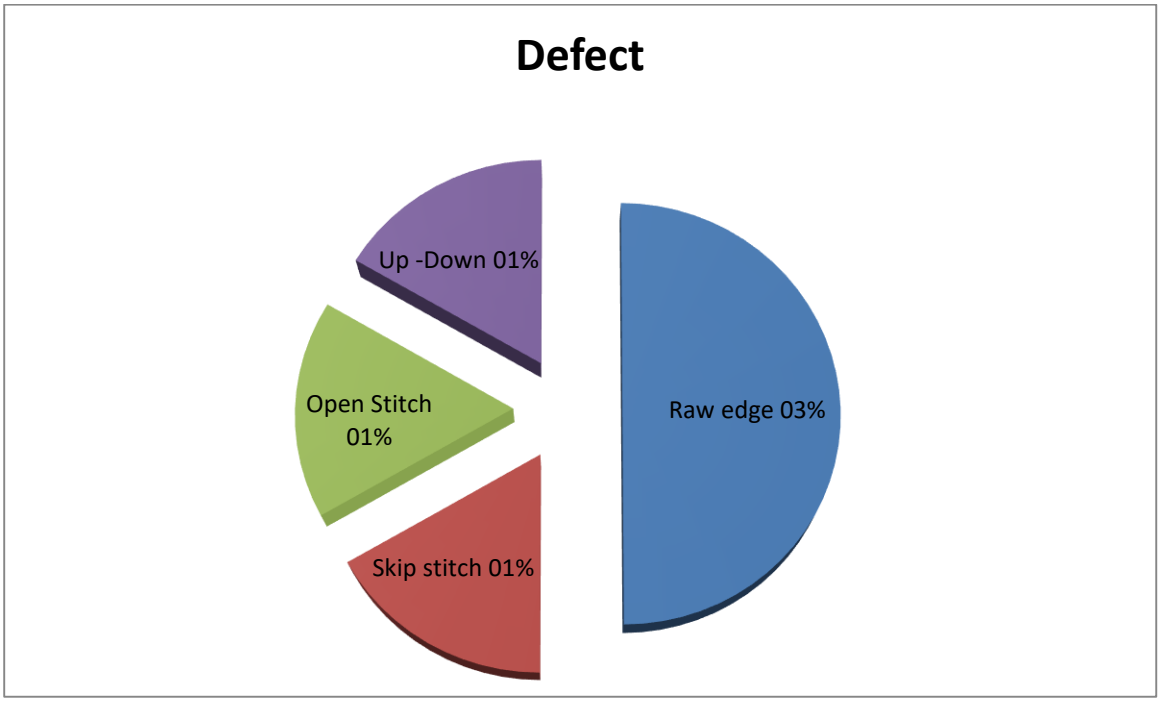


Graph 4.34: Graphical view of defect

Description:

After Table 3.4 Analysis we found deferent defect such as Up-Down, Uneven Stitch and Sport. Here we give Defect percentage according to graph Up-Down 7.48%, Un-Even Stitch 15.87% and Sport 5.22%. Reject garments is 0.88%.

4.3.5 Some defects analysis from table:



Graph 4.3.5: Graphical view of defect

Description:

After Table 3.1 Analysis we found deferent defect such as Up-Down, Raw edge, Skip Stitch, Open Stitch not equal and badge silhouetted. Here we found total defect 6pcs. According to graph defect are taken up and Down 1pcs, raw edge 3pcs, Skip stitch 1pcs, and open stitch 1pcs.

Chapter-05

Conclusion

5.0 Conclusion:

We completed our project by collecting the authentic inspection information from Active Composite Mills LTD. This project helps us to know about the inspection procedure not only that but also able to know about various types of sewing and finishing fault and also their rectified method. We also think this report helps us to gathered knowledge about sewing section and finishing section of garments industry. We also able to know how the working procedure of these section and the inspection procedure of this section is been done. At last we can say that by the knowledge from this project which will help us in our help us in our job life to take challenge in hard working as a textile engineer.

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