



Daffodil
International
University

Faculty of Engineering
Department of Textile Engineering

REPORT ON
Study on Different Types of Sewing Faults and Their Remedies

Course Title: Project (Thesis)

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A Report presented in partial fulfilment of the requirements for the degree of

Bachelor of Science in Textile Engineering

Advance in Apparel Manufacturing Technology

December, 2018

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,

I am just writing to let you know that this project report titled as “**Study on Different Types of Sewing Faults and Their Remedies**” has been prepared by the student bearing ID’s 151-23-4254 is completed for final evaluation. The whole report is prepared based on the proper investigation and interruption through critical analysis of empirical data with required belongings. The student were directly involved in their project activities and the report become vital to spark of many valuable information for the readers.

Therefore it will highly be appreciated 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

Acknowledgement

First of all I am grateful to Allah who give me sound mind & sound health to accomplish this project successfully.

I am also grateful to my supervisor **Engr.Mohammad Abdul Baset, Assistant Professor**, Department of Textile Engineering, Faculty of Engineering, Daffodil international University. Her endless patience, scholarly guidance, continual encouragement, energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting these at all stages have made it possible to complete this project.

I am also thankful to my all teachers, lab assistant, register sir, coordinators and all the employees of Daffodil International University. I am highly delighted to express my regards & gratitude to honorable Head **Prof. Dr. Md. Mahbul Haque** for providing his best support to me.

Finally, I would like to express a sense of gratitude to my beloved parents and friends for their mental support, strength and assistance throughout writing the project report.

Declaration

I hereby declare that, this project has been done by me under the supervision of **Mohammad Abdul Baset, Assistant Professor**, Department of Textile Engineering, Faculty of Engineering, Daffodil International University. I also declare that, neither this project nor any part of this project has been submitted elsewhere for award of any degree.

Marjit Das

.....

Marjit Das

151-23-4254

Abstract

This project is “Study on Different Types of Sewing Faults and Their Remedies” of “Knit Concern Ltd.” Garment manufacturing is quite different from any other conventional manufacturing. It is not a continuous production method. Each style is a different product that requires a different type of fabric, color, buttons, thread etc. Sewing process is one of the most important stages in labor intensive ready-made clothing. Quality faults occurring the process adversely affect the product quality and product efficiency and also increase the production cost. The processes with highest amounts of sewing faults and the effects of these processes on fault rates were investigated. In the sewing floors of Knit Concern Group is capable of producing 170,000 pieces of garments per day. It has 4,500 brand machines of Pegasus, Brother, and Juki with automatic thread cutting, trimming, and sucking devices.

Finally from the 3 line operation audit report they are E, C and O. From line no. E total defects 26 and total defects percentage 182%. And total quality audited 294. Then from line no. C total defects 13 and total defects percentage 91% and total quality audited 322. And last from line no. O total defects 31, total defects percentage 135% and total quality audited 462. From 3 line audit report I can see total QC passed percentage 276.26%, total Reject percentage 1.5%, total Average defects percentage 24.21% and alter percentage 22.71%.

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Chapter: 01

Introduction

1.1 Introduction:

This section of Sewing is the most important department of garments factory. Maximum faults are arise here which hamper the total quality of the garments. I just see the mainly some common types of sewing faults of readymade garments factory. The most essential segment in an article of clothing industry is its sewing segment.

1.2 Objectives of the study:

1. To improve quality of the garments.
2. To must minimize the sewing faults from the apparel.
3. To analysis the cutting, sewing and finishing fault data.
4. To identify the causes of sewing fault and try to solve this

1.3 Limitations:

During the study I had faced the following limitation.

1. I can't collect all the data due to some restriction.
2. Lack of experience.
3. Lack of sufficient guide.
4. For can't maintain the proper time.
5. Time was also a limitations.

Chapter-02

Literature Review

2.1 Sewing Faults:

In textile and Apparel Industry, sewing is one of the major processes in apparel production. It plays an important role in maintaining the quality of clothes. Hence it is important that all defects have to be avoided during sewing any apparel. In this paper, various faults or defects that can take place during sewing along with different remedies or methods to solve these defects are discussed.

2.2 There are mainly three types of sewing defects:

- 1) Problem of stitch formation.
- 2) Due to fabric distortion.
- 3) Due to fabric damage along seam line.

2.3 Problems of stitch formation:

1. Skip Stitch
2. Broken Stitch
3. Seam Pucker
4. Unbalance Stitch
5. Open Seam
6. Damage Fabric
7. Uneven Stitch
8. Placket Slanted
9. Dirt Shading

1) Skip Stitch:

When the stitches in the seam are not present in a regular wise then it creates the skip stitch. It is more harmful in case of chain stitch.



Figure: 2.1 Skip Stitch

Causes:

- i. If the distance between one loop to another loop is more.
- ii. Needle deflection.
- iii. If the distance between one loop to another loop is more.

Remedies:

- i. Adjust tension properly.
- ii. Needle size and thread should be adjusted.
- iii. Timing of hook or lopper with a needle should be adjusted properly.

2) Seam Puckering:

It's the common problem on fabrics.



Figure: 2.2 Seam Puckering

Causes:

- i. When two or more layers of fabric are sewn together then one layer shrinks more than others as a result different seam pucker is formed.
- ii. Fabric construction.
- iii. Extension of sewing thread.
- iv. Sewing threads shrinkage.

Remedies:

- i. Using less tension to the thread.
- ii. Fabric & sewing thread shrinkage percentage should be equal.
- iii. The improved feed mechanism of the sewing machine.

3) Broken Stitch:

After sewing process, if any garments come with broken stitch in quality control section then the fault is named as broken stitch.

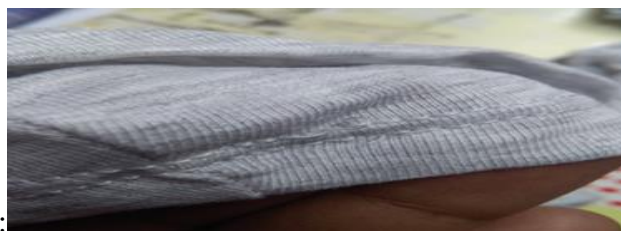


Figure: 2.3 Broken Stitch

Causes:

- i. Lack of skilled worker in trimming.
- ii. Improper setting
- iii. Timing between needle and looper or hook.
- iv. Used lower quality thread.

Remedies:

- i. Used higher quality thread.
- ii. The proper unwinding of thread from the package.
- iii. Trimming should be done more carefully.

4) Unbalance Stitch:

Improper interlacement of thread especially in lock stitch machine.



Figure: 2.4 Unbalance Stitch

Causes:

- i. Used wrong thread path.
- ii. If threads are not lubricated.
- iii. Incorrect passage of thread.

Remedies:

- i. Adjust thread tension.
- ii. Correct passage of thread.
- iii. Better qualities threads must be used.

5) Open Seam:

It's the major problem in fabrics.



Figure: 2.5 Open Seam

Causes:

- i. Due to proper sewing allowance.
- ii. Due to improper thread tension.

Remedies:

- i. Taking proper sewing allowance.

2.4 Damage of fabric on seam line:

It may be happened in case of new or fine needles. There are two types of damage are available given below:

2.4.1 Mechanical damage:

The following steps are to be taken to keep the fabrics free from this type of defects.

- By using perfect size & shape of the needle & needle point without any defect.

- By reducing the speed of sewing machine.
- By using lubricant.

2.4.2 Needle heating damage:

The following steps are to be taken to keep the fabrics free from this type of defect.

- By changing needle size & shape so that there is less generating of heat to the needle.
- By sewing smaller length at higher speed.
- By using lubricant to the needle.

2.4.3 Some faults:

1. Crease mark:

Crease is the common fault in sewing section.

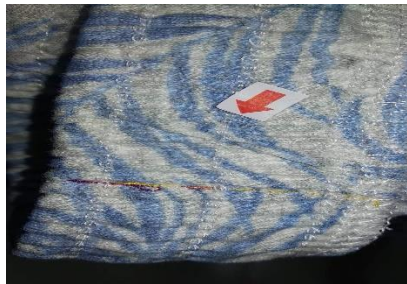


Figure: 2.6 Crease mark

Causes:

- If tension not perfect.
- If the fabric and thread shrinkage percentage should not be equal.
- If the timing should not be perfect.

Remedies:

- Tension should be perfect.
- Thread and fabric shrinkage percentage must be equal

2. Level missing:

Point up-down is also a common fault in fabric.



Figure: 2.7 level missing

Causes:

- Over passing the parts from one operator to another.
- Operator mistake to joining level but passed to another.

Remedies:

- Operator should be careful to join level.
- Operator helper should be check all parts before passing other to another.

3. Needle hole:



Figure: 2.8 Needle hole

Causes:

- Broken needle.
- Improper cleaning.
- Yarn breakage at knot.
- Very high yarn twist.

Remedies:

- Properly machine cleaning.
- Dust removes by the air gun.
- Needle broken check

Chapter: 03

Experimental Details

3.0 About Experimental Data:

I have collected some data in “Knit Concern Ltd”. Then I calculated defects percentage from different types of defects found in sewing section.

Broken stitch, uneven stitch, seam puckering, open seam, needle holes etc. are the most common defects found in sewing section.

Data Analysis:

For data analysis must have an idea about DHU. DHU means “Defect per Hundred Units”.

It means number of defects found per 100 garments.

$DHU = (\text{Total defects} / \text{Total inspection}) * 100$

Attachment of In Line Operations Audit Report:

3.1 In Line Operations Report-1

Report-1

Sewing line E in Knit Concern Ltd.:

KNIT CONCERN LTD. 62, Water Works Road, Godnail, Narayanganj		IN LINE OPERATIONS AUDIT REPORT						REC/MMP/015 REVISION NO : 05			
LINE	E	FACTORY	K.C.L13	DATE	24.12.18	LINE SUPERVISOR	MUSTAFA	LINE Q/C	ZAKIR		
BUYER	H&M	ORDER NO.	420422-1076	LINE SUPERVISOR	MUSTAFA	LINE Q/C	ZAKIR	DATE	24.12.18		
STYLE	TILLY	COLOR	BEIGE LIGHT	LINE SUPERVISOR	MUSTAFA	LINE Q/C	ZAKIR	DATE	24.12.18		
DEFECTS CODE LIST	EMPLOYEE	OPERATION	VISIT - 1		VISIT - 2		VISIT - 3		TOTAL QUANTITY AUDITED	TOTAL DEFECTS	% DEFECTS
CODE	NAME	DESCRIPTION	QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.			
S1	PARVIN	OPEN SEAM	2	S1 7	2	-	-	-	14	1	2%
S2	FARJANA	RAW MATERIAL SHADES WRONG SIDE	2	S18 7	2	S1 7	-	-	14	2	14%
S3	RAGAYA	OIL OR DRIT STAINS	2	S18 7	2	-	-	-	14	1	2%
S4	SHOBGJ	HOLES IN MATERIAL	2	-	2	S1 7	-	-	14	1	2%
S5	CHAMTO	MEASUREMENT OUT OF RANGE	2	S33 7	2	-	-	-	14	-	-
S15	HERA	WRONG SIZE LABEL	2	-	2	-	-	-	14	1	2%
S16	RAHANA	TWISTING	2	S18 7	2	-	-	-	14	1	2%
S17	SWEAYA	WRONG TRIM	2	S19 7	2	-	-	-	14	1	2%
S18	BHIMA	UNEVEN STITCH LINE OR PARTS	2	-	2	S15 7	-	-	14	1	2%
S19	GORSHA	LOOSE/SKIP STITCHES	2	S18 7	2	-	-	-	14	1	2%
S20	MASUD	UNCUT THREAD	2	S18 7	2	S18 7	-	-	14	2	14%
S21	ARIFA	SPI NOT CORRECT	2	-	2	-	-	-	14	-	-
S22	KANON	UNEVEN SHOULDER LENGTH	2	S18 7	2	-	-	-	14	1	2%
S23	ALAYAT	RIB SHADING	2	S1 7	2	S1 7	-	-	14	2	14%
S24	PRADIP	STRIPE MISMATCH	2	S1 7	2	S28 7	-	-	14	2	14%
S25	KADDAK	IRREGULAR BOTTOM HEM	2	S28 7	2	S1 7	-	-	14	2	14%
S26	TIYOB	WRONG PLACKET SHAPE	2	S15 2	2	-	-	-	14	2	14%
S27	SHAFIF	POGR JOINTS	2	-	2	S15 2	-	-	14	2	14%
S28	MAMIK	RAW EDGES	2	S15 2	2	-	-	-	14	2	14%
S29	KAYA	SEAM PUCKERING	2	S18 7	2	-	-	-	14	1	2%
S30	MOFIYUN	WRONG BUTTON HOLE PLACEMENT	2	-	2	-	-	-	14	-	-

Figure: 3.1 sewing line operations audit report-1

IN-LINE OPERATIONS ADUIT REPORT-1

Line	E
Buyer	H&M
Style	Tilly

Factory	K.C.L 13
Order No.	420422-1676
Color	BEIGE

Data	24.12.18
Line Supervisor	Mustafa
Line Q/C	Zakir

Defects code list		VISIT-1			VISIT-2			Total qty.	Total Defec ts
Code	Operation	QTY. Audit	Defects code	QTY.	QTY. Audit	Defects code	QTY.		
S1	Open seam	7	S1	7	7	-	-	14	1
S2	Raw material/shades/wrong side	7	S18	7	7	S1	9	14	2
S3	Oil or dirt stains	7	S18	7	7	-	-	14	1
S4	Holes in material	7	-	-	7	S1	9	14	1
S5	Measurement out of range	7	S33	7	7	-	-	14	1
S15	Wrong size label	7	-	-	7	-	-	14	-
S16	Twisting	7	S18	7	7	-	-	14	1
S17	Wrong trim	7	S19	7	7	-	-	14	1
S18	Uneven stitch line	7	-	-	7	S15	9	14	1
S19	Skip stitch/loose	7	S18	7	7	-	-	14	1
S20	Uncut thread	7	S18	7	7	S18	9	14	2
S21	SPI not correct	7	-	-	7	-	-	14	-
S22	Uneven shoulder length	7	S18	7	7	-	-	14	1
S23	Rib shading	7	S1	7	7	S1	9	14	2

S24	Stripe mismatch	7	S1	7	7	S28	9	14	2
S25	Irregular bottom hem	7	S28	7	7	S1	9	14	2
S26	Wrong placket shape	7	S15	7	7	-	-	14	2
S27	Pogr joints	7	-	-	7	S15	2	14	2
S28	Raw edges	7	S15	7	7	-	-	14	2
S29	Seam puckering	7	S18	7	7	-	-	14	1
S30	Wrong button/hole placement	7	-	-	7	-	-	14	-
S31	Uneven sleeve length								
S32	Back neck tape uneven								
								T. qty=294	Total Defects=26

Table: 3.1 In line operations audit report-1

$$\begin{aligned}
 \text{DHU} &= (\text{Total no. of defects} / \text{Total no. of quantity audited}) * 100 \\
 &= (26/294) * 100 \\
 &= 8.85\%
 \end{aligned}$$

From the table I can see that, the buyer was H&M and the style name TILLY. The no. of line supervisor 1, line q/c 1 & employee 21 was worked there. I can see that, there are two common defects occurred there. One in open seam and another in uneven stitch. From this, I found total quantity was 294 & total defect was 26.

They visited for 2 times. In there, S1, S18, S15, S19, S33 this defects are occurred. Several times uneven stitch line or parts (S18) and open seam (S1) these two defects are shown.

3.2 In Line Operation Report-2

Report-2

Sewing line C in Knit Concern Ltd.:

62, Water Works Road, Godnail, Narayanganj

IN LINE OPERATIONS AUDIT REPORT

REC/MMP/015
 REVISION NO: 05

LINE	BUYER	STYLE	FACTORY	ORDER NO.	COLOR	DATE	LINE SUPERVISOR	LINE Q/C
C	Ham	Richard Set	KEL-3	62416-6545	White	23-12-18	Jahid	Rohul Amin

DEFECTS CODE LIST	EMPLOYEE NAME	OPERATION	VISIT - 1			VISIT - 2			VISIT - 3			TOTAL QUANTITY AUDITED	TOTAL DEFECTS	%
			QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.				
S1 OPEN SEAM	Shety Shoykurjem										14	0	OK	
S2 RAW MATERIAL SHADES/WRONG SIDE	Masud	Bottom hem		S-1 01							14	1	7%	
S3 OIL OR DRIT STAINS	Roksana	CUTT JEIN									14	0	OK	
S4 HOLES IN MATERIAL	Musa	CUTT JEIN									14	0	OK	
S5 MEASUREMENT OUT OF RANGE	Bedarul	"									14	0	OK	
S15 WRONG SIZE LABEL	Khadija	Shave JEIN		S-1 01							14	1	7%	
S16 TWISTING	Raju	"									14	0	OK	
S17 WRONG TRIM	Tahmina	Placket Rollin		S-1 01							14	1	7%	
S18 UNEVEN STITCH LINE OR PARTS	Subnur	"									14	0	OK	
S19 LOOSE/SKIP STITCHES	Labony	Placket JEIN		S-1 01							14	1	7%	
S20 UN CUT THREAD	Arma	Collar stem									14	0	OK	
S21 SPI NOT CORRECT	Zahid	Collar Pack		S-1 01							14	1	7%	
S22 UNEVEN SHOULDER LENGTH	ouasim	Collar o/L									14	0	OK	
S23 RIB SHADING	Fatema	Size label									14	0	OK	
S24 STRIPE MISMATCH	Jamal	Cloth Stoc Attel		S-1 02							14	1	7%	
S25 IRREGULAR BOTTOM HEM	Shirin	Placket Rollin				S-1 01					14	1	7%	
S26 WRONG PLACKET SHAPE	Sharinik	"		S-1 02							14	1	7%	
S27 POGR JOINTS	Mondoy	"				S-1 01					14	1	7%	
S28 RAW EDGES	Shahana	Placket Toly		S-1 02		S-1 01					14	2	14%	
S29 SEAM PUCKERING	Shahana	Placket Toly				S-1 02					14	1	7%	
S30 WRONG BUTTON HOLE PLACEMENT	Sakib	Back neck tape				S-1 01					14	1	7%	
S31 UNEVEN SLEEVE LENGTH	Tanpina	POW STITCH									14	0	OK	
S32 BACK NECK TAPE UNEVEN	Rokib	Side Seam									14	0	OK	

Figure: 3.2 Sewing line operations audit report-2

IN-LINE OPERATIONS ADUIT REPORT-2

Line	C	Factory	KCL-3	Date	23-12-2018
Buyer	H&M	Order no.	162416-6545	Line supervisor	Jahid
Style	Richard Set	Colour	White	Line Q/C	Ruhul Amin

Code	Defects Code List Description	Operation	VISIT-1			VISIT-2			Total qty.audit	Total defects
			QTY. Audit	Defects code	QTY	QTY. Audit	Defects code	QTY.		
S1	Open seam	Shoulder Joint	7	-	-	7	-	-	14	0
S2	Raw material/s hades/wrong side	Sleeve hem	7	S18	01	7	-	-	14	1
S3	Oil or dirt stains	Sleeve joint	7	-	-	7	-	-	14	0
S4	Holes in material	Sleeve joint	7	-	-	7	-	-	14	0
S5	Measurement out of range	Neck rib tack	7	-	-	7	-	-	14	0
S15	Wrong size label	Neck rib tack	7	S18	01	7	-	-	14	1
S16	Twisting	Neck rib	7	-	-	7	-	-	14	0
S17	Wrong trim	Half piping	7	S18	01	7	-	-	14	1
S18	Uneven stitch line	Back tape	7	-	-	7	-	-	14	0
S19	Skip stitch/loos	Back tape	7	S18	01	7	-	-	14	1

	e									
S20	Uncut thread	Neck top stitch	7	-	-	7	-	-	14	0
S21	SPI not correct-	Loop joint	7	S18	02	7	-	-	14	2
S22	Uneven-shoulder length	Loop joint	7	-	-	7	-	-	14	0
S23	Rib shading	Bottom hem	7	-	-	7	-	-	14	0
S24	Stripe - mismatch	Bottom hem	7	S18	02	7	-	-	14	2
S25	Irregular bottom hem	Bottom hem	7	-	-	7	S1	01	14	1
S26	Wrong ---placket shape	Side seam	7	S18	02	7	-	-	14	2
S27	Pog joints	Side seam	7	-	-	7	S18	01	14	1
S28	Raw edges	Side seam	7	S18	02	7	S18	01	14	3
S29	Seam puckering	Sleeve bottom tack	7	-	-	7	S18	02	14	2
S30	Wrong button/hole placement	Sleeve bottom tack	7	-	-	7	S1	01	14	1
S31	Uneven sleeve length		7	-	-	7	-	-	14	0
S32	Back neck tape uneven		7	-	-	7	-	-	14	0
									Total	Total

									qty.audit	defects
									=322	=18

Table: 3.2 In line operations audit report-2


$$\begin{aligned}
 \text{DHU} &= (\text{Total no. of defects} / \text{Total no. of quantity audited}) * 100 \\
 &= (18 / 322) * 100 \\
 &= 5.60\%
 \end{aligned}$$

From the table I can see that, the buyer was H&M and the style name Richard Set. The no. of line supervisor 1, line q/c 1 & employee 23 was worked there. I can see that, there is one common defects occurred in there. It is uneven stitch line or parts. They visited here for 2 times. In their uneven stitch line or parts S18 this defects is occurred several times. Total defects are 13 and total defects percentage 91%. From this, I found total quantity was 322 & total defect was 18. After that, I got DHU 5.60%.

3.3 In Line Operations Report-3

Report-3

Sewing line O in Knit Concern Ltd.:



KNIT CONCERN LTD.
62, Water Works Road, Godnail, Narayanganj

IN LINE OPERATIONS AUDIT REPORT


REC/MMP/015
REVISION NO : 05


LINE	O
BUYER	JALLY WEIOL
STYLE	PAOLO LEBRONA

FACTORY	K.E.C
ORDER NO.	50058529
COLOR	Blue

DATE	17.12.18
LINE SUPERVISOR	RUBEL
LINE Q/C	Sellim

CODE	DEFECTS CODE LIST DESCRIPTION	EMPLOYEE NAME	OPERATION	VISIT - 1		VISIT - 2		VISIT - 3		TOTAL QUANTITY AUDITED	TOTAL DEFECTS	%
				QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.	QTY. AUDIT	DEFECTS CODE/ QTY.			
S1	OPEN SEAM	ARBEYA	IN SEAM TAPE	7	S-1 1	7	- -	7	- -	31	1	9%
S2	RAW MATERIAL SHADES/WRONG SIDE	SUMAYA	"	7	- -	7	S-1 1	7	S-1 1	31	2	9%
S3	OIL OR DRIT STAINS	HARUNZA	"	7	- -	7	S-1 1	7	S-1 1	31	2	9%
S4	HOLES IN MATERIAL	MAZINA	"	7	S-18 1	7	S-1 1	7	- -	31	2	9%
S5	MEASUREMENT OUT OF RANGE	SHARON	IN SEAM TAPE	7	- -	7	S-18 1	7	- -	31	1	4%
S15	WRONG SIZE LABEL	JUSMIM	"	7	S-18 1	7	S-1 1	7	- -	31	2	9%
S16	TWISTING	SARUNA	"	7	S-18 1	7	- -	7	S-1 1	31	2	9%
S17	WRONG TRIM	ARBEYA	IN SEAM TAPE	7	- -	7	- -	7	- -	31	-	0%
S18	UNEVEN STITCH LINE OR PARTS	SALIM	WAIST BELT	7	- -	7	S-23 1	7	- -	31	1	4%
S19	LOOSE/SKIP STITCHES	TAMA	WAIST BELT	7	- -	7	- -	7	S-18 1	31	1	4%
S20	UNCUT THREAD	SHAKIB	WAIST BELT	7	S-18 1	7	S-23 1	7	- -	31	2	9%
S21	SPI NOT CORRECT	ALIAS	"	7	S-18 1	7	- -	7	S-23 1	31	2	9%
S22	UNEVEN SHOULDER LENGTH	SOLHUZ	WAIST BELT	7	- -	7	S-18 1	7	S-1 1	31	2	9%
S23	RIB SHADING	SUBARU	"	7	- -	7	S-18 1	7	- -	31	1	4%
S24	STRIPE MISMATCH	SUNNY	WALF LAB DTR	7	- -	7	- -	7	- -	31	-	0%
S25	IRREGULAR BOTTOM HEM	SATIS	WALF LAB DTR	7	S-15 1	7	- -	7	- -	31	1	4%
S26	WRONG PLACKET SHAPE	SUNBL	LEBEL HEM	7	S-18 1	7	- -	7	- -	31	1	4%
S27	POGR JOINTS	HUNA	"	7	S-1 1	7	S-18 1	7	- -	31	2	9%
S28	RAW EDGES	BLUKA	"	7	- -	7	S-1 1	7	S-18 1	31	2	9%
S29	SEAM PUCKERING	FAYSAL	WAIST BELT	7	- -	7	S-18 1	7	- -	31	1	4%
S30	WRONG BUTTON/ HOLE PLACEMENT	ANKSANA	SIZELAB DTR	7	- -	7	S-18 1	7	- -	31	1	4%
S31	UNEVEN SLEEVE LENGTH	JOISMA	"	7	S-15 1	7	- -	7	S-15 1	31	2	9%
S32	BACK NECK TAPE UNEVEN											


 SNR Q/C / Q/C IN-CHARGE


 Q.A MANAGER



 PROD. MANAGER

Figure: 3.3 Sewing line operation audit report-3

IN-LINE OPERATIONS ADUIT REPORT-3

Line	O	Factory	KCL-3	Date	17.12.18
Buyer	TALLY.WEIJL	Order no.	500054579	Line supervisor	Rubel
Style	Pacolegging	Colour	Black	Line q/c	Salim

Code	Defect s code list Description	Oper ation	VISIT-1			VISIT-2			VISIT-3			Tota l qty audi ted	Tot al defe cts
			Qt y. au dit	Defe cs code	Q ty .	Qty.a udit	Def ects code	Qt y.	Qty.a udit	Def ects code	Qt y.		
S1	Open seam	To rise joint	7	S1	1	7	-	-	7	-	-	21	1
S2	Raw materi al/shades/wrong side	To rise joint	7	-	-	7	S1	1	7	S1	1	21	2
S3	Oil or dirt stains	To rise joint	7	-	-	7	S1	1	7	S1	1	21	2
S4	Holes in materi al	To rise joint	7	S18	1	7	S1	1	7	-	-	21	2
S5	Measu rement out of range	In seam joint	7	-	-	7	S18	1	7	-	-	21	1
S15	Wrong size label	In seam joint	7	S18	1	7	S1	1	7	-	-	21	2
S16	Twisti ng	In seam joint	7	S18	1	7	-	-	7	S1	1	21	2
S17	Wrong trim	In seam tack	7	-	-	7	-	-	7	-	-	21	-
S18	Uneve	waist	7	-	-	7	S23	1	7	-	-	21	1

	n stitch line or parts	belt											
S19	Loose/ skip stitches	waist belt	7	-	-	7	-	-	7	S18	1	21	1
S20	Uncut thread	waist belt	7	S18	1	7	S23	1	7	-	-	21	2
S21	SPI no-t correct	waist belt	7	S18	1	7	-	-	7	S23	1	21	2
S22	Uneven shoulder length	Waist belt joint	7	-	-	7	S18	1	7	S1	1	21	2
S23	Rib shading	Waist belt joint	7	-	-	7	S18	1	7	-	-	21	1
S24	Stripe mismatch	Care cab joint	7	-	-	7	-	-	7	-	-	21	-
S25	Irregular bottom hem	Care cab joint	7	S15	1	7	-	-	7	-	-	21	1
S26	Wrong placket shape	Leg hem	7	S18	1	7	-	-	7	-	-	21	1
S27	Pog joints	Leg hem	7	S1	1	7	S18	1	7	-	-	21	2
S28	Raw edge	Leg hem	7	-	-	7	S1	1	7	S18	1	21	2
S29	Seam puckering	Waist belt top	7	-	-	7	S18	1	7	-	-	21	1
S30	Wrong button/ hole placement	Size lab. Joint	7	-	-	7	S18	1	7	-	-	21	1
S31	Uneven sleeve length	Size lab joint	7	S15	1	7	-	-	7	S15	1	21	2
S32	Back neck												

	tape uneven												
												Total qty. audited= 462	Total defects= 31

Table: 3.3 In line operations audit report-3

DHU= (Total no. of defects/Total no. of quantity audited)*100

$$= (31/462)*100$$

$$= 6.70\%$$

From the table I can see that, the buyer was TALLY.WEIJL. The no. of line supervisor 1, line q/c 1 & employee 22 was worked there. I can see that, there is one common defects occurred in there. It is uneven stitch line or parts, Rib shading & open seam.They visited for 3 times. In there, S1, S18, S15, S2 this defects are occurred. Total defects 31 and defects percentage 135%.From this, I found total quantity was 462 & total defect was 31.After that, I got DHU 6.70%.

Chapter-04

Result & Discussion

4.1 Analysis of In Line Operations Audit Report-1



Figure: 4.1 Graphically Show Sewing Defects Number Measurement of In Line Operation Audit Report-1

Description:

From this graph, in open seam, Oil or dirt stains, holes in material, measurement out of range, twisting, wrong trim, uneven stitch line or parts, skip stitch/loose and uneven shoulder length respectively found 1 defect. But in raw material/shades/wrong side, uncut thread, rib shading, stripe mismatch, irregular bottom hem, wrong placket, shape, pogr joints, raw edges are respectively found 2 defect. Only in wrong size label and spi not correct found 0 defect. This the defect measurement graph.

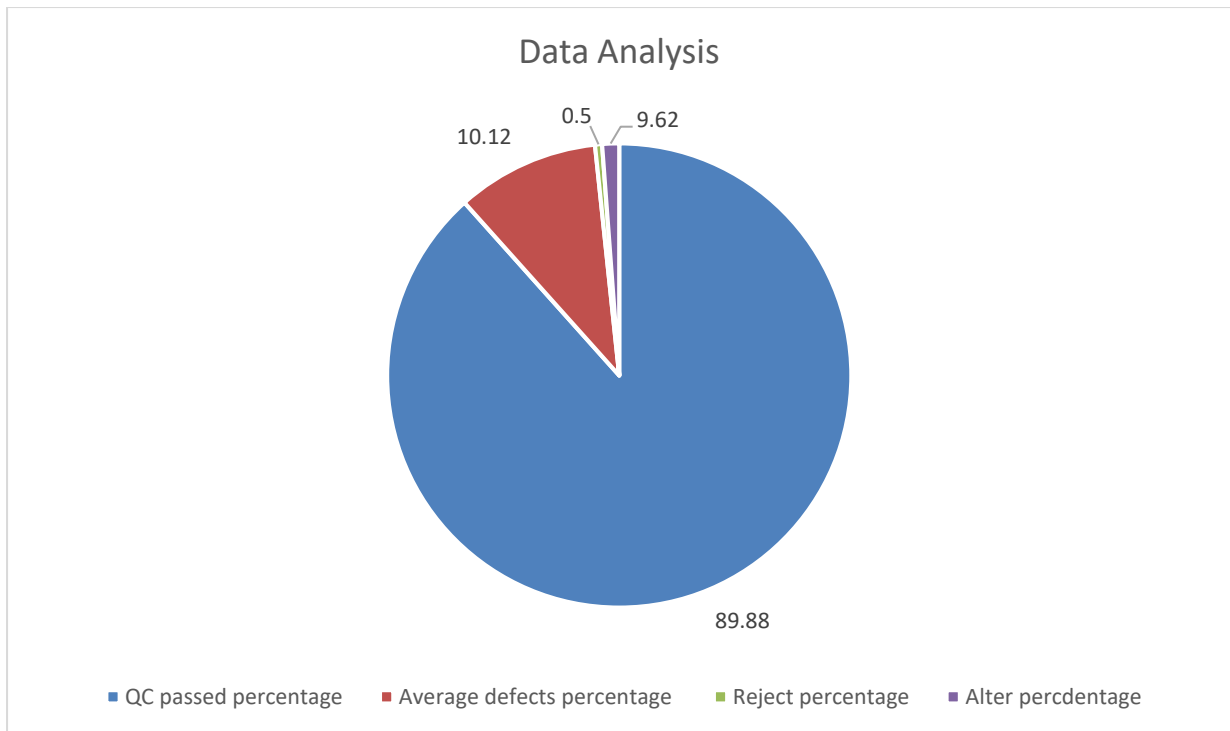


Figure: 4.2 Graphically Show Data Analysis of In Line Operations Audit Report-1

Description:

Here,

QC Passed percentage 89.88%

Average Defects percentage 10.12%

Reject percentage 0.5%

Alter percentage 9.62%

4.2 Analysis of In Line Operations Audit Report-2

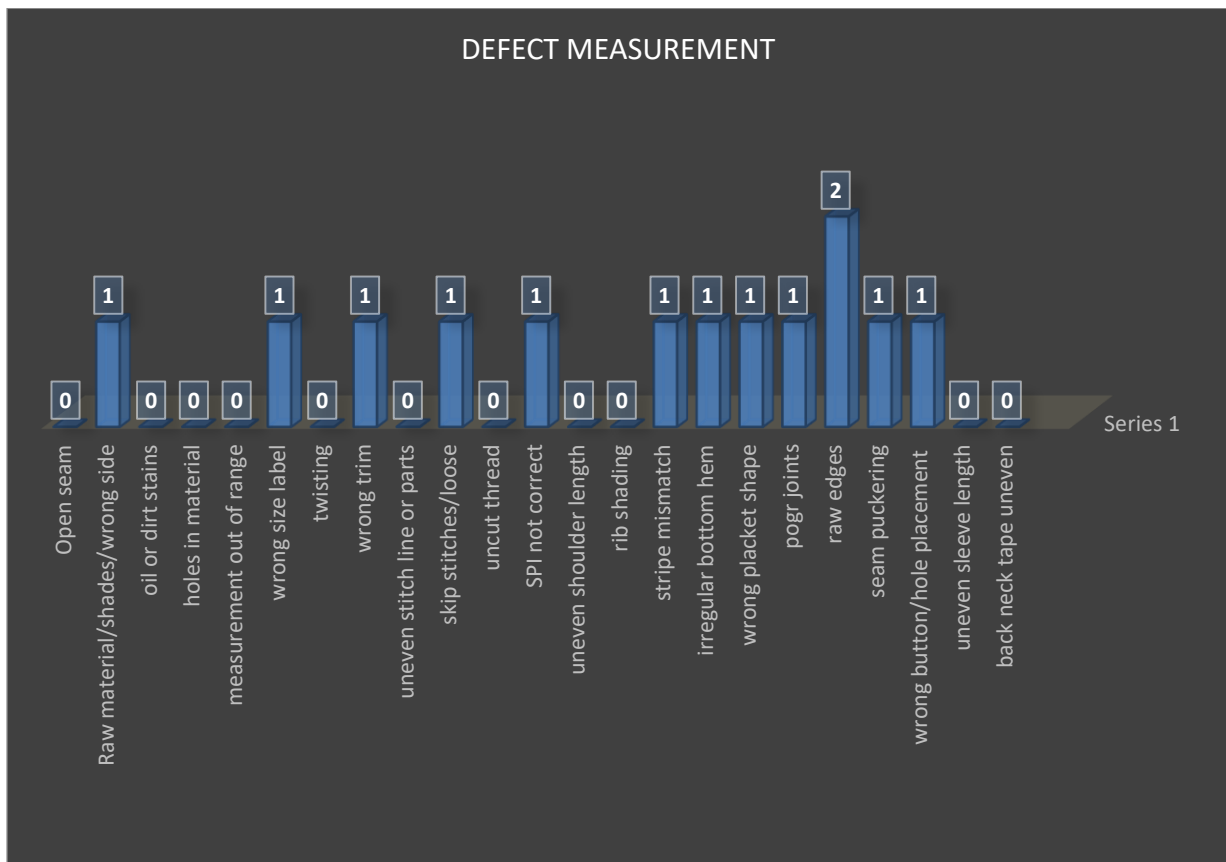


Figure: 4.3 Graphically Show Sewing Defects Number Measurement of In Line Operation Audit Report-2

Description:

In open seam, oil dirt, holes in material, measurement out of range, twisting, uneven stitch line or parts, uncut thread, uneven shoulder length, rib shading, uneven sleeve length and back neck tape uneven are respectively found 0 defect.

But in raw materials/shades/wrong side, wrong size label, wrong trim, skip stitch, spi not correct, stripe mismatch, irregular bottom hem, wrong placket shape, pogr joints, seam puckering, wrong button/hole placements are respectively found 1 defect. Only in raw edge found 2 defect.

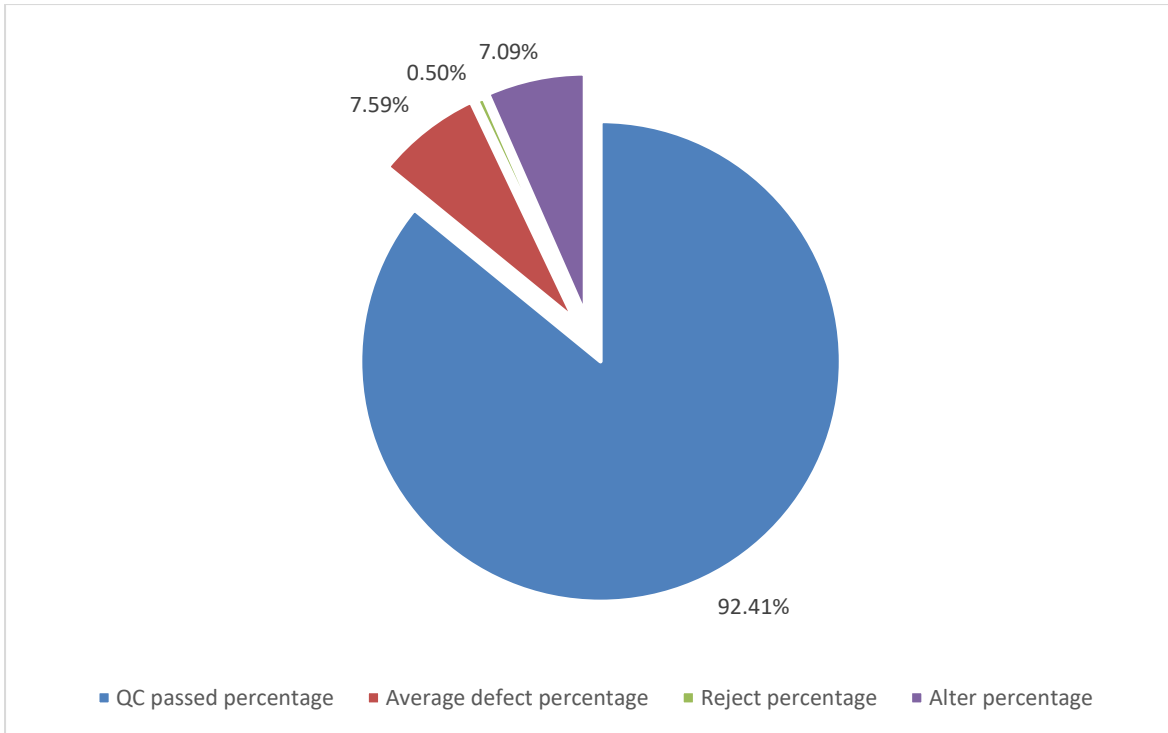


Figure: 4.4 Graphically Show Data Analysis of In Line Operations Audit Report-2

Description:

Here,

QC Passed percentage 92.41%

Average Defects percentage 7.59%

Reject percentage 0.5%

Alter percentage 7.09%

4.3 Analysis of In Line Operations Audit Report-3

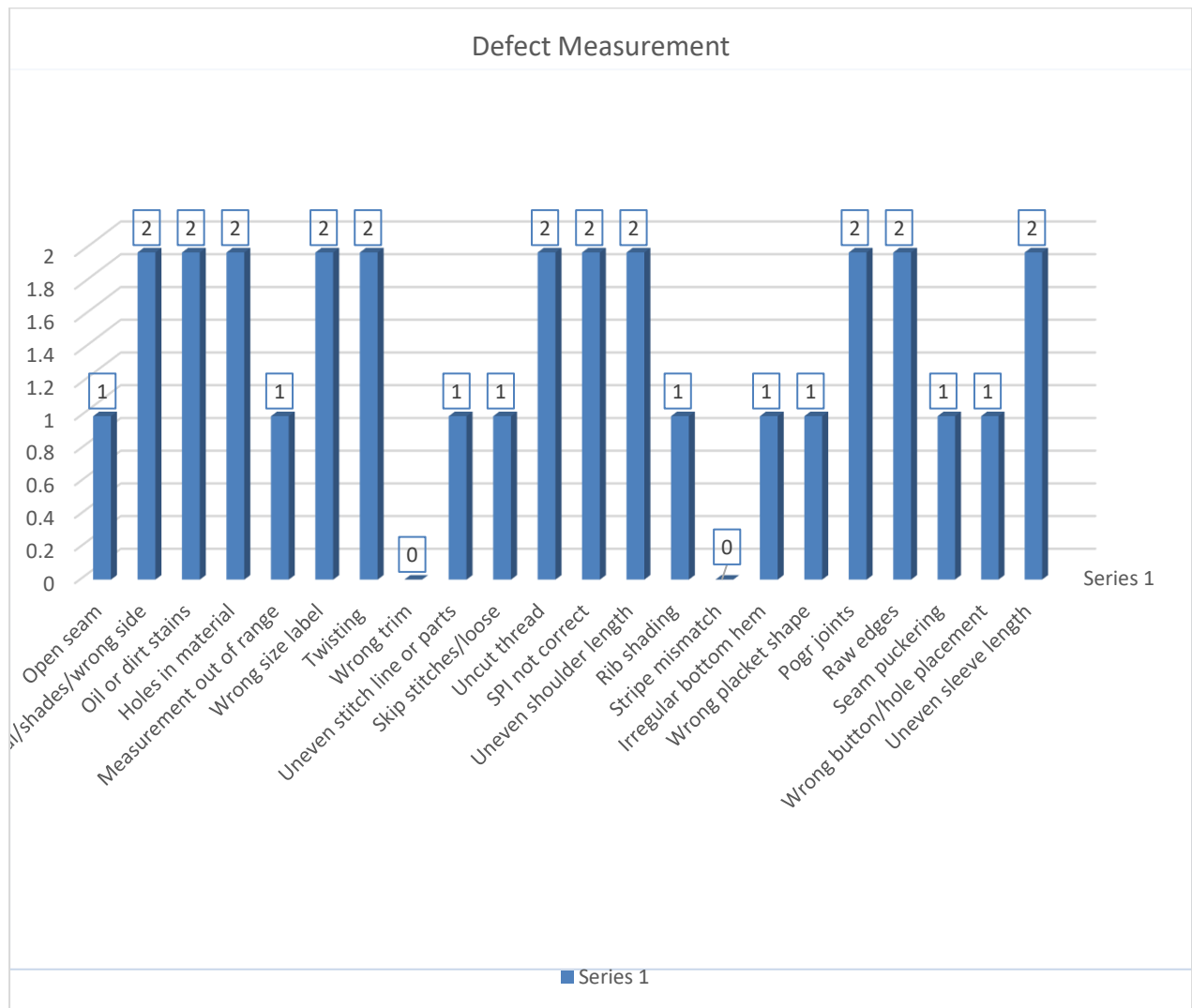


Figure: 4.5 Graphically Show Data Analysis of In Line Operations Audit Report-3

Description:

From graph, in raw material/shades/wrong side, oil or dirt stains, holes in material, wrong size label, uncut thread, spi not correct, uneven shoulder length, pogr joints, raw edges, uneven sleeve length are respectively found 2 defect.

But in open seam, measurement out of range, uneven stitch line or parts, skip stitch, rib shading, irregular bottom hem, wrong placket shape, seam puckering, wrong button/hole placement are respectively found 1 defect. Only in wrong trim and stripe mismatch found 0 defect.

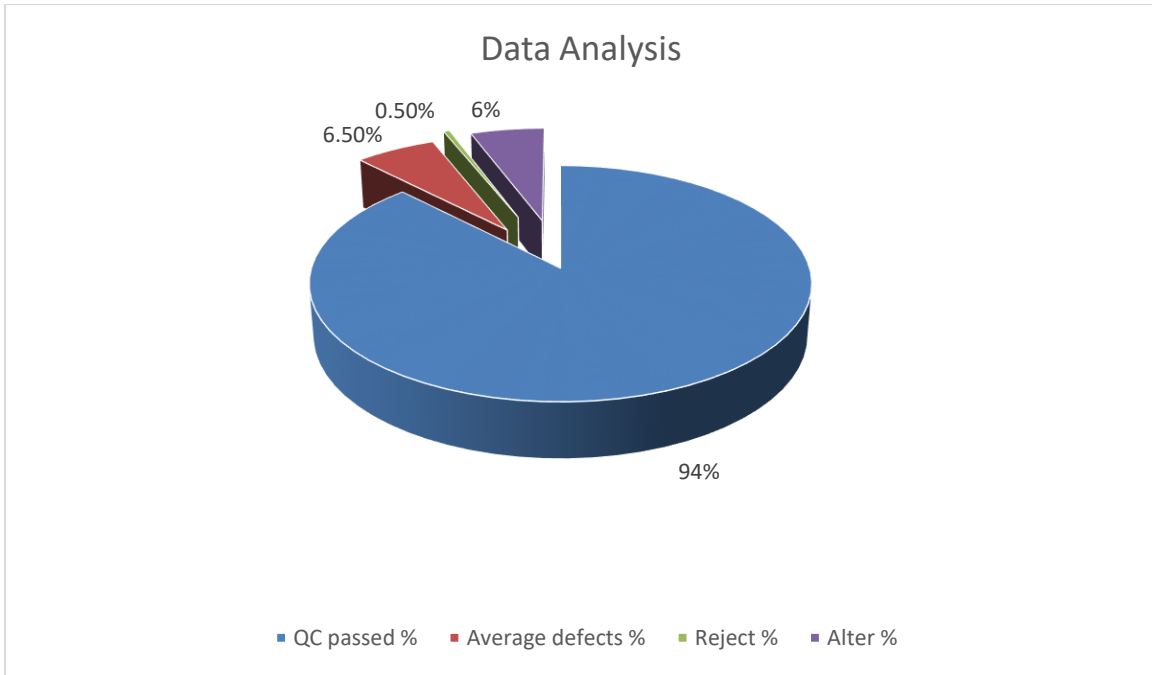


Figure: 4.6 Graphically Show Data Analysis of Line Operations Audit Report-3

Description:

Here, QC passed percentage 94%

Average percentage 6.50%

Reject percentage 0.5%

Alter percentage 6%

Chapter-05

Conclusion

5.1 Conclusion:

Finally, I have completed my thesis after lots of inspection, experiment & discussion. I have gathered a large experience about this project. I have increased my knowledge about how to sewing is done for making a garments, problems of sewing & how those problems are minimized. This project used a variety of garments sample which were grouped according to the end product categories. This study on sewing process in a ready-made clothing enterprise, the reasons increasing quality faults and the priorities were determined for the improvement studies. Material quality should be controlled by performing input controls, while the production quality should be provided by intermediary controls during production. Quality level should be constantly improved and for this purpose, regular trainings should be prepared in the enterprise.

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