



Daffodil
International
University

Faculty of Engineering
Department of Textile Engineering

Study on Manufacturing Process of organic cotton T-shirt

Course title: Project (Thesis)
Course code: TE-4214

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A thesis submitted in partial fulfillment of the requirements for the degree of
Bachelor of Science in Textile Engineering

Advance in Apparel Manufacturing Technology

9th December 2018

Acknowledgement

First, we are grateful to Allah who gives us sound mind & sound health to accomplish this project successfully.

We are also grateful to our supervisor **Mst. Murshida Khatun**, Senior Lecturer, 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.

We are also thankful to our all teachers, lab assistant, register sir, coordinators and all the employees of Daffodil International University. We are highly delighted to express our regards & gratitude to honorable Head **Prof. Dr. Md. Mahbubul Haque** for providing his best support to us.

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

Declaration

We hereby declare that, this project has been done by us under the supervision of **Mst. Murshida Khatun**, Senior Lecturer, Department of Textile Engineering, Faculty of Engineering, 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 or diploma.

.....

Md. Al-Amin

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.....

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Letter of Approval

9th December 2018

To

The Head

Department of Textile Engineering

102, Shukrabad, Mirpur Road, Dhaka 1207

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

Dear Sir,

I am just writing to let you know that this project report titled as “**Study on manufacturing process of organic cotton T-shirt**” has been prepared by the student bearing ID’s 151-23-4196 and 151-23-4236 are 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



.....
Mst. Murshida Khatun

Senior Lecturer

Department of Textile Engineering

Daffodil International University

Abstract

This report represents manufacturing process of cotton t-shirt. The assessment is done in cotton T-shirt which bearing style number is 2032944. For assessment the collected data cutting, printing, sewing, finishing. From data it is seen that order quantity, accessories etc found. It is occurred due to machine faults or carelessness of working operators. The problems were found such as uncut yarn from fabric, skip stitch, uneven stitch, puckering, label mistake and uneven joining and so on. To remove these problems the consciousness of operators and periodical inspection of machine is mandatory. The inspection during sewing and finishing is also another possible solution to remove the faults and ensuring the quality of the product.

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Chapter - I

Introduction

1.1 Objectives

- ❖ **To acquire knowledge about the RMG (Ready Made Garments) Industry.**
- ❖ **To know about the Manufacturing process of t-shirt.**
- ❖ **To learn about the cutting process.**
- ❖ **To learn about printing process.**
- ❖ **To learn about embroidery process.**
- ❖ **To acquire clear knowledge about other backward task related to RMG Sector.**
- ❖ **To obtain practical knowledge on the systems, procedures or organizations structure, products.**

1.2 Limitations

- ❖ **I think Two month or three month is not enough time to complete the thesis(project).
If we get more time we will know lot of information and complete more effectively.**
- ❖ **We are not collect all data in sewing section.**
- ❖ **It has taken so much time to collect any data or list from employees because they were so much busy.**
- ❖ **We are not collect data in embroidery section.**

Chapter-II

Literature Review

2.1 cotton

Cotton is a soft and hand feel is very softness, its is fluffy staple fiber its grows is a boll, nearlyly the seeds the cotton plant the genus gossipier in family malvaceac.



Fig2.0: cotton

2.1.1 Slubs Yarn

Slub yarn is refers to slub to respectfully spun of slub.



Fig 2.1: slub yarn

2.2 Cutting process of organic t-shirt

The cut is one of the main processes in the manufacture of garments. Here the pieces of clothing are cut according to the pattern. In the garment cutting department, a process flow diagram must be maintained to send the correct measurement pieces in the following process to make quality garments. As its importance in the manufacture of garments, this article presents a flow diagram of the process for the garment cutting department.



Fig2.2: Hand Cutter

2.2.1 Flow chart of cutting process (working)

- ❖ received fabric from dyeing section in the garments
- ❖ Than fabric approve
- ❖ Making marker
- ❖ Making pattern
- ❖ Buyer required prepared by sample
- ❖ Merchandising approving
- ❖ Cutting manger received the file
- ❖ Fabric spreading
- ❖ Set up machine
- ❖ Auto cutter machine running
- ❖ Finally complete this process

2.3 Printing process of organic t-shirt

2.3.1 Printing

Printing is the very important process in the garments. When buyer order in the garments than merchandising received in the order than he make it. Different types of printing in the garments section, different types printing are process are different, and different types printing recipe are different, we are learned about the pigment printing process , and screen printing process.

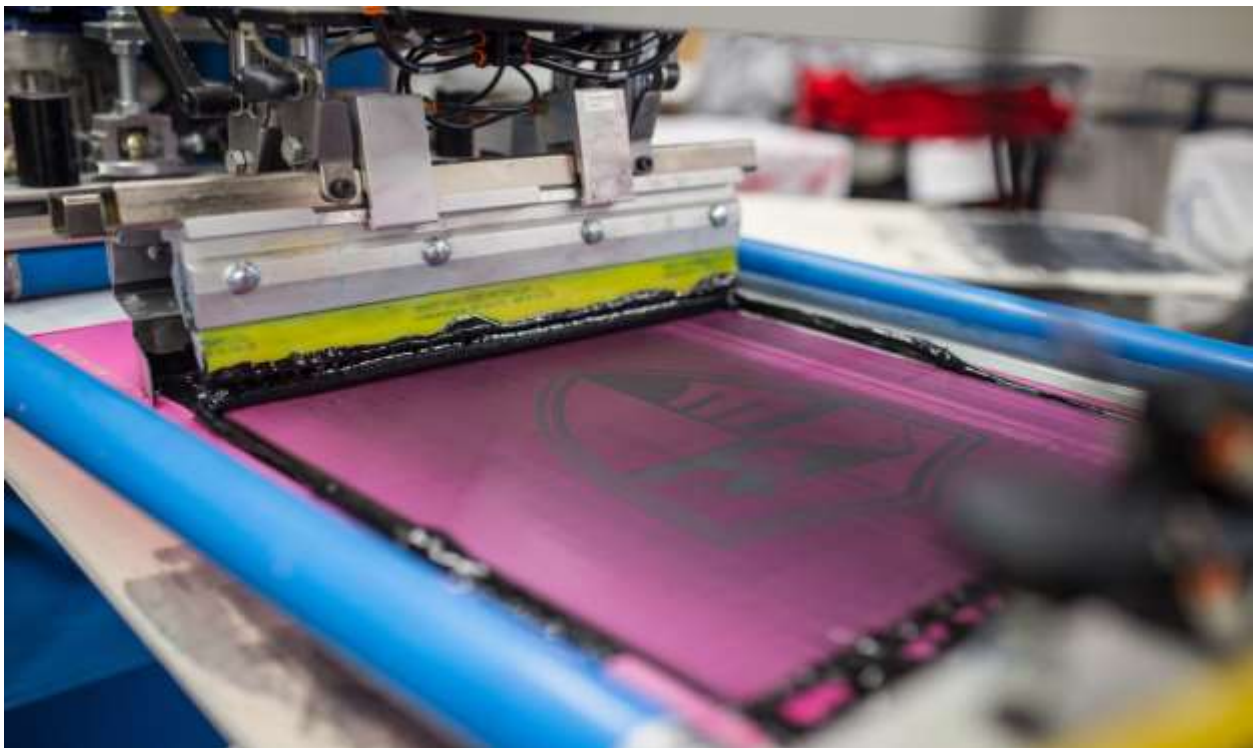


Fig2.3: Screen printing

2.3.7 Quality Control in Garments Printing Sectors

- A. Physical test
- B. Chemical test

A. Physical test:

1. Shade check

Shade check is done for all the rolls in a batch after printing. The light sources used are usually recommended by the buyer for shade check & determining the mesmerism of shades.

Light sources used: – Artificial day light D-65, TL 83, Fluorescent light, UV light.



Fig2.4: Shade Check

2. Fabric GSM check:

Fabric GSM is measured after the inspection. To measure the GSM the fabric is cut by GSM cutter and its weight is measured by electric balance. Then the result is multiplied by 100 to get the actual result.



Fig2.5: GSM Cutter for Fabric GSM Checks

3. Fabric Diameter Check:

After compacting the diameter of the fabric is constantly measured. If the diameter & the GSM are not appropriate then the fabric is treated in tumble dryer or the compactor.

4. Rubbing Fastness Test:

For rubbing fastness test they follow ISO 105 X 12 methods. 10 rub is done in 10 second in both warp and weft direction for both dry and wet rubbing. Change of shade of the sample is measured with grey scale and degree of staining of the test cloth is measured by staining scale.



Fig2.6: Rubber fastness test

B. Chemical Tests:

The chemical tests are –

- ❖ Color Fastness to Wash
- ❖ Color fastness to light

2.4 Sewing process of organic t-shirt:

2.4.1 Sewing:

When cutting is completed then transfer cutting fabric is sewing sector, then sewing management is received this garments , and operation is started.



Fig2.7: garments making process

2.4.3 Different types of industrial sewing machines and their uses

2.4.4 Single Needle Lock Stitch Machine

This machine makes lock stitches. Lock stitches are formed with one needle thread and one bobbin thread. This is a widely used sewing machine and used for sewing stitch. Basic to computer controlled version is available in this machine category.

Purpose: Single needle lock stitch machines are used for joining two or multiple fabric plies together. Machine is used to sew light weight, medium weight and heavy materials.



Fig2.8: Lock stitch

2.4.5 Over lock Sewing Machine

Over lock machines are available in 3 threads, 4 threads and 5 threads over edge sewing..

Purpose: This machine is used for surging garment panels (example: trouser panels surging) and for over edge stitch. These types of machine are mostly used in knitted garment sewing for over edge stitch. Like side seam stitch of a t-shirt is done using an overlock machine.



Fig2.9:over lock



Fig2.10:over lock stitch

2.4.6 Flat lock sewing machine

This machine is called as cover-stitch sewing machine. Flat lock sewing machines normally come with 2-3 needles. For bottom cover stitch machine 2 needle threads pass through the material and inter loop with 1 looper thread with the stitch set on the underside of the seam.

Flat lock machines are available in two types - Flat bed and Cylinder bed.

Usage of these machines: Flat lock machines are used for hemming sleeve and bottom of the knits products. For cover stitch can be used in any part of the garment for decorative purpose.



Fig2.11: flat lock

2.4.7 Feed off the Arm

This machine is used in making flat and felt seam. Two needle threads form the chain stitch.

For example, this machine is used for sewing shirt side seams and under arms, and for sewing jeans inseam.



Fig2.12: Feed of the arm machine

2.4.8 Button Attaching Machine

A special machine used only for stitching button in a garment. Different sizes of button can be attached in same the machine by changing the settings.

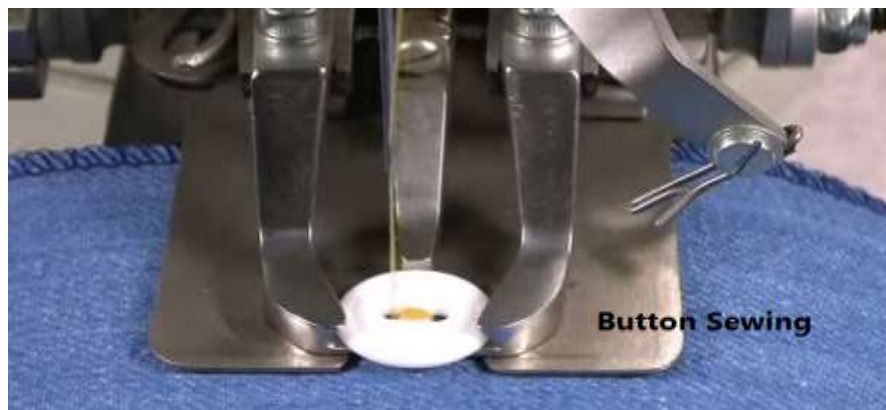


Fig2.13: Button sewing machine

Purpose: Attach button. Machine stitches button and trim thread automatically

2.4.9 Button Hole Machine

This machine is used for making the button holes on garments. Button holes can be made with different stitch density. Like in Shirts, Trousers, and Polo Shirts etc.

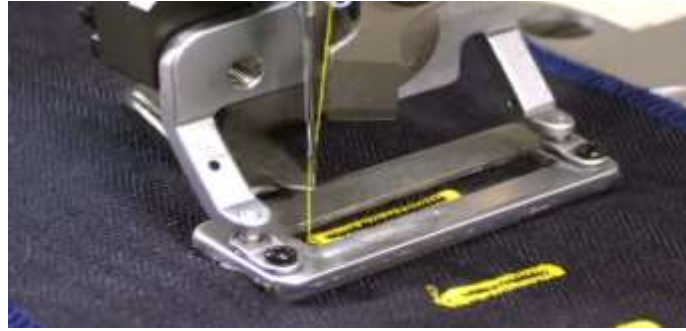


Fig2.14: Button sewing machine

2.4.10 Double needle lock stitch machine

A double needle lock stitch machine is used to sew two stitch lines at a time on the garment part. This reduces stitching time where double stitch line is needed to sew.

2.5 Finishing process of organic t-shirt

2.5.1 Garments Finishing:



Fig2.14: Ironing process in Garments



Fig2.15: Garments Packing Process



Fig: metal detector machine



Fig: sucker machine

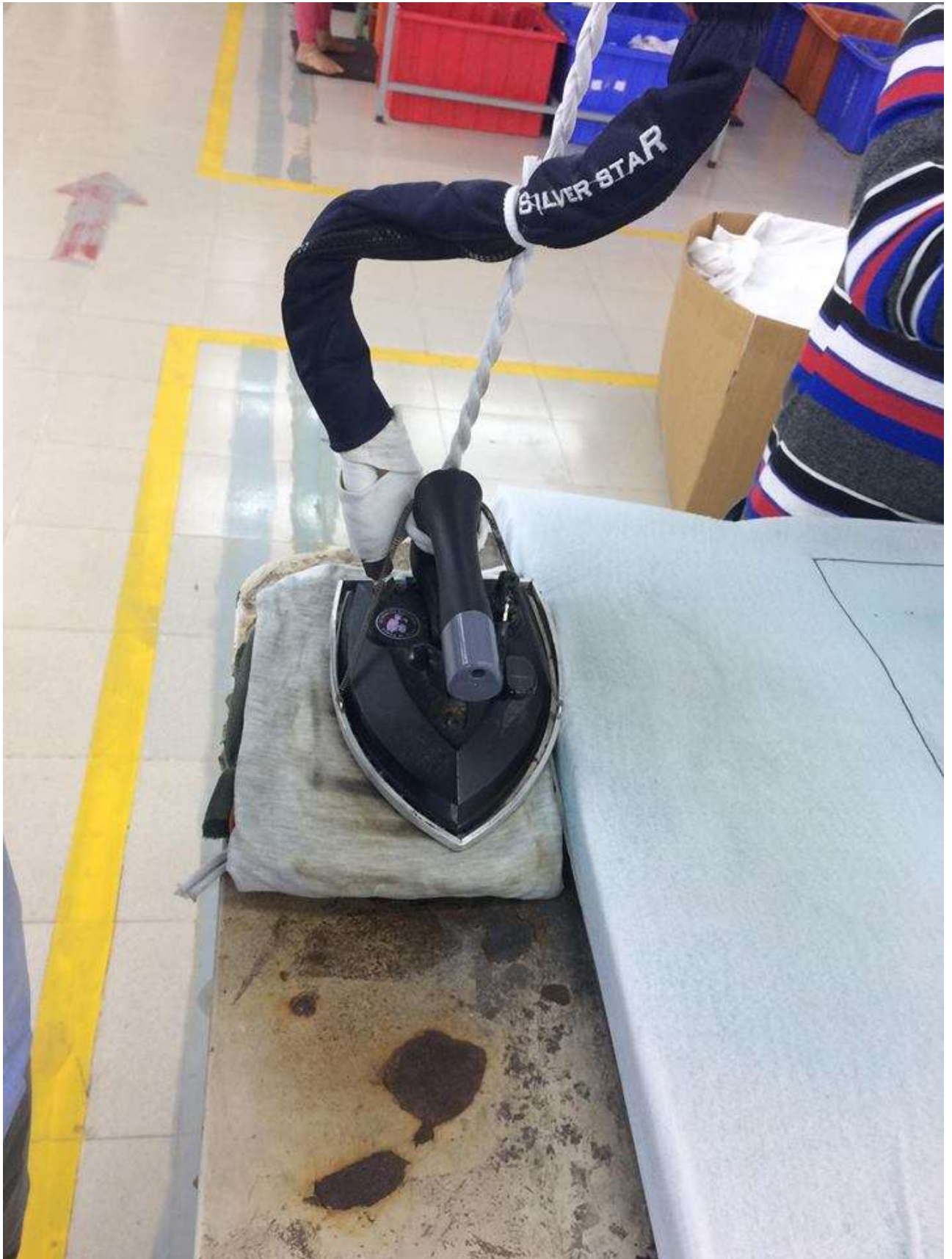


Fig: ironing

Chapter-III

Experimental Details

3.1 Material Used:

- ❖ **PC**
- ❖ **Calculator**
- ❖ **Measurement Tape**
- ❖ **Note Pad**
- ❖ **Pen**
- ❖ **Pencil**
- ❖ **Eraser**
- ❖ **Power Connection**
- ❖ **Internet.**

3.2 Out Line of Project Work / Methodology:

For smooth and accurate study everyone have to follow some rules & regulation. The study impute were collected from two sources:

3.2.1 Primary sources:

- ❖ **Practical different sectors in this factory**
- ❖ **Face to face conversation with the different division's personnel.**
- ❖ **Direct observations**
- ❖ **Daily diary (containing my activities of practical orientation of companies)**

3.2.2 Secondary sources:

- ❖ **Annual report of companies**
- ❖ **Files & Folders**
- ❖ **Website**
- ❖ **Magazine and newspapers**

3.3: Analysis for manufacturing process of organic cotton t-shirt



Fig3.1: slub single jersey

3.4 cutting production data

NORBAN COMTEX LIMITED

Factory-Sarabo, Kashimpur, Gazipur.

CUTTING PRODUCTION REPORT FOR 18NCL0429

Report Print: 17-Nov-18 1:00 pm

Consumption		BUYER: C&A		DIVISION: Boys																							
Print Emb		PROGRAM NO: 18NCL0429		SEASON: Q4																							
Fabrication		STYLE NO: 2032944		ORDER RECEIVE: 2-Aug-18																							
Fabric Color		STYLE TYPE: T-Shirt		SHIPMENT DATE: 28-Oct-18 28-Oct-18																							
Min Ex-Date		BRAND: Palomino		TTL DAY PRODUCTION: 6 Days																							
Cutting %		Program Order Qty: 2,708																									
Order Qty																											
Fabric Require Kg																											
Fabric Receive (kg)																											
Cutting (Pcs)																											
Excess Cutting Qty																											
Excess Cutting %																											
QC Pass (Pcs)																											
Today Replace																											
Today Reject																											
Print (Pcs)																											
Embroidry (Pcs)																											
Input (Pcs)																											
Inhand																											
Production Line																											
Print Factory																											
10-Sep-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242	233	261	90	2,818	110	4%	90	2,818	0	0	0	0	0	0	0	0	0	0	2,774	2%	44
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
13-Sep-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242		261	2600	2,818	110	4%	2,600	2,818	0	0	0	0	0	0	0	0	0	2,774	2%	44	
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
15-Sep-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242		261	128	2,818	110	4%	128	2,818	0	0	0	0	0	0	0	0	0	2,774	2%	44	
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
6-Oct-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242		261		2,818	110	4%		2,818	0	0	0	0	0	0	0	0	1,458	2,774	2%	44	
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
7-Oct-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242		261		2,818	110	4%		2,818	0	0	0	0	0	0	0	0	1,210	2,774	2%	44	
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
15-Oct-18	Yes	Slub Single Jersey - 100 % Organic Cotton 73.00: 160	Cloud Dancer	28-Oct-18	2,708	242		261		2,818	110	4%		2,818	0	0	0	0	0	0	0	0	105	2,774	2%	44	
	Yes				2,843			-19		0				0	0	0	0	0	0	0	0	0	44				
		1		Sub Total:						2,818		2,818		0		0		0		0		2,774					
		1		Grand Total:						2,818		2,818		0		0		0		0		2,774					

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Figure3.1: cutting production report

Cutting Production Report Program Wise

Cutting Date	Print Emb	Consumption	Fabrication	Fabric Color	Ex-Date	Cutting %	Order Qty.	Fabric Receive (Kg)		Cutting (Pcs)		Excess Cutting Qty	Excess Cutting %	QC pass (Pcs)		Today Replance	Today Reject	Print (Pcs)			Emb.(Pcs)			Input (Kg)		Input %	Inhand								
								Today	Total	Today	Total			Today	Total			Total	Total	Total	Total	Total	Total	Total	Total			Total	Total	Total	Total	Total	Total	Total	Total
10-Sep	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	233	261	90	2818	110	4%	90	2818	0	0	0	0	0	0	0	0	0	2774	2%	44								
	Yes							2843	-19	0	0				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	44		
13-Sep	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	2600	261	2818	110	4%	2600	2818	0	0	0	0	0	0	0	0	0	2774	2%	44									
	Yes								2843	-19				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	44		
15-Sep	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	128	261	2818	110	4%	128	2818	0	0	0	0	0	0	0	0	0	2774	2%	44									
	Yes								2843	-19				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	44		
6-Oct	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	110	261	2818	110	4%	110	2818	0	0	0	0	0	0	0	0	0	2774	2%	44									
	Yes								2843	-19				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	44	
7-Oct	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	110	261	2818	110	4%	110	2818	0	0	0	0	0	0	0	0	0	2774	2%	44									
	Yes								2843	-19				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	44	
15-Oct	Yes	Slub S/J 100% Organic Cotton 160 gsm	Cloud Dancer	28-Oct	5%	2708	242	110	261	2818	110	4%	110	2818	0	0	0	0	0	0	0	0	0	2774	2%	44									
	Yes								2843	-19				0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	44	
Sub Total									2828				2828	0	0				0			2774													
Grand Total									2828				2828	0	0				0			0		2774											

Table3.1: Cutting production data in Norban Comtex Ltd

Table analysis

Cutting date	Shipment date	fabrication	Fabric color	Order receive	Cutting%	Order qty	Fabric required kg	Cutting Qty	Excess	Balance
10-sep-18 to 15- oct-18	28-oct-18	Slub single jersey	Cloud dancer	2-aug-18	5%	2,708 2,843	242	2818	110	0

Table3.1: cutting production analysis

3.5 printing production data

Reporting : 11/17/2018 12:59:21PM
 Print Balance = In house but not production
 Delivery Balance = Production but not delivery
 TTL Balance = Print Balance + Delivery Balance
 CLOSED PROGRAM: Yes

NORBAN COMTEX LIMITED
PRINT PRODUCTION FOR 18NCL0429

BUYER: C&A STYLE TYPE: T-Shirt SEASON: Q4 PROGRAM TTL ORDER QTY Pcs: 2,708
 PROGRAM: 18NCL0429 BRAND: Palomino OORDER RECEIVE: 02-Aug-18 12:00 am
 STYLE: 2032944 DIVISION: Boys EX- DATE: 28-Oct-18 28-Oct-18

PROD DATE	MC	COLOR	PART	PRINT TYPE	ORDER QTY	RECEIVE		PRINT		REJECT		DELIVERY		TOTAL BAL	Price /Dzn	TTL Amount	SUPP	REMARK	
						TODAY	TTL BAL	TODAY	TTL BAL	TODAY	TTL	TODAY	TTL BAL						
PART : Fornt						2,795		2,795		21		2,774							
Cloud Dancer						2,708	2,795	2,795		21		2,774							
15-Sep-18		Cloud Dancer	Fornt		2,708	2,690	2,690	18	0	2,708	0	0	0	2,708	5,416				
16-Sep-18		Cloud Dancer	Fornt		2,708	0	2,690	18	82	2,626	0	0	0	2,708	5,334				
17-Sep-18		Cloud Dancer	Fornt		2,708	0	2,690	18	1,873	1,955	0	0	78	2,630	3,383				
18-Sep-18		Cloud Dancer	Fornt		2,708	0	2,690	18	735	2,690	0	0	2,439	191	209				
22-Sep-18		Cloud Dancer	Fornt		2,708	0	2,690	18	0	2,690	0	0	152	39	57				
13-Oct-18		Cloud Dancer	Fornt		2,708	105	2,795	-87	105	2,795	0	0	0	39	-48				
15-Oct-18		Cloud Dancer	Fornt		2,708	0	2,795	-87	0	2,795	21	21	105	-66	-153				
GRAND TOTAL						2,795		2,795		21		2,774							

Total
Print Quantity
2,795
Total
2,795

Total
Print Quantity
Fornt
2,795
Total
2,795

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Figure3.2: print production report

Print Production Report

Production Date	MC	Color	Part	Print Type	Order Qty	Receive		Print		Reject		Delivery		Total Balance	Price/ DZN	TTL Amount	Remarks	
						Today	Total	Today	Total	Today	Total	Today	Total					
																		Balance
Part-Front						2708	2795	2795		21		2774						
15-Sep		Cloud Dancer	Front	Pigment	2708	2690	2690	18	0	2708	0	0	0	2708	5416			
16-Sep		Cloud Dancer	Front	Pigment	2708	0	2690	18	82	2626	0	0	0	2708	5334			
17-Sep		Cloud Dancer	Front	Pigment	2708	0	2690	18	1873	1955	0	0	78	2630	3383			
18-Sep		Cloud Dancer	Front	Pigment	2708	0	2690	18	735	2690	0	0	2439	191	209			
22-Sep		Cloud Dancer	Front	Pigment	2708	0	2690	18	0	2690	0	0	152	39	57			
13-Oct		Cloud Dancer	Front	Pigment	2708	105	2795	-87	105	2795	0	0	0	39	-48			
15-Oct		Cloud Dancer	Front	Pigment	2708	0	2795	-87	0	2795	21	21	105	-66	-153			

Table3.2: Print production data in Norban Comtex Ltd

Table analysis

Printing date	fabrication	Fabric color	part	Print type	Order QTY	Receive	print	reject	delivery
15-sep-18 to 15-oct-18	Slub single jersey	Cloud dancer	Front	Pigment	2708	2795	2795	105	2774

Table3.2: print production analysis

3.6 Sewing production data

NORBAN COMTEX LIMITED
SEWING PRODUCTION REPORT PROGRAM WISE (PO + Color)

Report Print: 17-Nov-18 12:50 pm

TKY		BUYER:	CSA	BRAND:	Palomino	Program Total												
		PROGRAM NO:	18NCL0429	DIVISION:	Boys	Order Qty												
		STYLE NO:	2032944	SEASON:	Q4	2,708												
		STYLE TYPE:	T-SHIRT	TTL DAY P:	7	DAYS												
SEWING UNIT	LINE	SEWING DATE	PO	EX DATE	COLOR	LAYOUT NO	ORDER QTY	TODAY INPUT	INPUT BAL	TODAY OUTPUT	OUTPUT BAL	TODAY REJECT	W.I.P	WORK HOUR	TARGET	BONUS TARGET	REMARKS	
Sewing Unit4	Line25	7-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	1,152	0	0	0	9.81	3000	0			
Sewing Unit4	Line25	8-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	1,278	0	0	0	9.70	3000	0			
Sewing Unit4	Line25	9-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	164	0	0	0	10.22	3000	0			
Sewing Unit4	Line25	15-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	44	0	0	0	8.60	3000	0			
Sewing Unit4	Line25	16-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	85	0	0	0		3000	0			
Sewing Unit4	Line25	17-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	116	0	0	0		3000	0			
Sewing Unit4	Line25	21-Oct-18 22:54:33Z	28-03-18	28-03-18	Cloud Dancer	18NCL0429/1	0	0	4	0	0	0	10.04	3000	0			
Sub Total For PO:							2,708	0	2,026	2,761	-733	0	-2,761					
Sub Total For Color:							2,708	0	2,708	2,761	-83	0	-2,761					
GRAND TOTAL:							2,708	0	2,761	-83	0	-2,761						

This report has been generated by nERP Apparel Solutions, Powered by Norban Group of Companies.

Page 1 of 1

Figure3.3: Sewing production data

Sewing Production Report Program Wise

Sewing Unit	Line	Sewing Date	Ex-Fty	Color	Layout NO	Order Qty	Today Input	Input Balance	Output	Total Reject	WIP	Work Hour	Target	Bonus TGT.	Remarks
Sewing Unit 4	Line 25	7-Oct	28-Oct	Cloud Dancer	0429/1		0			0		9.81	2000	0	
Sewing Unit 4	Line 25	8-Oct	28-Oct	Cloud Dancer	0429/1		0			0		9.7	1500	0	
Sewing Unit 4	Line 25	9-Oct	28-Oct	Cloud Dancer	0429/1		0			0		10.22	1500	0	
Sewing Unit 4	Line 25	15-Oct	28-Oct	Cloud Dancer	0429/1		0			0		8	1500	0	
Sewing Unit 4	Line 25	16-Oct	28-Oct	Cloud Dancer	0429/1		0			0			1500	0	
Sewing Unit 4	Line 25	17-Oct	28-Oct	Cloud Dancer	0429/1		0			0			1500	0	
Sewing Unit 4	Line 25	21-Oct	28-Oct	Cloud Dancer	0429/1		0			0		10.04	1500	0	
Sub Total for PO						2028		2028	-733	0	-2761				
Sub Total for Color						2028		2708	-53	0	-2761				
Grand Total						2028				0	-2761				

Table3.3: Sewing production data in Norban Comtex Ltd

Table analysis

Sewing line	Sewing date	fabrication	color	Ex-date	Order QTY	Total output	Output bal	reject
Line 25	7-oct-18 to 21-oct-18	Slub single jersey	Cloud dancer	28-oct-18	2708	2761	-53	0

Table3.3: sewing production analysis

3.7 Finishing production report data

NORBAN COMTEX LIMITED														Report Print: 17-Nov-18 12:52 pm													
Factory-Sarabo, Kashimpur, Gazipur																											
FINISHING PRODUCTION REPORT FOR 18NCL0429																											
C&A														PROGRAM													
18NCL0429														ORDER QTY:													
2032944														2,708													
T-Shirt														TTL DAY P: 9 DAYS													
EX-DATE	Destination	Finishing Unit	Prod. Iron Use	Total Iron	OR QTY [PO+Color]	Finishing Date	Total Sewing Qty	INPUT		IRON		HANGTAG		POLY		CARTON		SHIPMENT COMPLETE				FOB \$	Poly Value \$	Ship Value \$			
			Re-Iron Use					Today	Total Balance	Today	Total Balance	Today	Total Balance	Today	Total Balance	Today	Total	Today	Total	Today	TTL CTN	By	Reject				
8-Oct-18	Germany	Finishing Garments Unit1			2,028	7-Oct-18	2,761	1,152	1,152	315	315	0	0	0	0	0	0	0	0	0	0	0	0	0	3.02	\$0.00	\$0.00
11-Oct-18	Germany	Finishing Garments Unit1			2,028	8-Oct-18	2,761	1,270	2,428	1,333	1,348	1,000	0	0	0	0	0	0	0	0	0	0	0	0	3.02	\$0.00	\$0.00
8-Oct-18	Germany	Finishing Garments Unit1			2,028	9-Oct-18	2,761	104	2,532	810	2,158	800	0	0	0	0	0	0	0	0	0	0	0	0	3.02	\$0.00	\$0.00
8-Oct-18	Germany	Finishing Garments Unit1			2,028	10-Oct-18	2,761	0	2,532	289	2,447	300	0	0	0	0	0	0	0	0	0	0	0	0	3.02	\$0.00	\$0.00
18-Oct-18	Germany	Finishing Garments Unit1			2,028	14-Oct-18	2,761	0	2,532	0	2,447	0	1,000	1,000	1,761	0	0	0	0	0	0	0	0	0	3.02	\$3,020.00	\$0.00
18-Oct-18	Germany	Finishing Garments Unit1	32	40	2,028	15-Oct-18	2,761	44	2,576	0	2,447	400	1,100	2,100	661	0	0	0	0	0	0	0	0	0	3.02	\$3,322.00	\$0.00
18-Oct-18	Germany	Finishing Garments Unit1	8		2,028	16-Oct-18	2,761	65	2,641	75	2,522	200	200	2,300	461	0	0	0	0	0	0	0	0	0	3.02	\$604.00	\$0.00
18-Oct-18	Germany	Finishing Garments Unit1			2,028	17-Oct-18	2,761	116	2,757	195	2,708	408	408	2,708	53	0	0	0	0	0	0	0	0	0	3.02	\$1,232.16	\$0.00
28-Oct-18	Germany	Finishing (Garments)			2,028	27-Oct-18	2,761	0	0	0	0	0	0	0	0	0	0	2,028	2,028	38	38	0	0	3.02	\$0.00	\$6,124.96	
18-Oct-18	Germany	Finishing (Garments)			600	27-Oct-18		0	0	0	0	0	0	0	0	0	0	600	600	6	6	0	0	2.90	\$0.00	\$1,740.00	
18-Oct-18	Germany	Finishing (Garments)			80	27-Oct-18		0	0	0	0	0	0	0	0	0	0	80	80	2	2	0	0	3.02	\$0.00	\$241.60	
SUB TOTAL FOR PO + COLOR :								2,757	2,708	3,108	2,708	0	2,708	46											\$8,578.16	\$8,106.16	
GRAND TOTAL :								2,757	2,708	3,108	2,708	0	2,708	46											\$8,118.16	\$8,106.16	

Figure3.4: Finishing production data

Finishing production

Finishing Production Report																								
Ex-Date	Destination	Finishing Unit	Prod. Iron Use	Total Iron	Order Qty [PO+Color]	Finishing Date	Total Sewing Qty	Input		Iron		HangTag		Poly		Carton		Shipment Complete				Rej.	FOB	Poly & Ship Value
								Today	Total Balance	Today	Total Balance	Today	Total Balance	Today	Total Balance	Today	Total	Today	Total	Total CTN	BY			
28-Oct	Germany	Unit-1			2028	7-Oct	2761	1152	1152	315	315	0	0	0	0	0	0	0	0	0	0	sea	\$3.02	\$0.00
								1609		2446				2761									\$0.00	
28-Oct	Germany	Unit-1			2028	8-Oct	2761	1276	2428	1033	1348	1000	0	0	0	0	0	0	0	0	0	sea	\$3.02	\$0.00
								333		1413				2761									\$0.00	
28-Oct	Germany	Unit-1			2028	9-Oct	2761	104	2532	810	2158	800	0	0	0	0	0	0	0	0	0	sea	\$3.02	\$0.00
								229		603				2671									\$0.00	
28-Oct	Germany	Unit-1			2028	10-Oct	2761	0	2532	289	2447	300	0	0	0	0	0	0	0	0	0	sea	\$3.02	\$0.00
								229		314				2761									\$0.00	
28-Oct	Germany	Unit-1			2028	14-Oct	2761	0	2532	0	2447	0	1000	1000	0	0	0	0	0	0	0	sea	\$3.02	\$3,020
28-Oct	Germany	Unit-1	32	40	2028	15-Oct	2761	44	2576	0	2447	400	1100	2100	0	0	0	0	0	0	0	sea	\$3.02	\$3,322
								185		314				661									\$0.00	
28-Oct	Germany	Unit-1			2028	16-Oct	2761	85	2641	75	2522	200	200	2300	0	0	0	0	0	0	0	sea	\$3.02	\$604
								120		239				461									\$0.00	
28-Oct	Germany	Unit-1			2028	17-Oct	2761	116	2757	186	2708	408	408	2708	0	0	0	0	0	0	0	sea	\$3.02	\$1,232
								4		53				53									\$0.00	
28-Oct	Germany	Finishing (garments)			2028	27-Oct	2761	0	0	0	0	0	0	0	0	0	2028	2028	38	sea	\$3.02	\$0.00		
								2761		2761				2761									\$6,124.56	
28-Oct	Germany	Finishing (garments)			600	27-Oct	2761	0	0	0	0	0	0	0	0	0	600	600	6	sea	\$3.02	\$0.00		
																							\$1,740	
28-Oct	Germany	Finishing (garments)			80	27-Oct	2761	0	0	0	0	0	0	0	0	0	80	80	2	sea	\$3.02	\$0.00		
																							\$241.60	
Sub Total For PO+Color								2757		2708		3108		2708		0		2708		46			\$8,178.16	
Grand Total																								

Table3.4: Finishing production data in Norban Comtex Ltd

Table analysis

Finishing date	Total iron use	Total sewing QTY	Iron	Hangtag	poly	Shipment complete
7-oct-18 to 27-oct-18	40	2761	2708	3108	2708	2708

Table3.4: Finishing production analysis

3.8 Finishing efficiency report (finishing)

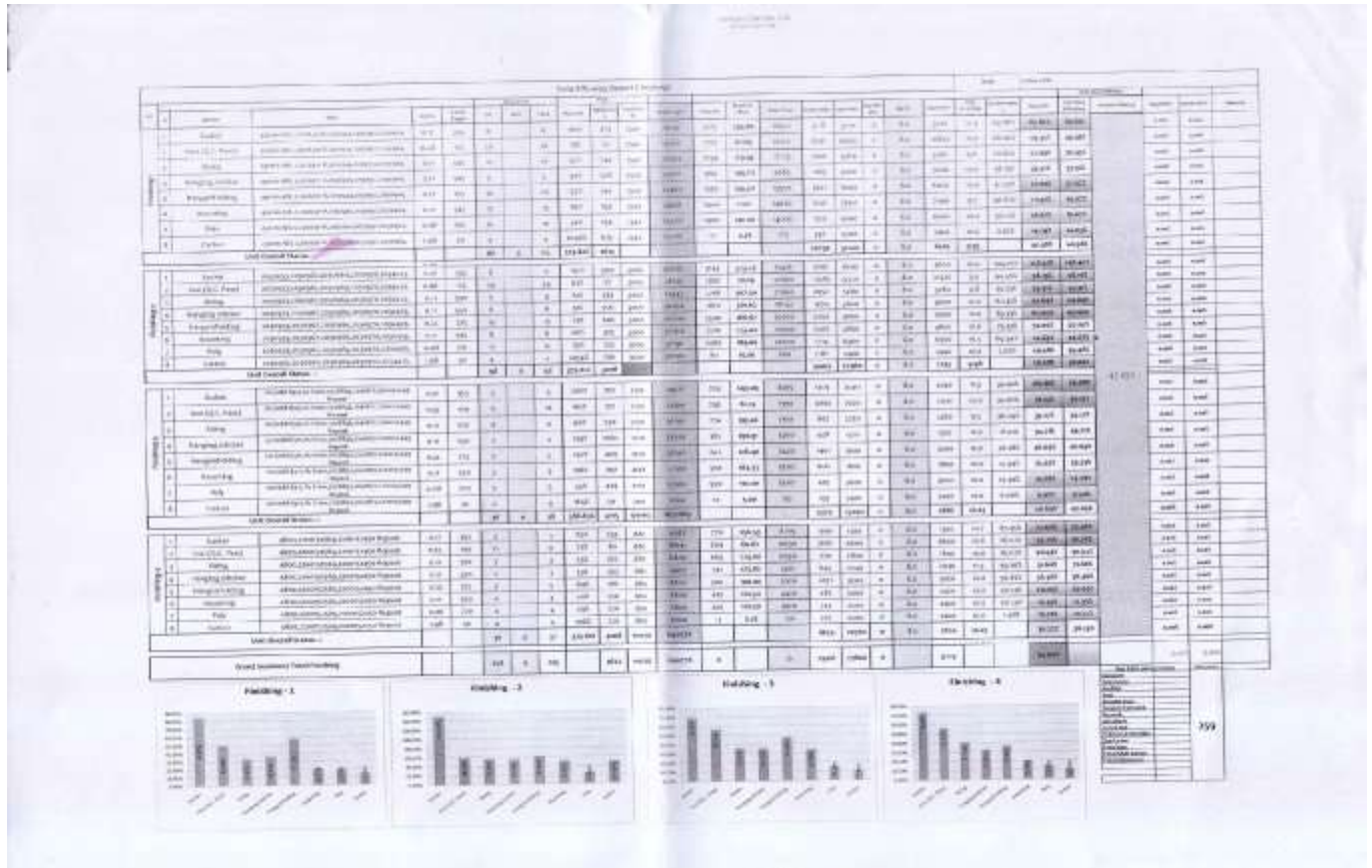


Table analysis

Style no	date	Sucker	Iron	Sizing	Hangtag	Hanger /folding	assorting	poly	carton
All oct to nov	4-nov-18	83.82%	49.35%	32.99%	35.51%	57.02%	20.37%	18.67%	14.03%

Table3.5: Daily efficiency (finishing)

Chapter-IV

Discussion of Result

4.1 Cutting report overview

As per cutting report data, 2818 pieces cutting has been completed with including 5% wastage with 100% quantity pass. Required fabric 242 kg (100% cotton slub single jersey) is required 3 working days to complete the whole quantity. Now cut panel ready to send in printing section.

4.2 Printing report overview

As per printing report data, 2795 pieces printing has been completed. Program total order quantity 2708 pieces and total 21 pieces printing has been rejected. Required 4 working days to complete the whole quantity. Now print panel ready to send in sewing section.

4.3 Sewing report overview

As per sewing report data, program total order quantity 2708 pieces and there total output 2761 pieces. Required 5 working days to complete the whole quality. Now sewing panel ready to send in finishing section.

4.4 Finishing report overview

As per finishing report data, program total order quantity 2708 pieces. Here 40 iron is used. Iron-2708, Hangtag-3108, poly-2708, Cartoon-46 has been completed. Required 9 working days to complete the whole quantity

4.5 Finishing efficiency report overview

As per finishing efficiency report data, including Sucker-83.82%, Iron-49.35%, Sizing-32.99%, Hangtag-35.51%, Hanger-57.02%, Assorting-20.37%, Poly-18.67% and Carton-14.03% with 100% quantity pass.

4.6 Auto Cutting machine

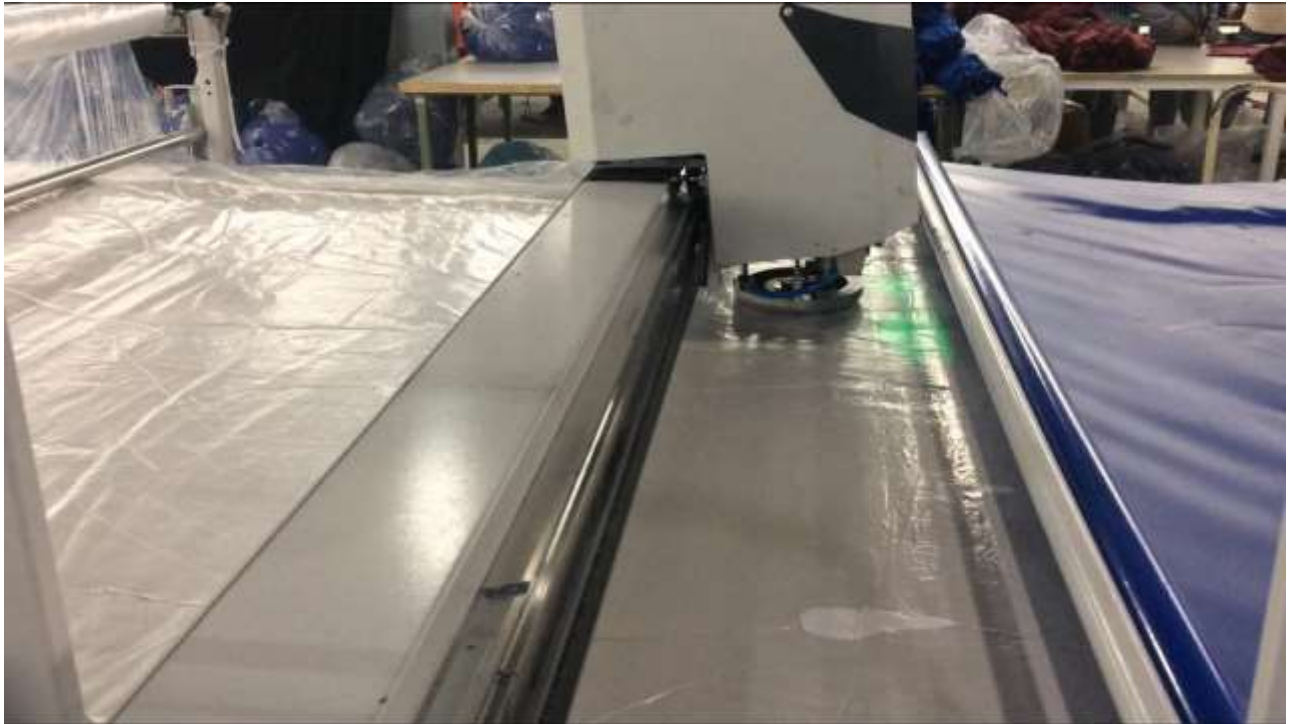


Figure 4.1: Auto cutter

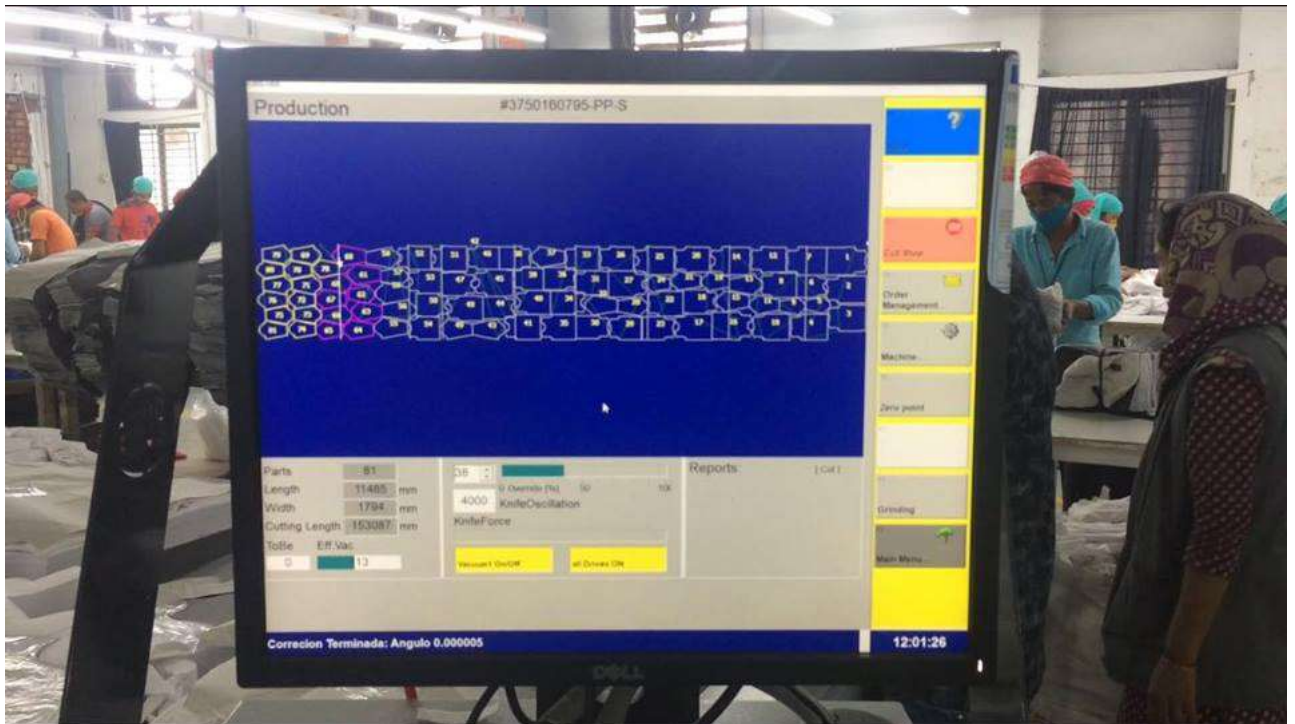


Figure4.2: Auto cutting monitor

4.7 Printing machine

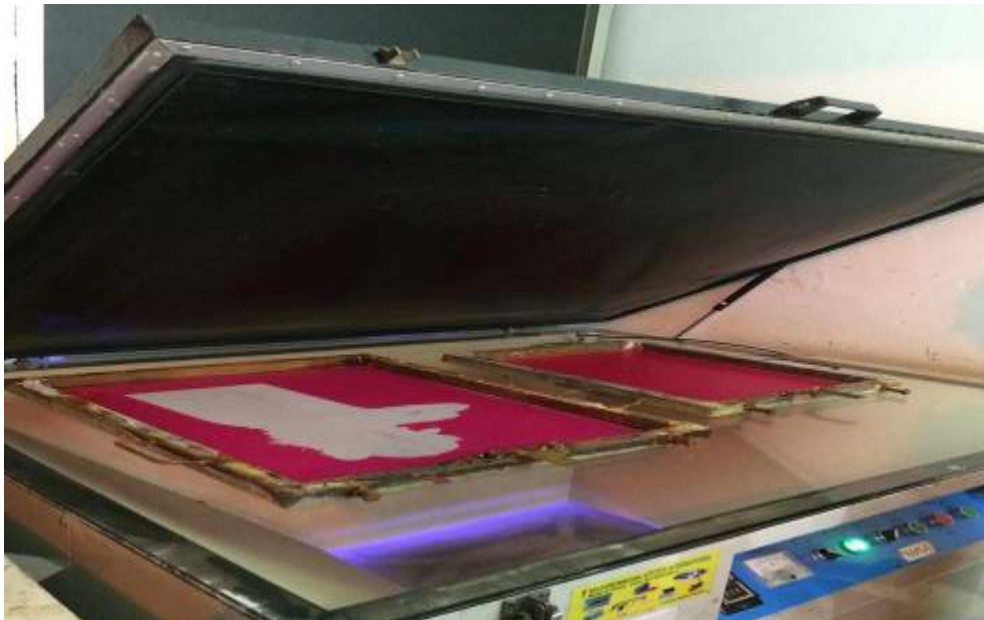


Figure4.3: Auto expose machine

Voltage: 220V

Power source: Electric

Frequency (HZ): 50 HZ

Material: mild steel

Power: 1.25 kw



Figure4.4: Auto dryer machine

4.7.1 Chemical used:

- ❖ EMULSION HARDENER DL
- ❖ EMULSION HARDENER A
- ❖ MIXER
- ❖ PHOTOCURE TXR
- ❖ TEXTIL PV



Figure4.5: emulsion hardener dl/A, mixer, textile pv

4.8 Sewing Operation describe

SI	OPERATION DESCRIBE	MACHINE	SMV
----	--------------------	---------	-----

1	Match back & front part	Manually	0.21
2	Shoulder join	O/L	0.41
3	Rib tack & fold	P/M	0.28
4	Rib join	O/L	0.26
5	Mark for size label position with attach	P/M	0.22
6	Back neck shoulder to shoulder piping join	FOA	0.31
7	Scissoring & aside	Manually	0.21
8	Main & size label mark	P/M	0.26
9	Main label attach	P/M	0.42
10	Sleeve hem	O/L	0.45
11	Sleeve shake & pair	Manually	0.25
12	Sleeve match with body	Manually	0.22
13	Sleeve join	O/L	0.5
14	Side seam with care label	O/L	0.68
15	Care label make	P/M	0.18
16	Sleeve open & close tack	P/M	0.36
17	Body turn with sticker remove	Manually	0.21
18	Body hem	O/L	0.32
19	Body hem shaking	Manually	0.21
20	Final thread trimming	Manually	0.55
	total		6.51

Chapter-V

Conclusion

5.1 Conclusion

In this report, we have learn manufacturing process of cotton t-shirt. The assessment is done by the C&A buyers, which style no 2032944, color cloud dancer. We have collect data for t-shirt cutting, printing, sewing, finishing and also collect picture for machine. Manufacturing process of cotton t-shirt is much critical for its different parts. Garments every parts attach carefully with actual size wise actual color. Every individual line have quality inspector, they are checking garments and insure its quality. Ironing process gives extra outlook and better half fell. Measurement variation for garments from sewing to after finishing. The defects were found such as uncut yarn from fabric, skip stitch, uneven stitch, puckering, and uneven join so on. To remove these problems the consciousness of operators and periodical inspection of machine have to do. Different types of

faults occurred during cutting, printing, sewing, finishing section. If the industry insuring operators proper guide line and trained then production is increase and defects quantity reduces.

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