



# **Faculty of Engineering**

**Department of Textile Engineering**

## **REPORT ON**

### **Industrial Attachment**

**At**

**Civic Apparels Ltd.**

**Course Title: Industrial Attachment**

**Course Code: TE-431**

#### **Submitted By**

**A.K.M. Arifur Rahman**

**ID: 151-23-4213**

#### **Supervised By**

**Mohammad Abdul Baset**

**Assistant Professor**

**Department of Textile Engineering**

**Daffodil International University**

This Report presented in partial fulfillment of the Requirement for the Degree of Bachelor of Science in Textile Engineering.

**Advance in Apparel Manufacturing Technology**

**Duration: 15<sup>th</sup> September to 14<sup>th</sup> November,2018**

# DECLARATION

I hereby declare that the work which is being presented in this report entitled, “**Industrial Attachment**” at “**Civic Apparels Ltd.**” Is done by myself, has not been presented for a degree of any other university and all the resources of collected information for this report have been duly acknowledged.

Submitted By

ID

SIGNATURE

A.K.M. Arifur Rahman

151-23-4213

*Arifur Rahman*

.....

# LETTER OF APPROVAL

December 01, 2018

To

The Head

Department of Textile Engineering

102, Shukrabad, Mirpur Road, Dhaka 1207

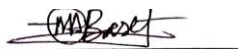
Subject: Approval of Industrial Attachment of B.Sc. in TE Program.

Dear Sir,

I am just writing to let you know that this report titled as “**Industrial Attachment**” has been prepared by the student bearing ID 151-23-4213 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. I was directly involved in my Industrial Attachment 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 Industrial Attachment report and consider it for final evaluation.

Yours Sincerely



.....  
Supervisor

Mohammad Abdul Baset

Assistant Professor

Department of Textile Engineering

Faculty of Engineering

Daffodil International University

# ACKNOWLEDGEMENT

At First, I would like to thanks almighty Allah for giving me sound mind &health to accomplish **Industrial Attachment** at **Civic Apparels Ltd.** successfully.

I am grateful to my supervisor 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 would like to give special thanks to supervisors, technicians, operators and all other staffs of **Civic Apparels Ltd.** who were most cordial and helpful to us during internship.

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

## **DEDICATION**

My beloved my Parents

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**Chapter-1**  
**EXECUTIVE SUMMARY**

## **1.1 Executive Summary**

This report presents a conception of Textile sector especially of a garments industry. Civic Apparels Ltd. in where I try to gather information about different departments. The factory has a nice system for the internship students that are the training schedule provided by the authority. There are several departments in Civic Apparels Ltd. among them Cutting, Sewing and Finishing are the major ones. There are also other departments those act as supporting of them. It describes about the activities of each departments and the relation among the departments. Training schedule is prepared in such a way that helps a learner to know that to produce a garment which department works first and correspondingly which works at last. Different types of order are running on the same time on a same floor with different types of garments from several buyers. But there is no miss match of any product except some cases which are removed by inspection. This paper concludes by identifying some important information about different department that help the factory to grow up quickly with large amount of profit with environment friendly technologies. This report may be a guideline for other small industries to become large in size and for students or other people to learn a little about a garments industry without visiting. I have started my 2 months internship in 15<sup>th</sup> September 2018 and have successfully completed in 14<sup>th</sup> November 2018. Two months long training is not enough to capture all the Information related to but it is possible to overview of all garments process.

**Chapter-2**  
**INFORMATION ABOUT FACTORY**

## 2.1 Company Profile



Figure 2.1: Civic Apparels Ltd.

<b>Company Name:</b>	Civic Apparels Ltd.
Founder	Mosharraf Hossain Dhali
Company Nature	Private Limited Company
Head office	J.R. Casero Tower (5 <sup>th</sup> , 7 <sup>th</sup> to 9 <sup>th</sup> floor), 46, Mohakhali C/A, Dhaka-1212
Tel No	+88-02-9850938
Email	info@impressivegrp.com
Web	<a href="http://www.impressivegrp.com">www.impressivegrp.com</a>
Established	1996
Location	Plot No-3, Factory Road, Shampur, Kadamtoli I/A, Dhaka-1204
Total area	1,30,000 sq. feet
Man-power	2,722
Total salary	3.5 million taka
Business field	Readymade Garments Manufacturing
Main product	Denim long pant, short pant, denim shortall, swimming shorts, cargo shorts, chino pant
Manufacturing capacity	5,15,000 Pieces/Month

Table: 2.1 Company profile

## 2.2 Major Buyers

Name	Logo
QUIKSILVER	
SAINSBURY	
JORDACHE	
WOOLWORTH	
GEORGE	
OSHKOSH	

Table: 2.2 Major buyers

## 2.3 Transport Facility

- ❖ **Office Stuff:** Bus, Car
- ❖ **Product:** Cargo van

## 2.4 Name of Department

1. Cutting Section
2. Sewing Section

### **3. Quality Section**

### **4. Sample Section**

### **5. Finishing Section**

## **2.5 Factory Working Time**

The office time is -

**8:00 a.m. to 5:00 p.m.**

## **2.6 Compliance Certifications**

Civic Apparels Ltd. focus on continued safety of our workers and providing them with a safe, secure and healthy working environment.

- ACCORD
- ALLIANCE
- CONFIDENCE IN TEXTILE
- OC-TPAT
- BSCI
- WRAP
- SEDEX

### **2.6.1 Safety training:** Facility provide all kind of safety training to all the workers and staffs

The Training Are:

- Health And Hazard Safety
- Fire safety
- Building Safety
- Product Safety
- Machine Safety
- Chemical Safety
- Work Place Safety.

## **2.7 Sister Concerns**

- ❖ Civic Apparel Ltd
- ❖ Tivoli Apparel Ltd
- ❖ ARK Washing Ltd
- ❖ Good Link Enp.
- ❖ G7 Printing & Packaging Ltd
- ❖ Royal Label & Accessories
- ❖ Impressive Green Tech. Ltd

## **2.8 History of the Group**

Civic Apparels Ltd. establishment began in 1996. The Impressive Group comprises of three well reputed, 100% export oriented garments manufacturing factories for any kind of woven garments, especially bottom and top wear of worldwide renowned brands. We are committed to quality and on time shipment. We focus on continued safety of our workers and providing them with a safe, secure and healthy working environment. All of our factories are in compliance with ALLIANCE and ACCORD standards. We began our venture with skilled manpower with only 4 production Lines, under its mother concern Impressive Garment (Pvt.) Ltd. Since then, we have expanded and currently boast 45 production Lines all together with our sister concerns CIVIC APPARELS LTD and Tivoli Apparels Limited. Our garments manufacturing specializes in Denim, Poplin, Flannel, Twill, Canvas, Corduroy, Stretch & other heavy Fabrics for men, women, children and infants. To be more specific, we specialize in Pants, Trousers, Bermuda, Shorts, Rib waist pant, Pull on pant, Chino pant, Sleep wear, Swim Wear, Boxers, Zip off Pant, Chino Pant, Shirt etc any kind of top and bottom item.

## **2.9 Vision and Mission**

### **Vision**

The primary reason to exist is to serve customers. Do this by ensuring the delivery of the very best value to customers, both external and internal. Delivery the best value to the best employees and associates. Invest in CSR activities that will improve the lifestyle and conditions of people.

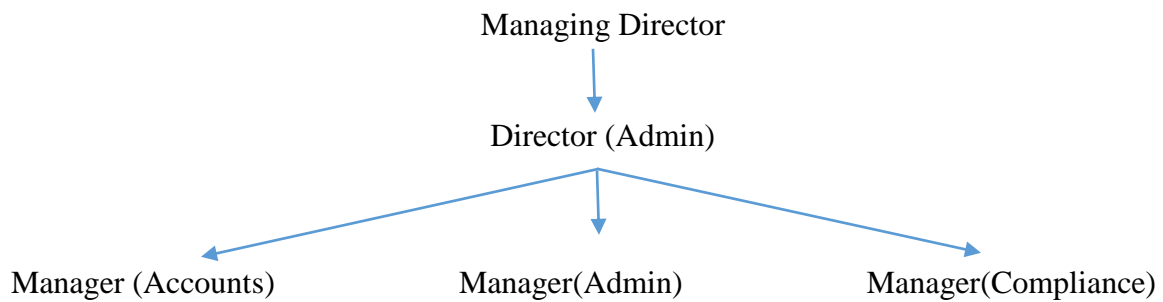


## **Mission**

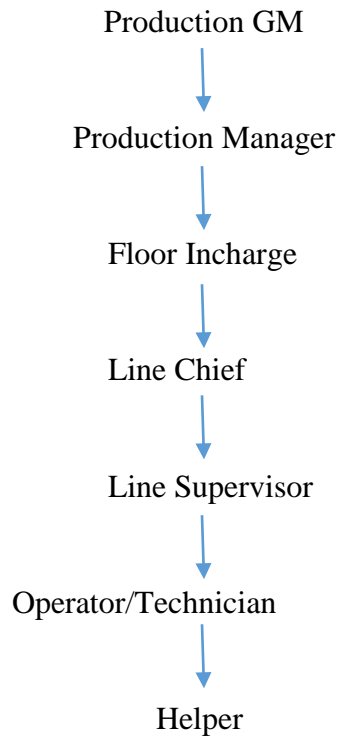
To keep setting an example by excelling in responsible and efficient operation focused on the creation of value. To keep below responsibility is the mission of the organization in long run along with to be the best qualified Garments in this industry.

## **2.10 Organogram**

### **2.10.1 Organogram of Administration**



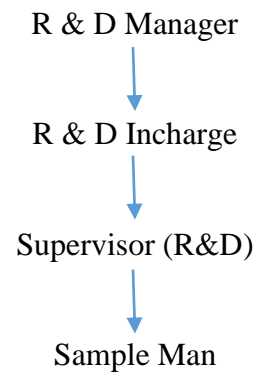
### 2.10.1 Organogram of Production (Sewing)



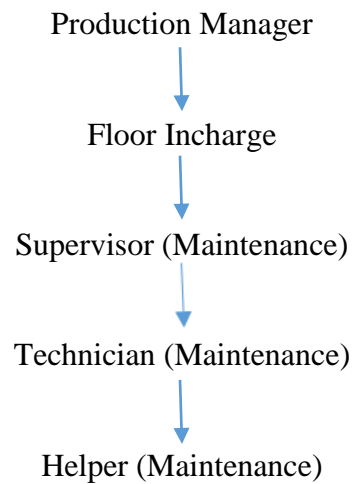
### 2.10.2 Organogram of Quality



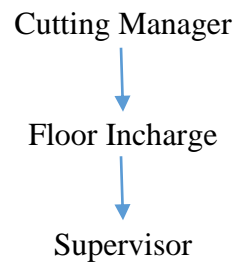
### 2.10.3 Organogram of Sample Section



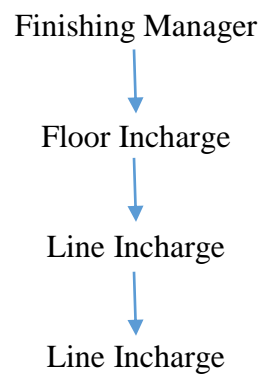
### 2.10.4 Organogram of Maintenance Section



### 2.10.5 Organogram of Cutting



### 2.10.6 Organogram of Finishing



## **Chapter-3**

### **DETAILS OF THE ATTACHMENT**

### 3.1 Human Resource Section

This section is situated on the ground floor of factory. They are take employee on factory. Without HR, no one can join factory. They are plays important role. They make employee profile, salary sheet, absent report, resign letter, salary increment data sheet etc. Every day they checkout every floor. If they get any problem, then they solve it.



3.1 Human Resource Section

### 3.2 Merchandising Section

In this factory, this department is on 1<sup>st</sup> floor. There have 8 merchandiser for each buyer. They receive new order from buying house. Buying merchandisers came here for giving order. They were very polite and helpful.



#### 3.2.1 Merchandising Section



#### 3.2.2 Merchandising Section

### **3.3 Industrial Engineering Section**

In this section, they do a lot of things in this factory. Because, daily production, layout, planning, costing, efficiency report, bulletin report lots of work the done everyday. They give target on production, follow up machine, worker efficiency, line balancing etc.



**3.3 IE Section**



### 3.4 Store Section

This section is on ground floor. Here store different types fabrics and accessories. There have many rack for keep fabric. Also store carton, packing accessories etc. They supply fabrics & accessories on floor as per as required.



3.4.1 Store Section



3.4.2 Store Section

### 3.5 Cutting Section

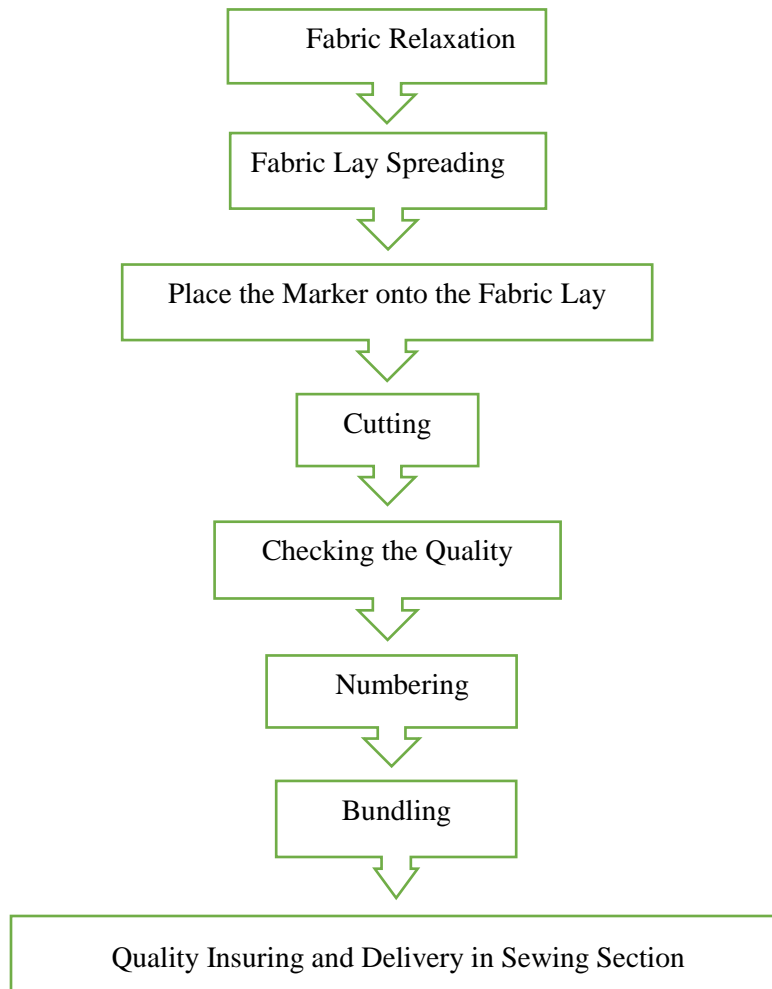
Cutting section is in the first floor of the factory. In this floor there are 5 line which contains nine (9) cutting machine. There are three (3) End Cutting machine and six (6) straight knife cutting machine. There have total five (5) table for cutting.

#### 3.5.1 Load plan of Cutting Section:



Figure 3.5.1 Load plan of cutting section

### 3.5.2 Flow chart of cutting section



### 3.5.3 Machine Description



Figure 3.6: Straight Knife

#### 1. Name: Straight Knife

No. of Machine:

Features:

Brand: MACK

Origin: Japan

Production Capacity: 10000-12000 Pcs/day

Used: Much suitable for the Parts of Polo Shirt, Trouser, Ten top etc

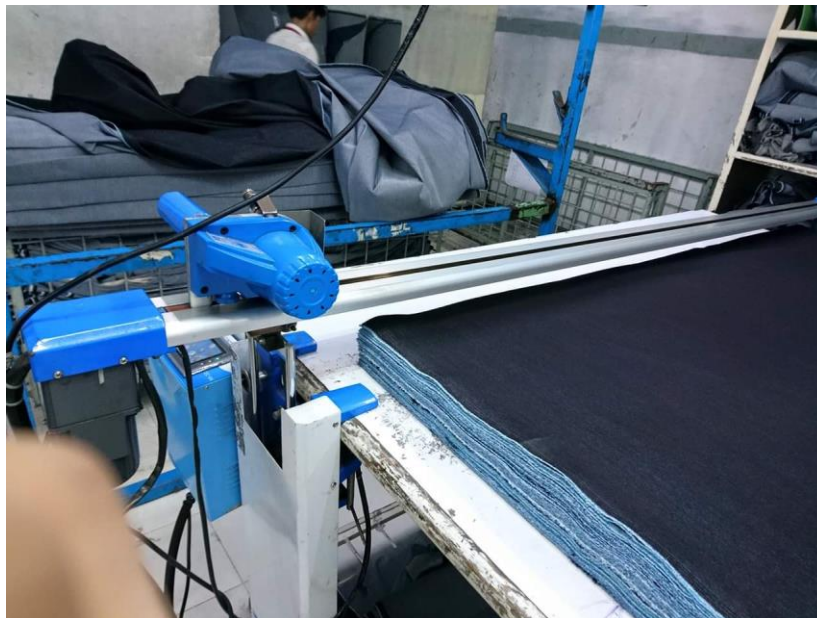


Figure 3.7: Computerized End Cutter

## 2. Name: Computerized End Cutter

No. of Machine: 03

Features:

Brand: Sigma

Used: Fabric lay edge cutting

## 3.6 Sewing Section

Sewing section is in the second floor of the factory. In this floor there are 5 line which contains nine (9) cutting machine. There are three (3) End Cutting machine and six (6) straight knife cutting machine. There have total five (5) table for cutting.

### 3.6.1 Load plan of sewing section



Figure 3.8: Load plan of sewing section

### 3.6.2 Machine Description

#### 1. Machine Name: Plain sewing machine

No. of machine:

Specification: 535

Brand: JUKI

Model: DLN-415

Origin: China

Type: Lock Stitch

No. of Needle: 01



Figure 3.9: Plain sewing machine

## 2. Machine Name: Chain stitch sewing machine

No. of machine: 25

Specification: 535

Brand: JUKI

Model: MH-481

Origin: China

Type: Chain Stitch

No. of Needle: 02



Figure 3.10: Chain stitch sewing machine



### 3. Machine Name: Double needle sewing machine

No. of machine: 126

Specification:

Brand: JUKI

Model: DDL-8700

Origin: China

Type: Chain Stitch

No. of Needle: 01



Figure 3.11: Double needle sewing machine

#### 4. Machine Name: Feed of the arm sewing machine

No. of machine: 45

Specification:

Brand: JUKI

Model: MS-1190

Origin: China

Type: Chain Stitch

No. of Needle: 03



Figure 3.12: Feed of the arm

**5. Machine Name: Over lock sewing machine**

No. of machine: 120

Specification:

Brand: JUKI

Model: MO-6700D

Origin: China

Type: Over lock

No. of Needle: 05



Figure 3.13: Over lock sewing machine

**6. Machine Name: Bar tack sewing machine**

No. of machine: 18

Specification:

Brand: JUKI

Model: LK-1900

Origin: China

Type: Bar tacking

No. of Needle: 01



Figure 3.14: Bar tack sewing machine

## 6. Machine Name: Flat lock sewing machine

No. of machine: 12

Specification:

Brand: JUKI

Model: MF-7523

Origin: China

Type: Flat locking

No. of Needle: 02



Figure 3.15: Flat lock sewing machine

**7. Machine Name:** Snap Button Attaching Machine

No. of machine: 12

Specification:

Brand: TAKING

Model: TK-808H

Origin: China

Type: Button attach



Figure 3.17: Snap button attaching machine

**8. Machine Name:** Button Hole Stitching Machine

No. of machine : 15

Specification:

Brand: TAKING

Model: TK-808H

Origin: China

Type: Button hole



Figure 3.17: Button hole sewing machine

### 3.6.3 Sewing Faults:

- Skipped Stitch
- Unbalanced Stitch
- Staggered Stitch
- Seam puckering
- Variable Stitch Density

### 3.7 Quality Section

Sewing section started from the second floor of the factory. In every floor there are five (5) line which contains (5\*5) quality table. There are three (3) sewing floor. Every floor have twenty five (25) quality check table. Total sewing section have seventy five (75) quality table. In finishing section, this factory has seven (7) lines. Every lines have one (1) quality check table. Total have 7 tables for quality section.



Figure 3.18: Pull Tester Machine



**3.7.1 Measurement Points:** In this chart, additional measurement are given after size shade. When get size shade result, then it make for sewing.

SAINSBURY'S TU CLOTHING  
Tu Clothing JEANS Specification

STY REF: Additional mmt 134630155 Charcoal grey straight denim

**\* ADDITIONAL MEASUREMENT POINTS**

ADDITIONAL MEASUREMENT POINTS		30	32	34	36	38	40	42	44
A	Fly length-frm uband down to base of fly slitch	14	14	15	15	16	16	17	17
B	Fly opening- ACTUAL OPENING-uband to bart-ck	12	12	13	13	14	14	15	15
C	Fly zip length- BULK lengths (moulded stopper each side of open zip track and across btm of zip)	11.5	11.5	12.5	12.5	13.5	13.5	14.5	14.5
D	Fly width-including twin needle - across btm of ub	4	4	4	4	4	4	4	4
E	Fly button count - exc waistband button	*	*	*	*	*	*	*	*
F	Belt loop width- end to end	6	6	6	6	6	6	6	6
G	Belt loop length- from top edge belt loop down to btm	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
H1	Front pocket mouth depth - INC TWIN NEEDLE	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-	waistband depth	4	4	4	4	4	4	4	4
K	Front pocket bag length-from underband	26	26	26	26	26	26	26	26
-	Front pocket bag width- across bottom	19	19	19	20	20	21	21	21
BAND SEAM * down to top edg coin pkt- nr s.seam									
-	Coin pocket position- across from side seam	2	2	2	2.5	2.5	3	3	3
-	Coin pocket mouth depth - centre - inc SINGLE NEEDL	1	1	1	1	1	1	1	1
-	Visible coin pocket width- at pkt mouth	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
-	Visible coin pocket depth-near side seam	4.5	4.5	4.5	5	5	5.5	5.5	5.5
-	Rear patch pocket position - top of pkt mouth - cross to side seam line	4.5	5	5.5	6	6.5	7	7.5	8
-	lar pkt. mouth position frm btm of CB yoke seam	3	3	3	3	3	3	3	3

Figure 3.19: Measurement points

**3.7.2 Measurement Report:** Before wash, how many tolerance allowed for a garment. It measured by CM. After measured, it write down and make a report.

**CIVIC APPARELS LTD.**  
Plot No. 3, Factory Road, Shampur, Kadamtoli II/A, Dhaka-1204

**MEASUREMENT REPORT**

BEFORE WASH:  END LINE:   
 AFTER WASH:  DURING PRESSING:   
 AFTER PRESSING:  FINAL:

BUYER: SAINI/BOB  
 STYLE NO: 155  
 P.O NO: \_\_\_\_\_

MEASUREMENT UNIT: IN  CM

S/L NO.	DETAILS OF MEASUREMENT POINT	TOL (+/-)	SPECS	BEFORE WASH		AFTER WASH		DURING PRESSING		AFTER PRESSING		FINAL		OUT OF TOLERANCE ALLOWED 10% OF TOTAL MEASUREMENT POINT	DATE	ITEM	ORDER	
				SIZE	SPECS	SIZE	SPECS	SIZE	SPECS	SIZE	SPECS	SIZE	SPECS					
1	OK PKT WIDTH	.5	16	16.0	16	16.2	17	17	18	18	18	18						
2																		
3	OK PKT CENTER	.5	17		17		18		18		18		19					
4																		
5	OK PKT SIDE	.5	16.7		16.7		17.7		17.7		17.7		17.7					
6																		
7	OK PKT BOTTOM	.5	19.2		19.2		19.2		19.2		19.2		19.2					
8																		
9	OK PKT Neck 1/2		6.2		6.2		6.2		6.2		6.2		6.2					
10																		
11	OK PKT Neck 1/2		3.2		3.2		3.2		3.2		3.2		3.2					
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		

Figure 3.20: Measurement Reports

### 3.8 Sample Section:

Here, Sample section is in 1<sup>st</sup> floor. Sample section have some machine for making sample, sample developing etc. They get ordered from factory merchandisers and make sample. After making sample they handover to factory merchandiser.



Figure 3.21: Sample room



Figure 3.22: Making sample

### 3.9 Finishing Section

In this factory, 2<sup>nd</sup> & 6<sup>th</sup> floor are used for finishing. There have seven (7) lines for finishing.

In finishing section-

1. Garments accessories are attaching
2. Ironing
3. Inspection
4. Shade checking
5. Pull testing
6. Metal detection
7. Folding
8. Hungering
9. Sizer
10. Packing



Figure 3.23: Shade checking, folding, packing and sizer



Figure 3.24: Packing and Boxing

**Chapter 4**  
**IMPACT OF INTERNSHIP**

## **4.1 HR Section**

In HR section I have learned about the following topics:

- Know about how they take worker.
- Know about salary sheet.
- How they follow up every floor regular.
- Know about how to make worker file.

## **4.2 Merchandising Section**

In Merchandising section I have learned about the following topics:

- How they get order from buying merchandising.
- How buying merchandiser follow up factory merchandiser
- How to do merchandising work in factory.
- How they make order sheet.

## **4.3 IE Section**

In IE section I have learned about the following topics:

- How they making layout plan.
- Know about work study on floor.
- How they give target on production.
- Know about layout bulletin.



## **4.4 Store Section**

In Store section I have learned about the following topics:

- How they store fabrics & accessories.
- Know about how they distribute products on production floor.
- How they receive box label order from co-ordinator etc.

## **4.5 Cutting Section**

In cutting section I have learned about the following topics:

- How to spreading fabric on table.
- How to cut fabric .
- Learn about cutting report.
- Know about cutting fabric grading etc.

## **4.6 Sewing Section**

In sewing section I have learned about the following topics:

- Where start to sewing.
- Learn about sewing process.
- Learn about different types of sewing machine.
- Learn about thread and needle etc.

## **4.7 Quality Section**

In quality section I have learned about the following topics:

- How to measured quality of garments.
- Learn about different inspection system.
- Quality check by using pull tester for shank button etc.

## **4.7 In Sample Section**

In sample section I have learned about the following topics:

- How they can get order from merchandise.
- How they make sample from measurement sheet.
- Learn about sample developing etc.

## **4.8 Finishing Section**

In finishing section I have learned about the following topics:

- How operator loop & thread cut.
- Know about ironing.
- How to join buckle.
- Know about different accessories.
- How they packing garments etc.

**Chapter 5**  
**CONCLUSION**

## **Conclusion**

The industrial training gives me the first opportunity to work in mills. It was a practical experience beyond the normal academic learning. This training gave me actual picture about man, machine, money, material, method and market and interdependence. I have earned the direct practical knowledge about the raw materials, actual running condition of the machine, works of technologist, administration.

Industrial training is an essential part for textile education because it minimizes the gap between theoretical and practical knowledge and also increase my thinking level about textile technology. My industrial training gives me lot of knowledge from industrial and I see its many different university knowledge from industrial work. My university give me theoretical knowledge to that's why I think it is the full knowledge which we learn it. It help me enrich of our knowledge.