

Faculty of Engineering Department of Textile Engineering

REPORT ON Industrial Attachment

At

Poem Fashion Ltd.

House# Ka-196/1, Joyar, Sahara Bazar, Vatara, Dhaka-1229

Course Code: TE-410Course Title: Industrial Attachment

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

Advance in Apparel Manufacturing Technology

Duration: From 08th October'18 to 03rd December'18.

ACKNOWLEDGEMENT

First of all, we are grateful to Allah who gives us sound mind & sound health to accomplish **Industrial Attachment** at **Poem Fashion Ltd.** 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 would like to give special thanks to the supervisors, technicians, operators and all other staffs of **Poem Fashion Ltd.** who were most cordial and helpful to us during internship.

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. MahbubulHaque** 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 completing industrial attachment.

DECLARATION

We hereby declare that the work which is being presented in this report entitled, "Industrial Attachment at Poem Fashion Ltd." Is original work of our own, 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.

Name	ID	Signature
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This is to certify that the above declaration made by the candidate is correct to the best of my knowledge.

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Faculty of Engineering

Daffodil International University

LETTER OF APPROVAL

December 11, 2018

То

The Head

Department of Textile Engineering

Daffodil International University

102, Shukrabad, Mirpur Road, Dhaka 1207

Subject: Approval of Industrial Attachment Report 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 151-23-4246 and 151-23-4103 is completed for final evaluation. The whole report is prepared based on the factory data with required belongings. The students were directly involved in their 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 report and consider it for final evaluation.

Yours Sincerely

ang

Mst. Murshida Khatun

Senior lecturer

Department of Textile Engineering

Faculty of Engineering

Daffodil International University

Table of Contents

ACKNOWLEDGEMENTii
DECLARATION iii
Letter of Approvaliv
Table of contentv-vi
1.1 Executive Summary2
2.1 Basic Information
2.1.1 Company Name &Address
2.1.2 Date of Establishment:
2.1.3 Founder and Directors:
2.2 General Information5
2.2.1 Layout
2.2.2 Total Area:
2.2.3 Total Building:
2.2.4 Total Floor:
2.2.5 Production capacity
2.2.7 Transport Facility
2.3 Human Resource & Organization Structure8
2.3.1 Organogram
2.3.2 Total no. of Section
2.3.3 Name of Section
2.3.4 Main production
2.3.5 Total no. of employee
2.3.6 Salary9
2.3.7 Vision and Mission
Chapter-3
Details of Attachment
3.1 CUTTING SECTION
3.1.1 Cutting Section
3.1.2 Layout

3.1.3 Organogram	14
3.1.4 Store Section	
3.1.4 Process of Cutting	
3.1.5 Machine in Cutting Section	
3.1.6 Parts of Cutting Machine with Their Functions	21
3.1.7 Major operations	22
3.1.8 Points Should Concern Fabric Cutting	22
3.1.9 Lay Height	22
3.1.10 Cutting Table Specification	22
3.1.11 Wastage during Cutting	23
3.2 SEWING SECTION	24
3.2 Sewing Section	25
3.2.1 Layout	25
2.2.2 Total Area:	25
2.2.3 Total Building:	25
2.2.4 Total Floor:	25
2.2.5 Production capacity	25
3.2.2 Organogram of Sewing Section	
3.2.3 Machine layout (T-shirt)	27
3.2.4 Different Type's Machineries with Functions in Sewing Section	
3.2.5 Quality control in sewing section	
3.3 FINISHING SECTION	
3.3 Finishing Section	
3.3.1 Layout of Finishing Section	
3.3.2 Organogram	
3.3.3 Finishing Work in Process	
3.3.4 Different Type's Machineries with Functions in Finishing Section	
3.3.6 Quality control in Finishing section (Faults & Remedies)	
4.1 Cutting Section:	
4.2 Sewing Section:	
4.3 Finishing Section:	

Conclusion:

Chapter-1 Executive Summary

1.1 Executive Summary

This report presents a conception of Textile sector especially of a knit garments industry and tries to clarify the overall processes required to complete a garment. Two months long training is not enough to capture all the information related to but it is possible to overview three departments cutting, sewing and finishing. "Poem Fashion Ltd" in where we try to gather information about those three departments. The factory has some limitation for the internship students that are the training schedule provided by the authority. There are only three departments in "Poem Fashion Ltd". 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. This paper includes from where order is received and to where it is supplied and how a large scale of products is produced within a very short period of time. 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. We have started our 2 months' internship at8th October and have successfully completed in 3rd December.

Chapter-2 Information about the Factory

2.1 Basic Information

2.1.1 Company Name & Address

Poem Fashion Ltd.

House# Ka-196/1, Joyar, Sahara Bazar, Vatara, Dhaka-1229

2.1.2 Date of Establishment:

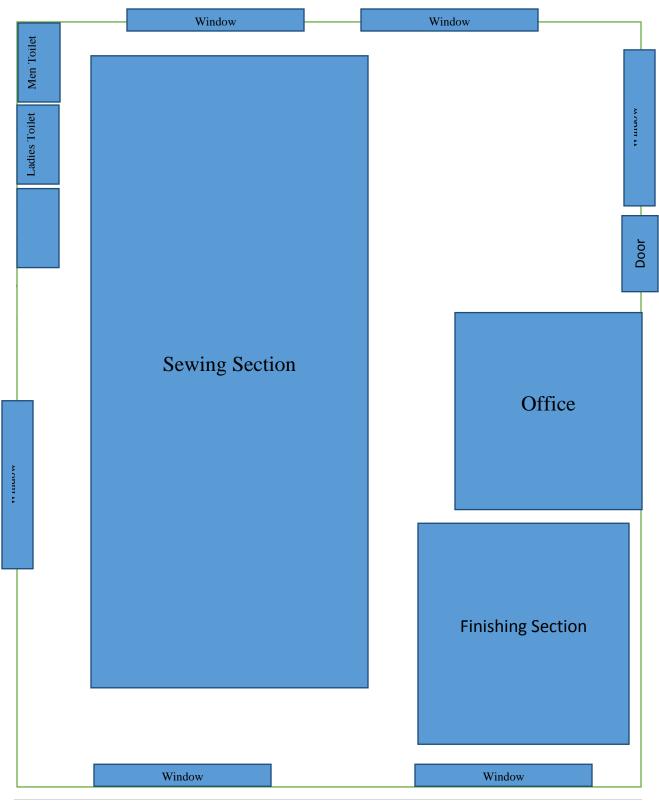
1St September 2018

2.1.3 Founder and Directors:

Kabita Baral

2.2 General Information

2.2.1 Layout



Buyer Name	Logo	
ARC	ARC, UNIFORMES	
	Figure 2.2.6.1 ARC Uniforms	
Aristo	Image: constraint of the second sec	

Table 2.2.6 Major Buyers with Their Logos

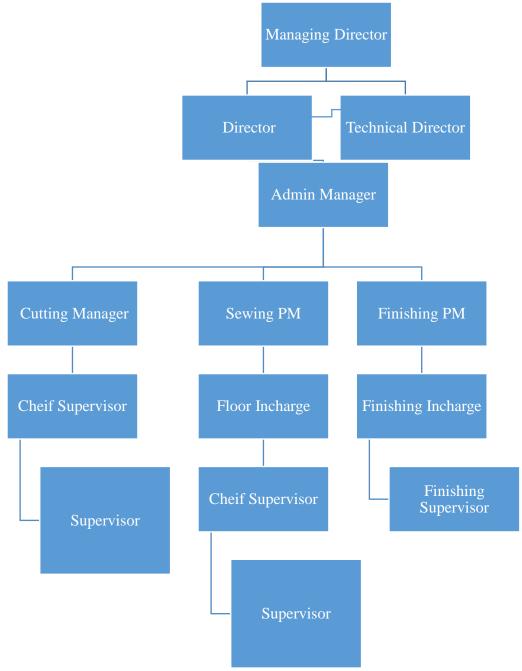


2.2.7 Transport Facility

Product: Cargo van

2.3 Human Resource & Organization Structure

2.3.1 Organogram



2.3.2 Total no. of Section

03

2.3.3 Name of Section

- I. Cutting Section
- II. Sewing section
- III. Finishing section

2.3.4 Main production

- Knitted Products
- Fabrics Used

Spandex, Fleece, S/J, Interlock, Rib, Lacoste, Pique etc.

• Garments

All types of knit items T-shirt, Polo Shirt, Hoodieand Jogging Pant (Sample) etc.

2.3.5 Total no. of employee

The number of total employee is 70

2.3.6 Salary 500000 tk

2.3.7 Vision and Mission

Vision

To become a truly global supplier that provides a sustainable growth opportunity for its customer, county and its employees, whilst achieving its goal of becoming the number one value fashion supplier across the world.

Mission

- > In future be a market leader in the field of value global supplier of RMG.
- > Deliver quality fashionable products at affordable prices.
- > Be innovative, cost effective and globally competitive.
- Outstrip our customer's expectations.
- > Provide opportunities for growth for our employees.

Chapter-3

Details of Attachment

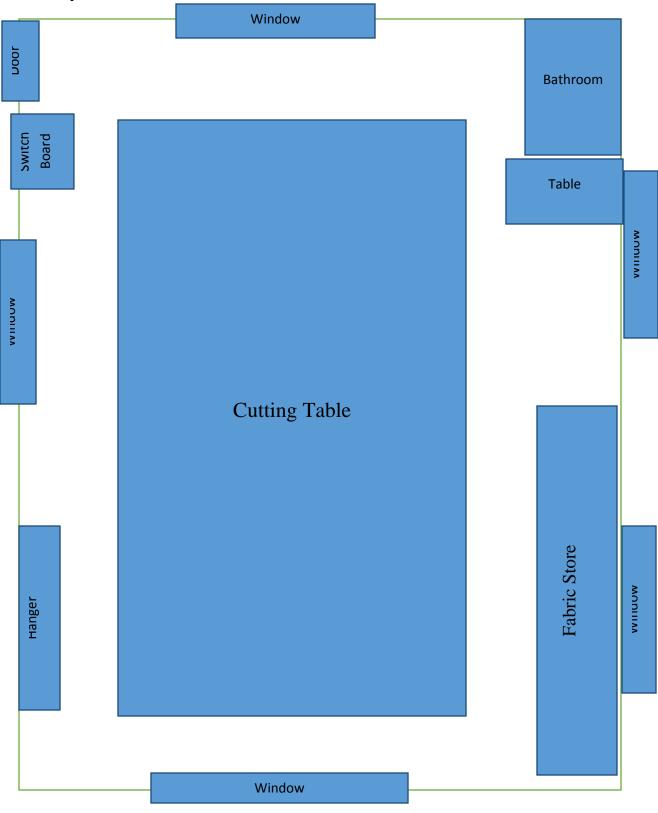
3.1CUTTING SECTION

3.1.1 Cutting Section

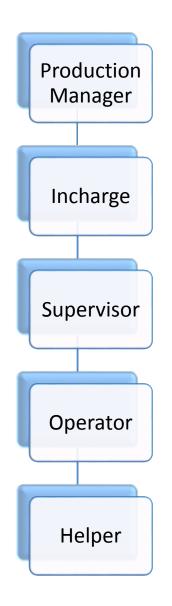


Figure 3.1.1 Cutting Section

3.1.2 Layout



3.1.3Organogram



3.1.4 Store Section Function

- Store the materials for order
- > Issue and supply the materials to production unit
- Prepare Inventory report



Figure 3.1.4.1Fabric Store

- After receiving fabric for each order then numbering different shade of color of the fabric role.
- ➢ Locally and Imported fabric is stored.
- > Different types of fabric like 100% cotton single jersey, Terry, Fleece & spandex etc.



Figure 3.1.4.2 Accessories Store



Figure 3.1.4.3 Accessories Store

Table 3.1.4Different Types of Accessories

- Main label
- ➢ Care label
- ➢ Size label
- > Threads
- ➤ Twill tape
- Tissue paper
- Snap button
- ➢ Hang tag
- ➢ Hanger

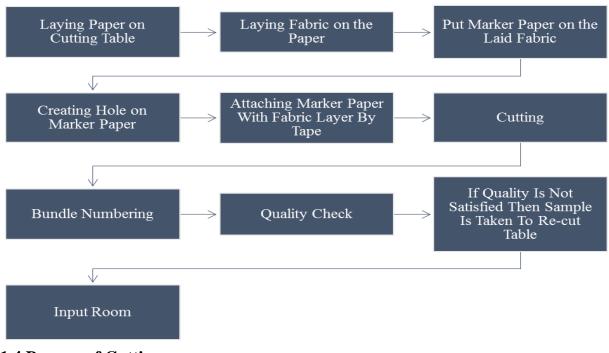
- ➢ Elastic
- > Zipper
- Hit seal label
- > Poly
- > Rope
- Button
- Garment Marking Chalk
- Lock pin
- ➢ Gum tape



Figure 3.1.4.4 Different type of Accessories



Figure 3.1.4.5 Different type of Accessories



3.1.4 Process of Cutting

3.1.5 Machine in Cutting Section

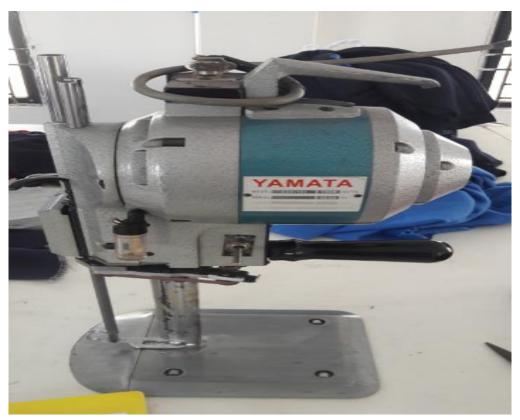


Figure 3.1.5.1 Fabric Cutting Machine

Table: 3.1.5.1	Fabric	cutting	machine	description
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Machine name	Cutting machine
Specification	Model: CSZ-103
	Manufacturer: YAMATA
	Type: Straight knife
	Origin: China
	Blade Length: 12"
	Blade Width: 1.5 cm
	Blade Thickness: .5 mm
Function	Used for cutting fabric layer according to maker.



Figure 3.1.5.2 Numbering Machine

Table: 3.1.5.1 Numbering machine description

Machine name	Numbering Machine
Function	Used for numbering the garments parts to avoid mixer.

3.1.6 Parts of Cutting Machine with Their Functions

- > Plate: To stand the machine and help to move the machine.
- ▶ Feed: To hold the layer of fabric by pressure.
- ➤ Knife: To cut the layer of fabric precisely.
- > Handle: To help to move the whole cutting machine according to design.
- > Power switch: It is used to run and stop the machine.
- > Oil box: To supply oil or lubricant to the machine parts.
- > Motor: To give reciprocating motion to the knife for cutting.
- Sharpening device: To make sharp the knife edge when required.

3.1.7 Major operations

- ➢ Spreading
- ➢ Marker Placing
- Cutting
- Sorting
- Numbering and checking

3.1.8 Points Should Concern Fabric Cutting

- > During Cutting operator must be used metal gloves.
- > Precision in cut i.e. the dimension of pattern and fabric parts is cut should be same.
- \succ The cut edge must be cleaned.
- ➢ Infused edge.
- Consistency in fabric cutting.
- ➢ Support of lay.
- Drill hole and size should be appropriate and it will be placed in its right place. If it is too large it would be seen after sewing. But if it is too small then it can be blocked easily.
- > Should position the pattern pieces on the fold or on the grain line as indicated.
- > Without shoe operator should not use cutting machine.
- ➤ Mask must be used during cutting.

3.1.9 Lay Height

- Single jersey/ spandex/ interlock: Maximum2-2.5"
- Single jersey/Cotton & Others: Maximum 3-4"
- ► Fleece Maximum 4-4.5"

3.1.10 Cutting Table Specification

- Total Cutting Table: 2 pcs
- ➤ Table Height: 36.5"
- ➢ Table Width: 66"
- ▶ Table Length: 294"

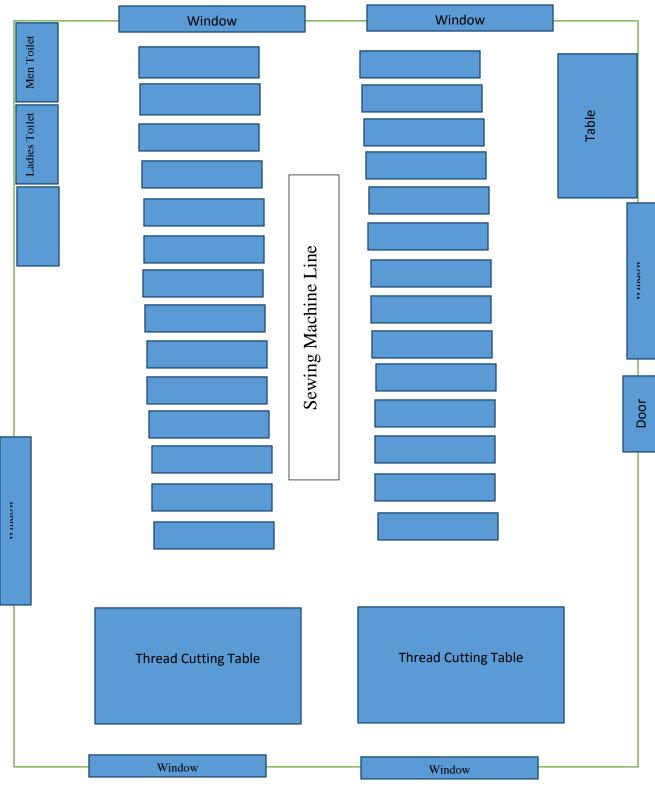
3.1.11 Wastage during Cutting

- Ends of ply losses.
- ➢ Selvedge loss.
- ➢ Loss of fabric in roll.
- ➢ Loss for fabric defect.

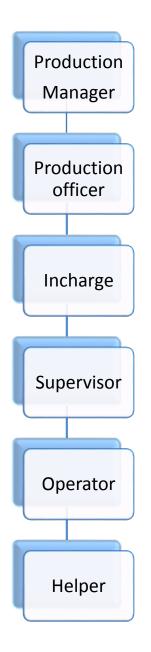
3.2SEWING SECTION

3.2 Sewing Section

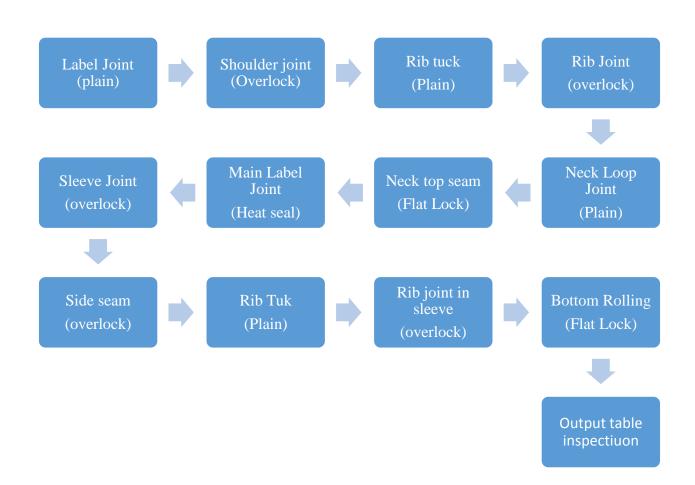
3.2.1 Layoutof Sewing Section



3.2.2 Organogram of Sewing Section



3.2.3 Machine layout (T-shirt)



3.2.4 Different Type's Machineries with Functions in Sewing Section 3.2.4.1 Plain Machine/Single Stitch Machine



Figure 3.2.4.1 Plain machine

Application:

- > Bottom hemming
- ➤ Belt making
- Loop tack stitch
- Pocket joint stitch
- > Zipper joint etc.

3.2.4.2 Over Lock Machine



Figure 3.2.4.20ver Lock Machine

Application:

- ➢ Neck piping
- Sleeve piping
- Sleeve joint
- ➢ Side seam etc.

3.2.4.3 Flat-Bed Machine



Figure 3.2.4.3 Flat-bed machine

Application:

- > Belt top seam
- ➤ Back tape joint

3.2.4.4 Flat Lock Cylinder bed Machine



Figure 3.2.4.4 Flat Lock Cylinder bed Machine

Application:

- ► Sleeve hem
- ► Leg hem

3.2.4.5 Button Hole Machine



Figure 3.2.4.5 Button Hole Machine

Application:

> To create a hole for button

3.2.4.6 Feed of the Arm Machine



Figure 3.2.4.6 Feed of the Arm Machine

Application:

➢ Used for neck piping

3.2.4.7 Button Attaching Machine



Figure 3.2.4.7 Button Attaching Machine

Application:

> To attached button in garment

3.2.4.8 Rib Cutter Machine



Figure 3.2.4.8 Rib Cutter Machine

Application:

> Cutting rib and make roll



Figure 3.2.4.9 Bar tuck Machine

3.2.4.9 Bar tuck Machine

Application:

➢ Bar tack stitch

3.2.4.10 Flat Lock Raw Edge Cutter Machine



Figure 3.2.4.10 Flat Lock Raw Edge Cutter Machine

Application:

➢ For body hem.

3.2.5 Quality control in sewing section

Sewing defects

- ➢ Needle damage
- ➢ Skipped stitch
- ➢ Seam pucker
- ➢ Wrong stitch density
- ➢ Uneven stitch
- > Defected stitch
- > Oil spot

Seaming defects

- ➢ Uneven width
- ➢ Uneven seam line
- > Not secured by back stitch
- > No matching of check or stripe
- ➢ No matching of seam

3.3FINISHING SECTION

3.3 Finishing Section



Figure 3.3 Finishing section

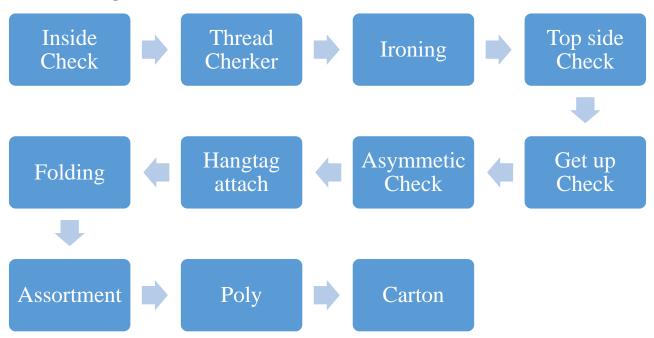
3.3.1 Layout of Finishing Section



3.3.2 Organogram



3.3.3 Finishing Work in Process



3.3.4 Different Type's Machineries with Functions in Finishing Section

3.3.4.1 Boiler



Figure 3.3.4.1 Boiler

Application:

Supply power to the iron for ironing.

3.3.4.2 Iron



Figure 3.3.4.2 Iron

Application:

> Use for ironing the garments.



3.3.4.3 Spot Removing Gun

Figure 3.3.4.3 Spot Removing Gun

Application:

➢ Used for removing spot from the garments.

3.3.4.4 Oil spot Removing Spray



Figure 3.3.4.4 Oil spot Removing Spray

Application:

> Applied for removing oil spot from garments.



3.3.4.5 Hand Trimmer

Figure 3.3.4.5 Hand Trimmer

Application:

 \blacktriangleright Use to cut off extra threads from the garments.

3.3.4.6 Tag Gun



Figure 3.3.4.6 Tag Gun

Application:

> Used for attach hang tag to the finished garments.

3.3.4.7 Grinding Machine



Figure 3.3.4.7 Grinding Machine

Specification

- ➤ Model: MD-150
- ≻ 500W

- ➢ 220-240V/50-60Hz
- ≽ 2950rpm

Application:

> Used to sharpen scissors and hand trimmers.

Table 3.3.5Process and Their Function

Process	Function
Inside Check	Check defect in inner part of garments.Like missed stitch, uneven seam.
Thread checker	Remove loose thread from garments part.
Ironing	Create a shape of garments.
Top side Check	Check defect in top part of garmentsLike,Uncut thread, Skipped stitch,Open seam
Get-up check	Check Cutting small thread Check Spot in garments
Hang tag attach	Hang tags are attached with a garment, such as,
	a) Price tag
	b) Tag of garment type
	These hang tags are attached with garment either by hand or by hang tag machine.
Folding	Pressed garments are folded in a specific dimension. This work is usually done by women labors.
Poly	In this section garments are packed in poly.
Carton	Poly is filled in carton.

3.3.6 Quality control in Finishing section (Faults & Remedies)

Various type of garment fault are detect in this section. Some of them are given below:

3.3.6.1Printing Spot:

Sometimes is preferred to improve products appearance. It will be done with various type of dyes and chemicals. So, in times of printing product may be printed with spot by the process. This types of fault are called printing spot.



Figure 3.3.6.1 Printing Spot

Causes:

- Using faulty printing machine.
- Lack of conscious in fabric handling.
- Using low quality printing screen, dyes or chemicals.

Remedies:

- High quality printing equipment should be use.
- Wash off such type of spot by relevant washing procedure.

3.3.6.2 Wrong Side Chap Tuck:

When chap tuck is done in wrong side of a garments is known as wrong side chap tuck. Actually chap tuck is done to secure the seam line.



Figure 1.3.6.2 Wrong Side Chap Tuck

- Negligence of the operator.
- Unskilled worker.

Remedies:

- Operator should be work carefully.
- Operation should be done again.

3.3.6.3 Fabric Hole:

It's a defective portion in the fabric where you are able to see the other part by means of the hole.



Figure 3.3.6.3 Fabric Hole

- Holes could be made by yarn breakage or yarn cracks.
- \circ Holes can come from fabric or it could be caused by the sewing section.
- Faulty trimming by the operator.
- Broken needle puncturing the fabric.

Remedies:

- Improve fabric inspection and garments cut piece.
- Fabric fault detector can use.
- Improve worker skill by training

3.3.6.4 Main Label Missing:

After sewing process when a garments come to the quality section without main label of the garments is considered as main label missing. Main label represent brand name of the specific garments.



Figure 3.3.6.4 Main Label Missing

Causes:

- Negligence of the worker.
- Hustling by worker.

Remedies:

• Process should be done more carefully.

• Process need to done again.

3.3.6.5 Stitch Missing:

After sewing process when a garment comes to the quality control section with missing an operation i. e. neck top seam missing is considered as stitch missing.



Figure 3.3.6.5 Stitch Missing

Causes:

- Negligence of operator.
- Lack of experience or input and output garments mixed-up.

Remedies:

- In times of working, operator should fully concentrate about their work.
- Process need to done again.

3.3.6.6 Chap Tuck Missing:

After sewing process, if the garments come to the finishing section without chap tuck then its called chap tuck missing. Actually chap tuck is done to secure the seam line.



Figure 3.3.6.6 Chap Tuck Missing

- Hustling by worker.
- Lack of concentration.

Remedies:

- Process need to done again.
- Operator should concentrate in their work.

3.3.6.7 Raw Edge:

After sewing, if the fabric raw part are unexpectedly shown on sewing area of the garments then the problem is refers as raw edge problem.



Figure 3.3.6.7 Raw Edge

- Lack of fabric handling by worker.
- Stickiness of presser foot.

Remedies:

- Worker should be well trained.
- Use appropriate needle plate, presser foot and feed dog height.
- Cut the raw edge part precisely.

3.3.6.8 Seam Puckering:

The gathering of a seam due to sewing or laundering causing an unacceptable seam appearance to the garments is known as seam puckering.



Figure 3.3.6.8 Seam Puckering

- This problem arises due to worker negligence.
- Negligence on sewing thread selection.
- Improper handling of fabric plies during sewing.
- Improper thread tension.

Remedies:

- Skilled worker should be use.
- Proper sewing thread should be selected.
- A periodically checking should be done on presser foot pressure, feed dog and thread tension for damages.
- Needle-thread-fabric selection should be more accurate.

3.3.6.9 Scissor Hole:



Figure 3.3.6.9 Scissor Hole

Causes:

- Poor handling by worker.
- \circ Unconsciousness of worker.
- o Lack of skill.

Remedies:

- Sharp equipment should hand carefully.
- Remove this part from product and attach new part.

3.3.6.10 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 3.3.6.10 Broken Stitch

- Using low quality thread is the main cause of this fault.
- Inappropriate thread tension.
- Lake of skilled worker in trimming.

Remedies:

- Use high quality thread in sewing.
- Trimming should be done more carefully.

3.3.6.11 Improper Size Label Joining:

This happen when size label isn't properly or partly join with garment.



Figure 3.3.6.11 Improper Size Label Joining

- Placement of size label and sewing needle is inappropriate.
- Improper handling of size label and garment part.
- Lack of concentration

Remedies:

- Attach the size label with garment again.
- Attachment and handling should be done with concentration.

3.3.6.12 Fall of Stitch:

In doing any type of stitching or joining if the stitch line isn't in the proper place where it belongs to then the fault is called as fall of stitch.

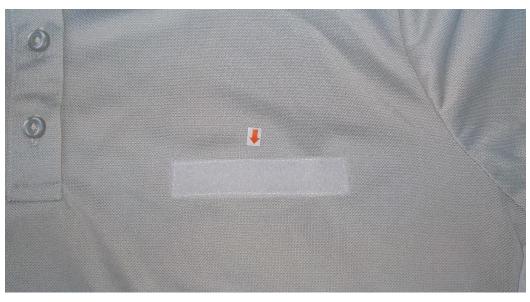


Figure 3.3.6.12 Fall of Stitch

Causes:

- Lack of skill.
- Improper hand movement by worker.
- Work with hustling.

Remedies:

- Should be careful in times if working.
- Do the job again.

3.3.6.13 Open Seam:

After sewing process, if the seam line is open or the fabric joint is open or lose then the fault is called as Open seam. It's a common and major sewing fault.



Figure 3.3.6.12 Open Seam

Causes:

- Improper handling of garment parts by worker.
- Needle deflection.
- Improper action of needle to make loop.
- Wrong timing between needle and looper.
- Inappropriate foot presser control in sewing.
- Mechanical problem of sewing machine.

Remedies:

- Skilled worker should be use.
- Proper handling of garments parts.
- Appropriate thread tension should be maintain.
- Check presser foot pressure.

3.3.6.14 Care Label Missing:

After completing all process if a garment made without care label then this fault is named as care label missing.



Figure 3.3.6.14 Care Label Missing

- Lake of concentration.
- Hustling in doing work by operator.

Remedies:

- Worker should more consciously doing their job.
- Attach the care label.

3.3.6.15 Wrong Joining:

When a garment made with a part of other garment is known as wrong joining.



Figure 3.3.6.15 Wrong Joining

Causes:

- Unconsciousness of worker.
- Faulty garment parts numbering.
- Inaccurate fabric cutting by cutting master.

Remedies:

- Attach a proper one in that place.
- Fabric cutting and numbering should be done more carefully.

3.3.6.16 Cuff Missing

If a garment made without cuff, then the faults is called cuff missing.



Figure 3.3.6.16 Cuff Missing

Causes:

- Negligence of operator.
- o Lack of skill.

Remedies:

- Operator should work carefully.
- Attach the missing part.

Chapter 4 Impact of Internship

4.1 Cutting Section:

In cutting section we have learned about-

- > Different types of fabric and their cutting process.
- ➢ Marker making.
- ➢ How to make marker for production.
- ➢ How to improve marker efficiency.
- ➢ Fabric spreading procedure.
- Cutting machine and function.
- > How different types of fabric cutting is done.

4.2 Sewing Section:

In sewing section, we have learned about:

- Different types of sewing machine.
- Different types of sewing machine function.
- > Different type of stich.
- Inspection procedure of buyer.
- Maintenance section working process.

4.3 Finishing Section:

In Finishing section, we have learned about:

- Different types of finishing process.
- > Different types of machines and accessories used in finishing.
- ➢ How the processes are done.
- > What kinds of faults are found in finishing and their remedies.

Chapter-5 Conclusion

Conclusion:

Industrial training sends us to the expected destiny of practical life. We have gathered some knowledge about garments cutting, sewing & finishing process in our 8 weeks' internship in Poem Fashion Ltd. We are very fortunate that we have got a chance to carry our industrial visit at such an industry. During this internship period, we have gained practical knowledge which has enabled us to compare with our theoretical knowledge in our academic period. In our training period, we have learned many things, such as different types of machines and their functions, techniques of productions and management system. Besides, we got an idea about the responsibility of different department of the factory. During our industrial training we have almost covered most of the section of the industry. However, highest effort has been given to achieve the objectives of the industrial training program. This industrial training will be very effective and blissful in our professional life. The management system of Poem Fashion Ltd. is very organized and the authority, officers and workers of the industry were very helpful so it was much easier for us to carry on our training successfully. We are showing our ultimate gratitude to poem Fashion Ltd. and our respective teachers for giving us such a wonderful opportunity.