

Report On  
Amtranet Limited  
Daily Activities and working Process in Garments Industry

By

Md. Murshedur Rahman  
ID-19281160

An internship report submitted to the Executive Development Center, Brac Institute of Governance and Development (BIGD), Brac University in partial fulfillment of the requirements for the degree of Post Graduate Diploma in Knitwear Industry Management (PGD-KIM)

Executive Development Center, BIGD  
BRAC University  
03 June-2021

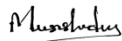
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## Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

**Student's Full Name & Signature:**



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**MD. Murshedur Rahman**

ID-19281160

**Academic Supervisor's Full Name & Signature:**



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**Shamim Esanul Haque**

Assistant professor And Assistant Dean,  
BRAC University  
66 Mohakhali, Dhaka-1212

## Letter of Transmittal

Shamim Ehsanul Haque  
Assistant professor And Assistant Dean,  
BRAC University  
66 Mohakhali, Dhaka-1212

Subject: Daily Activities and working Process in Garments Industry

Dear Madam,

Due to respect, as student of BRAC institute of governance and Development (BIGD), I have prepared of my internship report on readymade garments work process of Amtranet limited. I have tried to my best to bring out the original scenario of work process of Amtranet limited with full of effectiveness. I have great learned lot of valuable experience and knowledge. I am honestly thankful for your guidance during prepare of this report. I have done the report in a complete from and also my level best to conduct this in a professional method. This is true that, it's could have been done in a better system if there were no restriction. I trust that the report will meet the pleasure.

Sincerely yours,

*Murshedur*

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Md. Murshedur Rahman  
ID-19281160  
Executive Development Center, BIGD  
Brac University  
Date: 03-06-2021

## Non-Disclosure Agreement

This agreement is made and entered into by and between BIGD and the undersigned student at BIGD Md. Murshedur Rahman. I understand that I may have access to confidential information about the business and financial interests of the company where I have done my internship. I understand that Confidential Information is protected in every form, such as written records and correspondence, oral communications and computer programs and applications.

We agree both the partners being an important entity of this project not to use, copy, make notes regarding, remove, release, or disclose Confidential Information, unless it is permitted by the Respective Organization.

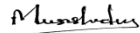
And I also agree not to share or release any authentication code or device, password, key card, or identification badge to any other person, and I agree not to use or release anyone else's authentication code or device, password, key card, or identification badge.

We understand that any breach of confidentiality may result in disciplinary action, including termination from the Internship Program (with the status of 'Failure' placed on my permanent transcript) or legal action.

We certify by my signature that I acknowledge being informed of the confidentiality policy concerning confidential information or its treatment.

We agree to adhere to and uphold the private and privileged information therein.

**Student's Full Name & Signature:**



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**MD. Murshedur Rahman**

ID-19281160

**Industry Supervisor's Full Name & Signature:**



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**Sm. Zahidul Islam**

Head of Operation

Amtranet Limited

## **Acknowledgement**

I would like to express my heartily gratitude of all the personnel who were involved directly or indirectly helped me to complete my internship report. Then I like to show my internship observer faculty, our honorable academic supervisor Shamim Ehsanul Haque and industry supervisor MD. Zaidul Islam for his valuable contribution in every stage of my internship program. Full time I want to regard particular topic, he clarified everything with so much forbearance. Finally, I would like to thank the employees of Amtranet Limited .I would never be able to complete my report successful without them.

*Murshedur*

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**MD. Murshedur Rahman**

## **Executive Summary**

Actually this internship report is based on Bangladesh RMG industry daily activities and work presses and its behavior. To bring about the report I did work in a garment making factory for 9 years practically name Amtranet Limited. For that, it is an opportunity for the everyone to gather information about the professional work process on RMG industry in through this report. i am working in every department for 3 month gradually to understand the nature of RMG industry. This internship report includes main work presses in RMG and ways, the internal sterna structure of a RMG Industry.

The main objective of the report becomes very clear the topic of the report. Amtranet limited started its journey in 2012. It is a ready Made garments manufacturing organization in Bangladesh. This industry continuously more reducing its rejection and rework rate in-process and final garments in order to ensure product quality and delivery time as buyer requirement and get buyer satisfaction. Amtranet Limited will ensure adequate training and suitable work to increase productivity and skills of the employees.

In this report I tried to cover a short profile of Amtranet Limited and major work presses of Amtranet Limited garment. It also includes all working process in RMG sector, my activities and the some problem I faced and some recommendations. I also add the challenge that faced during my task. Relating my work process with related books, journals and online blog, I write my overall experience in RMG sectors. Finally, I provided some reference from where I debt some information and ideas to write this internship report.

## **Table of Contents**

<b>Declaration.....</b>	<b>ii</b>
<b>Letter of Transmittal .....</b>	<b>iii</b>
<b>Non-Disclosure Agreement .....</b>	<b>iii</b>
<b>Acknowledgement.....</b>	<b>v</b>
<b>Executive Summary .....</b>	<b>vi</b>
<b>Table of Contents .....</b>	<b>vii</b>
<b>List of Acronyms .....</b>	<b>vii</b>
<b>Chapter 1 About Organization .....</b>	<b>1</b>
1.1 Overview of the Industry .....	1
1.2 Vision & Mission.....	3
1.3 Goals & Objectives .....	4
1.4 Organizational structure, Organogram, Branches and Departments .....	4
1.5 Products/services produced by the Industry .....	4
<b>Chapter 2 .....</b>	<b>5</b>
2.1 Proper Working Procedure of a Woven Garments Merchandiser:.....	5
2.2 Daily Activities of Store Room Management .....	8
2.3Cutting department and working procedure:.....	10
2.4 Working process in Sewing department:.....	vii
2.5 Daily Activities and Duties of an Industrial Engineer:.....	15
2.6 Finishing Department:.....	17
2.7 Quality control of the garment industry.....	19
<b>Chapter 3 .....</b>	<b>23</b>
3.1 Critical assessment of Internship work .....	23
3.2 Application of Generic and Industry specific courses during internship.....	25
<b>Chapter 4 Conclusion .....</b>	<b>26</b>
<b>References.....</b>	<b>26</b>

## **List of Acronyms**

QC	Quality controller
AMTL	AMTRANET limited
CAD	Computer aided design
PP	Pre-Production
SOP	Standard operating procedure
NPT	Non-productive Time
PM	Plane machine
WIP	Wait in process
IE	Industrial engineering
FOB	Free on board
SMV	Standard minute value
KPI	Key performance indicator
LC	Letter of credit
CA	Cash in advance
QA	Quality assurance
AQL	Acceptable quality level



# Chapter 1

## About Organization

### 1.1 Overview of the Industry

Amtranet Group

(Readymade garment industry)

Amtranet Limited a sister of Amtranet Group its started journey in the year of 2012 through creation of small sewing units called Amtranet Limited. Amtranet Limited is one of the renowned woven garments manufactures in Bangladesh which targets to satisfy its customers conditions and tries to balance the company environment compliance as per the requerment.1835 people including worker and employees has the company. Its produce woven tops bottom and heavy knit garments mainly 100% efficiency and use cotton or mixed cotton fabric and yearn for production. Amtranet Limited has Effective employees and management team to observe and maintain the work environment and efficient.

Amtranet Limited looks forward to make improvement in its environment and strategy. The company management team including the directors makes plans effectively to maintain good relation with the supplier and customer to reduce costs as much probability.

The company has 1800 including employees and worker. Amtranet limited makes Tops and Bottom garments mainly 100% efficiency and uses cotton and mixed fabric cotton fabric for Product. The company has efficient employees and train management team to observe and maintain the work environment workable.

Amtranet Limited effort to work on new conception in styling and new content of the woven wear is a continuous activity in the company with and objective to up the better and value of merchandiser. From 2014, this year the international business is start, the company condition with its every strengths and structure for developing a wide range of tops and bottom were for the foreign market.

Amtranet Products:

- Dress shirt
- Casual shirt
- Dress pants
- Casual pants
- Sweaters/Jacquards
- Denim bottoms

Our Compliance certification:

- Organic 100
- WRAP
- GLOBAL ORGANIC TEXTILE STANDARD – GOTS
- ALLIANCE
- Sedex
- ACCORD
- BSCI

Production Capacity: 350000 Per month

Production line : 16

Major Current Buyer: C&A, Carrefour, Sears Kmart, Camaieu, O'stin, Kiabi, Benetton, Inditex, Debenham, Orsay, Mango, Casino, Next.

Background of this study : I am Quality assurance officer in Amtranet limited. This is 100% export readymade woven garments industry and completed my internship report on Amtranet Limited. For the internship study in Amtranet I have almost go through in all the department to understand the complete working and try to find out the daily activities, planning and Another activities.

SINIFICANCE OF THE STUDY: This report from all the department of RMG sector such as Merchandising Department, Store Department, Cutting department, Quality department, IE department, finishing Department. So that completing this report I got overall idea about overall RMG sector which increase more knowledge than any others.

## **1.2 Vision & Mission**

### Vision

We want to establish in our factory an atmosphere of quality dominated products with transparent business environment to ensure sustainable partnership between customers and producer.

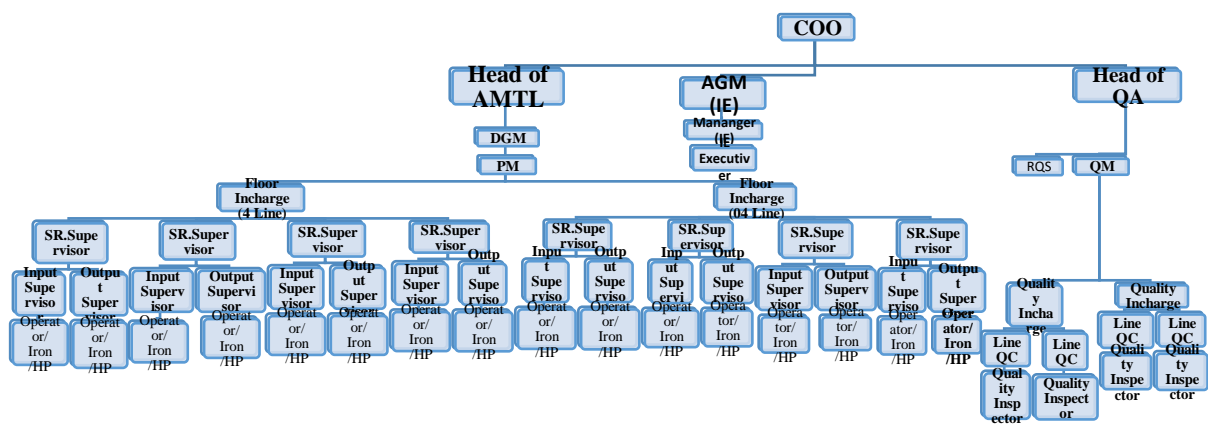
### Mission

- Excellence in quality
- Customer satisfaction
- Competitive price
- Timely goods delivery
- Product Safety
- Safe environment

### 1.3 Goals & Objectives

Contributing to Bangladesh's infrastructural development and business growth is our mission. Customers' needs are met through manufacturing and selling high-quality items and maintaining a high standard.

### 1.4 Organizational structure, Organogram, Branches and Departments



### 1.5 Products/services produced by the Industry

Amtranet Products:

- Dress shirt
- Casual shirt
- Dress pants
- Casual pants
- Sweaters/Jacquards
- Denim bottoms

## Chapter 2

### 2.1 Proper Working Procedure of a Woven Garments Merchandiser:

As an employee of Amtranet Limited I conducted my internship part in my current employing station in Amtranet Limited

Here, I am going to explain the Working procedures of a merchandiser of Amtranet Limited which I do the work physically.

Garments merchandising is the completely dependent on-time schedule. Amtranet limited merchandiser is just too efficient who can deliver his order during a timely. Time scheduling plays a crucial role altogether processes. As a result, every merchandiser of AMT has got to follow a working procedure. If the working procedure is ideal then it'll easy to respect the shipment date of the order. (2021)

Woven tops & bottom in display

Working procedures of a merchandiser:

The main working procedures of a woven garments merchandiser are discussed below: There are two important key factors for the right working procedure of woven garments merchandiser. By following it properly, anyone can touch his/her target very easily. garments merchandiser should be done fabric booking and requisition by following the buyer's instruction about the kinds of cloth that he/she advised such as-Cotton denim, Spandex denim, Slub denim, 2/1 RHT, etc and also supported order quantity.

2. Fabric in-housed:

After completing the material booking, a clothes merchandiser should arrange the accurate fabric as per the buyer's instruction and also in-hosed those before the print and embroidery approval (if there are any print and embroidery instructions).

3. Local accessories booking:

After completing all the above two steps, a merchandiser should confirm the local accessories booking such as Sewing thread, Zipper, Button, Metal Rivet, etc., and in-house those before starting the stitching process.

4. Accessories development:

As per order specification, if there's needed any accessories development such as-Logo button, Logo rivet, Logo zipper puller, all kinds of labels, etc. then those should be needed to develop with an urgent basis.

5. Accessories approval:

After completing the accessories development, these should be sent to the customer for approval. When the merchandiser received the approval of these accessories then he should manage the specified amount of accessories before starting the stitching process. Here one thing should be noted that, if you're unable to manage all the local accessories before sewing, you can't control all subsequent processes in your own way. It's a really important tip for a clothes merchandiser.

## Order execution

The second important interest ship during a timely is “Order execution”

Order execution contains the subsequent features:

1. Pattern making,
2. Print and embroidery development,
3. Fit sample making,
4. Wash development,
5. Wash approval,
6. Comments,
7. P.P sample making,
8. Cutting the material,
9. Print and embroidery,
10. Sewing,
11. Complete the washing process,
12. Finishing and QC check,
13. Shipment.

The in particular thirteen features are discussed within the following:

### 1. Pattern making:

After receiving all the small print from the customer, a merchandiser should pass urgently the whole reference sample with the buyer’s details instruction to the pattern section for pattern making.

### 2. Print and embroidery development:

If there are any print and embroidery, then it should be developed on an urgent basis by maintaining the buyer’s instruction.

### 3. Fit sample making:

In the meantime, a merchandiser should make the fit sample by maintaining the buyer’s instruction. Here one thing should be noted that, within the fit sample, the using fabric may be vary from buyer Fabrics follow up

The first and most vital one is “Fabrics follow up” and therefore the other is “Order execution”. Among two key points, now I will be able to discuss the very first important thing named “Fabric follow up”.

Fabric follows up contains the subsequent issues:

1. Fabric booking and Requisition,
2. Fabric in-housed,
3. Local accessories booking,
4. Accessories development,
5. Accessories approval.

All the most five key factors for the “fabric follow-up” are discussed below:

### 1. Fabric booking and Requisition:

When the customer forwards his/her sample with all the small print instruction, therein time a woven

Nominated fabric, color may vary than buyer nominated color, but measurement must be accurate as per buyers providing measurement sheet.

### 4. Wash development:

In woven merchandising, the washing procedure is extremely important. The washing process is that the heart of woven garments like denim, twill, etc. So it's needed extra care during this process though it's a time-killing process. Here a woven garments merchandiser should develop the wash process as per the buyer's instruction.

#### 5. Wash approval:

After developing the washing process, it should be approved by the customer on an urgent basis. Because it's seen that a sample has got to develop several times thanks to its different shade than the customer providing original. Here one thing should be noted that less time is required for wash approval, easy to finish the remainder of the method.

#### 6. Comments:

After making the fit sample it should send to the customer for his or her comments. When the customer comments on the fit sample, it must be noted and following their comments for subsequent steps.

#### 7. P.P sample making:

P.P sample means a pre-production sample. It's the approved sample for production. P.P sample should be made as per buyer's instruction. Here all are actual. All comments must be maintained accurately. After making a P.P sample it should be sent to the customer for approval. After receiving P. P approval, a merchandiser can easily attend the production.

#### 8. Cutting the fabric:

When the comments are received from the customer, a woven garments merchandiser should cut the fabrics for the specified quantity by following the buyer's comments.

#### 9. Print and embroidery:

After cutting the material, the specified cutting pieces should send to the print and embroidery section with the buyer's comments about the print and embroidery and completed on an urgent basis.

#### 10. Sewing:

After completing the print and embroidery process, all the cutting pieces should be input within the sewing section with the buyer's comments about the stitching.

#### 11. Complete the washing process:

After completing the stitching process, a woven garments merchandiser should send all the clothes to the washing plant and follow-up it with the buyer's instructions.

#### 12. Finishing and QC check:

When the washing procedure will complete the merchandiser must be fork over all the clothes to the finishing section. After finishing, all the clothes are sent to the QC (Quality Controller) department.

#### 13. Shipment:

When the QC department approved the standard then these are sent to the customer by sea or a Store Department

As an employee of Amtranet Limited, I conducted my internship part in my current employing station in Amtranet Limited.

Here, I am going to explain the recruitment procedure of Amtranet Limited which I do the work physically.

## **2.2 Daily Activities of Store Room Management**

As an employee of Amtranet Limited I conducted my internship part in my current employing station in Amtranet Limited

Here, I am going to explain the Daily Activities of Store Room Management of Amtranet Limited which I do the work physically.

The fabric and accessories stores department is centralized within the garment industry and every one the material and accessories come to the present unit first from the supplier and audited here and kept until it's distributed to other units. For an export-oriented and bulk production of the apparel industry, it's essential to take care of a well-organized and well-equipped inventory system. Proper storeroom management within the garment industry can reduce wastage of materials and time interval. The most responsibility of this department is to store the entire staple necessary to supply garments. This department is subdivided into three sections. Storekeeper follows a robust and appropriate working procedure. . (Kiron& me, 2020)

### **Process Flow of Store Room Management**

**Product Receive:** Here invoice is collected by the Merchandiser, without the invoice, it's impossible to form the inventory, because there's an inventory of products within the invoice.

**Inventory:** After Comparing invoices with received goods, the products are placed in inventory.

**Inspection of Goods:** Generally 10% of products are inspected if found defects quite tolerance, the lot are going to be declared as reject and inform supplier for replacing. Trims and accessories are going to be inspected at 10 you look after the entire quantity. if found defects quite tolerance, then declared as reject.

**Shade segregation:** Here pieces of materials from all rolls need to cut and made a blanket to segregate shade.

**Shrinkage Test:** From the material roll, 10% roll is going to be selected for the shrinkage test. Piece of cloth cut from each roll at 50cm ×50cm and sends for shrinkage test. Shrinkage test reports then send to Pattern Section.

**Issuing Product:** the shop always issues products for the cutting and sewing section as per pre-requisition from that department.

**Sustain balance:** Store always keeps the sustained record after the issuing product within the cutting and sewing section

Store Keeping System:

- Unload fabrics
- Inventory within the warehouse.
- Fabrics inspection
- Recording within the register book and Excel sheet



## **Fabric Inspection:**

The first step to being administered when received from the supplier is to examine the material . Within the fabric inspection department, a four-point system is been used for bales, rolls, and yard goods inspection.

Fig: Fabric inspector inspecting fabrics

Fabric Inspection Procedure:

1. As soon because the fabric received, the material inspection department inspects the material .
2. From the supplier the material is received within the sort of Rolls.
3. Consistent with the order placed, they place a 5% extra order to the supplier to satisfy the need.
4. Fabric received within the sort of Takas could also be of length usually 100 meters, but it is often 45 or 65 meters also.
5. Every fabric has got to be inspected 100% just in case 15% with the consent of concerned merchandiser approvals.
6. Then the Takas or Rolls are inspected fully width on the table or machine under the great light for defects analyses.
7. they're following Four Point System, during which a complete of 100 meters of cloth is inspected and, if the points allotted for 100 meters are but ( ) 40 points is Rejected Check the material length & width & compare against the length declared by the supplier.
8. Fabric width 1½'' to 2'' tolerance of specified width is accepted.
9. For each lot / every fabric order keep 1mts of cloth for lab testing & for quality standard reference.
10. Inspection reports are produced. Copies of the report are presented to the concerned merchandiser & department.
11. Needle Issued for various Machine from Store:
- 12. Table: List of various sorts of Needle Issued from Store**

Machine Type	Needle Type	Needle Size
Plain Machine	DB×1	11
Button hole & 2N Machine	DP×5	11,16,14
BTN stitch and Bartech Machine	DP-7	14
Chain Stitch Machine	TV-7	11,14,16
Feed Off The Arm machine	TV-64	11,14,16
Overclock Machine	DC-1	9,11,14,16

Register & Report use in Store:

- Needle Change register
- Different types needle balance register
- In House fabric Inspection report (4 Point system)
- Fabric Shade report
- Accessories Inspection Report
- Shrinkage test Report
- Fabric receive packing List
- Button issue register
- Updated information put in Bin Card (It is updated information card for bin or rack,

Sewing Line Accessories item stored within the store:

- Yarn
- Thin yarn: 40/2, 50 /2,60/2
- Thick yarn: 20/2, 20/3
- Button
- Interlining
- Main Label
- Sub labels
- Size Label
- Fit label
- Care Label: It contains the care construction. differing types of care labels are given below.
  1. Washing Symbol
  2. Bleaching symbol
  3. Ironing Symbol
  4. Cleaning Symbol
  5. Drying Symbol

Finishing Line Accessories item stored within the store:

- Neck board
- Hangtag with sticker
- Tissue (when folding shirts)
- Poly

Machine utilized in Store:

- Fabric Inspection Machine
- Heat wear label cutting machine

## **2.3 Cutting department and working procedure:**

As an employee of Amtranet Limited, I conducted my internship part in my current employing station in Amtranet Limited

Here, I am going to explain of the Cutting department and working procedure of Amtranet Limited which I do the work physically.

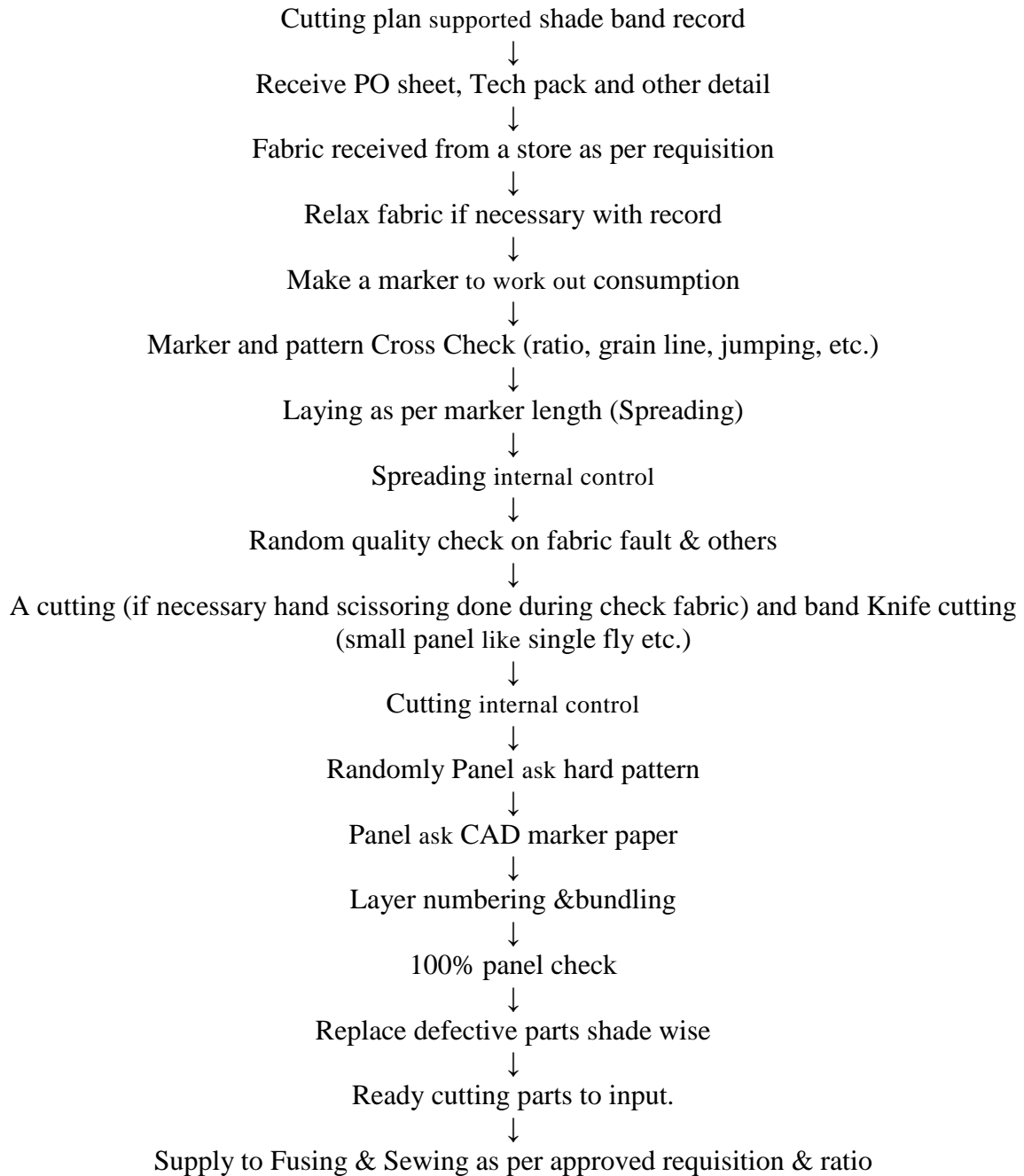
Cutting Process Procedure & Flow chart of garment industry

The cutting section within the garment industry

The room may be a section within the garments industry where to chop fabrics as per the

pattern, marker; cutting parts sew to usher in garments form. Cutting is that the most sensitive operation within the garment industry, cutter man work accuracy is that the key here to take care of good cutting quality. If you're associated with the garment industry or apparel manufacturing process you ought to know cutting work activities. Some certain rules and procedures need to maintain by the cutting department I'm giving a cutting process flow chart step by step below for your easy understanding.

### **Cutting Working Process Flow chart**



### **Flow Chart of clothes Cutting Section**

**The process flow is described briefly:**

### **Fabrics Relaxation**

Spandex fabrics are often relaxed from 24 to 48 hours before spreading as per customer requirements. Cotton fabric relaxation will depend upon customer requirements.

Pre-Spreading and Spreading internal control

1. Pattern and marker checking using approved sample
2. Pattern grain line
3. Spreading table marking lengthwise with allowance
4. Shade wise spreading by employing a fabrics shade chart
5. Spreading defects like leaning, bowing, skew, narrow goods, tension, and marking visual defects.

### **Cut Panel Inspection**

1. Quality an inspector will check Panel employing a hard pattern after cut from three different positions Top, Middle, and Bottom
2. If there any discrepancy, a correction are going to be immediate. If the panel found plus from hard patterns, it'll need to cut extra part. If the panel found minus from the hard pattern, will need to place the material under marker as per lay chart to remake again.
3. All cut panels will: The cut pieces are bundled finally.

**Input to Sewing:** The bundled cut piece ready for stitching.

be inspected to detect any sorts of fabric fault if any defective panel found, are going to be replaced from lay chart wise remnants by following the shade and pattern grain line.

**Production Order Sheet:** Cutting Section firstly takes the PO sheet. They determine all detailed information within the PO sheet especially size breakdown, size-wise and color-wise order quantity.

**Pattern receives:** They receive the approved pattern from the sample section.

**Marker Making:** After pattern receiving, they create markers consistent with the order sheet and pattern size.

**Fabric receives:** Fabric is that the main staple within the cutting section. All success depends on cutting. Therefore the cutting section has got to become serious once they receive the material. Is that the right fabric for the proper marker or not.

**Fabric Spreading:** Before spreading the material on the table they relax the unrolled fabric for 12-24 hr. After completing relaxation they spread the material on a table with proper tension.

**Marker Placing:** Marker may be a thin paper that carries all the clothes components and placed on fabric lay for cutting. Before cutting the marker from CAD placed on the material lay. Marker checked very carefully before placement on fabric.

**Cutting:** during this step, cutting is completed by a cutter machine. Straight knife cutting machine, Round knife cutting machines are mostly used for cutting.

**Sorting:** After cutting the cut parts are sorted consistent with shade, size-wise.

**Numbering & checking:** during this step, the cut parts are numbering and checking carefully in order that the only components never mistake. QC checks the cut parts. If any defect found they replace the cut piece.

Bundling the cut pieces are bundled finally.

**Input to Sewing:** The bundled cut piece ready for stitching.

## **2.4 Working process in Sewing department:**

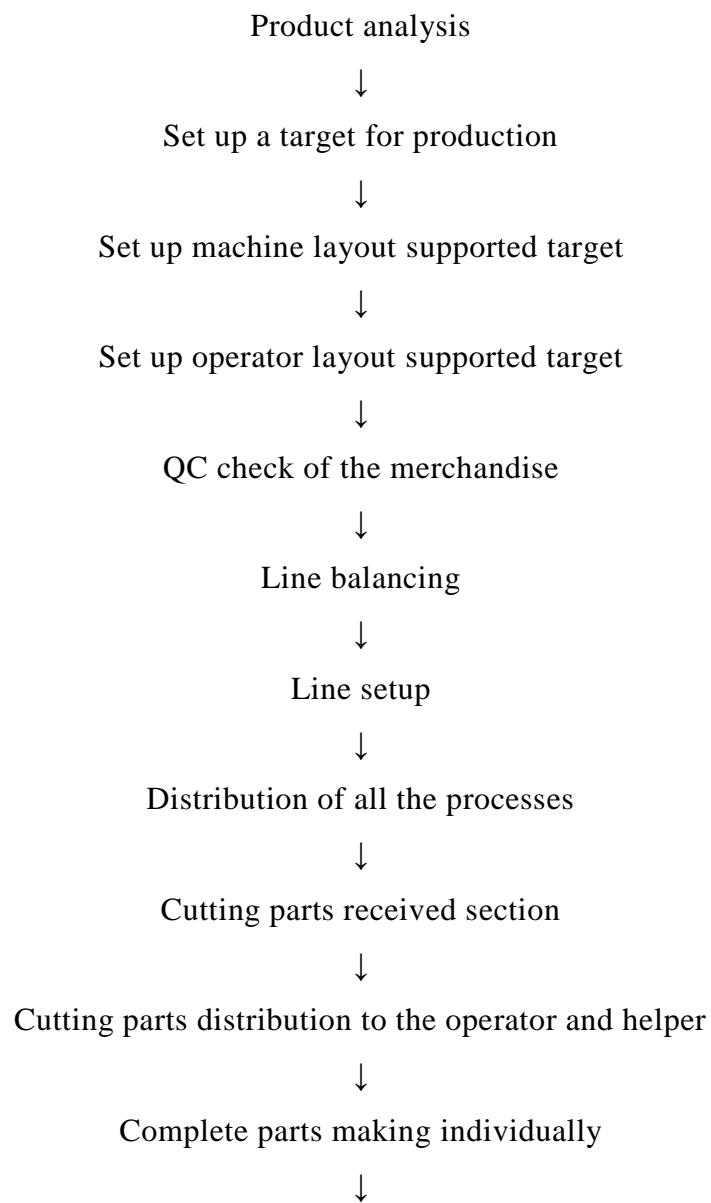
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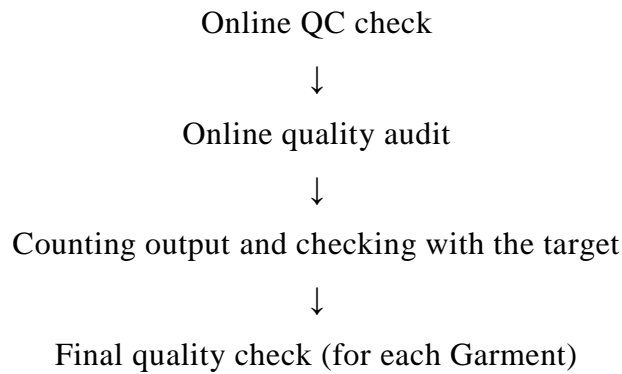
Here, I am going to explain the Working process in Sewing department of Amtranet Limited which I do the work physically.

Sewing is a crucial department within the garments manufacturing industry. All the parts of a garment are joined here by making stitches with the assistance of a needle and thread. Where the stitching process flow chart helps to form an entire garment easily. By maintaining the stitching process flow chart, an order is often completed during a timely.

### **Garments Sewing Department**

#### **Process Flow Chart for Garments Sewing Department:**





All the method sequence of the clothes sewing department are discussed below:

**Product analysis:**

In which way, a product has got to sew, it's decided here.

Set up a target for production:

Have to set a target for production supported the shipping schedule.

Set up machine layout supported target:

Have to prepare a machine setup layout supported daily target quantity.

Set up operator layout supported target:

Prepare operator layout found out supported machine quantity

**QC check of the product:**

Each garment must need to fulfill its right quality. So, product checking must be needed by QC.

**Line balancing:**

Line balancing may be a tool used for production lines to capacitate the flow line of production.

**Line setup:**

Line setup must be needed to realize healthy production.

**Distribution of all the processes:**

All the processes of stitching must be distributed to the proper person to avoid the damage of clothes .

**Cutting parts received section:**

A section, which received the cutting parts from the cutting department.

Cutting parts distribution to the operator and helper:

All the cutting parts should be distributed to the operator and helper after receiving those from the cutting department.

Complete parts making individually:

By joining all the parts, an entire garment has got to make here individually.

**Inline QC check:**

During the running of clothes sewing, a web QC check must be needed to form fault-free garments.

**Inline quality audit:**

An online quality audit must be needed here to point out the customer actual fault free product making process.

**Counting output and checking with the target:**

Comparing with the target quantity, all the output garments should be counted here to form sure achieving the target quantity.

**Final quality check (for each Garment):**

In this section, all the output garments are checked finally by maintaining one by one method to supply fault-free clothing into the finishing department.

**2.5 Daily Activities and Duties of an Industrial Engineer:**

As an employee of Amtranet Limited I conducted my internship part in my current employing station in Amtranet Limited.

Here, I am going to explain the daily activities and duties of an industrial engineer of Amtranet Limited which I do the work physically.

Daily activities and duties of an industrial engineer within the garments industry

1. Collect the road loading plan from the design department.
2. Attend in Pre-Production (PP) meeting.
3. Collect size set sample and make operation bulletin accordingly.
4. Collect operation bulletin and make a paper layout.
5. Ask maintenance responsible regarding the machine, folder, attachment, and technical personnel for technical issues.
6. Make discussion with a floor responsible about layout consistent with paper layout
7. Check Daily Non-productive time (NPT) and reduce machine breakdown time.
8. Make layout consistent with paper layout
9. Make line balancing consistent with target and capacity study during 2–3 days of layout.
10. Determine the bottleneck process and solve it.

11. If needed make 1-hour production studies within the required process.
12. Everyday input and output monitoring.
13. Give daily production target and follow-up production achievement.
14. Hourly production follow-up.
15. Everyday 5S related activities monitoring.
16. Cross-check thread consumption for each new style.
17. Ensure up to 65%-70% efficiency.
18. Workstation design
19. Operators' motion development by correcting faulty motion.
20. Reduce worker absenteeism and employee turnover
21. 5 pcs flow by reducing WIP
22. Reduce line setting time or throughput time.
23. Proper utilization of manpower by reducing unnecessary helping process.
24. Establish a gathering in-between QC and operators regarding critical points of the design while the layout.
25. Prepare daily Man/ Machine report
26. Developing move ship ratio.
27. Work to scale back absenteeism and operator turnover

**Duties and Responsibilities of an IE executive in cutting section**

1. Setting the cutting man ratio as per floor wise a monthly production plan.
2. Day-wise cutting efficiency calculation and work to extend efficiency.
3. Calculate SMV consistent with the style-wise operation by operation.
4. Cutting section weekly & monthly KPI reporting and performance follow-up.
5. Training about for the SMV, manpower reduces, efficiency increase, production develops, & wastage works reduce.
6. Hourly production monitoring & day wise Target production forecast & achieve.
7. Cutting capacity study
8. Make weekly and daily cutting plans.
9. Production increase purpose is going to be arranged instruments & tools & used technology.
10. Record the Non-productive Time (NPT)
11. If possible use the kaizen, Kanban system.



12. Follow the cutting WIP & printing, embroidery also. Because embroidery and printing associated with cutting.
13. Control the additional Overtime.
14. A day analyzes the running style & next style minimum of 20 minutes per day within the section.
15. determine the matter & give the permanent solution all at once (Responsible person of IE, Cutting QA, cutting SV, cutting in-charge, Cutting manager, Store officer, PM)
16. Follow up and ensure proper numbering, shade grouping, pattern number-wise cutting, and size breakdown.
17. Making style-wise cutting operation bulletin.
18. Style-wise consumption checking and confirming. Proper cutting wastage management.
19. Proper bundling and recut management.

### **Daily activities and duties of an industrial engineer within the garments industry**

1. To extend productivity
2. Process improvement by motion reduction.
3. Reduce add process (WIP) and take away the bottleneck.
4. Increase the efficiency of operations
5. Reduce the man-machine ratio
6. Process improvement to scale back cost, waste, and rejection reduce wastage and defects
7. Refill Key Performance Indicator (KPI) target.
8. Keep workplace and environment safe
9. Production planning and implementation
10. Evaluate operator and staff performance, disciplinary matters, training needs, and career development.
11. Set the target and make a draft, layout design of the machine requirement, material flow, and workstation to bring the simplest possible efficiency. Modern tools are wont to design the layout.
12. Monitor factory performance in terms of quality, delivery, cost-efficiency, and target improvements with the interior factory team and taking necessary corrective action.
13. Manpower balancing, target setting, and monitoring achievements.

### **2.6 Finishing Department:**

As an employee of Amtranet Limited, I conducted my internship part in my current employing station in Amtranet Limited.

Here, I am going to explain the Daily Activities and Duties of an Industrial Engineer of Amtranet Limited which I do the work physically.

### **Functions of Finishing Department in Garment Industry:**

In the production department garments are stitched by sewing machines. Stitched garments are finished in the finishing department. Finishing activities are performed prior to packing garments into poly bags. The major activities of a finishing department include thread trimming, checking garments, and ironing.[ Prasanta Sarkar-October 24, 2015]

The folding, tagging, and packing of clothes are wiped out the packing section within the finishing department. This post covers the main functions of the finishing department. Mind these functions may vary while there's a change in product categories.

### **Activities of the finishing department are listed below**

#### **1. Thread Trimming:**

In the stitching department, thread trails and thread chains aren't trimmed neatly. Uncut threads and thread tails in garments are trimmed within the finishing department by helpers. Uncut and loose threads on garments are considered defects.

#### **2. Checking garments:**

All garments are checked at the finishing stage for visuals and measurement. Finishing checkers check the entire garment inside and out. Checking is completed for garment detailing, like care labeling, and trims.

#### **3. Button attach and Butting holing:**

Products those have trimming like button, snap button, eyelets are attached in finishing section.

#### **4. Removing stains:**

Stains and spots are found on garments. Spots are removed employing a hand spot gun or by employing a stain removing machine before pressing. Dust and stains are often removed by machine washing. So, repeatedly finishing department wash garments inside the department.

#### **5. Repair work and mending**

Defective garments may have to repair for stitching and fabric defects. All repair activities are wiped out the finishing department itself rather than sending defective garments to the stitching department.

#### **6. Ironing garments:**

Garments are ironed employing a iron . this is often done to get rid of creases within the garment. For knitted garments measurements are set by the steam press. Vacuum pressing tables are used for garment pressing.

#### **7. Folding and tagging:**

Pressed garments are folded during a specified dimension. Tags, like price tags and hang tags are attached to the garment by means of a tagging gun or threads.

### **8. Packing garments:**

Finally, properly folded garments are packed into poly bags as per customer requirements. Individual poly bags are then packed into bigger cartons.

### **9. Preparation of packing list:**

The packing responsible prepares a packing list for the shipment. After packing is completed for an order, the finishing department informs the concerned merchant.

### **10. Internal shipment audits:**

The quality department performs internal shipment audits within the finishing department. This audit is completed before the ultimate inspection.

### **11. Documentation and reporting:**

Like other departments, the finishing department maintains production records for pressing and packing.

Apparel Quality control

In Garments Manufacturing, Quality

Quality Control in the garment industry

The garment industry is all about garments manufacturing, a producing industry about making a garment. Internal control in garments manufacturing is that the biggest deal for management, Satisfaction on the majority production, sample quality /workmanship what observed in garments manufacturing floor matching buyer expectation. Garments Quality requirements meet with correct quality, workmanship, and accepted measurement tolerance. Any chaos in quality issues garments manufacturer suffers most. Reporting is that the first works of quality controlling then work for an answer. Follow SOP in every work is that the key internal control.

### **Importance of internal control:**

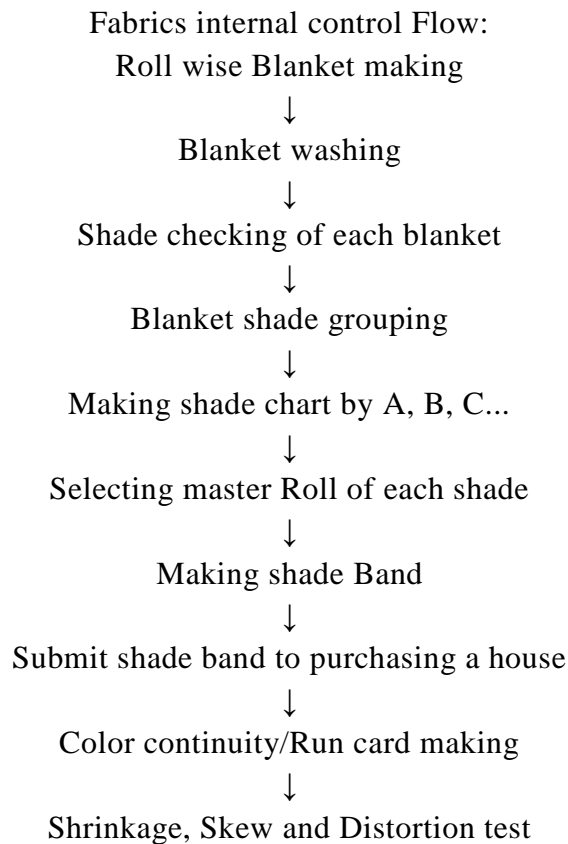
Quality is that the key to successful garment manufacturing. Nowadays Quality demand is extremely and everybody is extremely much fashion trend. If a clothes factory cannot meet the expected quality level they're going to lose order straightaway and affect business. Garments factory survive on Quality. Whenever the clothes industry penalizes an enormous amount of cash for failing in final quality inspection. Then the customer asks the factory to recheck all packed goods. Rechecking an entire lot and the re-final audit process is extremely much costly. Shipped garments have another quality audit process in of buyer overseas warehouse. If the customer found bad quality products in their audit, claim full FOB cost as their compensation. Quality is that the very first thing that garments manufacturers need to maintain.

## **2.7 Quality control of the garment industry**

### **Fabrics internal control**

There are many steps of cloth internal control within the garments industry. Fabrics shrinkage, distortion, shade, fabrics visual defects, etc. it's to try to inspections for all

rolls as per customer standards & segregate the rolls & properly distribute to cutting as per Shrinkage & shade wise.



### **Pattern internal control**

The pattern may be very sensitive and an unauthorized person not allowed editing the pattern. It's better to stay plus tendency altogether patterns. It also requires making separate patterns by considering shrinkage differences. There must a pattern library with ready a pattern of each style. Every stage pattern from sampling to bulk should keep separately and follow the change log as best practices of the clothes pattern section.

### **Cutting internal control**

Cutting isn't all about cut, bundling, and input to the stitching section. Cutting quality effects on end products like measurement, shape, fabrics defects on garments, etc.

1. Cutting is a crucial part of garments to stay standard qualities.
2. It must require staying the fabric's relaxation for a minimum of 24 hours. It must roll out all rolls by using fabric relaxation machines.
3. If fabrics are stretch fabrics, it's to handle separately by using smooth steel or plastic Pipe & got to pull the fabrics over that pipe to stay fabrics perfect.
4. After laying fabrics, it's to place a marker over the fabrics.
5. Then, it requires cutting the sting of laying fabrics. Also, divide laying fabrics into various big parts & keep a minimum of two hours & then, cut fabrics. It'll help to stay garments measurement unique.
6. Check fabric quality against approvals (construction /colors/weight/ etc....)

7. Maintain shade lots (ensure to match related components eg.-collar/cuff)
8. Ensure fabric relaxing procedures
9. Ensure layering, panel inspection & replacement SOP
10. Ensure numbering and bundling, proper storage, and transportation procedures.
11. Ensure outsourcing (print, EMB, etc....) procedures / SOP is following
12. Ensure outsourcing panels been checked 100% and removed/replace defective panels before input.
13. Ensure SOP follow-up at heat sealing/fusing pasting, etc.....
14. Follow up & update the cutting control chart.

### **Sewing internal control**

Through the received book, the stitching distributor will collect the whole wash garments from the washing section consistent with the buyer, style, lot, color, and size. There'll be a signature of the designated person within the wash distribution department. Within the Sewing section, a counter sample with buyer comments, size set comments; factory's P.P- meeting sheet, measurement sheet, and pass size set report are going to be hanging. All garments collected from the wash section should be separated consistent with the customer, style, color and size. Then marking the dimensions label, care label, the most labels to be applied. Following the sample after applying the label to the clothes, the buyer's label is going to be approved by the QA Department.

1. Follow key quality controlling points & check at regular intervals /check process & maintain records.
2. Provide pattern measurement to sewing QC to form sure before wash measurement and keep a record,
3. it's to stitch perfectly at the time of stitching garments & train operators & inform them about tolerance.
4. Strictly control to not cut by over lock machine.
5. Confirm no fraying out thanks to more handling within the sewing line, and set machine layout accordingly.
6. Confirm a separate pattern set to create supported shrinkage as per SOP.
7. Confirm wash QC measuring after wash goods batch to batch and keeping record out of tolerance quantity.
8. Ensure AQL 1.5 quality standards+ measurements at sewing section (maintain daily records)
9. Traffic signal system will increase operator quality and productivity
10. Confirm keeping record treatment recipe of out of tolerance garments and re-measuring report,
11. Send goods to washing shade wise bundle by bundle.
12. Follow the sample to work out the position of the care label.
13. Consistent with the sample, the hanger loop grading will need to be approved from the QA section.
14. Most label and size labels are going to be put within the middle. The side shouldn't be curved.
15. Most labels' backstitch contrast won't work.

16. Remove the dimensions mistake and always work on updating information for the label.

17. If there's a drag during production, you'll need to work on writing and tell the QA department.

### **Washing internal control**

Washing features a big role to stay control measurement, garments hand feels, and appearance. If washing can't meet the quality, garments put away as reject.

1. To stay measurement within tolerance, the washing plant has important roles.
2. it's to coach all washing-related personnel & create awareness regarding buyer-required wash & measurement tolerance standards.
3. They need to figure by memory & honestly maintain the recipe & timing. It's to see batch by batch after wash measurement.
4. it's to follow the customer wash team given instructions perfectly to take care of wash shade & measurement within tolerance.
5. it's to make a team which will measure the clothes in key points & then deliver goods.
6. The washing plant doesn't deliver any goods which are out of tolerance. They need to stay goods separately whose are out of tolerance.
7. Later, they need to transform with the clothes which are out of tolerance & then deliver goods.
8. Confirm to not pass out of tolerance garments into the finishing section by washing QC.
9. Confirm after wash measurement is correct before attaching finishing items.

### **Finishing internal control**

Finishing is finishing everything before the ultimate finished goods. Here the QC department has got to check whole garments' quality though there's an inspection system in cutting, sewing too.

All products, buyer, style, color, size, grading is going to be sent to the gate-up table gone by Iron QI. After the gate-up will use the QI number pass sticker within the ok garments.

1. All loose thread is going to be trimmed
2. Ironing/Pressing should be smooth, no crease mark is suitable
3. Right ticketing and proper placement must be ensured
4. Check & update packing /packaging accessories inventories beforehand
5. Ensure measurement accuracy
6. Ensure packing method, trims accuracy
7. Ensure packaging accuracy/ctn audit
8. Maintain AQL 2.5 quality standard at packing section (conduct daily inspections & advise reports)
9. All defects checked by the gate-up QI are going to be corrected and checked

## **Chapter 3**

### **3.1 Critical assessment of Internship work**

Following the buyer's confirmation of the order. As a merchandiser, I must examine all national and international business terms and conditions during order negotiation. Consider payment terms, testing parameter terms, and shipment conditions, among other things.

The production team or factory will build a size set sample and send it to us for pattern approval or call a size set meeting after final approval of the pre-production sample (I mean production permission from the buyer's side). After the factory receives permission for the size set sample, they can begin the bulk production.

The manufacturer will keep some processes given by the brand office during bulk production. Trims card permission from the local office, swatch permission from the local office, carton dimension clearance from the local office are just a few examples. The factory will contact us for a final inspection after the garments have been completed. Then our technical team or quality inspector will conduct a final examination. If the final inspection passes, the plant can begin making preparations for shipment. They conduct a final inspection, and there is an international system in place.

Example of some international inspection techniques are as under:

1.5 , 2.5 and 4.0. etc.

Inspection may be described, inside the clothing industry, because the visible examination or assessment of raw materials (such as material, Buttons, Zippers, stitching threads, Trims, and many others), in part completed additives of the garments and absolutely completed clothes on the subject of a few requirements, specifications or requirements.

#### **Prepare industrial documentation for cargo:**

Earlier than cargo the products, the manufacturing facility has to prepare some industrial documenting (with the aid of thinking about country wide and international terms and situation and laws). Without proper documentation they'll now not get charge. So right documentation is a completely essential component for the export business. Typically, underneath mentioned documentation needed for shipment-

Final inspection record:

Industrial bill:

Invoice of access:

Bill of Lading / Airway bill:

Import permission paper or import license:

Insurance paper / coverage certificate:

Purchase order sheet or Letter of credit (LC):

Fee receive is the very last level of woven

enterprise. Based on fee terms with client / client, they will ship fee. Right

here, I'm mentioning a few charge terms of knitwear export commercial

enterprise. Example of fee phrases-

Cash in advance (CA)

TT payment

Credit insurance



Open Account

Letter of credit (time)

Letter of credit (sight)

### **3.2 Application of Generic and Industry specific courses during internship**

The internship teaches me how to operate as part of a team rather than focused solely on myself. When I disagree with another member of the team, I gain patience as well. An internship exposes me to real-world job difficulties, allowing me to sharpen my problem-solving abilities. Work ethics, on the other hand, are only learned when I am exposed to the real world. So, make the most of my internship experiences and learn some adaptability skills while I'm here.

## Chapter 4

### Conclusion

During the accomplishment of this course , I felt that this path turned into a totally informative and full of information for us as well as, I felt that the maximum notion-provoking and interesting element become the internship length, where I am getting a brand new concept that the way to write an internship record. Despite the fact that, I have written this internship file based totally on my daily working experience, what I think to do daily basis in my office. This internship allows me to analyze my inner potentiality and boom my confidence and made me further knowledgeable for future obligations.

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