

# BRAC Business School

Report On: Apparel Manufacturing & Merchandising-  
Interstoff Apparels Ltd.

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Submission Date: 14<sup>th</sup> September, 2014

14th September'14

Mr. Suntu Kumar Ghosh  
Assistant Professor, BRAC Business School

Subject: Submission of the Internship Report

Dear Sir,

I am glad to inform you that I have completed my Internship Report on Garment Industry. I have gathered extensive knowledge while I was working on this project. Though there were some limitations and difficulties, I tried my best to eliminate those limitations with your help and your guidelines.

Since this is my first full form of project work on Garments sector, I tried my level best to finish this report as professional manure. I highly appreciate the opportunity to prepare this report.

Sincerely yours,  
Md. Mahmudul Hasan

Id: 11264007

## Acknowledgement

At first, I would like to thank almighty ALLAH for giving me the opportunity to complete my Internship Report. I want to thank to my supervisor **Mr. Suntu Kumar Ghosh** for tremendous support and constructive advice. I am pleased to all the people who have given their support and assistance. I am extremely grateful to all of them for the completion of my report successfully. **BRAC Business School** and **Interstoff Apparels Ltd.** provided me with enormous support and guidance for my internship program to be completed successfully.

Preparing this report was exciting and hard working at the same time. It is for the first time that I have been able to gather real life working experience in the garments factory.

I would like to express my foremost gratitude to other officials of **Interstoff Apparels Ltd.** especially **Md. Rezaul Karim** (Divisional Assistant Manager, Merchandising), **Md. Akhter Hosen** (Divisional Sr. Merchandiser), **Mr. Hasanul Haque** (Divisional Assistant Merchandiser) & **MD. Lutfor Rahman** (Sr.Executive, HR& Admin) and others, who helped me, gave me their valuable time and provided me the most relevant information on the basis of which I have prepared this report. I am thankful to all of them for helping and guiding me in a nice manner.

**Table of content**

Summary .....	05
Introduction .....	06
Sample section .....	10
Cutting Section .....	13
Sewing Section .....	16
Finishing Section .....	18
Production planning and control .....	20
Maintenance Section .....	21
Merchandising Section .....	23
My Job Responsibility.....	33
Other .....	34
Conclusion .....	36
References .....	37

## Summary

By means of practical knowledge it's not possible to apply the theoretical knowledge in the practical field. For any technical education, practical experience is almost equaled important in association with the theoretical knowledge.

The industrial attachment is the process which builds understanding, skills and attitude of the performer which improves his knowledge in boosting productivity and services. University education provides us vast theoretical knowledge as well as more practical attachment in despite of all these industrial attachments help me to be familiar with technical support of modern machinery and skillfulness about various processing stages.

It also provides us sufficient practical knowledge about production management, work study, efficiency, industrial management, purchasing, utility and maintenance of machinery and their operation techniques etc. The above mentioned cannot be achieved successfully by means of theoretical knowledge only. This is why it should be accomplished with practical knowledge in which it is based on. Industrial attachment makes us reliable to be accustomed with the industrial atmosphere and improve courage and inspiration to take self-responsibilities.

Garments study cannot be completed without factory based training because this industrial training minimizes the gap between theoretical and practical knowledge and makes us accustomed to industrial environment. I got an opportunity to complete three-month long industrial training at **Interstoff Apparels Ltd.** which is a 100% export-oriented composite industry. It has well planned & equipped fabric dyeing-finishing and garments units in addition to facilitate knitting and knitwear manufacturing.

## Chapter-01

### Introduction

#### Factory Profile:

**Interstoff Apparels Ltd.** is a modern knit manufacturer of high quality exportable fabrics and apparels in Bangladesh having all state of the art facilities. It is located Chandora (Pollibidyut), Kaliakoir, Gazipur which is one hour drive from capital city. It has established in September 2003 as a private limited company under joint stock of company. Today it has 12500 employees and equipped with latest machineries.

#### Our Vision:

To maximize synergistic benefit and become a market leader through the pursuit of high productivity, advance technological innovation and absolute customer satisfaction by leveraging on the strengths of our core business. In other word **Interstoff Apparels Ltd.** wants to be the best one knit apparel supply house and a market leader.

#### Our Mission:

- To focus on customer needs and wants continuously and manufacture high standard quality knit apparels.
- To establish us as the leading provider of knit apparels by serving international market especially for retailer.
- To strive to meet challenging market needs through a closer working relationship with business partner, innovative manufacturing process and maintaining standard customer service.

#### Our Values:

- Customer first.
- Pursuit of quality.
- Leverage through team work people is our valuable resources.
- Innovation and diversity.
- Efficiency improvement and cost control.

#### Our Goal:

- Customer satisfaction
- Competitive professional service
- Lower pricing
- Higher quality
- On time delivery
- Cost minimization
- Customer loyalty and reliability.

#### Garments product range:

- T-shirt
- Polo shirt
- Tank top
- Rubby shirt
- Sweat shirt
- Shorts
- Long Pant
- Cut and sewing T-Shirt
- Ladies any kinds of Lycra tops/ Dress/Pajamas and all sorts of knitted basic and fancy garments

#### Production capacity:

T-shirt: 18,500 pcs per-day.

Polo shirt: 5000 pcs per-day.

#### Primary Information:

Company Name: Interstoff Apparels Ltd.

BKMEA Membership Number: 1304

Membership Type: Ordinary Member

Year of Registration: 2008-01-16

#### Owner:

Contact Person Name: Md. Shahriar Alam

Contact Person Designation: Managing Director

#### Factory Address:

Chandra, (Pollibidyut)

Kaliakoir, Gazipur

Bangladesh

Telephone: 88-02-8817881, 9894544

Fax: 88-02-9289240

#### Head Office:

Address:

Road-35/A (New), House-43,

Gulshan-2, Dhaka-1212

Telephone: 88-02-9289103, 9289241

Fax: 88-02-8828458

Email: shahriar.alam@arafapparels.com

#### Factory Information:

Factory Category: A

Number of Machine: SEWING: 990

Knitting: 34

Dyeing: 14

Production Capacity: 1200000 pcs/year

Number of Employee (Workers): Male: 1850 | Female: 650 | Total: 2500

Yearly Turnover (In US\$): 3e+07

#### Utility:

#### **ETP (Effluent Treatment Plant) & WTP (Water Treatment Plant)**

Treated waste water, thus obtained from the plant will be practically colorless and will be suitable for discharge into the sewerage/main drain/canal.

- Power System
- Water Sources
- Boiler
- Air Compressor
- Geiterator
- Total Utility Space: 6,000 sq. ft.
- Total Manpower: 23 persons

#### Facilities:

The total factory area and floor space is 230000 sft. with lift facilities and stairs for general & emergency is owned by the employee and they have hygienically maintain washrooms, emergency treatment room & Child Care room.

#### Buyer's Name:

- M&S
- TESCO
- MOTHER CARE
- GAP
- COTTON ON
- H&M
- DEBENHAMS
- KALVIN KLEIN
- MANGO
- ZARA
- HURLEY
- SAINBUYR'S
- COLOUMBIA
- BROOK HAVEN
- JON LEWIIS



### Different Sections:

#### INTERSTOFF APPARELS LTD

- knitting Section
- knitting
- Inspection
- Dyeing section
- Batch section
- Dye house
- Dyeing lab
- Quality control
- Finishing
- Garments section
- Merchandising
- Sample
- Cutting & Cad
- Sewing section
- Finishing section
- Maintenance section
- Electrical
- Mechanical
- Store Section
- Administration Section
- Security Section
- Marketing Section
- Production Planning & Control
- Human Resource & Development Section

### Garment Section:

#### Organogram of Garment Section:

- **G.M**
- **Manager**
- **Assistant Manager**
- **Senior Executive**
- **Executive**
- **Production Officer**
- **Senior Supervisor**
- **Supervisor / Jr. Supervisor**
- **Production Operator**
- **Production Helper**

### **Apparel Section:**

This section is equipped with 570 units of sewing machine of Brother, Pegasus and Kansai special brand. These brands are reliable and dependable to produce quality knitwear. We always keep their standby generators ready to avoid interruption of production.

### **Product Development:**

A wide range of new products development by us meets requirement of the buyer. We generally produce the following types of fabrics:

- **Single Jersey 110-280 Gsm**
- **Pique 160-300 Gsm**
- **Lycra Pique 180-300 Gsm**
- **Lacoste 160-300Gsm**
- **Waffle 180-280Gsm**
- **Eng. Stripe (Pk & S/J) 160-250 Gsm**
- **Feeder Stripe (Pk & S/) 150-260 Gsm**
- **Drop Needle 180-260 Gsm**
- **Fleece (One Side Brush) 220-360 Gsm**
- **Lycra S/J (Full Feeder) 180-240 Gsm**
- **Lycra Rib 180-300Gsm**
- **Jacquard Design 150-230 Gsm**
- **Terry (2& 3 Thread) 180-320 Gsm**
- **Interlock 180-340 Gsm**
- **1x1& 2x2 Rib 180-280 Gsm**
- **Flat Knitted Solid & Tripping**
- **Collar & Cuff**

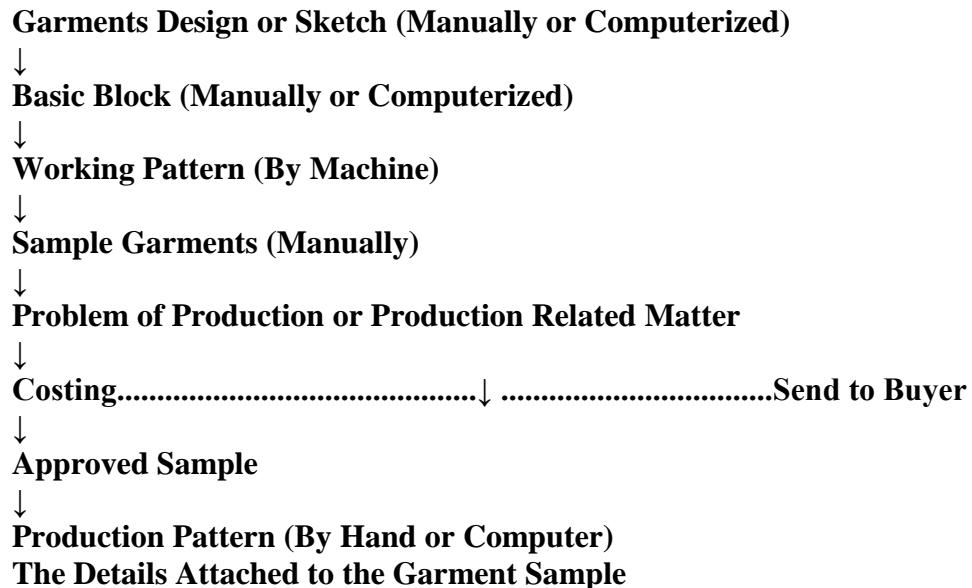
## **Chapter-02**

### **Sample section**

#### **SAMPLE:**

Garment samples are inevitably important and are developed to test before starting the bulk production. It means making a sample of the garment /fabric which requires to be sold. Sampling is one of the main processes in Garment Industry and it has a vital role in attracting buyers. Because the buyers generally places the order after they are satisfied with the quality of the samples in the process of garments sample making.

### Flow Chart of Sample Making:



After the confirmation of order, each sample sent to the buyer has the following details attached to it with the help of a tag. It contains the details pertaining to both what the buyer has demanded and what supplement fabric/trim etc they have used (if applicable).

- Ref No.
- Color
- Fabric
- Composition
- Construction
- Weight
- Description
- Quantity
- Style no. / Size
- Store

There is a sampling department in the company. But as the merchandiser is the person who is interacting with the buyers regarding samples and other requirements, this sampling department will work under the supervision of merchandising department. Also as the samples are to be made according to the buyer's price ranges and quality levels. The merchandiser has to advise sampling department suitably.

### Sequence of sample:

#### Development sample:

When we work with some buyers continuously, we will have to keep on sending samples to them very often. Whenever they have enquiries, buyer may need samples. Buyers may like to see the garments in a new fabric. For one enquiry, they may need samples in different fabrics to choose from. If they want to develop new style in new fabric, then we have to develop these samples.

**Fit Sample:** These samples are to be made after getting the order sheets. These samples are needed to check the measurements, style and fit. So they can be made in available similar fabrics but in the actual measurements and specifications. Samples are made with actual color and materials.

**Approval Sample:** In any discrete period of time, whenever it requires any revision in the sample, a mock-up is made as per new specification. It is sent to the buyer for his approval of the conformity that the revision is done correctly.

**Production sample:** It is a reference to the buyer that the bulk is being produced as per specification. Buyer wants to be assured that correct material is sourced and line workmanship confirm to the quality.

**Pre-production Sample/Size Set Sample:** When material for bulk production is arrived, a merchandiser prepares a sample with the actual material and sends to the buyer.

**Shipping Sample:** A shipping sample is kept from every pre-shipping inspection to be referred, if it is required, after the order has been delivered. Usually for any disputes shipping sample is important.

**Pattern making:** In our garments pattern is made by most of the time cad and sometimes hand. It is usually two types. They are; first pattern and second pattern.

#### □ **First Pattern**

First pattern is the first physical version of any garment as per the artwork done by designer and for developer.

Human Mind+ Sketch+ Paper Pattern+ Sample

Purpose: See the design work & test the fitting

Status: Nothing specific

Material: Available

Price: Not confirmed

Quantity: 1 (for customer) + 1 (for merchandiser)

Delivery: As per urgency

#### □ **Second Pattern**

Usually designer or developer always asks for some changes to the first pattern. Second pattern is made as per comments.

#### **Pattern cutting:**

Pattern masters are working in this factory. Pattern is being cut in two ways; manually and automatically (using CAD).

To make a pattern top part of a garments-

#### **Apparatus:**

- Pattern Paper
- Measurement Sheet
- Set square
- Measurement tape
- Pencil

#### **Working Procedure:**

- At first we take the pattern paper & fold 90° angles, then mark the pattern paper.
- Then we mark the body length (take allowance 2cm for hem& 1 cm for shoulder).

- Now we measure the back neck drop to the starting point of the pattern paper (seam allowance 1cm).
- Then take the front neck drop seam to seam (allowance is not needed).
- Now we measure the half of neck width seam to seam.
- Then take the shoulder length with 2cm for allowance.
- Now we take shoulder solve which is 2cm down of the shoulder point. At this point we measure the arm hole.
- Take chest of requirement and give a curve shape arm hole to solve
- Now we cut the pattern paper with the help of scissor.

To make a pattern bottom part of a garments-

**Apparatus:**

- Pattern Paper
- Measurement Sheet
- Set square
- Measurement tape
- Pencil

**Working Procedure:**

- At first we take the pattern paper & fold 90° angle, and then mark the pattern paper.
- Then we measure the half waist relaxed.
- Now we take waist band depth to the point of waist band.
- Then we measure the outside leg length & take cuff depth.
- To the waist depth we take front rise.
- Then we measure the thigh & shape a curve thigh to waist.
- At last we cut the pattern paper.

## Chapter-03

### Cutting section

**Cutting production process:**

Process sequence in cutting room:

Marker making

↓

Fabric spreading

↓

Placing marker paper on to the lay

↓

Fabric cutting

↓

Numbering



100% checking and parts replacing if needed



Shorting and bundling



Sewing or assembling

Operation of cutting during garments manufacturing are given below in details:

#### Marker Making:

The measuring department determines the fabric yardage needed for each style and size of the garments. Computer software helps the technicians to create the optimum fabric layout to suggest so that fabric can be used efficiently. Markers made in accordance to the patterns that are attached to the fabric with the help of adhesive stripping or staples. Markers are laid in such a way so that minimum possible fabric gets wasted during cutting operation. After marking the garments, manufacturer will get the idea of how much fabric he has to order in advance for the construction of garments. Therefore careful execution is important in this step. Computer marking is done on specialized software. In computerized marking, there is no need of large paper sheets for calculating the yardage; in fact, mathematical calculations are made instead to know how much fabric is required.

#### Fabric Spreading:

With the help of spreading machines, fabric is stacked on one another in reaches or lays that may go over 100 ft long and hundreds of plies (fabric pieces) thick.

#### Cutting:

The fabric is then cut with the help of cloth cutting machines suitable for the type of the cloth. These can be band cutters having similar work method like that of band saws, cutters having rotary blades, machines having reciprocal blades which saw up and down. Computerized machines use either blades or laser beams to cut the fabric in desired shapes.

#### Sorting/Bundling:

The sorter sorts the patterns according to size and design and makes bundles of them. This step requires much precision because of making bundles of mismatched patterns which can create severe problems. On each bundle there are specifications of the style size and the marker too is attached with it.

#### Sewing/Assembling:

The sorted bundles of fabrics are now ready to be stitched. Large garment manufacturers have their own sewing units while others use to give the fabrics on contract to other contractors. Stitching in-house is preferable because one can maintain quality control during the processing. On the other hand if contractors are hired keeping eye on quality which is difficult unless the contractor is one who precisely controls the process.

**Consumption of T-Shirt:**

**Equation:**  $\{(Body\ length + Sleeve\ length) * Chest\} * 2 * GSM / 10000 / 1000 * 5000$

**Solution:**

Body Length =  $50 + 6$  (Allowance) = 56 cm

Sleeve Length =  $15 + 3$  (Allowance) = 18 cm

Chest =  $37 + 3$  (Allowance) = 40 cm

GSM = 180 cm

=  $\{(56 + 18) * 40\} * 2 * 180 / 10000 / 1000 * 5000$

= 532.8 kg.

**Consumption of Collar:**

**Equation:**  $\{(Neck\ width + Front\ neck\ drop) * collar\ depth\} * 2 * GSM / 10000 / 1000 * 5000$

**Solution:**

Neck width =  $22 * 2 = 44$  cm

Front neck drop = 5 cm

Collar depth =  $2.5\ cm * 2 = 5$  cm

GSM = 240

=  $\{(44 + 5) * 5\} * 2 * 240 / 10000 / 1000 * 5000$

= 58.8 kg.

Total =  $532.8 + 58.8$  kg

= 591 kg

**Consumption of bottom part:**

Equation:  $Length * (width * 4) * G.S.M \div 10000 \div 1000 * 12$

Length =  $53 + 8 + 2 = 63$  cm

Width =  $18 * 4 + 6 = 78$  cm

G.S.M = 260

**Solution**

$[(63 * 78 * 260) \div 10000 \div 1000 * 12$

= 1.53 kgs

**Consumption of Pocket:**

Equation:  $Length * width * G.S.M \div 10000 \div 1000 * 12$

Length =  $11 + 2 = 13$  cm

Width = 10 cm

G.S.M = 260

**Solution**

$(13 * 10) * 260 \div 10000 \div 1000 * 12$

= 0.04056 kg

Total =  $1.53 + 0.04056$

1.5705 kg

## Chapter-04

### Sewing section

Process flow chart of sewing Section:

Receiving ⇨ Counting ⇨ Sewing ⇨ Quality check ⇨ Counting ⇨ Finishing

Different types of sewing machines:

- F/l machine
- P/L machine
- Other machine
- Over lock m/c
- Bar-take machine
- Button whole machine
- Button attaching machine e.t.c

#### Over lock m/c:

- Yamata 4<sup>th</sup> read O\L m\c
- Yamata 4<sup>th</sup> read O\L samsable m\c
- Yamata 6<sup>th</sup> read O\L m\c
- Juki 4<sup>th</sup> read O\L rowse cutter m\c
- Yamata 4<sup>th</sup> read O\L rullarm\c

#### Flat lock m/c:

- World Class Flat Lock Sewing Machine Yamata:
- Max Sewing Speed: 6000rpm
- Stitch Length: 1.2-4.4 mm
- Flat lock m/c

#### Plain m\c or other m\c:

- Brother plain m\c Juki plain m\c bangla
- Brother plain m\c Bangla Juki 2needle plain m\c
- Juki plain m\c auto Juki zigzag plain m\c
- F.D.M plain m\c auto Hikari zigzag plain m\c
- Brother H\S m\c auto Juki B\T m\c auto
- Brother B\S m\c auto Kansai P.M.D
- Brother B\T m\c auto Pequting m\c Kansai
- Juki H\S m\c auto Rib cutter m\c
- Juki B\S m\c auto Fusing m\c
- Juki B\S m\c auto



➤ **Level cutter m\c**

**Fault After Sewing:**

- Sleeves join puckering
- 4 point up down
- Ribs join puckering
- Body hem puckering
- Zigzag green line
- Neck top seam drop stitch
- Care level uneven
- Main level uneven
- Without tuck
- Side seam uneven
- Sleeve hem drop stitch\Broken stitch\ Puckering
- Shoulder tension tied\loose
- Back tape drop stitch\uneven
- Tuck in front part
- Raw edge
- Sleeve\body\shoulder needle damage
- Sizing mistake
- Measurement problem

**Machine parts:**

- **Thread stand**
- **Thread clamp**
- **Thread retainer**
- **Thread up level guide**
- **Thread Guide**
- **Pressure screw**
- **Needle clamp**
- **Needle**
- **Needle plate**
- **Feed dog**
- **Reverse lever**
- **Bobbin winder**
- **Pulley**
- **Foot**
- **Motor**
- **Safety guide**
- **Leg lifter**

All the parts starting from thread stand motor are checked whether are at satisfactory condition to run properly.

**Specifications:**

- Applicable to button-attaching for ordinary button
- Sews two or four holes
- Shacked button and others also can be sewn by equipping accessories.
- It's suitable for light and medium weight material.
- Single pedal starting.
- Automatic presser lifting.
- Automatic thread trimmer.
- Attaching firmly and reliably.

**Chapter-05****Finishing section****Finishing:**

“Finishing” is the addition of special detailing such as pleats, embroidery and screen printing to a garment. This includes hand stitching (unseen handwork done inside collars and lapels to give them shape) and its automated substitutes. This may also include adding buttons, hooks, eyes, or trims, as well as clipping loose threads. All finishing of moderate- and lower-priced garments is done by machine.

**Process flow chart of finishing:**

- Receiving
- Counting
- Quality check
- Spot removing (if needed)
- Fusing (if needed)
- Body top
- Ironing
- Getup measurement
- Getup check
- Metal detection check
- Hangering
- Sewing ticket
- Q.C
- Poly & cost tape
- Final inspection
- TRL
- Metal detector pass
- Cartooning

## Finishing Of Apparel:

Finishing is a vital part of apparels. Without finishing buyer will not accept the garments. So before going cartooning proper finishing have to be done. In finishing section there are some steps which are used for proper finishing of the apparels.

**Thread trimmings:** After making a apparel it may be arisen some extra thread in a apparel in finishing section. These extra threads should be removed from the apparel.

**Thread sucking:** In these process apparel fault is removed by the help of air. Thread sucking machine is removed the fault from a apparel quickly.

**Vacuum table for ironing:** In finishing section ironing is a most important part. Without ironing finishing is not complete. In finishing section ironing is done by the help of vacuum table.

**Production record:** How many products are finishing in the finishing section is recorded here.

## Machinery of Finishing Section:

- Fusing
- Dryer machine
- Washing machine
- Stem press machine
- Stain remover machine
- Iron
- The metal detector machine

## Finishing Department: Document

- Inspection Report
- Finishing Report
- Packing list
- Tag Pins & Broken needle Record
- Shipment document follow-up report sends to the planning & commercial department
- Order quantity sheet
- Metal detector Report
- Finishing check Report - Spot, Alter, Rejection, Basket, Defect

The metal-detector machine is basically used in the finishing department after getting the poly & before cartooning.

## Chapter-06

### Production planning and Control section

#### Production planning and controlling process in apparel:

- Taking order from marketing/ Merchandising division:
- Marketing or Merchandising division supplied fabric orders to the planning and control division by a specific format.

#### Analyzing the orders:

After getting the fabric order, this section analyzes the orders according to buyers order quantity, type of orders (type of fabric, color to be dyed etc.) and delivery date etc. This section plans for required quantity of fabric to be knitted, knitting balance, fabrics to be dyed, dyeing balance, RFD (ready for delivery), RFD balance, delivery fabric & delivery balance etc.

#### Planning for knitting:

This section plans for knitting production. Following parameters are important for the planning of knitting the fabric -

- **Order quantity** (required amount of fabric to be knitted)
- **Type of fabric to be knitted** (S/J, rib, interlock)
- **No of machine to be used**
- **Type of yarn used**
- **Resources of yarn**
- **Fabric GSM, width etc**

#### Planning for dyeing the fabric:

Production planning for dyeing is called "Batch plan". Batch plan is prepared according to the batch no, fabric construction, color, width, GSM and priority of delivery etc and written in a batch card.

#### Planning for finishing the fabric:

Finishing schedule are same as the dyeing. After dyeing, materials go to the finishing section with the batch plan. Finishing data is written to the batch card and is informed to the planning section. However, this section always forces to all the departments to finish all the work within the delivery time given by the buyers. Thus, it plays a very important role in the success of the company.

#### Planning for the Garments:

After the finishing process the finished fabrics are ready for producing garments. For the production of garments, these fabrics have to pass through some processes. They are;

- Laying
- Cutting

- Sorting
- Sewing
- Finishing
- Packing etc.

All these processes are planned according to the shipment schedule.

## Chapter-07

### Maintenance section

#### **Maintenance:**

Maintenance is the action taken to prevent a device or component from falling or to repair normal equipment degradation experience with the operation of the device to keep it in proper working order.

#### **Types of maintenance:**

Maintenance can be classified as following ways;

##### **1. Reactive /Break down maintenance:**

Reactive maintenance is basically the “run it till it breaks” maintenance mode. No action or efforts are taken to maintain the equipment as the designer originally intended to ensure the design.

- a) Advantage:
  - i. Low cost
  - ii. Less staff

- b) Disadvantages:

- i. Increased cost due to unplanned downtime of equipment.
- ii. If it is critical piece of equipment that needs to be back on line quickly, we will have to pay maintenance overtime cost.
- iii. Possible secondary equipment or process damage from equipment failure

##### **2. Preventive\ Schedule maintenance:**

Preventive maintenance can be defined as an action performed on a time or machine based schedule that detect, preclude or mitigate degradation of a component or system with the aim of sustaining or extending its useful life time to an acceptable level.

- a. Advantage:
  - i. Increase component life cycle
  - ii. Flexibility allows for the adjustment of maintenance periodicity

- b. Disadvantage:

- i. Labor intensive
- ii. Includes performance of unneeded maintenance

### **3. Predictive\ Planned maintenance:**

Predictive maintenance can be defined as a measurement that detects the degradation of machine there by allowing casual stressor to be eliminated or controlled prior to any significant deterioration in the component of physical state. Result indicates current and future functional capability.

#### **1. Advantage:**

- a. Increased component operational life and availability
- b. Better product quality
- c. Improved worker and environmental safety
- d. Decrease in cost for parts and labor

#### **2. Disadvantage:**

- a. Increased investment in diagnostic equipment
- b. Increased investment

### **Maintenance procedure:**

In our factory routine maintenance should be followed. We schedule a monthly maintenance & check or maintain machine one by one. In our garments we provide a one mechanics in a three line. But some foreign factories provide one machines in one line. Overall 500 hundred sewing machines are available in our sewing departments. There are varieties type of sewing machines are available in our factory. Such as 17 needles, 25 needles, 4 needles sewing machines which are used for decorative purpose. These types of machines are very costly. So we need proper maintenance to run this machine. On every floor in this industry we have 3 or 5 maintenance operators. When they see any problem of the machine, they repair this immediately. If they can't repair, then they take the machine in the maintenance room to solve this problem.

Some problem of the machine and how it solves:

#### **Needle Broken:**

Cause: Machine timing is not adjusting properly. Needle is fall over the machine plate. Needle is also broken due to working or handling problem of the operator.

Solve: Check the machine timing & set it properly. Well trained operator should be needed.

#### **Unwanted cutting thread:**

Cause: If needle eye is broken or timing is not set up properly.

Solve: Check the needle eye, Set up proper timing, provide well thread in the machine.

#### **False sewing in the machine:**

Cause: Needle is not well. Timing is not set up correctly.

Solve: Dust should be removed from the machine, set timing, provide well thread & needle.

### **Machine description**

Type of Machine Quantity (Sets) Sewing Capacity:

#### A. General Sewing Machine:

- Single Needle 2479
- Double Needle 712
- Over lock 630
- Kansai 187
- Bar Tack 11
- Button Stitch 120
- Button Hole 120
- Eyelet Button hole 54
- Bottom Hem 18 40,000 pieces per day
- Flat Lock 28
- Snap Button 129
- Blind Stitch 14
- Feed of the Arm 145
- Cutter m\c 62
- Heat Cutter 13
- Fusing m\c 07
- Over lock Elastic Attaching 03

## Chapter-08

### Merchandising Section

#### Merchandising

Merchandising is a process through which products re-planned, developed, executed and presented to the buyer. It includes directing and overseeing the development of product line from start to finish. Marketing and merchandising department are the team of merchandisers and marketers who work together under a profit controls head. Merchandisers handle the foreign buyers. The teams are made according to the buyers being handled. Merchandising is the department which mediates marketing and production departments. Sometimes merchandising department will have to do costing and pricing also. In any case, the merchandiser is the person whose responsibility is to execute the orders perfectly as per the costing and pricing. So it is a very valuable department. Following are the main responsibilities of merchandisers.

#### Two type of merchandising done in garment exports

- Marketing merchandising
- Product merchandising

#### Marketing merchandising:

Main function of marketing merchandising is

- Product Development
- Costing
- Ordering Marketing merchandising is to bring orders costly products development and it has direct contact with the buyer.

### **Product merchandising:**

Product merchandising is done in the unit. This includes all the responsibilities from sourcing to finishing, first sample onwards, the products merchandising work start and ends till shipment.

### **Merchandiser's other Responsibilities**

Apart from acting as a mediator between buyer and the production unit, merchandiser also has the responsibility to advise and assist other departments right from sampling to final shipping.

### **A Merchandisers key responsibility is as follows:**

- Product Development
- Market and product Analysis
- Selling the concept
- Booking orders
- Confirming Deliveries
- Designing and Sampling
- Costing
- Raw Material
- Flow Monitoring
- Production Follow Ups
- Payments Follows
- Internal & external communication
- Sampling
- Lab dips
- Accessories & trims Preparing internal order sheets
- Preparing purchase orders
- Advising and assisting production
- Accessories & trims
- Preparing internal order sheets
- Preparing purchase orders
- Advising and assisting production
- Advising quality department t about quality level
- Mediating production and quality department
- Giving shipping instructions and following shipping
- Helping documentation department
- Taking responsibility for inspections and
- Following up the shipment



## **Functioning of Merchandise Department**

### **Department Structure:**

- Marketing Merchandiser
- Head Merchandiser
- Senior Merchandiser
- Junior Merchandiser

### **Coordination regarding shipping:**

It is one of the responsibilities of merchandiser to follow the shipping. He has to give the shipping instructions clearly to the production, quality, documents and shipping departments.

It is not only enough to give the instructions to them, but also it is the merchandiser's duty to coordinate with these departments for smooth shipping and to follow them closely.

### **Taking responsibility for inspections:**

If we work with buying offices or buying agents or buyer's liaison offices, there will be many inspections like pilot batch, initial, online, mid final and final. If we work with the buyers directly, the number of inspections will be limited. The buyer may like to see the inspection in the middle of the production or final inspection. Sometimes, the buyer may ask any third party to do the inspections.

### **Following shipment:**

Finally the merchandiser has to make sure the vessel details, ETA, ETD, shipping lines, B/L instructions and documents of vessel connections, freight & other charges are in accordance with the buyer's instructions and our suitability.

### **Helping documentation department:**

Though the documentation department takes care of all documents, it is preferable for the merchandiser to check the important things like the prices, quantity, description, Category, HS code, consignee's & consignor's addresses, payment terms, delivery terms, purchase order number, port discharge etc.

### **Advising production and quality department about quality level:**

Each garment will have different acceptable quality level according to the buyer's specification and tolerance level. Though the production and quality departments are taking responsibility of quality, it is the merchandiser and the marketing manager who decide whether the quality is up to the acceptable level or not. So the merchandiser should advise and instruct the production and quality departments about the quality and tolerance levels of garment.

### **Advising and assisting production:**

As the merchandiser is the person who knows better about buyer's approvals, comments and instruction, for the better flawless production he will have to advise and assist production. As he has to guarantee the quality to the buyer, though there is a separate production departments, the merchandiser should know about day to day affairs, status and problems of each stage of production.

### **Preparing purchase orders:**

Merchandiser has to prepare purchase orders. They should advise to the purchase department. The description, quantity, quality standards, price or price target, delivery target and payment terms of the required raw materials, accessories and trims should be clearly mentioned in the purchase orders. The clear information will help everybody to understand the requirements clearly.

**Preparing internal order sheet:**

The merchandising department has to prepare internal order sheets based on the buyer's order sheets. From the merchandising department only, the other departments will get all the instructions and specifications. The merchandiser should be aware of the value of his job. So while preparing internal orders sheets, he should prepare them by taking care of each and every detail. He may omit some information to other departments, like buyer's address, export price delivery date etc. The other departments may not need this information.

**Accessories and Trims:**

The merchandiser has to send the accessories and trims like buttons, zippers, labels, hang tags, poly bags, inner boards etc to buyer for approval. It is better to send in 2 or 3 types or qualities for getting approval. This will save a good time.

**Internal & external communication:**

Earlier, we had seen the importance of communication with buyers. By the same way, internal communication is also very much valuable. As the other departments will follow the instructions given by the merchandising department, they have very high value. Other departments don't know the buyer's instructions. They know only the merchandising department's instructions. So it is the sole responsibility of merchandising department to instruct other departments about the specifications and instructions of buyer's orders clearly. Even a small omission, mistake or deviation of instruction may create big problems. Sometimes, they may not be correctable. Hence all the instructions to be double checked before being informed to other departments. Prevention is better than cure.

**Merchandising department and its activities:**

The "Merchandising" is known to the persons specially involved in garments trade. The term has been derived from the merchandise. Merchandise means goods that are bought & sold. The term "Merchandising" may be defined as: Person who merchandises the goods, specifically for export purpose. Garments merchandises means buying raw materials & accessories, producing garments, maintaining required quality level and exporting the garments within schedule time. From the above definitions, we can say that a person involved in garments merchandising needs a wide range of knowledge & skill to perform his job successfully. The job itself is technical and general as well.

**Merchandisers should have the following basic qualifications:**

- Good command in English and adequate knowledge of technical terms for accuracy and efficiency
- Good knowledge of fiber, yarn, fabric, dyeing, printing, finishing, dyes, color fastness, garment production etc.
- Clear conception of the usual potential quality problems in the garments manufacturing

- Good knowledge of the usual raw material inspection systems & garments inspection systems
- Knowledge of the quota system used in each of the producing countries, duty rates, customers regulations, shipping and banking documents etc.

### **Highlights of merchandising works:**

1. To collect buyers addresses
2. To establish contact with the buyers sending formal letters or profile
3. Receiving buyer's response and providing price quotation along with making of sample as counter or approval
4. Receiving samples comments from the buyer
5. To furnish the pro-forma invoice and sending the buyer
6. Taking necessary steps to develop lab-dips of the materials (FAB & ACC)
7. Receiving the master L/C & verify clauses of the L/C both in technical and commercial point of view
8. To confirm floor booking of the order with factory
9. To confirm transfer authentication of the L/C and favor of fact
10. Pushing the factory taking initial procurement to open the back-to-back L/C by bank
11. Searching reliable fabric and accessories sources and finalize supplying of the required materials relevant to the order
12. To monitor the shipment of raw materials and arrival in the factory
13. To monitor of the supplying materials while receiving factory
14. To order the test cutting with quality
15. To check/inspect/advise for the bulk production
16. To monitor production, quality and delivery
17. To advise factory if buyer change any instruction both in technical/commercial point of view to the order
18. Collecting order from the buyers
19. Sending Samples to the buyer for approval
20. Collecting accessories form different Suppliers
21. Giving order to the specified garment factory
22. Communicate with all the respective parties
23. Coordinating the whole process at a regular manner

### **Price negotiation & order confirmation:**

Price negotiation is the most important part of merchandising and marketing. Order confirmation depends on how cleverly and logically one can negotiate price with buyer. Competitive price is the key element of price negotiation. To make competitive price first of all we have to know about the product that buyers want to buy from us. Then we will calculate the raw material price, manufacturing cost & shipping terms of the product.

### **How to prepare garment price:**

There are processes for fixation of export prices which are as follows:

1. FOB (free On Board).
2. C & F (Cost & Freight).
3. CIF (Cost Insurance & Freight).

FOB means 'free on board'. Exporters don't bear the cost of freight of shipper air. It is buyer (importer) who himself bears the freight of ship or air. C & F means Cost of Freight; FOB (Cost) + Freight of Ship = C & F. In the case, ship or air freight is carried by the exporter while quoting price, the exporter quotes price a bit higher than FOB. The whole responsibility including the sending of goods to the selected port of the importer is shouldered by the exporter ship or air. Freight may vary from place to place and shippers to shippers. CIF means cost insurance & Freight. In this case in addition to the bearing of freight the cost of insurance is also borne by the exporter. The exporter, while quoting CIF price, quotes much higher than C&F value; C & F + Insurance = CIF. Normally we can add 1-2% insurance charge with CIF price during the fixation of FOB price of a T-Shirt. Following notes are to be followed carefully:

1. Cost of fabrics/dzn. Garments.
2. Cost of accessories/dzn garments.
3. C.M (Cost of Manufacturing) /dzn garments
4. Cost of embellishment (if any) likes print, embroidery etc
5. Commercial cost (Commission, if any)

#### **Fabrics Price:**

Knit fabric price is the sum of the below factors;

1. Yarn price per kg (approx \$6.40)
2. Knitting price per kg (approx \$0.15)
3. Dyeing price per kg (approx \$1.5)
4. Finishing price per kg (approx \$0.50)

Thus the fabric price per kg comes  $(\$6.40 + \$0.15 + \$1.50 + \$0.50) = \$8.55$ . Fabrics consumption for European T-Shirt is 3.00kgs per dozen. So fabrics price per dozen is  $(3.00 * 8.55) = \$25.65$

#### **Trimming Price:**

Trims cover all the trims used in the garments except the basic fabric. There are hundreds of items used to manufacture the garments, proper selection of trims and its quality are very important for styling. Otherwise the garment may be rejected or returned by the customers. As our assignment is based on basic T-Shirt, normally care label, main label, size label, sewing thread, poly bag price ticket, carton, tag pin, gum tape etc trims are used in a basic T-Shirt. Normally the trims cost per dozen which comes approx. \$2.00 for basic T-Shirt.

#### **CM calculation:**

CM means cost of cutting to making. It includes the cost of cutting, cost of sewing and the cost of packing. It also includes the overhead cost of the plant and the profit margin. Generally CM per dozen of a basic T-Shirt is \$5.00

#### **Other embellishment calculation:**

Other embellishment means print, embroidery, patch etc that makes any garment more attractive for customer. As our assignment is based on basic T-Shirt, we are not calculating any embellishment cost.

**Commercial cost:**

Commercial cost includes LC commission, UD commission, EXP commission, documentation cost, goods sent to forwarder cost etc. For basic T-Shirt it will save if we calculate commercial cost \$1.00 per dozen.

**Final garments cost & order confirmation:**

Now the final garments cost per dozen is the sum of fabrics cost, trimming cost, CM cost, other embellishment cost & commercial cost. So the garments price per dozen comes  $(\$25.65 + \$2.0 + \$5.00 + \$1.00) = \$33.65$ . Here T-Shirt per piece is  $(\$33.65/12p) \$$ . Thus we make manufacturing price & negotiate this price with Buyer. After negotiating price with the buyer we receive order confirmation & L/C from the buyer to execute the order.

**Fabrics & Accessories booking****Fabric booking:**

After receiving order confirmation from buyer we chase buyer to provide us PO sheet (purchase order) which includes color & size wise break down of the total quantity. Then we will go for knit fabrics booking. Yarn is the first element of knit fabric. So to make fabric we have to book suitable yarn from home or abroad. To import yarn from abroad it needs approximately 44/45 days and to buy yarn from Bangladesh it needs approximately 30 days. After receiving yarn we go for fabrics knitting and then coloring of the fabrics. After dyeing fabrics, it is ready to make garments.

**Trims booking:**

Various kinds of trims are used in basic T-Shirt. To buy or make booking for trims firstly, we have to know from buyer what kind of trims they required for their T-Shirt. After collecting trimming information from buyer, we have to develop the same and need to get approval. Then we will book trims from respective trims manufacturing house. It is very important to buy all the necessary trims before start garments production.

**Merchandising activities on product development:**

Product development is another important responsibility for RMG merchandisers. Before go to bulk production various stage of sampling has to pass in order to develop a product for end user.

**Sequence of Sampling:**

- Counter sample/Style sample/Salesmen sample
- Fitting sample/ Size set sample
- Pre-Production.
- Production Sample.
- Shipping Sample.
- Photo/ Advertisement/Catalog Sample

**Steps of Garment Sample Approval:****Step1**

Style sample (Closest available fabrics)

**Step2**

Size Set sample (Closest available fabrics)

**Step-3**

Pre- production sample (In Actual)

**Step4**

Production sample (In Actual)

**Trims:**

Trims cover all the trims used in the garments except the basic fabric. There're hundreds of items used to manufacture the garments, proper selection of trims and its quality are very important for styling. Otherwise the garment may be rejected or returned by the customers.

**Style sample development:**

The main object to develop style sample is to approve the styling of a product that a designer imagine first. This sample is usually made by available color but actual design, construction and weight. But sometimes buyers ask sample to make by actual color.

**Preproduction sample development:**

The main object to develop preproduction sample is to confirm the final product from buyer. After receiving preproduction sample we can start final bulk production.

**Production sample development:**

The main object to develop production sample is to confirm ultimate buyer that's what we produce and ship to sell for end user.

**Merchandising activities on production follow up****Production plan:**

After receiving a purchase order from buyer, merchandisers have to sit with production planners to make a production plan. Production plan contains below things:

- 1) Planned date to start knitting to make the required fabrics
- 2) Planned date to start dyeing to color the fabrics
- 3) Planned date to start cutting fabrics
- 4) Planned date to start sewing the required garments
- 5) Planned date to start packing the required garments
- 6) Planned date to hand over finished goods to buyer nominated sea or air forwarder

**Trail test cutting:**

Before start bulk cutting to adjust pattern, we cut each size and each color 10 or 15pcs. This is called test cutting. After approved trail or test cutting we can go for bulk cutting.

**Sewing:**

Sewing section is the section where cutting part are joined to make a garments. In sewing section sewing machines are set up according to the kind of final product.

**Packing:**

After sewing garments, it is packed into packing section. Here we put iron on garments, add various kinds of hangtags, poly bags and make garments ready to ship to the buyer.

**Price Quotation for Garment Buyers****There are following process for fixation price;****FOB:** Free on board

Exporter does not bear the cost of freight of ship or air. It is buyer who himself bears the cost of freight of ship or air.

**C&F:** Cost and Freight

Free on board + Freight. In this case ship or air freight is carried by the exporter while quoting price.

**CIF:** Cost insurance and Freight

Free on board freight and insurance. In this case in addition to the bearing of freight the cost of insurance is also borne by the exporter.

**CMT:** Cost of Manufacturing and Trimming

Manufacturer or exporter will get only the making charge of the garments. At sometimes they will get supplied fabrics by the buyers.

**Costing****How to calculate the price of a Polo Shirt:**

Description: 100% cotton pique polo shirt with two buttons at front placket or any pocket. At first we will calculate the consumption of body fabric from size spec which we have got from the buyer.

Suppose:

The body fabric consumption is 4.05 kg /dozen

So, total yarn consumption will be:  $4.05 + 9$

$= 4.05 + 0.3645 = 4.41 \text{ kg / dozen}$

ii) The current yarn price is \$4.00/kg

iii) The current pique knitting cost is \$0.20/kg (Knitted by circular knit S/J m/c)

iv) Average color dyeing cost is \$1.21/kg

v) Normally Collar & cuff consumption is 60 gm/body (1 pc collar & 2 pcs cuff) So, for 12pcs it will be:  $0.06 \times 12 + 9\% = 0.78 \text{ kg/dozen}$

vi) Collar & cuff knitting cost is \$0.05 (knitted by flat knitting m/c)

**Now start costing**

1<sup>st</sup> step: Body fabric cost calculation:

Yarn price / kg = \$4.00

Knitting cost /kg = \$0.20

Dyeing cost / kg = \$1.21

Finished fabric cost = \$5.41

2nd step: Collar & cuff cost calculation

Yarn cost/doz =  $0.78 \times \$4.00 = \$3.12$

Knitting cost/doz =  $\$0.05 \times 12 = \$0.60$

Dyeing cost:  $0.78 \times \$1.21 = \$0.94$

Collar & cuff cost /doz =  $\$4.94$

3rd Step: Total production cost

Body fabric cost ( $4.41 \text{ kg} \times \$5.41$ ) =  $\$23.86$  /doz

Collar & cuff cost=  $\$4.66$ /doz

CM =  $\$6.00$  /doz

Accessories Cost =  $\$3.00$  /doz

Total production cost =  $\$37.52$ / doz

Final Step

Fob pricing of per piece polo shirt:

Total production cost =  $\$37.52$  /doz

Commercial cost will be (3%) =  $\$0.95$  / doz (Except CM)

Profit will (20% of CM) =

$\$1.20$ /doz.....

Total FOB price (doz) =  $\$39.67$  /doz

Fob price per piece will be =  $\$3.3058$  / pc

Final quoted price for buyer =  $\$3.35$  / pc (FOB)

These are the steps to quote the price.

### Buyer's like or dislike in a merchandiser:

#### What buyers like:

- Good presentation: Calculation, paper, and scale etc.
- Manner: Politeness, good behavior, smart talking
- Time awareness: You should be punctual & sincere.
- Knowledge: About your product, company & about buyers
- Sensibility to the needs: Listening, understanding
- Appearance: Smart dress, formal dress and casual dress

#### What buyers dislike:

- Poor sales presentation
- Unacceptable manner
- Time wasting
- Outsmart appearance
- Poor knowledge



## Chapter-09

### Job Responsibility

#### **My job responsibilities:**

There are several job responsibilities which are occupied by me as I looked after the buyer “Mother Care”. In my job responsibilities, most of the time I was the helping hand of the merchandiser. My duty was to facilitate them. Most of the cases, it was not the final draft. These are as follows;

#### **Internal & external communication:**

Sometimes there are internal and external communications like; department to department, department to section, factory to factory, factory to buying house etc. There are so many internal departments in this garments factory; audit, sample, administrative, inspection, knitting, dyeing, finishing, store, security & safety, cutting, sewing, planning, research & development, lab, CAD and pattern. These are all the internal departments and sections with whom I had to make communications in several purposes by the requirements of the merchandising department. There are also some external communications with the buying house “Mother Care”, the printing factory “NSN”, the embroidery factory “Anam Clothing Ltd” and the factory “South East Textile Ltd” for out sourcing.

#### **Fabric booking:**

Fabric booking is an important task. Before doing fabric booking, getting consumption from the department of CAD is essential. CAD’s duty is to calculate how much fabric is needed for each garment. On the basis of that calculation we can easily find out the total amount of fabric. Then my boss handed over the task to me for fabric booking. He gave me the buyer PO sheet (purchase order) where the fabric details are given like, color & size wise break down of the total quantity and the marker or consumption of fabric per garment. After preparing it I mailed it to the concerned person and my boss for acknowledgement.

#### **Trims booking:**

Trims booking are quite similar to fabric booking. Here I also follow the same way and process. So I confirm all the bookings of trims from respective trims manufacturing house. It is very important to buy all the necessary trims before start garments production.

#### **Following up lab dips for buyer approval:**

After getting the buyer art-work sheet and sample from the buyer I forward all these to the lab for checking the color combination and percentage for preparing lab dips. After getting it I pack it and send it to the buying office for approval. On the basis of lab dips the required fabrics are prepared.

#### **Preparing swatch for buyer approval:**

On the requirement of the buyer our factory manufacture swatch. Swatch is a presentation of all the materials which are (Fabrics & Accessories) used for any specific style or order. Usually small piece of fabrics and each piece of accessories are attached in board paper in a systematical manner. Swatch is very important for production line to make the correct construction of a

garment and QC departments ensure it. I collect it from the QC department, prepare it and send it for buyer's approval.

#### **Preparing garments for buyer approval:**

After getting the art-work and PO sheet from the product development team, we hand over it to the pattern master in sampling department for making pattern sheet. After doing this, it goes to cutting master. He cuts the required fabric on the designed pattern. Then it goes to sewing master who sewing it with the required machine. After finishing these garments it comes to us finally. We pack it with the required document for the buying office. In this process we have to follow up it all the time for maintaining the quality.

#### **Preparing docket for buyer approval:**

After approving buying sample and green sample or preproduction sample, we prepare docket for bulk production. Docket is one kind of file which is provided to the buying office or liaison office before bulk production. In a docket there are several documents. First of all, it possesses FPT report (fabric performance test) and GPT report (garments performance report) where we find the information and performance of the fabric and garments. Secondly, we find a brief sheet in the docket where we find the art-work which indicates the garments style and design. Thirdly, we find supplier contract sheet which indicates the supplier details. Fourthly, we find red seal or fit seal comment which indicates the buyer's fit comments. Fifthly, we find packaging spec which indicates the size break down and required quantity. Sixthly, we find the approved bulk fabric. Seventhly, we find the approved print or embroidery. And lastly we find the bulk trims where approved button, yarn, sewing ticket, cord exist. Inputting all these things with required set of garments we pack it and send it to the buying office for final approval.

#### **Preparing production file:**

Production file will also follow the same process excluding FPT report, GPT report and brief sheet. Here the main concern is the factory for bulk production. Preparing the production file it handed over to the factory production department.

#### **Following up all processes:**

Another most important job responsibility is to follow up all the processes. My supervisor assigned me to follow up which fabric or garments or file is going where, what purpose and in what stage it is now. If the process is stop, my duty is to make it proceed on smoothly.

These are some of my job responsibilities among many of others.

## **Chapter-10 Other**

### **Garment accessories**

Different types of garments and finishing accessories used in the apparel or garment industries are given below;

- Thread
- Zipper

- Interlining
- Button for example: Snap button, plastic button, metal button
- Label: Main label, size label, wash label, care label
- Motif: Leather, plastic batch Metal
- Pocketing fabric
- Lining
- Velcro
- Elastic
- Cord
- Ribbon
- Toggles
- Rivet
- Collar bone

**Finishing accessories:**

- Hang tag
- Price tag
- Plastic/ poly bag
- Tissue paper
- Carton
- Scotch tape
- PP belt
- Tag pin
- Plastic clip
- Sticker

**Compliances maintained in Interstoff Apparels Ltd:**

Compliance means agreement with apparel compliance. Most of the apparel industry used compliance of ILO. Bangladeshi apparel industry used compliance of ILO & apparel compliance. Some contents of compliance with ILO and Bangladesh Labor Laws which are followed by Interstoff Apparels Ltd are given below:

- No child labor
- No forced labor
- Transport facilities for worker
- Hours of work
- Voluntary overtime
- Intervals for rest
- Weekly holidays
- Annual leave
- Festival holidays & leaves with bonus
- Maternity protection
- Worker's welfare committee
- Mineral drinking water

- Sanitary facilities
- First aid box
- Canteen services
- Day care center
- Health care activities for the worker & employ company doctor
- Fire extinguisher each & every floor & conduct fire drill at least 12 times a year
- Other safety department (no discrimination)
- Compensation cases department
- The development of compliance programmer
- Environmental developer
- Smoking free zone
- Disciplinary practices/ Harassment
- Freedom of association and right to collective bargaining
- Welfare facilities

## Chapter-11

### Conclusion

#### Conclusion:

By this project work, I have gathered a lot of knowledge about the garments industry and actually this is a very important task in apparels and garment industries. I tried to fulfill my objectives and I am quite satisfied. I think further thesis is required as my project work may have some limitations. Finally I can say that by the knowledge from this project which will help me in my professional life to take challenge as a potential merchandiser.

#### Findings:

Undoubtedly this industrial training was very helpful to learn about merchandising, production process, textile machineries, industrial management, match with industrial environment. It was the first opportunity to work in the garments factory to learn merchandising thoroughly.

#### Limitations:

- It is not possible to in compass the whole process in such a small frame as this is a report.
- Some of the points in different chapters are not included as these were not available.
- We did not get enough supervision from the responsible persons of different sections due to their busy schedule. So, there may some limitations of data of different section in this report.
- We had a very limited time. In spite of willingness to study in more details, it was not possible to do so.

**Suggestions:**

- Due to shortage of technical persons (Textile Engineers) sometimes quality level drops which need to be minimized by employing technical person especially at night.
- During our training period, most of the time the product were not first time right and need to be reprocessed. Increasing the production cost these problems has to be overcome.
- I observed that there is lack of understanding between top level personnel and floor level workplace. Here we should maintain chain of command.
- Supervisor or in- charge did not follow the program. So sometimes operators deviate from the set procedure which may hamper the quality of the product.
- The machine stoppage time should be analyzed and minimized. The maintenance should be carried out regularly.
- More skilled labor should be used in the project to improve productivity.

These are all the suggestions that I recommend to the company for improving the performance.

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