



**Faculty of Engineering  
Department of Textile Engineering**

**Project on**

## **Techniques to ensure on time shipment of woven garments**

**Course Title:** Project (Thesis)

**Course Code:** TH518

### **Submitted By**

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Professor

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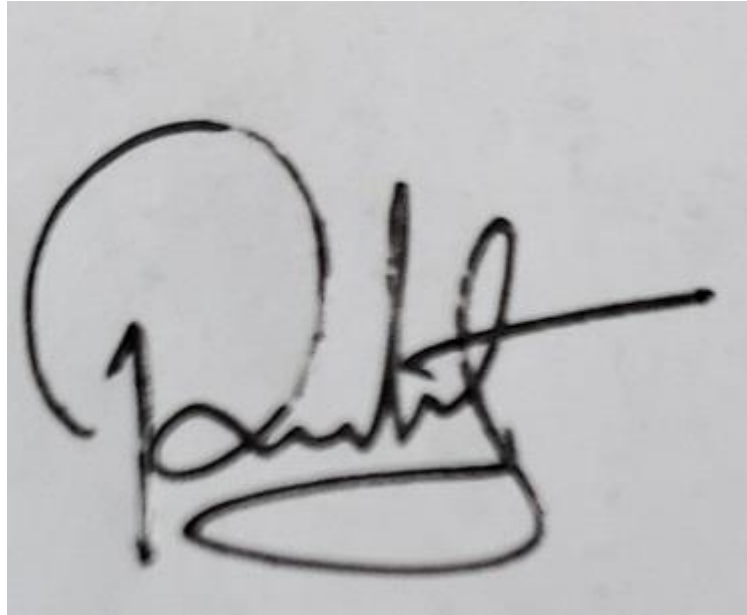
Faculty of Engineering

Daffodil International University

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

## DECLARATION

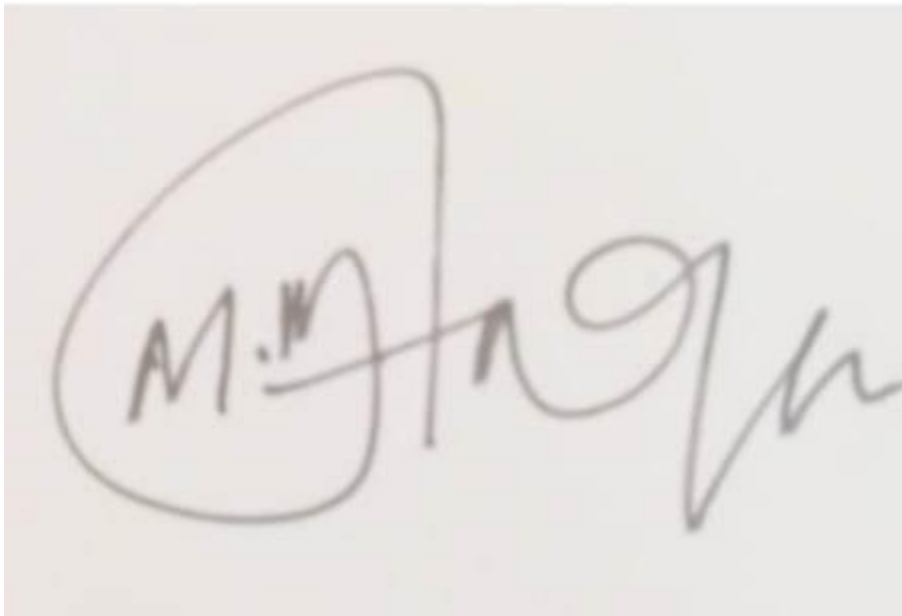
I am declare that this project is done my me, and the supervision is done under Md. Mahbubul Haque, Professor, Department of Textile Engineering, Daffodil International University. I also declare that there is no part of this project could not copied from any submitted degree.

A black and white photograph of a handwritten signature in cursive script. The signature is written in dark ink on a light-colored background. It features a large, prominent initial 'S' followed by several loops and a long horizontal stroke extending to the right.

Sayed Sahid Hasan  
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## **LETTER OF APPROVAL**

This thesis report prepared by Sayed Sahid Hasan ( 203-32-419) is approved in partial Fulfillment of the requirement for the Degree of MASTER'S OF SCIENCE IN TEXTILE ENGINEERING. The said student has completed his thesis work under my supervision. When he prepared this thesis I found his sincerity and punctuality.

A handwritten signature in black ink on a light-colored background. The signature is stylized and appears to read 'M. H. Haque'.

**Md. Mahbubul Haque, Ph.D. (UK), CTextFTI**  
**Professor**  
**Department of Textile Engineering**  
**Faculty of Engineering**  
**Daffodil International University**

## ACKNOWLEDGEMENT

First of all I thanked to my greatest Allah to help me to reach my target goal and completed my project successfully.

I am also great full to my honorable teacher **Md. Mahbubul Haque**, Ph.D. (UK), CTextFTI, Professor, Department of Textile Engineering Daffodil International University, because his knowledge in this RMG sector help me out to find out the real goal. On the other hand his supervision help me way out the calculative process and why I am choosing this topic and how it is important to my sector, why I should be work for that.

I must also thanks to my company Dazzle Textile Ltd, and specially my all calques because when I performed my project I took many data from them.

## **ABSTRACT**

This project thesis is all about the different technique and its different practices for on time shipment. On the other hand I am showing the main thing that how a professional merchandiser work and implementation his valuable knowledge in RMG sector.

I am confirm that if merchandiser section do not work out perfectly proper order will not come to industry. As a result, production, shipment will be close and the foreign currency will not be added the valuable strength in our economy.

All we know that ready made garments sector is the highest and main source of foreign currency. For that reason Merchandiser have been playing a vital role in this industry.

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**PART –ONE**

**INTRODUCTION**



## **1.1 Introduction:**

Bangladesh is the 2<sup>nd</sup> largest exporter country in the world with RMG sector. RMG ( Ready Made Garments) sector is most vital industry in the world. And merchandising means buying and selling of any goods . So the term merchandising is fully related with the export and import business sector. There are lots of work in merchandising sector like marketing, order negotiation, buyer meeting, price negotiation, order confirmation, factory meeting, production line maintain, quality assurance, L/C opening, shipping line booking, and last Ex-factory.

In Bangladesh . there are lots of opportunities for doing garments business. From past to present the technology getting updated . Lots of automatic machine included in this sector. And I want to say there is a big part from our textile industry and out merchandiser team make it more easier to getting this sector more efficient and sustainable. Due to that reason our mill owner make their industry compliance according to the brand customer requirement.

**PART- TWO**  
**Literature Review**

## 2.1 Exporting product from Bangladesh FY 2021 :

As a developing country Bangladesh export many product like textile and garments item and it is a source of economic growth development. Among them woven garments 37.40% and knit garments 43.76%.

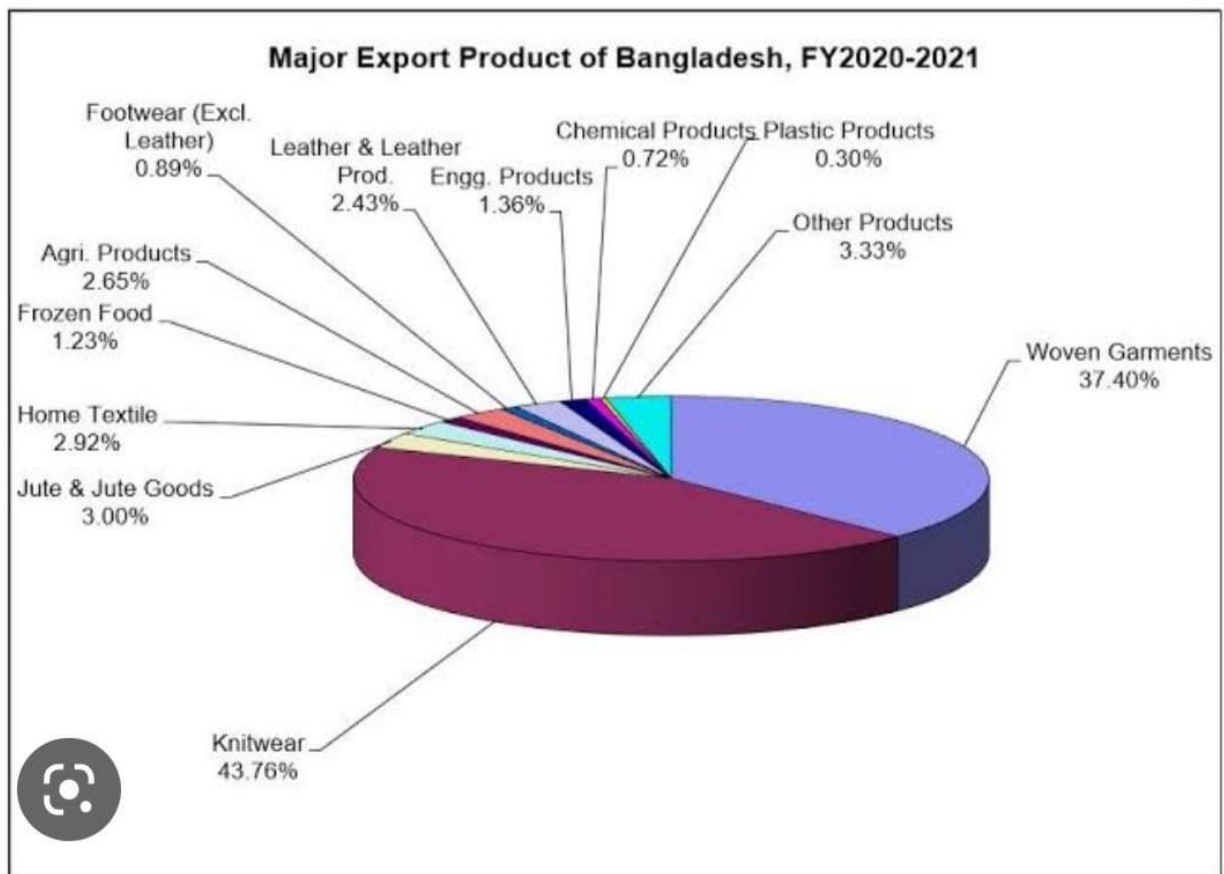


Figure:1

## 2.2 The garments factory increasing parameter last few years:



Figure:2

## 2.3 Merchandising:

Merchandising involves in marketing and production department. Its process and system related to some commercial place. Finally, it is said that who is process this system is called Merchandiser. The work of trying to sell goods or services by advertising them or displaying them attractively.

According to American Marketing Association, merchandising encompasses "planning involved in marketing the right merchandise or service at the right place, at the right time, in the right quantities, and at the right price."

The planning and promotion of sales by presenting a product to the right market at the proper time, by carrying out organized, skillful advertising, using attractive displays, etc.

## **2.4 Technique Of execution merchandising:**

Merchandising is executing an order from receiving to shipment through proper following-up the in-between processes. He is responsible for everything like sample making , send to buyer , approval from buyer and finally when it approved by buyer fo for bulk production. He is also responsible for on time ex-factory.

### **2.4.1 The different technique of Merchandiser :**

- > Buyer searching
- >Spec sheet receiving
- >Meeting with sample and production department
- >Discuss with marker section
- >Go through the trimmings and other things
- > Negotiation to customer about price
- >Finalization with customer
- >Preparing the TNA as per other supplier commitment.
- >Confirmation about lab-dip from customer
- >Fabric booking and accessories.
- >Receiving the PO
- >Monitoring production and product quality;
- >Making regular liaison with the customer and keeping him update on order & production status;
- >Follow up of customer instruction in respect of packing and packaging;
- >Arranging product delivery on time;
- >Follow up with the customer in respect of shipment and informing him shipment details;
- >Coordinate with shipping/ export department;
  
- >Arranging payment against export order;
- >Quick response follow up in respect of any of the buyer's query
  
- >Securing order, sourcing materials and constant follow-up with the customer;
- >Coordinate with all the concerned departments of manufacturing factory, supplier organization and the buyer.
- >Needs to cut a balance between quality, lead time, delivery schedule and price of the merchandise;
- >Organize the purchase of materials, follow-up of production, costing, quality & delivery schedule under tight deadlines

## **2.5 Technique OF A Merchandiser:**

The main role of a merchandiser is maintaining order collection and execution by handle different process. For that he must need the special knowledge about RMG sector. As well as he has to about different process like export import ,LC, BL, Shipment. Finally , fully know the role of merchandiser in business sector we must observe a order from collecting inquire sheet to ex-factory.

## **2.6 Technical work of Assistant Merchandiser:**

He has good knowledge about swatch  
How to approved swatch from buyer  
Have good relation with different manufacturing unit.  
Have to good relation in local supplier  
Must follow up in production line  
Collect the inventory report from the factory  
Have ability to arrange the final inspection

## **2.7 Technical work of Senior Merchandiser:**

- >Making sample as per customer requirement
- >Have good knowledge about costing
- >Price budgeting
- >Final order with customer
- >Latter of credit
- >International sourcing ability
- >Manufacturing planning with factory
- >Production checking
- >Quality maintain
- >Final inspection monitor
- >Contact with commercial department
- >Arrange ex-factory

## **2.8 Techniques of merchandiser:**

As a merchandiser, he must be fluent in English.

He must be an educated person.

He must have the ability to write in English and know English

Must know how to write e-mail

Must have a good appearance

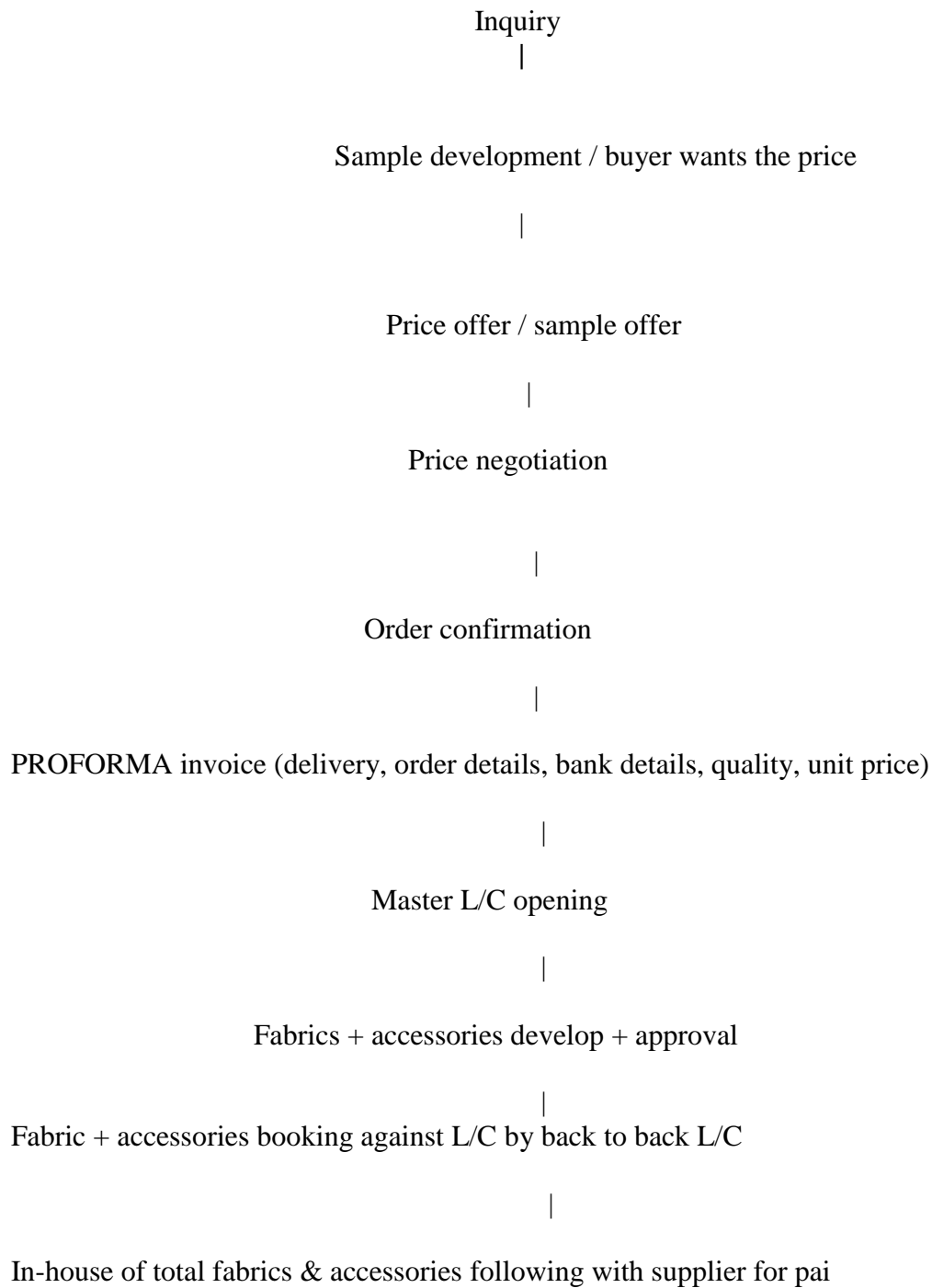
He must be able to handle high pressure work

Must have knowledge about dyeing and printing

Must have a good idea about computers like Excel, MS Word.

Must have knowledge about different types of fabrics and trims

## 2.9 Technical Procedure of merchandising:





## **2.10 Study on packaging:**

When an order is executed there are several factors related. So it should be as per customer following chart. Like- fabric GSM, yarn count, RFID, Carton system, sample management, garments costing, production planning, BL date, trimmings requirement measurement etc.

### **These are like:**

Brand name

Season

PO study

Size range

Packing ratio

Fabric contents

GSM

Ex-factory date

Trimmings details

Inspection should be maintained in AQL

Must include details if print used

Appliques and embroidery must be as per customer

Must follow in folding manual

Ex-factory as per port schedule

Brief idea about samples and address

## **2.11 Technique of Lead Time:**

Lead time is a process that is happening starting order time to finish.

It is the process that the order starting to submission the inquire sheet to Ex-factory. It is given by buyer. As per buyer requirement they give the schedule for shipment and in-house their warehouse. Because they also have a selling season so that things is related with the Lead time process.

## **2.12 TNA:**

Time and Action plan is a important part for any production. Basically, time and action plan made by merchandiser team. In TNA slot there are lots of things like plan ,management, fabric, accessories, in house ,booking etc. As per the chart buyer always know what is the real situation of the following order and what need to do for this order. It helps to merchandiser perfectly execution the order.

## **2.13 Necessity Of TNA:**

It is responsible for PP procedure.

Know the real situation of order process.

Have idea the time frame which is given by buyer.

It also gives the full fill idea of little problems solution.

TNA gives the idea about the status of running order and talks about delay or deviation, if any

Time and action plan gives the clear solution that when the item should be in house.

It also helps to decrease the late production.

Manufacturing level of factory

Types of the order.

Festivals of manufacturing country

Holidays

Breakdown of Ex-factory

Holyday of counter ,because it is related with raw material process.

Logistics process

Lead time calculated by customer

Goods problem

Fabric and trimmings real situation.

Buffer required from each department

Any faulty situation of country

Flexibility of freight forwarder

Response time from buyer at different stages

Lead times of various activities like L/C payment, custom clearance, etc

Final date of ex-factory

**In every situation the technique need the Time and Action plan.**

## 2.14

### TNA EXAMPLE

SL	Time Frame	Action to be taken
1	01.03.2021	Received Master L/C. for an Export Order
2	03.03.2021	To receive proforma Invoice for piece goods & accessories
3	08.03.2021	To Open Back to Back L/C for fabric
4	09.03.2021	To Open Back to Back L/C for trims & accessories
5	10.03.2021	To submit fit sample to buyer

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6	15.02.2021	To receive fabric samples from supplier
7	15.02.2021	To received trims & accessories sample
8	16.02.2021	To received comments on fit sample
9	18.02.2021	To submit size set sample to buyer
10	23.02.2021	To receive comments/approval of size set sample
11	25.02.2021	Ex-factory of fabric
12	25.02.2021	To submit PP sample to buyer

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## 2.15

21	18.4.2021	To start finishing of garments
22	18.4.2021	Receipt of cartons at store
23	20.4.2021	Cartoning commences
24	23.4.2021	Sewing Complete
25	24.4.2021	Finishing Complete
26	25.4.2021	Pre-Shipment Inspection complete
27	25.4.2021	Ex factory of merchandise
28	27.4.2021	Handing over to shipping line
29	28.4.2021	Shipping of goods
30	29.4.2021	To send shipment confirmation documents to buyer

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## **2.16 Sample Technique:**

The important one of part of RMG sector is sampling. Like when buyer place an order before they confirmed to see the things is called sample. They asking for different types of sample for confirming the order. Merchandisers should know the different types of sample for satisfy the buyer. Now the different types of sample is given bellow-

### **Proto type sample:**

In initial stage buyer wants to see the a sample which is called proto type sample. It is only for design , product material or color is not an issue for making the sample.

### **Fit Sample:**

The sample only made for checking the size or fitting is called fit sample. This is mainly requirement for girls or women dress.

### **Counter sample:**

When we submit a sample to buyer at that time we need another sample for workmanship and verify buyer comments is called counter sample. Color and design is very important for that sample.

### **Mock up sample:**

Mock up sample is need for customer another purpose , like sleeve , back part are not ready in this sample.

### **Salesmen sample:**

The sample is made from actual color, design and material is called salesmen sample.

## **2.16**

### **Approval Sample:**

Sometimes buyer revised the spec sheet then it need to approval sample. Because then buyer confused about the new sheet, that is why supplier submit the approval sample.

### **Size set sample:**

For size confirmation size set sample are making. And size set sample covered all color and size

### **Pre- production Sample:**

The factory makes the PP sample when all accessories and fabrics are in house in factory then they make a sample before starting the production. This sample also send to buyer for final approval.

### **Production sample:**

When the production is running buyer need to see the production that time supplier send some sample is called production sample. Because new technical sheet and approval sample is not match with the sample it would be great mistake.

### **TOP sample, online sample:**

When the first production is online then buyer take some sample to cross check with the pre-production sample.

### **Shipment Sample:**

After manufacturing is complete and prepared for ex-factory then buyer wants to see the final sample is called shipment sample.

## **2.17 Techniques of PO:**

Purchase order is very important for Merchandiser. Because when buyer confirm an order he/she send a file which is the document for confirmation. It has many thing like price confirmation, quantity confirmation, ratio confirmation , shipment date and place to BL.





**LPP**

LPP SA  
 Ul. LAKOWA 39/44  
 80-769 GDANSK

Supplier: 10083026 YOUTH FASHION LTD. [BD]  
 DHAKA YOUTH TOWER  
 1216 BANGLADESH

## ORDER WITH RFID

For this model, an order must be place for:

**HARD TAG - "GEN7 DUAL RF HT +16mmPIN"**

The hard tag must be ordered per Checkpoint's ordering site:

<https://checknet.checkpt.com>

**IMPORTANT NOTICE! It is forbidden to ship this order without hard tags attached!**

**Penalty for sending goods without hardtags - 25% of total order value.**

For support mail to Checkpoints Customer Service Helpdesk:  
 < [cs@checkpt-pls.com](mailto:cs@checkpt-pls.com) > or Contact Nur Alam at Checkpoint  
 Bangladesh Dhaka  
 (nur.alam@checkpt.com or phone +88 (0)9612969696)

RFID LPP contact data:  
 LPPRFID@lppsa.com

Commodity(invoice): BOYS' SHIRT	Model Name: KOSZULA CH BAS
Commodity(pincode): KOSZULA	Season: SS 2020
Product Group: shirts/woven_bl	Brand: RESERVED
Model No.: XE835	Collection name: SS20/4/CR/BOY BASIC/BASICOLOGY 4

1. No purchase and sale of goods will occur unless a Sales Confirmation (S.C.) form is signed, sealed by the supplier and sent back to LPP. The supplier is obliged to send S.C. within 14 days after receiving the order.  
 2. If after the scheduled delivery date, goods are not sent, LPP buyer has the right to decide whether accept or reject goods, without being under the obligation of paying any compensation. If the buyer accepts the new delivery date, the price from Sales Confirmation will be decreased according to the following rules:  
 a) one week of delay - the price will be decreased by 2%;  
 b) two weeks of delay - the price will be decreased by 4%;  
 c) three weeks of delay - the supplier is obligated to send goods from the order by all on supplier's costs, the supplier must send goods in the new delivery date set by the buyer;  
 d) more than three weeks of delay - LPP buyer has the right to cancel the order.  
 3. No difference between the supplier on which the order was based and the manufactured goods will be accepted. The supplier must not send goods without the written authorization of the buyer, who, even in such cases, has the right to reject goods once they have been examined.  
 4. The delivery of goods must be done in the ordered quantity. The buyer will accept the difference of a lower or higher amount of stock up to 3% of the quantity presented in the order. Nevertheless, in case of greater difference of stock than 3% (lower or higher) the supplier is obliged to receive the confirmation of acceptance from the buyer in the form of a written statement.  
 5. LPP reserves the right to provide Debt Notes to vendors who have issues with Quality of Deliveries. To be subjected to charging:  
 - Blank operations on cartons per delivery;  
 - 5% - 10% of delivery checked on rework - supplier will be charged 2% of total order value (generally);  
 - Over 10% of delivery checked on rework - supplier will be charged 5% of total order value (generally);  
 - Missing pieces of garment (generally, unit price per pcs);  
 - Missing RFID tags on single pieces of goods (generally, unit price per pcs);  
 - Missing RFID tags on single pieces of goods (generally, unit price per pcs);  
 - Dispatching goods without RFID tags and concealing that fact from LPP - penalty: 25% of total order value.  
 6. By the acceptance of the Formal Order and conditions included, the Supplier confirms that a separate signature and approval of Debt Notes from Supplier side is not required.  
 7. LPP's claim for damages (including the amount of the penalty) is acceptable.  
 8. If, for any reason, LPP introduces such changes on a model that may affect the delivery date, the supplier is obliged to declare whether they will be able to keep the original delivery date or they will have to change it. Any changes of delivery date must be obtained confirmed with the buyer. In case of lack of information from the supplier's side on the necessity of change of the delivery date, the buyer understands that the supplier takes the full responsibility to send the goods in the first delivery date on the order.  
 9. The readiness & availability for the inspection of goods must be set 4 days before the warehouse cut-off (Cargo handover date). LPP has the right to select the most convenient date of the inspection (start: Thursday 6.00 a.m.) and inform the Supplier. If selected by LPP for the inspection goods are not ready (the supplier failed to prepare them on time), the shipment is put on hold and delayed which results in discounts according to para 2 of this section.  
 10. If the majority of delivered goods will be reprocessed with the order in terms of quality, the buyer will be entitled to reimbursement of the costs of goods (material and labour), transport, duty, taxes and disposal. In each case the goods will not be returned to the producer and shall be destroyed by the buyer. The disposal cost shall not exceed 200 USD.  
 11. The supplier and the buyer will be subjected to Polish law and the jurisdiction and contention of the courts of justice and tribunals of the city of Gdansk (POLAND), mandatorily foregoing any other which might correspond to them.  
 12. The supplier confirms that he/she has carefully read and understood the manuals of cooperation with LPP. The supplier guarantees that he/she will obey and follow all information and instructions presented in LPP Manuals.  
 13. The correct original shipping documents must be delivered to LPP according to the deadline indicated in LPP Shipping Documents Manual. Incomplete or delayed originals will result in financial fee - 5% of order.  
 14. The supplier guarantees that he/she understands and accepts the requirements of the LPP Code of Conduct, that he/she has received.

<b>Entity   Order No:</b> 810778	
<b>Date of Order:</b> 2019/05/08	<b>PRICE POINT</b>
<b>Transport Type:</b> SEA-RUSSIA	<b>49,99</b> PLN <b>12,99</b> €
<b>Port of discharge:</b> Petersburg	<b>899</b> PYG <b>299</b> CZK
<b>Incoterms:</b> FOB Chittagong	<b>399</b> GPH <b>49,99</b> LEI
<b>Shipment date:</b> 2020/01/11	<b>3495</b> Ft <b>19,99</b> JIB
<b>Terms of payment:</b> T/T BZ 180	
<b>Currency:</b> USD	
<b>Inspection</b>	
<b>Availability From:</b> 2020/01/02	

## 2.20 Technique of Fabric Booking:

Fabric booking is an important part of merchandising. Because when a buyer confirms an order, he confirms it with the color, quantity, and size. So after making the consumption, it needs to be booked in fabric, either locally or internationally.

So it is mandatory to book fabric color-wise, otherwise the order will not be executed.

<b>To : Linvitex</b>							
<b>Attn : Mr.Nannu</b>							
<b>F'm : Sahed</b>							
<b>Subject : Fabric booking</b>							
				<b>Date: 20.03.18</b>			
<b>MISHA TEX BD</b>							
Nikunja-1, Khilkhet, Dhaka-1229.							
<b>FABRIC BOOKING</b>							
Style No	Fabric Quality	Colour	Qty/YDS	Unit Price USD / YDS	Total value (\$)	Finishing Remarks	
UF531,UF518	100% Cotton Oxford AOP	59X	9800 Yds			As previous production	
<b>Total :</b>			<b>10391 YDS</b>		<b>\$0.00</b>		

## 2.21 Technique of Consumption:

Consumption is very important issue for woven garments merchandising. There are many factors are related with the consumption. Now I will show the consumption process for a woven short sleeve shirt.



Figure:3

## 2.22 Measurement chart:

POM	POM Description	+tol	-tol	134	140	146	152	158	164	170			
357A	A - length - dlugosc	1	-1	55	58	61	<b>63</b>	65	67	69			
357B	B - shoulder width - szer. ramion	1	-1	33.5	34.5	35.5	<b>37</b>	39	41	43			
357C	C - sleeve length - dl. rekawa	1	-1	15.5	16.5	17.5	<b>18.5</b>	19.5	20.5	21.5			
357C1	C1 - sleeve length (inside) - dl. wew. rekawa	1	-1	4	4.5	5	<b>5.5</b>	6	6.5	7			
357D	D - chest - szer na linii kl. piersiowej	1	-1	38	39.5	41	<b>43</b>	45	47	48.5			
357E	E - armhole - gl. pachy	0.5	-0.5	15.5	16.5	17.5	<b>18.5</b>	19.5	20.5	21.5			
357F	F - bottom sleeve width - szer. dolu rekawa	0.5	-0.5	13	13.5	14	<b>14.5</b>	15	15.5	16			
357G	G - bottom width - szer na linii dolu wyrobu	1	-1	40	41.5	43	<b>45</b>	47	49	50.5			
357H	H- back yoke height- wys. karczku	0.5	-0.5	10	10.5	11	<b>11.5</b>	12	12.5	12.5			
357I	I - neck depth - gl. podkroju szyi	0.2	-0.2	6.1	6.3	6.5	<b>6.7</b>	6.9	7.1	7.3			
357M	M - neck width - szer. podkroju szyi	0.4	-0.4	13.7	14.1	14.5	<b>14.9</b>	15.3	15.7	16.1			
357V	V - collar width (at the end) - szer konca kołnierza	0.2	-0.2	3.8	3.8	3.8	<b>4</b>	4	4	4			
357X	X - collar width (at the bottom) - szer. kołnierza	0.2	-0.2	3.6	3.6	3.6	<b>3.8</b>	3.8	3.8	3.8			

Figure:4

## 2.23 Technique of fabric consumption:

### 1.Fabric consumption : Body + Chest

$$\begin{aligned} & (BL+AL) \times (1/2 \text{ Chest} + AL) \times 2 \times 12 \\ & : \dots\dots\dots \\ & \text{Fab width} \times 36 \times 2.54 \times 2.54 \\ & \\ & \quad 69 \times 48 \times 2 \times 12 \\ & = \dots\dots\dots \\ & \quad 54 \times 36 \times 2.54 \times 2.54 \\ & \\ & = 6.33 \text{yds /dozen} \end{aligned}$$

### 2.Fabric consumption : Sleeve

$$\begin{aligned} & (SL+AL) \times (\text{Arm Hole} + AL) \times 2 \times 2 \times 12 \\ & : \dots\dots\dots \\ & \text{Fab width} \times 36 \times 2.54 \times 2.54 \\ & \\ & \quad 23.5 \times 23.5 \times 2 \times 12 \times 2 \\ & = \dots\dots\dots \\ & \quad 54 \times 36 \times 2.54 \times 2.54 \\ & \\ & = 2.11 \text{yds /dozen} \end{aligned}$$

### 3.Fabric consumption : Collar

$$\begin{aligned} & (CL+AL) \times (CW + AL) \times 2 \times 12 \\ & : \dots\dots\dots \\ & \text{Fab width} \times 36 \times 2.54 \times 2.54 \end{aligned}$$

**38X6X2X12**

$$= \frac{\dots\dots\dots}{54 \times 36 \times 2.54 \times 2.54}$$

**=.43629yds /dozen**

**4.Fabric consumption : Collar band**

**(CBL+AL) X (CBW + AL)X 2 X 12**

:.....  
**Fab width X 36X2.54X2.54**

**16.9X8.7X2X12**

$$= \frac{\dots\dots\dots}{54 \times 36 \times 2.54 \times 2.54}$$

**=.2813yds /dozen**

**5.Fabric consumption : Yoke**

**(YL+AL) X (YH + AL)X 2 X 12**

:.....  
**Fab width X 36X2.54X2.54**

**42X13.5 X2X12**

$$= \frac{\dots\dots\dots}{54 \times 36 \times 2.54 \times 2.54}$$

**=1.08yds /dozen**

**So total fabric consumption for short sleeve shirt is:( 6.33+ 2.11+ .43629+.2813+1.080) =10.237 yds / Dozen**

## **Part –Three (Methodology)**

**Applying different technique in specific project for on time shipment**



### **3.1 Background Of technical Work:**

This career episode is all about achieving target production by using merchandising methods of style which is a woven shirt.

**Time Period:** August 2020 to January 2021.

**Place:** Dhaka, Bangladesh.

**Firm:** Dazzle Textile Ltd..

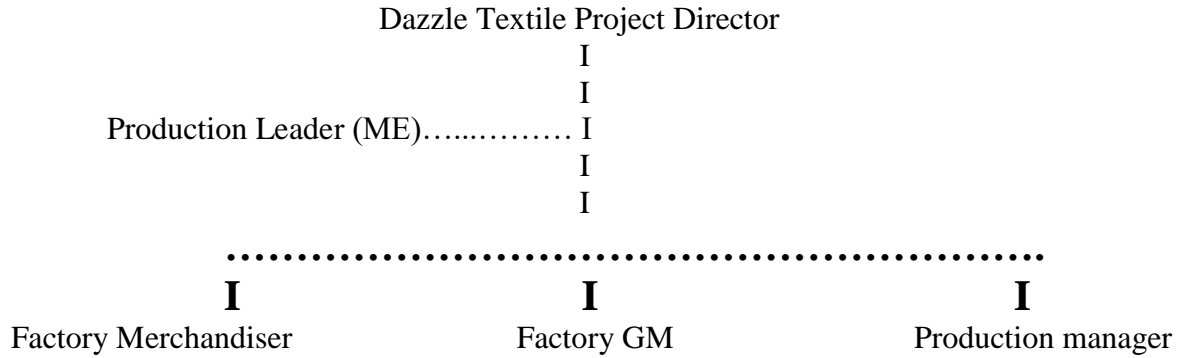
**Responsibility:** Merchandiser.

#### **Technical plan:**

LPP is a liaison company of polish. LPP is the world famous company. Dazzle textile ltd is agent office of LPP. On the other hand Youth fashion ltd. is the manufacturing partner of Dazzle textile lt.

Style VE076 is one of the targeted item for mother company LPP, because in last meeting they told to the vendor about this product. Some of their company issue they need it earlier shipment and regarding this matter we are planning to export it before the given shipment date. So from my responsibility I was pre planning with my team and also factory people how to meet up the earlier shipment date because there are lots of matter in a new style making program. Like fabric booking and production, accessories booking and production, factory line management, shipping line earlier booking etc. So as per our planning we contact with all supplier and booking all of things as per requirement and make a special team to monitor this special style production execution.

### 3.2 Technique for group making:



### 3.3 Following work followed by me:

- Monitoring the Fabric and accessories current situation.
- Monitoring the production line and get data the real situation of the line.
- Monitoring the quality team as per the buyer given table.
- Monitoring the higher working process and the output situation.
- Arranging the needed element where needed.
- Monitoring the cutting section and observing the consumption matching.
- Monitoring the problem creating section and arrangement the solution.
- Maintaining the buyer shipment process.

### 3.4 Personal technical Activities:

From first of beginning I started my work like Costing, that is way I need to calculate the CM .Because when we start the production we must needed to know what would be earn from the current style. I meet with factory technical person and factory GM regarding issue. After all planning they give me 4 production line. So the cost of making was-

Production per minute X Production Time / Efficiency

In here, for youth fashion Production per minute .043 , it was standard for 1 year

And the Supplier Operating time 113 minute

And finally Overall working efficiency 78 % (Fixed for this style)

So I calculated the CM

=.043 X 113/ 78%

=\$3.40

We got the CM for the specific style , which is real costing for factory.

So, now we can easily calculate the total production line cost and as per the policy we can easily find out the needed working hour for catch up the real shipment date.

Our target is that if we meet up the buyer targeted shipment date we will got huge order for next intake.

Production /Minute	.043	Youth fashion (fixed for 1)
SOT in Minute	113	Youth Fashion
Efficiency	78%	Target ( As per meeting)
Result	.043 X 113/ 78%	\$3.40

Table:1



		Fabric	Quantity		
					USD
Fabric		Specification	Quantity/ consumption	Unit price in	Amount in USD
Shell fabric		100% Viscose Structure: WOVEN POPLIN 50's/1 x 50's/1 132 x	1.61	1.5	2.42
fabric II					
fabric III					
<b>Lining piping</b>					
	padding	N/A			
body	quilting	N/A			
sleeves	quilting	N/A			
interlining					0.03
A c c e s s o r y	Main zipper	N/A			
	Fly zipper	N/A			
	Sleeves zipper	N/A			
	Legs zipper	N/A			
	Pockets zipper	N/A			
	Eyelet	N/A			
	snap button				
	Main buttons		8	0.0046	0.04
	Small buttons				
	Twill tape				
	snap button	N/A			
	snap button	N/A			
	elastic tape	N/A			
	string	N/A			
	Main/Size Label/Hangtag/Care-label/flag-label				0.13
	cartons + Polybag/carton stickers/poly+blister stickers/inner board				0.12
	Others				
Finishing				0.02	
Labour ( CM)					1.83
TRANSPORT & Commercial					0.20
Final price					4.78

### 3.4 Technique for TNA:

In this stage I maintain the TNA, which was very effective work for my execution order, and I also informed my all team members to follow the chart. As per the chart my first requirement was to in house the fabric and accessories. So I contact with the local and international supplier to send all things to the factory. So after receiving that I monitoring the inventory report and check out with booking and finally give permission for fabric cutting.

Technique for OWE calculation:

In the mean time I need to calculate the overall working efficiency because I found some discrepancy in L3. This method I knew from my mother company and applying their own software I got the result.

So the calculation was like that

Overall Working efficiency= (SOT X No of Output) / (Manpower X Working Hour)) X100

In previous we knew SOT= 113minute

Product out come / day= 190 pcs

Worker= 56

WH= 12X60= 720 minute

SO OWE= (113X190) / (720X 56)) X100= 53 %

Supplier Operating Time	113	
No of Out put	190	
Manpower	56	
Working Hour	720	
Theory	{(113X190)/ (56X720)}X100	
Result		53 %

Table :2

So, we can see the efficiency was in minus situation

Which was=70- 53=17%

So, we need take some action for the % balancing, because if we did not balance the % it hamper out shipment. So, I informed the production manager about the calculation and they would take necessary step to reduce the problem and got success result.

**3.4 Technique apply in PP Comments:** In this stage , factory people faced some problem and they informed me about that problem like in pre production sample button plate attached the tape but in pre production comments buyer cancel the tape from the plate. So, it was a very important topic in this situation. Because if they attached the tape in plate and buyer did not accepted it would be a great problem for both party. So I contact with buyer and got the real result and passed it in production line.



**Figure: 5**

**Before**

Supplier Operating Time	113	
No of Out put	219	
Manpower	56	
Working Hour	720	
Theory	$\{(113 \times 150) / (56 \times 720)\} \times 100$	61%

**After**

Supplier Operating Time	113	
No of Out put	280	
Manpower	56	
Working Hour	720	
Theory	$\{(113 \times 150) / (56 \times 720)\} \times 100$	
Result		78 %

So, The result was very time consuming, because if the worker attached the tape they needs .40 sec in per shirt which was time consuming. After clearing this issue they can easily reach the % efficiency and it will help for the real earlier ex-factor.

**3.4.1 Technique for increasing efficiency by setup automatic machine: In final situation I contact with finishing section because they might slow due to some little issue like they did not check the pin which was very prohibited for this order. And Quality controller team got different types of pin in poly pack. Which was critical fault for baby item.**

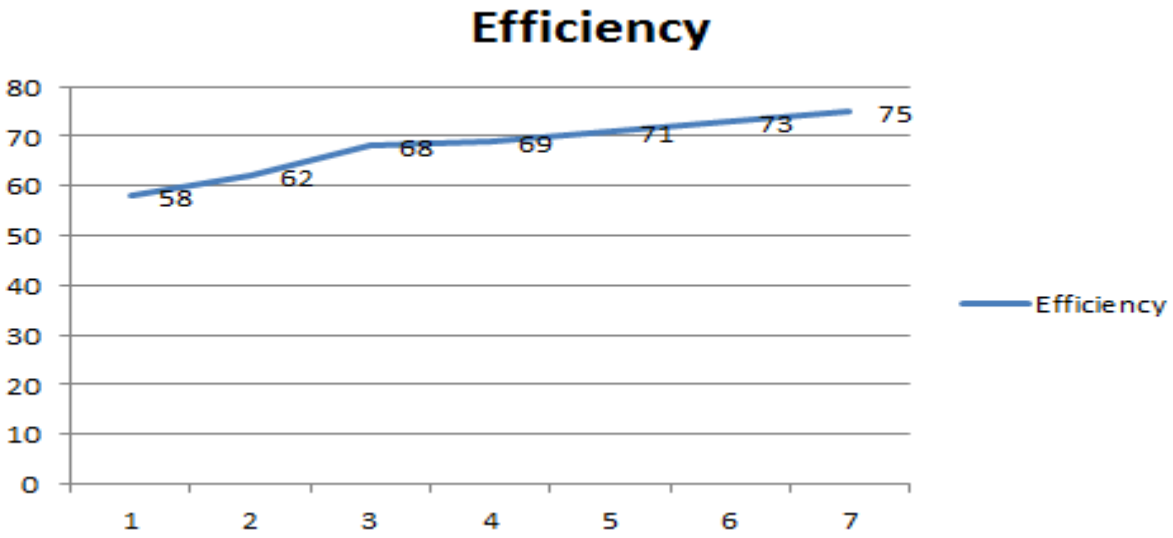


**Figure:6**

So, I talked with GM and request him for arranged another people and pin sensor machine to check each and every pcs shirt to avoid cancelation order. And the out put getting high like it increasing 175 to 300 pcs.

Supplier Operating Time	113	
No of Out put	219	
Manpower	56	
Working Hour	720	
Theory	$\{(113 \times 219) / (56 \times 720)\} \times 100$	
Result		84 %

Table :2



**Figure:7**

After final getting the report we saw the great news for efficiency increasing. Because if the efficiency did not getting higher we never catch the perfect shipment date. So, after taking all positive initiative we confirmed the production and packing and finally we mail to buyer for final inspection which was held by third party.



### 3.4.2 Technique for Inspection and running production inspection

Report :

supplier	Youth Fashion Ltd. [BD]		factory	Youth Fashion Ltd. [BD]			
<b>PACKING</b>							
packing	OK	comments					
<b>INSPECTED CARTONS</b>							
<b>ACCESSORIES</b>							
main label	OK	hangtag	OK	washing instr	OK		
comments:							
<b>INSPECTION DETAILS</b>							
defect list	comments			critical	major	minor	
fabric defect	damage				3		
poor stitching	skip				2		
fabric defect					1	3	
waist elastic twisted					1		
uncut threads						4	
deform	odd shape at wist, hem, hip					4	
				total	0	7	
<b>RESUME OF INSPECTION</b>							
status		status		status		status	
appearance	OK	workmanship	B	cleanness	OK	moisture	N/A
fabric quality	OK	measurement	B	trimmings	N/A	packing	N/A
color/dyeing	S	fitting/function	OK	decoration	N/A	others	N/A
<i>S - SMALL, B - BIG, C - CRITICAL</i>							
comments:							
inspection mark lower due to workmanship and measurements							
<b>INSPECTION DECISION</b>							
major defect	AQL: 4.0	mark(1-5)	3.0	inspection result			
inspected quantity	50			<b>N/A</b>			
number of major defects	7						
% of major defects	14						
<b>INSPECTOR</b>							
APII SHOWER							

Figure:8





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LPP Quality Department

2

**LPP**

**INSPECTION REPORT**

**2. SKIP STITCH**



**3. OTHER DEFECTS**



Figure:9

### 3.4.3 Technique on Inspection Result:

In inspection stage ,I performed a vital role for this style. Because inspection report is very important for garments shipment. Is here any discrepancy or bad inspection report from inspector product could be cancel or buyer asking for discount or buyer can ask for air shipment after recovery all problems.

So, we arrange all types of preparation for making the inspection program positive. Because we knew inspection must be conduct in AQL 4.0, So if the level is below 2.5 as per buyer regulations it would be Fail.

In this day we arrange everything like Moisture machine, weight machine, GSM cutter machine, so that can show a positive impact for inspection.

After all of preparation our result comes positive and we got AQL 3.0 out of 4.0.

Part –Four  
Result and Remarks

#### 4.1 Remarks Of technical process:

A vital part of RMG sector. Order marketing, price negotiation, order negotiation, Sampling , factory management, production management , out put per day ( Factory merchandiser) ,TNA, Lead time , L/C opening, Fabric booking etc. all things handle by a Merchandiser and all things process is called merchandising.

#### 4.2 Remarks of this episode:

##### Implementation of technique:

In this project I was applied all my technical knowledge, and applied different types of theory. Because as per our buyer comments buyer requirement was to make an earlier shipment due to their emergency. So, as a technical person made a successful project and I made the efficiency positive, made the goods in perfect as per buyer pre-production sample comments, contact with all supplier, made TNA, and finally booking goods as per needed time. Finally the goods reached the buyer address and buyer thanks our company lot and it would really help for next.

# Part – Five

## Conclusion

## **5.1 Conclusion:**

At the end of this project I want to say really it was a successful project, because I describe all things of merchandising and how we apply different techniques for ensure on time shipment. After knowing all things I showed that how works merchandiser and what is the importance of a technical person for execution perfect order. How it contribute in national economy and it is also work for unemployment word stop because if merchandiser did not catch the foreign order with in short time all factories and industries will shut down.

On the other hand I also showed that in the process of merchandising I implement it my own company order and solved many problem of that order and insure the on time shipment. Because this was a important order for my company that is why they assign me a to monitor this order as a merchandiser.



## 5.2Reference:

<http://www.onlineclothingstudy.com/2012/07/time-action-calender-format-for.html>

<http://www.textiletoday.com.bd/magazine/690>

<http://apparelmerchandisingworld.blogspot.com/2013/07/knit-fabric-consumption-formula.html>

<http://apparelmerchandisingworld.blogspot.com/2013/08/critical-path-tna.html>

My personal Job experience for this project