

Internship Report

Industrial Training on Marketing & Merchandising





Inspiring Excellence

Submitted to:

Mr. Noman Hossain Choudhury
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Submitted by:

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Semester: Fall 2016
Major: Marketing
Minor: E-Commerce
Course Title: BUS-400
Course Name: Internship

Date of Submission: 31st December, 2016

Letter of Transmittal

Mr. Noman Hossain Choudhury
Senior Lecturer
BRAC Business School
BRAC University

Subject: **Submission of internship report on “Industrial training on marketing & merchandising.”**

Dear Sir,

It is a great honor for me to submit my internship report (Industrial training on marketing & merchandising) under your supervision. I have worked at SQUARE Fashions Limited as a Marketing & Merchandising Intern for three months (September 20 – December 20). I gave my best effort for this course with the help of my supervisor’s instructions while preparing report. I am thankful to you sir for your kind support and helpful instruction in the process of writing.

It will be a great pleasure for me if the report can achieve its objective and it will be my pleasure to give clarification and suggestion regarding this report.

Sincerely Yours,

MD. Saiful Alam Anik
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Date: 06 September 2016

To
Mr. Ivan Shafaat Bari
Director
Office of Career Services & Alumni Relations
BRAC University, 49 Siddique Tower (2nd Floor)
Mohakhali, Dhaka-1212

Subject: Permission for Industrial Training (Internship Program).

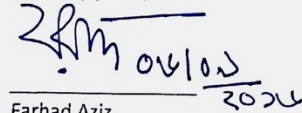
Dear Sir,

In response to your letter dated 05/09/2016 regarding Internship for BRAC University Student, the management is pleased to welcome Mr. Md. Saiful Alam Anik, ID No-12304021, BBA, Marketing of BRAC University has been permitted to undergo the program for 12 weeks in the Marketing & Merchandising Department at Square Fashions Ltd. at Valuka Factory, Mymensingh.

During this learning period a supervisor will be assigned to assist his internship activities on topics as well as pick & drop and lunch facilities also be provided.

Please feel free to contact Mr. Md. Kamruzzaman, Deputy Manager, HR & Admin Department of Head Office for any clarifications (Contact No. 01713274452).

Sincerely yours,



Farhad Aziz
Head of HR & Admin
Head Office

Copy to:

- Md. Alamgir Hossain, Executive Director, Operations & Finance

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Acknowledgements

In the name of ALLAH (SubhanahuWaTaala), most beneficent and merciful. Praise and thanks to him for giving me the opportunity to complete this study.

I would like to give my credits to all those who provided me valid information to complete this report. A special gratitude I would like to give my internship supervisor Mr. Noman H Chowdhury, whose contribution in most effective feedbacks, suggestion, helped me to coordinate my research work.

Along with that, I would like to thank my supervisor Mr. Biplob Mojumder (GM - Planning), Mr. Shamim Rahman (AGM - Operation) and Mr. Baig Shaifullah Al Mahmud (Sr. Executive – Marketing & Merchandising). Who introduced me to interesting phases of factory look upon and has given their valuable time, supervision, competent direction and spontaneous support in every step of my internship program throughout the last three months.

I would like to thank all the team members of Fabrics Unit, Garments Unit, Marketing & Merchandising department and all the seniors of SQUARE Fashions Limited with whom I have worked during the three months of my internship period for their guidance and support during the entire program.

I have worked hard to give my best for preparing this report. I will be very pleased to provide you with any further information if required.

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Executive Summary

Bangladesh is one of the leading ready mate garments exporters of the world. Every year Bangladesh exporters more than one third of the total garments requirement of the RMG market of the world. Every year Bangladesh earns more than 76% of its foreign currency from this sector. From my university I have get the opportunity to have 12 weeks industrial training in a factory. As a student garments technology, we have completed this industrial training in **SQUARE FASHION LIMITED**. From yarn issue to fabric than fabrics to garments making to decorating garments with lots of stuff like fabric quality, washing quality. The garments division has the capability to offer complete range for the 100% export to EU & USA market. The vision of the fabrics and garments division is to become the preferred partner for sourcing high quality value added garments from Bangladesh. Also to develop the local human resource.

Introduction

Bangladesh has established in Garment industries. This sector has given the opportunity of employment to huge number of unemployed and especially uneducated women in our country. Instantly, Bangladeshi entrepreneurs familiar with the world apparel markets and marketing. In addition, foreign buyers found Bangladesh an attractive sourcing place.

In RMG (Ready Made Garments) sector of Bangladesh, there are around 4000 garment factories at the current time, employing more than 12 lac labors, where 85% of the labor is women.

Bangladesh is ahead from other South Asian suppliers in terms of capacity of the ready-made garments industry.

There are various types of garments in Bangladesh. Garments classified into two broad categories. Woven and knit products. SQUARE Fashions Ltd. produce knitted product. In addition, in future they will open the woven product.

CUSTOMERS (BUYER)



MARKS &
SPENCER



pierre cardin

ESPRIT

s.Oliver

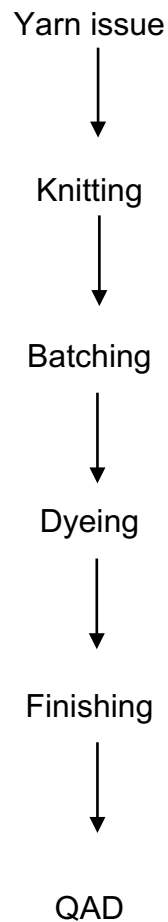
Square Fashions Ltd. (Fabrics Unit)

Fabric production process flow – from yarn issue to finished fabric:

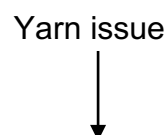
There are different kinds of process flow based on fabric quality. In this fabric unit, they have four kinds of fabric. Names given below with the process flow.

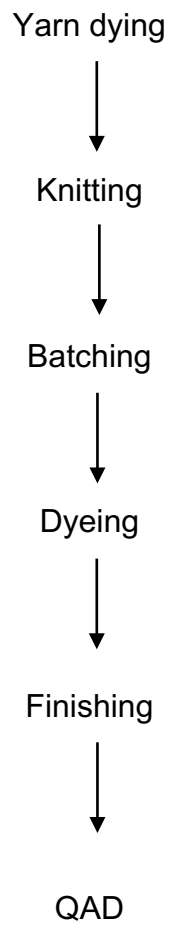
- a. Knitted Fabric (Solid Dyed Fabric)
- b. Knitted Fabric (Yarn Dyed Fabric)
- c. Mercerizing Fabric (Single Mercerize)
- d. Mercerizing Fabric (Double Mercerize)

Knitted Fabric (Solid Dyed Fabric)

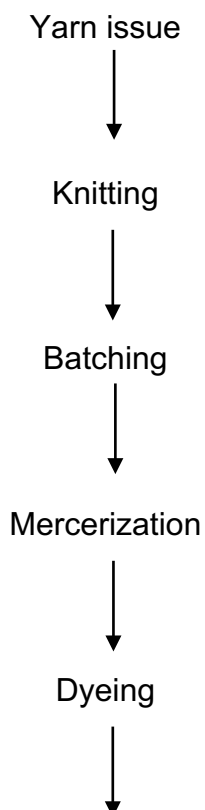


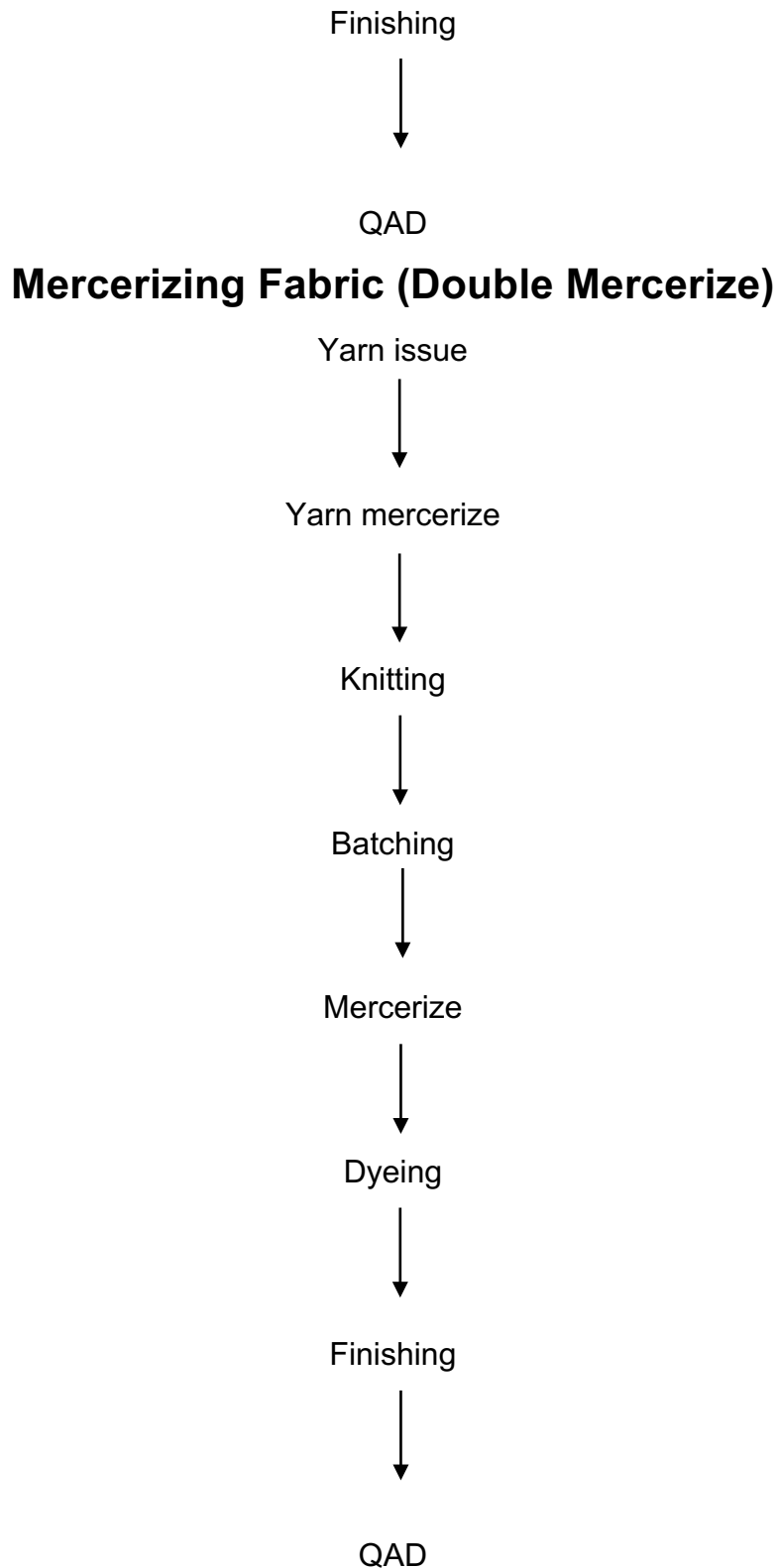
Knitted Fabric (Yarn Dyed Fabric)





Mercerizing Fabric (Single Mercerize)





Machines are in use for each process:

a. Functions of the particular machine

In knitting section, they have two kinds of machines. These are following:

1. Circular Knitting Section:

Circular knit is made of a machine that knits the fabric in a continuous circle (tube). T-shirt fabric is the best example of circular knit fabric.

2. Flat Knitting Section:

Flat knit is made of a machine that knits the fabric in sheets (or flat). In this factory, Flat knit used for collar and cuff knitting.



Figure 1 Circular Knitting Section



Figure 2 Flat Knitting Section

b. Machine's origin, specifications, name:

Circular Knitting section:



Figure 4 Pailung S/J Circular Knitting Machine



Figure 3 E-stripe Circular Knitting Machine

a) Specification of Circular Knitting M/C:

M/C Name	Brand	Dia	Gauge	No. of M/C	Origin
1	Mayer & Cie	30"	24	21	Germany
2	Mayer & Cie	36"	24	4	Germany
3	Mayer & Cie	26"	24	3	Germany
4	Mayer & Cie	30"	22	4	Germany
5	Mayer & Cie	30"	20	4	Germany

6	Mayer & Cie	36"	18	3	Germany
7	Mayer & Cie	34"	24	3	Germany
8	Mayer & Cie	38"	18	3	Germany
9	Mayer & Cie	34"	22	1	Germany
10	Mayer & Cie	23"	24	2	Germany
11	Mayer & Cie	34"	18	4	Germany
12	Mayer & Cie	30"	18	2	Germany
13	Mayer & Cie	24"	24	1	Germany
14	Mayer & Cie	30"	16	1	Germany
15	Mayer & Cie	36"	16	1	Germany
16	Mayer & Cie	38"	24	2	Germany
17	Mayer & Cie	22"	24	1	Germany
18	Mayer & Cie	28"	24	3	Germany
19	PAI LUNG	30"	20	7	Taiwan
20	PAI LUNG	32"	20	1	Taiwan
21	PAI LUNG	38"	24	2	Taiwan
22	PAI LUNG	32"	24	1	Taiwan
23	PAI LUNG	34"	24	2	Taiwan
24	PAI LUNG	44"	18	1	Taiwan
25	PAI LUNG	36"	14	2	Taiwan
26	LISKY	36"	24	6	China
27	LISKY	38"	24	2	China
28	LISKY	30"	24	3	China
29	Precision Fukuhara Works, LTD.	30"	22	1	Japan
30	Precision Fukuhara Works, LTD.	28"	24	1	Japan

Flat Knitting section:

Brand name: SHIMA SEIKI

Origin: Japan

Gauge: 14

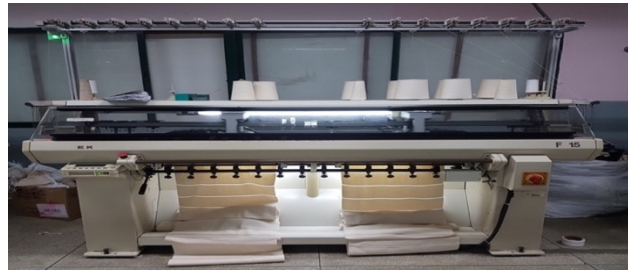


Figure 5 Flat Knitting Machine

b) Specification of FLAT BED Knitting M/C:

M/C Type	Brand	Gage	No. of M/C	Origin
Semi Jacquard	Stoll	14	8	German
Semi Jacquard	Shima Seiki	14	9	Japan
Full Jacquard	Shima Seiki	14	5	Japan
Full Jacquard	Matsuya	16	4	China
Semi Jacquard	Lisky	16	10	Taiwan

After dyeing section, there is another section name – Finishing section. In this section, also they have different kinds of machines. There are three kinds of machines in finishing section.

1. Standard Machine
 - a. Sun-Super K. (Korean)
 - b. Santex dryer (Switzerland)
 - c. Monforts dryer (Germany)
 - d. Bruckner (Germany)
2. Compacting Machine
 - a. Ferraro (Italy)
3. Slitting Machine
 - a. Bianco (Italy)
 - b. Carino (Italy)

In given below I have given some machines name with their working principles.

Dewatering Machine:

In knit fabric finishing process, dewatering machine used in case of tube or open form fabric after dyeing. During dewatering process additional chemical is used for soften the fabric. Different types of operational parameter controlled during dewatering process. After completing the dyeing process from the dyeing m/c then the fabrics are ready for dewatering. In this m/c, tubular fabrics are mainly processed. This m/c is using for controlling the width of the fabric, crease mark of the fabric, length of the fabric.

Slitter Machine:

Slitter machine used for tubular knit fabric to make it in open form. In open form fabric finishing line; slitter machine; is used for after dewatering and dyeing machine. Use to remove access water after pretreatment and dyeing.

Stenter Machine:

The stenter machine measure the length and width to pre determine dimensions and for heat setting. It used for applying finishing chemicals.

Compactor Machine:

Compactor is a textile-finishing machine. It helps to control GSM of the knitted fabric. It also controls shrinkage, twisting control, increase smoothness of fabric. There are two types of compactor:

1. Tubular compacting machine
2. Open width compacting machine

Different types of finishing machines



Figure 8 Slittering



Figure 6 Cornio



Figure 7 Sun-Super S



Figure 9 Xetmatex



Figure 11 Mario Crosta



Figure 10 Lafer

There is a quality machine in finishing section. Its name is – TIC Smart Fabric Inspection Machine. It is from Italy. There are six machines they have for inspection. Also for PUMA, they have a special machine. That is Uzu Fabric Inspection Machine. It is from Germany.

Categories of fabric and some basic characteristics of different kind of fabric:

- a) S/J (Single Jersey)
- b) D/J (Double Jersey)
- a) S/J:

1. Plain S/J (with or without elastin)
2. Single Lacoste (with or without elastin)
3. Double Lacoste (with or without elastin)
4. Polo Pique
5. Terry (with or without elastin)
6. Fleece (with or without elastin)

b) D/J:

1. Rib

- i. 1*1 Rib (with or without elastin)
- ii. 2*2 Rib (with or without elastin)
- iii. Lycra Rib
- iv. Double face jersey

2. Interlock

- i. Plain interlock with or without elastin.

Picture of different kinds of fabric:



Figure 13 Rib fabric



Figure 12 Single jersey



Figure 14 Double face jersey



Figure 16 Fleece

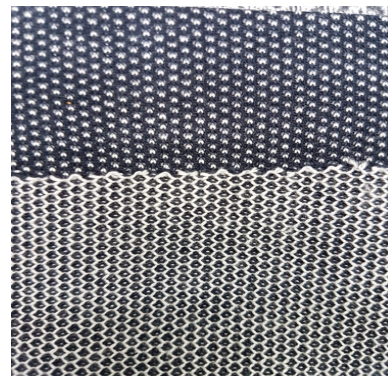


Figure 15 Honey Com Pk

Productivity of each process cycle time/number of batches per day/vessel size etc.:

After knitting in dyeing section, we calculate the cycle time / number of batches per day/ vessel size. They have three types of machines:

1. Slavos (Origin- Greece)

- a. Vanous (Capacity- 180 kg)
- b. Athena (Capacity- 250 kg)
- 2. Fongs (Origin- China and capacity- 250 kg)
- 3. Asia Kingdom (Origin- Taiwan and capacity- 200 kg)

Total machines:

Bulk machine in total = 13

Sclavos – 10

Asia Kingdom – 1

Fongs - 2

Sample machine in total = 8

Sclavos – 1

Fongs – 6

Asia kingdom – 1

Capacity:

Sclavos

Name	Port	Capacity
SV-1	2	360
SV-2	3	540
SV-3	2	360
SV-4	4	720
SV-5	4	720
SV-6	1	180
SV-8	2	500 (Athena-2)
SV-9	3	750 (Athena-2)
SV-10	3	750 (Athena-3)
SV-11	3	750 (Athena-3)

Fongs and Asia Kingdom

Name	Port	Capacity
FG	4	1000
FG	1	250
Asia Kingdom	4	800

Sample Machines

Name	Port	Capacity
SV-7	1	50
FG	1	120
FG	1	60
FG	1	60
AK	1	35
FG	1	20
FG	1	10
FG	1	10

Sclavos, 16*180 = 2880

 11*250 = 2750

AK, 4*200 = 800

FG, 5*250 = 1250

Sample, = 365

Capacity = 8045 Kg

Par day 2 batch. So total capacity is, 8045*2 = 16090 kg

Machines cycle time = 2.5 to 3 min

Batching Section:

This is one the most important part in dyeing section. This department comes after knitting and before dyeing. Here they category those fabric or yarn to set for specific dyeing machines. There is a formula for batching.

$$\text{GSM} = \frac{\text{gm}}{\text{L} * \text{W}}$$

In batching section, they find out the length of the fabric. For example, a fabric needs to dye. Therefore, they have to measure the dia (width), GSM, weight. Then from the above formula, they have to find out the length of that fabric. After finding out the length, they have to divide it with cycle time.

There is another formula to find out reel speed.

gm

That is, Reel Speed = $\frac{\text{gm}}{L * W * \text{cycle time}}$

Standard process loss in each production and reasons:

In this manufacturing, skills and expertise of knitting operator, dyeing operator are very important. An operator with higher efficiency produces more garments than with lower efficiency in the same time. When operators work with the higher efficiency than manufacturing cost of the factory will go down.

In knitting process loss, dust formation is an issue. Fabric rejection for mechanical or electrical reason. As a result, they have to produce more fabric than the requirement. Sometimes, yarn quality depends on weather. In winter, moisture is different from in summer. When yarn or fabrics put in store for natural relaxation, it has to cop up with the environment.

In dyeing process loss, at the time of bleaching, it loses 4 to 5%, enzyme it is 2 to 2.5%. If it is, grey mélangé fabric that losses 8-10%. Same for Black fabric too. For white fabric, it is 10-12%. In total, we can say that they lose around 10-14%.

Parameters of Quality Control (QC) and QAD staff check fabric and pass it:

In every section, they have their quality department. Form knitting to finishing they have different kinds of quality parameter. In knitting, they check the quality of knitted fabric. They have inspection machine to check the knitted fabrics.

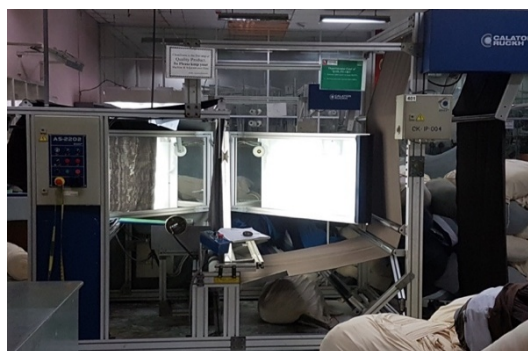


Figure 17 Inspection Machine

They have some criteria to find out the fault of fabrics. Also from the symptom, they can find out the problem. So that they can immediately take action to reduce problems.

Knitting Faults:

1. Hole Mark: Holes are the results of yarn breakage or yarn cracks. During loop formation, the yarn breaks in the rejoin of the needle hooks. If the yarn count is not correct on regarding structure, gauge course and density.
2. Needle Mark: When needle breaks down then needle marks come along the fabrics. If a needle or needle hook is slightly bent, needle marks come along with the fabrics.
3. Sinker Mark: Sometimes cannot hold a new loop as a result, a sinker mark comes. If the sinker head bends, then a sinker mark comes.
4. Star Mark: Yarn tension variation. Low GSM fabric production.
5. Drop Stitches: Defective needle. If yarn is not properly fed during the needle hook.
6. Oil Stain: When the needle is thick, then lines.
7. Rust Stain: If any rust in machine parts.
8. Pin Hole: Due to break down.
9. Barrie Mark: A fault in weft knitted fabric appears as a stripe.
10. Fly Dust: In knitting section too, much is yarn due to low twist as well as attaches to the fabric surface tightly.

After dyeing, they also check the quality of the fabric. Because, dyeing is a process of coloring fibers, yarns or fabrics with. Many known-unknown faults occur during the dyeing process.

Dyeing Faults:

Major dyeing faults which occur during dyeing operation.

1. Uneven dyeing
2. Batch to batch shade variation
3. Roll to roll variation or meter to meter variation
4. Crease mark
5. Dye spot
6. Wrinkle mark

In finishing, they again check the fabric condition. This is the last checkpoint for the quality of a fabric.



Figure 18 Final Quality Assurance Department

Bottleneck in any production process/segments and find out the scope for increasing ultimate productivity:

Bottleneck are holding up production operations, that consumes a great deal of time. As this is, the renowned company but still it can increase their production in some areas. They have some old machines that should replace with brand new machines in knitting section.

a) By increasing machine speed:

The needle movement is depended on the speed of machine. As a result, the ultimate production will increase.

b) By using machine with higher number of feeder:

If the number of feeder increases in the cylinder, then the number of courses will increase in one rotation at a time.

c) By using modern machine with advanced features:

They have to increase their modern technology. To produce various garments, they have to purchase modern machines.

Some less attention or neglected areas in a fabric-manufacturing factory that incur waste of money and work force:

As this is a well-established factory, so it is hard for anyone to find out the neglected area. Then like others factory it also has some area that needs to When fabric sent

to store for batching so that they can do the next process for dyeing. In this factory, they have separate building for batching and dyeing floor. In between these two floor, there is road. As a result, they move their batching fabric to dyeing floor by using transport. However, the problem mainly happens during winter and rainy season. Sometimes they keep their fabric in the road for lack of space. While raining it effects the fabric quality. Though they cover it with plastic but then again after long time, raining those cover cannot protect the fabric properly. This is a cause for fabric rejection.

Purpose of Lab:

Lab section is very important. Because, it helps to be approved from buyer. Quality has too much impact on garment analysis. Nowadays buyers are conscious about quality issue and do not compromise any fault.

Color fastness to water:

The test is to determine the resistance of color of dyed textiles to water. Multi-fiber fabrics attached with the test specimen and immersed into water, drained and placed between two plates under a specific pressure and time. Any change in color of the specimen and multi-fiber.

Color fastness to rubbing:

This test is designed for determine the degree of color, which may be, transferred form the surface of colored textile to specific meter test. Color fastness to rubbing is a basic test used by customer to determine the quality of colored fabric.

Methods of pilling measurement:

1. ICI piling box
2. Pilling test by Martindale Abrasion Tester
3. Random tumbling pilling test (Impulse)

Color fastness to light:

The complaints of poor color fastness when sports dress loses color. Some fabrics fades too fast like – the seat fabric inside of a car, the carpet etc. All dyes will fade cause of sunlight.

Physical LAB pictures



Figure 21 Flat dry



Figure 19 ICI Pilling Box



Figure 20 Martondor Pilling Box

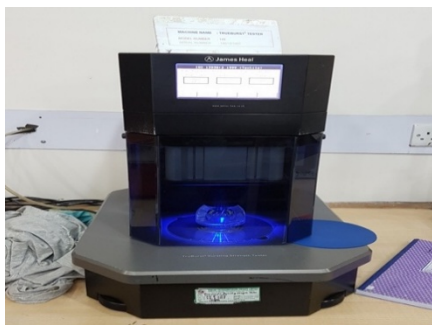


Figure 22 Bursting



Figure 23 Button pull tester



Figure 24 Quality checking

Chemical LAB pictures



Figure 27 Spectrophotometer



Figure 26 Pipetting by EDP



Figure 25 Pipetting by LAWER



Figure 28 Light Box



Figure 29 Hot and Cold wash

Different Parts of Dyeing Machine



Figure 31 Dyeing machine



Figure 30 Slitter Machine

Different Parts of Dyeing Machine (Cont'd)



Figure 32 Sample Dyeing



Figure 33 Colour mixing

Finishing Section

Quality Assurance Department Pictures



Figure 34 Fabric Faults

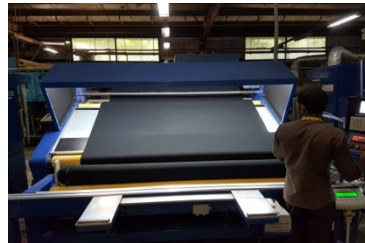


Figure 35 Tis Smart Fabric Inspection Machine

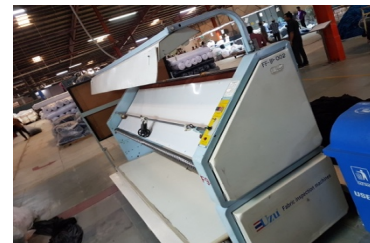
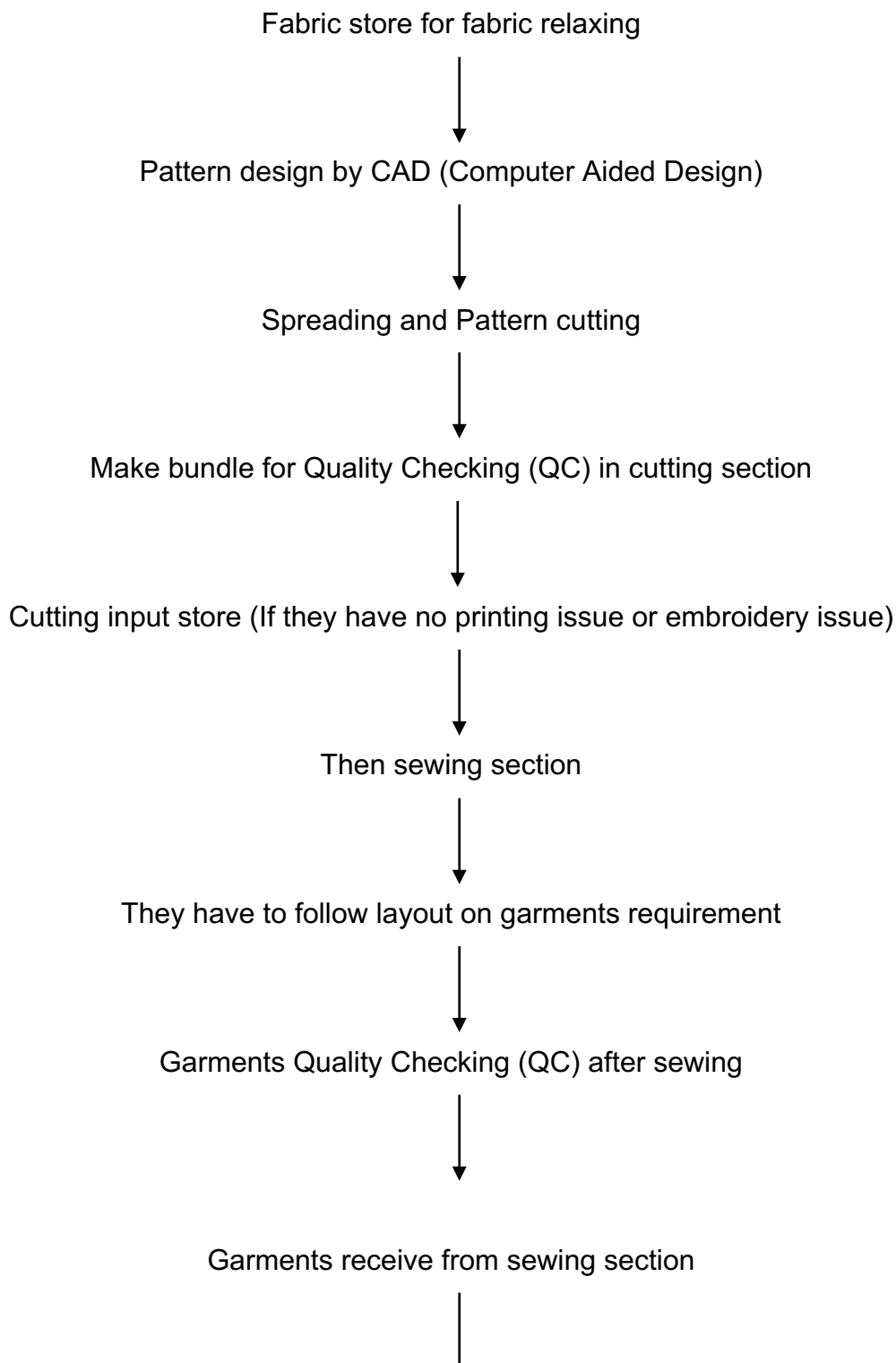


Figure 36 Uzu Fabric Inspection Machine

Square Fashions Ltd. (garments Unit)

Garments production process flow – from fabric to shipment:

Garments production is a lengthy process. It depends mainly on the buyer requirement. They give the requirement for every process. E.g., some fabrics needs to lay for relaxing about 12h. On the other hand, some fabrics laid for 8h only. Garments production process flow from fabric to shipment given below.



In case of wash, garments send to wash. After completing wash again, receive the garments by receiver in finishing



Iron supervisor bundle the garments and send the garments to iron man for ironing



QC check the measurement of the garments after ironing



Garments send to doing fold and poly



For packing garments, again separate according to color and size



Garments come to needle detection machine to check weather is there any metal or instrument or not



Finally, the garments complete into carton using gum tape for ready to shipment.

Machines are in use for each process.

a) The function of the particular machine:

Square Fashion Ltd. has used different type machine on different sector. Machines are with high technology. In section wise machines given below-

Cutting Section:

- Fabric inspection m/c
- Straight knife m/c

- Brand Knife m/c
- Fusing m/c
- Hand Operated Scissors

Sewing Section:

- Plain Machine (S/N)
- Double Needle Machine (D/N)
- Over Lock Machine (O/L)
- Flat Lock Machine (F/L)
- Kanchai Machine
- Blend Stitching m/c

Bar-tack Section:

- Button Hole Machine
- Button Join Machine
- Bar-tack Machine (B/T)
- Snap button attaching m/c

Finishing Section:

- Suction Machine
- Repeat attaching m/c
- Iron
- Metal detector m/c
- Spot cleaning m/c

b) Machine’s origin, specifications, name & quantity:

In below there are some information about machines their origins and number.

List of all cutting machine:

Name of Machine	Brand	Quantity	Origin
Auto Cutter Machine	GERBER	1	U.S.A

Auto Cutter Machine	Investornica	2	Spain
Plotter Machine	GERBER	2	U.S.A
	GERBER	1	U.S.A
	GERBER	1	U.S.A
	Loline	1	U.S.A
	Loline	1	U.S.A
	Loline	1	U.S.A
Fabric Spreader Machine	GERBER	2	U.S.A
	GERBER	1	U.S.A
	GERBER	2	U.S.A
Band Knife Cutting Machine	East Man Band Knife	4	U.S.A
	East Man Band Knife	1	U.S.A
Fusing Pressing Machine	HASHIMA	1	Japan
	HASHIMA	3	Japan
	HASHIMA	1	Japan
	HASHIMA	1	Japan
Straight Knife Machine 10"	KM Mack	21	Japan
Straight Knife Machine 10"	Eastman	5	U.S.A
Straight Knife Machine 8"	KM Mack	9	Japan
End Cutter Machine	East Man	12	U.S.A
End Cutter Machine	East Man	8	U.S.A
Bitting Machine	Ozibilim	2	Turkey

List of all sewing machines:

Name of Machine	Brand	Quantity	Origin
Single Needle Lock Stitch	JUKI, YAMATA, ZOJE, Brother	961	Japan, China
Over Lock	JUKI	806	Japan, China
Flat Lock	JUKI, SHING LING, YAMATO	632	Taiwan, China, Japan
Button Hole	JUKI, Brother	37	Japan, China
Button Attach	JUKI, Brother	51	Japan, China
Bar Tack	JUKI, Brother, SHING LING	24	Japan, China
FOA	JUKI, YAMOTO, PEGASUS	34	Japan
Single Needle Chain Stitch	JUKI	54	Japan
Single Needle Lock Stitch (Edge Cutter)	JUKI	63	Japan, China
Zig Zag	JUKI	26	Japan
Auto Cycle Sew M/C	JUKI	2	Japan
Kansai	KANSAI SPECIAL	56	Japan
Blanket Sel Stitch	-	1	-
Eyelet Hole	JUKI	1	Japan
Shuttle Stitch	JUKI	2	Japan
Smoke	KANSAI	1	Japan
Pin Tack	KANSAI	2	Japan
Bottom Wrapping & Knotting	LOVIA	2	China
Thread Trimmer	HASIMA	6	China
Snap Button	KANEM, MN-ENG, PRYM, NAGA SHING	31	Japan, China, Local

Rib Cutter	IDEA, TOYO, ZOJE, NISHO	27	China, Taiwan
Hand Stitch	KANSAI	2	Japan
Pearl Setting	KANSAI	2	Korea
Hot Fix setting	DAIRO	4	Korea
Thread rewinding	HASIMA	6	China

(Picture of Cutting Floor)



Figure 37 Cutting Floor

(Picture of Sewing Floor)



Figure 38 Sewing Floor

To know about the sewing machine and specific application of sewing machine to garments:

There are different kind of machines for sewing. With stitching name and functions given below.

Lock Stitching M/C:

- Group: Lock Stitch
- Function: Woven fabric stitching

Bat Tack M/C:

- Group: Lock Stitch
- Function: Bar tacking

Kansai M/C:

- Group: Chain Stitch
- Jacket cuff, Fu-long pant, waist belt joining.

Feed of the Arm M/C:

- Group: Chain Stitch
- Function: Inseam stitching of woven & jeans fabric.

Single Needle Chain Stitching M/C:

- Group: Chain Stitch
- Function: False stitching

Double Needle Chain Stitching M/C:

- Group: Chain Stitch
- Function: Side Seam Stitching

Button Hole M/C:

- Group: Lock Stitch/ Chain Stitch
- Function: Button hole making

Button Attaching M/C:

- Group: Lock Stitch/ Chain Stitch
- Function: Button attaching

Blend Stitching M/C:

- Group: Chain Stitch
- Function: Blend Stitching Making

Zigzag Stitching M/C:

- Group: Lock Stitch
- Function: Decorative seam making

The parameters of Quality Control (QC):

In every steps, they have quality parameters. If they find any fault than accordingly that fabrics or garments goes to previous section for rechecking.

Quality assurance procedure:

- Inspection room and sewing line should be clean and tidy.
- Fabric inspection report.
- Table store easy identification inspected and non-inspected fabric.
- Color contents card. Each batch with collar and rib fabric.
- Panel check report.
- Fabric relaxation report each batch import or local.
- Broken needle register.
- Process wise inspection system.
- Complete line file with list.
- Complete trims card.
- Pre-production (P.P) sample to hangs in relevant line.
- Size set checks records.
- Packing inspection.
- Pre final inspection.
- Final inspection records.
- Original measurement checks records packing section style wise garments.

(Picture of Quality Assurance Department)



Figure 40 Quality Assurance Department

The preparation of garments unit to start production:

In every process, they have pre plan for the further production. After getting order, they have to make a huge amount of fabrics or garments for the buyer. In that case, they have to maintain the quality and make sure to face least problem before delivering the product.

Before starting production:

- Fabric inventory.
- Accessories inventory.
- Trim card checking.
- Single poly measurement confirmed.
- Pre-production (P.P) size set.
- All fabric/ cotton type washed before going to inline elastics.
- Details pp meeting with factory/discuss possibility of problem critical area.

During Cutting:

- Fabric checked based on 4 points system.
- Fabric numbering method suitable and correct.
- Checking the cutting record.
- Blanket shade as it per buyer approved shade.

During in line:

- Compare pp. sample comments with first output.
- Compare all trims against approval.
- Finish pattern are correct measurement.
- Any bubbling after fusing/ wash.
- Is correct thread using in bobbin and top thread?
- Number of stitch per cm as per buyer given requirement.
- Correct size needle used in each operation.
- Is all type of making in line can be removed after sewing/washing?
- Measurement checked/ before wash/ after wash.

IE department planning and help production:

In this stage, they help two ways to production. One is directly and the other one is indirectly.

Directly help to production:

- a) Work-study officer plan on daily basis. They do planning for avoiding the lose time. They manage materials based on buyer requirement.
- b) They follow up the whole production process until to end. They balance the line as per layout. They assign supervisor for taking care of particular line. That supervisor task is to distribute the work equally among the worker with proper time management.
- c) They also judge the skill of every worker. Every 3 months' duration they again check the skill of their existing worker.
- d) Work-study officers observe the process of picking cutting part to sewing it and send it to other operator for further process. After observing the whole process, they try to find out the other way so that they can improve their lead-time.

- e) They always concern about balancing the work force by rearrange them before processing.
- f) They fixed target settings for daily basis.

Indirectly help to production:

- a) They provide productivity report to the marketing people for ensuring which product we should produce for maximizing the profit.
- b) They help to ensure what types of m/c they have and they need it for future. They give this data to maintenance and planning dept.

The function of merchandiser. Also the link to production process:

Merchandising:

Merchandising is the responsible from order analysis to shipment. Therefore, Merchandising is a very valuable department. Merchandising department analysis marketing and production departments. Merchandiser is the person whose responsibility is to execute the orders perfectly as per the costing and pricing.

Function of Merchandisers:

- a) Developing new samples, execute sample orders
- b) Costing
- c) Programming
- d) Raw materials/ Accessories arrangement
- e) Production scheduling (or) route card drafting
- f) Approval of various process, pattern and size set
- g) Pre-production follow up
- h) Meet inspection agencies
- i) Production controlling
- j) Identifying shortages and make arrangement for the shortages
- k) Following quality assurance procedures, quality control procedures
- l) Monitoring the in-house, sub-contractors and junior activities
- m) Buyer communication
- n) Communication with sub-contractor, processing units and other 3rd parties
- o) Proper reporting
- p) Highlighting to the management
- q) Record maintenance
- r) Developing samples

- s) Placement of orders to suppliers
- t) Taking measures for consistent production
- u) Taking preventive action to maintain the targeted performance in all areas of activates
- v) Attending meeting with superiors and furnishing the required details about merchandising.

Merchandiser link to production process:

- a) Internal and external communication
- b) Sampling
- c) Preparing internal order sheets
- d) Accessories and trims
- e) Preparing purchase orders
- f) Getting approvals on lab dips and bit looms
- g) Advising and assisting production and quality department
- h) Mediating production and quality departments
- i) Helping documentation
- j) Taking responsibility for inspections
- k) Giving shipping instruction and following shipment

Basic process flow:

New order:

Receive Product Package from buyer – Discussion with planning & production officer for the production – Analyze product package – List out type & fabric accessories – Do consumption of fabric & accessories – Do the costing & quote price – Negotiate & confirm price.

Confirmed order:

Prepare time & action calendar – Prepare Gantt chart – Receiving color standard – Submission of lab dip, strike off, hand loom – Development of printing & embroidery – Booking of yarn, fabric & accessories – Receiving of Master L/C – Opening BB L/C

Running Order:

Follow Prepare time & action calendar – Follow Prepare Gantt chart – Follow fabric, dye lot, shade – Follow up knitting & dyeing – Follow up printing, embroidery &

washing – Arrange all samples – Arrange all lab test – Arrange all inspection –
Ensure shipment of garments on time.

The inherent limitations that lead to low production (Work Study):

Some inherent limitation leads them to low production.

- a) Miss management to supervisor to worker
- b) Style selection line wise.
- c) Used short man power as per requirement
- d) Imbalance work in process
- e) Proper training for multi task purpose.

Standard wastage percentage in each production process:

This is very common for any kinds of organization. In every stage there must be some wastage will happen. In garments, there are three step before completing the full garments. Cutting, sewing and finishing. In cutting rejection rate is too low because in this stage they do design by CAD (Computer Aided Design). They use proper fabric in a maximum possible way. After cutting, this fabric goes to sewing section. According to SOP (Standard Operating Procedure), around .5% wastage happens. In printing there is 2% wastage happens in production. There are a lot of sector portion where fabrics are wasting. Like – after washing, ironing, designing, rejecting and so on. If we say in total, around 20% may loss in production process.

In a short about design studio, R&D and sampling:

Design studio:

Garment designers are allowing to create pattern for both sewing and knitting. As a designer they need to consider their color story, design functionality, technical package and garments pattern. They use illustrator for making their design. Customer satisfaction plays a big role in designing garments. The designer has to take into consideration what their customer desires in a specific garment.

R & D (Research and Development):

SQUARE understands the need for continuous evolution. Therefore, highest importance given to research and development. With the help of updated technology

and dedicated team of experts composed of members from marketing, merchandising and product engineer departments, SQUARE ensures continuous development and sampling at every stage of dyeing, spinning and finished garments production.

Sampling:

Garment sampling plays important role before going for bulk production. This process is very critical. Because every step needs to be done very carefully. The buyers mainly place the order after they are satisfied with the quality of the samples. Their purpose is to allow the buyer to judge the production capabilities of the manufacturer.

Recommendation:

Some areas should have to take some steps to improve. As I mentioned earlier about the wastage of fabrics, while moving it from batching section to dyeing section. There is a road between these two sections with no ceiling for protection from rain or winter season. Another thing is online marketing is getting popular day by day. People are spending much time on the virtual world. Online marketing products get maximum promotion. SQUARE can promote their factory through online sites. E.g., they can make some video clips about their factory scenario. They can make a video how they are giving facility to their employee. Government also has to show some responsibility to protect the garments industries. E.g., solve the license problem, providing proper environment for the work etc.

Conclusion:

It was one of the dreams come true moment of my life when I got internship confirmation call from RMG sector like SQUARE Fashions Ltd. I achieved valuable experience from renowned company will help me to do better in future for my professional career. The office environment and the people around there were a perfect for a fresh graduate like me. They helped me a lot to complete my internship report.

This report done on “Industrial Training on Marketing & Merchandising”. The Ready-Made Garments (RMG) industry earns a vital position in the Bangladesh economy. It is largest exporting industry in Bangladesh, its tremendous growth during the last 25 years. The industry plays a key role in employment. The government and RMG sector would have to work more together to maintain the respective position in global RMG market.