

Faculty of Engineering

Department of Textile Engineering

REPORT ON Industrial Attachment

At



Hemayetpur, Savar, Dhaka-1340, Bangladesh

Course Title: Industrial Attachment

Course Code: TE-431

Submitted By

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

Advance in Apparel Manufacturing Technology

Duration: From September 08, 2018 to November 08, 2018

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Industrial Attachment Report 2018



AKH Group

Hemayetpur, Savar Dhaka-1340, Bangladesh

Declaration

I sincerely declare that:

This Industrial Attachment has been done by me; I also declare that neither this Industrial Attachment nor any part of this Industrial Attachment has been submitted elsewhere for award of any degree or diploma.

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Signature:



Faculty of Engineering

Department Of Textile Engineering

Daffodil International University

Approval Sheet

This Industrial Report entitled "**Report on Industrial Attachment At AKH Group**" At Daffodil International University in December, 2018 prepared and submitted by Md. Tanvir Haider Tushar in partial fulfilment of the requirement for the degree of BACHELOR OF SCIENCE IN TEXTILE ENGINEERING has been examined and hereby recommended for approval and acceptance.

Supervisor:

Md. Abdullah Al Mamun

Assistant Professor

Department of Textile Engineering

Daffodil International University

Dedication

At first I want to dedicate this Industrial Training report to Almighty Allah for giving me a good opportunity to prove myself. Without his help it could not make into happen.

I also dedicate this report to Md. Abdullah Al Mamun, Assistant Professor of Daffodil International University who helped me to complete this report.

I also want dedicate this report to Md. Abul Kashem, DMD of AKH Group and all the people who have helped me in the AKH Group to complete this report.

Specially I want dedicate this report to my parents. Because they are my inspiration, because they are the reason the way I'm right now.

Acknowledgement

At first my gratefulness goes to Almighty Allah to give us strength and ability to complete my two months long industrial training and this report.

Now I wish to take this opportunity to thank a lot of people who have assisted and inspired me in completion of the training period.

Md. Abdullah Al Mamun, Assistant Professor of Daffodil International University my supervisor, to whom I am extremely indebted for his tremendous support and guidance throughout my training period. Being working with him I have not only earned valuable knowledge but also inspired by his innovativeness which helped enrich my experience to greater extent. His idea and way of working was truly remarkable.

I am also expressing my gratitude to **Prof. Dr. Mahbubul Haque** Head, Department of Textile Engineering, for his support and continuous guidance throughout our long journey in Daffodil International University and industrial training.

I should like to thank the management of the AKH Group, for giving us opportunity to do the industrial training successfully and also their valuable suggestions.

It's a great pleasure to express my satisfaction to The AKH Group authority for their sincere and cordial co-operation and I am very much indebted **to Md. Abul Kashem** DMD of AKH Group, for his association in completion of my training successfully. My training would never been completed without his convenient helps and supports.

Finally, I must acknowledge my Parents with due respect for their constant support, patients and believe on our ability which drives me in the success

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1.0 Executive Summary:

This report is titled "Report on Industrial Attachment at AKH Group". By achieving practical knowledge from the industrial attachment it is possible to apply the theoretical knowledge in the technical field. For any technical education, practical experience is almost equally necessary in association with the theoretical knowledge. The industrial attachment is the most effective process of achieving the practical experiences. It provides sufficient practical knowledge about Production Management, Productivity, Evaluation, Work Study, Efficiency, Industrial Management, Production Planning & Controlling, Utilities and Maintenance of Machineries and their Operation Techniques etc. AKH Group is one of the modern textile industry based on knit and woven garments production. The approach was to know and work with all the parameters of each section and practice with technical experts. As the academic advance study was in Garment Manufacturing Technology, emphasisment was in understanding and learning. Industrial attachment is an essential part of four years B.Sc. in Textile Engineering course of Daffodil International University. The opportunity to perform the industrial attachment with AKH Group. during 2 Months long, had studied the Man, Machine, Material and Planning, Grey Fabric Inspection, Finished Fabric Inspection, According to the studies in the whole chain of the factory have prepared the following report and would like to present as the internship report. B.Sc. in Textile Engineering is the combination of theoretical knowledge and the practical experiences. The main objective of this training is to comprehend the theoretical knowledge along with the practical knowledge. It also enabled to orient with the practical environment which is the place of future work.

2. Factory Information

2.1: Introduction:

AKH was established in the year 1997. Just about 15 kilometers to the North from the country's National Parliament in Sher-E-Bangla Nagar, Dhaka, and just by the Dhaka-Aricha highway, the Corporate Headquarters of AKH group and its other premises are situated at Hemayetpur, Savar. Public amenities and utilities as well as availability of workforce necessary for textiles and garment industry are in the best shapes in and around this area. Adding all of these advantages to its own expertise and other strengths, AKH has now successfully evolved into a highly integrated leading group in apparel manufacturing and exporting from Bangladesh.

The entire operations of AKH are carried out from three of its own premises, each being situated within a few minutes' drive from any of the others. These premises are designed with the most modern factory specifications. With 11 successful going concerns in the garment and allied sectors like knitting, dyeing, printing, embroidering, sewing, accessory manufacturing, packaging, C&F, and cargo carrying, it is now well ahead to have its own textile unit to produce both solid-dyed and yarn-dyed woven fabrics. Just keeping aside production of woven fabrics to start very soon, now it produces all other backward linkage materials for readymade garment production and has every facility necessary to meet its entire requirements for apparel exports.

On an aggregate floor space of 670,000 square feet in different production units, a few more than 14,000 people are now working in AKH to produce about 64,000 pieces of garments per day in the vertical set up of its knit factory, and about 40,000 pieces of shirts and blouses per day in its woven division.

2.2: Company Profile:

Head Office	133-134, Hamayetpur, Savar, Dhaka. Bangladesh.		
Phone	:(880-2) 7744001-8		
Fax	:(880-2) 7741830		
E-mail	:info@akhfashions.com		
Chairman	:Mr. Delwar Hossain		
Managing Director	:Mr. Md. Shamsul Alam		
Dy. Managing Director	:Mr. Md Abul Kashem		
	Md. Abul Kashem (Dy. Managing Director) E-Mail:		
Contact Person	kashem@akhfashions.com		
Contact reison	Moslehuddin Ahmed (Executive Director) E-Mail:		
	muahmed@akhfashions.com		
Year of Establishment	:1997		
Production Capacity/Monthl	y:1.2 Millions Pcs		
Total Turnover	:US\$ 50.00 million (2011)		
No. of Workers	:4290 Persons		
Main Product	:Woven Shirts (Men's/ Ladies/ Boys & Girls)		
Main Market	:USA, Canada & Europe, Japan		
	USA: Gap, Wal-Mart, Kohls, PVH, Wrangler, Jc-Penney, Sears K-		
	Mart Costco, Macy, EB, US Polo, BNR etc		
	UK: Mackays Stores, Marks & Spencer, Debenhams, Shop Direct,		
	Next etc.		
Durrans/Drands	Germany: C&A, Metro, Aldi etc.		
Buyers/Brands	Canada: Wal-Mart		
	Italy: United Colour of Benetton		
	France: Celio		
	Europe : H&M, Kigili, Pierre Cardin, CV etc.		
	Japan : ITOYOUKADO, TAKA-Q etc.		
Suppliers (Fabrics)	:Penfabric, Pentley (Malaysia), P.T. Argo Pantes, P.T. Unilon		

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	 (Indonesia), Taksang (HK), Jiangshu Textiles (China), Arvind/ BVM (India), Monno Fabric, Beximco Textile, Unicom Textile (Bangladesh) etc. (1) Export Import Bank of Bangladesh
	Gulshan Branch, 75, Gulahsn Avenue
	Dhaka 1212. Bangladesh
	Phone: 9886296, 9862262, 8819711
	Telex: 632125 EXN GL BJ. Fax: 880-2-8818703
Principal Bankers	E-mail: eximgul@bttb.net.bd. Swift # EXBKBDDH 007
	(2) Agrani Bank Ltd.
	Purana Palton Corp. Branch, Dhaka
	56, Purana Palton, Dhaka, Bangladesh.
	Phone: 8802-9560011, 9564769
	Cable: PURANA PALTON, Swift: AGBKBDDHA034
Head Office	:133-134, Hamayetpur, Savar, Dhaka. Bangladesh.
Phone	:(880-2) 7744001-8
Fax	:(880-2) 7741830
E-mail	:info@akhfashions.com
Chairman	:Mr. Delwar Hossain
Managing Director	:Mr. Md. Shamsul Alam
Dy. Managing Director	:Mr. Md Abul Kashem
	Md. Abul Kashem (Dy. Managing Director) E-Mail:
Contract Demon	kashem@akhfashions.com
Contact Person	Moslehuddin Ahmed (Executive Director) E-Mail:
	muahmed@akhfashions.com
Year of Establishment	:1997
Production Capacity/Month	ly:1.2 Millions Pcs
Total Turnover	:US\$ 50.00 million (2011)
No. of Workers	:4290 Persons

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Main Product	:Woven Shirts (Men's/ Ladies/ Boys & Girls)	
Main Market	:USA, Canada & Europe, Japan	
	USA: Gap, Wal-Mart, Kohls, PVH, Wrangler, Jc-Penney, Sears K-	
	Mart Costco, Macy, EB, US Polo, BNR etc	
	UK: Mackays Stores, Marks & Spencer, Debenhams, Shop Direct,	
	Next etc.	
D	Germany: C&A, Metro, Aldi etc.	
Buyers/Brands	: Canada: Wal-Mart	
	Italy: United Colour of Benetton	
	France: Celio	
	Europe : H&M, Kigili, Pierre Cardin, CV etc.	
	Japan : ITOYOUKADO, TAKA-Q etc.	
	Penfabric, Pentley (Malaysia), P.T. Argo Pantes, P.T. Unilon	
Grandling (Esheire)	(Indonesia), Taksang (HK), Jiangshu Textiles (China), Arvind/ BVM	
Suppliers (Fabrics)	(India), Monno Fabric, Beximco Textile, Unicom Textile	
	(Bangladesh) etc.	
	(1) Export Import Bank of Bangladesh	
	Gulshan Branch, 75, Gulahsn Avenue	
	Dhaka 1212. Bangladesh	
	Phone: 9886296, 9862262, 8819711	
	Telex: 632125 EXN GL BJ. Fax: 880-2-8818703	
Principal Bankers	E-mail: eximgul@bttb.net.bd. Swift # EXBKBDDH 007	
	(2) Agrani Bank Ltd.	
	Purana Palton Corp. Branch, Dhaka	
	56, Purana Palton, Dhaka, Bangladesh.	
	Phone: 8802-9560011, 9564769	
	Cable: PURANA PALTON, Swift: AGBKBDDHA034	
	Table 1: Company Profile	

2.3: Company Location:

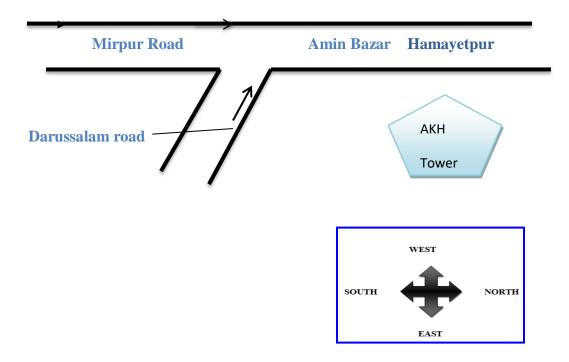


Figure 1: Road to AKH fashions ltd.

2.4: Compliance:

- 4 No Child Labor.
- No Forced Labor.
- **4** Transport Facilities for Worker.
- Hours of Work.
- **Voluntary over Time.**
- Interval for Rest.
- **Weekly Holidays**.
- 4 Annual Leave.
- ↓ Festival Holidays & Leaves with Bonus.
- **4** Maternity Protection.
- **Worker Participatory Committee.**
- **4** Mineral Drinking water.
- Sanitary Facilities.
- 🖊 First Aid box
- Canteen Services.
- **4** Day care center.
- Health Care Activities For The Workers & Employee Company Doctor.
- Fire Extinguisher Each & Every Floor Conduct Fire Drill At Least 12 Times a year. Company Giving A Top Prevention Of Fire & Eventual Education.
- **4** Environmental Developer.
- **4** Smoking Free Zone.
- **4** Group Insurance Coverage.
- \rm Gratuity.

2.5: Trainning and development:

AKH Group emphasize on the training & development aspects of the employees to develop & improve the skills of the employees.

Organizes Training program both local and overseas for the employees according to the training calendar.

1.5.1: Certificates:

AKH's list of accomplishment and Certificates for quality, efficiency, compliance and other good practices is pretty long. It is accredited with Fair-trade Certificate, Oekotex Standard 100 – Product Class-1, ISO 9001: 2000, Eco Sustainable Textile Standards, C-TPAT and many other Certificates. But on top, AKH weighs the best its buyers' satisfaction



Figure 2: Certificates

2.6: AKH Woven and Knit divisions little details:



Figure 3: AKH Group

2.6.1: Woven Division Sections:

- 1. Material Inventory
- 2. Fabric Inspection
- 3. Pattern & Marker check & Approval
- 4. Pre-production Meeting & Size set Sample Approval
- 5. Trial Cutting
- 6. Trial Production
- 7. Front Placket, Cuff, Color, Fusing & Making Inspection
- 8. First Inline Comments & Rectification
- 9. Bulk cutting & Production (As like trial cutting/production)
- 10. 2nd. Inline comments & Rectification
- 11. Thread Sucking
- 12. Ironing
- 13. 100% Quality Inspection
- 14. 100% Getup & Presentation Checking
- 15. Metal Detection (As required)

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- 16. Packing /Cartooning
- 17. Final Inspection



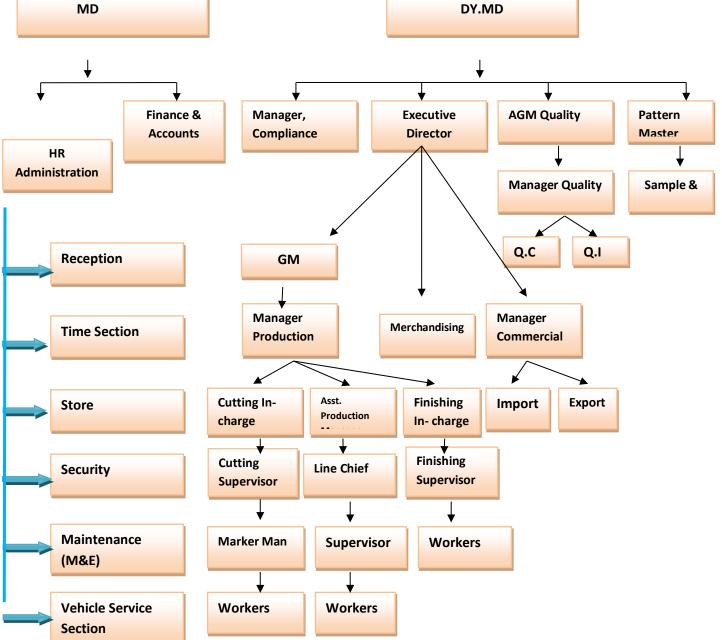


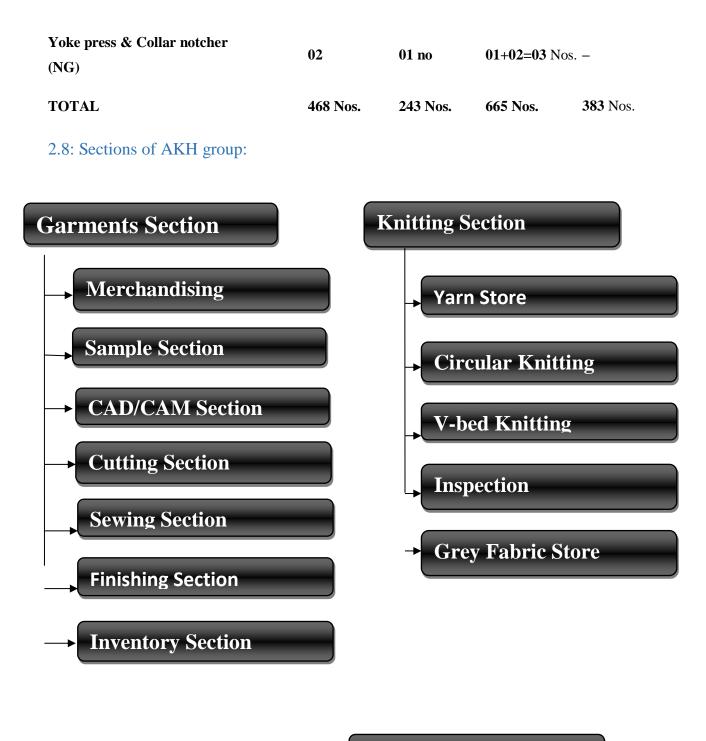
Figure 4: AKH hierarchy

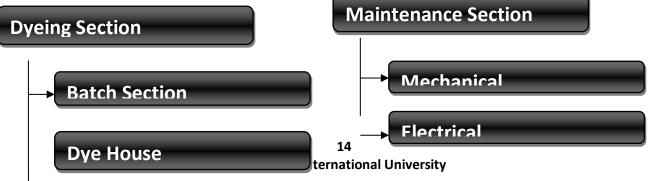
2.7: List of machine:

Names of Machine	AKH Fashions Ltd.(Unit 1&2)	Angshuk Ltc	AKH Shirts Ltd. (Unit – 01 & 02,03)	AKH Apparels Ltd
Plain Machine (Juki)	272 Nos.	132 Nos.	387 Nos.	230 Nos.
5 Thread Over lock (Juki)	24 Nos.	13 Nos.	36 Nos.	20 Nos.
3 Thread Over lock (Juki)	02 Nos.	01 Nos.	03 Nos.	02 Nos.
Feed of the Arm (Juki)	12 Nos.	09 Nos.	21 Nos.	10 Nos.
Double Needle (Juki)	12 Nos.	08 Nos.	16 Nos.	14 Nos.
Kansai Special	06 Nos.	04 Nos.	09 Nos.	06 Nos.
Button Hole (Juki)	17 Nos.	09 Nos.	22 Nos.	12 Nos.
Button Stitch (Lock Stitch) (Juki)	18 Nos.	12 Nos.	24 Nos.	13 Nos.
Barteck (Juki)	02 Nos.	01 No.	03 Nos.	02 Nos.
Band Knife (CKS)	01 No.	01 No.	02 Nos.	01 No.
Cutting Machine (KM)	03 Nos.	03 Nos.	08 Nos.	04 Nos.
Snap Button (Honrey)	08 Nos.	02 Nos.	10 Nos.	_
Thread Sucker (Local)	02 Nos.	01 No.	03 Nos.	02 Nos.
Collar Forming (Nagaishing)	02 Nos.	02 Nos.	04 Nos.	02 Nos.
Cuff Forming(Nagaishing)	01 No.	02 Nos.	02 Nos.	02 Nos.
Fusing (Machine) Kannegiesser	02 No.	01 No.	03 Nos.	01 No.
Front Placket Fuse	02 No.	01 No.	02 Nos.	01 No.

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Steam Boiler 9 Local)	02 No.	01 No.	03Nos.	01 No.
Steam Iron (Silver Star)	28 Nos.	15 Nos.	38 Nos.	24 Nos.
Vacuum Table (Local) & Hashima	28 Nos.	15 Nos.	38 Nos.	24 Nos.
Metal Detector (Lock)	01 No.	01 No.	01 No.	_
Generator (FG WILSON)	02 No.	_	_	01 No.
Compressor (Swan & jukai)	02 Nos.	02 Nos.	03 No.	01 No.
Neck Press (Nagaishing)	02 No.	01 No.	02 Nos.	01 No.
Arm Hole Fuse (Nagaishing)	02 Nos.	Nil	05 Nos.	_
Side Seam Fuse (Nagaishing)	01 No.	Nil	03 Nos.	_
Slv. Placket Creasing (Nagaishing)	01 No.	Nil	Nil	_
Fabric Inspection Machine (UZU)	01 No.	01 No.	01 No.	_
Label Cutting Machine (Local)	02 No.	01 No.	03 Nos.	02 Nos.
Thread Rewinding Machine (Local)	02 No.	01 No.	02 Nos.	02 Nos.
Belt Binding Machine (Toyo)	01 No.	01 No.	02 Nos.	01 No.
Button Pull test (Nagaishing)	01 No.	Nil	Nil	_
Saddle Stitch (Yamata)	04	-	_	02nos
Picot & Fagoting machine (kansai)	_	-		02 Nos.







Store Section

Figure 5: AKH sections

- 2.9: Concerns of AKH group:
- $\hfill\square$ AKH fashions Ltd.
- □ AKH Knitting and Dyeing Ltd.
- \Box AKH Knit wear Ltd.
- $\hfill\square$ AKH packaging and accessories Ltd.
- □ AKH cargo service
- \Box AKH shirts Ltd.
- \Box AKH embroidery Ltd.
- □ AKH print Ltd.
- \Box Angshuk Ltd.
- \Box AKH stitch art Ltd.
- \Box Angel enterprise Ltd.

 \Box Australian international school

- □ Button Tex Ltd.
- $\hfill\square$ Creative shirts Ltd.
- \Box Label Tex Ltd.
- \Box Sabah trade international Ltd.

Its other facilities are:

- \Box Own network Server.
- \Box Own power management.
- \Box Own utility management.
- \Box Transport facilities.
- \Box Medical centre.
- $\hfill\square$ Fire service facility.
- □ Effluent Treatment Plant &
- \Box Water treatment plant.

2.10: Buyers of AKH group:

Woven:

Buyer Name	Origin	Picture
GAP	USA	G A P
WAL-MART	USA	Walmart >¦<
Kohls	USA	KOHĽS
PVH	USA	рун
Wrangler	USA	WRANGLER
Jc-Penney	USA	JCPenney

Sears K-Mart Costco	USA	kmart
Macy	USA	★ macy [*] s
US Polo	USA	U.S. POLO ASSN. SINCE 1890
Mackays Stores	UK	MACKAYS
Marks & Spencer	UK	EST. 1884
Debenhams	UK	
Shop Direct	UK	
Next	UK	
C&A	Germany	C&A

Metro	Garmany	T
Metro	Germany	METRO
Aldi	Germany	ALDI
United Colour of Benetton	Italy	UNITED COLORS OF BENETTON.
Celio	France	celio*
Н&М	Europe	Hz M
Kigili	Europe	
Pierre Cardin	Europe	Pieur Cerdin [®]
CV	Europe	
ITOYOUKADO	Japan	
TAKA-Q	Japan	TAKAIQ BATH

Table 2Buyers List

2.11: Remarks:

As a factory, AKH Knitting and Dyeing Ltd. serve the environment. They do process the entire wastage water, and then disburse. To conserve the environmental issues, they are focus on Organic garment production as well and are certified by the GOTS for producing organic fabric and garment. Never the less, their all garment is Oeko-tex certified.

3. Garment

3.1: AKH garment production process:

Design / Sketch \downarrow Basic Block ____ Pattern Design \downarrow Sample Making Correction \downarrow Costing — **Production Pattern** \downarrow Grading \downarrow Marker Making \downarrow Fabric Inspection — Spreading ↓ Cutting \downarrow Sorting/Bundling \downarrow Sewing/Assembling \downarrow Inline Inspection 22 ©Daffodil International University

\downarrow

Pressing/ Finishing

 \downarrow

Final Inspection

 \downarrow

Packing

 \downarrow

Dispatch

Figure 6: Garment production

3.2: Operations done in AKG fashion ltd:

SL	Operation	Job	Method
No.			
01	Design/Sketch	It is given by buyers to manufacturers containing sketches including measurements of particular styles	Manual/Computerized
02	Basic Block	Basic block is an individual component of garments without any style of design (without Allowance, Style, Design)	Manual/Computerized
03	Working Pattern	When a pattern is made for a particular style with net dimension regarding the basic block along with allowance then it is called working pattern.	Manual/Computerized
04	Sample Garments	To make a sample, this will be approved by buyer. After making a sample, it is sent to buyer for approval to rectify the faults	Manual
05	Approved Sample	After rectify the faults, sample is again sent to buyers. If it is ok then , then it is called approved sample	Manual
06	Costing	 Ø Fabric Costing Ø Making Charged Ø Trimmings Ø Profit 	Manual
07	Production Pattern	Making allowance with net dimension for bulk production	Manual/Computerized

08	Grading	If the buyer requires different sizes, so should be grade as S, M, L, XL, XXL	Manual/Computerized
09	Marker Making	Marker is a thin paper which contains all the components for different sizes for a particular style of garments	Manual/Computerized
10	Fabric Spreading	To spread the fabrics on table properly for cutting	Manual/Computerized
11	Cutting	To cut fabric according to marker dimension	Manual/Computerized
12	Sorting & Bundling	Sort out the fabric according to size and for each size make in individual bundles	Manual
13	Sewing	To assemble a full garments	Manual
14	Ironing & Finishing	After sewing we will get a complete garment which is treated with steam ironing & also several finishing processes are done for example extra loose thread cutting	Manual
15	Inspection	Should be approved as initial sample	Manual
16	Packing	Treated by Polyethylene bag	Manual
17	Cartooning	After packing, it should be placed In cartooning for export	Manual
18	Dispatching	Ready for export	Manual

Table 30 perations of AKH fashion ltd.

3.3: AKH fashion ltd. manufacturing sequence:

Order confirm

 $\|$

Pattern make

 $\|$

Its sample makes and sent

 $\|$

Simple fabric and accessories order

Counter sample make & sent

 $\|$

Tag sample receive

 $\|$

Fabric & accessories order

Approved pattern grade

$\|$

Marker make

 $\|$

Fabric & accessories in house

Pre-production / p.p. meting

Trail cutting

Line setup

Cutting

Sewing/Bulk production start

 $\|$

In-line inspection

 $\|$

Production sample sent

 $\|$

Finishing

 $\|$

Ironing

Packing

Carton

Final inspection

Shipment sample

 $\|$

Shipment

Figure 7: AKH manufacturing chart

3.4: Section wise description:

3.4.1: Fabric Section:

AKH procures woven fabrics of highest standard and as per the buyers' requirements. As well, these fabrics are procured from its own sources meticulously chosen based on the track record of repute in maintaining delivery schedule and quality specifications. AKH is going to start its woven textile unit to produce both solid-dyed and yarn-dyed woven fabrics soon.

Inspecting thoroughly yard-by-yard conforming to the 4-point checking system, woven division of AKH issues fabrics to the production processes.

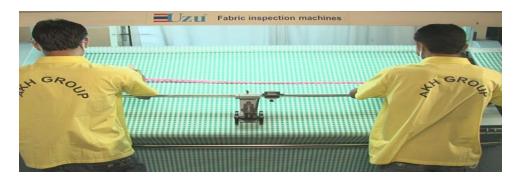


Figure 8: Fabric Section

3.4.2: Sample and design section:

Staffed by highly skilled and experienced master tailors, AKH woven division sample section is meant for exact reproduction of approved samples in virtually no time at all.



Figure 9: Sample and design section

3.4.3: Pattern and marker development:

Woven division of AKH has appropriate pattern and marker making facility of most sophisticated computer aided system.



Figure 10: Pattern and marker section

3.4.4: Cutting section:

Backed with the world's most contemporary marker solutions, the cutting technology and efficiency here is predestined to utilize fabrics maximally possible and to enable sewing section's line operations to excel in exercising their skills in continued identical reproduction of approved samples.



Figure 11: Cutting Section

3.4.5: Sewing Section:

Rendering the ultimate tailoring excellence without compromise, in 31 lines on about 350,000 square feet of floor space here, about 5000 skilled people are working in an ideal environment to produce about 100,000 pieces of high quality knit garments of diverse types in casual as well as fashion ranges every day. To ensure tailoring excellence, AKH has got some special types of sewing machines like Picot, Fagot, Press Button of Prym, Flat Seaming, Smoking, Zigzag, Feed-Of-The-Arm, Elastic Inserting etc.



Figure 12: Sewing section

3.4.6: Finishing and QC section:

AKH is having all of the world leading woven apparel finishing machinery. At present, carefully involving both in-process and end-process meticulous QC, this division is operating within the quality periphery of AQL 1.5 to 2.5 but it looks forward to achieving zero rejection level.



Figure 13: Finishing and QC section

3.4.7: Packing and Loading:

Being a qualified participant in the US Custom's Trade Partnership Against Terrorism, AKH strictly maintains the C-TPAT enclosure for packing and cartoning, conforming to all of the necessary requirements.



Figure 14: Finishing and loading section

3.4.8: Lab of AKH:

Lab is a important place for every factory. AKH also has one.

- Lab Activities:
- 1. Dimensional Stability.
- 2. Color Fastness to Rubbing Dry & Wet.
- 3. Color Fastness to Staining.
- 4. Color Fastness to water.
- 5. Color Fastness to Perspiration.
- 6. Color Fastness to SALIVA.
- 7. Cross Staining.
- 8.5 X wash.
- 9. Appearance.
- 10. PH Value.
- 11. Twisting.
- 12. Buttons Test.
- 13. Home Laundry for PACARING.
- 14. Fusing Test.
 - <u>Machine:</u>
- 1. Washing Machine.
- 2. Dry Machine.
- 3. PH Shaker Machine.
- 4. Weight Machine.
- 5. Inquevator or Woven Machine.
- 6. Rubbing Machine.
- 7. PH meter.
- 8. Light Box Machine.
- 9. Button Test Machine.
- 10. Grey Scale.

11. Changing Color Scale.











3.5 Merchandising

Department

3.5.1: Introduction about garment merchandising:

We should understand the Garments Merchandising at first Garments means Apparels or clothing which we need to wear every day, everybody, every time not only in our country, all over the world also .Merchandising means buying, producing and selling of any goods or products or services for the local or international market. If we combine this two English term Garments Merchandising then the meaning of garments merchandising becomes like following definition.

All the activities involved in procuring export order of any garment of particular design for specific quantity analysis of all the garment requires to produce the garments ,production of the quantity of garments with specific attention to required quality level production scheduling & exporting the garments within fixed time frame may be called Garments Merchandising.

From the said definition of garments merchandising it can be assumed clearly that procuring a garment export order that is export L/C production of those garments as per buyers satisfaction within limited time is not so easy. The activities involved in garments merchandising is normally done by a dynamic & person called garments merchandiser. The person Garments Merchandiser is one of the important key person of garments production & garments export sector.

3.5.2: Flow chart of merchandising:

Study sheet received

 \int

Fabric source & sample making

 \int

Development sample send to buyer



Sample acceptance by buyer

 \int

Pricing for buyer



Price negociation with buyer



Order confirmation receiving

IJ

Issue PI for L/c



PO(Persase order) sheet receving



Fabric booking



Size wise sample making 39 ©Daffodil International University

\int

Approval with buyer

\int

Trims & accessories approval receiving

\int

Trims & accessories order placing to supplier

\int

PI receiving from supplier & L/C opening

\int

PP (Pre production) sample making

\int

Production plane making

\int

Production approval receive

\int

Lab process ok

\int

Fabric ,Trims & Accessories receiving

IJ

Schedule booking all of the section

(Garments, knitting, dyeing, finishing, printing & other section)

Production start

 \square

Production follow up all section



In line inspection check



Pre final inspection ok

Final inspection booking

 \bigcup

Inspection report receive



Packaging



Delivery to shipment



Shipment approval document receive

Figure 15: Merchandising Flow chart

3.5.3: Job of a merchandiser:

- Merchandiser has to understand the buyer requirements.
- Have to know all the process to quote prices of any garments.
- Study the samples to quote price.
- Study the development package.
- Understand the order
- cost analysis of the order
- Make any changes if needed with the concern of the buyer for better look & production.
- Communicate with the sample section.
- Communicate with the production section for bulk production.
- Merchandiser should find out the sources of the fabrics, yarn, accessories & follow up the in-house procedure.
- Order sheet analysis & requirement list preparation.
- Arrange pre-production meeting
- Follow up bulk production according to CPS.
- Get updated on current status of order daily basis during production.

3.5.4: Analysis of and order sheet:

After receiving the order sheet Merchandiser has to study the order sheets very carefully. He has to check the main points of the order sheet. Such as

- Order No
- Style No
- Price of the product
- Item Description
- Fabric details
- Styling
- Price
- Shipment Date
- Quantity details

Example:

Example order sheet:

Buyer: Li and Fung

Brand: Gymboree

		g (****			
Master PO #	239189	Age group	Baby	User name	
Company	AKHECO AKH ECO APPARELS LTD.	Gender Group	Boy	Season Name	SUMMER 2019
Factory	AKH ECO APPARELS LTD.	Style	140196336	Delivery Name	19 GY SUMMER 1
Agent	LF CENTENNIAL PTE LTD.	Ref #	GYBB10100	Start Ship Date	2/16/2019
Country	BANGLADESH (BD)	Ship Mode	OCEAN	Cancel ship Date	2/22/2019
Sourcing Manager	Alexandra Arroyo		•		Page 1
		Print Date	10/30/2018 2:52:27	AM	
Product Purchase A	greement: The Worksheet and Product Purchase	Agreement are	the Contract		

Style	140196336	Picture 1: 140196336.jpg
Style Desc	BB W SS BLUE MULTI STRIPE WOVE	GYBB10100
Reference	GYBB10100	
Color Cd/Color	GY903	
Fabric Name	UW3049SOFT YD MADRAS	
Fabric Content	100% COTTON	
Fabric Const.		
Artwork Desc		

InfoSheet - Fabric

2 UW3049-SOFT YD MADRAS ALL GT0339-1-NV PLAID		Print Code	Color Code	Placement	Fabric	No
	WL-AMERICANA	GT0339-1-NVL-AMERICANA PLAID		ALL	UW3049-SOFT YD MADRAS	2
3 UW3088-4.07 OZ YD OXFORD INSIDE COLLAR STAND C3021-1-CHA	IAMBRAY	C3021-1-CHAMBRAY		INSIDE COLLAR STAND	UW3088-4.07 OZ YD OXFORD	3

InfoSheet - Artwork

No	Artwork No. & Description	Size	Placement



Master PO #	239189	Age group	Baby	User name	
Company	AKHECO AKH ECO APPARELS LTD.	Gender Group	Boy	Season Name	SUMMER 2019
Factory	AKH ECO APPARELS LTD.	Style	140196336	Delivery Name	19 GY SUMMER 1
Agent	LF CENTENNIAL PTE LTD.	Ref #	GYBB10100	Start Ship Date	2/16/2019
Country	BANGLADESH (BD)	Ship Mode	OCEAN	Cancel ship Date	2/22/2019
Sourcing Manager	Alexandra Arroyo				Page 2
		Print Date	10/30/2018 2:52:27	AM	

Product Purchase Agreement: The Worksheet and Product Purchase Agreement are the Contract

PO #	239	189 (GYN	BOREE	E)			S	itart Date		2/	16/2019		Cancel Dat	te	2/22/2019	
First Cost			2.87 R	letail		24.50	USD 1	fotal PO Q)ty			6,261	Reorder		N	
Company: AK	IECO A	KH ECO /	APPARI	ELS LTD.	Factory:	AKH EC	O APP/	ARELS LT	D. Count	try: B/	NGLADE	SH (BE))			
Silhouette Desc	: BWC0	18 - SHIR	T, Y/D,	NOT NAF	bwc S	hipment	Terms:	FOB FT	A:							
Size	Total	NB	0-3	3-6	6-12	1218	1824	2T	3T	4T	5T					
Multi PPK Sub	2,870	0	410	410	410	410	41(0 410	410		0 0					
Web-1 pc/pack	954	0	15	5 76	144	131	12	8 207	253		0 0					
Bulk Pack	2,437	0	35	5 250	440	412	374	4 513	413		0 0					
Total for PO	6,261	0	460	736	994	953	91	2 1,130	1,076		0 0					
Quota Cat.		239	239	239	239	239	239	340	340	340	340					

Total For ALL P.O.s

Size	Total	NB	0-3	3-6	6-12	1218	1824	2T	3T	4T	5T			
Multi PPK Sub	2,870	0	410	410	410	410	410	410	410	0	0			
Web-1 pc/pack	954	0	15	76	144	131	128	207	253	0	0			
Bulk Pack	2,437	0	35	250	440	412	374	513	413	0	0			
Total Order	6,261	0	460	736	994	953	912	1,130	1,076	0	0			

Figure 16: Order sheet

Where a merchandiser distributes his Order sheet copy?

Order Sheet Distribution.

In AKH (woven section) a Merchandiser has distribute the order sheet to all the concern department i.e.

- Commercial
- Planning
- Store
- Production section
- Quality section
- Sample section

3.5.5: Different types of sample that needed to complete an order:

Samples are very important to get an order from a buyer. There are different types of samples required to complete an order for a merchandiser.

FIRST : COUNTER SAMPLE / INITIAL SAMPLE / RED SEAL SAMPLE / STYLING SAMPLE/ FEED SAMPLE/PROTO

Produced With Available Fabric, Accessories. In one particular size to see the styling of the garments.

SECOND : SIZE SET SAMPLE / JUMPING SIZE SET SAMPLE

Produced With Available Fabric, Accessories.

THIRD : P.P SAMPLE. / PRE-PRODUCTION SAMPLE

Produced With Actual Fabric, Accessories.

FOURTH : SHIPMENT SAMPLE / GOLD SEAL SAMPLE

Produced With Actual Fabric, Accessories.

Besides these other two types of sample required. They are

SALES MAN SAMPLE: PRODUCED FOR RETAIL BUYERS WITH ACTUAL FABRICSA, ACCESSORIES AND PACKNIG.

GENERALLY SALES MAN SAMPLE COST DOUBLE OF THE FOB PRICE.

PHOTO SAMPLE: PRODUCED FOR CATALOGUE BUYERS.

PHOTO SHOUTS OUT REQUIRED PLACING THE GARMENTS IN A CATALOGUE.

WASH TEST SAMPLE: FABRIC FORM OR GARMENTS FORM TO SEE THE EFFECT OF PRINTING AND DYEING.

FLANELITY TEST SAMPLE: USED FOR FLEECE GARMENTS.

The points that a merchandiser considers for sample:

Consider Age group – new born / kids/ tanagers/ adult/ senior citizen

Consider color- ladies pick pinkish color/ for new born pick light color.

Consider gender - men's, ladies, boys, girls

Consider type of garments- shirt, pant, tank top, jeans, skirts, miniskirts, t-shirt, polo shirt etc.

3.5.6: Fabric Sourcing:

Fabric sourcing department is basically engaged in determining how and where its merchandise i.e. fabric will be obtained. It works in co-ordination with the merchandising department and looks after the delivery of the required goods within the scheduled time and cost. A fabric source must have knowledge about all varieties of fabric in order to execute their function effectively.

• Storage:

Location system of storage is followed i.e. fabric packages are stored in two areas

1. Checked fabric and

2. Unchecked fabric.

Such system maintenance of the store makes it easy to locate the fabric whenever needed in future.

• Fabric Issue:

The fabric store issues the fabric for cutting on Chillan. All fabric is not issued at one go; instead it is issued as required. The Chillan contains information regarding style no, color, buyer's name, and quantity to be issued and issued for which production unit.

3.5.7: Garment sampling:

Garment samples are inevitably important and are developed tested 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.

Details need to attach to a garment sample:

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 fabrics/trims etc. they have used (if applicable).

1. Ref no.

2. Color

3. Fabric

- 4. Composition
- 5. Description
- 6. Quantity
- 7. Style no / Size
- 8. Store

There may be a separate sampling department in a 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 buyers' price ranges and quality levels, merchandiser has to advise sampling department suitably.

• Example Swatch for Sampling:



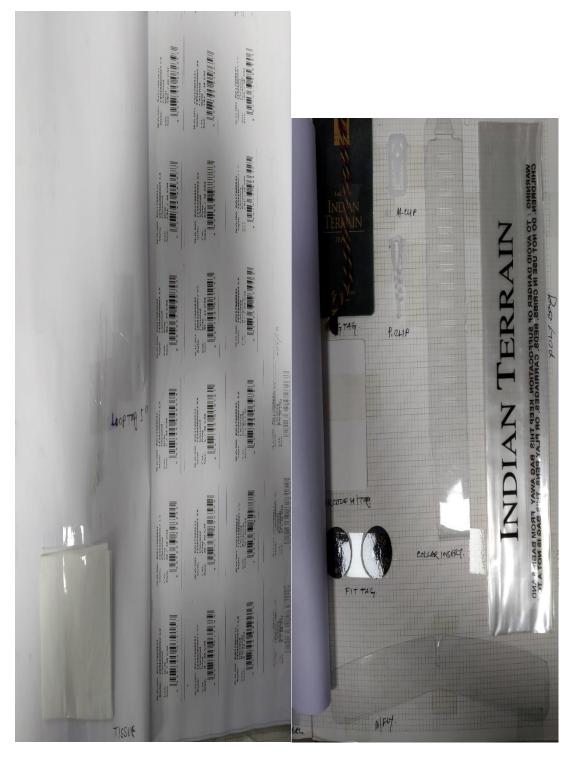


Figure 17: Swatch card

3.5.8: Costing for buyer:

Costing is a very complex procedure, with set patterns and guidelines followed by the industry, and it is difficult to find out costs for every process as there are some inbuilt costs while costing. Garment costing includes all the activities like purchase of raw materials and accessories, Woven fabrics, processing and finishing of fabrics, sewing and packing of garments, transport and conveyance, shipping, over heads, banking charges and commissions, etc. Costing includes all the activities like purchase of raw materials and accessories, knitting fabrics, processing and finishing of fabrics, sewing and packing of garments, transport and conveyance, shipping, over heads, banking charges and commissions, etc. To do perfect garment costing, one must know about all these activities thoroughly about their costs, procedures, advantages and risk factors. Also he must know how to solve the problems when occurred and to take suitable alternate decision immediately in time. We must be aware that there are always fluctuations in the costs of raw materials and accessories, charges of knitting, processing, finishing, sewing and packing, charges of transport and conveyance. Hence we must have update knowledge about the latest prices and charges, latest procedures, methods and quality systems, market prices and availability, transportation (road, sea, air) and freight charges, etc. We must remember that the quality depends on price; price depends on quality. Each product will have different price according to its quality. We do not manufacture only one quality of garments. Also we manufacture the garments not only for one customer. While we do the garment costing, the customer's price level, quality & quantity and payment terms, to be taken into consideration. Costing is the deciding factor for fixing of prices and the important thing to follow in all stages like purchase, production, marketing, sales, etc. Also update knowledge about everything related to garments, is essential to make perfect costing. Costing includes all the activities like purchase of fabrics and accessories, processing and finishing of fabrics, sewing and packing of garments, transport and conveyance, shipping, over heads, banking charges and commissions, etc.

Costing of garments:

Now keep in mind, the cost the garment is information you will need from the factory. A simple formula is used to calculate the cost of the garment and looks like this:

Costs of fabric + trims + labor + business overhead + profit = Garment Cost

This is how a factory will calculate the cost of manufacturing each garment. For you as the small business, your overhead and all of your expenses such as design research, markdown sales losses, brand advertising, promotions, rent, and everything else that goes along with owning and running a business are deducted from the total revenue you generate per garment. After you deduct all of the expenses of running your business from the revenue you generate from the garments you make and sell, you are left with your profit. The cost of piece goods (fabric) is generally about one-third the initial production cost of a garment. For the small company, the margin and mark-up will be higher than for bigger mass-producing companies that have a lower margin and mark-up percentages due to the volume they manufacture. Ultimately, the final figures may be a subjective call of what the market will bear.

Considering things for costing for a merchandiser:

Direct cost: Cost of raw material -- 66%. Cost of size and chemicals - 4%. Production cost comprising of running the machine, maintenance, power fuel, humidification and other utilities -- 8 % and worker wages and salaries -- 8% losses incurred due to shrinkage, wastage, grading, and also selling commissions.

• Indirect cost:

Interest on investment, loan, working capital, depreciation, etc. Above 7%, overheads and administrative expenses like traveling, telephone, couriers, legal issues, taxes comprising of 7%.

• Profit:

10 - 20% depending on the order size. In some companies, 70% of the fabric cost will comprise of direct cost, but in corporate selling only 40% cost of the fabric is direct cost and 60% is overheads.

3.5.9: CM calculation for costing for a merchandiser:

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

- Consumption for CM:
- Calculation per dozen for Woven products:

Measurements for Basic Shirt: L (Celio Brand)

 $\frac{1}{2}$ chest =55cm + 3cm (Allowance) =58cm

Center back length (CBL) = 76cm + 6cm (Allowance) = 82cm

Sleeve length (SL) = 68cm + 6cm (Allowance) = 74cm

• Fabric Consumption

Formula: ¹/₂ chest*(CBL+SL)*2/36

+5% (wastage)

(Fabric width-1)

58*(82+74)*2

+5% (wastage) 54

58*156*2	+5% (wastage)

- = 12774.168
 - <u>18096</u> +5% (wastage)
- = 12774.168
- = 1.417 Yds./pcs

For 12 pcs garments: 1.417 Yds.*12 =17.6604 yds./doz

- Wastage_Distribution:
- 1. Sewing wastage = 3%
- 2. Cutting and Finishing=2%
- 3. Print Wastage=2-3%
- 4. Emb. Wastage=2-3%
- 5. Garment Wash wastage=5% above (Depends on wash type)

Wash types and their wastage

- 1. Garment Normal Wash=2-3%
- 2. Garment Enzyme Wash=3-5%
- 3. Garment Stone Wash= 5-10%
- 4. Garment Pigment dyeing & wash=10-20%

Note: Wastage is variable depending on factory to factory.

• Sewing Thread Consumption per Body for CM costing:

Sewing thread consumption is very important for the garments costing. For quick costing we use our previous idea to calculate the sewing thread cost. Please find below an approximate sewing thread consumption list for some common item. This list is based on minimum wastage. So, at first please check your percent of wastage & and try to control it.

Consumption of

Sewing Item Consumption

Basic T-shirt	125 mtr
Basic Polo shirt	180 mtr
Basic L/slv Woven Shirt	150 mtr
Basic S/slv Woven Shirt	125 mtr
Classic L/slv Woven Shirt	175 mtr
Classic S/slv Woven Shirt	150 mtr
Basic shorts	350 mtr
Classic Shorts	450 mtr
Basic L/pants	350 mtr
Classic L/pants	450 mtr
Basic Nylon Jogging Suit	500 mtr
Basic Short all	350 mtr
Classic Short all	400 mtr
Basic Overall	400 mtr
Classic Overall	500 mtr
Padded Coverall	450 mtr

Basic Romper	350 mtr
Classic Romper	450 mtr
Night Dress	200 mtr
Pajama Set	450 mtr
Skirt	300 mtr
Panty	50 mtr
Brief	50 mtr
Brassier	100 mtr
Corp set	150 mtr
Tank Top	50 mtr
Denim 5 Pocket Pants	400 mtr
Basic Nylon Padded Jacket	350 mtr
Classic Nylon Padded Jacket	500 mtr
Denim Jacket	450 mtr
Twill Jacket	450 mtr
Basic Nylon Wind Breaker	300 mtr

3.5.10: Different invoices for a merchandiser:

Pro-forma Invoice

Company Name and Add	ress		
Pro-forma invoice no:			Date:
Brice Booking			
Quantity	Description	Unit Price	Total amount

Say total :(In Words)			
Country of Origin:			
Shipment from:			
Mode:			
Shipment Date:			
Negotiation Date:			
Payment by Confirmed ir	rrevocable L/C		
Part and Transshipment a	llowed		
Inspection Certificate and	l Certificate of origin is	sued by beneficiary	

Acceptable interest at rate realized by banks in exporting country to be paid from the date of negotiation of documents. We certify that we have no commission agents in Bangladesh. Add confirmation to the Letter of Credit at beneficiaries cost.

Example PI:

Buyer: LI & Fung

Brand: Gymboree

PO#850554-GYKB17872/140197359

PO#850561-GYTB17872/140197435

TOTAL AMOUNT:

HUZHOU SINO IMP.&EXP.CO.,LTD 10TH FLOOR JINHANG BUILDING NO.322, WEST HUANCHENG ROAD, HUZHOU, ZHEJIANG, CHINA DATE:2018-10-24 S/C NO.:DG0218-10318 PROFORMA INVOICE NO.:DG0218-10318 PROFORMA INVOICE THE SELLERS: THE BUYERS: HUZHOU SINO IMP.&EXP.CO.,LTD AKH ECO APPARELS LTD ADD:10TH FLOOR JINHANG BUILDING NO.322, 495 BALITHA, SHAHBELISWER, DHAMRAI WEST HUANCHENG ROAD, HUZHOU, ZHEJIANG, CHINA DHAKA-1800, BANGLADESH 本合約由買賣方訂立,根據本合約條款規定,買方同意購買,賣方同意出售下述商品: THIS PROFORMA INVOICE MADE BY AND BETWEEN THE BUYERS AND THE SELLERS , WHEREBY THE BUYERS AGREE TO SELL THE UNDER-MENTIONED COMMODITY ACCORDING TO THE TERMS AND CONDITIONS STIPULATED BELOW: 单价 金額 商品及規格 数里 UNIT PRICE(USD) AMOUNT(USD) COMMODITY AND SPECIFICATION QUANTITY (YDS) UW3000MS 3.60Z 100% COTTON FOB SHANGHAI OF CHINA C/W: 56" 40*40 133*72 HS CODE: 5208520091 COUNTRY OF ORIGINAL :CHINA COL: OC-6110-1

2,465

1,075

3,540

US\$1.64

US\$1.64

\$4,042.60

\$1,763.00

US\$5,805.60

	ESS : Quantity & Amount will	De + 0767 - 376		
2.包装/PACKING: I	LOOSE PACKING : ROLL			
3.出厂期/धा-шц	DATE: 2019-01-28			
4.装运口岸/LOADII	NG PORT: SHANGHAI, CHINA			
5. 保险/INSURANCE	: To be covered by the l	buyer for 110% of	invoice value against	
6. 付款条件/TEBES	OF PATHENT : T/T PAYMENT	BEFORE SHIPMENT		
7.备注:REMARKS:				
BANK DETAIL:				
BANK NAME:	BANK OF CHINA HUZI	HOU BRANCH		
ADDRESS:	208TH RENMIN ROAD	HUZHOU ZHEJIAN	IG CHINA	
SWIFT CODE:	BKCHCNBJ92G			
A/C:	357158371602			
SELLER(卖	(方)		BUYER	兵方)
HUZHOU SINO	IMP.&EXP.COLTD		AKH ECO APP	ARELS LTD

Figure 18: Proforma Invoice

3.5.11: Fabric booking for a merchandiser:

After receive 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 need approx 44/45 days and to buyer yarn from Bangladesh it need approx 20/30 days. After receive yarn we go for fabrics knitting and then coloring of the fabrics. After dyed fabrics is ready to make garments.

• Example Fabric Booking:

Buyer: Li & Fung

Brand: Gymboree

D.177	10.10.10						
DATE	:10-16-18						
MILL	:Raymond						
ATTN	:Kumar Amit						
FROM	:Masum/Sagar						
SUBJECT	Shell Fabric Booking						
BUYER	:Outlet						
Season#	Ref#	Style#	PO	Fabric code	Print/Color code	Fabric PO Qty	CW
19 OT SUMMER 1	GYKB17955	140197037		DN2007RA/CHAMBRAY	WA2118-SURFBIRD VA	3270	58.5"
19 OT SUMMER 1	GYTB17955	140197081		DN2007RA/CHAMBRAY	WA2118-SURFBIRD VA	1755	58.5"
Total						5025 YDS	
Pls issue the P.I in	n favour of AKH Ed	co Apparels Ltd	, 495 Balitha	, Shahbeliswer, Dhamra	i, Dhaka-1800, Bangladesh.		
THANKS & REGARDS							
Masum/Sagar							
AKH GROUP							

Figure 19: Fabric booking

3.5.12: Trims and Accessories details, booking and names for a merchandiser:

To fulfill the design objectives we need different kind of materials. Fabrics are the main material, which used for garment manufacturing. We need other materials also, which make the garments aesthetic, functional and commercially required. Usually other than fabrics these materials used for making garments are called trims and accessories.

Trims:

The raw materials used in sewing room other than fabric are called Trims. On the other hand materials are directly attached with the fabric to make a garment are called trims. Like: Threads, buttons, lining, zippers, labels, care labels, etc.(Interlining is used as shape forming / preserving materials.)

Accessories:

The materials, which are used to make a garment attractive for sale and packing, other than fabrics and trims, are called Accessories.

4.11.1: List of Trims and Accessories

<u>SL</u>	<u>Trims</u>		<u>Accessories</u>

1LabelsPoly bag2ButtonsElastic bag3ZippersMini Poly bag4PaddingMaster Carton

5	Interlining	Inner Carton
6	Down	Size Clip
7	Elastic	P.P. Band
8	Thread	Tag Pin
9	Twill Tape	Brass Pin
10	Stopper	Collar Stand
11	String/Draw Cord	Safety Pin
12	Piping Cord	Gum Tape
13	Emblem	Arrow Sticker
14	Logo Print	Scotch Tape
15	Swivel Hook	Barcode
16	Eyelet/ Grommet	Defect Indicator
17	Collar Stay	Tissue Paper
18	Cord Bell	Back Board
19	Buckle	Neck Board
20	Rivet	Butterfly
21	Weaving Belt	Numbering Stickers
22	Hook and Eye	Hanger
23	Velcro Tape	Size Stickers
24	Seam Sealing tape	Carton Pad
25	Shoulder pad	Both Side Tape
		63 ©Daffodil International University

26	Cable (steel ware)	Plastic Staple
27	Adjuster	Iron Seal
28	Recco	Clip
29	Elastic Threads	Ball chain
30	Shoulder Tape	Size Tag
	-	
31	-	Carton Sticker
31 32	-	Carton Sticker Safety Sticker

Finishing Accessories

- 1. Main Label.
- 2. Size Label.
- 3. Wash care label.
- 4. Poly bag.
- 5. Carton.
- 6. Sewing Thread.
- 7. Gum Tape.
- 8. Flag Label.

3.5.13: Trim & Accessories booking:

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

Button booking

Buyer: Li & Fung

Brand: Gymboree

DATE	:28-10-2018								
то	:AZMAIN ACCESSORIES								
ATTN	:MR. ALAMGIR HOSSAIN								
FROM	:Mr. Masum/Sag	ar							
SUBJECT	:Button Booking								
BUYER	:Gymboree								
FILE NO	:41/18/AEAL								
Pls see belo	ow details bookin	g sheet & deliver the	goods immediately.						
Season #	SI no #	Trim Type	Trim Code	Size	Placement	Bttn Color	Booked Qty	Unit	
19 GY SUMMER CAP	GYBB10155/ 140196072/ 238987	UB2000- HORN BUTTON	UB20037- 4HL FAUX HORN BUTTON	16L	CF	COLOR #2	231	Gross	
19 GY SUMMER CAP	GYBB10171/ 140196850/ 238990	UB2000- HORN BUTTON BUTTONS	UB20037-4HL FAUX HORN BUTTON	16L	CF	AS SAMPLED (COLOR #5)	184	Gross	
19 GY SUMMER CAP	GYB18407 / 140196096 / 238992	UB5000- FAUX METAL BUTTONS BUTTONS	ub50044wd-4HL METAL BUTTON WITHOUT DISTRESSED	18L	CF	ANTIQUE SILVERMETAL	337	Gross	
19 GY SUMMER	GYB18359 /	UB2000- HORN BUTTON	UB20037-4HL FAUX	18L	CF	COL #2	288	Gross	
CAP	140196097 / 238993	BUTTONS	HORN BUTTON	14L	COLLAR	COL #2	91	Gross	
	1		II				1131		

Note:

*PIs issue the P.I in favour of AKH Eco Apparels Ltd, 495 Balitha, Shahbeliswer, Dhamrai, Dhaka-1800, Bangladesh.

*Before start bulk production please send art work/soft copy for approval.

Figure 20: Button Booking

Tape Booking

Buyer: Li & Fung

Brand: Gymboree

DATE	:12-08-2018 (R-1)
ТО	:SUNNY ACC'S
ATTN	:Ms. CathyTsang
FROM	:Mr. Masum/Sagar
SUBJECT	:Tape Booking
BUYER	:Gymboree
FILE NO	:41/18/AEAL
Pls see be	low details booking sheet $\&$ deliver the goods immediately.

Season#	SI no #	Trim Type	Buyer item code	Size	Placeme nt	Color / Quality	Booke d Qty	Unit	Remarks
19 gy Summer Cap	GYBB101557 1401960727 238987	UT5000- TAPE - WEBBING/T	UT50122- LIGHTWEIGHT CANVAS WITH PICKSTITCH DETAILING POLY TAPE WITH 2	1/4"	Inside Collar Stand And Under Placket	BIRCH (SAND DUNES PIKSTITCH)		YDS	Need 50yds for sampling
19 GY SUMMER CAP	GYB18407 / 140196096 / 238992	UT5000- TAPE - WEBBING/T	UT50145- WOVENUT50122- LIGHTWEIGHT CANVAS WITH PICKSTITCH	3/16"	INSIDE COLLAR STAND	LILY WHITE (LILY WHITE AND CHRYSANTHEMU M STITCH LINE)		YDS	Need 50yds for sampling
19 GY SUMMER CAP	GYB183597 1401960977 238993	UT5000- TAPE - WEBBING/T	UT50122- LIGHTWEIGHT CANVAS WITH PICKSTITCH DETAILING	1/4"	INSIDE COLLAR STAND AND UNDER PLACKET	BIRCH (SAND DUNES PICKSTITCH)			Need 50yds for sampling
							0		

Note:

*Pls issue the P.I in favour of AKH Eco Apparels Ltd, 495 Balitha, Shahbeliswer, Dhamrai, Dhaka-1800, Bangladesh. *Before start bulk production please send art work/soft copy for approval.

Figure 21: Tape Booking

Thread Booking

Buyer: India Brand: Indian Terrain

DATE	:01-04-2018						1	
TO	:Coats, BD.							
ATTN	:Mr. Shadab							
ROM	:Mr. Sagar							
SUBJECT	:Sewing Thread Booking							
BUYER	Indian Terrain							
ILE	:19/18/AFL							
LS SEE THE	BELOW BOOKING SHEET & DELIVERY	THE GOODS IMMEDIATELY.						
Style	Gmt color	Usage	Article no	Epic	Sylko Matt	Tkt	Coats Shade	Book Qty
		body	2974	Yes		50's		
	PINK-751	bobbin	2974	Yes	Yes	75's	???	
		bttn hole	2974	Yes		120's		
		body	2974	Yes	50's			
	WHITE-751	bobbin	2974	Yes	Yes	75's	???	
		bttn hole	2974	Yes		120's		
		body	2974	Yes		50's		
	SKY-751	bobbin	2974	Yes	Yes	75's	???	
		bttn hole	2974	Yes		120's		
SB-321	TRIM FABRIC-ALL	TF-781 / BENGAL STRIPE/NAVY-INNER COLLAR BAND IN BIAS, UNDER CUFF, DOWN	2974	Yes		50's	???	
		SLEEVE PLACKET IN STRAIGHT GRAIN.				75's	???	
			2974	Yes		75's	Y1390	
	Additional Thread-ALL	LOOPER INSIDE FOA	2974	Yes		75's	Y1676	
			2974	Yes	N/A	75's	Y1081	
	BTN HOLE-CONTRAST/BARTACKS-	AT LAST BUTTON HOLE/BARTACK @ SLEEVEPLACKET-FUCHSIA(MATCH TO TAPE)	2974	Yes		120's	??	
	ALL	AT LAST BUTTON HOLE/BARTACK @ SLEEVEPLACKET-AQUA (MATCH TO TAPE)	2974	Yes		120's	??	
	ALL	Main Label	8725	Astra		120's	C7949	

Figure 22: Thread booking

Care label booking:

Buyer: Li & Fung

Brand: Gymboree



Label Order Form for Gymboree

To		Order Date	11/12/2018 10:55:33 PM
Fax		Vendor PO #	
Tel		Delivery Name	19 GY SPRING 3
Master PO #	239703	Company	AKHECO AKH ECO APPARELS LTD.
Ref #	GYB18416	Agent	LF CENTENNIAL PTE LTD.
Style #	140198829	Color Code	GYM001

ShipTo	Bill To	
Attn.	Atta.	
Fax	Fax	
Tel	Tel	

PO : 239703	Customer : US-GYMBOREE	Retail : 47.50CAD 39.50USD							
Size	Main	Color	Size Stkr	Barcode	GMT Qty	Order Qty			
XXS	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000198	470	500			
XS	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000199	566	600			
s	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000200	674	715			
М	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000201	701	740			
L	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000202	597	630			
XL	GRZKLBL-GY RZOE KID LOGO END FOLD LABEL			242000203	525	555			
XXS	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000198	470	500			
XS	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000199	566	600			
s	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000200	674	715			
М	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000201	701	740			
L	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000202	597	635			
XL	GRZSDLBF-GY RZOE SIDE SEAM CARE LABEL			242000203	525	555			
XXS	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000198	470	500			
XS	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000199	566	600			
s	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000200	674	715			
М	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000201	701	740			
L	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000202	597	635			
XL	URZSZCOO-GY R ZOE SIZE/COO LOOP LABEL			242000203	525	555			

Figure 23: Label booking

3.5.14: How a merchandiser places his order:

1. Once an order is placed the merchandise manager should fill out a PO checklist. All missing information with regards to the PO will be forwarded to the customer within 1 day of receiving the PO.

2. A complete PO package must be prepared and sent to the factory within 24 hours of receipt of order from customer with a copy of P.O. to Commercial Department.

3. Prepare a projected production plan & forward the same to the Head of Quality Control & to the related supplier. The schedule should comprise of expected dates for fabric Quality Check, ILC, IPC, MPC & FRI.

4. Prepare a projected sample plan & forward the same to the related supplier with a copy to the Head of department. Once sampling is completed Head of concern Merchandiser forwards the order file to the Head of Quality Control along with the approved sample & a copy of projected production schedule. Make sure the file is forwarded at least 5 days before start of actual production.

5.A meeting should be conducted between the Head of Merchandising Department, Concern Merchandiser, Head of Quality Control & Quality Control Officer (Production) discussing all the details of order.

6. Obtain an instruction sheet covering all the required information from the quality control officer & approve.

7. Make sure any new comments are added into the instruction sheet.

8. Regular follow up should be made with the suppliers & Quality Control regarding the status of production.

9. Make sure the Quality Control Department conducts all the required inspections i.e. Fabric Quality Testing, ILC, IPC, MPC & FRI for every order. For large volumes make certain, there are more than 1 MPC being conducted by the quality control.

10. Obtain daily production status from Quality Control & forward the same to IT for updating the Web Site latest by 11:00 every morning.

11.Obtain reports of all the inspection conducted i.e. Fabric Quality Testing, ILC, IPC, MPC & FRI for every order from quality control & keep a copy for record.

12. Visit the supplier at least during one inspection.

- 13. Make sure that FRI is conducted at least 2 days before the shipment date.
- 14. Once FRI is OK, inform buyer.
- 15. Update Order Checklist, format enclosed.
- 16. Update the excel sheet accordingly, format enclosed.

3.5.15: Time and Action (T&A) Calendar making of a merchandiser:

Choose the month that you are currently in or are waiting to work with. You will see a column for "Buy it", "Stage it" and "Sell it". The "Buy it" column are categories you should be focusing your buying efforts for this month; watching out for bulletins, researching needed vendors, and building up your basic inventory in these areas. The "Stage it" column is categories that should drive you're merchandising plan for your end caps, main aisle and seasonal areas. And finally, the "Sell it" column is the areas your customers should be looking for as they shop your store; employees should be stirring your customers to these areas via great customer service. Please note: The list of categories are all inclusive. Not all categories are for all stores, only order categories that are currently in your store or that you feel are right for your market.

Example T&A

Buyer: Li & Fung

Brand: Gymboree

SI	Lot		Brand	Ref	Style v	PO	FIT ,T	Product Descript ion	Style Descript ion	Fab description/Print code	Order qty	In Store Date :	Ex-fty date	Ship cancel	Prod time	1 B	Remar ks	Wark Type	Composit ion
1		19 GY	Gymboree	GYBB10155	140196072	238987	\$\$	BB	BB W SS WHITE AO PALM LEAF WOV	UW4471-SLUB LINEN / GB02214-LINE LEAF	6,269	4/15/2019	1/26/2019	2/1/2019				WASH070- WEEKEND WASH	55% LINEN 45% COTTON
2		19 GY SUMM ER CAP		GYBB10171	140196850	238990	\$\$	BB	BB W SS BLUE GUYABER A WOVEN TO	UW3034-YD OXFORD / C3021+CHAMBRAY (Shell fabric) and UW3034-YD OXFORD / GT0208-2-WVL- GUYABERA STRIPE (Trim fabric)	6,245		1/26/2019	2/1/2013				WASH035- Rugged Wash	100% Cotton
3		19 GY SUMM ER CAP		GYB18407	140196096	238992	\$\$	KB	B W SS CALIFORN IA MAP NAVY SMR	UW4471-SLUB LINEN / GB0220-1-VINTAGE CALI	7,127	4/15/2019	1/26/2019	2/1/2019				WASHO7O- Weekend Wash	55% LINEN 45% COTTON
4		19 GY SUMM ER CAP		GYB18353	140196097	238993	\$\$	KB	B W SS BANANA LEAF BIEGE	UW4471-SLUB LINEN / GB0221-1-LINE LEAF	6,112	4/15/2019	1/26/2019	2/1/2019				WASH070- Weekend Wash	55% LINEN 45% COTTON
5		19 OT SUMM ER 1	Outlet	GYKB17872	140197036	850467	SS	KB	KB RED SS PINEAPPL E WOVEN SHIR	UW3000MSBK-3.602 MS POPLIN (W3001MS) 7 GB0039-1-PINEAPPLE RED (shell) And UW3088-4.07 02 YD	4,783		2/2/2019	2/8/2013				WASHOTO- Weekend Wash	100% Cotton

Figure 24: T&A

3.5.16: Production Plan:

A production plan is that portion of intermediate-range business plan that manufacturing operations department is responsible for developing. The plan states in general terms the total amount of output that the manufacturing department is responsible to produce for each period in the planning horizon. The output is usually expressed in terms of pesos or other units of measurement (e.g. tons, liters, kegs.) or units of the aggregate product (this refers to the weighted average of all the products in your company). The production plan is the authorization of your manufacturing department to produce the items at a rate consistent with your company's overall corporate plan. This production plan needs to be translated into a master production schedule so as to schedule the items for completion promptly, according to promised delivery dates; to avoid the overloading or under loading of the production facility; and so that production capacity is efficiently utilized and low production costs result.

Importance of production planning for a merchandiser:

Production planning is one of the planning functions that a firm needs to perform to meet the needs of its customers. It is a medium-range planning activity that follows long-range planning in P/OM such as process planning and strategic capacity planning. Firms need to have an aggregate planning or production planning strategy to ensure that there is sufficient capacity to meet the demand forecast and to determine the best plan to meet this demand. A carefully developed production plan will allow your company to meet the following objectives:

- 1. Minimize costs / maximize profits
- 2. Maximize customer service
- 3. Minimize inventory investment

• Production Plan Making:

Activity 1: Determination of Requirements

The 1st activity in Production Planning is the determination of the requirements for the planning horizon. Demand forecasting plays an important role in the conduct of these three tasks. Managers thus need to be aware of the various factors that would affect the accuracy of the demand and sales forecast.

Activity 2: How to Meet the Requirements:

The next major activity involves the identification of the alternatives that the firm may employ to meet production forecasts as well as the constraints and costs involved.

Once the most appropriate plan has been selected, then the firm evaluates the plan and later on finalizes it for implementation. For more efficient and effective planning process, the formation of a production planning team composed of managers from manufacturing, marketing, purchasing and finance, is recommended.

• Production planning process:

To be able to perform the aggregate planning process, the following information should be available to this production planning team. These data include the following:

- 1. Materials / purchasing Information
- 2. Operations / manufacturing Information
- 3. Engineering / process Designs
- 4. Sales, marketing and distribution Information
- 5. Financial and accounting information
- 6. Human resources information



Sections

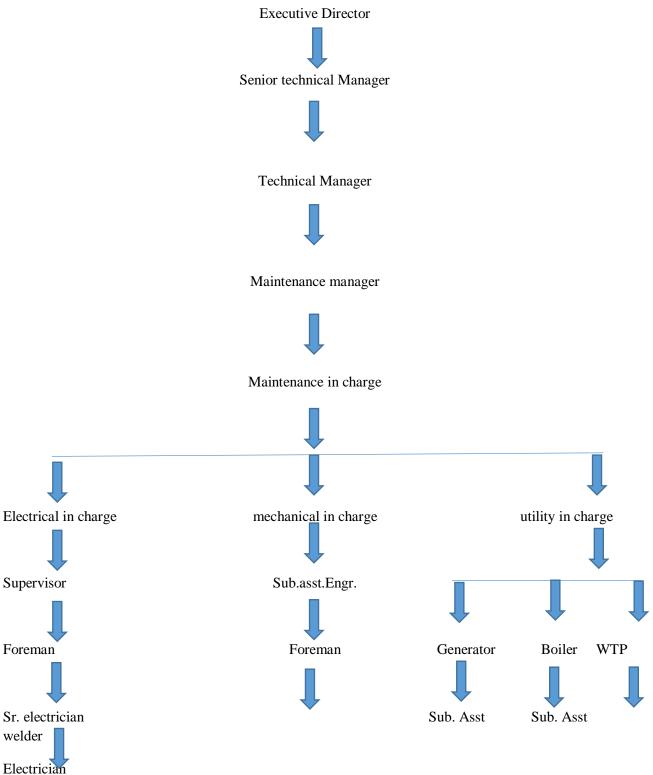


Figure 25: Maintenance Flow chart

What is maintenance?

The act which is done to keep the factory-plants, equipment, machine & instruments etc. in an Optimum working condition, minimize the breakdown of machines operation, to improve Productivity of existing machine, to avoid sinking of addition capital and to prolong the useful life of the factory-plant and machinery is known as maintenance. In AKH Knitting & Dyeing Ltd. Maintenance job is done by two departments. Those are, electrical department for electrical Maintenance and mechanical department.

Objectives of maintenance

- To keep the factory plant, equipment, machine tools etc in optimum working condition.
- To ensure specified accuracy to products and time schedule of delivery to customer.
- To minimize down time of the machine and to keep the production cycle within

Stipulated range.

- To modify the machines to meet extra requirements of product quality and quantity.
- To reduce maintenance cost as far as possible to reduce overhead cost.
- To prolong the useful life of the factory plant and machineries.

Types of maintenance:

- 1. Breakdown maintenance
- 2. Schedule maintenance
- 3. Planned maintenance
- 4. Routine maintenance
- 5. Preventive maintenance
- In AKH Knitting & Dyeing Ltd. Maintenance departments do the following job:
 - Breakdown maintenance
 - Schedule maintenance
 - Perfections

Breakdown maintenance:

- Breakdown maintenance is done when any electrical or mechanical problem is informed by
- Respective division where the problem is occurred. In the mean time maintenance people reach
- To the spot and try their best to solve the problem. Maintenance divisions have spare parts of
- Most common instruments and immediately they change the part. Since still now all equipment's
- & instruments of AKH knitting 7 Dyeing Ltd. Have the one year warranty. So, the supplier
- Engineers are called to solve the very complicated problems.

Schedule maintenance:

Schedule maintenance is done by maintenance division are as follows:

- Daily
- Monthly

Daily maintenance:

Daily maintenance report contains following terms:

- Status of m/c
- Problems

Maintenance people check all the machine and equipment status is it running or not. If there is Any problem of any equipment or instrument they solve it and write down the problems & its Solution details in log resister.

Monthly maintenance:

Monthly maintenance jobs are done by AKH maintenance departments as follows:

- Check pump housing oil
- Check all bearing, valve, sensor etc.
- Check all electrical & electronics appliances

- Cleaning all dyeing machines
- Replace air filter element
- Change the lubricating
- Check power transmission

Monthly maintenance report is given in appendix. I think this is a good & profitable Maintenance programmed which is giving the additional facilities of the factory production & Smooth running of the factories machinery.

Errection:

Maintenance division of AKH Knitting & Dyeing Ltd. do errection job. Since part of the plant is Still now under construction so the electrical and mechanical setting of these constructing part is Done by maintenance division. Now mechanical setting of ETP plant running by direct Supervision by mechanical department whereas electrical settings of eight floor garments Building is supervised by electrical department.

Preventive Maintenance:

Preventive maintenance is a predetermined routine actively to ensure on time inspection / Checking of facilities to uncover conditions that may lead to production break downs or harmful Description.

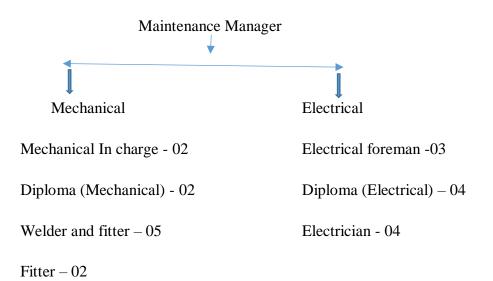
Routine Maintenance:

Maintenance of different machines is prepared by expert engineer of maintenance department. Normally in case of dyeing machine maintenance after 30 days complete checking of different Important parts are done.

Manpower set up for maintenance:

•	A Shift	7 AM - 2 PM

- B Shift 2 PM - 10 PM
- C Shift 10 PM 7 AM
 General Shift 9AM 6 PM



3.6.2: Maintenance Procedure:

Normally preventive maintenance should be done. During maintenance procedure following Points should be checked:

1. Check and tightening all motor terminals.

2. Check and clean pressure sensor and tightening terminals

3. Clean the ventilation fans of panel board and circular fan on top of Machine.

4. Check and clean the interfacing and data cables.

5. Check and tightening the proximity switch terminals.

6. Inspection, cleaning and tightening all the terminals in the panel.

7. Check and tightening limit switch, safety door guard and the

Emergency switch.

8. Functional test of the yarn detector.

Checking list of different parts:

1 Crease the m/c bearing.

- 2 Complete cleaning of machine.
- 3 Cleaning of drain valves, replace seals if required.
- 4 Check air supply filters, regulators auto drain seals
- 5 Clean filters element and blow out.
- 6 Greasing of unloading roller bearing.
- 7 Checking of oil level and bolts of unloading roller gearbox.
- 8 Checking of unloading roller coupling and packing.
- 9 Checking & cleaning (if required) of main vessel level indicator.
- 10 Check the oil level of pump bearing and refill if required.
- 11 Check the function of heat and cool modulating valves

12 Check all door seals.

Maintenance tools and equipment:

1. Combination tools / spanner

Function: Tightening & loosening of nuts & bolts.

2. Socket ratchet set

Function: Tightening of nuts & bolts.

3. Slide range

Function: Tightening & loosening of nuts & bolts.

4. Monkey pliers

Function: Tightening & loosening of nuts & bolts.

5. Pipe threat cutting tools

Function: To cut the threat in pipe.

6. Bearing puller

Function: To assist the opening of bearing from shaft.

7. Pipe range

Function: Tightening & loosening of pipe joint.

8. Pipe cutting tools

Function: For pipe cutting.

9. Hole punch

Function: Punching the hole.

10. Divider

Function: For circle marking on metal & wood.

11. Easy opener

Function: To open the broken head bolt.

12. External threat die

Function: For external threat cutting.

13. Heavy scissor

Function: Cutting of gasket & steel sheet.

14. Oil can

Function: Oiling of moving parts.

15. Drill machine and drill bit.

Function: For drilling.

16. Grease gun

Function: For greasing of moving parts of m/c.

17. Grinding m/c

Function: For grinding & cutting of mild steel.

18. Welding m/c

Function: For welding & cutting.

19. Spirit leveler

Function: For perfect leveling.

20. File

Function: For smoothing the surface.

21. Hammer

Function: For scaling & right angling.

22. Circlip tools

Function: Circlip opening & closing.

23. Hacksaw blade

Function: For metal cutting.

24. Handsaw (wood)

3.6.2: Remarks:

Maintenance of m/c is very essential to prolong the m/c life and good maintenance is important Consideration. It is necessary to check that all routine maintenance is being done regularly and Properly otherwise efficiency of each department will be reduced.

3.7: SWAT

analysis

3.7.1: What is SWAT analysis?



SWOT analysis (alternatively SWOT Matrix) is a structured planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. A SWOT analysis can be carried out for a product, place, industry or person. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. The technique is credited to Albert Humphrey, who led a convention at the Stanford Research Institute (now SRI International) in the 1960s and 1970s using data from Fortune 500 companies. The degree to which the internal environment of the firm matches with the external environment is expressed by the concept of strategic fit.

3.7.2: Strength of AKH:

- > A 100% Export oriented Composite Vertical Woven industry
- > Producing almost every type of garment.
- > Modern machineries.
- > Presently infrastructure new building
- Increase Garments division line.

- > They have International Certificate
- > International standard lab.
- > provide full time doctor facilities
- Excellent Tele-communications network of E-mail, Internet, Fax, ISD, NWD, Currier & Cellular services
- Readiness of new units to enhance systems and create infrastructure accordant with product growth and fast reactions to circumstance
- Our marketing team in here provides the day-to-day marketing support updating data Base.
- > Merchandising Team always have a good relation with the foreign Buyers
- > Our company uses ERP to provide streamlined services for customers
- We have very strong connection more than 50 factories in Bangladesh where we place our product ordered
- We have very strong marketing division for all kinds' of ready-made garments to expand market to Europe, U.S.A, Canada and all over the world.
- We are very much responsible and accountable to our ethics to implement all the local and international laws regarding environment, labor policy etc.

3.7.3: Weakness of AKH:

- > The country is deficient in creativity.
- Lack of production line.
- > Absence of easily on-hand middle management.
- > A small number of manufacturing methods.
- Low acquiescence: there is an international pressure group to compel the local producers and the government to implement social acquiescence. The US GSP may be cancelled and purchasing from US & EU may decrease significantly.
- M/c advancement is necessary. The machinery required to assess add on a garment or increase competence are missing in most industries.
- > Lack of training organizations for industrial workers, supervisors and managers.
- > Autocratic approach of nearly all the investors

- > No textiles Units.
- > No IE Section.
- Loading/unloading takes much time.
- Subject to natural calamities.
- > There is Work study department.
- > Merchandising department need to increase.

3.7.4: Opportunities of AKH:

- Bangladesh is included in the Least Developed Countries with which US is committed to enhance export trade.
- > Woven are very economical even with china and is the prospect for Bangladesh
- If skilled technicians are available to instruct, prearranged garment is an option because labor and energy cost are inexpensive.
- Foundation garments for Ladies for the FDI promise is significant because both, the technicians and highly developed machinery are essential for better competence and output
- > Demand is increasing day by day
- > All modern equipment & Machine setup in new division.

3.7.5: Threats of AKH:

- > The exporters have to prepare themselves to harvest the advantages offered by the opportunities.
- > Always try to motivate the employers & employees.
- > Try to improve fire protection.
- > Always maintain the product quality.
- > Shipment or delivery goods right time.
- > Political instability
- > Insufficient natural resource

4.Impact of

Internship

4.1: Sample development

- Have known what type of sample produced here
- Have known System of sample approval
- Have known what type of machine here

4.2: CAD Section

- Have known about working procedure of CAD
- Have known about marker making process
- Have known about different allowance.

4.3: Cutting

- Have known about cutting fabric
- Have known about method of cutting
- Have known defect of cutting section
- Have known about removal of fabric wastage

4.4: Sewing

- Have known about many type of sewing machine
- Have known about function of sewing machine
- Have known about sewing fault and their remedies
- Have known about total production of this section

4.5: Finishing

- Have known about total production of these garments.
- Have known about Trims and Accessories.
- Have known about how to quality assurance.

4.6: Printing

- Have known about different types of printing process.
- Have known printing fault, causes and remedies.

4.7: Embroidery

- Have known the types of embroidery stitches.
- Have known Embroidery machineries.

4.8: Quality

- Have gather knowledge about Quality Control system.
- Have know about garments inspection procedure

4.9: Merchandising

- Have known the activities of merchandising.
- Have known how they follow up production.
- Have known different consumption formula.

4.10: Compliance

- Have known about their compliance system
- Have known about medical facilities

5.Conclusion

At the end of my B.Sc. (Engg.) programme on "TE" from Daffodil International University. It is Essential to minimize the difference in practical and theoretical knowledge. I am very glad to get A chance to do my industrial internship project work in a renowned company as In the AKH Group.

As a developing country to develop in industrial sector textile industries give Bangladesh light in the dark. One of the industrial sectors that is contributing in our national economic development that is nothing but textile sector. As we have many hard working people only industrial development can play an important role in our economic development.

Textile processing is very important & critical process where the success depends on achieving required quality of the fabric. Quality finishing is directly related to the quality of used to process. There are many factories in Bangladesh. Most of them use various materials that are imported. If we would have as many factories to manufacture textile products in Bangladesh then we will be able to save huge money.

Only a proper thinking and good utilization of our resources can help us to manufacture textile products which will provide us more profit.

AKH Fashions LTD. is one of the up growing textile composite industries. It has a good installment of different equipment and instrument. Modern technology is used in garment section. Most of their machines are imported from Switzerland, Greece and China.

The company has a good practice in high class administration. It has a team of highly skilled stuffs and workers. Their product quality is well appreciated by many European buying companies.

The factory is located in a beautiful place with good communication to Dhaka. It has own power generation station, good water treatment plant.

They have well equipment for quality control of fabric.