Report On

Aswad Composite Mills Ltd.

Sub title: Industrial Engineering Department

By

Md. Rasel Molla

ID No:19281143

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

Executive Development Center, BIGD

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It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at

Brac University.

2. The report does not contain material previously published or written by a third party, ex-

cept where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other

degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

Md. Rasel Molla

Student ID:19281143

Supervisor's Full Name & Signature:

Dr. Mirza Masood Hassan

Head, Governance & Politics Cluster, BIGD, Brac University

ii

Letter of Transmittal

Dr. Mirza Masood Hassan

Head, Governance & Politics Cluster

BIGD, Brac University

66 Mohakhali, Dhaka-1212

Subject: Submission of Industry attachment (Internship) report

Dear Sir,

This is my pleasure to present my Industrial Attachment report. I complete it at Aswad Composite Mills Ltd. (A sister Concern of Palmal Group of Industries), which I was engaged by your direction.

I have attempted my best to finish the report with the essential data and recommended proposition in a significant compact and comprehensive manner as possible.

I trust that the report will meet the desires.

Sincerely yours,

Md. Rasel Molla

Student ID: 19281143

Section-B

Intake-4iiExecutive

Development Center, BIGDBrac University

Date: May 5, 2021

Non-Disclosure Agreement

This agreement has made and entered into by me and between Aswad Composite Mills Ltd. and the undersigned student at the following terms and conditions-

1. The two parties (1^{st} Party-student, Md. Rasel Molla and 2^{nd} Party-Aswad Composite Mills

Ltd.) agree that the internship report, in draft or final form, is not considered to be a confiden-

tial document and the internship report may be shared with other parties by the student, em-

ployer or faculty advisor. The faculty supervisor will maintain a copy of the internship report

for at least one year (in case of a grade review), at which time the supervisor may elect to de-

stroy the file copy.

2. The two parties agree that all documents and data provided by the employer to the student

in the course of the internship remain the property of the employer, but except where express-

ly requested by the employer, these will not be treated as confidential information by the fa-

culty supervisor and the student.

3. The two parties shall not be prohibited from disclosing any information obtained during

the internship if such information was in the public domain.

Student's Full Name & Signature:

- Jan

Md.Rasel Molla

ID: 19281143

Industrial Supervisor's Full Name & Signature:

Md. Firoj Uddin

DGM - Admin, HR & Compliance

Aswad Composite Mills Ltd.

Acknowledgement

At first my gratefulness goes to Almighty Allah to give me strength and ability to complete

the internship and this report. I have made my life more bountiful. May you name be exalted,

honored and glorified.

Now I wish to take this excellent opportunity to thank a lot of people who have assisted and

inspired me in the completion of our training period. Mr. Dr.Mirza Masood Hassanas my

academic supervisor, to whom I am extremely indebted for his tremendous support and guid-

ance throughout my training period. Being working with him I have not only earned valuable

knowledge but was also inspired by his innovativeness which helped enrich my experience to

a greater extent. His ideas and way of working was truly remarkable.

I would like to thank the management of the Aswad Composite Mills Ltd. for giving me the

opportunity to do the internship successfully and also their valuable suggestions. My deepest

appreciation goes to Mr. Md. Firoj Uddin, Deputy General Manager, Aswad Composite Mill

Ltd. for his permission to conduct my internship without which it would be uncompleted. The

generous support is greatly appreciated. I am indebted to Mr. Mostafa Iqbal (Divisional Head

HR), Mr. Shibly Haider (DMM. Merchandiser), Kishore Benedict Costa(GM Quality) for

their valuable idea sharing & teaching, advising, supervising and training during my intern-

ship. My gratitude also goes to Mr. Hasem Ali(Sample Manager) and also all officials and

employees of Aswad Composite Ltd. for their sincere co-operation, support and valuable ad-

vices. I hope their valuable information regarding to production process will help us a lot for

our future carrier.

Finally yet importantly, thanks go to our precious families for their never-ending love and

inspire at every stage of our life. Without their heartiest support & well wishes, completion

would not have been possible. I would also like to Aswad Composite Mills Ltd. for helping

me to complete internship successfully. My gratitude also goes to all the employees of Aswad

Composite MillLtd. for their sincere co-operation, support and valuable advices.

Student's Full Name & Signature:

Md. Rasel Molla

ID: 19281143

V

Executive Summary

This industrial attachment report summarized my internship period from month February 2021 to May 2021 finished my internship within 560 hour. I got an opportunity to complete three-months long industrial training at Aswad Composite Mills Ltd, which is a 100% export-oriented Knit Garments Industry. It has well planned & equipped garments units with facilitate knitwear manufacturing. It is a sister Concern of Palmal Group of Industries. More than three decades ago a new name emerged in RMG's scenario of Bangladesh a group of industries that came with immense possibilities and the bright future a head the name is Palmal group of industries. Aswad Composite Mills Ltd is the largest knitwear manufacture in Bangladesh and Indian subcontinent were serving multiple client across north America, The European, Australia, Asia—it business share in North America is nearly 40%, the European Union 35%, In Australia 20% and other 5%. This internship is including course for Post-Graduation Knitwear Industry Management. Academic education is not enough for a student to handle a business or manufacturing unit. This report has made for the mandatory requirement for the University and Organization. "The title name of this report is Aswad Composite Mills Ltd. Subtitle is Industrial Engineering Department" The topic is clearer to everybody.

It has not only a large production capacity but also have a good HR, Admin & Compliance team and better skill quality team and they work closely to buyer to fulfill their demand specially better quality goods as they expect. This report represented my overall observation and learning of the company. Also I gave special focused on Industrial Engineering Department where I had played a significant role as an Industrial Engineer. Throughout the complete report initially I have tried to show different department of our organization followed by the self-analysis and evaluation report such as Store, Production, Quality, HR, Sample, Merchandising and Industrial Engineering. This organization increase their manpower awareness about the code of conduct of customerto reduce its rejection/Defects and rework rate inprocess and final garments in order to ensure product quality level and delivery time as per buyer requirement and increase profitability overall organization. This organization also arrange training program to develop workers staff mentality and skill level as well as production friendly mind setup beside multi skill. Now a days Bangladesh garments industry facing lot of problem specially order cashing due to raw material cost is increasing day by day but manufacturing price go down. To eliminate unnecessary activities, remove excess manpower, ensure onetime delivery Industrial Engineer play vital role in this sector.

Table of Contents

Declarationii
Letter of Transmittaliii
Non-Disclosure Agreementiv
Acknowledgementv
Executive Summaryvi
List of Figuresx
Chapter 1: About organization1
1.1 Overview of the industries
1.2 Vision & Mission:
1.3 Organizational Organogram:
1.4 Name of the Branches 3
1.5 Name of the Department
1.6 Products & Services:4
1.7 Customers:
Chapter 2: Description about Task Accomplishment5
2.1 Sample Section6
2.1.1 Sample working flow chart:
2.1.2 Pattern:
2.1.3 Dummy:
2.1.4 The details attached to the Garment Sample:
2.1.5 Various types of sample and its details:
2.2 Production Department:
2.2.1 Cutting Section

2.2.1.1 Cutting working process follow chart:	11
2.2.1.2 Marker making:	12
2.2.1.3 Awareness require during marker preparation:	12
2.2.1.4 Requirements of marker planning:	12
2.2.1.5 Marker efficiency formula:	12
2.2.1.6 Factors are effecting on marker efficiency:	12
2.2.2 Sewing Section:	13
2.2.2.1 Sewing working process flow chart	13
2.2.3 Finishing Section:	14
2.2.3.1 Finishing Process Flow Chart:	14
2.3 Store Department:	16
2.3.1 Central store working flow chart:	16
2.3.2 Sub store working flow chart:	17
2.3.3 Finishing store:	18
2.4 Industrial Engineer Department:	18
2.4.1 IE working Flow Chart	18
2.4.2 Basics Techniques of Industrial Engineering:	19
2.4.3 Capacity Study:	19
2.4.4 Method Study:	20
2.4.5 Time Study:	20
2.4.6 Line balancing:	20
2.5 Merchandising Department	21
2.5.1 Flow Chart of Merchandising	21
2.5.2 Function of Merchandiser	22
2.5.2.2 Post Order Marchandising	22

2.5.3 Duty of Merchandiser to satisfy buyer	23
2.6 Quality Department:	23
2.6.1 Quality policy of Aswad Composite Mill Ltd.	23
2.6.2 Function of Cutting quality:	23
2.6.3 Function of sewing Quality:	23
2.6.4 Function of Finishing Quality:	24
2.6.5 Function of Quality Management:	24
2.7 Human Resource (HR) Department	24
2.7.1 Role of Human Resource (HR) Department	25
2.7.2 HR working process flow chart:	25
2.7.3 Short description HR activities:	26
Chapter: 3 Critical assessment of internship work	27
3.1 Application of Generic and Industry Specific Course:	27
3.1.1 HR Skills and Competencies (KIM-101)	27
3.1.2 Communication Skills (KIM-102)	28
3.1.3 Industrial Engineering (KIM-202)	28
3.1.4 Production management and merchandising (KIM-203)	28
3.1.5 Quality Management (KIM-204)	29
3.2 Finding of my Study	29
3.3 Suggestion for industry improvement:	30
3.4 Learning for self-improvement	30

4.1 Conclusions
4.2 References
List of Figures
Figure Figure 1: Organizational Organogram
Figure 2: Sample working process flow chart
Figure 3: Cutting working folow chart
Figure 4: Sewing working follow chart
Figure 5: Finishing working process flow chart
Figure 6: Central store working process flow chart
Figure 7: Sub-store working process flow chart
Figure 8: Industrial engineering working process flow chart
Figure 9: Merchandising working process flow chart
Figure 10: HR working process flow chart

Chapter 1: About organization

1.1 Overview of the industries

Aswad Composite Mills Ltd.is 100% export oriented knit readymade garments manufacturing factory in Bangladesh. It specialized on Polo shirts, T-shirts, Sweat Shirt, Jacket, Basic Shirt, Trousers, Boxer, panty etc. The factories are designed with fully modern machineries to meet the world market demand. We strictly maintain safety, health, hygienic systems and all other labor issues as per ILO & BGMEA and our factory is 100% socially compliant. The mission of the company committed and skilled team of production and fully pledged commercial, marketing, merchandising, sourcing and office management. To provide quality garments at a reasonable cost within definite time for the satisfaction for our customer through professional excellence by skilled management.

1.2 Vision & Mission:

Vision Statement

Aswad Composite Mills Ltd. taking inspiration from the past, setting milestones in the present, continually strive to unravel the opportunities that the future has in store. Tapping the vast pool of available opportunities and its tremendous experience, wish to work with zeal to implement new ideas innovations, better quality & providing best possible service to customers, which has kept us ahead. Aswad vision is to become the leading supplier to his customers by delivering socially, ethically and sustainable manufactured quality products with on time delivery using a highly efficient, Eco-friendly and vertically integrated manufacturing process.

Mission Statement

Aswad Composite Mill Ltd mission is to expand its business across the globe by ensuring best service, integrity, reliability & quality. The mission is very clear - provide best effort and services for their valuable customers. To satisfy and retain customers through employee involvement, teamwork, personal excellence, and integrating scientific approaches in our quest to become the leading manufacturer of apparel products. To be a big market leader in the field of RMG supplier and Manufacturer. On-time deliver quality fashionable products at affordable prices. Tobe globally competitive, innovative and cost effective.

1.3 Organizational Organogram:

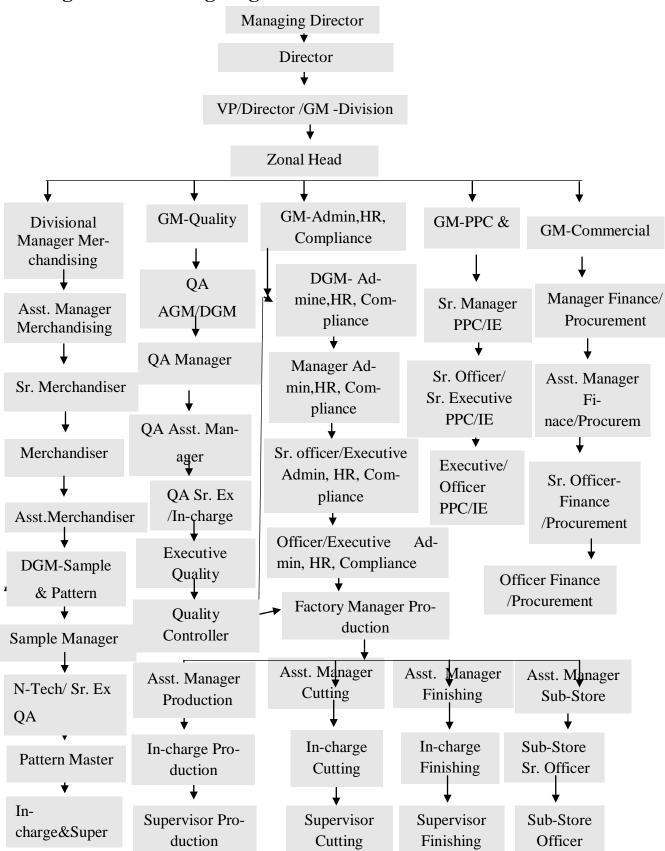


Figure 1: Organizational Organogram

1.4 Name of the Branches

- I. Aswad Composite Mills Ltd. (SP)
- II. Aswad Composite Mills Ltd. (KP)
- III. Arkey knitting & Dyeing Mills Ltd
- IV. Ayesha Washing Ltd
- V. Azmeri Composite Knit Ltd.
- VI. Cortz Apparel Ltd-1 & 2
- VII. Designer Line Pvt Ltd.
- VIII. Modern Needle Craft Ltd.
 - IX. Marian Apparels Ltd.
 - X. Nafa Apparels Ltd. Unit 1
 - XI. Nafa Apparels Ltd. Unit 2
- XII. Safaa Sweaters Ltd. | KRC

1.5 Name of the Department

- I. HR, Admin & Compliance Department
- II. Store Department
- III. Knitting & Dyeing Department
- IV. CAD Department
- V. Cutting Department
- VI. Sewing Department
- VII. Finishing Department
- VIII. Quality Department
 - IX. Merchandising Department
 - X. IE & Planning Department
 - XI. Audit & Account Department
- XII. Maintenance Department
- XIII. Procurement Department etc.

1.6 Products&Services:

All kind of knit items are producing by Aswad Composite Mills. See the below details.

Tops

- I. Polo (short sleeves)
- II. Polo (Full sleeves)
- III. Vest/Tank top
- IV. Sweaters/Sweat Shirt
- V. Knit shirt
- VI. Blazer
- VII. Zip Jacket/Hood Jacket

Bottoms

- I. Jogging pants
- II. Tailored jacket
- III. Cargo pants
- IV. Legging
- V. Skirt
- VI. Shorts
- VII. Long pant

1.7 Customers:

H&M, Walmart, Joe Fresh, Best & Less, Jack & Jons, Target, Next, Nygard, Zara, GAP, Sears, Kmart, UK, American Eagle, Perry Elis, New Look, Meijer, Kappa, Just Jeans, Takko, HBI, Next, NKD, Target Australia

Chapter 2: Description about Task Accomplishment

Throughout the internship period I have tried to gather adequate knowledge on technical terms, accurate and efficient communication skill regarding apparel manufacturing process & procedure. At first of this business buyer provide artwork & measurement sheet to make sample as a result they understand the capability level of the organization then buyer going on price negotiation and fixed the order with the order sheet. Beside order confirmation provide master letter of credit, open back to back letter of credit and also booking require fabric, accessories cartoon and packaging. When all raw materials, trims & accessories are in-house with all test approval report then conduct a preproduction meeting to start bulk production. Then all steps are going on accordingly such as cutting, sewing, finishing, quality checking and packing. Finally, goods are shipped to buyer destination and process complete with payment receive.

To finish all activities within time frame there are various department are involved such as Marketing and Merchandising, Product development, Industrial Engineering, Production Planning Control, Sample, Cutting, Sewing, Finishing, Quality Control, Packing, Maintenance, Store, HR and administration & Compliance, Fire and Safety, Security, Commercial and Accounts.

I try my level best to work different department of Aswad Composite Mills Ltd. Mr. **Md. Fi-roj Uddin**whoguide me for finishing my internship successfully.

Name of the department I have studied during my internship period.

Name of Department Date

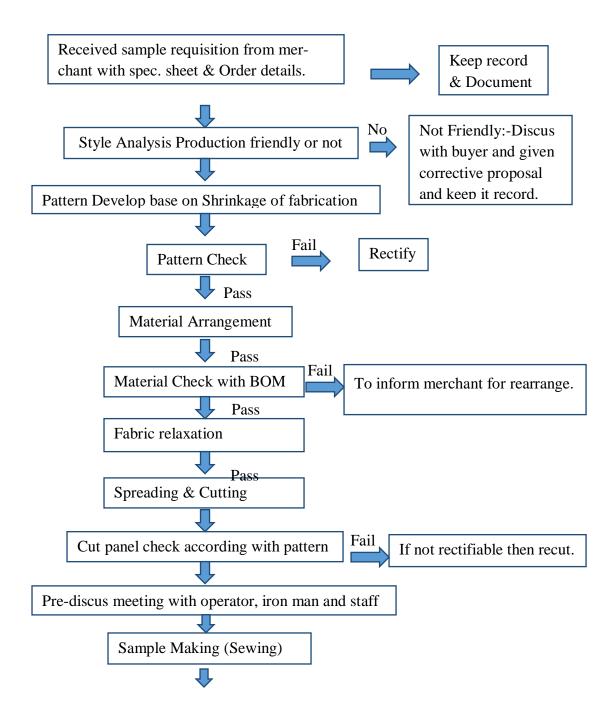
I.	Sample Department February 1, 2021 to February 14 ,2021
II.	Production DepartmentFebruary 15, 2021 to March 6,2021
1)	Cutting SectionFebruary 15, 2021 to February 24 ,2021
2)	Sewing Section February 25, 2021 to March 2,2021
3)	Finishing SectionMarch 3, 2021 to March 6,2021
III.	Store DepartmentMarch 7, 2021 to March 11, 2021
IV.	Industrial Engineering DepartmentMarch 14, 2021 to March 31, 2021
V.	Merchandising DepartmentApril 1, 2021 to April 11,2021
VI.	Quality DepartmentApril 12, 2021 to April 21,2021
VII.	HR, Admin DepartmentApril 22, 2021 to April 29, 2021

Let see the details of industrial work are present in below.

2.1 Sample Section

Garments sampling is one of the most important processes in garments industry which plays a vital role in attracting the buyers and customer. Normally buyers are placed an order after satisfying with the quality of samples. Sample is the model of the garment, upon what the buyer can decide on how and whether to confirm the order or not. The garment which is need for bulk production is called sample garments.

2.1.1 Sample working flow chart:



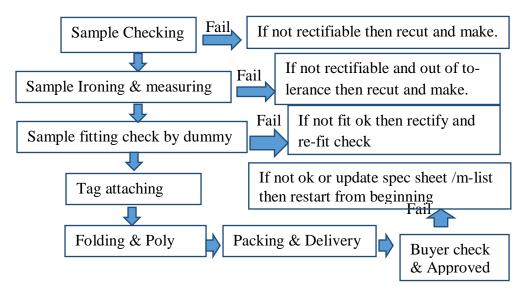


Figure 2: Sample working process follow chart

2.1.2 Pattern:

Base on buyer given artwork, MDL & Measurement chart pattern master makes pattern against specific style. After receiving an order generally buyer gives us a complete pattern and designer makes samples according to given pattern. Sometime prepare the pattern as per instruction of buyer and send to them to get confirmation after getting approval only then can use the pattern and make sample. After the sample is approved, final pattern is made with approximate allowance beside maintain other parameters. Then grading is preferred for the further process.

It includes:

- > Size wise grading.
- ➤ Marker making.
- ➤ Auto cad fabric mini marker consumption.
- ➤ Bulk/Booking fabric Consumption.

2.1.3 **Dummy**:

There is a large dummy room with various size of dummy. Dummy is used for checking fit of the garments.

There are two fit technicians to check the measurement and fit analysis an evolution of the technical issue also makes report details of the summary.

2.1.4 The details attached to the Garment Sample: After the confirmation of order, each sample sent to the buyer has the following details attached to it. It contains the details, what the buyer has demanded and what supplement fabric/trim etc. they have used.

- 1. Reference Number.
- 2. Color
- 3. Fabric
- 4. Consumption
- 5. Description
- 6. Quantity
- 7. Style Number
- 8. Size

2.1.5 Various types of sample and its details:

- **1. Develop sample:** It is the very first sample given to the buyer. It is prepared according to the buyer's specification. It is a trial sample prepared by the product development department. The buyer wants to see here how it looks like after applying a new design to it. Any type of fabric and color can be used here. For these types of samples 2-3pcs, garments should be made where 1pc for the manufacturer and the rest of those are sent to the buyer for correction.
- **2. Fit sample:** After approving the proto sample, the fit sample should be made by the following buyer provided a measurement sheet. It can be made by using similar fabric, nearer GSM, and any color. In Fit sample, stitching and measurement must be 100% accurate. Here fabrication and color can be changed but no compromise on stitching and measurement. 2-3 garments are used in the fit sample where 1pc is kept by the manufacturer and the rest of those are sent to the buyer.
- **3. Size set sample:** After approving the fit sample, based on the patterns of the approved sample, all the other sizes samples should be graded here and make patterns for different sizes. After that, make 2-3pcs sample for each size of that order. The manufacturer keeps a 1pc sample for himself and sends 1pc or 2pc samples to the buyer for cutting approval. Here, it should be noted that, without the size set sample approval, cutting should not be started.

- **4. Counter sample:** This type of sample is proceed based on the comments of size set sample after getting quotation sample from the buyer. For this sample, 2-3pcs clothing is required by buyer. This sample is called red tag sample and bulk sewing follow this once with its approval comments.
- **5.** Color sample: To check the color/shade of garments buyer request to send color sample of a style with each color instead of lap dip. According to color sample buyer confirm order against the approved quotation sample.
- **6. Photo shoot Sample:** Presentation is very important to make a good impression. For that designers make photo shoot with professional models to check the fitting and outlook.
- **7. Shipment sample:** A shipment sample is needed after completing the final inspection when goods are ready for shipment. It is a sample that reflects what buyers will receive down to Q.C, folding, tagging, bagging, labeling and final packaging included.

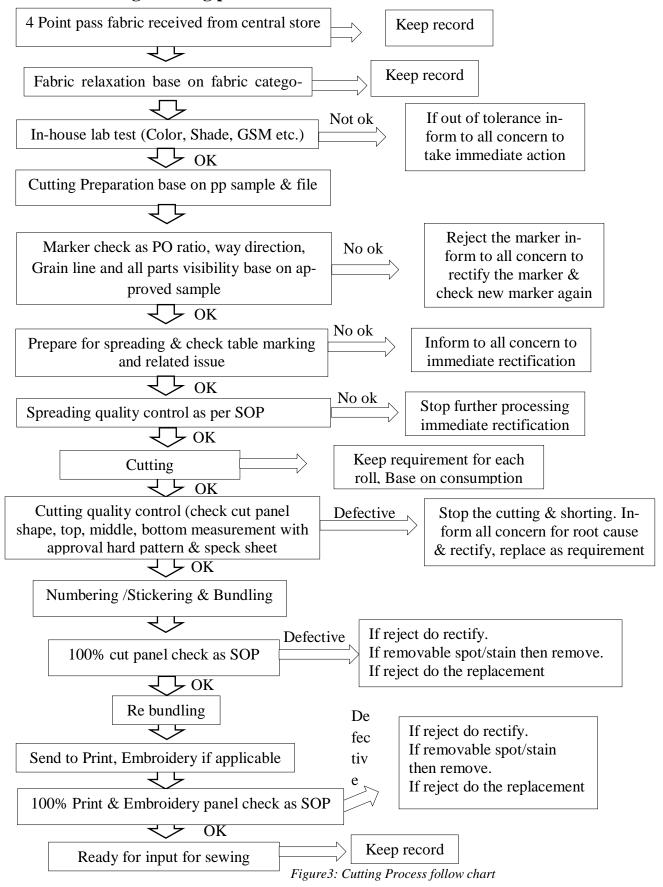
2.2 Production Department:

Garment production is collective activity forms of continual processes of fabric laying, spreading, marker making, cutting, stitching, checking, finishing, pressing and packaging. This is a process of converting input such as raw material into output as finish goods. As it is a complex process and fail to rise the expectable level of production then it will difficult to continue the business due to less productivity will became the business loser day after day. To make successful business at first properly set & monitoring the production process carefully. In garments production there is various department involves such as cutting, stitching/sewing, finishing etc.

2.2.1 Cutting Section

Cutting section in the garments industry is a place where to cut fabrics as per the buyer approved pattern, marker and cutting parts send to sewing section to bring in garments form by stitching. Cutting is the most sensitive operation in the apparel industry, cutter man work accuracy is the key here to maintain good cutting quality. Without fabric cutting process knowledge & technique you can't do well in this sector. Some certain rules and procedure have to follow by cutting department I am giving cutting process flow chart step by step in below for your easy understanding.

2.2.1.1Cutting working process follow chart:



2.2.1.2Marker making:

Marker is a thin paper where all parts of a style drawn by placing pattern by pencil and then it place upon the lay and cut along the drawing line is called marker. The process of marker making is called marker making. The method is available in Aswad Composite Mill Ltd.

2.2.1.3 Awareness require during marker preparation:

- 1. Pattern alignment
- 2. Pattern direction
- 3. Parts missing
- 4. Mismatched checked/ stripes
- 5. Over lapping
- 6. Marker too wide than fabric
- 7. Poor Or double line marking

2.2.1.4 Requirements of marker planning:

Marker planning is more technical part to cutting fabric and business profit% variable on marker planning.

- 1. Base on fabric properties and designs of garments marker planning are done.
- 2. Depends on cutting quality and quantity
- 3. Production planning and allocating quantity.

2.2.1.5 Marker efficiency formula:

Marker efficiency% = (Area of marker used for garments / Area of total marker) * 100

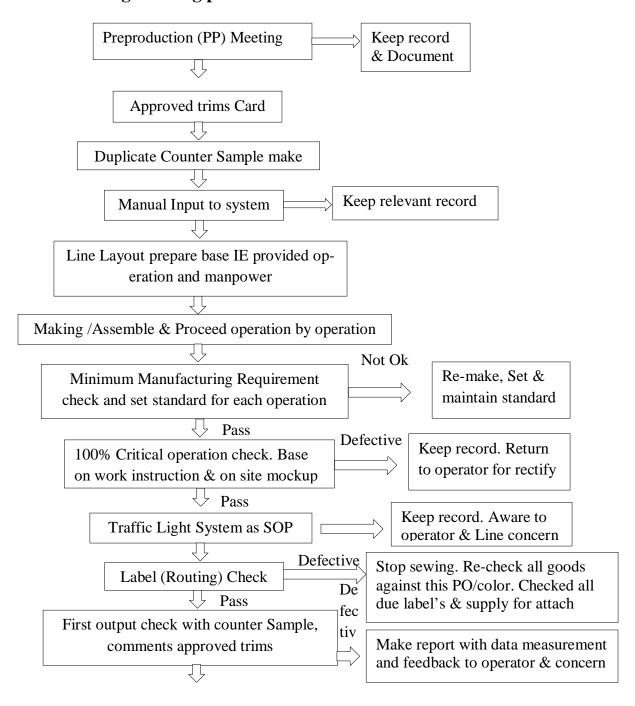
2.2.1.6 Factors are effecting on marker efficiency:

- 1. The factors which influence the Marker Efficiency
- 2. Skill & experience of marker operator
- 3. Number of pattern pieces& Size
- 4. Length of the fabric &marker
- 5. Physical properties of the fabric
- 6. Method of marker making
- 7. Marker width as well as fabric dia.
- 8. Style, items of the design of the garments

2.2.2Sewing Section:

In present the ready-made Garments is one of the parts of parcel of Garments sector. Without sewing process can't think ready-made garment. Cutting output as well as cut pieces are the main input for sewing against any style sewing. Beside cutting parts, sewing thread, care label, main label, button and others accessories & trims are parts and parcels to complete sewing of any garments.

2.2.2.1 Sewing working process flow chart



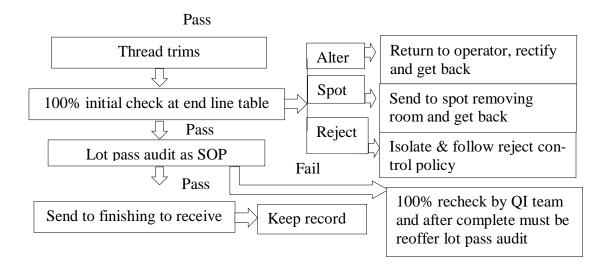
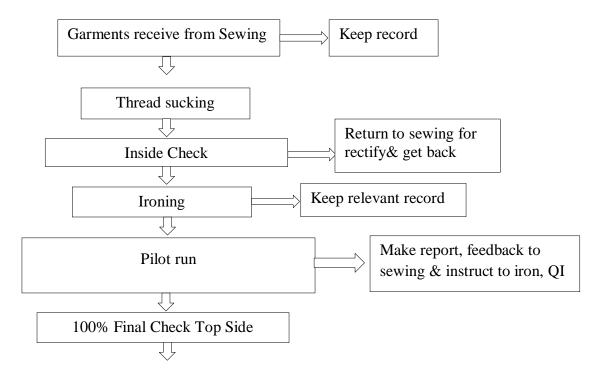


Figure 4: Sewingworking process follow chart

2.2.3 Finishing Section:

Garments Finishing process includes many processes includes ironing, attach ticketing, Folding, Packing. Product quality performance and product presentation depend on Garments finishing the process, a good finishing process gives a factory a better result. I have given the process flow chart of the finishing process for both shirt and pant manufacturing.

2.2.3.1 Finishing Process Flow Chart:



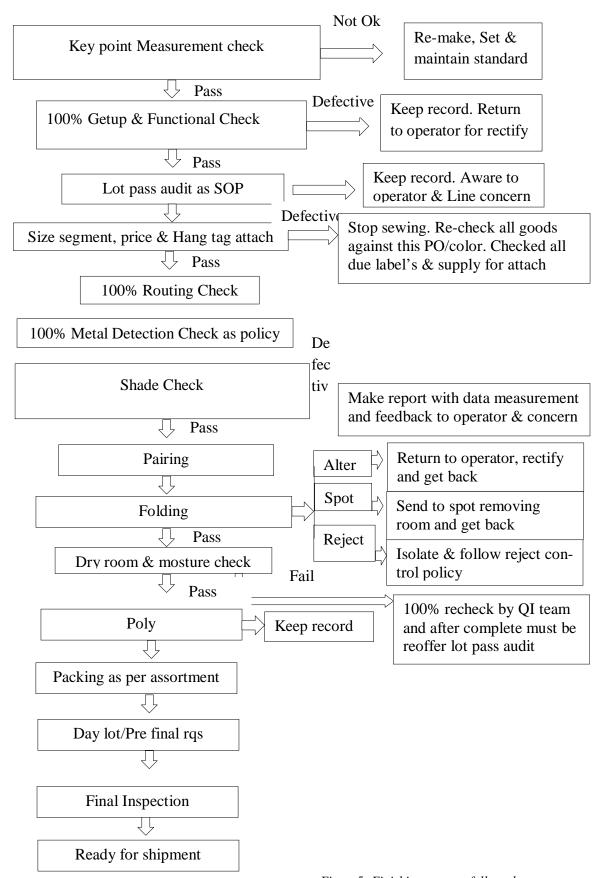


Figure 5: Finishing process follow chart

2.3 Store Department:

Aswad Composite Mill Ltd has a large Store department to stock all kind of raw materials, require accessories and finish goods. The place where inventory and stock all kind of raw materials, accessories and finished goods for safety or protection is called store. Store is very important department for any company to inventory and keep their readymade good before shipping and raw material with accessories before manufacturing. A well decorated store can give significant advantages.

There is three categories stores are available in Aswad Composite Mill Ltd.

1. Central Store 2. Sub store 3. Finishing good store

2.3.1 Central store working flow chart:

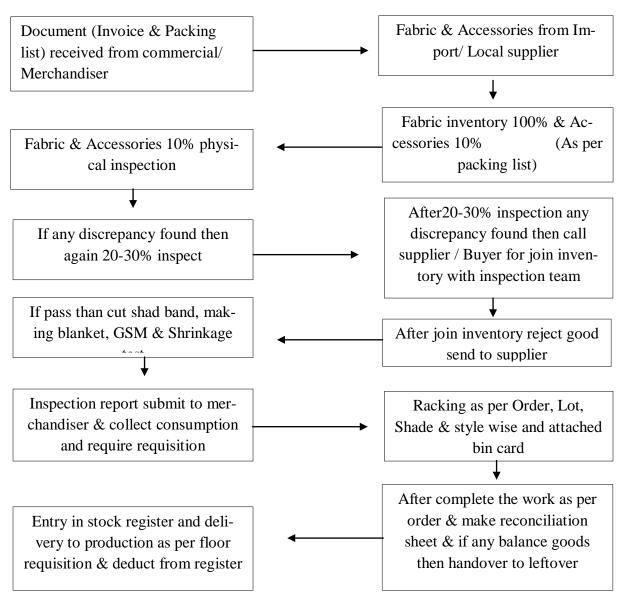


Figure 6: Central store working flow chart

2.3.2 Sub store workingflow chart:

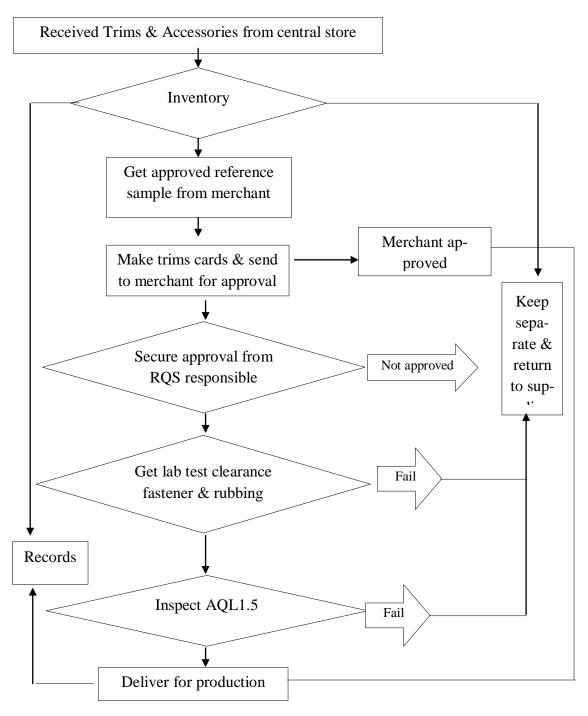


Figure 7: Sub- store working flow chart

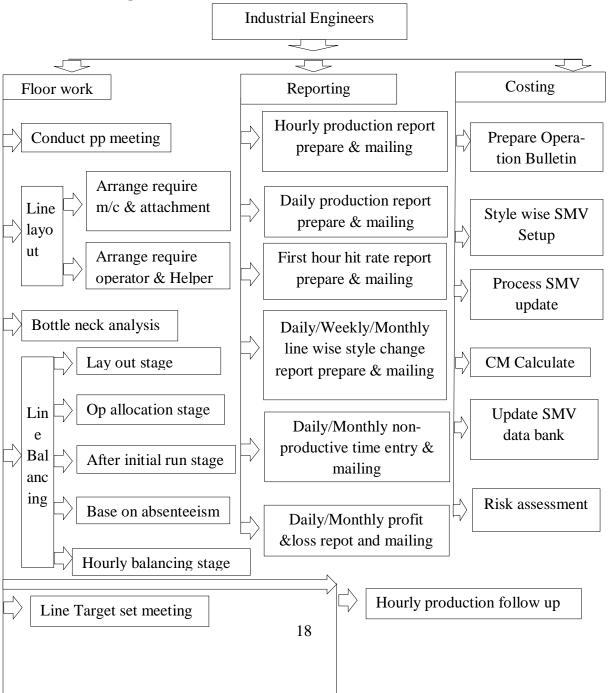
2.3.3 Finishing store:

After packing the garment are folding in carton. The carton size may be according to the buyer requirement. How many garment are kept in a carton that vary on buyer demand. Here goods arranged in self's and lay in floor in carton. Store inventory receive empty carton.

2.4 Industrial Engineer Department:

Industrial engineering is concerned with the design, improvement and installation of integrated system of man, machine and equipment drawing upon specialized knowledge and skill in the technical, economics and human sciences, either with the principles or methods of engineering analysis and design to specify, predict or evaluate the results to be obtained from such system.

2.4.1 IE working Flow Chart:



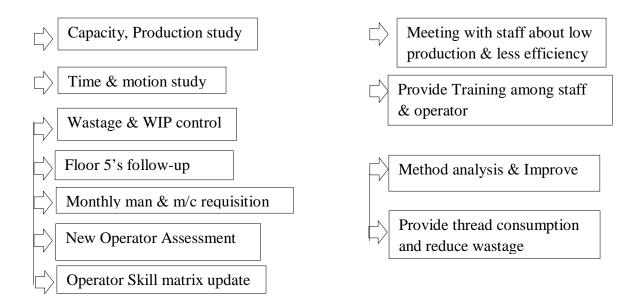


Figure 8: Industrial Engineers working flow chart

2.4.2 Basics Techniques of Industrial Engineering:

There are some basic terms, which are important to know before learning IE. A short description of these terms are highlighted below:

2.4.3 Capacity Study:

It is exactly the measure of the operator same as capability. It means the operator is capable of achieving the performance measured by the study. The major Need for capacity study is to set quotas, to motivate operator, and to measure the productions section capacity. By measuring the individual operator capacities, supervisor can determine the overall capacity of their section. It is simply the sum of individual capacity.

Procedure:

- 1. Use of stop watch
- 2. Measure the time study
- 3. Average the time cycle

This average cycle time measures the operator ability to do the particular job. It's the measure of the skill of particular operator. Because the Industrial Engineers want to measure the skills and ability of the operator in their average cycle time.

Benefits of Capacity Study:

1. Check targets

- 2. Motivate operators
- 3. Measure section production capability

2.4.4 Method Study:

Method study is the systematic recording and critical examination of existing and proposed ways of doing work, as a means of developing and applying easier and more effective methods and reducing costs.

The procedures which need to do follow while doing method study are given as follows. There are seven steps to be followed by industrial engineers to do method study they are,

- 1. Select the work to be studied
- 2. Define the objective
- 3. Record the relevant information and data
- 4. Examine information and data
- 5. Develop the improved method
- 6. Install improved method
- 7. Maintain the improved method
- 8. Work measurement

2.4.5 Time Study:

Work measurement is carried out by time study. Time study is a work measurement technique for recording the times and rates of working for elements of a specified job carried out under specified conditions and for analyzing the data so as to obtain the time necessary for carrying out the job at a level of performance

The steps to do the time study is as follows,

- 1. Observe the job and analyses to determine the element
- 2. Rate each element to compare with the accepted standard
- 3. Use the stopwatch to time each element
- 4. Average the selected element times
- 5. Multiply average element time by rating
- 6. Add the basic time for all the element
- 7. Add allowances

2.4.6 Line balancing:

To achieve desirable output must need to 100% line balancing

- 1. Every operator is doing the same amount of work
- 2. Doing the same amount of work to customer requirement
- 3. Variation is 'smoothed'
- 4. No one overburdened
- 5. No one waiting
- 6. Everyone working together in a balance fashion

2.5 Merchandising Department

Garments merchandising means buying raw materials & accessories, producing garments, maintaining required quality level and exporting the garments within schedule time.

2.5.1 Flow Chart of Merchandising

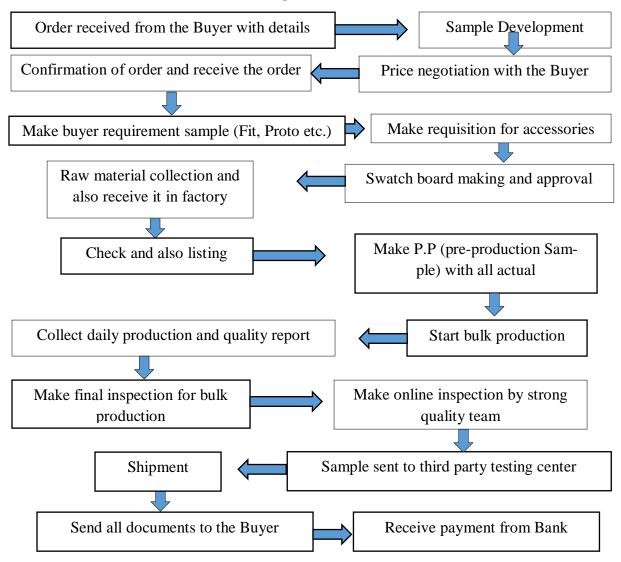


Figure 9: Merchandising working flow chart

2.5.2 Function of Merchandiser

2.5.2.1 Pre-order Merchandising To receive sample request file. Initial consumption calculationCosting and price quotingPrice negotiation with buyerPrice confirmationOrder confirmation& receive master Letter of credit

2.5.2.2Post Order Merchandising Collecting Raw materials

Prepare Time & Action plan

Select the appropriate supplier

Booking fabric and accessories required to complete the order after careful calculation with specification mentioned in the order sheet

Open Back to Back L/C

Receive sample of ordered raw materials for approval

Follow up production

Sending procuring information to the stores

Receive Purchas Invoice from suppliers

Receive raw materials in store

Inspect raw material (both quality and quantity)

Receive master L/C & Check master L/C

Amend master L/C if required

Making Swatch Card, get approval from buyer and distribute in different sections

Booking production line

Receive inventory report on raw materials

Attend Pre-production meeting

Arrange testing of raw materials and send test report to buyer

Arrange test cutting

Start bulk production

Arrange Final Inspection, collect IC and send to buyer

Hand over the goods to C&F and collect B/L

Submit required documents to the bank for receiving payment

Packing List & Bill of Lading

Inspection Certificate,

2.5.3Duty of Merchandiser to satisfy buyer

Right Quantity: To dispatch right quantity of product what buyer ordered.

Right Quality: It should be with right quality as accepted both parties.

Right Cost: Everybody wants more from what they are paid.

Right Time: No one wants to wait idle even in a Restaurant. Keeping delivery schedule is mandatory.

2.6 Quality Department:

Every garments manufacturing industry have a quality department to set standard procedure to quality control and quality assurance. All buyer have own quality standard while most of the procedure same. In garments industry different section quality police are different.

2.6.1 Quality policy of Aswad Composite Mill Ltd.

- 1. Ensure product of all levels to achieve given production and quality target.
- 2. Considering direction and requirement we want to export all good on time delivery without re-check.
- 3. For optimum quality production management will arrange to improve professional ability by training.
- 4. Utmost arrangement & offer to reduce alter.

2.6.2 Function of Cutting quality:

- 1. Follow up fabric relaxation before cutting and make report before and after relax
- 2. Check marker quality
- 3. Roll wise lay chart maintain
- 4. Pattern, miss cut, rugged cut, notches and match plie are checked by cutting quality

2.6.3 Function of sewing Quality:

- 1. All line quality controller are responsible to meet all kind of buyer requirement quality standard.
- 2. At the begging of a style quality inspector must check sample, trims card, spec sheet, thread count, color, SPI, Label etc.
- 3. Defect goods not be allowed by quality inspector and will limit defect rate by proper process monitoring.
- 4. Bundle card monitoring as per cutting and mistake bundle not allow to pass forward.

- 5. Mistake bundle, mistake size goods send to back on that process.
- 6. Follow machine cleaning before breakup factory and having oil card on the needle point.

2.6.4 Function of Finishing Quality:

- 1. 100% quality piece to piece garments checking and thread trimming as buyer requirement.
- 2. 100% quality piece to piece garments key points measuring.
- 3. 100% quality piece to piece garments pressing as per customer demand
- 4. One quality audit done before moving before goods going on packing.
- 5. To ensure 100% goods quality free form needle, Sharp tools and any others metal follow 100% needle detection inspection

2.6.5 Function of Quality Management:

- 1. To set standard operating procedure base one customer requirement.
- 2. To train operator, quality people, staff about quality policy, requirement and quality concept.
- 3. To implement 5'S housekeeping in workstation every department and monitoring.
- 4. To implement lean manufacturing and six sigma to improve quality.
- 5. To manage and monitor quality department of cutting, sewing, finishing.
- 6. Lead quality control and management system of cutting, sewing & finishing.
- 7. Doing internal audit keep with section head and report to higher management.
- 8. Keeping all technical file and control other documents.
- 9. Monitor sample on time delivery and first sample approved without fail.
- 10. Closely work with buying house to know buyer quality requirement and lead quality audit

2.7 Human Resource (HR) Department

Human Resource (HR) Department: Human factor is a vital element in garments manufacturing industry. It is one of the key dependent factors which drive the company's business towards profitability and growth.

- a) Money
- b) Material
- c) Machines And

d) Men

Manpower is ultimate resources of the organization because they think, speak, so that utilization of this resource is so much critical. Every success of an origination is depending on efficient and effective man power and their hard work. HR starts when a man enters in the organization and its end, when he leaves the organization .HR deals with the human dimension. Aswad Composite Mill Ltd. understands the value of "Human Resource".

2.7.1 Role of Human Resource (HR) Department

- 1. Manpower planning
- 2. Job analysis
- 3. Recruitments and selection
- 4. Performance appraisal
- 5. Compensation
- 6. Communication
- 7. Carrier planning and development
- 8. Conflict solution
- 9. Internal audit
- 10. Improve working environment and organizational development

2.7.2 HR working process flow chart:



Figure 10: HR working flow chart

2.7.3 Short description HR activities:

Planning: Planning is deciding in advance what to do? How to do? When to do? The planning function involves establishing goals & arranging them in a logical order.

Organizing: Organizing involves identifying responsibilities to be performed groping responsibilities into department or divisions & specifying organizational relationships.

Staffing: Staffing means filling job positions with the rights people at the right time. It involves determining staffing needs, screening people to fill the positions.

Directing: Directing is loading people in a manner that achieves the goals of the organization. Directing requires exceptional inter personal skills the ability to motivate people.

Controlling: Controlling is a function that evaluates in all areas & detects potential or actual deviations from the organization plan. Controlling includes information management, measurement of performance institution of corrective actions.

Budgeting: Budgeting, exempted from the list above, incorporates most of the administrative functions, beginning with the implementation of a budget plan through the application of budget controls.

Chapter: 3Critical assessment of internship work

Around 13 percent of the country's garment factories have employed foreign experts in the top posts who remit large amount of domestic currency every year. Among the large factories, the percentage is even bigger 47 percent, according to the CPD RMG a long survey conducted by the Centre for Policy Dialogue. In absence of skilled workforce, particularly in merchandising, design and marketing as well as in operation of sophisticated machines, the factory owners have hired experts from China, Taiwan, Japan, India and Pakistan to fill the gap. Brac University of BIGD has played a big role in this regard by producing numerous skilled people for the knit garment sector. Brac university lagging behind in technology, the introduction of advanced knit production processes among thestudents of PGD-KIM, and the proper knowledge of them and make an executive management as they will lead the company. There is a two aspect of this degree. One is generic and other is industrial specification beside internship. I have learnt a lots of important themes from both of generic & industrial specific course. During internship period there is some critical assessment issue. I have faced a lot of challenges in the meantime also learned how to manage the problem and how to handle the situation and solve the problem. Internship helped me to lean new thing and have become more familiar with the industrial specification and give me idea of modern tools and technic and show me benefits of new technology and upgraded technic and the overall improvement in productivity.

3.1 Application of Generic and Industry Specific Course:

3.1.1 HR Skills and Competencies (KIM-101)

During internship period I have seen that skill assessment play a vital role in garments industry. There are working lots of people in different level of skill to know their skill level even if he works in as worker or management role. I have also see the characteristic of department head someone as leader and someone manager which I have learned from HR skill and competencies course and also applied in the industries. I have applied the negotiation procedure in salary barging when workers and floor staff newly join in the factory that I have gather in the generic course. I have also applied recruiting process, procedure and advertising of various position in different department that I also gather in this course. I have also applied my generic knowledge about conflict of two party and resolve the situation.

3.1.2 Communication Skills (KIM-102)

During my internship I have showed that communication play an important role in ready mad garments sector. There is two communication namely verbal and Nonverbal. Normally reading communication, writing & listening skills, public speaking and e-mailing and business communication skill are includes in verbal communication which I have covered under communication skills course. In my internship period I have communicated with my supervisor and others top & mid management of various department so I have practiced this course by face to face verbal dialogue, over phoning, mailing. I have particularly learn about business mail writing. This course helped me in my internship how to communicate with different level of people and get their concentration toward my end. Only aperfect communication can make the work easier to complete any task within the short time that can I observed during my internship time when I communicated with different level of people. Due to lack of communication such as public speaking, weakness of writing a lot of problem arise in the garments sector.

3.1.3 Industrial Engineering (KIM-202)

During my internship I have supervised by head of industrial engineering department of this renowned knit industry. From academic course I have learned work study, method study, work measurement, 5's, SMED, LEAN, and Line balancing. I have applied the tools and technique about my knowledge which I have learnt during my academic course. During my internship I have applied work measurement technic to reduce operation time which help the organization save time and convert the time in productive time. As a result company became more financial benefited. Also applied lean tools in my internship to identify organization existing non-productive activities such as inventory, excess motion, excess production, defects, transportation, and waiting and also trained up them about is impact in business. The lesser waste the better profit. I also applied my line balancing knowledge which I have learn in academic class.

3.1.4 Production management and merchandising (KIM-203)

Aswad Composite Mills Ltd has separate production and merchandising department. During my internship I have calculated fabric consumption, prepared costing sheet on various order&also booking through nominated suppliers, Accessories costing & Booking. I have also applied my operation knowledge in production unit which I have learned during my academic course.

3.1.5 Quality Management (KIM-204)

I have applied quality management system as like QMS, Audit, Offline & online checking during my internship period which I have learned during my academic course. I have given guideline for update quality management system and they also got the better result in their internal audit, identified the root cause of the defects found in inline inspection and offline inspection.

3.2 Finding of my Study

- 1. Communication gap is high in different department head and their subordinate.
- 2. Have a better scope to install upgrade automation.
- 3. They're not used to modern tools technique in all area of the garments.
- 4. Lack of support from washing, printing & embroidery.
- 5. Insufficient fabric support and T&A not follow properly.
- 6. Insufficient supply from raw materials, finishing goods, accessories and trims.
- 7. Operator absenteeism reduce production due to imbalance line layout.
- 8. Short quantity order create hampering on productivity as well as line feeding, quality output and shipment.
- 9. DHU percentage is not so better due to bad fabric quality, operator lack of skill and lack of supervisor.
- 10. Time and action plan can't execute properly due to lack of responsibilities of the responsible persons.
- 11. Production (cutting, sewing & finish) get short time before shipment and face challenge to meet right time delivery due to T&A fail.

3.3 Suggestion for industry improvement:

- 1. Fabric store system is not good so this department need to improve.
- 2. There is no ERP or modern manufacturing system, so it should install.
- 3. Make comparatively effective T&N against any order and take necessary step to execute properly.
- 4. Educate, Skill and experience staff need to recruit to increase awareness of quality standard, increase productivity.
- 5. Set a skill industrial engineering department to bottle neck process and WIP control, asses require skill operation on the plant
- 6. Increase communication among all concern to take initiative advance against any risk.

3.4 Learning for self-improvement

The benefit of this degree not to be underestimated. By studying a postgraduate degree of KIM, developed my skills that will support me through of my daily life, such as time management, researching, presentation and writing skills. It's a nine month short course to which boost my expertise. It will add additional skills and knowledge. There is no doubts the personal achievement of graduation also cannot be underestimated. Aswad Composite Mills Ltd is established for expanding there is unit and utilized manpower. During my internship period I have learn various practical knowledge on production, Quality, merchandising. Both academic and internship help me to improve my communication skills such as operation skill, decision making skill, analytic skill, leadership skill and listening, writing, emailing skill in the corporate office. By the dent of this degree I can get the opportunity for build my knowledge, experience skill related to my job field which will help me to build a dynamic carrier in Knitwear sector in Bangladesh. It also added extra ordinary skill and courage in our mind which made us crystal clear concept regarding knit wear industry management and their managerial role & activities which inspires me to conduct myself as top level executive.

Chapter: 4

4.1 Conclusions

This internship was on study and implementation Knitwear Industry Management for the post-graduation diploma degreeof Brac University in Aswad Composite Mills Ltd. For the first few daysmy industrial tried to learn the processes in the garments production line and marketing, merchandising role & activities. Then those processes were studied as well as analyzed using some cutting, sewing, finishing and quality tools andtechniques where found various type of problem. Eventually some layouts and process flows is proposed that maximizes the productivity and minimizes cost. They also ensure the better utilization of manpower, machine others equipment and factory floor space. At the same time these attachment will helpto develop agood relationship among theall level management and workers. Also it will provide an easier way for the management to coordinate and integrate the factory production with the current level of resources. It is hoped and believed that, if the management accepts my guideline and implement these techniques, it will certainly help them to increase the productivity with this existing level of resources.

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