



DAFFODIL INTERNATIONAL UNIVERSITY

Faculty of Engineering

Department of Textile Engineering

REPORT ON INDUSTRIAL ATTACHMENT AT PACIFIC FIBRE CORPORATION LTD.

Submitted by:

SL	NAME	ID	E-MAIL
01	Md. Tohidur Rahman	112-23-2611	tahid23-2611@diu.edu.bd
02	Md. Mostafa Kamal	111-23-2415	kamal2415@diu.edu.bd

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

Supervised by:

Prof. Dr. S. M. Mahabub-Ul- Haque Majumder

Professor & Dean,

Faculty of Science and Information Technology

Daffodil International University

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DECLARATION

We hereby declare that, this thesis paper has been done under the supervision of Prof. Dr. S. M. Mahabub- Ul- Haque Majumder. Department of Textile Engineering, Daffodil International University. We also declare that neither this internship report nor any part of this internship report has been submitted elsewhere for award of any degree.

Supervised By:

.....

Prof. Dr. S. M. Mahabub-Ul- Haque Majumder
Professor & Dean,
Faculty of Science and Information Technology
Daffodil International University

Submitted By:

NAME	ID	SIGNATURE
01. Md. Tohidur Rahman	112-23-2611
02. Md. Mostafa Kamal	111-23-2415

Department of Textile Engineering,
Daffodil International University

Internship Period: 2nd September-2nd November

EXECUTIVE SUMMARY

The Industrial Attachment is the most effective way for Textile Engineering student to be achieved the knowledge about the practical field of the Textile Manufacturing. It brings an opportunity to all the learners to enrich their academic knowledge by practicing with the experts of the practical field of textile.

It is our pleasure that we had an opportunity to complete our two month internship at **Pacific Fibre Corporation Ltd.** which is one of the most modern industries of the country.

Pacific Fibre Corporation Ltd. is one of the major garments manufacturing organization in Bangladesh. This organization increasingly reducing its rejection and rework rate in-process and final garments in order to ensure product quality and delivery time as per buyer requirement and increase profitability. Babylon will ensure sufficient training and suitable work to increase productivity and skills of the employee. Now Pacific Fibre Corporation Ltd. has a 20000 square feet area.

INTERODUCTION

Textile and Garments sector is the largest and fastest improving sector in Bangladesh. It is the strongest media of earning the foreign currency. Textile is formed with some other sector like knitting, dyeing and garments.

From yarn to fabric, **Pacific Fibre Corporation Ltd.** is truly integrated undertaking. The Pacific Fibre Corporation Ltd. has the capability to offer a complete production range for the export of Textile markets. The goal of Pacific Fibre Corporation Ltd is to become the preferred partner for sourcing high quality fabrics and clothing from Bangladesh with highly advanced Technology and an emphasis on developing local human resources. Pacific Fibre Corporation Ltd. has the potential to make an important contribution to the nation's growing readymade garments export sector.

The ratio behind the existing structure and future expansion of Pacific Fibre Corporation Ltd. is to capture value added at each stage of the textile manufacturing process. Despite Bangladesh's lack of indigenous cotton production capability, Pacific Fibre Corporation Ltd. has leveraged Bangladesh's labor cost advantage and export competitiveness to the maximum.

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CHAPTER 01

COMPANY PROFILE

Pacific Fibre Corporation (front view)



1.0 INFORMATION:

Pacific Fibre Corporation Ltd.

(100% Export oriented knitting, Dyeing, Finishing, Printing, Sewing Thread, Embroidery & Garments)

Location: B-37, 38, 39 BSCIC Industrial Estate, Konabari, Gazipur, Bangladesh

Phone: 88-02-92979607, 9297608

E-mail: pacificfcl@gmail.com

Head Office

House # 07 (5th Floor), Road # 14/C Sector # 04,

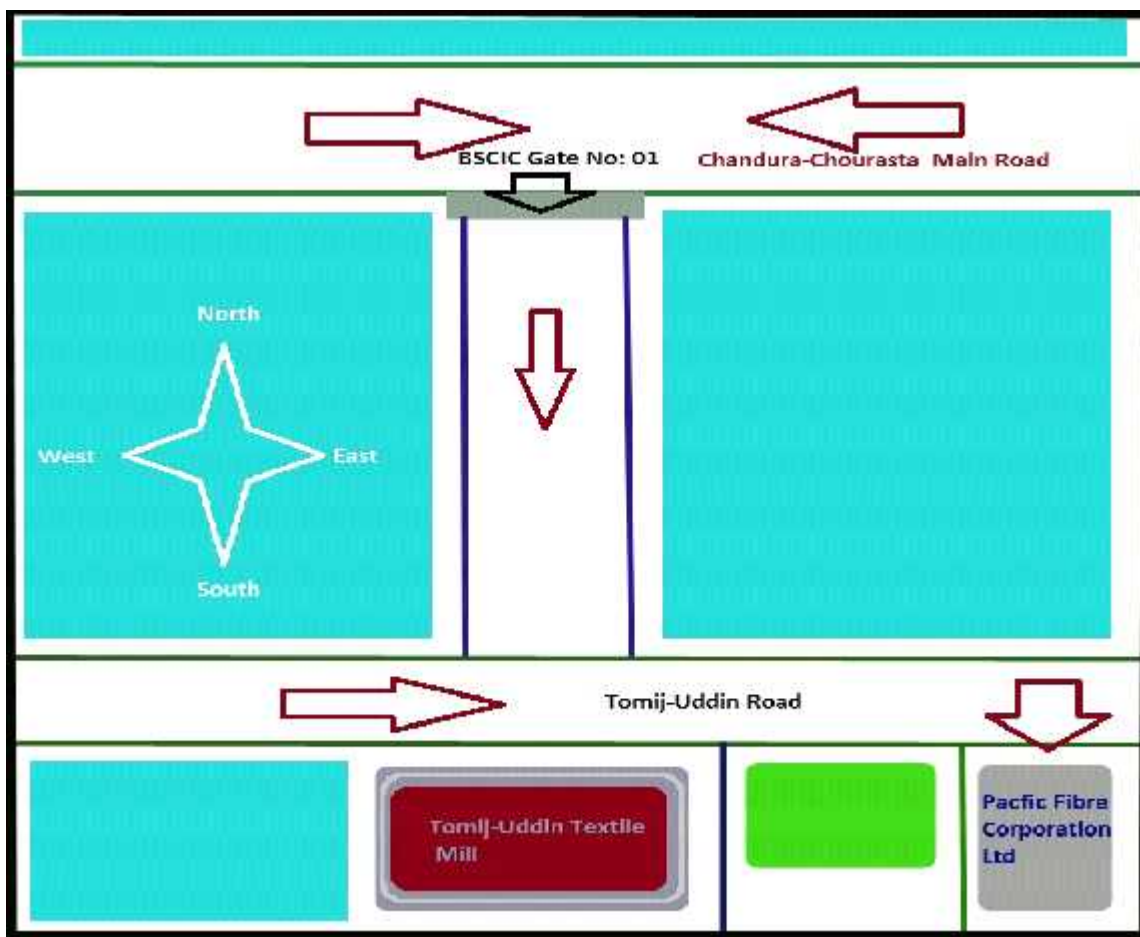
Uttara, Dhaka-1230

Phone: 88-02-8952686, 8959822

1.1 About Pacific Fibre corporations:

Pacific Fibre Corporation Ltd. with the address Konabari, BSCIC Industrial Estate, Gazipur, Dhaka, Bangladesh. Was incorporated with limited liability in June. 2006 Pacific Fibre Corporation Ltd is 100% export-oriented garment manufacturing. It has the possibility of knitting, dyeing, cutting, sewing and finishing. PFCL has 5 high machine temperature dyeing staff eco-dye world class not to use threats to nature and the environment. Theistic dye ability day is 5000 barrels. His unit finition has a capacity of 7,000 barrels per day. They also have a permanent agreement with Rising Knitting Textile Ltd.

1.2 Ways to Pacific Fibre Corporation Ltd:



1.3 Factory Description:

PACIFIC FIBRE CORPORATION LTD. is one of the largest vertical integrated knit garments manufacturing and exporting composite unit in Bangladesh. It has the machinery which follows the modern Technology for the production. In PRINTING and GARMENTS section it has medium production capacity. And the dyeing and knitting capacity is in a less production due to insufficient of gas supply in the industry at day shift. PACIFIC FIBRE CORPORATION LTD. produces the product with assuring the required quality for International and National Buyers. It is presently producing the production for the USA, India, UK, Canada and Bangladesh. It has a very well equipped laboratory with a good quality control department. The QC department follows ISO, British Standard (BS) and American Standard (AS).

PACIFIC FIBRE CORPORATION LTD. maintains very hard worker Human Resources and Development (HRD) and also MIS development section. They follow the modern methods of production with the help of different department and the qualified manpower.

In this report, we have tried to produce some information about PACIFIC FIBRE CORPORATION LTD. We have observed that they produce high quality knitted fabrics fulfilling the special requirements for the different types of buyers.

1.4 Certification:

- a) ISO 9001: 2000
- b) BGMEA, Registration No: 3526
- c) EPB Registration No: 4313
- b) BSCIC certified
- c) GOTS certified

1.5 Bayer of Pacific Fibre Corporation:

- a) Sears
- b) S. A. Inditex (Zara)
- c) Kik
- d) Peter Werth
- e) Gor plant
- f) Puig Jarner
- g) Fruit of the Loom
- h) main round
- i) MJC
- j) BJD Inc
- k) Red Cats
- l) Holland Group Mode

1.6 Rules of conduct:

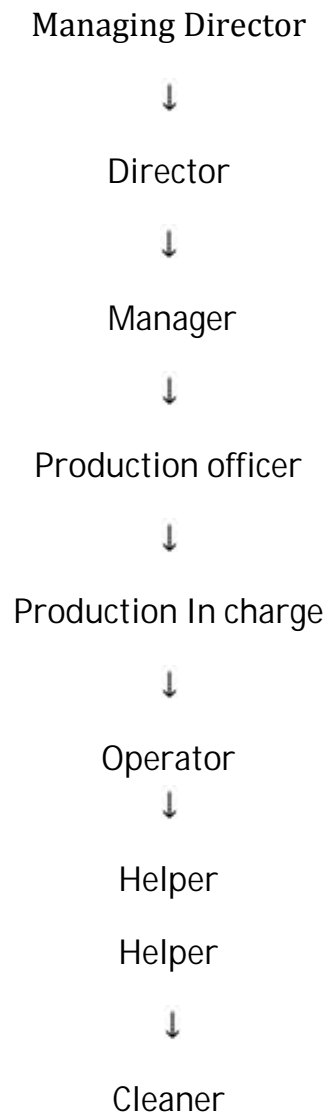
Code of conduct for directors and senior management:

The Board of Directors (the "Board") of the Company, with the exception of the following, in practice, wrote the code of conduct and ethics subsequently adopted for directors and executive officers of the Company (the "Code").

Senior management staff means that all key members of the management team below the level Commission president / chair of each department of the company, other functional managers and the Secretary of the Company.

This Code is intended for all members of the Board of Directors and senior to focus on the areas of ethical frameworks, integrity and honesty, with tips to help recognize [Type equation here.](#) and deal with ethical issues; Mechanisms to report conduct contrary to the ethics / dishonest; and contribute to a culture of honesty, integrity and responsibility. The Code of Conduct approved by the Board and changes in subset following, if any, to this end the Council will be posted on the website of the company.

1.7 Process Management OF PFCL:



1.8 Achievement:

1. OIOS audit, the first hypoid Knit Composite Ltd, DBID: 20609
2. GOTS certificate was made. ID: 28084998
3. PFCL certificate found Oki-Text Standard composite knitting mill in Bangladesh ID NO HBD.61520, Test No. 08

1.9 Extra devices presented by the PFCL:

1. competitive price
2. High quality
3. Timely delivery
4. Promptly
5. Maintain social obligations
6. Customer Satisfaction
7. Compliance meeting buyer

1.10 Shift Classification:

- Garments- 1st Shift 8 Hours (08.00 Am to 05.00 Pm)
- Printing- 1st Shift 8 Hours (08.00 Am to 05.00 Pm)
- Knitting-1st Shift 8 Hours (08.00 Am to 05.00 Pm)
- Dyeing - 1st Shift 12 Hours (08.00 Am to 8.00 Pm) [Day]
 - 2nd Shift 12 Hours (08.00 Pm to 08.00 Am) [Night]

1.11 Goals and objectives PFCL:

1. Set up as one of the leading textile industry in Bangladesh and up growing to five years Pacific Fibre Corporation Ltd
2. To qualify for building export international quality standard quality Pacific Fibre Corporation Ltd
3. To monitor the social life of all kinds of labor laws, workers, human rights.
4. To develop industry beneficiary institution that can serve the society and the nation.

1.12 Mission & Vision:

Mission:

Pacific Fibre Corporation Ltd mission is to create the conditions and infrastructure for the supply and production of sustainable textile products.

Pacific Fibre Corporation Ltd:

So making high quality to withstand high competitiveness.

Design, manufacture and sale of high quality and affordable clothing and accessories.

To use the latest technologies in the manufacturing process.

To provide a safe working environment for employees.

To operate the business with great motivation and dedication.

Erving and support the society in which we work.

Vision:

Pacific Fibre Corporation Ltd is a leading up growing sustainable textile company producing high quality products and the largest observation of social, economic and environmental standards. Its objective is to provide high quality products and fast service to our customers. Pacific Fibre Corporation Ltd goal is to create a good price through a competitive atmosphere, fine systems and processes.

PFCL vision is threefold:

1. Launch the textile industry in Bangladesh
2. Economic and Environmental Respect the highest social standards
3. Maintain customers engaged and satisfied.

CHAPTER 02

KNIT DYEING SECTION

2.0 Dyeing floor:

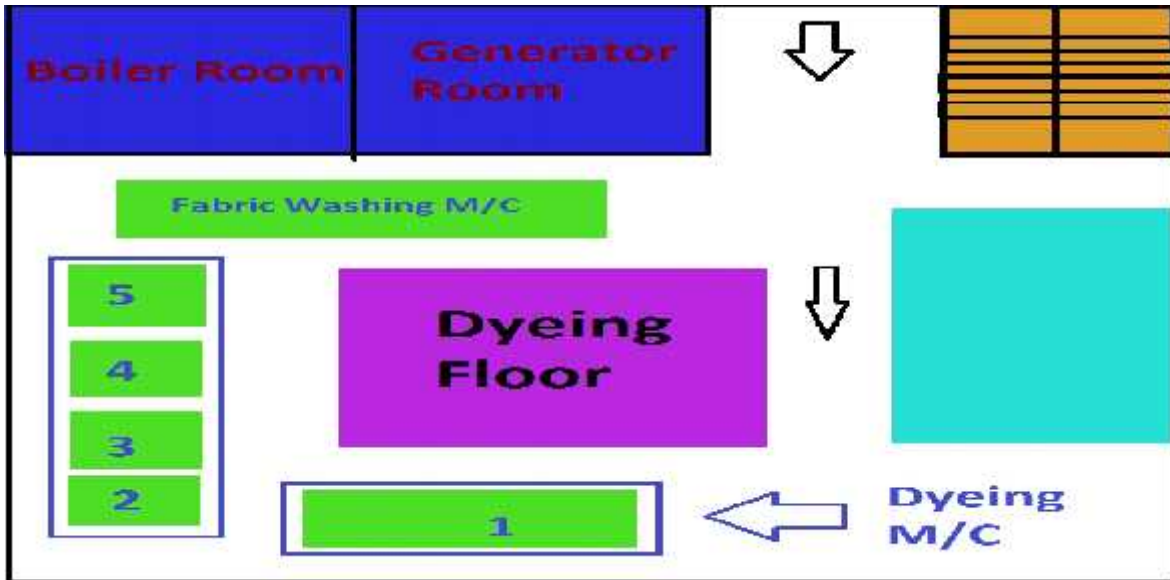


Fig: Dyeing Floor

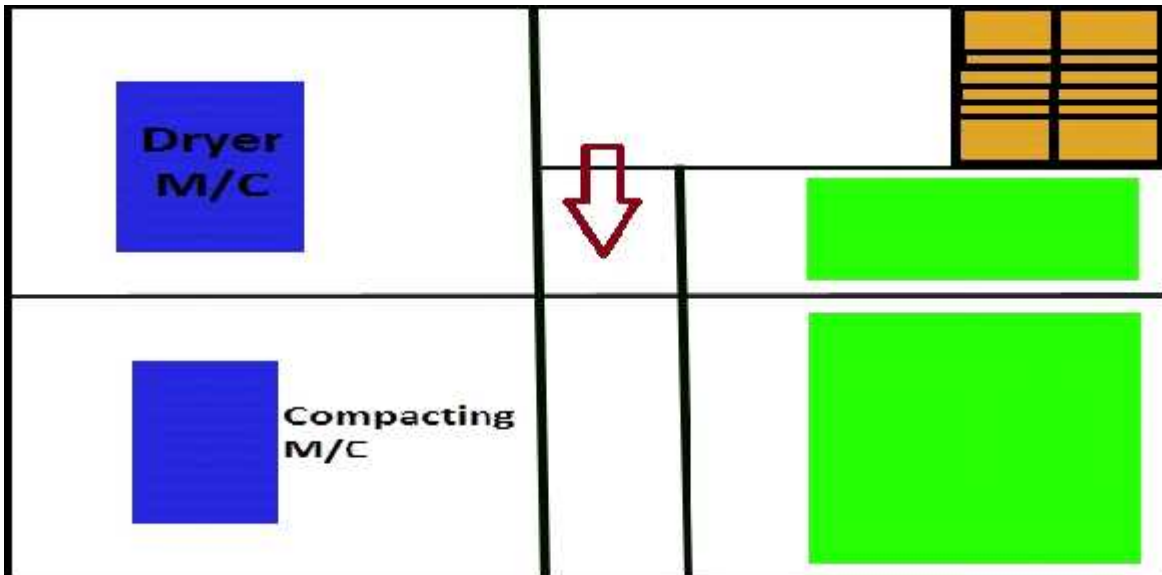
The dyeing section is a modern dyeing section equipped with highly productive world class dyeing machines such as A.K.M Dyeing m/c. In dyeing section there are 2 sample dyeing m/c in & 3 bulk dyeing m/c.

2.1 Layout plan of Dyeing section:

Ground Floor



1st Floor



2.2 Machine description for dyeing section:

Total no of dyeing m/c : 05

Sample dyeing m/c : 02

Dyeing m/c : 03

Machine no: 01



Fig: 01 Sample dyeing m/c

Machine name : A.K.M Dyeing m/c
Made in : Asian Kindom Machinery Industry co.Ltd
Machine type : Sample dyeing m/c
Machine capacity : 15 kg
Liquor ratio : 1: 5-7
Maximum press heat exchanger : 5kg/cm²
Maximum heat exchanger : 140°C
Fabric speed : 350 yd/min
MFC no : Amt02858
Date : 2001.5

Machine no: 02



Fig: 02 Sample dyeing m/c

Machine name : A.K.M Dyeing m/c
Made in : Asian Kindom Machinery Industry co.Ltd
Machine type : Sample dyeing m/c
Machine capacity : 25 kg
Liquor ratio : 1: 5-7
Maximum press heat exchanger : 5kg/cm²
Maximum heat exchanger : 140°C
Fabric speed : 350 yd/min
MFC no : Amt02858
Date : 2001.5

Machine no: 03



Fig: 03 Bulk dyeing m/c

Machine name : A.K.M Dyeing m/c
Made in : Asian Kindom Machinery Industry co.Ltd.
Machine type : Nom-702
Machine capacity : 280-400 kg
Liquor ratio : 1:5-7
Heating Area : 2.3 m²
Maximum press heat exchanger : 5kg/cm²
Maximum heat exchanger : 140°C
Fabric speed : 350 yd/min
MFC no : Amt02858
Date : 2001.5

Machine no: 04



Fig: 04 Bulk dyeing m/c

Machine name : A.K.M Dyeing m/c
Made in : Asian Kindom Machinery Industry co.Ltd.
Machine type : Nom-705
Machine capacity : 250-300 kg
Liquor ratio : 1:5-7
Heating Area : 2.3 cm²
Maximum press heat exchanger : 5kg/cm²
Maximum heat exchanger : 140°C
Fabric speed : 350 yd/min
MFC no : Amt02858
Date : 2001.5

Machine: 05



Fig: 05 Bulk dyeing m/c

Machine name : A.K.M Dyeing m/c
Made in : Asian Kindom Machinery Industry co.Ltd.
Machine type : Nom-705
Machine capacity : 140-200 kg
Liquor ratio : 1:5-7
Heating Area : 2.3 cm²
Maximum press heat exchanger : 5kg/cm²
Maximum heat exchanger : 140°C
Fabric speed : 350 yd/min
MFC no : Amt02858
Date : 2001.5

2.3 Squeezer M/C:



Fig: Balloon squeezer machine for tube knitted fabrics

Dewatering of knitted fabrics with a traditional hydro extractor results creases and wrinkles. These can be avoided by installing our GURUSON balloon squeezer. It solves the problem and also brings two semi-continues operations into a single, continues process of extraction and plating. This machine can open, untangle, extract stretch and well compact knitted fabric continuously in a single operation.

Model:

Balloon squeezer with double padder

Technical specification:

Power : 15Kw, 415V, 3Phase, 50 Hz

Nip pressure : 1st Nio: 0-100 kg/cm²

2nd Nio : 0-20 kg/cm²

Working width : 12-55 inches

Air consumption : 400 L/Hour

Machine speed : 1-60m/min

Overfeed : 100% to 150% adjustable

Plating length : 80 cm. Approx

2.4 Heat setting machine for tube knitted fabrics:



Fig: Heat setting machine for tube knitted fabrics

GURUSON Heat Setting Machine is specially designed for Lycra Fabric, P.C., Polyester, spun and all type of blended fabrics. In fact the machine is required to remove crush marks, Crease Marks & wrinkles of tube from fabrics. After process the fabric comes out with excellent finish in plated form.

Salient features:

Auto plating of Fabrics, smooth running, excellent finishing of fabrics, semi auto user friendly, less man power required for operating, easy handling of fabrics, all motor supported with A.C. drive, efficient steam chamber, adds moisture at entry point in dry fabric, absorb moisture to each core of fiber, adjustable structure to give required width, thermo set the fabric in even form. Steel roller, cooling chamber prevents change of color, trolley attachment.

Motor load : 5 Kw.

Heating load : 32 Kw.

Steam required : 50 kg/hr.

Running speed : 3 to 15 m/min.

2.5 Steam calendar machine:



Fig: Steam calendar machine

GURUSON Steam Calendar is specially designed to press and finish the 100% Cotton fabric, sinker, interlock, knitted fabric in tube form. We have got two models one is single roll and other double roll. Temperature between the rolls is controlled up to 125° C. The machine is available in four different sizes i.e.36", 48", 60", 72" working width. The motorized and magnetic stretcher is provided to keep the width of fabric constant and makes it possible to obtain the desired overfeed.

Salient features:

Plc & touch screen

Motor supported with V.F.D.

Magnetic stretcher

Maximum working width : 1500mm.

Minimum working width : 300mm.

Working speed : 40 m/min.

Electric load : 5 H.P.

Steam consumption : 100-200 kg./Hr.

Overall dimensions : 2900x1900x1850 (WxLxH)

2.6 Other Machines in Ground Floor:

Boiler:



Fig: Cochran Boiler, Fire Tube

DAE LIM ROYAL		CERTIFICATE NO	
TYPE: SMOKE TUBE PACKAGED BOILER		MODEL	DLRG-250
MODEL	DL-2	CAPACITY	1500 kg/hr
ACTIVE EVAPORATION	1500 kg/hr	POWER	1.5 MW
DESIGN PRESSURE	1 MPa	TYPE	TURBO
DESIGN TEMPERATURE	183.2 °C	CAPACITY	1500 kg/hr
HEAT EFFICIENCY	90 %	POWER	1.5 MW
FUEL CONSUMPTION	Gas: 11.2 kg/hr Oil: 1.2 kg/hr	TYPE	FULL SIZE
HEATING SURFACE	22 m ²	NOMINAL SIZE	40" x 40"
MANUFACTURE NO.	2003-37-30	SETTING PRESSURE	1 MPa
MANUFACTURE DATE	2003-2	CAPACITY	1500
DAE LIM ROYAL BOILER CO., LTD			

Fig: Boiler Specification

2.7 Generator:



Fig: Gas Generator

Stoichiometric Generator:

Stoichiometric Generator sets, 6 to 150 kW, are designed for applications of gaseous fuel as a result of fuel contaminant, economic.

Special features and advantages:

A complete selection of voltages, accessories, and generator set and control options are available for customizing to your application. Major features include:

Multiple control system options, including NFPA 110 compliance

Natural gas, propane or combination fuel systems

Weather-protective and sound-attenuated enclosures address environmental concerns for outdoor installations

Strong motor-starting capability and fast recovery from transient load changes to keep your site operational

Some models are available with optional closed-loop fuel control systems and three-way catalyst to limit emissions to 1.5 grams per brake horsepower-hour

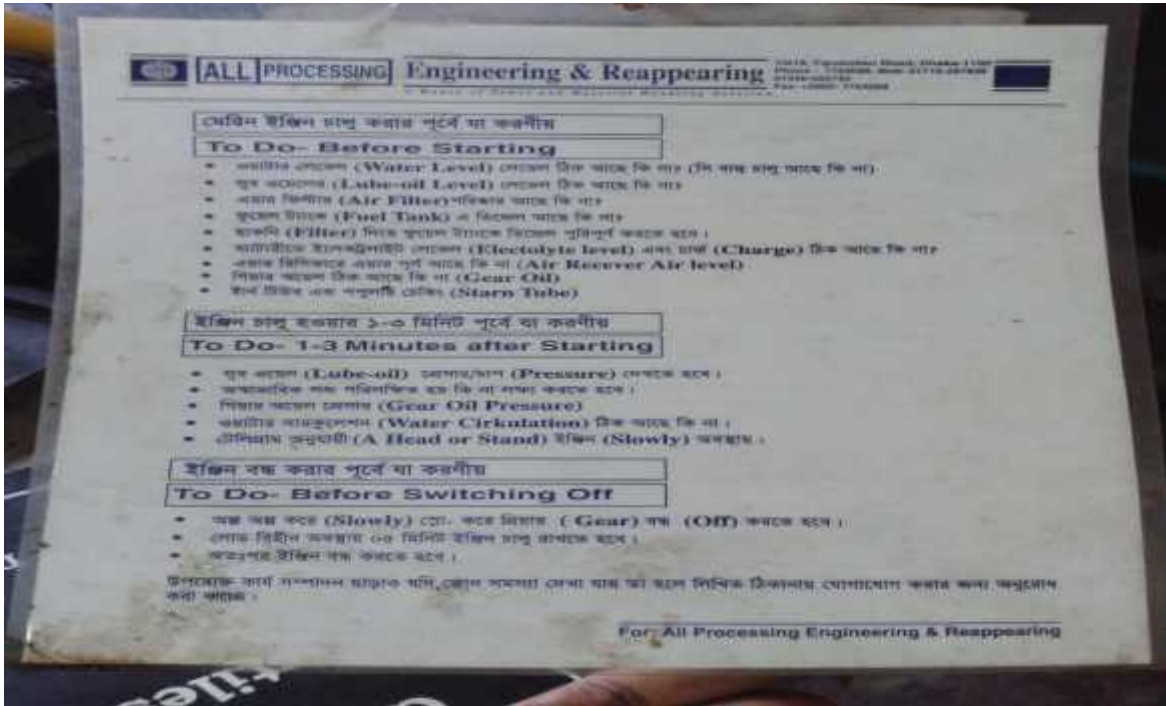


Fig: User Manual

2.8 Flow Chart of Cotton Knit Fabrics Dyeing:

Grey Cloth

Stitching & Sewing

Shearing and Cropping

Singeing

Desizing

Scouring

Bleaching

Washing

Dyeing

Drying

Calendaring

Final Inspection

2.9 Dyeing Recipe for Reactive dye:

- Detergent (PCLF) =0.8%
- Sequestering Agent (2UD) =0.5%
- Stabilizer (Sifa) = 0.3%
- Soda=2.5%
- H₂O₂=2.5%
- Acetic Acid=0.5%
- Enzyme=0.3%
- Leveling Agent=1.5%
- Sequestering Agent=0.5%
- Reactive Dye
- Yellow SPD=0.08%
- Yellow 4GL=1.4%
- Salt=35%
- Soda=8%
- Acetic Acid=0.3%
- Softener =0.2%
- Soaping Agent (Hog)=0.3%
- M: L=1:10
- Time= 6-7 hours
- Fabric Weight: 168 kg
- PH=10-11.5

Dyeing Procedure:

1. At first Detergent (PCLF), Sequestering Agent (2UD), Stabilizer (Sifa), Soda were added to the dyeing chamber and required amount of water is added to it at room temperature 10 minutes.
2. Fabric was added to the dyeing chamber and increase the temperature at 70-80°C. Then, the scouring process was going on 1 hour.
3. Then, H₂O₂ was added to the bath and continue 1 hour at 70-80°C.
4. After bleaching, drain out and then washed the fabric at 80°C about 15 min. And cut out a sample to test how much the bleaching was occurred on the fabric. If it passed in the test then we should go to the next step.
5. To neutralize the fabric, added acetic acid and raise the temperature 80°C and continue it 15 min.
6. Then, drain out and supply cold water and make a cold wash about 15 min and bath drain out.
7. After scouring and bleaching the fabric, Dye, Salt, Softener, Sequestering agent and required amount of water is added to the dye bath at room temperature for 10 min.
8. Dosing the Soda with raising the temperature at 60°C. And PH maintains 10-11.5 and continue 1 hour.
9. Drain out and make a normal wash. Then, fabric is hot washed at 80°C for 20 min.
10. Made acid wash at 80°C for 15 min to maintain the PH range 4.5-5.
11. Drain out and Non-ionic Soap wash at 60°C about 20 min.
12. Cold wash about 20 min.

Finishing:

1. Squeezing
2. Heat setting
3. Fabric Compacting.

2.10 Chemical list of Pacific Fibre Corporation:

S.L	Chemical	Dyes
01	Hydrogen Peroxide	Black LW
02	Acetic Acid	Black SDS
03	G/Salt	Red BS
04	C/Salt	Red RR
05	Soda Ash	Red HE3B
06	Caustic	Yellow 4GL
07	Softener	Yellow LW
08	Enzyme	Yellow SPD
09	Bleaching powder	Black ECOG
10	Fixing Agent	Blue HEGN
11	Anti-creasing Agent	Blue SPD
12	Detergent	Blue PR
13	Leveling Agent	Orange -25
14	Sequestering Agent	Orange ME2ri
15	Stabilizer	Turgaise GC
16	Soaping Agent	S/Black BR

2.11 Dyeing Faults & Remedies:

1. Uneven dyeing:

Causes:

- Uneven pretreatment.
- Improper color dosing.
- Uneven heat setting just in case of artificial fibers.
- Lack of management on colouring m/c.

Remedies:

- By making certain even pretreatment.
- By correct color dosing.
- By making certain even heat setting just in case of artificial fibers.
- By dominant on colouring m/c.

2. Batch to batch shade variation:

Causes:

- Improper dosing time of dyes and chemicals.
- Dyes ton variation.
- Improper reel speed, pump speed, liquor magnitude relation.
- Improper pretreatment.

Remedies:

- Use standards dyes and chemicals.
- Maintain constant liquor magnitude relation.
- Maintain constant colouring cycle.

3. Uneven dyeing effect:

Causes:

- Faulty injection of alkali.
- Improper addition of color.
- Attributable to hardness of water.
- Improper salt dosing.
- Dye migration throughout intermediate colouring.

Remedies:

- By making certain correct pretreatment.
- Correct dosing of dyes and chemicals.
- Heat ought to be same throughout the dye and chemicals.
- Correct salt dosing.

4. Roll to roll variation:

Causes:

- Poor migration of dyes.
- Improper dyes solubility.
- Faulty m/c speed.

Remedies:

- Use normal dyes and chemicals.
- Correct m/c speed.

5. Crease mark:

Causes:

- Poor gap of the material rope.
- Shock cooling of artificial material.

Remedies:

- Maintaining the correct reel speed and pump speed.
- Reducing the m/c load.

6. Dye spot:

Causes:

- Improper dissolving of dyes in dye bathtub.
- Improper dissolving of hydrated oxide in dye bathtub.

Remedies:

- By correct dissolving of dyes and chemicals.
- By passing the dissolved coloring material through affine stainless-steel mesh filter, in order that the massive un-dissolved particles are removed.

7. Chemical Mark:

Causes:

- Improper admixture of the chemical.
- Improper period of time of the material throughout application of chemical.

Remedies:

- Maintaining correct reel speed & pump speed.
- Correct admixture of the chemical before addition.

CHAPTER 03

GARMENTS SECTION

3.1 Garments Production Process:

Stepwise garments manufacturing: sequence on industrial basis is given below:

Design / Sketch

Pattern Design

Sample Making

Production Pattern

Grading

Marker Making

Spreading

Cutting

Sorting/Bundling

Sewing/Assembling

Inspection

Pressing/ Finishing

Final Inspection

Packing

Dispatch

3.2 Merchandiser:

The initial stage of operation after buyer approval (sample).the merchandiser's also submit the required price recognizing all the aspect for the garments and send to the buyer the unit cost of the garments with the samples. In this time they also estimate the lead time and made an agreement how the shipment will done and other things.

3.3 Design:

It is given by buyers to manufacturers containing design including manually measurements of particular styles or design.

3.4 Sample making:

To make a sample, this will be approved by buyer. After making a sample, it's sent to buyer for approval to rectify the faults.

3.5 Production pattern:

To making allowance with net body measure for bulk production is manually.

3.6 Marker Making:

According to the requisition, while all the materials came in to the SKFL's store room then this Department starts their work. For marker making they are working to manually marker making system. The efficiency of the marker making fully depends on the planning. Usually it varies from 80-85%. If the attachment is less then efficiency rises up to 90%.

3.7 Spreading:

To manually spread the fabrics on the table correctly for cutting section.

3.8 Cutting:

According to the marker use four cutting machines. Where one is fully manually run by fabric lay and others are manually operated. Before cutting the fabric are spread into the cutting bed by manually. After fabric spread and fabric cutting by Knife Roller cutting m/c. Two machines are employed for this purpose.



Fig: Cutting Section

3.9 Fusing:

In the fusing section four fusing machine are use to join interlining. And also Collar, Cuff and Tapes are separated here also.

3.10 Sewing:



Fig: Sewing Section Layout

After cutting the individual parts, they are sending to the sewing Department. In the sewing Department total 38 teams are working and each group is working on different buyers. End of every line there is an inspection table and for every three line there is a QAD supervisor to ensure the quality of the product.

3.11 Ironing & Finishing:

After sewing we will get complete garments which are treated with steam ironing & also finishing processes are done for extra loose or hairy thread cutting by manually.



Fig: Finishing Section

3.12 Store & Delivery:

After the QC department approval the products are packed and send to the store room and then they are ready to deliver to the customer or buyer.

3.13 Sample Department:

This Department is work to submit the samples according to the buyer's requirements for approval. They also maintain the previous approved samples for display.

3.14 Training Department:

An individual Department is work here to develop the employer's performance and other aspects of the organization.

3.15 Printing and Embroidery Department:

Pacific Fibre Corporation has a screen printing Department. Where two fully automated machines and an automated curing machine is working. Here the graphics design unit, table printing unit screen developing unit and color preparing unit also available. They only print the buyers given design and not done any own created design for printing. In Pacific Fibre Corporation has also modern machinery decorated Embroidery section and produces more decorative design and construction.

3.16 Distribution Unit:

This Department is supply the garment's trimmings, equipments for the garments machines if need and also do the maintenance program and record the necessary floor work's information's.

3.17 Costing:

Costing is a process by which the setting price of a product is calculated. It is a very important task for a factory, which runs for business purposes. And it is also strictly followed in the NCL. Costing of the products considering the raw materials expenditure, salary and wages of officers and workers, distributions and advertisement expenses etc. all direct and indirect expenses is done in this factory. It is determined by a troop of accountants with advice and consultancy of executive director.

3.18 Price of the Product:

Generally price of product is determined by the required profit adding to the total expenses.

So, Price of products= (Direct expenses + Indirect expenses + Factory Overhead) + Required profit.

3.19 Classification of Label:

Pacific Fibre Corporation has a small Label industry. They produce various types of decorative labels. Labels can be classified as follows;

According to end use:

Main Label: it is used to describe various types of information's like fiber composition of the garment/textile, logo of the company, name of the manufacturing country etc.

Size Label: it is used to describe the size of the garment/textile, e.g. small (S), medium (M), large (L), extra large (XL) etc,

Extra Label: This type of label is introduced recently they are attached at the placket or at the bottom part of the shirt or any other part.

Care Labels: It is used to describe care instructions or symbols like i.e. washing, bleaching, drying, ironing and/or dry washing etc.

Sticker Label: This type of labels is fancy items and is attached to various types of articles either to show the brand names and other details or enhance their customer acceptability.

Package Size and Label:

Most common sizes are

S =Small.

M =Medium.

L =Large.

XL =Extra Large.

XLL =Very Very Large.

Sample Attachment:

S.L	Sample Name	Sample
01	Grey Fabric	
02	Scoured Fabric	
03	Bleached Fabric	

Dyed sample attachment:

S.L	Recipe	Sample
01	F. Yellow GDR=2.8% F. Red WHR=1.2% F. Black-B=1.2% 60/15	
02	S. Yellow SPD=0.47% F. Red 4GL=0.33% F. Black-B=0.42% 30/7	
03	Yellow SPD=0.5% F. Red 3BS=0.38% Blue HERN=0.6% 20/5	
04	S. Red3BS=0.28% S. Yellow SPD=0.56% R. Blue LW=0.6% 20/5	
05	R. Yellow 4GL=1.2% R. T/G=0.002% 30/7	

S.L	Recipe	Sample
06	S. yellow 4GL=1% R. T/G=0.0036% 25/6	
07	R. Red=0.17% R. OR ME2RL=1.2% R. Black-B=0.002% 30/7	
08	R. OR MER2RL=1.4% R. Red 3BS=1.2% 40/10	
09	R. Yellow 4GL=0.96% R. T/G=.2% R. Blue RR=0.005% 20/5	
10	R. Yellow SDR=0.5% Blue RR=.0.5% 25/6	

S.L	Recipe	Sample
11	R. Yellow GDR=0.2% R. Red LW=0.44% F. Black-G=4% 60/15	
12	F. Yellow GDR=0.2% F. Red WHR=0.4% F. Black-B=2.8% 60/15	
13	R. Red 3BS=0.8% Blue LW=0.3% 20/5	
14	S. Yellow SPD=0.15% R. Red 3BS=1.6% R. Blue LW=0.4% 30/7	
15	R. Red WHR=2.2% R. OR ME2RL=1.4% F. Black-B=0.008% 60/15	

Conclusion

Two months industrial training in Pacific Fibre Corporation Ltd. was a concluding part of the B.Sc. in Textile Engineering course which enables graduates to attain sound practical knowledge. It gives us an orientation to ourselves'1's with the practical as well as theoretical knowledge.

It was a great pleasure for us to work in of Pacific Fibre Corporation Ltd. which provides us a wide range of scope. All the employees tried to give optimum service to us at Pacific Fibre Corporation Ltd.

From the learning point of view we can say that we really enjoyed our internship from the very beginning. We are much confident that these two months internship program at this Garments factory will definitely helps us to realize our future carrier in the job.

Last of all, we would like to thank all the officers & other stuffs that helped us by their active cooperation. We are lucky because we completed our internship in a well known industry which will help us in future job market.

We think this training must assist us in our future industrial work.