

INTERNSHIP REPORT

**SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF
BACHELOR OF SCIENCE – FASHION DESIGN**

by

KAVIYA SRI .S (41105005)



**DEPARTMENT OF FASHION DESIGN
SCHOOL OF BUILDING AND ENVIRONMENT**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited with “A++” by NAAC

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI – 600119

JULY 2023

SCHOOL OF BUILDING AND ENVIRONMENT
DEPARTMENT OF FASHION DESIGN

INTERNSHIP REPORT (S105AINT)
2023 - 2024

Name of the Student : KAVIYA SRLS

Reg No : 41105005

Semester : V

Batch : 2021-2024



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A++" Grade by NAAC | 12B Status by UGC | Approved by AICTE
www.sathyabama.ac.in

SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF FASHION DESIGN

INTERNSHIP REPORT (S105AINT)

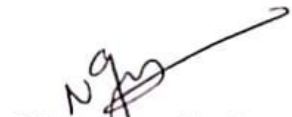
2023 – 2024

VIVA VOCE EXAMINATION

This to certify that the Internship (S105AINT) is the work of KAVIYA SRI.S-4115005 during semester V, is a student of Fashion Design department had undergone training in PENTAGON GARMENTS has been monitored by the continuous assessment during 11/06/2023 to 03/05/2023.

Submitted for Viva Voce examination held on: 06.09.2023


Mentor


Class Coordinator


Internal Examiner
Examiner


External


Head of the Department
Head of the Department
Fashion Design
Sathyabama Institute of Science and Technology
Chennai-600 119



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A++" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

DECLARATION

I KAVIYA SRI.S here by declare that the Internship (S105AINT) for 21 days from 11/05/2023 to 03/06/2023 done by me under the guidance of Mrs. N. GAYATHRI, is my original work and is prepared based upon the data and information collected during my internship period is submitted in partial fulfillment of the requirements for the completion of practical training session.

Date: 06.09.2023

Place: CHENNAI

Kaviya Sri. S.

SIGNATURE OF THE
CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY** for their kind encouragement in doing this Internship and completing it successfully. I am grateful to them.

I convey my thanks to **Dr. DEVYANI GANGOPADHYAY** Dean, School of Building and Environment for providing me constant support and guidance. Your dedication to fostering a positive and nurturing academic environment has made a significant impact on my personal and professional growth.

I express my deep sense of gratitude to **Mrs. S. KRITHIKA** Head of the Department, Department of Fashion Design, School of Building and Environment, for providing me the assistance and knowledge at the right time during the progressive review.

I would like to extend my sincere gratitude to **Mrs. BARANI RAJKUMAR** for giving me the chance to be a part of your esteemed organization and gain practical experience in the industry. I admire, the great opportunity that has provided to us and all the elements that made a contribution toward my understanding throughout this period

I would like to express my sincere and deep sense of gratitude to **Mrs. N. GAYATHRI** for her valuable guidance, suggestions and constant encouragement. I feel privileged to have the opportunity to be under your guidance, that paved way for the successful completion of my internship.

Last but not the least, I would like to thank all my **FAMILY MEMBERS, FRIENDS AND RELATIVES** for their support during the Internship period.

BONAFIDE CERTIFICATE FROM COLLEGE



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Ref: SHD/2023/04/24/55

24 April, 2023

BONAFIDE CERTIFICATE

This is to certify that **Ms. KAVIYA SRI S**, Register Number **41105005** is a Bonafide student of our Institution pursuing 2nd year **BACHELOR OF SCIENCE in FASHION DESIGN** during the academic year **2022-2023**. She will be completing the course in the year **2024**.

This certificate is issued for the purpose of **Applying INTERNSHIP**.

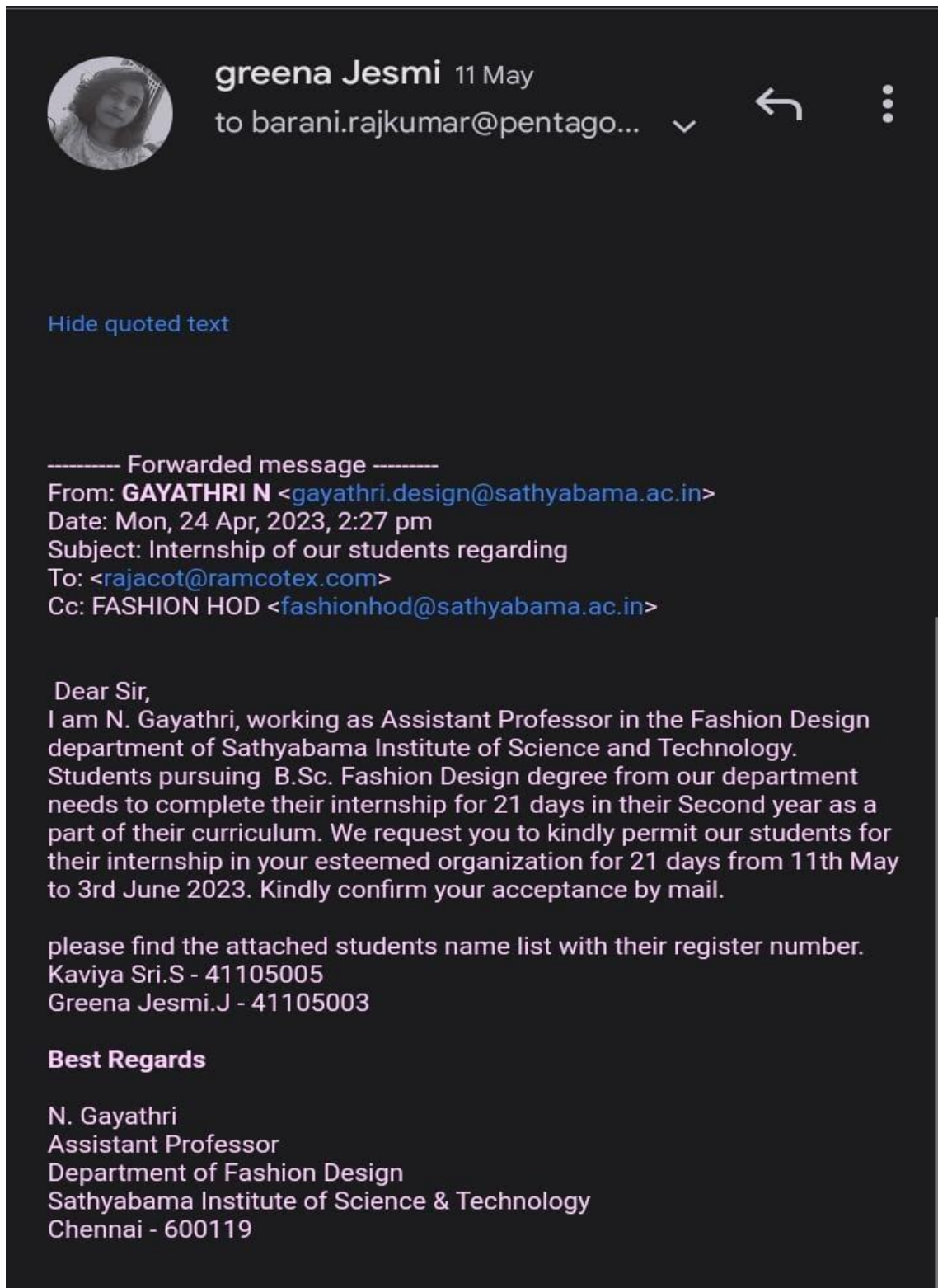
A handwritten signature in black ink, appearing to read 'G. Sundari', is written over the printed name of the Dean.

DEAN (STUDENT AFFAIRS)

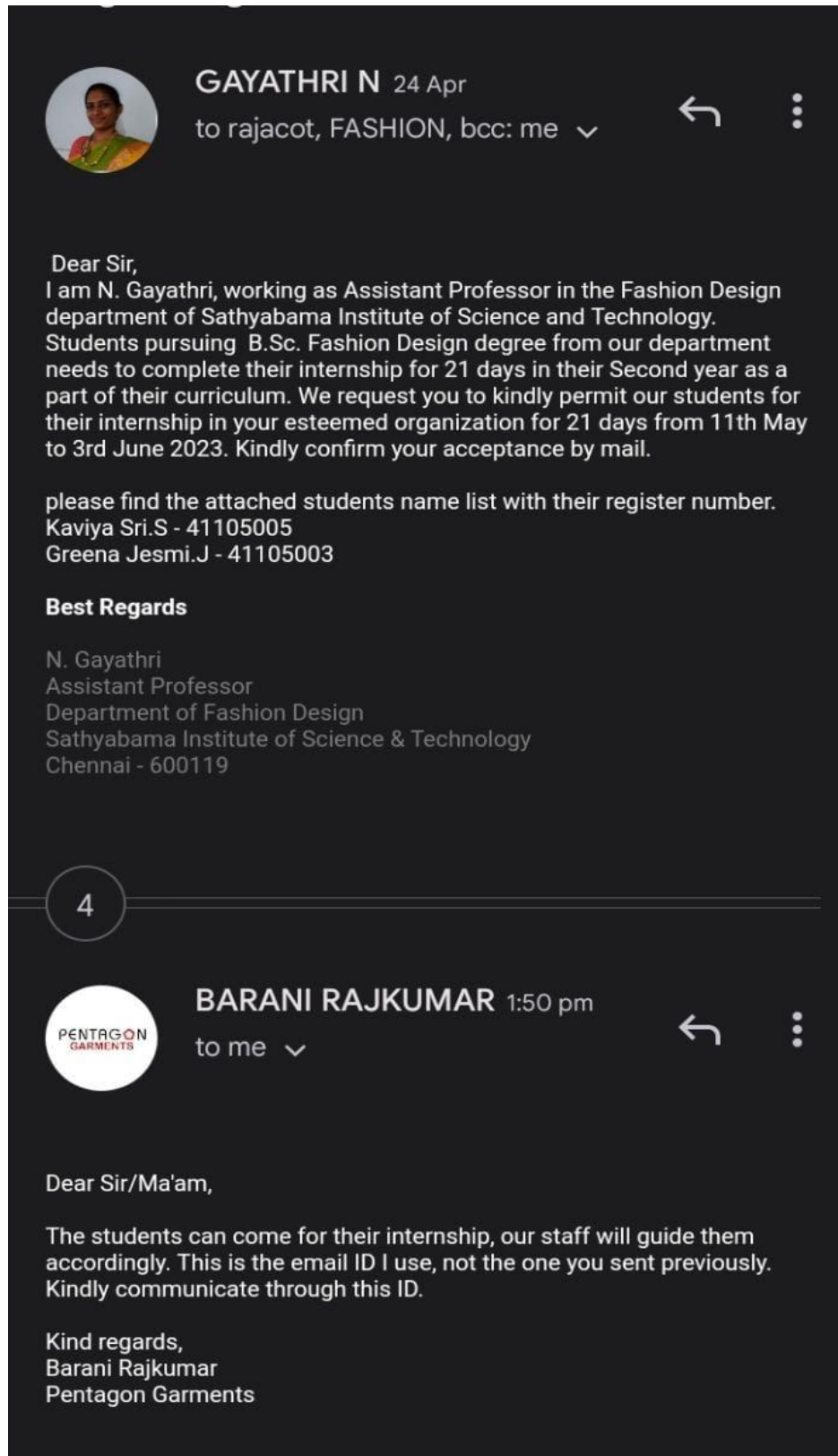
Dr. G. SUNDARI, M.E., Ph.D.,
DEAN (STUDENT AFFAIRS)

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

MAIL REQUEST FROM DEPARTMENT TO COMPANY



MAIL ACCEPTANCE FROM COMPANY



PERFORMANCE REPORT

DEPARTMENT OF FASHION DESIGN

INTERNSHIP REPORT 2023

(Continuous progress report of the trainee for the period of 21 days in the industry to be submitted to HOD by the Trainee in Charge the Organization)

1. **Name of the Industry** : Pentagon Garments
2. **Address** : 216, Alagai Nagar, Rajapalayam-626117
3. **Name of the student** : Kaviya Sri.S
4. **Duration** : 11-05-2023 to 03-06-2023
5. **Total No. of days** : 21 days

Evaluation of performance criteria shall be on

*Note: Kindly grade the student as per her overall performance in the office during the assessment days, which will be converted to the allotted 40 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of the departments		✓			
Participation in the industry	✓				
Handling the given work		✓			
Punctuality		✓			
Coordination With Other Workers	✓				
Oral communication	✓				
Attitude	✓				
OVERALL PERFORMANCE	Very good				

Any other Remarks _____ Nil

Murugan

Signature of the Head of the Office:

CERTIFICATE

PENTAGON GARMENTS

216, Alagai Nagar, RAJAPALAYAM - 626 117.
Virudhunagar Dist., Tamilnadu.

Date: 05.06.2023

TO WHOM SO EVER IT MAY CONCERN

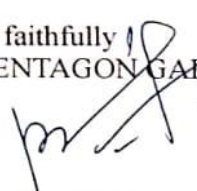
This is to certify that Ms.KAVIYA SRI S.(Reg.No.41105005) 2nd year Bachelor of Science in FASHION DESIGN student of SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY Chennai-600119 completed her Internship Training in our Organization during the period from 11.05.2023 to 03.06.2023.

During the Internship Training period she has gained knowledge in various aspects in our business.

We wish her to success in all his future endeavours.

Thanking You

Yours faithfully
For PENTAGON GARMENTS,


Authorized Signature

INTERNSHIP DETAILS

1. INDUSTRY / ORGANIZATION: PENTAGON GARMENTS

Mentor Name : **Mr. Murugan**
Designation of the mentor : **HR**
Contact Number : **9965841700**
Address : **216, Alagai Nagar, Rajapalayam-626117**

2. INSTITUTION: SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

Mentor Name : **Mrs. N. Gayathri**
Designation of the mentor : **Assistant Professor**
Student Name : **Kaviya Sri. S**
Department : **Department of Fashion design**
Address : **Jeppiaar Nagar, Rajiv Gandhi Salai,
Chennai - 600 119. Tamil Nadu, INDIA**

DAILY REPORT

DATE	REPORT
12/05/2023	Introduction
15/05/2023	Understanding of the things in the company
16/05/2023	Safety measures to be followed before starting the daily routine
17/05/2023	Study on store department and its function
18/05/2023	Filing section in the store department
19/05/2023	Fabric checking Department
22/05/2023	Cutting department
25/05/2023	Filing section in the Cutting department
26/05/2023	Sewing Department
29/05/2023	Work of the Quality Controller in the sewing department
30/05/2023	Quality checking department after the garment is stitched
31/05/2023	Learnt about the process how excess threads are removed and explained about the needle area
01/06/2023	Packing Department
02/06/2023	Worked in fabric checking and cutting department
03/06/2023	Mentor review

INDEX

S.NO	CONTENT	Pg.NO
1	INTRODUCTION	14
2	COMPANY PROFILE	15
3	LAWS AND SCHEMES FOR EMPLOYEE	20
4	FABRIC STORE DEPARTMENT	38
5	FABRIC INSPECTION DEPARTMENT	41
6	CUTTING DEPARTMENT	50
7	SEWING DEPARTMENT	55
8	QUALITY CHECKING DEPARTMENT	57
9	IRONING DEPARTMENT	58
10	PACKING DEPARTMENT	60
11	REPORT MAINTAINED IN THE INDUSTRY	61
12	CONCULSION	66
13	BIBLIOGRAGHY	68

1. INTRODUCTION

The garment manufacturing industry holds a significant position in the global economy, playing a crucial role in meeting the ever-changing demands of fashion-conscious consumers worldwide. With a history dating back centuries, the industry has evolved substantially over time, incorporating technological advancements, adapting to global trade dynamics, and responding to shifting consumer preferences. As a result, it has become an essential sector driving economic growth, employment generation, and international trade.

Garment manufacturing involves the mass production of clothing and apparel, encompassing a wide range of products from everyday wear to haute couture. This industry not only supports fashion houses and high-end designers but also caters to the needs of the masses, making it one of the most diverse and dynamic sectors within the textile and apparel domain.

In this introduction, we will delve into the evolution of the garment manufacturing industry, exploring its historical roots, key drivers of change, and its current state in the contemporary global landscape. We will also highlight the challenges and opportunities that the industry faces in the modern era, including ethical and environmental concerns, technological disruptions, and the pursuit of sustainable practices.

Moreover, we will shed light on the crucial role of globalization and international trade in shaping the garment manufacturing industry, leading to the emergence of production hubs in different parts of the world. Additionally, we will discuss how digitalization and e-commerce have revolutionized consumer behavior, necessitating a paradigm shift in manufacturing processes to cater to the demands of a rapidly evolving market.

Throughout this analysis, we will emphasize the industry's potential for growth and its capacity to drive positive change. By embracing innovation, sustainability, and responsible practices, garment manufacturers have the opportunity to not only thrive in a competitive market but also contribute to a more socially conscious and environmentally sustainable future.

2. COMPANY PROFILE:

GJ INNOVATIONS & TEXTILE NETWORK PRIVATE LIMITED

GJ Innovations & Textile Network Private Limited was on 01st September 2005. It was classified as non-government company. It was involved in Research and experimental development on natural sciences and engineering (NSE). This class includes systematic creative work in the fields of research and development in natural sciences, medical sciences, agriculture and engineering & technology.

GJ Innovations & Textile Network Private Limited's Annual General Meeting (AGM) was last held on 30 November 2021 and as per records from Ministry of Corporate Affairs (MCA), its balance sheet was last filed on 31 March 2021.

Directors of GJ Innovations & Textile Network Private Limited are Karpagavalli Govindaraj, Pandurangan Govindaraj and Jawahar Govindaraj.

GJ Innovations & Textile Network Private Limited's Corporate Identification Number is (CIN) U73100TN2005PTC057371 and its registration number is 57371. Its Email address is jawahar.govindaraj@pentagontextiles.com and its registered address is 1/407, D.P-2, SIDCO INDUSTRIAL ESTATE SULAKKARAI VIRUDHUNAGAR TN 626003 IN .

Current status of GJ Innovations & Textile Network Private Limited is - Active.



Fig 1 Front view of the company

Company Details

CIN	U73100TN2005PTC057371
Company Name	GJ INNOVATIONS & TEXTILE NETWORK PRIVATE LIMITED
Company Status	Active
RoC	RoC-Chennai
Registration Number	57371
Company Category	Company limited by Shares
Company Sub Category	Non-govt company
Class of Company	Private
Date of Incorporation	01 September 2005
Age of Company	17 years, 8 month, 30 days

Share Capital & Number of Employees

Authorized Capital	₹7,800,000
Paid up capital	₹7,800,000

Listing and Annual Compliance Details

Listing status	Unlisted
Date of Last Annual General Meeting	30 November 2021
Date of Latest Balance Sheet	31 March 2021

Contact Details

Email ID: jawahar.govindaraj@pentagontextiles.com

Address:

1/407, D.P-2, SIDCO INDUSTRIAL ESTATE SULAKKARAI VIRUDHUNAGAR TN 626003
IN

Director Details

DIN	Director Name	Designation	Appointment Date
01892462	KARPAGAVALLI GOVINDARAJ	Director	11 June 2009
01891564	PANDURANGAN GOVINDARAJ	Director	01 September 2005
00843134	JAWAHAR GOVINDARAJ	Director	01 September 2005

Establishment Name	City	Pin code	Address
GJ INNOVATION & TEXTILE NETWORK (P) LTD	MADURAI	626003	1/407,SIDCO INDUSTRIAL ESTATE, SULAKKARA, IVIRUDHUNAGAR-709, TN.

Establishment Details

Pentagon Textiles

Pentagon Textile Network was established by a group of five highly qualified professionals from diversified industries in the Year 2006. The primary focus has been to provide excellent and cost-effective textiles product to consumer market in India and the world through creativity and innovation.

They proudly claim innovation was triggering word for setting up Pentagon operations as our MD Mr. Jawahar has demonstrated enormous knowledge and skills in the areas of Intelligent Garments. Pentagon's desire to establish world class Textile industries setup can be traced back to its promoter's close link with textile industries and Mr. Jawahar's love and passion towards intelligent textiles. They have developed and incorporated excellent operating system to sustain the growth. Pentagon has truly incorporated the six-sigma quality, Kaizen, and 5 S to ensure the excellent quality, continuous improvement and sustainable growth. Pentagon's management council plays a very critical role in implementing the strategies, procedures and policies.

They have strategically selected the locations for weaving and garments to improve the employment situation and help the villages around Virudhunagar, Tamil Nadu. We believe in societal obligation and have been doing their best to improve the society around them.

ADDRESS

Pentagon Garments

216, Alagai Nagar

Rajapalayam

Pin-code: 626117

merchant.garments@pentagontextiles.com

Contact: (+91) 9750943104

Pentagon Apparels - I

2, By-Pass Road

Virudhunagar

Pin-code: 626001

merchant.garments@pentagontextiles.com

Contact: (+91) 9750943104

Pentagon Apparels - II

DP.No, 71 to 82, SIDCO New Industrial Estate, Alagapuri Main Road , Pavali,

Virudhunagar

Pin-code:626001

merchant.garments@pentagontextiles.com

Contact: (+91) 9750943104



Fig 2(Front view of the company)



Fig 3(Logo of the company)

3. LAWS AND SCHEMES FOR EMPLOYEE

3.1 THE EMPLOYEES' STATE INSURANCE ACT, 1948

OBJECTIVE

The object of the Act is to provide sickness, maternity, disablement and medical benefits and to secure the health of employees of factories and establishments and pay dependents' benefits to the dependents of such employees. (*Absolves liability under WC Act and Maternity Benefit Act*)

Constitutional Provisions

- The Constitution has mandated the HEALTH SUBJECT under the STATE LIST.
- Therefore, the Medical Side (i.e.) the Dispensaries & the Hospitals are run by the State Govt.
- The Insurance & Finance is administered by the ESI Corporation (Central Govt.)

APPLICABILITY

Establishments (as notified by the government) which are employing to all Factories (except seasonal factories) & 10 or more employees.

For **all type** of **employees** drawing wages (excluding OT) up to Rs. 21,000/- per month.

Contribution under ESI Act,1948

1. Employees: 0.75% on total monthly gross wages
2. Employer: 3.25% on total monthly gross wages

ANY EXEMPTIONS:-

Employees drawing wages less than Rs. 176/- per day are exempted from paying the employees' share (0.75%) of contribution. However, Employers' Share is payable.

Incentive to Employers for employing differently abled persons

The employer's contribution (3.25%) is waived off for 36 months from the date of enrolment in ESI.

The eligibility condition is, the disability should be 40% or above. Further the upper wage ceiling for such employees to avail this benefit is up to Rs.25,000/-

For registering such employees, the concerned ESIC branch manager may be contacted, as this category of employees cannot be registered from the employer's portal directly.

TWO CATEGORIES OF BENEFITS

➤ The CASH BENEFITS which comprise of....

- Sickness benefit
- Extended Sickness Benefit
- Maternity benefit
- Disablement benefit
- Dependents' benefit

▪ and..... The MEDICAL BENEFITS.

Sickness Benefit

- Should have put 9 months service for availing this benefit.
- Minimum 78 days of the payment of contribution in a corresponding half year is must for eligibility.
- During sickness the Insured employees are entitled to receive a sum equal to their 70% of his/her average gross daily salary.
- Benefit is not payable for the first 2 days of sickness (termed a waiting days).
- Maximum benefit days entitled is for 91 days in a year.

Extended Sickness Benefit

- Sickness Benefit is extendable up to two years in the cases of long-term diseases viz. TB, leprosy, AIDS, Malignant Diseases numbering 34 similar diseases.
- The insured person is paid a benefit at an enhanced rate of 80% of wages for a maximum of 2 years.
- Eligibility conditions: Minimum 2 years of service and should have paid at least 156 days of contribution.

Maternity benefit

- Payable for Confinement, miscarriage or medical termination of pregnancy and also for sickness arising out of it.
- Eligibility minimum 9 months of service prior to the date of confinement.
- Payment of contribution for at least 70 days in the immediately preceding two consecutive half years (a.k.a. contribution periods).
- Benefit payable for 26 weeks @ 100% of Gross Daily Salary.
- Additional 30 days for sickness arising out of confinement.

Dependants' Benefit

The deceased's widow and his widowed mother are entitled for pension up to their life-time or re-marriage whichever is earlier.

1. Son is entitled for pension up to 25 years of age.
2. Daughter is entitled up to marriage.

*However, a widower is not entitled for a pension.

The minimum pension payable for a family is not less than Rs. 1200/-pm. Pension payable every month through ECS.

CASHLESS TREATMENT PROCEDURE

Should have a Pehchan Card issued by ESIC



Register at the ESI Dispensary



Obtain Referral Letter from the ESI Doctor(IMO) & the Eligibility Certificate from ESIC Branch Manager



Directly go to the Tie-Up Hospital and get admitted and treated



Cashless Treatment will be provided at the Hospital



Tie -Up Hospital will claim the bill directly from the ESIC

3.2 Factories Act 1948 and Tamil Nadu Factories Rules 1950

The First Factories Act 1881 (India)

In 1875, the first committee appointed to inquire into the conditions of factory work proposed legal restriction in the form of factory laws. The first Factories Act was adopted in 1881. The Factory Commission was appointed in 1885. Men and women, worked continuously day and night for 8 consecutive days and for 18 hours from 4 a.m. to 10 p.m., Three or four annas was the wage. “ Those working these excessive hours frequently died.” There was another Factories Act in 1891, and a Royal Commission on Labor was appointed in 1892. Restrictions on hours of work and on the employment of women Were the chief gains of these investigations and legislation.

THE FACTORIES ACT, 1948 (Amendment on 1987)

This Act extends to the whole of INDIA and come into force on 1-4-1949. FACTORY means any premises including the precincts thereof ; Where 10 or more workers are working or were working on any day of the preceding 12 months and in any part of which a Manufacturing Process is being carried on with the aid of Power or ordinarily so, or Whereon 20 or more workers are working, or were working on any day of the preceding 12 months, and in any part of which a manufacturing Process is being carried on without the aid of Power or ordinarily so.

MANUFACTURING PROCESS -means any process for – Making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal ; or Pumping oil, water, sewage or any other substance ; or Generating, transforming or transmitting Power ; or Printing, Composing, Book binding ; or Constructing, repairing or breaking up ships and vessels ; or preserving or storing any article in cold storage.

OCCUPIER of a Factory means the person who has ultimate control over the affairs of the Factory ; any one of the partners in the firm, any one of the directors in a company , the manager in factory owned by Central Government or State Government or Local Authority.

WORKER means a person employed , directly or by or through any agency, including a Contractor, with or without the knowledge of the principal employer, whether for remuneration or not, in any manufacturing process, or in cleaning any part of the machinery or premises used for manufacturing process ,or any other kind of work incidental to, or connected with , the manufacturing process, or the subject of the manufacturing process.

GENERAL DUTIES OF THE OCCUPIER

The Occupier shall ensure so far as reasonably practicable, the health, safety and welfare of all the workers while they are at work in the Factory, which shall include ; provide and maintain the plant and system in a safe manner without risk to health, Provide information, instruction, training and supervision which are necessary to ensure health & safety, provide safe means of access to and egress from the place of work, Provide and maintain the monitoring of working environment in the factory. The Occupier of the factory employing more than 50 workers shall prepare a HEALTH & SAFETY POLICY in writing as prescribed and a copy shall be sent to the Chief Inspector of Factories.

GENERAL DUTIES OF THE MANUFACTURER

Every person who designs, manufactures, imports or supplies any article for use in any factory shall ; ensure, so far as reasonably practicable, designed and constructed to be safe and without risk when properly used, make arrangements for carrying out tests and examination, provide adequate information regarding the article, design, when put to use, will be safe and without risk to the health of the workers.

PENALTIES AND PROCEDURES

Any contravention of the provisions of this Act or Rule or any order in writing given thereunder, the occupier and the manager of the factory shall each be guilty of an offence and punishable with imprisonment for a term which may extend to two years or with fine which may extend to one lakh rupees or with both. For continuation of offence fine Rs.100 for each day If any contravention has resulted in an accident-causing death or serious bodily injury, the fine shall not be less than Rs.25,000 and Rs.5,000 in case of serious bodily injury. For repeated offence - imprisonment for three years or fine Rs.10,000 and up to 2 lakhs or with both. If any worker employed in a factory contravenes any provision of this Act or Rule shall be punished with fine Rs.500.

REGISTERS , RECORDS AND RETURNS

- FORM NO.1. -- Application for permission to construct, extend or take into use any building as a factory.
- FORM NO.2 -- Application for registration and grant or renewal of license.
- FORM NO.5 -- Certificate of fitness for young persons.
- FORM NO.6 -- Humidity Register.
- FORM NO.7 -- Record of lime washing, painting etc.
- FORM NO.8 -- Report of examination of pressure vessel or plant.
- FORM NO.8A -- Report of examination of water sealed gas holder.
- FORM NO.9 -- Register of compensatory holidays.
- FORM NO.10 -- Overtime muster roll for exempted workers.
- FORM NO.11 -- Notice of period work.
- FORM NO.12 -- Register of adult workers.
- FORM NO.14 -- Register of young persons.
- FORM NO.15 -- Register of leave with wages.
- FORM NO.17 -- Health register.
- FORM NO.18 -- Report of accident.
- FORM NO.18A -- Report of Dangerous Occurrence.
- FORM NO.18B -- Report of further details of accident.
- FORM NO.19 -- Notice of poisoning or disease continued
- FORM NO.21 -- Half-yearly Returns.
- FORM NO.22 -- Annual Returns.
- FORM NO.25 -- Muster Roll.
- FORM NO.25A -- Muster Roll for exempted adult workers.
- FORM NO.25B -- Time card.
- FORM NO.26 -- Register of accidents.
- FORM NO.26A -- Register of Dangerous occurrence.
- FORM NO.27 -- Certificate of Fitness
- FORM NO.28 -- Register of exemptions.
- FORM NO.29 -- Particulars of rooms.
- FORM NO.34 -- Nomination form by workers.

- FORM NO.35 -- Register of properly trained adult workers.
- FORM NO.36 -- Report of examination of Hoist or Lifts.
- FORM NO.37 -- Report of examination of Dust Extraction System.
- FORM NO.38 -- Record of eye examination.
- FORM NO.39 -- Pre-employment Health Register

3.3 WELFARE

WASHING FACILITIES :-

Separate Washing Facilities for Male and Female with adequate water supply, soap, nail brushes and shall be kept in a clean and orderly condition . At least 27.3 liters of water shall be provided to each worker.

CRECHES :-

Factories employing more than 30 women workers shall maintain a Creche Room. The Creche Room shall contain washing facilities, cradles or cots, toys, playground, Milk. A qualified nurse shall be employed.

CANTEENS :-

Factories employing more than 250 workers shall maintain shall maintain a Canteen. The Canteen shall run on non-profit basis. Canteen managing committee shall be formed , consisting of equal number of persons nominated by the Management and elected by the workers.

REST ROOMS AND LUNCH ROOMS :-

Factories employing more than 150 workers shall maintain a Rest Room & Lunch Room. Rest Room shall be provided with chairs or benches with back rest, drinking water, washing facilities. A portion of the Rest Room shall be partitioned off for women workers.

FIRST – AID APPLIANCES :-

First Aid boxes or Cupboards distinctively marked with red cross on white background shall be maintained for the corresponding factories as specified.

- 1) Class – A : All factories of 85 (1) & up to Fifty workers of 2 (m) (i) factories
- 2) Class – B : All factories of 2 (m) (i) employing up to fifty workers.
- 3) Class - C : All factories employing more than fifty workers.

Notice regarding the First Aid box is to be displayed. Persons who are in charge of the First Aid boxes shall possess Certificate granted by the St. John's Ambulance Association.

Factories employing more than 500 workers shall maintain an Ambulance Room with the prescribed equipment and persons.

WORKING HOURS

WEEKLY WORKING HOURS :- 48 hours in a week for adults.

DAILY WORKING HOURS :- 9 hours in a day.

INTERVELS FOR REST :- Working hour shall not exceed 5 hours with an interval of at least $\frac{1}{2}$ hour.

SPREAD OVER :- The spread over of the daily working hours shall not be more than 10 $\frac{1}{2}$ hours.

WEEKLY HOLIDAYS :- Weekly holiday for one whole day on the first day of the week, or whole day on one of the three days immediately before or after the first day. Compensatory holiday for the loss of weekly holiday shall be given within two months immediately following month.

EXTRA WAGES FOR OVER TIME :-

When the worker work for more than nine hours in a day and forty-eight hours in a week shall be entitled for twice his ordinary rate of wages.

RESTRICTION ON DOUBLE EMPLOYMENT :-

The workers are not allowed to work in any other factory on the day of work.

NOTICE OF PERIODS OF WORK FOR ADULT WORKERS :-

Notice of period of work in Form 11 shall be displayed and a copy shall be sent to the Inspector.

REGISTER OF ADULT WORKERS :-

A register of adult workers in Form 12 shall be maintained.

MUSTER ROLL or ATTENDENCE REGISTER :-

A muster roll or Attendance register shall be maintained in Form 25 and the daily attendance of all the workers shall be entered.

OVER TIME SLIPS :-

Period of overtime shall be entered in the overtime slip in duplicate, signed by the Manager, and a copy issued to the workers.

HEALTH CLEANLINESS :-

Floors, Passages, staircase and work benches shall be cleaned every day & washed with disinfectant, where necessary, once in a week. Painted or varnished once in five years, whitewashed or color washed once in 14 months. Doors, windows and Shutters be painted or varnished once in 5 years.

DISPOSAL OF WASTE AND EFFLUENTS :-

Effective arrangements shall be made to treatment and disposal of Waste and Effluents in an innocuous manner with the consent of the Tamil Nādu Pollution Control Board.

VENTILATION & TEMPERATURE :-

The temperature at floor level shall not exceed 30°C The air movement shall be at least 30 meters per minute. Ventilating openings shall be at least 15% of the floor area. Mechanical Ventilation shall provide at least six times the volume of the workroom.

DUST AND FUMES :-

Effective methods using Exhaust Appliance shall be provided to prevent the workers inhalation of any dust or fumes and from accumulation in the workroom.

OVERCROWDING :-

No room in a factory shall be overcrowded with workers. At least 14.2 cubic meters of air space or 4.2 Sq.metres of floor area shall be provided of each worker.

LIGHTING :-

Sufficient or suitable lighting (Natural or Artificial or both) shall be provided. The general Illumination shall not be less than 65 Lux. The Illumination on the passage shall not be less than 5.5 Lux. Effective method shall be taken to prevent Glare.

DRINKING WATER :-

At least 4.5 liters of drinking water shall be provided for each worker. The source shall be from Public Water System or from other source approved by the health Officer. The drinking water shall be kept in suitable vessels with dust proof covers and fitted with taps. If more than 250 workers are employed there shall be a Water Cooler.

LATRINE & URINAL ACCOMMODATION :-

Separate latrine and urinal accommodation for Males and Females clearly indicated by Display Boards. One latrine for 20 workers up to 100 workers and one more for every addition of 50 workers. Latrine shall be under cover fitted with doors and fasteners. Proper water facilities and drains shall be provided. Whitewashed at least once in 4 months.

SPITTOONS :-

Spittoons shall be provided in sufficient numbers and located in suitable places. It shall be filled with dry sand and bleaching powder.

PLANTING OF TREES :-

In every Factory more than 100 workers are employed shall plant and maintain trees approved by the District Agricultural Officer.

LIST OF NOTIFIABLE DISEASES

- ❖ Lead poisoning.
- ❖ Lead tetra-ethyl poisoning.
- ❖ Phosphorus poisoning.
- ❖ Mercury poisoning.
- ❖ Manganese poisoning.
- ❖ Arsenic poisoning.
- ❖ Poisoning by Nitrous fumes.
- ❖ Carbon bisulphide poisoning.
- ❖ Benzene poisoning.
- ❖ Chrome ulceration.
- ❖ Anthrax.
- ❖ Silicosis.
- ❖ Halogen poisoning.
- ❖ Pathological manifestation due to
 - Radio Active substances
 - X-ray. Primary epithelioma Tous cancer of skin.
- ❖ Toxic anemia.
- ❖ Toxic jaundice.
- ❖ Oil acne or dermatitis d
- ❖ use to mineral oils.
- ❖ Byssinosis. Asbestosis.
- ❖ Occupational or contact dermatitis.
- ❖ Noise induced hearing loss.
- ❖ Beryllium poisoning.
- ❖ Carbon monoxide poisoning.
- ❖ Coal miners pneumoconiosis
- ❖ Phosgene poisoning.
- ❖ Occupational cancer.
- ❖ Isocyanate poisoning.
- ❖ Toxic nephritis.

3.4 SAFETY

FENCING OF MACHINERY :-

Every moving part of a Prime mover, fly wheel, electric motor, generator, transmission machinery and all dangerous part of any machinery - shall be fenced by safety guards of substantial construction which shall be constantly maintained and kept in position while the machinery is in motion or in use. In every factory suitable device for cutting off power in emergency shall be provided. Suitable locking devices shall be provided to prevent accidental starting of the machinery. In all machinery every set screw, bolt or key on any revolving shaft, spindle, wheel or pinion shall be so sunk, encased or effectively guarded. All spur worm, toothed gear shall be completely encased.

HOISTS AND LIFTS :-

Every hoist and lift shall be - of good mechanical construction, sound material and adequate strength. They shall be properly maintained and shall be thoroughly examined by a competent person at least once in six months and shall be entered in a prescribed register. Every hoist way and lift way shall be sufficiently protected by an enclosure fitted with gates and prevent any person from being trapped between any parts. The maximum safe working load (SWL) shall be plainly marked on every hoist or lift. No load greater than SWL shall be carried on. The cage of every hoist or lift shall be fitted with gates fitted with interlocking devices.

LIFTING MACHINERES, CHAINS, ROPES AND LIFTING TACKLES : -

LIFTING MACHINE means a crane, crab, winch, toggle, pulley block , gin wheel, transporter or runway. LIFTING TACKLE means chain sling, rope sling, hook, shackle, swivel, coupling, socket, clamp, tray used in connection with raising or lowering of persons or material. Every lifting machine, chain, rope and lifting tackle shall be of good construction, sound material, and adequate strength and free from defects, shall be properly maintained and thoroughly examined by a competent person at least once in twelve months and recorded in a prescribed register. The maximum safe working load (SWL) shall be plainly marked on every hoist or lift. No load greater than SWL shall be carried on. No person shall be employed or work near the wheel track of the traveling crane and a distance of at least six meters shall be maintained form the place of work. No worker shall be employed to operate a crane, locomotive, or fork lift or to give signal without medical examination of eyes at least once in every two years.

REVOLVING MACHINERY :-

The maximum safe working peripheral speed of every grinding wheel, abrasive wheel, shaft and spindle shall be displayed near the machine. Effective measures shall be taken to ensure that the safe working peripheral speed shall not be exceeded.

PRESSURE PLANT :-

Pressure Vessel means a vessel that may be used for containing, storing, distributing, transferring, distilling, processing or otherwise handling any gas, vapor or liquid under pressure greater than the atmospheric pressure (1 Kg/sq.cm) and includes any pipe lines fittings or other equipment attached thereto or used in connection therewith. Plant means a system of piping that is connected to a pressure vessel and is used to contain a gas, vapor or liquid under pressure greater than the atmospheric pressure and includes the pressure vessel. Every vessel shall be properly designed on sound engineering practice, shall be of good construction, sound material, adequate strength and free from any defects, shall be properly maintained in a safe condition. Suitable safety valve or other effective pressure relieving device of adequate capacity to ensure that the maximum permissible working pressure of the vessel shall not be exceeded. Suitable pressure gauge with the dial range not less than 1.5 times the maximum permissible working pressure with a prominent red mark to indicate the maximum working pressure. Suitable nipple and globe valve exclusively to attach a test pressure gauge for checking the accuracy of the pressure gauge. Suitable stop valve by which the pressure vessel may be isolated from other pressure vessels, or plant or source of supply shall be provided. Suitable drain cock or valve at the lowest part of the vessel shall be provided for the discharge of the liquid that may collect in the vessel. Suitable pressure reducing valve or any other automatic device to prevent the maximum permissible working pressure being exceeded. No pressure vessel or plant shall be used in a factory unless there has obtained from the maker of the pressure vessel or plant or from the Notified Person a test certificate. Water gauge glass of a boiler shall be fitted with proper guard

TESTING OF PRESSURE VESSEL :-

Every pressure vessel or plant in service shall be thoroughly examined by a notified person : Externally, once in six months; Internally once in twelve months; (if thorough internal test is not possible, hydrostatic test shall be carried out once in two years) Hydrostatically once in four years, with 1.25 times the design pressure or 1.5 times the maximum working pressure. If it is impracticable to carry out the above tests, then ULTRASONIC TEST shall be conducted once in four years.

THIN-WALLED PRESSURE VESSELS :-

Any pressure vessel or plant of thin wall such as sizing cylinders made of copper or any other non-ferrous metal, the maximum working pressure shall be reduced at the rate of 5 percent per year of its use, and no such pressure vessel shall be allowed to continue after twenty years.

WATER SEALED GAS HOLDERS :-

GAS HOLDER means a water sealed gas holder which has a storage capacity of not less than 141.5 Cu.M. (5000 cft) Every gas holder shall be of good construction, sound material, adequate strength and properly maintained. Every gas holder shall be marked with distinguishing number or letter. Every gas holder shall be thoroughly examined by a notified person at least once in every twelve months. The gas holder which is in use for more than 10 years, the internal

examination shall be done by the notified person with electronic or other accurate devices. A register shall be maintained to record the test conducted and the repairs made.

THERMIC FLUID HEATERS :-

All heaters shall be of construction that the coils are removable for cleaning and visual inspection. Suitable arrangements shall be made to cool the furnace in case of power failure. Before restarting the furnace, it shall be effectively purged. Velocity of the thermic fluid shall not fall below the minimum recommended level. Thermic fluid shall be circulated in closed circuit with an expansion and deaerator tank installed outside the shed. Every furnace shall be provided with Photo cell actuated audio visual alarm to indicate the flame failure and auto shut off of the burner. The inspection doors of the furnace shall have inter-lock with the burner so that door cannot be opened unless the furnace is shut off and cooled.

All the heaters shall be provided with :-

1. Fluid level controller,
2. Temperature controller the coils shall be cleaned at least once in six months and the burner nozzle , oil filter and pumps shall be cleaned once in a week.

The heater coil shall be subjected to pressure test, twice the operating pressure, at least once in every 12 months by a competent person.

PERSONAL PROTECTIVE EQUIPMENTS :- All the Personal Protective equipment's provided to the workers shall have ISI certification. PPE shall be provided to the workers , with regard to the nature of hazards involved in the work. Suitable and sufficient ladders, duck ladders or crawling boards shall be provided and used by the workers who are allowed to work on fragile roofs. Safety Belts shall be provided and made to use by any person working above two meters and the other end of the rope of the safety belt shall be securely tied to a fixed structure. The safety belt shall be thoroughly examined by a competent person at least once in six months and shall be entered in a register. Suitable goggles shall be provided to the persons employed in any process which involve risk of injury to the eyes from particles and fragments thrown off during the process and exposure to excessive light or IR or UV radiation.

GENERAL SAFETY :-

- 1) No building, wall, chimney, bridge, tunnel, road, gallery, stairway, ramp, floor, platform, staging or other structure, whether permanent or temporary, shall be constructed, situated or maintained in any factory in such a manner as to cause risk of bodily injury.
- 2) No machinery, plant or equipment shall be constructed, situated, operated or maintained in any factory in such a manner as to cause risk of bodily injury.
- 3) No process or work shall be carried on in any factory in such a manner as to cause risk of bodily injury.
- 4) No material or equipment shall be stacked or stored in such a manner as to cause risk of bodily injury.

FIRE SAFETY :-

In every factory all practicable measures shall be taken to prevent outbreak of fire and its spread, both internally and externally and to provide safe means of escape and necessary equipment's and facilities for extinguishing fire. All processes, storages, equipment, plants etc., involving serious explosion and fire hazard shall be located in segregated building. Ventilation ducts, pneumatic conveyers and similar equipment involving a serious fire risk shall be provided with flame arresting or automatic fire extinguishing appliances. The passage between machines, piles of materials should be not at least 90 cm. and for storage piles the clearance between the ceiling and top of the pile should not be less than 2 mts. Protection against LIGHTNING shall be provided for the building, storage tanks, elevators, tall chimneys and sub stations. All electrical apparatus shall be excluded from the risk area to prevent the danger of fire. Continued Effective measures shall be adopted for prevention of accumulation of static charges. Workers shall wear shoes without iron nails. smoking, lighting or carrying matches, lighters or smoking materials shall be prohibited. Transmission belts with iron fasteners shall not be used. Adequate ventilation shall be provided where materials of spontaneous ignition are stored. Flammable liquids shall be stored in limited quantities in closed containers in well-ventilated rooms. No flammable waste material shall be permitted to accumulate on the floors and shall be removed at least once in a day. In every factory there shall be provided and maintained suitable and adequate firefighting equipment for fighting fires in early stages.

OVENS AND DRIERS :- Oven or Drier means any enclosed structure, receptacle, compartment or box which is used for baking, drying or otherwise processing any article or substances at higher temperature and in which a flammable or explosive mixture of air and a flammable substance is likely to be formed. Electrical power in separate circuit with isolation switches shall be provided. Every drier or oven shall be properly designed with sound materials and free from defects. No dries or oven shall be used without a test certificate from a competent person. Every oven or drier shall be provided with a positive and effective safety ventilation so as to dilute the concentration of flammable substance in air. Every oven or drier shall be provided with suitably designed explosive panels so as to release under an internal pressure of 0.25 kg/cm.sq..

FRAGILE ROOFS :- No person shall be required or allowed to stand, walk or work on a fragile roof without suitable ladders, duck ladders or crawling boards and without a work permit by a responsible person in the factory.

EXCESSIVE WEIGHTS :- No man, woman or young person shall lift , carry or move by hand or on head any material, article, tool or appliance exceeding the limits set below ; Adult male --- 50 Kgs Adult female --- 30 Kgs. Adolescent male – 30 Kgs. Adolescent female – 20 Kgs. Male child --- 16 Kgs. Female child -- 13 Kgs.

SAFETY COMMITTEE- There shall be a SAFETY COMMITTEE in every factory wherein 250 or more workers are employed , or Dangerous operation under Section 87 of the Act is carried on, or Hazardous process under Section 2(cb) is carried on. The Safety Committee shall consist of Management representative and Worker's representative elected by the workers. The tenure shall be three years. A senior official shall be the Chairman and a Safety officer or Factory medical officer shall be the secretary. The Safety Committee shall meet at least once in a quarter.

FUNCTIONS AND DUTIES OF THE SAFETY COMMITTEE. Assist and cooperate with the management in achieving the aims and objectives of the Health and Safety policy. Arrive at a practical solution to the Health, Safety and Environmental problems. Create safety awareness amongst the workers. Discuss the reports on safety, environmental and health survey, safety audits, emergency and disaster management plans. Review the recommendations made by it.

DANGEROUS OPERATIONS- Manufacture of aerated water and incidental process. Electro plating . Manufacture and repair of electric accumulators. Glass manufacture. Grinding and glazing of metals. Manufacture of lead and its compounds. Generation of gas from petroleum. Sand blasting, Shot blasting or Grit blasting. Tanning of hides and skins. Cellulose spraying. Graphite powdering. Lead process in printing industry. Cashew nut processing. Dyeing, stenciling or painting of mats, carpets or coir. Pottery and Ceramic industry. Continued Chemical works. Manufacture of dichromate. Compression of Oxygen and Hydrogen produced by electrolysis of water. Manipulation of material containing silica. Handling and processing of Asbestos. Handling and manipulation of corrosive substances. Manufacture and manipulation of carcinogenic dye intermediates. Solvent extraction plant. Fireworks and Match works. Manufacture and manipulation of Manganese and compounds. Carbon-di-sulphide plant. Manufacture, handling and use of Benzene. Operation involving high noise level. Manufacture and manipulation of dangerous pesticides. Manufacture of Rayon by Viscose process. Highly flammable liquids and compressed gases. Foundries operation.

SAFETY PRECAUTIONS IN SCHEDULED FACTORIES. Textile machinery. Ginning factory. Wood working machinery. Rubber mills. Printing press. Jute mills. Tea factories. Brick and tile factories. Decorticating factories. Polishing and grinding machinery. Centrifugal machines. Power press. Shears, Slitters and Guillotine machines.

HAZARDOUS PROCESSES (1987 amendment) The following are the Hazardous processes:- Ferrous Metallurgical Industries Non-ferrous Metallurgical Industries Foundries (Ferrous & Nonferrous, Sand or Shot blasting) Coal, Coke, Lignite & Fuel Gas Industries Power

Generation Industries Pulp, Paper & Paper Products Industries Fertilizer Industries (Nitrogenous, Phosphatic & Mixed) Cement Industries Petroleum Industries Petro chemical Industries Drug & Pharmaceutical Industries Fermentation Industries Rubber (Synthetic) Industries Paint & Pigment Industries Continued Leather Tanning Industries Electroplating Industries Chemical Industries (Coke oven, Coal tar, Industrial gases, Industrial Carbon, Acids & Alkalis, Chromates, Lead & Compounds, Electro Chemicals, Electro Thermal, Nitrogenous compounds, Phosphorous & Compounds, Halogen & Compounds, Explosives.) Insecticides, Fungicides, Herbicides & Pesticides Synthetic Resin & Plastics Man-made Fiber (Cellulose & Non cellulose) Electrical Accumulators (Manufacture & Repair) Glass & Ceramics Asbestos & Products Solvent Extraction Benzene & Products Carbon di sulphide Dyes & Intermediates Highly flammable liquids & Gases.

COMPULSORY DISCLOSURE OF INFORMATION BY THE OCCUPIER. (Section 41B & Rule 62-D, 62-E, 62-F, 62-G, 62-F) The Occupier of every factory involving a Hazardous Process shall disclose in the manner prescribed all information regarding dangers, including health hazards arising and the measures to overcome such hazards arising from the exposure, handling, transportation, storage and other process to the Workers, to general Public, Local Authority, Emergency Authority & Chief Inspector of Factories. The Occupier shall lay down a detailed POLICY with respect to the health and safety of the workers employed and draw an ON-SITE EMERGENCY PLAN & DISASTER CONTROL MEASURES and intimate the same to the Chief Inspector of Factories and Local Authority and General Public. Accurate Information regarding the quantity, Characteristics of the material and the waste and the manner of disposal. Every Container shall be LABELLED or marked to Identify the contents, Health hazards, Name of the Manufacturer, recommended PPE etc. The Occupier with previous approval of the Chief Inspector of Factories, lay down measures for handling, usage, transportation and storage of the Hazardous Substance inside the factory and disposal outside the factory and publicize them the workers and general public.

WORKERS PARTICIPATION IN SAFETY MANAGEMENT -The Occupier shall setup a Safety Committee consisting of equal number of representatives from the Workers and Management. **RIGHT OF THE WORKERS TO WARN ABOUT THE IMINENT DANGER** The workers bring to the notice of any imminent Danger to the Occupier, Agent, Manager directly or through Safety Committee. Immediate remedial action should be taken and the report should be sent to the Inspector of Factories.

SPECIFIC RESPONSIBILITY OF THE OCCUPIER- The Occupier shall maintain accurate and up to date health records or medical records of the workers in the factory who are exposed to toxic and harmful substances; Appoint persons who are possess qualifications and experience in handling hazardous substances and are competent to supervise such activities.

MEDICAL EXAMINATION- The Workers employed in the HAZARDOUS PROCESS shall be medically examined by a qualified medical practitioner; Once before employment Once in a period of six months to ascertain the Occupational Health Hazards The details of Pre-employment and Periodical medical examination shall be recorded in the Health Registers in form 39 and 17 respectively.

OCCUPATIONAL HEALTH CENTRES- For Factories employing up to 50 workers :- Factory Medical Officer on retainer basis can be employed, five persons should be trained in first aid, fully equipped First Aid Box shall be maintained. For Factories employing up to 200 workers :- Occupational Health Centre shall be maintained Part-time Medical officer to attend at least twice in a week One qualified Compounder should be employed. For Factories employing above 200 workers :- One full time Medical Officer and one more for every 1000 workers there off shall be employed. One Occupational Health Centre with at least two rooms one Compounder, Suitable Medical Emergency Equipment as suggested in the Schedule . AMBULANCE VAN with full time Driver cum Mechanic and Helper trained in First Aid should be made available.

SAFETY, HEALTH & ENVIRONMENT POLICY- It is the intention of the COMPANY to commit itself, and all the persons in the top management; to give priority to the occupational health and safety of all the persons working in the factory and to protect and improve the environment in and around the factory, and to follow all the relevant statutory requirements, and to assign the responsibilities to the relevant personnel. The workers are made known about their responsibility to improve occupational health and safety and the environment inside and outside the factory. Proper and adequate training is given to the workers to understand the importance of occupational health and safety and to improve the environment. The workers are made to involve themselves in the safety committee and other safety programs to express their ideas in the improvement of the health, safety and environment. Continued

The management;

- (a) intends to take into consideration the health and safety performance of each individual worker for the career growth evaluation.
- (b) conducts periodical safety, health and environmental study , survey and audits to assess the risk involved and take all remedial measures.
- (c) intends to integrate the health, safety and environment with purchase of all plants, machinery , equipment and materials as well as selection and placement of the personnel.
- (d) arrange to educate and train all the workers and the general public residing in the near vicinity about the health, safety and environment whenever required.
- (e) allots adequate fund for the upkeep of the occupational health, safety and environment and training programs.
- (f) provides a resume of the occupational health, safety and environment performance in the Annual Report.

The Contractors, Sub-Contractors, Agents and their Contract workers are instructed to follow the health and safety rules and procedures and to improve the environment and their performance towards health, safety and environment will be considered for the continuance of the contract.

(Signature)

The Occupier.

Enclosure: Organizational setup to carry out the Policy.

WORK PERMIT

Date :

Time :

Plant:

Machinery or equipment :

Nature of work :

The following Persons are permitted to work as mentioned above. It is certified that the place of work is examined and found to be safe for working. The necessary Personal Protective equipment are supplied to all the permitted workers. Effective supervision is ensured during the work.

Name of the workers permitted :

- 1.
- 2.
- 3.

Plant Manager
Maintenance Manager

Process Manager

CLEARANCE CERTIFICATE

The above said work has been completed satisfactorily on (date)—(time)--- and the plant /machinery/ equipment is fit for operation.

Plant Manager
Manager

Process Manager

Maintenance

4. Fabric Store Department

For a bulk production industry, it is essential to maintain a well-organized and well-equipped inventory system. The main responsibility of fabric store department is to store all the raw materials specially fabric necessary to produce garments. This department is sub divided into three sections.



Fig 5 Storage



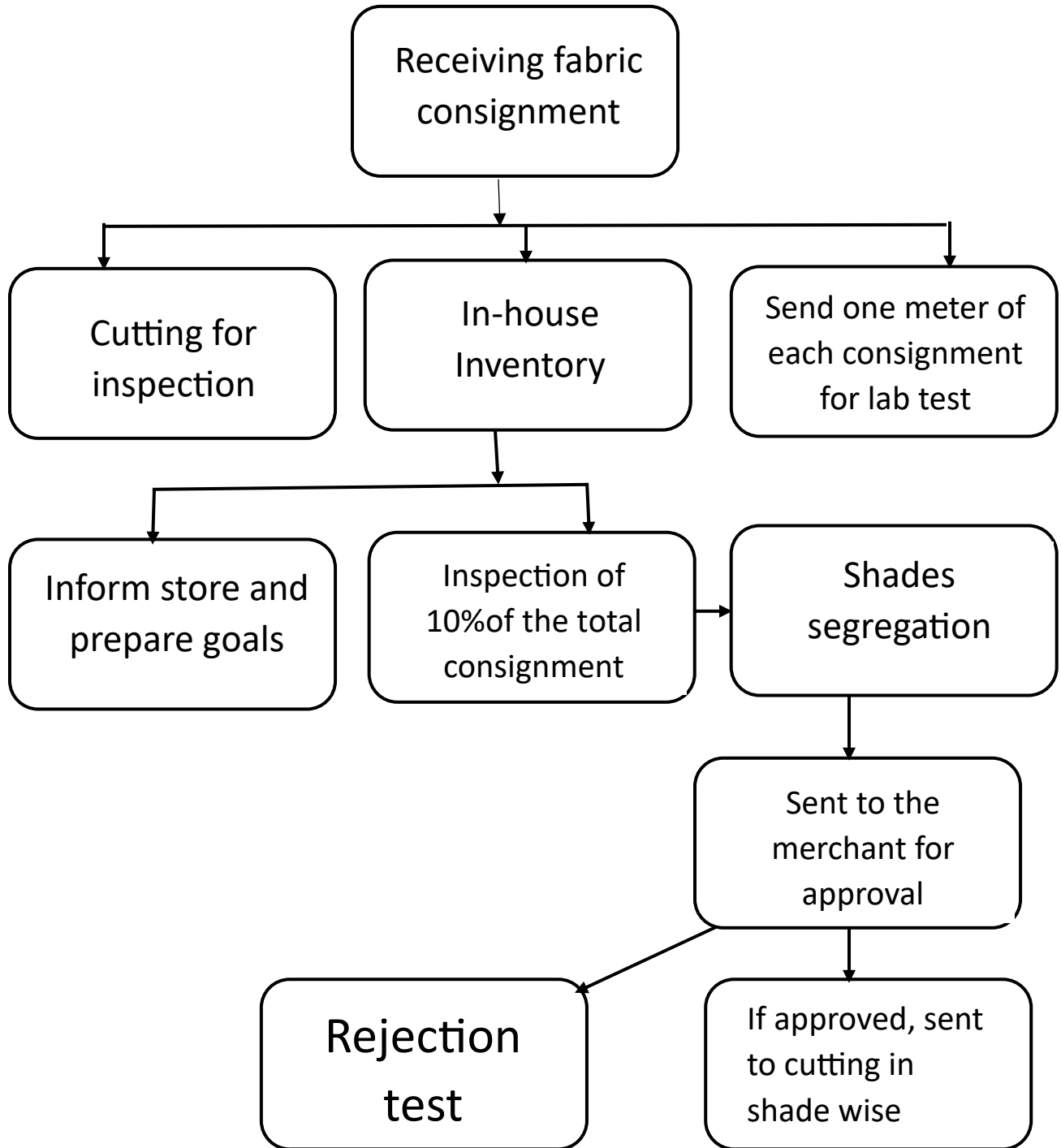
Fig 6 Trims and accessories

Inventory can be described as stock maintained between any two processes for uninterrupted operation. It can also be defined as assets that are intended for sale, or are in the process of being produced for sale, or are to be used in producing goods. Inventory is primarily maintained due to two reasons—to optimize the sourcing cost (where requirement can be predicted) and to minimize the risk of stock out (where requirement cannot be predicted).

The higher the inventory, the higher the capital blockage, and/or the higher the space requirement; on the other hand, lower inventory may lead to disruption in production or unsatisfied customers. Therefore, managing inventory is very important for a garment factory. The main goal of all the garment production systems is to decrease the total production time which leads to reduction in inventory cost.

4.1 Working Flow Chart of Fabric Store Department in Garment Industry:

They follow a strong and appropriate working procedure. Their work process flow is given below:



4.2 Working Procedure of Fabric Store Department:

1. Receiving Fabric roll:-

Woven fabric is supplied in roll package. Once these rolls of fabric are delivered the store in-charge receives the incoming consignment. This is the first phenomenon which is done in fabric store.

2. In-house Inventory:-

Once these rolls are received, the store in-charge matches the packing list of the fabric consignment with the original quantity of the fabric rolls (i.e., fabric width, fabric length). He also keeps the all the record in a log book. This inventory maybe done alone by the store in-charge or with the presence of a representative of the fabric supplier.

3. Cutting for inspection:-

At the time of inventory, a piece of fabric is cut form every roll. The piece is of full width of the fabric and of a length depending on buyer .This cut piece is send for inspection tests like shrinkage, blanket making for shade segregation.



Fig 7 Taking fabric to check GSM

5. FABRIC INSPECTION MACHINE

Fabric inspection helps understand quality in terms of color, density, weight, printing, measurement and other quality criteria prior to the garment production. We are covering some of the basic things about fabric inspection so you can get practical tips on this, whether you are a merchandiser or a garment supplier.

5.1 IMPORTANCE OF FABRIC INSPECTION MACHINE

As mentioned above, a fabric inspection can prevent defects in the final product but there are several other reasons it is a crucial element for any factory.

Whether it is a reduction in productivity or increased overheads, garment brands/suppliers can face production challenges from defective fabric such as:

- Inconsistencies in the cuttable width will impact their fabric consumption/wastage.
- Different color shading among rolls or within the same roll impacts product quality and requires special management during the cutting/sewing/packing and other production steps to segregate by color shades.
- LSV - Length wise Shade Variation
- CSV – Center to Selvedge Shade Variation
- High defect rates in the fabric (such as stains/holes etc.) will impact the consumption per garment and increase the risk of defects found in the garment.

5.2 SYSTEM USED IN FABRIC INSPECTION

There are several grading systems adopted for fabric inspection such as the 10-point system and the Dallas system. Among all, the 4-point system has become the most commonly adopted system for fabric inspection.

The 4-point system works on a penalty point basis and as its name has probably suggested, points are deducted from 1 to 4, with 4 points being the highest deduction for major defects.

5.3 SAMPLING SIZE IN 4-POINT SYSTEM

Unlike product inspection which adopts AQL System, the sampling size is 10% of the total lots in meters per order per color.

5.4 PENALTY SYSTEM IN 4-POINT INSPECTION

As mentioned above, defects are graded and points are deducted accordingly. Defects for fabric are measured mostly by length. Below is a table showing the calculation of defect deduction on 4-point fabric inspection:

Length of defect	Penalty Point
7 cm or less / 3 inches or less	1
8 to 15 cm / 3 to 6 inches	2
16 to 22 cm / 6 to 9 inches	3
Over 22 cm / Over 9 inches	4
Holes and Openings 2.5 cm or less / 1 inch or less	2
Holes and Openings Over 2.5 cm / Over 1 inch	4

When assessing, defects that are not visible on the face of the fabric are not counted, and a maximum of 4 points are deducted for any single defect on the same fabric.

5.5 PASS AND FAIL CRITERIA OF THE 4-POINT SYSTEM

The result is calculated by an equation below:

$$\text{Total points} = \frac{\text{total points X 3300}}{\text{Meterage of the roll X width in inches}} \quad \left. \vphantom{\frac{\text{total points X 3300}}{\text{Meterage of the roll X width in inches}}} \right\} \text{WOVEN FABRIC}$$

$$\text{Total points} = \frac{\text{total points X GSM X 00.0836}}{\text{Weight of the roll in Kg}} \quad \left. \vphantom{\frac{\text{total points X GSM X 00.0836}}{\text{Weight of the roll in Kg}}} \right\} \text{KNITTED FABRIC}$$

$$\text{Points allowed for} \quad \left\{ \begin{array}{l} 1 \text{ Roll} = 40 \text{ points} \\ 1 \text{ Lot} = 25 \text{ points} \end{array} \right.$$

At Eurofins, we take 24 points per 100 square meter as the passing score, which is a moderate level of stringtiness. If your fabric is of higher value, you can consider lowering the passing score to below 20.

5.6 THINGS ASSESSED IN FABRIC INSPECTION

When examining the quality of the fabric, different criteria are used by the inspectors.

Packing

The identification stickers, shipping marks, packing lists and packing quantity are checked against the requirements and specifications.

Weight

The weight of the fabric is a key indicator of the conformance of these materials. Measured mostly in GSM (grams per square), the fabric weight is a good reference of fabric density, composition and construction.

To measure the weight of a woven fabric, a sample is cut out by a circle cutter and weighed by one roll of each lot. For knit fabric, a minimum of 10% of rolls from each lot is to be examined for weight.

Conformity

Inspectors work either with fabric samples provided by clients as the comparison samples or, in the absence of fabric samples from clients, the beginning and end of the roll will be cut for conformity checking against the inspected roll.

Conformity is assessed on

- Colors
- Printing and angle gap
- Elasticity
- Hand feels, etc.

Quality

Needless to say, quality is a must to be inspected. Common defects of fabric include holes, stains, fabric bar, poor finishing, coarse yarn and running knit.

5.7 THE ARRANGEMENT FOR DEFECTIVE FABRIC

Depending on the seriousness of the defects, fabric might be discarded and a replacement will be required. For instance, different color shading among rolls requires special management during cutting to segregate by color shades.

In some other cases, defects of fabric can be avoided during the cut & sew phase as defects are marked by defect stickers clearly.



Fig 8 Mistake found on the fabric

5.8 PROCESS AND OTHER THINGS DONE IN FABRIC INSPECTION

Fabric inspection is carried out by both fabric manufacturers and garment manufacturers. Fabric inspection is the process of checking the fabric sheet for detecting faults in the fabric and preparing an inspection report. After the fabric inspection, grading of the fabric is done according to the fabric quality level.



Fig 9 Checking the fabric

In fabric inspection, fabric rolls are opened and passed through a fabric checking machine having the light under the fabric and the fabric checker does the visual inspection of the fabric. While checking fabric checker marks the defects with a chalk or put a sticker on the defects.

At the end of the checking, a fabric roll inspection report is made for that fabric roll. In fabric inspection, fabric rolls are graded and segregated by marking rolls either one of the following categories (in a garment manufacturing unit)

- Passed - these fabric rolls are ready for use
- Failed - Not ready for use in the cutting. Can be accepted after correction.
- Rejected - Not acceptable. rejected fabrics are sent back to the supplier
- Decision pending - Waiting for approval from the authorized person whether to pass or fail or reject the fabric.

In the textile mills, fabric grading is done different way – like Gold, Silver or grade A, grade B. Textile mills used to send fabric inspection report to their customers with the fabric.

Garment units those don't have fabric inspection machine, check the fabric on a flat table. While checking the fabric there should be enough light from under the table and overhead light to detect fabric flaws.

The fabric is a primary raw material for making garments and the costliest item among the items required for garment manufacturing (in most of the apparel product categories). As the standard operating procedure, in textile mills fabrics are checked prior packing fabric and in a garment manufacturing unit fabric is inspected prior to bulk cutting. For inspecting the fabric, garment units use some kinds of inspection systems like the **4-point system, 10-point system or random checking of fabric** (5-10% of total fabric length).

The objective of fabric inspection is delivering quality fabric to the garment makers and making quality garments. A defective fabric will only produce a defective garment. In case a faulty fabric is used in garment making, it will increase the cost of manufacturing due to repair work, part change, and even garment rejection. To avoid processing defective fabric in production, as a preventive action, fabric rolls are inspected. This way defective and damaged fabrics can be separated and sent back to the fabric suppliers.

In case garment unit trusts the fabric supplier for their fabric quality, they may check the fabrics selecting fabric rolls randomly. Some factories used to inspect 10% of total fabric rolls. In case factory found a dissatisfactory result in 10% fabric inspection, they inspect all fabric rolls.

The faults in fabric include weaving defects in woven fabric, knitting defects in knits fabrics, processing defects and handling defects.



Fig 10 Rejected rolls

5.9 Fabric inspection format

In 4-point system following format is used for capturing inspection data and further data analysis.

5.10 FABRIC SHADE VARIATIONS:

- From textiles person the textile sheet will be sent to company with label in fabric with variations of shades A,B,C,D
- After in company they make fabric shade Contamination board for reference
- For fabric defects checking process will be in manually Form of shade variations in garments
Shade variation in the fabric may appear as within same fabric roll, there may be shade variation like 'Centre to selvedge (CSV)' and 'salvage to salvage' Within same fabric roll lengthwise shade variation

5.11 APPROVAL FOR FABRIC:

- The reference fabric with approval by the buyer will be referred and compared with the fabric which able to process. Swatch should be in 10"×10" or 25"×25" ROLL TICKET (Bar Code) Sticker

BASE PARAMETERS:

- Supplier Name
- Fabric Mill
- Fabric Description
- Fabric Content
- Color Standard Name and No.
- Roll Number
- Roll Length
- Cuttable width
- Production lot
- Shade

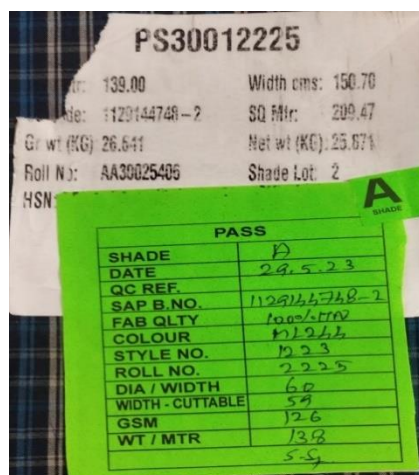


Fig 11 Information written on the roll label

5.12 GSM Cutter-New Hydraulic

- 1) Instrument is used to cut any kind of fabric –woven/knits/non-woven/ paper in circle form of 100 sq cm. precisely.
- 2) Metal platform eliminates completely regular use of GSM Cutter blades and pads hence saving money and time.
- 3) Any Kind of textile / paper/industrial textile material of any GSM can be accurately cut. Safely and firmly grips fabric to accurately cut 100 cm.sq fabric circle samples.
- 4) Hardened metal wheels to ensure smooth and long knife life.
- 5) Net Weight : 11Kgs
- 6) Net Dimensions : 8" (Length) X 5.5" (Width) X 11" (Height)



Fig 12 GSM cutter

5.13 Digital Balance

- 1) The fabric piece cut in GSM Cutter can be mounted on this machine for direct reading as 'GSM '.
- 2) Also, can be used for multipurpose weighing options up to 600 grams in 0.01 grams sensitivity.
- 3) Can read results in grams, oz., carats etc. Also, can cover "piece counting options".
- 4) The instrument is repairable and re-calibratable.
- 5) Adaptor or battery interfaced.
- 6) Option of pocket weighing balance is also available.
- 7) Option of pocket weighing balance is also available.
- 8) Dimension : length×depth×height=12"×10"×10"



Fig 13 Digital Balance

6. Cutting Department

The department of any garment industry, where several layers of fabric are cut together by pattern for the production of the garment, is called cutting department. Cutting department has special importance in garment manufacturing, it is not possible to make garment in abundance without cutting department.

The fabric is first cut using the first pattern to make any garment. To make complete the garment, the fabric is cut into several parts, then these cut parts are sent to the sewing department for stitching, where the whole garment is made by adding these parts.

The cutting department has a huge contribution in the garment industry. The first step in the garment manufacturing process is cutting after the buyer has confirmed the order, this cutting done in bulk is possible only by the cutting department. The cutting department receives this order from the production manager.

If the fabric is not cut properly according to the design, it ruins the entire order. In other words, the cutting department is the fundamental foundation of any garment industry.

6.1 Function of the cutting department:

The main function of the cutting department is cut the fabric according to the design. Firstly, the cutting department provides the pattern of garment is printed in long paper according to the size and quantity given by the buyer. The paper with the pattern is laid on the layers of the fabric. Then the cutting master cut the fabric with help of the pattern on the top.

The work to be done by the cutting department, which is as follows.

Take fabric from the fabric store:

The cutting department receives the order form the production manager to cut the fabric. After receiving the order, the cutting in charge sends the fabric requirement, and receive the fabric from fabric store. Relaxation of fabric: Knitted fabric takes longer to relaxation then woven fabric. So, after getting the fabric from the fabric store, the cutting department first opens the fabric rolls, and then spreads the fabric on the table and leaves it to relax overnight. As a result, the fabric is fully rested.

Fabric spreading:

It is very necessary to spread the fabric properly for cutting. There are large tables in the cutting department to spread the fabric. Several fabric layers are spread on these tables for mass production. The length of fabric spread on the table is kept as per requirement and the number of layers of fabric to be spread is determined according to the cutting machine or cutting order.

Fabrics Cutting:

All the layers are cut together by a cutting machine after marking by paper pattern. 2 types of cutting machine are used- straight knife cutting machine and band knife cutting machine are used to cut these layers of fabric.

Shorting:

After cutting the fabric, all these parts should not be mixed together. For this, different size and color are shorted.

Bundling:

After shorting the cut fabric parts or components, the cut parts are made into separate bundles of size wise and color wise. So that it does not mix with other parts, color or size.



Fig 14 bundling the parts of the garment

Numbering of garment plies (Parts):

After the bundle is created, the numbering on the layers starts. After bundling all the separated parts, stickers are numbered on each layer of the bundle. And now all these bundles are placed on the inventory table before sending them to the next operation.

Inspection component:

After shorting, the cutting quality and standard of all these cut components are inspected and if any type of defect is seen in any component, then the defective parts are either replaced or removed.

Re-cutting panels:

Whatever panel of garment is found to be defective in the bundle is re-cut. After receiving these bundles by the sewing department, the parts in which the defect is found are replaced by cutting of the cutting department



Fig 15 recutting the mistake in parts of the garment

6.2 Process in cutting department



Fig 16 Taking the fabric



Fig 17 Laying the fabric



Fig 18 Pattern and cutting



Fig 19 Checking pieces



Fig 20 numbering



Fig 21 bundling

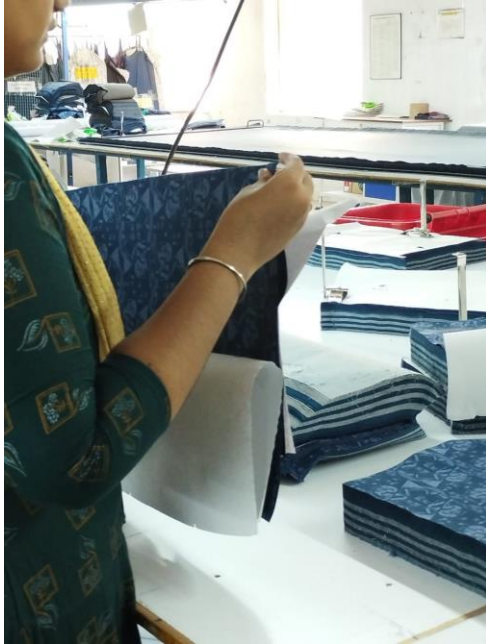


Fig 22-checking



Fig 23-recutting

7. Sewing Department

The sewing department works on first receiving planning sheets from the planning department, receiving cutting Pcs fabrics from the cutting department, and setting up the layout according to the instructions of the Industrial Engineering department. The sewing department converts fabric into cloth or garments through different sewing machines and different sewing processes. So, the sewing department is the king department in the apparel industry. The main department in the garments industry is sewing.

The sewing department as sewing section. Then continue sewing according to the mockup. In the sewing line, quality inspector inspection is the critical point in the line, and at the end of the line, 100% inspection of the garment. If any part of the garment rejects from the garment, then it is kept on the red basket, oil spot keeps on the yellow basket, and the altered garment keeps on the green basket. Only the altered garment sends the line and the oil spots garment sends the oil spot removal room. After the end of the quality inspection, garment counted and bundled, and if the wash is required, send the garment to the wash; otherwise, send it to the finishing department.

7.1 Functions of the Sewing department

- Collect input material from the cutting section and feed it to the sewing line.
- Sew the process of the full garment by process as per line layout and operation bulletin.
- Ensure correct sewing thread, label, and shade during process work.
- Responsible for all sewing operations in a garment.

- Fill up daily production targets as per planning and report.
- Responsible for completing all sewing processes and sending to next process washing/finishing.
- 100% quality inspection before moving from this department.
- Operator by operator efficiency increases and overall productivity improvement.
- Follow up on every individual sewing process maintaining good quality.
- Handover sewing output garments to the next section.
- Taking care overall sewing department and being responsible for this department.

7.2 Sewing quality Control

In the sewing section, the quality inspector checks the critical point and critical measurement according to the buyer's approval sample. If the quality is not OK, then take corrective action. Then they are lot audit and body ready for finishing. Generally, quality control of sewing is divided into 4/5 areas, they are front part, back part, garments assembly, waistband sewing and output garments inspection. If the sewing section quality is good in any department, then garments quality is good. The sewing quality control flow chart is here, you can see:

Sewing line input receive



In-line Inspection



100% end line inspection



Critical Measurement



Output inspection



Lot inspection



Fig 24 Attaching the parts of the garment

8 Quality checking department

8.1 Checkpoints in the sewing departments are as follows.

- **Inline inspection:** In the assembly line generally check points are kept for the critical operations. In these checkpoints, 100% checking is done for partially stitched garments and defect-free pieces are forwarded to the next process. This type of checking is used for the high-value garment.
- **Roaming inspection:** In this case, checkers roam around the line and randomly check pieces at each operation.
- **Traffic light inspection system:** Some garment manufacturers use this inspection system. In this system, each operator is given a card for measuring their quality performance. The quality checker goes to the operator and does a random check for few pieces and according to the inspection result, the checker marked red or green on the card following rating criteria.
- **End of line inspection or table checking:** A checker checks a completely stitched garment at the end of the line. 100% checking is done here,

- **Audit of the checked pieces:** some manufacturers follow this audit procedure but it is a very essential checkpoint to assure that only 100% of the inspected garment is sent to finishing from the sewing department. And all defective pieces are repaired before sending it to the finishing section.

8.2 Checkpoints in the finishing department consist of the followings

- **Initial finishing inspection:** checking done prior to pressing of the garment at the finishing room is known as initial finishing.
- **Final finishing Inspection:** After pressing, garments are again checked and passed to the folding section for tagging and packing.
- **Internal audit:** After garments are packed up to a certain quantity, the quality control team, do an audit of packed garments. This process is carried out to ensure that before handing over shipment to buyer QC



Fig 25 Quality checking department

9 Ironing Department

9.1 Types of Pressing or Ironing Applied in the Apparel Industry:

Pressing or ironing is one of the important processes in the **finishing department** of the **readymade garments industry**. There are different types of the **pressing process** applied in the garments which are mentioned in this article.

Categories of Pressing or Ironing Applied in Garments Industry:

The pressing of the **garment** is categorized into five according to the garments types, designs, and materials are given below:

1. No pressing,
2. Minimum pressing,
3. Under pressing,
4. Final pressing,
5. Permanent pressing.

9.2 All the above pressing categories have explained the below:

1. No pressing or ironing: Some garments do not need pressing such as underwear, briefs, swimwear. These types of garments are made of knitted fabric.

2. Minimum pressing or ironing:

Some **garments** are available which need finishing done by applying heat but no need for pressure such as nightgowns, knitted **T-shirts**, Leisurewear, and so on. These types of garments are pressed by steaming and by flowing dry air to the garments called minimum pressing.

3. Under pressing or ironing:

To complete **sewing** easily and beautifully, it must require to give minimum ironing to some parts of garments before sewing is called under pressing. Especially under pressing is done to most of the **apparel** industries for making a coat, jacket, and **trousers** and so on. For example, where there is needed for doing a crease effect to the parts of garments done by pressing before **sewing**.

4. Final pressing or ironing:

The final pressing is done by applying heat and pressure to the garments. This is done after making of garments. This is generally done in a jacket, trouser, skirt and so on. Special types of pressing **machines** are used here for final pressing.

5. Permanent pressing or ironing:

This is a special type of pressing when it is given to retain the shape of **apparel** or special conditions. Example: dirt and pleat which cannot be displaced or drawn off after **washing** of garments again. This type of ironing is done by applying high temperature and steam. Sometimes there is needed for pressure.



Fig 26 Ironing the garment

10 Packing Department

10.1 Packing section:

Packing is part of [garment finishing](#). It is done by the requirement of the buyer. Various types of packing [accessories](#) are available in the storeroom such as polybag, packing board, tissue paper, hanger, scotch tape, gum tape, carton, etc. Flow chart of packing section in the garment industry is as follow:



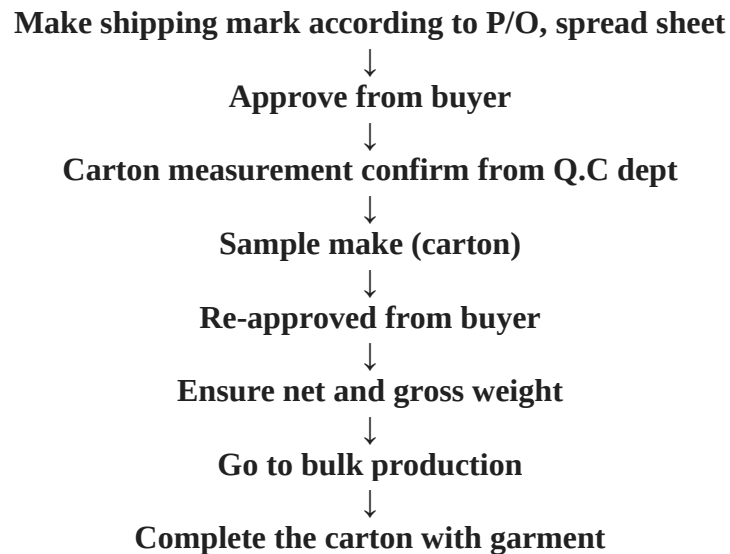
Fig 27 Packed garments



Fig 28 packing department

10.2 Flow Chart of Packing Section in Garment Industry:

Process sequence of packing section is given below:



11. Report maintained in the industry

11.1 Fabric inspection department

Fabric Inspection Procedure

- ✓ Prepare for Inspection
- ✓ Visual Inspection
- ✓ Measurements
- ✓ Fabric Quality Check
- ✓ Inspection of Fabric Construction
- ✓ Identify Defects
- ✓ Record Results
- ✓ Report Findings
- ✓ Communicate with Suppliers

Fig 29 Fabric inspection procedure

Item	Unit	Measurement
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	100%	100%
6	100%	100%
7	100%	100%
8	100%	100%
9	100%	100%
10	100%	100%
11	100%	100%
12	100%	100%
13	100%	100%
14	100%	100%
15	100%	100%
16	100%	100%
17	100%	100%
18	100%	100%
19	100%	100%
20	100%	100%
21	100%	100%
22	100%	100%
23	100%	100%
24	100%	100%
25	100%	100%
26	100%	100%
27	100%	100%
28	100%	100%
29	100%	100%
30	100%	100%

Fig 30 Report made during fabric inspection

11.2 FPT Report

The FPT test is being performed at an approved testing facility. The following are some common testing parameters.

- Fabric construction
- The fiber content present in the fabric
- Fabric weight
- Color fastness
- Weave construction
- Yarn count

Page Industries Testing Laboratory - Unit 4					
(Begur Hobli, Hanga Sandra, Bommalahalli, BANGALORE, 560068)					
LAB TEST REPORT					
Report No : 42315066					
Test Name	Parameter	Results	UoM	Requirement	Conclusion
Fabric Construction (ASTM D3775 - 17)	Ends Per Inch	120	Nos	120.00	Pass
	Picks Per Inch	72	Nos	72.00	Pass
Pilling Resistance (ASTM D3512 / D3512M - 16) After 30 min	Pilling Resistance (Rating)	4.0	Rtg	3.50	Pass
Tensile Strength ASTM D5034 - 09(2017): m/c used: CRE (1" Grab method)	Tensile Strength - Warp	81.6	lbf	> 25.00	Pass
	Tensile Strength - Weft	36.0	lbf	> 25.00	Pass
Tear Strength ASTM D1424 - 09(2013): Type of m/c used: Elmendorf Tearing Tester	Tear Strength - Warp	1450.6	gmf	> 907.00	Pass
	Tear Strength - Weft	1130.6	gmf	> 907.00	Pass
Color Fastness to Washing (AATCC 61-2020) Program - 2A, (Liquor Ratio: 1:5 GPL, Steel balls 50, Duration: 45 min, Temp: 40°C, Detergent: 1993 WOB Ref. detergent).	CF to Washing - Color Change	4.0	grd	4.00	Pass
	CF to Washing - Self Staining	4.0	grd	4.00	Pass
	CF to Washing - Staining on Acetate	4.5	grd	3.50	Pass
	CF to Washing - Staining on Cotton	4.0	grd	3.50	Pass
	CF to Washing - Staining on Nylon	4.5	grd	3.50	Pass
	CF to Washing - Staining on Polyester	4.5	grd	3.50	Pass
	CF to Washing - Staining on Acrylic	4.5	grd	3.50	Pass
	CF to Washing - Staining on Wool	4.5	grd	3.50	Pass
	Remarks: Solution staining - 3.0				
	CF to Perspiration - Color Change	4.0	grd	4.00	Pass
Color Fastness to Perspiration (AATCC 15-2021)	CF to Perspiration - Self Staining	4.0	grd	4.00	Pass
	CF to Perspiration - Staining on Acetate	4.5	grd	3.50	Pass
	CF to Perspiration - Staining on Cotton	4.5	grd	3.50	Pass
	CF to Perspiration - Staining on Nylon	4.5	grd	3.50	Pass
	CF to Perspiration - Staining on Polyester	4.5	grd	3.50	Pass
	CF to Perspiration - Staining on Acrylic	4.5	grd	3.50	Pass
	CF to Perspiration - Staining on Wool	4.5	grd	3.50	Pass
Color Fastness to Water (ISO 105-E01:2013)	CF to Water - Color Change	4	grd	4	Pass
	CF to Water - Self Staining	4	grd	4	Pass
	CF to Water - Staining on Acetate	4 - 5	grd	4	Pass
	CF to Water - Staining on Cotton	4 - 5	grd	4	Pass
	CF to Water - Staining on Nylon	4 - 5	grd	4	Pass
	CF to Water - Staining on Polyester	4 - 5	grd	4	Pass
	CF to Water - Staining on Acrylic	4 - 5	grd	4	Pass
	CF to Water - Staining on Wool	4 - 5	grd	4	Pass

Fig 31 FPT report

11.3 Cut Panel Report

1. To identify different types of cutting faults.
2. To identify the major problem in cutting.

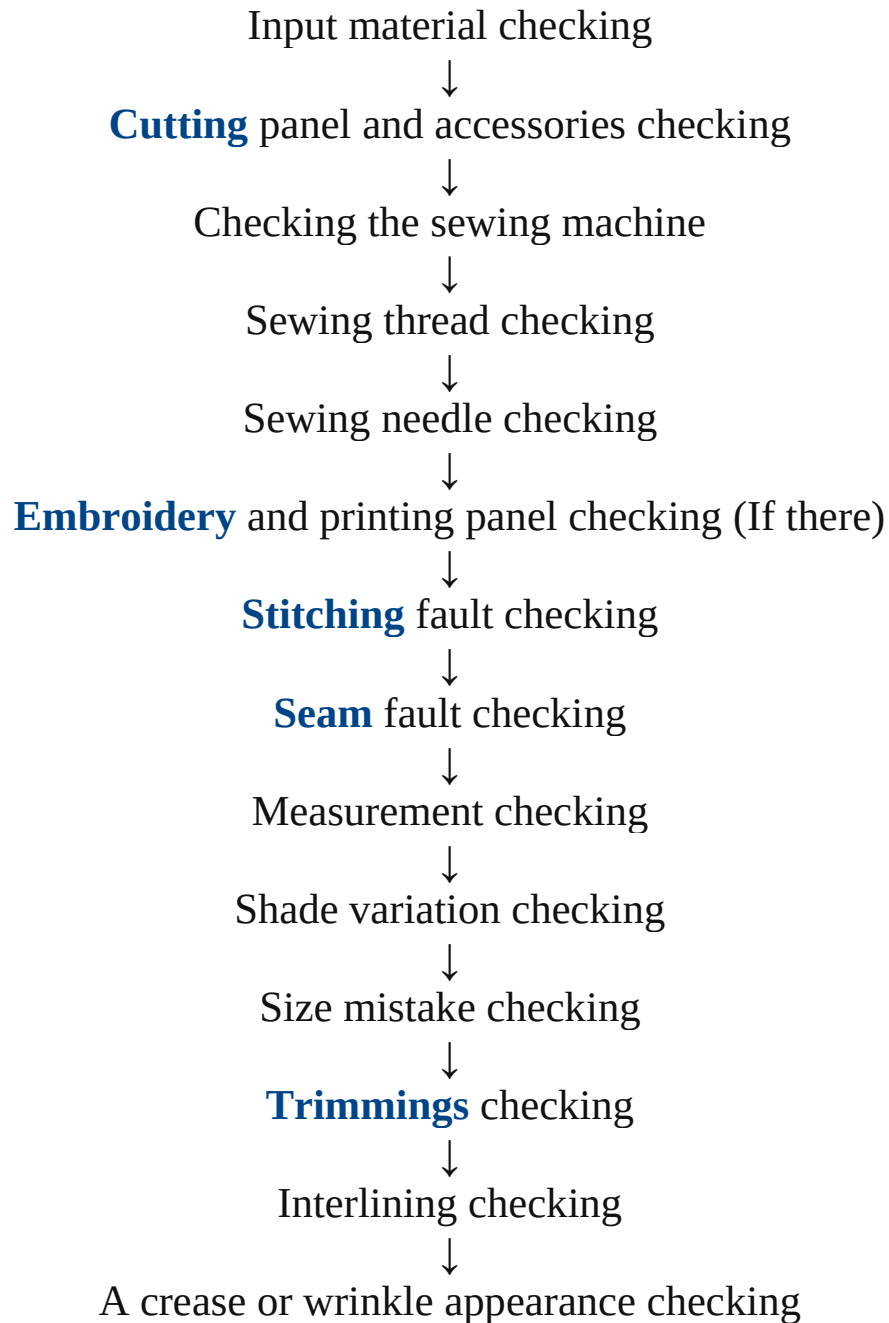
- [illegible]

11.4 Operator Report

[illegible]

63

Process Sequence of Quality Control in Sewing Section:



11.5 Trim card

1. Make a list of trims to be attached to the garments. Like stitching threads, button, zippers, twill tapes, laces, labels etc.
2. Take approval of all these trims from buyers or the concerned person.
3. Take 2-3 trims for all items from store depending on the number of copies you want to make.
4. Take one trim card and write style name and order number on the top of the card.
5. Attach trims on the card by staple pins or affix the item by adhesive tape. In case, you can't place all trims on a single card, you can use an additional card for making your trim card.
6. Write the name of each item with the article number (item code number). You can also mention garment location where to attach that particular trim.
7. Cross check the trim with the approved one and sign on the trim. You can cross sign on all items. Make sure signed items cannot be replaced easily.
8. Your trim card is ready. Use the trim card as required.

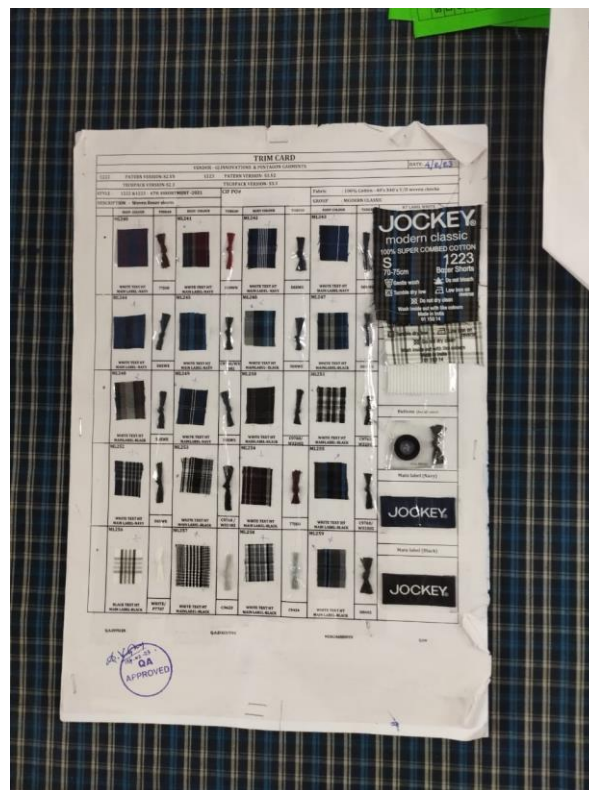


Fig 34 Trim card

12. Conclusion

My internship in the garment manufacturing industry has been an enlightening and enriching experience that has provided valuable insights into the complexities and intricacies of this dynamic sector. Throughout my time in the industry, I have had the opportunity to witness first-hand the various stages of garment production, from design conception to the final product reaching the shelves.

During my internship, I have learned about the importance of efficient supply chain management, the significance of quality control and assurance, and the role of innovation and technology in streamlining production processes. I have witnessed the dedication and hard work of the skilled workers and professionals who contribute to the creation of stylish and functional garments.

One of the standout aspects of my internship was the exposure to the industry's commitment to sustainability and ethical practices. I have seen how some companies are making conscious efforts to reduce their environmental impact by adopting eco-friendly materials, recycling initiatives, and waste reduction strategies. Additionally, I was impressed by the focus on fair labor practices, ensuring the well-being and safety of the workers in the manufacturing facilities.

Furthermore, I have gained an appreciation for the global nature of the garment manufacturing industry. The industry's reliance on international trade and supply chain networks has given rise to production hubs in different parts of the world, each contributing its unique strengths to the overall value chain.

In conclusion, my internship in the garment manufacturing industry has been a transformative experience, equipping me with valuable knowledge and skills that will undoubtedly prove beneficial in my future endeavors. I am grateful for the opportunities I have had to collaborate with industry professionals, and I am confident that the lessons I have learned will serve as a solid foundation for a career in this ever-evolving sector.



13. Bibliography

- 1) <https://pentagontextiles.com/>
- 2) https://www.justdial.com/Virudhunagar/Pentagon-Textile-Network-Pvt-Ltd-Amathur/9999P4562-4562-110222182616-F6G2_BZDET
- 3) <https://www.onlineclothingstudy.com/2013/05/necessary-production-reports-for.html>
- 4) https://www.researchgate.net/publication/300558517_Quality_control_and_quality_assurance_in_the_apparel_industry