Finisher and Packer

Participant Handbook

AMHSSC

Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment

NCVET

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

N·S·D·C
RE IMAGINE FUTURE

APPAREL MADE-UPS HOME FURNISHING SECTOR SKILL COUNCIL

SCPwD
दिव्यांग व्यक्तियों के लिए कौशल परिषद्
Skill Council for Persons with Disability

Participant Handbook

Sector
Apparel / Made-Up's and Home Furnishing

Sub-Sector
Apparel / Made-Up's / Home Furnishing

Occupation
Finisher & Packer

Reference ID: **AMH/Q2255, Version 3.0**
SCPwD Reference ID: PWD/AMH/Q2255,NSQF level: 2.5

Finisher and Packer
(Divyangjan)
for Locomotor Disability (LD)
for Speech & Hearing Impairment (SHI)
for Low Vision (LV)

https://youtu.be/xJOKX1uHZ6k
Scan QR code to access e-book

Second Edition

ISBN: 978-93-86620-59-0

Printed in India

Copyright ©

Apparel Made-ups & Home Furnishing Sector Skill Council

Flat No. A-312 to A-323, 3rd Floor, Somdatt Chamber-1,

Bhikaji Cama Place, Africa Avenue, New Delhi-110066

E-mail: jdop@sscamh.com

Website: www.sscamh.com

Disclaimer

The information contained herein has been obtained from sources reliable to AMHSSC. AMHSSC disclaims all warranties to the accuracy, completeness or adequacy of such information. AMHSSC shall have no liability for errors, omissions, or inadequacies, in the information contained herein, or for interpretations thereof. Every effort has been made to trace the owners of the copyright material included in the book. The publishers would be grateful for any omissions brought to their notice for acknowledgements in future editions of the book. No entity in AMHSSC shall be responsible for any loss whatsoever, sustained by any person who relies on this material. The material in this publication is copyrighted by AMHSSC. No parts of this publication may be reproduced, stored or distributed in any form or by any means either on paper or electronic media, unless authorized by the AMHSSC.

Note: SCPwD

SCPwD has borrowed the qualification of Field Sales Executive - (Divyangjan) from MHSSC which is approved by NCVET in the 22th meeting of NSQC on 25 Aug 2022 (Link of MOM

https://ncvet.gov.in/wp-content/uploads/2023/01/MoM-22nd-NSQC-held-on-25-August-2022.pdf

And uploaded on NQR WWW.nqr.gov.in

The book caters to the job role aligned to the following disabilities as per the NQR codes mentioned below.

LD - 2022/PWD/SCPWD/05849

SHI - 2022/PWD/SCPWD/06387

LV - 2022/PWD/SCPWD/05850

"Skilling is building a better India. If we have to move India towards development then Skill Development should be our mission."

Shri Narendra Modi
Prime Minister of India


Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment
APPAREL MADE-UPS HOME FURNISHING SECTOR SKILL COUNCIL
SCPwD
दिव्यांग व्यक्तियों के लिए कौशल परिषद्
Skill Council for Persons with Disability
NCVET
N·S·D·C
National Skill Development Corporation
Transforming the skill landscape
Certificate
COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS
is hereby issued by the
Skill Council for Persons with Disability
for
SKILLING CONTENT: PARTICIPANT HANDBOOK
Complying to National Occupational Standards of
Job Role/ Qualification Pack: Finisher and Packer (Apparel) QP. No. PWD/PWD/CON/Q0602, Version 3.0, NSQF LEVEL 3
Date of Issuance: 17/11/2022
Valid up to*: 17/11/2026
*Valid up to the next review date of the Qualification Pack or the 'Valid up to' date mentioned above (whichever is earlier)
Authorised Signatory
(Skill Council for Persons with Disability)

Acknowledgements

We are thankful to Methods Apparel Consultancy India Pvt Ltd and to all organisations and individuals who have helped us in preparing this Participant Manual.

We are especially thankful to Shahi Exports Pvt Ltd, Orient Fashions Exports (India) Pvt Ltd, Matrix Clothing Pvt Ltd, Richa Global Exports Pvt Ltd, Modelama Exports Pvt Ltd, Numero Uno Clothing Ltd, FCR Kiran Modes and M/S Khorania Brothers for their kind support in the development of this manual.

About this Book

This Participant Handbook is designed to enable training for the specific Qualification Pack(QP). Each National Occupational (NOS) is covered across Unit/s.

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS.

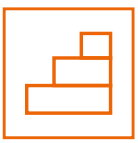
- AMH/N0102: Maintain work area, tools and machines
- AMH/N0104: Comply with industry, regulatory and organizational requirements and Greening of Job roles
- AMH/N2255: Plan and organize finishing & packing processes
- AMH/N2256: Carry out the process of finishing & Packing operations
- AMH/N2257: Maintain health, safety and security in the Finishing & packing department with Gender and PwD Sensitization
- DGT/VSQ/N0101: Employability Skills (30 Hours)

The symbols used in this book are described below:

Symbols Used


Learning Outcomes


Exercise


Steps


Activity


Tips


Notes


Objectives

Table of Content

Table of Content

It is recommended that all trainings include the appropriate Employability skills Module.

Content for the same can be accessed at:

https://www.skillindiadigital.gov.in/content/list

1. Introduction and Orientation

Unit 1.1 - Introduction to Apparel Sector

Unit 1.2 - Roles and Responsibilities of Finisher & Packer

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Familiarise with Apparel industry.
2. Identify the role and responsibilities of Finisher and Packer.

UNIT 1.1: Introduction to Apparel Sector

Unit Objectives

At the end of this unit, participants will be able to:

1. Familiarise with apparel industry.
2. Describe the home furnishing and made-ups sub sectors.

1.1.1 Apparel Sector – Industry Overview

The apparel and textile industry is one of the most booming industries. Apart from providing one of the basic necessities of life, it also plays an important role through its contribution to industrial output, employment generation, and the export earnings of the country. With Indian apparel and textile being among the world's largest producers, the country is also the 5th largest exporter of apparel and textile across the globe with US$ 36.4 billion. (source: Annual T&A industry report 2021 by Wazir Advisors)

The textile industry is one of the oldest business options in India since the ancient age. Different types of textile fibers are produced in India, among which cotton, jute, silk, and wool are the major ones. Both skilled laborers and unskilled officials are needed to run this business smoothly. Thus, the textile and apparel industry serves as the platform offering a huge number of employment opportunities to eligible people in India. A brief on complete supply chain for apparel industry is shown as below.

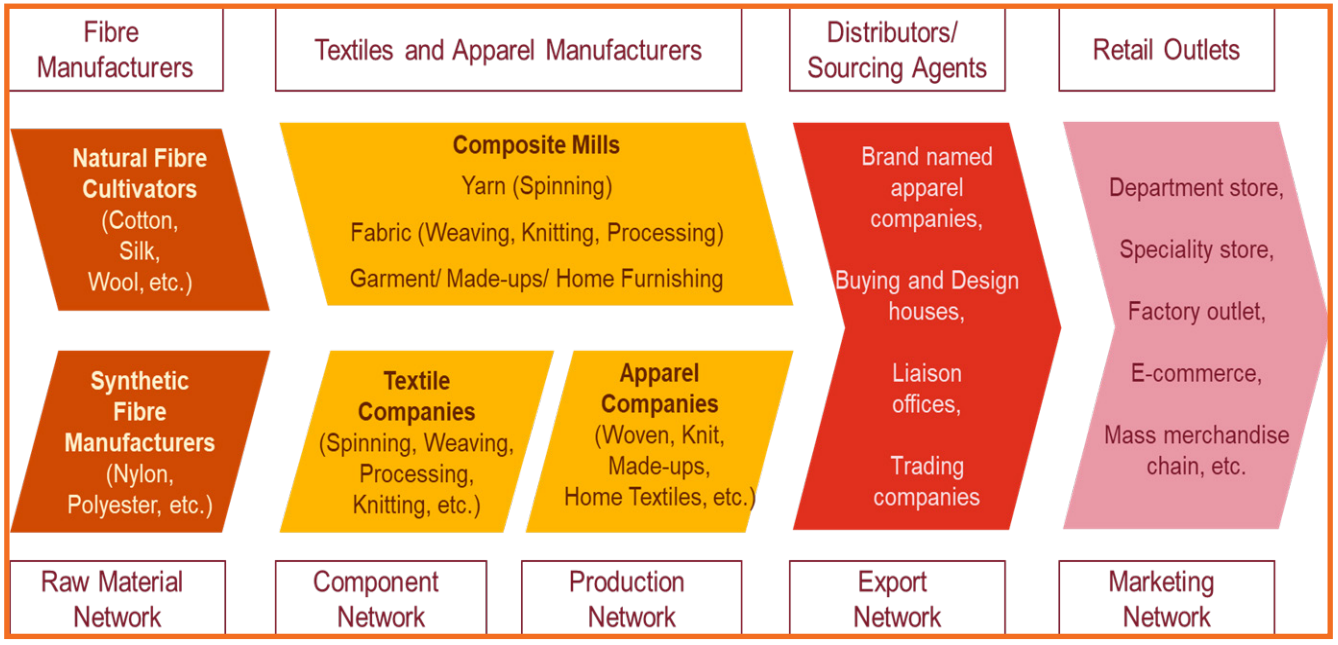


Fig.1.1.1: Apparel production process

The Indian textile sub-sector has traditionally been contributing significantly to the economy and manpower as well as to the structural changes in the manufacturing sector. Several factors that would contribute to the growth would include:

- Rising income levels are expected to increase the demand for home textiles and garments from domestic Consumers.
- Free trade agreements provide India a comparative advantage in the export segment as compared to its competitors – China, Bangladesh and Pakistan – as they create opportunities for manufacturers to supply to potential markets in East Asia.
- Low production cost continues to be an advantage for the sector and, consequently, demand from existing foreign markets continues to increase.
- Structural changes in the sector, with a shift from vertically disintegrated to integrated large firms, with automated machines for yarn and fabric production.
- Increased spending on research and development to enter the specialized fabrics and technical textiles sector.
- Favorable policy environment to support domestic and foreign investments and the implementation of schemes to enhance the production capacity and improve technology.

Ready Made Garments

The ready-made garments segment comprises men's, women's and kid's clothing, which may be used for either private (home/office wear) or commercial (uniforms for school, waiters and flight crew) purposes. The ready-made garments section has grown rapidly in the last few years. Both exports and domestic demands shall drive sector growth in future.

- Men's wear is the biggest segment in the ready-made garment segment, comprising about 43 percent of its share in the total revenue generated. This is followed by women's wear, with a share of 38 percent; 10 percent share of boys wear and 9 percent for girls wear in the total revenue generated by the ready-made garment segment.
- Changing lifestyles and consumption patterns are expected to drive the sector's supply of casual wear with an 11 percent growth, which would drive demand for workforce with specialized skills in western formals design, blended fabrics and increased application work on clothes.

Garment Factory Departments

Pre-Production	Production	Auxiliary
• Marketing and business development • Design • Merchandising • Sampling • Production Planning and Control • Pattern Making • Fabric Store and fabric sourcing • Trims and Accessory Store • Fabric Testing Lab	• Cutting department • Sewing department • Quality Control department • Machine Maintenance department • Garment Washing department • Finishing department • Printing department • Embroidery department • Packing	• Industrial Engineering Department • EDP / IT department • Accounting Department • Human Resource and Administration • Shipping and documentation

Fig.1.1.2: Apparel production department

1.1.2 Made-ups and Home Furnishings

The made-ups sub-sector is growing at a steadily increasing pace in the country. The wide variety of products that come under this sub-sector are not only include necessities but also functional and luxury products. Made- ups sub-sector is divided into three (3) broad categories:

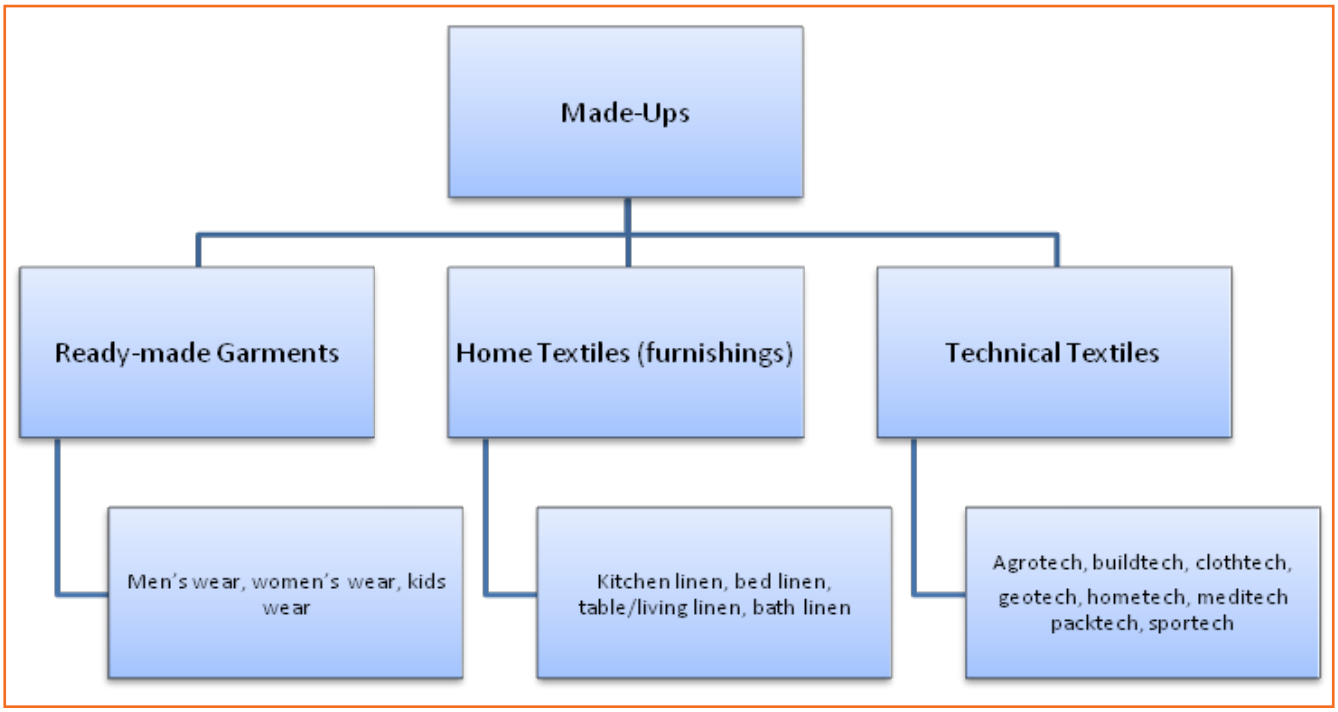


Fig.1.1.3: Made-ups and Home Furnishing Sub-sector

Indian is among one of the biggest exporters in Apparel and Made-ups industry. In Home Textiles India is second only to China in global exports, whereas in apparels, India is among the top 10. , India is fast becoming one of the leading global players in the Home Furnishings/ Textile. Home Furnishings industry offers wide varieties of products like bedspreads, furnishing fabrics, curtains, rugs, cushion covers etc.

The Indian Home Furnishing industry provides a unique blend of modern technology and ethnic techniques to bring out products that are one of the best in the world. The increase in the spending power of the Indian working class is also expected to contribute in the growth of domestic consumption of made-ups and home furnishings industry.

Fig.1.1.4: Home Furnishing

With increased demand and completion from countries like China, the demand of skilled workforce/kaarigars in the Home Furnishings industry is bound to increase in coming years

Size of Indian Textile and Apparel Industry

In India, the Apparel industry is spread across the country. However, the distribution of the clusters depends on the availability of raw material as well as the manufacturing. Cotton based units can be seen in all parts of the country, while the synthetic and woolen based industries are mainly concentrated in Maharashtra, Gujarat, Punjab, Jammu & Kashmir, Haryana, Madhya Pradesh and Uttar Pradesh. The silk-based industry finds concentration in Andhra Pradesh, Karnataka and Tamil Nadu while, jute clusters are largely located in Bihar and West Bengal.

Most of the apparel exporters (approx. 95%) are based out of Delhi NCR, Tamil Nadu Punjab, Rajasthan, Maharashtra and West Bengal. Rest of the India accounts for remaining 5% of the apparel exporters.

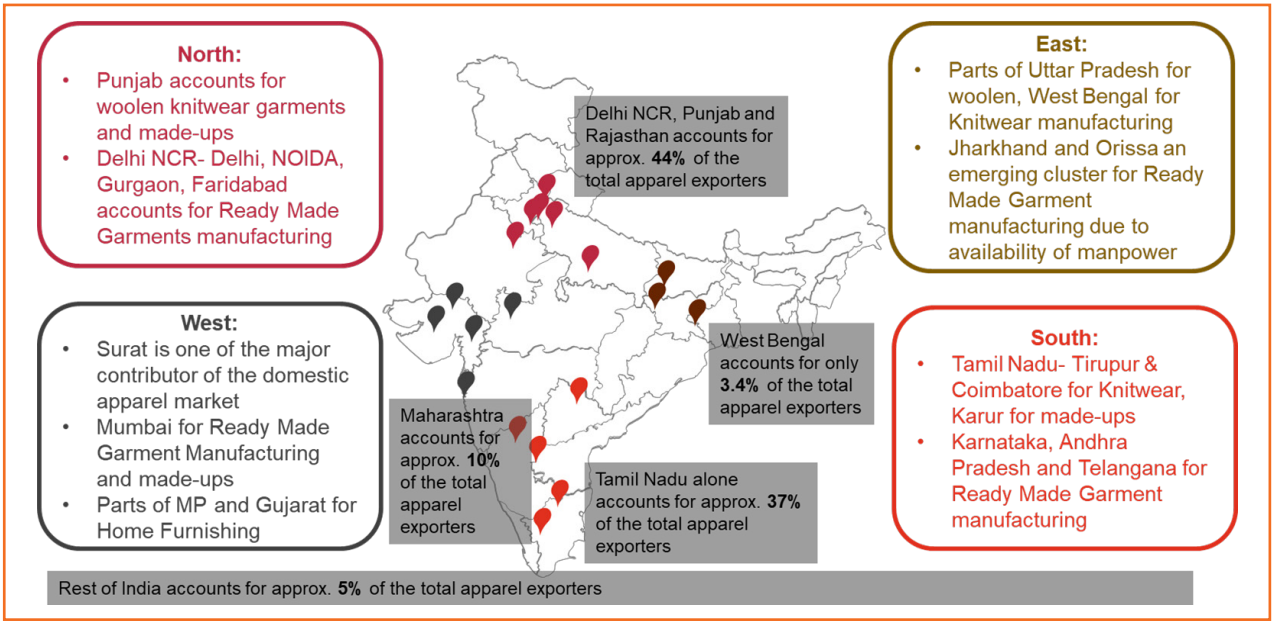


Fig.1.1.5: Major Apparel, Made-ups and Home Furnishing Clusters in India

1.1.3 Skill Development Policy

Indian government runs more than seventy skill development schemes at central, state and district level. The government has launched the Skill India flagship program to empower youth of the country by imparting employable skills to them. Under this initiative, the government has set up Ministry of Skill Development and Entrepreneurship (MSDE) to bring all the skill initiatives of the government under one umbrella and lead skill development ecosystem in the country. The ministry also launched a comprehensive Skill Development Policy in 2015 in which, detailed skill set requirement, courses offered, and roles and responsibilities of different stakeholders were defined. Further, sector wise skill gap analysis was also undertaken to understand sector specific skill requirement.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) are the flagship schemes which offer a variety of courses in the AMH sector. Among other skill development programmes, Integrated Skill Development Scheme (ISDS) was the main program run by the Ministry of Textiles, Government of India, introduced in XIIth Five Year Plan (FY 12-17).

The scheme had a target to train 1.5 million people for the T&A industry. As continuation of the scheme, the ministry has launched Scheme for Capacity Building in Textile Sector (SCBTS) also known as SAMARTH in 2018 with a target to train 1 million people in the sector.

ISDS has helped the industry by supplying skilled workforce, which, in turn, has helped the manufacturers in improving productivity and quality. Overall, it has helped in reducing cost, wastage and improving competitiveness that resulted in better business performances.

1.1.4 Employment Scenario in the Sector

Indian Garment Industry is closely connected to the fashion industry and grows hand in hand. Apparel Made-up & Home furnishing (AMH) is one of the largest employments generating sector in India, constituting about 60 per cent share of the total Textile and Apparel (T&A) exportsThe Indian textile sub-sector has traditionally been contributing significantly to the economy and manpower as well as to the structural changes in the manufacturing sector .As per the latest round of Periodic Labor Force Survey (2018-19), the total workforce in India is estimated to be about 479 million. The share of labor working in the manufacturing sector was around

12.2 per cent (about 59 Million). Direct employment in the AMH sector primarily comes under manufacturing and the service sectors. The AMH sector employs about 35.8 million labour out of which 47% are engaged directly through the core manufacturing and trade of AMH product and 53% are engages indirectly through the ancillary sector activities.

India is among the very few countries which have presence across the entire supply chain, from natural and synthetic fibers right up to finished goods manufacturing. It has presence in organised mill sector as well as decentralised sectors like handloom, power loom, silk, etc.

Incremental human resource requirement in core AMH sector, including manufacturing and trade is estimated to be about 35 Lakh for upcoming five years period between 2021-22 and 2025-26. Of the total incremental human resource demand, 89 per cent demand is projected to be in manufacturing of AMH products and 11 per cent demand is projected to be in trade related activity. Incremental labour demand in ancillary sector is estimated to be about 52 Lakh. Thus, the total incremental labour demand in AMH sector is about 87 Lakh.

Total incremental supply at all skill level, during the 2021-25 period, is projected to be of 18.4 Lakh. With the incremental demand of 31 Lakh, the skill gap in AMH - manufacturing is projected to be of 12.6 Lakh.

UNIT 1.2: Roles and Responsibilities of Finisher & Packer

Unit Objectives

At the end of this unit, participants will be able to:

1. Define who Finisher & Packer is.
2. Identify the roles and responsibilities of Finisher & Packer.

1.2.1 Finisher & Packer – Job Description and Attributes

Finisher and packer is responsible for all the working process involved in finishing to packing job in the apparel industry. He always ensures that, all the complete garments are carefully checked, properly ironed, measured, cleaned or dust is removed, poly packed, and finally cartooned as per buyer specification.

Finisher and Packer is a professional who targets the delivery time of a garment manufacturing unit to achieve the highest quality standard garment. This makes sure that unit meets the buyer's requirements as well as operator's health and safety requirements to ensure the consumer is happy with the end result. He always communicates with staff and management to update the information. He is involved at the end of the working process in the finishing and packing department.

Responsibilities are monitoring production, quality and delivery of packed products ready to dispatch along with the quality parameters as per priority and specifications. The key attributes of an in-line checker are:

- Supervises and coordinates activities of workers engaged in finishing and packing.
- Schedules finishing of cloth according to color, width and type of finish, to maintain efficient operation.
- Selects standard formulas that meet customer specifications or uses knowledge of finish ingredients and application methods to develop new formulas.
- Writes mixing instructions for use by chemical mixer.
- Writes work orders for supervisors indicating specified finish, style, and yardage of cloth to be processed.
- Examines cloth to verify that finish meets specifications.
- Inventories and orders chemicals and supplies from purchasing department.
- Fulfilling orders by arranging inventory in shipping containers.
- Preparation for shipment.
- Interpreting order invoices to determine which items need to be shipped.
- Stacking items safely and securely after quality control assessments.

In the apparel industry, finisher and packer's job is to help complete the smooth production for total garment making. He ensures that every plan for making a defects free garment is as per shipment schedule.

The job is generally involved in different sections like, knitting, dyeing, printing, store, batch, laboratory finishing, textile finishing, total garments finishing etc.and finally the packing. To do the finishing and packing job, finishing and packing sections are divided in to 6 categories according to the working types. These are

- Thread trimmers
- In-side QC

- Ironing
- Folding
- Packing
- Final QC

1.2.2 Roles and Responsibilities of Finisher & Packer

The key roles and responsibilities of a Finsiher and packer are:

- To read and follow order wise instructions and specification
- Makes plan and schedule for the jobs assigned to them.
- Keeps contract with production manager.
- Makes liaison with Sewing Section and Merchandizing Department.
- Receives different items from the store for finishing and packing purpose.
- Follows up with the washing centers.
- Keeps liaison with sub-Contract Factories.
- Close Contact with concerned personnel.
- Receive the accessories from Store for Packing.
- Packing list.

Responsibilities

- To follow up, that all the complete garments are perfectly received in finishing room from the sewing section.
- To check all the garment threads are trimmed properly.
- To ensure that, the measurements are ok.
- To reduce the garment damage by over heat, by controlling heat of the iron.
- To pass a garment for immediate cleaning if, after ironing any defects are seen.
- To ensure that the finishing tables are clean.
- To check out the defects and rejects on garment.
- To find out the cause of garment defects.
- To examine the defects and take special care about oil marks, stain marks, burns, cracks, and pits etc.
- To examine the garment for seam puckering development after washing or ironing.
- To record the inspection data and submit it.
- To ensure that all the goods are folded as per standard practice or as per buyer instructions.
- Understand the packing mode and styles as per customer instructions.
- Identify the tools and equipment's required for packing.
- Arrange for all essential materials and accessories required for packing.
- Identify the buyer's needs and follow the checklist for packing.

- Segregate damaged and defective goods and rectify repairable faults.
- Maintain accurate packing records.
- Ensure that the packed materials are stored safely and securely in the warehouse.
- Weigh packed materials and arrange them in cartons.
- Mark and label cartons.
- Measure, weigh, and count products and materials.
- Record product, packaging, and order information on specified forms and records.
- Prepare for the dispatch of the materials.

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
Apparel industry in India	https://youtu.be/tN5oLGSjepQ
Role and Responsibilities of a finisher packer	https://youtu.be/xJOKX1uHZ6k

Exercise

1. India is _____ largest exporter of Apparel and Textile
   a) 2nd
   b) 3rd
   c) 4th
   d) 5th

2. The apparel and textile industry contributes ____ percent to the country's GDP from domestic sector
   a) 5
   b) 6
   c) 7
   d) 10
3. Biggest segment in the ready-made garment is
   a) Children's Wear
   b) Women's Wear
   c) Men's Wear
   d) Sport's Wear
4. Which of these items comes under category of Home Furnishing and Made-ups?
   a) Bedspreads
   b) Curtains
   c) Cushion covers
   d) All of the above
5. What is the full form of PMKVY?
   a) Pradhan Mantri Kushal Vikas Yogna
   b) Pradhan Mantri Kaushal Vikas Yogna
   c) Pradhan Mantri Krishi Vikas Yogna
   d) None of the above
6. In which year SAMARTH Scheme launched?
   a) 2015
   b) 2016
   c) 2018
   d) 2021
7. Which of these Skill Development scheme is run by Ministry of Textile?
   a) ISDS
   b) DDU-GKY
   c) PMKVY
   d) All the above
8. India is _____ largest exporter of Apparel and Textile
   a) 2nd
   b) 3rd
   c) 4th
   d) 5th

9. _____ are essential part of finishing department
   a) Team Work
   b) Coordination
   c) Cooperation
   d) All the above
10. Packing list is a _____ type of document.
   a) Pre Shipment Document
   b) Post Shipment Document
   c) Both A & b
   d) None of the above
11. Thread Trimming is a part of _____ Department.
   a) Packing Department
   b) Cutting Department
   c) Finishing Department
   d) Fabric Department
12. Size ratio and color ratio of order quantity is important for _____ department.
   a) Packing Department
   b) Cutting Department
   c) Sewing Department
   d) All the above
13. Packing is done on the basis of
   a) Shipping Line Instructions
   b) Buyers Instruction
   c) Packing Department Manager Instructions
   d) All the above
14. Arrange for all essential materials and accessories required for packing is the responsibility of a packer.
   a) True
   b) False
15. Indian is not among one of the biggest exporters in Apparel and Made-ups industry.
   a) True
   b) False
16. Tags, such as price tags and hang tags are attached to the garment by means of a Kimble gun or threads.
   a) True
   b) False

2. Plan and Organize Finishing Processes

Unit 2.1 - Functions of Finishing Department

Unit 2.2 - Washing Department and Snapping Area

Unit 2.3 - Pressing and Packaging

AMH/N2255

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Identify process steps in finishing and packing department and define sequence of processes.
2. Split finishing operations for a particular style of product category into discrete processes or sub processes.
3. Organize processes or sub processes of finishing and packing.
4. Acquire knowledge about solvents, chemicals and their uses.
5. Acquire knowledge about different finishes and their effect on garment.
6. Acquire knowledge about pressing and packing and its importance.
7. Identify and understand the material required for packing.
8. Learn about methods and equipments used for pressing and folding.

UNIT 2.1: Functions of Finishing Department

Unit Objectives

At the end of this unit, participants will be able to:

1. Familiarize with flowchart of garment finishing and packing section.
2. Identify process steps in finishing define sequence of processes.
3. Split finishing operations for a particular style of product category into discrete processes or sub processes.
4. Organize processes or sub processes of finishing.

2.1.1 The Finishing and Packing Department

In the Finishing department, garments are nicely pressed and packed into poly bags. A finishing department has the following sub-processes. Washing of garment, (Some factories may have separate washing department), buttoning and buttonholing, trimming threads, checking of washed or unwashed garments, removing stains, ironing or pressing, final checking of garments after ironing, mending or repair work, tagging, folding and packing.

Finishing is the second last step of the garment production. All mistakes made during the process accrue and can become a huge problem at this stage. The Quality Department also has a huge potential to improve products, and thus requires special attention. It is vital that this department is given importance, since there is a great potential to make financial savings.

After making complete stitched garments by sewing section, these are passed in finishing department for ironing, folding, poly packing, cartooning to get attractive appearance. All types of garments finishing and thereafter packing activities are done here.

The flow chart of garments finishing and packing section is as follows:

Flow chart of finishing department in garment industry:

Receiving sewn garments from sewing room
↓
Initial quality check
↓
Washing
↓
Button attachment
↓
Tread trimming
↓
Ironing/pressing (inside)
↓
Quality inspection (inside) process wise
↓
Ironing / pressing (outside)
↓

Fig.2.1.1: Finishing and Packing Department (a)

Quality inspection (outside) process wise
↓
Re-pressing
↓
Inspection overall (out looks)
↓
Accessories attachment
↓
Folding
↓
Shade sorting
↓
Poly packing
↓
Quality audit
↓
Preparing packing list
↓
Assorting
↓
Carton packing
↓
Final inspection
↓
Recording the documents

Fig.2.1.2: Finishing and Packing Department (b)

2.1.2 Garment Finishing Department's Function

Receiving Sewn Garments from Sewing Room

Here, sewn garments are received from sewing department for finishing the garments.

Initial quality check: Here stitched garments are initially checked by the quality controller. If there is any repairable or washable defect, then garments need repair works in finishing section. But if any major sewing defect is found, then fabric is again sent to the sewing department for correction.

Washing: For washing the garments, 100% check is required after receiving garments from the sewing department. Defective garments should be rectified and reject pieces should be sorted out. If there are any faults like oil marks, stains, other dust and spots then garment washing is needed. Some spots are removed by using spot remover. Dust and stains are removed by using machine wash inside the finishing section.

Button attachment: Buttons, button holes, snap buttons, eyelets are attached on garments in finishing section.

Thread Cutting: The garments have thread tails and the uncut threads which need to be trimmed in the finishing department. This trimming process can be done either manually or with the help of a thread trimming machine. The thread trimming machine sucks out all loose threads

Fig.2.1.3: Thread Cutting

Pressing: Pressing of garment is to ensure, there are no folds in the garment. To have a good result, usage of Vacuum pressing tables is a must.

Fig.2.1.4: Pressing

Inspection overall (outlook)

Here, quality inspector ensures the overall outlook of garments.

Accessories attachment: All kinds of garments accessories like hang tag; price tag, barcode etc. are attached here.

Fig.2.1.5: Tagging

Tagging: Price tags and hang tags are attached to the garment using kimble gun or thread and is an integral part of finishing process.

Folding: Garments are folded here as per buyer's instructions. After complete pressing, the garments are folded in a predetermined area. Garments are folded according to the buyer's direction, requirements in a standard area. Folding classification depends on the fabric types. There are mainly four types of folding. They are –

- **Stand up:** Collar is folded and situated at 90* angle.
- **Semi stand up:** Collar is folded with body and situated at 45 degree angle.

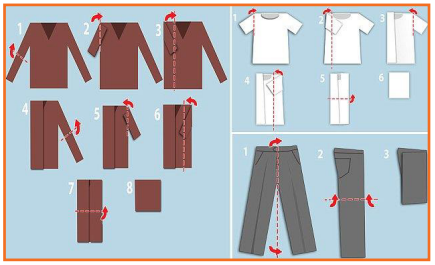


Fig.2.1.6: Folding

Fig.2.1.7: Flat pack

- **Flat pack:** Collar is separated as a hole on the body of shirt.

- **Hanger pack:** shirt is packed and transported by hanging on the hanger.

Fig.2.1.8: Hanger pack

Shade sorting: Finisher or Quality checker checks the color shade sorting on garments. They calculate a shade number for each sample based on how close its color shade is to the standard.

Metal Check: Checking the metal type component into the garments or with its accessories like button, zipper etc. is called metal check.

Poly packing: After folding and color shade sorting garments are poly packed here as per buyer requirements.

Quality audit: Quality audit can be performed in the sewing section as well as in the finishing section. It is very effective quality control activity to achieve the quality target. Quality audit is done prior to final inspection.

Fig.2.1.9: Metal check

Prepare a packing list: In this stage, finisher prepares packing list for cartooning and garment shipment also. After preparing packing list finishing department informs it to apparel merchandiser.

Assorting: Before cartooning, finisher must confirm and follow the color and size wise assorting system.

Assortment: After completing the packing of garments, the garments must be placed in a predetermined pack by sorting according to the size and color. Then garments are packed into inner box according to the size and color. This process working in order is called assortment.

Fig.2.1.10: Assortment

Carton pack

Here all the garments are packed in cartons to be sent safely to the buyer. The process of packing of inner boxes entered into the carton is called cartooning. The carton is properly warped by the scotch tape. Some information like carton box no, size, shipping mark and the destination are printed on the carton.

Fig.2.1.11: Carton pack

Barcode

Barcode is a specially Buyer wise sticker.

Fig.2.1.12: Barcode

Final inspection

If all the above processes are perfectly done, then apparel manufacturers organize pre-shipment or final inspection of garments. After finishing of the garments, factory top management, Merchandisers, production manager, QC, Finishing inspector and buyers representatives are to do this final inspection.

Recording the documents

All detailed documents about production to shipment are recorded or filed up in the official desk.

Dispatch shipment

A packing list for the shipment is prepared by the packing in-charge. The finishing department informs the concerned merchant after packing is completed for the order and it is ready to dispatch after passing the final inspection.

UNIT 2.2: Washing Department and Snapping Area

Unit Objectives

At the end of this unit, participants will be able to:

1. Familiarize with washing department workflow.
2. Discuss the different types of washing and its importance.
3. Analyze the snapping area and machines used for snapping.

2.2.1 Washing

This is one of the key departments in the garment industry. Garment washing is normally done after stitching. According to fashion trends and consumer demands, buyers ask for garment washing. For washing, apparel buyers mention exactly what types of washing they need for the order. Each wash has a different type of appearance on the fabric surface. The processes involves in this area makes the garment attractive and comfortable to wear.

2.2.2 Objectives of Washing

Washing process is done according to the fabric quality and buyer requirements. Even though the basic objective is cleaning, garment washing is also applied to change or modify the outlook, appearance, comfortability, and design of garments.

- To clean garments of filth, dust, and waste items.
- To take out sizing materials from clothing.
- Customers can find precise measurements for clothing due to wash shrinkage.
- The amount of detergent used, the processing duration, and the processing temperature all affect the fading impact.
- To brighten the colour of clothing.
- To improve the smoothness of clothing.
- To alter the appearance of clothing.
- To make the product immediately wearable after purchasing.
- To make clothing more comfortable and practical.
- To get rid of hazardous components from clothing.

2.2.3 Types of Washing

In garments industry, there are two kinds of washing process are available named wet washing process and dry washing process. The most common washing technique is normal wash. In the wet washing process like enzyme wash, stone wash and bleach wash included. In dry washing process chemicals like Potassium per magnet spray and hand scraping is used. Washing gives an attractive look to the product as it applies grinding, destroy, Blasting,

whiskering, permanent wrinkle, deep dye, tie dye, pp. spray, hand crapping, p.p spoonzing etc. It also enhances the soft hand feel of the garment.

DRY WASH	Sand blasting
	Hand scrapping
	Potassium per magnet spray
	Destroying
	Whisking or wrinkling
WET WASH	Normal wash
	Pigment wash
	Enzyme wash
	Stone wash
	Bleach wash
	Enzyme-stone wash
	Bleach-stone wash
	Acid wash

Fig.2.2.1: Types of wash

2.2.4 Types of Wash

Normal wash: The main purpose of this wash is to shrink the object and to remove magic ink used on it, dust, dirt, and any other impurities adhering to the garment. It is normally in plain water along with1-2% non-ionic detergent for 4-5 min at room temp. Afterwards it is hydro extracted using hydro extractor.

After this garments are either tumble dried or Line dried as per garment and its wash care. If it is tumbledried then condition for the tumble drier usually are as follow:

Temp. -50c Time -30min.

Silicon wash: The main object of the silicon wash is to impart soft feel in the fabric. This is why this wash is commonly known as softener wash. In this fabric/ garment is treated with a solution of 2gpl of Amino Silicon Softener. The ph of the solution is maintained between 5-5.5 using Acetic Acid. The object is dipped in this solution for 20-30 min. at a temp between 40-50 c.

After this the solution is drained and the goods are treated with plain water to remove remaining solution. Then goods are hydro extracted. After this the goods are either tumble-dried or line dried as per wash care requirement.

In case of white goods the ph is maintained using Citric acid instead of Acetic acid, which will otherwise cause yellowing of garment.

Fig.2.2.2: Silicon Washed Jeans

Enzyme wash: As the name suggests, the goods are treated with a solution of Enzyme. The object of enzyme wash is:

- To give a faded effect to the garment. This happens because enzymes are nothing but a form of bacteria. They secrets the cellulosic part from the surface of fabric which ultimately gives a faded look.
- To avoid problem of pilling. Pilling is the formation of boll shaped cluster of fibers on the surface of fabric. By treating with enzyme this problem can be avoided.

In this the goods are treated with 2-2.5 gpl of enzyme solution of acidic medium at 50-60 c for 30-45 min depending upon the level of effect required.

After this the goods are given a silicon wash to impart a soft feel to the goods. Afterwards normal procedure of hydro extraction and tumble\line drying are followed.

Fig.2.2.3: Enzyme Washed Jean

Fig.2.2.4: Vintage Washed Fabric

Vintage wash: This performs the same functions as the enzyme wash but the action is more severe. In this also a faded effect is obtained but a better effect is achieved. In this goods are treated with a solution of 0.3gpl soda, 0.2gpl non-ionic soap (NID) in acidic medium. Afterwards goods are hydro extracted and then tumble/ line dried as per requirement of wash care. There is no need of doing softener wash after this. But this wash is done very rarely since such types of effects are needed in some special cases only.

Acid Wash: For acid wash, the base colour of the garment is removed by spraying acid on the specified areas. After washing, checking of garment is done. Here the faults like stick marks and sewing thread bleeding etc. are checked. If the fabric is ok then it is sent to snapping area.

Fig.2.2.5: Acid Washed Jean

2.2.4 Flow Chart Washing

Process Flowchart of Denim Washing

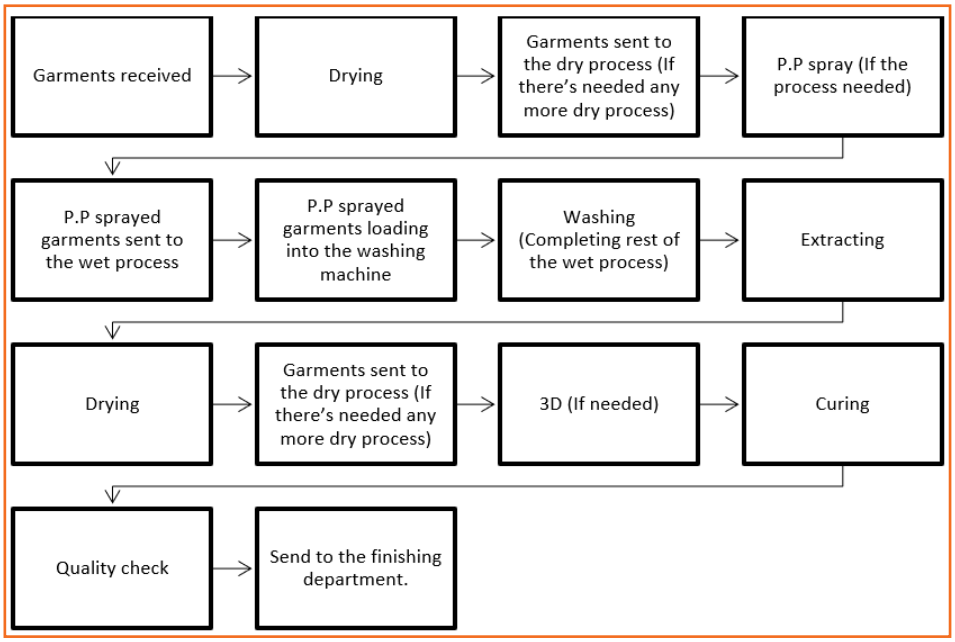


Fig.2.2.6: Flowchart of washing

2.2.6 Washing Defects

- Shade variation
- Spot on garments
- Variation in the level of PH value
- Destroyed garment parts
- Running shade
- Abrasion on garments
- Over blasting/low blasting
- Bad smell due to poor neutralization
- Poor hand feel
- Too high hairiness
- Crease marks
- After wash hole
- Bleach spot
- Burned fabric
- Garment parts not smooth

2.2.7 Buttoning/ Snapping Area

This area is also known as buttoning area, as in this buttons is attached to the garment. Before the attachment of the buttons, marking is done on the garment so that buttons can be attached on proper place of the garment. In snapping area following machines are widely used:

Chak button machine: Variables in this machine are size and shape of the button which determines the design of the button clamp, the number and disposition of holes, the form of stitching where there are four holes (this may be crossover or parallel) and the number of stitches.

For different types of buttons there are different programs. It is an automatic machine where bobbin is filled automatically. About 1/4th of a second is required by a machine for single button attachment

Eye or kaaj (button hole) machine: It is used for kaaj (Button Hole) formation in the garments. In this compressor is used for thread insertion, as the path of the thread in the machine is quite complicated. It is also provided with the cutter for making hole in the kaaj. Length of kaaj, size of kaaj and tail of kaaj is automatically set by the operator.

Fig.2.2.7: Eye or kaaj

2.2.8 Care Labels and Instructions

A label attached to a garment or fabric giving the manufacturer's instructions for its care and cleaning.

Washing Instructions	Machine Wash COLD
	Machine Wash COLD Permanent Press
	Machine Wash COLD Gentle Cycle
	Hand Wash
	Machine Wash WARM
	Machine Wash WARM Permanent Press
	Machine Wash WARM Gentle Cycle
	Do Not Wash
	Machine Wash HOT
	Machine Wash HOT Permanent Press
	Machine Wash HOT Gentle Cycle
Bleaching Instructions	Bleach as Needed
	Non-chlorine Bleach as Needed
	Do Not Bleach
Drying Instructions	Tumble Dry NO HEAT
	Tumble Dry NO HEAT Permanent Press

Fig.2.2.8: Care labels and instructions (a)

	Tumble Dry NO HEAT Gentle Cycle
	Do Not Tumble Dry
	Tumble Dry LOW HEAT
	Tumble Dry LOW HEAT Permanent Press
	Tumble Dry LOW HEAT Gentle Cycle
	Line Dry
	Tumble Dry MEDIUM
	Tumble Dry MEDIUM Permanent Press
	Tumble Dry MEDIUM Gentle Cycle
	Drip Dry
	Tumble Dry HIGH
	Dry Flat
Ironing Instructions	Iron Steam or Dry LOW HEAT
	Iron Steam or Dry MEDIUM HEAT
	Iron Steam or Dry HIGH HEAT
	Do Not Iron with Steam
	Do Not Iron
Dry-cleaning Instructions	Dry-cleaning
	Do Not Dry-clean

Fig.2.2.9: Care labels and instructions (b)

UNIT 2.3: Pressing

Unit Objectives

At the end of this unit, participants will be able to:

1. Discuss the purpose of pressing.
2. Describe the about methods and equipments used in pressing.
3. Acquire knowledge regarding pressing and folding instructions.

2.3.1 Pressing

The most essential finishing process in the readymade garments industry is pressing or ironing, which includes heating and pressing a material with or without steam to remove undesired wrinkles and give the clothes a smooth appearance. To create creases in the clothing, pressing or ironing is also used. Ironing is the term used in the garment manufacturing industry to describe pressing.

Fig.2.3.1: Pressing/ironing

2.3.2 Objectives of Pressing

The main purposes of pressing are:

- To smooth away unwanted creases and crush marks: - In garment manufacturing, creases and crushes occur in garment as a result of operator handling and these are particularly bad where garments are handled between operations in bundles. That's why pressing is necessary.
- To make cre3ases where design of the garment requires them: - Creases are sometimes design feature in some garments (where a series of creases often referred to as pleating) and some collar style. Creases are less obvious but still require pressing when they are hems or cuff edges, front edges, top edges of waist bands, pocket flaps etc.
- To refinish the fabric after manufacturing the garment: - Pressing makes the final presentation of the garment ready for sale.

Before pressing any fabric, we should press samples of fabric in order to ensure following question:

- Does the fabric shrink?

  Avoid any moisture.
- Does the fabric shine?

  Reduce the pressure and heat.

- Does the fabric melt?

  Reduce the heat.
- Does the fabric get any watermark?

  Do not steam.
- Does the folder edge show an impression?

  Reduce the pressure.

Different types of pressing instruction

1. Hot pressing
2. Medium pressing
3. Light pressing
4. Do not press and steam etc.

2.3.4 Quality Checks Points Pressing

The main quality check points of pressing are:

- Creases correctly formed or not
- Finished garment smooth or not
- Wrinkle free or not
- Showing its proper appearance or not
- Creases correctly formed or not
- Water spots or stain is there or not
- Garments thoroughly dried or not
- Garment components including Pockets smooth or not
- Garments correctly molded or not
- Due to heat and moisture Shrinkage is there or not
- Burned or scorched garments
- Edges wavy and stretched or thick and cockling
- Burned or scorched garments
- Lining shows pleats creases and wrinkles
- Color change from original shade
- Shiny marks
- Not pressed or improperly pressed

2.3.4.1 Pressing Equipment and Methods

There are hundreds of different types of pressing machines in the market because of the variety of garment types produced, each with its own specific pressing requirements.

Iron

- At the ancient period, a small case, made by iron in which the heated coal and wood is used by burning and the garments are pressed by the lower smooth surfaces of case.
- At present, these coal and wood are replaced by electricity and this eclectic iron is widely used in household purpose.
- To control the temperature of electric iron, it is needed to control the regulator.
- For updating and to do easy, Iron is heated by supplying steam to the steam Iron.

Fig.2.3.2: Press/iron

- The steam inlet and outlet is controlled by a controlling switch provided in the Iron.
- For steam Iron, special air suction bed is used to control the unexpected crease on garments.
- This is triangular in shape and weighted from 1 to 15 kegs.

Fig.2.3.3: Steam air finisher

Steam air finisher

- This type of garments finishing machine is known as puffer or dolly press.
- The dolly press contains a frame which contains form and the steam and compressed air are flowed by pipe through the form.
- The pressing form is generally made by heavy canvas fabric.
- There is no sleeve and the usable form size is made according to the size of body of garments.
- Steam and air are supplied for a predetermined time by using a timer.
- Normally, 8 seconds for steam supply and next 8 seconds for hot air supply.
- This type pressing is used for pressing T-shirts, jeans, pants, blouses, and sportswear and so on.

Steam press

- This contains a static buck and a head whose are shaped with each other.
- The fabric is placed on the buck and the head is placed then on it and pressing is done by applying heat and pressure.
- The ironing bed is made by spreading the layers of fabrics on the buck which is placed in a frame.
- There is provided air suction and steam flow system through the buck.

Fig.2.3.4: Steam press

- The table is placed around the buck on which fabric is placed.
- The head is placed down on the buck by scissor action and then pressure is applied.

Steam tunnel

- In this process garments are pressed without any pressure.
- Garments are hung on hanger and pushed into a tanner containing separate chamber through a running rain.
- Garments are heated on first chamber and unexpected crease is removed from fabric by relaxation and gravitational force.
- Garments are dried by hot air in the 2nd chamber.
- This type of pressing is used for pressing T-shirts and knitted wears.

Fig.2.3.5: Steam tunnel

The form finishing machine

Is one of the types used for finishing men's and women's jackets, blousons and skirts? During the pressing operations, the body and sleeves are precisely tensioned by pneumatically operated clamps pressure pads which can be set for individual forms. A microprocessor monitors and regulators the programmed times, temperatures and the sequence or combination of team, hot air, cold air, and vacuum.

Fig.2.3.6: Form finishing machine

Fig.2.3.7: Small cabinet press

The small cabinet press

Is designed to press the heat shirts before they are buttoned, thus preventing button marks on the finished article. During the pressing process, the back and front are tensioned by air-filled bags, which ensure an even pressing surface when the shirt is between the two shaped pressing plates. This particular machine can be efficiently operated by one person only when there is a reasonable balance between the handling and pressing cycle times.

Purpose of ironing

- **To smooth away unwanted creases and crush marks:** In garment production, creases and crushing occur in garments as a result of operator handling.

Fig.2.3.8: Purpose of ironing 1

- **To make creases where the design of garment requires them:** Creases are obvious design features in trousers, skirts, dresses etc where a series of creases is often referred to as pleating.

Fig.2.3.9: Purpose of ironing 2

Fig.2.3.10: Purpose of ironing 3

- **To mould the garment to the contour of the body:** It is the enhancement of shape of a garment. The areas where this moulding takes place are around the ends of darts, collars, shoulders, armholes and sleeve heads, and sometimes trouser legs.

- **To prepare garments for further sewing:** The term under ironing is used for ironing operations on partly constructed garments, or ironing operations within the sewing line. It may be possible to topstitch a collar which has not been pressed, but it is likely to be more quickly and accurately sewn if it has been pressed.

Fig.2.3.11: Purpose of ironing 4

- **To refinish the fabric after manufacturing the garment:** The means of ironing are heat, moisture, (usually as steam) and pressure in combination.

Fig.2.3.12: Purpose of ironing 5

Parts of Industrial Steam Press

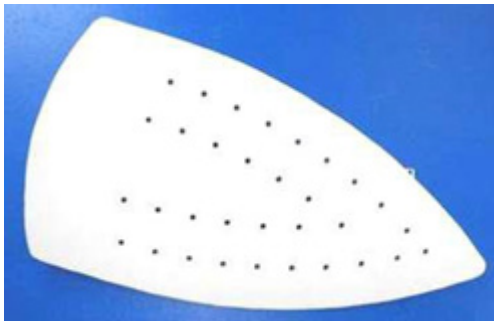
Temperature regulator: Used for adjusting the temperature of the iron. The temperature must be set according to the fabric.	
Steam release button: This button when pressed, releases steam from the holes on iron base.	
Safety Plate: Protects the users hand from hot base.	
Iron Box mat: This mat is heat resistant and used for resting hot iron.	

Fig.2.3.13: Parts of Industrial Steam Press

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
Finishing Section of a Garments Factory	https://youtu.be/WKNM3ruHlGs

Exercise

1. Finishing is a _____ step in production.
   a) Last
   b) Second Last
   c) Third Last
   d) None of the above
2. After Stitching Process flow is like: 1) Folding, 2)poly packing, 3) cartooning 4) ironing,
   a) 1,3,4,2
   b) 4,1,2,3,
   c) 1,2,3,4
   d) 1,2,3,4,
3. Sewn garments are initially checked by the quality controller in order to verify the quality
   a) True
   b) False
4. If there is a defect that can be fixed or washed out, repair work can be done in the finishing section itself.
   a) True
   b) False
5. In the finishing section, defects like oil marks, stains, and spots are removed by using spot remover.
   a) True
   b) False
6. _____ are attached in finishing department.
   a) Interlining
   b) Pocket

c) Buttons

d) Zippers

7. The finishing section needs to clip the tail ends and uncut threads since it affects the quality.

a) True

b) False

8. The procedure of thread trimming can be carried out manually or with the aid of a thread trimming machine.

a) True

b) False

9. The use of vacuum pressing tables is essential for the successful pressing of clothing.

a) True

b) False

10. The purpose of pressing clothing is to make sure there are no folds in it.

a) True

b) False

11. Garments are folded in accordance with the manufacturer's preferences and directions.

a) True

b) False

12. From the below given options which one is a garment folding type

a) Stand up

b) Flat pack

c) Semi stand up

d) All of the above

13. Depending on how closely a garment's colour shade resembles the standard, the finisher or quality checker evaluates the colour shade sorting on the garment.

a) True

b) False

14. The carton box should contain the information

a) Carton box no and size

b) Shipping mark

c) Destination

d) All of the above

15. Quality audit is a very effective quality control activity to achieve the quality target and should be done prior to the final inspection.

a) True

b) False

16. Each wash technique provides a different type of appearance on the fabric surface.
    a) True
    b) False
17. Garment washing makes the garment attractive and comfortable to wear
    a) True
    b) False
18. Washing types are decided as per the buyer requirements
    a) True
    b) False
19. The basic objective of washing is to
    a) Modify the outlook and Enhance the Appearance,
    b) Increase comfort
    c) Clean garments of filth, dust
    d) All of the above
20. The most common washing technique is
    a) Wet washing
    b) Dry washing
    c) Normal wash
    d) Stone wash
21. Grinding, destroy, Blasting, whiskering, permanent wrinkle, p.p spoonzing these are the the process involved in washing
    a) True
    b) False
22. To impart a soft feel to the fabric, what kind of wash is used?
    a) Enzyme wash
    b) Silicon wash
    c) Acid Wash
    d) Vintage wash
23. To shrink the object and get rid of any impurities that are stuck to the clothing, like dirt and dust. What sort of wash is applied?
    a) Enzyme wash
    b) Silicon wash
    c) Normal wash
    d) Vintage wash

24. To remove the base colour of the garment from the specified areas. What kind of wash is used?
    a) Enzyme wash
    b) Silicon wash
    c) Acid Wash
    d) Vintage wash
25. Pigment is dry wash
    a) True
    b) False
26. Sand Blasting is a _____ wash
    a) Wet
    b) Dry
    c) Both A & B
    d) None of the above
27. About 1/4th of a second is required by a machine for single button attachment
    a) True
    b) False
28. Too high hairiness is one of washing defects
    a) True
    b) False
29. Sign indicates _____
    a) Iron steam or dry low heat
    b) Iron steam or dry medium heat
    c) Don't iron with steam
    d) Iron steam or don't dry medium heat
30. Sign Says _____
    a) Line Dry
    b) Do not bleach
    c) Tumble Dry
    d) Do not twist
31. Creases are sometimes design feature in some garments
    a) True
    b) False
32. The main purposes of pressing is to
    a) To smooth away unwanted creases and crush marks
    b) To refinish the fabric after manufacturing the

c) To make cre3ases where design of the garment requires

d) All of the above

33. What steps should be followed if fabric shrinkage is discovered during sample pressing?

a) Avoid any moisture

b) Reduce the pressure

c) Do not steam

d) Reduce the pressure and heat.

34. What measures should be taken if fabric melting is found while pressing a sample?

a) Avoid any moisture

b) Reduce the pressure

c) Do not steam

d) Reduce heat

35. For steam Iron, special air suction bed is used to control the unexpected crease on garments

a) True

b) False

36. Steam air finisher is utilized for pressing T-shirts, sportswear, jeans, slacks, and blouses etc.

a) True

b) False

37. In Steam air finisher garments are pressed without any pressure.

a) True

b) False

3. Plan and Organize Packing Processes

Unit 3.1 - Functions of Packing Department

Unit 3.2 - Inspection

AMH/N2255

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Identify process steps in packing department and define sequence of processes.
2. Organize processes or sub processes of packing.
3. Acquire knowledge about packing and its importance.
4. Identify and understand the material required for packing.
5. Learn about methods and equipments used for folding and packing.
6. Acquire knowledge about packing, its importance and types of packaging.
7. Identify Faults in and their quality management.
8. Acquire knowledge about importance of inspection and how is it done.

UNIT 3.1: Functions of Packing Department

Unit Objectives

At the end of this unit, participants will be able to:

1. Elaborate the objectives of packing.
2. Familiarise with packing process flow.
3. Elaborate functioning of a packing department.

3.1.1 Objectives of Packing

Objectives of packing are given below:

- **Protection of the garment:** Packing is mainly done to ensure that the garment is protected and the quality 0of the garment is maintained by protecting it from moisture, dust and other natural elements.
- **Identification of product:** In each package , the labelling and tagging is unique and can be remembered.
- **Reduction in costs:** An efficiently packed product can reduce costs for both the manufacturer and the purchasers.
- **Product promotion:** A neatly and attractively packed product adds to the promotional value of the product. The packaging used in packing acts as an advertising medium.
- **Security:** To control the chaces of theft, packing plays an integral part.
- **Convince:** Packages can have features that can add convince in distribution, handling, stacking, display, reusing and disposal.
- Reducing the **security risks of shipment**.
- **Information transmission** like how to use, transport, recycle or dispose of the product.

3.1.2 Quality Checks Points in Packing

Some important quality check points in packing are given below:

- Correct ticketing and placement
- Packing accuracy of quantity, assortment, and folding
- Correct carton selection as per customer requirement
- Packaging, sealing, binding and barcode checking

3.1.3 Process Flow Chart in Packing

Fig.3.1.1: Packing flow chart

3.1.4 Types of Packaging

Packaging are mainly two types and that is based on two different ways which are:

1. Based on garment packaging
2. Based on packaging design

Based on garment packaging

According to different garments types, following packaging systems are mostly used in apparel industry.

There are various methods of packing which are followed by the finishing section. The packer has to pack the garment as per the method preferred by the buyer.

Following is the most used packing types:

1. Stand up pack
2. Flat Pack
3. Hanger Pack
4. Dead Man Pack

Stand Up Pack

- This type of packing is normally used for shirts.
- Tissue paper, back support clips, Inner collar, PUC outer portion and butterfly are some of the materials used in this style of packing.
- The normal sizes used in this method are 8" x 12" and 10" x 14".
- It is an attractive pack and this enhances the appeal of the garments to the customer. The main drawback of this method of packing is that it is time consuming and once unpacked, it is difficult to repack.

Fig.3.1.2: Stand Up Pack

Fig.3.1.3: Flat Pack

Flat Pack

- This method of packing is mainly used for ladies garments. It is very similar to the Stand Up pack method, but lesser packing materials are used.
- Tissue paper, back support, clips and poly bag are the only materials used in this packing method
- The normal sizes used in this method are 8" x 10" and 10" x 12".
- Since it uses lesser packing materials it is much cheaper than the Stand Up but it is less attractive as it does not present the garment as clearly as the Stand Up method.

Hanger Pack

- It is a popular method used for packing Blazers, coats, pants and children's garments . The garment is packed and transported by hanging it on a hanger.
- Poly bag and hanger are the only materials used in this packing method.
- Since very few materials are used this is the cheapest and convenient method of packing and unpacking.

Fig.3.1.4: Hanger Pack

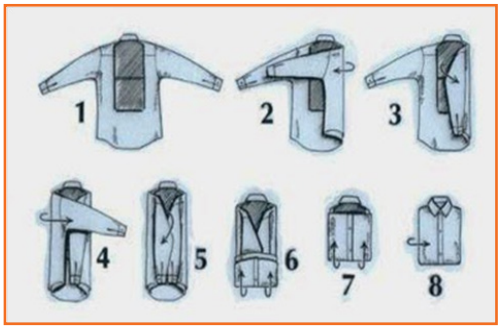


Fig.3.1.5: Dead Man Pack

Dead Man Pack

- This method of packing is used for shirts. The sleeves are folded in the front or back of the shirt and pinned together and the garment is then folded in the centre.
- Pins or clips and poly bag are the only materials required in this packing method.
- This method is very cost effective. The garment can be easily examined in packed condition also making it very convenient for customers.

Specialty Packing

Decorative/special packaging for goods especially for gifting purpose is known as specialty packing. This packing enhances the beauty of the products/gifts. This type of packing may include ribbons, colourful images etc. Specialty packing is also done during holidays etc. to build the image/brand of the company.

Fig.3.1.6: Specialty Packing

Based on packaging design

Merchandising packaging: The function of a Merchandising packaging is:

- Easy to identify the product.
- It helps to enhance the appeal of the product.
- To give the artistic value of a package, different color, design and other ingredients that are used to Identify, enhance and attract.
- For attracting the consumer to the package.
- For protecting the product quality until the consumer uses the item.

Vacuum Packaging: The function of a vacuum packaging is:

- To minimize the shipping bulk of unfinished garments.
- To reduce the shipping weight of garments shipped.
- To confine a garment from dust or objectionable odors before and during shipping

- To prevent garments from wrinkles or creases, during shipping, this will have to be removed before the retailer displays the garments
- To minimize storage space for both the manufacturer and retailer

Other uses: Vacuum packaging is used not only for packing and storing garments, but also for packaging household accessories made from textiles, such as blankets, bedspreads, pillows and towels-anything with bulk that can be easily compressed.

Fig.3.1.7: Other Packing types

Shipment Packaging: With respect to the protection from shipment packaging may be divided into two classes.

Closed containers carrying garments: Without a covering merchandising package (an open merchandising package). These are covered completely individually by a merchandising package (closed merchandising packages).

Open containers carrying garments:

- In open merchandising packages,
- In closed merchandising packages.

Some examples of open merchandising packages carried in open containers are:

- Costs, suits, or dresses are delivering without individual covers on hangers.
- Hanging garments from portable hanger racks.

"Hanger Pack", are the examples of closed containers designed to carry the garments in open or closed merchandising packages. Benefits of packaging:

Packaging can have features that add benefits in distribution, handling, stacking, display, sale, opening, reclosing, use, dispensing, reuse, recycling, and ease of disposal.

3.1.5 Materials and Accessories Required for Packing

Materials and accessories are very important to support the process of packing. The main purpose of packing materials and accessories are to improve the quality of the garment and to make the garment look attractive and presentable. It also protects the garment from dust, water and other elements.

The following are the most popularly used materials and accessories:

Poly Bag: Poly bags are used for all types of packing. There are different types of poly bags used for different packing methods:

1. **Plain poly bag:** It is used to pack all kinds of garments and is widely used in the industry.
2. **Gazetted Poly bag:** Is a larger poly bag and has an extra 2 inch width which extends from the top layer of the bag at the mouth portion of the bag. The extra inches protect the garment from slipping out of the bag.
3. **Poly bag with hangers:** Is used both in hanger pack as well as stand up pack.

Fig.3.1.8: Plain polybag

Fig.3.1.9: Back Support Board

Back Support Board: This is used to achieve correct folding size both in flat pack and stand up packing methods. It is made of cardboard and placed under the garment. The back support enhances the shape of the garment and makes it look more presentable. The packer should ensure that the back support board is of the correct dimension, correct thickness and has no sharp edges.

Inner Collar Band: It is made of plastic. It is used for packing shirts and is placed inside the shirt collar to provide support to the collar and give it a good shape.

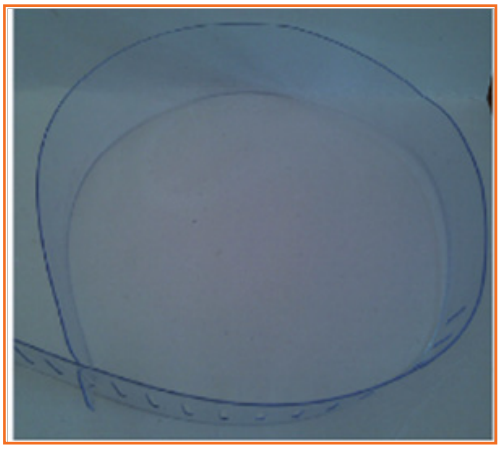


Fig.3.1.10: Inner Collar Band

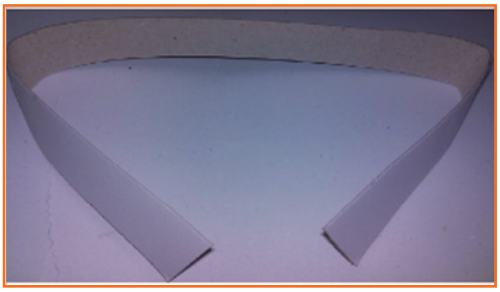


Fig.3.1.11: Outer Collar Band

Outer Collar Band: It is made of poly vinyl chloride sheet and is used along with the inner collar band to provide support to the collar. It is placed inside the folds of the shirt collor.

Fig.3.1.12: Butterfly

Butterfly: It is also known as collar butterfly. It is used to give a raised appearance to the collar points to enhance its presentation. It is used on the neck button between the collar points. Single layer, double layer and bubbled butterfly are the different types of butterflies used by packers.

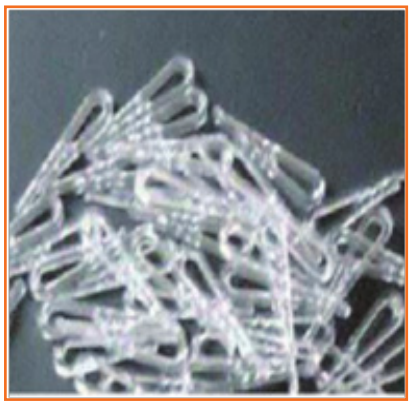


Fig.3.1.13: Plastic clips

Plastic Clips: Plastic clips are used to hold the folded edges of the garment in position. It is made out of plastic. Depending on the required firmness of the grip, Plain and gripper type are the different types of plastic clips used by the packers. The gripper type gives a firmer grip than the plain type.

Fig.3.1.14: Pins

Pins: Are made out of metal and is used to join two parts of a garment together. It holds the fold of a garment firmly and ensures that the fold stays in place. Plain and ball head type are the two different types of pins used by packers.

Fig.3.1.15: Tissue Paper

Tissue Paper: It is used in all types of packing to ensure that the pressed garments remain crease free. Like the back support board, this is also placed in between the garment folds. Since this serves the same purpose of the back support board is more economical, it is more popularly used.

Fig.3.1.16: Crepe Paper

Crepe Paper: It is made in a range of thickness and softness. Crepe paper is used to prevent creasing and crushing of a garment. They are also used for decorative purpose.

Fig.3.1.17: Cello Tape

Cello Tape: It is used in the final stage of packing. It is an adhesive tape used for sealing the carton. It comes in different sizes and is sold in a roll form. The width of the tape to be used depends on the carton size.

Clothes Hanger: It is used mainly for the hanger pack method of packing. Wire hanger, wooden hanger and plastic hanger the types of hangers used.

Fig.3.1.18: Hanger

Fig.3.1.19: Hand Tags

Hand Tags: Hand tags are an information card which is attached to the garment. The tag will provide information about the cost, fabric details, brand name, size etc. The tag is attached to the garment by the packer either using a plastic string or thread. Tags are generally made of plastic or paper.

Photo-in-lay

Photo of the packed garment on the packet.

Fig.3.1.20: Photo-in-lay Pack

Fig.3.1.21: Carton

Carton: The most important container for shipment of goods is carton. As per the construction of the cartons, the buyer gives a written instruction as to the construction of the cartons. Cartons should be satisfactorily strong so that they can carry the garments to the buyer in far off nations undamaged. Some buyer likes the usage of ply board to increase fortification of their goods. Types of carton are explained in *Heading 1.6.2.*

3.1.6 Carton Packing Types

Delivery of garments is done to the buyers, in cartons. As per instruction of the buyer Garments are kept in a carton, in a polybag. Garments are loaded in cartons in a chosen quantity of size and colour. This quantity is called assortment. Sustaining the chosen assortment and categorisation is important. This shows what sizes and colours should go with each carton.

The most used carton packing types

Solid colour solid size pack: All garments are of same size and color (For example, Garments-42, color-Red, Size-Small)

Color	S
Green	300

Fig.3.1.22: Solid colour solid size pack

Solid colour assorted size pack: According to this strategy all the garments are of the same color but there is a variation of sizes (For Example, Garments-42, Color-Red, Size- Small, Medium and long ratio with1:2:1)

color	S	M	L
Green	200	300	400

Fig.3.1.23: Solid colour assorted size pack

Assorted colour solid size pack: The colour of the garments is different but the size is same (Garments- 42, Size-medium, Color-Red and Blue)

Color	S
Green	200
Red	300

Fig.3.1.24: Assorted colour assorted size pack

Assorted colour assorted size pack: Garments are of different colors and sizes (Garments-42, Color-Red and blue, Size-Small and Medium)

Color	S	M	L
Green	100	200	300
Yellow	300	500	400
Blue	200	250	150

Fig.3.1.25: Assorted colour assorted size pack

Example of an assorted packing order:

Packing : Assorted color, assorted size

Ctn No	Ctn	Colour	Size			Pcs/Ctn	Total pcs	Remarks
			S	M	L			
1-134	134	GRAVEL	2	4	2	8 Pcs	1,072 Pcs	
		NEW CREAM	2	4	2	8 Pcs	1,072 Pcs	
		TIBET NATURAL	2	4	2	8 Pcs	1,072 Pcs	
		BLACK	2	6	4	12 Pcs	1,608 Pcs	
Total	134		8	18	10	36 Pcs	4,824 Pcs	

Fig.3.1.26: Assorted colour assorted size pack - Packing

3.1.7 Carton Sizes and Types

The most important container for shipping goods is "Carton". Buyer usually gives written instruction as to the creation of the cartons. Cartons should be effectively strong so that they can carry the garments to the buyer in far off states and even different nations, undamaged. Some buyer also likes to use additional ply board to upsurge safety of their goods.

Types of Cartons

Folding Cartons: Folding cartons may it be a paperboard carton or paperboard boxes, there are some of the most usual types of boxes for packing. A pack comprising a tie is a folding carton or nowadays some t-shirts and casual shirts also come in this packing.

Fig.3.1.27: Folding cartons

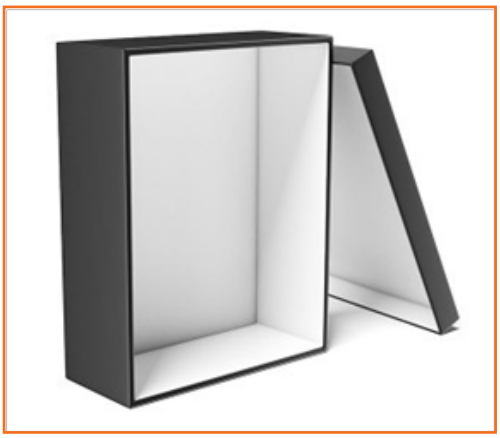


Fig.3.1.28: Rigid boxes

Rigid Boxes: Rigid boxes (set-up boxes) are tougher and do not fold or collapse as folding cartons do. They are frequently used for valuable. They are used when the product within is heavy and in need of extra support. These days designer ties/handkerchiefs etc. come in this type of packing.

Fig.3.1.29: Corrugated boxes

Corrugated Boxes: Corrugated boxes are commonly reffered to as brown cardboard boxes and are used for outermost packing. They are also known as shipper or master packs

Cartons are made of multiple plies of the special type of paper. Number of plies indicates the quality of the carton.

- 3 plies
- 5 plies
- 7 plies

The packages are packed into small cartons called inner cartons and placed inside the main or master cartons. This way of packaging keeps the garment safe and away from damage.

Inner carton

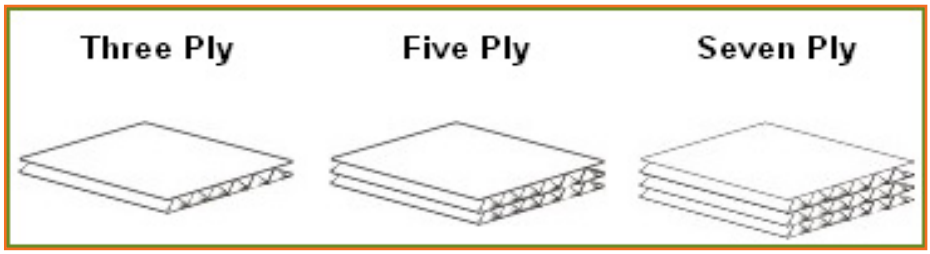


Fig.3.1.30: Deferent types of plies of cartons

Inner cartons are smaller cartons. An outer carton often contains a number of inner cartons. For example, an outer carton must contain forty shirts and they should be divided into four inner cartons.

Master carton

The master carton is the outer carton which holds all the smaller inner cartons. The surface of the outer carton is marked with various details of its contents for example the quantity of units and shipping details. The master carton is designed to protect the smaller units.

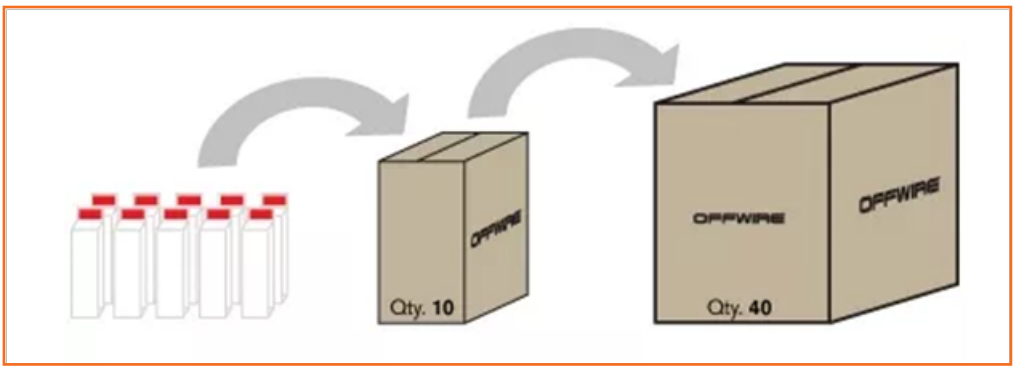


Fig.3.1.31(a): Carton Packaging

Fig.3.1.32(b): Carton Packaging

3.1.8 Information on Packaging

Specification of poly-bag:

- Poly-bag size: length and width. 12-200 Gauge or 30-50 micron
- Thickness: 100 micron = 1 mm
- Type: Flop, self-seal, tubs etc.
- Print: Warning for suffocation

Carton and packaging instruction

How product is to be packed within a carton will vary by pack type and product. The packing specification will be sent to the manufacturer. Normally it represents a single styles/color/size. There are three types garment packing are mostly use in apparel industry. They are

Bulk pack: Single SKU to a carton garments can be bagged or unbagged individually depending on the product. For the overseas shipments the unbagged garments are placed in a large poly bag before being placed in a carton. Do not bundle individual garment together.

Pre pack: A specific configuration of SKUS packed together. There are three pre pack types:

1. **Single:** A pre pack consisting of garments of solid color and solid size.

   Example: A single pre pack of t-shirt could be 6 size small red color packed together as a bundle.

   Color..... Small Total

   Red..... 06 06

2. **Multiple:** A pre pack consists of garments of solid color but multiple sizes.

   Example: A multiple per pack of t-shirts could be 2 size small, 2 size medium and 2 size large color t- shirt packed together as a bundle.

3. **Assorted:** A prepack consists of garments of multiple color and or multiple sizes.

   Example: An assorted pre pack to t-shirt could be 1 size smaller yellow t-shirt, 1 size medium yellow t-shirt, 1 size large yellow t-shirt, 1 size small & medium red color t-shirt and 1 size large red t-shirt packed together as a bundle.

   Color ..... S ..... M ..... L ..... Total garments

   Yellow ..... 1 ..... 1 ..... 1 03

   Red ..... 1.....1 ..... 1 03

Garments on hangers: There are two ways of packing or shipping a garment on a hanger.

GOH/Flat pack: Garments on a hanger laid flat in carton.

GOH/Loose: Garments on a hanger and hung on ropes inside a crate & placed in a shipping container.

Carton specifications: Carton specifications are three types. These are

- Carton dimensions
- Carton material
- Carton marking & labeling

Carton dimensions:

- Length /width/height = 24 x 24 x 8
- Maximum allowable deviation from the stated carton measurement.

Carton material:

- Liner board must be wet strength.
- Telescopic carton must have a minimum of 175 pound per square inch bursting strength for the top, 120 pound per square inch for the bottom.
- Flutes per linear foot of corrugation must be 50 ± 3 with a height of 3/32 inches (0.238 cm)
- Metal staple should not be used in the formation of the box.

Carton marking & labeling: Complete carton content, information to be located on slides in the carton.

Main mark:

- Address information
- Carton number
- Style/size/quantity
- Country of origin etc.
- Carton measurement

Side mark:

- Color names
- Gross weight
- Net weight
- Carton dimensions etc.

Carton security:

- Strapping
- Taping

Packing & Packaging Requirements

- Ensure the carton is strong and secure enough to protect the contents in the normal transport and distribution processes according to the standards.
- Ensure the contents of the carton are packed as per instructions.

- Ensure the labeling/marking are as per requirements.
- Eliminate the outer shipper carton where inners are the distribution unit.
- Ensure the carton does not display any misleading information or unrelated printed matter, - for example, brands or product names unrelated to the cartons content.

It is important to:

- Use the correct size carton for the goods you need to pack to minimize free space in carton.
- Ensure that packages form a stable unit load.
- Ensure that cartons are adequately sealed to support the content.
- Do not use brown paper wrapping.
- Do not use any form of strapping.
- Do not use carton stapling.

Hangers

The hangers must be secured with a cable tie. All film specifications remain the same as for pre-made bags. The supplier must ensure that the heat setting is adequate to seal the bags sufficiently without overheating and weakening the bag strength. Garments should be hung loose in bags. Bottom edge of garment should remain above bottom edge of bag.

Garments must have no more than 6cm to 12cm excess at the bottom heat-sealed or taped closed.

UNIT 3.2: Inspection

Unit Objectives

At the end of this unit, participants will be able to:

1. Define what inspection is and why is it done.
2. Discuss the procedure to carry out inspection.
3. Analyze faults in finishing section and their quality management.

3.2.1 Inspection

In garment Industry, two main techniques are used to control quality.

1. Testing
2. Inspection

Inspection is the function to judge the quality product. Inspection is the process of measuring the quality of a product or service in terms of established standards.

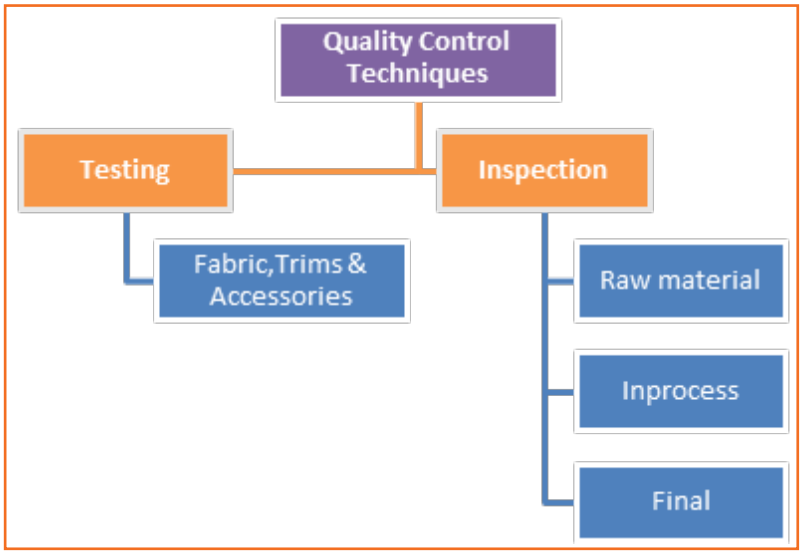


Fig.3.2.1: Functioning of inspection

In garments industry, inspection is carried out in the three stages. They are, Raw material inspection, Inprocess inspection, Final inspection. The final inspection is conducted only after completing the processing of the garment.

Objectives of Inspection

- To ensure that garments measure the buyer's specifications within the allowed tolerance after pressing.
- To ensure finished garments have to no loose threads or blemishes and are press to give an acceptable appearance according to the customer specifications.
- To ensure the garments are folded and packaged to the customer's specifications.
- To ensure the correct packaging items have been used.
- To ensure the garment is an acceptable appearance after packaging.

- To ensure all inner boxes contain the correct quality per size and color and that the boxes contain the correct number of cartons and display the correct marking.

Quality control of finishing sections

Following inspection/audit is done to attain AQL:

- **Process inspection:** Garments are checked process wise in the finishing section to identify defects and pass only the passed garments.
- **Two hourly audits:** Every after two-hours audit is done on finishing lot to attain AQL the required AQL. Day's final audit: At the end of the day accumulated lot of finished garments are statistically audited to attain required AQL.
- **Lot final audit:** On completion of packing of one complete lot of garment, QA manager conduct statistical audit based on required AQL garments. Garments are offered for final inspection by buyer /clients for shipment only when these are through in this audit.

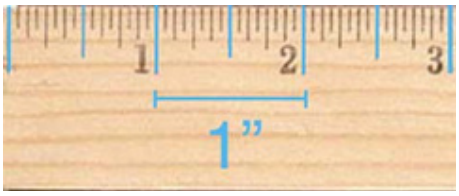
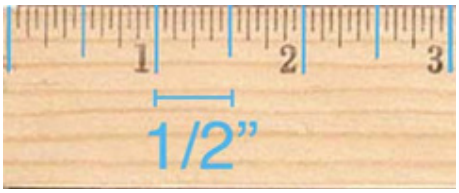
3.2.2 Use of Measuring Tape

A tape measure or measuring tape is a flexible form of ruler. It consists of a ribbon of cloth, plastic, fibre glass, or metal strip with linear measurement markings. It is a common measuring tool. Its flexibility allows for a measure of great length to be easily carried in pocket or toolkit and permits one to measure around curves or corners. For taking measurements in garments, generally fibre made measuring tapes are used which have inch marks on one side and inch as well centimeter marks on the other side.

There are usually two types of measuring tapes that are used: One is the self-retracting spring mechanism tape and the second one is a long length tape.

In case of straight measurements ruler can be used but measuring tape is a more versatile measuring tool which can be used to measure longer lengths and curves very easily.

In case of measuring garments, usually the fiber tape is used with inches and centimeter marked on two sides of the tape. It is both flexible and can be used for long.

	The distance between two consecutive longest straight vertical marks is known as 1 inch
	The long vertical lines in between two inch lines form the half inch line. The distance between an inch line and the line just in between two inch lines is known as ½ inches.
	The slightly shorter vertical mark that divides half inches in the middle form ¼ inches. Its distance from either inch mark or ½ inch mark is ¼

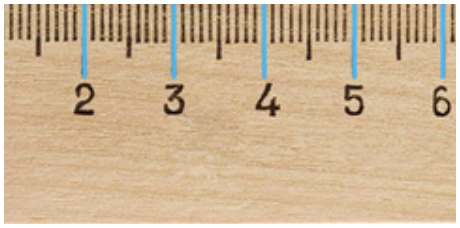
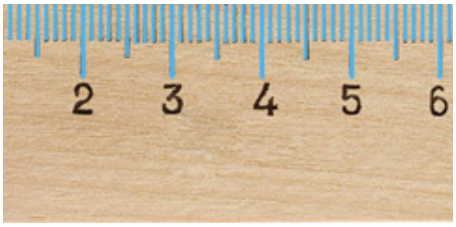
	These are the second smallest markings on a ruler or in some cases the smallest. The distance between this small mark and its consecutive bigger mark is known as 1/8 inches.
	The smallest marks although not present in all rulers are the sixteenth mark and the distance between the smallest tick and any of the ticks just after or before it is known as 1/16 inches.
Metric Scale	
	Metric scales have markings in centimeter and millimeter. The larger markings in a metric scale represent centimeter.
	The smaller ticks on a metric ruler represent a millimeter. There are 10 millimeters in a centimeter so there will be 9 marking in between two centimeter markings.

Fig.3.2.2: Measuring scale

Conversion Table

Units	1m	1m	1cm	1m	1m	1ft	1in	1in
Conversion	100cm	1000mm	10mm	3.28ft	39.97in	12in	25.4mm	2.54cm

It is possible to measure in one unit and convert it to any desired unit of measurement.

For example:

1 inch = 2.54 cm

So, 5 inches = 5 x 2.54 cm = 12.7 cm

Similarly,

1cm = 10 mm

So, 2cm = 2 x 10 mm = 20 mm

The reverse is also true,

30mm = 30 / 10 cm = 3 cm

How to measure

A garment is inspected for any defects or flaws that might have remained or that have formed while it was stitched. A process of inspecting a garment can be broken down into a number of small steps which are very important to produce good quality garments.

We can begin inspection on the following lines:

- Identify a place with a neat flat table and good lighting.
- Keep two bins aside to keep good and defective garments separately.
- Keep the fit sample, spec sheets, trim cards etc. ready for reference
- Accessories like measuring tape, Audit forms, pencil etc. should be carried.
- Lay Garment on Table, Front-Up.
- Flip Garment over to back
- Turn Garment inside out and check the wrong side

Let's make a try at checking a T-shirt/polo neck. We can start as per the following steps after we are done with the steps written above:

- Hold the garment by the shoulders.

Fig.3.2.3: Measuring process-1

- Lay it flat on the table; examine the styling details as indicated by the arrows.

Fig.3.2.4: Measuring process-2

- Check the seam quality, no threads, check labels.

Fig.3.2.5: Measuring process-3

- Check neckline or collar.

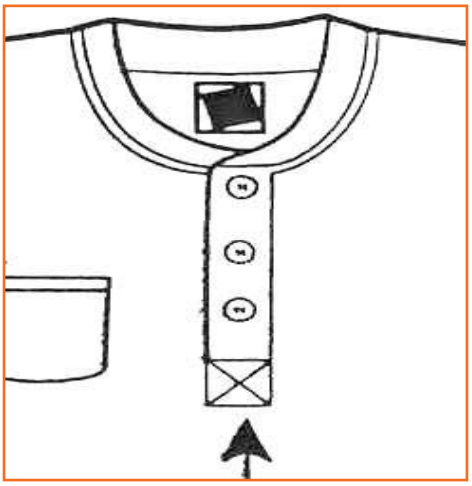


Fig.3.2.6: Measuring process-4

- Check both shoulder seams are of the same length.

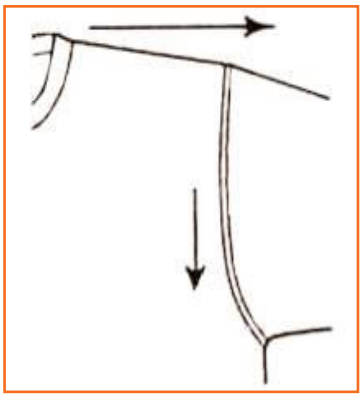


Fig.3.2.7: Measuring process-5

- Check buttons, buttonholes.

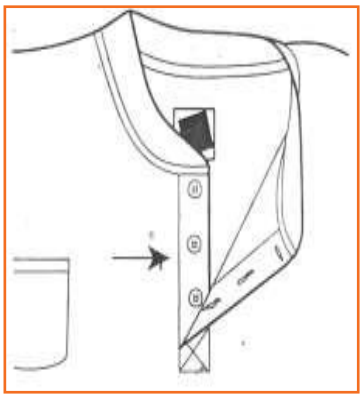


Fig.3.2.8: Measuring process-6

- Check length.

Fig.3.2.9: Measuring process-7

- Check sleeve length and sleeve hem.

Fig.3.2.10: Measuring process-8

- Armhole width.

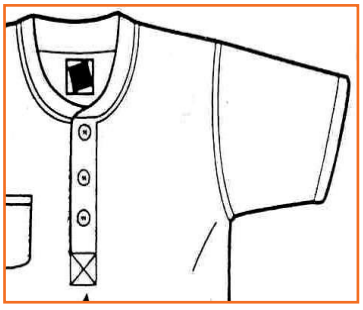


Fig.3.2.11: Measuring process-9

- Check if side seams are both the same length, check for puckering.

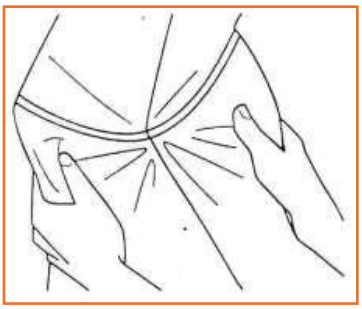


Fig.3.2.12: Measuring process-10

3.2.2.1 Inspection Procedure

Procedure of inspection are as:

- Select at random from the packaging section a quantity of shirt as per the sample plan.
- Remove the shirt from the polybag and measure to ensure it is the correct folded size and tie-space is the correct width.
- From the P.O or the packaging specification chart, unfold the garment and check that all the packaging items have been used as specified.
- Record on the inspection from any items that are found missing.
- Visually inspect the garment for its overall appearance, giving particular attention to the critical areas, i.e. collar, pocket and also the matching of stripes and plaid.
- If any defect is found a green Q.C sticker must be put on the garment and the details recorded on the inspection form. The defective garment should then be passed to the pressing supervisor for corrective action.
- After have unfolded the garment, measure it to ensure the size tolerance allowed after pressing. It is refer to buyer's specification for the measurement point.
- If a garment is rendered as reject, then a red Q.C sticker must be put on the garment and the garment again passed to the pressing supervisor.
- All details must be recorded on the inspection form.

Final checking for pressing/ folding

- Checking if there is any burn or scorch mark.
- Any shine surface.
- Improperly pressed garment affecting overall appearance.
- Incorrect folding methods and size.
- Hanging and loose threads.
- No proper drying prior to packaging.
- Incorrect packaging items.

Final checking for packaging/labeling:

- Check labels against purchase order information

  Style/color

  Size
- Purchase order number

  Quantity. UPC sticker
- International case marking (diamond marks)

  Country of origin

  Final destination (Address only)

  Carton number

Some common problems of packaging:

- Incorrect barcode tickets (hangtags) attach to garments. Incorrect counting of garments.
- Incorrect loading of garment on to containers.

3.2.3 Defects

Classification of defects

Certain defects are acceptable to some while unacceptable to others. Fabric for curtain inner lining may not generally be judged with stringent dealings. Whereas that for high grade dress wear may be rejected on the basis of a minuscule imperfection. Classification is the categorization of defects into major and minor. Defects have been classified depending on several factors. In some cases defects may not be defects in the first place. For instance: Barre in knitting appears in the form of sequential horizontal lines on the fabric. This could easily be used as an effect and usefully incorporated in products. Laddering can be achieved as an effect by deliberately deactivating a needle in the bed.

Sometimes the classification defends on the frequency of the defect. A small hole in the fabric may not cause problems but repeated small holes will obviously be problematic and thus a major defect. The classification of some depends on degree of visibility. For instance registration issues can be ignored if there is only minor misalignment. Variation in matching of dyed shade is acceptable within certain limits. Defects are classified as under:

1. **Major Defect:** A defect that, if conspicuous on the finished product, would cause the item to be second. A 'Second' is an example of major defects. It is a garment with a conspicuous defect that affects the saleability or serviceability of the item.
2. **Minor Defect:** A defect that would not cause the product to be termed as a second either because of severity or location.
3. **Critical defect:** Critical defects are also defined as a defect that is likely to result in hazardous or unsafe conditions for an individual in using the product and that does not meet the mandatory guidelines. A critical defect in garments may cause accident to the wearer and may malfunction when wearer out wearing a garment with critical defect.Critical defects are those which would render the item unusable, or could cause harm to the user or someone in the vicinity of the product. An item will often fail product inspection if a single critical defect is found within the order.

These faults have to reported immediately to the supervisor. In case of not reporting, the defects will not be rectified and result is rework.

Marker Making Defects

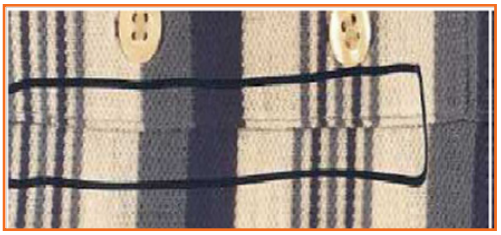


Fig.3.2.13: Marker Making Defects

- Size Mixing. Components not correctly labelled in marker.
- Patterns facing incorrect direction on napped fabrics.
- Patterns facing in different direction (either way) on a one-way fabric.
- Garment Components omitted during marker making
- Patterns misaligned with respect to the fabric grain.
- Line definition poor (e.g., too thick chalk, indistinctly printed line) leading to inaccurate cutting.
- Mismatched checks and stripes.

Fig.3.2.14: Plies misaligned

Common Spreading Defects

Plies misaligned:

- Incorrect tension of plies
- Fabric spread too tight or too loose, causing parts not to fit in sewing and finished garments not to meet size tolerances.
- Spread distorted by the attraction or repulsion of plies caused by excessive static electricity.
- Plies not all facing in correct direction (whether —one way‖ as with nap, or —one way either way as with some check designs)
- Unacceptable damages situated in garment parts

Common Cutting Defects

Fig.3.2.15: Cutting Defects

- **Inaccurate cutting:** Distorted garment parts. Top and bottom plies of different size
- **Notches:** Misplaced, too deep, or omitted
- **Drill marks:** Misplaced not perpendicular through the spread
- **Frayed edges, fused edges:** Caused by a faulty knife not sharp enough, or rotating at too high a speed
- Marker incorrectly positioned on top of spread
- Slits opened inaccurately or omitted
- Mixed plies resulting in Shaded Garment parts when assembled
- Mixed Size parts resulting in uneven appearance
- Inconsistent Grain and Surface of the Skin

Bundling and Ticketing

Numbering or Pasting of a number sticker on all the components of all the garments. The number acts as the identification of the component and the lot from which the component is cut.

- **Bundling:** Assembling the cut components in small batches of pre-defined number as per the requirements of production system.
- **Ticketing:** The process of attaching a ticket to all the bundles that provides basic information about the bundle and the components in the bundle.

Important Points

- Numbering should be done on wrong side of fabric only.
- Number stickers should be checked for glue
- Numbering of a ply twice or skipping of a ply should not occur
- The information on bundle tickets must be accurate
- Care must be taken to avoid mixing of components of different sizes in a bundle
- Sewn on shade marking tickets falling off, damaging fabric, omitted, misplaced or wrongly numbered
- Adhesive shade marking tickets falling off or sticking too hard , omitted, misplaced, wrongly numbered
- Bundles or boxes not stacked in box, or rolled in correct order in bundles or rolled or folded too tightly causing creases
- Work tickets, coupon payment tickets or progress tickets omitted , misplaced or mixed makes both quality and quality control difficult
- Wrong Size , Wrong Shade, wrong type of trimmings put in Bundle

Fig.3.2.16(a): Unmatched Trimmings

Fig.3.2.16(b): Matched Trimmings

Common Problems of Fusing

- Discoloration after fusing: The temporary or permanent change in shade, color of a fabric caused by the action of heat on certain dyes during fusing.

Fig.3.2.17(a): Normal Fabric

Fig.3.2.17(b): Discoloration after fusing

Strike through

- Strike through means that the adhesive resin appears on the outer face of the fabric being fused

Fig.3.2.18(a): Ideal fusing in fabric

Fig.3.2.18(b): Strike through in a fabric

Fig.3.2.18(c): Interlining shrinking

Strike Back

Fig.3.2.19(a): Ideal fusing

Fig.3.2.19(b): Strike Back

Shine / Glazing and Discoloration

- The temporary or permanent change in shade, colour of a fabric caused by the action of heat on certain dyes during fusing.

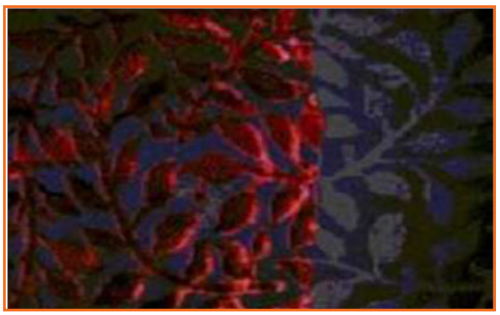


Fig.3.2.20: Glazing and Discoloration

Fig.3.2.21: Fusing distortion

Fusing distortion

- Fusing distortion means garment panels are distorted during the fusing process. This problem should be prevented as distorted garment panel after fusing cannot be corrected other than discarded as waste.

Fusing delamination

- Fusing delamination, sometimes appear as bubbling or rippling is the complete breakdown of bond between fusible interlining and fabric surface. It is normally found after the garment has been dry cleaned or washed.

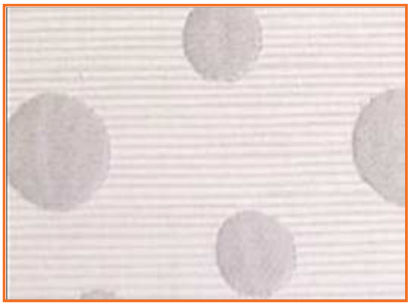


Fig.3.2.22(a): Ideal fusing

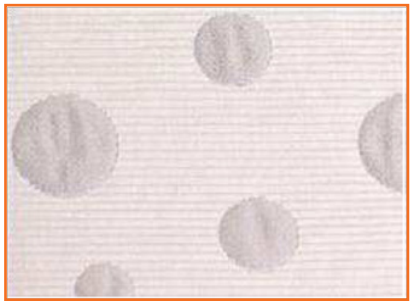
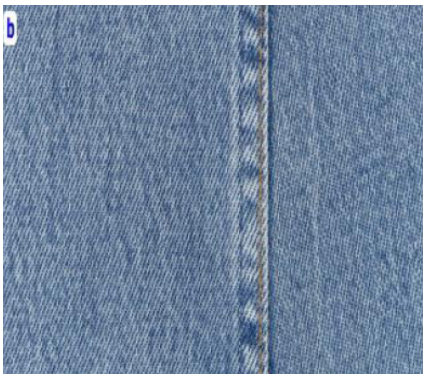
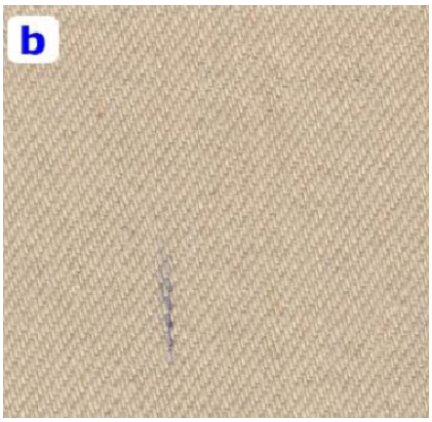
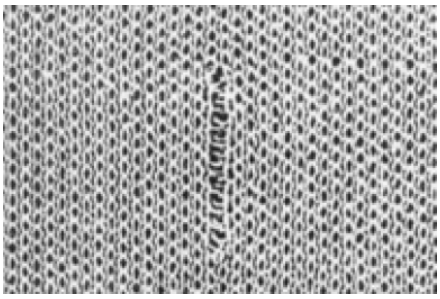
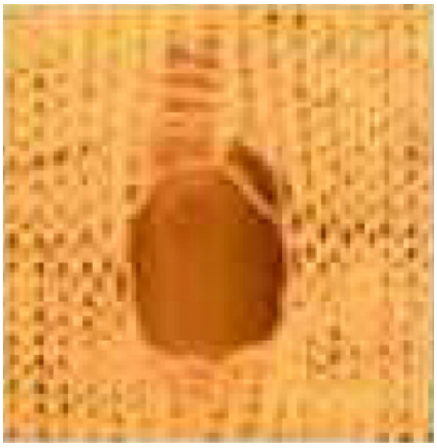
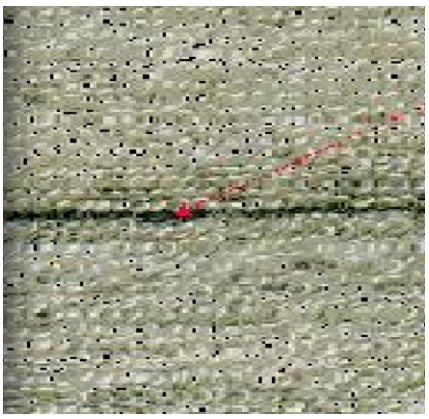
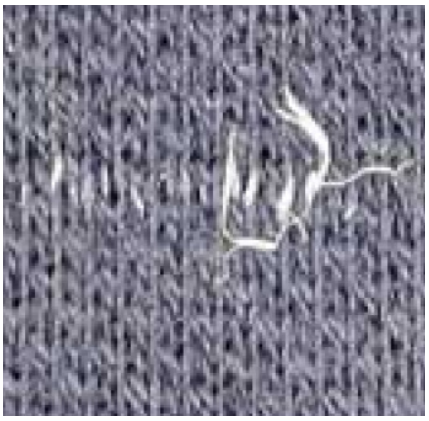


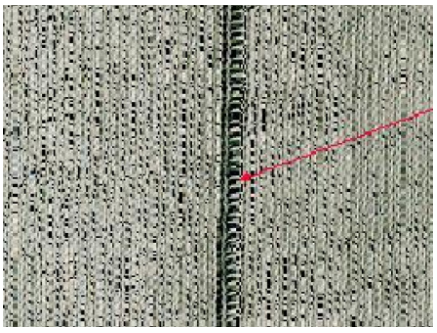
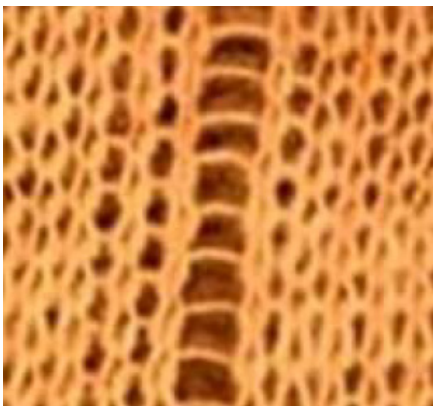
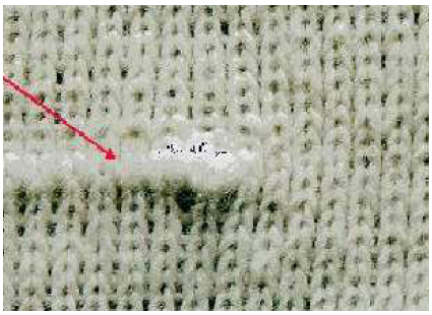
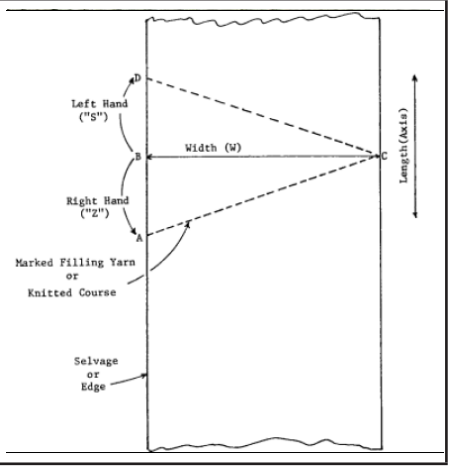
Fig.3.2.22(b): Fusing delamination

Common Fabric Defects

Defect	Explanation	Severity	Photograph
Defects of Woven Fabric			
Dropped Pick	Caused by the filling insertion mechanism on a shuttle less loom not holding the filling yarn, causing the filling yarn to be woven without tension. The filling yarn appears as "kinky."	Major	
End Out	Caused by broken yarn and loom continuing to run with left end.	Major	
Slub	Usually caused by an additional piece of yarn that's woven into fabric. It can even be caused by thick places in the yarn. Often is caused by fly waste being spun in yarn in the spinning process.	Major or Minor	

Knots	Caused by tying spools of yarn together	Usually Minor	
Mixed End (Yarn)	Yarn of a different fiber blend used on the wrap frame, resulting in a streak in the fabric.	Usually Major	
Mixed Filling	Caused by bobbin of lightweight yarn or different fiber blend used in filling. Will appear as a distinct shade change	Major	
Soiled Filling or End	Dirty, oil looking spots on the wrap or filling yarns, or on package-dyed yarn	Major	

Defects of Knitted Fabric			
Drop Stitches	Results from malfunctioning needle or jack. can appear as holes or missing stitches.	Major	
Hole	Caused by broken needle.	Major	
Missing Yarn	Occurs in circular knit. Caused by one end of yarn missing from feed and machine is running continuously.	Major	
Mixed Yarn	Occurs in wrap knit. Results from wrong fiber yarn (or wrong size yarn) placed on wrap. cloth might appear as thick end or different color if fibers have different affinity for dye.	Major	

Needle Line	Caused by bent needle forming distorted stitches. Usually verticals line.	Major or Minor	
Runner	Caused by broken needle. Can appear as vertical line. (Most machines have a stopping device to prevent machine once a needle breaks.)	Major	
Slub	Usually caused by a thick or heavy place in yarn, or by lint getting onto yarn feeds.	Major or Minor	
Askewed or Bias	Condition wherever filling yarns are not square with wrap yarns on woven fabrics or wherever courses don't seem to be square with wale lines on knits.	Major or Minor	

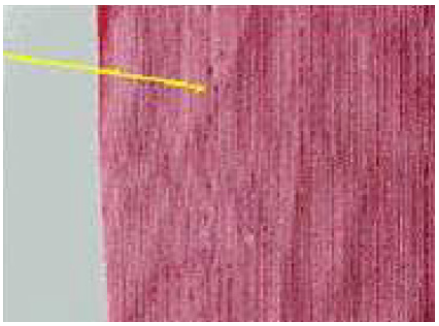
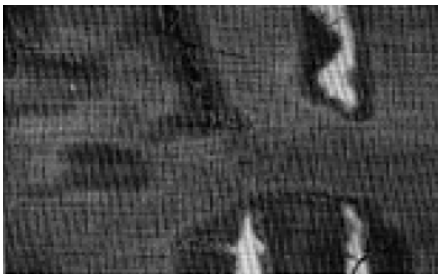
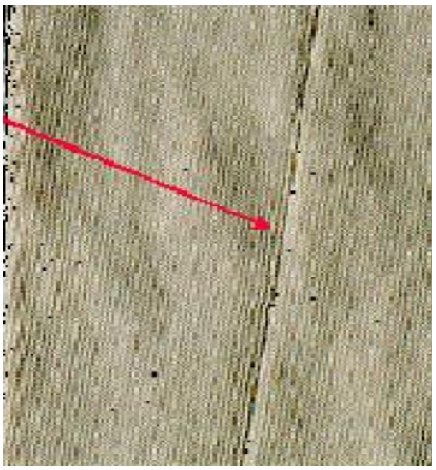
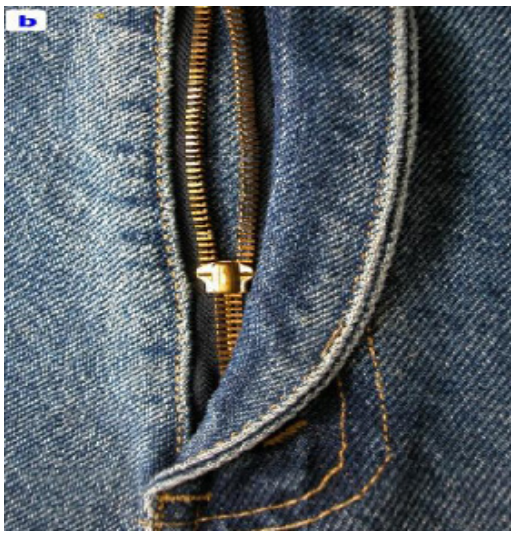
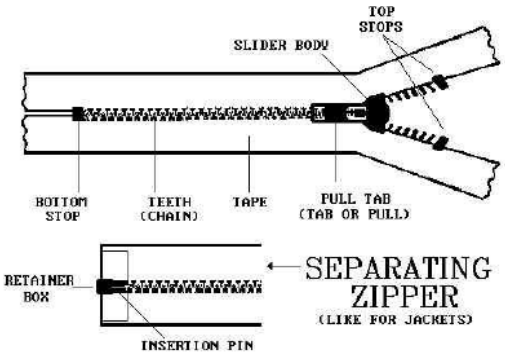
Pin holes	Holes along selvage caused by pins holding fabric while processes through stenter frame	Major if extents into body of fabric	
Straying End	Caused when an end of yarn breaks and loose end strays and is knit irregularly into another area.	Major	
Bowing	Usually caused by finishing in knits ,the course lines lie in an arc across width of goods.	Major on stripes or patterns Minor on Solid color	

Fig.3.2.23: Woven and Knit Fabric Defects

Accessories Defect

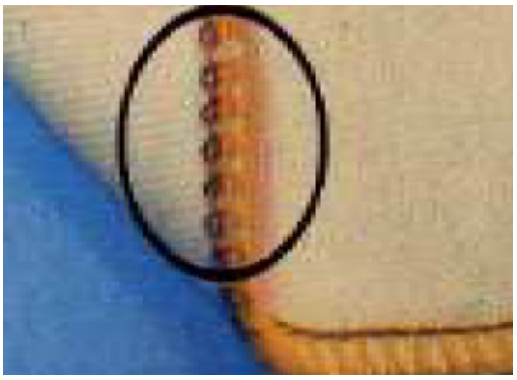
Zippers		
Slider defect	**Won't Lock:** Not apparent without testing by placing Zipper slider in locked position and applying tension. **Faulty Dimension:** Not readily apparent. May cause either a hard or a loose operating zipper. Either condition may result in zipper failure before garment is worn out. **Crushed Slider:** May be due to improper garment pressing or due to padding or compensating springs in the presses not being in best condition. **Tarnished:** Does not generally interfere with operating qualities but is a matter of appearance only. Judging" this as a defect depending upon degree of tarnish. Burn or Rough Spots Not immediately apparent. Can cause snagging and early wear on the upper tape. Lock Prong Interferes Indicated by pull-tab not staying in locked position or slider not moving freely after being released from locked position. **Weak Slider Bodies:** Can best be determined with correct testing equipment. However, manifests itself by slider becoming compressed or crushed below minimum pressure or becoming distorted enough to form hard operation.	 
Chain or Teeth Defect	**Improper Dimensions:** Not always apparent unless slider works with great difficulty or operates too easily. Zipper' may give initial satisfactory operation but fail after only moderate use and especially after laundering or dry cleaning. **Miss meshed and Unmeshed Teeth:** Readily visible, particularly in large. Usually results in inoperable zipper. Missing Teeth: Readily visible, will result in early failure of the zipper.	

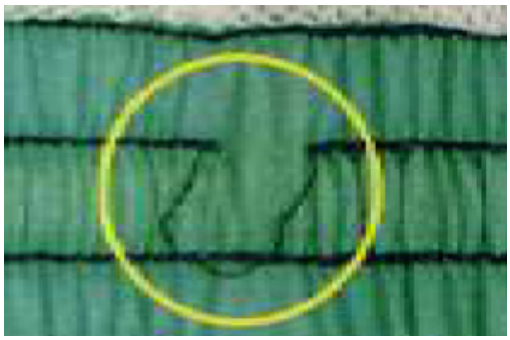
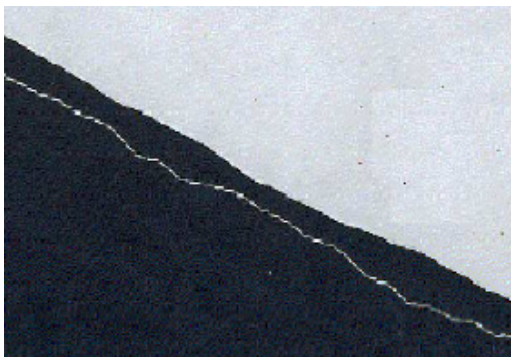
	Misplaced Teeth: This refers to a tooth being out of position, and occasionally may involve two or three teeth. Seriousness ranges from trifling to almost as serious as a missing tooth depending upon the degree of misplacement and general design of zipper. **Off color:** This defect is quite apparent. Zipper makers usually carry an entire range of tape colours. because of similarity of different colours, one may be mistaken for another. it's also possible, because of color similarities or distinction in dye lots that the {two|the 2} halves of the zipper can have two different shades of tape. **Humpy Chain:** readily noticeable by its waviness. Causes issue at sewing operation and distorts finished garment's look. **Cord not attached to Tape:** because of skipped stitches during operation of sewing cord to tape. Not readily apparent however under strain, cord and teeth can rip away from tape and render zipper and garment unusable. Length: Improper zipper length for given opening.	
Top or Bottom Stop Defects	**Missing Top or Bottom Stop:** Readily apparent and will end in zipper failure. If facilities for attaching a top or bottom stop don't seem to be available, then the complete zipper ought to get replaced. In some instances, bottom stops ar hooked up at garment plant. an improperly or poorly attached bottom stop is also result of carelessness on a part of the operator or of improper functioning of the bottom stop machine.	
	Snap Fasteners	
Hard Action	In light-weight goods this may result in stud or socket pulling through the material. The snap fastener manufacturer can be of help in recommending proper tension of stud in socket for weight of garment material.	

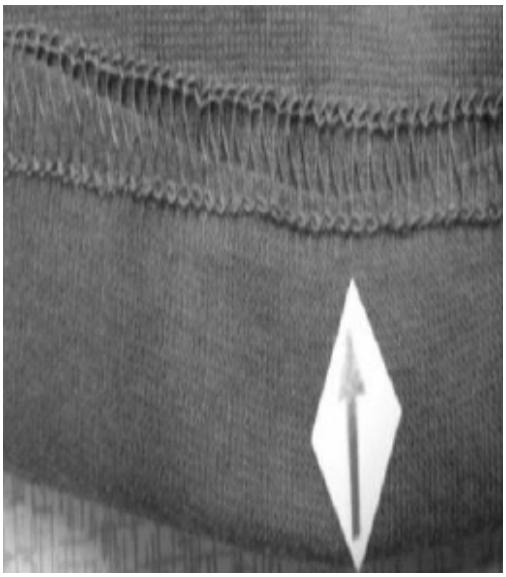
		
Light Action	Snap fastener does not stay closed because of lack of proper tensions. Same comment applies as for tight closure.	
Hooks & Eyes	**Improperly Applied:** This is usually caused by a careless operator or improperly adjusted attaching equipment, and corrections are usually simple when apparent. **Improper Alignment:** Gauges are available for attaching equipment to assure proper alignment in positioning. this can be a necessary if garment is to own a properly tailored look. If the top of the zipper is extended into the waistband of the garment, than the hook and eye ought to be offset to prevent it from hit the zipper material. **Poor Finish:** May be the result of improper finishing or pocking of the metal surface and, while this defect dose not interferes with the functional operation, it may not leave the desired finished appearance of the garment. **Tight/Loose Closure:** Attaching equipment bad fit with an adjustable feature permitting secure application of hook and eye to either light-weight or heavyweight goods. If closures seem too tight, then one should instantly check the attaching equipment for correct adjustment.	
Buttons		
Rough or Dull Surfaces	This fault is not so serious except in cases of extreme roughness or poor surface appearance.	
Non- Uniform. Inaccurately Spaced Chipped or Blocked Sew Hole:	This type of defects cannot be noted during the garment manufacturing operation and can slip inspection unnoticed but it frequently causes needle breakage or cut thread.	

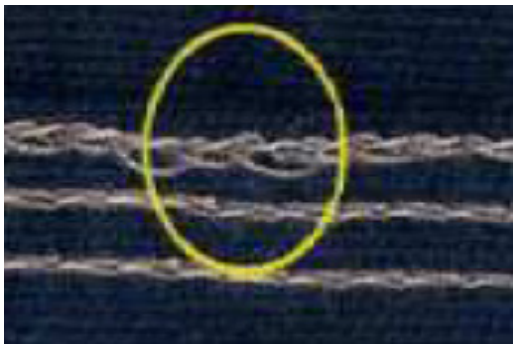
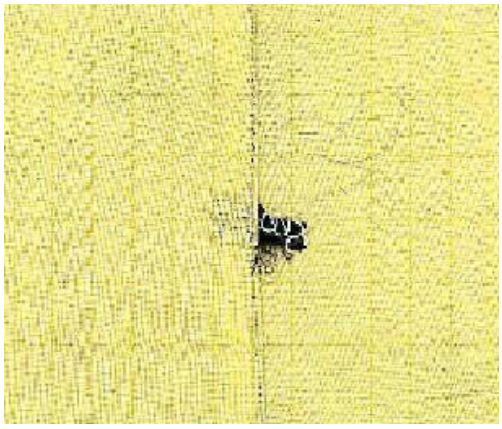
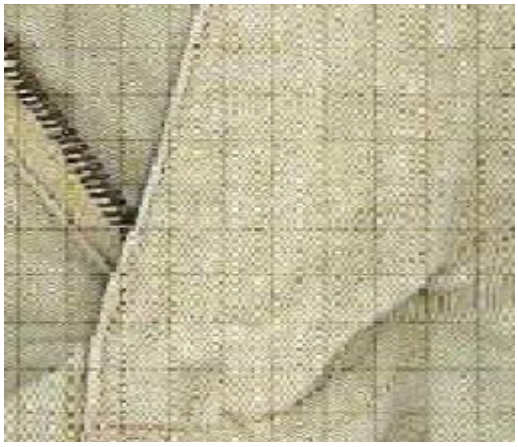
Fig.3.2.24: Accessories Defect

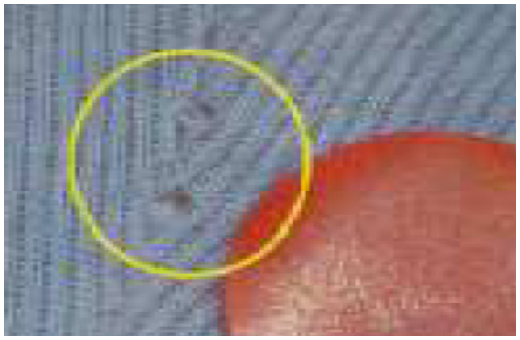
Stitch and Seam Defects

Type of Defects	Description	Photograph
Broken stitches	Caused due to: • Too thick/ too thin a thread for the needle • Needle heat • Operator working non-rhythmically • Too tight tension	
Skipped stitches	Caused due to: • Hook irregularly failing to pick up the loop of thread from a needle's eye	
Seam Grinning	Caused due to: • The Seam itself may open and produce a Gap between two pieces of fabric • Arising from too loose a tension or too large stitch length or use of a wrong stitch type.	
Unbalanced stitch	Caused due to: • Arising from unbalanced tension of needle thread and bobbin/looper thread.	

Improperly formed Stitches	Caused due to: • Bad thread tension • Ill fitting machine components	
Irregular or incorrect shape of sewing line	Caused due to: • Badly set guide, • Handling error	
Twisted seams	Caused due to: • Improper alignment of fabric parts, • Mismatched notches, components off grain	
Mismatched stripes or checks	Caused due to: • Mishandling by operator • Incorrect cutting	

Insecure back stitching	Caused due to: • Rows do not cover the first row of stitching-Manual error	
Uneven width of inlay	Caused due to: • Bad handling by operator • Incorrectly set guide, incorrectly set folder	
Linings too full, too tight.	Caused due to: • Operator twisted or stretched extensively during Sewing	
Uneven Stitch Density	Caused due to: • Operator causing the machine to snatch and does not allow the machine to control fabric feeding.	
Wrong Stitch density	Caused due to: • Too high SPI give rise to jamming and rupture of fabric • Too low SPI give rise to weak seams and seam grinning	

Mismatched seams	Caused due to: • Edges of the upper and lower fabric parts not matched during sewing, causing the seams to shift	
Loose Stitch	Caused due to: • Unbalanced seam sewing thread tension not set properly	
Extraneous part caught in the seam	Caused due to: • Handling error	
Garment parts Cockling, Pleated, Twisted, Showing Bubbles	Caused due to: • Handling error • Usage of wrong interlining/fusing under improper conditions	

Components of features wrongly positioned or misaligned	Caused due to: • Incorrect marking • Incorrect sewing not following the marker	
Seam Slippage	Caused due to: • Insufficient thread tension • Low count, unbalanced weave and filament yarns.	
Thread Breakage	Caused due to: • Improper m/c settings • Incorrect threading • Excessive needle heat • Incompatible needle, thread and fabric, damaged machine parts	
Yarn Severance	Caused due to: • Incorrect needle point • Damaged needle • High machine speed	

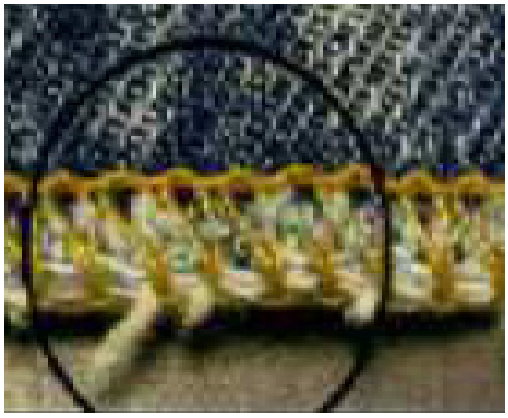
Puckering	Caused due to: • Tension pucker • Feed pucker • Puckering due to differential shrinkage • Puckering due to structural jamming	
Ragged Edges	Caused due to: • Knives on automatic sewing machine not dipping smoothly.	
Uncut thread	Caused due to: • Operators' negligence • Malfunctioning thread trimmer in automatic machines	
Oil stains	Caused due to: • Malfunctioning machines	

Fig.3.2.25: Stitching Defect

3.2.4 Trimming Defects

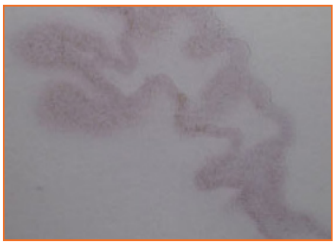
Untrimmed Threads	
Stitching thread cut during trimming	
Fabric cut due to mishandling on operators part.	
Stickers not removed	

Fig.3.2.26: Trimming Defects

3.2.5 Rectification of Defects

In the finishing department the garment goes through a lot of processes. These processesinvolve machine and human handling, which may cause damages to the garment.

The Packer should be able to segregate and quarantine damaged/ defective pieces and rectify repairable faults.

Defect Name	Cause	Remedy	Image
Oil stain	When the garment comes in contact with grease covered machine parts, it may leave some stains on the garment. This maybe also caused due to careless handling of garments.	Oil stains can be removed by using an aerosol petroleum-based solvent pre -treatment spray, or a pump-type detergent-based pre-treatment spray.	
Water Spots	When the wet fabric is left for too long before drying it might cause water spots on the fabric. It can result into color migration leaving blotches on the fabric.	Can be removed by using spot lifter chemicals.	
Crease Mark	Crease marks are caused when the fabric is folded or ironed incorrectly during the finishing process.	Creases can be removed by re ironing the garments.	
Shrinkage	Shrinkage is primarily due to high tension during the knitting, dyeing and the finishing processes.	Steam iron can be used.	
Untrimmed threads	Is caused if the loose threads are not trimmed properly by the finishing department.	Trim the loose threads manually by the help of a clipper or by using a loose thread trimming machine.	

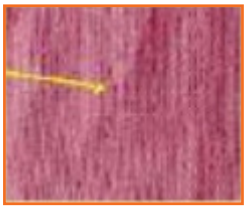
Misaligned buttons	This is caused due stitching error.	Can be sent back to the stitching department for realigning the buttons.	
Gout	Caused by a foreign matter accidentally woven into the fabric.	The foreign matter can be pulled out using a plucker.	
Pin Holes	Caused by broken needle, yarn breakage at knot, or improper cleaning.	Non repairable if the pin holes extends to the body of the fabric and is visible in the finished product.	
Seam Tears	Caused by turning equipment's used to reverse garments	The garment can be sent to the stitching department for the seam to be re stitched.	
Iron spots	Caused if the surface of the steam iron used is dirty.	Spot lifter chemicals can clear iron spots.	
Crease Removal	Caused during manufacture or during movements of garment due to crushing or incorrect handling.	Ironing (with spraying of water) will rectify this fault	

Fig.3.2.27: Rectification of defects

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
Garments Packaging	https://youtu.be/gyF5xX8ZiH4
Garments Inspection Method	https://youtu.be/jOYh5oP4-IQ
Categorization of garment defects	https://youtu.be/SPtD6mAZ0GU

Industry Visit

The purpose of visiting an apparel manufacturing unit is to get hands on knowledge about various processes involved in the work of a packer. During the visit you have to interact with packers and supervisors to understand how packing is done in industry. Make sure that you keep a notebook handy and note down any important points that come up during your interaction at the apparel manufacturing unit. When you go to an apparel manufacturing unit, you should:

- Understand the inspection and possible defects.
- Analyse how a packer:
  - » Identifies different defects in garments
  - » Rectifies defects in garments and labels before packing
  - » Gets familiarised with packing list
  - » Weighs goods correctly
  - » Prepares products for shipment
- Ask questions to packers/supervisors if you have any query.

Exercise

1. Packing is done to ensure that the garment is protected from moisture, dust and other natural elements.
   a) True
   b) False
2. Each package's labelling and tagging is distinct
   a) True
   b) False
3. Objectives of packing is for
   a) Reduce the risks of shipment
   b) Product promotion
   c) Protection of the garment
   d) All of the above
4. Through packaging Information can be conveyed like
   a) How to use,
   b) Transport,
   c) Recycle or dispose
   d) All of the above
5. The _____is the outer carton which holds all the smaller inner cartons
   a) Rigid Boxes
   b) Inner carton
   c) Corrugated Boxes
   d) Master carton
6. _____type of packing is normally used for shirts.
   a) Stand up pack
   b) Flat Pack
   c) Hanger Pack
   d) Dead Man Pack
7. Garments are of different colors and sizes this kind of carton packing type is known as _____
   a) Assorted colour solid size pack
   b) Assorted colour assorted size pack
   c) Solid colour assorted size pack
   d) Solid colour solid size pack
8. Materials and accessories are very important to support the process of unpacking.
   a) True
   b) False

9. Which of the followings are popularly used materials and accessories for packing?
   a) Inner collar band
   b) Butterfly
   c) Tissue paper
   d) All the above
10. What are the types of Cartons?
   a) Rigid Boxes
   b) Corrugated Boxes
   c) Master Carton
   d) All the above
11. Which of the following is the Common Cutting Defect?
   a) Bundling
   b) Drill Marks
   c) Ticketing
   d) Piles misaligned
12. A vertical yarn in a knit fabric is called _____
   a) Wales
   b) Course
   c) Weft
   d) Selvedge
13. _____is an arc shaped line lie across the width of the fabric.
   a) Barre
   b) Bowing
   c) Drop stitch
   d) Skewing
14. Strike through means that the adhesive resin appears on the outer face of the fabric being fused
   a) True
   b) False
15. _____is a fabric related issue which occurs in fabrics which are with low number of warp and weft yarns.
   a) Run off
   b) Seam opening
   c) Seam grinning
   d) Seam slippage

16. Untrimmed loose thread on a garment is a _____ defect.
    a) Major
    b) Critical
    c) Minor
    d) None of the above
17. The major reason for the seam grin is _____.
    a) Loose Stitch
    b) Too tight tension
    c) Cutting defect
    d) Finishing quality issue
18. The complete garments inside and out, initial checking is done in the finishing dept is done by the
    a) Quality Auditor
    b) Finishing checkers
    c) Buyer QC
    d) Finishing Supervisor
19. In the garment Industry, two main techniques are used to control quality: testing and inspection.
    a) True
    b) False
20. In a tape measure the smallest tick and any of the ticks shortly following or before it are _____.
    a) 1/4 inch
    b) 1/8 inch
    c) 1/16 inch
    d) 1/2 inch
21. Mismatched checks and stripes are occurred due to
    a) Finishing defects
    b) Washing defects
    c) Marker defects
    d) Packing defects
22. Fusing delamination, sometimes appear as bubbling or rippling is the complete breakdown of bond between fusible interlining and fabric surface
    a) True
    b) False
23. Humpy zipper Chains readily noticeable by its waviness.
    a) True
    b) False

4. Carryout the Process of Finishing

Unit 4.1 - Finishing Machines, Tools and Equipment used in Apparel Industry

Unit 4.2 - Documents to be maintained by Finisher

AMH/N2256

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Identify tools and equipment's used in finishing.
2. Discuss the essential finishing machines, tools and equipment's used in finishing.
3. Identify the functions of different tools and equipment.
4. Discuss the different finishers used in garment units.
5. Discuss about different finishing machines.
6. Define what documents are to be maintained by finisher.
7. Discuss the Standard Operating Procedure in finishing department.

UNIT 4.1: Finishing Machine, Tools and Equipments in Apparel Industry

Unit Objectives

At the end of this unit, participants will be able to:

1. Assess the essential finishing machines, tools and equipment's used in finishing.
2. Demonstrate the functions of different tools and equipment's.
3. Discuss the different finishers used in garment units.
4. Discuss about different finishing machines.

4.1.1 Introduction

There are lots of machineries, tools and equipments are used in finishing the garments like, Pressing machine, steam presses, leg press, trouser topper etc. in order to complete finishing treatment and produce zero defects of garments. After stitching, the raw garments are passed through various finishing processes and handled carefully prior to packing. Finishing techniques comprises of thread trimming, spot cleaning, and ironing, removing dust and loose threads and fibers.

4.1.2 Finishing Tools, Machines and Equipment

For getting finishing touch, defects free and quality passed garments are received from the sewing department. Main finishing activities like as thread removal, ironing or pressing, measurements check, quality inspection, folding, label attaching, hang tag and barcode attaching, poly packing, and packaging are implemented here. Every instruction of buyer and specifications has to be followed in this finishing department. To do these finishing activities clothing industry uses different types of finishing machines, tools and equipment. These types of garments finishing machine, tools, and equipment's are also used for attaching finishing accessories in garments industry.

Before arrange a final inspection, finisher uses some essential finishing machines, tools and equipment in order to complete finishing treatment and produce zero defects of garments. Some common names of finishing Machines, Tools and equipment in garments Industry are given below alphabetically:

- Bodies dummy
- Boiler
- Button attachment machine
- Carton staple machine
- Compressor
- Final inspection table
- Iron cap

- Iron plate
- Light checking box
- Local iron (For pressing or Ironing)
- Measurement tape
- Normal folding table
- Packing table
- Plastic staple attached
- Re-iron table
- Scissor
- Snap button attachment machine
- Spray gun (For spot remove)
- Stand-up shirt folding table
- Steam iron (For pressing or Ironing)
- Tag gun
- Thread cutting table
- Thread sucker
- Trimmer
- Vacuum table
- Weight scale

Thread trimmer: In the sewing process, the operator does not cut thread ends neatly. All untrimmed threads are cut at the finishing stage. Workers use manual thread trimmers to cut thread tails. Automatic thread trimming machines are also available.

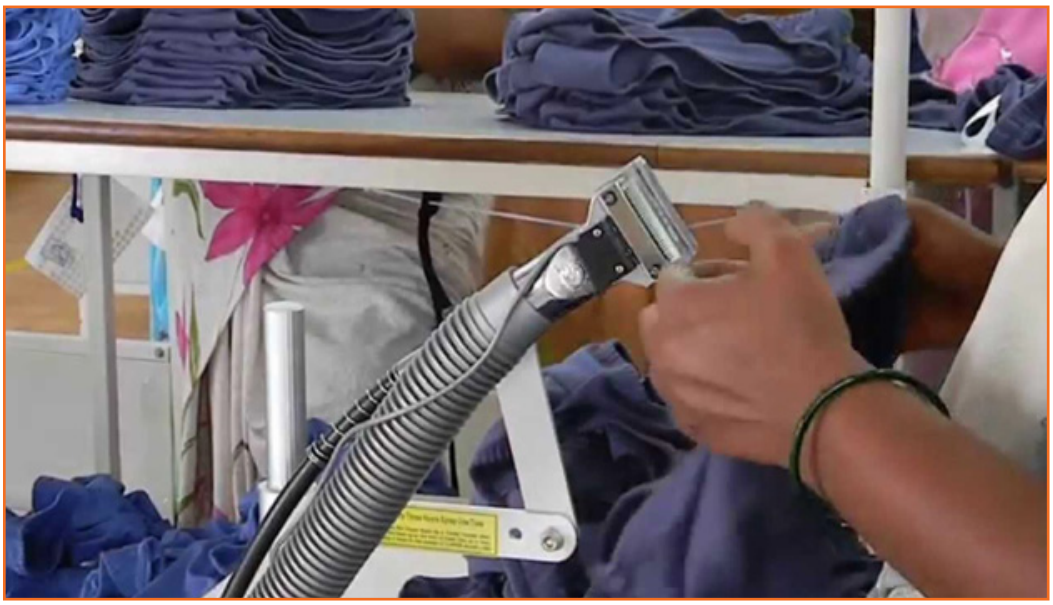


Fig.4.1.1: Thread trimmer

Thread sucking machine: The loose threads on the garment must be removed from the garment. For this thread sucking machines are used.

Manual thread removing equipment: In knits garments, loose threads are removed manually by using gum tapes.

Garment checking workstation: At the finishing stage all garments are thoroughly checked. Later garment lots are inspected. For this quality checking workstation is required with adequate light, display board, bins for storing segregated garments.

Vacuum pressing table and steam iron: A vacuum pressing table and a steam iron are used to remove creases on garments and to iron garments. Inside the vacuum table, there is air suction, which helps to grip the garment when it is ironed. Hot steam is supplied for steam irons to heat the iron.

Spotting gun: This equipment is used to remove stains from garments. Using a spotting gun, the solvent is sprayed at high speed to the stained area. The solvent dissolves stains found on garments. Sometimes liquid soap, solvent, and toothbrush are used for cleaning stains.

Kimble gun: Different types of tags, such as hang tags, price tags, and special tags are attached to folded garments, with a kimble gun.

Steam boiler: To keep the steam press hot all the time, steam generated in a boiler, is supplied to irons. Boiler with the single pressing workstation is also available.

Washing machine: For bulk washing, the factory uses a high-capacity washing machine. For washing a smaller number of garments and sample pieces, the domestic washing machine is used for removing dirt.

Sewing machine for repair work: Few sewing machines (especially a single needle lock stitch machine) are kept in the finishing section for repair work and part changing.

Measuring tapes: Measuring tapes are used to measure garments. Quality checkers use it while performing measurement checking.

Mending needles: Cut and holes in knits garment are repaired by mending. For mending, the worker uses hand needle or knitting needles.

Color box and color pencil: Sometimes, the factory needs to do touching work on the garment to match the shade of the print. Also to hide the unwanted spots, touching is required. For this, color pencils and a liquid color is required.

Needle detectors: This machine is used by garment manufacturers, who make children's garments. Garments are passed through the needle detector machine. If any metal part is there in the garment, the machine will detect it. This machine ensures that no broken needle parts or other metal parts are present in the clothes.

Other machines: Some factories used to do buttoning and buttonholing operations (Kaaj-button) in the finishing section. In that case, these two machines are considered as finishing machines.

Draw cord inserting tools: Factories need to insert draw cords in many garment products. Like waistband draw cord in bottoms (track pants, leggings) and in a hoody. A long needle or a device is used for inserting draw cords.

Buttons Tool: Tool for inserting buttons into the button loops.

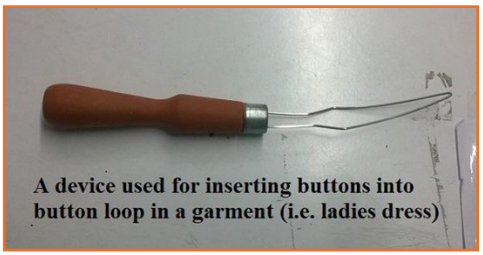


Fig.4.1.2: Buttons Tool

The above tools and equipment listed for common apparel products. There are many product specific tools available for finishing garments. Factories also use some other finishing equipment for garment finishing like -Form finishing and Channel Finishing.

4.1.3 Type of Finisher

Different types of finishers for different garments are given below:

1. **Universal Finisher:** This universal finisher is the preferred equipment for small to middle sized laundries and textile care plants. Spin-dry shirts, blouses, smocks or dustcoats are finished quickly without creases by the high performance silent hot-air fan. Dry garments, such as jackets, coats, etc., can also be finished on this machine. The individual functions are called step by step on the kicker plate.
2. **Shirt Finisher:** Shirt Finisher provides an excellent and complete finish for washed, pre-treated or wet processed shirts. The shirts are placed on hangers, buttoned or unbuttoned prior to the finishing operation. Seam tensioning elements, custom shaped shoulder forms, electrically heated pressing plates for the shirt pocket, the integrated suction plate and stretch-control are standard features.
3. **Form Finisher for Dresses & Shirts:** The height and shoulder width (270-450 mm/ 10.6-17.7 in.) of the dress form is adjustable and the sleeves can be closed with a zip. The individual dress forms turn through 360 degrees and can be exchanged within seconds.

4.1.3 Garment Finishing Machines

Finishing machine for garments is very essential to improve the quality. Factory must have complete department structure with finishing machine comprising of all relevant categories to have smooth operational function. Garment finishing machines must be provided with a complete sample for Packing along with all packing trims and approval from Technical department, which is certified by Q.A. Manager.

Fusing Machine for Garments

Fusing press machine for garments is very much important to maintain the quality of the products. The press machine carries out fusing by holding the fabric & the interlining between the conveyor belts while heating. The pieces are then pressed by rollers at the outlet. The required fusing temperature is achieved by bringing the belt into contact with the heating elements

Each day before start of production, the pressure on the left, right and center of the rollers shall be checked by means of the light weight woven fabric strips. One of the strip shall be passed through the T Shirt Heat Press Machine for garments while holding the other and tight. When the end passes out of the press, the strip will be pull to feel the pressure of the rollers.

T Shirt Heat Press Machine

Fusing t shirt heat press machine for garments is very much important to maintain the quality of the products. The press machine carries out fusing by holding the fabric & the fusible interlining between the conveyor belts while heating.

Industrial Metal Detector

A model garment is doing all products to be checked 100% with an industrial metal detector prior to shipment after all manufacturing operations have been completed. This check is being carried out after the final examination and packaging of the garment (incl. attachment of swing tickets) but before packing/boxing the goods in the metal free zone and are being the part of the final quality control procedure. Industrial metal detectors are an aid to

prevent metal contamination and are the best way to ensure that needle control procedures are effective, but are not to being used to replace an effective needle replacement policy. Metal detection are being implemented within the production process and used in conjunction with the broken needle procedure.

Best Handheld Metal Detector

Handheld metal detector, for broken needle fragments that are missing handheld detector will be used to scan the last bundle of work and items within a meter radius of the working place. All products must be scanned on a metal free workplace. The handheld detector is kept in the Production office. It is recommended to use a partition for metal detection or set a metal detection zone that clearly identifies metal checked and non-checked stock.

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
T-Shirts Folding And Packing	https://youtu.be/Nl1m96MOffI

UNIT 4.2: Documents to be maintained by Finisher

Unit Objectives

At the end of this unit, participants will be able to:

1. Recognise the documents to be maintained by finisher.
2. SOP in finishing section.

4.2.1 Documents to be Maintained by Finisher

Common documents

Production Receiving: Details to be maintained by finishing department for non-wash garments receiving from Production and Washed garments receiving from Washing.

Stores requisition: For trims and others to be prepared by finishing in charge and have to get approval from Production Manager or Finishing Manager to submit to Stores.

Layout: To be prepared by Work study department and set targets with the approval from P.M.

Hourly production records: To be maintained to monitor hourly targets. Production recorder has to forward it hourly to Finishing in charge through supervisors.

Garment return records / Style reconciliation: To be maintained and style reconciliation reports to be submit to F.M. on completion of each style

Approved Trim Card: This has to be approved by the Merchandiser and certified by Q.A. Manager prior to handing over to Factory. All sections have to follow this for fabric and all trims to be used for particular style.

Approved Packing Sample: Technical department have to provide a complete packing sample with all trims attached to the garment and with approved folding method. Q.A Manager has to certify this sample before sending to finishing machine department. Also a sample tag should be attached to the garment which includes complete details such as buyer, P.O. number, style number along with the signature of person's approved and certified.

Fig.4.2.1: Packing cartons

Q.C And Q.I. Instruction: Finishing machine of Q/A In charge has to provide complete instructions about the style/garments checking in finishing, Clock wise/sequence checking of garment, about ZONES of the garment to consider defects to be analyzed and clear instructions to be given to Q.C's and Q.I.'s

Target Setting: Section Q.C. In charge has to set target for Q.I's with consultation of I.E. department and has to monitor hourly individual production.

After Wash Checking: Q.I to be instructed by the Q.C about sequence of checking and zones of the garment. This can be illustrated with sketch or photo attached to the Q.C instruction sheet. Then Hourly quality inspection report to be maintained by Q.I's, entering the observations/ findings and it's quantities. Finishing Q.C and Finishing supervisor have to note defect and rework quantities hourly basis and assure acceptable quality levels are maintained in this points. Each Q.I.'s identification mark to be attached in an invisible place in each passed garment.

Pressing Quality: Finishing Q.C along with Finishing supervisor has to give instructions for pressing the garment. Q.C is responsible to assure the standard of garment pressing is acceptable.

Measurements: Waist and inseam of each garment to be measured on table. In addition to these, three pieces of each size covering full size set to be measured by finishing Q.C for all measurement points' specified. This exercise to be in practice twice a day and report to be submitted to Q.A.M daily. Q/C and Q/I should be instructed clearly about measuring points as per the particular buyer's measurement guide

Appearance Check: Finishing Q.C has to instruct Q.I's to perform this activity in Q.C instruction sheet. General appearance, presentation of the garment and trim placement to be taken care at this point. Each Q.I's identification label to be attached to the garment at an invisible place.

A.Q.L. Audit: Independent auditor has to conduct this audit for the quantity accumulated in each two hour intervals per day. Sample quantity for A.Q.L 1.5 to be selected randomly for each lot to do the audit. Result of this audit report is to be submitted to Q.A.M at completion. In the event of any lot is failed, it has to be kept in a separate location for rechecking, avoiding mix up with passed lots.

Pre Final Inspection (Internal): Finishing Q.C in charge has to conduct pre final inspection at A.Q.L 1.5.It is advisable to conduct first pre final when complete 10% of packing or any style to minimize recheck quantity, in case of inspection failed. Also the advantage of this percentage will be to do correction at a small quantity. Pre-final inspection report to be submitted to Q.A.M upon completion.

Final Inspection (Internal): This inspection to be conducted by Q.A.M at completion of at least 80% of each style before submitting merchandise to buyer's inspection.

Finishing A.Q.L. Audits – Daily and Monthly Summary: Finishing in charge has to maintain these summaries daily and monthly and submit to Q.A.M. to submit for management review. This is very important as it is a KEY PRODUCTIVITY INDICATOR (K.P.I) in finishing quality

Finishing Defects/Rejects – Daily and Monthly Summary: Finishing in charge has to maintain these summaries daily and monthly and submit to Q.A.M. to submit for management review. This is very important as it is a KEY PRODUCTIVITY INDICATOR (K.P.I) in finishing machine quality.

Buyer's Final Inspection Result Summary – Monthly: Finishing in charge has to maintain summary report for each month and submit to Q.A.M. to submit for management.

4.2.2 SOP for Finishing

SOP for apparel finishing needs following points included:

- First of all, pcs are received from wash lot wise. The Hourly auditor picks up pcs randomly, checks for hand feel and shade; does rough ironing and checks the measurements. If any issues are encountered, it is immediately informed to the Finishing In-charge and the pcs are sent for rewash.
- 100% process thread trimming is done.
- 100% process inspection is done by In Side Q/C. Defective garments are sent for alteration / rejection based on the type, size and location of defect.
- Ironing is done for In Side pass pcs.
- 100% process inspection is done by Top Side Q/C for Quality as well as measurement. Defective garments are sent for alteration / rejection based on the type, size and location of defect.
- All the pass pieces are attached with packing trims and packed after shade and size assortment to ensure that each carton should contain same shade garments only.
- The hourly auditor does 12 pcs. audit per hour per lot and does 3 pcs measurement checking per hour.
- The Internal audit is carried out after this. The auditor checks 32 Pcs twice a day (before lunch and after lunch). The auditor also inspects quality and measurements for each size covering all colors.
- 100% External inspection is done to confirm the Packing Accuracy.
- After This CT PAT (Customs Trade Partnership Against Terrorism) audit is done. After this process, Pre Final inspection is carried out.
- Pre Final is done to check the quality and measurement of the packed goods based on AQL 2.5 system per lot.
- If any of the above mentioned quality checks fail, the pcs are again sent to the 1st process i.e. Thread Trimming and entire cycle is reworked.
- After passing Pre Final, Buyer Inspection is done for quality and measurement of the packed goods based on AQL 2.5 system.
- Once, the packed goods pass the Buyer Inspection, the Goods can be shipped.

4.2.3 Reports in Finishing Section

Eight reports are being made in the Finishing Section:

- Finishing Quality Inspection Report
- Style/ Line OQL Summary
- Hourly Final Audit Report
- Measurement Chart Fit Audit Report (By Q/C)
- Measurement Chart Fit Audit Report (By Auditor)
- Inline/ Final Inspection report
- Weekly Root Cause Analysis chart
- Finishing Q/C, Iron Man and Folding man Counseling report

Try to analyze following sample sheet:

FIRST BULK REVIEW MEETING

BUYER:

ORDER NO:

Date:

Reviewed By:

SL NO.	TOPICS	RESULT			REQUIREMENT / PLACEMENT	SL NO.	TOPICS	RESULT			REQUIREMENT / PLACEMENT
		N/A	OK	NOT OK				N/A	OK	NOT OK	
01	Main Label					15	Heat Seal				
02	Care Label					16	Button				
03	Others Label					17	Spare Button				
04	Fabric Composition					18	Twill Tape				
05	UPC / EAN					19	Elastic				
06	Fabric Shade					20	Snap				
07	Fabric GSM					21	Rivet				
08	Shell 2 Shade					22	Thread				
09	Shell 2 GSM					23	SPI				
10	Fabric Handfeel					24	Measurement				
11	Lining Color					25	Zipper				
12	Embroidery					26	Mobillion tape				
13	Applique					27	Bow attach				
14	Embroidery Backing					28	Bartake				
15	Printing					29	Contrast				
16	Strass / Stone					30	Barcode				
17	Trimings					31	Workmanship				

NOTED	RESULT	REMARKS
Have buyer's all Counter Sample comments been followed ?	Yes / No	
Have you checked each size 1 pcs against approved sample ?	Yes / No	
Is fabric relaxed properly & reported ?	Yes / No	
Is wash test result ok ?	Yes / No	
Is contrast fabric shade ok & matched ?	Yes / No	
Pull test result passed @ 21 lbs ?	Yes / No	
Are all measurements within tolerance ?	Yes / No	
Is Size Set Result ok ?	Yes / No	
Final Comments:		

QC Incharge PM QM Tech. Head Merchandizer Buyer's Repr.

Fig.4.2.2: Sample sheet

Industry Visit

The purpose of visiting an apparel production unit is to get hands on knowledge about various processes involved in the work of an Pressman. During the visit you have to interact with Pressmen and supervisors to understand how work is done in industry. Make sure that you keep a notebook handy and note down any important points that come up during your interaction with apparel production team. When you go to an apparel production unit, you should:

- Examine various garment sizes.
- Understand various terms used in Garment charts.
- Ask questions to Pressmen/supervisors/Pressmen if you have any query.

Exercise

1. Form finishing machine is one of a _____ machine. Pressing
   a) Folding machine
   b) Steam removal machine
   c) Visually inspecting machine
   d) Finishing machine
2. Loose threads on the garment must be removed from the garment b using sucking machines
   a) True
   b) False
3. Spotting gun: This equipment is used to remove stains from garments.
   a) True
   b) False
4. Steam boiler: To keep the steam press hot all the time,
   a) True
   b) False
5. Needle detectors detect if any metal part is there in the garment
   a) True
   b) False
6. Universal finisher is the preferred equipment for small to middle sized laundries and Textile care plants
   a) True
   b) False

7. Which equipment provides an excellent and complete finish for washed, pre-treated or wet Processed shirts
   a) Universal finisher
   b) Form finisher
   c) Shirt finisher
   d) All of the above
8. After stitching, the raw garments are passed through various finishing processes and handled carefully prior to packing.
   a) True
   b) False
9. Garment finishing machine, tools, and equipment's are also used for attaching finishing accessories in garments
   a) True
   b) False
10. To detect broken needle fragments that are missing handheld detector will be used to scan the all the bundle of garments within a meter radius of the working place.
   a) True
   b) False
11. Final Inspection (Internal) to be conducted by _____at completion of at least 80% of each style before submitting merchandise to buyer's inspection.
   a) Q.A.M
   b) QC
   c) Buyer QC
   d) Inline Checker
12. The quality and colour of the garment are checked using _____
   a) Swatch cards
   b) Trim cards
   c) Spec sheet
   d) Kimble gun
13. Documents to be maintained by finishing department for non-wash garments receiving from Production and Washed garments receiving from Washing.
   a) True
   b) False
14. Finishing sections have to follow approved trim card for fabric and all trims to be used for particular style.
   a) True
   b) False

15. Technical department have to provide a complete packing sample with all trims attached to the garment
    a) True
    b) False
16. Q.I to be instructed by the Q.C about Clock wise/sequence of checking and zones of the garment.
    a) True
    b) False
17. Q.C is responsible to assure the standard of garment pressing
    a) True
    b) False
18. During checking general appearance, presentation of the garment and trim placement to be taken care of
    a) True
    b) False
19. Finishing in charge has to maintain Daily and Monthly Summary and submit to Q.A.M.
    a) True
    b) False
20. 100% process inspection is done by In line Q/C.
    a) True
    b) False

5. Carryout the Process of Packaging Operations

Unit 5.1 - Packaging Process

AMH/N2256

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Identify tools and equipment's used in Packing.
2. Discuss the essential finishing machines, tools and equipment's used in finishing.
3. Identify the functions of different tools and equipment.
4. Discuss the different finishers used in garment units.
5. Discuss about different finishing machines.
6. Define what documents are to be maintained by finisher.
7. Discuss the Standard Operating Procedure in finishing department.
8. Identify different defects in garments.
9. Rectify defects in garments before packing.
10. Understand and identify labels.
11. Use labels appropriately.
12. Familiarize with packing list.
13. Use packing list appropriately.
14. Understand weighing of packed goods.
15. Weigh goods correctly.
16. Prepare for shipment of products.

UNIT 5.1: Packaging Process

Unit Objectives

At the end of this unit, participants will be able to:

1. Identify different defects in garments.
2. Rectify defects in garments before packing.
3. Understand and identify labels.
4. Use labels appropriately.
5. Familiarize with packing list.
6. Use packing list appropriately.
7. Understand weighing.
8. Weigh goods correctly.
9. Prepare for shipment of products.

5.1.1 Packing

The packing operation consists of packaging process activities from folding, inner packing, outer packing, labeling, marking, inner layer etc. to finally packed in carton or as special instruction defined by buyer.

He/she should have good interpersonal skills, vigilant and very good eye sight to detect faults as it is the last step before the product. He checks and ensures correct labels, right tagging, suitable inner packaging, appropriate outer package, carton size, sealing of carton etc.

5.1.2 Labels

There is communication via a garment label is between the buyer and product. A garment label comprises of various information of the garments. The informations like buyer name, country of origin, types of fabric, types of yarn, fabric configuration, garments size, special instruction about care etc. If there is no label, a garment cannot be sold in the foreign market.

5.1.3 Types of labels

There are mainly two types of label and these are:

1. Main Label
2. Sub Label

Main Label

Main label comprises the Brand logo/name of the buyer such as H&M, American Eagle, Nautica etc. Brand name is the significant feature for any product. Because the customers are targeted the Brand during buying any product. A Brand name is the mental gratification about the product from the customer's point of view. A main label is totally certified the right quality of the brand.

Fig.5.1.1: Main label

Sub Label

Sub Label is not a label by itself but it includes different types of label. These are in the following:

- Care Label
- Size Label
- Price Label
- Composition Label
- Special Label
- Flag Label

All kinds of Sub Labels are discussed in the following:

Care Label:

Another eminent type of label is the Care label. It helps the clients to distinguish and understand how the product should be cared. It designates diverse types of care instruction about the garments like Bleaching, Washing, Drying, Laundering and Pressing, if it can be maintained in directed way, then the garments will achieve greater sturdiness and garments shade will be perfect for its highest period of time.

Fig.5.1.2: Care label

Fig.5.1.3: Size label

Size Label:

Size label indicates the size of the garments. Size labels are indicated as S, M, L, XL, where S for small, M for medium, L for large and XL for extra large.

Price Label:

Price label indicates the price of the garments.

Fig.5.1.4: Price label

Fig.5.1.5: Composition label

Composition Label:

Composition label specifies the manufacturing details and composition percentage of any garments. That means, it shows which fabrication (Cotton Sub denim, Cotton Regular denim etc.) and composition percentage (95% Cotton 5% Spandex, 100% Cotton etc.) have followed during its manufacturing.

Special Label:

Sometimes the buyer directed to use special label in the garments to entice the consumers on their items. Examples of special labels are 100% silk, 100% Cotton and 100% Leather etc.

Fig.5.1.6: Special label

Fig.5.1.7: Flag label

Flag Label:

Flag label is a very minor label covers Brands name or Brands logo of the buyer. It is attached in the side seam of bottom parts of the garments.

Manufacturer Label: Manufacturer label includes the manufacturer's code given by buyers. Most of the international buyers source garments from different part of the world and deal out those garment across the world. In case buyer needs to trail the manufacturer of a particular product, they use this code.

Batch Mark Label: A label that signposts which sewing line or batch has manufactured that particular garment. This label generally is not asked by buyers or brands. Few garment manufacturers add this label for the interior value and quality inspection process and correct which line had made the garment and which checker had check the same. This label is usually attached at side seam under wash care label.

Fig.5.1.8: Batch Mark label

Care instructions on care labels

- **Laundering:** It is a process of washing a garment with a detergent solution or bleach to remove dirt and stains.

Fig.5.1.9: Washing Instructions

- **Chlorine bleach:** A process carried out in aqueous medium before, during or after the washing process to remove stains or improve the whiteness of the fabric

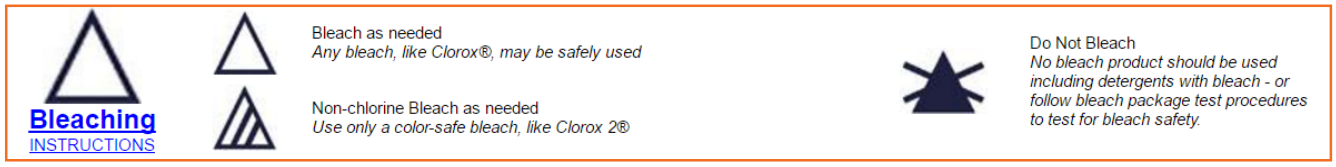


Fig.5.1.10: Bleaching Instructions

- **Dry cleaning:** A garment cleaning process by means of organic solvents such as petroleum and fluorocarbon. This process consists of cleaning, rinsing, spinning and dying.

Fig.5.1.11: Dry Cleaning Instructions

- **Tumble drying:** It is a process of removing residual water from a washed textile article, by treatment with hot air in a rotating drum.

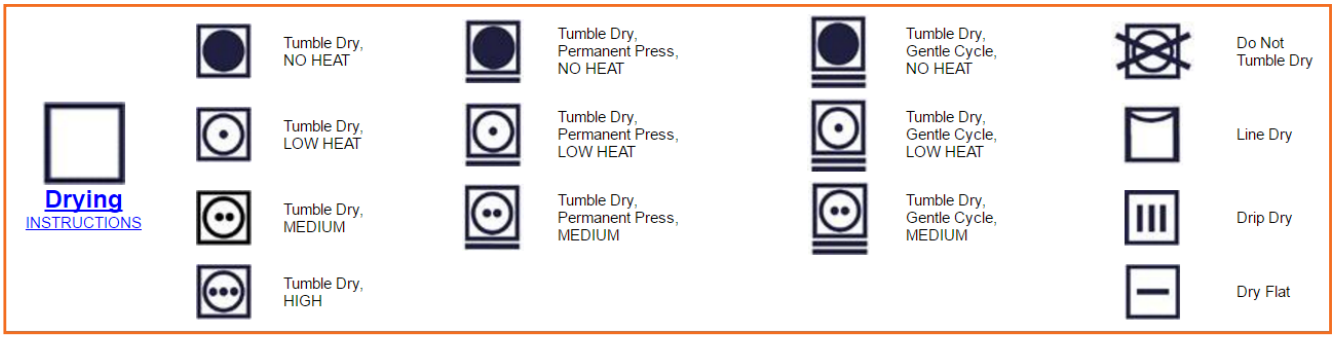


Fig.5.1.12: Dry Instructions

- **Ironing:** A method of pressing using a heated iron. This is a process used to remove the creases in a garment.

Fig.5.1.13: Ironing Instructions

Care Labeling Systems

International care labelling system: The international Symposium system was introduced in 1963 in Paris. International association for textile care labelling (GINETEX) replaced the international Symposium system in 1975. Below mentioned symbols are used in GINETEX system.

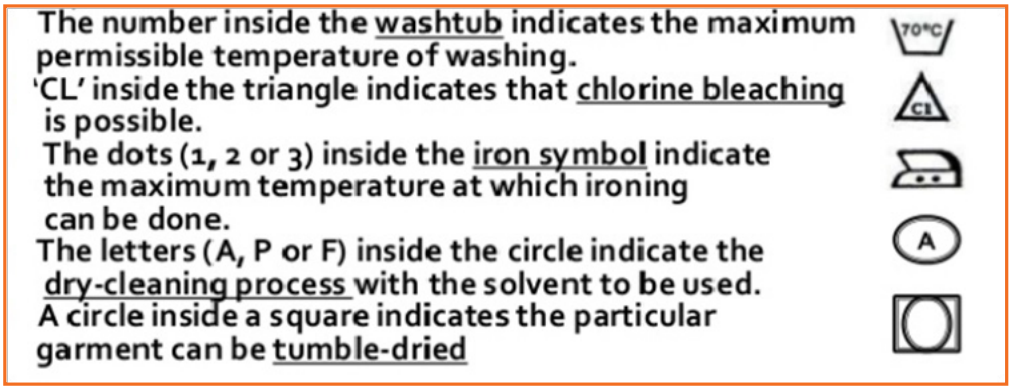


Fig.5.1.14: Care Labeling Systems

Japanese care labelling system: The Japanese care labelling system uses basic symbols and are very different from the other care labelling system.

SYMBOL	INSTRUCTION
	May be ironed directly at 180-2100C
95	Machine wash at 950C or less water temperature
30	Hand wash in water temperature of 300C or less
	Wring softly by hand or spin dry by machine quickly.
	Lay flat to dry
	Use chlorine bleach.
	Any dry-cleaning agent can be used

Fig.5.1.15: Japanese care labelling system

British care labelling system: The British care labelling system uses graphic symbols.

SYMBOL	INSTRUCTIONS
	Washtub indicates washing.
	Triangle indicates bleaching.
	Iron indicates ironing.
	Circle indicates dry-cleaning.
	Square indicates drying.
	Cross superimposed on any of the preceding five symbols indicates that such a treatment or process should be used.

Fig.5.1.16: British care labelling system

5.1.4 Labelling Categories

1. Mandatory labelling
2. Voluntary labelling

Voluntary labelling

It is not a mandatory label and is affixed to the garment only if the manufacturer chooses to. The following are examples of voluntary labelling

1. **Brand labelling:** Brand labels work as a popular tool in advertising. The brand label bears the name of the brand under which the garment was manufactured.

Fig.5.1.17: Labelling

2. **Union labelling:** Union labelling assures the customer that the garment was made under fair and good working conditions.

Fig.5.1.18: Union labelling

Mandatory labels

Mandatory labels are label's which are regulated by law. The information is mandatory and has to be declared by the manufacturer. Information related to health and safety, environmental issues etc. are mentioned on mandatory labels.

Silk regulation 1932, Wool product labelling act 1939 (amended in 1986), Fur products labelling act 1952 (amended in 1980), Permanent care labelling regulation 1972 are the few regulatory for mandatory labels.

5.1.5 Packing List

It is very important for the packing section to pack goods as per the packing list provided by the merchandiser. The packer has to pack the goods as per ratio/assortment and this is then inspected.

The packing list is then used by the commercial department to make final packing listfor forwarding agent and customs dept. to determine the total shipment weight and volume and whether the correct cargo is being shipped. A merchandiser should prepare a clear packing list so that all the purpose could be served.

The sample packing list below will help understand the how a packing list is made.

Sample Packing List-1

	Sunday, August 10, 2013
Buyer	ABC
Item Description	LOOSE KNIT SHAKER RIB L/SLV CARDIGAN
Style	M-S-9S066-AST-GO
Po Number	M-S-018700
Order Qty	4,824 Pcs
Ship Qty	4,824 Pcs
Total Carton	134 Ctn

Fig.5.1.19: Sample Packing List-1

Packing : Assorted color, assorted size

Ctn No	Ctn	Colour	Size			Pcs/Ctn	Total pcs	Remarks
			S	M	L			
1-134	134	GRAVEL	2	4	2	8 Pcs	1,072 Pcs	
		NEW CREAM	2	4	2	8 Pcs	1,072 Pcs	
		TIBET NATURAL	2	4	2	8 Pcs	1,072 Pcs	
		BLACK	2	6	4	12 Pcs	1,608 Pcs	
Total	134		8	18	10	36 Pcs	4,824 Pcs	

Fig.5.1.20: Packing : Assorted color, assorted size

Net Weight : 13 Kgs

Gross Weight : 16 Kgs

Carton Meas : 30" X 18" X 17"

Total CBM : 20.1536

Commercial department final packing list

Carton main shipping marks for both long side:

Style : M-S-9S066-AST-GO

Carton : .....of.....

Gross Weight :..... Kgs

Color Code : AST

PO : M-S-018700

Made in :BANGLADESH

Net Weight : ..... Kgs

QUANTITY : 36 Pcs

Carton side shipping marks for both short side:

Color(s)	S	M	L	TOTAL
GRAVEL	2	4	2	8 PCS
NEW CREAM	2	4	2	8 PCS
TIBET NATURAL	2	4	2	8 PCS
BLACK	2	6	4	12 PCS
TOTAL	8	18	10	36 PCS

Fig.5.1.21: Carton Measurement: 30" X 18" X 17"

Without correct info commercial dept. cannot prepare final packing list. See below a sample packing list prepared by commercial dept.

PACKING LIST (Prepared by commercial dept.)

EXPOTER/SHIPPER NAME: …… LTD. …… ……., BANGLADESH.	**INVOICE NO.: …….** **DATE: 20-06-2011** **EXP NO.: ……..** **DATE: 20-06-2011** **L/C NO.: ……..** **DATE: 02-02-2011** **CAT :** **H.T.S. CODE NO.:**
Applicant: E.S. SUTTON INC. 1400 BROADWAY, 26TH FLOOR NEW YORK, NY 10018, USA.	**B/L NO.:** **DATE:** **CARRIER:** **E.R.C. NO.: RA-79178** **TERMS OF PAYMENT:** IRREVOCABLE LETTER OF CREDIT AT SIGHT.
NOTITY: **A) E.S. SUTTON INC** 115 KENNEDY DRIVE SAYREVILLE, NJ 08872, CANADA.	**L/C ISSUIN BANK:** HSBC BANK USA, N.A. 2 HANSON PLACE, BROOKL YN, NEW YORK 11217, USA. **ADVISING BANK:** FIRST SECURITY ISLAMI BANK LTD. BANANI BRANCH, PLOT # 80, BLOCK # B, KEMAL ATATURK AVENUE, DHAKA-1213
PORT OF LOADING : DHAKA AIRPORT,	**FINAL DESTINATION : VANCOUVER, CANADA.**
PORT OF DISCHARGE : VANCOUVER, CANADA.	**SHIPPED PER : AIR**

SHIPPING MARKS	DESCRIPTION OF GOODS	CTN NO	CTN QTY	PCS CTN	TOTAL PCS
SHIP TO: WAL-MART CANADA DEPT: 33 BRAND NAME: GEORGE ITEMDESCRIPTION: FUR TRIMMED DUSTER SWEATER MEASURMENTS: 17 X 17 X 12 INCH MADE IN BANGLADESH **SIDE MARK** DEPT: 33 BRAND NAME: GEORGE ITEM: FUR TRIMMED DUSTER SWEATER STYLE: GRF120307G PO: 84233VM, 84234VM,84267VM COLOR: TRUE BLACK SIZE: S(7/8)-M(10/12)-L(14)-(2-3-3) QUANTITY: 8PCS CARTON-OF- G.W : 12.74 LBS PRICE TICKET: YES	FUR TRIMMED DUSTER SWEATER **STYLE NO** GRF120307G **PO NO** 84233VM	1-445	445 Ctn	8 Pcs	3,560 Pcs
TOTAL			**445 Ctn**		**3,560 Pcs**

GRAND TOTAL CARTON	:	445 CTN
GRAND TOTAL PCS	:	3,560 PCS
GRAND TOTAL NET WEIGHT	:	2,051.00 KGS
GRAND TOTAL GROSS WEIGHT	:	2,571.00 KGS
GRAND TOTAL MEASURMENT	:	17" X 17" X 12"
CARTON MEASURMENT	:	24.00 CBM
COUNTRY OF ORIGIN	:	BANGLADESH

For, …….. Ltd.

Authorized Signature

Fig.5.1.22: Packing List prepared by commercial department

5.1.6 Carton Marking

Carton marking and labelling is necessary and a very important process in preparing for shipping the cartons.

Carton marking guide

The buyer usually specifies how the carton has to be labelled and marked to facilitate easy identification by receivers.

Exporters normally need to put the following markings on cartons to be shipped:

- Shipper's mark
- Country of origin (U.S.A.)
- Weight marking (in pounds and in kilograms)
- Number of packages and size of cases (in inches and centimeters)
- Handling marks (international pictorial symbols)
- Cautionary markings, such as "This Side Up" or "Use No Hooks" (in English and in the language of the country of destination)
- Port of entry
- Labels for hazardous materials (universal symbols adapted by the International Airi Transport Association and the International Maritime Organization)

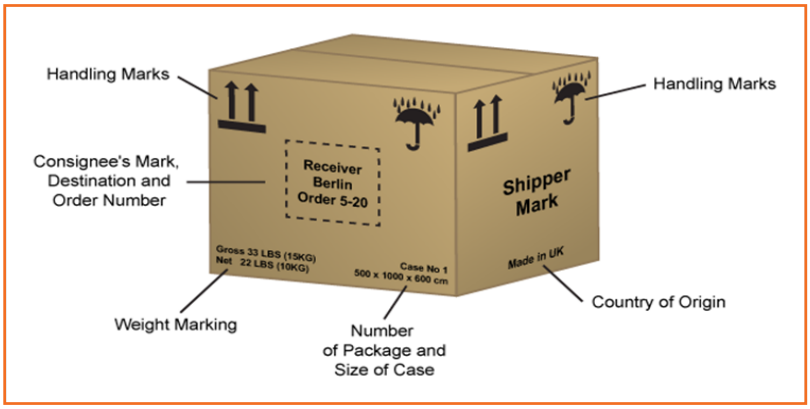


Fig.5.1.23: Carton marking

Pictorial markings on cartons

Various pictorial marks can also applied to the carton on the basis of its contents, the carton may be handled by those who do not speak either the language of the country of origin or destination and pictorial markings are very helpful to overcome this.

Fig.5.1.24: Pictorial markings on cartons (a)

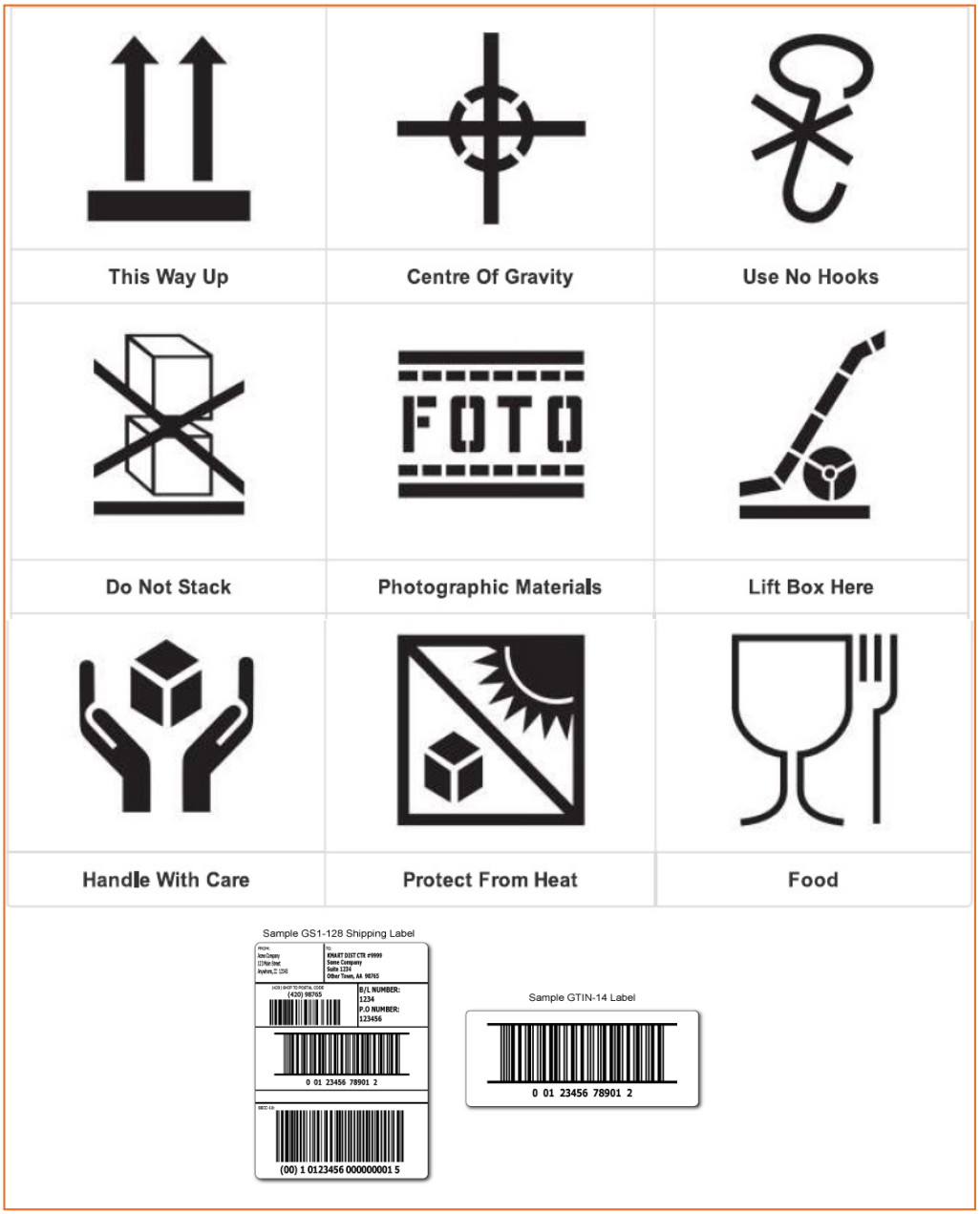


Fig.5.1.25: Pictorial markings on cartons (b)

5.1.7 Weighing of Packed Goods

The packed cartons have to be weighed and measured in order for it to be prepared for dispatch. Equipment's that are used for weighing and measuring packages should bare a stamp of Government approval. This is to ensure that the equipment has been made of a particular standard and also confirms the accuracy of the weight.

Government stamps generally take the form of either:

- A lead plug embedded into the equipment on which is stamped a numbered crown and year
- A series of stickers attached to the equipment

Information plates on some equipment also give other required details. The following are examples of the stamps and stickers seen on approved weighing and measuring equipment:

Fig.5.1.26: CE Stamp

Fig.5.1.27: Stamp - Approved

The packages have to be appropriately marked in the units used in the country that the package will be dispatched to or as specified.

- India uses the Metric system of measurement.
- Britain uses Imperial system of measurement.
- U.S uses United states customary units.

Table of approximate conversions

LENGTH:METRIC TO U.S	WEIGHT (MASS):METRIC TO U.S
1 m = 1.09 yd	1 kg = 2.20 lb
1m = 2.28 ft	1 g = 0.04 oz
2.54 cm = 1 in.	0.45 kg = 1 lb
0.30 m = 1 ft	7.35 g = 1 oz

Fig.5.1.28: Approximate conversions

5.1.8 How to Calculate Net and Gross Weight

Net weight is the total weight of an item (gross weight) minus the weight of any containers or packaging also confined within the gross weight. To determine the net weight you must know both the total weight of the object and the tare weight, or the weight of everything except the item you are seeking the net weight for.

Determine the gross weight of the object of interest by placing the object, including the container or packing, on the scale. Write down the reading on the scale, known as the **gross weight**.

Fig.5.1.29: Weight Calculation

Take away the object to be weighed, from the container or packaging and place aside. Place all of the packaging or the containers on the scale and record the total weight, known as the tare weight. Deduct the tare weight from the gross weight using a calculator to obtain the net weight. In a nutshell, **Gross Weight** is the total weight of a cargo of goods, including their packaging, like pallets, crates.

Net Weight is the weight, or mass, of the goods themselves without any packaging. **Tar e** is the weight of packaging or a container without the goods.

5.1.9 Introduction to Measurements

If you are given a few bricks and asked to construct a wall in a straight line, what would you do? Before doing anything, you might ask how long this straight line is. In asking this question, you are trying to understand the outline of the structure in terms of some numbers. For instance, by "how long", you are asking for the "length".

- Measurement is the method of conveying a number to anything as a feature such as height, weight, length, width, volume, etc. Typically, this assignment of numbers is according to a standard measurement such as feet, kilo, meter and litre.
- For example, the height of a person is measured in feet and inches.

5.1.10 Why and Where Measurements is Needed?

How often do you buy an object that does not fit your room or buy a dress that is oversized or does not fit at all? Perhaps, rarely or never. But, how do you decide if a piece of clothing fits you or not? You take measurements.

- In your daily work too, you need measurements to get the right size and shape of things.
- In construction, for example, you may need to measure the height of a roof and capacity of a container.
- Similarly, you may need to measure the angle and slope of a ramp.

Typically, depending on the trade rules and local custom, the units of measurements vary. For example, in some places, meters may be prominent and in some others feet.

- As a Helper Mason, you need to be conversant with the various units of measurement and their conversion.
- To understand one system of measurement in terms of another system, conversion is needed.

5.1.11 Different Modes of Measurements

Depending on what you are measuring, there will be a mode of measurement. Here are a few modes of measurements.

- Linear measurement - For measuring the distance between two points, linear mode of measurement is used. Examples of linear measurements are length, breadth, height, and thickness of a wall.
- Measurement of Area - For measuring the amount of space inside the boundary of a flat and 2-dimensional object, area is used as a mode of measurement. The space covered by the boundary of your house is a typical example of area.

Note: *Linear measurements help you to measure even an area.*

- Volume measurement - For measuring the capacity, which is the amount of space within a 3-dimensional object, volume is used as a mode of measurement. An example of volume measurement is the capacity of water that can be occupied in a tank of a certain length, breadth, and height.
- Weight measurement - For measuring the quantity or heaviness of any object, weight is used as a mode of measurement. For example, the heaviness of a cement bag.

5.1.12 Measuring Aids and Units

Each mode of measurement is measured with the help of a measuring aid. Here are a few measuring aids.

- **Linear measurement:** Use the mason square or measuring tape to measure the distance between two points. The popular unit of measurement is in meters or feet. Note that linear measurements help you to determine area and volume too.

Note: *Linear measurements help you to determine area and volume too.*

- **Weight measurement:** Use weighing machines to measure the quantity of any object. The unit of measurement is in kilograms or tons.
- **Angular measurement:** Use the compass or the measuring tape to measure the size of the angle between two straight lines that meet at one point.
- For compass, the unit of measurement is in degrees.
- For measuring tape, the unit of measurement is in feet and meters.

5.1.13 Taking Measurements

Follow the precautions while taking measurements:

- While using the mason square or measuring tape, be consistent in using either meters or feet.
- While using the compass, make sure that you do not commit the parallax error.
- While using the tube level, ensure that there is no air bubble in the tube.

5.1.14 Different Standards of Measurement

FPS, CGS and MKS are the three standardized systems of units used to measure the fundamental quantities length, mass and time.

- In Foot-Pound-Second (FPS) system the unit of length is foot, unit of mass is pound and unit of time is second.
- In Centimeter-Gram –Second (CGS) system the unit of length is centimeter, unit of mass is gram and unit of time is second.
- In Meter-Kilogram-Second (MKS) system the unit of length is meter, unit of mass is kilogram and unit of time is second.

5.1.15 Conversion Tables

The following tables will help you to convert quantities from one standard system to other.

Length	Area	Capacity	Weight
1 mile = 1.609 km	1 sq. mile = 2.59 km²	1 gallon = 4.5461 litres	1 ton = 1.016 tonnes
1 yard = 0.9144 m	1 acre = 0.4047 hectares	1 US gallon = 3.785 litres	1 lb. = 0.4536 kg
1 foot = 0.3048 m	1 acre = 4046.86m²	1 pint = 0.5683 litres	1 oz. = 7.3495 g
1 inch = 25.4 mm	1 sq. yard = 0.8361 m²	1 cu. inch = 16.3871 cm³	1 US ton = 0.9072 tonnes
	1 sq. foot =0.0929 m²		
	1 sq. inch = 645.16 mm²		

Fig.5.1.30(a): Conversion Tables

Length	Area	Capacity	Weight
1 km = 0.6214 miles	1 km2 = 0.3861 mile²	1 litre = 0.22 gal.	1 tonnne = 0.9842 ton
1 m = 1.0936 yards	1 km2 = 247.105 acres	1 litre = 0.2642 US gal.	1 tonne = 1.1023 US ton
1 m = 3.2808 feet	1 hectares = 2.4711 acres	1 litre = 1.7598 pint	1 kg = 2.2046 lb.
1 mm = 0.0394 inches	1 m2 = 10.7639 feet²	1 m3 = 219.969 gal.	1 kg =35.274 oz.
	1 mm2 = 0.0016 inches²	1 m3 = 35.3147 feet³	

Fig.5.1.30(b): Conversion Tables

Note: *Use the calculator for the conversion of quantities from one standard to the other.*

Conversion from FPS to CGS - Example

If a man is 6 feet tall, what is his height in centimeters?

- One foot is equal to twelve inches; hence, 6 feet is equal to six times of twelve that is equal to 72 inches.
- As one inch is equal to 2.54 centimeters, 72 inches is equal to 2.54 times of 72 that is equal to 182.88 centimeters.

Conversion from CGS to MKS - Example

How many kilograms are in 1563 grams of cement?

- 1000 grams would make one kilogram of cement.
- Hence, 1563 grams of cement has 1.563 kilograms.

Conversion from FPS (Cubic Yard) to FPS (Cubic Foot) - Example

How many cubic yards is 54 cubic feet.

- 1 yard is equal to 3 feet.
- Hence, 1 cubic yard is equal to 3x3x3 feet that is equal to 27 cubic feet.
- Hence, 54 cubic feet is equal to 2 times 27, that is, 2 cubic yards.

Conversion from FPS to CGS - Example

If distance travelled by you from city A to City B is 50 miles, then calculate the distance in kilometres.

- 1 mile is equal to 1.6 kilometers.
- Hence, 50 mile is equal to 5 X 1.6 that is 80 kilometres.

5.1.16 Net and Gross Weight

- **Net weight** is the actual weight of the product without any packing material.
- A **gross weight** is the total of the actual weight of the product plus the packaging weight.

  Ex: The weight of just a shirt (without packaging) is 100 gms, the weight of poly-pack of the shirt is 1 gm, weight of clips used for packing is 2 gms, weight of carton is 50 gms. Here the net weight of the product will be 100 gms (weight of just the shirt). Whereas, the gross of the product will be:

  Weight of shirt (100 gms) + weight of poly-pack (1 gm) + weight of clips (2 gms) + weight of carton (50 gms)

  = 153 gms (weight of shirt plus weight of packaging material)

5.1.17 Quality

Quality is of upmost importance in any aspect of business. Quality equals to customer stratification. In the garment industry quality control plays a major role right from the initial stage of procuring raw materials to the final finished garment. Quality is based on many aspects. The garment has to be as per order, free or defects and within the given budget and time frame.

Some common factors involved in garment quality are:

- Fabric Quality
- Quality of accessories
- Quality of cutting
- Quality of machines
- Quality of sewing
- Quality of washing
- Quality of finishing
- Quality of Packing

In an organisation, the quality assurance department is responsible for establishment and maintenance of all activities and functions aiming at attaining the required quality.

5.1.17.1 Organisational Structure

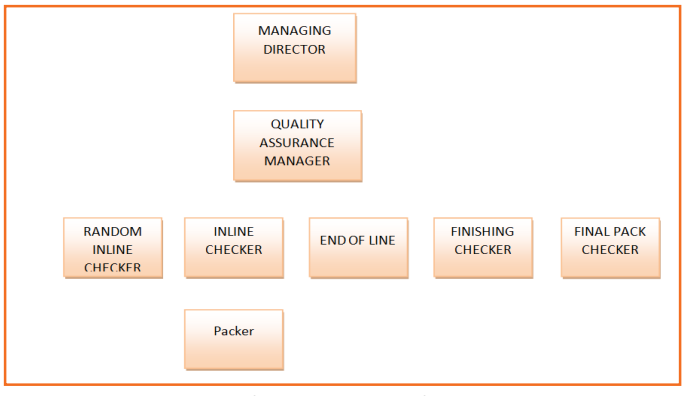


Fig.5.1.31: Organisational Structure in Quality Department

Quality assurance manager

- Plays an important role and responsible for assuring that products meet certain standards in quality.
- Responsible for developing and testing and inspecting methods and.
- Monitor testing procedures and ensures all tests are performed as per procedures.
- Ensures all safety standards are met and is responsible for the welfare of the people in the department.

Cutting checker

- Responsible for checking and inspecting cut parts.
- Responsible for reporting any fault or problem relating to spreading, cutting and bundling of cut parts. Inline and Random inline checker.
- Responsible for checking semi stitched garments.
- Responsible for feeding back faults to the cutting department.
- Responsible for generating reports relating to all inline inspection.

End of line checker

- Responsible for doing the final inspection on all the sewn garments.
- Responsible for generating final inspection reports.

Packer

- Responsible for checking quality of goods at the time of packing.
- Informing supervisors about any defects and getting them rectified.
- Ensuring the packing material is of high quality.
- Ensuring all paperwork is complete before final shipping.

5.1.18 Understanding Quality Standards

Maintaining quality standards as per the buyer's instructions is very important for every manufacturer. Repeat orders from the buyers will vastly depend on the quality standards set and maintained by the manufacturer.

People in the quality department have to follow specifications given in the Specification sheets, Trim cards and swatch cards to match the quality standards that the buyer expects from them.

Swatch Cards

The quality and colour of the garment are checked using swatch cards.

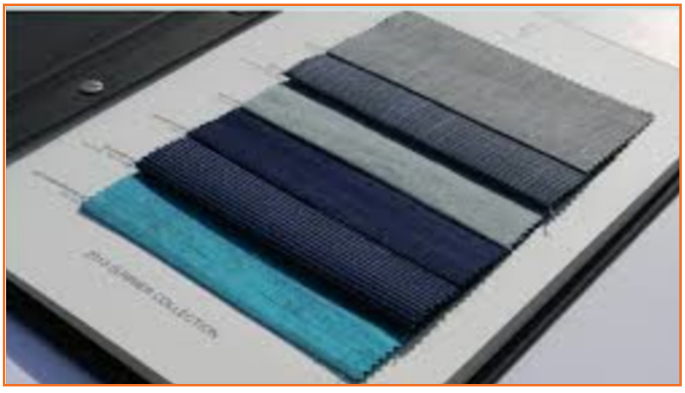


Fig.5.1.32: Swatch Cards

Specification Sheet

Contains details of the measurements, the sketch of the garment, fabric details and other important instructions given by the buyer on placing an order.

DESIGNERS NEXUS SPEC SHEET

FACTORY:	BUYER:	DATE:	FABRICATION	STRETCH POPLIN
P.O. #	REF#	Q:	FABRIC DESIGN	SOLID
STYLE #	BODY# T-2070	APP. BY:	TRIM	

DATE/ INNITIALS

JUNIOR TOP/DRESS/JACKET	M	1ST FIT	RVSD SPEC	2ND FIT	APPRVD SPEC
BODY LENGTH FROM HPS	24 1/2				
ACROSS SHOULDERS	14 1/2				
CHEST 1" BELOW ARMHOLE	18 1/2				
WAIST 15 1/2" BLW HPS	15 1/2				
WAIST AT SEAM					
BOTTOM SWEEP	19				
SHIRT TAIL	2 1/4				
SLEEVE LENGTH FROM CB					
SLEEVE LENGTH FROM SHOULDER	10 1/2				
ARMHOLE CURVED	9 1/2				
BICEP (1" BELOW ARMHOLE)					
SLEEVE OPENING	5 1/2				
TOP CUFF OPENING	5 3/4				
CUFF HEIGHT	3				
NECK OPENING	6 1/2				
FRONT NECK DROP FROM HPS TO SEAM	2 1/2				
FRONT NECK DROP FROM HPS RUFFLE SM	12 1/2				
BACK NECK DROP	1/2				
COLLAR POINTS	2 1/2				
COLLAR LENGTH PT TO PT	16				
COLLAR WIDTH AT CB	2				
COLLAR STAND HEIGHT	1 1/8				
FRONT PLACKET (OVERLAP) WIDTH	1				

SKETCH

BUTTONS:	9PCS 16L 2HOLE PEARLIZED W/RIM DTM
TOP STITCHING:	DTM BODY

COMMENTS:

APPROVALS:

Fig.5.1.33: Designers Nexus Spec Sheet

Trim Cards

Trim cards or sample cards give specifications of the accessories and trim samples that are used in the garments. It helps the buyer to select the trims and accessories he would like on the garment ordered by him.

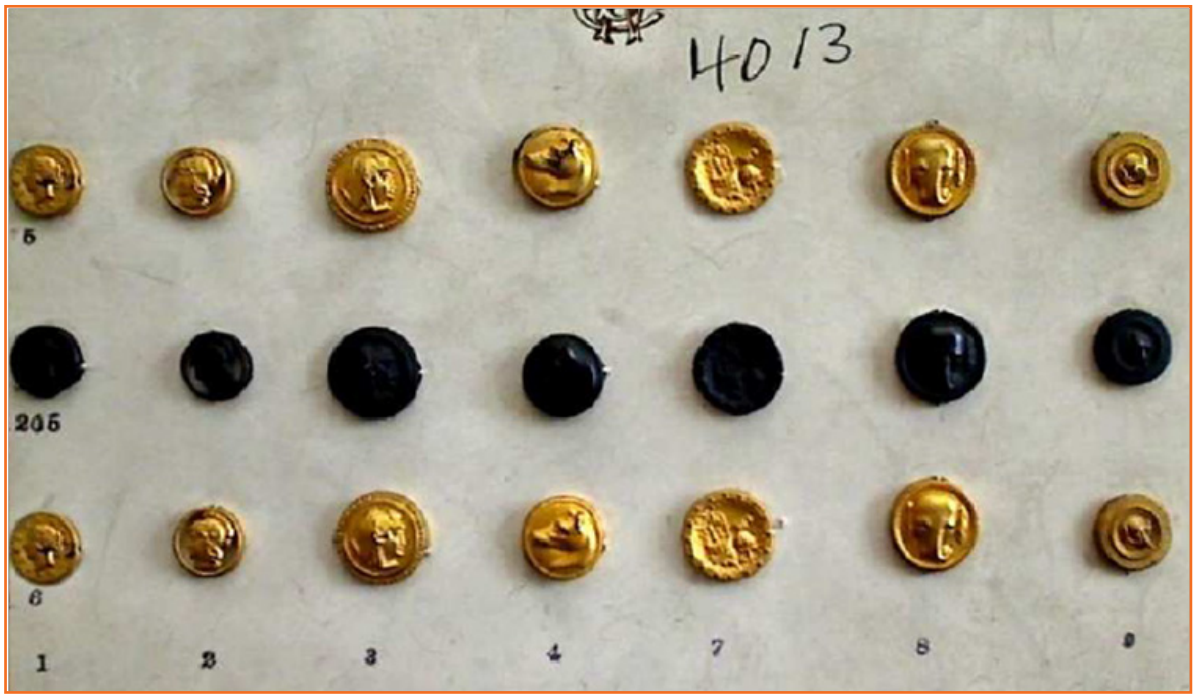


Fig.5.1.34: Trim Cards

Button Sizes: Button sizes are an important factor for quality checking. A packer has to ensure that the buttons used in garments are of the size, colour and shape specified in the design specification. In button sizes, ligne(L) is the traditional unit for measuring buttons.

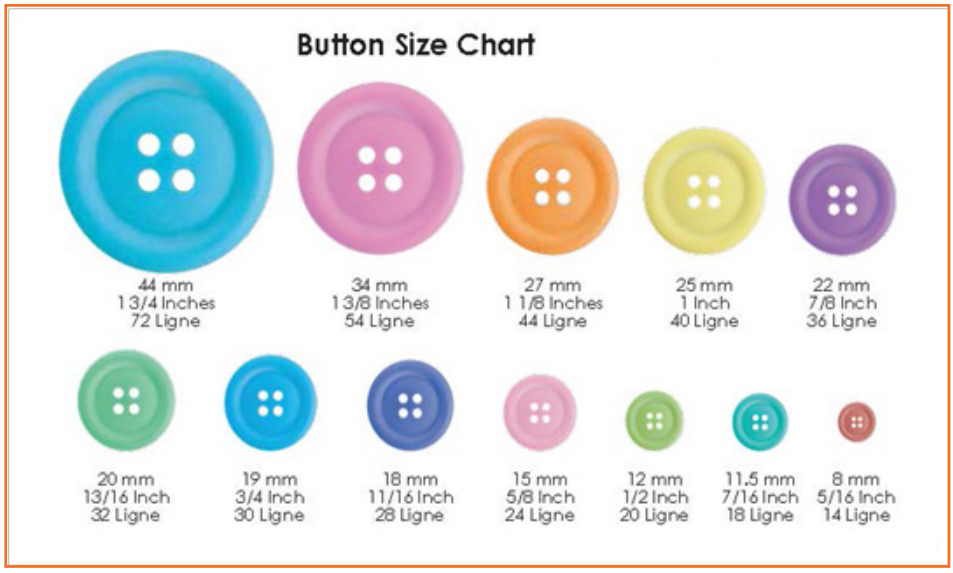


Fig.5.1.35: Different Sizes of Buttons

A packer has to ensure that the quality of the garments is according to specification so that high quality material is prepared for shipping.

5.1.19 Packaging Defects

Some common packaging defects are:

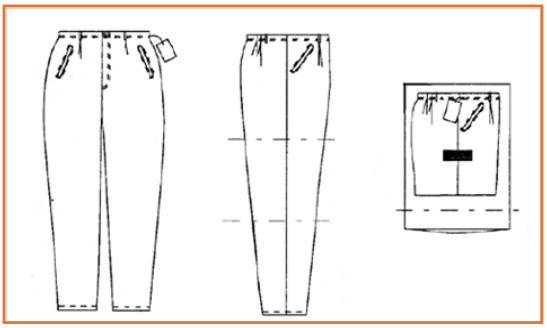
Defects	Description	Image
Package Defects	• When discrepancies are found in carton labeling information, pack quantities/quality or methods of packaging. • Correct packages should be sourced.	
Product in Carton incorrect	• Mixed sizes in same carton, mixed sizes within same garment i.e. warm-up's, incorrect carton count, incorrect style / size / color etc. • Any mis-packed cartons should be considered defective and replaced.	
Polybag Not as specified	• Incorrect polybag size, ventilation holes, missing / incorrect recycle info, incorrect material etc. • Polybags that are not to specification should be considered defective and repackaged.	

Stickers / hangtags / Carton labels (missing/incorrect)	• Missing / incorrect carton labels, UPC labels, price tickets, hangtags, hangtags bleeding etc. • These labels, tickets etc. should be replaced immediately.	
Missing labels/tags	• No tags/labels attached to the package/carton leading to problem in identification and tagging.	 With Tag Missing tag

Fig.5.1.36: Defects

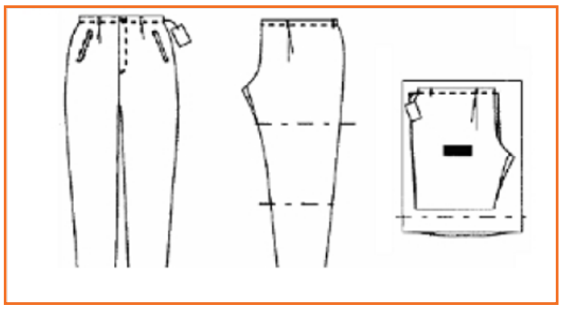
5.1.20 Folding Garments

Different types of garments are made and packed in an apparel/garment organisation. These have to be correctly folded before packing them in bags, cartons etc. Some methods of folding garments for packing are given below:

1a. Pant Folded Side to Side	
• Close zipper and waist buttons. • Fold pant in half, with inseam to out seam keeping ends of waistband to inside of pant. • Fold leg in thirds, fold bottom edge to above knee and fold up to waist edge.	

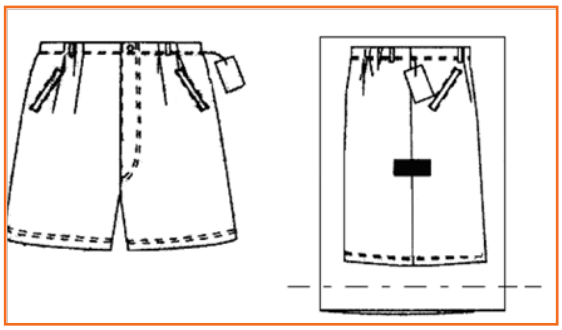
1b. Pant Folded Front to Back

- Close zipper and waist buttons.
- Fold pant front to back with fold at rise.
- Fold leg in thirds – bottom edge to above knee and fold up to waist edge.



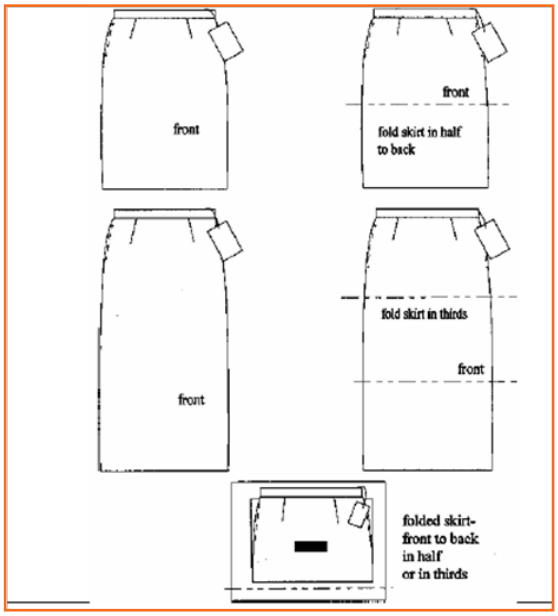
2. Shorts

- Close zipper and waist buttons.
- Fold short in half with inseam-to-inseam keeping ends of waistband to the inside of short.



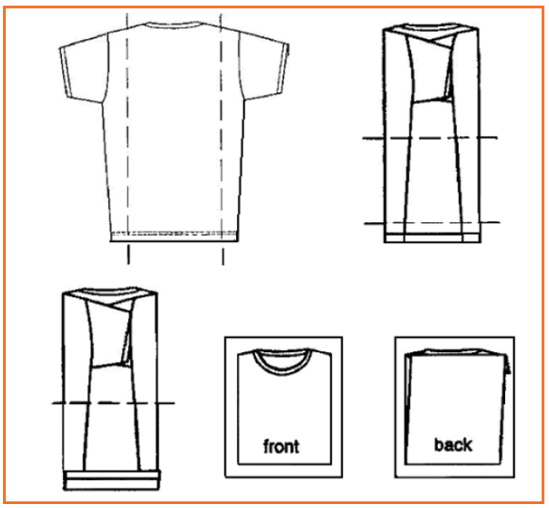
3. Short or Long Skirt

- Close zipper and waist buttons.
- Lay skirt flat – front to back.
- Fold short skirt in half bringing hem to waist.
- Fold long skirt into thirds.



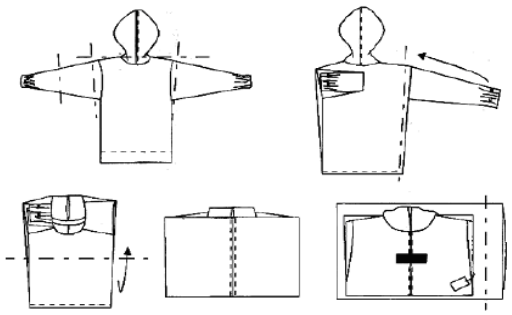
4. T-Shirt

- Fold the arms straight across back.
- Fold the shirt side seams across back of shirt.
- Fold the bottom edge of shirt about 2-inches from the bottom.
- Fold the shirt in half.



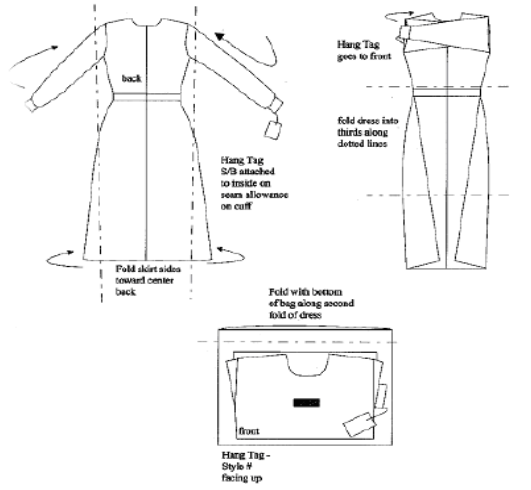
5. Hooded Jackets

- Fold left sleeve in half – fold back to side seam.
- Fold right sleeve back to meet left sleeve.
- Fold hood down.
- Fold in half.



6. Long Sleeve Full Skirt Dress

- With dress laid flat, fold skirt sides toward center back.
- Fold left sleeve back.
- Fold right sleeve over left sleeve with hangtag going toward front.
- Fold dress into thirds.



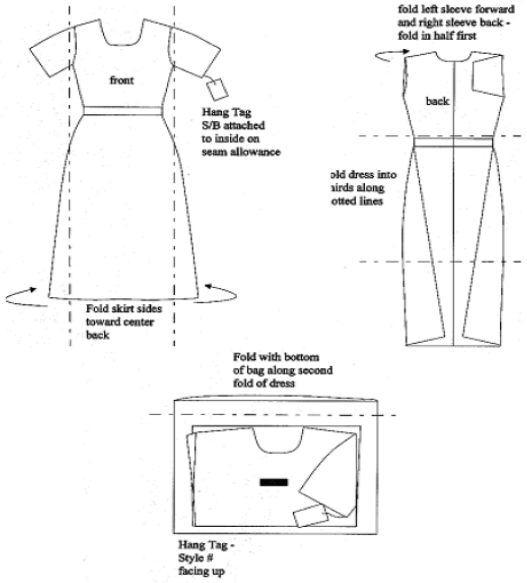
7. Short Sleeve Full Skirt Dress	
• With dress laid flat, fold skirt sides toward center back. • Fold right sleeve back, fold left sleeve forward. • Fold dress into thirds.	

Fig.5.1.37: Folding process of garments

5.1.21 Shipping Documents

The products which are packed, are stored in the storeroom until it is ready to be shipped. If the products have to be exported, there are various documents that have to be prepared to facilitate the shipment.

Shipping advice

Shipping advice is a document which is sent to the buyer. It helps the buyer to track the goods as per details and importer can plan import permission procedures accordingly. The following details are stated in the shipping advice.

- Purchase order/ Contract number
- Customer identification number
- Number of packages and their contents
- Weights of the package
- Dimensions of the package
- Delivery address
- Dispatch date

Copy of the commercial invoice/Bill

This document is used by the government to determine the true value of good when the package passes through customs.

Copy of packing list

The packing list is more detailed and informative that the packing list used in the packing department. It mentions the contents of each individual item and also its weight and measurements.

Export licence

It is a document which is issued by the government to authorise the shipment of specific goods in specific quantities to the mentioned destination.

Insurance certificate

This document assures the consignee that the insurance will cover the loss or damage to the cargo during transit.

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
Garment Labels	https://youtu.be/wSf_AcUyv0M
Garments Size	https://youtu.be/WjlKMrSsCeE

Exercise

1. _____helps the buyer to track the goods as per details
   a) Invoice
   b) Commercial invoice
   c) Export license
   d) Shipping advice
2. _____assures the customer that the garment was made under fair and good working conditions.
   a) Mandatory labels
   b) Union labeling
   c) Voluntary labeling
   d) Brand labeling

3. One inch = _____
   a) 24.4 mm
   b) 25.4 mm
   c) 24.5 mm
   d) 25.5 mm
4. A garment _____comprises of various information of the garments
   a) Label
   b) Packing
   c) Sub label
   d) Care label
5. Pictorial markings is applied to the carton on the basis of its contents, because it _____
   a) Mandatory
   b) Optional
   c) Buyers specification
   d) For who do not speak either the language of the country of origin or destination
6. _____ is responsible for doing the checking of garment components
   a) Endline checker
   b) In line checker
   c) Cutting checker
   d) QA Manager
7. One foot is equal to _____
   a) Ten inch
   b) Nine inch
   c) twelve inches
   d) Eleven inch
8. By using _____various tags, are affixed to folded garments.
   a) Tag gun
   b) Kimble gun
   c) Stain gun
   d) Needle detectors
9. _____are specifications of the accessories and trim samples that are used in the garments
   a) Trim cards
   b) Spec sheet
   c) Quality flag
   d) Swatch card

10. Types of Cartons are_____
    a) Rigid Boxes
    b) Corrugated Boxes
    c) Master Carton
    d) All the above
11. The master carton is the outer carton which holds all the smaller inner cartons.
    a) True
    b) False
12. Materials and accessories are very important to support the process of unpacking.
    a) True
    b) False
13. An efficiently packed product can reduce costs for both the manufacturer and the purchasers
    a) True
    b) False
14. Label and Sub Label are the types of Labels.
    a) True
    b) False
15. _____ is not a mandatory label and is affixed to the garment only if the manufacturer chooses to.
    a) Mandatory labelling
    b) Composition Labelling
    c) Voluntary Labelling
    d) All the above
16. Without correct info commercial dept. cannot prepare final packing list.
    a) True
    b) False
17. The packer has not to pack the goods as per ratio/assortment and this is then inspected.
    a) True
    b) False
18. Carton marking and labelling is necessary and a very important process in preparing for shipping the cartons.
    a) True
    b) False
19. Various pictorial marks can also apply to the carton on the basis of its contents.
    a) True
    b) False

20. India uses the Metric system of measurement.
    a) True
    b) False
21. The packed products are stored in the warehouse until it is ready to be dispatched.
    a) Carton
    b) Room
    c) Warehouse
    d) All the above
22. _____ document assures the consignee that the insurance will cover the loss or damage to the
    a) Cargo during transit.
    b) Export License
    c) Insurance Certificate
    d) Commercial invoice
    e) Packing list
23. Which of the followings are the modes of measurements?
    a) Volume measurements
    b) Weight measurements
    c) Measurement of area
    d) All the above
24. A Gross weight is the actual weight of the product without any packing material.
    a) True
    b) False
25. Quality Assurance manager is responsible for checking and inspecting cut parts.
    a) True
    b) False
26. Packer is responsible for checking quality of goods at the time of packing .
    a) True
    b) False

NCVET
कौशल गुणवत्ता प्रगति

Skill India
कौशल भारत-कुशल भारत

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

N·S·D·C
RE IMAGINE FUTURE

6. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization

APPAREL MADE-UPS & HOME FURNISHING SECTOR SKILL COUNCIL

Unit 6.1 – Maintain Health, Safety and Security at Work Place

Unit 6.2 – First Aid & CPR

Unit 6.3 – Sensitivity towards People with disability and Gender Equality

AMH/N2257

Key Learning Outcomes

At the end of this unit, participants will be able to:

1. Comply with health and safety related instructions applicable to the workplace.
2. Use and maintain personal protective equipment as per protocol.
3. Maintain a healthy lifestyle and guard against dependency on intoxicants.
4. Follow environment management system related procedures.
5. Identify and correct if possible) malfunctions in machinery and equipment.
6. Report any service malfunctions that can not be rectified.
7. Store materials and equipment in line with manufacturer's and organizational requirements.
8. Safely handle and move waste and debris.
9. Minimize health and safety risks to self and others due to own actions.
10. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks.
11. Monitor the workplace and work processes for potential risks and threats.
12. Carryout periodic walk-through to keep work area free from hazards and obstructions, if assigned.
13. Report hazards and potential risks/threats to supervisors or other authorized personnel.
14. Participate in mock drills/ evacuation procedures organized at the workplace.
15. Undertake first aid, fire-fighting and emergency response training, if asked to do so.
16. Take action based on instructions in the event of fire.
17. Follow organization procedures.
18. Analyze the First Aid & CPR.
19. Follow health, safety, gender and PwD related instructions applicable to workplace.
20. Maintain gender equality, practice the same at workplace or in apparel industry.

UNIT 6.1: Maintain Health, Safety, and Security at Work Place

Unit Objectives

At the end of this unit, participants will be able to:

1. Comply with health and safety related instructions applicable to the workplace.
2. Use and maintain personal protective equipment as per protocol.
3. Maintain a healthy lifestyle and guard against dependency on intoxicants.
4. Follow environment management system related procedures.
5. Identify and correct if possible) malfunctions in machinery and equipment.
6. Report any service malfunctions that cannot be rectified.
7. Store materials and equipment in line with manufacturer's and organizational requirements.
8. Safely handle and move waste and debris.
9. Minimize health and safety risks to self and others due to own actions.
10. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks.
11. Monitor the workplace and work processes for potential risks and threats.
12. Carryout periodic walk-through to keep work area free from hazards and obstructions, if assigned.
13. Report hazards and potential risks/threats to supervisors or other authorized personnel.
14. Participate in mock drills/ evacuation procedures organized at the workplace.
15. Undertake first aid, fire-fghting and emergency response training, if asked to do so.
16. Take action based on instructions in the event of fire.
17. Follow organization procedures.
18. Describe the Covid-19 management.

6.1.1 Introduction

Features in garment industry that could be improved to prevent injuries include; communication, involvement of employees in decision making, education and training of employees and management on prevention strategies, and the ergonomic conditions at the plant.

The clothing industry is usually considered as a safe place to work. Compared to other industries, there are fewer serious risks in clothing factories. The hazards in clothing industry are different from others. The major health risks in this industry come from more subtle hazards whose effect build up over time.

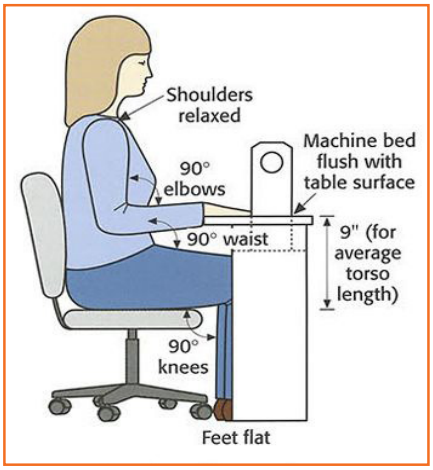


Fig.6.1.1: Body Posture

Workers in this industry face a substantially higher risk of muscle pain and injury than workers in other jobs. Studies also show that frequency of neck and shoulder injuries increases with years of employment. These injuries have a long-term effect on workers' health.

The physical requirements of a job are an important risk factor related to muscle pain and injury. The risks for Pressman have been linked to conditions such as improper work area design, including sitting arrangements.

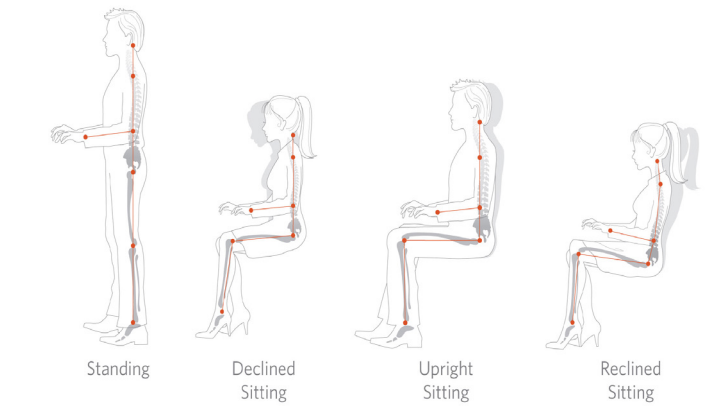


Fig.6.1.2: Body Posture

Factors like repeated motions, force, body-posture are associated with higher risks and rate of injury. There are other factors are linked to injuries. Some of these factors include improper height of work pace, excessive workload, lack of support from co-worker, overall work environment etc. The factors that lead to reduction in injury rates include empowering workforce, following safety protocol, good housekeeping practices and increased support from top management.

6.1.2 Hazards in Finishing

Once sewn, the completed garment is ironed by pressers and checked for loose threads, stains and other defects by finishers. Finishers perform a variety of hand work, including clipping loose threads, hand sewing, turning and hand pressing. Ergonomic hazards are a problem for workers who finish, ticket, pack and distribute apparel. They often perform highly repetitive tasks, frequently involving working with the hands and arms in awkward and unhealthy postures. Seating and workstations for these workers are rarely adjustable or designed for comfort or health. Finishing workers, including pressers, often work standing and in static positions, despite the fact that many of the jobs could be equipped with chairs, stools or sit-stand chairs, and workers could alternate between standing and sitting. Table tops could be adjusted to the proper height for the operator and could be tilted to enable the operator to work in a more comfortable position. Padded table edges and properly designed and sized tools could eliminate some stresses on hands, wrists and arms.

Pressing the sewn product is performed either using a hand iron or a buck press. Sewn products may also be steamed using a hand steamer or a steam tunnel. Presses and irons may present risks of burns, as well as ergonomic hazards. While most presses are designed with two-handed controls, eliminating the possibility of getting the hand stuck in the press, some old machines still exist which do not have these safety features. Working a pressing machine also presents the risks of shoulder, neck and back injury caused by frequent overhead reaching and by constant standing and operating the foot pedals. While the job can be made safer by a more highly automated machine and by proper positioning of the worker at the machine, the current machinery makes it difficult to eliminate the high stress.

Ticketers, who use ticketing guns to place tags on finished garments, are at risk of hand and wrist injury from this highly repetitive operation. Automatic, as opposed to manual, ticketing guns can help decrease the force needed to perform the operation, greatly reducing stress and strain on the fingers and hands.

Types of hazard

1. Electrical
2. Gas

3. Burning and scalding
4. Chemical
5. Manual handling
6. Infection control
7. Cleaning
8. Fire
9. Lone working

Health and safety in washing department

A laundry contains many hazards for a new or inexperienced employee but everyone should be aware of the dangers that exist there. Access should be restricted, especially for service users, and the room should always be locked when it is left unoccupied or work has finished for the day.

All of these items should be individually risk assessed by the manager responsible for laundry operations and the results fed back to the staff involved.

Protective clothing and equipment

- When working in the laundry, the correct clothing and equipment must be used at all times.
- Rubber gloves, and any other PPE indicated by product labels, must be worn when sorting laundry, cleaning the premises and handling chemicals.
- Disposable gloves and aprons must always be worn when handling items contaminated with anybody spillage.
- Eye protection must be worn when dispensing chemicals and changing the auto-dosing containers.
- Face masks must be worn when cleaning the lint screen on tumble dryers and for any chemicals that give a warning on the label.

Fig.6.1.3: PPEs being used in a garment factory

Personal Hygiene

- To maintain hygiene at the appropriate level, laundry staff must wash their hands:
- When entering or leaving the laundry
- After removing gloves
- After cleaning
- After handling used, infected or fouled laundry
- Before handling clean laundry (wet or dry)
- Before taking a break

6.1.2 The 'Ergonomics'

Ergonomically-designed job ensures that an employee who is tall is given a comfortable space in or near his/her workspace so that the work efficiency is not hindered. Similarly, an employee who is shorter is able to reach all of his or her tools and products without upsetting comfort and safe assortment.

Workers are usually compelled to work in the confinement of the job or workstation that previously was designed with no dynamism or change when they are hired. This leads the workforce to work in difficult postures and positions, all of which may result in work-related injuries/disorders.

The work-place related injuries often start as minor aches and pains but can develop into incapacitating injuries that affect everyday activities. Ergonomics aims at preventing injuries by monitoring the risk factors such as force, repetition, posture and vibration that can cause injuries to develop.

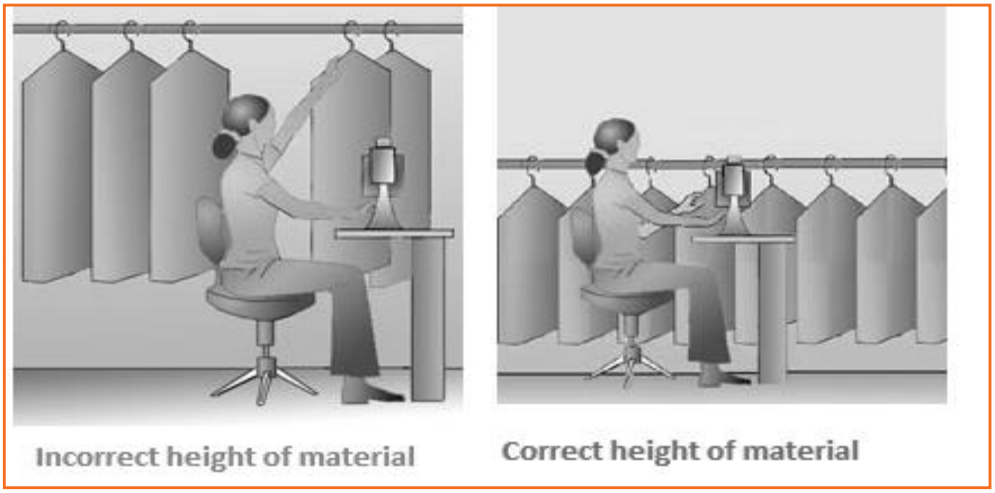


Fig.6.1.4: Situating the material

Injuries and illnesses among textile and apparel workers

- 81% complained CTDs to the wrist.
- 49% of workers is suffering from neck pains.
- 35% report obstinate lower back pain.
- 25% have suffered a compensable increasing trauma disorder.

- 14% reported CTDs to the elbow.
- 5% reported CTDs to the shoulder.
- Absenteeism increases as working conditions worsens.
- High employee turnover is associated with detrimental working conditions.
- Embroidery tasks are associated with pain in the shoulders, wrists, and hands.
- Ironing by hand is associated with elbow pain.
- Fitting fabric in frames like of work, are associated with CTDs of the hands and wrists.

Some fundamental ergonomic principals that should be followed in our workplaces are:

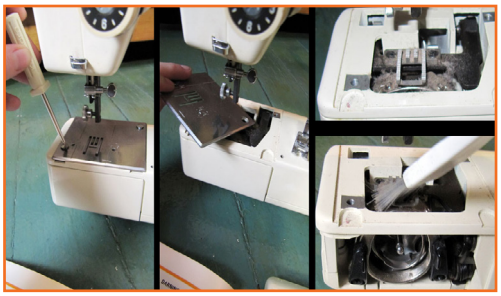


Fig.6.1.5: Cleaning the Tools

- **Proper tools:** Tools and equipment provided at work place should be appropriate for the specific tasks being performed. The apparatus should allow the workers to keep their hands and wrists straight – the position they would be in if they were droopy relaxed at your side. The workers should bend the tool– not the wrist. The tool should fit easily into the hand. If the grip size is too large or too small, it will be uncomfortable and will increase the risk of injury. Tools should not have sharp edges.
- **Keep repetitive motions to a minimum:** Workstations can be restructured to avoid the number of health hazards which chances due to repetitive motions that must be performed. Using a power-driven screwdriver or tools with a notch device can decrease the number of twisting motions with the arm. Work stations should have enough space for the given tasks and provide proper chairs. For deterrence of ergonomic injuries, the labour force should be encouraged to change work and take frequent but short breaks. Some tasks can be mechanical or reformatted to eliminate musculoskeletal injuries. Manufacturing tools and equipment should integrated ergonomic design codes and should not require an extreme amount of force to operate.
- **Avoid awkward postures:** The industry is such that the workforce's job should not require you to work with your hands above shoulder height on a regular basis. Arms should be closer to the body and not raised too high. Bending of their wrists, back and neck should be avoided.
- **Use safe lifting procedures:** The employee should avoid lifting objects that are too heavy. Use more than one person or a mechanical device to reduce the load. The workstation should not require lifting objects above the head or twisting his/her back while lifting. One must keep the load close to his body. Heavy and often lifted objects should be kept between knee and shoulder height and not on the floor or above the head level.
- **Get proper rest:** It is imperative to take frequent breaks to rejuverate the body and mind so that they don't get injuried. The workforce should be groomed to understand that they should take a break from the work not just mentally but physically too. If a person has errand which doesn't allow him to sit, he must take intervals from his work to relax his leg muscles. If he is doing a sitting job, he must go for a walk whenever his work permits.

  For example, if you stand all day, while performing your job you should sit down to rest your legs and feet during your breaks. If you sit down, when working you should stand up and walk around during your breaks to give your back a rest and to increase circulation in your legs. By doing this the musculoskeletal injuries can be prevented.

- **Other things to consider:** Chemicals also have a part in garment manufacturing. Dyes, enzymes, solvents and other chemicals are used to create different fabric finishes and provide durability to the product. Proper ventilation and personal protective equipment are important for protection of workers engaged in chemical processing. Similarly, for workers who handle the finished material and may be exposed to excess chemicals and off-gassing, protective equipment should be used.

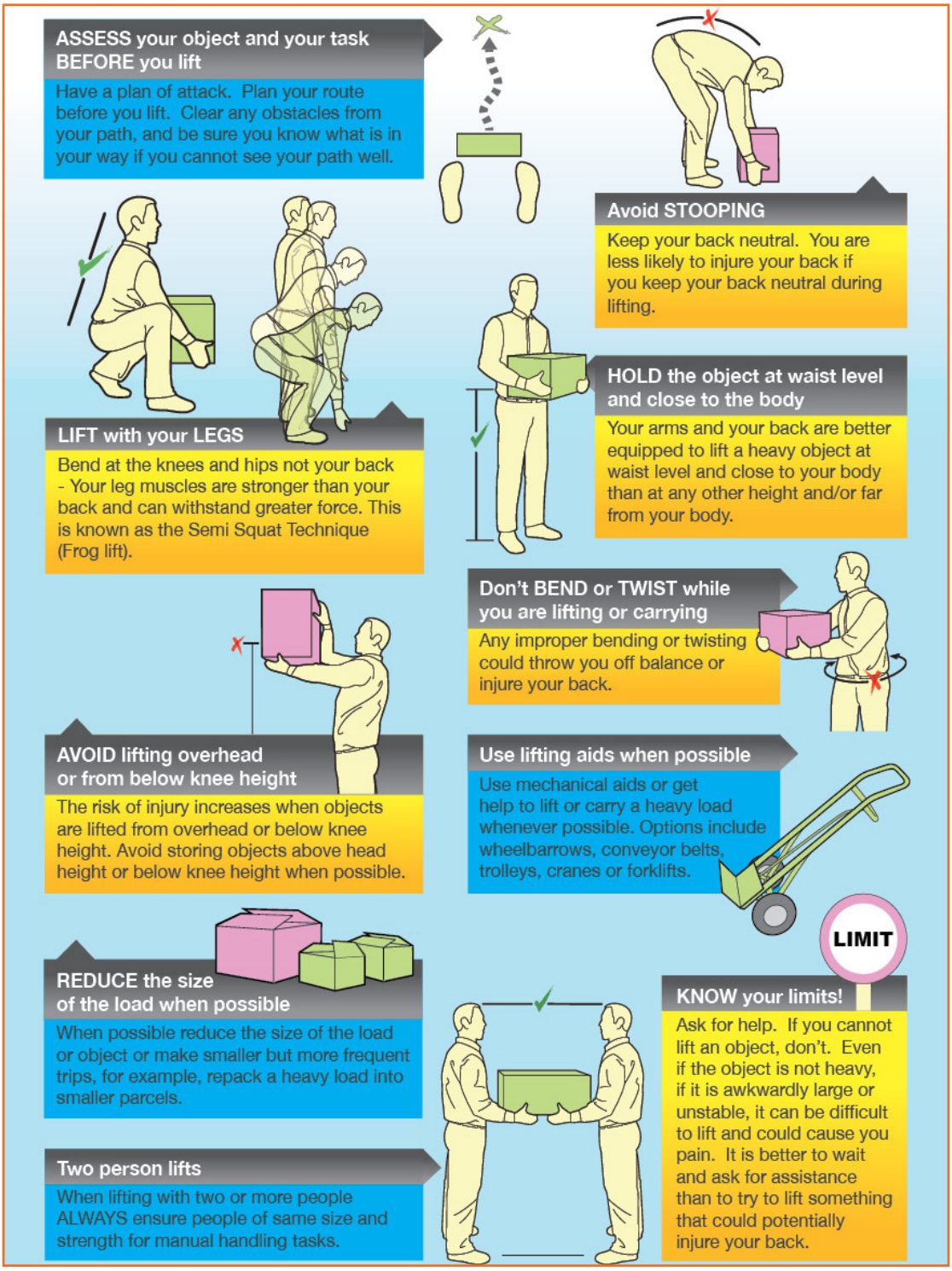


Fig.6.1.6: Do's and Don'ts in material handling

6.1.3 Environmental Control Measures

Hazardous substances in one form or another can be found in almost all small and medium-sized enterprises. The garments industry generates a lot of dust from fabrics being cut and sewn. Some fabrics release chemicals which saturate the air causing difficulties in breathing and eye irritation. Solvents used for cleaning fabrics and garments may cause fatigue, headache and dizziness. Dust and solvents, when breathed, can lead to lung diseases and are very dangerous. Not only will this affect the well-being of your workers, it will also result in a reduction of productivity and product quality, increased absenteeism and turnover of staff. High levels of dust interfere with efficient production and require cleaning operations that may spoil materials and finished products. Improved conditions usually mean increased output, higher productivity and quality. There are simple and inexpensive ways to control most of the environmental problems. Improvements often result in cost savings, productivity benefits and increased safety of workers. The following rules provide a series of low-cost measures for sound environmental control.

6.1.3.1 Clean Regularly and Properly - Don't Spread Dust

Dust originates from fabrics and threads, from cutting and sewing to packing operations. Thus, it is very common to see small clothing enterprises with ceilings and walls full of dusty cobwebs. Even machines which are not regularly cleaned could be full of dust which may cause them to break down.

Dust increases wear and tear on machinery, necessitating more maintenance. It also negatively affects the quality of raw materials and finished products. Dust entering the respiratory system can damage the worker's lungs. Some dust can also cause allergies. Dust should be removed regularly and eliminated from the source. More comprehensive cleaning should be carried out as often as necessary. This cleaning should also include walls, ceilings, storage racks and other areas where dust accumulates. Dust on windows, walls and lamps will significantly reduce the lighting in the workplace.

Fig.6.1.7: Cleaning the Shop Floor

One low-cost cleaning method is sweeping the floor carefully with an appropriate broom and accompanying dust pan to prevent dust from spreading. Spraying water on the floor before sweeping will avoid dust remaining airborne. When dust is moistened it can be easily removed with a broom More effective methods of controlling dust include using a vacuum cleaner or a wet mop.

6.1.4 Make Local Ventilation Cost-effective

Local ventilation should only be considered as a means of reducing chemical hazards when other means have failed. There are cost-effective ways of improving ventilation.

Use proper fans

Apart from those used for ventilating workstations, fans may be utilized to remove dangerous substances from the workplace. Contaminated air can be pushed or blown outside by having more open windows. A few points should be considered:

- There should be no obstacles between the fan and opening. Anything in the way significantly reduces the desired effect.
- The air speed should be low to reduce turbulence. In the garment industry, different fans are used; some use industrial fans or wall fans as shown in Fig. There are advantages and disadvantages for these types of fans. Industrial fans are so powerful that workers near them may be affected. Ceiling fans of the rotary type may lift the cloth being sewn, hence speed should be controlled.
- Contaminated air should not be blown in the direction of other workers on the way to the opening.

Fig.6.1.8: Using Fans

- Care should be taken that air expelled from the workplace does not affect people outside the enterprise.
- A fan may not be sufficient to remove vapours from hazardous fumes such as those sometimes used in silkscreen printing. Extractor systems to remove dust and hazardous chemicals should be installed. These systems may be quite expensive and it may be more economical to replace the hazardous chemicals.

6.1.5 Good Lighting for Quality Products

Good lighting does not mean more light bulbs and more use of electricity. Natural lighting is usually a better option than the bulbs. But if there is a difficulty in arranging for a natural lighting through windows and ventilators, its important that the bulbs and other elements of artificial lights should be well-maintained. A good lighting arrangement is directly proportionate to an efficient workforce.

80% of the absorption of information from our surroundings are from our eye as a sense organ. Bad lighting means wrong or lesser absorption of information, leading to lower productivity. Eye strain in low light can lead to head ache and again decreases the productivity level of the worker.

It is imperative to understand the ways in which we can arrange for a good lighting without increasing the electricity bills. First of all one has to identify if at all you need to work upon the existing brightness level in the work place. Lighting requirements are reliant on three main features:

- The environment of the working area
- The nature of the task
- The sharpness of the worker's eyesight

A sewer needs focused light at needle point, so needle lights should always be fitted. A worker packing garments requires more largely lighting. In many situations, packers work on special tiered work tops, where lights are built into the station. The age group of the workforce is also important factor to determine this. Which means, an older worker may need twice as much light as a younger one. Another way to identify the gap, in lighting problem is going around the workplace, observing the workers and asking them about their visual problems. The plan of improvements may not have much impact if the workers' eyesight is insufficient. An eyesight test for all employees should be carried out. Even if some workers do not follow advice about obtaining glasses. One will be aware of the problem and a possible reason for low efficiency and decreased productivity.

6.1.5.1 Use of Daylight

It is very unfortunate that many corporations undermine the fact that natural light is the best and the cheapest source of illumination. One had to gauge the surface area of the work area and measure the windows and skylights. Ideally the open space that includes the windows, ventilation windows and door should be one-third of the total area of work.

However a determinant of choosing the natural light is the heat that is emitted in the work place.

Fig.6.1.9: Use of daylight

If there is too many machinery omitting heat, it isn't a great idea to allow the natural heat to come in and add up to the temperature.

The higher the window, the more light is in. Skylights can double the light of a low light but if made in a lower level, it faces obstacles ad is blocked by the machineries and storage containers. If the factory doesn't have a skylight, one must consider to replace the opaque roofs with translucent or transparent plastic rooftops.

It is important to paint the walls in lighter shades which not just give a sense of space to a room, but the workstation would look illuminated. It enhances the visual conditions and a pleasant cheerful environment is encouraged.

The matt finish of whitewash is a great idea. Many enterprises are implementing white tile ceilings. To avoid harmful glare, one should avoid gloss paint for walls. Pale colours are better than white. A slightly dimmer colour below eye level is accommodating. But one should maintain cleanliness, since lack of regular cleaning can result in the loss of at least 10 to 20 per cent of light. Special care should be taken to clean skylights, which are sometimes difficult to reach.

These colours are much better than the black formerly used for the bodies or chrome finish for the Figs, which reflect more glare. An unsatisfactory circulation of natural light over the work area, particularly in embroidery rooms, is a problem. Considering the fact, one must change the layout of benches and machines in order to minimize shadow zones. Workstations with high lighting requirements should be moved closer to the windows and possibly be assembled together for the provision of additional lighting. However, if the workstation layout

responds well to your production needs, you may instead reorganize the delivery and height of the lamps or add needle lights which are good options.

Fig.6.1.10: Sunlight in the Shop Floor

6.1.6 Reporting an Accident and an Incident

Your responsibility requires you to be aware of potential hazards and correct reporting processes. If you notice a potentially hazardous situation, eg: a client expressing violent behavior, it is important that you report it immediately to management and fill out the appropriate forms as legally required of you.

If you are injured at work you must:

- Report the injury to management as soon as possible, and certainly within 24hours.
- Seek proper treatment for your injury.

6.1.6.1 Accidents

Always work in a safe manner to prevent accidents from occurring in the first place. Make sure that you have been given adequate information and on-the-job training about the first aid facilities and services available in your workplace, including:

- Where to find first aid kits.
- Location of first aid rooms.
- Complete, up-to-date contact details of trained first aid officers in the workplace procedures for critical accidents – such as who should be responsible for calling.
- The ambulance/doctor/nurse and what is the best method of contact, measures for evacuation of the injured person/s.
- Emergency procedure for the elimination of life-threatening chemicals commonly used in the workplace.
- Universal precautions for the control of infection.
- Who to contact for debriefing/psychological support.

Reporting of incidents and accidents is required under the Work Health and Safety (WHS) legislation. Workplaces tend to have well developed reporting procedures in place, which aim to fully understand the accident/incident and prevent any future occurrences through investment in injury prevention, based upon accurate data. Reporting and recording should also facilitate costing and associated financial loss.

Always report an accident to management immediately. There should be a form at each workplace that you (or the person involved) and any witnesses can fill out, where possible, otherwise. The form should cover the following areas:

- **Description of the occurrence:** What was the event that occurred, which required this report to be completed?
- **Nature of injury or disease:** Select the most appropriate description from a range of options. What injury or disease happened as a result of the occurrence?
- **First aid, medical treatment or hospital admission:** This section asks for a description of what was done to treat the injury or disease.
- **Part of the body affected:** Tick off which part or parts of the body were affected as a result of the occurrence.
- **Source of injury:** What actually caused the person to be injured or acquire a disease? This could be a piece of machinery or other hazardous materials for example.
- **Probable cause or causes of injury:** How was the source listed above actually responsible for the injury?
- **Investigation:** This asks a series of questions that seek to find out why the person has been injured or has acquired a disease.
- **Notification checklist:** This checklist makes sure that everyone who should have been contacted regarding the matter has been contacted and asks whether appropriate action has been taken by the authorities.
- **Preventative action:** This asks whether or not any action has been taken to prevent the occurrence from happening again.
- **Witness details:** This part is to be filled out if someone saw the occurrence happen. It is essential if any sort of legal action is to be taken.

6.1.7 Mock Drills/ Evacuations

Fire safety and evacuation plans sketch staff duties and accountabilities in time of emergency. Continuing training is required to help safeguard that the employees are conscious of those duties and responsibilities. Fire fighting trainings serve as an prospect for staff members to validate, under replicated fire conditions, that they can perform those duties and responsibilities safely and efficiently. It's also a time for them to demonstration that they are aware of defend-in-place strategies and can take advantage of your facility's fire protection features and exit facilities to protect the people in their care.

Fig.6.1.11: Fire Safety

Fire drills are excellent exercise designed to evaluate staff response to a replicated emergency. They are also a test of your facility's fire safety/ evacuation strategies and staff training programs. It is not essential that all fire drills run smoothly. That's okay, so long as staff and the organization learns from them and correct mistakes made. It's vital, therefore, that there be a analysis of each drill so that any problems met can be addressed. Perhaps the problems are due to unfinished or out-dated fire safety/emigration plans. Perhaps there's a need for additional staff training.

The two essential components of a fire preparedness plan are the following:

1. An emergency action plan, which details what to do when a fire occurs.
2. A fire prevention plan, which describes what to do to prevent a fire from occurring.

6.1.8 Low-cost Work-related Welfare Facilities and Benefits

Work-related welfare conveniences and facilities are never given heed to. Who cares about toilets, first-aid kits, lunch rooms or lockers? What do they have to do with the hard authenticities of production? One answer is that workforces care. During each working day, workers need to drink water or some other beverage, eat meals and snacks, wash their hands, visit a lavatory, and rest to recover from fatigue. This can be difficult or easy, unpleasant or comfortable, a health risk or an aid to hygiene and nutrition. The essential facilities in the factory show if you care about employees more or the machines.

Another good reason is that extra efforts for better facilities are often appreciated far beyond the time and money capitalized, Work-related facilities benefit workers to overcome problems which are important to them. Let workers express their priorities for improvements and give their feedback. You may be surprised at the results. Giving a hygienic and wel-maintained workplace is indirectly showing yur employees how much you care for them.

A small enterprise can be a community where workers are loyal, with good industrial relations and high morale, It can also be a place where workers look for the first chance to leave and care little about the owner's success. Which kind of initiative do you want? The series of low-cost facilities that trails will help to retain the best staffs.

6.1.8.1 Essential Facilities

Drinking water

Drinking water is indispensable for all workers; if this is not provided, they become thirsty and gradually dehydrated. This greatly increases fatigue and lowers productivity, especially in a hot environment. Place water vessels near each group of workers, or provide taps or cascades with clean water in a central place. This will minimize the time lost in going to get a drink. However, drinking water should not be placed in washrooms or toilets, near dangerous machines or other hazards, nor in places where it can be contaminated by dust, chemicals or other substances.

If there is any doubt about contamination, water must be thoroughly boiled or properly filtered or treated. Unhealthy water will lead to illness and therefore absenteeism from work. Before starting to use a new water source for drinking purposes, it is advisable to have it tested to make sure it conforms to the national standard for drinking water. The design, construction and operation of deep wells for the extraction of ground water should be subjected to the provisions of existing water codes. Piped water should only be used when a hygienic water supply is guaranteed. A clear distinction between potable and non-potable water taps should be made and a "Safe Drinking Water" sign should be put up near to each tap.

Drinking water vessels should be made from materials that can easily be cleaned, Even if the vessels are filled with fresh water, the water inside, if kept for even a short time, can become unhygienic. It should therefore be different frequently. It is also imperative to make sure that drinking water is cool. If a water cooler is too luxurious, the water vessels can be placed in the coolest place in the factory. It will facilitate the water to remain cool throughout the day. They should not be left uncovered, under the sun or in a hot place. Drinking fountains for production areas are very advantageous from a hygienic point of view. They can be fitted with a jet or bubbler outlet and/or goose-neck or other outlet for filling drinking cups. The fountain should be free from sharp angles and designed to prevent unnecessary splashing. Water outlets should be above the rim of overflow level so that they will not be contaminated with waste water. The water outlet should be shielded to prevent the lips of a drinker from being placed on it. Drinking water containers should be attended by a designated person. Containers should be made of impermeable materials. A cooling device would be an advantage. (Unglazed pottery can be used, due to its unique cooling effect, in dust-free places.) Containers should be provided with suitable covers, and kept in a cool place protected from the sun. The water must be changed frequently.

To avoid the possible spread of infection, it is better to use throwaway cups or to provide separate cups for each worker and to arrange for regular washing. When containers are used, it is important to clean them regularly. Cleaning and other necessary conservation tasks should be assigned to a specific person. In addition, the provision of a competence for boiling water will enable people to make coffee or other hot beverage during breaks. Hot water is required if the enterprise has a childcare facility.

6.1.5.2 Sanitary Facilities

There are several reasons why the provision of washing facilities is important:

- Dirt and grime can be ingested and cause sickness or disease; they are, in any case, unpleasant and demoralizing.
- Washing is a necessity when women have their monthly periods.
- Washing is required for basic hygiene after using the toilet.
- Apart from the obvious basic need, sanitary facilities are required by law. Clienteles often create an impression of an enterprise through the quality of its sanitary facilities.

- There should be a sufficient number of hygienic facilities on the work locations and each should be conveniently located to avoid long walks, waiting and hindrance. The law of the country must be monitored, but the following are the minimum requirements:
- One restroom is required for up to five men; two toilets for six to 40 men.
- One separate restroom for up to five women and two toilets for six to 30 women.
- One wash-basin for every 15 workers.

Fig.6.1.12: Signages

Ideally, there would be a separate toilet for men and women. These should be characterized as follows:

- The toilet bowl must be free from stain or odour and function properly.
- The walls of the toilet must be clean and tiles unstained.
- The ceiling of the toilet must be free from cobwebs and dust.
- Floors must be clean and safe (no broken tiles, nor slippery surface).
- Proper illumination must be provided inside the toilet.
- Toilets must have a continuous supply of water; in case water is limited in the area, water should be stocked in containers and refilled regularly.
- Mirrors and rubbish bins should be provided in the washroom.
- Soap and toilet paper should be provided.
- The washroom should provide complete privacy to users and should be fully ventilated.

6.1.9 Be Ready for Emergencies

Misfortunes can happen even if proper defensive measures are installed. So, always be prepared for emergencies and have readiness for disaster management, like cuts and bruises, eye injuries, burns, poisoning and electric shocks. Every enterprise should maintain a well-stocked first-aid box and assign at least one person from every shift to handle emergencies. First-aid boxes should be clearly marked and situated in a place, so that they are readily reachable in an emergency. They should not be more than 100 metres away from any place on the work site. Ideally, such kits should be near a wash-basin and in good lighting conditions. Their supplies need to be regularly checked and replenished. The contents of a first-aid box are often regulated by law, with variations according to the size and the likely industrial hazards of the enterprise. A typical basic kit may include the following items in a dustproof and waterproof box:

Fig.6.1.13: First Aid

- Sterile bandages, pressure bandages, dressings (gauze pads) and slings. These should be individually wrapped and placed in a dustproof box or bag. Adequate quantities of the different sizes should be available at all times to treat small cuts and burns.
- Cotton wool for cleaning wounds.

Ideally, there would be a separate toilet for men and women. These should be characterized as follows:

- The toilet bowl must be free from stain or odour and utility properly.
- The walls of the toilet must be clean and tiles unstained.
- The ceiling of the toilet must be free from torpors and dust.
- Floors must be clean and safe (no broken tiles, nor slippery surface).
- Proper illumination must be provided inside the restroom.
- Lavatories must have a continuous supply of water; in case water is limited in the area, water should be stocked in containers and refilled regularly.
- Mirrors and rubbish bins should be provided in the washroom.
- Soap and toilet paper should be provided.
- The washroom should give complete privacy to users and should be fully aired.

6.1.10 Safety Signs at Workplace

Safety Signs: Sign providing information or instruction about safety or health at work by means of a signboard, a colour, an illuminated sign or acoustic signal, a verbal communication or hand signal.

Signboard: A sign which provides information or instructions by a combination of shape, colour and a symbol or pictogram which is rendered visible by lighting of sufficient intensity. In practice, many signboards may be accompanied by supplementary text, eg 'Fire exit', alongside the symbol of a moving person. Signboards can be of the following four types:

1. **Prohibition sign:** A sign prohibiting behaviour likely to increase or cause danger (eg 'no access for unauthorised persons').

Fig.6.1.14: Prohibition sign

2. **Warning sign:** A sign giving warning of a hazard or danger (eg 'danger: electricity').

Fig.6.1.15: Warning sign

3. **Mandatory sign:** A sign prescribing specific behaviour (eg 'eye protection must be worn').

Fig.6.1.16: Mandatory sign

4. **Emergency escape, Fire and First-aid signs:** A sign giving information on emergency exits, first aid, or rescue facilities (eg 'emergency exit/escape route'.

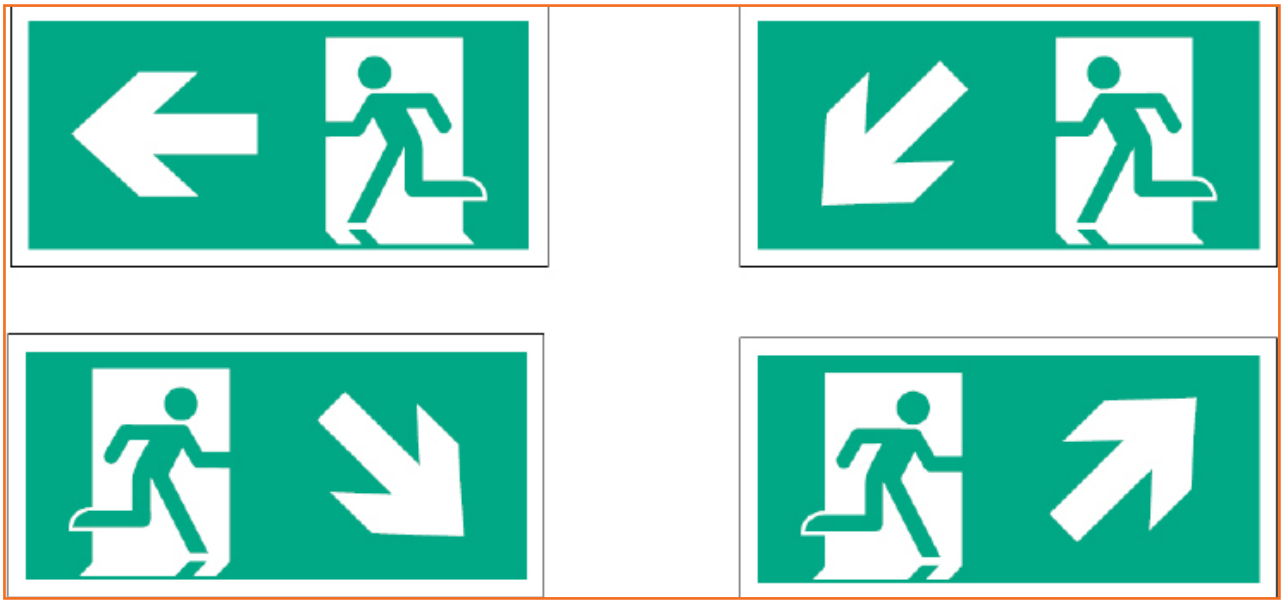


Fig.6.1.17: Emergency escape

Signs for emergency exits

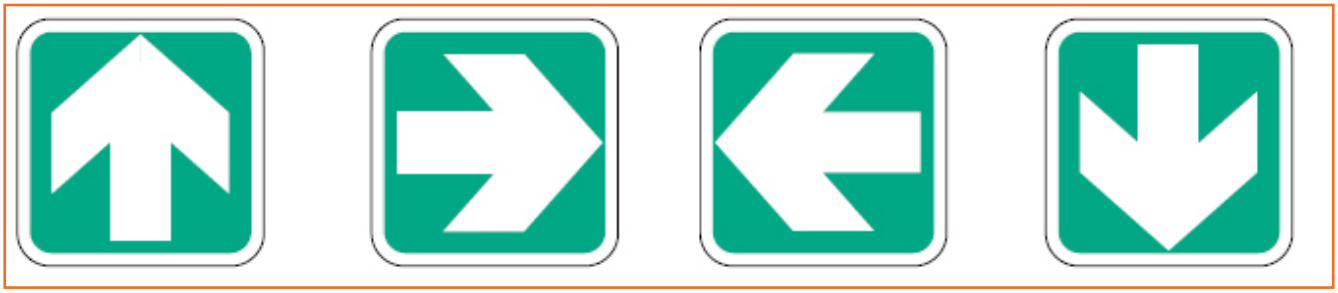


Fig.6.1.18: Signs for emergency exits

Signs for Fire and First Aid

Fig.6.1.19: Signs for Fire

6.1.11 Prevention and Management of Corona Virus

As we all know a new respiratory disease called COVID-19 is spreading across the world. India has also reported cases from states and the government is trying to contain the spread of the disease. We can play a major role in preventing its spread by follow Covid safety guidelines.

COVID-19 is a disease caused by the “novel corona virus”. Common symptoms are Fever, Dry cough,Breathing difficulty, Some patients also have aches and pains, nasal congestion, runny nose, sore throat or diarrhea

Fig.6.1.20: Prevention from COVID-19

COVID-19 spreads mainly by droplets produced as a result of coughing or sneezing of a COVID-19 infected person. To protect yourself from Covid-19, follow below guidelines.

- Maintain a safe distance from others (at least 1 metre), even if they don’t appear to be sick.
- Wear a mask in public, especially indoors or when physical distancing is not possible.
- Choose open, well-ventilated spaces over closed ones. Open a window if indoors.
- Clean your hands often. Use soap and water, or an alcohol-based hand rub.
- Get vaccinated when it’s your turn. Follow local guidance about vaccination.
- Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell.
- If you have a fever, cough and difficulty breathing, seek medical attention. Call in advance so your healthcare provider can direct you to the right health facility.

This protects you, and prevents the spread of viruses and other infections.

UNIT 6.2: First Aid & CPR

Unit Objectives

At the end of this unit, participants will be able to:

1. Apply first aid on an injured person.
2. Interpret the procedure of CPR.

6.2.1 First Aid

First aid is the assistance given to any person suffering a sudden illness or injury, with care provided to preserve life, prevent the condition from worsening, and/or promote recovery. It includes initial intervention in a serious condition prior to professional medical help being available, such as performing CPR while awaiting an ambulance, as well as the complete treatment of minor conditions, such as applying a plaster to a cut. First aid is generally performed by the layperson, with many people trained in providing basic levels of first aid, and others willing to do so from acquired knowledge. Mental health first aid is an extension of the concept of first aid to cover mental health.

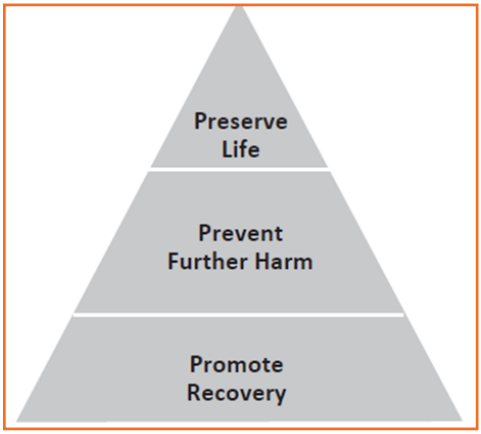


Fig.6.2.1: First aid Pyramid

There are many situations which may require first aid, and many countries have legislation, regulation, or guidance which specifies a minimum level of first aid provision in certain circumstances. This can include specific training or equipment to be available in the workplace (such as an Automated External Defibrillator), the provision of specialist first aid cover at public gatherings, or mandatory first aid training within schools. First aid, however, does not necessarily require any particular equipment or prior knowledge, and can involve improvisation with materials available at the time, often by untrained persons.

Vital Signs	Good	Poor
Heart Rate	60-100 beats per minute	Less than 60 or greater than 100 beats per minute
Respirations	14-16 breaths per minute	Less than 14 breaths per minute
Skin	Warm, pink and dry	Cool, pale and moist
Consciousness	Alert and orientated	Drowsy or unconscious

Fig.6.2.2: Vital Signs

Awareness	Assessment	Action	Aftercare
• Observe • Stop to Help	• Assess what is required to be done • Ask yourself, 'Can I do it?'	• Do what you can • Call for expert medical help • Take care of your and the bystander's safety	• Once you have assisted the victim, stay with him/her till expert care arrives

Fig.6.2.3: Four A's of First Aid

While delivering First Aid always remember:

- Prevent deterioration.
- Act swiftly, deliberately and confidently.
- Golden Hour – First 60 minutes following an accident.
- Platinum Period – First 15 minutes following an accident.
- Prevent shock and choking.
- Stop bleeding.
- Loosen victim's clothes.
- Regulate respiratory system.
- Avoid crowding/over-crowding.
- Arrange to take victim to safe place/hospital.
- Attend to emergencies first with ease and without fear.
- Do not overdo. Remember that the person giving first aid is not a doctor.

Injury	Symptom	Do's	Don'ts
Fracture	• Pain • Swelling • Visible bone	• Immobilise the affected part • Stabilise the affected part • Use a cloth as a sling • Use board as a sling • Carefully Transfer the victim on a stretcher	• Do not move the affected part • Do not wash or probe the injured area
Burns (see Degrees of Burn table)	• Redness of skin • Blistered skin • Injury marks • Headache/seizures	• In case of electrical burn, cut-off the power supply • In case of fire, put out fire with blanket/coat • Use water to douse the flames • Remove any jewellery from the affected area • Wash the burn with water	• Do not pull off any clothing stuck to the burnt skin • Do not place ice on the burn • Do not use cotton to cover the burn

Bleeding	• Bruises • Visible blood loss from body • Coughing blood • Wound/Injury marks • Unconsciousness due to blood loss • Dizziness • Pale skin	• Check victim's breathing • Elevate the wound above heart level • Apply direct pressure to the wound with a clean cloth or hands • Remove any visible objects from the wounds • Apply bandage once the bleeding stops	• Do not clean the wound from out to in direction • Do not apply too much pressure (not more than 15 mins) • Do not give water to the victim
Heat Stroke/Sun Stoke	• High body temperature • Headache • Hot and dry skin • Nausea/Vomiting • Unconsciousness	• Move the victim to a cool, shady place • Wet the victim's skin with a sponge • If possible apply ice packs to victim's neck, back and armpits • Remove any jewellery from the affected area • Wash the burn with water	• Do not let people crowd around the victim • Do not give any hot drinks to the victim
Unconsciousness	• No movement of limbs • No verbal response or gestures • Pale skin	• Loosen clothing around neck, waist and chest • Check for breathing • Place the victim's legs above the level of heart • If victim is not breathing, perform CPR	• Do not throw water or slap the victim • Do not force feed anything • Do not raise the head high as it may block the airway

Fig.6.2.4: First Aid for different types of injuries

1st Degree Burn	2nd Degree Burn	3rd Degree Burn	4th Degree Burn
Will recover itself in a few days. **Action Required:** Place under running water.	Serious but recovers in a few weeks. **Action Required:** Place clean wet cloth over the burnt area.	Very Serious and will require skin grafting. **Action Required:** Place a clean dry cloth over the burnt area.	Extremely Serious and requires many years with repeated plastic surgery and skin grafting, is life threatening. **Action Required:** Leave open and prevent infection.

Fig.6.2.5: Degree of Burns

6.2.2 Splints and Aids of Torso

A splint is a bandage that immobilizes a broken bone. Sometimes this is done by using rigid objects such as sticks or boards. For some injuries, however, this isn't possible and the only option is to tie the broken limb to the body.

6.2.2.1 Splints

During the application of a splint, it is important to not attempt to straighten the break. This will lead to more injury and pain for the affected. Instead, the splint should be applies to the break the way it was.

When using rigid material

Always use long enough pieces to reach the joints beyond the break. For example, when splinting a forearm, the material should be long enough to touch both the wrist and the elbow. This helps keep the material in place and prevents too much pressure from being applied to the wound.

- Always put padding between the rigid material and the body to keep the victim comfortable.
- Knots should be tied between the body and the rigid material. This is an easier option when it comes to untying them. However, if this can't be carried out, the knots should be tied over the rigid material.
- Padding should always be used between the body and the rigid material in order to provide a comfortable setting to the affected.

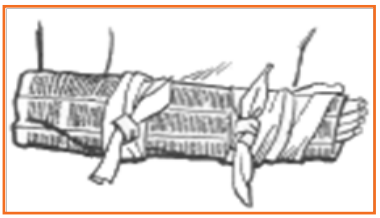


Fig.6.2.6: Splint the Forearm

- Splint the wrist in the same way. The entire forearm should be immobilized.

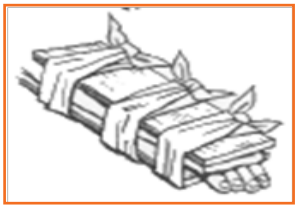


Fig.6.2.7: splint the Wrist

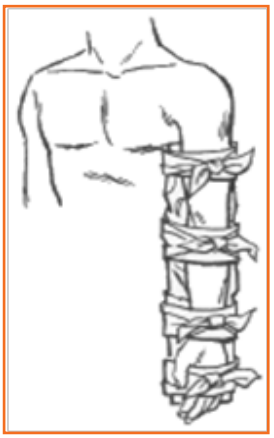


Fig.6.2.8: Splint the Elbow

- To splint the elbow, use enough rigid material to go from the armpit to the hand. The entire arm should be immobilized. Do not attempt to straighten or bend the elbow; splint it in position.
- To splint the upper leg, use long pieces of rigid material that will reach from the ankle to the armpit. Above the hips, tie long straps around the torso to hold the top of the splint in place.

Fig.6.2.9: Splint the Upper Leg

- The pieces used should be long enough to reach the joint beyond the break. For instance, when a forearm is splinted, the material should be long enough in such a way that it includes both the wrist and the elbow. This helps in preventing too much pressure to the wound and also helps in keeping the material in place.

Fig.6.2.10: Splint the Lower Leg

6.2.3 CPR

Basic life support (BLS) is a level of medical care which is used for victims of life-threatening illnesses or injuries until they can be given full medical care at a hospital.

First aid is as easy as ABC – airway, breathing and CPR (cardiopulmonary resuscitation). In any situation, apply the DRSABCD Action Plan.

DRSABCD stands for:

- **Danger:** Always check the danger to you, any bystanders and then the injured or ill person. Make sure you do not put yourself in danger when going to the assistance of another person.
- **Response:** Is the person conscious? Do they respond when you talk to them, touch their hands or squeeze their shoulder?
- **Send for help:** Call ambulance.
- **Airway:** Is the person's airway clear? Is the person breathing? If the person is responding, they are conscious and their airway is clear, assess how you can help them with any injury.

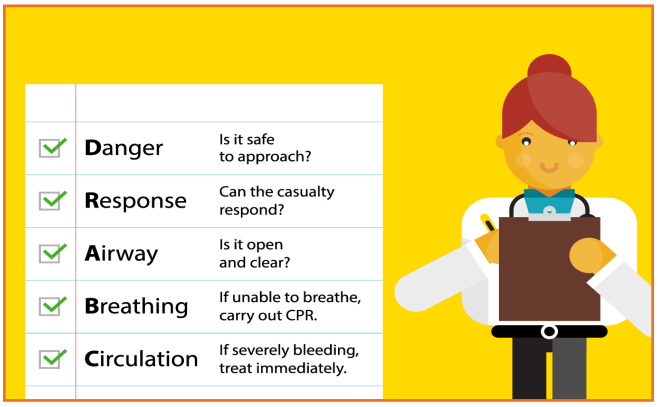


Fig.6.2.11: Basic life support chart

If the person is not responding and they are unconscious, you need to check their airway by opening their mouth and having a look inside. If their mouth is clear, tilt their head gently back (by lifting their chin) and check for breathing. If the mouth is not clear, place the person on their side, open their mouth and clear the contents, then tilt the head back and check for breathing.

- **Breathing:** Check for breathing by looking for chest movements (up and down). Listen by putting your ear near to their mouth and nose. Feel for breathing by putting your hand on the lower part of their chest. If the person is unconscious but breathing, turn them onto their side, carefully ensuring that you keep their head, neck and spine in alignment. Monitor their breathing until you hand over to the ambulance officers.
- **CPR (cardiopulmonary resuscitation):** if an adult is unconscious and not breathing, make sure they are flat on their back and then place the heel of one hand in the centre of their chest and your other hand on top. Press down firmly and smoothly (compressing to one third of their chest depth) 30 times. Give two breaths. To get the breath in, tilt their head back gently by lifting their chin. Pinch their nostrils closed, place your open mouth firmly over their open mouth and blow firmly into their mouth. Keep going with the 30 compressions and two breaths at the speed of approximately five repeats in two minutes until you hand over to the ambulance officers or another trained person, or until the person you are resuscitating responds.
- **Defibrillator:** For unconscious adults who are not breathing, an automated external defibrillator (AED) is applied. An AED is a machine that delivers an electrical shock to cancel any irregular heart beat (arrhythmia), in an effort get the normal heart beating to re-establish itself. Please ensure that a trained person is there

to apply the AED. If the person responds to defibrillation, turn them onto their side and tilt their head to maintain their airway.

1. Airway

Once you have assessed the patient's level of consciousness, evaluate the patient's airway. Remember, if the patient is alert and talking, the airway is open. For a patient who is unresponsive, make sure that he or she is in a supine (face-up) position to effectively evaluate the airway. If the patient is face-down, you must roll the patient onto his or her back, taking care not to create or worsen an injury. If the patient is unresponsive and his or her airway is not open, you need to open the airway. Head-tilt/chin-lift technique can be used to open the airway.

Head-tilt/chin-lift technique

To perform the head-tilt/chin lift technique on an adult:

- Press down on the forehead while pulling up on the bony part of the chin with two to three fingers of the other hand.
- Tilt the head past a neutral position to open the airway while avoiding hyperextension of the neck.

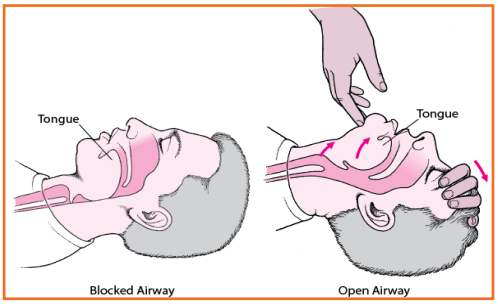


Fig.6.2.12: Airway

2. Cardiopulmonary resuscitation

Cardiopulmonary resuscitation circulates blood that contains oxygen to the vital organs of a patient in cardiac arrest when the heart and breathing have stopped. It includes chest compressions and ventilations as well as the use of an automated external defibrillator.

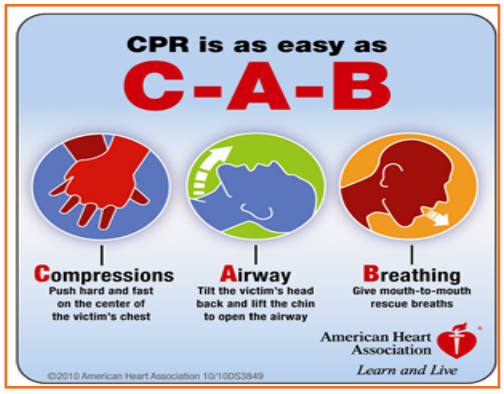


Fig.6.2.13: CAB

- **Compressions:** One component of CPR is chest compressions. To ensure optimal patient outcomes, high-quality CPR must be performed. You can ensure high-quality CPR by providing high-quality chest compressions, making sure that the:
  - » Patient is on a firm, flat surface to allow for adequate compression. In a non- healthcare setting this would typically be on the floor or ground, while in a healthcare setting this may be on a stretcher or bed.
  - » The chest is exposed to ensure proper hand placement and the ability to visualize chest recoil.
  - » Hands are correctly positioned with the heel of one hand in the center of the chest on the lower half of sternum with the other hand on top. Most rescuers find that interlacing their fingers makes it easier to provide compressions while keeping the fingers off the chest.

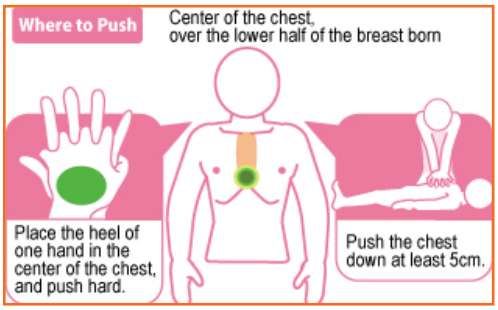


Fig.6.2.14: Compressions

- » Arms are as straight as possible, with the shoulders directly over the hands to promote effective compressions. Locking elbows will help maintain straight arms.
- » Compressions are given at the correct rate of at least 100 per minute to a maximum of 120 per minute, and at the proper depth of at least 2 inches for an adult to promote adequate circulation.
- » The chest must be allowed to fully recoil between each compression to allow blood to flow back into the heart following the compression.
- » For adult co-workers, CPR consists of 30 chest compressions followed by 2 ventilations.

- **Ventilations:** Ventilations supply oxygen to a patient who is not breathing. They may be given via several methods including:

Mouth-to-Mouth

- Open the airway past a neutral position using the head-tilt/chin-lift technique.
- Pinch the nose shut and make a complete seal over the patient's mouth with your mouth.
- Give ventilations by blowing into the patient's mouth. Ventilations should be given one at a time. Take a break between breaths by breaking the seal slightly between ventilations and then taking a breath before re-sealing over the mouth.

Pocket mask

CPR breathing barriers, such as pocket masks, create a barrier between your mouth and the patient's mouth and nose. This barrier can help to protect you from contact with a patient's blood, vomitus and saliva, and from breathing the air that the patient exhales.

- Assemble the mask and valve.
- Open the airway past the neutral position using the head-tilt/chin-lift technique from the patient's side when alone.
- Place the mask over the mouth and nose of the patient starting from the bridge of the nose, then place the bottom of the mask below the mouth to the chin (the mask should not extend past the chin).
- Seal the mask by placing the "webbing" between your index finger and thumb on the top of the mask above the valve while placing your remaining fingers on the side of the patient's face. With your other hand (the hand closest to the patient's chest), place your thumb along the base of the mask while placing your bent index finger under the patient's chin, lifting the face into the mask.

6.2.4 Performing CPR for an Adult

- **STEP 1: Check the scene for immediate danger:** Make sure that you are not compromising your own safety by administering CPR to someone else. Is there a fire? Is the person lying on a roadway? It is important to do whatever is necessary to move yourself and carry the other person to safety.
- **STEP 2: Assess the victim's consciousness:** Gently tap his or her on their shoulder and ask, "Are you OK?" If the person responds in affirmative in a loud or clear voice, CPR is not required. Instead, one should undertake basic first aid and take measures to prevent or treat shock and assess whether there is a need to contact emergency services. If the victim is not responsive, the following steps should be undertaken.
- **STEP 3: Do not check for a pulse:** Unless you're a trained medical professional, odds are you'll spend too much valuable time looking for a pulse when you should be doing compressions.

- **STEP 4: Check for breathing:** Make sure that the airway is not blocked. If the mouth is closed, press with your thumb and forefinger on both cheeks at the end of the teeth and then look inside. Remove any visible obstacle that is in your reach but never push your fingers inside too far. Put your ear close to the victim's nose and mouth, and listen for slight breathing. If the victim is coughing or breathing normally, do not perform CPR.

Fig.6.2.15(a): Performing CPR for an Adult

- **STEP 5: Place the victim on his or her back:** Make sure he or she is lying as flat as possible-this will prevent injury while you're doing chest compressions. Tilt their head back by using your palm against their forehead and a push against their chin.

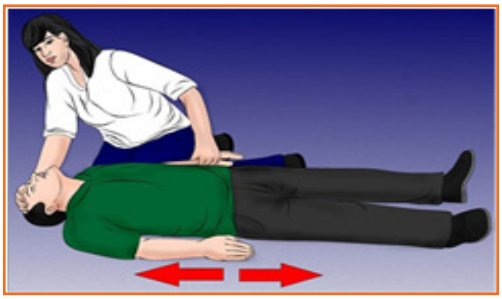


Fig.6.2.15(b): Performing CPR for an Adult

- **STEP 6:** Place the heel of one hand on the victim's breastbone, 2 finger-widths above the meeting area of the lower ribs, exactly in the middle of the chest.

Fig.6.2.15(c): Performing CPR for an Adult

- **STEP 7:** Place your second hand on top of the first hand, Palms-down, interlock the fingers of the second hand between the first.

Fig.6.2.15(d): Performing CPR for an Adult

- **STEP 8:** Position your body directly over your hands, so that your arms are straight and somewhat rigid. Don't flex the arms to push, but sort of lock your elbows, and use your upper body strength to push.

Fig.6.2.15(e): Performing CPR for an Adult

- **STEP 9:** Perform 30 chest compressions. Press down with both hands directly over the breastbone to perform a compression, which helps the heart beat. Chest compressions are more critical for correcting abnormal heart rhythms (ventricular fibrillation or pulseless ventricular tachycardia, heart rapidly quivering instead of beating). You should press down by about 2 inches (5 cm).

Fig.6.2.15(f): Performing CPR for an Adult

- **STEP 10:** Minimize pauses in chest compression that occur when changing providers or preparing for a shock. Attempt to limit interruptions to less than 10 seconds.

Fig.6.2.15(g): Performing CPR for an Adult

- **STEP 11:** Make sure the airway is open. Place your hand on the victim's forehead and two fingers on their chin and tilt the head back to open the airway. If you suspect a neck injury, pull the jaw forward rather than lifting the chin. If jaw thrust fails to open the airway, do a careful head tilt and chin lift. If there are no signs of life, place a breathing barrier (if available) over the victim's mouth.

Fig.6.2.15(h): Performing CPR for an Adult

- **STEP 12:** Give two rescue breaths (optional). If you are trained in CPR and totally confident, give two rescue breaths after your 30 chest compressions. If you've never done CPR before, or you're trained but rusty, stick with only chest compressions.

Fig.6.2.15(i): Performing CPR for an Adult

- **STEP 13:** Repeat the cycle of 30 chest compressions. If you're also doing rescue breaths, keep doing a cycle of 30 chest compressions, and then 2 rescue breaths; repeat the 30 compressions and 2 more breaths. You should do CPR for 2 minutes (5 cycles of compressions to breaths) before spend time checking for signs of life.

6.2.5 CPR Using AED

- **STEP 1:** Use an AED (automated external defibrillator). If an AED is available in the immediate area, use it as soon as possible to jump-start the victim's heart. Make sure there are no puddles or standing water in the immediate area.

Fig.6.2.16(a): Performing CPR for an Adult

- **STEP 2:** Fully expose the victim's chest. Remove any metal necklaces or underwire bras. Check for any body piercings, or evidence that the victim has a pacemaker or implantable cardioverter defibrillator (should be indicated by a medical bracelet) to avoid shocking too close to those spots. Make sure the chest is absolutely dry and the victim is not in a puddle. Note that, if the person has a lot of chest hair, you may need to shave it, if possible. Some AED kits come with razors for this purpose.

Fig.6.2.16(b): Performing CPR for an Adult

- **STEP 2:** Attach the sticky pads with electrodes to the victim's chest. Follow the instructions on the AED for placement. Move the pads at least 1 inch (2.5 cm) away from any metal piercings or implanted devices. Make sure no one is touching the person, when you apply the shock.

Fig.6.2.16(c): Performing CPR for an Adult

- **STEP 8:** Press analyse on the AED machine. If a shock is needed for the patient, the machine will notify you. If you do shock the victim, make sure no one is touching him or her.
- **STEP 9:** Do not remove pads from the victim and resume CPR for another 5 cycles before using the AED again. Stick on adhesive electrode pads are intended to be left in place.

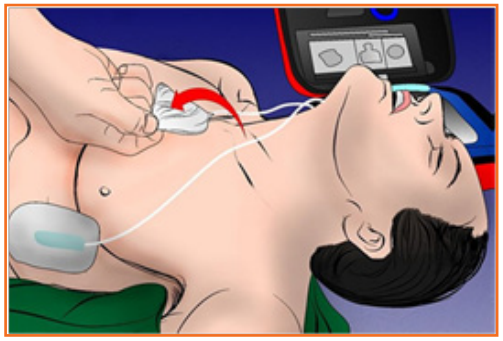


Fig.6.2.16(d): Performing CPR for an Adult

6.2.6 Chain of Survival

Chain of Survival is a sequential process for providing treatment to victims of SCA outside of a hospital setting. More people can survive SCA if the following steps occur in rapid succession:

- Cardiac arrest is immediately recognized and the emergency response system is activated.
- Early cardiopulmonary resuscitation (CPR) is started with an emphasis on chest compression.
- Rapid defibrillation occurs.
- Effective advanced life support is begun.
- Integrated post-cardiac arrest care is provided.
- Quick execution of each step is critical because the chances of survival decrease 7 to 10 percent with each passing minute.

UNIT: 6.3: Sensitivity towards People with disability and Gender Equality

Unit Objectives

At the end of this unit, participants will be able to:

1. Elaborate the details about PWD Sensitization.
2. Explain gender sensitization and equality.

6.3.1 What is sensitization?

The process of becoming highly sensitive to specific events or situations (especially emotional events or situations) Sensitization doesn't always mean feeling the same pain the other person is feeling. It means knowing that the pain exists and there is a different way of living. Despite how the person lives, he or she has a right to exist in a society. It's an attitudinal change and very much required in current time.

Sensitivity to People with Disability

According to the Oxford Dictionary, a disability could be described as an impairment which can be Intellectual, limitations, cognitive, improvement, sensory, exercise or the mixture of all these. Incapacity impacts a person's activities and may happen at birth. Sometimes, it could happen in adulthood. In the medical model, individuals with certain physical, intellectual, psychological and mental impairments are taken as disabled. According to this, the disability lies in the individual as it is equated with restrictions of activity with the burden of adjusting with environment through cures, treatment and rehabilitation.

People with disabilities are subject to multiple deprivations with limited access to basic services, including education, employment, rehabilitation facilities etc. To work towards an inclusive, barrier free society by raising awareness and policy actions, there is a need to have comprehensive reliable statistics on people with disability and their socio-economic conditions

The Constitution of India ensures equality, freedom, justice and dignity of all individuals including persons with disabilities and mandates an inclusive society for all.

The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation Act, 1995) came into force on February 7, 1996.This was an important landmark and was a significant step in the direction of ensuring equal opportunities for persons with disabilities and their full participation in the nation building. The Act provides for both preventive and promotional aspects of rehabilitation like education, employment and vocational training, job reservation, research and manpower development, creation of barrier-free environment, rehabilitation of person with disability, unemployment allowance for the disabled, special insurance scheme for the disabled employees and establishment of homes for persons with severe disability etc.

In order to give focused attention to Policy issues and meaningful thrust to the activities aimed at welfare and empowerment of the Persons with Disabilities, a separate Department of Empowerment of Persons with Disabilities (Divyangjan) (DEPwD) under Ministry of Social Justice & Empowerment was set up in May 2012.

Empowerment of persons with disabilities is an inter-disciplinary process, covering various aspects namely, prevention, early detection, intervention, education, health, vocational training, rehabilitation and social integration.

The disability community is very diverse. Some individuals with a disability may be employed, while others may rely on public benefits as their main sources of income. Some of the public benefits they receive might have limitations. Income, resource and savings limits often prevent individuals from enhancing their financial wellbeing and self-sufficiency as they concentrate efforts on retaining their benefits

Rather than charities, disabled people need sensitivity of the society and initiatives to make their life easy.. New and existing programs are available to help people with disabilities develop skills in financial management and self-sufficiency. Government keeps trying to support in every possible manner so that they can earn their livelihood.

We learn so many virtues from disabled people like patience, courage, positive thinking etc .Hence; this gives us all the more reasons to have a developmental approach towards them. With so many technological breakthroughs happening all over the world, the Governments have spent in Research and development and innovations which would make the life of disabled people happier and easier.

For example, the invention of artificial limbs caused a revolution. They are available to the most disabled people and they can reap benefits from them.

Also, educating them and giving them jobs based upon their physical condition will make them feel a "sense of achievement" and increase their happiness quotient.

Also, disabled people should be trained by specialists in their fields so that they can try and overcome their shortcomings to the maximum extent possible and lead a life which is satisfactory and happy.

6.3.1.1 Myths and Stereotypes

We are all individuals with commonalities and differences and that is true for persons with disabilities as well. As an instructor, it is important to remember to not show pity or put an individual up on a pedestal – everyone should be treated as equals regardless of one's abilities. When working with people with disabilities, it is important to avoid stereotypes. To debunk common stereotypes and myths, below are some key items to note about persons with disabilities:

- Persons with disabilities are all ages, come from diverse cultures and financial backgrounds.
- People with disabilities work.
- People with disabilities have families.
- Not all persons with disabilities are on or receive benefits such as ESI, Medicaid, etc.
- People with disabilities have goals and dreams.
- All people with disabilities do not necessarily want or need assistance.
- People who are blind or have low vision may wear glasses.
- People who are deaf may use their voice and may be able to read lips, but not all.
- Not all people who use wheelchairs are completely paralyzed – some may be able to walk short distances.
- Delayed or slow speech is not necessarily a sign of a slowed mental process.
- Persons with learning disabilities can be highly intelligent individuals; they simply have a different way of learning.

6.3.1.2 People's First Language

Positive language empowers people and helps them feel respected and important. When writing or speaking about people who have a disability, it is important to put the person first, usually addressing them by name or including them as a member of a group, such as a student or co-worker. Group designations such as "the blind," "the retarded" or "the disabled" are inappropriate because they do not reflect the individuality, equality or dignity of people with disabilities.

Here are some general tips to keep in mind:

- **Offer to shake hands when introduced.** People with limited hand use or an artificial limb can usually shake hands and offering the left hand is an acceptable greeting.
- **Treat adults as adults!** Address people with disabilities by their first names only when extending that same familiarity to all others.
- **Ask First.** If you offer assistance (always ask before assisting someone), then wait until the offer is accepted. Then ask the individual with a disability for instructions on how you may assist them.
- **Relax.** Don't be embarrassed if you happen to use common expressions such as, "See you later" or "Did you hear about this?", that seem to relate to a person's disability
- **Give them respect** as any other individual.

6.3.2 Gender Sensitization

What is Gender?

The socially constructed and culturally defined roles, responsibilities, attributes, and entitlements assigned to people based on their sex assigned at birth in a given setting, along with the power relations between and among the assigned groups.

Gender equality is the concept that all human beings, irrespective of their sex or gender identity, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or discrimination.

What is Gender Bias?

- Gender bias is the tendency to make decisions or take actions based on preconceived notions of capability according to gender. People with disabilities have families.
- Not all persons with disabilities are on or receive benefits such as ESI, Medicaid, etc

It is the process of raising awareness and inculcating empathy about one's own and the other gender. Since one of the most common area of discrimination is based on gender, there is a great need to sensitize the youth on gender related issues. This would strongly contribute in ensuring that equal roles, responsibilities, opportunities, and expectations are assigned to both men and women. Training on gender sensitization will help break the stereotypes around job roles, women's participation in particular trades, and would support in equal participation of men and women in the decision-making process.

6.3.2.1 Why is the Need for Gender Sensitivity

Couple communication and decision-making

The role of men and women in household decisions about finances, food consumption, childcare, healthcare or travel often reflect power relations in the home. When power relations are unequal, it results in not only

one sided biased decision but also can increase risky sexual behavior and intimate partner violence. While it is important for women to play a larger role in important household decisions, such as financing, men should also become more involved in healthcare and household decisions around health. Couple communication and joint decision-making have a positive impact on health outcomes.

Access to opportunities and resources

Gender-related factors also affect health outcomes through differential access to opportunities and resources like education, employment and healthcare.

- **Education:** Gender roles often restrict both boys' and girls' access to education which can have long-term effects on health outcomes. For example, more educated women and formally employed women are more likely to use family planning, which reduces the risk of unwanted pregnancy and potentially, the need for abortion
- **Employment:** In many contexts, women's traditional responsibilities are primarily domestic and they do not work outside the home. When they do, they are often part of the informal economy, in lower-paid and less-skilled jobs without opportunities to join unions or trade organizations that advocate for better pay or rights
- **Healthcare:** Women's mobility may limit their access to health services and existing programs intended to increase knowledge of family planning or other health information. Men often do not go to health clinics for their own care or with their partner because pregnancy and child health are seen as a "woman's domain.".

Social, cultural and gender norms

Norms related to gender, such as gender preference, masculinity and fertility, also influence health outcomes.

- **Gender Preference:** In India, China, and to a certain extent in some African countries, there is a gender bias in child healthcare. Preference for boys can lead to financial resources for education and other services, like healthcare, being differentially allocated within households. Reasons for this preference vary, and include the perception that boys will financially support their parents when they are older, and that families are obliged to pay dowries when their daughters marry.
- **Fertility:** In many areas, a woman's value is often measured by her ability to have children. This can lead women to put their own health or the health of their family at risk by starting pregnancy too early, when not yet physically matured, and giving birth without proper spacing or having more children than the household can support. For couples facing fertility issues, women often bear the brunt of household and community-level stigma and abuse for failing to conceive.
- **Masculinity:** Masculine ideas associating men with strength, virility, dominance and power may increase the number of sexual partners and inhibit the use of condoms, thereby increasing the risk for unwanted pregnancy or the transmission of STIs or HIV through unprotected sex or sexual violence. These masculine norms also may promote or normalize violence against women

Summary of Need for Gender Sensitization

- To provide balance to the society
- To provide equal opportunities to women and men
- To gauge views of all sections of society
- To distribute resources evenly
- To allow same personal freedom for men and women
- To even out the gender bias present in the society

How to stop gender bias

- Education that helps create attitudinal shifts towards gender bias and activities to spread awareness.
- Continuous efforts towards breaking myths and stereotypes around gender.
- Ensuring State accountability to implement various schemes, policies, laws, constitutional guarantees and international commitments.
- Institutionalizing gender sensitive processes within various systems such as law and programmes.
- Encouraging community ownership in preventing violations based on gender discrimination.

Sexual harassment at workplace is an extension of violence in everyday life and severely affects. Women's right to work in a safe and secure environment. While it is the responsibility of every employer to ensure safety of women at the workplace, it is also important for the trainees, both men and women, to be aware of all aspects of sexual harassment at the workplace. Skill training for both male and female trainees and professionals in the skilling ecosystem is centered around the following issues:

- What constitutes workplace sexual harassment?
- Where can the aggrieved complain about the same?
- What are the rights of the aggrieved?
- What is the redressal mechanism?
- Which are the bodies involved in addressing these complaints?
- What are the possible actions that can be taken against the accused?

Industry Visit

The purpose of visiting an apparel manufacturing unit is to get hands on knowledge about various processes involved in the work of a Pressman. During the visit you have to interact with Pressmen and supervisors to understand how work is done in industry. Make sure that you keep a notebook handy and note down any important points that come up during your interaction at the apparel manufacturing unit. When you go to an apparel manufacturing unit, you should:

- Know about the production system.
- Understand the machine safety and maintenance rules of industry.
- Analyze how Pressmen:
  - » Use and maintain personal protective equipment as per protocol.
  - » Maintain a healthy lifestyle and guard against dependency on intoxicants.
  - » Follow environment management system related procedures.
  - » Identify and correct (if possible) malfunctions in machinery and equipment.
  - » Store materials and equipment in line with manufacturer's and organizational requirements.
  - » Minimize health and safety risks to self and others due to own actions.
  - » Monitor the workplace and work processes for potential risks and threats.
  - » Carryout periodic walk-through to keep work area free from hazards and obstructions, if assigned.
  - » Report hazards and potential risks/threats to supervisors or other authorized personnel.
  - » Participate in mock drills/ evacuation procedures organized at the workplace.
  - » Take action based on instructions in the event of fire.
- Ask questions to Pressmen/supervisors if you have any query.

Resources

Scan the QR code or click the link to access the videos or e-book.

Description	QR Code
Description	QR Code
Health related threats in apparel industry and control on them	https://youtu.be/POlQ27GQZp0
First aid	https://youtu.be/DQ7JPNgU8Wg
Gender sensitization	https://youtu.be/Wi1exdO1lig

Exercise

1. While working at workplace, your waist should be at:
   a) 300
   b) 600
   c) 900
   d) 1200
2. We receive _____ per cent of all information through our eyes.
   a) 75%
   b) 60%
   c) 70%
   d) 80%

3. The major health risks in the garment industry come from more subtle hazards whose effect build up over time.
   a) True
   b) False
4. Workers in the garment industry face a considerably higher risk of muscle pain and injury than workers in other jobs.
   a) True
   b) False
5. Factors like repeated motions, force, body-posture are not associated with higher risks and rate of injury
   a) True
   b) False
6. Some fundamental ergonomic principals that should be followed in our workplaces are
   a) Keep repetitive motions to a minimum
   b) Use proper tools
   c) Avoid awkward postures:
   d) All of the above
7. Avoid lifting overhead or rom below knee heights
   a) True
   b) False
8. Bad lighting means wrong or lesser absorption of information, leading to lower productivity.
   a) True
   b) False
9. 'Ergonomics' is related to human
   a) Comfort
   b) Safety
   c) Both 'a' and 'b'
   d) None of the above
10. Fire drills are excellent exercise designed to
   a) Evaluate staff response to replicated emergency
   b) Test of your firms fire safety
   c) Test evacuation strategies and staff training programs
   d) All of the above
11. In case of fire do not use _____.
   a) Lift
   b) Stairs
   c) Ladder
   d) Window

12. The factors that lead to reduction in injury rates include:
    a) Empowering workforce
    b) Following safety protocol
    c) Good housekeeping practices
    d) Support from top management
    e) All of the above
13. Lighting requirements are reliant on:
    a) The environment of the working area
    b) The nature of the task
    c) The sharpness of the worker's eyesight
    d) All of the above
14. Signs can be
    a) Illuminated one
    b) Combination of shape,
    c) Pictogram
    d) All of the above
15. Repetitive motion injuries are caused by _____ exposure to a combination of factors.
    a) Short term
    b) Intermittent
    c) Prolonged
    d) Immediate
16. First aid means
    a) The assistance given to any person suffering a sudden illness or injury
    b) Care provided to preserve life during a sudden illness or injury
    c) Prevent the illness /injury condition from worsening, and/or promote recovery.
    d) All of the above
17. Heart rate of a healthy person should be:
    a) 40-60 beats per minute
    b) 70-110 beats per minute
    c) 80-100 beats per minute
    d) 60-100 beats per minute
18. What is not in Four A's of First Aid:
    a) Awareness
    b) Assessment
    c) Action
    d) Attitude

19. The symptoms of fracture:
    a) Pain
    b) Swelling
    c) Visible bone
    d) All of the above
20. Which degree of burn is explained as; extremely serious and requires many years with repeated plastic surgery and skin grafting to heal?
    a) 1st Degree Burn
    b) 2st Degree Burn
    c) 3st Degree Burn
    d) 4st Degree Burn
21. _____ is a level of medical care which is used for victims of life-threatening illnesses or injuries until they can be given full medical care at a hospital.
    a) Basic life support (BLS)
    b) CPR
    c) ABC
    d) All of the above
22. What you mean by golden hour
    a) First 15minutes following an accident.
    b) First 60 minutes following an accident.
    c) First 30 minutes following an accident.
    d) First 45 minutes following an accident.
23. Cardiopulmonary resuscitation is the abbreviation of CPR
    a) True
    b) False
24. An AED is a machine that delivers an electrical shock to cancel any irregular heartbeat to get the normal heart beating to re-establish itself.
    a) True
    b) False
25. You can ensure high-quality CPR by providing high-quality chest compressions
    a) True
    b) False
26. Gender bias is the tendency to make decisions or take actions based on preconceived notions of capability according to gender state
    a) True
    b) False
27. When working with people with disabilities, it is important to avoid stereotypes.
    a) True
    b) False

28. Sensitization means
    a) Knowing that there is a different way of living.
    b) He or she has a right to exist in a society
    c) It's an attitudinal change
    d) All of the above
29. People with disabilities are subject to multiple lacks to basic services, including education, employment, rehabilitation facilities etc.
    a) True
    b) False
30. The Constitution of India ensures _____.
    a) Equality, freedom
    b) Justice and dignity
    c) Equality, freedom, justice and dignity
    d) Equality and justice
31. Gender bias eradication can be done through
    a) By breaking myths and stereotypes around gender
    b) Implementing various schemes, policies and laws
    c) Preventing violations based on gender discrimination.
    d) All of the above
32. It is the responsibility of every employer to ensure safety of women at the workplace
    a) True
    b) False
33. Delayed or slow speech is not necessarily a sign of a slowed mental process.
    a) True
    b) False
34. We learn so many virtues from disabled people like patience, courage, positive thinking etc
    a) True
    b) False
35. Disabled people need sensitivity of the society and initiatives to make their life easy
    a) True
    b) False

7. Maintain Work-Area, Tools and Machines

Unit 7.1 - Maintain Work Area, Tools and Machines

AMH/N0102

Key Learning Outcomes

At the end of the module, participants will be able to:

1. Practice the machine safety and maintain machines properly.
2. Carry out basic maintenance of machine.
3. Maintain tools and equipments and handle them safely.
4. Use materials to minimize waste.
5. Carryout running maintenance within agreed schedules.
6. Carry out maintenance and/or cleaning within one's responsibility.
7. Work in a comfort position with the correct posture.
8. Use cleaning equipment and methods appropriate for the work to be carried out.
9. Dispose of waste safely in the designated location.
10. Store cleaning equipment safely after use.
11. Carryout cleaning according to schedules and limits of responsibility.
12. Realise the importance of safe working practices and code of conduct (COC) and Social Accountability standards followed by the garment industry.

UNIT 7.1: Maintain Work Area, Tools and Machines

Unit Objectives

At the end of this unit, participants will be able to:

1. Practice the machine safety and maintain machines properly.
2. Carry out basic maintenance of machine.
3. Maintain tools and equipments and handle them safely.
4. Use materials to minimize waste.
5. Carryout running maintenance within agreed schedules.
6. Carry out maintenance and/or cleaning within one's responsibility.
7. Work in a comfortable position with the correct posture.
8. Use cleaning substances equipments, and methods appropriate for the work to be carried out.
9. Dispose of waste safely in the designated location.
10. Store cleaning equipment safely after use.
11. Carryout cleaning according to schedules and limits of responsibility.
12. Maintain Hazard Free Work Environment.
13. Follow safe work practices.

7.1.1 Introduction

Machines are essential to modern production. However, along with accrued productivity, they have brought hazards into the workplace. Proper management of machine hazards has traditionally been seen as expensive and a constraint on productivity. In general, the garment manufacturing trade is considered to be less dangerous than alternative industrial sectors and, therefore, safety policy is a low priority in several enterprises. For example, it has been ascertained that some workers remove guards protective belts from sewing machines, and manual cutting machines are operated with naked hands.

Machine breakdown is a common reason behind production delay affecting delivery schedules. Considering the importance of meeting delivery dates, a competitive enterprise cannot afford penalties for delay due to machine breakdown therefore, proper maintenance of machines to prolong their economic life, reduce breakdowns, prevent defective outputs and guarantee safe operation ought to be additional importance. Protective staff against pollution from the frequent use of solvents for cleaning and the existence of cotton or other fibers within the surroundings ought to also be taken into consideration. Maintenance and safety measures to eliminate these hazards and increase machine productivity, beside affordable techniques for environmental control, are mentioned below.

Carry out basic maintenance of machine

It is important to carryout basic maintenance of own machine and surroundings. While operating a sewing machine we can keep a check of these two maintenances by keeping an eye on the needle point i.e.:

- Must check the needle point and stitch quality while working.

- Be attentive and look for any kind of oil leakage is found, replace (or inform) immediately.
- For hazard free environment, always keep the hook area clean and tidy.

Routine Maintenance

This covers sub kinds of maintenance:

Daily maintenance of the machinery: While carrying out the daily maintenance one must look for whether the machine and its area is clean, look for threading of the machine, quality and quantity of the oil. Make sure to switch off the machines after operation this is one of the most important part of daily maintenance. Keep a check on needle tip and needle bend it should not be dull or rusty at all.

Weekly maintenance: Consists of checking up the oil level and oil color in the machine. Make sure to remove the presser foot, throat plate and the feed dog too and clean them all thoroughly. Hook timing and clearance is also adjusted weekly so that the machine can work efficiently.

Monthly maintenance: While keeping an eye on monthly maintenance of the machinery it is very important check oil flow in the pipeline, refill the oil up to its maximum level for efficient and flawless performance.

7.1.2 Maintain Machines and Equipment Properly

A poorly maintained machine is inefficient, if not dangerous. It will also have frequent breakdowns and quality issues. Proper maintenance isn't lost production time; it's an investment for higher productivity and lower repair prices. Nonetheless in several corporations, machines are maintained only if they break down. This can be as a result of a number of reasons:

- Machines are owned by the contractors or they're leased.
- No maintenance personnel are available.
- No time to maintain machines is allotted under production time.
- There is a powerful belief that maintenance means cost.
- Some machines are not simple to maintain.

Machine down-time affects production and causes delays. Defects are also produced causing quality and productivity problems. Machine maintenance should, therefore, be planned and coordinated with supervisors and workers.

7.1.3 Maintaining Hazard Free Work Environment

Effective maintenance of work premises or housekeeping can eliminate some workplace hazards and help get a job done safely and properly. Poor housekeeping can frequently contribute to accidents by hiding hazards that cause injuries. If the sight of paper, threads, broken parts, debris, clutter and spills is accepted as normal, then other more serious health and safety hazards may be taken for granted.

Housekeeping is not just cleanliness. It includes keeping work areas neat and orderly; maintaining halls and floors free of slip and trip hazards; and removing of waste materials (e.g., paper, threads, pieces of fabric etc.) and other fire hazards from work areas. It also requires paying attention to important details such as the layout of the whole workplace, aisle marking, the adequacy of storage facilities, and maintenance. Good housekeeping is also a basic part of accident and fire prevention.

Effective housekeeping is a continuous process: it is not a hit-and-miss clean-up done occasionally. Periodic "panic" clean-ups are costly and ineffective in reducing accidents.

7.1.3.1 Purpose and Benefits of Maintaining Hazard-free Workplace

Poor housekeeping or ill-maintained workplace can result in accidents like:

- Tripping over loose objects on floors, stairs and platforms
- Being hit by falling objects
- Slipping on greasy, wet or dirty surfaces
- Striking against projecting, poorly stacked items or misplaced material
- Cutting, puncturing, or tearing the skin of hands or other parts of the body on projecting needles, wire or steel strapping

To avoid these hazards, a workplace must "maintain" order throughout a workday. Although this effort requires a great deal of management and planning, the benefits are many

Few benefits of maintaining hazard-free work place are:

- Reduced handling to ease the flow of materials
- Fewer tripping and slipping accidents in clutter-free and spill-free work areas
- Decreased fire hazards
- Lower worker exposures to hazardous substances (e.g. broken needles, dusts, vapours)
- Better control of tools and materials, including inventory and supplies
- More efficient equipment clean-up and maintenance
- Better hygienic conditions leading to improved health
- More effective use of space
- Reduced property damage by improving preventive maintenance
- Improved morale
- Improved productivity (tools and materials will be easy to find)

7.1.3.2 Planning Workplace Maintenance

A good maintenance program plans and manages the orderly storage and movement of materials from point of entry to exit. It includes a material flow plan to ensure minimal handling. The plan also ensures that work areas are not used as storage areas by having workers move materials to and from work areas as needed. Part of the plan could include investing in extra bins and more frequent disposal.

Housekeeping order is "maintained" not "achieved." Cleaning and organization must be done regularly, not just at the end of the shift. Integrating housekeeping into jobs can help ensure this is done. A good housekeeping program identifies and assigns responsibilities for the following:

- Clean up during the shift
- Day-to-day clean-up
- Waste disposal
- Removal of unused materials
- Inspection to ensure clean-up is complete

7.1.4 Maintaining Tools and Equipment

The best quality tools and equipment cannot last long if not properly taken care of. Few key points in tool and equipment maintenance are:

- **Proper Storage:** All tools and equipment should be stored properly in their designated places. Good organization is not just about saving time when you're looking for the proper tool, or even just about saving space in your garage or shed. Good organization can go a long way toward keeping tools in proper working order for longer. Do not leave tools like needles, scissors, hoops scattered around or lying on the work station. After finishing the work, all tools and equipment should be placed in their designated places
- **Regular Maintenance:** All tools that require lubricant should be regularly lubricated like scissors and hoop locks. Also, regular checks should be done to ensure the tools are working properly and if required repairs should be carried out
- **Correct Usage:** Most tools are designed to perform specific functions. Using the wrong tool for a job can pose a safety hazard to you and those around you. By using your equipment incorrectly, you can make the tool less effective for its intended use. For instance, proper needles should be used for embroidering depending on the type of stitches and fabrics used
- **Cleaning tools after use:** Tools like needles, scissors, hoops etc. should be properly cleaned after every use. This can be simply done by wiping them with a clean piece of cloth.

7.1.5 Garment Waste

"The two shocking facts about garments"

- Over 70% of the world's population use second hand clothes.
- The average lifetime of a garment is about three years.

What is Waste?

- Waste is an unwanted or undesired material or substance.
- It is also referred to as rubbish, trash, garbage, or junk depending upon the type of material and the regional terminology.
- In living organisms, waste relates to unwanted substances or toxins that are expelled from them.

Waste Management

- This the human control of the collection, treatment and disposal of different wastes. This is in order to reduce the negative impacts waste has on environment and society.
- Waste is directly linked to the human development, both technologically and socially.
- The compositions of different wastes have varied over time and location, with industrial development and innovation being directly linked to waste materials.
- Examples of this include plastics and nuclear technology. Some components of waste have economical value and can be recycled once correctly recovered.

Biodegradable Waste

- Such as food waste or sewage, is broken down naturally by microorganisms either aerobically or an aerobically.
- If the disposal of biodegradable waste is not controlled it can cause a number of wider problems including contributing to the release of greenhouse gases and can impact upon human health via encouragement of pathogens.

- It is difficult to define specifically what a waste is. Items that some people discard have value to others.
- It is widely recognized that waste materials are a valuable resource, whilst there is debate as to how this value is best realized.
- Governments need to define what waste is in order that it can be safely and legally managed.
- Different definitions need to be combined in order to ensure the safe and legal disposal of the waste.

Negative Impact on Environment

- Waste pollution is considered a serious threat by many and can broadly be defined as any pollution associated with waste and waste management practices.
- Typical materials that are found in household waste, and which have specific environmental impacts, include biodegradable wastes, batteries, aerosols, oils, acids and fluorescent tubes.

Source of Garment Waste

- Although the majority of textile waste originates from household sources, waste textiles also arise during yarn and fabric manufacture, garment-making processes and from the retail industry.
- These are termed post-industrial waste, as opposed to the post-consumer waste which goes to jumble sales and charity shops.
- Together they provide a vast potential for recovery and recycling.

History on recycling of garment wastes

- Textile recycling originated in the Yorkshire Dales about 200 years ago.
- These days the 'rag and bone' men are textile reclamation businesses, which collect textiles for reuse (often abroad), and send material to the 'wiping' and 'flocking' industry and fibers to be reclaimed to make new garments.
- Textiles made from both natural and man-made fibers can be recycled.
- It is estimated that more than 1 million tones of textiles are thrown away every year, with most of this coming from household sources. Textiles make up about 3% by weight of a household bin. At least 50% of the textiles we throw away are recyclable.

Recycling of Garment Waste

- Recycling of waste raw materials left by garment factories has emerged as a good income generating source for many people in recent times.
- As the informal sector requires small investment, it attracts a good number of investors who are employing thousands of people, mostly from under-privileged classes.
- The garment leftovers, called ***Jhoot*** by the people involved in the trade, are virtually turned into useful materials.
- Every bit and pieces of waste raw materials starting from cut-pieces of clothes, zippers, buttons, thread, elastic fasteners, used plastic packets, broken cloth hangers, empty bobbins to rejected pants, shirts and t-shirts are sold from the garment factories.

Stages of recycling

- First stage of recycling starts with sorting, which is usually done by colors, type of fabric and its condition.
- The usable clothes are bought by small garment factories with one or two machines reproducing clothes with it. Children's frocks, skirts, shirts, pyjamas, pillow cases are produced with this usable portion of the wastage.
- These reproduced items are mostly sold in street side stalls all around the city. "Because of the ***Jhoot*** trade the poor segment of the society can buy clothes at cheaper prices."

Use of garment wastes

- The unusable parts and extremely shredded clothes are recycled into waste cotton.
- Mattress, pillows, cushions, seat stuffing and padding in cars, public buses and rickshaws are usually done with these recycled clothes and processed cotton.
- Even bandages are being reproduced with leftover white cotton fabrics.
- While buttons, zippers, elastic fastener, hangers and plastic bags are resold to mini garment accessory sellers.
- Buttons, zipper, elastics fasteners are mostly purchased by local tailors, said an accessory seller.

Environmental and Economic benefits of Garment Recycling

- Reduces the need for landfill space.
- Textiles present particular problems in landfill as synthetic (man-made fibres) products will not decompose, while woolen garments do decompose and produce methane, which contributes to global warming.
- Reduces pressure on virgin resources.
- Aids the balance of payments as we import fewer materials for our needs.
- Results in less pollution and energy savings, as fibres do not have to be transported from abroad.

7.1.6 Common Cleaning Products

Cleaning substances are substances (usually liquids, powders, sprays, or granules) used to remove dirt, including dust, stains, bad smells, and clutter on surfaces. Purposes of cleaning agents include health, beauty, removing offensive odour, and avoiding the spread of dirt and contaminants to oneself and others. Some cleaning agents can kill bacteria and clean at the same time.

Common types of cleaning products are detailed below:

Acidic: Acidic cleaning agents are mainly used for removal of inorganic deposits like scaling. The active ingredients are normally strong mineral acids and chelants. Often, surfactants and corrosion inhibitors are added to the acid. Hydrochloric acid (also called muriatic acid) is a common mineral acid typically used for concrete. Vinegar can also be used to clean hard surfaces and remove calcium deposits. Sulfuric acid is used in acidic drain cleaners to unblock clogged pipes by dissolving greases, proteins

Alkaline: Alkaline cleaning agents contain strong bases like sodium hydroxide or potassium hydroxide. Bleach (pH 12) and ammonia (pH 11) are common alkaline cleaning agents. Often, dispersants, to prevent re-deposition of dissolved dirt, and to attack rust, are added to the alkaline agent. Alkaline cleaners can dissolve fats (including grease), oils, and protein-based substance

Neutral: Neutral washing agents are pH-neutral and based on non-ionic surfactants that disperse different types of dirt.

Degreaser: Cleaning agents specially made for removal of grease are called degreasers. These may be solvent-based or solvent-containing and may also have surfactants as active ingredients. The solvents have a dissolving action on grease and similar dirt. The solvent-containing degreaser may have an alkaline washing agent added to a solvent to promote further degreasing. Degreasing agents may also be made solvent-free based on alkaline chemicals and/or surfactants.

7.1.6.1 Commonly used Cleaning Substances

It is imperative to use the correct cleaning products and equipment on various surfaces. Cleaning chemicals and detergents should always be used conferring to the manufacturer's guidelines. Cleaning substances can be divided into four categories:

Detergents: Detergents are probably the most common cleaning substance used in the home and vary from floor cleaners, dish washing cleaners, washing powders, hand soaps and so on. These products are used to remove dirt and grease from a number of surfaces. Detergents should be diluted according to the manufacturer's instruction. A detergent will clean a surface it is applied to.

Fig.7.1.1: Type of Cleaning Substance

Sanitizers: Apart from general cleaning detergents, sanitizers are also commonly used cleaning agents used in the various kinds of fabrics even at home. This is because they are so convenient to use. Sanitizers comprise cleaning chemicals which are good at disinfecting and cleaning at the same time, therefore they contain a detergent as well as a sterilising agent or disinfectant.

Sterilising Agents: Sterilising agents are similar to disinfectants, but are generally used for specialised areas where sterile surfaces and objects are a precondition. These cleaning chemicals are able to kill bacteria spores, viruses and germs that may be resistant to the chemicals found in disinfectants. In order to ensure surfaces and objects are sterile, sterilising chemicals are used with other cleaning methods such as steam or heating when absolute sterility is a crucial.

Disinfectants: Though disinfectants are not able to kill all bacteria spores, it is considered to be a good cleansing agent. In order to apply a disinfectant to an area, it must first be cleaned thoroughly with other cleaning chemicals, such as a detergent. This is done in order to first remove any dirt or grime on surfaces before applying a disinfectant.

Resources

Scan the QR codes or click on the link to watch the related videos.

Descriptions	QR Codes
Wastes in garments factory	https://youtu.be/2ybCDqMITug

Industry Visit

The purpose of visiting an apparel manufacturing unit is to get hands on knowledge about various processes involved in the work of a finisher and packer. During the visit you have to interact with finishers and packers and supervisors to understand how finishing and packing is done in industry. Make sure that you keep a notebook handy and note down any important points that come up during your interaction at the apparel manufacturing unit. When you go to an apparel manufacturing unit, you should:

- Know about the packing system.
- Understand the tools and equipment safety and maintenance rules of industry.
- Analyze how packers:
  - » Maintain tools and equipments and handle them safely and use materials to minimize waste.
  - » Work in a comfortable position with the correct posture.
  - » Dispose of waste safely in the designated location.
  - » Store cleaning equipment safely after use.
- Ask questions to Packers/supervisors if you have any query.

Exercise

1. Machine down-time doesn't affect production and causes delays.
   a) True
   b) False
2. Poor housekeeping or ill-maintained workplace can result which of the following accidents?
   a) Slipping on greasy, wet or dirty surfaces
   b) Being hit by falling objects
   c) Cutting hand
   d) All the above
3. How will you maintain tools and equipment for their long life?

   .....

   .....

   .....

   .....
4. What is garment waste?

   .....

   .....

   .....

   .....

8. Follow Regulatory and Company's Rules and Greening of Job Roles

Unit 8.1 - Follow Regulatory and Company's Rules

AMH/N0104

Key Learning Outcomes

At the end of this module, participants will be able to:

1. Carryout work functions in accordance with legislation and regulations, organizational guidelines and procedures.
2. Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel.
3. Apply and follow these policies and procedures within your work practices.
4. Provide support to your supervisor and team members in enforcing these considerations.
5. Identify and report any possible deviation to these requirements.
6. Explain the effect and importance of Greening of Job roles.

UNIT 8.1: Follow Regulatory and Company's Rules

Unit Objectives

At the end of this unit, participants will be able to:

1. Carryout work functions in accordance with legislation and regulations, organizational guidelines and procedures.
2. Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel.
3. Apply and follow these policies and procedures within your work practices.
4. Provide support to your supervisor and team members in enforcing these considerations.
5. Identify and report any possible deviation to these requirements.
6. Explain the effect and importance of Greening of Job roles.

8.1.1 Defining Compliance for Your Organization

According to Merriam Webster the dictionary definition of compliance is as follows:

1. The act or process of complying to a desire, demand, proposal, or regimen, or to coercion.
2. Conformity in fulfilling official requirements.
3. A disposition to yield to others.
4. The ability of an object to yield elastically when a force is applied.

Fig.8.1.1: Regulatory Compliance

Supervisory compliance for industries, world- wide falls under the second definition. There are many managers, general councils, and policy officers that would consent in agreement at any of the other definitions as well. Let's discuss, what is compliance? Whether an organization is confronting an external regulatory compliance from a government agency, or seeks to comply with its own organizational mandates, policies or procedures, compliance in actuality means conforming to requirements and a proof that your organization has done so. This is usually attained by the scheming and development of managerial policies that will map out the projected code of conduct.

From a policy's point of view, there are many aspects that impact an organization's policies, including legislative and regulatory requirements, organizational best practices, and the market demands. If we look at government/ public sector agencies, financial service businesses, and healthcare providers - we find that they are controlled and must develop internal policies in order to ensure compliance. The actual trial comes from the juncture of practice with the laid policy.

After that, they must adopt ways to enforce those policies and measure their effectiveness. Initially this may seem to be an easy and convenient task. But the dilemma is creating a policy – without any mechanism, may it be manual, automated, or third-part, to measure and monitor compliance of the policies is very difficult. In order to build effective policies, we must not only have an understanding of the statutory requirements that will shape

the policy within our organizations, but how these policies relate to the business practices, the workforce, the methodologies of operations and the technologies within the corporation.

Irrespective of the requirements to which an organization must obey, a well-planned model is essential which will be one that assimilates strategies with their people, processes, and technology. This includes education, monitoring, and enforcement. Organizations should look to use machineries and to develop procedures that make it easier to do the right thing or to simply disregard the policy all together. In conducting performance audits, an assessment should be made of compliance with applicable laws and regulations when necessary to satisfy the audit objectives. The auditor should design the audit to provide reasonable assurance of detecting illegal acts that could significantly affect audit objectives. The auditor also should be alert to situations or transactions that could be indicative of illegal acts that may have an indirect effect on the audit results.

8.1.2 Significance of Compliance in Indian Garment Industry

Compliance is the standard for the product which ensures that it is aligned to its industry's qualitative demands. This also includes audits and inspections which are crucial to a proper and formal work environment. Compliance and its demand is rapidly growing in today's industrial scene since globalization of manufacturing standards has also created a demand for ethically created products. This standard of compliance is crucial because of the increase in export of garments from India.

Social Compliance

The treatment of the employees by its business constitutes social compliance. This also includes their environment and their personal perspective on social responsibility as an employee. The treatment of employees regarding wages, work conditions and working hours. A compliance audit is necessary in order to determine if the company meets standard environmental laws.

Compliance Audit

Process Safety Management, Risk Management Programs, and Process Security Management are all organised and provided by audits and assessments. Compliance and its verification is carried out with audits that focus particularly on these policies and procedures. The design and implementation of these audits ensures this compliance. Additionally, all sorts of deficiencies can be addressed and solved through corrective action.

In India, compliance audit consists of a thorough examination of orders, regulations, rules and directions for dealing with prudence, legality, transparency and adequacy. It is the job of auditors to collect information by reviewing documents, visually observing the site and staff interviews. This data is cross checked with applicable regulations and permits to ensure how well the operation is when sieved through applicable and required legalities.

There are three main phases of compliance audit in India:

1. **Pre-audit:** It includes planning and organising the audit; establishing the audit objectives, scope and etiquette; and reviewing the design of the program by inspecting documentation
2. **On-site audit:** It includes conducting personnel interviews, reviewing records, and making observations to assess program implementation
3. **Post-audit:** It includes briefing the management on audit findings, and preparing a final report

Therefore, Indian apparel manufacturers need to follow Government guidelines, and social compliance standards not only within their sphere of operations, but also insist their vendors, distributors, and other collaborators involved in the supply chain to do the same.

8.1.2.1 Core Labour Standards

International labour standards have grown into a wide-ranging system of gadgets on work and social policy, backed by a administrative system intended to address all sorts of complications in their submission at the national level

- Removal of Discernment in Employment and Occupation
- Freedom of Association
- Right to Collective Bargaining
- Elimination of all Forms of Forced or Compulsory Labour
- Effective Abolition of Child Labour

Apparel industry players would ensure that labour contractors don't involve forced labour or child labour and get the supply chain of the suppliers audited. Apparel Export Promotion Council (AEPC), a top organization of Indian apparel exporters, has envisioned a garment factory compliance program 'Disha' -Driving Industry towards Sustainable Human Capital Advancement. The prime objective of this body is to make India a global benchmark for social compliance in apparel Industrial. This Common Compliance Code design will prepare the Indian apparel industry on a mutual platform towards a more social and ecologically compliant industrial atmosphere.

8.1.3 India Adopting Universal Standards on Child Labour

The compliance level of garment factory is very high for Indian exporters. To ensure that all standards are being complied with, the big international companies, mindful of their branding, often generate and follow their own compliance standards. Numerous U.S. companies have incorporated "child labour" in their code of conduct, due to tenacious signal of child exploitation in the industry.

7.1.3.1 Common Compliance Code

There is a compliance exhaustion in the Apparel Industry,. Although they are trading with the global brands, the apparel sellers still don't consent that compliance is an integral management practice. The Indian apparel export industry has been indisputable to implement zero tolerance on child labour and cleanse the supply chain.

"This common compliance code will not only give the opportunity for the industry to negate international claims against child labour promotion in the garment industry, but will also help to improve the image of the industry and win more international businesses," as quoted by one of the Board Member of AMHSSC.

8.1.4 Role of AEPC in Indian Garment Industry

The apparel industry of India is one of the significant export segments. It enjoys a good global ranking because of its quality and price affordability. But there is an emerging need to increase effectiveness in the social domain as the industry faces various labour, compliance and background situations.

Being a labour rigorous industry, social compliance is becoming an integral issue for this sector. The apparel export promotion council of India (AEPC) under the textiles ministry is plateful domestic textile trade to follow the global norms through development and application of tools to help workshops certify, monitor and improve universal standards.

Fig.8.1.2: AEPC Logo

AEPC's assistance to garment exporters

AEPC brings about invaluable backing to Indian garment exporters and also the international buyers who select India as their favoured tracing terminus for garments. The body today has grown-up to become the most powerful connotation for promotion and facilitation of garment exports. With an objective of structuring a strong ground for Indian exporters, AEPC is devoted to provide various podiums which would help in increasing garment exports.

Role of Apparel Export Promotion Council in India

In India, the Apparel Export Promotion Council (AEPC) is committed to legal compliance and principled business Practices. It encourages members/exporters to comply with all applicable laws and regulations of the country to meet international compliance standards. Further, the council has designed a garment factory compliance program 'Disha' (Driving Industry towards Sustainable Human Capital Advancement) that aims to spread awareness regarding the importance of compliance among garment exporters.

8.1.5 Indian Garment Industry and Social Responsibility

The apparel industry of India, is one of the biggest segments among the various industries existing. It is also one of the oldest and an eminent industry in terms of output, investment and employment. A sector which has a global market share and has earned reputation for its permanence, worth and magnificence. The industry is growing at a fast pace with change in customer taste and inclinations. There are numerous factors impacting a change in customer preferences. Few of them are here:

- Rise in disposable incomes
- Government policy focused on fast-track growth
- Convenience of shopping at departmental stores and shopping malls
- Increasing demand for branded apparels and fashion accessories
- Boom in the retail industry

8.1.5.1 International Labour Standards

The Indian apparel industry had established itself substantially not just in the domestic but global market too. The improved density from international apparel buyers to comply with labour principles and rights in Indian garment factories has resulted into a vast number of labels and code of conduct.

8.1.5.2 Corporate Social Responsibility

Corporate social responsibility (CSR) fundamentally connotes that the establishment should work in a principled way. It should work in the best interest of the parties associated with it. The notion of social accountability and responsibilities in Indian apparel sector is fastening acceptance. Increasing number of companies are tiresome to work in a mode to defend the interests of the workforce, clients, contractors and the society.

8.1.5.3 Social Responsibility in the Garment Industry

Garment firms have social responsibility associated with workforce and the surroundings. Social responsibility in the global clothing industry gives a deep examination of labour practices and values. But the ways by which the various organisations takes up to accomplish their social accountability may be different. A garment factory can fulfil its social responsibility in the following manner:

- By creating and providing a challenging environment to the workforce.
- Creation and provision of fair book of policies for any kind of employee dispute, if any.
- Affirm a safe and positive working environment for the employees.
- Prohibit child labour and abolish any kind of child abuse.
- Provision of equal opportunities to the employees to voice their feedback and have an effective policy for the solution of dispute.
- Ensure ethical recruitment, training, remuneration, appraisal and other policies.

8.1.6 Indian Apparel Trade and Compliance Standards

With the increasing globalisation, a lot of prominence has been placed on global compliance standards in the garment industry. Factories involved in the international trade must keep a proper check of the garment factory compliance at regular interludes. Therefore, every apparel export business needs to have a proper understanding of compliance rules for foreign trade.

8.1.6.1 Why Code of Ethics is Required

The code of ethics is concerned with the quality of the products and services from the workstations along with the working environment that should meet the provisions of audits and assessments. If followed sincerely, these ethics will result into:

- Cumulative national affordability in terms of social compliance.
- Growing competitiveness of small scale industrialists.
- Dropping burden on manufacturers.

Some of the compliance codes in Indian garment industry are listed below.

8.1.6.2 Working Hour & Wage Rate Compliance

- Garment workshops should ensure a confirmation that employees should get minimum wages as per the domestic law and according to their working hours spent by them in the industry.
- Employer should confirm an equal wages to both men and women employees who are performing the same work or work of a similar nature.
- Workforce employed for more than nine hours on any day or for more than 48 hours in any week, shall be qualified to wages at premium legal rates for such overtime work.
- Every employee must be entitled to one holiday in a week. Whenever a worker is required to work on a weekly holiday, he is to be allowed a compensatory holiday for each holiday so lost.

8.1.6.3 Workplace & Work Environment Compliance

- Businesses units should see that they are providing a proper clean, hygienic, well-ventilation, sufficient light and air to provide the workforce with standard work environment. A comfortable workstation with a clean and neat workplace is a mandate.
- Indian garment industries should ensure that the workers are given a comfortable sitting chair with back support and proper leg space.

8.1.6.4 Non-discrimination Compliance

Under federal and state laws, it is in contradiction of the law for proprietors to differentiate staffs and job applicants and/or harassment to occur with their organizations. It is also against the law to treat people unethically or bother them because of the age, disability, homosexuality, marital or domestic status, race, sex or transgender status of any relative, friend or colleague of a job applicant or employee Employers, managers and supervisors must treat all their job applicants and employees on the basis of their individual merit and not because of irrelevant personal characteristics. They must also do their best to make sure that their employees are not harassing any other job applicant or employee.

8.1.6.5 Social Compliance in India

Religion, community, culture or belief characteristics should never be the basis of distinction among employees by the organisation. All the terms and conditions of employment should be based on a person's ability to do the job. The mandate for social compliance is growing every day. One can accomplish a dynamic and vigorous compliance system only when the workforce is provided with an equal stand to voice their concern and have consultative instrument at the workplace.

The Apparel Export Promotion Council of India (AEPC), a summit framework of Indian apparel exporters, runs all social compliance services to meet international global standards. This council trains and monitors industrial unit to upgrade the factory conditions and labour values and standards.

8.1.7 Health and Safety Compliance in Indian Garment Industry

Apparel industry has won increased attention from consumers, social workers, welfare organisations and trademarked international buyers. Many global players are demanding that their "code of conduct" should be complied to, before entering into an agreement. Nowadays, continuous observance to quality standards and employee contentment have become significant bounds for gauging the company's performance.

Apart from the growing quality of outputs that meet transnationally recognised standards, it is essential for the suppliers to improve safety and health compliance code and provide proper working atmosphere in their work locations.

Numerous overseas countries have established various international compliance standards on safety and health compliance. Exporters should follow these codes to live on in the global market. One should not under-estimate the benefits drawn from regular drilling of compliance codes of conduct which can bring higher price of yields, less employee turnover rate, smooth trade relation as well as global image & status.

8.1.7.1 Need for Compliance Codes

There is prominent impact of social compliance on company's economic outcomes. Companies should adopt compliance code to protect their goodwill and brand name in the market. The Indian apparel industry needs to be hard-hitting on compliance rather than opposing with other developing countries manufacturing low-cost garments.

8.1.7.2 Compliance Code Guidelines

Apparel factories ought to contemplate the below mentioned guidelines when complying with safety and health compliance code standards:

- Trades should comply with international standard code, such as ISO or importing countries standard code to become competitive in international markets.
- It is necessary for workers involved in loading and unloading operations.
- Young aduls (between 15 to 18 years) are not allowed to work on any dangerous machine without sufficient training and supervision.
- Ear plugs or muffs should be given in places with excessive sound such as generator rooms and embroidery rooms.
- Factories should have effective fire extinguisher with proper usage instructions.
- Eye-wear and face shields should be a must, providing in areas with danger of flying objects, sparks, glare, hazardous liquids and excessive dust.

Code to protect their goodwill in the market

This industry needs to be tough on compliance rather than challenging with other developing countries manufacturing inexpensive garments. In India, the Apparel Export Promotion Council (AEPC) is committed to legal compliance and ethical business practices and encourages members/exporters to comply with all applicable laws and regulations of the country to meet international compliance standards.

The council has designed a garment factory compliance program 'Disha' (Driving Industry towards Sustainable Human Capital Advancement) that aims to spread awareness regarding the importance of compliance among apparel exporters.

8.1.8 Compliance Code Guidelines for Indian Garment Industry

The Indian apparel industry supports considerably to India's export earnings. India has industrialised as a major following destination for various buyers. The USA and the EU endure to be the most domineering markets for Indian apparel industry, bookkeeping for about two-third of India's textiles exports. These countries have been demanding upon compliance to certain social, environmental and safety standards and norms by the manufacture units involved in export business. Corporate codes of conduct that discourses labour standards vary from corporation to corporation and location to location. Some of the common Indian Garment industry compliance code guidelines are:

- Exporters must not be intricate in unfair labour practices but limited to interferences in matters regarding freedom of association.
- Exporters shall recompense workforce for all hours operated. Workers on a piece rate payment scheme or any other incentive scheme should be paid according to that.

- Exporters shall not illogically restrain the liberty of movement of workers, including movement in canteen during breaks, using toilets, accessing water, or to access necessary medical attention, as a means to maintain work discipline.
- Exporters are about to offer workers with paid annual leaves as required under local laws, guidelines and processes. Exporters shall not impose any undue limitations on workers' use of annual leave or taking any type of sick or maternity leave.
- There shall be no alterations in workers remuneration for work of equal value on the basis of gender, race, religion, age, nationality, sexual orientation, social political opinion, disability or ethnic origin.
- Exporters shall not threaten female workers with firing or any other employment conclusion that adversely distresses their service status in order to avert them from getting married or becoming pregnant.
- Exporters shall confirm that proper ventilation systems are installed within their premises to prevent airborne exposures which may affect the health of workers.
- Members shall not custom any form of physical or mental, emotional violence, threats, harassment, or abuse against workers seeking to form organisations or participating in union activities, including strikes.
- Workers shall be permitted to at least 24 successive hours of rest in every seven-day period. If workers must work on a rest day, another successive 24 hours rest day must be provided.
- Exporters shall pay workers at least the legal minimum wage or the usual industry wage, the one that is Higher. This indeed is the most essential code of compliance for Indian Industry.
- Garment exporters must ensure that the minimum age requirement to unsafe employment shall not be less than 14 years. This is the most significant concern in the country. Each worker has the right to enter into and to terminate their employment freely. Indian apparel makers need to follow all the compliance rules to comply with global standards. Often companies adopt industry compliance codes to project a positive image and protect their goodwill in the market. The Indian garment industry needs to be strong on compliance instead of competing with other developing countries manufacturing inexpensive garments.

Indian apparel makers need to follow all the compliance rules to comply with global standards. Often companies adopt industry compliance codes to project a positive image and protect their goodwill in the market. The Indian garment industry needs to be strong on compliance instead of competing with other developing countries manufacturing inexpensive garments.

8.1.9 India Complying with International Standards on Child Labour

Child labour has been a grave crime in India. It still exists. Children are in poverty, ignorance, and corruption due to illiteracy. Child labour superfluities under many conditions such as discernment (based on gender, ethnic, or religious issues), inaccessibility of educational and other substitutes, weak enforcement of child labour laws, etc. Large global firms, conscious of their image, often set up their own compliance standards for the exporters to ensure that all standards are being complied with.

Various companies of U.S originality have included child labour in their code of conduct, due to tenacious evidence of child exploitation in the industry. In worldwide market, the buyer's compulsory requirement is to have an audit. As India is a leading garment exporter, the level of garment factory compliance is very high for Indian exporters. The child labour issue is one of the very important aspect that the audit checks. Therefore, all the export units must be highly compliant on issues related to child labour.

8.1.6.1 Code of Conduct for Garment Exporters

- Garment exporters must safeguard that the bottom limit of the age requirement to non-hazardous employment should not be less than 14 years. Moreover, all young workers (between 14 to 18 years) must be sheltered from doing any work that is likely to be dangerous or that may be injurious to their health and physical, mental, social, or moral development. Exporters must detect all legal necessities for work being performed by lawful young workers.
- Further, the trainees or occupational students shall not be under the legal age for employment (as provided under the applicable laws). They cannot be used on regular production lines as long as they are trainees and unless their pay and other benefits are at par with the regular workforce.
- A proper process is followed for checking the age of the workers. The minimum certification and credentials required to be maintained shall include- proof of age certificates by registered/ licensed dentists, birth certificate, school leaving certificate, national identity like passport, driving license, voter card etc. or any other document required under the applicable laws.

Apparel industry players would now make sure that labour contractors don't engage child labour and get the supply chain of the suppliers audited. Apparel Export Promotion Council (AEPC) has intended a garment factory compliance program 'Disha' (Driving Industry towards Sustainable Human Capital Advancement) to make India a global benchmark for social acquiescence in apparel manufacturing and export. This Common Compliance Code project will prepare the Indian apparel industry on a mutual platform towards a more social and environmentally accommodating industrial environment.

8.1.10 Green Jobs

"'Green jobs' are defined as jobs that reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable."

Green jobs can produce goods or provide services that reduce environmental impact, such as green buildings or clean technology adoption. An important section of green jobs lies in sustainable or clean manufacturing. India has already begun preparation towards a green transition by institutionalizing capacity buildings for green jobs through jobs, including legal regulations and skill mapping. The country is accelerating the expansion of green jobs in large industries like automotive, textile, brick manufacturing, power sector, and green buildings. It is gradually expanding its coverage to hard-to-abate sectors such as steel, thermal power plants, and manufacturing SMEs.

India will soon be the most populous country in the world – and home to one of the youngest populations. India is the world's third-largest energy consuming country, with 80 per cent of demand met by coal, oil and solid biomass. Despite its efforts, India is predicted to be among the top three emitters by 2030. Millions of Indian households are set to buy new appliances, air conditioning units and vehicles.

Rapid growth is expected in building stock, other infrastructure, and construction materials. In recent years, India created a massive expansion in renewable energy. India's efforts at promoting LED lighting are a huge success story. Over 367 million LED bulbs, 7.2 million LED tube lights and 2.3 million energy efficient fans have been distributed. This has brought big savings in power use, greenhouse gas emissions and household bills.

India has also taken steps to control plastic pollution, including bans on single-use plastic and strengthening extended producer responsibility. India has also committed to restoring 26 million hectares of degraded land by 2030. But India, like every nation, must do more. And doing more is in the best interests of the entire nation. A recent World Economic Forum estimate suggests that India's decarbonization journey represents a USD 15 trillion economic opportunity by 2070. This journey could create as many as 50 million net new jobs.

Fig.8.1.3: Diversified green jobs

About sustainability and sustainable workplace

Sustainability, greening the corporation, environment management are gradually becoming a part of the corporate vocabulary. The way the natural resources are extracted and consumed from earth, it is going to be very difficult to replenish them timely. It is often discussed in various forums that for generating the resources we spend in one year; earth takes around 1.5 years for the re-generation. Hence, it can be assumed that there will a requirement of the capacity of almost two Earths by 2030 to keep pace with the present natural resource consumption, and the requirement will be of three planets by 2050.

The current requirement is towards developing long-term, meaningful relationships, and self-discipline for attaining effective results. Thus, the design of the workplace is such that supports the basic and core idea in a more accommodating and comprehensive manner.

A Green workplace is an eco-friendly and focused organisation and leans towards the adoption of business practices that are justifiable in nature, energy efficient, and well suited to the complex as well as the ever changing world of business. It advocates the model based on 3Rs — reduce, reuse, recycle. It encompasses green competencies, green attitude, and green behaviour, which is combined synergistically to help the organisation become green or sustainable. Values are the essential characteristic that both employees and organisations uphold and operate at multiple levels (societal, organisational and personal), thus playing a fundamental role in shaping the organisation's culture with regard to a shift towards greater sustainability.

The idea of introducing green initiatives into the workplace can feel a little daunting at first. And while it may feel overwhelming trying to figure out where to start, there are actually lots of ways we can be more green in the office without bringing the whole forest inside, without huge cost implications and with long-term benefits to the company, employee well-being and future spend. Implementing a few simple changes for a more sustainable, green workplace can be really effective in reducing your business' impact on the environment.

Sustainability is now counted as one of the major pillars of apparel export business and a growth tool. Though its key areas involve saving of energy, water, more greenery in the factories, maximum use of natural resources, green factories, there are many other initiatives which are being taken by various companies as per their need, priorities, and with the changing sustainability landscape, bench marks and issues are also evolving. All these efforts are generating great results, bringing buyers closer to them and creating a sense of profitability and responsibility amongst the companies towards the people and the planet.

A Few Green workplace initiatives

1. Discourage food and water wastage
2. Switch off the lights or power when not in use
3. Switch off the sewing machine when not in use
4. Stop using Single use Plastic
5. Segregate waste as per waste management/disposal policy
6. Any sort of wastages like empty glasses/bottles/plastics/containers etc should be kept in a specific area to be recycled
7. Throw waste only in the allocated basket or trolley
8. Minimise use of paper
9. Use of LED lights
10. Installation of solar panels

Encourage similar practice at home also.

Exercise

1. The Chief Compliance Officer is the only person who should care about compliance issues.
   a) True
   b) False
2. Companies must comply with rules and regulations including company law, tax law and environmental protection regulations requires---------- procedures.
   a) Compliance
   b) Effective operations
   c) Financial reporting
   d) Reporting
3. Code of conduct supersedes which of the following:
   a) Department's policy and procedure
   b) None
   c) Central Laws and Regulation
   d) Public Law and Regulation
4. Auditors are assigned for ----------
   a) Controls on account balances
   b) Controls over classes of transactions
   c) Controls over disclosures
   d) Controls over loss
5. Following by employer's Code of Conduct ----------
   a) Helps me make taking ethical decisions
   b) To making me a better employee
   c) Is just waste of time
   d) Encourages production and ensures safety and security
6. Professional ethics means
   a) Morality
   b) Honesty
   c) All of the above
   d) Sympathy
7. Green jobs can produce goods or provide services that reduce environmental impact,a. Water Pollution
   a) True
   b) False

8. When you face possible compliance violation, it's best to contact only your supervisor.
   a) True
   b) False
9. Documentations is an important part of a compliance program.
   a) True
   b) False
10. Code of Conduct acts as one of the guidelines as to how the company operates
   a) True
   b) False

9. Soft Skills

Key Learning Outcomes

At the end of the module, participants will be able to:

1. Interpret the basic meaning of Soft Skills, their components and their benefits.
2. Interpret Work Readiness and its significance.
3. Explain communication process.
4. Explain about verbal and non- verbal communication.
5. Explain about the barriers in communication process.
6. Maintain cleanliness and hygiene.
7. Identify specific uniform guidelines
8. Maintain positive body language while speaking.
9. Interpret good eating habit and their impact on health.
10. Develop a positive attitude and behavior.
11. Explain team dynamics.
12. Explain how to manage relations.
13. Learn about Stress and anger management skills.
14. Learn to develop leadership qualities.
15. Explain about what is social interaction and what are social interaction behaviors.
16. Practice Self introduction in public.
17. Participate in group discussions in the class.
18. Identify the importance of team building and team work.
19. Explain about the time management.
20. Develop time management skills.
21. Learn about effective time planning.
22. Interpret the importance of resume.
23. Learn how to prepare a resume.
24. Explain the procedure of interview.
25. Practice mock interview.
26. Identify how to present themselves during an interview.

UNIT 9.1: Introduction to the Soft Skills

Unit Objectives

At the end of this unit, participants will be able to:

1. Interpret basic meaning of Soft Skills, their components and their benefits.
2. Explain the components and their benefits.

9.1.1 What is a Soft Skill?

Soft skills are personal attributes that describes an individual's ability to interact with others. Soft skills is a term often associated with a person's EQ, the cluster of personality traits, social graces, communication language, personal habits, friendliness and optimism that characterise relationship with other people. Soft Skills complement hard skills which are occupational requirements of a job and many other activities. They are related to feelings, emotions, insights and an inner knowing.

Soft skills have more to do with who we are than what we know. As such soft, skills encompasses, the character traits that decide how well one interact with others and are usually a definite part of one's personality.

According to a survey the long term success in job is 75 % due to soft skills and 25 % due to technical knowhow. Soft skills also determine how satisfied and happy one remains in professional and personal situations.

Fig.9.1.1: Soft skills

9.1.2 Components of Soft Skills

- Adaptability
- Emotional Strength
- Leadership Quality
- Team Playing Ability
- Decision Making
- Interpersonal Communication
- Negotiation Skills

9.1.3 Benefits of Soft Skills

Some of the benefits of Soft Skills are as:

- Increased credibility with customers.
- Increased customer satisfaction.
- More productive employees.
- Out service the competition.
- Recognition from the industry, employer and peers.
- New employment opportunities.
- Increased ability to perform on the job.

UNIT 9.2: Effective Communication

Unit Objectives

At the end of this unit, participants will be able to:

1. Explain the meaning of Communication and process of communication.
2. Elaborate about the types of communication.
3. Identify the barrier in effective communication.

9.2.1 Introduction

In the information age we have to send, receive and process huge number of messages everyday. But effective communication is more than just exchanging information, it also about understanding the emotion behind the information. Effective communication can improve relationship at home, work, and in social situations by deepening our connections to others and improving teamwork, decision making and problem solving.

Effective communication skill is a learned skill, it is more effective when it's spontaneous than formula.

9.2.2 The Communication Process

The process of conveying information through the exchange of thoughts, ideas, feelings, intentions, attitude by speech, gesture, writing etc. is known as communication. It is the meaningful exchange of information between two or more participants.

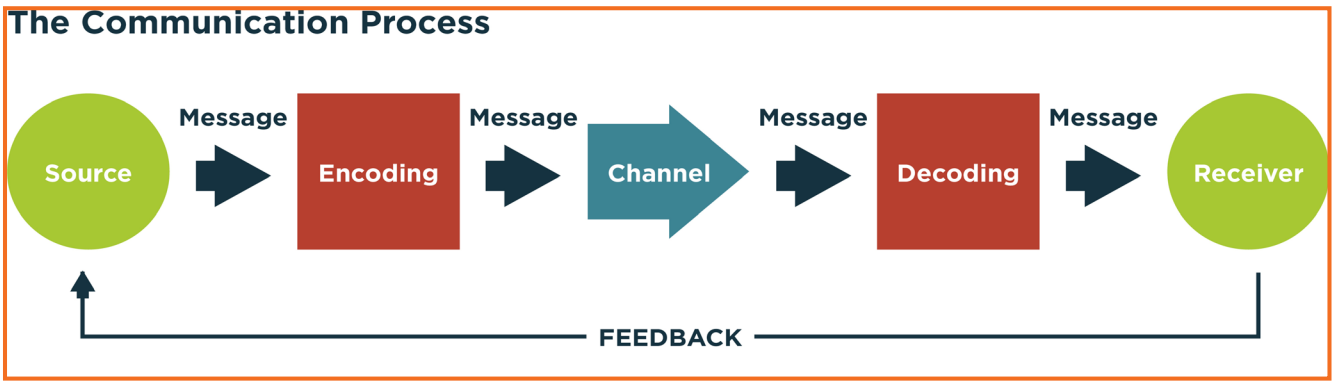


Fig.9.2.1: The Communication Process

Communication requires a sender, a message, a medium and a recipient. Communication process is complete only when a receiver understands the sender message.

Communication with other involves three steps:

1. **Message:** First information exists in the mind of the sender. It can be a concept, idea, formation and feeling.
2. **Encoding:** A message is sent to the receiver in words or other symbols.
3. **Decoding:** Lastly the receiver translates the words or symbols into a concept or information that a person can understand.

9.2.3 Verbal and Non-Verbal Communication

Communication can be categorized into three basic types. These include:

1. **Verbal Communication:** It means you listen to a person to understand their meaning. Verbal communications have the advantage of immediate feedback, are best for conveying emotions and can involve storytelling and crucial conversations.
2. **Written Communication:** letters, books, newspapers are printed messages in which you read their meaning. They are asynchronous, can reach many readers and are best for conveying information.
3. **Nonverbal Communication:** It means you observe a person and infer meaning. Both verbal and written communications convey nonverbal communication and are also supported by body language, eye contact, facial expression, posture, touch and space.

9.2.4 Communicating Effectively Identifying Barriers

There are many reasons why communications fail. These failures are the result of barriers in communication which may occur at any stage in the communication process. Barriers may lead to one's message becoming distorted and therefore risk wasting both time and money by causing confusion and misunderstanding. Effective communication involves overcoming these barriers and conveying a clear and concise message.

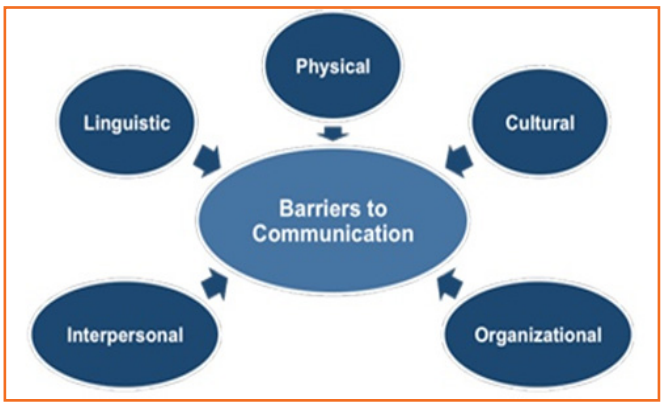


Fig.9.2.2: Barriers in Communication

A skilled communicator must be aware of these barriers and try to reduce their impact by continually checking understanding or by offering proper feedback.

Dealing with Barriers

- Use simple, easily understood word. Overcomplicating makes things confusing
- While speaking in other language always prepare beforehand
- Always give or take feedback to ensure the effectiveness of communication
- Be alert to cues
- Listen, listen, listen …

9.2.5.1 Some Tips for Active Listening

- Concentrate what the person is talking about and not on noise or other external distractions.
- Understand his emotions and you get it all right. Is the speaker angry, happy or plainly inquisitive?
- When the speaker is saying or telling something, don't break the chain of his thoughts.
- Don't avoid completing sentences of the speaker. Let them speak and speak only after they finish.
- It's alright if you haven't understood at first chance. Request to repeat the information.
- Practice makes a man perfect. Listen intently, focus and ignore other noises. Listen more and talk when required.

It takes a lot of concentration and determination to be active listener. Old habits are hard to break and if you're listening habits are not good then you have to break those. Start listening deliberately and remind yourself frequently that your goal is to hear truly what the other person is saying.

UNIT 9.3: Grooming and Hygiene

Unit Objectives

At the end of this unit, participants will be able to:

1. Maintain cleanliness and hygiene.
2. Keep their dress clean and tidy.
3. Maintain positive body language while speaking.
4. Enable to perform more of the do's than the don'ts.
5. Avoiding bad things such as gutkha and alcohol.

9.3.1 Personal Grooming

Personal Grooming is the term for how people take care of their body appearance. Once you enter your store/ department you need to be dressed in full uniform as per company norms, and also properly groom yourself as per the service standards.

Personal grooming not only makes us presentable to other people but good personal hygiene is essential for good health. Habits that are considered personal grooming include, bathing, dressing, applying makeup, hair removal and taking care of one's teeth and skin.

9.3.2 Positive Body Posture and Language

- Clean hands at all times as they mostly will be handling merchandise and customers.
- Avoid biting nails on the floor.
- Manage body odour & bad breath to be under control as they are offensive to the customer.
- Maintain straight & upright posture on the shop floor.
- Slouching on the floor, hands in pockets, hands on the hips are not courteous to the custome.
- Keep your hands out of your pocket
- Don't Fidget. Fidgeting is a clear sign of nervousness
- Keep your eyes forward. This indicates that you are interested in communication with other.
- Stand up straight with your shoulders back. It communicates confidence.
- Don't cross your arms when meeting other persons.

9.3.3 Personal Hygiene

Personal Hygiene is the set of practices to follow to preserve one's health. Maintaining a high level of personal hygiene will help to increase self-esteem while minimizing the chances of developing infections. Poor personal hygiene can have significant implications on the success of job applications or chances of the promotion.

9.3.4 Physical Fitness

Apart from following these hygienic practices, one should also be physically fit. Physical fitness is an outcome of regular exercise. Exercise may be of many different forms. Jogging, morning-walk, weight-lifting, gym, swimming, cycling, yoga and many more.

Things to be avoided

There are certain habits that have severe ill-effects on one's health. Such habits should be avoided for a healthy life.

- Alcoholism
- Tobacco / Smoking
- Gutkha

UNIT 9.4: Development of Interpersonal Skill

Unit Objectives

At the end of this unit, participants will be able to:

1. Develop a positive attitude and behaviour.
2. Describe the goal setting.
3. Motivate for team participation at work.
4. Practice relations and stress management at work.
5. Develop leadership qualities.

9.4.1 Introduction

Interpersonal skill development is the blend of different traits of day to day life that play an important role in creating our impression in other's mind. It starts from inside. The role of interpersonal skill development is to help us understand how to make choices about our attitudes and actions.

These include various traits like:

- Positive Attitude
- Motivation
- Goal Setting
- Team Work
- Managing Relations
- Etiquette
- Stress and Anger Management
- Conflict Resolution

9.4.2 Goal Setting

Goal setting is a powerful process for thinking about your ideal future. The process of setting goals helps you to choose where you want to go in life.

Goal setting involves establishing specific, measurable, achievable, and realistic and time targeted goals. Goal setting helps people work towards their own objectives. Goals are a form of motivation that sets the standard for self-satisfaction with performance. Achieving the goal one has for oneself is a measure of success and being able to meet job challenges is a way one measures success in the workplace.

1. Financial
2. Education
3. Family
4. Health
5. Public Service

9.4.3 Team Dynamics

A team comprises a group of people associated for a common purpose. Teams are especially appropriate for conducting complex tasks. A team is a special instance of a group in which shared goal is the common thing. This creates a dynamic between team members and because they are dependent on each other for success. For example a sports team wins or loses as a whole.

Factors of Team Dynamics

- Tolerance and Cooperation
- Set aside feelings of caste, creed, profession
- Put up with each other
- Identify strengths of each
- Who can do what

9.4.4 Managing Relations

We all have different personalities, different wants and needs, and different ways of showing our emotions which affects people around us.

70% of the workplace learning is informal, when people talk to each other at work they actually are learning to do their job better. Friendlier workers are effective communicators, more productive and trusted more by employers and co-workers.

Stress and Anger Management

Anger is a normal and a healthy emotion. Managing anger can be a problem for some people who find it difficult to keep their anger under control. There are many health issues related to a unresolved anger such as high blood pressure, heart attack, depression, anxiety, colds and flu and problems related with digestion.

Always remember:

- Avoid unnecessary stress, learn to say no and take control of your environment.
- Express your feelings instead of boiling them up.
- Accept the things you can’t change.
- Learn to forgive.
- Don’t react immediately.
- Post pone for a few seconds whatever you wish to say or do.
- Take a deep breath.
- Speak when you have calmed down.

9.4.5 Etiquette

Etiquette are the customs or rules governing behaviour regarded as correct or acceptable in social and official life. It includes:

- Making Positive Impression
- How you treat with people
- Communicating at Workspace
- Work Ethics
- Discipline
- Commitment to work:
- Punctuality
- Ownership and responsibility
- Striving to excel:

9.4.6 Conflict Resolution

What is a Conflict?

A problem or a situation that may be difficult to understand or to deal with.

Why do we need to resolve conflicts?

- If a problem is not solved or addressed at the right time it may blow out of proportion
- An unsolved problem can be like Cancer which spreads and translates itself into all other areas in life
- Unsolved problems may lead to increased levels of bitterness and frustration
- It may foster bad habits like back-biting, gossiping, etc.
- Persons involved in conflict may lose focus and target each other's character instead of the specific behavior to be modified.

How to work out Conflicts?

- **STOP** - before you lose control of your temper and make the conflict worse.
- **SAY** - what you feel is the problem. What is causing the disagreement? What do you want?
- **LISTEN -** to the other person's ideas and feelings.
- **THINK** - of solutions that will satisfy both of you.

If you still can't agree, ask someone else to help you work it out.

9.4.7 Leadership Skills

The ability to lead effectively is based on a number of key skills. These skills are highly sought after by employers as they involve dealing with a number of people in such a way as to motivate, enthuse and build respect. Some of the qualities that every good leader should possess are:

- Honesty

- Ability to delegate
- Ability to take initiative
- Good communications skills
- Confidence
- Commitment
- Positive Attitude
- Creativity
- Be decisive
- Focus on the big picture

UNIT 9.5: Social Interaction

Unit Objectives

At the end of this unit, participants will be able to:

1. Analyze the social interaction.
2. Define duties and responsibility.
3. Explain about the team work.

9.5.1 Social Interaction

Social interaction is the process by which we act and react to those around us. It includes those acts people perform toward each other and responses they give in return. Social interaction includes a large number of behaviours. They are:

- Exchange
- Competition
- Cooperation
- Conflict
- Coercin

9.5.2 Self- Introduction

Everyone in their lifetime, have to introduce themselves to the audience or a class. It is a speech which lies around 3 minutes to 5 minutes. It is very important that it gives the first impression to other about us. It has a great impact on your self-esteem and self-confidence. It's helpful in:

- Feeling better about yourself
- Boosting your confidence
- Building your self esteem
- Making friends
- Feeling in control

Points for Self Introduction

- Wishes
- Purpose
- Name
- Father's Name
- Family
- Profession
- Location
- Hobbies/Habits
- Life Aim
- Achievements
- Favourite Person's or Ideal
- Your Strengths and Weakness

9.5.3 Cooperation

Cooperation is the process of groups of organisms working or acting together for their mutual benefit. Cooperation among family members, friends and peers is very common and healthy. It is the backbone of any society.

Family cooperation provides an avenue for a family to come closer. It increases coping skills and decision making. **Experiential Knowledge:** contributes to solving problems and improving quality of life.

- **Emotional support:** Esteem, attachment and reassurance
- **Instrumental Support:** Material goods and services.

How to be a cooperative person

For being a cooperative person following things needs to be done:

- Listen carefully to others and be sure you understand what they are saying.
- Share when you have something that others would like to have.
- Take Turns when there is something that nobody wants to do, or when more than one person wants to do the same thing.
- Compromise when you have a serious conflict.
- Do your part the very best that you possibly can. This will inspire others to do the same.
- Show appreciation to people for what they contribute.
- Encourage people to do their best.
- Make people needed. Working together is a lot more fun that way.
- Don’t isolate or exclude anyone. Everybody has something valuable to offer, and nobody likes being left out.

UNIT 9.6: Group Interaction

Unit Objectives

At the end of this unit, participants will be able to:

1. Participate in group discussions in the class.
2. Give speech in the public.
3. Paraphrase the importance of team building and team work.

9.6.1 Group Interaction

Every day we meet with groups of people socially and professionally. How we interact plays a large role in the impressions we create. Interaction that occurs while a group completes a cooperative task describes how the group works.

Everything you do in a group setting makes an impression on everyone in the group. Don't ever think something doesn't matter. Everything matters. Take every opportunity to take part in informal and formal group interactions. Start by making small contributions to discussion, prepare a question to ask or agree with another person's remark. Ask for other persons opinion.

Dos and Don'ts of Group Interaction

Do's	Don't
• Speak pleasantly and politely to the group. • Respect the contribution of every speaker. • Remember that a discussion is not an argument. Learn to disagree politely. • Think about your contribution before you speak. How best can you answer the question/ contribute to the topic? • Try to stick to the discussion topic. Don't introduce irrelevant information. • Be aware of your body language when you are speaking. • Agree with and acknowledge what you find interesting.	• Lose your temper. A discussion is not an argument. • Shout. Use a moderate tone and medium pitch. • Use too many gestures when you speak. Gestures like finger pointing and table thumping can appear aggressive. • Dominate the discussion. Confident speakers should allow quieter students a chance to contribute. • Draw too much on personal experience or anecdote. Although some tutors encourage students to reflect on their own experience, remember not to generalize too much. • Interrupt. Wait for a speaker to finish what they are saying before you speak.

Fig.9.6.1: Dos and Don'ts of Group Interaction

9.6.2 Teamwork

Teamwork is a very important part of working life. They can have a big impact on:

- The profitability of an organisation
- Whether people enjoy their work
- Staff retention rates
- Team and individual performance

Importance of Team Building

Team building activities not only boost morale of the team members, but it can also increase the success rate of the teams. Team building is an important activity as it:

- Facilitates better communication
- Motivates employees
- Promotes creativity
- Develops problem-solving skills
- Breaks the barrier

UNIT 9.7: Time Management

Unit Objectives

At the end of this unit, participants will be able to:

1. Describe the concept of time management.
2. Develop time management skills.
3. Explain effective time planning.

9.7.1 Time Management

Time management is the act of process of planning and exercising conscious control over the amount of time spent on specific activities, especially to increase effectiveness, efficiency or productivity. It is an activity with the goal to maximize the overall benefit of a set of activities within the boundary condition of a limited amount of time.

Some effective time management

- Delegate tasks.
- Identify time wasters.
- Combine activities – Plan for them.
- Break down big tasks down to the smallest task possible.
- Accomplish them one by one.
- At the end of the day conduct a simple analysis to see which activity took time.

9.7.2 Pareto Analysis

- According to this 80% of the tasks can be completed in 20% of the time. The remaining 20 % of the tasks take 80 % of your time. And the task which should fall in first category should be given a higher priority.
- Time also depends on the method adopted to complete the task. There are always simpler and easier ways to complete the task. If one uses complex ways then it will be time consuming. One should always try to find out alternate ways to complete a task.

Urgent Important Matrix

1. The Urgent and Important Tasks	2. The Non Urgent but Important Tasks
DO NOW	PLAN TO DO THEM
• Emergencies, complaints and crisis issues	• Planning, preparation
• Demands from superiors	• Scheduling
• Planned tasks or project work now due	• Designing, testing
• Meetings with superiors/colleagues	• Thinking, creating, modelling the data

3. The Non Important but Urgent Tasks	4. The Non Important and non-Urgent Tasks
REJECT AND EXPLAIN • Trivial requests from others • Apparent emergencies • Misunderstandings appearing in work • Pointless routines or activities	RESIST AND CEASE • Comfort' activities, computer • Games, net surfing, excessive • Cigarette breaks • Chat, gossip, social • Communications • Reading irrelevant and useless material

Fig.9.7.1: Urgent Important Matrix

This matrix helps you understand:

- What should be done
- What should be planned
- What should be resisted
- What should be rejected

The simplest method of managing time is to create a general to do list. Prioritize the task list:

- A daily list of things to do, numbered in the order of their priority
- Start with the most unpleasant and difficult task first latter will completed easily and quickly.
- Map out everything while making a task list
- Learn to say "No" to unimportant things
- Strikeout the things completed so that you are familiar what have been completed and what needs to be completed.

Prioritize the above mentioned activities in the following heads.

Important Tasks	Unimportant Tasks	Urgent Tasks	Not Urgent Tasks

UNIT 9.8: Resume Preparation

Unit Objectives

At the end of this unit, participants will be able to:

1. Explain the importance of resume.
2. Discuss basic steps for the preparation of a resume.

9.8.1 Introduction

A resume is a self-advertisement that, when done properly shows how your skills, experience and achievements match the requirement of the job you want. The resume is a tool with one specific purpose to win an interview. It convinces the employer that you have what it takes to be a successful in the new career or position.

It also establishes you as a professional person with high standards and excellent writing skills based on the fact your resume is written well. It also helps you clarify your direction, qualifications and strengths, boost your confidence or to start the process of committing to a job or a career change.

One must know about a resume that:

- Your resume is to get you an interview not a job
- Your resume will be screened by an employer for just 15-20 seconds. That's all the time your resume has to make an impact.

There are different sections on the resume in the same order as mentioned under:

Section	What is the employer looking for
Header	Your identity and to contact you
Objective	To check if their requirement and your objective match
Education	To check if you have the basic qualification for the job/ internship you are applying for
Practical Experience/Projects	To see if you have done anything that reflects your potential capability. Also to see how different you are from your peers.
Skills	How equipped you are in terms of your personality traits as well as occupational skills
Interests	Professional aspects apart, how meaningful is your life?
Other	Is there anything else significant and relevant you want to showcase, that will add value to your resume.

Fig.9.8.1: Different sections on the resume

9.5.2 Points to Remember

- Make sure that the length of your resume does not exceed 2 pages.
- Do a thorough recheck and make sure there are absolutely no errors in your resume. No grammatical errors, no spelling mistakes, no punctuation errors.
- Run through your resume time and again for to make improvements and wording sentences better.
- Choose a professional font in a size 11 or 12. You can use multiple fonts for different parts of resume, but try to limit it maximum of two fonts. Instead changing between fonts, try making specific sections bold or italicized instead.
- The font size of your header and the introduction to a section may be a size 14 or 16.
- Your text should always be printed in solid black ink. Make sure to deactivate any hyperlinks so that they don't print in blue or other contrasting colour.
- Your page should have one inch margin all the way around with 1.5 or 2 point line spacing. The body of your resume should align left and your header should be centred at the top of the page.

UNIT 9.9: Interview Preparation

Unit Objectives

At the end of this unit, participants will be able to:

1. Explain the procedure of an interview.
2. Prepare for interview.

9.9.1 Interview

An interview is a conversation between two or more people (the interviewer(s) and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee. An interview is the first and last hurdle you need to cross in order to get a job.

Common Types of Interview

1. **Traditional HR Interview:** Most interviews are face to face. The most traditional is a one-on-one conversation with the HR Executive where the candidate's focus should be on the person asking question. You are advised to maintain good eye contact, listen keenly and answer promptly.
2. **Panel Interview:** In this situation, there is more than one interviewer. A panel ranging from two to ten members may conduct this part of the selection process. This is an ideal chance for you to display group management and group presentation skills.
3. **Technical interview:** The objective of this interview is to basically evaluate technical knowledge. Majority of the questions will be based on the skills sets mentioned in the candidate's resume.
4. **Telephone Interview:** Telephone interviews may also be used as a preliminary interview for candidates who live far away from the job site.

Before going for an interview, it is important to have clarity of the role you are applying for. It's also important that you know where you are applying and who will you be talking to. Your answers should tell the employer that you are the match they are looking for.

This requires you to do a small research on the following fields:

- Company & Field
- Job Description
- Yourself (Skills, Values & Interests)
- Resume (Experience)

It is important that you dress professionally. It is a proven fact that the way we dress makes a huge difference in the way we are perceived. 90% of the way you communicate with other people is through body language (gestures, expressions, etc.) and the first Impression we make. It is very simple to make a great first impression.

For a good first impression it is important those we:

- Smell good
- Have a professional appearance

- Pay attention to your grooming
- Make eye contact
- Know what and how you speak
- Our overall personality contributes to our complete perception.

How to dress for Interview

Men	Women
Long-sleeved buttoned shirt (clean and pressed)	Conservative pump, no stilettos
Dark shoes (cleaned and polished) and dark socks	Jewellery -One set of earrings (preferably knobs)
Get a haircut (short hair is always best)	No bangles
No Jewellery (chains, earrings, piercing)	Minimal use of makeup
No beards or Tattoos	

Fig.9.9.1: Dress for Interview

9.9.2 The Do's and Don'ts in an Interview

Some of you might have faced an interview and some of you might not have. However, by now, you definitely have a better understanding what are the accepted standards of a professional behaviour. Read the sentences given and mark them as do's or don'ts, in relation to an interview:

Sentence	Do's	Don'ts
Be yourself		
Burp while talking!!!		
Just out from a 'powder factory' (worn too much make-up)		
Reach just about the right time for the interview		
Just barge in the cabin/ office		
Forget to greet the receptionist/ don't respond		
Think before you speak		
Do your homework- Visit the company website		
Take time to think (TTTT)		
Wear bright colour clothes on the D-day		
Emphasis on your strengths		
Argue/ Debate with the interviewer		
Chew gum during the interview.		
Review your educational and work experiences		
See your documents flying out of the file (Being clumsy)		
Thank the interviewer		
Have the 'they need me' attitude		

Maintain eye contact and good body language		
Only give monosyllabic answers(depends on the kind of questions asked…in-between)		
Carry a copy of your resume		

Fig.9.9.2: Do's and Don'ts in an Interview

9.9.3 During the Interview

- Be confident, not arrogant
- Sell yourself - Keep your energy up
- Maintain your posture
- Be positive, don't complain
- Know your resume and accomplishments.

It isn't sufficient to have ideas. They have to be expressed effectively in the interview. The parameters that the candidates are assessed on during the interview are very simple. These are the parameters that this training program has prepared you for.

10. Employability Skills

Unit 10.1 - Employability Skills – 60 Hours

UNIT 10.1: Employability Skills – 30 Hours

To read the e-book on Employability Skills scan the QR Code below.

https://www.skillindiadigital.gov.in/content/detail/1-afb18fd8-344f-4762-b167-6f491877775a

11. Annexure- Resources

Module No.	Unit No.	Name of Subject	URL	QR Code
1. Introduction and Orientation to Finisher and Packer	Unit 1.1 - Introduction to Sewing and Apparel Sector	Apparel industry in India	https://youtu.be/tN5oLGSjepQ	
1. Introduction and Orientation to Finisher and Packer	Unit 1.2 - Roles and Responsibilities of Finisher & Packer	Role and Responsibilities of a finisher packer	https://youtu.be/xJOKX1uHZ6k	
3. Plan and Organize Packing Processes	Unit 2.1 - Functions of Finishing Department	Unit 3.1 - Functions of Packing Department	https://youtu.be/WKNM3ruHlGs	
3. Plan and Organize Packing Processes	Unit 3.2 - Packaging	Garments Packaging	https://youtu.be/gyF5xX8ZiH4	
3. Plan and Organize Packing Processes	Unit 3.3 - Inspection	Garments Inspection Method	https://youtu.be/jOYh5oP4-IQ	
3. Plan and Organize Packing Processes	Unit 3.3 - Inspection	Categorization of garment defects	https://youtu.be/SPtD6mAZ0GU	
4. Carryout the Process of Finishing	Unit 4.1 - Finishing Machines, Tools and Equipment used in Apparel Industry	Garment Labels	https://youtu.be/wSf_AcUyv0M	

5. Carryout the Process of Packaging Operations	Unit 5.1 - Packaging Process	Garments Size	https://youtu.be/WjlKMrSsCeE	
6. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 6.1 – Maintain Health, Safety and Security at Work Place	Potential risks and threats associated with the workplace in garment industry	https://youtu.be/POlQ27GQZp0	
6. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 6.2 – First Aid & CPR	First Aid & CPR	https://youtu.be/DQ7JPNgU8Wg	
6. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 6.3 – Sensitivity towards People with disability and Gender Equality	What is sensitization	https://youtu.be/Wi1exdO1lig	
7. Maintain Work-Area, Tools and Machines	Unit 7.1 - Maintain Work Area, Tools and Machines	Wastes in garments factory	https://youtu.be/2ybCDqMITug	

https://youtu.be/xJOKX1uHZ6k
Scan QR code to access e-book

Skill Council for Persons with Disability
Sector Skill Council Contact Details:
Address: 501, City Centre, Plot No. 5 Sector 12 Dwarka New Delhi - 110075
Website: www.scpwd.in
Phone: 01120892791

Price: `