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APPAREL MADE-UPS HOME FURNISHING
SECTOR SKILL COUNCIL

Facilitator Guide



Sewing Machine Operator (Knits)

Sector
Apparel / Made-Up's and Home Furnishing

Sub-Sector
Apparel

Occupation
Sewing Machine Operator (Knits)

Reference ID: AMH/Q0305, Version 4.0
NSQF level: 2.5

Apparel Made-ups & Home Furnishing Sector Skill Council

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"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

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About this Guide

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

The Trainers will be able to get a clear insight regarding the purpose of the program and will be able to give the participants proper training regarding stitching or sewing fabrics, fur and synthetic materials.

The rules and regulations for proving the training have been clearly given in the book and they should be holistically followed by the trainers to meet the purpose behind the framing of this course.

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/N0305: Plan and Prepare for process of sewing of knit fabrics as per plan received from stitching/line supervisor
- AMH/N0306: Stitch knitted fabrics as per plan
- AMH/N0307: Maintain health, safety and security in the production line with Gender and PwD Sensitization
- DGT/VSQ/N0101: Employability Skills (30 Hours)

The symbols used in this book are described below.

Symbols Used

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It is recommended that all trainings include the appropriate Employability skills Module.
Content for the same can be accessed at:
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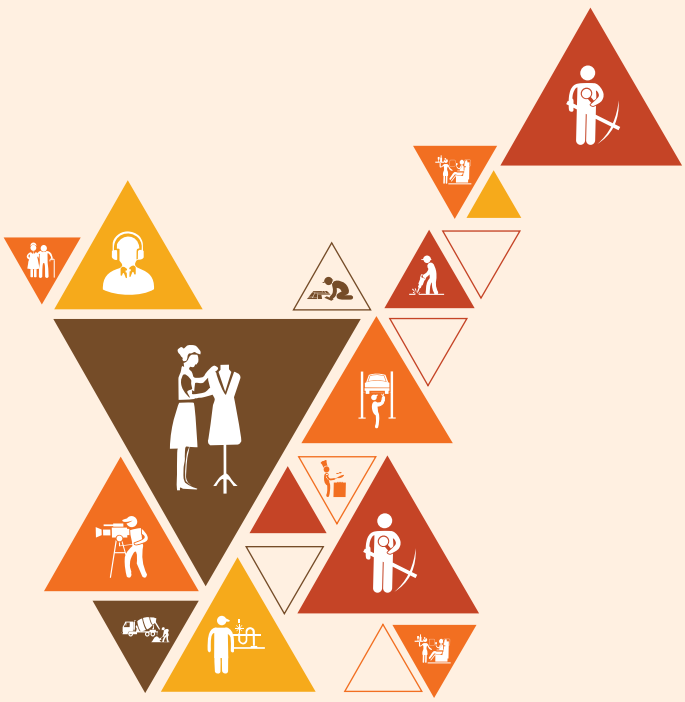
1. Introduction and Orientation

Unit 1.1 – Introduction to Sewing and Apparel Sector

Unit 1.2 – Role and Responsibilities of a Sewing machine Operator (Knits)



Key Learning Outcomes 

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

1. Familiarise with apparel industry.
2. Identify the role and responsibilities of sewing machine operator in knitting.

UNIT 1.1: Introduction to Sewing and Apparel Sector

Unit Objectives

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

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

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster
- PC with LCD Projector or Flip Chart
- Copies of handouts, Participants Handbook

Do

- Welcome the participants to the program.
- Introduce yourself to the participants mentioning about you, your name and work experience.
- Before starting the session tell them what they are going to learn in this program.

Say

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.

Demonstrate

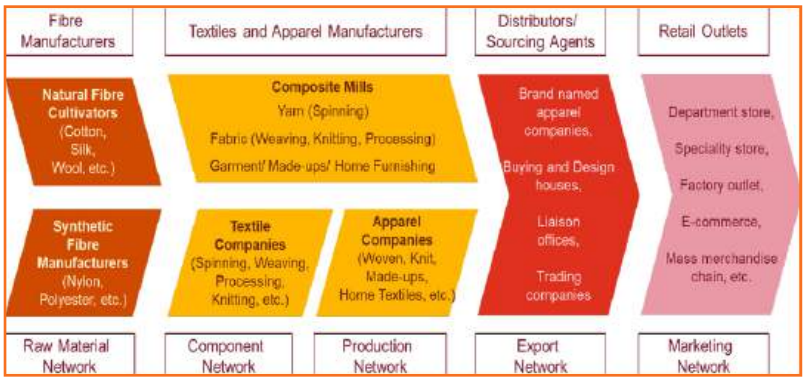


Fig.1.1.1: Apparel production process

Explain

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.

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

Do

- Discuss made-ups and home furnishings with participants. Tell them that 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.

Demonstrate

Made- ups sub-sector is divided into three (3) broad categories:

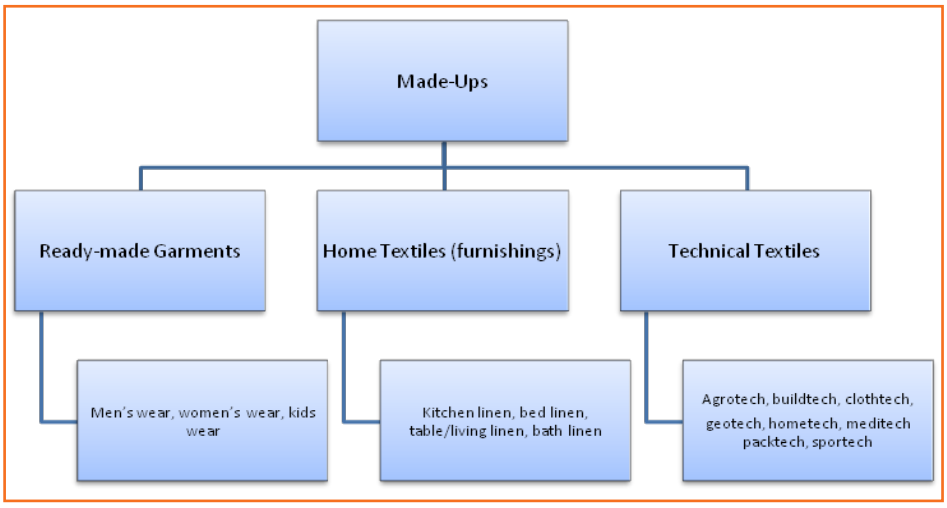


Fig.1.1.3: Made-ups and Home Furnishing Sub-sector

Explain

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.

Refer to PH "1.1.3 Made-ups and Home Furnishings"

Do

- Explain the skill development policy to the participants.
- Describe the employment scenario in the apparel sector.

Say

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).

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.

Explain

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.

Refer to PH "1.1.4 Skill Development Policy"

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.

Refer to PH "1.1.5 Employment Scenario in the Sector"

Notes for Facilitation

- You could ask the students who get out during the game to be the music keepers. They can start and stop the music as the game progresses.
- Encourage shy students to provide information about themselves by prompting them with questions such as 'what do you enjoy doing the most', 'what is your favorite movie or book' etc.
- Advise the students as to how can they enhance their skills and stand out off the crowd in the competitive world.

Ask

Suggestive questions to ask students:

1. Ask students to explain the employment scenario in the sector.
2. Ask students to explain the actual & projected size of Indian Apparel Industry.

Activity

- Conduct a skill practice activity.
- Ask the participants to assemble together.
- Explain the purpose and duration of the activity.

Skill Practice	Time	Resources
• Give the students the idea of how fashion designing can be seen as a new dimension of developing skill along with understanding their potentials when they introduce themselves. • Make the students aware of the rising scope of the Apparel industry in India.	1 Hour	PC with LCD Projector or Flip Chart Copies of handouts, Participants Handbook

UNIT 1.2: Roles and Responsibilities of Sewing Machine Operator (Knits)

Unit Objectives

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

1. Know who is SMO (Knits).
2. Understand the roles and responsibilities of SMO (Knits).

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the roles and responsibilities of Sewing Machine Operator (Knits).

Say

- Tell them that they are going to learn about the Sewing Machine Operator (Knits). Fabric Sewing Machine Operator (Knits), also called a 'Stitcher or Machinist' is an important job-role in the Apparel, Made-Ups and Home Furnishing Industry and their manufacturing sector making knit garments. The primary responsibility of sewing machine operator (knits) is to stitch/sew knit fabrics with due care to convert them into garment and apparel.
- Discuss with the participants about the Personal Attributes of Sewing Machine Operator.

Elaborate

Tell them – A SMO (Knits) requires certain attributes in order to complete the tasks given. Some key personal attributes are:

- Good Vision
- Eye - leg - hand synchronization
- Motor Skills
- Good interpersonal skills,
- Open to learning
- Basic appreciative knowledge of measurements

Say

- Tell the participants about the Roles and Responsibilities of Sewing Machine Operator.

Elaborate

The Key roles and responsibilities of a Sewing Machine Operator are as follows:

- Understand and identify different types of fabrics used in knitting
- Identify and work with various threads and needles used in knitting operation
- Operate various knitting machines and sewing machines used for knitting
- Ensure that tool/equipment and raw material are available as required
- Ensure proper storage of tools and equipment
- Perform basic maintenance of tools and machines
- Carry out various stitches required to perform knitting
- Identify various defects in fabrics and final garments
- Perform repair of basic defects
- Keep the supervisor informed about any problems or discrepancies in the sewing process
- Ensure that the product conforms to the design specification

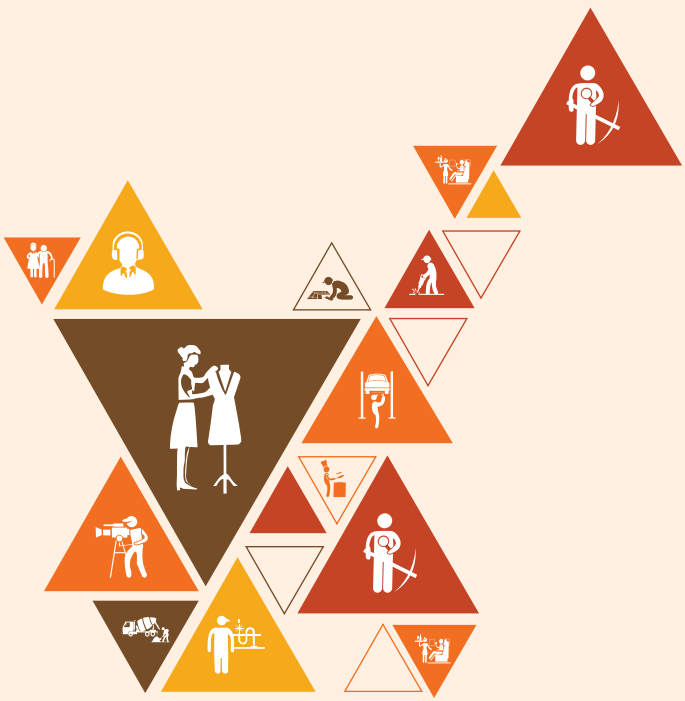
Notes for Facilitation

- Summarize the main points.
- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

2. Plan and prepare for Sewing of Knit Fabric

Unit 2.1 – Basic Materials for Sewing of knits

Unit 2.2 – Machine and Equipment for Sewing Knits



AMH/N0305

Key Learning Outcomes

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

1. Understand the difference between machines according to instructions
2. Ensure machine parts like needles, foot, spools etc. are properly working
3. Ensure tools and material required for sewing of knit fabrics is available
4. Select appropriate material for the process
5. Inform supervisor in case any clarification is required
6. Recognize the different types of industrial sewing machines.
7. Familiarize with the feed mechanisms.
8. Determine the basic list of material and tools required for stitching.
9. Check the equipment is safe and set-up in readiness for use.
10. Recognize about the different types of threads, needles and fabrics.

UNIT 2.1: Basic Materials for Sewing of knits

Unit Objectives

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

1. Understand the differentiation between Knit and Woven and various Knitting terms.
2. Comprehend the common knitting terminologies.
3. Recognize the different types of industrial sewing machines.
4. Familiarize with the feed mechanisms.
5. Determine the basic list of material and tools required for stitching.
6. Explain commonly used knit fabrics.
7. Recognise the equipment used for sewing knits.
8. Various Industrial Sewing Machines.
9. Selection of needles for sewing of knits.

Resources to be used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next unit of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell the participants they will learn about Stitching Operations.

Say

- Tell the participants about the knit fabric. Knit fabric is a textile made by interloping of a set of yarn. Knit fabric's properties are divergent from woven fabric in that, it is more flexible and can be more easily constructed into small pieces, making it perfect for socks and hats.
- Also tell them about the difference of woven and knitted fabric.

Elaborate

Tell them – Injection

Woven	Knits
• Two types of threads are used	• One type of thread is used
• Long process	• Short process
• Yarn movement is restricted	• Yarn movement is not restricted
• Strong fabric	• Weaker fabric
• Less comfortable	• More comfortable
• Wrinkles easily	• Highly crease resistant
• Ironing is necessary	• Requires no ironing
• Thinner fabric	• Thicker fabric
• Less extensible	• More extensible
• Cutting waste cannot be reduced	• Cutting waste can be minimized
• Stable fabric	• Less stable fabric
• Examples are Twill Chiffon, Denim, Poplin	• Examples are simple jersey, Interlock, pique, rib

Say

- Now tell the participants about the common knitting terms. Do not be confusing if you hear a few fervent knitters talking among themselves about “To cast on” or “Dropping a stitch”.

Elaborate

Tell them – Some of the common knitting terms are:

- Alternate
- Bind Off
- Cast On
- Course
- Count
- Decrease
- Garter Stitch
- Gauge
- Increase
- Knit
- Make 1
- Moss Stitch
- Purl
- Pass Slipped Stitch Over
- Repeat
- Reverse Shaping
- Row
- Slip
- Stocking Stitch
- Through the Black of the Loop
- Together
- Wale
- Yarn Back
- Yarn Forward
- Yarn Front
- Yarn Round Needle

Do

Discuss with the participants about the commonly used knit fabrics.

- **Single Jersey:** The fabric can be very stretchy single knitting, usually light-weight, jersey with one flat side and one piled side. When made with a lightweight yarn, this is the fabric most often used to make T-shirts.
- **Purl:** In purl-knitted fabrics, both face and back stitches occur in at least one wale, and sometimes in all of the wales. Purl fabrics are usually fairly chunky and, when they are not extended lengthwise, they often show only back loops on both the face and reverse of the fabric.
- **Rib:** In knitting, ribbing is a pattern in which vertical stripes of stockinet alternate with vertical stripes of reverse stockinet stitch. These two types of stripes may be separated by other stripes in which knit and purl stitches alternate vertically; such plissé stripes add width and depth to ribbing but not more elasticity.
- **Interlock:** Similar to a jersey knit except both front and back of the fabric look identical. Double knit read more » construction makes this a thicker knit fabric. Interlock is the tightest knit, gives the smoothest surface and the finest hand. The fabric is extremely soft, firm and absorbent.
- **Tricot:** Tricot is a special case of warp knitting, in which the yarn zigzags vertically, following a single column ("wale") of knitting, rather than a single row ("course"), as is customary. Tricot and its relatives are very resistant to runs, and are commonly used in lingerie.
- **Raschel:** All warp-knit fabrics are resistant to runs and relatively easy to sew. Raschel lace— a common type of machine made lace—is a warp knit fabric but using many more guide-bars (12+) than the usual machines which mostly have three or four bars.

Demonstrate

Debrief participants about the defects in Knit Fabrics.

- **Skewed or Bias:** Condition where courses are not square with wale lines on knit. This basically happens when the fabric is loosely knitted.
- **Barre:** Occurs in circular knit. This is caused by mixing yarn on feed into machine.
- **Birdseye:** Caused by accidental tucking from malfunctioning needle. This is usually two small distorted stitches, side by side.
- **Bowing:** This is typically caused by finishing in knits the coarse lines lie in an arc across width of goods. It is critical on stripes or patterns and not as critical on solid color fabrics.
- **Broken color pattern:** This kind of fabric defect is usually caused by color yarn out of place on frame.
- **Crease Streak:** Occurs in tubular knits. Results from creased fabric passing through squeeze rollers in the dyeing process.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- There are several defects related to fabrics. It has gauged, that approximately 70% of the apparel industry's cost is expended on getting an excellent quality standard fabric to meet client expectations and market reputation.

Elaborate

There are various defects found such as, mismatch in threads, or using an incorrect stitching technique, improper creasing of any garment and many more. Likewise a garment can also have faulty when it has colour defect or size difference. Sizing defect must be controlled carefully as it can worsen a garment where they can't be repaired and has to send for a re-making of the product which could be time and cost consuming for the trade. It is imperative to look for the material judiciously. The material to be used should be free from:

- Abrasion Mark
- Misprinting
- Roughness
- Double Pick
- Oil Stains
- Skew
- Dye Stain

Say

- Tell the participants about the sewing thread. A small diameter yarn or twisted strand usually treated with a surface coating or lubricant or both, intended to be used to stitch one or more pieces of material or an object to material are referred to as sewing thread.

Elaborate

Tell them about the types of thread.

- **Rayon:** Rayon is the most popular fibre used for embroidering. Its shine and softness makes it a cheaper alternative for silk. Stiches made with rayon threads are smooth and are responsible for higher quality embroidery.
- **Polyester:** Polyester is a fibre produced from the synthetic processing of polymer resins. It can be made to have a matte finish or a high shine finish, similar to silk. Unlike rayon, polyester does not fade or shrink when washed.
- **Nylon:** This is another synthetically produced thread with good strength. However, the disadvantages are many, like, not being heat resistant, not color fast (becomes yellow over time) and also become brittle through laundering and exposure.

- **Cotton:** This is the only 100% natural fiber thread made for high speed machine. These threads perform beautifully in machines and have a soft sheen. Embroidery floss is made up of 6 strands that can either be separated or kept together.
- **Wool:** A popular animal fiber, wool has a very soft look when it is stitched. While it is not very reflective, it has a soft texture and a soft look when stitched.

Say

- Tell the participants about the basics of thread construction. All conventional sewing threads begin their production cycle as simple yarns. These basic yarns are produced by twisting together relatively short fibres or fine continuous filaments.

Elaborate

Explain – Some terms used in the context of thread construction are:

- **Twist:** The 'twist' of a thread refers to the number of turns per unit length required to hold the fibers / plies together to give the yarn / thread substance the required strength and flexibility.
- **Twist direction:** Direction of twist is identified as 'S' for left twist and 'Z' for right twist. Most single needle lock stitch and other machines are designed for 'Z' twist threads. 'S' twist thread untwists during stitch formation.
- **Ply and cord:** Yarns with many components are twisted together to form ply thread. Most commonly used are 2, 3 or 4 ply threads. Threads are twisted together to give corded thread used are 4, 6 or 9 cord.
- **Sewing Thread Numbering:** The thickness of sewing threads is defined by Tex. or Tkt. (Ticket). And these two thread numbering terms are widely used.
- **Tex Numbering:** Tex is a metric system of textile yarn and thread numbering. Tex is defined as weight of 1000 meters' thread in grams. For example, Tex 50 means a length of 1000 meters of thread will gives 40 grams of weight.

Say

- Tell the participants to refer to the table about Recommended Thread for Knit of Different Types.

Elaborate

Referring to the table below, explain the suggestions of threads for various types of Knits.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

Activity

- Divide the class into four equal groups.
- Tell the participants they have to demonstrate the injection moulding machine.
- Assign some parts of the machine to each group.
- Tell them they would be given a time of 15 minute for preparation and then they finally need to demonstrate in front of the class. The time for demonstration should not exceed 20 minutes per group.
- Once the demonstrations are completed appreciate the efforts made by the groups and summarize the highlights of the activity.

	Time	Resources
1. Demonstration of Injection Moulding Machine	2.5 Hours	Injection Moulding Machine, White Board and Chart Papers

UNIT 2.2: Machine and Equipment for Sewing Knits

Unit Objectives

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

1. Describe the industrial sewing machine and its types.
2. Explain the feed mechanisms.
3. Select the needles for sewing of knits.
4. Recognise basic list of material and tools required for stitching.
5. Visit the sewing line.
6. Report to line supervisor in case of any query or mishap.

Resources to be used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Sewing Machine
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next unit of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell the participants they will learn about machines and equipment for sewing knits.

Say

- Tell the participants about the industrial sewing machines. The industrial sewing machine is a heavy duty version of a standard home sewing machine, and it is used in the clothing and other related industries, such as upholstery. These machines are designed to sew multiple layers of knits together along with handling of stretch in them.
- Also tell the participants about the sewing machine based on bed type.

Elaborate

Explain – In bed type sewing machines the fabric travels with respect to the bed while being sewn, and the frame of the machine is constructed for the mounting the machine. There are five types of horizontal beds namely:

- Flatbed
- Cylinder-bed
- Length Cylinder Bed
- Perimeter Cylinder Bed
- Post-bed
- Raised Bed
- Feed off the arm

Do

Discuss with the participants about the types of sewing machine based on stitch.

- **Lockstitch Machine:** The Single Needle Lock Stitch machine is the most popular and versatile sewing machine in the industry.
- **Chain stitch:** It is a sewing and embroidery technique in which a series of looped stitches form a chain-like pattern.
- **Multi-needle Sewing Machine:** It is a flatbed, multi-needles and double chain stitch machine with horizontal looper movement mechanism.

Say

- Tell the participants about the special machine for knits.

Elaborate

Explain – The special machines for knits are:

1. **Overlock Machine:** The overlock machine is designed to stitch over the edge of one or two pieces of fabric to produce neat edging that will not fray.
2. **Three Thread Overlock Machine:** Stitch formed by interaction between vertical of needles and horizontal movement of two loopers.
3. **Four Thread Overlock Machine:** This machine stitches a chain stitch or a safety stitch and overcasts seams. Four-thread overlock machine has two needles and two loopers and this can be converted to both two and three thread overlock.
4. **Five-Thread Overlock Machine:** This type of machine is used to stitch a 2-thread chain stitch combined with a 3-thread overlock.

5. **Flatlock Machine:** Flatlock machines are specialized, high speed machines. These machines are extremely fast and efficient.
6. **Multi-Thread Flat Lock:** Flatlock stitching is the stitching that looks like overlocking on both sides of a seam and is often used in swimwear, sportswear, on baby's clothes, or just as a decorative exposed seam.
7. **Button Attach Machine:** Clothes are held together by buttons, a button is one of the most basic elements of fashion.

Do

Discuss with the participants about the parts of a sewing machine. Followings are the parts of a sewing machine:

- Needle
- Hook
- Bobbin Case
- Bobbin
- Throat plate
- Feed dog
- Presser foot
- Reverse feed lever
- Finger guard
- Presser Bar
- Tension post
- Presser foot regulator
- Thread take up lever
- Oil sight window
- Thread stand
- Knee Lifter
- Hand Lifter
- Bobbin Winder
- On-Off Switch
- Pedal

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Tell the participants about the parts of overlock machine.

Elaborate

The special machines for knits are:

- Thread tree
- Needles
- Thread plate
- Presser foot pressure adjustment screw
- Spool pin
- Spool support
- Thread take-up cover
- Bed extensions
- Presser foot
- Material plate cover
- Left needle thread tension dial

- Right needle thread tension dial
- Upper looper thread tension dial
- Lower looper thread tension dial
- Front cover
- Foot lifting lever
- Power and light switch
- Stitch length adjustment dial
- Hand wheel
- Differential feed ratio adjustment dial
- Stitch width dial

Inside of the front cover

- Thread guide
- Lower looper threading lever
- Thread take up for loopers
- Upper looper
- Upper knife
- Lower looper
- Stitch finger
- Knife lever
- Front cover compartment

Say

- Tell the participants about the flat lock machine. Flatlock stitching is the stitching that looks like overlocking on both sides of a seam and is often used in swimwear, sportswear, on baby's clothes, or just as a decorative exposed seam.
- Also tell the participants about the feed mechanism.

Elaborate

Feed mechanisms is the basic motion of needles, loopers and bobbins, the material being sewn must move so that each cycle of needle motion involves a different part of the material. This motion is known as feed, and sewing machines have almost as many ways of feeding material as they do of forming stitches.

The types of the feed mechanism are as follows:

1. Drop Feed Mechanism
2. Differential Bottom Feed Mechanism
3. Adjustable Top Feed System
4. Needle Feed System Mechanism
5. Unison Feed
6. Puller Feed Mechanism

Say

- Tell the participants about the selection of needles for sewing of knits.

Elaborate

- Tell them – Selecting the right needle is just as important as selecting the fabric, Stabilizer and thread. There are diverse sizes and types of needles for a variety of fabric. The European metric sizing system for sewing machine needles is numbered from 60 to 110. The American sizing system is numbered from 8 to 18.
- An easy way to remember is, the lighter the fabric the smaller the needle size and the heavier the fabric the larger the needle size. Many times the thread you will be using for your sewing assignment will also determine the type of needle you choose. For example, when using a fine, delicate thread, be sure to use a slightly smaller needle size.

Say

- Tell the participants about the sewing machine needles for knits.

Elaborate

The parts of a sewing machine needle for knits are:

- **Shank:** Top of needle that inserts into machine; most often has round needle in right position.
- **Shaft:** Body of needle below shank. Shaft thickness determines needle size.
- **Front groove:** Slit above needle eye, should be large enough to “cradle” thread.
- **Point:** Needle tip that penetrates fabric to pass thread to bobbin-hook and form stitch. Shape of point varies among needle types.
- **Scarf:** Indentation at back of needle. A long scarf helps eliminate skipped stitches by allowing bobbin hook to loop thread more easily.
- **Eye Hole:** Eye Hole in end of needle through which thread passes. Needle size and type determine size and shape of eye.

Say

Talk to the participants about the various needle point types. Also elaborate, When we select the needle for a specific fabric, we have to decide on two things, when we select the needle for a specific fabric, we have to decide on two things:

- Needle thickness
- Point shape

Elaborate

- Explain, the Choice of Needle Thickness is varid. We sew some coarse cloth using different needles and check the seams. If the needle is not right, we can cause a damage to the cloth by pulling it considerably.

Say

- Tell the participants about the basic list of material and tools required for stitching.

Elaborate

Tell them – The basic list of tools and materials are as follows:

- Scissors
- Rotary cutter
- Thread
- Measuring tape
- Needles
- Fabric
- Pins
- Pincushion
- Iron and Ironing Board
- Seam ripper
- Pinking Shears
- Cutting Table
- Sewing Gauge
- Hem Gauge
- Yardstick/Meter stick
- Hip Curve
- L-square
- Tailor's Chalk
- Novelty Yarns
- Masking tape
- French Curve
- Hand Needle
- Punch Needle
- Frame, round
- Pattern making paper
- Tracing paper
- Hand held thread trimmer
- Bent neck, metallic Tweezer
- Pencils (HB, 2B, 4B)
- Pick glass
- Needle threader
- Nonwoven Non-fusible Backing Paper
- Hand embroidery book
- Fabric Glue
- Surface ornamentation material (Beads, Sequins)
- Buttons
- Hooks
- Trims
- Lace
- Zipper
- Pant hooks
- Sewing Mannequin
- Greyscale
- Thimble
- Piping
- Rib Collar
- Techpack

Say

- Talk about the Needle Numbering System that There are two number systems associated with sewing machine needles.

Elaborate

Explain in detail, the European labelling system ranges from 60 to 120, 60 being the finest and 120 the thickest needle. American Labelling system comprises of needles with thickness ranging from 8 to 19 of which 8 is the finest and 19 the heaviest.

American	European
8	60
9	65
10	70
11	75
12	80
14	90
16	10
18	110
19	120

Say

- Talk about the basic list of materials and tools required for stitching.

Elaborate

Mention in details about the various materials, tools and equipment required for stitching.

Scissors	Rotary cutter	Thread	Measuring tape
Needles	Fabric	Pins	Pincushion
Cutting Table	Iron and Ironing Board	Tailor's Chalk	Seam ripper
Sewing Gauge	Pinking Shears	Novelty Yarns	Hem Gauge
Hip Curve	Yardstick/Meter stick	French Curve	L-square
Masking tape	Punch Needle	Hand Needle	Frame, round
Pick glass	Pattern making paper	Pencils (HB, 2B, 4B)	Buttons

Tracing paper	Hand held thread trimmer	Trims	Laces
Needle threader	Bent neck, metallic Tweezer	Hooks	Piping
Zippers	Nonwoven Non-fusible Backing Paper	Fabric Glue	Rib collar
Pant hook	Hand embroidery book	Thimble	Techpack
Sewing Mannequin	Surface ornamentation material (Beads, Sequin)		Grey Scale

Activity

- Divide the class into three equal groups and name them group A, group B and group C.
- Tell group A, B and C they have to give presentation on Industrial Sewing Machines, Materials and Tools required for stitching and Threads respectively.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

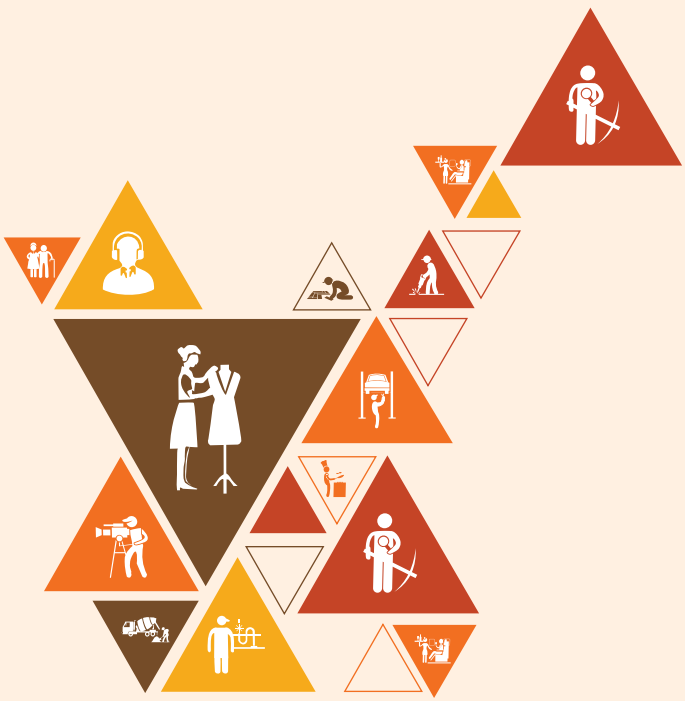
	Time	Resources
1. Demonstrate about the Industrial Sewing Machine, Materials and tools required for stitching and Threads	2 Hours	Charts and pen

3. Stitch Knitted Fabric

Unit 3.1 – Stitch Components to Produce Apparels

Unit 3.2 – Stitching a T-Shirt

Unit 3.3 – Contribute to Achieve Product Quality in Stitching Operations



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Key Learning Outcomes

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

1. Adjust the machine.
2. Ask questions to obtain more information.
3. Estimate the expected length of time for the process.
4. Perform a test sew run.
5. Know the different types of stitching and seam.
6. Selection of correct machinery as per the garment or made –ups and home furnishing product plan like single needle machine, top and bottom feet, differential feet, etc.
7. Selection of appropriate attachments according to the garment requirements like binder, folder, and essential mechanism tools, etc.
8. Optimize positioning and layout of materials to ensure smooth and productive working.
9. Stitch the correct materials in the right sequence as required by the product specification as per the specified stitch type (stitch classes), hems and seamsPerform complex stitching operations with precision and accuracy.
10. Ensure stitched product meets specification as per the techpack and in terms of stitch per inch, labels and trimmings.
11. Ensure stitched product conforms to shape and size requirement.
12. Check the stitched components meet as per the standards and specifications mentioned in the job card.
13. Make adjustments promptly to ensure the stitching work matches the Specification.
14. Maintain the required productivity and quality levels.

Unit 3.1: Stitch Components to Produce Apparels

Unit Objectives

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

1. Adjust the machine.
2. Ask questions to obtain more information.
3. Estimate the expected length of time for the process.
4. Perform a test sew run.
5. Know the different types of stitching and seam.

Resources to be used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next unit of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell the participants they are going to learn about Stitch Components to Produce Apparels.

Demonstrate

Debrief participants about the threading. Explain and demonstrate these steps to the participants:

- **Step 1:** This is where the thread goes. If you have a cap or stopper put it on after you put the thread on. Also put the side of the thread with the little cut to the back or bottom.
- **Step 2:** Allow the string to unwind and put it through this hoop. Mine can also snap in from the back but usually with older machines this is a hoop.
- **Step 3:** This can also be a loop but mine slides in through the back.
- **Step 4:** From the tension bring the thread up and from right to left put it through the hole here.

- **Step 5:** Then bring it down from the take up lever into the coiled thread guide
- **Step 6:** Then into the next thread guide.
- **Step 7:** Then thread the needle front to back or right to left depending on your machine. Pull enough thread through so that it does not pull out when the needle moves 5-10 inches.
- **Step 8:** Insert the bobbin.
- **Step 9:** Pull the string out tight and set the bobbin into the tray. Insert the thread into the metal notch and pull back.

Debrief participants about the bobbin winder. Explain and demonstrate these steps to the participants:

- **Step 1:**
  - » a) Place spool of thread on spool pin.
  - » b) Slide spool pin holder/cap firmly over rim of spool to prevent thread from tangling.
  - » c) Push bobbin winder pin to far left if it is not already there.
  - » d) Pass the thread from spool through thread guide
- **Step 2:** Pass thread end, from inside, through small hole in rim of bobbin
- **Step 3:**
  - » Place bobbin onto pin.
  - » Push bobbin winder pin to the right. This will stop the needle from moving.
- **Step 4**:
  - » Holding thread end, step on speed controller to run machine until desired amount of thread is wound.
  - » Cut thread; push bobbin to the left and remove it from bobbin winder pin

Say

- Now tell the participants about the Treadles. A treadle is a part of a machine which is operated by the foot to produce reciprocating or rotary motion in a machine such as a weaving loom (reciprocating) or grinder (rotary).
- Discuss with the participants about the Tension Adjustment. To make a basic adjustment, adjust the bobbin spring; tighter if the bobbin thread shows on the upper layer, and looser if the needle thread shows on the under layer. Also tell the participants about the Adjusting the Needle.

Elaborate

Tell them – Needle is chosen and adjusted as per the requirement, i.e. it depends on what thread and what material is been used. While selecting and adjusting needle for specific fabric, two things must be considered:

- Thickness of a needle
- Point-shape

Choice of needle point

- Cut Points: These points have sharp tips to cut through the cloth therefore they are used for stitching leather products and clothes.
- Cloth Points: They have slight round shape and can cut through the cloth without damaging it. Suitability of thread and needle is also based on cloth material for e.g. for light weight silk, satin or crepe cloth point needles can be used as they cut through the cloth without providing them any damage.

Demonstrate

Debrief participants about replacing a needle. Explain and demonstrate these steps to the participants:

- **Step 1:** Hold the needle with your left hand and undo the screw at the top of the needle with your right hand.
- **Step 2:** Remove the needle by pulling down and away from the needle clamp.
- **Step 3:** With the flat side towards the back push the new needle up inside the needle clamp as high as it will go.
- **Step 4:** Use your fingers initially and then your tool of choice to tighten the needle clamp screw. The tighter you can make this, the better. A loose clamp may leave the needle down in the fabric you are sewing.
- **Step 5:** Re-thread your needle, pushing the thread from front to back.

Say

- Tell the participants about the stitch formation. The lock stitch uses two threads, an upper and a lower. Lock stitch is so named because the two threads, upper and lower, "lock" (entwine) together in the hole in the fabric which they pass through.
- Tell the participants about the Pre-Sewing Activities.

Elaborate

Tell them – Before sewing a garment, the sewing machine operator should.

- Ensure the materials used meet the specification matching. Go to through the spec sheet and make sure the materials meet the specifications provided by the buyer.
- A techpack is informative sheet that has all the specifications of the requirements before starting the garment making process.
- A Techpack is generally made by the designer and finalized in discussion with the merchandisers, and then forwarded to the production department for the reference.
- Check that equipment is safe and set up in readiness for use. Perform a machine, needle and spool check. Do the samples run to check thread tension.
- Check that the materials to be used are free from faults. Go through all the material required for constructing the garment. Do fabric, thread and trims checking before sewing.

Say

- Tell the participants about the properties of knit fabric and its handling.

Elaborate

- Tell them – The pattern of Knit fabric is relatively complex: The yarn that has been knitted follows a looped path along its row, the loops of one row is pulled through the loops of the row below it.
- Since there is no single straight line of yarn anywhere in the pattern, a knitted piece of fabric can bounce in all directions. This elasticity is all but unavailable in woven fabrics which only stretch along the bias.
- The basic knitted fabric has a definite "right side" and "wrong side". On the right side, the visible portions of the loops are the verticals connecting two rows which are arranged in a grid of V shapes. On the wrong side, the ends of the loops are visible, both the tops and bottoms, creating a much more bumpy texture sometimes called reverse stockinette.
- The most common texture for a knitted fabric is that made by the flat stockinet stitch—as seen, though very small, in machine-made stockings.

Say

- Tell the participants how to ask questions to obtain more information.

Elaborate

- Tell them – Ask questions to obtain more information on tasks when the instructions are unclear and finalize the stitching option with supervisor in case of queries:
- It is important to ask questions rather to act like a dumb or a super heroic figure to the group or the team at your work place.
- It is important to play attention, while demonstration or details are been given/taught on how to perform your certain job role, however even if you haven't been told or maybe you were unable to understand at once, it's always suggested.
- As a sewing machine operator it is very important for you to be proactive at all times like pro-active in learning or asking things you aren't sure about and pro-active and swift in working as well.

Demonstrate

Discuss with the participants how to estimate the expected length of time for the process. Standard Allowed Minute is used to measure work content of a fabric.

Method 1: Calculation of SAM Using Synthetic Data

In this method, Predetermined Time Standard-PTS code is used to establish "Standard Time" of the sewing products.

- **Step 1:** Choice one process for which you want to calculate SAM.
- **Step 2:** Understand the motions of that process. Stand by the operator and see how he/she is doing it.
- **Step 3:** Make a list of all motions consecutively. State the synthetic data for Time Measuring Unit values. For synthetic data, you can refer GSD (without license use of GSD code prohibited but for personal use and study one can refer GSD code and TMU values) or Sewing Performance Data table (SPD).
- **Step 4:** Estimate SAM by summing up the bundle allowance and personal allowance to the basic time.

Standard allowed minutes (SAM) = (Basic minute + Bundle allowances + machine and personal allowances).

Method 2: Calculation of SAM through Time Study

- **Step 1:** Choose one operation for which you want to calculate SAM.
- **Step 2:** Take a stopclock. Stand next to the operator. Check the set time for that operation. (cycle time is the total time taken to do all the tasks, needed to complete one operation, i.e. time from pick up part of the first piece to next pick up of the next piece).
- **Step 3:** Presentation rating. Now, rate the operator at what performance level the operator was doing the job seeing his/her movement and work speed. Suppose that operator performance rating is 80%. Suppose cycle time is 0.60 minutes. Basic time = (0.60 X 80%) = 0.48 minutes.
- **Step 4:** Calculate SAM by the following formula:

Standard allowed minutes (SAM) = (Basic minute + Bundle allowances + machine and personal allowances).

Debrief participants about performing a test run. Explain and demonstrate these steps to the participants:

- **Step 1:** Cleaning and oiling: Check if the machine is been cleaned and oiled properly. With the presser foot up, try to run the machine at full speed for one minute. If you hear a noticeable discrepancy in speed then the machine surely needs some lubrication. Remove the top cover (if machine has one.)If not, you should be able to find holes on top of it. Apply only a drop of SEWING MACHINE OIL (not 3 in 1 oil or any other kind of oil or rust inhibitor). Next, reach the bottom of your machine.
- **Step 2:** Check feed dogs: Remove the feed dog, clean the feed dogs. Try to pass a rag under them and with an old needle or narrow tool, remove the lint inside the feed channels. Put back the needle plate.
- **Step 3:** Look for upper tension: Most sewing machine problems are caused by thread tension. Learn this basic principle right now: the upper tension determines your UNDER stitch. And the bobbin (bottom) tension determines your UPPER stitch. Unless you are experimented to dismantle the upper tension unit or if it's explained in your manual, follow this simple technique. Tension discs are often disrupted by pieces of broken thread, lint and dust. This cause a gap between the tension discs and no pressure is applied to the thread resulting of thread loops underneath.
- **Step 4:** The bottom bobbin: Check also for the condition of the bobbin winder rubber tire. If you can see cracks and worn flat surfaces, replace it. This very popular item is available at any sewing shop for a dollar or so. When winding a bobbin, check to see of the thread winds evenly from each side of the bobbin. Then check the bottom of your bobbin case.

Say

- Tell the participants how to check that the material is free from faults. It is important to go through and inspect every garment which is produced in the garment factory.

Elaborate

Tell them – Any part of the machinery or the garment which you would be required to work on, should be checked that the material about to be used is fault-free. Any faulty material found, should be reported to the responsible authority immediately, it should be sent for replacement. While using the material the commonly seen faults are in:

- Fabric Defects: Roughness in Fabric
- Abrasion Mark
- Misprinting
- Double Pick
- Oil Stains
- Skew
- Dye Stain

Say

- Now tell the participants about the Seam. Seam is a joint consisting of a sequence of stitches uniting two or more pieces of material(s).

Elaborate

Tell them – Seam is used for assembling parts in the production of sewn items.

Seam Classes

- Class 1 – Superimposed seam
- Class 2 – Lapped seam
- Class 3 – Bound seams
- Class 4 – Flat seams
- Class 5 – Decorative/Ornamental stitching
- Class 6 – Edge finishing/neatening
- Class 7 – Attaching of separate items
- Class 8 – Single ply construction

Say

- Tell the participants about the types of Seam which are:
  - » Flat Seam
  - » Superimposed Seams
  - » French Seam
  - » Lap Felled Seam
  - » Bound Seams
  - » Decorative/Ornamental Stitching
  - » Edge finishing/neatening
- Tell the participants about the Stitches.

Elaborate

Tell them – A Stitch in one unit of conformation of thread resulting from repeatedly passing a strand or strands and/or loop or loops of thread into or through a material at uniformly spaced intervals to form a series of stitches. Types of Stitches are:

- Lock Stitch
- Zigzag Stitch
- Blind Stitch Type
- Buttonhole Stitch
- Basting Stitch
- Overlock Stitch Application in Knit Garments
- Four Thread overlock Stitches
- Five Thread Overlock Safety Stitch

Say

- Tell the participants about the Pockets, Plackets and Sleeves.

Elaborate

- Tell them – A pocket is a bag- or envelope-like receptacle either fastened to or inserted in an article of clothing to hold small items.
- A placket is an opening in the upper part of trousers or skirts, or at the neck or sleeve of a garment. Plackets are almost always used to allow clothing to be put on or removed easily
- Sleeve is the part of a garment that covers the arm, or through which the arm passes or slips.

Say

- Tell the participant why it is important to carry out test sews. In order to be very good at stitching, one needs to practice it. Hence it is important to carry out stitching tests and practices time to time until reached perfection.

Elaborate

Tell them – Some of the most common and important types of stitching i.e. lock and chain stitch. Below are the steps which show how to work on a sewing machine by following simple steps given in the activity.

- **Lockstitch:** It is stitch made on a sewing machine by the interlocking of the needle – thread and the bobbin - thread. In lockstitch they 'lock' together in the hole in the fabric which they pass through.
- **Chain stitch:** It is a decorative sewing stitch. Here loops are connected like links of a chain. Chain-stitch is a sewing machine and embroidery like links of a chain. It is a sewing and embroidery technique in which a series of looped stitches are linked together to form a chain-like pattern. In the steps given below there's activity for performing the lock-stitch and chain stitch.

Demonstrate

Debrief participants about the lockstitch. Explain and demonstrate these steps to the participants:

Step 1:

- Keep the slide plate open so that the hook-set is visible.
- Bring needle to its lowest position into the hole through which it reaches the bobbin by slowly moving the hand-wheel.

Step 2:

- Keep the slide plate open so that the hook-set is visible.
- Bring needle to its lowest position into the hole through which it reaches the bobbin by slowly moving the hand-wheel.

Step 3:

- Thus the upper thread is lock-stitched (interlaced) with the lower thread.
- Stitch formation is completed when the upper thread lifts the lower thread.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Debrief participants about the Chain Stitch. Explain and demonstrate these steps to the participants:

Step 1:

- Needle is the lowest position.
- Upper thread becomes loose when needle goes up from its lowest position.

Step 2:

- The needle moves up and comes out of the cloth and the unstitched portion of cloth is pushed forward to form a stitch.
- The looper rotates and removes the loop of the needle-thread it had caught.

Step 3:

- Looper keeps rotating and pulls thread towards its own centre.
- Thread take-up lever tightens the earlier loop of thread which the looper removed in step 6.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

Activity

- Divide the class into two equal groups.
- Tell the participants they have to demonstrate the steps for lockstitch and chain stitch. They have to perform this activity in the lab.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the activity is complete appreciate the efforts made by the group and summarize the highlights of the activity.

	Time	Resources
1. Demonstrate the steps of lockstitch and chain stitch.	3 Hours	Charts, pens, scissor, thread and cloth material.

Unit 3.2: Stitch a T-Shirt

Unit Objectives

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

1. Prepare to stitch a T-Shirt for men.
2. Stitch a T-Shirt.

Resources to be used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next unit of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the Stitching a T-shirt.

Say

- Tell the participants about the preparations for Stitching a T-Shirt.

Elaborate

Tell them – Keep in mind that the Strathcona Henley has 5/8" seam allowances on all seams. Some t-shirt patterns may have smaller seam allowances than this – make sure to check your pattern!

- Insert a ballpoint needle into your machine and test your stitch style (check out this post if you are wondering how to choose a stitch style)
- Reduce the pressure on your presser foot if your sewing machine provides this option – if you are unsure whether it does, make sure to take the time to check your manual. Reducing the pressure will make handling your knit fabric much easier since it will not become stretched out as you sew.
- Whenever you start sewing a seam, start with the needle in the "down position" so that it is lowered into the fabric. This will reduce the risk of the first needle motion punching the fabric into the needle plate of the sewing machine.

Say

- Tell the participants how to sew the Shoulders of a T-Shirt.

Demonstrate

Tell them – The steps of Sew the Shoulder are as follows:

- **STEP 1:** If you decide to stabilize, you can use rayon seam binding (as seen above), clear swimsuit elastic, a thin woven fabric strip, or even the selvedge of your knit fabric (you will notice that the selvedge isn't as stretchy as the rest of your fabric). The goal here is to choose something that doesn't stretch much and isn't very bulky.
- **STEP 2:** Place the t-shirt front and back with right sides together. Place the stabilizer along the wrong side of the back of the t-shirt. You will notice that the back shoulder is wider than the front shoulder – it is drafted this way to accommodate for men's muscular and rounded shoulders! Stretch the shirt front to match the shirt back at the shoulder seam as you sew.
- **STEP 3:** If you are using a very a stabilizer that does not allow any stretch at all, you might as well use a straight stitch for this seam. The shoulder seams do not need to stretch and they are quite visible so a tidy straight stitch can produce an attractive seam. If you choose to use an elastic or knit selvedge as a stabilizer you will still want to use a stretch stitch since all of your materials contain stretch!
- **STEP 4:** Press the seam allowances towards the back to cover your stabilizer (it is also possible to press your seam allowances open if you would like to reduce bulk).
- **STEP 5:** If you would like, you can finish your seam allowances using another row of zig zag stitching. This will stop any potential fraying (which may or may not occur depending on the style of knit you choose).
- **STEP 6:** Trim the 5/8" seam allowance to reduce bulk.

Say

- Tell the participants how to sew the neckline of a T-Shirt.

Demonstrate

Tell them – The steps of Sew the neckline are as follows:

- **STEP 1:** Now that the shoulder seams are sewn, you will have a neck hole that is ready to finish with binding.
- **STEP 2:** With right sides together, join the narrow edges of the neckline binding. Sew this using a straight stitch (this short seam doesn't need to stretch either).
- **STEP 3:** Trim the seam allowance and press the seam allowances open.
- **STEP 4:** Finish preparing the binding by folding it in half lengthwise so that the raw edges meet. Press along the folded edge.

- **STEP 5:** Arrange the t-shirt body with right sides facing you. Place the binding circle on top of t-shirt, alight all of the raw edges. I like to match the binding seam to one of the shoulder seams but you could also align this seam with center back if you prefer.
- **STEP 6:** If you are using the Strathcona Henley pattern, ignore all the notches on the neckline binding (they are intended for the Henley variation of the pattern). Pin the binding to the neckline so that it is stretched evenly around the neckline – it might take some fiddling to get this evenly stretched. I tend to use 8 pins spaced evenly.
- **STEP 7:** Stitch the binding to the neckline using a zig zag (or other stretch stitch). I used to place the t-shirt with the binding facing up on the sewing machine but recently switched my technique. I now place the t-shirt facing up and stretch the t-shirt with my fingers as I sew. Try out both ways and see what works best for you! I find that my new method reduces the risk of creating little tucks in the t-shirt neckline (they are super annoying to stitch rip!!!).
- **STEP 8:** Press the finished neckline.
- **STEP 9:** If you would like, you can finish the neckline by adding a line of stitching around the shirt 1/8" from the neckline seam to lock the seam allowance in place. I used a zig zag stitch here but you can up your game for really professional results by using a twin needle (or you can skip this step altogether if your fabric presses well and you don't think your seam allowance will tend to flip upwards – I often avoid stitching when I am sewing with crisp and thin cotton jerseys but find it is necessary when sewing with thicker cotton interlocks).
- **STEP 10:** Trim the neckline seam allowance.

Say

- Tell the participants how to sew the sleeves of a T-Shirt.

Demonstrate

Tell them – The steps of Sew the sleeves are as follows:

- **STEP 1:** Place the t-shirt and sleeve with right sides together.
- **STEP 2:** Line up the shoulder seam with the middle sleeve notch.
- **STEP 3:** Place a pin where each notch meets.
- **STEP 4:** Sew the sleeve seam using a zig zag stitch (or other stretch stitch). You will need to adjust often (with the needle down so that the fabric doesn't slip out of the way) to avoid creating any tucks and wrinkles.
- **STEP 5:** Finish the sleeve seam allowance with a second row of zig zag stitching and trim.
- **STEP 6:** Press the sleeve seam. Press the seam allowance towards the sleeves – this is the classic direction to place sleeve seams (as seen on tailored garments). Try both ways to see which way fits best on the recipient's shoulders! Press the sleeve seam on a tailor's ham or on the narrow curve of the end of an ironing board so as to keep the rounded shape of the seam.

Say

- Tell the participants how to sew the side seams of a T-Shirt.

Demonstrate

Tell them – The steps of Sew the side seams are as follows:

- **STEP 1:** Pin the sleeve and side seams – make sure that the underarm seam meets. Stitch using a zig-zag stitch or other stretch stitch.
- **STEP 2:** Finish the seam allowance with another row of zig zag stitching and trim the seam allowance.
- **STEP 3:** Press the seam allowances towards the back – your shirt is almost finished

Say

- Tell the participants how to sew the Hems of a T-Shirt.

Demonstrate

Tell them – The steps of Sew the Hems are as follows:

- **STEP 1:** You can finish the hem as you normally would – by pressing the raw edge up and then pressing upwards again – but you might find that this creates too much bulk for your knit t-shirt to sit nice and casually (it could look fairly stiff with a thick hem). Alternatively, you could finish the edge by pressing up once at the hem notch.
- **STEP 2:** Once pressed and pinned in place, stitch the single layer hem in place using a twin needle, or, as photographed, with a simple zig zag stitch. Try your very best to keep the knit relaxed – refrain from stretching in any way!
- **STEP 3:** Repeat this hemming step for the sleeve hems.

A nice basic, classically shaped crew-neck menswear t-shirt is ready to wear!

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

Activity

- Divide the class into two equal groups.
- Tell the participants they have to demonstrate the steps of sewing the shoulders and sewing the neckline. They have to perform this activity in the lab.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the activity is complete appreciate the efforts made by the group and summarize the highlights of the activity.

Skill Practice	Time	Resources
1. Demonstrate the steps of sewing the shoulders and neckline.	3 hour	Charts and pen Charts and pen

Unit 3.3: Contribute to Achieve Product Quality in Stitching Operations

Unit Objectives

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

1. Familiarize with the product quality.
2. Coordinate with seniors and others.
3. Understand the sewing process flow.
4. Learn about the production system.
5. Inspect stitched products against specifications.
6. Identify, mark and place rejects in the designated locations.
7. Carry out alterations.
8. Sew and apply trims by hand and machine.
9. Maintain workflow and meet production target.
10. Familiarize with the quality department and its role in production.
11. Understand the inspection and possible defects.

Resources to be used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- Pc with LCD Projector or Flip Chart.
- Hook and Loop
- Hook and Eye
- Zipper
- Participant Manual
- Copies of Handouts.

Do

- Greet and welcome the participants to the next unit of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the Product Quality in Stitching Operations

Say

- Tell the participants about the Product Quality. What is quality? If a product fulfills the customer's expectations, the customer will be pleased and consider that the product is of acceptable or even high quality. If his or her expectations are not fulfilled, the customer will consider that the product is of low quality. This means that the quality of a product may be defined as "its ability to fulfill the customer's needs and expectations".

Elaborate

Tell them – Quality needs to be defined firstly in terms of parameters or characteristics, which vary from product to product. For example, for a mechanical or electronic product these are performance, reliability, safety and appearance. For pharmaceutical products, parameters such as physical and chemical characteristics, medicinal effect, toxicity, taste and shelf life may be important. For a food product they will include taste, nutritional properties, texture, and shelf life and so on.

Fixing product specifications

A specification is the minimum requirement according to which a producer or service provider makes and delivers the product and service to the customer. In setting specification limits, the following should be considered:

- The user's and/or customer's needs.
- Requirements relating to product safety and health hazards provided for in the statutory and regulatory requirements.
- Requirements provided for in national and/or international standards.
- The competitor's product specifications, in order to gain marketing advantages.
- In designing the product, the capacity of processes and machines should be kept in mind.
- It is also necessary to maintain a balance between cost and value realization. The clearer the specification, the better the possibility of creating and delivering quality products. Preparing product design.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Tell the participants about the Guidelines. A guide for small and medium-sized enterprises procedures prepared, inspection equipment provided, checking and calibration of inspection equipment planned for, inspection personnel selected and trained and prepilot and pilot runs carried out. One should never attempt to solve a quality problem by carrying out more inspections.

Elaborate

Tell them – The manufacturing can begin only when the design and planning have been completed. If the planning is carried out systematically, things should run smoothly. During manufacture the following are the most common factors that can affect quality:

- **Set-up**: Some processes, such as punching, cutting, printing and labelling, are so consistent that, if the initial set-up is correct, the whole lot will conform to the specifications.
- **Machines and tools:** From time to time changes can occur in machine or tool settings, which can then lead to defects. Processes of this type include machining, resistance welding and filling.
- **Operator**: There are some processes where the result depends on the skill and attention of the operator, such as welding, hand soldering and painting processes.
- **Materials and components:** It is important to ensure the quality of raw materials and components by undertaking regular checks on the suppliers' processes and also where necessary by carrying out incoming inspection.

Correction of quality deficiencies: Rework and scrap are a by-product of human effort, sometimes because quality cannot be attained. This could be caused by errors in quality planning and possibly during the manufacturing process.

The following are obvious possibilities:

- The shop-floor operators had no clear idea what standard of quality was required.
- The method was such that it was very difficult to get the job right, but very easy to get it wrong.
- The machine and equipment were incapable of achieving the tolerances required.
- The incoming materials and components were unsatisfactory.
- The operators were untrained and not up to the job; Shop-floor quality control was either not properly planned or not properly executed, or both.

Say

- Tell the participants about the Coordination. It is obvious from the above steps that everybody in the company, that is the salesmen, designers, purchasing, stores and methods staff, plant engineers, jigs and tool personnel, production planning and production staff, operators, inspection and testing staff, packaging, and dispatch and so on, are responsible for product quality. Indeed, quality is everybody's business. Unfortunately, if care is not taken, it ends up being nobody's business.
- Also tell the participants about Stitched products specifications.

Elaborate

Tell them – It is essential to analyze the meet specification in terms of labels and trimmings. There should be various quality check points and before sending the product for final finish it should be thoroughly crosschecked that it has correct labels them. The stitched products should be checked in sewing section and well as printing, labeling or finishing section as well.

Trimmings & labels play an important role in making a good quality garment. Usually trims are randomly inspected. It is usually inspected against standards on the following parameters. Please note that these parameters may differ in other trims.

- **Matching Shade**: It is essential that the trims' color should match with base fabric rather than color code or pantone card.
- **Shrinkage**: If the shrinkage percentage of the trims differs from the fabric's (base material) shrinkage percentage, then it is definitely going to cause a defective garment.
- **Color bleeding**: Dyed trims like Buttons, sewing threads, dyed tapes and laces are checked for color bleeding.
- **Width & Thickness:** Measure width of the trims such as tapes, elastics, laces etc. It would be good if you take measure after wash.
- **Size & Numbers:** Thread numbers, button size, length of zippers etc. need to check against standards.

Labels and tags

Texts printed in the trims for e.g. hang tags, price tags, brand labels, case labels etc. play a vital role. It is very important to make sure that all the information and details must match with the fabric type, the fabric type and the label should not mismatch. Also, the content or text used should be only the one which is approved by the concerned authority. Also, the fibre content printed in care label must match with test report made for fibre content.

Say

- Tell the participants about the principle of Inspection.

Elaborate

Tell them – Inspection can be defined as the visual examination or review of raw materials, partially finished components of the garments and completely finished garments in relation to some standards, specifications, or requirements, as well as measuring the garments to check if they meet the required measurements.

How much to inspect?

- No inspection
- 100% inspection
- Spot checking- inspecting random shipments
- Arbitrary sampling-10% sampling
- Statistical sampling or acceptance sampling-flexibility with regard to the amount of inspection to be performed

Inspection terms

- **Sample:** A sample consists of one or more units of a product drawn from a lot or batch, the units of the sample being selected at random without regards to their quality. The number of units of a product in the sample is the sample size.
- **Lot or batch:** Means 'Inspection lot' or 'Inspection Batch', that is a collection of units of a product from which a sample is to be drawn and inspected.
- **Lot or batch size:** The lot or batch size is the number of units of a product in a lot or batch:

Percent defective = Number of defectives × 100 / Number of units inspected

Do

Discuss with the participants how to identify Mark and Place Rejects in the Designated Locations.

- Always examine your working surroundings and then the work station where you are working. Inspect if there are any unwanted hazardous materials scattered around your work station or the work area.
- Keep the work area clean and tidy all the time, once this is accomplished look for any unwanted or faulty item.
- While looking for a faulty item make sure to identify it properly, mark it clearly and label it promptly as rejected.
- Place the rejected item in the assigned or designated locations only.
- Place the fabric or other rejected items which are torn, damaged broken, stained etc in the rejection box (designated area) of the work-place.
- If we talk about garments in particular then it can be said that the garment can be rejected after been tested and declared failed in terms of conformance and specifications.

Say

- Now tell the participants about the Alterations. Making a product which is of customer's choice and expectations is one of the best ways to run the business or any industry successfully. Hence, it is important to make sure that the material used for making a product should be compatible with that product's specification.

Elaborate

Tell them – Product's accuracy and finishing always depends on what materials are been used on it, what quality fabric is it and are these matching the product's specification or not? This defines the brand.

Some of the common defects which are found during the stitch are as - Puckering, Seam Grin, Seam Slippage, Skipped Stitches, Unbalanced Stitches, Uneven SPI. After identifying the defects it is important to carry out alterations, without a delay.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Now tell the participants how to pass the stitched item to the next stage after validation.

Elaborate

Tell them – Once the garment is been stitched and prepared it is necessary to send it further for manufacturing process once it is been validated. Usually, after the garment is been stitched and completely prepared it checked for fabric quality like no loose threads or uneven stitches and labelling (or tags). It is important to have all tags in place i.e. price tag, warranty tag (if any) washing instructions, brand label etc. should all in intact and be at their specific place. The content displayed should be the one approved by the concerned authority, there should be no false statement or mismatch in the language or misprinting. Once they are checked, confirmed and validated then the garment is been sent for the finishing-process of the garment where it is washed, cleaned, pressed. Any activities related to the garment was left un-finished in the previous process i.e. left or missed by any chance it is done at this stage. After finishing it is packed, and distributed to their respective retail stores through the appropriate logistics system and network.

Say

- Now tell the participants what to do if stitched items do not meet production specifications. While stitching, many a times there are unwanted and unknown faults which are not good for garments. Hence they are also needed to be rectified so that the garments can be sold or displayed flawlessly.

Elaborate

Tell them – Here are some of the faults which are found while stitching.

Seam Grin

Seam Slippage

Once you increase seam allowance, use a higher stitch density and opt for a lapped fell seam.

Seam Pucker:

- Bad tension
- Bad feet
- Fabric Thread instability
- Uneven shrinkage during finishing
- Thread bloat from washing

Structural jamming/ inherit pucker

- Tight weaving does not have enough room between yarns for thread
- Sewing caused yarns to be pushed out of place

As shown in the images above, seam pucker usually occurs.

Feed Pucker: Feed pucker usually takes place while very fine fabrics are sewed. The piles of fabric tend to slip over each other which results in uneven feed hence it leads to pucker.

Shrinkage Pucker: Shrinkage pucker occurs during the process of washing the thread in the seam, shrinks, pulling the fabric with it. Usually it takes place while using cotton threads. Shrinkage Pucker can be avoided by using threads with low shrinkage properties.

Say

- Tell the participants how to sew and apply trims by hand and machine.

Elaborate

Tell them – Trims can be applied either by hands or by machines however it is important to check when to use hand trim for e.g. for fixing a button or to use a machine trim for e.g. modifying the stitch.

- Always choose the right method of repairing the production and make sure to re-make it as per the requirement and specification of the customer and of a company
- Check if the machines are set up and are in good working conditions. To attain production targets machines should be working efficiently all the time.
- Sometimes, Hand sewing is required when there is a need repairing re-welting or piece welting. You need to know whether the repair is to be made by hand or machine, the main equipment used and their capabilities and what problems may occur when undertaking the repair and how to prevent/ rectify them. As adhesives will be used you need to know how to use and store them safely.

Say

- Tell the participants how to maintain work flow and meet production target.

Elaborate

Tell them – Here are some of the tips with which work should be carried out so that the workflow can be maintained and production target can be achieved:

- Fabric's pieces and lining must be pinned or sewn together as per the requirement and they should be set in such a way that they are ready for assembly.
- One production's work flow should not affect the work flow of other production, handling of material should be very careful to keep away material from the risk of damage.
- All the production sections should work in synchronization with each other i.e. trimming should work in a way that spreading and cutting can work in sync with stitching and stitching can maintain coordination with embroidery, printing and so on. By doing so, a production target and quality products can be produced.
- Working in sync can improve efficiency in work.

Say

- Now tell the participants about the 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.

Elaborate

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.

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
2. Minor Defect
3. Second

Some of the common defects are:

1. Marker Making Defects
2. Common Spreading Defects Plies misaligned:
3. Common Cutting Defects
4. Bundling and Ticketing

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Tell participants about the Accessories Defect.

Elaborate

- Tell them – Some common accessories defects are as follows:

Accessories Defect

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Tell the participants about the process of rectifying defects.

Elaborate

- Explain – the process of rectifying few defects are as follows:

Processes to Rectify Few Defects

Defects	Rectification
Restitched Seams / Broken Stitches	• Using better quality sewing threads • Ensure proper machine maintenance
Open Seam – Seam Failure – Stitch	• Better quality threads • Proper size thread for application • Proper tension
Seam Slippage	• Change seam type if possible • Increase seam width • Optimize the stitches per inch.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual and explain trainees' the concept.

Say

- Tell participants about the industry visit and the purpose behind this visit. The purpose of visiting an apparel manufacturing unit is to get hands on knowledge about various processes involved in the work of an SMO. During the visit you have to interact with Sewing Machine Operators and supervisors to understand how work is done in industry.

Elaborate

Tell them – 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.
- » Inspect stitched products against specifications.
- » Analyse how SMOs:
  - » Inspect stitched products against specifications
  - » Carryout alterations
  - » Sew and apply trims by hand and machine
- » Also understand the inspection and possible defects.
- » Ask questions to SMOs/supervisors if you have any query.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

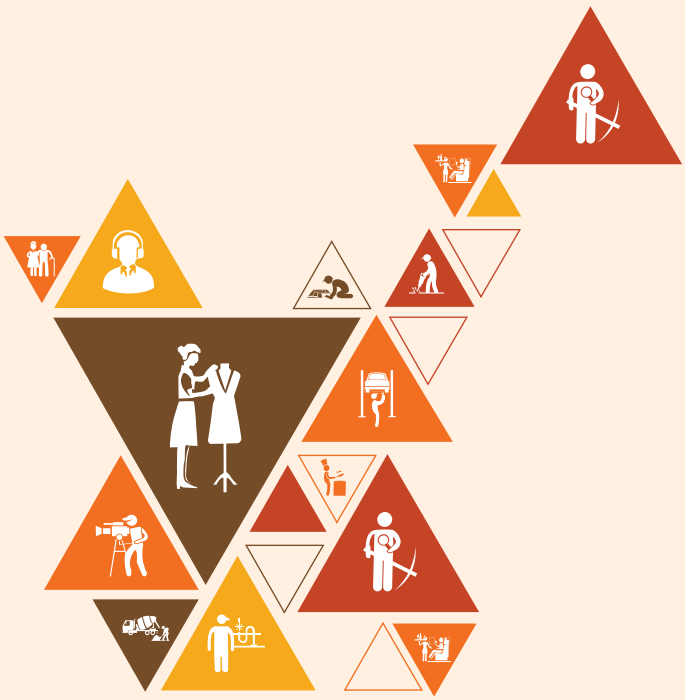
Activity

- Divide the class into five equal groups.
- Write the name of 4 defects on 4 piece of paper which are Woven defects, Fabric defects, Accessories defects, stitch and seam defect, and on the 5th piece of paper write “Rectification of Defects”. Now fold the papers.
- Now ask each group to pick one folded paper.
- Tell the participants they have to give presentation based on their respective topics.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

Skill Practice	Time	Resources
1. Demonstrate about the defects	3 hour	Charts and pen

4. Maintain Work Area, Tools and Machines

Unit 4.1 - Maintain Work Area, Tools and Machines



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Key Learning Outcomes

At the end of this 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. Make hazard free working area.
5. Use materials to minimize waste.
6. Carryout running maintenance within agreed schedules.
7. Carry out maintenance and/or cleaning within one's responsibility.
8. Work in a comfortable position with the correct posture.
9. Use cleaning equipment and methods appropriate for the work to be carried out.
10. Dispose of waste safely in the designated location.
11. Store cleaning equipment safely after use.
12. Carryout cleaning according to schedules and limits of responsibility.

UNIT: 4.1 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. Make hazard free working area.
5. Use materials to minimize waste.
6. Carryout running maintenance within agreed schedules.
7. Carry out maintenance and/or cleaning within one's responsibility.
8. Work in a comfortable position with the correct posture.
9. Use cleaning equipment and methods appropriate for the work to be carried out.
10. Dispose of waste safely in the designated location.
11. Store cleaning equipment safely after use.
12. Carryout cleaning according to schedules and limits of responsibility.

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster
- PC with LCD Projector or Flip Chart
- Copies of handouts, Participants Handbook

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about Finishing Department Workflow

Say

- Machines are essential to modern production. However, along with increased productivity, they have brought hazards into the workplace. Proper control of machine hazards has traditionally been seen as costly and a constraint on productivity. In general, the garment manufacturing industry is considered to be less dangerous than other industrial sectors and, therefore, safety policy is a low priority in many enterprises. For example, it has been observed that some workers remove guards protecting belts from sewing machines and manual cutting machines are operated with naked hands.

Do

- Teach the students about the techniques of maintaining machines.
- Make them learn how to clean the Bobbin area.
- Explain the steps of cleaning the feed dog assembly.
- Explain the steps of lubricating the machine and also make them understand the functions of the machine guards.
- The basic steps of maintain the machine should be thoroughly demonstrated to them.
- Lastly, it is extremely essential to make them understand the safety tips that are common towards using and handling the machine.

Demonstrate

Cleaning the Bobbin Area

- **Step 1:** Turn off and unplug the sewing machine.
- **Step 2:** Remove the bobbin cover and the bobbin.
- **Step 3:** Using a small lint brush (many machines come with one), carefully remove any lint from the bobbin area. Be especially sure to remove any lint from crevices and tight places, since compacted lint can actually stop the machine from running.
- **Step 4:** Using the lint brush or canned air, remove the lint from the area around the needle, the presser foot and the thread guides.
- **Step 5:** Remove any lint from the inside of the doors and lids of the sewing machine.
- **Step 6:** Replace the bobbin and the bobbin cover.
- **Step 7:** Plug the sewing machine back in and turn it on.

Note: *Make sure to check that after cleaning all the machine parts are properly placed and tightened. It should be safe for using it the next time.*

Cleaning the Tension Assembly

- **Step 1:** Clean your machine often. Each stitch is precise and even a bit of lint collected on the tension assembly can cause problems. Make it a habit to clean your sewing machine after any large project.
- **Step 2:** Raise the pressure foot to release the tension on the disks. Gently run the folded edge of a clean piece of lint free cloth through the tension disks. Compressed air will also dislodge any bits of thread or lint.
- **Step 3:** Remove all lint along the thread guides using a small brush or clean cloth.
- **Step 4:** Check the bobbin area of the machine. The bobbin controls the lower tension and can be a source of built up lint. Depending on the type of machine you have, the bobbin consists of the bobbin, case and on some models a removable hook race. Remove these according to your instruction manual and clean with a cloth or small brush.
- **Step 5:** Do a final check to make sure the tension is correct and that the bobbin assembly is in place properly before you begin your next project.

Cleaning the Feed Dog Assembly

- **Step 1:** Unplug the machine and examine the feed dogs. The newer machines have metal feed dogs, but older models may have rubber ones, which often need replacing. Examine the feed dogs and check for damage.
- **Step 2:** Remove the throat plate, which is the covering over the feed dogs, and clean it with a soft cloth. Use a small soft brush to clean the feed dogs. Make sure to remove all lint and thread from the grooves of the teeth. Some machines have an adjustment that lowers the feed dogs for specific sewing procedures. They should be in the raised position for better viewing during the cleaning process.
- **Step 3:** Clean the area around the feed dogs with a soft brush. Compressed air is a good choice to use in the small tight areas.
- **Step 4:** Wipe down all areas with a clean, lint free cloth before replacing the throat plate.
- **Step 5:** Prepare to clean the feed dogs and all other areas that lint may accumulate on, after every project. Your sewing machine will last longer and need fewer repairs if kept clean and lint free.

Steps in Lubricating Machine

- **Step 1:** Purchase a high-quality brand of sewing machine oil from a sewing store or other specialty retailer. Higher quality generally comes with a higher price tag, but the price of good sewing machine oil is favorable to the costs involved with repairing or replacing an entire sewing machine.
- **Step 2:** Unplug your sewing machine. Make sure its power switch is set to 'off.' Because you will be dealing with fluid, it is especially important to make absolutely certain any power supply is disconnected.
- **Step 3:** Drop a single drip of sewing machine oil onto the mechanism that drives the sewing needle. If you purchased quality sewing machine oil, more than one drop will generally not be necessary.
- **Step 4:** Repeat Step 3, applying a single drop of oil to every part of your sewing machine that moves. Consult your sewing machine owner's manual if you need instruction on how to access any moving parts that may be contained beneath the casing of the machine.
- **Step 5:** Allow the oil to absorb by letting your sewing machine stand for a few minutes. Most experts suggest that 15 to 30 minutes is a good window of time to let your machine stand while the sewing machine oil works its magic.

- **Step 6:** Plug your sewing machine back in. When you have safely done so, turn the power switch to 'on.'
- **Step 7:** Feed some scrap fabric through the sewing machine, running its moving parts at a slow but constant rate. This will allow the oil to spread evenly throughout the parts that require lubrication to maintain optimal performance.

Elaborate

Machine Guard

There are different safety guards given in the sewing machine which are important to use and it is also essential to check that the correct safety guard is in place as per the requirement. Below are given the machine guards of a sewing machine.

- Finger guard
- Eye guard
- Belt guard
- Motor pulley guard

Troubleshoot Common Machine

In several cases machine issues are due to the employee not having received correct training in basic machine maintenance. This causes issues that need to be corrected by a certified mechanic/technician. All garment enterprises suffer from such issues to varying degrees. Some common causes are:

- Incorrect needles
- Incorrect machine settings for the fabric
- Inexperienced workers
- Inexperienced mechanics/technicians
- Fabric finishes.

On-the-job training sessions could also be organized for beginners as part of their training period. Enlist the assistance of senior operators with teaching skills. group work will provide good opportunities for these training sessions. Sessions ought to embrace acquiring the essential sewing skills and troubleshooting sewing issues.

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 i.e.
  - » Daily maintenance of the machinery
  - » Weekly maintenance
  - » Monthly maintenance

Activity

In the industry visit:

- Make the students show you about the maintenance techniques.
- Ask them to clean and dispose wastes
- Ask them to demonstrate them the store cleaning equipments.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

(Suggestive Note) As per students give practical question of your choice to understand the student's outcome.

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Skill India
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सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

N·S·D·C
RE IMAGINE FUTURE

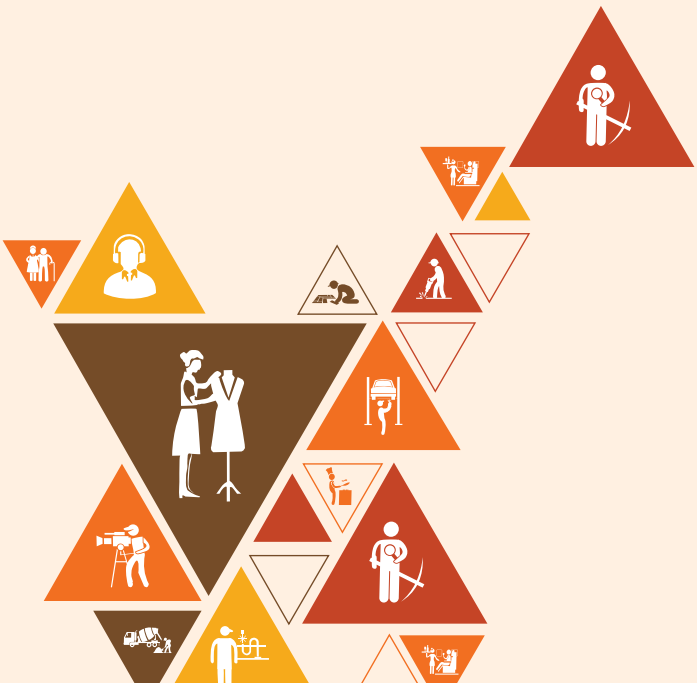
A National Initiative with NSDC
APPAREL MADE-UPS & HOME FURNISHING
SECTOR SKILL COUNCIL

5. Maintaining Health, Safety and Security at Workplace with Gender and PwD Sensitization

Unit 5.1 – Maintain Health, Safety and Security at Work Place

Unit 5.2 – First Aid & CPR

Unit 5.3 – Sensitivity towards People with disability and Gender Equality



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Key Learning Outcomes

At the end of this module, 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. Explain the prevention and management of Corona virus.

UNIT 5.1: Maintain Health, Safety, and Security at the Workplace

Unit Objectives

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

1. Identify methods to be vigilant for potential risks and threats associated with the workplace.
2. Handle tools and equipment in work area.
3. Check the workplace and work processes for risks like fire, electric shocks, etc.
4. Demonstrate the use of personal protective equipment.
5. Analyze sanitary facility in work place.
6. Analyze the work related facilities and benefits.
7. Explain about safety sign in working area.
8. Explain the prevention and management of Corona virus.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Introduce the students to the health hazards that they might face in this employment over the long run.
- Explain the potential injuries and illnesses that apparel workers might face.
- Tell them about the environmental standards that should be taken care by them.
- Make them understand the value of daylight and positive health aspects.
- Explain the importance of essential facilities and their presence.
- Explain the importance of proper sanitation facilities.

Say

- About the good effects of cost effective ventilation.
- About the requirements of light and air in the workplace.
- About the accidents that might take place in the process.
- About the mitigation of the accidents and the safety measures.
- About understanding the safety signals and symbols.

Elaborate

Ergonomically-designed job ensures that an employee is given comfortably enough space in or near his/her workspace so that the work efficiency is not hindered. The work-place related injuries often start as minor aches and pains but can develop into incapacitating injuries that affect everyday activities.

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.
- 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.

Clean Regularly and Properly - Don't Spread Dust

- Dust originates from fabrics and threads, from cutting and sewing to packing operations.
- It is very common to see small clothing enterprises with ceilings and walls full of dusty cobwebs.
- 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.

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.

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. 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

Make Full 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.
- 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.

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.

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.

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.

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.

Make Sure Essential Facilities Serve Their Purpose

- **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.

- **Sanitary Facilities:**
  - » Like water facilities, sanitation facilities are also very important. The importance of proper sanitation facilities increases in the public context as improper facilities or unhygienic conditions can deteriorate the health of the employees by being breeding ground for several diseases.
  - » 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.
- **Be Ready for Emergencies:** A typical basic kit may include the following items in a dust proof and waterproof box:
  - » Individually wrapped and placed in a dust proof box or bag.
  - » Sufficient quantities of the different sizes should be available at all times to treat small cuts and burns.
  - » Cotton wool for cleaning wounds
  - » Scissors, tweezers (for splinters) and safety pins
  - » An eye bath and eye wash bottle
  - » Ready-to-use antiseptic solution and cream
  - » Simple over-the-counter medicines such as aspirin and antacid
  - » A booklet or leaflet giving advice on first-aid treatment

Ask

- Ask the participants some random questions from the previous learnings.
- Ask them to demonstrate the body posture at the workplace.
- Ask them how can they make the local ventilation cost effective.

Do

- Tell them that they will learn some basic prevention from Covid 19 in this unit.
- Get them demonstrate the basic hand hygiene and how to mask the face.

Say

- Now, let's understand the Covid-19. 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.

Elaborate

Prevention and Management of Corona Virus

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.

Refer to PH "Fig.5.1.19: Prevention from COVID-19".

Field Visit

- Conduct a skill practice activity.
- Ask the participants to assemble together.
- Explain the purpose and duration of the activity.

Skill Practice	Time	Resources
• 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. • Undertake first aid, fire-fighting and emergency response training, if asked to do so. • Take action based on instructions in the event of fire.	2 Hour	PC with LCD Projector or Flip Chart Copies of handouts, Participants Handbook

Exercise

1. While working at workplace, your waist should be at:
   a) 30º
   b) 60º
   c) 90º
   d) 120º

1. We receive _____ per cent of all information through our eyes.
   a) 75%
   b) 60%
   c) 70%
   d) 80%

2. In case of fire do not use _____.
   a) Lift
   b) Stairs
   c) Ladder
   d) Window

3. 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

4. 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

UNIT 5.2: First Aid and CPR

Unit Objectives

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

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

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about first aid and CPR in this unit.

Say

- Explain what is first aid
- Explain about splints and aids of torso
- State what id CPR
- Demonstrate how to perform CPR on an adult
- Demonstrate CPR using AED

Elaborate

First aid is the help given to any individual suffering from an unforeseen illness or injury, with care provided to preserve life, stop the condition from worsening, and/or promote recovery. It includes initial intervention during a serious condition before skilled medical help being accessible, like performing CPR while waiting for the ambulance, also because the complete treatment of minor conditions, such as applying a plaster to a cut. First aid is usually performed by the layman, with many of us trained in providing basic levels of first aid, and others willing to try and do thus from acquired information. Mental health first aid is an extension of the idea of first aid to cover mental health.

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	• 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.5.2.1: 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.5.2.2: Degree of Burns

Demonstrate

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 place cushioning between the rigid material and the body to stay the victim comfy. Tie knots between the rigid material and the body (in mid-air) once doable. This makes them easier to untie. If this can be impossible, tie knots over the rigid material.
- To splint the forearm, surround the split with rigid material and snugly bandage it to the arm with wide cloth strips. A newspaper or magazine, curled into a "U" form, works alright.
- Splint the wrist joint within the same approach. The whole forearm needs to be immobilized.

- To splint the elbow, use enough rigid material to travel from the armpit to the hand. The entire arm ought to be immobilized. Don't plan to straighten or bend the elbow; splint it in position.
- To splint the upper leg, use long items of rigid material which will reach from the ankle joint to the armpit. On top of the hips, tie long straps round the torso to carry the top of the splint in place.
- To splint the lower leg, use rigid material long enough to travel from the knee to the foot. The foot ought to be immobilized and unable to turn. Make sure to use a lot of cushioning, particularly round the ankle.

Elaborate

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.
- **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.

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.

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.

- **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.
  - » 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.

Demonstrate

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.
- **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.
- **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.
- **Step 7:** Place your second hand on top of the first hand, Palms-down, interlock the fingers of the second hand between the first.
- **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.
- **Step 9:** Perform 30 chest compressions. Press down with both hands directly over the breastbone to perform a compression, which helps the heart beat.
- **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.
- **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.
- **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.
- **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.

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.
- **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.
- **Step 3:** 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.
- **Step 4:** 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 5:** 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.

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.

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT: 5.3: Sensitivity towards People with Disability and Gender Equality

Unit Objectives

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

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

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about Sensitivity towards People with disability and Gender Equality in this unit.

Say

- Dear participants, in this unit we are going to lean about PwD, gender sensitization and equality. 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.

Elaborate

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.

Please refer to PH "5.3.1 What is sensitization?"

Do

- Tell the participants that in this session, they will learn about myths about sensitization, people's first language and gender sensitivity.

Say

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.

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.

Explain

Myths and 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.

People's first language

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.

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.

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.

Need for Gender Sensitivity

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. This is required for:

1. Couple communication and decision-making
2. Access to opportunities and resources
3. Social, cultural and gender norms

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.

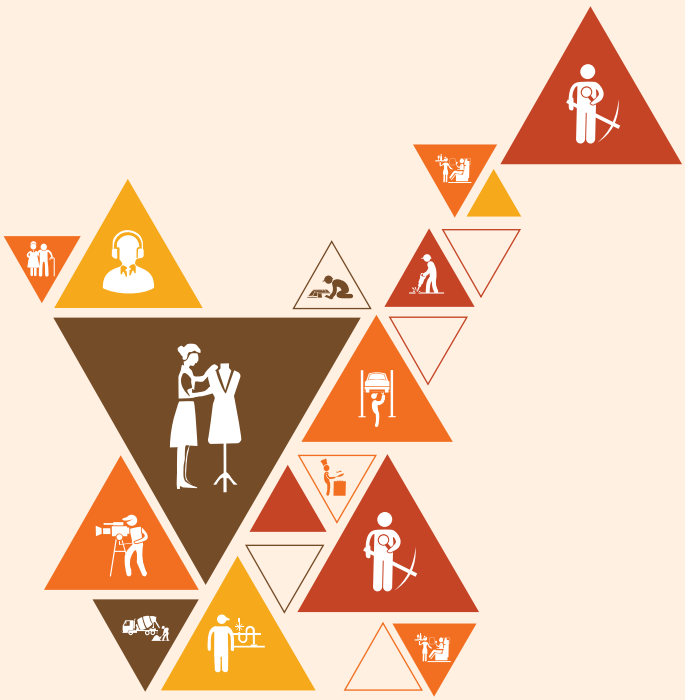
Please refer to PH "5.3.2.1 Need for Gender Sensitivity"

Exercise

1. 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
2. What is not in Four A's of First Aid:
   a) Awareness
   b) Assessment
   c) Action
   d) Attitude
3. The symptoms of fracture:
   a) Pain
   b) Swelling
   c) Visible bone
   d) All of the above
4. 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
5. ..... 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

6. Comply with Industry, Regulatory and Organizational Requirements

Unit 6.1 - Comply with Industry, Regulatory and Organizational Requirements



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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. Know the effect and importance of Greening of Job roles.

UNIT 6.1: Comply with Industry, Regulatory and Organizational Requirements

Unit Objectives

At the end of the 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.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about industry, regulatory and organisational essentials in this unit.

Say

- The clear and crisp definition of compliance.
- Explain the significance of compliance in Indian Garment Industry.
- Enlighten them about the core labor standards of India.
- Explain the role played by AEPC in the Garment Industry in India.
- Talk about the social responsibility towards this end.
- Explain the importance of ethics.
- State the labour laws and tell them about their rights, compensations and duties.
- Health and safety compliance should be explained.
- State the codes of practices which are needed to be noted.

Elaborate

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.

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.

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.

Compliance Audit: Risk Management Programs, Process Safety Management and Process Security Management are all controlled 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.

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

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.

India Adopting Universal Standards on Child Labour

- 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.

Common Compliance Code

The Indian apparel export industry has been indisputable to implement zero tolerance on child labour and cleanse the supply chain.

Role of AEPC in Indian Garment Industry

AEPC in its unceasing efforts to make India a preferred sourcing end point plans to undertake a series of activities to reinforce the compliance code volume in the Indian export garment industry.

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.

International Labour Standards

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.

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.

Social Responsibility in the Garment Industry

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.

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.

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.

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.

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

Social Compliance in India

- All the terms and conditions of employment should be based on a person's ability to do the job.
- 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.

Health and Safety Compliance in Indian Garment Industry

- 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

Need for Compliance Codes

- The Indian apparel industry needs to be hard-hitting on compliance rather than opposing with other developing countries manufacturing low-cost garments.

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.

Role of Apparel Export Promotion Council 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).

Compliance Code Guidelines for Indian Garment Industry

- Countries like Europe and USA that are the biggest markets for Indian apparel countries have been insisting upon compliance to certain social, environmental and safety standards and norms by the production units involved in export business.
- Some of the common Indian Garment industry compliance code guidelines are:
- There shall be no differences in workers remuneration for work of equal value on the basis of gender, race, religion, age, disability, sexual orientation, nationality, political opinion, or social or ethnic origin.
- Exporters shall ensure that proper ventilation systems are installed within their premises to prevent airborne exposures which may affect the health of workers.
- Workers shall be entitled to at least 24 consecutive hours of rest in every seven-day period. If workers must work on a rest day, an alternative consecutive 24 hours rest day must be provided.
- Exporters shall pay workers at least the legal minimum wage or the prevailing industry wage, whichever is higher.
- Exporters shall not unreasonably restrain the freedom of movement of workers, including movement in canteen during breaks, using toilets, accessing water, etc.
- Garment exporters must ensure that the minimum age requirement to non-hazardous employment shall not be less than 14 years.
- Exporters shall not threaten female workers with dismissal or any other employment decision that negatively affects their employment status in order to prevent them from getting married or becoming pregnant.

India Complying with International Standards on Child Labour

- 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.

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.
- The trainees or occupational students shall not be under the legal age for employment (as provided under the applicable laws).
- A proper process is followed for checking the age of the workers.

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.

Refer to PH "6.1.9 Green Jobs" and "Fig.5.1.3: Diversified green jobs"

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

Exercise

1. **What are the three main phases of compliance audits in India?**

   There are three main phases of compliance audit in India:

   a) 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

   b) On-site audit: It includes conducting personnel interviews, reviewing records, and making observations to assess program implementation

   c) Post-audit: It includes briefing the management on audit findings, and preparing a final report.

2. **The compliance level of garment factory is ..... for Indian exporters.**

   a) **Very high**

   b) Very low

   c) Unstable

   d) All of the above

3. **What is the full meaning of (AEPC)?**

   Apparel Export Promotion Council

4. **Describe about India's compliment 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.

7. Soft Skills and Communication Skills

Unit 7.1 - Introduction to the Soft Skills

Unit 7.2 - Effective Communication

Unit 7.3 - Grooming and Hygiene

Unit 7.4 - Interpersonal Skill Development

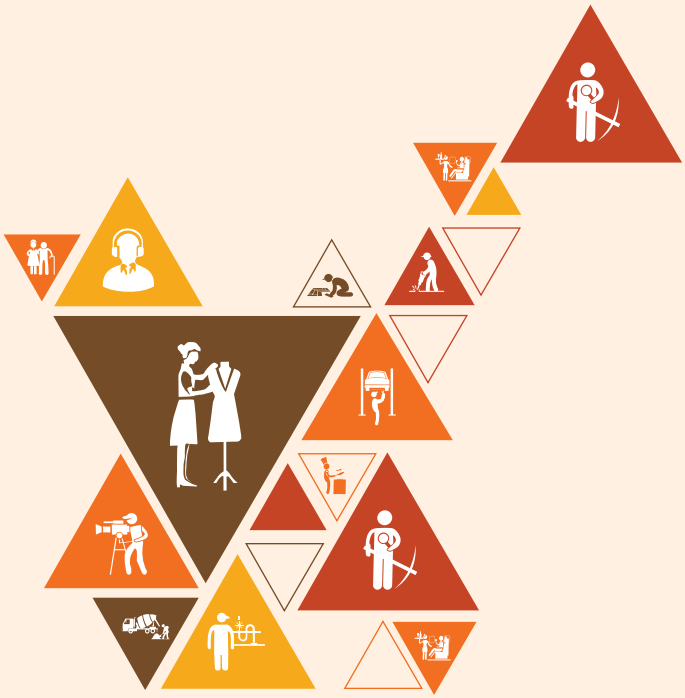
Unit 7.5 - Social Interaction

Unit 7.6 - Group Interaction

Unit 7.7 - Time Management

Unit 7.8 - Resume Preparation

Unit 7.9 - Interview Preparation



Key Learning Outcomes

At the end of this 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 7.1: Introduction to the Soft Skills

Unit Objectives

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

1. Interpret basic soft skills.
2. Explain the work readiness.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about soft skills in this unit.

Say

- Tell about soft skill
- The benefits of soft skills
- Necessity of soft skills

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.2: Effective Communication

Unit Objectives

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

1. Analyze the communication process.
2. Explain the communication barriers.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about effective communication in this unit.

Say

- Explain the communication process
- Tell about the importance of verbal and non-verbal communication
- Give tips on active listening

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.3: Grooming and Hygiene

Unit Objectives

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

1. Identify and follow personal grooming and hygiene.
2. Explain Specific Uniform Guideline.
3. Maintain personal hygiene in work place.
4. Follow good eating habit.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about grooming and hygiene in this unit.

Say

- Enlighten students about necessity of personal grooming
- Tell the importance of body posture
- Explain the necessity of proper hygiene
- Tell them about healthy living and healthy food habits
- Create awareness about HIV/AIDS

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.4: Development of Interpersonal Skill

Unit Objectives

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

1. Analyze positive attitude and behavior.
2. Interact effectively in a group.
3. Explain the qualities of a leadership.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about the development of interpersonal skills in this unit.

Say

- Tell the importance of maintaining positive attitude
- Give examples of successful people
- Tell the importance of goal setting
- Explain importance of team work
- Enlighten about the importance of etiquettes
- Say about stress and anger management
- Speak about leadership skills

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.5: Social Interaction

Unit Objectives

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

1. Understand what social interaction is and what social interaction behaviours are.
2. Give a brief description about himself/herself in public.
3. Follow daily duties.
4. Cooperate with peers, family and other members in society.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about social interaction in this unit.

Say

- Tell about duties and responsibilities
- Enlighten people about the necessity of cooperation

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.6: Group Interaction

Unit Objectives

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

1. Define the effectiveness of group interaction.
2. Effectiveness of the team work.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about group discussion in this unit.

Say

- Teach about importance of group interaction.
- Show why is team work necessary

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.7: Time Management

Unit Objectives

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

1. Manage time effectively.
2. Define management skill.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about time management in this unit.

Say

- Tell the importance of maintaining positive attitude
- Give examples of successful people
- Tell the importance of goal setting
- Explain importance of team work
- Enlighten about the importance of etiquettes
- Say about stress and anger management
- Speak about leadership skills

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.8: Resume Preparation

Unit Objectives

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

1. Explain the importance of resume.
2. Discuss basic steps for the preparation of a resume.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about resume preparation in this unit.

Say

- Tell the importance of maintaining positive attitude
- Give examples of successful people
- Tell the importance of goal setting
- Explain importance of team work
- Enlighten about the importance of etiquettes
- Say about stress and anger management
- Speak about leadership skills

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 7.9: Interview Preparation

Unit Objectives

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

1. Explain the procedure of an interview.
2. Prepare for interview.

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about interview preparation in this unit.

Say

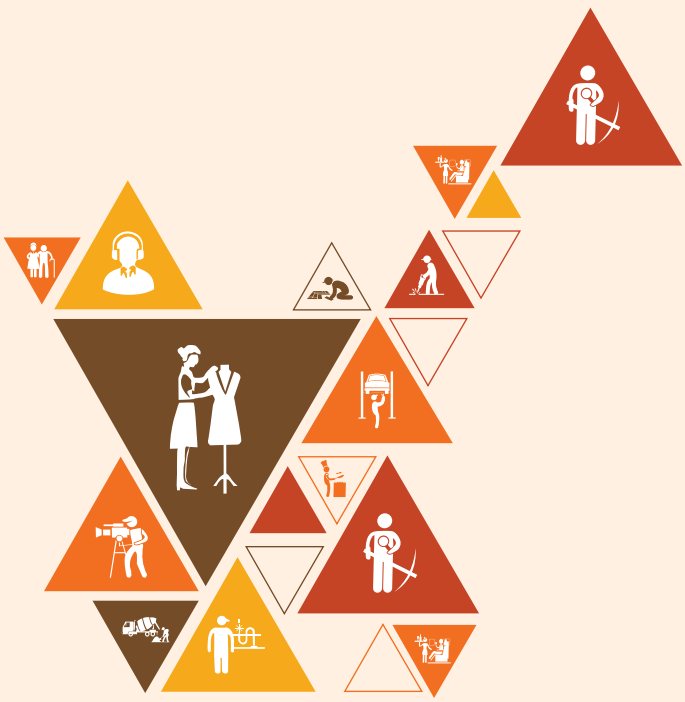
- Tell the importance of maintaining positive attitude
- Give examples of successful people
- Tell the importance of goal setting
- Explain importance of team work
- Enlighten about the importance of etiquettes
- Say about stress and anger management
- Speak about leadership skills

Notes for Facilitation

- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.

8. Employability Skills

Unit 8.1 - Employability Skills – 30 Hours



UNIT 8.1: Employability Skills – 30 Hours

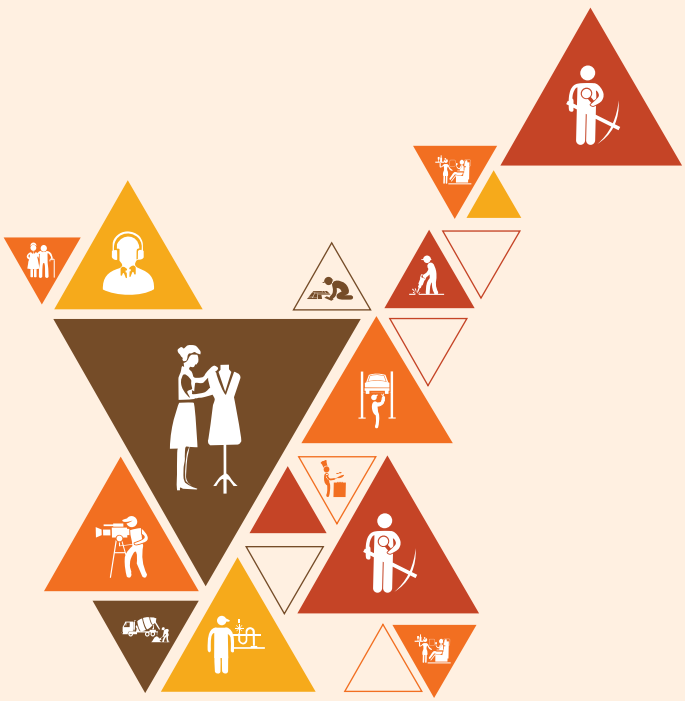
To read the e-book on Employability Skills scan the QR Code below.

https://www.skillindiadigital.gov.in/content/detail/1-afb18fd8-344f-4762-b167-6f491877775a

9. Annexures

Annexure I: Resources

Annexure II: Training Delivery Plan



Annexure I: Resources

Module No.	Unit No.	Name of Subject	URL	QR Code
1. Introduction and Orientation	Unit 1.1 - Introduction to Sewing and Apparel Sector	Apparel Sector in India – Industry Overview	https://youtu.be/tN5oLGSjepQ	
1. Introduction and Orientation	Unit 1.2 - Role and Responsibilities of Sewing Machine Operator (Knits)	Role and Responsibilities of Sewing Machine Operator	https://youtu.be/aHo2Kp2LeiY	
1. Introduction and Orientation	Unit 1.2 - Role and Responsibilities of Sewing Machine Operator (Knits)	Fabric Knitting	https://youtu.be/wdcFhc5ULkc	
2. Plan and Prepare for Sewing of Knit Fabrics	Unit 2.1 - Basic Materials for Sewing of Knits	Types of Industrial Sewing Machines	https://youtu.be/nwQLVcOCd18	
2. Plan and Prepare for Sewing of Knit Fabrics	Unit 2.1 - Basic Materials for Sewing of Knits	Parts of a Sewing Machine	https://youtu.be/aI_hc7DoKXk	
2. Plan and Prepare for Sewing of Knit Fabrics	Unit 2.1 - Basic Materials for Sewing of Knits	Classification of defects	https://youtu.be/SPtD6mAZ0GU	
3. Stitch Knitted Fabrics	Unit 3.1 - Stitch Components to Produce Apparels	निट फैब्रिक को सिलना	https://youtu.be/uANfrCEBkAQ	

3. Stitch Knitted Fabrics	Unit 3.1 - Stitch Components to Produce Apparels	Sewing knitted fabric without pucker	https://youtu.be/crIp5RQShso	
3. Stitch Knitted Fabrics	Unit 3.1 - Stitch Components to Produce Apparels	Parts and Functions of Overlock Machine	https://youtu.be/eJfdLTgaY-k	
3. Stitch Knitted Fabrics	Unit 3.1 - Stitch Components to Produce Apparels	Lock stitch and chain stitch	https://youtu.be/U3OTU3g0HG0	
3. Stitch Knitted Fabrics	Unit 3.2 - Contribute to Achieve Product Quality in Stitching Operations	Classification of Garment Defects	https://youtu.be/SPtD6mAZ0GU	
3. Stitch Knitted Fabrics	Unit 3.3 - Stitching a T-Shirt	Stitching a T-shirt	https://youtu.be/32zNC1MA v9o	
4. Maintain Work-Area, Tools and Machines	Unit 4.1 - Maintain Work Area, Tools and Machines	Maintenance of single needle sewing machine	https://youtu.be/6iE2DT6LVpg	
5. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 5.1 – Maintain Health, Safety and Security at Work Place	Potential risks and threats associated with the workplace in garment industry	https://youtu.be/POlQ27GQZp0	

5. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 5.2 – First Aid & CPR	First Aid & CPR	https://youtu.be/DQ7JPNgU8Wg	
5. Maintain health, Safety and Security in the Finishing Department with Gender & PwD Sensitization	Unit 5.3 – Sensitivity towards People with disability and Gender Equality	What is sensitization	https://youtu.be/Wi1exdO1lig	

Annexure II

Training Delivery Plan

Training Delivery Plan			
Program Name:	Sewing Machine Operator (Knits)		
Qualification Pack Name & Ref. ID	AMH/Q 0305		
Version No.	3.0	**Version Update Date**	17-11-2022
Pre-requisites to Training	• Grade 9 with No Experience required • Grade 8 pass and pursuing continuous schooling in regular school with No Experience required • 8th grade pass with 1 year relevant experience • 5th grade pass with 4 year relevant experience • Ability to read and write with 5 year relevant experience • Previous relevant Qualification of NSQF Level 2 with 6 months relevant experience • Previous relevant Qualification of NSQF Level 1 with 1.5 year relevant experience		
Training Outcomes	**By the end of this program, the participants will be able to:** 1. Plan and prepare for process of sewing of knit fabric as per plan received from stitching/ line supervisor 2. Stitch Knitted fabric as per plan 3. Maintain work area, tools and machines 4. Maintain health, safety, security in tailoring shop with Gender & PwD Sensitization. 5. Maintain work area, tools and machines. 6. Comply with industry, regulatory and organizational requirements and Greening of Job roles.		

Sl. No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools/ Aids	Duration
1.	Introduction and Orientation	Introduction to Sewing and Apparel Sector	**Theory** • Introduce each other. • Build rapport with fellow students and the trainer. • Introduce the students to the art of sewing. • To familiarize with Apparel Industry.		• Facilitator-led – Discussion Demonstration	Organisation chart, Illustrations, Pen & paper exercise	2:00 hr.
		Roles and responsibilities of Sewing Machine Operator (Knits)	**Theory** • Job Description of an SMO • Roles and responsibilities of SMO		• Facilitator-led - discussion	Pen & paper exercise, role plays and flow charts	1:00 hr.
2.	Plan and prepare for Sewing of Knit Fabrics	Prepare for Stitching Operations	**Theory** • Discuss the basic of knits fabrics	AMH/N0305	• Facilitator-led - discussion	Fabric Swatch file, charts, images, pen & paper exercise	1:00 hrs.
			Theory • Explain the difference of woven & knitted fabrics	AMH/N0305	• Facilitator-led - discussion	Fabric Swatch file, charts, images, pen & paper exercise	1:00 hrs.
			Theory • Explain different knitting terms • Build an understanding of commonly used knit fabrics	AMH/N0305	• Facilitator-led - discussion	Fabric Swatch file, charts, images, pen & paper exercise	1:00 hrs.
			Theory • Analyze commonly found defects in knit fabric	AMH/N0305	• Facilitator-led - discussion	Fabric Swatch file, fabric defect file, charts, images, pen & paper exercis	1:00 hrs.
			Theory • Build an understanding of Sewing Thread • Identify different types of threads	AMH/N0305	• Facilitator-led - discussion	Different type of threads, charts, images, pen & paper exercise	1:00 hrs.
			Theory • Apply the knowledge of sewing thread	AMH/N0305	• Facilitator-led - discussion	Type of sewing threads, charts, images, pen & paper exercise	1:00 hrs.
			Theory • Explain the basics of thread construction	AMH/N0305	• Facilitator-led - discussion	Type of threads, charts, images, pen & paper exercise	1:00 hrs.
			Practical • Recommended threads for knits of different types • Create understanding of thread-fabric compatibility	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Different type of threads, different fabrics, charts and images	6:00 hrs.
		Machine & Equipment for sewing knits	**Theory** • Discuss the Industrial Sewing machines • Elaborate on types of sewing machine based on stitch	AMH/N0305	• Facilitator-led - discussion	Audio Visual Clips, Sewing Machine, charts, images and schematic diagrams	1:00 hrs.

			Theory • Build an understanding of special machines for knits	AMH/N0305	• Facilitator-led - discussion	Audio Visual Clips, Sewing Machine and Fabric swatch	1:00 hrs.
			Theory • Discuss the parts of sewing machine	AMH/N0305	• Facilitator-led - discussion	Audio Visual Clips, Sewing Machine and schematic diagram	1:00 hrs.
			Practical • Demonstrate using different sewing machine for knits	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, Sewing Machine and schematic diagram	6:00 hrs.
			Practical • Make use of parts of O/L machine • Make use of parts of feed of the arm machine	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, O/L Machine, Feed of the arm machine, schematic diagram and fabric swatch	6:00 hrs.
			Practical • Operate a flat lock machine • Operate a button stitch machine	AMH/N0305	• Facilitator-led - discussion • Demonstration	Audio Visual Clips, Flat lock Machine, Button stitch machine, schematic diagram and fabric swatch	5:00 hrs.
			Practical • Creating an understanding about Feed mechanism	AMH/N0305	• Facilitator-led - discussion • Demonstration	Audio Visual Clips, Various sewing machine, schematic diagram and fabric swatch	5:00 hrs.
			Theory • Explain sewing machine needle used for knits fabric	AMH/N0305	• Facilitator-led - discussion	Audio Visual Clips, Sewing Machine, Various gauge of sewing needles, schematic diagram and fabric swatch	1:00 hrs.
			Practical • Creating an understanding about thread-needle compatibility	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, Sewing Machine, Various gauge of sewing needles, various sewing thread, schematic diagram and fabric swatch	4:00 hrs.
			Practical • Select of needles for knit fabric	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, Sewing Machine, Various gauge of sewing needles, various sewing thread, schematic diagram and fabric swatch	4:00 hrs.
			Practical • Making different seams applicable in knitted garments	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, Sewing Machine, Fabric, Various gauge of sewing needles, various sewing thread, schematic diagram and fabric swatch	5:00 hrs.
			Theory • Explain basic list of material & tools	AMH/N0305	• Facilitator-led - discussion	Audio Visual Clips, Basic tool & equipment list, schematic diagram and fabric swatch	1:00 hrs.

			Practical • Using different materials & tools in sewing process	AMH/N0305	• Facilitator-led - discussion • Demonstration in practical lab	Audio Visual Clips, Basic tool & equipment list, schematic diagram, and fabric swatch	4:00 hrs.
		Establishing Learner's Understanding	• Analyze and examine learning confirmation	AMH/N0305	• Facilitator led question-answer session • Evaluate the learner for their understanding & proficiency of the module • Process based evaluation	Pen & paper exercise, question answer session, Process charts, schematic diagrams, illustrations, charts and images	-
3.	Stitch Knitted Fabric	Stitch Components to Produce Apparels	**Theory** • Explain the steps in adjusting the machine	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT and Audio Visual Clips	2:00 hrs.
			Theory • Estimate time for different process	AMH/N0306	• Facilitator-led - discussion	PPT, Audio Visual Clips, pen & paper exercise	1:00 hrs..
			Theory • Discuss steps in performing test runs	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT, Audio Visual Clips	2:00 hrs.
			Practical • Demonstrate adjusting the machine thread • Demonstrate using the bobbin winder	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, bobbin and bobbin case	6:00 hrs.
			Practical • Demonstrate replacing a needle • Perform a test run • Checking of material • Sew a Seam	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and fabric	6:00 hrs.
			Practical • Perform different type of Seams	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and fabric	6:00 hrs.
			Practical • Make different types of pockets, plackets and sleeves	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and fabric	6:00 hrs.
			Practical • Make different type of Stitches	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and material	6:00 hrs.
			Practical • Apply steps for lockstitch	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and material	5:00 hrs.
			Practical • Apply steps for chain stitch	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and material	5:00 hrs.

			Practical • Demonstrate Corner stitch • Achieve desired quality and speed • Curve stitch	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and material	6:00 hrs.
			Practical • Demonstrate Curve stitch • Achieve desired quality and speed	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Sewing machine, thread, needle and material	6:00 hrs.
		Stitching a T- Shirt	**Theory** • List materials required in stitching a T-shirt for men	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT, Audio Visual Clips and different style t-shirts	2:00 hrs.
			Theory • List the steps in stitching a T- Shirt	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT, Audio Visual Clips and different style t-shirts	2:00 hrs.
			Practical • Sew the shoulders	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Fabric, sewing material, sewing machine, thread, needle, etc.	2:00 hrs.
			Practical • Sew the neckline	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Fabric, sewing material, sewing machine, thread, needle, etc.	2:00 hrs.
			Practical • Sew the sleeves	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Fabric, sewing material, sewing machine, thread, needle, etc.	2:00 hrs.
			Practical • Sew the side seams • Sew the hems	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Fabric, sewing material,, sewing machine, thread, needle, etc.	2:00 hrs.
		Contribute to Achieve Product Quality in Stitching Operations	**Theory** • Explain product quality. • Discuss importance of quality	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT and Audio Visual Clips	3:00 hrs.
			Theory • Build an understanding of importance of communication • Explain how to coordinate with seniors and others.	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT and Audio Visual Clips	2:00 hrs.
			Theory • Explain the sewing process flow. • Explain about the production system	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT and Audio Visual Clips	1:00 hrs.

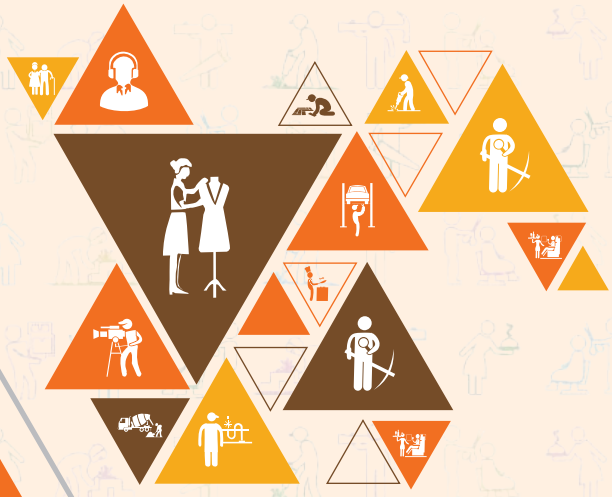
			Theory • Inspect stitched products against specifications. • Identify, mark and place rejects in the designated locations.	AMH/N0306	• Facilitator-led - discussion	Process chart, pen & paper exercise, schematic diagrams, charts, PPT and Audio Visual Clips	3:00 hrs.
			Practical • Take part in the inspection and possible defects	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	2:00 hrs.
			Practical • Explain the quality department and its role in production	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	2:00 hrs.
			Practical • Explain the sewing department and its process flow	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	2:00 hrs.
			Practical • Carry out alterations • Sew and apply trims by hand and machine.	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components, trims and accessories	6:00 hrs.
			Practical • Sew and apply trims by hand and machine.	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	4:00 hrs.
			Practical • Maintain workflow and meet production target	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	4:00 hrs.
			Practical • Identification and Classification of Defects » Major defects » Minor defects » Seconds	AMH/N0306	• Practical Lab	Process chart, schematic diagrams, charts, Defect swatch file, fabric file, documents, etc.	6:00 hrs.
			Practical • Identify knit fabric defects • Identify defects of woven fabric • Rectifying defects	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	6:00 hrs.

			Practical • Identify defects in Accessories & trims • Identify stitch and seam Defects	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	6:00 hrs.
			Practical • Process to rectify defects • Take part in an inspection loop	AMH/N0306	• Facilitator-led - discussion • Demonstration	Process chart, schematic diagrams, charts, PPT, Audio Visual Clips, Stitched garments and components	4:00 hrs.
		Establishing Learner's Understanding	• Analyze and examine learning confirmation	AMH/N0306	• Facilitator led question-answer session • Evaluate the learner for their understanding & proficiency of the module • Process based evaluation	Pen & paper exercise, question answer session, Process charts, schematic diagrams, illustrations, charts and images	-
4.	Maintain Work Area, Tools and Machines	Maintain Work Area, Tools and Machines	**Theory** • Importance of machine cleanliness and maintenance	AMH/N0102	• Facilitator-led - discussion	Handbook/Facilitator Guide	4:00 hrs.
			Theory • Importance of Preventive & Running maintenance of machine & tools	AMH/N0102	• Facilitator-led - discussion	Handbook/Facilitator Guide	4:00 hrs.
			Theory • Minimization of waste • Safe waste disposal in the designated location	AMH/N0102	• Facilitator-led - discussion	Handbook/Facilitator Guide	4:00 hrs
			Theory • Work in a comfortable position with the correct posture and maintain personal health safety measures	AMH/N0102	• Facilitator-led - discussion	Handbook/Facilitator Guide	3:00 hrs.
			Practical • Steps of cleaning the bobbin area • Steps of cleaning the tension assembly • Cleaning the feed dog assembly	AMH/N0102	• Practical Lab	Note Pad, Pen, sewing machine	3:00 hrs.
			Practical • Change needle guard • Maintain machine after work is done	AMH/N0102	• Practical Lab	Note Pad, Pen, sewing machine	3:00 hrs.
			Practical • Maintain machine after work is done	AMH/N0102	• Practical Lab	Note Pad, Pen, sewing machine	3:00 hrs.
			Practical • Steps in lubricating Machine	AMH/N0102	• Practical Lab	Note Pad, Pen, sewing machine, Oil	3:00 hrs.
			Practical • Machine guards • Sewing machine safety tips	AMH/N0102	• Practical Lab	Note Pad, Pen, sewing machine	3:00 hrs.

			• Ensure learning confirmation	AMH/N0102	• Facilitator led question-answer session • Gauge the learner for their understanding & proficiency of the module • Process based gauging to map learning curve	Notepad, Fabric ,Pencil, Pen, sewing machine, thread, needle, bobbin, bobbin case, Participant Handbook/Facilitator Guide	
5.	Maintain a Healthy, Safe and Secure Working Environment with Gender and PwD Sensitization	Maintaining Health, Safety and Security at Workplace	**Theory** • Elaborate on health & safety related instructions at the workplace	AMH/N0307	• Facilitator-led - discussion	Charts of good personal health practices, note pad, audio-visual clips	2:00 hrs.
			Practical • Identify the personal protective equipments	AMH/N0307	• Facilitator-led - discussion	Chart for PPE, note pad, , audio-visual clips	1:00 hrs.
			Theory • Build an understanding of importance of ergonomics at the workplace	AMH/N0307	• Facilitator-led - discussion	Audio-visual clips. Various posture charts	2:00 hrs.
			Theory • Elaborate on probable hazards at the workplace and handling them	AMH/N0307	• Facilitator-led - discussion	Audio-visual clips, Process charts	2:00 hrs.
			Theory • Summarize probable machine/ equipment malfunctions	AMH/N0307	• Facilitator-led - discussion	Diagrams, charts etc.	3:00 hrs.
			Theory • Discuss first aid & its application	AMH/N0307	• Facilitator-led - discussion	Chart for First Aid materials, , First Aid Box	4:00 hrs.
			Practical • Demonstrate wearing and taking off PPE	AMH/N0307	• Practical Lab	Process charts, flow charts, Various PPEs	3:00 hrs.
			Practical • Take part in mock drills / evacuation • Make use of first aid	AMH/N0307	• Practical Lab	Mock drill video, mock drill charts, first aid box	3:00 hrs.
			Practical • Take part in periodic walk through for hazard identification	AMH/N0307	• Practical Lab	Tools & equipments, documents, charts etc.	3:00 hrs.
			Practical • Apply emergency preparedness & response • Identify safety signs at workplace	AMH/N0307	• Practical Lab	Mock drill video, mock drill charts, first aid box	3:00 hrs.
		First Aid and CPR	**Practical** • Apply first aid on an injured person. • Understand the procedures of doing CPR.	AMH/N0307	• Power-point presentation • Facilitator- led - discussion • Audio- visuals Images	Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.	2:00 hrs.

		Sensitivity towards People with disability and Gender Equality	**Theory** • Develop an Elaborate the details about PWD Sensitization. • Explain gender sensitization and equality.	AMH/N0307	• Facilitator-led - session and discussion	Process chart, schematic diagram, pen & paper exercise, charts and images	2:00 hrs.
6.	Follow Regulatory and Company's Rules and Greening of Job Roles	Follow Regulatory and Company's Rules	**Theory**: • Elaborate general policies and regulations in the Apparel Industry	AMH/N0104	• Facilitator-led – discussion	Illustration, images, etc.	4:00 hrs.
			Theory: • Support to supervisors and team members	AMH/N0104	• Facilitator-led – discussion	Illustration, images, process charts, pen & paper exercise, etc.	4:00 hrs.
			Practical: • Identify and report any policy deviation	AMH/N0104	• Role Plays/ team Work	Illustration, images, process charts, pen & paper exercise, etc.	8:00 hrs.
			Practical: • Demonstrate skills to work in a team	AMH/N0104	• Role Plays/ team Work	Team building exercises and games, documents, charts, etc.	7:00 hrs.
			Theory: • Explain the role of APEC in Indian Garment Industry	AMH/N0104	• Facilitator-led – discussion	Apparel industry structure charts, documents, etc.	2:00 hrs.
			Theory: • Examine the significance of compliance in Indian Garment Industry	AMH/N0104	• Facilitator-led – discussion	Apparel industry structure charts, documents, etc.	3:00 hrs.
			Theory: • Explain the effect and importance of Greening of Job roles.	AMH/N0104	• Facilitator-led – discussion	Apparel industry structure charts, documents, etc.	2:00 hrs.
		Establishing Learner's Understanding	• Analyze and examine learning confirmation	AMH/N0104	• Facilitator led question- answer session • Evaluate the learner for their understanding & proficiency of the module • Process based evaluation	Pen & paper exercise, question answer session, Process charts, schematic diagrams, illustrations, charts and images	
7.	Soft Skills	Soft Skills	**Theory** • Explain body language and non verbal communication • Discuss about conducting self in interview • Explain anger and conflict management	Bridge Module	• Facilitator-led - session and discussion	Presentation, Audi-visual clips and Role plays	

			Theory • Explain towards managing job related stress effectively • Build an understanding about work ethics	Bridge Module	• Facilitator-led - session and discussion	Presentation, Audi-visual clips and Role plays	
			Theory • Develop awareness towards AIDS • Discuss the importance of health and hygiene • Develop awareness about ill effects of alcohol and tobacco.	Bridge Module	• Facilitator-led - session and discussion	Presentation, Audi-visual clips and Role plays	
			Practical: • Demonstrate grooming and hygiene • Apply time management skills • Apply resume preparation skills • Demonstrate for Interview preparation skills	Bridge Module	• Facilitator-led - session and discussion	Grooming videos, grooming charts, resume templates, documents, charts, etc.	
		Establishing Learner's Understanding	• Analyze and examine learning confirmation	Bridge Module	• Facilitator led question- answer session • Evaluate the learner for their understand-ing & proficiency of the module • Process based evaluation	Pen & paper exercise, question answer session, Process charts, schematic diagrams, illustrations, charts and images	



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