Facilitator Guide

Stenter Machine Operator

Sector:
Textiles

Sub-sector:
Processing

Occupation:
Finishing

Reference ID: TSC/Q 5401, Version 1.0
NSQF Level: 4
"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
Acknowledgements

Textile Sector Skill Council is expressing its grateful to Honorable Prime Minister of India Shri. Narendra Modi, for his continuous emphasizes on skill development initiative, which is a crucial and need of the hour requirement of our country.

TSC is grateful and deeply indebted to Honorable Minister of State Shri. Rajiv Pratap Rudy, for his tireless motivation and encouragement of all our Skill India stack holders which is the key factor behind this skill India project.

TSC expresses its gratitude to the ministry of Skill development and Entrepreneurship who had supported us continuously and being a catalyst in our journey towards our targets.

TSC express its respectable thanks to National Skill Development Corporation (NSDC) for their support in preparing our handbooks and developing standards.

TSC thanking all Sector Skill Councils (SSCs) for their parallel feedbacks which helped us a lot in preparing this wonderful handbook.

TSC is grateful and deeply indebted to Indian Texpreneurs Federation (ITF), Coimbatore, for their dedicated support in the preparation of this Facilitators Guide.

Also TSC Thanking industry association Like SIMA, SITRA & BTRA for their contribution in the development of our Indian textile industry.
About this Guide

This Facilitator guide is designed to extend perfect training to new comers for the job roll of Stenter Machine Operator. This facilitator guide is prepared in line with respective Qualification Pack TSC/Q5401, NSQF Level 4.

This facilitator guide is developed by Indian Texpreneurs Federation (ITF), an association of the Indian textile industry as per the instruction from Textile Sector Skill Council (TSC). ITF membership represent the entire technical textile value chain from raw materials to finished goods producers, machinery manufacturers, consultants, centre of excellence and R&D Institutes. With the high experience of our technical team and vast experience of our member mills made this preparation more practical and aligned to respective NQS as well

TSC is an approved Sector Skill Council – SSC by National Skill Development Corporation (NSDC) for the development of skill in spinning, weaving, processing and handloom sectors of the textile industry. TSC is a non-profit making organisation represented by industry, government and academia to develop innovative skill solutions and to investment in skills and job creation for textile industry.

The key objective of TSC is to define the skill requirement of the industry and to create a deployable talent pool of workforce for the textile industry. TSC is developing a skilled work force for the textile industry through setting curriculum for training, facilitator guide, participant handbook, accreditation of trade competency, implementing various skill development schemes, assessment of trained candidates and certification of successful candidates.

The National Skill Development Corporation, (NSDC) is a one of its kind, Public Private Partnership in India, under the Ministry of Skill Development & Entrepreneurship (MoSDE). It aims to promote skill development by catalysing creation of large, quality, for profit vocational institutions. NSDC is developing the skill landscape of India through various Sector Skill Councils (SSCs) and Various Skill development schemes.

Symbols Used

- Steps
- Time
- Tips
- Notes
- Objectives
- Do
- Ask
- Explain
- Elaborate
- Field Visit
- Practical
- Lab
- Demonstrate
- Exercise
- Team Activity
- Facilitation Notes
- Learning Outcomes
- Say
- Resources
- Activity
- Summary
- Role Play
- Example
# Table of Contents

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules and Units</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Introduction</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Unit 1.1 – General Process Flow in Textile Industry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unit 1.2 – Stenter Brief Job/Role Description and Career Progression</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Unit 1.3 – Objective of Stenter M/C and Various Processes</td>
<td>9</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Taking charge of shift and Handing over shift to operator (TSC/Q5401)</strong></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Unit 2.1 – Taking Charge of Shift</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Unit 2.2 – General Check List on Stenter M/C</td>
<td>17</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Operating Stenter (TSC/Q5402)</strong></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Unit 3.1 – Parts of Stenter M/C and their Functions</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Unit 3.2 – Operating Procedure of Stenter M/C</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Unit 3.3 – Fabric Quality after Stenter Observation and Assessment</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Unit 3.4 – Preventive and Corrective Action for Damages to Fabric</td>
<td>33</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Preparing the Finishing Chemicals (TSC/Q5403)</strong></td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Unit 4.1 - Preparation of Finishing Bath</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Unit 4.2 - Dos and Don’ts for Stenter M/C</td>
<td>40</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Maintain Work Area, Tools and Machine (TSC/Q9001)</strong></td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Unit 5.1 – Maintain Work Area Handling on Stenter M/C</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Unit 5.2 – Maintain Tools on Stenter M/C</td>
<td>48</td>
</tr>
<tr>
<td>6.</td>
<td><strong>Working in a Team (TSC/Q9002)</strong></td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Unit 6.1 - Concept and Advantages of working in a Team</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Unit 6.2 – Commitment and Trust</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Unit 6.3 – Communication</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Unit 6.4 – Adaptability</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Unit 6.5 – Creative Freedom</td>
<td>62</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Maintain Health, Safety and Security at Work Place (TSC/Q9003)</strong></td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Unit 7.1 – Maintain Health, Safety and Security at Work Place</td>
<td>66</td>
</tr>
</tbody>
</table>
Unit 7.2 - Safety for Man and Industry Health
9
Unit 7.3 - Safety for Material and Machine
9
Unit 7.4 - Emergency Response Training and Recognizing the Hazards
12
8. Comply with Industry and Organizational Requirements (TSC/Q9004)
78
Unit 8.1 - Self Development
80
Unit 8.2 - Team Work
83
Unit 8.3 - Organizational Standards
85
Unit 8.4 - Industry Standards
87
9. Employability and Entrepreneurship Skills
89
Unit 9.1 - Personal Strengths and Value System
93
Unit 9.2 - Digital Literacy: A Recap
98
Unit 9.3 - Money Matters
100
Unit 9.4 - Preparing for Employment and Self Employment
104
Unit 9.5 - Understanding Entrepreneurship
106
Unit 9.6 - Preparing to be an Entrepreneur
113
10. Annexures
119
Annexure I: Training Delivery Plan
120
Annexure II: Assessment Criteria
134
1. Introduction

Unit 1.1 – General Process Flow in Textile Industry
Unit 1.2 – Stenter Brief Job/Role Description and Career Progression
Unit 1.3 – Objective of Stenter m/c and Various Processes
Key Learning Outcomes

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

1. Explain the importance of textile processing
2. Describe the General process flow in textile
3. Understand and explain role of stenter machine in the finishing
4. Describe your role on stenter machine and personal attributes required for the job
5. What are the career progression opportunities for stenter operator
6. Explain the General objectives of stenter machine
7. Describe different processes carried out on stenter machine
UNIT 1.1: General Process Flow in Textile Industry

Unit Objectives

At the end of this unit, students will be able to:
1. Explain the importance of textile processing
2. Describe the general process flow in Textile Industry

1.1.1: Why Textile Processing?

Say

- Tell to know the grey fabric produced in loom having no aesthetic value, luster, required shade or design etc
- Tell that the grey fabric lack of softness/wearing comfort/functional properties
- Tell that the process helps to convert the fabric into desired quality of fabric by overcoming the deficiencies

Fig. 1.1.1: Grey fabric and processed fabric
Do
- Do understand the meaning of functional properties like antibacterial, easy to iron, water repellent

Ask
- Ask about the necessity of processing fabric

1.1.2: General Process Flow

Say
- Say that the processing is carried out as per customer requirements
- Tell to understand various process like pretreatment process, dyeing process, printing process, finishing process

Do
- Do know the sub process of finishing process
- Stenter Drying and Width Stretching
- Stenter Heat Setting
- Stenter Finishing
- Sanforization
- Calendaring
- Decatization
- Kier Decatization
- Paper Press
- Peaching/raising/brushing Etc
Ask to understand the general process flow with the flow chart:

- Grey fabric
- Pretreatment
- Dyeing / Printing
- Finishing process
- Inspection / Packing
UNIT 1.2: Stenter, Job/Role Description and Progression

Unit Objectives
At the end of this unit, students will be able to:
1. Understand and explain role of stenter machine in the finishing
2. Describe your role on stenter machine and personal attributes required for the job
3. What is the career progression opportunities for a stenter

1.2.1: Job/Role Description

Say
- Tell that stenter machine operator has to do the job of drying, heat setting and finishing of fabric with the control of process parameters
- Tell that producing the desired effect on the fabric in this process lies with stenter operator

Do
- Do know the importance of the stenter operator's job responsibility
- Do understand the technical skills and knowledge required for operating the stenter
1.2.2: Career Progression and Personal Attributes

- Tell that career progression of a stenter operator is the advancement or upward movement in the career.
- Tell to understand the involvement of a stenter operator in changing the fibre characteristic using mechanical action to improve its feeling, size and appearance.
- Tell that labour head, quality inspector, supervisor are the next level of career progression for a stenter operator.
Do

- Do know the job involving technical skills using technology, mastery of textile fibres, its physical and mechanical properties etc.

Fig. 1.2.2.1: Visual aspects of stenter operator

Ask

- Ask question regarding the requirement of other skills like good eyesight, visual aspects, matching skills etc.
- Ask about the opportunity for a stenter operator in the career progression

Fig. 1.2.2.2: Career progression
UNIT 1.3: Objective of Stenter M/C and Various Processes

Unit Objectives

At the end of this unit, students will be able to:
1. Explain the General objective of stenter machine
2. Describe the different processes carried out on stenter machine

1.3.1: Objective of Stenter M/C

Say

- Tell that the objective of stenter machine is to carry out various processes to impart the desired quality as required in market

![List of processes]

*Fig. 1.3.1: Objective of stenter machine*

Do

- Do check the purpose of heat setting process in stenter machine
Ask

- Ask whether stenter machine is used for controlling width and shrinkage of fabric

Elaborate

- Explain the objectives of stenter machine with two processes

1.3.2: Processes carried out on Stenter Machine

Say

- Tell that stenter machine is not only used for drying but also for heat setting, preparatory for printing, curing, finishing etc.
- Tell that other multiple purpose of stenter machine is the control of width, loop and moisture, pigment dye application etc.
- Tell that drying process is done after every wet processing to reduce the moisture to the desired level for next process

![Diagram of stenter machine](image)

Fig. 1.3.2.1: Drying process

- Tell that preparatory for printing process is to remove crease, wrinkle with uniform width for printing
- Tell to impart finishing to the fabric to make it comfort for end use as demanded in the market
Do

- Do check the finishing process purpose like imparting luster, improve wearing qualities such as non-soiling, anti-crease, soft feel, adding extra value such appealing, aesthetic look etc.
- Do know the temporary finish such as calendaring, embossing, starching etc. and permanent finish such as sanforising, water proof, flame proof, resin finishing etc.

Ask

- Ask about functional finish like water proof/water repellant finish, soil release finish, fire retardant finish, anti-ageing finish, anti-wrinkle finish, wash and wear finish etc.
- Ask question on heat setting process purpose of dimensional stability to the fabric
- Ask few advantages of heat setting process
- Ask the difference between treated with heat setting process and not treated

Fig. 1.3.2.2: Difference between heat set fabric and unheat set
2. Taking Charge of Shift and Handing over Shift to Operator

Unit 2.1 – Taking Charge of Shift
Unit 2.2 – General Check List on Stenter M/C
Key Learning Outcomes

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

1. Understand importance of taking and hand over of shift charge
2. Analyze the important communication requires during taking and hand over of shift charge
3. Explain the General checklist which is ensured prior to machine start
UNIT 2.1: Taking Charge of Shift

Unit Objectives

At the end of this unit, students will be able to:
1. Understand the importance of taking and handing over of shift charge
2. Analyze the important communication required during taking and handing over of shift charge

2.1.1: Taking Charge of Shift

Say 🗣

- Say to come earlier by 10 to 15 minutes to shift to discuss the work completed and pending work in shift.
- Say to avoid communication gap otherwise it leads to loss/delay/damage.
- Tell to know the aspects of scheduled activities.
- Tell to know the status of production, quality, safety etc. in previous shift.
- Tell to know the technical details of lot card, availability of tools/equipment and that of trolleys for loading and unloading of fabric, readiness of chemical with enough quantity etc.
- Say to check the cleanliness of department and machine.

![Fig. 2.1.1.1: Discuss about lot card process details](image1)
![Fig. 2.1.1.2: Checking the readiness of chemicals](image2)

Do ✔

- Do check the readiness of next batch process with lot card before start the work.

Ask 🎫

- Ask how to equip yourself to continue the next shift without interruption.
Elaborate

• Explain the process details with lot card of previous shift to charge taker

Notes for Facilitation

• Ensure that necessary operational tools like scissors, stitching machine etc. are on right place

2.1.2: Handover of Shift Charge

Say

• Say to meet and discuss with succeeding operator about pending work and completed work
• Tell to communicate production, quality, safety, spares, instructions
• Tell about the availability of tools, trolley and chemicals
• Tell to provide the relevant details of stoppage of machine, breakdown, damage, spares etc.

Do

• Do discuss about the lot card with process details of previous shift and next batch details

Ask

• Ask to get the concurrence of incoming operator and supervisor before leaving the shift
• Ask to inform incoming supervisor if the incoming operator fails to report to shift
Notes for Facilitation

- Ensure that the padding mangle and trough are cleaned and all filters are clean
- Ensure that all the utilities supply is proper and sufficient
- The shift is handed over to incoming shift operator properly
UNIT 2.3: General Check List on Stenter M/C

Unit Objectives
At the end of this unit, students will be able to:
1. Explain the General checklist which is ensured prior to machine start

2.3.1: General Check List on Stenter M/C

Say
- Tell to use the check list to check the important points while starting the stenter machine
- Tell to know if any deviation with the check list for correcting it

Elaborate
- Explain how to use the check list with the following

<table>
<thead>
<tr>
<th>Ref No.</th>
<th>Unclean condition</th>
<th>Clean condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 a)</td>
<td><img src="image1.jpg" alt="Image" /></td>
<td><img src="image2.jpg" alt="Image" /></td>
</tr>
</tbody>
</table>

Cont.....
<table>
<thead>
<tr>
<th>2.3 b)</th>
<th>Power Supply</th>
<th>Water Supply</th>
<th>Thermic fluid supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image1.jpg" alt="Image" /></td>
<td><img src="image2.jpg" alt="Image" /></td>
<td><img src="image3.jpg" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>Right</td>
<td>Right</td>
</tr>
</tbody>
</table>

2.3 c) Ensure all the guide rollers, guiders, padding mangle are in working smoothly, creaseless and will not create any abrasion lines. Also check control panel to ensure working parameter

|        | ![Image](image4.jpg) | ![Image](image5.jpg) | ![Image](image6.jpg) |
|        | Right              | Right              | Right               |

2.3 d) Skew and bow correction mechanism, overfeed unit, planter device, selvedge photo sensors are in working condition and clean and free from fluff

|        | ![Image](image7.jpg) | ![Image](image8.jpg) | ![Image](image9.jpg) |
|        | Right              | Right              | Right               |
2.3 e) Ensure all the guide rollers, guiders, padding mangle are in working smoothly, creaseless and will not create any abrasion lines. Also check control panel to ensure working parameter.

2.3 g) Slew and bow correction mechanism, overfeed unit, cantering device, selvedge photo sensors are in working condition and clean and free from fluff.
3. Operation of Stenter

Unit 3.1 – Parts of Stenter M/C and their Functions
Unit 3.2 – Operating Procedure of Stenter M/C
Unit 3.3 – Fabric Quality after Stenter Observation and Assessment
Unit 3.4 – Preventive and Corrective Action for Damages to Fabric
Key Learning Outcomes

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

1. Understand different important parts of stenter machine
2. Explain functions of different stenter machine parts
3. Explain preparatory activities on the Stenter
4. Describe specified task as per work order to operate stenter machine
5. Learn different signal and its importance
6. Analyze fabric defects quality after stenter
7. Understand machine related problem and its diverse effect on fabric
8. Explain the problem and damages seen on the stenter machine
9. Describe the Corrective/preventive action to be taken on stenter machine
UNIT 3.1: Parts of Stenter M/C and their Function

Unit Objectives

At the end of this module, you will be able to:
1. Understand different important parts of stenter machine
2. Explain functions of different stenter machine parts

3.1.1: Important Parts of Stenter M/C

Say

- Tell to know stenter machine as an electrical machine
- Tell to know the important parts of stenter m/c helping to approach the parts easily for achieving high productivity with better quality of fabric

![Diagram of important parts of stenter machine](image)
### 3.1.2: Parts of Stenter M/C and their Function

- Tell to know the functions of parts of stenter machine and some details are as under

<table>
<thead>
<tr>
<th>M/C part</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Padder and trough</td>
<td>To apply the required chemical finishing evenly across width to the fabric by padding technique</td>
</tr>
<tr>
<td></td>
<td>Guide rolls</td>
<td>To guide the fabric towards the chain device in continuity without creases and bundling</td>
</tr>
<tr>
<td></td>
<td>Pneumatic cloth Guider</td>
<td>To guide the cloth increase free manner to the process Continuously. It avoid bundling and gathering of fabric by firm holding selvedges with run</td>
</tr>
<tr>
<td></td>
<td>Weft straightener</td>
<td>To remove /adjust skew and bow in fabric as per requirement</td>
</tr>
</tbody>
</table>

Contd/..
<table>
<thead>
<tr>
<th>M/C part</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blower/circulation</td>
<td>To blow or provide required amount of air on thermic fluid heating system. The circulating fans blow air from the base to the upper side</td>
</tr>
<tr>
<td></td>
<td>Fans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Filters</td>
<td>To separate dust and fluffs from air</td>
</tr>
<tr>
<td></td>
<td>Exhaust fans</td>
<td>Exhaust fans sucks all the hot air within the chambers</td>
</tr>
<tr>
<td></td>
<td>Heat recovery system</td>
<td>This is recent development applied in modern stenter machine which helps to recovery the heat which is being exhaust to the environment</td>
</tr>
<tr>
<td></td>
<td>Cooling drum</td>
<td>To cool out coming fabric before plaitsing in the trolley</td>
</tr>
<tr>
<td></td>
<td>Platter</td>
<td>To take out fabric from chain section and put in trolley by reversibe plaits form</td>
</tr>
</tbody>
</table>

*Fig. 5.1.2: List of some parts name and function*
UNIT 3.2: Operating Procedure of Stenter M/C

Unit Objectives

At the end of this module, you will be able to:
1. Explain preparatory activities on the Stenter
2. Describe specified task as per work order to operate stenter machine
3. Learn different signal and its importance

3.2.1: Preparatory Activities on the Stenter M/C

Say

Tell that stenter operator should be competent to understand and perform his/her activities
- Tell to know preparatory activities on stenter machine as follows

Fabric to be stentered is ready to the feeding end of m/c and is joined to the leader cloth and trolley or batch is aligned properly to feed fabric crease free

As per process finishing/chemical bath is ready in overhead tank and same is taken to the padding mangle with appropriate flow

Feed the fabric to chain through mangle, weft straighter, centering device, photocell and overfeed device, chain (clip or pin) and take out to delivery end

Fig. 3.2.1: Preparatory activities on stenter m/c.
3.2.2: Operate Machine for Specified Task as per Work Order

Say

- Tell to understand the specified task as mentioned in work order / lot card

Read & understand the process being followed from the lot card / supervisor to the given fabric lot

Fig. 3.2.2.1: Read the Lot Card
- Do carry out the same specific tasks as given below

<table>
<thead>
<tr>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set the machine to the required width of the fabric</td>
</tr>
<tr>
<td>Fabric face side is always up. Ensure on each stitch</td>
</tr>
<tr>
<td>Adjust the overfeed device as per the requirement of the fabric lot / process</td>
</tr>
<tr>
<td>Keep optimum pressure of the squeezer rolls to get specified results and pick up %</td>
</tr>
<tr>
<td>Mangle pick up is uniform across width. Finishing bath emulsion is stable</td>
</tr>
</tbody>
</table>

*Fig. 3.2.2.2: Some specific tasks*
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric after stenter drying shall have the moisture ≤ 5 and is cooled</td>
<td></td>
</tr>
<tr>
<td>Check various above mentioned control parameters at regular interval</td>
<td></td>
</tr>
<tr>
<td>After process completion, batch should be covered by plastic sheet with identification tag</td>
<td></td>
</tr>
<tr>
<td>Write stentered meters, date and time of process completion and observations on Production order card with signature of shift officer</td>
<td></td>
</tr>
<tr>
<td>Selvedge pinning photocell is working properly continuously throughout the process and there are no moon marks or width variation due to improper pinning</td>
<td></td>
</tr>
<tr>
<td>Temperature and speed are maintained as per standard, No shade variation is created on stenter due to temperature variation across width</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 3.2.2.3: Preparatory activities on stenter m/c
Elaborate

- Explain the special instructions to follow if any

<table>
<thead>
<tr>
<th>S.No</th>
<th>Indicator</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green light on start button</td>
<td>M/C is in operation</td>
</tr>
<tr>
<td>2</td>
<td>Red light on stop button</td>
<td>M/C is in stopped condition</td>
</tr>
<tr>
<td>3</td>
<td>Red light blinking on temperature indicator</td>
<td>Heating is on</td>
</tr>
<tr>
<td>4</td>
<td>Mike and Speaker</td>
<td>To pass important message from front operator to back operator and vice versa</td>
</tr>
</tbody>
</table>

Fig 3.2.2.4: Table - Different signals and its importance

Notes for Facilitation

- Ensure to act on signal to attend the stenter machine as the signal provides effective communication
UNIT 3.3: Fabric Quality after Stenter Observation and Assessment

Unit Objectives

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

1. Analyze fabric defects quality after stenter
2. Understand machine related problem and its diverse effect on fabric

Say

- Tell that the operator should ensure the quality of fabric coming out of machine as per process requirement
- Tell to observe and assess some quality of fabric as given below

<table>
<thead>
<tr>
<th>Width assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width assessment</td>
</tr>
<tr>
<td>Width assessment</td>
</tr>
<tr>
<td>Tearing due to over tension or poor strength</td>
</tr>
<tr>
<td>proper pinning on selvedge</td>
</tr>
</tbody>
</table>

Fig 3.3.1: Fabric observation and assessment
<table>
<thead>
<tr>
<th>Do ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do observe the following quality of fabric and give your assessment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Image</th>
<th>Assessment comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><img src="image4.jpg" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><img src="image5.jpg" alt="Image" /></td>
<td></td>
</tr>
</tbody>
</table>

*Fig. 3.3.2: Observation of fabric quality*
Ask

- Ask about some machine related issues that affect the quality of fabric and feel

Elaborate

- Explain some machine related issues affecting the quality of fabric with the following:

<table>
<thead>
<tr>
<th>M/C related problem</th>
<th>Effective damage to fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper guide roller alignment</td>
<td>Will result in the travelling creases, uneven tension on fabric</td>
</tr>
<tr>
<td>Guider problem</td>
<td>Will result into fabric bundling, rupture or damage or abrasion line on fabric selvedge zone</td>
</tr>
<tr>
<td>Uneven Mangle pressure</td>
<td>Uneven finish application and hence uneven fabric feel across the width and also may lead to creases</td>
</tr>
<tr>
<td>Skew/Bowing unit malfunction</td>
<td>Skew and bow insertion in fabric</td>
</tr>
<tr>
<td>Photocell non-functioning</td>
<td>Creation of damages like moon mark, uneven width, de pinning fabric tearing etc</td>
</tr>
<tr>
<td>Temperature controller not working</td>
<td>May give inconsistent finish, harsh feel, fabric tearing, yellowing due to overheating etc</td>
</tr>
<tr>
<td>Damages clips and pin bars</td>
<td>Creation of damages like moon mark, uneven width, de pinning fabric tearing etc</td>
</tr>
<tr>
<td>Filter are not clean</td>
<td>Uneven hot air circulation leading uneven temp and hence centre to selvedge shade, finish variation</td>
</tr>
</tbody>
</table>

Fig. 3.3.3: Table containing machine related issues on fabric quality

Notes for Facilitation

- Ensure that operator should note down the non-conformities and report to supervisor immediately to take corrective action
UNIT 3.4: Preventive and Correction Action for Damages to Fabric

Unit Objectives

At the end of this module, you will be able to:
1. Explain the problem and damages seen on the stenter machine.
2. Describe the Corrective/preventive action to be taken on stenter machine.

Say

- Tell that the operator should be cautious in identifying the defect of fabric and take quick corrective action without delay because it involves loss to the organization if allowed the defect leading to continuous damage to machine/fabric.
- Tell to understand some of possible corrective action for the fabric defect as given below.

<table>
<thead>
<tr>
<th>Picture</th>
<th>Damages/Problems</th>
<th>Corrective/preventive action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skew and bow</td>
<td>Bow, Skew</td>
<td>Ensure skew is set as per weave/design of fabric. Bowing is set properly. Ensure chain/rail is properly moving and with balance speed and balance no. of clips or pin bars. Look for input fabric construction also.</td>
</tr>
<tr>
<td>Moon mark, de-pinning and width variation</td>
<td></td>
<td>Ensure input fabric width is appropriate to output width. Avoid excessive stretching of width this will lead into de-pinning, improper working of photocell and pinion brush.</td>
</tr>
</tbody>
</table>

Fig. 3.4.1: Corrective action for defective fabric
Do

- Do observe the following fabric defect and tell the possible corrective action

<table>
<thead>
<tr>
<th>Picture</th>
<th>Damage/Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Picture" /></td>
<td>Travelling crease while chemical padding</td>
</tr>
<tr>
<td><img src="image2.png" alt="Picture" /></td>
<td>Chemical coagulation stains on fabric</td>
</tr>
<tr>
<td><img src="image3.png" alt="Picture" /></td>
<td>Yellowing and harshening of fabric</td>
</tr>
</tbody>
</table>

**Fig. 3.4.2: Fabric defects**

**Notes for Facilitation**

- Ensure that operate reports the damages/problems faced in process to supervisor for taking preventive/corrective actions without delay to avoid loss/damage to machine/fabric.
4. Preparing the Finishing Chemicals

Unit 4.1 – Preparation of Finishing Bath
Unit 4.2 – Dos and Don’ts for Stenter M/C
Key Learning Outcomes

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

1. Understand preparation procedure of finishing bath on stenter machine
2. Explain what are do's and don'ts for operation of stenter machine
3. Analyze fabric defects quality after stenter
4. Understand machine related problem and its diverse effect on fabric
5. Explain the problem and damages seen on the stenter machine
6. Describe the Corrective/preventive action to be taken on stenter machine
UNIT 4.1: Preparation of Chemical Bath for Finishing

Unit Objectives
At the end of this unit, students will be able to:
1. Understanding preparation procedure of finishing bath on stenter m/c

Say
- Say to know the procedure of preparation of finishing chemicals
- Tell to keep the finishing solution tank clean and free from fluff and contamination of earlier solution
- Tell to follow the chemical consumption slip given by shift officer to keep ready the finishing chemical after weighing correctly

Do
- Do prepare the final bath with PH of 5 to 5.5 as per recipe slip
- Do add acetic acid or suitable buffer to half quantity of water to achieve PH value

Ask
- Ask how you decide the softener quantity
- Ask whether the stirring of chemical is necessary or not
- Ask how to make up desired volume of chemical
Notes for Facilitation

- Ensure that there is no coagulation process in the bath and solution is clear and no suspended solids are observed.
- Ensure that at any time during finish padding process Trough temp is \[ \leq 25 \, ^\circ{\text{C}} \].
UNIT 4.2: Dos and Don’ts for Stenter M/C

Unit Objectives
At the end of this unit, students will be able to:
1. Explain what are dos and don’ts for operation of stenter m/c

4.2.1: Dos for Chemical Bath Preparation

Say
- Say that the stenter machine is very important part in the textile processing
- Tell that the stenter machine is responsible for final appearance of the fabric
- Tell to run the stenter machine carefully with minimum quality loss of fabric

Elaborate
- Explain about the practices of Dos to be observed by the stenter operator during process with the following

<table>
<thead>
<tr>
<th>Ref No</th>
<th>Picture</th>
<th>Dos</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.1 a)</td>
<td><img src="image1.png" alt="Picture" /></td>
<td>Use clean and fluff free chemical tank for the preparation of finishing liquor</td>
</tr>
<tr>
<td>4.2.1 b)</td>
<td><img src="image2.png" alt="Picture" /></td>
<td>Weigh exactly quantity of finishing chemicals separately as per chemical consumption slip given by shift officer</td>
</tr>
</tbody>
</table>

Contd....
Explain about the practices of Dos to be observed by the stenter.

<table>
<thead>
<tr>
<th>Ref No</th>
<th>Picture</th>
<th>Dos</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.1 c)</td>
<td><img src="image" alt="Picture" /></td>
<td>Stir the finishing liquor thoroughly until homogenous solution is achieved.</td>
</tr>
<tr>
<td>4.2.1 d)</td>
<td><img src="image" alt="Picture" /></td>
<td>Filter the prepared chemical properly before padding the fabric in it.</td>
</tr>
<tr>
<td>4.2.1 e)</td>
<td><img src="image" alt="Picture" /></td>
<td>Check pH of finishing bath while preparing and also at regular interval on machine.</td>
</tr>
<tr>
<td>4.2.1 f)</td>
<td><img src="image" alt="Picture" /></td>
<td>Maintain the temperature of prepared chemical bath as prescribed with shift supervisor.</td>
</tr>
<tr>
<td>4.2.1 g)</td>
<td><img src="image" alt="Picture" /></td>
<td>Clean chemical tank and trough regularly.</td>
</tr>
</tbody>
</table>

*Fig. 4.2.1.1: List of Dos for chemical preparation in stenter m/c*
### 4.2.2: Don’ts for Chemical Bath Preparation

#### Elaborate

Explain about the practices of Don’ts to be observed by the stenter operator during process with the following

<table>
<thead>
<tr>
<th>Ref No</th>
<th>Picture</th>
<th>Don’ts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.2 a)</td>
<td><img src="image1" alt="Picture" /></td>
<td>Don’t prepare the finishing chemical bath in dirty, tinted or flushed service tank. Clean the tank before use</td>
</tr>
<tr>
<td>4.2.2 b)</td>
<td><img src="image2" alt="Picture" /></td>
<td>Don’t use coagulated ore precipitated finishing liquor on the machine</td>
</tr>
<tr>
<td>4.2.2 d)</td>
<td><img src="image3" alt="Picture" /></td>
<td>Don’t allow spillage of chemicals, dirty surrounding of tank and machine</td>
</tr>
<tr>
<td>4.2.2 e)</td>
<td><img src="image4" alt="Picture" /></td>
<td>Don’t use bare hands for preparing the chemicals and use safety gloves for preparing the finishing chemicals</td>
</tr>
</tbody>
</table>

**Fig. 4.2.2.2: List of Don’ts for chemical bath preparation in stenter machine**

#### Notes for Facilitation

- Ensure to maintain the process parameters as per requirements
5. Maintain Work Area, Tools and Machines

Unit 5.1 – Maintain Work Area Handling on Stenter M/C
Unit 5.2 – Maintain Tools on Stenter M/C
Key Learning Outcomes

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

1. Understand importance of work area handling
2. Explain how to handle in-process fabric and manage material handling on machine and surroundings
3. Understand work area tools
4. Explain importance of housekeeping tools and its effective use
UNIT 5.1: Maintain Work Area Handling on Stenter M/C

Unit Objectives

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

1. Understand importance of work area handling
2. Explain, how to handle in-process fabric and manage material handling on machine and surroundings

Say

• Say to understand the importance of house keeping
• Tell to maintain housekeeping which provides pleasant and productive working environment

Do

• Do check the covering of material and fabric properly in the department

Ask

• Ask how to avoid the spillage of chemicals or oils on the floor

Notes for Facilitation

• Ensure to avoid the mixing of anything in the waste box
• Ensure that all materials are kept on its place with proper identification and traceability
Elaborate

- Explain work area tools and handling practice on stenter machine with the following

<table>
<thead>
<tr>
<th>Ref No</th>
<th>Tools</th>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 a)</td>
<td><img src="image.png" alt="Fork Lift" /></td>
<td>For heavy batch handling use Fork Lift</td>
</tr>
<tr>
<td>5.1 b)</td>
<td><img src="image.png" alt="Roll" /></td>
<td>Goods practice of covering batches by plastic</td>
</tr>
<tr>
<td>5.1 c)</td>
<td><img src="image.png" alt="Stacking Batches" /></td>
<td>Stacking batches in proper way</td>
</tr>
<tr>
<td>5.1 d)</td>
<td><img src="image.png" alt="Due to Improper Trolley" /></td>
<td>Due to use of improper trolley, fabric is being damaged or stained</td>
</tr>
<tr>
<td>5.1 e)</td>
<td><img src="image.png" alt="Good Practices" /></td>
<td>Good practices of covering fabric in box trolley</td>
</tr>
</tbody>
</table>

*Fig. 5.1: Work area tools and handling practices on stenter m/c*
UNIT 5.2: Maintain Tools on Stenter M/C

Unit Objectives

At the end of this unit, students will be able to:
1. Understanding work area tools
2. Explain the importance of housekeeping tools and its effective use

Say

- Tell to keep surrounding of machine, machine itself and machine parts like guides, rollers and others clean
- Tell to clean the machine daily from dust, colour stains, chemical stains etc.

Ask

- Ask to check the floor of surrounding to machine for its cleanliness

Elaborate

- Explain usage of work area tools on stenter m/c

<table>
<thead>
<tr>
<th>Ref No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2 a)</td>
<td>Bucket, Wringer and Floor mob</td>
</tr>
<tr>
<td></td>
<td>Broom and Dustpan</td>
</tr>
</tbody>
</table>

Contd.....
- Explain usage of work area tools on stenter m/c

<table>
<thead>
<tr>
<th>5.2 b)</th>
<th>5.2 c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber Gloves</td>
<td>Protective Shoes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.2 d)</th>
<th>5.2 c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary Waste</td>
<td>Chindi Waste</td>
</tr>
</tbody>
</table>

Fig. 5.2: Work area tools and handling housekeeping on stenter m/c
Notes for Facilitation

- Ensure to understand that effective housekeeping and proper use of tools reduce the chances of accident at process house
6. Working in a Team

Unit 6.1 – Concept and Advantages of working in a Team
Unit 6.2 – Commitment and Trust
Unit 6.3 – Communication
Unit 6.4 – Adaptability
Unit 6.5 – Creative Freedom
At the end of this module, student will be able to:

1. Understand concept and Advantages of Working in a Team
2. Explain how team work is important to achieve self-improvement, organization improvement and quality productivity improvement
3. Explain important requirements of machine operator for working in team
UNIT 6.1: Concept and Advantages of Working in a Team

Unit Objectives

At the end of this unit, students will be able to:
1. Understand concept and Advantages of Working in a Team
2. Explain how team work is important to achieve self improvement, organization improvement and quality productivity improvement

Concept

Say

• Say that the concept of working in a team is to work together with common goal with similar and standard style of function with commitment and trust of each other with focus on common goal

Advantages of “Working as a Team”

Say

• Say that the working as a team increases awareness of contribution and role of each member
• Tell that it gives great commitment to the task
• Tell that it gives cooperative attitude and making of quality decision
• Tell that it facilitates to improve the interpersonal relationship
• Tell that it provides problem solving environment
• Say that it increases the quantity, quality and productivity achievements
UNIT 6.2: Commitment and Trust

Unit Objectives

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

1. Taking responsibility to do own job
2. Working with efficiently and effectively

6.2.1: Be Accountable to the Own Role in Whole Process

Say

• Say to take ownership of assigned machines to perform well

Do

• Do check the process parameters, count identification, machine condition etc., while taking charge of the shift

Ask

• Ask to follow the standard operating procedure as a tenter

6.2.2: Perform All Roles with Full Responsibility

Say

• Say to note down the superior and the previous shift tenter instructions to follow
Do

- Do know the changes made in previous shift and follow the tenting responsibility

Ask

- Ask to coordinate with the jobber, cleaning and maintenance personnel

Notes for Facilitation

- Ensure to achieve high productivity, good quality and low waste generation
- Ensure to follow the standard order
- Ensure to attend the work regularly
- Ensure to plan the leave in advance

6.2.3: Be Effective and Efficient at Work Place

Say

- Say to perform well to achieve high productivity, good quality and least waste

Do

- Do coordinate with jobber, cleaning and maintenance personnel

Ask

- Ask to understand the standard operating procedure to do tenting work effectively
UNIT 6.3: Communication

Unit Objectives

At the end of this unit, students will be able to:
1. Improving communication on company policies
2. Ability to report all problems faced during the shift
3. Improving the interacting skill with colleagues

6.3.1: Properly communicate about company policies

Say

- Say to understand the rules and regulations to follow
- Tell to know the quality policy and company policy

Do

- Do know the state and center labour legislations and the standing order

Ask

- Ask to communicate to all coworkers about the rules and regulations, company policy, standing order, labour legislation etc. properly

6.3.2: Report all the Problems Faced during the Process

Say

- Say to report about the unsafe condition, abnormality in machine or in factory to superior
Ask

- Ask to check the abnormality in behavior of others, process condition or any other things affecting the normality faced in shift for reporting to superior

6.3.3: Talk Politely with Team Members and Colleagues

Say

- Say to perform the special task or cleaning work with team members without any conflict

Do

- Do the task by explaining the problems if any politely to complete it

Ask

- Ask to follow the work instructions or procedures with great patience

6.3.4: Submit Daily Report of Own Performance

Say

- Say to maintain the records and registers to record relating to performance of machine, production and quality problems, difficult in following the instructions etc
**Do**

- Do report to superior about the changes in the shift, machine break down, empties and cops, position, breakage rate etc.

**Ask**

- Ask to maintain the record of waste generation, production, count changes etc.

*Fig. 6.3.4: Maintain record*
UNIT 6.4: Adaptability

Unit Objectives

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

1. Gain skill to work/handle critical situations
2. Adapt our self to work in different circumstances

6.4.1: Adjust in Different Work Situations

Say
- Say to accept the alternate job and changes politely and follow the instructions properly
- Tell to accept the tools and equipment and use them properly as instructed

Do
- Do understand the changes in machine, court, process, instructions to follow properly

Ask
- Ask to use the tools and equipment and give the feedback about it

6.4.2: Give Due Importance to other’s Point of View

Say
- Say to work as a team with the cleaning and maintenance personnel, cops supplier, sweeper and perform the task
Do
- Do accept the suggestions from others and implement it while working as a team

Ask
- Ask to give due importance to other’s view

6.4.3: Avoid Conflicting Situations

Say
- Say to avoid the arguments with others leading to conflict situations

Do
- Do accept the points of others whether it is correct or against the company rules and regulation and counsel it properly with guidance of superior

Ask
- Ask to maintain the cordial relationship with colleagues.
UNIT 6.5: Creative Freedom

Unit Objectives

At the end of this unit, students will be able to:
1. Improving innovative skills
2. Developing internal skills

6.5.1: Develop New Ideas for Work Procedures

Say

- Say to understand the work instructions or procedure and analyze for improvement

Do

- Do follow Kaizen, Quality Circle, TQM, TPM or lean system to create new ideas or procedures

6.5.2: Improve upon the Existing Techniques to increase Process Efficiency

Say

- Say to give priority in attending the breaks and cop changes

Do

- Do concentrate on reducing the down time of machine during count change
Ask

- Ask to pay attention the suction effectiveness of waste box, exhaust and OHTC, and relative humidity condition for maintaining Autocorner efficiency

6.5.3: Avoid Conflicting Situations

Say

- Say to avoid the arguments with others leading to conflict situations

![Image](image.png)

Fig. 6.5.3: Avoid conflicting situation

Do

- Do accept the points of others whether it is correct or against the company rules and regulation and counsel it properly with guidance of superior

Ask

- Ask to maintain the cordial relationship with colleagues
7. Maintain Health, Safety and Security at Work Place

Unit 7.1 – Maintain Health, Safety and Security at Work Place
Unit 7.2 – Safety for Man and Industry Health
Unit 7.3 – Safety for Material and Machine
Unit 7.4 – Emergency Response Training and Recognizing the Hazards
At the end of this module, student will be able to:

1. Explain what safety means
2. Describe the necessities of safety at work place
3. Understand what is safety for man
4. Discuss role of safety in industry
UNIT 7.1: Importance of Safety and Security at Work Place

Unit Objectives

At the end of this unit, students will be able to:
1. Explain what safety means
2. Describe the necessities of safety at work place

Say

- Tell that safety is the state of being in safe condition to protect from undesirable things like physical, social, spiritual, financial, political, emotional, occupational, educational, psychological, damages, accidents etc.

7.1.1: What Safety Means

Say

- Say that safety means complete understanding of your work and knowledge of every steps of your work and to avoid committing mistake costing you and the company
- Tell that safety make you prepared to cope with unexpected situations and keep you alert
- Tell that safety means the consideration of your dependence of family, the company and your well being

Ask

- Ask about the safety standards at work place to follow
UNIT 7.2: Safety for Man and Industry Health

Unit Objectives

At the end of this unit, students will be able to:
1. Understand what is safety for man
2. Discuss role of safety in industry

7.2.1: Safety for Man

Say

- Say to use gum boots, face masks, eye goggles, ear plugs, hand gloves wherever applicable
- Tell to follow the safety rules at workplace
- Tell to check the safe guards at right place
- Tell to check the unwanted materials in the department

Fig. 7.2.1.1: Entanglement hazard
Fig. 7.2.1.2: Crush hazard
Fig. 7.2.1.3: Rotary shaft hazard
Fig. 7.2.1.4: Chemicals hazard
Do

- Do be careful while passing nearby hot thermo pack oil line, steam line, hot water, chemicals, rotating parts like gears, wheels etc.

Ask

- Ask about the tools used in workplace
- Ask about the importance of first aid box

Notes for Facilitation

- Ensure to avoid wearing of loose dresses, chains and rings at workplace
- Ensure to avoid spillage of oil and chemicals and to keep machine and surrounding clean

7.2.2: Industrial Safety

Say

- Tell that industrial safety relates to occupational health and safety
- Tell that industrial safety is to minimize hazards, risks, accidents, near misses by managing the operation and events within the industry through protection of employees and assets
- Tell to follow the relevant laws, compliances, best practices addressed for best protection

Fig. 7.2.2: Industrialsafety
UNIT 7.3: Safety for Material and Machine

Unit Objectives

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

1. Explain safety for material and machine

7.3.1: Safety for Material and Machine

Say

- Tell that man safety is above all other safety parameters
- Tell to ensure the working practices of all members to avoid harmful accident in work area and machine
- Tell not to throw the waste on the floor
- Tell that all materials are covered and kept at designated place with identification and proper coding
- Tell not to overload trolley/batch/container beyond its capacity

Fig. 7.3.1.1: Materials covered properly
Fig. 7.3.1.2: Keep goods and materials at designated place
**Do**

- Do cover machine with guard and keep it clean
- Do keep surrounding of machine in clean condition

*Fig. 7.3.1.3: Cover machine with guards*  
*Fig. 7.3.1.4: Keep machine surrounding clean*

**Do**

- Ask to check the hot utility pipelines for proper heat insulated material
- Ask to repair the leakage in the utility pipelines such as gas, steam, water, oil etc.

*Fig. 7.3.1.5: Steam leakage in work place*  
*Fig. 7.3.1.6: Oil leakage in work place*
Notes for Facilitation

- Ensure that material is kept away from electrical switch board, live steam, leaking water line, direct sun light etc.
- Ensure the cleanliness for your hands before touching the material directly
- Ensure proper oiling and greasing of the applicable machine parts
- Ensure proper insulation of utility like hot pipeline

Fig. 7.3.1.6: Thermal Insulation
UNIT 7.4: Emergency Response Training and Recognizing the Hazards

Unit Objectives

At the end of this unit, students will be able to:
1. Develop ability to recognize the hazards
2. Knowing the different kind hazards will occur with respect to the machine & work place

7.4.1: Undertake First Aid, Fire Fighting and Emergency Response Training, if asked to do so

Say

- Tell to alert the coworkers to use appropriate extinguisher in case of fire
- Tell to report the accident to superior immediately

![Images of Fire Extinguisher, Water Hose, and Water Buckets]

Do

- Do treat the victim with first aid after switch off the power supply in case of accident

Ask

- Ask to blow the alarm in case of major incident
7.4.2: Follow Organization Procedures for Shutdown and Evacuation When required

**Say**
- Tell to alert people inside the mill with switching on alarm to know the circumstance

![Fig. 7.4.2.1: Emergency alarm switch](image1)
![Fig. 7.4.2.2: Emergency exit](image2)

**Do**
- Do alert the fellow workers to guide them evacuate in case of emergency and fire

**Ask**
- Ask to use emergency exit to get outside of mill immediately when situation is out of control
7.4.3: Identify Different Kinds of Possible Hazards

Say

- Tell to identify if any things as unsafe such as electrical wiring problems, fire smoke, abnormal noise and sound produced by machine, damaged equipment’s, damaged floor surface, damaged exhaust grill, working without safeguard provided by the mills, etc.,

![Fig. 7.4.3.1: Industrial Possible Hazards](image)

Do

- Do report the possible hazard to superior for taking necessary actions
- Do check the smoke or odor of possible fire and report it
Ask

- Ask to check the electrical wiring problem if found it in unprotected
- Ask to check the abnormal noise or sound or vibration from machine
- Ask to check the damaged equipment/tools, floor surface etc

**Fig. 7.4.3.2: Electrical wire in unsafe condition**

**Fig. 7.4.3.3: Electrical hazards**

Notes for Facilitation

- Ensure that all identified hazards are brought to the notice of concerned person immediately to correct it
- Ensure to work with safeguards provided by the mill and counsel others if not followed it
Fig. 7.4.3.3: Keeping the waste in waste box

Fig. 7.4.3.4: Throwing of waste on the floor near the waste box

Fig. 7.4.3.5: Correct filling of silver in the can

Fig. 7.4.3.6: Silver tends to fall down due to over filling of silver in the can

Fig. 7.4.3.7: Run the machine with positioning the guide of creel

Fig. 7.4.3.8: Run the machine without positioning the guide of creel
8. Comply with Industry and Organizational Requirements

Unit 8.1 – Self Development
Unit 8.2 – Team Work
Unit 8.3 – Organizational Standards
Unit 8.4 – Industry Standards
Key Learning Outcomes

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

1. Know about organizational and industry standards
2. Know the requirements for self-development
3. Gain knowledge on Organizational & Industry standards
UNIT 8.1: Self Development

Unit Objectives

At the end of this unit, students will be able to:
1. Identifying our own strength and use wherever required
2. Develop thinking capability and try for new/best ideas

8.1.1: Perform Own Duties Effectively

Say

- Say to understand the rules and regulations in the standing order of the mill
- Tell to follow the standard order of the mill

Do

- Do follow the rules and regulations in performing duties from reporting to end of the duty

Ask

- Ask to adhere the standing order in all cases related to taking and handing over the shift, taking leave, leaving the workplace, using toilet and canteen etc.

Elaborate

- Explain the rules and regulations listed out in the standing order of the mill

Notes for Facilitation

- Ensure to follow the safety instructions or procedures as per mill’s standing order
8.1.2: Take Responsibility Own Actions

Say
- Say to wear the protective equipment at workplace by following safety regulations
- Tell to maintain the perform of machine

Do
- Do avoid to violate the disciplinary procedures and follow the code of conduct

Ask
- Ask to work effectively to keep up the machine productivity, quality, safety etc.

8.1.3: Be Accountable towards the Job Role and Assigned Duties

Say
- Say to do the tending job as an autoconer tenter and perform the duty as specified
- Tell to look after the assigned drums, production, good yarn quality, waste at minimum etc.
8.1.4: Take Initiative and Innovate the Existing Methods

Say

- Say to contribute for continuous improvement by adopting lean management like Quality circle, 5S, Kaizen, TPM, TQM etc.

![Lean management system](image)

Fig. 8.1.4: Lean management system

8.1.5: Focus on Self Learning and Improvement

Say

- Say to interact with superior and skill development department to initiate the improvement
- Tell to apply the learning knowledge to simplify the work, system and to improve the production, quality etc.

![Self learning and improvement](image)

Fig. 8.1.5: Self learning and improvement
UNIT 8.2: Team Work

Unit Objectives

At the end of this unit, students will be able to:
1. Developing team working skills
2. Able to handle co-workers/team members and achieving the goal without hurting them

8.2.1: Coordinate with all the Team Members and Colleagues

Say
- Say to extend the cooperation with team members when working as a team for a project in autoconer for improving production, quality, waste reduction, cost reduction, safety etc.

Do
- Do motivate the team members and colleagues for achieving the result

Ask
- Ask to coordinate with team members for continual improvement
- Ask to interact with others and develop the knowledge

8.2.2: Communicate Politely

Say
- Say to report about the problems faced in production, quality, machine performance etc. to superior and to get suitable instructions from superior to follow
Do

- Do follow the instructions from superior with regard to working and process condition and follow the right procedures.

Ask

- Ask to follow the necessary changes as instructed by superior in court change in autoconer.

8.2.3: Avoid Conflicts and Miscommunication

Say

- Say to understand the communication without distortion of theme.

Do

- Do avoid the miscommunication leading to the conflicts.
UNIT 8.3: Organizational Standards

Unit Objectives

At the end of this unit, students will be able to:
1. Knowing the organizational standards

8.3.1: Know the Organizational Standards

Say
- Say to understand the organization, procedures, rules and regulations, standing order, job description, process parameters, change procedures etc

Do
- Do know the standard operating procedure to work as a dryer operator

Ask
- Ask to interact with superior and colleagues to understand the procedures and instructions

8.3.2: Implement them in your Performance

Say
- Say to follow all work instructions and company rules and regulations in attending the time of duty, shift timing, working hours, safety follow up etc
8.3.3: Motivate others to follow them

Do
- Do perform to give specified production, required quality, improving productivity, controlling the waste etc

Say
- Say to observe the performance of colleagues and others in the factory for their behavior to insist to follow the work instruction, rules and regulations, safety procedures etc

Ask
- Ask to check the violation of organizational standards and to bring to their notice
- Ask to motivate the colleagues and others to follow the organizational standards
UNIT 8.4: Industry Standards

Unit Objectives
At the end of this unit, students will be able to:
1. Knowing the industry standards
2. Able to follow the standards

8.4.1: Know the Industry Standards

Say
- Tell to know the quality and maintenance standards as said in Textile Research Association
- Tell to know the labour legislation of state and center
- Tell to know the code of conduct given in employer’s organization
- Tell to know the safety standards as prescribed by Inspector of factories

Do
- Do follow the industry standards regarding firefighting, first aid etc.

Ask
- Ask to know the ISO standards in case of quality management, environment management.
- Ask to follow the national occupational standards and others properly

8.4.2: Align them with Organization Standards

Say
- Say to understand and follow all industry standards stated in 8.4.1 and all the relevant standards
to textile units depending upon location, machines, process etc.
Do
- Do understand both all industry standards and all the relevant standards of textile unit and align

Ask
- Ask question on the relevant standing orders, job description and work instructions

Elaborate
- Explain the working condition and process details in autoconer to follow
9. Employability and Entrepreneurship Skills

Unit 9.1 – Personal Strengths and Value System
Unit 9.2 – Digital Literacy: A Recap
Unit 9.3 – Money Matters
Unit 9.4 – Preparing for Employment and Self-Employment
Unit 9.5 – Understanding Entrepreneurship
Unit 9.6 – Preparing to be an Entrepreneur
Key Learning Outcomes

At the end of this module, student will be able to

1. Explain the meaning of health
2. List common health issues
3. Discuss tips to prevent common health issues
4. Explain the meaning of hygiene
5. Understand the purpose of Swachh Bharat Abhiyan
6. Explain the meaning of habit
7. Discuss ways to set up a safe work environment
8. Discuss critical safety habits to be followed by employees
9. Explain the importance of self-analysis
10. Understand motivation with the help of Maslow’s Hierarchy of Needs
11. Discuss the meaning of achievement motivation
12. List the characteristics of entrepreneurs with achievement motivation
13. List the different factors that motivate you
14. Discuss how to maintain a positive attitude
15. Discuss the role of attitude in self-analysis
16. List your strengths and weaknesses
17. Discuss the qualities of honest people
18. Describe the importance of honesty in entrepreneurs
19. Discuss the elements of a strong work ethic
20. Discuss how to foster a good work ethic
21. List the characteristics of highly creative people
22. List the characteristics of highly innovative people
23. Discuss the benefits of time management
24. List the traits of effective time managers
25. Describe effective time management technique
26. Discuss the importance of anger management
27. Describe anger management strategies
28. Discuss tips for anger management
29. Discuss the causes of stress
30. Discuss the symptoms of stress
31. Discuss tips for stress management
32. Identify the basic parts of a computer
33. Identify the basic parts of a keyboard
34. Recall basic computer terminology
35. Recall basic computer terminology
36. Recall the functions of basic computer keys
37. Discuss the main applications of MS Office
38. Discuss the benefits of Microsoft Outlook
39. Discuss the different types of e-commerce
40. Discuss how the Digital India campaign will help boost e-commerce in India
41. Explain how you will sell a product or service on an e-commerce platform
42. Discuss the importance of saving money
43. Discuss the benefits of saving money
44. Discuss the main types of bank accounts
45. Describe the process of opening a bank account
46. Differentiate between fixed and variable costs
47. Describe the main types of investment options
48. Describe the different types of insurance products
49. Describe the different types of taxes
50. Discuss the uses of online banking
51. Discuss the main types of electronic funds transfers
52. Discuss the steps to prepare for an interview
53. Discuss the steps to create an effective Resume
54. Discuss the most frequently asked interview questions
55. Discuss how to answer the most frequently asked interview questions
56. Discuss basic workplace terminology
57. Discuss the concept of entrepreneurship
58. Discuss the importance of entrepreneurship
59. Describe the characteristics of an entrepreneur
60. Describe the different types of enterprises
61. List the qualities of an effective leader
62. Discuss the benefits of effective leadership
63. List the traits of an effective team
64. Discuss the importance of listening effectively
65. Discuss how to listen effectively
66. Discuss the importance of speaking effectively
67. Discuss how to speak effectively
68. Discuss how to solve problems
69. List important problem solving traits
70. Discuss ways to assess problem solving skills
71. Discuss the importance of negotiation
72. Discuss how to negotiate
74. List the characteristics of entrepreneurs
75. Recall entrepreneur success stories
76. Discuss the entrepreneurial process
77. Describe the entrepreneurship ecosystem
78. Discuss the government’s role in the entrepreneurship ecosystem
79. Discuss the current entrepreneurship ecosystem in India
80. Understand the purpose of the Make in India campaign
81. Discuss the relationship between entrepreneurship and risk appetite
82. Discuss the relationship between entrepreneurship and resilience
83. Describe the characteristics of a resilient entrepreneur
84. Discuss how to deal with failure
85. Discuss how market research is carried out
86. Describe the 4 Ps of marketing
87. Discuss the importance of idea generation
88. Recall basic business terminology
89. Discuss the need for CRM
90. Discuss the benefits of CRM
91. Discuss the need for networking
92. Discuss the benefits of networking
93. Understand the importance of setting goals
94. Differentiate between short-term, medium-term and long-term goals
95. Discuss how to write a business plan
96. Explain the financial planning process
97. Discuss ways to manage your risk
98. Describe the procedure and formalities for applying for bank finance
99. Discuss how to manage your own enterprise
100. List important questions that every entrepreneur should ask before starting an enterprise
UNIT 9.1: Personal Strengths and Value Systems

Unit Objectives

At the end of this unit, students will be able to:
1. Explain the meaning of health
2. List common health issues
3. Discuss tips to prevent common health issues
4. Explain the meaning of hygiene
5. Understand the purpose of Swacch Bharat Abhiyan
6. Explain the meaning of habit
7. Discuss ways to set up a safe work environment
8. Discuss critical safety habits to be followed by employees
9. Explain the importance of self-analysis
10. Understand motivation with the help of Maslow’s Hierarchy of Needs
11. Discuss the meaning of achievement motivation
12. List the characteristics of entrepreneurs with achievement motivation
13. List the different factors that motivate you
14. Discuss how to maintain a positive attitude
15. Discuss the role of attitude in self-analysis
16. List your strengths and weaknesses
17. Discuss the qualities of honest people
18. Describe the importance of honesty in entrepreneurs
19. Discuss the elements of a strong work ethic
20. Discuss how to foster a good work ethic
21. List the characteristics of highly creative people
22. List the characteristics of highly innovative people
23. Discuss the benefits of time management
24. List the traits of effective time managers
25. Describe effective time management techniques
26. Discuss the importance of anger management
27. Describe anger management strategies
28. Discuss tips for anger management
29. Discuss the causes of stress
30. Discuss the symptoms of stress
31. Discuss tips for stress management
91.1: Health, Habits, and Hygiene: What is Health?

**Say**
- Say that according to World Health Organization (WHO), the health means not merely absence of disease or infirmity but a state of complete physical, mental and social well being
- Tell that the health does not mean of no physical ailment but you also need to think about whether you are feeling relaxed, calm and happy

**Do**
- Do know the common health diseases that are Allergies, Asthma, Skin disorders, Depression and Anxiety, Diabetes, Cough, Cold, Sore Throat, Difficulty sleeping and Obesity
- Do prevent ill health by eating healthy food and vegetables, avoiding alcohol, avoiding high sugar content items, avoiding smoking, doing exercise, drinking more water daily etc
- Do understand the hygiene that spell out the practice and condition to maintain health and to prevent the spreading of disease according to “WHO”
- Do know “Swachh Bharat Abhiyan” (Clean India Mission) launched by Prime Minister Modi to clean streets and roads of India and raise overall cleanliness
- Do understand the habits, that is, a repeated behavior frequently and avoid bad habits

91.2: Safety: Tips to Design a Safe Workplace

**Say**
- Tell that every employer is obliged to ensure the design of workplace with all safety standards
- Tell that the employer considers the points of workplace with the ergonomically designed, mechanical aid, protective equipment, emergency exits, safety health codes, expert advice on safety aspects etc
- Say that the employer also keeps in mind about the points like reporting the unsafe hazards to supervisor, recognizing the unsafe condition and reporting, wearing the protective equipment properly, taking rest during shift, taking off from work during the week etc
9.1.3: Self Analysis - Attitude, Achievement, Motivation:

Say

- Say that self-analysis means to understand your personality and to find the area where you can grow and develop further.
- Tell that motivation is the reason to behave and understand the motivation through Maslow’s Hierarchy of Needs that defined one’s need at various stages.
- Tell that certain people are motivated by achieving the great challenging accomplishment.
- Say that the entrepreneur with achievement motivation is unafraid, flexible and adaptive, future oriented etc.
- Tell that the attitude is your tendency to feel or think about something or someone.
- Tell to develop positive attitude like avoid negative people, delete negative phrase, concentrate what is good for you, imagine your succeeding and achieving the goal etc.
- Tell that the positive attitude builds the confidence in workplace.
- Tell that the another way is to do self-analysis to know your weakness and strength.

9.1.4: Honest and Work Ethics: What is Honest?

Say

- Say that the honesty is the quality of being fair and truthful.
- Tell that the characteristic of honest people is forge the trustful, meaningful and healthy friendship, stand up for firm belief, now worry about what others think of them etc.
- Tell that when entrepreneurs are honest with their customers, it leads to stronger relationships, which in turn results in business growth and a stronger customer network.
- Say that being ethical in the workplace means displaying values like honesty, integrity and respect in all your decisions and communications.
- Tell that some elements of a strong work ethic are professionalism, respectfulness, dependability, dedication, determination, accountability and humility.
- Tell that display positive work ethics like honest, reliability, good attitude, good work habits, respect, initiative, trustworthiness, integrity and efficiency.
9.1.5: Creativity and Innovation: What is Creativity?

Say

- Say that creativity means viewing things in new ways or from different perspectives, and then converting these ideas into reality
- Tell that some characteristic of creativity people are imaginative, playful, see the issues from different angles, notice small details, very curious etc
- Tell that innovation means turning an idea into a solution that adds value
- Tell that Some characteristics of highly innovative people are embrace doing things different, don’t believe in taking shortcuts, not afraid to be unconventional, highly proactive and persistent, organized, cautious and risk-averse

9.1.6: Time Management: What is Time Management?

Say

- Say that Time management is the process of organizing your time, and deciding how to allocate your time between different activities
- Tell that Time management can lead to huge benefits like higher productivity, higher efficiency, better professional reputation, higher chances for career advancement, reduced stress, greater opportunities to achieve goal
- Tell that Some traits of effective time managers are begin projects early, break tasks into steps, set daily objectives, modify plans if required, flexible and open minded, continually review long term goals, think of alternate solutions if required
- Tell that certain time management techniques are plan out your day as well as plan for interruptions, close your mind to all distractions, delegate your work, stop procrastinating, prioritize and maintain a log book of your own activities
9.1.7: Anger Management: What is Anger Management?

Say

- Say that Anger management is the process of learning to recognize the signs that you, or someone else, is becoming angry and taking the best course of action to calm down the situation in a positive way. Anger management does not mean suppressing anger.
- Tell that Anger is a perfectly normal human emotion.
- Tell that some strategies that can help you control your anger are relaxation, cognitive restructuring, better communication, and changing your environment.
- Tell that you keep your anger in check with some time to collect your thoughts before you speak out in anger, express the reason for your anger in an assertive way, do some form of physical exercise like running or walking briskly.

9.1.8: Stress Management: What is Stress?

Say

- Say that anything which challenges or threatens our well-being can be defined as stress.
- Tell that stress can be caused by internal and external factors.
- Tell that Stress can manifest itself in numerous ways.
- Tell that stress takes a look at the cognitive, emotional, physical, and behavioral symptoms of stress.
- Tell that you manage your stress better by finding stressors, finding other ways to handle the various sources of your stress.
- Tell that you cannot control everything, but you can control how you respond.
- Tell that discuss your feelings, opinions, and beliefs rather than reacting angrily, defensively, or passively.
- Tell that practice relaxation techniques like meditation, yoga, or Tai Chi when you start feeling stressed.
- Tell that eat healthy foods like fruits and vegetables.
- Tell that schedule time to pursue your hobbies and interests.
- Tell that ensure you get at least 7-8 hours of sleep.
UNIT 9.2: Digital Literacy: A Recap

Unit Objectives

At the end of this unit, students will be able to:
1. Identify the basic parts of a computer
2. Identify the basic parts of a keyboard
3. Recall basic computer terminology
4. Recall the functions of basic computer keys
5. Discuss the main applications of MS Office
6. Discuss the benefits of Microsoft Outlook
7. Discuss the different types of e-commerce
8. List the benefits of e-commerce for retailers and customers
9. Discuss how the Digital India campaign will help boost e-commerce in India
10. Describe how you will sell a product or service on an e-commerce platform

9.2.1: Computer and Internet Basics:

Say

- Say to know the basic parts of computer that consist of central processing unit, monitor, hard drive, keyboard, desktop, mouse, printer, icon, mouse, taskbar, program menu, recycle bin, speaker and cursor

Tell to know the internet terms like World Wide Web, website, homepage, link/hyperlink, web address/URL, address box etc
- Tell to know basic computer keys like arrow keys, space bar, shift, cap lock, back space etc
9.2.2: MS Office and Email: About MS Office

Say

- Say to know that MS Office or Microsoft Office is a suite of computer programs developed by Microsoft
- Tell to know some of the most popular and universally used MS Office applications such as Microsoft Word, Microsoft Excel and Microsoft PowerPoint, Microsoft Outlook, Microsoft Note and Microsoft Access
- Tell that a popular email management choice especially in the workplace, Microsoft Outlook also includes an address book, notebook, web browser and calendar

Do

- Do write emails offline and send them when you’re connected again

9.2.3: E-Commerce: What is E-Commerce?

Say

- Say to know that E-commerce called electronic commerce is the buying or selling of goods and services, or the transmitting of money or data, electronically on the internet
- Tell to know that some examples of e-commerce are Online shopping, Electronic payments, Online ticketing, Internet banking etc
- Say to know that the main types of e-commerce are business to business, business to consumer, consumer to consumer etc
- Tell to know that the e-commerce business provides some benefits for retailers and customers
- Say to know that Prime Minister Narendra Modi launched the Digital India campaign in 2015, with the objective of offering every citizen of India access to digital services, knowledge and information
- Tell to know that you can choose a product or service that you want to sell online
UNIT 9.3: Money Matters

Unit Objectives

At the end of this unit, students will be able to:
1. Discuss the importance of saving money
2. Discuss the benefits of saving money
3. Discuss the main types of bank accounts
4. Describe the process of opening a bank account
5. Differentiate between fixed and variable costs
6. Describe the main types of investment options
7. Describe the different types of insurance products
8. Describe the different types of taxes
9. Discuss the uses of online banking
10. Discuss the main types of electronic funds transfers

9.3.1: Personal Finance - Why to Save:

Say

• Say to know that saving is important to meet the emergency requirement in future so as to give the peace of mind at present
• Tell to know that inculcating the habit of saving is giving financial independent, invest yourself in education, get of debt, meeting emergency expenses, affordable to huge expenses etc

Do

• Do have the habit of saving to meet out the expenses during retirement
9.3.2: Types of Bank Accounts, Opening a Bank Account: Type of Bank Accounts

Say

- Say to know that there are 4 types of bank accounts such as saving account, current account, recurring deposit account and fixed deposit account.
- Tell that saving account can be opened with filling in the account opening form, affixing the photo, providing the Know Your Customer details and submit all documents.

Notes for Facilitation

- Ensure that the valid document like passport or Voter’s identity card or Adhaar card or PAN card or driving license is submitted for opening the account.

9.3.3: Costs: Fixed Vs Variable: What are Fixed and Variable Costs?

Say

- Say to know that fixed cost does not vary with the volume of goods or services the company produced and variable cost increase or decrease with the volume of goods or services.
- Tell to know that depreciation, tax, rent, salary, insurance comes under fixed cost whereas material consumed, wages, commission on sales, packing expenses etc. under variable cost.

Ask

- Ask will the particular cost change if the company stopped its production activities?
9.3.4: Investment, Insurance and Taxes:

Say

- Say to know that investment means that money is spent today with the aim of reaping financial gains at a future time.
- Tell to know that the main types of investment options are bonds, stocks, small saving schemes, venture capital, mutual funds, private equity, hedge funds, fixed deposits and real estate.
- Tell to know that there are two types of insurances such as Life insurance or Non-life insurance or General insurance.
- Tell to know that the main life insurance products are Term insurance, Endowment policy, Unit-linked insurance plan, Moneyback insurance policy and Whole life insurance.
- Tell to know that General Insurance deals with all insurance covering assets like animals, agricultural crops, goods, factories, cars and so on.
- Tell to know that the main general insurance products are Motor insurance, Health insurance, Marine insurance, Home insurance and Travel insurance.
- Say to know that two types of taxes are Direct and Indirect taxes.
- Tell to know that Direct taxes are levied on a person or entity and they are income tax, securities transaction tax, capital gain tax, prerequisite tax and corporate tax.
- Tell to know that Indirect taxes are levied on goods or services and they are sales tax, service tax, value added tax, custom duty & Octroi and Excise duty.

Notes for Facilitation

- Ensure that you are buying the right type of insurance policy for yourself.
- Remember, not paying taxes can result in penalties ranging from fines to imprisonment.

9.3.5: Online Banking, NEFT, RTGS etc.: What is Online Banking?

Say

- Say to know that Internet or online banking allows account holders to access their account.
Ask

- Ask to understand that Electronic funds transfer is a convenient way of transferring money from the comfort of one's own home, using integrated banking tools like internet and mobile banking.
- Ask to understand that NEFT stands for National Electronic Funds Transfer. This money transfer system allows you to electronically transfer funds from your respective bank accounts to any other account, either in the same bank or belonging to any other bank.
- Ask to understand that RTGS stands for Real Time Gross Settlement. This is a real-time funds transfer system which enables you to transfer funds from one bank to another, in real time or on a gross basis.
- Ask to understand that IMPS stands for Immediate Payment Service. This is a real-time, inter-bank, electronic funds transfer system used to transfer money instantly within banks across India.

Notes for Facilitation

- Ensure that never click on any links in any e-mail message to access your online banking website.
UNIT 9.4: Preparing for Employment and Self Employment

Unit Objectives

At the end of this unit, students will be able to:
1. Discuss the steps to prepare for an interview
2. Discuss the steps to create an effective Resume
3. Discuss the most frequently asked interview questions
4. Discuss how to answer the most frequently asked interview questions
5. Discuss basic workplace terminology

9.4.1: Interview Preparation: How to prepare for an Interview

Say

- Say to know that the success of your getting the job that you want depends largely on how well your interview for that job goes.
- Tell to know that the steps to follow in order to be well prepared for an interview are research the organization, think about whether your skills and qualifications match the job requirements, go through the most typical interview questions asked, and prepare your responses, plan your attire for the interview etc.

9.4.2: Preparing an Effective Resume: How to Create an Effective Resume

Say

- Say to know that a resume is a formal document that lists a candidate’s work experience, education and skills.
- Tell to know that the steps to create an effective resume are write the address section, add the profile summary section, include your educational qualifications, list your technical, list your strengths, list your extracurricular activities and write your personal details.
Notes for Facilitation

- Ensure that keep your resume file name short, simple and informational and the resume is neat and free from typing errors

9.4.3: Interview FAQs:

Say

- Say to know that some of the most frequently asked interview questions are: Can you tell me a little about yourself?, How did you hear about the position?, What do you know about the company?, Why do you want this job? Etc

9.4.4: Work Readiness – Terms & Terminologies: Basic Workplace Terminology

Say

- Say to know that every employee should be well versed with the terms like annual leave, background check, benefits, breaks, compensation package, contract of employment, corporate culture, deduction, discrimination, employee, employee training, employment gaps, fixed term contract, holiday, letter of agreement, letter of acceptance, leave, layoff, maternity leave, mentor, minimum wage etc

Ask

- Ask what is the maternity leave and layoff
UNIT 9.5: Understanding Entrepreneurship

Unit Objectives

At the end of this unit, students will be able to:
1. Discuss the concept of entrepreneurship
2. Discuss the importance of entrepreneurship
3. Describe the characteristics of an entrepreneur
4. Describe the different types of enterprises
5. List the qualities of an effective leader
6. Discuss the benefits of effective leadership
7. List the traits of an effective team
8. Discuss the importance of listening effectively
9. Discuss how to listen effectively
10. Discuss the importance of speaking effectively
11. Discuss how to speak effectively
12. Discuss how to solve problems
13. List important problem solving traits
14. Discuss ways to assess problem solving skills
15. Discuss the importance of negotiation
16. Discuss how to negotiate
17. Discuss how to identify new business opportunities
18. Discuss how to identify business opportunities within your business
19. Understand the meaning of entrepreneur
20. Describe the different types of entrepreneurs
21. List the characteristics of entrepreneurs
22. Recall entrepreneur success stories
23. Discuss the entrepreneurial process
24. Describe the entrepreneurship ecosystem
25. Discuss the government’s role in the entrepreneurship ecosystem
26. Discuss the current entrepreneurship ecosystem in India
27. Understand the purpose of the Make in India campaign
28. Discuss the relationship between entrepreneurship and risk appetite
29. Discuss the relationship between entrepreneurship and resilience
30. Describe the characteristics of a resilient entrepreneur
31. Discuss how to deal with failure
9.5.1: Concept Introduction, (Characteristic of an Entrepreneur, types of firms / types of enterprises): Entrepreneurs and Entrepreneurship

Say

- Say to know that anyone who is determined to start the business with risk is an entrepreneur
- Tell to know that entrepreneurs aim is to create an enterprise with creativity, innovative and vast reserve of motivation to achieve the success
- Tell to know that the process of creating an enterprise is known as entrepreneurship
- Tell to know that importance of entrepreneur helps to develop the economy of a country
- Tell to know that characteristic of entrepreneur is decisive, motivated, visionaries, highly creative, open minded etc.
- Tell to know that entrepreneurs have the tendency to have a high risk tolerance, thorough plan everything, manage the money wisely etc.
- Say to know that types of enterprises are sole proprietorship, partnership, limited liability partnership

9.5.2: Leadership & Teamwork: Leadership and Leaders

Say

- Say to know that leaders believe in doing the right things and helping others to do the right things
- Say to know that an effective leader is someone who creates an inspiring vision of the future
- Tell that some critical leadership skills that every entrepreneur must have are pragmatism, humility, flexibility, authenticity, reinvention and awareness
- Say that great leadership leads to gaining the loyalty and commitment of the team members, building morale and instilling confidence in the team members etc.
- Tell that team work is combination of all members efforts working for a common goal
- Say that an effective team is one which has unity of purpose, great communication skills, initiative, excellent organizational skill etc.
9.5.3: Communication Skills: Listening & Speaking: The Importance of Listening Effectively

Say

- Say to know that listening is the ability to receive and understand the message during the process of communication.
- Tell that one has to listen effectively by observing the activities of stop talking, stop interrupting, and focus stop interrupting completely on what is being said, open minded etc.
- Say that the effective speaking is with incorporating body language in your speech, making proper draft, feeling and emotion under control etc.

Notes for Facilitation

- Ensure that the flow of speech is logical and avoid irritating mannerism with a conscious

9.5.4: Problem Solving & Negotiation skills: What is a Problem?

Say

- Say to know that all problems contain two elements such as goals and obstacles.
- Tell that the problem solving is to know the obstacles and eliminate it.
- Tell that some logical steps of solving the problem to follow are identify the problem, study it, possible solutions, select one solution, implement it and check the problem solved.
- Tell that some traits of solving the problem are being open minded, not panicking, being proactive, having positive attitude focusing on right problem etc.
- Tell that negotiation means to solve the difference between two parties with amicable settlement without any disputes.
- Tell that how to negotiate with the steps of preparing agreement, discuss the problems, clarify the objectives etc.

Ask

- Ask about how to assess the problem skills.
- Ask about why negotiation skills is necessary.
Notes for Facilitation

- Ensure that focus on building a relationship rather than winning.

9.5.5: Business Opportunities Identification: Entrepreneur and Opportunities

Say

- Say that the ability of identifying business opportunities is the essential characteristic of an entrepreneur.
- Tell that the opportunity is a good chance or favorable situation to do something offered by circumstance.
- Tell that an idea is an opportunity when it creates value to customers/solves a significant problem etc.
- Tell that factors such as economic trends, market trends, change in funding etc. are considered when looking for opportunities.

Ask

- Ask about the common questions faced by entrepreneurs.
- Ask about why negotiation skills is necessary.

Elaborate

- Explain the ways to identify the business opportunities within your business using SWOT analysis and opportunity analysis.
9.5.6: Entrepreneurship Support Eco-System: What is an Entrepreneur?

Say

- Say that an entrepreneur runs an enterprise, assumes all the risks and rewards of the enterprise.
- Tell that the characteristics of an entrepreneur are highly motivated, persuasive, creative, mentally prepared, excellent business skills, proactive etc.
- Tell that the policy makers in Government consider the feasibility of an enterprise started up by an entrepreneur and do encouraging new ventures.
- Tell that Governments across the world are recognizing that new businesses flourish in distinctive types of supportive environments.
- Tell that Make in India Campaign launched by Prime Minister Narendra Modi invites aspiring entrepreneurs to invest easily with supporting new idea for creating state of the art facilities for manufacturing goods in India.

Ask

- Ask what are four types of entrepreneurs.
- Ask two successful stories of entrepreneurs.

Elaborate

- Explain the entrepreneurial process with idea generation, germination or recognition, preparation, incubation, feasibility study, realization and verification.

Notes for Facilitation

- Ensure that identify the key features of your ecosystem and enrich them to ensure self-sustainability of your entrepreneurship support ecosystem.
9.5.7: Risk Appetite and Resilience: Entrepreneurship and Risks

Say:

- Say that Entrepreneurship is synonymous with the ability to take risks. This ability, called risk appetite, is an entrepreneurial trait that is partly genetic and partly acquired.
- Tell that risk appetite is defined as the extent to which a company is equipped to take risk in order to achieve the objectives.
- Tell that risk resilience is the characteristic of an entrepreneur to manage his business and protect it against the changes in business environment.
- Tell that entrepreneurial resilience is the ability to overcome the setback in life and career aspiration.

Ask:

- Ask about the various level of categories in risk appetite.

Elaborate:

- Elaborate the risk appetite statement with the nature of risk faced the acceptable of risk appetite categories etc.

Notes for Facilitation:

- Ensure that the characteristic of entrepreneur resilience is a strong internal sense of control and survival attitude.
9.5.8: Success and Failures: Understanding Success and Failures in Entrepreneurship

Say

- Say that not allow the fear of failing to stop from going ahead with your plans
- Tell that focus on important task rather than small tasks to achieve success
- Tell that try an idea to make it work for success
- Tell that learn lessons and experience from each failure
- Tell that failure make you stronger and control your ego

Ask

- Ask about shyam's reaction of first failure

Notes for Facilitation

- Ensure to identify your mission and purpose before start an enterprise
UNIT 9.6: Preparing to be an Entrepreneur

Unit Objectives

At the end of this unit, students will be able to:
1. Discuss how market research is carried out
2. Describe the 4 Ps of marketing
3. Discuss the importance of idea generation
4. Recall basic business terminology
5. Discuss the need for CRM
6. Discuss the benefits of CRM
7. Discuss the need for networking
8. Discuss the benefits of networking
9. Understand the importance of setting goals
10. Differentiate between short-term, medium-term and long-term goals
11. Discuss how to write a business plan
12. Explain the financial planning process
13. Discuss ways to manage your risk
14. Describe the procedure and formalities for applying for bank finance
15. Discuss how to manage your own enterprise
16. List important questions that every entrepreneur should ask before starting an enterprise

9.6.1: Market Study / the 4Ps Marketing / Importance of an IDEA: Understanding Market

Say

- Say that market research enables to gather, analyze and interpret the market information on a product or service sold in the market
- Say that market research involves primary and secondary information
- Tell that primary information is obtained through interview and the secondary information is from public sources, commercial sources and educational institutes
- Say that the 4 Ps marketing are product, price, promotion and place

Do

- Do know the product such as tangible good and intangible service
- Do understand the factors such as profit margin, supply, demand and market strategy deciding the price
Ask

- Ask about the key elements of promotion of a product

Notes for Facilitation

- Ensure that discussing ideas loud with the interested people to add, views, opinion on your ideas


Say

- Say that every entrepreneur should be well versed in the basic business terms like accounting, account payable, account receivable, assets, balance sheet, capital, cash flow, depreciation, liabilities, revenue, expenses, working capital etc.

Do

- Do know about financial report

Ask

- Ask about the difference between net worth and net income

Notes for Facilitation

- Ensure that every entrepreneur should have good understanding of all business terms
9.6.3: CRM and Networking: What is CRM?

Say

- Say that Customer relationship management (CRM) helps to recognize the value of clients and enables to capitalize on improved customer improved relations
- Tell that networking is based on referrals or introductions or can take place via phone, email, social and business networking websites

Do

- Do understand the customer’s want by knowing the customer needs changing in relation to time and technology
- Do understand the need of networking

Ask

- Ask question on few benefits of CRM
- Ask question on few benefits of networking

Notes for Facilitation

- Ensure that when networking, ask open minded questions rather than yes/no questions

9.6.4: Business Plan: Why Set Goals?

Say

- Say that setting goals give long term vision and short term motivation
- Tell that goals are classified as short, medium and long term goals
- Tell that business plan is used to monitor progress, foster accountable and control the fate of business
Do
- Do understand what is executive summary under elements of business plan

Ask
- Ask about the business description
- Ask question on market analysis

Notes for Facilitation
- Ensure all the important elements are covered in your business plan

9.6.5: Procedure and Formalities for Bank Finance: The Need for Bank Finance

Say
- Say that banks are one of largest funders of startups
- Tell that entrepreneurs looking for funding from banks must provide banks with information relating to their general credentials, financial situation and guarantees or collaterals that can be offered

Do
- Do know the standard financial reports such as balance sheet, profit and loss account etc
Ask

- Ask about general credentials
- Ask about the meaning of guarantees or collateral

Notes for Facilitation

- Ensure be cautious and avoid borrowing more than you need, for longer

9.6.6: Enterprise Management – An Overview: How to Manage Your Enterprise

Say

- Say that enterprise management involves managing day to day activities and figures out how to handle the large scale events

Do

- Do know the steps of managing the enterprise such as use your leadership skills, divide works among others, hire right people for the job etc

Ask

- Ask to use all your skills and the skills of your employees to market your enterprise in an effective manner

Notes for Facilitation

- Ensure that train your people to handle the customer well
9.6.7: 20 Questions to Ask Yourself before Considering Entrepreneurship

**Say**

- Say that understand all 20 questions given below and ask yourself about the preparedness of entrepreneurship.
- Why am I starting a business?
- What problem am I solving?
- Have others attempted to solve this problem before? Did they succeed or fail?
- Do I have a mentor or industry expert that I can call on?
- Who is my ideal customer?
- Who are my competitors?
- What makes my business idea different from other business ideas?
- What are the key features of my product or service?
- Have I done a SWOT analysis?
- What is the size of the market that will buy my product or service?
- What would it take to build a minimum viable product to test the market?
- How much money do I need to get started?
- Will I need to get a loan?
- How soon will my products or services be available?
- When will I break even or make a profit?
- How will those who invest in my idea make a profit?
- How should I set up the legal structure of my business?
- What taxes will I need to pay?
- What kind of insurance will I need?
- Have I reached out to potential customers for feedback?

**Do**

- Do know the investment to start your business.

**Ask**

- Ask yourself whether the answers to 20 questions are correct in all respects.

**Notes for Facilitation**

- Ensure that it is very important to validate your business ideas before you invest significant time, money and resources into it.
10. Annexures

Annexure I: Training Delivery Plan
Annexure II: Assessment Criteria
| Annexure I |
| Training Delivery Plan |

**Training Delivery Plan**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Certificate Course in Stenter Machine Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification Pack Name &amp; Ref.ID</td>
<td>Stenter Machine Operator - TSC/Q 3901</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Version No</th>
<th>1.0</th>
<th>Version Update Date</th>
<th>25.02.15</th>
</tr>
</thead>
</table>

| Pre-requisites to Training (if any) | Preferable class V / the ability to read/write and communicate effectively for the job role |

**By the end of this program, the participants will be able to:**
- Explain the importance of textile processing
- Describe the General process flow in textile
- Understand and explain role of Stenter machine in textile finishing
- Describe your role on Stenter machine and personal attributes required for the job
- What are the career progression opportunities for Stenter machine operator
- Explain the general objectives of Stenter machine
- Describe different processes carried out on Stenter machine
- Understand importance of taking and hand over of shift charge
- Analyze the important communication requires during taking and hand over of shift charge
- Explain the General checklist which is ensured prior to machine start
- Understand different Important parts of Stenter machine
- Explain functions of different Stenter machine parts
- Explain preparatory activities on the Stenter
- Describe specified task as per work order to operate Stenter machine
- Learn different signal and its importance
- Analyze fabric defects quality after Stenter
- Understand machine related problem and its diverse effect on fabric
- Explain the problem and damages seen on the Stenter machine
- Describe the Corrective /preventive action to be taken on Stenter machine
- Understand preparation procedure of finishing bath on Stenter machine
- Explain what are do's and don'ts for operation of Stenter machine
- Analyze fabric defects quality after Stenter
- Understand machine related problem and its diverse effect on fabric
- Explain the problem and damages seen on the Stenter machine
- Describe the Corrective /preventive action to be taken on Stenter machine
- Understand importance of work area handling
- Explain, how to handle in-process fabric and material handling on machine and surroundings
- Understand work area tools
- Explain importance of housekeeping tools and its effective use
- Understand concept and Advantages of Working in a Team
- Explain how team work is important to achieve self-improvement, organization improvement and quality productivity improvement
- Explain important requirements of machine operator for working in team
- Explain, what safety means
- Describe the necessities of safety at work place
- Understand what is safety for man
- Discuss role of safety in industry
- Explain safety for material and machine
- Know about organizational and industry standards
- Know the requirements for self-development
- Gain knowledge on Organizational & Industry standards
<table>
<thead>
<tr>
<th>S. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objective</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/AlDs</th>
<th>Duration</th>
</tr>
</thead>
</table>
| 1     | Introduction | Icebreaker Day 1 | • Introduce each other  
• Build rapport with fellow students and the facilitator | NA | Group Activity: Passing the Parcel | Available objects such as a book, pen, duster etc. | Theory Duration (hh:mm) 00:30 |
| 2     | TSC/N0209 Taking charge of shift and handing over shift to operator | Taking Charge of Shift Day 1, 2 & 3 | • Come at least 10 - 15 minutes earlier to the work place  
• Bring the necessary operational tools to the department  
• Meet the previous shift operator and discuss with him/her regarding the issues faced by them with respect to the quality or production or spare or safety or any other specific instruction etc.  
• Understand the fabric being processed & process running on the machine  
• Ensure the technical details are mentioned on the job card display on the machine  
• Check for the availability of the spare trolley for unloading the fabric  
• Check the next batch to be processed is ready near the machine  
• Ensure the required dyes & chemicals are already weighed & prepared | PC 1 to PC 10 | Demonstration, Visual photos or video of tools  
Demonstration, group activity | Class room Working tools  
Class room | Theory Duration (hh:mm) 02:24  
Practical Duration (hh:mm) 20:06 |
<table>
<thead>
<tr>
<th>S. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objective</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/Aids</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>• the machines &amp; other work areas</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stenter machine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/her shift superior as well that of the previous shift as well</td>
<td></td>
<td>Demonstration, Group activity</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Handling over the shift</td>
<td>• Hand over the shift to the incoming operator in a proper manner</td>
<td>PC11 to PC22</td>
<td>Demonstration, Pair activity</td>
<td>Class room</td>
<td>Theory Duration (hh:mm) 02:24 Practical Duration (hh:mm) 24:48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Day3, 4, 5, 6 &amp; 8</td>
<td>• Ensure in providing the details regarding fabric quality &amp; the process running on the machine</td>
<td></td>
<td>Demonstration, Pair activity</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• To provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure the empty trolley is near the machine for unloading the fabric</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stenter machine, trolley</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure the next lot to be processed is ready near the machine already stitched &amp; arranged properly</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stender machine, next lot material</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure the required dyes &amp; chemicals for the next lot or next process are weighed &amp; prepared</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stenter machine, dyes, chemicals, weight chart</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Alts</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>--------------------------------------</td>
<td>-----------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Get clearance from the incoming counterpart before leaving the work spot</td>
<td></td>
<td>Demonstration</td>
<td>Classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Report to his/ her shift superiors as well as that of the incoming shift operator In case his/ her counterpart doesn’t report for the incoming shift</td>
<td></td>
<td>Demonstration</td>
<td>Classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure the shift has to be properly handed over to the incoming shift operator</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stenter machine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and should leave the department only after getting concurrence for the same from his/ her superiors</td>
<td></td>
<td>Demonstration, Group activity</td>
<td>Classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Collect the wastes from waste collection bags, weigh them and transport to storage area</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Waste bag, trolley, weighment machine, storage place</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure the machine and its work place is clean</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Stenter machine</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Aids</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------</td>
</tr>
<tr>
<td>4</td>
<td>TSC/Q5402 Operating the Stenter Machine</td>
<td>Carry out preparatory activities for operations in the machine Day 8 &amp; 9</td>
<td>• Ensure that the machine is clean &lt;br&gt; • Feed the fabric from the batch or trolley in the center of the machine &lt;br&gt; • Ensure fabric is creaseless and evenly fed into the machine</td>
<td>PC1 to PC3</td>
<td>Demonstration, Practical</td>
<td>Stenter Machine &lt;br&gt; Stenter Machine, Feed fabric</td>
<td>Theory Duration (hh:mm) 00:00 &lt;br&gt; Practical Duration (hh:mm) 7:06</td>
</tr>
<tr>
<td>5</td>
<td>Operate the machine for specified tasks as per Work Order Day 9, 10 &amp; 11</td>
<td></td>
<td>• Know the operations of the machine &lt;br&gt; • Read &amp; understand the process being followed to do the task &lt;br&gt; • Set the width maximum and minimum once a day keep even tension on fabric throughout the process &lt;br&gt; • Keep optimum pressure of the squeezer rolls to get specified results &lt;br&gt; • Set the required temp &amp; fan speeds in all chambers &lt;br&gt; • Feed the fabric to the stenter chain &lt;br&gt; • Adjust the overfeed device as per the requirement of the fabric &lt;br&gt; • Start the machine &amp; take out the fabric at the delivery end</td>
<td>PC4 to PC12</td>
<td>Demonstration with photo/video, Practical</td>
<td>Class room, Stenter Machine &lt;br&gt; Class room, model process chart</td>
<td>Theory Duration (hh:mm) 02:24 &lt;br&gt; Practical Duration (hh:mm) 18:54</td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Aids</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>-----------------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| 6     |                       | Clean the machine on a regular basis and carry out preventive maintenance activities Day 11, 12 & 13 | • Make sure the machine is kept clean at all times before loading, while running & after unloading the fabric  
• Follow the preventive maintenance schedule & ensure the machine is running smoothly  
• Check that all controls are functioning properly  
• Ensure the right quality of water, steam & air is available for proper functioning of machine  
• Cool down the machine after completion of job | PC13 to PC17 | Demonstration, Practical | Stenter Machine, Preventive maintenance schedule | Theory Duration (hh:mm) 09:00  
Practical Duration (hh:mm) 15:24 |
| 9     | TSC/NS403  
Preparing the finishing chemicals Day 15 | Dissolving and mixing the chemicals | • Dissolve the pre weighed or dispensed chemicals in the drum  
• Stir & mix the chemicals properly to make a homogenous liquid  
• Adjust the pH, temp & concentration of the mixture as specified in the finishing recipe | PC1 to PC3 | Demonstration, Practical | Stenter machine, Chemicals  
Stenter machine, Chemicals, mixing tools | Theory Duration (hh:mm) 02:24  
Practical Duration (hh:mm) 05:54 |
<table>
<thead>
<tr>
<th>S. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objective</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/Aids</th>
<th>Duration</th>
</tr>
</thead>
</table>
| 10    |             | Feeding the chemicals into the mangle trough Day 16 | • Feed the chemicals either manually or via pump to the mangle trough  
• Adjust the mangle pressure to get the required pick up | PC4 to PC5 | Demonstration, Practical | Stenter machine, chemical, feeding tools | Theory Duration (hh:mm) 00:00  
Practical Duration (hh:mm) 03:30 |
| 15    | TSC/N9001  | Maintain work area, tools and machines Day 16, 17, 18, 19 & 20 | • Handle materials, machinery, equipment and tools with care and use them in the correct way  
• Use correct lifting and handling procedures  
• Use materials to minimize waste  
• Maintain a clean and hazard free working area  
• Maintain tools and equipment  
• Carry out running maintenance within agreed schedules  
• Carry out maintenance and/or cleaning within one’s responsibility  
• Report unsafe equipment and other dangerous occurrences  
• Ensure that the correct machine guards are in place  
• Work in a comfortable position with the correct posture | PC1 to PC14 | Demonstration and Practical | Class room, Stenter machine | Theory Duration (hh:mm) 12:00  
Practical Duration (hh:mm) 22:24 |
<table>
<thead>
<tr>
<th>S. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objective</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/Aids</th>
<th>Duration</th>
</tr>
</thead>
</table>
| 16    | TSC/N9002   | Commitment and trust | • Use cleaning equipment and methods appropriate for the work to be carried out  
• Dispose of waste safely in the designated location  
• Store cleaning equipment safely after use  
• Carry out cleaning according to schedules and limits of responsibility | Demonstration with photo/video | Class room | Theory Duration (hh:mm) 03:30  
Practical Duration (hh:mm) 07:06 |
|       | Working in a team | Day 22 & 23 | | | | |
| 17    | Communication | | • Be accountable to the own role in whole process  
• Perform all roles with full responsibility  
• Be effective and efficient at workplace | Demonstration | Class room | Theory Duration (hh:mm) 03:30  
Practical Duration (hh:mm) 03:30 |
|       | Day 23 & 24 | | | | | |
| 18    | Adaptability | | • Adjust in different work situations  
• Give due importance to others point of view | Demonstration | Class room | Theory Duration (hh:mm) 03:30 |
<p>|       | Day 24 &amp; 25 | | | | | |</p>
<table>
<thead>
<tr>
<th>S. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objective</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/Alds</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avoid conflicting situations</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td>Practical Duration (hh:mm) 07:06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Collaborate with colleagues performing the pre-required and post-required duty of processing unit tenter</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Creative freedom</td>
<td>Develop new ideas for work procedures</td>
<td>PC12 &amp; 13</td>
<td>Demonstration</td>
<td>Class room</td>
<td>Theory Duration (hh:mm) 01:12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Day 25</td>
<td>Improve upon the existing techniques to increase process efficiency</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td>Practical Duration (hh:mm) 01:12</td>
</tr>
<tr>
<td>20</td>
<td>TSC/N0003 Maintain health, safety and security at work</td>
<td>Comply with health, Safety and security requirements at work</td>
<td>Comply with health and safety related instructions applicable to the workplace</td>
<td>PC1 to PC18</td>
<td>Demonstration</td>
<td>Class room</td>
<td>Theory Duration (hh:mm) 20:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Day 25, 26, 27, 29, 30, 31, 32, 33 &amp; 34</td>
<td>Use and maintain personal protective equipment such as “ear plug”, “nose mask”, “head cap” etc., as per protocol</td>
<td></td>
<td>Demonstration</td>
<td>Class room PPE</td>
<td>Practical Duration (hh:mm) 44:54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carry out own activities in line with approved guidelines and procedures</td>
<td></td>
<td>Demonstration</td>
<td>Class room and guideline</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maintain a healthy lifestyle and guard against dependency on intoxicants</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Follow environment management system related procedures</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identify and correct (if possible) malfunctions in machinery and equipment</td>
<td></td>
<td>Demonstration</td>
<td>Class room, Stenter machine</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Alds</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Report any service malfunctions that cannot be rectified</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Store materials and equipment in line with organizational requirement</td>
<td></td>
<td>Demonstration with photo/videos and practical</td>
<td>Class room, Stenter machine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Safely handle and remove waste</td>
<td></td>
<td>Demonstration with photo/videos and practical</td>
<td>Class room, Stenter machine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Minimize health and safety risks to self and others due to own actions</td>
<td></td>
<td>Demonstration with photo/videos</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Seek clarifications, from supervisors or other authorized personnel in case of perceived risks</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Monitor the workplace and work processes for potential risks and threat</td>
<td></td>
<td>Demonstration with photo/videos</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</td>
<td></td>
<td>Demonstration with photo/videos</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Report hazards and potential risks/threats to supervisors or other authorized personnel</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Participate in mock drills/ evacuation procedures organized at the workplace</td>
<td></td>
<td>Demonstration with photo/videos and Practical</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Alds</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Undertake first aid, fire-fighting and emergency response training, if asked to do so</td>
<td></td>
<td>Demonstration with photos/videos</td>
<td>Class room, first Aid materials, Fire fighting equipments</td>
<td>Class room, Theory Duration (hh:mm) 02:24 Practical Duration (hh:mm) 07:06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Take action based on instructions in the event of fire, emergencies or accidents</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Follow organization procedures for shutdown and evacuation when required</td>
<td></td>
<td>Demonstration, Practical</td>
<td>Class room, Emergency evacuation chart</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Recognizing the hazards Day 36 &amp; 37</td>
<td></td>
<td>• Identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry</td>
<td>PC19 &amp; 20</td>
<td>Demonstration with photo/ videos</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Recognize other possible security issues existing in the workplace</td>
<td></td>
<td>Demonstration with photo/videos</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Planning the safety techniques Day 37</td>
<td></td>
<td>• Recognize different measures to curb the hazards</td>
<td>PC 21</td>
<td>Demonstration</td>
<td>Class room</td>
<td>Theory Duration (hh:mm) 01:12 Practical Duration (hh:mm) 02:24</td>
</tr>
<tr>
<td>23</td>
<td>Implementing the programs Day 37 &amp; 38</td>
<td></td>
<td>• Communicate the safety plan to everyone</td>
<td>PC22 &amp; 23</td>
<td>Demonstration</td>
<td>Class room</td>
<td>Theory Duration (hh:mm) 03:30 Practical Duration (hh:mm) 02:24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Attach disciplinary rules with the implementation</td>
<td></td>
<td>Demonstration</td>
<td>Class room</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Module Name</td>
<td>Session Name</td>
<td>Session Objective</td>
<td>NOS Reference</td>
<td>Methodology</td>
<td>Training Tools/Aids</td>
<td>Duration</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| 24 | TSC/N9004 Comply with industry and organizational requirements | Self development Day 38, 39 & 40 | - Perform own duties effectively  
- Take responsibility for own actions  
- Be accountable towards the job role and assigned duties  
- Take initiative and innovate the existing methods  
- Focus on self-learning and improvement | PC1 to PC5 | Demonstration | Class room | Theory Duration (hh:mm) 05:54  
Practical Duration (hh:mm) 15:24 |
| 25 | Team work Day 41 & 43 | Co-ordinate with all the team members and colleagues  
- Communicate politely  
- Avoid conflicts and miscommunication | PC 5 to PC8 | Demonstration with photo/videos  
Demonstration with photo/videos  
Demonstration with photo/videos | Class room | Theory Duration (hh:mm) 03:30  
Practical Duration (hh:mm) 07:06 |
| 26 | Organization standards Day 43 & 44 | Know the organizational standards  
- Implement them in your performance  
- Motivate others to follow them | PC 9 to PC11 | Demonstration with photo/videos  
Demonstration with photo/videos  
Demonstration with photo/videos | Class room | Theory Duration (hh:mm) 03:30  
Practical Duration (hh:mm) 05:54 |
| 27 | Industry standards Day 44 | Know the industry standards  
- Align them with organization standards | PC 12 & 13 | Demonstration with photo/videos  
Demonstration with photo/videos | Class room | Theory Duration (hh:mm) 01:12  
Practical Duration (hh:mm) 03:30 |
<table>
<thead>
<tr>
<th>Total Duration:</th>
<th>Unique Equipment Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theory Duration</strong></td>
<td>Apron, head cap, nose mask, earplug, shoe, hip bag</td>
</tr>
<tr>
<td>(hh:mm)</td>
<td></td>
</tr>
<tr>
<td>77:24</td>
<td></td>
</tr>
<tr>
<td><strong>Practical Duration</strong></td>
<td></td>
</tr>
<tr>
<td>(hh:mm)</td>
<td></td>
</tr>
<tr>
<td>225:36</td>
<td></td>
</tr>
</tbody>
</table>

Grand Total Course Duration: 300 Hours, 0 Minutes

(This syllabus/curriculum has been approved by TSC: Textile Sector Skill Council)
**Key Learning Outcomes**

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

1) About the Assessment methodology  
2) NOS wise Marks allotment  
3) Assessment Method wise Mark Allocation  
4) The Minimum Marks to Pass in the Assessment  
5) How to face the assessment comfortably

**Unit 10.1: Assessment Criteria**

**Unit Objectives**

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

1) Face the assessment with confidence  
2) Complete the assessment in time  
3) Succeed in the assessment comfortably

### 10.1.1 Criteria for Assessment of Trainees

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Guidelines for Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Performance Criteria (PC) will be created by the Sector Skill Council.</td>
</tr>
<tr>
<td>2.</td>
<td>Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS</td>
</tr>
<tr>
<td>3.</td>
<td>SSC will also laydown proportion of marks for Theory, Viva and Skills Practical for each PC.</td>
</tr>
<tr>
<td>4.</td>
<td>The assessment for the theory part will be based on knowledge bank of questions created by the SSC – Model Questions Given in this Chapter for Reference</td>
</tr>
<tr>
<td>5.</td>
<td>Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria given below)</td>
</tr>
<tr>
<td>6.</td>
<td>To pass the Qualification Pack, every trainee should score minimum 80% in individual NOS and overall.</td>
</tr>
<tr>
<td>7.</td>
<td>In case of successfully passing only in certain NOS’s, the trainee is eligible to take subsequent</td>
</tr>
<tr>
<td>Performance Criteria (PC)</td>
<td>Total Marks</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>1. TSC/N5401 Taking charge of shift and handing over shift to operator</td>
<td>42</td>
</tr>
<tr>
<td>PC1. come at least 10 - 15 minutes earlier to the work place</td>
<td>2</td>
</tr>
<tr>
<td>PC2. bring the necessary operational tools to the department</td>
<td>1</td>
</tr>
<tr>
<td>PC3. meet the previous shift operator and discuss with him/her regarding the issues</td>
<td>3</td>
</tr>
<tr>
<td>faced by them with respect to the quality or production or spare or safety or any other</td>
<td></td>
</tr>
<tr>
<td>specific instruction etc.</td>
<td></td>
</tr>
<tr>
<td>PC4. understand the fabric being processed &amp; process running on the machine</td>
<td>3</td>
</tr>
<tr>
<td>PC5. ensure the technical details are mentioned on the job card display on the machine</td>
<td>3</td>
</tr>
<tr>
<td>PC6. check for the availability of the spare trolley for unloading the fabric</td>
<td>1</td>
</tr>
<tr>
<td>PC7. check the next batch to be processed is ready near the machine</td>
<td>1</td>
</tr>
<tr>
<td>PC8. ensure the required dyes &amp; chemicals are already weighed &amp; prepared</td>
<td>1</td>
</tr>
<tr>
<td>PC9. check the cleanliness of the machines &amp; other work areas</td>
<td>2</td>
</tr>
<tr>
<td>PC10. question the previous shift operator for any deviation in the above and bring the</td>
<td></td>
</tr>
<tr>
<td>same to the knowledge of his/ her shift superior as well that of the previous shift as</td>
<td></td>
</tr>
<tr>
<td>well</td>
<td>2</td>
</tr>
<tr>
<td>PC11. hand over the shift to the incoming operator in a proper manner</td>
<td>1</td>
</tr>
<tr>
<td>PC12. ensure in providing the details regarding fabric quality &amp; the process running on</td>
<td></td>
</tr>
<tr>
<td>the machine</td>
<td>3</td>
</tr>
<tr>
<td>PC13. provide all relevant information regarding the stoppages or breakdown in the</td>
<td>2</td>
</tr>
<tr>
<td>machine, any damage to the fabric or machine</td>
<td></td>
</tr>
<tr>
<td>PC14. ensure the empty trolley is near the machine for unloading the fabric</td>
<td>1</td>
</tr>
<tr>
<td>PC15. ensure the next lot to be processed, which is already stitched &amp; arranged properly</td>
<td></td>
</tr>
<tr>
<td>is ready near the machine</td>
<td>2</td>
</tr>
<tr>
<td>PC16. ensure the required dyes &amp; chemicals for the next lot or next process are weighed</td>
<td></td>
</tr>
<tr>
<td>&amp; prepared</td>
<td>2</td>
</tr>
<tr>
<td>PC17. get clearance from the incoming counterpart before leaving the work spot</td>
<td>2</td>
</tr>
<tr>
<td>PC18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn’t report for the incoming shift</td>
<td>2</td>
</tr>
<tr>
<td>PC19. ensure the shift has to be properly handed over to the incoming shift operator</td>
<td>2</td>
</tr>
<tr>
<td>PC20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and leave the department only after getting</td>
<td>3</td>
</tr>
<tr>
<td>PC21. collect the wastes from waste collection bags, weigh them and transport to storage area</td>
<td>1</td>
</tr>
<tr>
<td>PC22. ensure the machine and its work place is clean</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| 2. TSC/N5402 Operating the Stenter Machine | 37 | 2 | 0 | 2 | 0 |
| PC1. ensure that the machine is clean | 2 | 0 | 2 | 0 |
| PC2. feed the fabric from the batch or trolley in the center of the machine | 2 | 0 | 2 | 0 |
| PC3. ensure fabric is crease-less and evenly fed into the machine | 2 | 0 | 2 | 0 |
| PC4. know the operations of the machine | 2 | 0 | 1 | 0 |
| PC5. read & understand the process being followed to do the task | 3 | 1 | 1 | 1 |
| PC6. set the width maximum and minimum once a day keep even tension on fabric throughout the process | 2 | 0 | 1 | 1 |
| PC7. keep even tension on fabric throughout the process | 2 | 0 | 2 | 0 |
| PC8. keep optimum pressure of the squeezer rolls to get specified results | 2 | 0 | 1 | 1 |
| PC9. set the required temp & fan speeds in all chambers | 3 | 1 | 1 | 1 |
| PC10. feed the fabric to the stenter chain | 1 | 0 | 1 | 0 |
| PC11. adjust the overfeed device as per the requirement of the fabric | 2 | 0 | 1 | 1 |
| PC12. start the machine & take out the fabric at the delivery end | 1 | 0 | 1 | 0 |
| PC13. check various control parameters such as temp, width, mandle pressure & machine speed at regular interval, hardness of the pader | 3 | 0 | 2 | 1 |
| PC14. make sure the machine is kept clean at all times, before loading, while running & after unloading the fabric | 2 | 0 | 2 | 0 |
| PC15. follow the preventive maintenance schedule & ensure the machine is running smoothly | 2 | 0 | 2 | 0 |
| PC16. check that all controls are functioning properly | 2 | 0 | 2 | 0 |
| PC17. ensure the right quality of water, steam & air is available for proper functioning of machine | 2 | 0 | 2 | 0 |
| PC18. cool down the machine after completion of job | 2 | 0 | 2 | 0 |
| **Total** | **37** | **2** | **29** | **6** |
| **Weightage%** | **100%** | **5%** | **78%** | **16%** |

3. TSC/N5403  
**Recording the Finishing Chemicals**

| PC1. dissolve the pre weighed or dispensed chemicals in the drum | 10 | 2 | 0 | 2 | 0 |
| PC2. stir & mix the chemicals properly to make a homogenous liquid | 2 | 1 | 1 | 0 |
| PC3. adjust the pH, temp & concentration of the mixture as specified in the finishing recipe | 3 | 1 | 1 | 1 |
| PC4. feed the chemicals either manually or via pump to the mangle trough | 1 | 0 | 1 | 0 |
| PC5. adjust the mangle pressure to get the required pick up | 2 | 0 | 2 | 0 |
| **Total** | **10** | **2** | **7** | **1** |
| **Weightage%** | **100%** | **20%** | **70%** | **10%** |

4. TSC/N9001  
**Maintain work area, tools and machines**

<p>| PC1. handle materials, machinery, equipment and tools with care and use them in the correct way | 29 | 3 | 1 | 2 | 0 |
| PC2. use correct lifting and handling procedures | 1 | 0 | 1 | 0 |
| PC3. use materials to minimize waste | 2 | 1 | 1 | 0 |
| PC4. maintain a clean and hazard free working area | 3 | 1 | 1 | 1 |
| PC5. maintain tools and equipment | 3 | 1 | 2 | 0 |
| PC6. carry out running maintenance within agreed schedules | 2 | 1 | 1 | 0 |
| PC7. carry out maintenance and/or cleaning within one’s responsibility | 1 | 0 | 1 | 0 |
| PC8. report unsafe equipment and other dangerous occurrences | 1 | 1 | 0 | 0 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PC8. ensure that the correct machine guards are in place</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC9. work in a comfortable position with the correct posture</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC10. use cleaning equipment and methods appropriate for the work to be carried out</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC11. dispose of waste safely in the designated location</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC12. store cleaning equipment safely after use</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC13. carry out cleaning according to schedules and limits of responsibility</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>10</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Weightage%</td>
<td>100%</td>
<td>34%</td>
<td>62%</td>
<td>3%</td>
</tr>
</tbody>
</table>

5. TSC/N9002 Working in a team

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1. be accountable to the own role in whole process</td>
<td>26</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC2. perform all roles with full responsibility</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC3. be effective and efficient at workplace</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC4. properly communicate about company policies</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC5. report all problems faced during the process</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PC6. talk politely with other team members and colleagues</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC7. submit daily report of own performance</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC8. adjust in different work situations</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC9. give due importance to others' point of view</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC10. avoid conflicting situations</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC11. develop new ideas for work procedures</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC12. improve upon the existing techniques to increase process efficiency</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>10</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Weightage%</td>
<td>100%</td>
<td>38%</td>
<td>46%</td>
<td>15%</td>
</tr>
</tbody>
</table>

6. TSC/N9003 Maintain health, safety and security at workplace

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1. comply with health and safety related instructions applicable to the workplace</td>
<td>71</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PC2. use and maintain personal protective equipment such as “ear plug”, “nose mask”, “head cap” etc., as per protocol</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>PC3. carry out own activities in line with approved guidelines and procedures</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC4. maintain a healthy lifestyle and guard against dependency on intoxicants</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>PC5. follow environment management system related procedures</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC6. identify and correct (if possible) malfunctions in machinery and equipment</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC7. report any service malfunctions that cannot be rectified</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC8. store materials and equipment in line with organisational requirements</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC9. safely handle and remove waste</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC10. minimize health and safety risks to self and others due to own actions</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC12. monitor the workplace and work processes for potential risks and threat</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC15. participate in mock drills/ evacuation procedures organized at the workplace</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC17. take action based on instructions in the event of fire, emergencies or accidents</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC18. follow organisation procedures for shutdown and evacuation when required</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>PC20. recognise other possible security issues existing in the workplace</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC21. attach disciplinary rules with the implementation</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC22. communicate the safety plan to everyone</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC23. attach disciplinary rules with the implementation</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weightage %</td>
<td>71</td>
<td>23</td>
<td>33</td>
<td>15</td>
</tr>
<tr>
<td>7. TSC/ N9004 Comply with industry and organisational requirements</td>
<td>39</td>
<td>4</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>PC1. perform own duties effectively</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC2. take responsibility for own actions</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC3. be accountable towards the job role and assigned duties</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC4. take initiative and innovate the existing methods</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PC5. focus on self-learning and improvement</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PC6. co-ordinate with all the team members and colleagues</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC7. communicate politely</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC8. avoid conflicts and miscommunication</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC9. know the organisational standards</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PC10. implement them in your performance</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC11. motivate others to follow them</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PC12. know the industry standards</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PC13. align them with organisation standards</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39</td>
<td>12</td>
<td>21</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weightage %</th>
<th>100%</th>
<th>31%</th>
<th>54%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>254</td>
<td>63</td>
<td>153</td>
<td>38</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>