

**MES COURSE MODULE**

**IN**

**TEXTILES – CHEMICAL PROCESSING**

<b>1. Module Name</b>	<b>Effluent Water Treatment plant operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 701
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the Effluent treatment plant and discharge water of permitted COD value. Cleaning the sledges periodically
<b>6. Duration</b>	400 hours
<b>7. Course content:</b>	

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Safety of man and machine</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Submitting the effluents and water for testing the COD and getting instructions for adding chemicals.</li> <li>➤ Handling the chemical containers</li> <li>➤ Monitoring chemical pipelines and water lines</li> <li>➤ Removing the sledges periodically.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Importance of ecology, effluent treatment and norms for discharging treated water. Details of the effluent treatment plant and machines, chemical pipelines and storage conditions.</li> <li>➤ Basic knowledge about various aspects of Effluents, and treating them. Removing the sledge and disposing them</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of colours and chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

### **8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Effluent treatment plant	1No
Water storage tanks	4 No
Aprons, Gloves, Gum shoes and Caps	20

<b>1. Module Name</b>	<b>Hot air dryer operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 702
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate a hot air dryer
<b>6. Duration</b>	500 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Safety of man and machine</li> <li>➤ To maintain cleanliness around the work place</li> <li>➤ To clean the inside portion of the dryer and remove burnt cottons</li> <li>➤ To feed loose bleached or dyed fibres or hanks into drying chamber</li> <li>➤ Setting the fans, speed and temperature of the heating coils in the machine</li> <li>➤ Monitoring the Moisture content.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of hot air drying of fibres and yarns</li> <li>➤ Importance of drying with hot air and the controls in the hot air chamber</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Hot air drying Chamber	1No
Apron, cap/helmet, gloves and shoes	20

<b>1. Module Name</b>	<b>Batching Machine Operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 703
<b>4. Entry Qualification</b>	Minimum 5th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to prepare batches of fabric for high speed printing machines
<b>6. Duration</b>	300 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Cleaning of the machine and surroundings</li> <li>➤ Operating the panel board</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Threading of the fabric in the machine</li> <li>➤ End to end stitching of fabric</li> <li>➤ Removing the crease and selvedge folds from cloth while winding the fabric</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of batch preparation and screen printing productivity.</li> <li>➤ Importance of large batch preparation and productivity of printing.</li> <li>➤ Details of the batch preparation</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of colours and chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Batching machine	1 No
Sewing machine	2 No
Apron, cap and shoes	20

<b>1. Module Name</b>	<b>Soaper machine operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 704
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the Soaper with required chemical agency, adjusting proper flow of chemicals to remove the excessive adhering colours on fabric
<b>6. Duration</b>	300 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
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<ul style="list-style-type: none"> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Threading the fabric to the machine</li> <li>➤ Arranging the fabrics as per the requirement of soaping</li> <li>➤ Preparing Soap water mixtures</li> <li>➤ Adjusting time, temperature and tension in the ager</li> <li>➤ Removing creases in printed cloth while soaping.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Soaper machine operation for printed materials</li> <li>➤ Importance of soaping the printed material</li> <li>➤ Details of the machines</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of colours and chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>
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#### 8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Soaping Machine	1 No
Apron, cap, gloves and gum boots	20

<b>1. Module Name</b>	<b>Desizing Machine Operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 705
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the machine with speed control, steam control, preparing and monitoring chemical solutions, ensuring entanglement less operation and proper piling. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	300 hours
<b>7. Course content</b>	

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Feeding of the fabric to the machine</li> <li>➤ Preparation of desizing solution</li> <li>➤ Taking chemical, steam, water, Temperature control and pH control</li> <li>➤ Piling of desized fabric in bins.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Desizing, Chemicals and enzymes used, function and operation of the machines to get optimum production</li> <li>➤ Importance of Desizing of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

### **8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Desizing machine	1 No
Storage Bins	2 No
Apron, caps, gloves and shoes	20

<b>1. Module Name</b>	<b>Fabric Singeing Machine Operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 706
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person

would be able to operate the machine with speed control, flame control, Air control, Exhaust fan control, Electrical heater control, etc., without damaging the fabric, or allow catching fire. Shall have required knowledge of electrical operations and intricacies of the machine during the process  
400 hours

**6. Duration**

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Feeding of the fabric to the machine</li> <li>➤ Pouring of petrol to the tank</li> <li>➤ Adjusting the flame length</li> <li>➤ Maintaining cold water level in quenching machine.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Singeing machine function and operation to get optimum production</li> <li>➤ Importance of Singeing of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Singeing Machine	1 No
Inspection Tables	2 Nos
Singeing elements – Electrical	4 Nos
Singeing elements – Gas	4 Nos
Apron, caps and shoes	20

**1. Module Name****Fabric Mercerising Machine Operator****2. Sector**

Textiles - Chemical Processing (Wet Processing)

**3. Code**

TCP 707

**4. Entry Qualification**

Minimum 7th Standard and 14 years of age

**5. Terminal Competency**

After completion of the course, the trained person would be able to operate the machine with speed control, Stretch Control. Measuring and monitoring the concentration of caustic soda solution, monitoring washing of cloth at all places, Electrical control, etc., without damaging the fabric. Shall have required knowledge of chemical reactions and intricacies of the machine during the process

**6. Duration**

400 hours

**7. Course content**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Feeding of the fabric to the machine</li> <li>➤ Checking and maintaining the strength of chemical solution</li> <li>➤ Temperature control in washing point and recuperator unit</li> <li>➤ Examining the lustre at the delivery end of the machine.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Mercerising machine function and operation to get optimum production</li> <li>➤ Importance of Mercerising of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Mercerising Machine	1 No
Inspection Tables	2 No
Apron, Helmet, Gloves and Shoes	20

<b>1. Module Name</b>	<b>Jigger Machine operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 708
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the machine. Mount the batches, feed the chemicals and water, control the speed, time, temperature and reversing operations. Removing the batches, sampling out for shade matching. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	300 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Mounting the batch</li> <li>➤ Monitoring the water, chemicals and dye feeding.</li> <li>➤ Temperature control of dye bath</li> <li>➤ Stocking dyed batches properly</li> <li>➤ Adjusting and maintaining speed of running and reversing</li> <li>➤ Sampling out for shade matching.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Importance of dyeing of fabrics in open width</li> <li>➤ Basic knowledge about various aspects of Jigger and Jumbo Jigger machine, function and operation to get optimum production.</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of colours and chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Normal open Jigger	1 No
Jumbo Jigger	1 No
Hooded Jigger	1 No
Apron, Helmet, Gloves and Shoes	20

<b>1. Module Name</b>	<b>HT-HP cheese dyeing of yarns - machine operator</b>
<b>2. Sector</b>	Textiles – Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 709
<b>4. Entry Qualification</b>	Minimum 7 <sup>th</sup> Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to load the cheeses in the cheese carrier, load the cheese carrier into dyeing vessel, monitor liquor flow, time, temperature, pressure, dyeing and washing cycles. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	400 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Mounting of cheeses in the cheese carrier</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Monitoring the dyeing and washing cycles, water, chemicals and dye stuff additions, temperature, time and pressure.</li> <li>➤ Unloading the dyed materials and sending for further process.</li> <li>➤ Practicing the work considering safety of man and machine</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Importance of dyeing of yarns in cheese form.</li> <li>➤ Basic knowledge about various aspects of yarn dyeing in cheese form and Beam form.</li> <li>➤ Details of the machines</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of colours and chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Vertical Cheese dyeing machine	1 No
Cheese carrier	1Set
Helmet, Apron, gloves and shoes	20

<b>1. Module Name</b>	<b>Pre-shrinking machine Operator - Zero-zero finishing or Felt Calendar</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 710
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the machine with speed control, heating and cooling operations, rubber felt adjustments ensuring entanglement less and damage less operation for both cloth and the machines, with width monitoring. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	300 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Heating and cooling of cylinder and rubber felt.</li> <li>➤ Feeding of the fabric to the machine</li> <li>➤ Pressure control of the felt on cylinder</li> <li>➤ Adjusting and maintaining speed</li> <li>➤ Examining the delivered cloth for feel and width uniformity.</li> <li>➤ Practicing considering safety and health aspects.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Pre shrinking machine, function and operation to get optimum production.</li> <li>➤ Importance of Pre shrinking of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Pre Shrinking machine	1 No
Inspection tables	2 No
Helmet, Apron, Gloves and Shoes	20

<b>1. Module Name</b>	<b>Stenter or Finishing Machine Operator – Cylinder dryer</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 711
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	The trained person would be able to operate the machine with proper control of parameter to get the required effect. Preparation of finishing chemicals. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	300 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings and oiling and greasing of the machine</li> <li>➤ Preparing finishing mix recipe</li> <li>➤ Feeding of the fabric to the clips in the machine. Adjusting the required width of cloth.</li> <li>➤ To open steam valve of damping box and that of steam pipe and coils underneath the Stenter</li> <li>➤ To put the end of cloth from the Stenter through draw roller to the Plaiter or to wrap round the batching roll</li> <li>➤ Adjusting and maintaining temperature, speed and mangle pressure</li> <li>➤ Maintaining required moisture content in dried fabric</li> <li>➤ Verifying the finish uniformity at the delivery.</li> <li>➤ Practicing considering safety and health aspects.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Stenter machine, function and operation to get optimum production. Different types of hot air stenters viz Clip Stenter, Belt Stenter and Pin Stenter</li> <li>➤ Importance of finishing and drying of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Maintaining the quality</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Hot air Stenter	1 No
Helmet, gloves, apron and shoes	20

<b>1. Module Name</b>	<b>Inspection operator /Piece checker (near Baling)</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 712
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to identify shade variations, Design wise metres of fabrics received, substandard quality and seconds packed.
<b>6. Duration</b>	400 hours
<b>7. Course content:</b>	

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ Identifying shade variations in the fabrics received for baling.</li> <li>➤ Verifying the length of fabrics packed as substandard and as seconds.</li> <li>➤ Recording the substandard packing and seconds packing and ensuring the packing slip preparation.</li> <li>➤ Practicing considering safety and health aspects.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about allowable shade variation in a sort, segregating the fabrics as per shade.</li> <li>➤ Importance of Quality and the customer expectations</li> <li>➤ Method of checking the shades and segregating the fabrics</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

### **8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Inspection table	20 No
Apron, caps and shoes	20
Formats for reporting	As needed

<b>1. Module Name</b>	<b>Continuous Bleaching plant, Machine Operator</b>
<b>2. Sector</b>	Textiles - Chemical Processing (Wet Processing)
<b>3. Code</b>	TCP 713
<b>4. Entry Qualification</b>	Minimum 7th Standard and 14 years of age
<b>5. Terminal Competency</b>	After completion of the course, the trained person would be able to operate the machine with speed control, maintain proper pressure on the squeezing rollers, maintaining speed, regulate supply of steam and air, monitoring the movement of fabric to avoid entanglements, ensuring proper piling in bins. Knowledge of electrical operations and intricacies of the machine operation.
<b>6. Duration</b>	400 hours

**7. Course content:**

<b>Practical Competencies</b>	<b>Under pinning Knowledge (Theory)</b>
<ul style="list-style-type: none"> <li>➤ End to End stitching of fabric pieces</li> <li>➤ Operation of panel board</li> <li>➤ Cleaning of the machine and the surroundings</li> <li>➤ Oiling and greasing of the machine</li> <li>➤ Feeding of the fabric to the machine</li> <li>➤ Preparation of bleaching solution</li> <li>➤ Controlling squeezing roller, washer machines rollers</li> <li>➤ Temperature control in Peroxide and caustic device</li> <li>➤ Understanding the proper sequence and speeds of different components of the plant</li> <li>➤ Attending to water pumps and recirculation pumps.</li> <li>➤ Practicing considering safety and health aspects.</li> <li>➤ Mock drill for fire fighting and first aid.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic knowledge about various aspects of Bleaching plant, function and operation to get optimum production</li> <li>➤ Importance of Bleaching of fabrics</li> <li>➤ Details of the machine</li> <li>➤ Importance of discipline and punctuality</li> <li>➤ Ill effects of absenteeism</li> <li>➤ Productivity and quality</li> <li>➤ Knowledge of chemicals used</li> <li>➤ Quality of work</li> <li>➤ Safety precautions</li> <li>➤ First aid and fire fighting</li> </ul>

**8. Tools and Equipments for a batch of 20 trainees**

<b>Description</b>	<b>Quantity</b>
Fabric bleaching plant	1 No
Inspection Tables	2 No
Helmet, aprons, gloves and shoes	20