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# TEXTILE WET PROCESSING



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## TRAINER GUIDE

National Vocational Certificate Level 2

Version 1 - November, 2019



Implemented by  
**giz** Deutsche Gesellschaft  
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The transfer gap between the training environment and working on the job is reduced substantially in a competence-based approach. This is because training and assessment are relevant to what needs to be done on the job. As a result, it takes less time for trainees to become competent in the required areas. This, in turn, contributes to improved efficiency where training and assessment are concerned.

### **3. Increased productivity**

When trainees become competent in the competence standards that their own industry has defined, when they know what the performance expectations are and receive recognition for their abilities through successful assessments, they are likely to be more motivated and experience higher job satisfaction. The result is improved productivity for organizations. The communication and constructive feedback between future employers and employees will improve as a result of a competence-based approach, which can also increase productivity.

### **4. Reduced risk**

Using a competence-based approach to training, development, and assessment, employers are able to create project teams of people with complementary skills. A trainee's record of the skills, knowledge and understanding relating to the competence standards they have achieved can be used by a future employer to identify and provide further relevant training and assessment for new skills areas. Competence standards can shape employee development and promotional paths within an organization and give employees the opportunity to learn more competencies beyond their roles. It can also provide organizations with greater ability to scale and flex as needed, thereby reducing the risk they face.

### **5. Increased customer satisfaction**

Employees who have been trained and assessed using a competence-based approach are, by the definition of the relevant competence standards, able to perform the required tasks associated with a job. The knock-on effect is that, in service-related industries, they are able to provide high service levels, thereby increasing customer satisfaction. In production or manufacturing industries, they are able to work closely to industry standards in a more effective and efficient way.

## **Lesson plans**

This manual provides a series of lesson plans that will guide delivery of each module for the *Textile Wet Processing* qualification. It is important for trainers to be flexible and be ready to adapt lesson plans to suit the context of the subject and the needs of their trainees.

Good teachers acknowledge that CBT means each and every trainee in the class learns at a different speed. The good teacher is prepared to throw aside the day's lesson plan and do something different (and unplanned) for the class even if it means 'writing' a lesson plan for each trainee to match their learning pace for that day or week.

Learning by doing is different from learning theory and then applying it. To learn to do something, trainees need someone looking over their shoulder saying ‘it’s not quite like that, it’s like this’, ‘you do it like this because ...’, or even ‘tell me why you chose to do it like this?’.

In this way, trainees learn that theoretical knowledge is meaningless if it is not seen in the context of what they are doing. In other words, if a trainee doesn’t know why they do something, they will not do it competently (skills underpinned by knowledge = competent performer).

This is how a *Textile Wet Processing* (Dyeing machine operator) acquires a practical grasp of the standards expected. It’s not by learning it in theory, but because those standards are acquired through correction by people who show what the standards are, and correct the trainee where they do not meet those standards, and where they repeat it correction until they have internalized those standards.

FORMAT FOR LESSON PLAN			
<b>Module: Perform Winch Dyeing</b>			
<b>Learning Unit 1: Prepare workstation for Winch dyeing</b>			
Methods	Key Notes	Media	Time
The tools, material and techniques used for Preparing workstation for Winch dyeing			
<b>Introduction</b>			
This session will introduce learners to the tools, techniques and material used for Preparing workstation for Winch dyeing using presentation, demonstration, question and answer, and practical skills development.			
<b>Main Body</b>			
<ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on winch dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul>			
<b>Conclusion</b>			

To conclude the session, review the tools, techniques and material used for Preparing workstation for Winch dyeing. Give learners the opportunity to ask questions.
<b><u>Assessment</u></b>
Question and answer, discussion groups with feedback, observation of practice skills development
<b>Total time:</b>

## Demonstration of skill

Demonstration or modeling a skill is a powerful tool, which is used, in vocational training. The instructions for trainers for demonstration are as under:

- a) Read the procedure mentioned in the Trainer Guide for the relevant Learning Unit before demonstration.
- b) Arrange all tools, equipment and consumable material, which are required for demonstration of a skill.
- c) Practice the skill before demonstration to trainees, if possible.
- d) Introduce the skill to trainees clearly at the commencement of demonstration.
- e) Explain how the skill relates to the skill(s) already acquired and describe the expected results or show the objects to trainees.
- f) Carry out demonstration in a way that can be seen by all trainees.
- g) Perform each step slowly and describe each step clearly so that all trainees can hear and understand.
- h) Identify critical or complex steps, or steps that involve safety precautions to be followed.
- i) Explain theoretical knowledge where applicable and ask questions to trainees to test their understanding.
- j) Repeat critical steps in demonstration, if required.

Summarize the demonstration by asking questions to trainee.

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Module-6  
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## Overview of the program

<b>Course:</b> NVQ Certificate Level 2 in <i>Textile Wet Processing</i> (Dyeing Machine Operator.	<b>Total Course Duration:</b> 950 hours
<b>Course Overview:</b>	
The Textile Sector- <i>Textile Wet Processing</i> (Dyeing Machine Operator) program is to engage young people with a program of development that will provide them with the knowledge, skills and understanding to start this career in Pakistan. The program has been developed to address specific dyeing machines, such as winch, jigger, jet, soft flow, garment, rope, cone, pad batch, pad steam, stenter dyeing machines the manpower availability within the country, and meeting and exceeding the needs and expectations of their customers.	

## Trainer's guidelines

Module 6: 0723001090 Perform Winch Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU1: <b>Prepare workstation for Winch dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by winch dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on winch dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to</p>	<p>Class Room</p> <p>Workshop.</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p> <p>Illustrations from catalogues or the internet of equipment used to prepare machine for operations.</p>



Module 6: 0723001090 Perform Winch Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for winch dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>		
<p>LU2:</p> <p><b>Operate Winch dyeing machine for fabric dyeing</b></p>	<p>Invite an experienced winch dyeing machine operator from industry to deliver a presentation to trainees about using winch dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for winch dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• the importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the winch dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed fabric.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> </ul>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industries</p>	<p>Learner guide</p> <p>Videos for related knowledge on multimedia</p> <p>Handouts</p>

Module 6: 0723001090 Perform Winch Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<ul style="list-style-type: none"> <li>compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then needs to demonstrate the operating of winch dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating winch dyeing machine in a controlled environment.</p>		
LU3:  <b>Maintain Production Register for Winch dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for winch dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for winch dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	Workshop.  Classroom	Learner Guide  Learner self-assessment forms

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## Module 7: 0723001091 Perform Jigger Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU1. <b>Prepare workstation for Jigger dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by jigger dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on jigger dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for jigger dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p>	Class Room  Workshop.	Learner guide  Handouts  Presentation  Videos  Illustrations from catalogues or the internet of equipment used to prepare machine for operations.

Module 7: 0723001091 Perform Jigger Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	Take verbal feedback from each group.		
LU2.  <b>Operate Jigger dyeing machine for fabric dyeing</b>	<p>Invite an experienced jigger dyeing machine operator from industry to deliver a presentation to trainees about using jigger dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for jigger dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• the importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the jigger dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed fabric.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of jigger dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating jigger dyeing machine in a controlled environment.</p>	Class Room  Workshop.  Visit dyeing industries	Learner guide  Videos for related knowledge on multimedia  Handouts

Module 7: 0723001091 Perform Jigger Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU3.  <b>Maintain Production Register for Jigger dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for jigger dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for jigger dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	Workshop.  Classroom	Learner Guide  Learner self-assessment forms

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## Module 8: 0723001092 Perform Jet Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1.</b> <b>Prepare workstation for Jet dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by jet dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on jet dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for</p>	<p>Class Room</p> <p>Workshop.</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p> <p>Illustrations from catalogues or the internet of equipment used to prepare machine for operations.</p>



Module 8: 0723001092 Perform Jet Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>winch dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>		
<b>LU2.</b>  <b>Operate Jet dyeing machine for fabric dyeing</b>	<p>Invite an experienced jet dyeing machine operator from industry to deliver a presentation to trainees about using jet dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for jet dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• The importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the jet dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed fabric.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of jet dyeing machine to learners. Where facilities</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industries</p>	<p>Learner guide</p> <p>Videos for related knowledge on multimedia</p> <p>Handouts</p>

Module 8: 0723001092 Perform Jet Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating jet dyeing machine in a controlled environment.		
<b>LU3.</b> <b>Maintain Production Register for Jet dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for jet dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for jigger dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Workshop.</p> <p>Classroom</p>	<p>Learner Guide</p> <p>Learner self-assessment forms</p>

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Module 9: 0723001093 Perform Pad batch dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1.</b>  <b>Prepare workstation for Pad batch dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by pad batch dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on pad batch dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, pick-up, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for pad batch dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p> <p>Illustrations from catalogues or the internet of equipment used to prepare machine for operations.</p>
<b>LU2. Operate Pad batch dyeing machine</b>	<p>Invite an experienced jigger dyeing machine operator from industry to deliver a presentation to trainees about using pad</p>	<p>Class Room</p>	<p>Learner guide</p> <p>Videos for related</p>

Module 9: 0723001093 Perform Pad batch dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
for fabric dyeing	<p>batch dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for pad batch dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• the importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately.</li> <li>• Methods of threading and stitching the feeding fabric on pad batch dyeing machine.</li> <li>• Methods of loading and un-loading of fabric to the pad batch dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of fixation of dyed fabric.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of pad batch dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating pad batch dyeing machine in a controlled environment.</p>	<p>Workshop.</p> <p>Visit dyeing industries</p>	<p>knowledge on multimedia</p> <p>Handouts</p>
LU3. Maintain Production Register for Pad batch dyeing	<p>Trainees need to practice their skills in independently for maintaining the production register for pad batch dyeing</p>	<p>Workshop.</p> <p>Classroom</p>	<p>Learner Guide</p> <p>Learner self-</p>

Module 9: 0723001093 Perform Pad batch dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
machine.	<p>machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for pad batch dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>		assessment forms

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## Module 10: 0723001094 Perform Pad Thermosol Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Pad Thermosol dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by pad thermosol dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on pad thermosol dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for pad thermosol dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>



Module 10: 0723001094 Perform Pad Thermosol Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>understanding.</p> <p>Take verbal feedback from each group.</p>		
<p>LU2.</p> <p><b>Operate Pad Thermosol dyeing machine for fabric dyeing</b></p>	<p>Invite an experienced pad thermosol dyeing machine operator from industry to deliver a presentation to trainees about using pad thermosol dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for pad thermosol dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• The importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the pad thermosol dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Methods of threading and stitching the feeding fabric on pad thermosol dyeing machine.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of pad thermosol dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

Module 10: 0723001094 Perform Pad Thermosol Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	chemicals for operating pad thermosol dyeing machine in a controlled environment.		
<b>LU3. Maintain Production Register for Pad Thermosol dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for pad thermosol dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for jigger dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

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## Module 11: 0723001095 Perform Pad Steam Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Pad Steam dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by Pad steam dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on Pad steam dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, pick up, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for Pad steam dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>
<b>LU2.</b>	Invite an experienced Pad steam dyeing machine operator from	Class Room	Learner guide

Module 11: 0723001095 Perform Pad Steam Dyeing			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>Operate Pad Steam dyeing machine for fabric dyeing</b>	<p>industry to deliver a presentation to trainees about using Pad steam dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for Pad steam dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• The importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the Pad steam dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Methods of threading and stitching the feeding fabric on pad steam dyeing machine.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of pad steam dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating pad steam dyeing machine in a controlled environment.</p>	<p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Handouts</p> <p>Presentation</p> <p>Videos</p>
<b>LU3. Maintain Production Register</b>	Trainees need to practice their skills in independently for maintaining the production register for pad steam dyeing	Class Room	Learner guide

**Module 11: 0723001095 Perform Pad Steam Dyeing**

<b>Learning Unit</b>	<b>Suggested Teaching / Learning Activities</b>	<b>Delivery Context</b>	<b>Media</b>
<b>for Pad Steam dyeing machine.</b>	<p>machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for pad steam dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Handouts</p> <p>Presentation</p> <p>Videos</p>

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## Module 12: 0723001096 Perform Cone Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Cone dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by cone dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on cone dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of cone / yarn etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for cone dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>



## Module 12: 0723001096 Perform Cone Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<p>LU2.</p> <p><b>Operate Cone dyeing machine for yarn dyeing</b></p>	<p>Invite an experienced cone dyeing machine operator from industry to deliver a presentation to trainees about using cone dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for cone dyeing machine.</li> <li>• Sequencing the operations performed correctly</li> <li>• The importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of cones to the cone dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and yarn quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed cones.</li> <li>• Quality requirements following dyeing the yarn.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of cone dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating cone dyeing machine in a controlled environment.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

**Module 12: 0723001096 Perform Cone Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU3. Maintain Production Register for Cone dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for cone dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for cone dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

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## Module 13 : 0723001097 Perform Rope Dyeing (Denim)

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Rope dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by rope dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on rope dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of rope etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for rope dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

## Module 13 : 0723001097 Perform Rope Dyeing (Denim)

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<p>LU2.</p> <p><b>Operate Rope dyeing machine for rope dyeing</b></p>	<p>Invite an experienced rope dyeing machine operator from industry to deliver a presentation to trainees about using rope dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for rope dyeing machine.</li> <li>• Sequencing the operations performed correctly</li> <li>• The importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of ropes to the rope dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and rope quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed rope.</li> <li>• Quality requirements following dyeing the rope.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of rope dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating rope dyeing machine in a controlled environment.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

**Module 13 : 0723001097 Perform Rope Dyeing (Denim)**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU3. Maintain Production Register for Rope dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for rope dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for rope dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

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## Module 14: 0723001098 Perform Soft flow Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Soft flow dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by soft flow dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on soft flow dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for soft flow dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>



**Module 14: 0723001098 Perform Soft flow Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU2.  <b>Operate Soft flow dyeing machine for fabric dyeing</b>	<p>Invite an experienced soft flow dyeing machine operator from industry to deliver a presentation to trainees about using soft flow dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"><li>• Operational procedure for soft flow dyeing machine.</li><li>• Sequencing the operations performed correctly</li><li>• The importance of using the correct dyes, chemicals and auxiliaries.</li><li>• Measuring dyes, chemicals and auxiliaries accurately</li><li>• Methods of loading and un-loading of fabric to the soft flow dyeing machine.</li><li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li><li>• Types of possible dyeing defects during operations and their possible remedies.</li><li>• Importance and benefits of wash-off and neutralization of dyed fabric.</li><li>• Quality requirements following dyeing the fabric.</li><li>• working independently</li><li>• compliance with relevant regulations and standards</li></ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of soft flow dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating soft flow dyeing machine in a controlled environment.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

**Module 14: 0723001098 Perform Soft flow Dyeing**

<b>Learning Unit</b>	<b>Suggested Teaching / Learning Activities</b>	<b>Delivery Context</b>	<b>Media</b>
<b>LU3. Maintain Production Register for Soft flow dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for soft flow dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for soft flow dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

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## Module 15: 0723001099 Perform Garment Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Garment dyeing</b>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by garment dyeing machine. Include examples of:</p> <ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on garment dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of garment etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for garment dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

## Module 15: 0723001099 Perform Garment Dyeing

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<p>LU2.</p> <p><b>Operate Garment dyeing machine for garment dyeing</b></p>	<p>Invite an experienced garment dyeing machine operator from industry to deliver a presentation to trainees about using garment dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for garment dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• the importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of garments to the garment dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and garment quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed garment.</li> <li>• Importance of hydro exactor and tumble dryer for garment drying after dyeing.</li> <li>• Quality requirements following dyeing the garment.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of garment dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating garment dyeing machine in a controlled</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

**Module 15: 0723001099 Perform Garment Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	environment.		
<b>LU3. Maintain Production Register for Garment dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for garment dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for garment dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

**Module : 0723001100 Perform Stenter Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<b>LU1. Prepare workstation for Stenter dyeing</b>	Begin this session with an illustrative presentation about the preparation of workstation for performing dyeing by stenter dyeing machine. Include examples of:	Class Room	<p>Learner guide</p> <p>Handouts</p>

**Module : 0723001100 Perform Stenter Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<ul style="list-style-type: none"> <li>• Importance of safety precautions according to job requirement.</li> <li>• The benefits of preparing workstation for working on stenter dyeing machine.</li> <li>• Advantages of cleaning the machine prior to start the new dyeing plan.</li> <li>• Ensure that all parts of machine are in working condition for dyeing.</li> <li>• Arrangement of materials required for dyeing operations.</li> <li>• Setting the dyeing and machine parameters like dye weight, chemical pH, liquor ratio, temperature, weight and length of fabric etc.</li> <li>• Handling techniques for tools and equipments.</li> <li>• Checking the condition of machine for dyeing.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of workstation and verify all dyeing and machine parameters and present <b>THREE</b> situations that illustrate their discussion.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to preparing workstation for stenter dyeing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.</p> <p>Take verbal feedback from each group.</p>	<p>Workshop.</p> <p>Visit dyeing industry</p>	<p>Presentation</p> <p>Videos</p>
<p>LU2.</p> <p><b>Operate Stenter dyeing machine for fabric dyeing</b></p>	<p>Invite an experienced stenter dyeing machine operator from industry to deliver a presentation to trainees about using stenter dyeing machine for dyeing independently to complete the target efficiently and in-time. Ask the invited operator to address the</p>	<p>Class Room</p> <p>Workshop.</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p>

**Module : 0723001100 Perform Stenter Dyeing**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>following key points:</p> <ul style="list-style-type: none"> <li>• Operational procedure for stenter dyeing machine.</li> <li>• sequencing the operations performed correctly</li> <li>• the importance of using the correct dyes, chemicals and auxiliaries.</li> <li>• Measuring dyes, chemicals and auxiliaries accurately</li> <li>• Methods of loading and un-loading of fabric to the stenter dyeing machine.</li> <li>• Importance of machine speed according to the nature of dyeing and fabric quality.</li> <li>• Types of possible dyeing defects during operations and their possible remedies.</li> <li>• Importance and benefits of wash-off and neutralization of dyed fabric.</li> <li>• Quality requirements following dyeing the fabric.</li> <li>• working independently</li> <li>• compliance with relevant regulations and standards</li> </ul> <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p> <p>The teacher / invited operator then need to demonstrate the operating of stenter dyeing machine to learners. Where facilities exist at the training provider's premises, enable learners to practice using the appropriate tools, equipment, dyes and chemicals for operating stenter dyeing machine in a controlled environment.</p>	Visit dyeing industry	Videos
<b>LU3. Maintain Production Register for Stenter dyeing machine.</b>	<p>Trainees need to practice their skills in independently for maintaining the production register for stenter dyeing machine after job completed in a realistic environment.</p> <p>After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on</p>	<p>Class Room</p> <p>Workshop.</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p>



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	<p>their ability to prepare production register, record all dyeing and machine process parameter's time and faults occurred during production.</p> <p>After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for maintaining production register for stenter dyeing machine. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.</p> <p>Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.</p> <p>End the group discussion activity with a summary.</p>	Visit dyeing industry	Videos

