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TRAINER GUIDE

National Vocational Certificate Level 2

Version 1 - April, 2019



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Introduction

Competence-based training helps to bridge the gap between what is taught in training and what tasks will be performed on the job. Training trainees to perform actual job functions helps to ensure that future front-line workers have the skills, knowledge and abilities required to perform their jobs properly, safely and effectively. In addition to competence-based training, assessment based on the performance of actual work competencies helps to ensure that:

- trainees are performing their work tasks as safely as possible
- performance gaps are recognized prior to serious incidents
- training can be implemented to improve competence.

There are significant benefits to competence-based training:

1. Cost effectiveness

Since training activities and assessments in a competence-based approach are goal-oriented, trainers focus on clearly defined areas of skills, knowledge and understanding that their own industry has defined in the competence standards. At the same time, trainees are more motivated to learn when they realize the benefits of improved performance.

2. Efficiency

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 *Industrial Garment Expert* 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 Industrial stitching 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 internalised those standards.

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.

Overview of the program

Course: NVQ Certificate Level 2 in Industrial Garment Expert (Industrial Stitching Machine Operator).	Total Course Duration: 550 hours
Course Overview:	
The Textile Sector- Industrial Garment Expert (Industrial Stitching 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 stitching machines, such as single needle, double needle, over lock, flat lock, and packing / finishing the product, the manpower availability within the country, and meeting and exceeding the needs and expectations of their customers.	

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Module-2

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Trainer's guidelines

Module 2: Operate single needle lock stitching machine			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU1: Prepare machine for sewing	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing single needle lock stitching machine. Include examples of:</p> <ul style="list-style-type: none"> • Importance of safety precautions according to job requirement. • The benefits of preparing workstation for working on single needle lock stitching machine. • Advantages of cleaning the machine prior to start and checking of oil level and its importance. • Ensure that all parts of machine are in working condition for stitching. • Arrangement of materials required for sewing operations. • Checking the SPI (Stitches per Inch) is according to required parameters on rough fabric before start of the production. • Types of bobbins and their usages. • Selecting the right sewing needle and sewing thread for operations of sewing. • Types of needles used for different sewing operations. • Handling techniques for tools and equipments. • Checking the condition of machine for sewing. • Problems with sewing the material. • working independently • compliance with relevant regulations and standards <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of threading the machine and verify SPI to stitch the garment and present THREE situations that illustrate their discussion.</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>

	Take verbal feedback from each group.		
<p>LU2:</p> <p>Perform sewing operation with single needle lock stitch machine for production</p>	<p>Invite an experienced stitching operator from industry to deliver a presentation to trainees about using single needle lock stitching machine for stitching 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"> Operational procedure for single needle lock stitching machine. sequencing the operations performed correctly the importance of using the correct tools and equipment Measuring stitched parts of garment accurately Importance of machine speed according to the nature of fabric quality. Types of possible stitching defects during operations and their possible remedies. Quality requirements following stitching the garment. Types of stitches and Seams in relation to quality of the fabric. working independently compliance with relevant regulations and standards <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit garment industries</p> <p>Stitching room</p>	<p>Learner guide</p> <p>Videos for related knowledge on multimedia</p> <p>Handouts</p>
<p>LU3:</p> <p>Clean workstation</p>	<p>Trainees need to practice their skills in independently for cleaning the 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 workstation, Stitching and clean workstation. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.</p>	<p>Workshop.</p> <p>Classroom</p>	<p>Learner Guide</p> <p>Learner self-assessment forms</p>
Module 3: Operate double needle lock stitching machine			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media

<p>LU1. Prepare machine for sewing</p>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing double needle lock stitching machine. Include examples of:</p> <ul style="list-style-type: none"> • Importance of safety precautions according to job requirement. • The benefits of preparing workstation for working on double needle lock stitching machine. • Advantages of cleaning the machine prior to start and checking of oil level and its importance. • Ensure that all parts of machine are in working condition for stitching. • Arrangement of materials required for sewing operations. • Checking the SPI (Stitches per Inch) is according to required parameters on rough fabric before start of the production. • Types of bobbins and their usages. • Selecting the right sewing needle and sewing thread for operations of sewing. • Types of needles used for different sewing operations. • Handling techniques for tools and equipments. • Checking the condition of machine for sewing. • Problems with sewing the material. • working independently • compliance with relevant regulations and standards <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of threading the machine and verify SPI to stitch the garment and present THREE situations that illustrate their discussion.</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>
<p>LU2.</p>	<p>Invite an experienced stitching operator from industry to deliver a presentation to trainees about using double needle</p>	<p>Class Room</p>	<p>Learner guide</p>

<p>Perform sewing operation by double needle lock stitch machine for production</p>	<p>lock stitching machine for stitching 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"> • Operational procedure for double needle lock stitching machine. • sequencing the operations performed correctly • the importance of using the correct tools and equipment • Measuring stitched parts of garment accurately • Importance of machine speed according to the nature of fabric quality. • Types of possible stitching defects during operations and their possible remedies. • Quality requirements following stitching the garment. • Types of stitches and Seams in relation to quality of the fabric. • working independently • compliance with relevant regulations and standards <p>After the presentation, invite trainees to pose questions to the invited operator that will clarify their understanding.</p>	<p>Workshop. Visit garment industries Stitching room</p>	<p>Videos for related knowledge on multimedia Handouts</p>
<p>LU3. Clean workstation</p>	<p>Trainees need to practice their skills in independently for cleaning the 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 workstation, Stitching and clean workstation. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.</p>	<p>Workshop. Classroom</p>	<p>Learner Guide Learner self-assessment forms</p>

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Module 4: Operate over lock stitching machine

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<p>LU1. Prepare machine for sewing</p>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing over lock stitching machine. Include examples of:</p> <ul style="list-style-type: none"> • Importance of safety precautions according to job requirement. • The benefits of preparing workstation for working on over lock stitching machine. • Advantages of cleaning the machine prior to start and checking of oil level and its importance. • Ensure that all parts of machine are in working condition for stitching. • Arrangement of materials required for sewing operations. • Checking the SPI (Stitches per Inch) is according to required parameters on rough fabric before start of the production. • Types of bobbins and their usages. • Selecting the right sewing needle and sewing thread for operations of sewing. • Types of needles used for different sewing operations. • Handling techniques for tools and equipments. • Checking the condition of machine for sewing. • Problems with sewing the material. • working independently • compliance with relevant regulations and standards <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of</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 4: Operate over lock stitching machine			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>threading the machine and verify SPI to stitch the garment and present THREE situations that illustrate their discussion.</p> <p>Take verbal feedback from each group.</p>		
<p>LU2.</p> <p>Perform sewing operation by using over lock stitching</p>	<p>Deliveries an illustrated presentation on sewing operations requirements for the over lock stitching section. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Operational procedure for over lock stitching machine. • sequencing the operations performed correctly • Machine speed and its effects on production and quality. • the importance of using the correct tools and equipment • Measuring stitched parts of garment accurately • Importance of machine speed according to the nature of fabric quality. • Types of possible stitching defects during operations and their possible remedies. • Quality requirements following stitching the garment. • Types of stitches and Seams in relation to quality of the fabric. • working independently • compliance with relevant regulations and standards <p>Ask learners to work in small groups. Each small group should consider THREE of the above issues and illustrate the importance of each issue with specific examples from a stitching unit situation.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit garment industries</p> <p>Stitching room</p>	<p>Learner guide</p> <p>Videos for related knowledge on multimedia</p> <p>Handouts</p>
<p>LU3.</p> <p>Clean workstation</p>	<p>Trainees need to practice their skills in independently for cleaning the machine after job completed in a realistic environment.</p>	<p>Workshop.</p> <p>Classroom</p>	<p>Learner Guide</p> <p>Learner self-assessment forms</p>

Module 4: Operate over lock stitching machine

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare workstation, Stitching and clean workstation. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.		

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Module 5: Operate flat lock chain stitching machine			
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
<p>LU1.</p> <p>Prepare machine for sewing</p>	<p>Begin this session with an illustrative presentation about the preparation of workstation for performing flat lock stitching machine. Include examples of:</p> <ul style="list-style-type: none"> • Importance of safety precautions according to job requirement. • The benefits of preparing workstation for working on flat lock stitching machine. • Advantages of cleaning the machine prior to start and checking of oil level and its importance. • Ensure that all parts of machine are in working condition for stitching. • Arrangement of materials required for sewing operations. • Checking the SPI (Stitches per Inch) is according to required parameters on rough fabric before start of the production. • Types of bobbins and their usages. • The importance of sewing guides and use of various Presser foot like high shank, low shank, slant shank and Snap-On. • Selecting the right sewing needle and sewing thread for operations of sewing. • Types of needles used for different sewing operations. • Handling techniques for tools and equipments. • Checking the condition of machine for sewing. • Difference between lopper thread and needle thread. • Problems with sewing the material. • working independently • compliance with relevant regulations and standards <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently preparation of threading the machine and verify SPI to stitch the garment and</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>

	<p>present THREE situations that illustrate their discussion.</p> <p>Take verbal feedback from each group.</p>		
<p>LU2. Perform sewing operation by using the flat lock chain stitching</p>	<p>Delivery an illustrated presentation on sewing operations requirements for the flat lock stitching section. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Operational procedure for flat lock stitching machine. • sequencing the operations performed correctly • Machine speed and its effects on production and quality. • the importance of using the correct tools and equipment • Measuring stitched parts of garment accurately • Importance of machine speed according to the nature of fabric quality. • Types of possible stitching defects during operations and their possible remedies. • Quality requirements following stitching the garment. • Types of stitches and Seams in relation to quality of the fabric. • working independently • compliance with relevant regulations and standards <p>Ask learners to work in small groups. Each small group should consider THREE of the above issues and illustrate the importance of each issue with specific examples from a stitching unit situation.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit garment industries</p> <p>Stitching room</p>	<p>Learner guide</p> <p>Videos for related knowledge on multimedia</p> <p>Handouts</p>
<p>LU3. Clean workstation</p>	<p>Trainees need to practice their skills in independently for cleaning the 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 workstation, Stitching and clean workstation. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.</p>	<p>Workshop.</p> <p>Classroom</p>	<p>Learner Guide</p> <p>Learner self-assessment forms</p>

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Module 6: Perform product finishing and packaging

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU1.Perform cropping	<p>Lead a discussion about the importance of cropping and its effect on finishing quality of the garment / product. Ensure the discussion focuses on the following points:</p> <ul style="list-style-type: none"> • Understanding the relationship between cropping and quality. • Methods and techniques of cropping. • Types of cropping and their advantages. • Working principle of loose thread sucking thread machine, their types and advantages with relationship with quality. • Types of tweaking the garment. <p>Following the discussion, arrange the trainees in small groups. Provide each group with a role play situation about problems of cropping, for example problems with equipment, including equipment (thread sucking machine) not working. Each group should role play their situation to find an acceptable solution to the problem and practice for the cropping with different methods.</p> <p>Take feedback after the role plays and, as a group, consider the solutions suggested for each problem.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit finishing department of garment industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p> <p>Illustrations from catalogues or the internet of equipment used for cropping</p>
LU2. Perform pressing	<p>Deliver an illustrative presentation on the use of pressing equipment and multi-stage methods independently to press and finishing the garment / product according OH&S practices. Ensure that the presentation addresses the following points:</p> <ul style="list-style-type: none"> • Handling techniques of press machine according to different types of fabrics. T • Importance of following safety precautions during pressing the product. • Types of press with their advantages and disadvantages. 	<p>Class Room</p> <p>Workshop.</p> <p>Visit finishing department of garment industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p> <p>Illustrations from catalogues or the internet of equipment</p>

Module 6: Perform product finishing and packaging

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<ul style="list-style-type: none"> • sequencing the appropriate multi-stage pressing methods correctly • the importance of using the correct temperature or steam. • Types of boilers used for press machine. • quality requirements for pressing the product. • working independently • compliance with relevant regulations and standards <p>Ask the learner group to work in pairs to discuss the key points of using equipment and multi-stage methods independently to press and finish the garment / product.</p> <p>Following the pairs discussion, link two pairs together and ask each pair to share their findings</p>		used for pressing
LU3.Perform checking	<p>Deliver an illustrative presentation on the use of methods of checking the garment independently to ensure quality parameters. Ensure that the presentation addresses the following points:</p> <ul style="list-style-type: none"> • the effect and importance of different and multi-stage inspection processes on different products • Types of defects and their possible remedies. • Calculating procedure for DHU (Defects per Hundred) system. • Quality requirements for packing the garment. • Ensuring the product measurement and weight according to the requirements. • Trims and accessories are paced properly before packing the product. • working independently • compliance with relevant regulations and standards <p>Ask the learner group to work in pairs to discuss the key points of using inspection methods independently to before packing the</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit finishing department of garment industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

Module 6: Perform product finishing and packaging

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<p>garment. Following the pairs discussion, link two pairs together and ask each pair to discuss defects and their possible remedies and share their findings.</p>		
LU4. Perform packing	<p>Begin this session with an illustrative presentation about the preparation of packing the garments / products. Include examples of:</p> <ul style="list-style-type: none"> • types of packing with their advantages. • Advantages of cleaning the workstation for packing prior to start. • Ensure that all parts of accessories required for packing in line with quality standards. • Handling techniques for packing the garments. . • Importance of separating rejection form A-grade goods and segregate/collect as per policy. • Elaborate folding process and its techniques. • working independently • compliance with relevant regulations and standards <p>Arrange learners into small groups. Ask each group to discuss the importance of being able to independently pack the garment with all quality parameters and present THREE situations that illustrate their discussion.</p> <p>Take verbal feedback from each group.</p>	<p>Class Room</p> <p>Workshop.</p> <p>Visit finishing department of garment industry</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>
LU5. Manage stock	<p>Deliver an illustrative presentation on the use of methods of checking the garment independently to ensure quality parameters. Ensure that the presentation addresses the following points:</p> <ul style="list-style-type: none"> • the effect and importance of different and multi-stage stock management processes on different products with different buyers. 	<p>Class Room</p> <p>Workshop.</p> <p>Visit warehouse of</p>	<p>Learner guide</p> <p>Handouts</p> <p>Presentation</p> <p>Videos</p>

Module 6: Perform product finishing and packaging

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
	<ul style="list-style-type: none">• Importance of carton stacking.• Benefits of marking the cartoon in proper company's standard.• Quality requirements for stocking the garment / product cartons for shipment.• working independently• compliance with relevant regulations and standards <p>Ask the learner group to work in pairs to discuss the key points of using stocking methods independently to before the shipment.</p> <p>Following the pairs discussion, link two pairs together and ask each pair to discuss marking, cartooning and stocking the garment lots before shipment and their standards in-line with quality.</p>	garment industry	

