



Unit Standard 4495 V5

Trainee:

Demonstrate knowledge of the cam actions of weft-knitting latch needle machines


Assessor:

Level 3, 7 Credits, Open Entry

<p>Unit Requirements</p>	<p>To be credited with this unit standard you must be able to;</p> <ul style="list-style-type: none"> ➤ identify and describe the critical positions in the knitting cycle of the latch needles; ➤ identify and describe the alterations made to the camming for tucking and miss-knitting on the needles of one or both beds; ➤ identify and describe the effects of knockover timing by alteration; to the sinker or rib needle knockover; ➤ and identify and describe the means of alteration of fabric quality.
<p>Special note:</p>	<p>This unit standard applies to persons servicing any of the following categories of knitting machine:</p> <ul style="list-style-type: none"> half-hose; full-length hosiery; circular piecegoods; flat bed; circular garment-length. <p>This unit standard can apply to persons working on any mix of the following:</p> <ul style="list-style-type: none"> machines with a single cylinder; machines with superimposed cylinders (double cylinder or links/links machines); rib machines of all types; interlock machines; flat bed machines, both rib and purl. <p>This unit standard can also apply to machines built to knit by means of compound needles.</p> <p>Technical aspects that are required to be covered in demonstrating competence in this unit standard include:</p> <ul style="list-style-type: none"> the knitting cycle; the principal cams controlling the knitting cycle; alterations to the cams to produce miss-knitting, and tucking; knockover timing; delayed knockover; the means of adjusting knitting quality; the correct positionings of yarns in the feeders. <p>In respect of knockover timing, this will relate to needle and sinker timing on single cylinder machines; delayed knockover will relate to needle timing in those rib, interlock, and double cylinder machines where the means is provided to alter the knockover timing of the needles.</p>

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<p>Special note: (cont.)</p>	<p>The industry knows the various cams associated with latch-needle knitting by a variety of names. In respect of this unit standard, the following terms are used:</p> <p>clearing cam – that cam which displaces needles to clearing height;</p> <p>stitch cam – that cam which displaces cleared needles to the knockover position;</p> <p>tuck cam – a modified clearing cam that raises needles part-way to clearing height such that the old loop remains on the opened latch when a new loop is taken – technically known as tucking in the hook;</p> <p>miss-knit cam – a modified clearing cam that causes no displacement of the needles at the point where clearing would take place so that the needles neither clear their old loop nor take a new loop into the hook.</p> <p>The ways in which the clearing cam is modified into a tuck cam or a miss-knitting cam will vary from machine-type to machine-type.</p> <p>Similarly, some machines and their fabric are known by alternative names. In this unit standard, a rib machine is a machine in which the needle beds are at 90° to each other, its needles are in rib gating, and its production is rib fabric (of some form or another).</p>
<p>Notes to Trainee</p>	<p>This assessment document is not a training programme. The training programme for the skills and knowledge required for this unit will be provided by your employer as part of your on-job training, or by programs from training providers. This document is a guide for you, your trainer, and your assessor for the assessment once you have learned and practised the skills involved.</p> <p>The time you will need to spend on training and practice to reach the standard which demonstrates that you are competent in this area will of course depend on other tasks that you may also have which are not part of this unit standard.</p> <div style="display: flex; align-items: center;">  <div style="display: flex; justify-content: space-between; width: 100%;"> (Trainee can answer verbally or in writing.) (Trainee to write or assessor to record) </div> </div>
<p>Assessment</p>	<p>Assessment for many of the tasks will be to workroom standards and workplace procedures. You will need to discuss what these standards are with your trainer and/or assessor during your training period so that you are aware of what is required. Where these standards and work instructions are written down, you should collect copies so that you have something to refer to. Your assessor will also refer to these when you are being assessed.</p> <p>In some cases for workplace skills, your Assessor may use someone with specialised knowledge of the process or machine to confirm your skills. This person is called a Verifier.</p> <p>Some assessments require evidence that you demonstrate competence on an ongoing basis. Your assessor may also use a Verifier to confirm that this is the case.</p> <p>You do not need to be assessed for all of the Unit Standard at one time. Assessment can take place as you develop the knowledge and skills. Your assessor will keep a record of progress, and once you have been assessed as competent for all the tasks, you will have completed this unit standard.</p> <p>If any parts of the standard are not met, further evidence of your competence in that task/s will be sought. This is indicated on the Assessment Evidence Guide by the abbreviation FER (Further Evidence Required).</p>

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Assessor must discuss with Trainee prior to assessment	
Before the assessment	<p>If there are any parts of the assessment that you are not clear about, you must ask the assessor before you start the Assessment. You need to agree to the amount and type of evidence to be collected.</p> <p>You must tell the assessor if you have any special needs e.g. hearing or seeing difficulties before doing the assessment tasks. The assessor/verifier will take these special needs into consideration during the assessment.</p>
During the Assessment	<p>The assessment process will consist of questions to assess your knowledge, and observation of you carrying out specific tasks. You would normally answer questions verbally and your assessor will note answers. In some cases you may be able to demonstrate knowledge as a written project. In this case simple diagrams could be used. You should discuss the best way with your assessor.</p> <p>The workplace is often a noisy environment. Your assessor will try and find a quiet place to ask questions so that you are able answer easily. However, in some cases you may feel better able to answer questions at a machine or worksite. You should discuss this with your assessor before the assessment.</p>
After the Assessment	<p>The assessor will tell you if you are 'competent' or 'not yet competent'. Not yet competent means that you have not done the tasks, or part of the tasks to the standard that is needed, and you will have to give the assessor more information. If you need to give the assessor more information then you will be clearly told of what it is that you need to do.</p> <p>You have a right to appeal your assessor's decision if you are not happy with the assessor's decision. Your assessor will explain the appeal process.</p> <p>At the end of the assessment you will be asked to sign the assessment to show that you were happy with how the assessment went. Do not sign this section if you do not agree that the assessment was fair.</p> <p>You and your assessor must each sign and keep a copy of the Candidate Check List and the Assessment Record. These are at the back of this Assessment Document.</p> <p>Results of the assessment will be kept by your assessor, passed to your Employer, and sent to the Apparel and Textile ITO who will register competency on the New Zealand Qualifications Framework</p>
Special Needs Identified (enter any special needs here)	
	<p>Assessment Process above has been discussed and Trainee understands the process.</p> <p>Trainee _____ (sign)</p> <p>Assessor _____ (sign)</p>

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Note to Trainee and Assessor:

Competence must be shown on one or more of the machines listed in the special notes.

Element 1. Identify and describe the critical positions in the knitting cycle of the latch needles

p c 1.1	The principal cams are identified and described in terms of their function		
Cam (attach another page if necessary)	Identify and describe what this cam does in the knitting cycle	Competent(C) Further Evidence Required (FER) & Sign/Date	
p c 1.2	The critical positions in the knitting cycle are identified and described in terms of the knitting action of the needles		
Position	Identify and describe the position in relation to the knitting action of the needles	C /FER & Sign/Date	
clearing			
feeding			
knockover			

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Element 1. Identify and describe the critical positions in the knitting cycle of the latch needles (cont.)

p c 1.3	<p>The feeding of yarns is identified and described in terms of their placement into the path of the needles for correct knitting.</p> <p>Describe the way in which the yarn is placed into the needle path: (add an extra sheet if necessary)</p>
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Assessor Notes:

Element 2. Identify and describe the alterations made to the camming for tucking and miss-knitting on the needles of one or both beds.

		C /FER & Sign/Date
p c 2.1	<p>The displacement distance of the tuck cams is identified and described in relation to the clearing cam</p> <p>Description: (add an extra sheet if necessary)</p>	
p c 2.2	<p>The displacement distance of the miss-knitting cams is identified and described in relation to the clearing cam</p> <p>Description: (add an extra sheet if necessary)</p>	
p c 2.3	<p>Tucking on some or all of one set of needles is identified and described in terms of the effect</p> <p>Description: (add an extra sheet if necessary)</p>	

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Element 2. Identify and describe the alterations made to the camming for tucking and miss-knitting on the needles of one or both beds. (cont.)

		C /FER & Sign/Date
p c 2.4	<p>Miss-knitting on some or all of one set of needles is identified and described in terms of the effect</p> <p>Description: (add an extra sheet if necessary)</p>	
<p>Assessor Notes:</p>		

Element 3. Identify and describe the effects of knockover timing by alteration to the sinker or rib needle knockover.

		C /FER & Sign/Date
p c 3.1	<p>Synchronised timing is identified and described in terms of needle knockover</p> <p>Describe either the synchronised timing of sinkers in single cylinder machines, or synchronised timing of rib needle knockover on rib and interlock machines</p> <p>Description: (add an extra sheet if necessary)</p>	

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Element 3. Identify and describe the effects of knockover timing by alteration to the sinker or rib needle knockover. (cont.)

		C /FER & Sign/Date
p c 3.2	<p>Delayed knockover timing is identified and described in terms of the effects Describe the effects of either delayed timing of sinkers in single cylinder machines, or delayed timing of rib needle knockover on rib and interlock machines</p> <p>Description: (add an extra sheet if necessary)</p>	
<p>Assessor Notes:</p>		

Element 4. Identify and describe the means of alteration of fabric quality.

		C /FER & Sign/Date
p c 4.1	<p>The method or methods are described by means of which stitch quality is adjusted Description: (add an extra sheet if necessary)</p>	
p c 4.2	<p>Stitch cam adjustment on the quality of a fabric are described in terms of the effects Description: (add an extra sheet if necessary)</p>	

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Element 4. Identify and describe the means of alteration of fabric quality. (cont.)

		C /FER & Sign/Date
p c 4.3	<p>Delayed knockover timing or sinker timing on the quality of a fabric relative to synchronised knockover timing is described in terms of the effect.</p> <p>Describe either delayed timing of sinkers in single cylinder machines, or delayed timing of rib needle knockover on rib and interlock machines. (note – delayed knockover timing on rib and interlock machines is restricted to the production of 1 x 1 rib and 1 x 1 interlock respectively)</p> <p>Description: (add an extra sheet if necessary)</p>	
Assessor Notes:		

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Special Note	
The unit requires that the following technical aspects have been covered in demonstrating competence in this unit standard	Covered
the knitting cycle	
the principal cams controlling the knitting cycle	
alterations to the cams to produce miss-knitting, and tucking	
knockover timing	
delayed knockover	
the means of adjusting knitting quality	
the correct positionings of yarns in the feeders	
Assessor Notes:	

Assessment Decisions: Competent / Not Competent (circle one)

Assessor : _____ **Date:** _____

Action Plan for Further Evidence (if required)

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CANDIDATE’S CHECKLIST (candidate to retain).

PRE-ASSESSMENT. (When I meet the assessor:)

		Tick
1	I agree to the unit standards/elements to be used for the assessment.	
2	The purpose and process of the assessment is explained to me.	
3	I agree to the amount and type of evidence to be collected.	
4	I agree to the date, time and location for the assessment.	
5	What happens to the assessment result and the appeals system is explained to me	
6	The assessor agrees to keep my Supervisor/Line Manager informed.	
7	The following resources will be available for the assessment::	

Candidate Signature: _____

Assessor Signature: _____

AFTER ASSESSMENT

1	The assessment was carried out as programmed above.	
2	I was informed of the assessment result.	
3	I was given sufficient feedback after the assessment.	
4	I signed the assessment record.	
5	If assessed competent the assessor signed the assessment record for forwarding to the ITO with my fee/s.	
*	If assessed not yet competent the elements to be reassessed were recorded in the Assessor’s Register.	

Candidate Signature: _____

Assessor Signature: _____

Assessor to fill in details below when candidates is assessed competent:

Candidate’s name:

Competent in unit standard number: 4495 V5

Assessors signature : _____ Date: _____

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ASSESSMENT RECORD SHEET

Trainee Details (Trainee to complete)

Name _____ Date of birth: _____

Home address: _____

Employer: _____

Signed: _____ Date: _____

Assessor Details (Assessor to fill out)

As an ATITO workplace assessor I verify that I have assessed the person above as competent in the unit standard(s) listed below.

Signed: _____ Date: ____/____/____

WA Number:

Full Name: _____

It is recommended that Workplace Assessors contact the ATITO before embarking on assessment to ensure that they have the latest information.

Unit Id	Unit Standard Title	Level	Credit	Signed (Assessor)
4495 V5	Demonstrate knowledge of the cam actions of weft-knitting latch needle machines	3	7	

TOTAL CREDITS

Payment for credit fees enclosed (\$1.55 per credit):

YES NO – ATITO will invoice employer - please attach company order number if necessary.

Assessor: Ensure this form is completed in full. Make 2 extra copies. Give one to the trainee, keep one for your files, and send the original to: **Apparel & Textile ITO, PO Box 13-210, Christchurch**