

Demonstrate knowledge of the knitting and fashioning cycles of full-fashioned machines

Level 3

Credits 7

Purpose This unit standard is for mechanics of full-fashioned industrial knitting machines.

People credited with this unit standard are able to: identify and describe the relationships of elements to needles at the critical positions of the knitting cycle and the fashioning cycle; identify the function of the selvedge screws; and identify and describe the means of regulating stitch size.

Subfield Industrial Machine Knitting

Domain Knitting Machine Servicing and Maintenance

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Competenz

Accreditation and Moderation Action Plan (AMAP) reference 0030

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 This unit standard applies to the full-fashioned sector of the knitting industry and to full-fashioned machines.

- 2 Technical aspects that are required to be covered in demonstrating competence in this unit standard include:
- a the knitting cycle of the full-fashioned machine, consisting of the draw and the knitting action;
 - b the fashioning cycle;
 - c the critical stages in each cycle, and the positions of all of the elements relative to the needles at each stage;
 - d the selvedge screws and their control of fashioning and knitting width;
 - e control of fabric quality;
 - f the means of adjustment of knitting quality;
 - i collectively, through the quality motion;
 - ii through the slur cam at each individual head.

Elements and performance criteria

Element 1

Identify and describe the relationships of elements to needles at the critical positions of the knitting cycle and the fashioning cycle.

Performance criteria

- 1.1 The needles and all elements in the knitting head are identified and described in terms of their function.
- Range needles, sinkers, presser, knockovers, yarn carriers, carrier tubes, slur bar, slur cam, striking jacks, falling bar, fashioning points.
- 1.2 The elements in the knitting head and the needles are identified and described in terms of their relationships at each critical position in the knitting cycle.
- Range draw, first landing, pressing, second landing, knockover, holding down, sinker action, threading-up.
- 1.3 The fashioning boxes and elements and the needles are identified and described in terms of their relationships at each critical position in the fashioning cycle.
- Range standing, first boxing, take-off, transfer, second boxing, delivery, threading-up.
- 1.4 The movement of the main camshaft is identified and described in terms of the transitions from knitting to fashioning and back.
- Range full-fashioned machines with draw motion.
- 1.5 The disengagement of the draw during fashioning is identified and described in terms of its function.
- Range full-fashioned machines with draw motion.

Element 2

Identify the function of the selvedge screws.

Performance criteria

- 2.1 The movement of the selvedge screws during the transfer action in the fashioning cycle is identified and described in terms of function.
- 2.2 The control of knitting width and carrier traverse during the knitting cycle is identified and described in terms of function.

Element 3

Identify and describe the means of regulating stitch size.

Performance criteria

- 3.1 The quality motion is identified and its collective effect is described in terms of its control of quality at all sections of the machine.
- 3.2 The slur cams are identified and their effect is described in terms of the control of quality of their adjustment at any section of the machine.
- 3.3 The function of the falling bar is described in relation to the movement of the sinkers during the draw.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz info@competenz.org.nz if you wish to suggest changes to the content of this unit standard.