

## Operate warping machinery for warp knitting

**Level** 2

**Credits** 16

**Purpose** This unit standard is for operators of warping machinery for warp knitting.

People credited with this unit standard are able to: creel yarns; set up the warping head; run the warping machine to produce beams of specified lengths; identify all yarns in use by technical distinctions and other identifiers; and identify and sort wastes.

**Subfield** Industrial Machine Knitting

**Domain** Warp Preparation - Warp Knitting

**Status** Registered

**Status date** 19 March 2010

**Date version published** 19 March 2010

**Planned review date** 31 December 2015

**Entry information** Open.

**Accreditation** Evaluation of documentation 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>.

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### Special notes

- 1 This unit standard applies to the direct warping of sectional and pattern beams, and indirect mill warping. It applies to warp preparation for both tricot and Raschel machines.
- 2 Performance of the elements must comply with the requirements of the Health and Safety in Employment Act 1992.
- 3 Technical aspects that are required to be covered in demonstrating competence in this unit standard include the following:
  - a application of occupational safety and health procedures including first aid equipment, use of material handling equipment, and safe lifting practices;
  - b yarn-joining to company standards;

- c creeling yarns and threading yarns through correct yarn-paths and eyelets and tension devices;
- d setting reeds and sleys to thread-distribution required on knitting machines;
- e even distribution and build-up of yarns on beam to give beams where all yarns will run in the knitting machine at identical tension and without being trapped at the beam flanges, or by collapse of yarns in the warp;
- f correct operation of warp-scanning and other equipment, if fitted;
- g operating warping equipment;
- h completion of warps by gumming-out or other methods to present the warps in the most favourable condition ready for threading into warp-knitting machines;
- i recognition of yarns in use by labelled descriptions and identifiers, which may include:
  - i Decitex or yarn-count descriptions;
  - ii Batch or merge numbers;
  - iii Fibre content;
  - iv Colour description;
  - v Direction of twist in single-end false-twist yarns;
  - vi Identification of yarns by colour-coding on winding packages.

#### 4 Definitions

*Workplace procedures* refer to the verbal or documented procedures for performing activities including health and safety, operational, environmental and quality management requirements. They refer to manuals, manufacturers' specifications, codes of practice, or policy statements.

*Work instructions* refer to the written or verbal instructions which relate to the production of a specific batch of textile.

## Elements and performance criteria

### Element 1

Creel yarns.

#### Performance criteria

- 1.1 Yarn packages are set up on the creel in accordance with workplace procedures.
- 1.2 Ends are joined in accordance with workplace procedures.
- 1.3 Yarns are threaded from creel to warper through tension devices, eyelets, and condensers in accordance with workplace procedures.
- 1.4 Tensions are applied uniformly to all yarns in the warp in accordance with workplace procedures.

## Element 2

Set up the warping head.

### Performance criteria

- 2.1 Reeds or thread guides are set to the knitting machine threading set-out and gauge for the warp in accordance with workplace procedures.
- 2.2 Detection and other devices are set in accordance with workplace procedures.
- 2.3 Sections or beams are set into the headstock, secured, and prepared in accordance with workplace procedures.
- 2.4 Material handling equipment is operated in accordance with workplace procedures.

## Element 3

Run the warping machine to produce beams of specified lengths.

### Performance criteria

- 3.1 The warping machine is operated in accordance with workplace procedures to produce beams of lengths specified in work instructions.
- 3.2 Beams are produced through reed and traverse-mechanism adjustments during warp build-up, free of yarn collars and/or winding collapses in accordance with workplace procedures.
- 3.3 Beams of exact levelness throughout are produced by means of critical setting and adjustment of yarn tensions in accordance with workplace procedures.
- 3.4 Broken ends are reset in accordance with workplace procedures.
- 3.5 Completed beams are prepared ready for threading into warp-knitting machines in accordance with workplace procedures.
- 3.6 Completed beams are identified, doffed, and stored in accordance with workplace procedures or as directed by the supervisor.
- 3.7 Yarn paths, eyelets, tension devices, and reeds are clean and free of contamination and build-up of residues from the yarns in accordance with workplace procedures.
- 3.8 The warping environment is clean and free of contaminants in accordance with workplace procedures.
- 3.9 The warper is lubricated as directed and in accordance with workplace procedures.

## Element 4

Identify all yarns in use by technical distinctions and other identifiers.

### Performance criteria

- 4.1 Yarns in use are identified by labelled descriptions of linear density and colour codings in accordance with workplace procedures.
- 4.2 Yarns in use are distinguished by fibre-type according to labelled descriptions in accordance with workplace procedures.
- 4.3 Yarns are distinguished by manufacturer's batch number or merge number in accordance with workplace procedures.
- 4.4 Yarns returned to store are positively identified by technical description for ready re-use in accordance with workplace procedures.

## Element 5

Identify and sort wastes.

### Performance criteria

- 5.1 Yarn wastes are identified by fibre type and sorted in accordance with workplace procedures.

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### 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.

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### Comments on this unit standard

Please contact [Competenz info@competenz.org.nz](mailto:Competenz info@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.