



Australian Government

Department of Education, Employment and Workplace Relations

LMTTX3022A Set up and operate weaving looms for production

Revision Number: 1

LMTTX3022A Set up and operate weaving looms for production

Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required to set up and operate weaving looms in a textile enterprise including set up for production changes and the conduct of sample runs.

Application of the Unit

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This unit applies to the setting up of looms for production changes in an enterprise. Discretion and judgement may be required, for both self and others, in planning and selecting processes, procedures or outcomes.

Work may be conducted in a variety of environments, such as operational workplace activities, restricted space, hazardous, controlled or exposed conditions.

The extent of loom set up will be dependent on the product, equipment, production requirements and workplace arrangements in each enterprise.

Work may be conducted in small to large scale enterprises and may involve individual and team activities.

The application of this unit is according to OHS practices of the enterprise and workplace practices, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling

This unit requires the application of skills associated with planning and organising of resources and machinery for the required work, as well as applying skills and knowledge of machines and equipment to ensure production outcomes are met. This unit also requires an ability to communicate in writing and verbally with others as well as team work skills to work with loom operators.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Conduct sample run on new product and organise sample quality testing	1.1 Loom is set up and operated in accordance with manufacturer and workplace instructions to produce a specified sample of a new design or product 1.2 Sample is produced and tested, or the test is organised, in accordance with workplace procedures to ensure required standards of quality are met 1.3 Test results are interpreted to determine adjustment requirements
2 Set up weaving loom	2.1 Product specifications are interpreted correctly in relation to loom setting requirements 2.2 Loom is set in accordance with product specifications, loom manufacturer instructions and workplace requirements 2.3 Loom is operated in accordance with manufacturer and workplace instructions to produce a specified sample 2.4 Loom is set to run at optimum quality and efficiency levels 2.5 Electronic process monitoring is set safely and to the correct functions if applicable
3 Supervise loom operation	3.1 Loom started and stopped safely without creating faults 3.2 Loom is set to produce required quantity and quality of product 3.3 Weaving operators are instructed of any special operating requirements 3.4 Assistance is provided to loom operators as required
4 Readjust machine settings to meet requirements	4.1 Adjustment changes are assessed in accordance with product and loom specifications 4.2 Loom specifications are changed and recorded to meet product requirements 4.3 Appropriate production personnel are informed of the availability of the new loom set-up 4.4 Loom is monitored during production process
5 Maintain records	5.1 Records are maintained and reports prepared, where necessary

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- spinning methods
- yarn twist and application
- fibre types and their method of production
- fibre parameters
- yarn counts, ie Tex
- warping methods
- yarn conditioning
- fabric types
- design types
- Sett construction
- warp tying methods
- loom components
- weaving process and the various types of weaving
- factors affecting loom performance, ie yarn strength, sizing, ambient conditions
- setting up and adjustment requirements for the range of machines and equipment used in the enterprise
- machine manufacturer specifications
- safety and environmental aspects of relevant enterprise activities
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- set and operate machines
- operate primary mechanisms, eg shed forming, weft insertion, beat up, let off and take up
- test, analyse and prepare samples
- differentiate between constructions
- differentiate between types of weaves
- draw up a simple range of patterns
- read, interpret and follow information on work specifications, standard operating procedures and work instructions and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information

This describes the essential skills and knowledge and their level, required for this unit.

- carry our work according to OHS practices

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered	Demonstrates skills and knowledge to: • interpret production specifications accurately • set loom correctly • operate loom safely and correctly • perform sample runs • arrange or conduct testing of sample • make appropriate readjustments • apply workplace health and safety policies in production operations • maintain accurate records
Consistency in performance	Consistently applies skills and knowledge when: • organising work • completing tasks • identifying improvements • using workplace practices • using OHS practices • recording and reporting accidents and incidents • assessing operational readiness of equipment used and work processes • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions • completing work systematically with attention to detail without damage to goods and equipment
Resource implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Context for assessment	Assessment may occur on the job or in an appropriately simulated environment.
Interdependent Assessment	This unit may be assessed independently or in combination with other relevant units.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Looms may include	- weaving looms - any ancillary machine typically used in the weaving sector concerned for example loading and unloading equipment - microprocessor or computer controlled looms - both production and service equipment used in the enterprise - broadloom - narrowloom - all shuttle types - Jacquard looms
Product specifications may include may include	- quality name - pile height - beat-up - width - weaving construction (pattern)
Electronic process may include	- horseshoe wire - knock offs - photo cells - micro switches - fibre optics - missing end detectors (med)
OHS practices	OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may include: - manual handling techniques - standard operating procedures - personal protective equipment - safe materials handling - taking of rest breaks - ergonomic arrangement of workplaces - following marked walkways - safe storage of equipment

- housekeeping
- reporting accidents and incidents
- other OHS practices relevant to the job and enterprise

Unit Sector(s)

Sector Textile Production