



Australian Government

Department of Education, Employment and Workplace Relations

LMTTX2006B Operate a weaving loom

Revision Number: 1

LMTTX2006B Operate a weaving loom

Modification History

Not applicable.

Unit Descriptor

Unit descriptor The unit covers the skills and knowledge to prepare, operate and monitor a weaving loom.

Application of the Unit

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The unit applies to the preparation, operation, monitoring and adjusting of a weaving loom including Jacquard looms used in the production of a range of textile fabrics and materials.

Creeling and beaming skills are covered in *LMTTX2005B Perform creeling operations*

Work is conducted according to defined procedures.

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 for the safe and efficient use of weaving looms. This unit also requires the ability to check the quality of products, identify and communicate inconsistencies or other problems and complete workplace documentation. Self management skills are applied to ensure workplace and quality standards are achieved.

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 Assist in set-up and loading of weaving loom	1.1 Loom settings are checked against product requirements. 1.2 Yarns are identified, checked and tied into the loom according to manufacturer specifications. 1.3 Non-conforming materials are reported. 1.4 Area around loom is kept clean during setting and loading.
2 Operate and monitor weaving loom	2.1 Weaving loom is started and stopped according to manufacturer requirements and OHS practices. 2.2 Loom is monitored to ensure correct operation. 2.3 Waste is sorted. 2.4 Cleaning of area is completed to ensure work environment is maintained in a safe productive manner. 2.5 Minor product process and machine faults are identified and corrected where necessary to meet specified requirements, and are reported. 2.6 Major machine faults are reported.
3 Check product quality	3.1 Product is checked against quality standards. 3.2 Product is assessed for faults and non-conformances. 3.3 Product faults are rectified or reported.
4 Complete weaving process	4.1 Product is unloaded or removed according to manufacturer specifications. 4.2 Product is despatched to next process. 4.3 Cleaning of area is completed to ensure work environment is maintained in a safe and productive manner. 4.4 Production records and other documentation are accurately completed.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level

Demonstrates knowledge of:

- procedures and guidelines for safe operation of weaving machines
- basic principles of weaving technology and processes, including:
- different types of weaves and looms
- arrangement of mechanisms on looms
- drives of looms
- dynamics of the whole machine
- warp repair methods
- warp regulation and product take-up
- shedding devices
- thread tensioners and dynamics of thread movement and breakage
- beating-up devices
- types of picking,
- tension and weft length checking.
- knotting and creeling techniques
- warp tying methods
- typical fault conditions and related fault finding procedures
- types and styles of yarns used in woven products
- minor machine maintenance and repair techniques
- technical specifications manuals
- quality standards and practices
- OHS practices, including hazard identification and control measures
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- check loom safety equipment and report any faults
- recognise, rectify and report loom faults or problems
- clean loom as required
- use resources effectively and efficiently
- recognise fault conditions
- confirm compliance to operational specifications
- 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

REQUIRED SKILLS AND KNOWLEDGE

- meet specifications
- clarify and check task-related information
- carry out 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: • check machine settings to meet production requirements • monitor weaving machine according to defined procedures and methods • make minor adjustments • check product against quality standards • load and unload products according to workplace practices • complete records accurately and completely • apply OHS practices in work operations
Consistency in performance	Consistently applies skills and knowledge when: • organising work • completing tasks according to instructions • working systematically with attention to detail according to instructions • identifying improvements and avoiding damage • using workplace practices • using OHS practices • recording and reporting accidents and incidents • assessing operational readiness of equipment • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions
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.
Weaving loom may include	• beam or creel fed • broadlooms • narrowlooms • shuttle type looms • Jacquard weaving looms • sample weaving looms • air jet • rapier • projectile
Product requirements may include	• yarn combinations and patterns • tension • size • weight • selvedge • type of weave
Yarns may be	• wool • nylon • acrylic • polypropylene • polyester • cotton • blends
Ties may include	• splicing • weavers knot • double weavers knot
OHS practices	OHS practices include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may relate to: • manual handling techniques • standard operating procedures • personal protective equipment

- Faults may include
- safe materials handling
 - taking of rest breaks
 - ergonomic arrangement of workplaces
 - following marked walkways
 - safe storage of equipment
 - housekeeping
 - reporting accidents and incidents
 - environmental practices
 - holes
 - foreign matter
 - crossed ends
 - crossing spools
 - incorrect selvedge
 - loops in face, rough face
 - creasing
 - lines
 - marks
 - broken yarns
 - blocked creel tubes
 - false lifts
 - missing picks

Unit Sector(s)

Sector Textile Production