



Australian Government

Department of Education, Employment and Workplace Relations

LMTTX3020A Identify and correct weaving process faults

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required to identify and correct product and weaving loom faults.

Application of the Unit

Application of the Unit

This unit applies to identifying and correcting weaving process problems in a textile operating environment. Discretion and judgement may be required, for both self and others, in planning and selecting processes, procedures or outcomes. Repairs are undertaken in accordance with established workplace procedures and practices and may include requirements recommended by manufacturers.

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 problem solving to identify faults and problems of equipment used in textile production. This unit also requires the ability to communicate information on equipment operations and production requirements.

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 Gather relevant information	1.1 Pattern and production requirements are checked 1.2 Weaving operator is consulted on loom operation and on any operator identified faults 1.3 Loom operation and woven product is observed for faults
2 Recognise and correct weaving faults	2.1 Weft faults are identified 2.2 Warp faults are identified 2.3 Selvedge faults are identified 2.4 General faults including incorrect creeling and other set up faults are identified 2.5 Cause of fault is determined and action taken in accordance with OHS practices 2.6 Any changes needed to be made in loom operation by the weaving operator are explained
3 Maintain records	3.1 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:

- textile terms and definitions as they apply to weaving processes
- fibres, yarns, fabrics and other textiles
- weaving patterns and processes including yarn counts, sizing methods, yarn conditioning, fabric counts, design types, Sett construction, and warp tying methods
- types of textile weaving faults
- manufacturer's specifications for machine or equipment
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- operate a weaving loom
- distinguish yarn counts
- distinguish between types of weaves
- recognise textile faults
- read and follow a draft pattern
- draw ends in correctly
- 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
- 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: • identify and correct textile related weaving faults • apply problem solving techniques to resolve faults efficiently and effectively • apply workplace health and safety policies in work 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 should be assessed in conjunction with LMTTX3003B <i>Set up and operate weaving looms for production</i>

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

- any machine typically used in the weaving sector concerned
- microprocessor or computer controlled machines
- both production and facility equipment used in the enterprise

Weaving faults may include

- weft faults such as:
 - broken picks
 - missing picks
 - tight picks
- warp faults such as:
 - wrong draft
 - wrong dent
 - wrong reed
 - ends missing
 - tight ends
 - wrong yarn
 - wrong counts
 - breaking yarn ends
 - crossed ends and ends holding down
 - cords breaking
 - beam going slack and tight
 - ends jumping over sley
 - end smash
 - shuttle cord breaking
 - jute breaking or missing shuttle
 - jute looping on selvedge
 - jutes slipping over divider bars
 - gaps in selvedge
 - poor selvedge
 - pulling in on selvedge
 - dragging, lifting
 - knife marks
 - tooth off comb
 - wool on back

	• full outs • short rows • frames falling out • crossing spools • wrong spools • threading rip backs • chain out of horse shoe • broken horse shoe • rollers off chain • loops in face, rough face • carpet around roller
Causes of faults may include	• poor threading • dirty or oily marks • jute missing shuttle • shuttle cord cutting • jute cutting • narrow selvages • selvages looping • selvages wide • warp ends breaking out • smashing of warps • cloth working forward • short rows • dirty back and trapped yarn on surface • spools falling out of chain • spools coming short • wide shot or open weave
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