



Australian Government

Department of Education, Employment and Workplace Relations

LMTTN2011B Undertake fibre blending and feeding for nonwoven technical production processes

Release: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge to undertake fibre blending and feeding for nonwoven technical production processes.

Application of the Unit

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The unit applies to the preparation and blending of fibres for feeding into a carding machine. Fibres may be natural or synthetic and are used in a nonwoven textile production process.

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 OH&S 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 fibre blending processes and technology. This unit also requires the application of skills associated with problem solving to identify and test fibres and identify inconsistencies or other problems. Learning and self management skills are required to expand and apply knowledge of fibres and communication skills are used to interpret and complete workplace documentation.

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 Check and identify raw fibres	<p>1.1 Production specifications are checked to identify <i>fibres</i> required for carding operation.</p> <p>1.2 Raw fibres are identified for compliance to <i>fibre production specification</i>.</p> <p>1.3 Checks are carried out as necessary to determine compliance with production requirements.</p> <p>1.4 Non-conforming or defective fibre batches are reported.</p>
2 Blend fibres	<p>2.1 Fibres are selected and blended according to production specification.</p> <p>2.2 Additives are loaded where required.</p> <p>2.3 Fibres are correctly loaded into carding machine.</p> <p>2.4 Blending is conducted according to <i>OH&S practices</i>.</p> <p>2.5 Blending is monitored to ensure blending consistency and feed uniformity.</p> <p>2.6 <i>Waste</i> is sorted.</p>
3 Complete records	<p>3.1 Production records or other documentation are accurately completed.</p>

Required Skills and Knowledge

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

Demonstrates knowledge of:

- fibre types and basic characteristics
- blending and feeding processes
- technical specifications, manuals and operating instructions
- quality standards and procedures
- OH&S practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- check machine safety equipment and report any faults
- prepare fibre for carding
- load and unload materials according to machine and workplace practices
- start and stop machines according to specifications
- monitor machine operations, including machine production readings
- recognise, rectify and report machine faults or problems as required
- clean machines as required
- check machine maintenance records
- recognise fault conditions
- check and 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
- meet specifications
- clarify and check task-related information
- carry out work according to OH&S 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

Demonstrates skills and knowledge to:

- check machine settings to meet production requirements
- monitor and operate carding machine involving defined procedures and methods
- make minor adjustments
- check product samples against quality standards
- load and unload products according production requirements
- complete records accurately and completely
- apply OH&S 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
- • identifying improvements and avoiding damage
- • using workplace practices
- • using OH&S 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 OH&S 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.

All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.

- | | |
|--|--|
| Fibres include | <ul style="list-style-type: none">• natural and synthetic fibres |
| Fibre production specification may include | <ul style="list-style-type: none">• fibre types, including:<ul style="list-style-type: none">• rayon• nylon• polyester• polypropylene• cotton• wool• cellulose• glass• fibre characteristics, including:<ul style="list-style-type: none">• absorbency• abrasion resistance• modulus• web 'handle'• moisture absorption• chemical and temperature resistance• size (diameter)• fineness (decitex or denier)• fibre crimp |
| OH&S practices | <p>OH&S 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:</p> <ul style="list-style-type: none">• manual handling techniques• standard operating procedures• personal protective equipment• safe materials handling• taking of rest breaks• ergonomic arrangement of workplaces• following marked walkways |

- Waste may include
- safe storage of equipment
 - housekeeping
 - reporting accidents and incidents
 - environmental practices
 - processed burr
 - contaminants
 - processed sweepings
 - non-conforming fibre materials
 - machine waste, e.g. grease, oil

Unit Sector(s)

Sector Technical Textiles and Nonwovens