



**Australian Government**

# **MSTTN2011 Undertake fibre blending and feeding for non-woven technical production processes**

**Release: 1**

# MSTTN2011 Undertake fibre blending and feeding for non-woven technical production processes

## Modification History

Release 1. Supersedes and is equivalent to LMTTN2011B Undertake fibre blending and feeding for non-woven technical production processes

## Application

This unit of competency covers the skills and knowledge required to undertake fibre blending and feeding for non-woven technical production processes.

The unit of competency applies to the preparation and blending of natural or synthetic fibres for feeding into a carding machine. Fibres may be natural or synthetic and are used in a non-woven 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.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Pre-requisite Unit

Nil

## Competency Field

Technical textiles and non-wovens

## Unit Sector

Not applicable

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

### 1 Determine job requirements

- 1.1 Follow standard operating procedures (SOPs)
- 1.2 Comply with work health and safety (WHS) requirements at all times
- 1.3 Use appropriate personal protective equipment (PPE) in

|   |                                      |     |                                                                                                             |
|---|--------------------------------------|-----|-------------------------------------------------------------------------------------------------------------|
|   |                                      |     | accordance with SOPs                                                                                        |
|   |                                      | 1.4 | Identify job requirements from specifications, drawings, job sheets or work instructions                    |
| 2 | <b>Check and identify raw fibres</b> | 2.1 | Check production specifications to identify fibres required for carding operation                           |
|   |                                      | 2.2 | Check raw fibres comply with fibre production specification                                                 |
|   |                                      | 2.3 | Carry out checks, as necessary, to determine compliance with production requirements                        |
|   |                                      | 2.4 | Report non-conforming or defective fibre batches                                                            |
| 3 | <b>Blend fibres</b>                  | 3.1 | Select and blend fibres according to production specification                                               |
|   |                                      | 3.2 | Load additives, where required                                                                              |
|   |                                      | 3.3 | Load fibres into carding machine correctly                                                                  |
|   |                                      | 3.4 | Conduct and monitor blending to ensure blending consistency and feed uniformity, according to WHS practices |
|   |                                      | 3.5 | Sort waste according to workplace procedures                                                                |
| 4 | <b>Complete records</b>              | 4.1 | Complete production records or other documentation                                                          |

## Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

**Workplace procedures include one or more of the following:**

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- 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
- WHS practices

**Australian Standards include:**

- the relevant industry or Australian Standards that are current at the time this unit is being undertaken

**Fibre production specifications include one or more of the following:**

- fibre types:
  - rayon
  - nylon
  - polyester
  - polypropylene
  - cotton
  - wool
  - cellulose
  - glass
- fibre characteristics:
  - absorbency
  - abrasion resistance
  - modulus
  - web 'handle'
  - moisture absorption
  - chemical and temperature resistance
  - size (diameter)
  - fineness (decitex or denier)
  - fibre crimp

**Waste includes one or**

- processed burr

**more of the following:**

- contaminants
- processed sweepings
- non-conforming fibre materials
- machine waste (e.g. grease and oil)

**WHS practices**

WHS practices include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and include one or more of the following:

- manual handling techniques
- SOPs
- PPE
- 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

## Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTTN2011B Undertake fibre blending and feeding for non-woven technical production processes

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

# **Assessment Requirements for MSTTN2011 Undertake fibre blending and feeding for non-woven technical production processes**

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## **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include:

- reading and following work instructions, standard operating procedures (SOPs), safe work practices and other reference material
- applying relevant standards
- checking production specifications to identify required fibres
- selecting and blending fibres according to production specification on at least three (3) occasions
- conducting and monitoring blending to ensure blending consistency and feed uniformity, according to work health and safety (WHS) practices, on at least three (3) occasions
- sorting waste according to workplace procedures
- following job specifications and orders
- applying workplace procedures
- maintaining records.

## **Knowledge Evidence**

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- relevant Australian Standards
- fibre types and basic characteristics
- blending and feeding processes
- technical specifications, manuals and operating instructions
- quality standards and procedures
- WHS practices, including hazard identification and control measures
- quality practices
- workplace procedures
- recording and reporting practices.

## **Assessment Conditions**

- Assessors must:

- satisfy the assessor competency requirements that are in place at the time of the assessment, as set by the VET regulator
- have vocational competency in undertaking fibre blending and feeding for nonwoven technical production processes, at least to the level being assessed, with relevant industry knowledge and experience.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.

## Links

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