



Australian Government

MSTTN2001 Set up and operate a dry laid web forming machine

Release: 1

MSTTN2001 Set up and operate a dry laid web forming machine

Modification History

Release 1. Supersedes and is equivalent to LMTTN2001B Set up and operate a dry laid web forming machine

Application

This unit of competency covers the skills and knowledge required to set up and operate dry laid web forming machines used to manufacture non-woven textiles.

The unit of competency covers the skills needed for initial start-up and product changeovers of dry laid web forming machines, including machine settings, first-off runs, adjustments and instructions to operators.

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

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|---|---|-----|---|
| 2 | Set up and load dry laid web forming machine | 2.1 | Check specifications to identify requirements for production |
| | | 2.2 | Check raw materials, containers and quantities |
| | | 2.3 | Adjust machine settings to meet product requirements |
| | | 2.4 | Clean area around machine during and on completion of setting and loading |
| | | | |
| 3 | Operate and monitor dry laid web forming machine | 3.1 | Start and stop dry laid web forming machine according to manufacturer instructions and job requirements |
| | | 3.2 | Monitor machine operations to ensure safe and correct operation |
| | | 3.3 | Sort waste and clean machine when required |
| | | 3.4 | Identify, correct and report minor product, process and machine faults, where necessary, to meet specified requirements |
| | | 3.5 | Operate machine according to WHS and workplace practices and report major machine faults |
| | | | |
| 4 | Check quality and complete dry laid web forming operations | 4.1 | Check formed web against quality standards and production requirements |
| | | 4.2 | Identify, rectify or report web faults and non-conformances |
| | | 4.3 | Despatch dry laid web to next manufacturing or packing process |
| | | 4.4 | Clean area to maintain a safe and productive work environment |
| | | 4.5 | Complete production records |

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

Australian Standards include:

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

Fibres include one or more of the following:

- fibre size:
 - length 30-80 mm
 - 1.1-8.0 dtex (diameter)
- fibre types:
 - rayon and other cellulose
 - nylon
 - polyester
 - polypropylene
 - cotton
 - wool
 - glass
 - bi-component

Dry laid web includes one or more of the following:

- web formed using any of the following techniques:
 - carded web (parallel laid)
 - carded web (cross laid)
 - carded web (random laid)
 - air laid staple fibre web
 - high-loft webs

WHS practices

WHS practices must 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
- other WHS practices relevant to the job and enterprise

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTTN2001B Set up and operate a dry laid web forming machine

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 MSTTN2001 Set up and operate a dry laid web forming machine

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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 on at least two occasions and include:

- reading and following work instructions, standard operating procedures (SOPs), safe work practices and other reference material
- applying relevant standards
- checking machine safety equipment and reporting any faults
- preparing materials for web forming
- loading and unloading materials
- starting and stopping dry laid web forming machines according to specifications on at least two (2) occasions
- monitoring machine operations, including machine production readings, on at least two (2) occasions
- recognising, rectifying and reporting machine faults or problems as required
- maintaining clean machines and work environment, as required
- undertaking quality checks and recognising and responding to faulty product
- applying workplace procedures
- maintaining accurate 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, including:
 - rayon and other cellulose
 - nylon
 - polyester
 - polypropylene
 - cotton
 - wool
 - glass
 - bi-component

- fibre characteristics, including:
 - absorbency
 - abrasion resistance
 - modulus
 - web 'handle'
 - moisture absorption
 - chemical and temperature resistance
 - melting point
 - fibre measuring units, including decitex and denier and fibre diameter - equation
 - fibre or filament crimp
- advantages of fibre opening and blending:
 - component independent system
 - guarantee a homogeneous mixture
 - constant performance
 - flexible operation
 - high degree of automation
 - working and stripping principles of carding
- different types of carded webs, such as:
 - parallel laid web
 - parallel laid web with spreading device
 - parallel laid web with scrambling
 - random laid web
 - random laid web with scrambling
 - layered and cross laid webs
- 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 setting up and operating a dry laid web forming machine, 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.

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