



Australian Government

MSTTX2008 Operate a machine for complex production operations

Release: 1

MSTTX2008 Operate a machine for complex production operations

Modification History

Release 1. Supersedes:

- LMTTX2002B Prepare yarn for textile manufacturing
- LMTTX2003B Perform spinning operations
- LMTTX2004B Perform tufting operations
- LMTTX2005B Perform creeling operations
- LMTTX2006B Operate a weaving loom
- LMTTX2008B Apply finishing processes to textile production
- LMTTX2010B Load and operate dyeing equipment
- LMTTX2016B Perform knotting for weaving operations
- LMTTX2018B Re-start machine after stoppage

Not equivalent

Application

This unit of competency covers the skills and knowledge required to knowledge to set up, operate and monitor one or more machine used in a range of textile production operations.

The unit applies to the exercise of initiative, judgement and discretion in own work, for the operation of a complex machine or process, the operation of one or more than one type of machine, or the performance of a complex task or tasks on a machine.

The unit of competency applies to a range of complex operational tasks directly related to the manufacture of textiles or textile products. It provides the skills and knowledge required to operate one or more machines or machine types and undertake some complex tasks under supervision within a production environment. The unit applies to breadth and depth of knowledge of machine production in a range of situations. It includes skills to solve a defined range of non-routine problems by applying known solutions.

The application of the unit of competency and the evidence requirements may focus on one or more industry sectors, workplace contexts and machine types and will be determined by operational conditions and production requirements.

Work is conducted according to defined procedures. Work may be conducted in small to large scale enterprises and may involve individual and team related activities.

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

Pre-requisite Unit

Nil

Competency Field

Textile production

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	Prepare to operate one or more TCF machines or machine types	2.1	Coordinate preparations by confirming specifications, materials and machine type required for production
		2.2	Identify and undertake preliminary operations, and follow required procedures to prepare materials and equipment
		2.3	Load materials for processing according to machine requirements and manufacturer specifications
		2.4	Keep machine and components, and area around machine clean during preparation and loading and apply relevant WHS practices
		2.5	Identify, recognise and raise awareness of risks and potential hazards
3	Operate and monitor machine	3.1	Start, operate, stop, re-start and monitor machine operations in accordance with manufacturer requirements to produce textile material or product

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| | | 3.2 | Check machine in the event of stoppage and follow procedures for re-starting machine |
| | | 3.3 | Use initiative, judgement and discretion to monitor process and make adjustments in response to non-major and non-routine problems to maintain quality output |
| | | 3.4 | Perform maintenance according to workplace procedures |
| | | 3.5 | Report major machine or product faults and clean machine according to workplace procedures |
| | | 3.6 | Maintain work environment in a safe productive manner |
| 4 | Coordinate and monitor materials | 4.1 | Use initiative, judgement and discretion to identify non-conforming raw materials/yarns/fabrics and maintain material quality |
| | | 4.2 | Use initiative, judgement and discretion to monitor output and respond to non-routine problems |
| | | 4.3 | Perform operations related to materials as determined by enterprise requirements |
| 5 | Complete and finalise operations | 5.1 | Unload or remove textile material or product according to manufacturer specifications and workplace procedures |
| | | 5.2 | Check output of machine or product against quality specifications, identify and rectify faults or non-conformance and report according to workplace procedures |
| | | 5.3 | Despatch product to next process according to production sequence |
| | | 5.4 | Complete production records and other documentation, according to workplace procedures |

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
- PPE
- 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 includes:

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

Coordinate preparations includes but is not limited to one or more of the following:

- checking specifications to identify materials and process required
- identifying machine processes and operational stages
- coordinating a bank of machines according to operational requirements and workplace procedures

Operations related to materials may include but is not limited to:

- sorting, re-using and /or disposing of waste

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:

- hazard identification
- induction training
- hazard control

- risk assessment
- implementing risk reduction measures specific to the tasks
- manual handling techniques
- SOPs
- PPE
- safe materials handling
- taking of rest breaks
- ergonomic conditions of workplace
- following marked walkways
- safe storage of equipment
- housekeeping to keep work area safe
- reporting accidents and incidents
- environmental practices
- safe disposal of chemical and hazardous substances

Unit Mapping Information

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Not equivalent

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 MSTTX2008 Operate a machine for complex production operations

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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
- applying relevant standards
- coordinating preparations to confirm specifications, and prepare materials and equipment to meet requirements for production and follow workplace procedures
- checking specifications and machine safety equipment and reporting any faults
- loading and unloading materials according to machine and workplace procedures
- starting, operating, stopping, and monitoring complex production operations on one or more machines or machine types on at least three (3) occasions, in accordance with manufacturer requirements, to produce textile material or product
- using initiative, judgement and discretion to monitor process and make machine adjustments in response to non-major and non-routine problems to maintain quality output
- reporting major machine or product faults
- using initiative, judgement and discretion to identify non-conforming raw materials/yarns/fabrics and maintain material quality
- using initiative, judgement and discretion to monitor output and respond to non-routine problems
- despatching product to next process according to production sequence and following operations
- recognising and raising awareness of risks and potential hazards
- 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
- one or more machines or machine types associated with textile production in an identified context, and the type of product they produce. Machine type may be selected from those listed in the following groups:
 - machines for knitting:
 - circular knitting machines
 - electronic and automatic flat knitting machines
 - machines for spinning:
 - spinning machines
 - drawing machines
 - roving machines
 - twisting machines
 - winding machines
 - carding machines:
 - burr handling systems
 - air filtration equipment
 - combs
 - doffer waste system
 - blending systems
 - compressed air and hydraulic systems
 - tufting looms:
 - winding machines
 - finishing equipment
 - other ancillary equipment
 - weaving machines:
 - weaving looms
 - broadloom
 - narrowloom
 - all shuttle types
 - Jacquard looms
 - microprocessor or computer controlled looms
 - dyeing machines
 - finishing machines
- procedures and guidelines for safe operation of machinery

- material or product requirements for multiple machinery operation
- operational sequence of machinery and stages of operation
- textiles and products produced by textile production machines
 - fibres, including polyester, cotton, wool, viscose and rayon
 - yarns, including ring spun, open-ended spun, air jet spun and friction spun
 - fabrics
 - finished products, including socks, sweaters, towels, sheets, blankets, carpets, rope and twine, mops and industrial textiles
- typical fault conditions and related fault-finding procedures
- details of materials and processes associated with preparing the machine for production
- types and characteristics of fibres, threads, yarns and other materials required for textile operations
- characteristics of quality and substandard products
- machinery maintenance and repair techniques
- procedures for checking, reporting and re-starting after stoppage
- finishing processes
- technical specifications manuals
- quality standards and practices
- standards for clean and tidy working environment
- work health and safety (WHS) hazards and risks
- appropriate handling of waste
- 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 operating a machine for complex production operations, 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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