



Australian Government

MSTTX3006 Ensure efficient operation of textile machines

Release: 1

MSTTX3006 Ensure efficient operation of textile machines

Modification History

Release 1. Supersedes and is equivalent to LMTTX3006B Ensure efficient operation of textile machines

Application

This unit of competency covers the skills and knowledge required to ensure efficient operation of textile machines.

The unit of competency applies to the routine monitoring, problem solving and maintenance of machines and equipment used in the textile industry.

It involves working with discretion, judgement and initiative on the job in own work, and may include liaison with specialist technicians, including mechanics and technicians and production supervisors.

The application of machine fault diagnosis is within the competency and scope of the operator. The unit does not cover complex problems requiring a textile mechanic.

Work may be conducted in a variety of environments, such as operational workplace activities, restricted space, and hazardous, controlled or exposed conditions.

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

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 | 1.1 | Follow standard operating procedures (SOPs) |
|---|----------------------|-----|---|

	requirements	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 ensure efficient machine operation	2.1	Monitor and review machine performance and make necessary adjustments to ensure operations and product meet quality standards and workplace procedures
		2.2	Consult machine operator to assess machine operations and processes, and maintain records and documentation of machine performance
		2.3	Identify symptoms of machinery fault
		2.4	Visually inspect machine components and product to identify source of fault
		2.5	Refer to operating manuals or documentation, as required
3	Determine problem cause and solution	3.1	Determine possible causes of problem and gather further information to confirm or eliminate possible cause
		3.2	Consult appropriate personnel to confirm cause
		3.3	Determine immediate solution and trial or implement
		3.4	Determine permanent solution in consultation with appropriate personnel
4	Conduct routine checks of performance efficiency	4.1	Use appropriate hand tools and hand-held power tools to implement routine checks of machine performance and preventative maintenance strategy, in accordance with manufacturer instructions
		4.2	Assess and perform periodic servicing, such as lubrication and greasing, in accordance with manufacturer instructions

		4.3	Clean machine in accordance with manufacturer cleaning instructions and work environment
5	Perform preventative maintenance procedures	5.1	Inspect parts according to operating procedures and manufacturer instructions
		5.2	Maintain service and production records to assist with life cycle monitoring of parts and machine, as required
		5.3	Identify faulty parts for repair, replacement or adjustment and take necessary action
		5.4	Inspect, check and monitor replacement parts and consumables to ensure they comply with operational specifications

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 include:

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

Identify problems includes one or more of the following:

- identifying symptoms of machinery fault
- using visual inspection of machine and product to locate fault
- locating fault within section or component of machine
- referring to operating manuals or documentation for information, as required

Symptoms include one or more of the following:

- product does not meet specification
- machine is not operating to specification
- sounds not attributed to normal operation
- recurrent faults, such as yarn breaking

Machines include one or more of the following:

- knitting machines
- carding machines
- spinning machines
- weaving looms
- dyeing equipment
- tufting looms
- finishing equipment
- creeling and warping machines

Appropriate personnel include one or more of the following:

- textile mechanic
- supervisor
- senior operator

Immediate solutions include one or more of the following:

- decommission machine
- change settings
- adjust operation
- perform temporary fix
- refer to textile mechanic

Parts and consumables include one or more of the following:

- belts
- globes
- combs

- other items that require periodic replacement as a result of normal machine and production operations

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTTX3006B Ensure efficient operation of textile machines

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 MSTTX3006 Ensure efficient operation of textile machines

Modification History

Release 1. Supersedes and is equivalent to LMTTX3006B Ensure efficient operation of textile machines

Performance Evidence

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

- reading and following work instructions, standard operating procedures (SOPs), safe work practices, manufacturer instructions'
- applying relevant standards
- operating machines correctly
- monitoring machine performance against specifications, undertaking minor adjustments, and maintaining records and documentation of machine performance, on at least two (2) occasions
- recognising, rectifying and reporting machine or product faults or problems on at least two (2) occasions
- using hand tools and hand-held power tools
- identifying and replacing replaceable parts and consumables used in normal machine operations
- performing periodic servicing, such as lubrication and greasing, in accordance with manufacturer instructions
- cleaning machine in accordance with manufacturer cleaning instructions and work environment
- communicating and cooperating with mechanics/technicians and production personnel
- identifying faulty parts for repair, replacement or adjustment and taking necessary action
- inspecting, checking and monitoring replacement parts and consumables to ensure they comply with operational specifications.

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
- procedures and guidelines for safe operation of machines
- typical fault conditions and related fault-finding procedures
- routine maintenance processes and practices
- preventative maintenance concepts
- root cause analysis concepts

- range and use of replacement parts and consumables
- operation of hand tools and hand-held power tools
- techniques to replace parts and consumables
- characteristics of materials and fibres
- technical specifications manuals
- quality standards and 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 ensuring efficient operation of textile machines, 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

Companion Volume implementation guides are found in VETNet -

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