



Australian Government

MSTGN4003 Install and commission process and machine control programs

Release: 1

MSTGN4003 Install and commission process and machine control programs

Modification History

Release 1. Supersedes and is equivalent to LMTGN4003A Install and commission process and machine control programs

Application

This unit of competency covers the skills and knowledge required to install and commission process and machine control system programs in machines and equipment.

The unit of competency applies to machines and equipment used within a production workplace using complex textile, clothing and footwear (TCF) production equipment with control systems involving advanced:

- electronic technology
- pneumatic technology
- hydraulic technology
- robotics technology.

Discretion and judgement may be required, for both self and others, in planning and selecting processes, procedures or outcomes, including liaison with specialist technicians.

This unit of competency is applicable to all sectors of the TCF industry.

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

Generic

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	Install automatic process and machine control program	2.1	Select appropriate program loading technique and connect external loading devices to automatic process and machine control system correctly
		2.2	Place process and machine control system in correct operational mode to accept program loading
		2.3	Download program in accordance with manufacturers' recommended procedure, workplace procedures or appropriate SOPs and WHS practices
		2.4	Undertake checks appropriately during and after downloading to ensure data transfer is accurate and complete
		2.5	Disconnect all external program loading devices and connections from process and machine control system
3	Commission automatic process and machine control program	3.1	Determine program format and operational intent
		3.2	Check program instructions for compliance with specifications
		3.3	Counter-set software timers to specification, where required
		3.4	Step through program manually and check and measure outputs for compliance with specifications
		3.5	Check external inputs for compliance with specifications

- according to specified procedures
- 3.6 Run program and check total operation for compliance with specifications, where applicable
- 3.7 Assess confirmation of program master copy storage
- 4 **Maintain records** 4.1 Maintain records and prepare reports, where necessary, in accordance with 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
- 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

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTGN4003A Install and commission process and machine control programs

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 MSTGN4003 Install and commission process and machine control programs

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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
- installing automatic process and machine control program
- selecting and using appropriate loading technique
- performing checks to ensure accurate data transfer
- commissioning automatic process and machine control program
- checking program instructions
- running program to ensure compliance with specifications
- monitoring performance
- maintaining accurate records
- following workplace procedures.

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
- appropriate installation and commissioning procedures
- quality requirements and relevant standards
- machine and equipment manufacturer specifications and instructions
- safety and environmental aspects of relevant workplace activities
- 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 installing and commissioning process and machine control systems, 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.
- The unit is applicable to all TCF sectors and assessment must ensure it is delivered to suit the industry it is being applied to.

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