



Australian Government

MSTGN4007 Contribute to the development of products or processes

Release: 1

MSTGN4007 Contribute to the development of products or processes

Modification History

Release 1. Supersedes and is equivalent to LMTGN4016A Contribute to the development of products or processes

Application

This unit of competency covers the skills and knowledge required to contribute to developing products or processes within the workplace.

This unit of competency applies to activities contributing to development of products or processes within the enterprise. It includes conducting trials to establish whether products or processes conform to requirements. Judgement may be required in planning and selecting appropriate processes or procedures for self and others.

Work may be conducted in restricted spaces or exposed conditions or controlled or open environments.

This unit of competency is applicable to all sectors of the textiles, clothing and footwear (TCF) industry.

Work responsibilities will vary in scope according to size of the workplace, range of designs or products, specialisation in the workplace and workplace quality standards. 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.

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|---|---|--|
| 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 for development of products or processes | 2.1 Identify and interpret provisional specifications in consultation with others, where required |
| | | 2.2 Identify requirements for feasibility study in conjunction with others, as required |
| | | 2.3 Provide assistance to feasibility studies to assess feasibility of design and development |
| | | |
| 3 | Assist in developing or engineering product | 3.1 Interpret product or process specifications and develop preliminary specifications from feasibility study |
| | | 3.2 Use specifications to develop or engineer the product |
| | | 3.3 Check or select raw materials to meet requirements |
| | | 3.4 Determine machine or equipment or skill availability according to requirements |
| | | |
| 4 | Conduct and assess trials | 4.1 Confirm and clarify requirements for trial to establish procedures and parameters as per site policies or procedures |
| | | 4.2 Liaise with production areas to organise and conduct trials as per site policies or procedures |
| | | 4.3 Assess trials in accordance with the established workplace procedures |
| | | |
| 5 | Interpret and report results | 5.1 Analyse results of the trials to determine if performance is suitable for production to proceed |

- 5.2 Prepare reports on performance
- 5.3 Maintain records according to workplace procedures, where required

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

Feasibility studies include, but are not limited to, one or more of the following:

- sampling
- trial run production
- consideration of machine capabilities
- availability of resources
- required quality
- cost

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 includes 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 LMTGN4016A Contribute to the development of products or 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 MSTGN4007 Contribute to the development of products or 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
- applying relevant standards
- providing assistance to feasibility studies to assess feasibility of design and development for at least two (2) different products or processes
- interpreting product or process specifications from feasibility study and using them to develop or engineer two (2) different products
- determining availability of required resources, including equipment, raw materials, skills and personnel according to requirements
- selecting, interpreting and evaluating procedures or processes
- liaising with production area to organise and conduct trials, and analysing and reporting on results of trials to determine if production can proceed
- preparing reports on performance and maintaining records according to 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
- industry and product processes
- product and process development procedures
- machine or equipment, resource and skill capabilities within the workplace
- feasibility study and sampling procedures
- safety and environmental aspects of relevant workplace activities
- trials to assess if production can proceed, such as:
 - confirming and clarifying requirements
 - liaising with production area
 - allocating work
 - reviewing and evaluating processes and products
 - performing trials

- interpreting data
- analysing results
- reporting processes
- quality practices
- workplace procedures
- recording and reporting practices.
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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 contributing to the development of products or 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.
- 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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