



Australian Government

MSTLG3001 Make a prototype

Release: 1

MSTLG3001 Make a prototype

Modification History

Release 1. Supersedes and is equivalent to LMTLG3001A Make a prototype

Application

This unit of competency covers the skills and knowledge to design processes leading to the making of a prototype for marketing purposes and must reflect fashion trends and the enterprise focus of manufacture.

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within industry codes, standards and defined procedures.

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

Pre-requisite Unit

Nil

Competency Field

Leather 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 customer requirements, specifications, drawings, job sheets or work instructions

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|---|--|--|
| 2 | Design or modify existing model | <div style="margin-left: 20px;"><div>2.1</div><div>2.2</div><div>2.3</div><div>2.4</div><div>2.5</div></div> |
| | | <div style="margin-left: 40px;"><p>Set up workstation in accordance with specifications and workplace procedures</p><p>Design components to conform with model, using computer-aided design (CAD) or manual technique with reference to all relevant operations</p><p>Select materials, trims and colours</p><p>Produce models from appropriate materials to specifications</p><p>Ensure ongoing liaison occurs with relevant departments in workplace to ensure workability and marketability of design and availability of materials and resources, including workforce skills</p></div> |
| | | |
| 3 | Produce prototype | <div style="margin-left: 20px;"><div>3.1</div><div>3.2</div></div> |
| | | <div style="margin-left: 40px;"><p>Modify or design existing model to translate design concept into 3-D</p><p>Coordinate making of prototype using sample patterns, relevant designed components and all relevant manufacturing processes</p></div> |
| | | |
| 4 | Test prototype | <div style="margin-left: 20px;"><div>4.1</div><div>4.2</div><div>4.3</div><div>4.4</div></div> |
| | | <div style="margin-left: 40px;"><p>Liaise with other relevant departments in relation to practicality of design and cost of production, and predicted commercial success</p><p>Review prototype with customer specifications and customer, as appropriate</p><p>Make corrections, as necessary</p><p>Make samples for marketing or testing</p></div> |
| | | |
| 5 | Produce patterns | <div style="margin-left: 20px;"><div>5.1</div><div>5.2</div><div>5.3</div></div> |
| | | <div style="margin-left: 40px;"><p>Create standard or master pattern from the mean form</p><p>Dissect standard to produce all working patterns, making adjustments for enterprise procedures and materials used to create patterns</p><p>Derive patterns from the master pattern allowing for adjustments, as required</p></div> |

5.4 Prepare and store documentation

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, industry codes and standards, 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
Leather products include one or more of the following:	• clothing • bags • accessories • saddles and saddlery components
Australian Standards include:	• the relevant industry or Australian Standards that are current at the time this unit is being undertaken
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
- PPE
- safe materials handling
- 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

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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 MSTLG3001 Make a prototype

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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, industry codes and standards
- planning and coordinating complicated designs, that consist of at least four (4) components, and prototype operations in line with specifications, customer requirements and work deadlines
- preparing equipment and work prior to commencing operations
- using computer-aided design (CAD) or manual techniques to design components to conform with model
- selecting appropriate materials
- liaising with other relevant departments to determine practicality of design, cost of production and predicted commercial success
- producing prototypes for at least two (2) different products, using appropriate manufacturing processes over the full range of operations
- reviewing prototype with customer specifications and customer
- making samples for marketing and testing and correcting, as necessary
- producing working patterns for at least two (2) different leather products.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- manufacturing focus of the enterprise
- manufacturing capacity, skill capacity, and tool or equipment base of workplace
- materials and properties and their reaction to manufacturing processes
- pattern design and prototype construction
- CAD and manual techniques used in the design phase
- quality standards and handling procedures
- work health and safety (WHS) and environmental aspects of relevant processes
- relevant federal and state or territory legislative or regulatory requirements
- recording and reporting procedures.

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 making a prototype, 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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