



Australian Government

Department of Education, Employment and Workplace Relations

LMTGN4014A Design production tooling

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required to design tooling required for producing textile, clothing or footwear (TCF) products.

Application of the Unit

Application of the Unit

This unit applies to the design of tooling to meet specific manufacturing requirements. Discretion and judgement may be required, for both self and others, in planning and selecting processes, procedures or outcomes. The unit can refer to workplace and client initiated ideas or requests. The size and work organisation within enterprise will determine the range of interaction with other areas, for example:

- prototype or sample maker,
- engineering
- management
- external supplier

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within defined procedures under direct supervision.

This unit is applied according to OHS and workplace practices of the enterprise, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- 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

This unit requires the application of skills associated with initiative, enterprise and problem solving in designing tools to meet manufacturing requirements. This unit also requires an ability to develop tooling specifications, and brief and liaise with relevant suppliers and engineering personnel.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
1 Clarify requirements	1.1 Tooling requirements are defined and clarified 1.2 Specifications and design parameters are interpreted
2 Contribute to development of design or engineering specifications	2.1 Engineering or design specifications for tooling are developed, which include items to be produced internally or by external suppliers 2.2 Specification details are confirmed and prepared in accordance with enterprise procedures, including required standards of construction and overall quality
3 Liaise with engineering or external supplier	3.1 Tooling brief is provided to engineering and external supplier, as required 3.2 Liaison occurs with the component supplier and engineering area to manufacture knives or tooling

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit

Demonstrates knowledge of:

- the requirements of tooling design
- product construction
- quality requirements
- materials used in product production
- safety and environmental aspects of relevant workplace activities
- workplace procedures and reporting processes
- OHS practices, including hazard identification and control measures
- recording and reporting practices

Demonstrates skills to:

- prepare specifications
- use manual or CAD systems
- communicate effectively with individuals, work groups and supervisors
- maintain records, document and transfer information
- read, interpret and follow information on work specifications, , standard operating procedures and work instructions and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practices

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered	Demonstrates skills and knowledge to: • define requirements • develop accurate specifications • assess technical requirements • liaise with engineer or external supplier • communicate effectively with design team, customers, etc. • apply workplace health and safety policies in work operations • maintain accurate records
Consistency in performance	Consistently applies skills and knowledge when: • organising work • completing tasks • identifying improvements • using workplace practices • using OHS practices • recording and reporting accidents and incidents • assessing operational readiness of equipment used and work processes • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions • completing work systematically with attention to detail without damage to goods and equipment
Resource implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Context for assessment	Assessment may occur on the job or in an appropriately simulated environment.
Interdependent assessment	This unit may be assessed independently or in combination with other relevant units.

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
OHS practices	OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may include: • manual handling techniques • standard operating procedures • personal protective equipment • safe materials handling • taking of rest breaks • ergonomic arrangement of workplaces • following marked walkways • safe storage of equipment • housekeeping • reporting accidents and incidents • other OHS practices relevant to the job and enterprise

Unit Sector(s)

Sector	All
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