



Australian Government

Department of Education, Employment and Workplace Relations

AUMFTK5001 Establish a test or trial for components of plant, tooling, equipment or systems

Release: 1

AUMFTK5001 Establish a test or trial for components of plant, tooling, equipment or systems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the application of the required skills and knowledge to design and establish a test/trial of a component of plant, tooling, equipment, product or system in accordance with an industry standard test. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	The unit applies to the automotive and related component manufacturing environment and involves application of skills and knowledge to be used within the scope of the person's job and authority.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains Employability Skills.
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Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify test/trial objectives	1.1. Applicable organisation requirements relevant in establishing the testing/trialling of components of plant, tooling, equipment, product or systems are verified and complied with throughout the work activity 1.2. Instructions and plans are read and interpreted to identify processes and materials to complete work tasks 1.3. Materials/components/parts required to be tested are received in accordance with organisational inventory procedures 1.4. The test/trial objectives are identified in consultation with development engineers or other relevant stakeholders
2. Determine the test/trial methodology	2.1. The testing/trialling sequence and specified procedures for the tests/trials are determined in accordance with the test objectives, national or international standards, organisational procedures and manufacturers' instructions 2.2. The required test/trial equipment and tools are identified and accessed/obtained in accordance with work plans and organisational procedures 2.3. Stakeholders are identified and consulted
3. Identify and allocate resources	3.1. Resources required to test/trial the component are identified 3.2. Personnel are tasked to undertake the setup and conduct of the test/trial 3.3. A test/trial plan is prepared in accordance with organisational requirements and in agreement with the relevant stakeholders
4. Determine and establish the reporting regime	4.1. The data elements required to be reported on and the frequency of reports are determined in consultation with the tasking development engineers 4.2. The report(s) structure(s) is/are identified in conjunction with the tasking development engineers 4.3. Reporting regime is incorporated into the test/trial plan 4.4. Reporting regime is trialled to ensure practicality and credibility of report format, data and frequency.
5. Monitor the test/trial	5.1. Conduct is monitored in accordance with the test/trial plan 5.2. Guidance is provided to personnel conducting the trial as required 5.3. Modifications to the plan are proposed to the stakeholders where required and endorsed changes implemented
6. Complete the work processes	6.1. Reports are distributed as required in the plan and organisational procedures 6.2. Test/trial procedures are documented and recorded in accordance with organisational recordkeeping procedures

ELEMENT	PERFORMANCE CRITERIA
	6.3. Resources are recycled or written off in accordance with organisational procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- speak clearly and directly in order to consult with development engineers and other relevant stakeholders
- apply teamwork to a range of situations, including the setup and conduct of testing/trialling
- solve problems particularly in teams in order to meet performance indicators
- show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas
- access, interpret and apply information on relevant organisation policies, procedures and instructions, particularly to ensure that environmental and organisational procedures are adhered to regarding the recycling and writing off of resources
- manage time when planning, preparing and organising work priorities
- take responsibility for organising own work priorities.

Required knowledge

- relevant Occupational Health and Safety and Environmental legislation, regulations, standards and codes of practice and organisation policies and procedures needed to carry out work in a manner which ensures the safety of people, equipment and the environment.
- organisational supply/replenishment systems and processes for materials, equipment and tools
- types of tools and equipment and procedures for their safe use, operation and maintenance
- vehicle structures
- evaluation techniques
- environmental protection requirements relating to the disposal of waste material
- established communication channels and protocols
- methods of problem identification and resolution
- the preparation of plans and tasking of resources
- procedures for the recording, reporting and maintenance of workplace records and information.

Evidence Guide

EVIDENCE GUIDE	
<p>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 this Training Package.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • compliance with relevant legislation, regulations, standards, codes of practice and established safe practices and organisation policies and procedures for establishing a test for components/materials of plant, equipment, product, or systems • maintaining a working knowledge of current organisation inventory procedures • working and communicating effectively and positively with others involved in the work • applying, within authority, the requirements of the job or work role which could include: <ul style="list-style-type: none"> • establishing tests or trials • monitoring tests or trials • oversighting of reports of results • achieving work quality goals • accurate completion of test/trial procedures • completing work area housekeeping requirements including the documentation of project activity and process outcomes • modify activities to cater for variations in organisation context and environment.
Context of and specific resources for assessment	<ul style="list-style-type: none"> • assessment of the competency should take place in a safe working environment in a passenger motor vehicle manufacturing plant or simulated environment using tools/equipment/machinery required for the production process without undue disruption to the production process • assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • assessment methods must confirm consistency and accuracy of performance (over time and in a range of organisation relevant contexts) together with application of underpinning knowledge • assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its

EVIDENCE GUIDE	
	<p>correct interpretation and application</p> <ul style="list-style-type: none">• assessment may be applied under project related conditions (real or simulated) and require evidence of process• assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.

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 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.

<p><i>Organisation requirements</i> may include:</p>	<ul style="list-style-type: none"> • access and equity principles and practices • environmental management (waste disposal, recycling and re-use guidelines) • emergency and evacuation procedures • equipment use procedures • ethical standards • legal obligations • maintenance and storage procedures • OHS requirements • organisational and site guidelines • policies and procedures relating to own role and responsibility • procedural manuals • quality assurance guidelines • quality and continuous improvement processes and standards • recording and reporting guidelines.
<p><i>Components of plant, tooling, equipment, product or systems</i> may include:</p>	<p>components of plant, tooling, equipment, product and or systems used in the manufacturing or testing process. Within this context product is further defined as a component, sub-component or material of a passenger motor vehicle. Plant, tooling, equipment and systems are further defined as components or sub-components of the plant, tooling, materials or systems of the testing or manufacturing infrastructure/resources.</p>
<p><i>Instructions</i> may include:</p>	<ul style="list-style-type: none"> • workplace procedures relating to the use and operation of tools and equipment • departmental requirements • workplace instructions, including job sheets, plans, specifications, drawings and designs • workplace procedures relating to reporting and communications • manufacturers' instructions for the use of equipment and materials.
<p><i>Inventory procedures</i> may include:</p>	<p>automatic or demand driven ordering and replenishment, central or local storage and maintenance procedures and systems and supply or demand driven disposal processes.</p>

RANGE STATEMENT	
<i>Procedures for the tests/trials</i> may include:	tests/trials to establish compliance with a standard, or to establish performance limits of product/materials or test/production plant/tooling/equipment/materials/ systems.
<i>Stakeholders</i> may include:	parties such as the design engineers, test/trial operators and corporate resource and budget managers with an interest in the test/trial conduct and/or outcome.
<i>Test/trial plan</i> may include:	covers the instrument detailing the objective(s), conduct, tasking and responsibilities, resource allocation and reporting and documentation requirements for the test/trial and is structured in accordance with endorsed organisations requirements

Unit Sector(s)

Unit sector	Technical - Tools and Equipment
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Competency field

Competency field	Manufacturing - Passenger Motor Vehicle
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Co-requisite units

Not applicable.