



Australian Government

AUMATW002 Inspect welding

Release: 1

AUMATW002 Inspect welding

Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMATW4002 Conduct welding inspection

Application

This unit describes the performance outcomes required to prepare and perform welding inspections using established procedures.

It applies to those in an automotive and related manufacturing environment.

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

Competency Field

Common

Unit Sector

Technical - Welding, Grinding, Machining and Soldering

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Plan and prepare inspections	1.1 Welding requirements and weld specifications are identified from welding standards 1.2 Weld quality requirements for inspection are established and confirmed 1.3 Inspection methods, tools and test equipment are selected and prepared 1.4 Welding test and inspection plan is prepared according to workplace procedures

Elements	Performance Criteria
2. Conduct inspections	2.1 Welding processes are monitored to ensure industry welding standards are met 2.2 Welding is tested according to test equipment workplace procedures 2.3 Weld defects are identified and corrective actions taken 2.4 Weld test results are analysed using test equipment and according to workplace procedures
3. Report findings	3.1 Test results, analysis and recommendations for action are reported according to workplace procedures 3.2 Test result sheets are legibly completed 3.3 Work area is cleaned, and waste materials disposed of, reused or recycled according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	- identify work health and safety (WHS) requirements and workplace procedures relating to inspecting welding - interpret test equipment instructions, weld inspections and test reports - interpret manufacturer's weld specifications - interpret equipment standard operating procedures (SOPs) or workplace equivalent.
Writing skills to:	complete test result sheets.
Oral communication skills to:	- identify and clarify welding requirements - communicate test and inspection results with production teams.
Numeracy skills to:	analyse numerical information in welding test results.
Problem-solving skills to:	- identify welding problems in order to meet workplace performance indicators - determine welding recommendations following analysis of welding test results.
Technology skills to:	use specialised equipment, such as non-destructive weld testing equipment.

Range of Conditions

This section specifies 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. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Workplace procedures</i> must include:	• recording and reporting guidelines for inspection and test results • use of welding test equipment • weld quality guidelines • WHS requirements to conduct weld inspection.
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Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Assessment Requirements for AUMATW002 Inspect welding

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Performance Evidence

Before competency can be determined, individuals must have competently inspected and tested welds on vehicles bodies and components on a minimum of three occasions.

Individuals must demonstrate they can:

- conduct welding inspections and tests, and identify deviations, observing work health and safety (WHS) requirements and workplace procedures
- select and use weld inspection and testing equipment, methods and techniques
- interpret workplace weld quality requirements
- make recommendations for action, based on analysis of test results
- clearly and legibly report inspection and test results and recommendations.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- WHS requirements when inspecting welds
- workplace procedures when inspecting welds
- weld testing equipment methods and techniques
- processes for conducting post-welding inspections and tests
- workplace weld quality requirements
- non-destructive testing techniques
- methods for correcting welding defects
- methods of controlling distortion of welds.

Assessment Conditions

Assessors must satisfy SNR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the inspection and testing of vehicle and component welds, e.g. work orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive manufacturing workplace or simulated workplace
- tools, equipment and machinery required for inspecting and testing welding of vehicles and componentry
- vehicles and components with welds that require inspecting and testing
- workplace procedures and WHS requirements to inspect welds.

Links

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