



Australian Government

Assessment Requirements for MEM05025 Perform welding/fabrication inspection

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM05025C Perform welding/fabrication inspection

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- organising/conducting appropriate non-destructive tests or verifying results of previous test procedures
- establishing and validating welding procedures by interpreting joint design specification, organising a test piece, interpreting the results and preparing a report identifying action to be taken
- ensuring quality assurance procedures are carried out, including checking identification (material test certification numbers), movement and document material through workshop in-site
- carrying out final inspection of fabrications, including material forming and dimensional checks against specifications
- maintaining and reviewing quality records to ensure compliance.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe welding practices and procedures and use of personal protective equipment (PPE)
- types of non-destructive tests, their application and procedures
- welding specifications and procedures for the given weld
- tests/checks to be conducted
- arithmetic operations, formulae and calculations for testing welding/fabrications
- procedures for:
 - initiating the weld tests and obtaining previous weld tests
 - verifying/amending previously established weld test procedures
 - documenting welding procedures and preparing a weld test piece
 - documenting/recording the movement of material through the workshop and reasons why this is necessary
 - transferring material test certification numbers

- identifying consumables and reasons for marking consumables for identification purposes
- using and storing consumables and the consequences of inappropriate use and/or storage of consumables
- maintaining welding quality records
- reasons for any identified discrepancies between previous and current weld tests
- effects of testing procedures on test results
- parameters and variables affecting the performance of the weld with respect to specifications
- tools, equipment, techniques and procedures necessary to check each variable, form and dimensions of the welded components
- tools, equipment, techniques and procedures to initiate, carry out, obtain and report the prescribed tests results
- discrepancies between the test results and weld specifications and remedial action to be taken to return welds produced to specification
- reasons and methods for correctly marking/identifying weld materials
- person(s) who can witness the transfer of material test certification numbers and reasons why this is important
- storage life of consumables
- welding quality requirements of the relevant code, standard and/or welding procedure.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing welding/fabrication inspection at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Assessment must include evidence of 480 hours of workplace practice associated with the skills of this unit in a functioning workplace.
- All aspects of competent application of the unit must be addressed including prerequisite competency units and associated workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge assessment may be either verbal or written but must adequately reflect the knowledge requirements of the unit and its prerequisites in a functioning workplace.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- 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.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>