Assessment Requirements for MEM05018
Perform advanced welding using gas metal arc welding process
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Modification History
Release 1. Supersedes and is equivalent to MEM05018C Perform advanced welding using gas metal arc welding process

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
- identifying and interpreting specifications from drawings, sketches and verbal or written job instructions for performing advanced welding using gas metal arc welding (GMAW) process to AS 1554 Structural Purpose
- selecting appropriate weld and joint preparation methods
- consistently weld materials to AS 1554 Structural Purpose or equivalent using AC or DC welding machines and electrodes while preventing distortion
- rectifying any defects
- completing and maintaining weld records related to GMAW Structural Purpose onto standard workplace forms.

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)
- in-depth knowledge of the properties and characteristics of a wide range of materials
- requirements to conform to AS 1554 Structural Purpose or equivalent
- weld procedures and requirements
- different welder identification systems, including numbering, bar coding, paint coding and letter stamps
- causes of weld defects and methods of rectification.

Assessment Conditions
- Assessors must:
  - have vocational competency in performing advanced welding using GMAW process 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 160 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](https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2)