



Australian Government

**Assessment Requirements for MEM05071
Perform advanced manual thermal cutting,
gouging and shaping**

Release: 1

Assessment Requirements for MEM05071 Perform advanced manual thermal cutting, gouging and shaping

Modification History

Release 1. Unit code changed. Changes to performance evidence and knowledge evidence. Supersedes and is not equivalent to MEM05008 Perform advanced manual thermal heating cutting, gouging and shaping.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to:

- follow work instructions, standard operating procedures (SOPs) and safe work practices
- select appropriate equipment to manual heat, thermal cut and gouge, including the selection of settings and consumables to specifications, on at least two occasions
- check condition of equipment and material
- set up:
 - gas cylinders
 - hoses
 - blowpipes
 - tips and nozzles
 - regulators
 - flashback arrestors
 - jigs, fixtures, and work piece restraints
- operate equipment to produce complex internal and external profiles with shape, profile and surface finish to predetermined specifications with minimum loss of sound material
- operate equipment to cut material to job requirement
- operate equipment to gouge material to job requirement
- identify equipment defects and take appropriate remedial action
- check final product for compliance with specifications.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

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 work practices and procedures and use of personal protective equipment (PPE)
- cutting processes and procedures appropriate to different types of materials
- potential equipment faults
- manual cutting, gouging and shaping specifications and procedures

- use and applications of equipment and techniques for manual, cutting, gouging and shaping
- set up procedures for manual cutting, gouging and shaping equipment and accessories
- equipment settings, pre-checks and operation
- sources of information and application on equipment settings and consumables
- procedures for adjusting manual cutting, shaping and gouging equipment
- cutting allowances and reasons for applying them
- procedures and reasons for minimising waste material
- techniques required to correct defects and their causes.
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Assessment Conditions

- Assessors must:
- have vocational competency in performing advanced manual thermal cutting, gouging and shaping 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 occur in a functioning workplace. Where assessment in the workplace would be unsafe, impractical or threatens the environment, assessment must occur in a sufficiently rigorous simulated environment that reflects the circumstances that would be experienced in a functioning workplace. Assessment must cover all aspects of workplace performance, including 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 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.
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Links

Companion Volume implementation guides are found in VETNet -

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