



**Australian Government**

**Assessment Requirements for MEM05008  
Perform advanced manual thermal cutting,  
gouging and shaping**

**Release: 1**

# Assessment Requirements for MEM05008 Perform advanced manual thermal cutting, gouging and shaping

## Modification History

Release 1. Supersedes and is equivalent to MEM05008C 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 on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- selecting appropriate equipment to manual heat, thermal cut and gouge, including the selection of settings and consumables to specifications
- checking condition of equipment
- setting up:
  - gas cylinders
  - hoses
  - blowpipes
  - tips and nozzles
  - regulators
  - flashback arrestors
- operating equipment to produce complex internal and external profiles with shape/profile/surface finish to predetermined specifications with minimum loss of sound material
- identifying defects and taking appropriate remedial action
- checking final product for compliance with specifications.

## 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 various materials
- potential equipment faults
- heating, cutting and surface finish specifications and procedures
- use and applications of tools, equipment and techniques for heating and cutting
- assembling procedures for equipment and accessories
- equipment settings, pre-checks and operation

- sources of information and application on equipment settings and consumables
- procedures for adjusting heating and cutting equipment
- cutting allowances and reasons for applying them
- tools, equipment and techniques required to correct cutting defects
- procedures and reasons for minimising waste material
- cutting defects and their causes and tools, equipment and techniques required to correct defects.

## 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
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- 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.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>