



Australian Government

Assessment Requirements for MEM06009 Hand forge complex shapes

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM06009A Hand forge complex shapes

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 and using measuring guides
- calculating allowances for material volume, bending, shrinkage and oxidation
- selecting and using hand forging tools to forge complex shapes on anvil to meet specifications
- forging open and bundled split sections safely using heating equipment, as required, to meet specifications
- producing jigs and tools for complex shapes
- performing heat treatment processes for forgings.

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)
- forging hand tools and their applications
- techniques and procedures for hand forging complex shapes
- procedures for measuring forged articles and numerical operations and calculations/formulae for complex shapes
- forging temperatures and heat specifications for multiple pieces
- tools, techniques and equipment required to taper and bend materials
- effects of material shrinkage and oxidation on the dimensions of the forged article
- methods of overcoming/allowing for the effects of shrinkage and oxidation when hand forging articles
- procedures for handling forgings
- heating equipment and applications and appropriate heat treatment processes for forging different materials.

Assessment Conditions

- Assessors must:
 - have vocational competency in hand forging complex shapes 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>