



Australian Government

**Assessment Requirements for MEM09009
Create 2-D drawings using computer-aided
design system**

Release: 1

Assessment Requirements for MEM09009 Create 2-D drawings using computer-aided design system

Modification History

Release 1. Supersedes and is equivalent to MEM09009C Create 2D drawings using computer aided design system

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
- preparing computer-aided design (CAD) systems to create 2-D drawings by customising system variables, menus and drawing defaults and developing macros to specifications and SOPs
- creating 2-D drawings using CAD with the full capacity of the software system and linking drawing entities
- undertaking numerical operations, geometry and calculations or formulae associated with creating 2-D drawings using CAD system
- linking entities to data attributes including mean properties associated with an entity and creating detailed views using appropriate scales to suit specifications
- producing and saving files in various formats, listing link entities in a bill of materials format and extracting supplementary data from drawing to meet job requirements.

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
- CAD software system
- system variables that can be customised
- procedures for:
 - customising identified system variables and reasons why
 - customising menus, system defaults and developing macros and reasons why
 - linking drawing entities to database attributes
 - printing drawing files
 - creating additional views of the object being drawn
 - saving drawing files
 - producing bills of material

- extracting data with respect to drawn shapes and features
- applicable drafting standards and procedures
- drawing features of the CAD software system
- reasons for using specialised software features
- appropriate drawing scales
- various formats in which drawing files can be saved and reasons for using different formats when saving drawing files
- properties of shapes, sections and features that can be extracted from the drawing file.

Assessment Conditions

- Assessors must:
 - have vocational competency in creating 2-D drawings using computer-aided design system 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>