



Australian Government

**Assessment Requirements for MEM07014
Perform electro-discharge machining
(EDM) operations**

Release: 2

Assessment Requirements for MEM07014 Perform electro-discharge machining (EDM) operations

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM07014 Perform electro-discharge machining (EDM) operations (Release 1).

Release 1. Supersedes and is equivalent to MEM07014B Perform electro-discharge (EDM) machining operations.

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, drawings and other applicable reference documents with respect to performing electro-discharge machining (EDM) operations
- determining the coordinates of the work pieces relative to the machine datum
- calculating machining parameters necessary in achieving the safe, accurate and efficient machining of the work piece
- calculating the electrode surface area and selecting the correct electrodes for the job
- setting up job using appropriate holding devices and accessories
- performing EDM operations to produce components to specifications
- checking components for conformance to specifications using precision measuring instruments
- rectifying non-compliant product.

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)
- sequence of operations to achieve the EDM job requirements
- electrode types and geometry required to achieve the specified outcome
- effects of material to be machined on the electrode material and geometry
- procedures for producing electrodes for the electro-discharge machining process
- coordinates of the feature(s) to be machined
- coordinates of the electrode relative to the machine datum
- procedures for operating the electro-discharge machine to produce components
- tools, techniques and equipment appropriate to the checking of machined components

- tools, techniques and equipment for checking components for conformance to specifications and rectifying non-compliant components
- reasons for selecting the tools, techniques and equipment to be used.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing electro-discharge machining (EDM) operations 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.
- 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>