



Australian Government

Assessment Requirements for MEM08018 Electroplate engineering coatings

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM08018B Electroplate engineering coatings

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
- determining the composition of surfaces to be treated and selecting suitable methods and techniques for electroplated coating treatment
- preparing surfaces to be treated with pre-treatment process using masking and constructing/fitting shields/robbars, where necessary, and fitting anodes
- electroplating surfaces, monitoring the treatment process and adjusting solutions and operating parameters to meet 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)
- effects of plating process on different materials
- conditions affecting engineering finishes
- base metal types and the surface finish of untreated material
- mechanical/chemical and specialised electroplating pre-treatment processes
- process parameters for achieving different coatings
- characteristics of different surface finishes
- masking materials and masking techniques
- safe operation of equipment to produce engineering finishes
- current distribution principles
- methods of constructing/fabricating, fitting anodes and current capacity of conforming/auxiliary anodes
- role, construction, properties, applications, and positioning of shields and robbars
- finish requirements and permissible tolerances
- causes of electroplating process abnormalities and their related corrective actions
- purpose and application of simple tests including pH, titration and density
- calculations related to additions/adjustments to solution and of product surface area
- procedures for safe handling of chemicals.

Assessment Conditions

- Assessors must:
 - have vocational competency in electroplating engineering coatings 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>