



**Australian Government**

# **Assessment Requirements for MEM48025**

## **Select surface treatment methods for metallic components or products**

**Release: 1**

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## **Modification History**

Release 1. Supersedes and is equivalent to MSATCM514A Select surface treatment methods for metallic components or products.

## **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, charts, lists, drawings and other applicable reference documents in selecting surface treatment methods for metallic components or products
- researching the surface treatment methods by their principle properties
- selecting surface treatment process and materials to match application outcome on at least two occasions
- arranging tests appropriate to the metal or alloy and surface treatment material and analysing the results on at least two occasions.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

## **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)
- surface preparation methods
- theory of electroplating
- surface treatment requirements as specified in the Range of Conditions, including:
- principal properties of different surface treatments for metals and alloys
- process route for different types of surface treatment
- advantages and disadvantages of using different methods
- effects of different types of bonding in materials
- effects of mechanical and thermal processes on the principal properties of materials.
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## **Assessment Conditions**

- Assessors must:

- have vocational competency in selecting surface treatment methods for metallic components or products 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 that 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.
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## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>