



Australian Government

MEM08001 Perform wire, jig and barrel load/unload work

Release: 1

MEM08001 Perform wire, jig and barrel load/unload work

Modification History

Release 1. Supersedes and is equivalent to MEM08001B Perform wire, jig and barrel load/unload work

Application

This unit of competency defines the skills and knowledge required to load barrels for mass finishing processes, undertake jig work for non-electrolytic processes, undertake wire jig and rack work for electrolytic processes, and unload and remove jigs after finishing.

Where the selection and use of engineering measurement is required unit MEM12023 Perform engineering measurements should also be selected.

Where the selection and use of tools is required unit MEM18001 Use hand tools and unit MEM18002 Use power tools/hand held operations, as appropriate should also be selected.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Surface finishing

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
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1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS)

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
			requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPS
		1.4	Identify job requirements from specifications, job sheets or work instructions
2	Load barrels for mass finishing processes	2.1	Load machinery taking into account load mass
		2.2	Secure machine access openings in accordance with SOPs
3	Undertake jig work for non-electrolytic processes	3.1	Secure components appropriately using SOPs
4	Undertake wire jig and rack work for electrolytic processes	4.1	Select type and size of wire or rack and inspect for conformance to specification
		4.2	Identify damaged racks for repair or replacement
		4.3	Secure components presenting appropriate faces according to procedures
5	Unload and remove jigs after finishing	5.1	Unload and stack components without causing damage to the finish following SOPs
		5.2	Remove and store jigs following SOPs

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, accessibility of the item, and local industry and regional contexts) are included.

Non-electrolytic processes include one (1) or more of the following:

- degreasing
- de-scaling
- surface blasting
- flame cleaning
- wet blasting
- grinding
- polishing
- wet coating
- powder coating
- electroplating
- anodising
- electroless plating
- electrophoretic coating
- hot dip metallising

Damaged racks include one (1) or more of the following:

- damage to plastic coating or contact points
- ensuring good electrical contact
- positioning to facilitate optimum thickness on significant surfaces
- avoidance of gas entrapment
- position of contact marks

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM08001B Perform wire, jig and barrel load/unload work

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM08001 Perform wire, jig and barrel load/unload work

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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
- loading into surface finishing machinery safely and with correct material load mass
- securing and positioning components to minimise damage and securing machine access openings
- unloading and stacking components to minimise damage
- selecting the correct type and size of wire or rack
- identifying damaged racks for repair or replacement
- undertaking jig work for non-electrolytic processes in conformance to specifications
- undertaking wire jig and rack work for electrolytic processes in conformance to 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)
- procedures for loading machinery for mass finishing processes
- distribution of the components in the machinery and reasons for distributing the components in a particular manner
- procedures for securing machine access openings and consequences of not securing machine access openings
- procedures for jiggling work for non-electrolytic processes
- precautions to be taken when jiggling work for non-electrolytic finishing processes
- appropriate types and sizes of wire or racks used in conjunction with surface finishing using electrolytic processes
- different faces to be surface finished/coated
- procedures for securing the components to be surface finished using electrolytic processes
- procedures for unloading and stacking surface finished components

- damage that can be caused by inappropriate handling and storing of surface finished components.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing wire, jig and barrel loading and unloading work 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.

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