



Australian Government

MEM08011 Prepare surfaces using solvents and/or mechanical means

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM08011B Prepare surfaces using solvents and/or mechanical means

Application

This unit of competency defines the skills and knowledge required to select the appropriate preparation process, select and set up the equipment, undertake blasting or application of solvents on metal and non-metal materials, and check the finished surface.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

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

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

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13003	Work safely with industrial chemicals and materials
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

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.

1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify surface preparation requirements from specifications, job sheets or work instructions
2	Prepare to undertake work	2.1	Select appropriate solvent and solvent application to meet job specification
		2.2	Select appropriate mechanical equipment to meet job specification
		2.3	Prepare worksite for surface cleaning activities
3	Set up equipment	3.1	Set up and prepare appropriate equipment and any required consumables in accordance with manufactures' specifications and SOPs
4	Prepare surfaces using solvents as required	4.1	Establish safe working environment for solvent use according to regulatory requirements and SOPs
		4.2	Apply solvent in accordance with procedures
		4.3	Neutralise treated surface and make it safe to handle
5	Prepare surfaces using mechanical means as required	5.1	Establish safe working environment for mechanical surface preparation according to regulatory requirements and procedures
		5.2	Prepare surfaces using mechanical means
		5.3	Clean mechanical equipment and check for damage and

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

operational faults, in accordance with procedures

5.4 Record any equipment faults and report in accordance with SOPs

6 **Inspect prepared surface**

6.1 Check surface preparation for cleanliness and conformance to specifications

6.2 Rectify faults or defects where required and record/report in accordance with procedures

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.

Surface preparation includes the following:

- new surfaces and restoration work

Solvents include one (1) or more of the following:

- acids
- chlorinated solvents
- hydrocarbons

Solvent application methods include one (1) or more of the following:

- spraying
- wiping
- brushing
- vapour degreasing

Mechanical equipment includes one (1) or more of

- linishers
- grinders

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.

the following:

- polishers
- sanders
- blast device
- enclosures
- air grinders

Consumables include one (1) or more of the following:

- emery cloth/belts
- grinding/sanding disks
- grinding accessories

Unit Mapping Information

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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>