



**Australian Government**

# **MEM08013 Prepare surfaces by abrasive blasting (advanced)**

**Release: 1**

## MEM08013 Prepare surfaces by abrasive blasting (advanced)

### Modification History

Release 1. Supersedes and is equivalent to MEM08013B Prepare surfaces by abrasive blasting (advanced)

### Application

This unit of competency defines the skills and knowledge required to perform, at an advanced level of skill, surface preparation using abrasive blasting.

The operation and maintenance of compressed air systems and associated items, including emergency shutdown procedures is included.

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.

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

MEM08012	Prepare surfaces by abrasive blasting (basic)
MEM08016	Control blast coating by-products, materials and emissions
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

### 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	<b>Determine job requirements</b>	<p>1.1 Follow standard operating procedures (SOPs)</p> <p>1.2 Comply with work health and safety (WHS) requirements at all times</p> <p>1.3 Use appropriate personal protective equipment (PPE) in accordance with SOPs</p> <p>1.4 Identify job requirements from specifications, job sheets or work instructions</p>
2	<b>Prepare to undertake work</b>	<p>2.1 Select appropriate abrasive blasting process and equipment to meet job specification</p> <p>2.2 Select appropriate abrasive blasting media to meet job specification</p> <p>2.3 Prepare worksite for surface cleaning activities</p>
3	<b>Set up equipment</b>	<p>3.1 Assemble, set up and correctly and safely prepare appropriate equipment and any required consumables in accordance with manufacturers' specifications and workplace procedures</p> <p>3.2 Select correct rust inhibitor to reduce corrosion for use in wet abrasive blast methods, where required</p> <p>3.3 Carry out pre-operational checks on equipment, rectify faults or report for further action</p>
4	<b>Inspect surface prior to cleaning</b>	<p>4.1 Inspect work piece prior to cleaning in accordance with procedures</p> <p>4.2 Report identified faults/defects requiring remedial or pre-treatment action, as required</p>
5	<b>Prepare surfaces</b>	<p>5.1 Operate blasting equipment in accordance procedures</p>

Elements describe the essential outcomes.

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

<b>using abrasive blasting</b>	5.2	Undertake emergency shutdown procedures, as required
	5.3	Undertake work to meet environmental requirements
	5.4	Carry out abrasive media disposal in accordance with environmental requirements and procedures
	5.5	Disassemble, clean and inspect blasting equipment in accordance with manufacturers' specifications
	5.6	Record equipment faults and report in accordance with SOPs
<b>6 Inspect prepared surface</b>	6.1	Assess surface preparation for cleanliness and conformance with specifications
	6.2	Rectify faults or defects where required and record inspection results and report in accordance with 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.

**Blasting process includes one (1) or more of the following:**

- wet
- dry
- vacuum automatic rotary
- centrifugal
- water blasting (including HP and UHP)

**Blasting media includes**

- garnet

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- one (1) or more of the following:**
- ilmenite
  - slags
  - steel grit
  - steel shot
  - water
  - glass bead
  - soda

- Equipment includes one (1) or more of the following:**
- blast nozzles
  - compressors
  - blast and helmet ventilation
  - air hoses
  - blast pots
  - nozzles
  - safety equipment

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM08012B Prepare surfaces by abrasive blasting (advanced)

## Links

Companion Volume implementation guides are found in VETNet -

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