



Australian Government

MEM07008 Perform grinding operations

Release: 1

MEM07008 Perform grinding operations

Modification History

Release 1. Supersedes and is equivalent to MEM07008D Perform grinding operations

Application

This unit of competency has been developed for Engineering Tradesperson - Mechanical apprenticeship training and the recognition of trad-level skills in performing grinding operations and checking finished components for conformance to specifications.

Skills covered by this unit are generally applied in occupational and work situations associated with trade-level fitting and machining work.

Where the selection and use of precision mechanical measurement is required unit MEM12003 Perform precision mechanical measurement should also be selected.

Where the selection and use of power tools/hand held operations is required unit MEM18002 Use power tools/hand held operations 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

MEM07005	Perform general machining
MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM12024	Perform computations
MEM13015	Work safely and effectively in manufacturing and engineering
MEM14006	Plan work activities
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Machine and process operations

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 job requirements from specifications, drawings, job sheets or work instructions |
| | | |
| 2 | Prepare to undertake work | 2.1 Determine sequence of operations to meet job specifications |
| | | 2.2 Select and apply appropriate holding devices |
| | | 2.3 Check machine guards, coolant and dust extraction devices |
| | | |
| 3 | Select grinding wheels and accessories | 3.1 Select and dress wheels based on knowledge of grinding wheel structure and application |
| | | 3.2 Select accessories to facilitate production to job specifications |
| | | |
| 4 | Perform grinding operations | 4.1 Set up grinding machine and adjust in accordance with defined procedures |
| | | 4.2 Ensure work is securely held to avoid damage to product, and meet safety requirements |
| | | 4.3 Perform grinding operations to specifications |

Elements describe the essential outcomes.

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

5 Check components

5.1 Check components for compliance with specifications

5.2 Rectify non-compliant product 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.

Grinding machines include one (1) or more of the following:

- surface
- cylindrical
- centreless

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

- dimensions and tolerances
- geometry and tolerances
- surface finish

Holding devices include one (1) or more of the following:

- vices
- clamps
- magnetic chucks
- face plates
- collets
- ¾ jaw chuck

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

- shape
- grit/bond composition

Balanced includes the following:

- static and dynamic balancing

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

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