



Australian Government

**MEM07002 Perform precision
shaping/planing/slotting operations**

Release: 2

MEM07002 Perform precision shaping/planing/slotting operations

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM07002 Perform precision shaping/planing/slotting operations (Release 1).

Release 1. Supersedes and is equivalent to MEM07002B Perform precision shaping/planing/slotting operations.

Application

This unit of competency defines the skills and knowledge required to perform precision shaping/planing/slotting operations.

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 |
| MEM12003 | Perform precision mechanical measurement |
| 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 | Perform precision shaping/ planing/ slotting operations | 2.1 | Determine cutting parameters |
| | | 2.2 | Carry out precision operations using appropriate tools, equipment, techniques and procedures to meet specifications |
| 3 | Check component | 3.1 | Check components for compliance with specifications |
| | | 3.2 | 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.

- Tools include the following:**
- cutting tools
 - tool holders
- Cutting parameters include one (1) or more of the following:**
- feeds
 - speeds
 - depth of cut
 - length of cut
- Shaping operations include one (1) or more of the following:**
- precision flat surfaces
 - shoulders
 - slots
 - keyways
 - angles
 - dovetails
- Planing operations include one (1) or more of the following:**
- horizontal surfaces
 - vertical surfaces
 - angles
- Slotting operations include one (1) or more of the following:**
- feathered keyways
 - tapered keyways
 - slotting internal cavities
 - dovetails
 - slotting circular surfaces
 - internal splines

Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM07002 Perform precision shaping/planing/slotting operations (Release 1).

Release 1. Supersedes and is equivalent to MEM07002B Perform precision shaping/planing/slotting operations.

Links

Companion Volume implementation guides are found in VETNet -

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