

Australian Government

# MEM07012 Perform complex grinding operations

Release: 2

#### **MEM07012** Perform complex grinding operations

#### **Modification History**

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM07012 Perform complex grinding operations (Release 1).

Release 1. Supersedes and is equivalent to MEM07012B Perform complex grinding operations.

## Application

This unit of competency defines the skills and knowledge required to perform complex and high precision grinding operations.

Grinding operations are performed on a variety of materials to achieve high levels of precision for dimensions and finish.

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		
MEM07008	Perform grinding operations		
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	Set up work	2.1	Select grinding wheels based on shape and grit/bond composition and dress to form and size, as required	
		2.2	Set up work to required level of accuracy according to specifications	
3	Perform complex grinding	3.1	Perform specialised grinding operations on components	
		3.2	Check components for compliance with specifications	
		3.3	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.

Complex and high precision grinding operations include one (1) or more of the following:

- jig grinding
- grinding eccentrics
- thread grinding
- gauges
- shapes and forms

#### **Unit Mapping Information**

Release 2. Supersedes and is equivalent to MEM07012 Perform complex grinding operations (Release 1).

Release 1. Supersedes and is equivalent to MEM07012B Perform complex grinding operations.

#### Links

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