



Australian Government

MEM07004B Perform machine setting (complex)

Release 2

MEM07004B Perform machine setting (complex)

Modification History

Release 2 - Additional prerequisite pathway included. Outcomes remain equivalent.

Unit Descriptor

This unit covers determining job requirements, performing complex machine setting, instructing the operator and replacing worn or damaged tooling.

Application of the Unit

Application of the unit	This unit applies to the setting of a range of non-numerical control/computer numerical control production machines and processes. This may include manual, semi-automatic and automatic machines. Where numerical control/computer numerical control skills are required, Unit MEM07015B (Set computer controlled machines/processes) should be selected. Band: A Unit Weight: 8
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM07005C	Perform general machining
	MEM07006C	Perform lathe operations
	MEM09002B	Interpret technical drawing

Prerequisite units		
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 2	MEM07005C	Perform general machining
	MEM07007C	Perform milling operations
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 3	MEM07005C	Perform general machining
	MEM07008D	Perform grinding operations
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 4	MEM07005C	Perform general machining
	MEM07013B	Perform machining operations using horizontal and/or vertical boring machines
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools

Prerequisite units		
Path 5	MEM07001B	Perform operational maintenance of machines/equipment
	MEM07003B	Perform machine setting (routine)
	MEM07024B	Operate and monitor machine/process
	MEM07025B	Perform advanced machine/process operation
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 6	MEM07001B	Perform operational maintenance of machines/equipment
	MEM07003B	Perform machine setting (routine)
	MEM07024B	Operate and monitor machine/process
	MEM07026B	Perform advanced plastic processing
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 7	MEM07001B	Perform operational maintenance of machines/equipment
	MEM07003B	Perform machine setting (routine)
	MEM07024B	Operate and monitor machine/process

Prerequisite units		
	MEM07027B	Perform advanced press operations
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
Path 8	MEM07041A	Perform production machining
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine job requirements	1.1. Job sheets or equivalent instructions are interpreted correctly and understood
2. Set machine	2.1 Safe working practices are understood and implemented 2.2 Sequence of operations is determined and machine is set accordingly 2.3 Machine is adjusted to meet specifications and operational requirements 2.4 First-off samples are measured and inspected for compliance with specifications
3. Instruct machine operator	3.1 Machine operator is instructed, if necessary, on sequencing settings and any required safety procedures
4. Replace worn/damaged tooling	4.1 Tools are changed and settings are adjusted to specification as required

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- interpreting information on written job sheets, instructions, standard operating procedures, safe working procedures and other applicable reference documents
- determining machine/process sequences
- verbally conveying routine and familiar instructions
- checking and adjusting machine and replacing worn or damaged tooling
- checking and clarifying task-related information
- measuring to specified tolerances

Required knowledge

Look for evidence that confirms knowledge of:

- characteristics and hazards of machine/process
- tooling, equipment and timing requirements of the machine's operations

- common product faults or defects and adjustments
- consequences of not instructing the machine operator
- use and application of personal protective equipment
- safe work practices and procedures
- strategies for conveying routine instructions

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to determine job requirements, set the machine, instruct the operator and replace worn or damaged tooling. Competency in this unit cannot be claimed until all prerequisites have been satisfied.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
Context of and specific resources for assessment	This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with performing complex machine setting or other units requiring the exercise of the skills and knowledge covered by this unit.
Method of assessment	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools,

	equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
Guidance information for assessment	

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Equivalent instructions	Standard operating procedures, safe working procedures, operation sheets
Set	The selection of gears, cams, trip dogs, pin boards or other timing mechanisms

Unit Sector(s)

Not applicable

Co-requisite units

Co-requisite units		

Competency field

Machine and process operations