



Australian Government

Department of Education, Employment and Workplace Relations

MEM19007B Perform gemstone setting

Release: 1

MEM19007B Perform gemstone setting

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers performing most diamond and gem setting styles by manual methods.
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Application of the Unit

Application of the unit	This unit applies to most diamond and gem setting styles by manual methods, with the aid of basic electrical/mechanical equipment. Techniques cover the basic forms of claw, grain and rub-over styles by manual methods, over a range of design styles. Metals may include precious jewellery metals and their alloys. The unit is not intended to cover the work of a specialist gemstone setter and typically applies in a jewellery manufacturing and repair environment. Do not select this unit for the setting of stones into wax, rubber, resin, etc. For production setting, Unit MEM07024B (Operate and monitor machine/process) should be considered. Where annealing and tempering are required, Unit MEM19005B (Produce three-dimensional precision items) should also be selected. Band: A Unit Weight: 6
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM12023A	Perform engineering measurements
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations
	MEM18003C	Use tools for precision work
	MEM19003B	Handle gem materials

Employability Skills Information

Employability skills	This unit contains employability skills.
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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. Identify setting requirements	1.1. Setting requirements are identified. 1.2. Gemstone status is assessed. 1.3. Setting metal is identified.
2. Prepare materials and equipment for setting	2.1. Tools are selected for use in achieving the desired outcome. 2.2. Tools are prepared and maintained to produce required specifications. 2.3. Metal is prepared for setting.
3. Perform gemstone setting	3.1. Gemstones are secured correctly. 3.2. Setting metal is finished/burnished to specification.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Look for evidence that confirms skills in:

- selecting and preparing tools
- identifying metals
- identifying gemstone features
- adjusting, sharpening and maintaining tools
- preparing metals
- securing gemstones
- reading and interpreting routine information on written job instructions, specifications and standard operating procedures. May include drawings

Required knowledge

Look for evidence that confirms knowledge of:

- setting processes and terminology
- gemstone features and handling procedures
- suitability of metal for carving and setting
- maintenance of tools
- setting techniques, processes and procedures

REQUIRED SKILLS AND KNOWLEDGE

- working properties of materials

Evidence Guide

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 perform basic gemstone setting. 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 gemstone 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

EVIDENCE GUIDE**assessment****Range Statement****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.

Tools

Various holding and securing devices, pliers, burrs, scaupers, burnishers, emery, beadern

Setting requirements

Type of setting, specific product handling measures

Unit Sector(s)**Unit sector****Co-requisite units****Co-requisite units**

Competency field

Competency field	Jewellery and horological
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