



Australian Government

MEM19051 Construct multiple stone settings

Release: 1

MEM19051 Construct multiple stone settings

Modification History

Release 1. Supersedes and is equivalent to MEM19051A Construct multiple stone settings.

Application

This unit of competency defines the skills and knowledge required to construct jewellery that incorporates multiple stone settings and clusters in pieces such as rings, brooches and pendants. It will involve construction techniques such as bezel, shank, claw and eternity rings.

This unit applies to individuals involved in jewellery manufacture in a small or large-scale production context. They use and adapt technical skills and knowledge to produce work that meets pre-determined design and production requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: B

Unit Weight: 4

Pre-requisite Unit

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

MEM19045 Set gems in channel style settings

MEM19047 Set gems in claw and bezel style settings

Competency Field

Jewellery

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
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 personal protective equipment (PPE) in accordance with SOPs

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Interpret specifications or design to determine customer requirements
2. Research setting styles	2.1 Conduct research into design features to inform work 2.2 Conduct research into traditional and contemporary trends, styles and applications of jewellery containing multiple stone settings 2.3 Document findings and methods of construction as basis for work practice
3. Construct stone setting	3.1 Plan construction, materials and equipment based on job requirements 3.2 Estimate costs and confirm viability in accordance with workplace procedures 3.3 Source materials, equipment and components required to complete work 3.4 Apply construction techniques to meet design specifications
4. Finish work	4.1 Check work against quality and client requirements and rectify any deficiencies 4.2 Determine and use safe cleaning techniques for item to ensure features are protected from damage in readiness for presentation to client 4.3 Complete documentation in accordance with workplace procedures 4.4 Clean up and maintain production environment and equipment in accordance with SOPs

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.	
Specifications include one or more of the following:	• drawings • job sheets • work instructions.
Materials include one or more of the following:	• diamond, ruby, sapphire and emerald • lapis lazuli and malachite • amber, coral and ivory, and their synthetics and limitations • rocks • amorphous opal • glass, plastic and composite stones • gold, silver, platinum, palladium, copper and their alloys.
Multiple stone set jewellery includes one or more of the following:	• coronet cluster rings and pendants • wire cluster rings • individual setting eternity rings • carved eternity rings • ribbon style brooches or pendants • plate setting brooches.
Construction techniques include one or more of the following:	• bezel • shank • claw • eternity rings.
Environmental requirements include one or more of the following:	• liquid and solid waste • emissions (gas, fume, vapour, smoke, fugitive emissions or dust) • excessive noise • excessive energy and water use.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM19051A Construct multiple stone settings.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM19051 Construct multiple stone settings

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- determining customer requirements including those related to repair or restoration
- planning the design and construction, estimating costs and confirming viability of constructing multiple stone set jewellery
- measuring and marking out stones on at least two occasions according to design requirements
- applying a range of jewellery construction techniques to complete multiple stone items of jewellery on at least two occasions, including cleaning and presenting item to client
- completing work by hand according to job requirements and to industry quality standards
- completing documentation in accordance with SOPs.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- methods used to determine customer requirements
- range of techniques used in multiple stone jewellery construction
- characteristics and responses of materials and gems used in jewellery
- types of multiple stone set jewellery
- techniques used for multiple stone constructions and conditions and limitations for application
- cleaning and handling requirements for jewellery materials
- environmental considerations when constructing multiple stone settings.

Assessment Conditions

- Assessors must:

- have vocational competency in constructing multiple stone settings at least to the level being assessed with relevant industry knowledge and experience
- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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