

MEM19013 Produce jewellery metal masters

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM19013B Produce jewellery metal masters

Application

This unit of competency covers the skills and knowledge required for producing jewellery master patterns for jewellery reproduction.

Where machining is required as a major component of this manufacturing concept unit MEM07005 Perform general machining should also be selected.

Where component(s) require preparation or manufacture by numerically controlled (NC)/computer numerically controlled (CNC)/computer-aided design (CAD)/computer-aided manufacture (CAM) as an integral part of this process by the person working autonomously appropriate units should also be selected.

Where electro-deposition and/or electro-forming of metal are required unit MEM07024 Operate and monitor machine and process or unit MEM08003 Perform electroplating operations, should also be selected as appropriate.

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

Band:

This unit has dual status and is to be regarded as both a Specialisation Band A unit and Specialisation Band B unit for progression to C5 (AQF level V).

Unit Weight: 4

Pre-requisite Unit

MEM08010	Manually finish/polish materials
MEM13004	Work safely with molten metals/glass
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM19001	Perform jewellery metal casting

Competency Field

Jewellery and horological

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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 **Produce master**
- 2.1 Select technique and process to achieve quality high polish finish for masters
- 2.2 Select materials, tools and equipment for task
- 2.3 Mark out materials and develop construction plan to meet specifications and stages of process
- 2.4 Prepare pattern materials and produce master
- 3 Finish and inspect work
- 3.1 Check item for compliance with specifications
- 3.2 Determine the action required when item does not comply with specifications and carry out the determined action
- 3.3 Record weights and measurements
- 3.4 Fit sprue material, as required
- 3.5 Apply final finish to meet specifications and store item
- 3.6 Evaluate master and compare to production sample

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.

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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.

Materials include one (1) or more of the following:

jewellery alloys

base metals

Tools and equipment include one (1) or more of the following:

hand and power tools

lathes

non-CNC machines

Unit Mapping Information

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Links

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

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