



Australian Government

MEM19037 Plan and implement chenier fabrication process

Release: 1

MEM19037 Plan and implement chenier fabrication process

Modification History

Release 1. Supersedes and is equivalent to MEM19037A Plan and implement chenier fabrication process.

Application

This unit of competency defines the skills and knowledge required to fabricate chenier items and basic hinges. It applies to initial production and repair work.

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: A

Unit Weight: 2

Pre-requisite Unit

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

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) and meet environmental requirements 1.2 Comply with work health and safety (WHS) requirements at all times 1.3 Use personal protective equipment (PPE) in accordance with SOPs 1.4 Identify job requirements from specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Prepare for work	2.1 Establish, plan and organise stages, materials, tools and equipment for the fabrication process 2.2 Accurately calculate required materials based on specifications
3. Draw chenier materials to size	3.1 Cut materials to required size 3.2 Anneal materials to relieve stress based on specifications 3.3 Draw materials to specified tolerance using appropriate equipment 3.4 Carry out finishing processes, including soldering, to specifications
4. Produce items from cheniers	4.1 Solder seams free from pin holes, inclusions and excess flooding 4.2 Ensure cheniers have a smooth and blemish-free surface 4.3 Conduct quality assurance during construction to maintain finish consistency and ensure items are produced to all specified dimensions
5. Fabricate hinges	5.1 Produce knuckles and bearer wires or sheets to specification 5.2 Gap items to size and specification 5.3 Cut, file and place knuckles according to item requirement 5.4 Flush and draw solder under knuckles 5.5 Make pin fit comfortably through knuckles of adjoining sides

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:	<ul style="list-style-type: none"> • drawings • job sheets • work instructions.
Equipment includes one or more of the following:	<ul style="list-style-type: none"> • jewellery bench and adjustable chair • soldering torch and equipment • pickle bath and heater • flexible drive and drill bits • swage blocks • hand tools • measuring and marking out equipment • abrasives • draw bench and various drawplates • polishing motor with extraction, mops, brushes and various polishing compounds • protective clothing and equipment.
Cut materials includes one or more of the following:	<ul style="list-style-type: none"> • establishing required wall thickness and diameter • establishing required swage or form.
Material includes one or more of the following:	<ul style="list-style-type: none"> • various thickness sheets • silver • gilding • nickel silver • hard solder • medium solder
Finished includes one or more of the following:	<ul style="list-style-type: none"> • finishing by files and emery • polishing on a polishing motor using appropriate mops and compounds.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM19037A Plan and implement chenier fabrication process.

Links

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