

Australian Government

# MEM21004 Clean watch and clock components

Release: 1

#### MEM21004 Clean watch and clock components

#### **Modification History**

Release 1. Supersedes and is equivalent to MEM21004A Clean watch and clock components

### Application

This unit of competency defines the skills and knowledge required to apply cleaning techniques for watch and clock movements, cases and other components by manual, mechanical and electronic methods, using a range of media.

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**

Horology

## **Elements and Performance Criteria**

	nts describe the ial outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
1 Determine job requirements	0	1.1	Follow standard operating procedures (SOPs)
	requirements	1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Identify job requirements from specifications, job sheets or work instructions
2	Apply principles of WHS to	2.1	Select and use appropriate personal protective equipment (PPE) based on information in relevant safety data sheet

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.		
	cleaning activities		(SDS)	
		2.2	Identify hazards associated with cleaning equipment and media	
		2.3	Follow emergency response procedures	
3	Select and prepare appropriate methods,	3.1	Select cleaning methods, processes and equipment according to type and size of mechanisms, components and cases	
	equipment and solutions	3.2	Select cleaning solutions appropriate to component, finish, surface coating and material	
		3.3	Decant, mix and prepare solutions for use	
		3.4	Dispose of chemicals according to manufacturer guidelines, legislation and regulations	
4	Prepare parts and components for cleaning	4.1	Dismantle watch or clock and component parts to optimise cleaning	
	for cicaning	4.2	Pre-clean components, as required, for inspection	
		4.3	Arrange components during machine cleaning to prevent damage	
		4.4	Arrange and sequence parts and components for cleaning to assist subsequent identification, reassembly and to optimise cleaning	
5	Perform cleaning operations	5.1	Set up and operate cleaning equipment using correct and safe work practices	
		5.2	Monitor and control exposure of components to solutions during cleaning process	
		5.3	Remove residues, dry and handle cleaned components, as appropriate	
		5.4	Arrange storage of cleaned components to maintain	

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	finish and cleanliness

6	Assess outcomes	6.1	Verify condition of cleaned components and identify
	of cleaning		remaining residues and contaminants, damage to surface
	process		coatings and other component damage

6.2 Account for all components

# 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.

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.

PPE includes one (1) or more of the following:	• • •	protective masks gloves for handling chemicals fire blankets and extinguishers ventilation of cleaning area clothing (dustcoats and aprons)
Emergency response procedures include one (1) or more of the following:	• • •	safe selection and use of fire extinguishers use of safety blankets and other methods of suppressing solvent-based fires emergency treatment of eye splashes and chemical burns emergency treatment of chemical inhalation and absorption

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.

Cleaning methods,	<ul> <li>rotational mechanical processes</li> </ul>
processes and	• vibrational mechanical processes
equipment include one	electronic (ultrasonic)
(1) or more of the	• steam cleaning
following:	cleaning machines
	cleaning baskets
	hand cleaning
Cleaning solutions include one (1) or more of the following:	<ul> <li>number 1 degreasing and cleaning solution (WF1)</li> <li>customised solutions</li> <li>ammonia</li> <li>oleic acid</li> <li>acetone</li> <li>water-based solutions</li> <li>commercial grade ammonia concentrates</li> </ul>

- rinsing solutions
- hydrocarbon solvents

## **Unit Mapping Information**

Release 1. Supersedes and is equivalent to MEM21004A Clean watch and clock components

#### Links

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