

## MEM18001C Use hand tools

<b>Unit descriptor</b>	This unit covers using a range of hand tools for a variety of general engineering applications.
<b>Prerequisites</b>	None
<b>Competency field</b>	Maintenance & diagnostics
<b>Application of the competency</b>	Applications may include hand tools used for adjusting, dismantling, assembling and finishing of items or components, and the finishing, cutting, scraping of metallic and non-metallic material to size and shape. This includes simple tapping and threading and routine maintenance of hand tools.
<b>Related units</b>	This unit should not be selected if the hand tool is dedicated to a single operation or machine and if only a machine specific/customised tool is used.  When using hand held power tools or power tools used for hand held operations, refer to Unit MEM18002B (Use power tools/hand held operations).
<b>Band</b>	A
<b>Unit weight</b>	2
<b>Notes</b>	There are no notes for this unit.

<b>Elements</b>	<b>Performance criteria</b>
Elements are the essential outcomes of the unit of competency.	Together, performance criteria specify the requirements for competent performance. Text in <i>italics</i> is explained in the range statement following.
1 Use hand tools	<p>1.1 <i>Hand tools</i> are selected appropriate to the task requirements.</p> <p>1.2 Hand tools are used to produce desired outcomes to <i>job specifications</i> which may include finish, tension, size or shape.</p> <p>1.3 All safety requirements are adhered to before, during and after use.</p> <p>1.4 Unsafe or faulty tools are identified and marked for repair according to designated procedures before, during and after use.</p> <p>1.5 <i>Routine maintenance</i> of tools, including hand sharpening is undertaken according to standard operational procedures, principles and techniques.</p> <p>1.6 Hand tools are stored safely in appropriate location according to standard operational procedures and manufacturers' recommendations.</p>

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in italics in the performance criteria is explained here.

The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

Variable	Scope
<i>Hand tools</i>	Hacksaws, hammers, punches, screwdrivers, sockets, wrenches, scrapers, chisels, gouges, wood planes and files of all cross-sectional shapes and types
<i>Job specifications</i>	Finish, tension, size or shape etc.
<i>Routine maintenance</i>	Cleaning, lubricating, tightening, simple tool repairs, hand sharpening and adjustments using engineering principles, tools, equipment and procedures

## Evidence guide

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit must be able to use hand tools for a range of general engineering applications.

### Context of 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.

### Interdependent assessment

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with using hand tools 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.

**Consistency of performance** 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.

**Required skills**

Look for evidence that confirms skills in:

- reading and following information on standard operating procedures
- following verbal instructions
- selecting hand tools appropriate to the task
- using hand tools safely
- identifying hand tool defects and marking for repair
- maintaining/sharpening hand tools using appropriate techniques
- storing hand tools in accordance with manufacturers'/standard operating procedures

**Required knowledge**

Look for evidence that confirms knowledge of:

- applications of different hand tools in a general engineering context
- common faults and/or defects in hand tools
- procedures for marking unsafe or faulty tools for repair
- routine maintenance requirements for a range of hand tools
- storage location and procedures for a range of hand tools
- hazards and control measures associated with using hand tools
- use and application of personal protective equipment
- safe work practices and procedures