



**Australian Government**

# **MSFFDM4022 Select, use and maintain hand tools for the creation of custom products**

**Release: 1**

# MSFFDM4022 Select, use and maintain hand tools for the creation of custom products

## Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed to active voice. Range of Conditions removed and relevant content moved to Assessment Requirements. Assessment Requirements changed to clarify volume and frequency of evidence and remove duplication with Performance Criteria. Supersedes and is equivalent to MSFFDT4013 Select use and maintain hand tools for the creation of custom furniture.

## Application

This unit describes the skills and knowledge required to select and use hand tools in applications relating to custom furniture making. It includes manufacturing specialist hand tools that support unique functions.

This unit applies to individuals working in a manufacturing or design studio environment use hand tools in the creation of products, either alone or as part of an internal or external team.

No licensing or certification requirements apply to this unit at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

## Competency Field

Workshop practice

## 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. Prepare for hand-tools work                   | <p>1.1 Verify and ensure compliance with work health and safety (WHS), legislative and workplace requirements relevant to selection and applicable to use of hand tools</p> <p>1.2 Research and identify suitable type and range of hand tools based on their functions, manufacturing specifications and quality reputations</p> <p>1.3 Select hand tools based on job requirements</p> <p>1.4 Check hand tools for serviceability, precision settings, maintenance compliance and safety</p> <p>1.5 Ensure equipment for holding or supporting materials while using</p> |

| Elements                                          | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>  | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                   | hand tools is available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2. Identify and manufacture specialist hand tools | 2.1 Identify need for manufacture of specialist hand tools from research undertaken of existing hand tool capabilities<br>2.2 Complete and verify design of specialist tool based on tool requirements<br>2.3 Select materials for the specialist tool from required functions and available materials options<br>2.4 Manufacture specialist tool to specifications<br>2.5 Test and modify specialist tool as required to satisfy specified function<br>2.6 Document design specifications in accordance with workplace procedures |
| 3. Use hand tools                                 | 3.1 Locate and hold materials in place for hand tool application<br>3.2 Ensure hand tool safety requirements are complied with throughout operation<br>3.3 Apply and adjust hand tools as required to achieve required specificity of outcome<br>3.4 Maintain hand tools as needed during operation to ensure continuing achievement of specified outcomes<br>3.5 Safely store hand tools during operation when not in immediate use in accordance with manufacturer specifications and workplace procedures                       |
| 4. Finalise operation and maintain tools          | 4.1 Clean, maintain and store all tools and equipment in accordance with manufacturer specifications<br>4.2 Clean and clear work area in accordance with workplace procedures<br>4.3 Complete required workplace documentation                                                                                                                                                                                                                                                                                                     |

## Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Numeracy skills to interpret technical information.
- Writing skills to complete workplace documentation.

*Other foundation skills essential to performance are explicit in the performance criteria of this unit of competency.*

## **Unit Mapping Information**

Release 1. Supersedes and equivalent to MSFFDT4013 Select, use and maintain hand tools for the creation of custom furniture.

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

# **Assessment Requirements for MSFFDM4022 Select, use and maintain hand tools for the creation of custom products**

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## **Performance Evidence**

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- select, use and maintain six different hand tools for different specified production functions across three different products, utilising the full capabilities of the hand tools to achieve outcomes
- design and manufacture one specialist hand tool for a specified production function
- tune and sharpen two of the following:
  - chisels
  - hand planes
  - spokeshave.

## **Knowledge Evidence**

There must be evidence the candidate has knowledge of:

- types, characteristics, uses, limitations and maintenance requirements of the range of hand tools used in furniture production, including:
  - hand planes
  - chisels
  - hand saws
  - spokeshave
  - hammer
  - mallet
  - marking-out tools
  - files
  - rasps
  - scraper
  - screwdrivers
  - hand drill

- straight edges
- knives
- clamps
- steel/bronze wool
- sandpaper
- brushes
- stones and whetstones
- grinder
- manufacturing specifications for hand tools
- processes for evaluating the quality of hand tools in terms of specifications, safety, maintainability and commercial reputation
- techniques for the design of specialised hand tools and the manufacturer of one-off tools
- workflow within the workplace
- relevant work health and safety regulations, legislation, regulations, standards and codes of practice relevant to use of hand tools
- workplace and site standards, requirements, policies and procedures for use of hand tools.

## Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
  - a wide range of industry-standard hand tools.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

## Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>