



**Australian Government**

# **MSFFM1002 Operate basic woodworking machines**

**Release: 1**

# MSFFM1002 Operate basic woodworking machines

## Modification History

Release 1 - New unit of competency

## Application

This unit of competency covers operating basic woodworking machines used for sawing, planing, sanding and drilling in the production of furniture. It applies to a VET in Schools or pre-vocational program for new entrants to the furnishing industry.

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

## Pre-requisite Unit

## Competency Field

## Unit Sector

Furniture Making

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- |   |                  |     |   |
|---|------------------|-----|---|
| 1 | Prepare for work | 1.1 | Work instructions are used to identify job requirements, including quality, materials, equipment, and quantities                              |
|   |                  | 1.2 | Work health and safety (WHS) requirements, including ventilation requirements and personal protection needs, are observed throughout the work |
|   |                  | 1.3 | Material for machining is selected and inspected for quality  |
|   |                  | 1.4 | Machines, cutting tools and jigs are identified and checked for safe and effective operation  |
| 2 | Operate machines | 2.1 | Safety equipment, including emergency stops, gauges, guards and controls are checked  |
|   |                  | 2.2 | Machine start-up procedure is carried out in accordance with manufacturer instructions  |

- 2.3 Material is fed into machine in accordance with manufacturer instructions, safe handling procedures and standard workplace operating procedures
  - 2.4 Machine is operated in accordance with its designed capacity and purpose, tooling requirements and to manufacturer recommendations
  - 2.5 Machine operation is monitored to ensure product quality and output
  - 2.6 Waste quantities are minimised
  - 2.7 Items that do not meet quality requirements are recycled or discarded according to workplace procedures
  - 2.8 Problems with the required work and/or the operation of the machine are identified and reported to appropriate persons
- 3 Clean up work area and maintain equipment
- 3.1 Material that can be re-used is collected and stored
  - 3.2 Waste and scrap are removed following workplace procedures
  - 3.3 Equipment and work area are cleaned and inspected for serviceable condition in accordance with workplace procedures
  - 3.4 Unserviceable equipment is reported in accordance with workplace procedures

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

## Range of Conditions

Specifies 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. Range is restricted to essential operating conditions and any other variables essential to the

work environment.

**Basic woodworking machines include:**

- cross cut saw
- rip saw
- band saw
- panel saw
- surface planer (buzzer/jointer)
- panel planer (thicknesser)
- bobbin sander
- disc sander
- belt sander (finisher) – stroke and finisher
- vertical drill press
- horizontal borer (single bit)

**Tasks include:**

- machine face
- machine edge
- off fence ripping
- freehand ripping
- freehand curve cutting
- parallel rip (oversize by 5 mm+)
- docking:
  - (oversize + 20 mm)
  - (accurate to +/- 0.25 mm)
  - square (no tolerance)
- cut flat panel board (off rip fence using scribe saw)
- cut flat panel board (off cross-cut fence using scribe saw)
- parallel plane width
- parallel plane thickness
- sand concave surface
- sand straight surface
- sand end grain and outside curve
- sand flat surfaces
- hinge boring
- drill holes to pre-determined depths vertically, selecting and replacing drill bits as required
- changing belts and blades
- drill holes to pre-determined depths horizontally (and to create a mortise)

**Unit context includes:**

- WHS requirements, including legislation, building codes, material safety management systems, hazardous substances and dangerous goods code, and local safe operating procedures
- work is carried out in accordance with legislative obligations, environmental legislation, relevant health

regulations, manual handling procedures and organisation insurance requirements

- competency may be demonstrated in workplaces involved in the manufacture of solid timber furniture, domestic furniture, commercial furniture, kitchen and bathroom cabinets and/or furniture components
- solid timber and manufactured board

**Materials to be machined include:**

**Personal protective equipment includes:**

- that prescribed under legislation, regulations and enterprise policies and practices

**Information and procedures include:**

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturer specifications and operational procedures

## Unit Mapping Information

Supersedes and is equivalent to LMFFM1002B Operate basic woodworking machines.

## Links

Companion Volume implementation guides are found in VETNet -

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