



**Australian Government**

# **FWP31021 Certificate III in Saw Technology**

**Release: 1**

## FWP31021 Certificate III in Saw Technology

### Modification History

| Release   | Comments  |
|-----------|---|
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 7.0. |

### Qualification Description

This qualification reflects the job role of Saw Technicians who service, maintain and align saw blades, knives and guides for timber sawmilling machines and other applications. Saw Technicians may also inspect, test, maintain and troubleshoot mechanical components on sawing machine centres to achieve sawing production rates and product tolerances.

The elective groups and units of competency within this qualification can provide Saw Technicians with two pathway options. Saw Technicians can use the qualification to develop skills in performing general saw servicing operations or develop skills in saw maintenance engineering roles.

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

### Entry Requirements

There are no entry requirements for this qualification.

### Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 26 units of competency:
  - 7 core units plus
  - 19 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualification Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- all 4 units must be selected from either Group A or Group B
- a minimum of 8 units must be selected from Group C
- remaining units can be selected from Group C and/or Group D and can include up to 2 units from any currently endorsed Training Package or accredited course.

Elective units must be relevant to work undertaken in the sawmilling and processing sector of the industry.

**Core Units**

|            |   |
|------------|---|
| BSBTWK201  | Work effectively with others  |
| FWPCOT3279 | Assess and maintain saw technology tools  |
| FWPCOT3283 | Sharpen and position blades or knives in chipper, canter and reducer              |
| FWPCOT3286 | Identify levelling and tensioning requirements for saw blades                     |
| FWPCOT3290 | Apply knowledge of timber properties, sawmill operations and sawmilling equipment |
| FWPSAW3247 | Replace tungsten tips   |
| FWPSAW3251 | Apply principles of blade design to sawing procedures                             |

**Elective Units**

An asterisk (\*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

**Group A – General electives (service operations)**

|            |  |
|------------|--|
| FWPCOR2206 | Work effectively in the forest and wood products industry                                  |
| FWPCOR2208 | Communicate and interact effectively in the forest and wood products industry              |
| FWPCOR3205 | Apply safety, health and environmental requirements in forest and wood products operations |
| MEM30032A  | Produce basic engineering drawings   |

**Group B – General electives (maintenance engineering)**

|           |  |
|-----------|--|
| MEM09002* | Interpret technical drawing                                  |
| MEM13015  | Work safely and effectively in manufacturing and engineering |
| MEM14006* | Plan work activities   |
| MEM16006* | Organise and communicate information                         |

**Group C – Saw technology (service operations)****Servicing saw blades and guides**

|            |   |
|------------|---|
| FWPCOT3280 | Replace saw blades, knives and guides                                   |
| FWPCOT3282 | Assess and maintain saw blade and sawing machine performance            |
| FWPCOT3287 | Operate CNC equipment for grinding, tensioning and levelling saw blades |
| FWPCOT3294 | Swage and shape saw blades  |
| FWPSAW3232 | Sharpen band saw blades   |
| FWPSAW3233 | Sharpen circular saw blades   |
| FWPSAW3235 | Recondition saw guides  |
| FWPSAW3236 | Sharpen tipped circular saw blades                                      |
| FWPSAW3237 | Level and tension circular saw blades                                   |
| FWPSAW3238 | Replace Stellite tips   |
| FWPSAW3239 | Assess and maintain wide band saw blades                                |

**Servicing cutters for timber processing**

|            |  |
|------------|--|
| FWPCOT3276 | Sharpen cutters using a straight knife grinder         |
| FWPCOT3277 | Sharpen cutters in head using a profile knife grinder  |
| FWPCOT3278 | Sharpen cutters in head using a straight knife grinder |
| FWPCOT3281 | Manufacture profile cutters                            |
| FWPCOT3295 | Assess and maintain cutter performance                 |
| FWPCOT3298 | Produce templates                                      |

**Servicing sawing machine**

|            |                                     |
|------------|-------------------------------------|
| FWPSAW3240 | Assess and maintain band saw wheels |
|------------|-------------------------------------|

|            |                                 |
|------------|---------------------------------|
| FWPSAW3244 | Align sawing production systems |
|------------|---------------------------------|

**Other services**

|            |   |
|------------|---|
| FWPCOT2245 | Operate and maintain a table saw  |
| FWPCOT3271 | Hand sharpen knives and blades for commercial and domestic cutting services |
| FWPSAW3234 | File and set saw blades for hand saws and circular saws                     |

**Group D – Saw technology (maintenance engineering)****Mechanical maintenance**

|           |  |
|-----------|--|
| MEM11011* | Undertake manual handling                              |
| MEM12023* | Perform engineering measurements                       |
| MEM12024* | Perform computations                                   |
| MEM18001* | Use hand tools   |
| MEM18002* | Use power tools/hand held operations                   |
| MEM18055* | Dismantle, replace and assemble engineering components |

**Welding**

|            |  |
|------------|--|
| FWPSAW3245 | Join band saw blades                     |
| MEM05006*  | Perform brazing and/or silver soldering  |
| MEM05049*  | Perform routine gas tungsten arc welding |
| MEM05050*  | Perform routine gas metal arc welding    |

**Quality processes**

|            |   |
|------------|---|
| FWPCOT3285 | Apply knowledge of wood technology principles to end use applications |
| FWPCOT3291 | Apply principles of timber and process optimisation in                |

|            |  |
|------------|--|
|            | sawmill operations   |
| FWPCOT3327 | Contribute to energy efficiency in the forest and wood products industry |
| MSMSUP390  | Use structured problem-solving tools                                     |
| MSS402040  | Apply 5S procedures  |
| MSS404054  | Apply statistics to operational processes                                |

### Prerequisite requirements

Units listed in the *Prerequisite requirement* column that have their own prerequisite requirements are shown with an asterisk (\*)

| Unit of competency                                | Prerequisite requirement  |
|---|---|
| MEM05006 Perform brazing and/or silver soldering  | MEM11011 Undertake manual handling*<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*  |
| MEM05049 Perform routine gas tungsten arc welding | MEM11011 Undertake manual handling*<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*  |
| MEM05050 Perform routine gas metal arc welding    | MEM11011 Undertake manual handling*<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*  |
| MEM09002 Interpret technical drawing              | MEM12023 Perform engineering measurements*<br>MEM12024 Perform computations*<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information* |
| MEM11011 Undertake manual handling                | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*   |
| MEM12023 Perform                                  | MEM13015 Work safely and effectively in manufacturing and   |

|   |   |
|---|---|
| engineering measurements  | engineering<br>MEM16006 Organise and communicate information*   |
| MEM12024 Perform computations                                   | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*   |
| MEM14006 Plan work activities                                   | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*   |
| MEM16006 Organise and communicate information                   | MEM13015 Work safely and effectively in manufacturing and engineering   |
| MEM18001 Use hand tools   | MEM11011 Undertake manual handling<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*   |
| MEM18002 Use power tools/hand held operations                   | MEM11011 Undertake manual handling<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*   |
| MEM18055 Dismantle, replace and assemble engineering components | MEM09002 Interpret technical drawing*<br>MEM11011 Undertake manual handling*<br>MEM12023 Perform engineering measurements*<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information*<br>MEM18001 Use hand tools*<br>MEM18002 Use power tools/hand held operations* |

## Qualification Mapping Information

| Code and title<br>current version  | Code and title<br>previous version | Comments                               | Equivalence status |
|------------------------------------|------------------------------------|--|--------------------|
| FWP31021<br>Certificate III in Saw | FWP31019<br>Certificate III in Saw | Updated imported and native unit codes | Equivalent         |

| Code and title<br>current version | Code and title<br>previous version | Comments               | Equivalence status |
|-----------------------------------|------------------------------------|------------------------|--------------------|
| Technology                        | Technology                         | New qualification code |                    |

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>