



**Australian Government**

# **Assessment Requirements for FWPCOT3277 Sharpen cutters in head using a profile knife grinder**

**Release: 1**

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### Modification History

| Release   | Comments                                                                              |
|-----------|---------------------------------------------------------------------------------------|
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 5.0. |

### Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has sharpened cutters in head using a profile knife grinder and has:

- followed work order and relevant workplace health and safety and environmental protection procedures
- selected template that met profile requirements
- cleaned and checked cutters and cutter head before sharpening
- prepared the grinder
- mounted and adjusted cutter head and template in the grinder
- stored cutter head after sharpening
- completed workplace reports.

### Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose, features, operating parameters, components and operation of profile knife grinders used to sharpen cutters in head
- equipment used in setting up and running profile knife grinders
- purpose of template and specifications
- components of cutter head
- types of cutters used to produce complex profiles
- types, effects and remedial action for dealing with cutter and cutter head faults:
  - warp
  - cracks
  - chips
  - burns

- delamination
- raised spots
- types of grinder wheels for sharpening various cutter profiles
- types, effects and remedial action for dealing with grinding wheel faults:
  - cracks
  - clogging
- effects of an incorrect set-up of coolant flow, traversing stops, traversing speed, wheel advance, grinding angle
- problems associated with the operation of grinder:
  - burning
  - incorrect grinding angle
  - incorrect cutter set-up
- defects in cutter edges after sharpening:
  - burning
  - chipping
  - grinding marks
- procedures for:
  - cleaning cutters and cutter head
  - preparing grinder
  - mounting and adjusting cutter head and template in the grinder
  - grinding and honing cutters in head
  - storing cutter head
- cutting angles for specific wood species and desired finish
- tolerances for concentricity and weight
- types and applications of complex profiles:
  - tongue and groove flooring
  - lining board
  - shiplap
  - joinery profiles and other detailed mouldings
- types and effects of hazards and control measure associated with using grinders:
  - grinding wheel disintegration
  - loose grinding wheel
  - exposure to grinding coolant
- workplace procedures specific to using profile knife grinders:
  - workplace health and safety, with particular emphasis on equipment lock-out, isolation procedures, machine guarding and use of personal protective equipment (PPE)
  - communication reporting lines
  - recording and reporting production outcomes, equipment faults and maintenance requirements
  - environment protection legislation relating to sawmill operations.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in a timber processing facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - profile knife grinder
  - cutters in head for complex profiles
  - tools for setting up profile knife grinder
  - PPE for sharpening cutters in head using a profile knife grinder
  - coolant
- specifications:
  - template documents for recording work outcomes, equipment faults and maintenance requirements
  - manufacturer instructions for sharpening cutters in head using a profile knife grinder
  - work order with specific instructions for sharpening cutters in head using a profile knife grinder
  - workplace procedures for sharpening cutters in head using a profile knife grinder.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

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