



**Australian Government**

# **FWPCOT3278 Sharpen cutters in head using a straight knife grinder**

**Release: 2**

# FWPCOT3278 Sharpen cutters in head using a straight knife grinder

## Modification History

| Release   | Comments                                                                              |
|-----------|---------------------------------------------------------------------------------------|
| Release 2 | This version released with FWP Forest and Wood Products Training Package Version 6.0. |
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 5.0. |

## Application

This unit of competency describes the skills and knowledge required to sharpen cutters in head using a straight knife grinder.

The unit applies to individuals who sharpen cutters in head on a straight knife grinder for use on a moulder/planer to produce timber with simple profiles such as DAR (dressed all round) boards, either with a square edge or pencil round edge, or skip-dressed boards.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

## Pre-requisite Unit

Nil

## Unit Sector

Common Technical (COT)

## 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 work                              | 1.1 Review work order to determine job requirements and, where                                         |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|                                                  | <p>required, seek clarification from appropriate personnel</p> <p>1.2 Review workplace health and safety procedures, including the use of personal protective equipment, equipment lock-out and safe manual handling techniques</p> <p>1.3 Identify, assess and take actions to mitigate risks and hazards associated with sharpening cutters in head using a straight knife grinder</p> <p>1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency</p> <p>1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace</p> <p>1.6 Obtain tools, equipment and testing devices needed for the work, and check for correct operation and safety</p> |
| 2. Clean and check cutter head before sharpening | <p>2.1 Clean cutter head according to workplace procedures</p> <p>2.2 Check cutter head for faults and take remedial action according to workplace procedures</p> <p>2.3 Check, and if required adjust, cutters for position in or on cutter head according to manufacturer specifications</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3. Prepare grinder                               | <p>3.1 Clean grinder and work area according to workplace procedures</p> <p>3.2 Select grinding wheel and grinding speed according to workplace procedures</p> <p>3.3 Check grinding wheel for faults and take remedial action according to workplace procedures</p> <p>3.4 Fit grinding wheel and check grinder operation according to manufacturer and workplace procedures</p> <p>3.5 Shape and dress grinding wheel according to manufacturer and workplace procedures</p> <p>3.6 Set grinding settings according to workplace requirements and manufacturer specifications</p>                                                                                                                                                                                                                                        |
| 4. Mount and adjust cutter head in the grinder   | <p>4.1 Lock cutter head to arbor according to manufacturer specifications</p> <p>4.2 Set tool rest according to manufacturer specifications</p> <p>4.3 Set wheel advance according to manufacturer specifications</p> <p>4.4 Set traversing stops according to manufacturer specifications</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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                  | 4.5 Adjust clearance between grinding wheel and cutters according to manufacturer specifications<br>4.6 Check and top up coolant level according to manufacturer specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5. Sharpen cutters in head                       | 5.1 Check operation of grinder for problems after the first pass according to workplace procedures<br>5.2 Maintain coolant flow rate and cleanliness during wet grinding according to workplace procedures<br>5.3 Ground cutters until the specified edge and clearance angles are obtained across all cutters<br>5.4 Ground cutter edges to a constant straight line<br>5.5 Sharpen cutter to specified angle, within permitted tolerances for concentricity and weight, and check that cutter is free from defects<br>5.6 Hone cutters and remove burrs according to workplace procedures<br>5.7 Clean grinder after sharpening according to workplace procedures |
| 6. Store cutter head                             | 6.1 Drain cutter head, if applicable<br>6.2 Store cutter head according to workplace procedures<br>6.3 Record and report work outcomes, equipment faults and maintenance requirements to appropriate personnel                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

| Skill                      | Description                                                                                                                            |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy                   | <ul style="list-style-type: none"> <li>Measures finished dimensions against specifications and allowable tolerances</li> </ul>         |
| Navigate the world of work | <ul style="list-style-type: none"> <li>Understands main tasks, responsibilities and boundaries of own role</li> </ul>                  |
| Interact with others       | <ul style="list-style-type: none"> <li>Uses modes of communication suitable to purpose to confirm and clarify understanding</li> </ul> |

| Skill             | Description                                                                                 |
|-------------------|---------------------------------------------------------------------------------------------|
| Get the work done | <ul style="list-style-type: none"><li>Recognises and responds to routine problems</li></ul> |

## Unit Mapping Information

| Code and title<br>current version                                                       | Code and title<br>previous version                                                      | Comments                  | Equivalence status |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------|--------------------|
| FWPCOT3278<br>Sharpen cutters in<br>head using a straight<br>knife grinder<br>Release 2 | FWPCOT3278<br>Sharpen cutters in<br>head using a straight<br>knife<br>grinder Release 1 | Minor edit to Application | Equivalent         |

## Links

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