



Australian Government

FWPCOT3277 Sharpen cutters in head using a profile knife grinder

Release: 1

FWPCOT3277 Sharpen cutters in head using a profile knife grinder

Modification History

Release	Comments
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 profile knife grinder.

The unit applies to individuals who sharpen cutters in head on a profile knife grinder for use on a moulder in a timber processing facility to produce timber with complex profiles such as tongue and groove flooring, lining board, shiplap, joinery profiles and other detailed mouldings.

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, including cutter profile type, dimensions and tooling information, and, where required, seek clarification from appropriate personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Review workplace health and safety procedures, including the use of personal protective equipment, equipment lock-out and safe manual handling techniques 1.3 Identify, assess and take actions to mitigate risks and hazards associated with sharpening cutters in head using a profile knife grinder 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.6 Obtain tools, equipment and testing devices needed for the work, and check for correct operation and safety 1.7 Select template for profile knife grinder according to cutter profile requirements
2. Clean and check cutter head before sharpening	2.1 Clean cutter head according to workplace procedures 2.2 Check cutters and cutter head for faults and take remedial action according to workplace procedures 2.3 Check, adjust and position cutters and cutter head according to manufacturer specifications
3. Prepare grinder	3.1 Clean grinder and work area according to workplace procedures 3.2 Select grinding wheel and grinding speed according to workplace procedures 3.3 Check grinding wheel for faults and take remedial action according to workplace procedures 3.4 Shape and dress grinding wheel according to manufacturer and workplace procedures 3.5 Fit grinding wheel on its supporting arbor and check grinder operation according to manufacturer and workplace procedures 3.6 Set grinding angle and automatic feed according to manufacturer and workplace procedures 3.7 Check size and shape of the stylus for suitability for the cutter profile
4. Mount and adjust cutter head and template	4.1 Lock cutter head to arbor according to manufacturer specifications 4.2 Set dividing head and tool rest according to manufacturer

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
in the grinder	specifications 4.3 Mount template and adjust to cutters according to manufacturer specifications 4.4 Adjust clearance between grinding wheel and cutters according to manufacturer specifications 4.5 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 5.2 Maintain coolant flow rate and cleanliness during wet grinding to prevent the cutter from burning 5.3 Grind cutters until the specified edge and clearance angles are obtained across all cutters 5.4 Grind cutters to conform to the template 5.5 Sharpen cutter edges to specified angle, within permitted tolerances for concentricity and weight, and check that cutter is free from defects 5.6 Hone cutters and remove burrs according to workplace procedures 5.7 Clean grinder after sharpening according to workplace procedures
6. Store cutter head	6.1 Drain cutter head, if applicable 6.2 Store cutter head according to workplace procedures 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	Measures finished dimensions against specifications and allowable tolerances
Navigate the world of	Understands main tasks, responsibilities and boundaries of own

Skill	Description
work	role
Interact with others	Uses modes of communication suitable to purpose to confirm and clarify understanding
Get the work done	Recognises and responds to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3277 Sharpen cutters in head using a profile knife grinder	FWPCOT3210 Sharpen cutting tools	The original unit has been replaced by three units, including this unit, to define specific skills required of operators for using different methods and equipment for sharpening different types of cutters to produce timber with simple and complex profiles	No equivalent unit

Links

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