



Australian Government

FWPCOT3271 Hand sharpen knives and blades for commercial and domestic cutting services

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.

Application

This unit of competency describes the skills and knowledge required to hand sharpen knives and blades using files and grinders for a range of commercial and domestic services that use hand drill bits, hand chainsaw, scissors, wood chisels, garden tools and other cutting tools.

The unit applies to individuals who sharpen machine knives and blades in a saw technician workshop or sawmill facility.

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 sharpening	1.1 Review work order to determine job requirements and, where required, seek clarification from appropriate personnel 1.2 Review workplace health and safety procedures, including the use of personal protective equipment, equipment lock-out and safe manual

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	handling techniques 1.3 Identify, assess and take actions to mitigate risks and hazards associated with hand sharpening knives and blades 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Remove and replace knives or blades to be sharpened from designated machinery 1.6 Select sharpening equipment appropriate to the type of knife or blade and work requirements, and check for operational effectiveness
2. Assess knife or blade condition and set up for sharpening	2.1 Identify defects and assess the cutting performance of knife or blade for sharpening requirements 2.2 Clean knife or blade holders to workplace standards 2.3 Assess condition of knife or blade holder, and correct defects 2.4 Select jig setting for knife or blade assembly 2.5 Separate and re-assemble knife or blade assembly according to manufacturer recommendations
3. Sharpen knives or blades	3.1 Clean excess build-up from knives or blades and inspect for defects, replacing those unable to be repaired by sharpening 3.2 Select geometry for knives or blades from manufacturer instructions 3.3 Select manual sharpening equipment and suitable attachment for holding the knife or blade 3.4 Feed sharpening equipment across knife or blade, into cutting edge, to obtain clean cutting edge that conforms with geometric requirements without defects and burns 3.5 Inspect knife or blade after sharpening for accuracy, and hone remaining burrs to obtain a sharp cutting edge 3.6 Identify, record and report sharpening and equipment faults to the 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	Identifies the pitch and angle that a knife or blade is sharpened at
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
FWPCOT3271 Hand sharpen knives and blades for commercial and domestic cutting services	FWPCOT3201 Hand sharpen knives and blades	Updated application statement; revised knowledge evidence; updated unit code and title to reflect changes and for compliance	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>

Assessment Requirements for FWPCOT3271 Hand sharpen knives and blades for commercial and domestic cutting services

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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:

- followed work order and relevant workplace health and safety and environmental protection procedures
- prepared for hand sharpening of knives or blades
- safely and effectively hand sharpened knives or blades using powered and manual sharpening equipment
- removed and replaced knives or blades from designated machinery
- recorded and reported workplace activity.

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:

- regulations, standards, codes of practice and established safe practices for hand sharpening knives and blades
- geometry of knives and blades, including the pitch and angle that a knife or blade is sharpened at, allowing for the device that the knife or blade is in and the material to be cut
- defects in the cutting edges of knives and blades:
 - burrs
 - burns
 - chips
 - splits
 - dents
- characteristics of different types of metal knives and blades:
 - drill bits
 - hand chainsaw

- clipper blades
- gardening tools
- scissors
- wood chisels
- mincer blades
- shears
- other cutting equipment types with knives or blades
- sharpening methods and geometry:
 - pitch
 - depth of cut
 - speed the knife or blade is sharpened at to obtain a sharp edge
- basic knowledge of physics of knives or blades, including:
 - blade material and properties
 - impact of material-to-be-cut properties on knives or blades
 - direction of cut
 - forces on a knife or blade
 - heat removal when relevant
 - knife or blade configuration
- types, safe use and maintenance of manual sharpening equipment:
 - power-driven sharpening equipment with procedures for safe use and lock-out
 - files (round, triangular, square and flat)
 - honing tools
 - saw sets
- risks and hazards associated with hand sharpening knives and blades
- workplace procedures for hand sharpening knives and blades:
 - workplace health and safety with particular emphasis on equipment lock-out, use of personal protective equipment (PPE) and safe manual handling techniques
 - recording and reporting production outcomes and equipment faults
 - communication channels and protocols
- environmental protection requirements, including the safe disposal of waste material and the cleaning of plant, tools and equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a saw technician workshop, a sawmill facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - PPE suitable for hand sharpening knives and blades

- equipment from which knives and blades are to be removed for inspection and sharpening
- knives and blades to be hand sharpened
- power-driven sharpening equipment with procedures for safe use and lock-out
- files (round, triangular, square and flat)
- honing tools
- saw sets
- specifications:
 - manufacturer instructions for use, repair and maintenance of equipment
 - work order with specific instructions for hand sharpening knives and blades
 - workplace procedures for sharpening knives and blades.

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

Links

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