



Australian Government

FWPCOT3283 Sharpen and position blades or knives in chipper, canter and reducer

Release: 1

FWPCOT3283 Sharpen and position blades or knives in chipper, canter and reducer

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 set up, sharpen and use either Babbitt or set screw processes for positioning straight and angled blades or knives in disc chippers, chipping heads, canters and reducers to process logs.

The unit applies to individuals who work as saw technicians to sharpen and position blades and knives in a timber processing 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 work	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 sharpening and setting up blades and knives for chipper, canter or reducer 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Select appropriate grinding and Babbitt or set screw equipment and check for operational effectiveness
2. Assess condition and set up the blade or knife assembly	2.1 Set up chipper, canter or reducer blade or knife assembly according to workplace safety procedures and manufacturer recommendations 2.2 Remove and replace blade or knife for sharpening from chipper, canter or reducer 2.3 Assess cutting performance of blade or knife to determine sharpening requirements 2.4 Assess condition of knife holder, jig and chuck, and correct defects 2.5 Clean and secure knife holder to chuck according to workplace procedures 2.6 Select jig type and setting for the required blade or knife set-up
3. Set up grinding equipment	3.1 Clean blades or knives of excess build-up, inspect Babbitts for defects and replace where unserviceable 3.2 Set up grinding equipment for sharpening blades or knives according to workplace safety procedures and manufacturer recommendations 3.3 Select angle for sharpening blade or knife to suit its use in the machine 3.4 Set up the grinder with suitable ancillary equipment for holding knife or blade, and examine and dress grinding wheel 3.5 Select grinding wheel speed and feeds to suit blade or knife, grinding wheel material and configuration
4. Operate grinder to sharpen blades or knives	4.1 Operate grinder according to workplace safety procedures and manufacturer recommendations 4.2 Feed grinding wheel across and into cutting edge to sharpen blade

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	or knife to geometric requirements without defects or burns 4.3 Monitor grinder for operational effectiveness and apply coolant as required 4.4 Inspect blade or knife after sharpening for accuracy, and hone remaining burrs to obtain sharp cutting edge 4.5 Dispose of unserviceable and damaged blades or knives according to workplace procedures and environmental protection practices
5. Apply Babbitt to blades or knives	5.1 Apply Babbitt to blades or knives for chipper, canter or reducer according to workplace safety procedures 5.2 Inspect Babbitt to assess reconditioning requirements 5.3 Heat Babbitt material to required pouring temperature 5.4 Set up blade or knife in pouring jig to required dimensions 5.5 Pour Babbitt to minimise material waste and avoid cavities and shrinkage 5.6 Cool assembly and remove excess material to allow correct positioning in the machine
6. Adjust set screws on blades or knives	6.1 Inspect set screws and replace bent or broken screws 6.2 Adjust set screws to position knife or blade at the correct depth, and lock into position to avoid knife or blade movement 6.3 Record and report processing problems and equipment faults 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
Reading	Reads basic grinding wheel settings
Numeracy	- Completes precise calculations involving measurement of angles - Interprets machine scale to set grinding wheel down-feed for appropriate stock removal rate

Skill	Description
Navigate the world of work	Understands main tasks, responsibilities and boundaries of own 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
FWPCOT3283 Sharpen and position blades or knives in chipper, canter and reducer	FWPCOT3233 Sharpen and align blades and knives	Split element 5; reworded elements; revised performance criteria, performance evidence, knowledge evidence and assessment conditions; 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>