



Australian Government

FWPCOT3282 Assess and maintain saw blade and sawing machine performance

Release: 1

FWPCOT3282 Assess and maintain saw blade and sawing machine performance

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 assess and maintain the cutting performance of sawing blades or knives and sawing machines, including circular saws, band saws, chippers, canters and reducers.

The unit applies to individuals who assess and maintain the cutting performance of sawing machines and blades or knives in a timber sawmill environment.

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 and implement workplace health and safety requirements, including the use of personal protective equipment, equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	lock-out and safe manual handling techniques 1.3 Identify, assess and take actions to mitigate risks and hazards associated with assessing and maintaining the cutting performance of sawing blades or knives 1.4 Identify and implement workplace procedures for minimising and disposing of material and maximising energy efficiency
2. Monitor and inspect sawing blades or knives and machine	2.1 Obtain information relating to current and past performance problems and review to assess process problems 2.2 Observe sawing machine and in-feed and out-feed equipment under operating conditions to determine the extent of problems 2.3 Monitor condition and performance of sawing blades or knives to identify cutting problems according to workplace procedures 2.4 Examine timber fed through sawing in-feed and out-feed equipment to determine potential causes of the cutting problem 2.5 Apply problem-solving techniques to identify the causes of cutting problems and poor saw performance 2.6 Lock out the machine and inspect parts to identify worn, broken and loose components
3. Assess technical performance of sawing operation	3.1 Compare technical performance of sawing operation against other comparable machine and blades 3.2 Assess technical performance of sawing operation to identify future improvements and feasibility of options for new components 3.3 Communicate the outcomes of technical assessment to appropriate personnel
4. Rectify cutting problems	4.1 Identify characteristics of cutting problems, and diagnose possible causes 4.2 Refer to other trades and operations personnel to validate assessed causes 4.3 Prepare solution responses, and discuss with relevant personnel to identify and agree on a preferred option 4.4 Implement selected course of action, review cutting results and communicate to appropriate personnel 4.5 Record and report causes of cutting problems and action taken according to workplace procedures

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	Sources and extracts information from machine records, service history and log books to determine potential causes of cutting problems
Numeracy	- Locates and interprets routine numerical data involving angles, dimensions and speeds from cutting performance records - Uses formulae to calculate sawing efficiency
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
FWPCOT3282 Assess and maintain saw blade and sawing machine performance	FWPCOT3216 Assess and maintain saw performance	Reworded application; revised performance criteria and evidence for mapping; renamed elements for clarity; 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 FWPCOT3282 Assess and maintain saw blade and sawing machine performance

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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 the individual has, on least one occasion, assessed cutting performance of one or more of the following sawing machines and associated sawing blades or knives:

- band saw
- circular saw
- chipper
- canter
- reducer.

In doing the above, the individual has:

- followed work order and relevant workplace health and safety and environmental protection procedures
- monitored sawing operation and inspected sawing machine, in-feed and out-feed equipment and associated sawing blades or knives for identifying the types and the root cause of cutting problems
- assessed technical performance of sawing operation
- identified a safe course of action for rectifying the cutting problem
- reported on the cutting problem, fault diagnosis process and rectification outcomes.

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 and operation of sawing machines and associated blades or knives, including one or more of the following:
 - band saws and band saw blades
 - circular saws and circular saw blades

- chippers, canters, reducers and associated blades or knives
- typical sawing problems, causes and solutions:
 - cuts not straight or clean
 - excess heat
 - pitch marks in the job
 - diamond shapes and roughness in the cut
 - saw blades changed too regularly
- typical causes of damage and poor saw performance:
 - forcing timber through the in-feed equipment
 - hydraulic and electrical system not performing well
 - damage from foreign matter
 - incorrect operating speeds
 - oversized material removal
 - incorrect setting of in-feed and out-feed equipment
 - poor sharpening or setting of sawing blades or knives
- methods for:
 - assessing condition and performance of sawing blades or knives and machine
 - diagnosing causes of damage and poor performance
 - rectifying problems and improving cutting performance
- types of risk and hazards and mitigation measures associated with assessing and maintaining cutting performance
- workplace procedures specific to assessing and maintaining cutting performance:
 - workplace health and safety, with particular emphasis on machine lock-out, use of personal protective equipment (PPE) and safe manual handling techniques
 - communication reporting lines
 - recording and reporting cutting problems, the fault diagnosis process and rectification outcomes
 - disposal of material and other waste.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber processing or manufacturing facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - one or more of the following sawing machines and associated blades and knives: band saws, circular saws, chippers, canters, reducers
 - PPE suitable for assessing and maintaining saw performance
- specifications:
 - records of equipment fault and cutting performance

- template documents for recording and reporting cutting problems, the fault diagnosis process and rectification outcomes
- workplace procedures for assessing and maintaining sawing machine performance
- manufacturer instructions for use, repair and maintenance of sawing machine, including in-feed and out-feed equipment
- work order with specific instructions for assessing cutting performance of sawing machine and blades or knives.

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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