



Australian Government

FWPSAW3250 Select and saw logs in multi-species operations

Release: 1

FWPSAW3250 Select and saw logs in multi-species operations

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 select and saw (break down) logs from multiple timber species into flitches or cants, and maintain production flow while allowing for changes in species.

The unit applies to individuals who select and saw logs from multiple species in a timber processing plant.

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

Sawmilling and Processing (SAW)

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 sawing and select logs	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 handling techniques

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify, assess and take actions to mitigate risks and hazards associated with selecting and sawing logs in multi-species operations 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Reject, segregate or dispose of defective logs according to workplace procedures and environmental protection practices 1.6 Select tools and equipment for sorting and sawing operations, and check for serviceability 1.7 Identify cutting patterns to achieve maximum output of flitches and cants from different species 1.8 Plan flow of logs in and out of the sawing area to maximise production
2. Break down logs	2.1 Complete pre-start-up equipment checks to ensure operational effectiveness 2.2 Use dogs to secure and align logs to saw and minimise damage 2.3 Clear logs of foreign matter and feed into saw at feed rate according to workplace safety procedures 2.4 Plan, maintain and adjust sawing sequence to produce the required quantity of flitches or cants and maximise feed rate 2.5 Check and adjust break down process regularly to maintain desired quality and output, allowing for defects and changes in species 2.6 Direct flitches or cants to the designated area according to work order 2.7 Identify routine processing problems, and resolve or report to appropriate personnel
3. Complete operator maintenance	3.1 Lock out equipment according to workplace procedures 3.2 Check saw blades for bluntness or damage 3.3 Remove and replace saw blades according to manufacturer recommendations 3.4 Dispose of used blades according to workplace procedures and environmental protection practices 3.5 Complete basic non-specialist maintenance of equipment 3.6 Keep machine clear of dust and debris according to safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	procedures 3.7 Record and report 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
Reading	Extracts essential information from operational manuals to determine safe operating procedures for equipment
Writing	Prepares routine written reports using the required format, language and structure
Oral communication	Employs active listening and questioning to clarify the content of work orders
Numeracy	- Identifies quantities of required material within work orders, and counts number of logs to be sawn - Measures log size across multiple species according to work orders - Completes routine calculations to determine correct angles for aligning logs to equipment - Calculates the feed rate to optimise the quality and quantity of production output
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
FWPSAW3250 Select and saw logs in multi-species operations	FWPSAW3227 Select and saw logs in multi-species operations	Reworded Application statement for clarity; updated workplace health and safety requirements in Performance Criteria and Performance Evidence; added new Performance Criteria (PC 1.6, 1.7 and 1.8) to match Knowledge Evidence; updated Foundation Skills	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 FWPSAW3250 Select and saw logs in multi-species operations

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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
- selected logs according to production requirements and log utilisation that included assessment of at least one of the following:
 - diameter range
 - curvature
 - faults
 - softwood species of various types
 - moisture content
- sawn logs in multi-species operations to produce flitches in line with a work order and workplace specifications
- adjusted break down process regularly to allow for changes in species
- completed at least one of the following types of basic non-specialist maintenance of equipment tasks:
 - cleaning the machine of wood chips and sawdust
 - replacing blunt saw blades
 - inspecting machine parts for wear or damage, including guards
 - greasing and lubricating moving parts
 - checking the operation of emergency stop buttons and lock-out systems.

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:

- types of risk and hazards and mitigation measures associated with selecting and sawing logs in multi-species operations
- workplace procedures specific to selecting and sawing logs in multi-species operations:
 - workplace health and safety, with particular emphasis on equipment lock-out and use of personal protective equipment (PPE)
 - communication reporting lines
 - recording and reporting processing problems and equipment faults
- environmental protection practices for timber processing operations:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing timber
- purpose, features and operation of equipment used to saw flitches and cants:
 - carriages, including standard three-headed dog carriages and flat top carriages with head rigs
 - saws, including circular saws, bench saws and overhead frame saws or band saws
- operation of the mechanical feed
- operation of the conveyor system to transport logs to and from the sawing area
- types and uses of maintenance tools and equipment for saws
- typical range of industry and organisation specific species types:
 - visual characteristics of logs
 - recovery characteristics
- typical workflow processes for sawing flitches and cants
- methods of adjusting workflow and sawing schedule during operation to account for differences in species
- range of cutting patterns used on logs to achieve maximum output of flitches and cants
- different cutting patterns required for different species of trees
- assessment of logs for:
 - diameter range
 - curvature
 - faults
 - softwood species of various types
 - moisture content
- range of feed rates and how they impact on the production output and finished quality of flitches and cants
- typical flow of log supply in and out of the sawing area
- methods for assessing saw blade condition
- species and recovery characteristics of timber and timber defects
- cutting pattern requirements, feed rates and finish
- flow control systems and marking requirements
- typical log defects and how they impact on the ability to produce quality flitches and cants:
 - warp

- wane
- curvature
- cupping
- shakes
- insect defects
- knots
- resin pockets.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - one or more of the following types of carriages: standard three-headed dog carriages and flat top carriages with head rigs
 - one or more of the following types of saws: circular saws, bench saws and overhead frame saws or band saws
 - mechanical feed
 - conveyor system to transport logs to and from the sawing area
 - maintenance tools and equipment for saws
 - consumable saw blades
 - PPE suitable for selecting and sawing logs
 - a selection of logs from different species of trees
- specifications:
 - template documents for recording equipment faults and maintenance requirements
 - manufacturer instructions for use, repair and maintenance of equipment
 - work order with specific instructions for selecting and sawing logs from multiple species, and despatch to downstream processing
 - workplace procedures for selecting and sawing logs in multi-species operations.

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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