

Modification history

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

FWPSAW3XXX	Select and saw logs in multi-species operations
Application	<p>This unit of competency describes the skills and knowledge required to segregate and saw logs into flitches or cants and maintain the production flow, allowing for changes in species. Work includes operator maintenance.</p> <p>The unit applies to individuals who select and saw logs in multi-species operations in logs in a timber processing facility.</p> <p>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.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Sawmilling and Processing (SAW)

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 in multi-species operation	1.1 Determine job requirements from work order or instructions and, where required, seek clarification from appropriate personnel 1.2 Review workplace health and safety and environment protection procedures for work activity, including emergency procedures to be followed in the event of an emergency situation 1.3 Identify, assess and take actions to mitigate risks and hazards associated with sawing logs 1.4 Select tools and equipment for sorting and sawing operations, and check for serviceability
2. Segregate logs for sawing in multi-species operation	2.1 Select appropriate logs according to species, size, grade and/or other characteristics to suit job requirements 2.2 Reject and direct defective logs for reuse, recycling or disposal according to workplace procedures and environmental protection practices 2.3 Identify sawing sequence and cutting patterns to achieve maximum output of flitches or cants from different species 2.4 Plan flow of logs in and out of the sawing area to maximise production
3. Saw logs in multi-species operation	3.1 Complete pre-start-up equipment checks to ensure operational effectiveness 3.2 Use dogs to secure and align logs to saw and minimise damage 3.3 Clear logs of foreign matter and feed into saw at feed rate according to workplace procedures 3.4 Maximise feed rate and adjust sawing sequence or process regularly to achieve required production output and quality considering log defects and changes in species 3.5 Direct flitches or cants to the designated area according to job requirements 3.6 Identify routine processing problems and resolve or report to 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>
4. Complete operator maintenance	4.1 Lock out equipment according to workplace procedures 4.2 Check saw blades for bluntness or damage 4.3 Remove and replace saw blades according to manufacturer recommendations 4.4 Dispose of used blades according to workplace procedures and environmental protection practices 4.5 Complete basic non-specialist maintenance of equipment 4.6 Keep machine clear of dust and debris according to safety procedures 4.7 Record and report equipment faults and maintenance requirements to appropriate personnel

Foundation Skills	
<i>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.</i>	
Skill	Description
Writing	<ul style="list-style-type: none"> Prepare routine written reports using the required format, language and structure
Oral communication	<ul style="list-style-type: none"> Employ active listening and questioning to clarify the content of work orders
Numeracy	<ul style="list-style-type: none"> Identify quantities of required material within work orders, and counts number of logs to be sawn Measure log size across multiple species according to work orders Complete routine calculations to determine correct angles for aligning logs to equipment Perform basic calculations to determine the feed rate to optimise quality and quantity of production output

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3XXX Select and saw logs in multi-species operations	FWPSAW3250 Select and saw logs in multi-species operations	Revised Application, Elements, Performance Criteria, Foundation Skills, Performance Evidence and Assessment Conditions	Equivalent

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

TITLE	Assessment requirements for FWPSAW3XXX Selected and saw logs in multi-species operations
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has sawn logs in a multi-species operation for one production cycle to produce flitches or cants according to job requirements and workplace operational procedures.</p> <p>In undertaking this activity, the individual has:</p> <ul style="list-style-type: none"> • selected logs based on production requirements, log utilisation and at least one of the following characteristics: <ul style="list-style-type: none"> • diameter range • curvature • faults • softwood species • moisture content • secured, aligned, and fed logs into saw at an optimal feed rate, modifying the sawing sequence or procedure to meet production output and quality requirements in response to log defects and species variations • completed basic non-specialist maintenance on the equipment used • produced routine reports containing information on production, maintenance and quality. 	
Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • diameter range • curvature • faults • softwood species of various types 	

Knowledge Evidence

- 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 quality
- 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 the skills in this unit of competency 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:
 - log sawing equipment
 - PPE suitable for selecting and sawing logs
 - logs from different species of trees
- specifications:
 - workplace procedures for sawing logs in a multiple species operation
 - workplace emergency procedures relevant to log sawing operations
 - workplace health and safety and environmental policies and procedures applicable to sawing logs in a multiple species operation.

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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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>