



Australian Government

FWPSAW3230 Perform primary log breakdown

Release: 1

FWPSAW3230 Perform primary log breakdown

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 operate an automatic, manual or semi-automated log breakdown system, namely a headrig saw centre and accompanying conveying systems, to convert logs into flitches or cants.

The unit applies to individuals who operate breakdown equipment to convert logs into flitches or cants for re-sawing 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 primary log breakdown	1.1 Review work order and, where required, check with 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 performing primary log breakdown 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Match cutting pattern and product mix to available logs according to workplace procedures 1.6 Identify processing constraints and potential solutions according to workplace procedures
2. Operate breakdown equipment to produce cants and flitches	2.1 Complete pre-start-up checks according to manufacturer and workplace procedures 2.2 Check input logs to ensure compliance with specifications 2.3 Check that other upstream and downstream processing stages are ready for production 2.4 Select cutting programme based on incoming logs and work order requirements 2.5 Cut trial log to check for quality and compliance with cutting schedule requirements 2.6 Operate breakdown equipment to comply with the cutting strategy, maximise grade and size and optimise recovery value 2.7 Manage product flow to ensure efficient workflow in the sawmill and optimise breakdown operations
3. Monitor the performance of breakdown equipment	3.1 Enter control information into any control device fitted to the breakdown equipment according to workplace procedures 3.2 Monitor and interpret output data according to workplace procedures 3.3 Monitor output from the breakdown equipment and implement corrective action according to workplace procedures 3.4 Complete production, maintenance and quality records according to workplace procedures 3.5 Identify routine processing problems, and resolve or report to appropriate personnel
4. Implement routine maintenance procedures for breakdown	4.1 Carry out preventative maintenance and cleaning schedule for breakdown equipment according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
equipment	4.2 Coordinate saw changes with other staff and make adjustments to breakdown equipment 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	- Extracts information from manufacturer procedures to verify safe lock-out procedures when performing routine equipment maintenance - Determines work specifications by identifying information in work orders
Writing	- Completes basic written reports for maintenance staff on observed equipment faults - Completes hazard identification forms
Oral communication	- Asks open and closed questions to clarify work instructions - Responds to questions on routine matters related to output quality from quality control personnel
Numeracy	- Counts number of logs to be sawn - Performs basic calculations to determine feed rate to optimise quality and quantity of production output
Navigate the world of work	Understands main tasks, responsibilities and boundaries of own role
Interact with others	Participates in conversations with team members relevant to the implementation of maintenance procedures
Get the work done	- Identifies and responds to routine problems - Plans and organises own work activities and resources

Unit Mapping Information

Code and title	Code and title	Comments	Equivalence status
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current version	previous version		
FWPSAW3230 Perform primary log breakdown	FWPSAW3203 Break down logs	Updated unit title to focus unit on primary log breakdown process; revised elements, performance criteria and evidence; updated foundation skills; clarified assessment requirements	No 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 FWPSAW3230 Perform primary log breakdown

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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
- broken down logs to produce flitches or cants according to a work order
- monitored the performance of breakdown equipment
- implemented routine maintenance procedures for breakdown equipment.

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 breaking down logs
- workplace procedures specific to breaking down logs:
 - workplace health and safety, with particular emphasis on equipment lock-out and use of personal protective equipment (PPE)
 - communication reporting lines
 - recording and reporting of processing problems and equipment faults
- environmental protection practices specific to timber processing plants:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing timber
- basic operations that transform logs into sawn boards:
 - sawing
 - edging
 - trimming
- distinction between primary and secondary log breakdown

- best opening face (BOF)
- purpose, operating components and operation of breakdown equipment:
 - headrig saw centre and accompanying conveying systems
- operating parameters and capability of breakdown equipment
- safety features of breakdown equipment:
 - isolation procedures
 - stop button
 - lock-out switch or system
 - hold cards
 - guards
- processing constraints and potential solutions:
 - markets
 - log supply
 - product mix
 - downstream processing options
- role of breakdown equipment in the log conversion process
- typical workflow processes for breaking down logs
- hazards associated with the operation of breakdown equipment:
 - moving equipment
 - dust
 - mobile plant
 - noise
- typical flow of log supply in and out of the sawing area
- range of cutting patterns used on logs to achieve maximum output of flitches and cants
- range of feed rates and how they affect production output and finished quality of flitches and cants
- characteristics of timber and typical log defects and the impact on the production of quality flitches and cants:
 - warp
 - wane
 - curvature
 - cupping
 - shakes
 - insect defects
 - knots
 - resin pockets
- breakdown processes, feed rates and finish
- methods for assessing saw blade condition
- types of storage and labelling systems
- types of and processes for implementing routine operator maintenance activities associated with sawing operations.

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:
 - automatic, manual or semi-automated log breakdown system
 - PPE for breaking down logs
 - a selection of logs
- specifications:
 - manufacturer instructions for equipment operation and maintenance
 - work order with specific instructions for breaking down logs and despatching to downstream processing
 - template documents for recording equipment faults and maintenance requirements
 - organisational policies and procedures for breaking down logs.

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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