



Australian Government

FWPSAW4207 Optimise timber production for volume and value recovery

Release: 1

FWPSAW4207 Optimise timber production for volume and value recovery

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 optimise the volume and value of sawn timber based on analysis of timber characteristics, machine capability and product demand.

The unit applies to individuals who optimise timber production for volume and value recovery in a timber sawmill.

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 to optimise timber production	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 optimising timber production 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.6 Obtain tools, equipment and timber needed for the work
2. Plan to optimise the volume and value of timber production	2.1 Identify cutting plan and output mix based on analysis of timber characteristics, machine capability and product demand 2.2 Identify processing constraints and potential solutions to ensure that production and quality requirements are met 2.3 Check input material against specification and production run requirements 2.4 Inspect timber for defects and identify potential impact on the cutting plan, production run and product quality 2.5 Finalise cutting plan based on inspection outcomes 2.6 Identify implications of unsuitable planning on volume and value of timber production and associated impacts on customers and saw centre efficiency 2.7 Check trial pieces to ensure compliance with production and product quality requirements 2.8 Communicate cutting plan, production rate and quality requirements to appropriate personnel
3. Implement and report on the optimisation plan	3.1 Implement cutting plan to optimise volume and value of timber production 3.2 Manage production rate to ensure compliance with optimisation objectives 3.3 Monitor quality of cut timber to ensure compliance with optimisation objectives 3.4 Manage reuse, recycling or disposal of items that do not meet quality requirements 3.5 Monitor product flow to optimise downstream processes 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>
4. Report on optimisation	4.1 Review optimisation objectives in relation to timber volume and value recovery 4.2 Record production outcomes according to workplace procedures 4.3 Compare production outcomes with optimisation objectives 4.4 Report production outcomes and compliance with optimisation objectives to the appropriate person

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 regarding the capability of sawing machines
Writing	Prepares routine written reports using the required format, language and structure
Oral communication	Employs active listening and questioning to clarify content of work orders
Numeracy	Interprets graphical and statistical data to compare production output against optimisation objectives
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

FWPSAW4207 Optimise timber production for volume and value recovery	Not applicable	New unit	No equivalent unit
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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 FWPSAW4207 Optimise timber production for volume and value recovery

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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:

- established and implemented a plan for optimising the volume and value recovery of timber production
- in doing the above job, the individual has:
 - followed work order and relevant workplace health and safety and environmental protection procedures
 - identified, assessed and taken actions to mitigate risks and hazards associated with sawing operations
 - recorded and reported on production outcomes and their compliance with optimisation objectives.

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:

- optimisation principles
- cutting patterns
- timber processing constraints:
 - markets
 - timber supply
 - preferred products
 - downstream processing options
- determinants of product mix:
 - timber characteristics
 - machine capability
 - product demand

- optimisation software
- influences on timber volume and value recovery
- methods for reusing, recycling or disposing of items that do not meet quality requirements
- timber defects:
 - types
 - impact on volume and value of recovered timber
 - inspection methods
- risks and hazards associated with sawing operations
- safe work practices and procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a sawmill or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - optimisation software package and associated computing hardware
 - tools, equipment and timber needed for the work
 - personal protective equipment for sawmill operations
- specifications:
 - template documents for recording production outcomes
 - manufacturer instructions for optimisation software
 - work order with specific instructions for optimising timber production for volume and value recovery
 - workplace procedures for optimising timber production for volume and value recovery.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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