



Australian Government

FWPCOT3291 Apply principles of timber and process optimisation in sawmill operations

Release: 1

FWPCOT3291 Apply principles of timber and process optimisation in sawmill 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 apply optimisation principles in sawmilling operations to increase timber value and volume recovery. It includes identifying the drivers for optimisation, assessing opportunities for timber and workflow optimisation, identifying optimisation opportunities in own work area and participating in and evaluating optimisation initiatives.

The unit applies to individuals who are involved in timber and process optimisation in sawmilling operations.

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. Identify opportunities for optimisation in	1.1 Identify drivers for optimisation in sawmilling operations 1.2 Identify potential impact of timber and material flow optimisation

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
sawmilling operations	on timber value and volume recovery in sawmill operations 1.3 Assess opportunities for timber optimisation in sawmilling operations 1.4 Assess opportunities for material flow optimisation in sawmilling operations 1.5 Identify the technologies and work practices that are applied to enhance timber and workflow optimisation in sawmill operations
2. Identify optimisation opportunities in own work area	2.1 Compare current work practices, procedures, processes or equipment performance in own work area with requirements or performance indicators in relation to timber value and volume recovery 2.2 Recognise variances that indicate sub-optimal performance 2.3 Identify causes of sub-optimal performance and recommend corrective actions to relevant personnel
3. Participate in optimisation initiative	3.1 Participate in an approved optimisation initiative and monitor performance 3.2 Assess results of optimisation initiative 3.3 Record outcomes of actions and communicate to relevant 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 key information from workplace documents on optimisation initiatives
Writing	Prepares routine written reports using required format, language and structure
Oral communication	Employs active listening and questioning to clarify content of work orders
Numeracy	Interprets graphical and statistical data used to describe and show

Skill	Description
	timber production, equipment performance and value recovery
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
FWPCOT3291 Apply principles of timber and process optimisation in sawmill operations	Not applicable	New unit	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 FWPCOT3291 Apply principles of timber and process optimisation in sawmill 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 the individual has, on at least one occasion, identified opportunities for timber and workflow optimisation in own work area and has:

- identified the drivers for optimisation
- distinguished between timber and workflow optimisation
- made recommendations to correct sub-optimal performance in own work area
- participated in one optimisation initiative.

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:

- timber value and volume recovery:
 - definition
 - ways of measuring
- drivers for optimisation in sawmilling operations:
 - efficiency
 - productivity
 - quality
 - competitiveness
- distinction between timber and material flow optimisation
- measures to improve timber and material flow optimisation
- impact of timber and material flow optimisation on timber value and volume recovery in sawmill operations
- opportunities for timber optimisation in sawmilling operations in one or more of the following areas:
 - log sorting

- sawing in the green mill
- dry mill processing
- grading
- timber treatment
- opportunities for material flow optimisation in sawmilling operations
- technologies applied to enhance timber and workflow optimisation in sawmill operations:
 - 3D, X-ray and acoustic scanning devices
 - automated transfer systems
 - computer-assisted machine centres for sawing and re-sawing
- work practices applied to enhance timber and workflow optimisation in sawmill operations.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a forest product factory setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - workplace documents that provide basic information on work practices, procedures, processes or equipment performance in own work area
 - workplace documents that provide basic information on requirements or performance indicators in relation to timber value and volume recovery
 - access to and opportunity to participate in a real or simulated optimisation initiative relevant to sawmilling 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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