



Australian Government

FWPCOT3293 Use scanning equipment for timber grading

Release: 1

FWPCOT3293 Use scanning equipment for timber grading

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 set up, test, operate and maintain different forms of scanning equipment for timber grading.

The unit applies to individuals who use scanning equipment for timber grading used 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. Prepare to operate scanning equipment for timber grading	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 1.3 Identify, assess and take actions to mitigate risks and hazards

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	associated with using scanning equipment for timber grading 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 type and quantity of timber for grading from a storage location
2. Set up and test scanning equipment for timber grading	2.1 Determine settings for scanning equipment according to work order and manufacturer instructions 2.2 Identify relevant reference materials on the scanning equipment and use as required 2.3 Identify the prerequisites for effective testing of scanning equipment 2.4 Conduct test run to check the operation of scanning equipment and accuracy of grading outcomes 2.5 Compare test results with actual data to confirm that scanning equipment is providing accurate grading outcomes 2.6 Make adjustments to equipment settings as required 2.7 Record all testing data accurately according to workplace and manufacturer requirements
3. Operate, monitor and troubleshoot scanning equipment for timber grading	3.1 Carry out equipment start-up procedures according to manufacturer instructions 3.2 Operate equipment according to designed capacity and manufacturer recommendations 3.3 Perform routine operational checks on the performance of the scanning equipment according to workplace, safety and manufacturer procedures 3.4 Withdraw sample products for independent testing and comparison with grading determined by scanning equipment, investigate anomalies, identify root causes and implement solutions 3.5 Identify problems with the operation of scanning equipment, and resolve or report to the appropriate person 3.6 Complete equipment shut-down 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. Finalise operation and maintain equipment	4.1 Follow workplace safety procedures to lock out equipment 4.2 Perform routine maintenance according to workplace and manufacturer instructions 4.3 Record and report grading outcomes, equipment faults and maintenance outcomes 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 software parameters of scanning equipment
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 data related to grading process
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
FWPCOT3293 Use scanning	Not applicable	New unit	No equivalent unit

equipment for timber grading			
---------------------------------	--	--	--

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 FWPCOT3293 Use scanning equipment for timber grading

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 5.0.

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:

- operated, monitored and troubleshoot scanning equipment for timber grading
- 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 operating scanning equipment
 - set up and tested scanning equipment
 - performed routine maintenance on scanning equipment
 - recorded grading outcomes according to workplace requirements.

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 grading standards
- types of scanning equipment used for timber grading:
 - optical (1–3 dimension)
 - X-ray
 - microwave
 - multispectral
 - acoustic
- functions of key components of scanning equipment, operating principles, details of the pre-use, calibration and safety checks, and operating procedures for the items used
- factors that may impact on the accuracy of scanning equipment and their control
- methods used to:

- set up and test scanning equipment
- clean and maintain scanning equipment
- awareness of environmental sustainability issues as they relate to the work task
- types of risk and hazards and mitigation measures associated with operating scanning equipment for timber grading
- legal, ethical and work health and safety requirements specific to the work task
- typical flow of material supply in and out of the grading area
- range of industry standard strength grades and thresholds and applicable terminology
- markings used on timber boards to identify grades
- reason for independent testing of boards and processes for sampling and preparing boards for testing.

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:
 - scanning equipment for timber grading including one or more of the following: optical, X-ray, microwave, multispectral, acoustic scanning equipment
 - personal protective equipment for operating scanning equipment for timber grading
 - a variety of timber for grading
- specifications:
 - template documents for recording grading outcomes
 - manufacturer instructions for scanning equipment
 - work order with specific instructions for using scanning equipment for timber grading
 - workplace procedures for grading timber using scanning equipment.

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

Links

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