



Australian Government

FWPCOT3270 Grade and mark logs

Release: 1

FWPCOT3270 Grade and mark logs

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 3.0

Application

This unit of competency describes the skills and knowledge required to visually assess and measure logs in a commercial forest harvesting environment, to determine the best end-use of individual logs and mark products for identification.

The unit applies to individuals who grade and mark logs at roadside, landing area or timber mill. Operators generally work under broad direction and take responsibility for their work.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Core 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 grade and mark logs	1.1 Review log product specifications for species, product usage and size in reference to the grading and marking of logs 1.2 Review production plan, confirm its targets and assess wood flow requirements to ensure efficient operations and overall productivity 1.3 Confirm, identify and report health, safety, environmental and heritage risks of operation in line with standard operating procedures and site safety and environmental management plan 1.4 Apply risk control measures in line with standard operating

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	procedures, site operational plan, legislative requirements and industry standards to eliminate or minimise risks 1.5 Identify emergency plan procedures to follow in the event of an emergency 1.6 Select appropriate log size measuring tools and calibration methods 1.7 Calibrate log measuring tools to ensure accuracy of length and diameter measurements
2. Grade and mark logs	2.1 Visually assess logs for species and quality characteristics to determine their best end-use in line with product specifications 2.2 Measure logs and defects for size 2.3 Grade logs and determine logs which are to be recovered 2.4 Mark graded logs for product identification in line with industry standards 2.5 Direct mechanical equipment to conduct log segregation and stacking into product groups 2.6 Tag stacks for identification in line with industry standards and production plan requirements for an optimum transport and logistics cycle time
3. Verify grading and marking logs	3.1 Conduct size accuracy checks by using standard or digital measuring tools to verify that graded logs meet length and diameter specifications and remediate errors 3.2 Verify that marking and tagging has been conducted correctly and display required information 3.2 Mark and report logs that cannot be clearly or safely evaluated for size or quality characteristics

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
-------	-------------

Skill	Description
Reading	read and understand production, safety and environmental management plans, product specifications and industry standards for grading logs
Writing	record information about logs
Oral Communication	- interact verbally with machine operators on site to create log stacks - use appropriate vocabulary including technical language directly relevant to role
Numeracy	count logs and measure log diameter and length
Navigate the world of work	- understand main tasks, responsibilities and boundaries of own role - calibrate and use log measuring tools according to workplace procedures
Interact with others	- report log grading and safety information to relevant personnel - participate in conversations relevant to role by responding and explaining as required
Get the work done	- recognise and respond to routine problems - plan and organise own work activities and resources

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3270 Grade and mark logs	FWPCOT3223 Grade and mark logs	Significant changes to reflect industry requirements for a safe and appropriate operation. New PCs were added, most PCs were edited and PE and KE increased in content to map against the revised PCs. Additional foundation skills identified. Code change to reflect outcomes of unit.	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for FWPCOT3270 Grade and mark logs

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 3.0

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria of this unit. There must be evidence that, on at least one occasion, the individual has:

- safely and correctly assessed, measured, graded and marked logs for segregation into product groups in line with specified product best-usage and production plan
- checked risk associated to the operation and applied standard operating procedures
- used log measuring tools and methods to measure logs and logs defects
- applied knowledge of log species, log quality characteristics and defects to grade logs
- identified and assessed log defects
- followed log product specifications and production plan requirements for grading and marking logs.

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:

- information and requirements contained in log product specifications and a production plan
- health and operational hazards or risks related to log grading and marking operations and factors that can change or introduce new hazards
- industry-accepted work health and safety risk control measures, legal obligations of the current Work Health and Safety Acts or Occupational Health and Safety Acts and regulations and requirements of industry standards and/or codes of practice for log grading and marking operations as outlined in workplace procedures and production plan
- industry-accepted warning signs, their correct positioning and procedures to maintain communication and work safety
- required emergency response procedure, including firefighting resources and emergency response

- industry-accepted environmental control measures, restrictions, legal obligations of the current Environment Protection Acts and regulations and requirements of industry standards and/or codes of practice for log grading and marking operations as outlined in workplace procedures and production plan
- log species, quality characteristics and defects particular to the site and production system
- regional quality requirements for log products with particular end uses, markets and values
- maximum log damage or defect allowance and minimum quality allowance particular to a production system
- criteria for recycling and re-using logs with significant defects
- log measuring tools for length and diameter measurements
- methods for calibrating and verifying log measuring tools
- techniques and methods for measuring log diameter, length and defects using standard and digital tools
- causes of manual length and diameter measurement error
- industry-accepted methods for product identification.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a forest harvesting site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - logs for grading and marking
 - standard and digital log measuring tools
 - personal protective equipment required for grading and marking logs
- specifications:
 - access to workplace policies and procedures which cover current Work Health and Safety Acts or Occupation Health and Safety Acts, regulations and related industry standards and codes of practice applicable to forest harvesting operations
 - access to workplace policies and procedure which cover current Environment Protection Acts, regulations and related industry standards and codes of practice applicable to forest harvesting operations
 - access to site operational plan, production plan and log product specifications
 - access to site emergency procedure
 - access to workplace standard operating procedure for log segregation and sorting.

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

Links

Companion Volume implementation guides are found in VETNet -

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