



Australian Government

FWPHAR3212 Operate yarder

Release: 1

FWPHAR3212 Operate yarder

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to operate a yarder for log production and use optimised production processes in a commercial forest harvesting environment.

The unit applies to individuals who work as yarder operators in cable logging operations in a forest or plantation harvesting environment.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation, standards and codes of practice 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

Harvesting and Haulage (HAR)

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. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Plan and prepare to operate a yarder	1.1 Determine job requirements from work order or instruction and, where required, seek clarification from appropriate personnel 1.2 Confirm production plan targets for felling and processing, and assess wood flow requirements to ensure efficient machine operation

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
	and overall productivity 1.3 Confirm safety and environmental protection requirements for the task according to workplace procedures 1.4 Confirm type, size and quantity of stems and/or logs to be moved with yarder to ensure that loads, machine and cable system are consistent with safe working load requirements and workplace health and safety and workplace procedures 1.5 Identify, assess and take actions to mitigate risks and hazards associated with yarder operations 1.6 Identify emergency plan procedures to follow in the event of an emergency 1.7 Use production plans to identify location of landing area, extraction routes and entry points for efficient extraction of stems and/or logs and minimum interference with other forestry operations 1.8 Assess terrain characteristics to establish machine stability
2. Set up yarder	2.1 Use industry-accepted warning signs, vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during yarder set-up and operation 2.2 Move yarder to the landing according to workplace and regulatory and manufacturer requirements 2.3 Position yarder on landing for stability according to planned system design by adjusting the technique in response to terrain conditions and ensuring a stable level support base for outriggers 2.4 Check that tower or spar is rigged to suit system design and raised according to manufacturer recommendations and regulatory requirements 2.5 Work with other personnel to tension lines with enough slack to facilitate yarder movements
3. Inspect and maintain cable system	3.1 Observe mechanical system components during normal operations, note faults and take corrective actions 3.2 Inspect system components routinely and maintain, repair or replace according to manufacturer recommendations, workplace procedures and regulatory requirements 3.3 Inspect guylines routinely and adjust tension to equalise load according to manufacturer recommendations, workplace procedures

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	and regulatory requirements 3.4 Lubricate blocks to maintain operational condition 3.5 Identify repetitive damage of cable system and review and amend operational practices
4. Haul stems and/or logs	4.1 Carry out pre-operational checks on machine and cable system according to workplace procedures and manufacturer recommendations to ensure optimal production performance and operational effectiveness 4.2 Perform yarder operations only in response to breakout, landing signals or own transmitted signals 4.3 Monitor, manage and control yarder mechanical systems to maintain log alignment and satisfy safe operating limits 4.4 Control tension in running and standing lines to balance the lift and deflection consistency with payload and rope capacities 4.5 Halt haul and clear hang-ups and obstacles in cooperation with the rigging slinger 4.6 Use haul speed and line swing to position logs on the landing, control payloads and work with the chaser to optimise workflow 4.7 Return rigging to extraction point and position according to signals from rigging slinger 4.8 Operate yarder to minimise breakage and damage to stems and/or logs, standing trees and environment according to workplace procedures and production plan requirements
5. Carry out machine operator maintenance	5.1 Shut down, de-energise and isolate yarder according to workplace procedures or manufacturer recommendations 5.2 Clean, check and carry out routine maintenance activities on yarder to maintain optimum operational performance 5.3 Identify and report machine faults, malfunctions or problems according to workplace procedures and manufacturer recommendations 5.4 Clean work area of all debris and waste resulting from yarder operation and dispose of or recycle waste materials according to workplace environmental management plan 5.5 Record yarder operations and maintenance activities

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	Interpret workplace documentation to determine work requirements
Writing	Use technical and workplace specific vocabulary to accurately and legibly complete workplace records and forms
Oral communication	Ask questions to clarify contents of production plans
Numeracy	- Interpret gauges relevant to safe machinery operation - Determine haul speed to optimise workflow

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR3212 Operate yarder	FWPHAR3231 Operate yarder	Minor changes to Application and Knowledge Evidence Added new Performance Criteria Updated Foundation Skills, Performance Evidence and Assessment Conditions	Equivalent

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 FWPHAR3212 Operate yarder

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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:

- operated a yarder and cable system safely and effectively by performing at least four turns to lift and carry stems and/or logs on slopes from the stump to the roadside or landing area according to a production plan
- carried out routine maintenance on a yarder.

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 a production plan and site safety and environmental management plans
- hazardous or safe working zones in cable harvesting operations
- health and workplace hazards or risks related to yarder operations, and factors that can change or introduce new hazards
- industry-accepted work health and safety risk control measures, legal obligations and requirements of industry standards and/or codes of practice for yarder operations as outlined in workplace procedures and production plan
- warning signs, their correct positioning, vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during yarder operations
- required emergency response procedure, including firefighting resources and emergency response
- potential impacts of yarder operations on onsite and offsite environmental values, including cultural heritage, flora, fauna, ground compaction, water contamination and soil erosion
- environmental control measures, restrictions, legal obligations and requirements of industry standards and codes of practice for yarder operations as outlined in workplace procedures and production plan
- landings usage

- wood flow requirements and extraction and production bottlenecks particular to a production system
- effects of weather on ground conditions
- effects of slope and terrain conditions on yarder stability and operation
- machine specifications, restrictions and safe operating procedures, including stability and operation in different terrain conditions and slopes, and methods to shut down, de-energise and isolate the machine as outlined in workplace procedures or operator manual
- cable systems used in yarder operations
- machine cabin controls and operating procedures
- machine operating techniques to pull stems and/or logs and avoid mechanical damage to products during operations
- techniques to minimise damage to products, machine, cables and environment
- methods to conduct machine and cable system pre-operational checks and detect faults as outlined in workplace procedures or operator manual
- location of machine's major mechanical systems and parts of the machine in which energy is stored as outlined in operator manuals for safe and efficient conduct of the machine operator maintenance tasks
- machine and cable systems maintenance and servicing requirements as outlined in user or operator manuals
- reporting requirements regarding site, incident and hazard, personal reporting, production and machine maintenance.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated on a working cable logging operation
- resources, equipment and materials:
 - active cable logging system
 - personal protective equipment required in harvesting operations
- specifications:
 - access to workplace safety and environmental protection policies and procedures applicable to forest harvesting operations
 - access to production plan
 - access to site emergency procedure
 - access to workplace standard operating procedures or operator manual for cable logging equipment.

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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