



Australian Government

FWPHAR3234 Conduct mechanical processor operations

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to operate a wheeled or tracked mechanical processor to process trees, and to segregate and stack logs, in a commercial forest harvesting environment.

The unit applies to individuals who operate a wheeled or tracked mechanical processor as part of forestry operations.

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.</i>
1. Prepare for mechanical processor operations	1.1 Determine job requirements from work order or instruction and, where required, seek clarification from appropriate personnel 1.2 Confirm production targets and assess wood flow requirements to ensure efficient machine operation and overall productivity 1.3 Confirm workplace health and safety requirements, including use of personal protective equipment (PPE) and machine guards, for the task 1.4 Confirm environment protection requirements, including

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	identifying potential impact of mechanical processor operations on onsite and offsite environmental values including cultural heritage, flora, fauna, ground compaction, water contamination and soil erosion 1.5 Identify, assess and take actions to mitigate risks and hazards associated with machine operations 1.6 Identify emergency plan procedures to follow in the event of an incident or accident 1.7 Select equipment appropriate to work requirements and check for operational effectiveness 1.8 Identify access to tree or log to be extracted and assess working conditions for safety 1.9 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.10 Plan mechanical processor operations according to workplace procedures, environmental and heritage concerns
2. Operate equipment	2.1 Conduct pre-operational checks on equipment and attachments according to manufacturer recommendations and workplace procedures 2.2 Establish and maintain communication with other personnel and comply with safety signage according to workplace requirements 2.3 Detect site hazards associated with processor operations, and use safe operating techniques to minimise risk 2.4 Operate mechanical processor within equipment capabilities and limitations and workplace procedures 2.5 Manoeuvre mechanical processor to ensure safe and efficient operations 2.6 Adjust operating techniques to meet work requirements and site conditions
3. Process individual trees	3.1 Monitor movement and whereabouts of other personnel to ensure safety 3.2 Plan processing to ensure minimal tree damage and maximum recovery 3.3 Position equipment for stable and safe access to felled tree and to ensure loads are placed within rated load/reach capacity 3.4 Program or modify processing controller to produce standard

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	length and diameter of logs with optimal grade and length combination according to work plan requirements 3.5 Adjust processing techniques in response to unexpected characteristics, movement or condition of tree 3.6 Move timber/stems to pre-bunching site, ensuring personnel safety and minimal damage to timber and surrounding environment 3.7 Move equipment over pre-arranged routes with minimal damage to environment
4. Segregate and stack logs	4.1 Locate stacks to provide appropriate space for conduct of other landing operations in line with planned layout and workplace requirements 4.2 Position and construct log stacks to provide stability and minimise problems from slippage and falling of logs 4.3 Carry out maintenance of log stacks according to planned layout and workplace requirements 4.4 Visually assess delivered logs and direct/move to appropriate location for further processing or stacking
5. Carry out machine operator maintenance	5.1 Follow equipment lock-out procedures according to workplace health and safety requirements and workplace procedures 5.2 Conduct visual inspection and fault-finding procedures according to manufacturers' recommendations and workplace procedures 5.3 Conduct routine operational servicing to maintain optimum operational performance of equipment 5.4 Diagnose faults, malfunctions or problems with equipment, and report according to workplace procedures 5.5 Clean and store equipment, attachments and other ancillary equipment
6. Complete work-related reports	6.1 Complete reporting requirements related to site, incidents and hazards, personal reporting, check-in, production, machine maintenance and block completion. 6.2 Submit reports to appropriate personnel according to workplace procedures

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	- Read and understand production plans and workplace safety and environmental management plans in a forest harvesting environment - Read and understand standard operating procedures and/or manufacturer instructions for the operation of forest harvesting machinery
Writing	Record operation, production and machine maintenance on paper-based or electronic media
Oral communication	- Interact verbally and non-verbally using agreed systems and processes to communicate with others on site to ensure safe and effective machine operations - Use technical language directly relevant to role
Numeracy	- Interpret gauges relevant to safe operation of harvesting machinery - Estimate dimensions and angles of a stable log stack - Estimate weight of logs to determine loading requirements and compliance to machine specifications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR3234 Conduct mechanical processor operations	FWPHAR3210 Conduct mechanical processor operations	Updated Application Statement Minor updates to Performance Criteria Reworded Foundation Skills 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 FWPHAR3234 Conduct mechanical processor 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 planned, prepared and safely and effectively operated a wheeled or tracked mechanical processor to process one batch of trees and to segregate and stack logs in a commercial forest harvesting environment.

In undertaking this activity, the individual has:

- determined job requirements from work order or instruction
- complied with workplace health and safety requirements, including use of personal protective equipment (PPE) and machine guards, for the task
- operated mechanical processor safely and effectively within equipment capabilities and limitations
- adjusted operating techniques in response to site conditions
- maintained log stacks, with consideration given to providing for anticipated stock levels, stock rotation requirements, size, segregation of lengths, species, grades
- visually assessed delivered logs for characteristics including species type, diameter, length and grade, and directed to additional locations for further processing and stacking
- monitored trees for unexpected characteristics that may cause danger and referred to appropriate personnel
- established communication with other personnel and monitored their movements to maintain safety on site
- conducted pre-operational and post-operational checks, routine cleaning and operational servicing of equipment.

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 work order, production plan and site safety and environmental management plans

- health and operational hazards or risks related to mechanical processor 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 mechanical processor operations as outlined in workplace procedures and production plan
- the types and correct positioning of industry-accepted warning signs, vehicle-to-vehicle communication systems and procedures to maintain communication and work safety during mechanical processor operations
- required emergency response procedures, including firefighting resources and emergency response
- potential impacts of mechanical processor operations on on-site and off-site environmental values, including cultural heritage, flora, fauna, ground compaction, water contamination and soil erosion
- industry-accepted environmental control measures, environmental restrictions, legal obligations of the current Environment Protection Acts and regulations and requirements of industry standards and/or codes of practice for mechanical processor operations as outlined in workplace procedures and production plan
- tree shapes, species, quality characteristics and log defects particular to the site and production system
- effects of weather on ground conditions
- effects of slope and terrain conditions on machine stability and operation
- operational procedures and checks, including start-up and shutdown procedures
- operating and maintaining machine, attachments and ancillary equipment in line with manufacturer instructions
- industry-accepted reporting requirements regarding site, incidents and hazards, personal reporting, check-in, production, machine maintenance and block completion.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated in a forest or wood products work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - log landing site
 - wheeled or tracked mechanical processor
 - log sheets for recording measurement and operation
 - PPE suited for operation of a mechanical processor
- relationships:
 - on site personnel for individual to interact with and monitor their movements
- specifications:

- workplace health, safety and environmental policies and procedures applicable to mechanical processor operations
- workplace policies and procedures for operating a mechanical processor
- workplace emergency procedure.

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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