



Australian Government

FWPHAR3210 Conduct mechanical processor operations

Release: 2

FWPHAR3210 Conduct mechanical processor operations

Modification History

Release	Comment
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to operate a wheeled or tracked mechanical processor in a commercial forest harvesting environment. Activities include processing trees mechanically, segregating, and stacking logs.

The unit applies to individuals who operate a wheeled or tracked mechanical processor. 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

Harvesting (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. Plan and prepare for operations	1.1 Prepare to work safely according to workplace requirements 1.2 Obtain and review environmental, regulatory and legal requirements for conducting mechanical processing operations 1.3 Review work plan and clarify requirements with appropriate personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Select equipment appropriate to work requirements and check for operational effectiveness 1.5 Plan mechanical processor operations in line with site procedures, environmental and heritage concerns 1.6 Identify access to tree or log to be extracted and assess working conditions for safety 1.7 Identify emergency plan procedures to follow in the event of an emergency
2. Operate equipment	2.1 Conduct pre-operational checks on equipment and attachments in line with manufacturers' recommendations and site procedures 2.2 Establish and maintain communication with other personnel to ensure safety in line with safety 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 manoeuvre to ensure safe and efficient operations 2.5 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 length and diameter of logs with optimal grade and length combination in line with 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 the timber and surrounding environment 3.7 Move equipment over pre-arranged routes with minimal damage to the environment
4. Segregate and stack	4.1 Locate stacks to provide appropriate space for the conduct of other

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
logs	landing operations in line with planned layout and site 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 in line with planned layout and site 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 in line with workplace health and safety requirements and site procedures 5.2 Conduct visual inspection and fault finding procedures in line with manufacturers' recommendations and site 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 in line with site procedures 5.5 Clean and store equipment, attachments and other ancillary equipment 5.6 Record and report mechanical processor operation results in line with site 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 site safety and environmental management plans in a forest harvesting environment - read and understand standard operating procedures and/or manufacturers' instructions for the operation of forest harvesting machinery
Writing	record operation, production and machine maintenance on paper based or electronic media

Skill	Description
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 appropriate vocabulary including technical language directly relevant to role
Numeracy	- interpret gauges relevant to safe operation of harvesting machinery - determine construction of stable log stack - estimate the weight of logs to determine loading requirements and compliance to machine specifications
Navigate the world of work	understand main tasks, responsibilities and boundaries of own role
Interact with others	- use modes of communication suitable to purpose to confirm and clarify understanding - communicate and report operational and safety information to on-site personnel
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
FWPHAR3210 Conduct mechanical processor operations Release 2	FWPHAR3210 Conduct mechanical processor operations Release 1	Minor additions to the foundation skills, with no other changes.	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 FWPHAR3210 Conduct mechanical processor operations

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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:

- planned, prepared and safely and effectively operated a mechanical processor to process trees mechanically, segregate and stack logs
- followed work order for conducting mechanical processing
- 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 direct 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 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
- industry-accepted warning signs, their correct positioning, vehicle-to-vehicle communication systems and procedures to maintain communication and work safety during mechanical processor operations
- required emergency response procedure including firefighting resources and emergency response
- potential impacts of mechanical processor operations on onsite and offsite 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 shut-down procedures
- operating and maintaining machine, attachments and ancillary equipment in line with manufacturers' instructions
- industry-accepted reporting requirements regarding site, incident and hazard, personal reporting, check-in, production, machine maintenance and block completion.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a log landing site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - wheeled or tracked mechanical processor
 - personal protective equipment
- specifications:
 - access to workplace policies and procedures which cover current Work Health and Safety Acts or Occupational Health and Safety Acts, regulations and related industry standards and codes of practice applicable to forest harvesting operations
 - access to workplace policies and procedures which cover current Environment Protection Acts, regulations and related industry standards and codes of practice applicable to forest harvesting operations
 - access to workplace policies and procedures for operating a mechanical processor
 - access to site emergency procedure

- log sheets for recording measurement and operation

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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