



Australian Government

FWPHAR3203 Operate integrated or split flail and wood chipper with crane

Release: 1

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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 an integrated or split flail debarker and wood chipper with crane in an infield wood chipping operation. This unit includes preparing for infield wood chipping activities, conducting pre-operational machinery checks, setting up machinery, loading whole trees and logs with crane, monitoring machine operations, and implementing machine maintenance.

The unit applies to individuals who work as infield wood chipping machine operators in a commercial forest environment.

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

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 infield wood chipping activities	1.1 Determine job requirements from work order or instruction and, where required, seek clarification from 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>
	1.2 Confirm production targets and assess wood flow requirements to ensure efficient machine operation and overall productivity 1.3 Confirm safety and environmental protection requirements for the task according to workplace procedures 1.4 Identify, assess and take actions to mitigate risks and hazards associated with machine operations 1.5 Identify emergency procedures to follow in the event of an emergency 1.6 Identify type and quantity of material to be chipped, and quality requirements for chipped material 1.7 Plan infield wood chipping activities according to work order or instruction 1.8 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.9 Select, fit and use personal protective equipment 1.10 Conduct pre-operational machinery checks according to manufacturer recommendations and workplace procedures
2. Set up integrated or split flail and wood chipper with crane	2.1 Determine an appropriate location for integrated or split flail and wood chipper with crane 2.2 Position machine according to work requirements, manufacturer instructions, terrain characteristics, workflow and workplace safety requirements 2.3 Secure and set up machine according to work requirements, manufacturer instructions and workplace safety requirements
3. Chip whole trees and logs	3.1 Assess whole trees and logs and dispose of or recycle material unsuitable for chipping according to environmental protection practices, quality requirements and workplace procedures 3.2 Load flail/chipper systematically using crane at feed rate applicable to safety and stability of machine, characteristics of material to be chipped, chip quality, capacity of flail and chipper and loading capacity of transport vehicles 3.3 Chip whole trees and logs to chip sizes specified in work order 3.4 Operate crane and manoeuvre log grapple safely and efficiently to avoid harm to people, flail/chipper, other machines and the environment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.5 Confirm all merchantable product from the site is loaded into flail/chipper and all waste is managed according to work plan 3.6 Monitor output for compliance with flailing and chip specifications 3.7 Confirm safety of self and others and monitor location of people in relation to machine while machine is in operation 3.8 Load chipped material into transport vehicles according to vehicle load and distribution requirements and load covering requirements 3.9 Respond to critical situations requiring emergency shutdown to prevent personal injury or damage to machine or product
4. Carry out operator maintenance	4.1 Lock out equipment according to workplace safety and manufacturer requirements 4.2 Access tools and service equipment required for performing routine maintenance according to manufacturer instructions 4.3 Check flail chains, chipper knives, counter knives and anvil for wear and damage at appropriate or recommended intervals 4.4 Complete operator maintenance tasks according to manufacturer recommendations and workplace procedures 4.5 Record and report production outcomes and equipment faults 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	Interpret workplace documentation to determine requirements
Writing	Use technical and workplace specific vocabulary to accurately and legibly complete workplace records and forms
Numeracy	Interpret numerical and graphical information shown on machine screens, displays and gauges relevant to safe machine operation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR3203 Operate integrated or split flail and wood chipper with crane	FWPHAR3215 Operate a heavy production mobile chipper	Redesigned unit using content from FWPHAR3215 Operate a heavy production mobile chipper to provide specific skills for specialised in-field wood chipping equipment	Not 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 FWPHAR3203 Operate integrated or split flail and wood chipper with crane

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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 operated either an integrated or split flail and wood chipper with crane on four separate occasions in an infield wood chipping operation according to a work order or instructions
- carried out routine machine maintenance on two occasions.

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
- health and safety requirements related to operating an integrated or split flail and wood chipper with crane in infield wood chipping operations:
 - hazardous or safe working zones
 - workplace hazards or risks related to the operation
 - factors that can change or introduce new hazards
 - risk control measures
 - legal obligations and industry standards and/or codes of practice requirements
 - warning signs and their correct positioning
 - vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during operations
 - emergency response procedure and firefighting resources
- environmental care related to infield wood chipping operations:

- potential impacts of infield wood chipping operations on onsite and offsite environmental values (cultural heritage, flora and fauna, ground compaction, water contamination and soil erosion)
- control measures, restrictions, legal obligations and industry standards and codes of practice requirements related to the operation
- procedures for safe operation of integrated or split flail and wood chipper with crane:
 - pre-operational checks and detect faults
 - machine stability in different terrain conditions and slopes
 - shut down
- factors and their effects on the stability and operation of integrated or split flail and wood chipper with crane
 - slope and terrain conditions
 - machine specifications and restrictions
- reporting requirements regarding site, incident and hazard, personal reporting, check-in, production, and machine maintenance
- woodchip specifications
- features of integrated or split flail and wood chipper with crane:
 - static/mobile
 - integrated/split flail – chipper
 - crane
 - chains, knives and anvils
 - machine components
 - machine capacity
 - machine preparation and positioning
- techniques for determining and optimising feed rate
- influences on feed rate for flail/chipper:
 - machine capacity
 - type and condition of timber
 - product type and quality requirements
 - loading capacity of transport vehicles
- procedures for loading chips into truck for transport
- mass and load covering requirements of transport vehicles
- machine maintenance, servicing requirements and procedures for removing, replacing and disposing of chains, chipper knives, counter knives and anvil.

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 an infield wood chipping setting

- resources, equipment and materials:
 - integrated or split flail and wood chipper with crane
 - whole trees and logs to be chipped
 - personal protective equipment required in infield wood chipping operations
 - vehicle-to-vehicle communication system
 - truck to load
- specifications:
 - access to work order or instruction detailing infield wood chipping activities to be carried out by operator
 - access to workplace safety and environmental protection policies and procedures applicable to infield wood chipping operations
 - access to production plan
 - access to workplace safe operating procedures or operator manual for integrated or split flail and wood chipper with crane
 - access to user manual for vehicle-to-vehicle communication system.

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