



Australian Government

FDFWGG2009A Operate specialised canopy management equipment

Release: 2

FDFWGG2009A Operate specialised canopy management equipment

Modification History

This unit supersedes and is equivalent to FDFWGGCMSB Operate specialised canopy management equipment.

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This specialist unit has been developed for the wine grape growing stream of the wine sector. It covers the skills and knowledge required to attach, set up, operate and detach canopy management equipment.
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Application of the Unit

Application of the unit	This unit applies to the operation of specialised equipment used in wine grape growing.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	AHCMOM202A Operate tractors
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Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for canopy management activities	1.1 Canopy management requirements are identified and planned 1.2 Canopy management equipment is confirmed as available and ready for use 1.3 Equipment is set up to meet requirements
2. Operate canopy management equipment	2.1 Equipment is started up according to workplace procedures 2.2 Canopy management techniques are applied to vines according to their vigour, capacity and manager's instructions 2.3 Equipment performance is monitored to confirm performance is maintained within specifications 2.4 Canopy management activities are monitored to confirm performance is maintained within specifications 2.5 Out-of-specification performance is identified, rectified and/or reported
3. Shut down canopy management equipment	3.1 Canopy management equipment is shut down according to workplace procedures 3.2 Equipment is cleaned and stored according to workplace procedures 3.3 Work is conducted in accordance with workplace environmental guidelines
4. Record information	4.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify canopy management requirements
- select, fit and use personal protective clothing and/or equipment
- liaise with other work areas
- identify canopy management requirements. Factors to be considered include:
 - grape variety
 - vine vigour
 - end use of fruit, quality and yield requirements
 - climate
 - operating conditions
 - workplace procedures, manager's instructions
- attach equipment to tractor
- set up equipment to meet requirements
- confirm equipment status and condition
- operate equipment to meet requirements
- recognise equipment performance problems and rectify and/or report according to workplace procedures
- monitor canopy management activities. This will include monitoring:
 - width of canopy
 - speed of tractor and power take-off rpm
 - density of foliage
 - air circulation
 - light penetration or shade
 - bud numbers, spur length
 - vine damage
 - progress
 - problems and anomalies
- shut down equipment in response to an emergency situation
- shut down equipment in response to routine shutdown requirements
- clean and store equipment
- detach equipment from tractor
- use appropriate cleaning techniques
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record problems and/or corrective action

- identify, rectify and/or report environmental non-compliance
- maintain workplace records
- maintain work area to meet housekeeping standards
- carry out routine maintenance of equipment according to enterprise procedures
- use hand tools according to enterprise procedures
- use power tools according to enterprise procedures
- interpret mechanical drawings according to enterprise procedures
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- key factors affecting the canopy management technique adopted. These may include:
 - climate, forecast and current weather conditions
 - vineyard aspect and terrain
 - grape variety and vigour
 - grape quality and characteristics required
 - trellis design
 - harvesting techniques
 - disease risk and occurrence
 - stage of maturity and development
- operating parameters and procedures
- recognition of correct vine growth stages at which to carry out canopy management activities
- factors influencing vine vigour, including:
 - grape variety
 - trellis design
 - vine spacing
 - fertilisers
 - irrigation
 - rootstock
- features and benefits of a range of canopy management styles and techniques and their respective affect on grape quality, cropping yield and wine production requirements. This should include techniques to manage:
 - light penetration and shading
 - air circulation and disease reduction
 - annual growth stages of vine development
 - crop quality and quantity

- significance and method of monitoring canopy management activities
- purpose and basic components of canopy management equipment
- operational procedures for equipment
- Occupational health and safety (OHS) hazards and controls
- environmental issues and controls
- basic vine canopy problems or anomalies
- procedures and responsibility for reporting problems
- cleaning and storage requirements and procedures for equipment
- shutdown sequence
- routine maintenance procedures for equipment where relevant
- procedures for using hand tools where relevant
- procedures for using power tools where relevant
- interpretation of mechanical drawings where relevant.

Evidence Guide

EVIDENCE GUIDE	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	<p>Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • use personal protective clothing and equipment • select and confirm availability of equipment and prepare according to instructions • attach, set up equipment to meet requirements • start and operate equipment in accordance with operation instructions and requirements of workplace and task • perform emergency and routine shutdowns • take corrective action in response to out-of-specification results or non-compliance • demonstrate knowledge of OHS hazards, controls and emergency procedures • sort, collect, treat, recycle or dispose of waste • record information appropriately.
<p>Context of and specific resources for assessment</p>	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required

EVIDENCE GUIDE	
	<ul style="list-style-type: none"> documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
Polices and procedures	Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	<p>Workplace information may include:</p> <ul style="list-style-type: none"> Standard Operating Procedures (SOPs) specifications production schedules routine maintenance schedules work notes Material Safety Data Sheets (MSDS) manufacturer instructions verbal directions from manager, supervisor or senior operator
Equipment	<p>Equipment may include:</p> <ul style="list-style-type: none"> tractor circular saws cutter bars

RANGE STATEMENT	
	<ul style="list-style-type: none"> • blades • knives • drum pruners • mechanical leaf pluckers • wire lifters
Terrain	<p>Terrain must enable safe and effective operation of equipment. It may include:</p> <ul style="list-style-type: none"> • tracks • access roads • vineyard rows • open paddocks • flat, undulating, steep, hilly or terraced land • and on- and off-road environments
Conditions	<p>Conditions must enable safe and effective operation of equipment. These may include:</p> <ul style="list-style-type: none"> • dry • wet • slippery • boggy • icy • foggy • windy • day and night conditions
Confirming equipment status	<p>Confirming equipment status will include:</p> <ul style="list-style-type: none"> • checking that all safety standards and pre-start requirements are met and that equipment is operational
Information systems	<p>Information systems may be:</p> <ul style="list-style-type: none"> • print or screen based
Canopy management techniques	<p>Canopy management techniques may vary and should include:</p> <ul style="list-style-type: none"> • those required by the workplace (e.g. pruning, trimming, plucking and lifting)
Problems and anomalies	<p>Problems and anomalies may include:</p> <ul style="list-style-type: none"> • dead vines • signs of common pests and diseases, such as light brown apple moth (LBAM), boring insects, mildew,

RANGE STATEMENT

	<p>eutypa, phomopsis, dying arm, crown gall and diseased wood</p> <ul style="list-style-type: none">• signs of trellis and/or irrigation disrepair or problems• machinery breakdowns
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Unit Sector(s)

Unit sector	Wine operations
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