



**Australian Government**

# **FWPHAR3229 Operate single grip harvester**

**Release: 1**

# FWPHAR3229 Operate single grip harvester

## Modification History

| Release   | Comments                                                                              |
|-----------|---------------------------------------------------------------------------------------|
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 3.0. |

## Application

This unit of competency describes the skills and knowledge required to operate a single grip harvester for log production and use optimised production processes in a commercial forest harvesting environment. The main job functions are to fell trees, delimb, cut stems to optimum value and segregate log products. Activities are to be conducted safely and to ensure optimal value recovery and extraction of logs.

The unit applies to individuals who work as single grip harvester operators in small or larger harvesting crews. Operators generally work under broad direction to complete routine activities related to harvesting operations 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 to operate a single grip harvester | 1.1 Review production plan, confirm its targets for felling and processing and assess wood flow requirements to ensure efficient machine operation and overall productivity<br>1.2 Confirm, identify and report health, safety, environmental and heritage risks of operation in line with standard operating procedures |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|                                                  | <p>and site safety and environmental management plans</p> <p>1.3 Apply risk control measures in line with standard operating procedures, site operational plan, legislative requirements and industry standards to eliminate or minimise risks</p> <p>1.4 Identify emergency plan procedures to follow in the event of an emergency</p> <p>1.5 Use production plan to identify entry points to the coupe, access to tree, extraction routes and directions to landings to facilitate an efficient process and minimise interference with other forestry operations</p> <p>1.6 Check work area to ensure there is appropriate space to safely manoeuvre both the machine and stems, stockpile processed logs and store or dispose of stem waste and tops according to production plan</p> <p>1.7 Assess terrain characteristics to establish machine stability</p> <p>1.8 Identify cutting sequence and felling directions to minimise damage to the trees and the surrounding environment in line with the production plan</p> <p>1.9 Use log cutting instructions and/or production plan to determine the product types and quality parameters to be produced</p> <p>1.10 Carry out pre-operational checks on machine in line with workplace procedures or manufacturers' recommendations to ensure optimal production performance and operational effectiveness</p> |
| 2. Operate single grip harvester                 | <p>2.1 Use industry-accepted warning signs, vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during operation</p> <p>2.2 Assess individual trees to determine the best machine position, fall direction, hazards, placement of cuts and grade quality</p> <p>2.3 Drive and position the machine and harvester head in response to tree characteristics and terrain conditions to ensure stability</p> <p>2.4 Use appropriate methods to reset the harvesting head length counter to prevent loss of log volume or value</p> <p>2.5 Assess tree species, size and quality characteristics in line with log cutting instructions and/or production plan requirements and use cabin controls to clamp, cut and produce logs with optimal length, quality and diameter</p> <p>2.6 Adjust clamping, cutting and processing techniques in response to unexpected characteristics, movement or condition of tree to minimise</p>                                                                                                                                                                                                                                                                                                                                                                                       |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                  | <p>log and log surface damage in line with the production plan requirements</p> <p>2.7 Move machine over pre-arranged routes to minimise environmental impact</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3. Segregate and stack logs                      | <p>3.1 Visually assess logs for size, species and quality characteristics during stacking at the pre-bunching site to ensure they are placed in the appropriate stack for transport and further processing and in line with the production plan requirements</p> <p>3.2 Mark and report logs that cannot be clearly and safely assessed in line with the production plan requirements</p> <p>3.3 Position and construct log stacks to avoid log damage, provide stability, restrict height for efficient extraction and allow space for the conduct of other operations in line with worksite layout and the production plan requirements</p> <p>3.4 Maintain stack separation and identification to ensure products are presented for an optimum transport and logistics cycle time and are in line with industry standards and production plan requirements</p> |
| 4. Carry out machine operator maintenance        | <p>4.1 Park, shut-down, de-energise and isolate single grip harvester in line with workplace procedures or manufacturers' recommendations</p> <p>4.2 Adjust feed roller pressures and delimbing knife settings to minimise roller stud and delimbing damage</p> <p>4.3 Clean, check and carry out routine maintenance tasks on single grip harvester to maintain optimum performance</p> <p>4.4 Identify and report machine faults, malfunctions or problems in line with workplace procedures or manufacturers' recommendations</p> <p>4.5 Clean work area and dispose of or recycle waste materials in line with site environmental management plan</p> <p>4.6 Record single grip harvester operations and maintenance activities</p>                                                                                                                           |

## 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                    | <ul style="list-style-type: none"> <li>read production plans, site safety and environmental management plans in a forest harvesting environment</li> <li>read standard operating procedures and/or manufacturers' instructions for the operation of forest harvesting machinery</li> </ul>                          |
| Writing                    | <ul style="list-style-type: none"> <li>record operation, production and machine maintenance on paper based or electronic media</li> </ul>                                                                                                                                                                           |
| Oral Communication         | <ul style="list-style-type: none"> <li>interact verbally and non-verbally using agreed systems and processes to communicate with others on site to ensure safe and effective single grip harvester operations</li> <li>use appropriate vocabulary including technical language directly relevant to role</li> </ul> |
| Numeracy                   | <ul style="list-style-type: none"> <li>interpret gauges relevant to safe operation of harvesting machinery</li> <li>determine construction of stable log stack</li> </ul>                                                                                                                                           |
| Navigate the world of work | <ul style="list-style-type: none"> <li>understand main tasks, responsibilities and boundaries of own role</li> </ul>                                                                                                                                                                                                |
| Interact with others       | <ul style="list-style-type: none"> <li>use modes of communication suitable to purpose to confirm and clarify understanding</li> <li>communicate and report operational and safety information to on-site personnel</li> </ul>                                                                                       |
| Get the work done          | <ul style="list-style-type: none"> <li>recognise and respond to routine problems</li> <li>plan and organise own work activities and resources</li> </ul>                                                                                                                                                            |

## Unit Mapping Information

| Code and title current version              | Code and title previous version               | Comments                                                                                                                                                                                                                                                                    | Equivalence status |
|---------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| FWPHAR3229<br>Operate single grip harvester | FWPHAR3214<br>Operate a single grip harvester | Significant changes to reflect industry requirements for a safe appropriate and efficient operation, including value recovery and product quality. A new element and new PCs were added, most PCs were edited and PE and KE increased in content to map against the revised | No equivalent unit |

| Code and title<br>current version | Code and title<br>previous version | Comments                                                                                                                                  | Equivalence status |
|-----------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                                   |                                    | PCs.<br>Additional foundation<br>skills identified.<br>Code and title change<br>for consistency with<br>other machine<br>operation units. |                    |

## Links

Companion Volume implementation guides are found in VETNet -

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