Modification history

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| Release | Comments |
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 5.0. |

| FWPCOT3XXX | Use scanning equipment for timber grading |
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| Application | This unit of competency describes the skills and knowledge required to set up and test different forms of scanning equipment for timber grading.  The unit applies to individuals who use scanning equipment for timber grading used in sawmilling operations.  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 occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | COT |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare to operate scanning equipment for timber grading | 1.1 Review work order to determine job requirements and where required seek clarification from appropriate personnel  1.2 Identify and apply workplace health and safety requirements, including use of personal protective equipment, equipment lockout and safe manual handling techniques  1.3 Identify, assess and take actions to mitigate risks and hazards associated with operating scanning equipment used for timber grading  1.4 Identify and implement workplace procedures for minimising waste material and maximising energy efficiency  1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace  1.6 Obtain type and quantity of timber for grading from a storage location |
| 2. Set up and test scanning equipment for timber grading | 2.1 Determine settings for scanning equipment according to work order and manufacturer instructions  2.2 Identify relevant reference materials on the scanning equipment and use as required  2.3 Identify the prerequisites for effective testing of scanning equipment  2.4 Conduct test run to check the operation of scanning equipment and accuracy of grading outcomes  2.5 Compare test results with actual data to confirm that scanning equipment is providing accurate grading outcomes  2.6 Make adjustments to equipment settings as required  2.7 Record all testing data accurately according to workplace and manufacturer requirements |
| 3.Operate, monitor and troubleshoot scanning equipment for timber grading | 3.1 Carry out equipment start-up procedures according to manufacturer instructions  3.2 Operate equipment according to designed capacity and manufacturer recommendations  3.3 Perform routine operational checks on the performance of the scanning equipment according to workplace, safety and manufacturer procedures  3.4 Withdraw sample products for independent testing and comparison with grading determined by scanning equipment, investigate anomalies, identify root causes and implement solutions  3.5 Identify problems with the operation of scanning equipment and resolve or report to the appropriate person  3.6 Complete equipment shut down procedures |
| 4. Finalise operation and maintain equipment | 4.1 Follow workplace safety procedures to lock out equipment  4.2 Perform routine maintenance according to workplace and manufacturer instructions  4.3 Record and report grading outcomes, equipment faults and maintenance outcomes 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. | |
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| Skill | Description |
| Reading | * Extract essential information from operational manuals to determine software parameters of scanning equipment |
| Writing | * Prepare routine written reports using the required format, language and structure |
| Oral Communication | * Employ active listening and questioning to clarify content of work orders |
| Numeracy | * Interpret graphical data related to grading process |
| 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 |
| Get the work done | * Recognise and respond to routine problems |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPCOT3XXX Use scanning equipment for grading timber | Not applicable | New unit | Not applicable |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47 |

| TITLE | Assessment requirements for FWPCOT3XXX Use scanning equipment for timber grading |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that, on at least one occasion, the individual has:   * reviewed work order to determine job requirements * used personal protective equipment (PPE), lockout procedures and safe manual handling techniques throughout the work * identified, assessed and taken actions to mitigate risks and hazards associated with operating scanning equipment * set up and tested scanning equipment * operated, monitored and troubleshot scanning equipment for timber grading * performed routine maintenance on scanning equipment * recorded grading outcomes according to workplace requirements | |

| Knowledge Evidence |
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| 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:   * timber grading standards * types of scanning equipment used for timber grading * optical [1-3 dimension] * X-ray * microwave * multispectral * acoustic * functions of key components of scanning equipment operating principles, details of the pre-use, calibration and safety checks, and operating procedures for the items used * factors that may impact on the accuracy of scanning equipment and their control * methods used to: * set up and test scanning equipment * clean and maintain scanning equipment * awareness of environmental sustainability issues as they relate to the work task * types of risk and hazards and mitigation measures associated with operating scanning equipment for timber grading * legal, ethical and work health and safety requirements specific to the work task * typical flow of material supply in and out of the grading area * range of industry standard strength grades and thresholds and applicable terminology * markings used on timber boards to identify grades * reason for independent testing of boards and processes for sampling and preparing boards for testing. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions * skills must be demonstrated in a sawmill or an environment that accurately represents workplace conditions * resources, equipment and materials: * scanning equipment for timber grading including one or more of the following: optical, X-ray, microwave, multispectral, acoustic scanning equipment * PPE for operating scanning equipment for timber grading * a variety of timber for grading * specifications: * template documents for recording grading outcomes * manufacturer instructions for scanning equipment * work order with specific instructions for using scanning equipment for timber grading * workplace procedures for grading timber using scanning equipment.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and / or standards. |

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