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 | Cut timber products using high-speed optimiser |
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| Application | This unit of competency describes the skills and knowledge required to prepare and cut timber products to differing lengths and angles using computer numerical control (CNC) optimising docking and trimming saws. The unit applies to individuals who cut timber products using a high-speed optimiser in a timber processing or timber product manufacturing plant.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 | Common Technical |

| 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 for cutting timber product | 1.1 Review work order to determine job requirements and where required seek clarification from appropriate personnel1.2 Review environmental protection procedures and workplace health and safety requirements, including the use of personal protective equipment, equipment lockout and safe manual handling techniques1.3 Identify, assess and take actions to mitigate risks and hazards associated with cutting timber product using CNC optimising saws1.4 Identify and implement workplace procedures for minimising waste material and maximising energy efficiency1.5 Obtain type and quantity of timber product to be cut from a storage location1.6 Identify required cutting patterns and saw setup sequences |
| 2. Operate CNC optimising saws | 2.1 Perform preoperational checks according to manufacturer and workplace procedures2.2 Select and set computer software program to job specifications and check machine cycle2.3 Complete trial run to verify system operation and check timber product for length and angle specification within the set tolerance2.4 Use machine according to workplace safety procedures, manufacturer instructions and environmental protection practices2.5 Load timber product into the machine and operate to minimise waste and ensure correct lengths and angles are produced2.6 Monitor the process regularly to ensure continuity of material flow, and quality and quantity of production output2.7 Redirect incorrect cuts, off-cuts and timber product with defects for reuse, recycling or disposal according to workplace procedures and environmental protection practices2.8 Identify routine processing problems and resolve or report to appropriate personnel |
| 3. Perform operator maintenance | 3.1 Lock out machine and equipment according to workplace safety procedures 3.2 Check saw blades for bluntness or damage3.3 Remove and replace saw blades according to manufacturer recommendations3.4 Dispose of used blades according to environmental protection practices3.5 Keep the work area clear of dust and debris according to workplace safety procedures3.6 Record and report production outcomes, equipment faults and maintenance requirements to appropriate personnel. |

| Foundation SkillsThis 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 safe operating procedures for equipment
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| Writing | * Prepare routine written reports using the required format, language and structure
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| Oral Communication | * Employ active listening and questioning to clarify the content of work orders
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| Numeracy | * Interpret graphical information presented in electronic and print formats
* Set numerical data on computer optimising program according to length and angle specifications
* Measure finished dimensions for specified length and angle and allowable tolerances
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| Navigate the world of work | * Identify main tasks, responsibilities and boundaries of own role
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| Interact with others | * Use modes of communication suitable to purpose to confirm and clarify understanding
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| 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 Cut timber products using high-speed optimiser | FWPCOT3206 Cut material using high speed optimiser | Updated application statement; updated performance criteria to reflect environmental and workplace health and safety requirements; updated foundation skills; added performance evidence to map to performance criteria; updated unit title and code to reflect changes. | Equivalent |

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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 Cut timber products using high-speed optimiser |
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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:* cut three or more of the following timber products using a high-speed optimiser:
* laminated veneer timber
* plywood
* chipboard
* medium density fibreboard
* dressed timber
* preservative treated timber
* finger jointed timber
* during the cutting process, the individual has:
* read and clarified work order
* followed relevant workplace health and safety and environmental protection procedures
* prepared computer numerical control (CNC) optimising saw for cutting timber product at a specified length and angle
* identified cutting pattern
* set optimising software program
* operated machine and equipment according to manufacturer procedures
* monitored production output and quality
* performed operator maintenance.
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| 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: * features, programming and operation of CNC optimising docking and trimming saws
* range of cutting patterns used with CNC optimising saws to achieve maximum output of timber product
* range of industry standard lengths, cross sections and tolerances for relevant timber products and applicable terminology
* methods for assessing saw blade condition
* methods of monitoring production output and quality
* types of risk and hazards and mitigation measures associated with cutting timber products using high-speed optimisers
* workplace procedures specific to cutting timber products using high-speed optimisers:
* workplace health and safety with particular emphasis on equipment lockout and use of personal protective equipment (PPE)
* communication reporting lines
* recording and reporting production outcomes, equipment faults and maintenance requirements
* environmental protection practices for timber processing or wood product manufacturing plants :
* reducing water and energy use
* cleaning plant, tools and equipment
* disposing of, recycling and reusing timber and other waste.
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| 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 timber processing plant, wood product manufacturing plant or an environment that accurately represents workplace conditions
* resources, equipment and materials:
* CNC optimising docking and trimming saws
* a computer program for optimising saws
* maintenance tools and equipment for optimising saws
* consumable saw blades
* PPE suitable for cutting timber using high-speed optimisers
* three or more of the following types of timber products: laminated veneer timber, plywood, chipboard, medium density fibreboard, dressed timber, preservative treated timber, finger jointed timber
* specifications:
* template documents for recording production outcomes, equipment faults and maintenance requirements
* manufacturer instructions for use and maintenance of equipment
* work order with specific instructions for cutting material using high-speed optimisers
* workplace procedures for cutting material using high-speed optimisers.

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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