

Modification history

| Release | Comments |
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| Release 2 | This version released with FWP Forest and Wood Products Training Package Version [4.0] Version created to update workplace health and safety requirements in performance criteria and clarify intent of unit and assessment requirements. |
| Release 1 | This version replaces equivalent FPICOT3234B Cut material using CNC sizing machines, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format. |

| UNIT CODE | FWPCOT3234 Cut material using CNC sizing machines |
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| Application | <p>This unit of competency describes the skills and knowledge required to set up and operate computer numerically controlled (CNC) sizing machines <u>to process used for the production of engineered wood products and timber components in a timber manufacturing facility</u>. Work <u>also involves is completed in a forest products factory setting and includes</u> operator maintenance.</p> <p>The unit applies to individuals who work as production workers, engineered timber products technicians, machine operators or timber fabricators. <u>Operators generally work under broad or limited direction to complete routine activities related to own work and take responsibility for their work.</u></p> <p><u>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.</u></p> <p>No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.</p> |
| Prerequisite Unit | Nil |
| Unit Sector | Common Technical |

| 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 cutting <u>engineered wood product or timber</u> | <p>1.1 Review work order <u>and specifications</u> and where required check with appropriate personnel</p> <p><u>1.2 Follow workplace health and safety requirements, environmental protection practices and emergency procedures and use personal protective equipment (PPE) in line with operational requirements throughout CNC cutting operations</u></p> <p><u>1.3 Identify and report hazards, accidents, incidents and/or near misses in line with operational requirements and health and safety legislative requirements to maintain safe work practices.</u></p> <p><u>1.2 Select appropriate personal protective equipment and check for operational effectiveness</u></p> <p>1.3 Obtain type and quantity of material to be cut from storage location</p> <p><u>1.4 Plan material cutting process in line with work order</u></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> |
| 2. Set up <u>CNC sizing</u> machine | 2.1 Set CNC optimising program to job <u>meet work</u> specifications 2.2 Check cutting machine mechanisms, emergency stops, gauges, guards and controls for safe and effective operation 2.3 Adjust cutting machine settings in line with work orders <u>specifications</u> 2.4 Complete trial run to check system and machine operation for accuracy, quality and dimensions of finished work 2.5 Accept or reject trialled material and dispose of in line with environmental protection practices 2.6 Complete final adjustments to CNC optimising program and equipment |
| 3. Operate <u>CNC sizing</u> machine | 3.1 Use equipment in line with <u>organisational workplace health and safety</u> procedures, manufacturer's instructions, design <u>operating</u> capacity and purpose and environmental protection practices 3.2 Feed <u>engineered wood product or timber materials</u> into machine, operate cutting equipment in line with tooling requirements and monitor use regularly to minimise waste and ensure correct dimensions are produced 3.3 Repair or dispose of incorrect cuts, off-cuts and material with defects in line with environmental protection practices 3.4 Identify routine processing problems and resolve or report to appropriate personnel |
| 4. Complete operator maintenance | 4.1 Lock out equipment <u>Follow in line with organisational safety workplace health and safety</u> procedures to lock out equipment 4.2 Check blades for bluntness or damage 4.3 Remove and replace blades in line with manufacturer recommendations 4.4 Dispose of used blades in line with environmental protection practices 4.5 Keep machine clear of dust and debris in line with organisational safety procedures 4.6 Record and report production outcomes, equipment faults and maintenance requirements to appropriate personnel |

| Foundation Skills | |
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| <i>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.</i> | |
| Skill | Description |
| Numeracy | <ul style="list-style-type: none"> identify quantities of required material within work orders and count and count numbers to be cut set numerical data on CNC optimising program according to sizing specifications calculate the feed rate to optimise quality and quantity of production output measure finished dimensions against specifications and allowable tolerances |
| Oral communication | <ul style="list-style-type: none"> ask open and closed probe questions and actively listen to clarify contents of work orders |
| Reading | <ul style="list-style-type: none"> interpret: <ul style="list-style-type: none"> workplace health and safety and other organisational procedures work orders manufacturer instructions and maintenance recommendations |
| Writing | <ul style="list-style-type: none"> complete accurate basic records for production outcomes, equipment faults and maintenance requirements |
| Plan and organise | <ul style="list-style-type: none"> efficiently and logically sequence the stages of preparation and production using work order to guide activities |

| Unit Mapping Information | | | |
|---|---|---|---------------------------|
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPCOT3234 Cut material using CNC sizing machines | FWPCOT3234 Cut material using CNC sizing machines | Updated workplace health and safety requirements in performance criteria and clarified intent of unit and assessment requirements | Equivalent unit |

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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 |
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| TITLE | Assessment requirements for FWPCOT3234 Cut material using CNC sizing machines |
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| Performance Evidence | |
| <p>An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills of this unit. There must be evidence that, on at least one occasion, the individual has:</p> <ul style="list-style-type: none"> • followed organisational <u>workplace health and safety requirements and environmental protection policies and procedures relevant to</u> cutting <u>engineered wood product or timber material</u> using CNC sizing machines • cut <u>engineered wood product or timber materials</u> using CNC <u>sizing</u> equipment in line with a work order and within prescribed organisational tolerances and according to manufacturers recommendations • setting computer programs for the CNC <u>sizing</u> equipment <u>to follow in line with work specifications</u> • conducted operator maintenance on CNC equipment. | |
| Knowledge Evidence | |
| <p>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:</p> <ul style="list-style-type: none"> • <u>health and operational hazards or risks related to operating CNC sizing machines for cutting engineered wood products or timber as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides</u> • organisational policies and procedures specific to cutting material using CNC sizing machines: <ul style="list-style-type: none"> • workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment • <u>use of CNC equipment</u> • communication reporting lines • recording and reporting production outcomes, equipment faults and maintenance requirements • environmental protection practices for <u>forest products factory setting timber manufacturing facilities</u>: <ul style="list-style-type: none"> • reducing water and energy use • cleaning plant, tools and equipment • disposing of, recycling and reusing timber and other waste • range of cutting patterns used with CNC sizing machines to achieve accurate dimensions and quality of finished <u>workproduct</u> • characteristics of timber, timber products and timber defects • system functions and capabilities of CNC software for sizing machines including cutting patterns and sequences • purpose, features and operation of CNC sizing machines: <ul style="list-style-type: none"> • CNC beam saws • CNC double end profiling machines • methods for assessing saw blade condition. | |
| Assessment Conditions | |
| <p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • skills must be demonstrated in an environment that accurately represents workplace conditions • resources, equipment and materials: <ul style="list-style-type: none"> • CNC sizing machines • computer program for sizing machines • maintenance tools and equipment for sizing machines • consumable saw blades • personal protective equipment suitable for cutting material using CNC sizing machines • <u>suitable material a diverse range of including one or more of the following</u> commercial timber: <ul style="list-style-type: none"> • <u>beams, including laminated beams</u> • <u>cross laminated timber</u> • laminated veneer • chipboard • medium density fibreboard • dressed timber | |

| Assessment Conditions |
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| <ul style="list-style-type: none">• preservative treated timber• specifications:<ul style="list-style-type: none">• manufacturer instructions for use and maintenance of equipment• work order with specific instructions for cutting material using CNC sizing machines• <u>workplace health and safety and emergency procedures</u>• <u>environmental protection procedures</u>• organisational policies and procedures for cutting material using CNC sizing machines.• template documents for recording production outcomes, equipment faults and maintenance requirements <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |

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