



**Australian Government**

**Assessment Requirements for  
FWPCOT3235 Machine material using  
CNC machining and processing centres**

**Release: 3**

## Assessment Requirements for FWPCOT3235 Machine material using CNC machining and processing centres

### Modification History

Release	Comments
Release 3	This version released with FWP Forest and Wood Products Training Package Version 4.0.
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

### Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that, on at least one occasion, the individual has:

- followed workplace health and safety requirements and environmental protection procedures for processing engineered wood product or timber using one or more of the following types of computer numerical control (CNC) machining and processing centres:
  - CNC three-axis machining centres
  - CNC multi-tasking machining centres
  - CNC flat-bed routers and mortisers
- set computer programs for the CNC machining and processing centres according to work specifications
- machined one or more of the following types of engineered wood products or timber using the CNC machining and processing centres according to work specifications, manufacturer recommendations and within prescribed tolerances:
  - glued laminated timber (glulam)
  - cross-laminated timber (CLT)
  - laminated veneer
  - chipboard
  - medium density fibreboard
  - dressed timber
  - preservative treated timber
- conducted operator maintenance on the CNC machining and processing centres, cutting tools and equipment.

## Knowledge Evidence

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:

- health and safety hazards or risks related to operating a CNC machine and processing centre for engineered wood products and timber as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides
- workplace policies and procedures specific to machining engineered wood products and timber using CNC machine and processing centres:
  - health and safety, with particular emphasis on equipment lockout and the use of personal protective equipment (PPE)
  - use of CNC machines, cutting tools and equipment
  - communication reporting lines
  - recording and reporting production outcomes, machine and equipment faults and maintenance requirements
- environmental protection practices for timber manufacturing facilities:
  - reducing water and energy use
  - cleaning plant, cutting tools and equipment
  - disposing of, recycling and reusing timber and other waste
- range of cutting patterns used with CNC machining and processing centres to achieve accurate dimensions and quality of finished work
- system functions and capabilities of CNC software for machining and processing centres
- purpose, features and operation of CNC machining and processing centres and equipment used to machine engineered wood products and timber:
  - three-axis machining centres
  - multi-tasking machining centres
  - flat-bed routers and mortisers
  - dust extraction equipment
  - jigs and shaped templates for routing
- timber characteristics, timber products and timber defects
- methods for assessing cutting tools condition.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - one or more types of CNC machining and processing centres
  - dust extraction equipment
  - jigs and shaped templates for routing

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- maintenance tools for boring, routing and mortising operations
  - cutting tools suitable for machining operations including cutter, router, boring, drilling and mortising bits
  - PPE suitable for machining material using CNC machining and processing centres
  - engineered wood product or timber suitable for machining operations using CNC machining and processing centres
  - CNC program suitable for the machining operations
  - specifications:
    - manufacturer instructions for use and maintenance of equipment
    - work order with specific instructions for machining material using CNC machining and processing centres
    - workplace policies and procedures for machining material using CNC machining and processing centres, including health and safety and emergency procedures and environmental protection procedures
    - template documents for recording production outcomes, equipment faults and maintenance requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

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