



Australian Government

Assessment Requirements for FWPCOT3332 Machine timber or engineered wood products using CNC machining and processing centres

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, for one production run, the individual has machined engineered wood product or timber using one type of computer numerical control (CNC) machining and processing centre selected from:

- CNC three-axis machining centre
- CNC multi-tasking machining centre
- CNC flat-bed router and mortiser.

In performing this task, the individual has machined one type of engineered wood product or timber selected from:

- glued laminated timber (glulam)
- cross-laminated timber (CLT)
- laminated veneer
- chipboard
- medium density fibreboard
- dressed timber
- preservative treated timber.

Also, in performing this task, the individual has:

- followed workplace health and safety and environmental protection practices and/or procedures
- set computer program, conducted a trial run and made necessary adjustments to ensure that quality and dimensions of finished work conform to work specifications
- run CNC machining and processing centre according to workplace operating procedures

- achieved finished dimensions within prescribed tolerances
- conducted operator maintenance on the CNC machining and processing centre.

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, including:
 - health and safety, with particular emphasis on equipment lock-out 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 requirements and practices for timber manufacturing facilities, including:
 - 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 centre to achieve accurate dimensions and quality of finished work
- system functions and capabilities of CNC software for machining and processing centre
- purpose, features and operation of CNC machining and processing centre and equipment used to machine engineered wood products or timber, including:
 - 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 condition of cutting tools.

Assessment Conditions

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, a timber product manufacturing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - CNC machining and processing centre
 - CNC program suitable for the machining operation
 - dust extraction equipment
 - cutting tools and equipment suitable for CNC machining operation
 - maintenance tools suitable for CNC machining operation
 - PPE suitable for machining timber or engineered wood products using CNC machining and processing centres
 - engineered wood product or timber suitable for machining operations using CNC machining and processing centre
- specifications:
 - work order with specific instructions for machining timber or engineered wood products using CNC machining and processing centre
 - workplace operating procedure for CNC machining and processing centre
 - workplace policies and procedures for machining timber or engineered wood products using CNC machining and processing centre, including health and safety and emergency procedures and environmental protection policies and/or procedures.

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>