



Australian Government

FWPCOT3235 Machine material using CNC machining and processing centres

Release: 3

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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.

Application

This unit of competency describes the skills and knowledge required to set up, operate and maintain computer numerical control (CNC) machining and processing centres used to process and cut holes in engineered wood products and timber components in a manufacturing facility. Work also involves operator maintenance.

The unit applies to individuals who work as production workers, timber fabricators and engineered timber products technicians. Operators generally work under broad or limited direction to complete routine activities related to their own work, and take responsibility for their work.

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 licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Common Technical

Elements and Performance Criteria

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 machining engineered wood products or timber	<p>1.1 Review work order, machining specifications, workplace health and safety requirements, environmental protection practices and emergency procedures for CNC machining operation and, where required, check with appropriate personnel</p> <p>1.2 Identify and report hazards and use personal protective equipment according to workplace requirements and health and safety legislation to maintain safe work practices</p> <p>1.3 Obtain the type and quantity of material for machining from a storage location</p>
2. Set up the CNC machine	<p>2.1 Set CNC program to meet work specifications</p> <p>2.2 Check the CNC machine mechanisms, cutting tools, jigs, emergency stops, gauges, guards and controls for safe and effective operation</p> <p>2.3 Adjust the CNC machine settings according to work specifications</p> <p>2.4 Complete trial run to check system and machine operation for accuracy, quality and dimensions of finished work</p> <p>2.5 Accept or reject trialled material and dispose of according to environmental protection practices</p> <p>2.6 Complete final adjustments to the CNC program, cutting tools and equipment</p>
3. Operate the CNC machine	<p>3.1 Use the CNC machine, cutting tools and equipment according to organisational safety procedures, manufacturer instructions, operational capacity and purpose and environmental protection practices</p> <p>3.2 Feed engineered wood product or timber into the CNC machine, operate cutting tools according to tooling requirements and regularly monitor to minimise waste and ensure correct dimensions are produced</p> <p>3.3 Repair or dispose of incorrect cuts, off-cuts and material with defects according to environmental protection practices</p> <p>3.4 Identify routine processing problems and resolve or report to appropriate personnel</p>
4. Complete operator maintenance	4.1 Lock out the CNC machine according to workplace health and safety procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.2 Check cutting tools for bluntness or damage 4.3 Remove and replace cutting tools according to manufacturer recommendations 4.4 Dispose of used cutting tools according to environmental protection practices 4.5 Keep machining area clear of dust and debris according to organisational safety procedures 4.6 Record and report production outcomes, machine and equipment faults and maintenance requirements 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.

Skill	Description
Numeracy	<ul style="list-style-type: none"> Identify quantities of required material within work plans, and count numbers to be machined Set numerical data on CNC program according to machining specifications Calculate the feed rate to optimise quality and quantity of production output Measure finished dimensions against specifications and appropriate tolerances
Navigate the world of work	<ul style="list-style-type: none"> Understand main tasks, responsibilities and boundaries of own role
Interact with others	<ul style="list-style-type: none"> Use modes of communication suitable for the purpose to confirm and clarify understanding
Get the work done	<ul style="list-style-type: none"> Recognise and respond to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3235 Machine material using CNC machining and processing centres Release 3	FWPCOT3235 Machine material using CNC machining and processing centres Release 2	Updated workplace health and safety requirements and foundation skills; clarified the intent of the unit and assessment requirements.	Equivalent unit

Links

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