

Title	Operate a Computer Numerical Controlled machine to produce wooden components		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to demonstrate and apply knowledge of: preparing to operate; and operating, a Computer Numerical Controlled (CNC) machine, to produce wooden components.
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Classification	Furniture > Furniture and Cabinet Making
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Available grade	Achieved
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Guidance Information

- 1 Assessment information
This unit standard must be assessed against on-job.
All activities and performance criteria must be carried out in accordance with worksite policies and procedures.
- 2 Personal protective equipment, appropriate to job requirements, is to be selected and used in accordance with worksite policies and procedures and manufacturer's instructions.
- 3 Reference
Guidance for woodworking machinery, available at <https://worksafe.govt.nz/topic-and-industry/machinery/woodworking>.
- 4 Definitions
Manufacturer's instructions are instructions provided by manufacturers of substances, equipment, and machinery used in furniture making. These instructions may include details on safe and correct handling, use and storage of substances and/or details on substance properties. Examples are labels on substance containers, product data sheets, and operator's manuals.
SOIs refer to safe operating instructions which are documented instructions attached to machines which detail requirements for safe operation of the particular machines.
Worksite policies and procedures refer to documented policies and to documented or other directions provided to staff. These may include, but are not limited to, ways of managing health and safety, environmental considerations, quality, and production, and must conform to legislation. Examples include standard operating procedures, company health and safety plans, on-site briefings, and supervisor's instructions.

Outcomes and performance criteria

Outcome 1

Demonstrate and apply knowledge of preparing to operate a CNC machine to produce wooden components.

Performance criteria

- 1.1 Job specifications are obtained and interpreted.
- Range number of components, dimensions, material type, hole positions, hardware, time limits.
- 1.2 Material is selected in accordance with job specifications, stacked, and positioned safely.
- 1.3 Machine safety features are identified, and their purpose is explained in accordance with manufacturer's instructions.
- Range includes but is not limited to – emergency stop, guards, isolating switch.
- 1.4 Techniques for safely loading material onto the machine are explained.
- Range carrying, lifting.
- 1.5 Environmental and safety requirements are met.
- Range electrical power, lighting, ventilation, dust extraction.
- 1.6 The machine fields to be used and the positioning of components within those fields are explained in accordance with job specifications.

Outcome 2

Demonstrate and apply knowledge of operating a CNC machine to produce wooden components.

Performance criteria

- 2.1 Pre-start checks are performed in accordance with the manufacturer's recommendations.
- 2.2 Machine is started in accordance with SOIs.
- 2.3 One test piece of job material is run through the machine and checked in accordance with job specifications. The procedure for dealing with out of specification components is explained.

- 2.4 Material is loaded into the machine in accordance with job specifications and SOIs.
Range correct field, correct position, square to the stops.
- 2.5 Components are produced within the time limits in accordance with job specifications.
- 2.6 Off-cuts are removed from the work area during operation in accordance with SOIs.
- 2.7 Machine operation is carried out in accordance with SOIs.
- 2.8 Output is monitored to ensure components meet job specifications.
Range component dimensions, number of components.
- 2.9 The procedure to be followed when defects in components are identified is explained.
- 2.10 Components are stacked ready for the next operation.
- 2.11 Machine is put into safe mode after producing components in accordance with SOIs.
- 2.12 Machine is cleaned, and waste material is disposed of.
- 2.13 Work area is left clean, clear, and safe.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	9 August 1994	31 December 2023
Review	2	7 May 1997	31 December 2023
Review	3	26 February 2002	31 December 2023
Review	4	19 June 2009	N/A
Review	5	10 December 2020	N/A

Consent and Moderation Requirements (CMR) reference	0173
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.