

Title	Describe the operation of a computer numerical control machine for joinery work		
Level	3	Credits	2

Purpose	<p>People credited with this unit standard are able to describe:</p> <ul style="list-style-type: none"> – preparation procedures for using a computer numerical control (CNC) machine to produce joinery work; – required materials and their preparation for a CNC machining job; – procedures for setting a CNC machine for joinery work; and – procedures for operating a CNC machine for joinery work.
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Classification	Joinery > Joinery Core Skills
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Available grade	Achieved
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Guidance Information

- 1 Legislation and guidelines relevant to this unit standard include:
 - Health and Safety at Work Act 2015; available from www.legislation.govt.nz;
 - *Safe Use of Machinery: Best Practice Guidelines*; available from www.worksafe.govt.nz, and any subsequent amendments and replacements.

- 2 Assessment

This standard recognises the ability to work to construction workplace standards under the supervision of a commercially competent practitioner whose role is to ensure the completed construction meets industry and regulatory requirements.

Evidence for this unit standard must reflect commercial standards; the verbal and written information covering company policy, standard operating procedures and processes and job-specific instructions.

This unit standard must be assessed under the supervision of a commercially competent practitioner in workplace conditions that reflect:

- commercial standards, current health, safety, industry, and workplace requirements; and
- industry requirements for commercially acceptable timeframes.

- 3 Definitions

Daily maintenance refers to lubricating adjustments or fences, cleaning, identifying basic problems, attending to damage, wear and tear, unusual noises, and electrical problems.

Joinery work refers to the work, job, or project relevant to joinery, cabinetry, timber doors and windows, stairs, bench tops and specialty surfaces.

Safety equipment refers to personal safety equipment (eye protection, hearing protection, skin protection, protection from inhalation, foot protection) and safety devices (laser beams, pressure pads).

Workplace requirements refer to the documented procedures specific to a workplace which set out the standard and the required practices of that workplace. This may include job specifications, standard operating procedures, practices, manufacturer recommendations, technical data sheets and material safety data sheets.

4 Range

Computer numerical control (CNC) joinery machines may include but are not limited to one of:

- multi-headed CNC machine;
- multi-axis contour machine;
- four sider;
- multi-boring machine.

Outcomes and performance criteria

Outcome 1

Describe preparation procedures for using a CNC machine to produce joinery work.

Performance criteria

- 1.1 Required safety equipment and its use are described for a CNC machine in terms of manufacturer's specifications and workplace requirements.
- 1.2 Pre start-up procedures for machine operation are described in terms of legislation, manufacturer's specifications, and workplace requirements.

Range pre start-up procedures include – check for presence of services.

Outcome 2

Describe required materials and their preparation for a CNC machining job.

Performance criteria

- 2.1 Materials required for a machining job are described in terms of workplace requirements.
- 2.2 Any defects in materials are identified and described in terms of workplace requirements.
- 2.3 Procedures for delivery of materials to the CNC machine in preparation for the operation are described in terms of workplace requirements.

Outcome 3

Describe procedures for setting a CNC machine for joinery work.

Performance criteria

- 3.1 Procedures for tool selection and mounting are described in terms of manufacturer's specifications and workplace requirements.
- 3.2 Procedures for checking tools for defects are described in terms of manufacturer's specifications and workplace requirements.
- 3.3 Any defects in tools are identified and described in terms of workplace requirements.
- 3.4 Procedures for daily maintenance of machine and parts are described in terms of manufacturer's specifications and workplace requirements.
- Range maintenance and lubrication includes – air filters, oil levels, greasing.
- 3.5 Procedures for daily maintenance of equipment are described in terms of manufacturer's specifications, and workplace requirements.

Outcome 4

Describe procedures for operating a CNC machine for joinery work.

Performance criteria

- 4.1 Machine operation is described in terms of the job specifications and workplace requirements.
- 4.2 Procedures for monitoring and adjusting output of machine to ensure continuity of the process are described in terms of workplace requirements.
- 4.3 Any defects in product produced are identified and described in terms of workplace requirements.
- 4.4 Setting adjustments for machine tools and implements are described in terms of workplace requirements.
- 4.5 Procedures for identifying and reporting operating faults are described in terms of workplace requirements.
- 4.6 Time limits for machine output are described in terms of job specifications.
- 4.7 Procedures for machine and work-area clean-up are described in terms of workplace requirements.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 June 2005	31 December 2013
Review	2	23 January 2009	31 December 2015
Review	3	24 October 2014	31 December 2025
Review	4	30 March 2023	N/A

Consent and Moderation Requirements (CMR) reference

0073

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangaAraRau.nz if you wish to suggest changes to the content of this unit standard.