Title	Set and operate computer numerical control machinery used to produce joinery work		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: - establish job requirements to produce joinery work using a computer numerical control (CNC) joinery machine; - prepare materials to produce joinery work using a CNC joinery machine; - prepare a CNC joinery machine; - set a CNC joinery machine; and - operate a CNC machine used to produce joinery work.
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Classification	Joinery > Joinery Core Skills
Available grade	Achieved

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

Evidence for this unit standard must reflect commercial competence; the ability to demonstrate knowledge and skills in the context of the currently accepted requirements of a business operating in a commercial environment.

Evidence must also reflect commercial standards; the verbal and written information covering company policy, standard operating procedures and processes and jobspecific 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

CNC joinery machinery refers to multi-headed CNC machines, multi-axis contour machines, four sider and multi-boring machines.

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

Routine maintenance refers to those requirements routinely undertaken to keep machinery in good working order. It does not include the services usually provided by a specialist engineer or service technician.

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, procedures, practices, manufacturer recommendations, technical data sheets and material safety data sheets.

Outcomes and performance criteria

Outcome 1

Establish job requirements to produce joinery work using a CNC joinery machine.

Performance criteria

- 1.1 Job specifications are obtained, understood, and verified in accordance with workplace requirements.
- 1.2 Personal protective equipment is obtained and worn in accordance with the manufacturers and workplace requirements.
- 1.3 Presence of services is checked and reported if they are not present in accordance with workplace requirements.

Range services include – electrical power, lighting, air supply, dust extraction fans.

Outcome 2

Prepare materials to produce joinery work using a CNC joinery machine.

Performance criteria

- 2.1 Materials are selected to meet the job specifications.
- 2.2 Any defects and discrepancies in materials are identified and defective materials are disposed of in accordance with workplace requirements.

Range defects and discrepancies include – quantity, natural defects, manufacturing defects, dimensional defects, presence of foreign bodies.

Outcome 3

Prepare a CNC joinery machine used to produce joinery work.

NZQA unit standard 28225 version 2
Page 3 of 4

Performance criteria

3.1 Tools are selected and mounted in accordance with the job and the manufacturer's specifications.

Range tools include – cutters, blades, bits.

Tools are checked for any defects in accordance with the job and the manufacturer's specifications.

Range defects include – blunt cutters, cutter tooth and cutter grinding defects.

- 3.3 Any defective tools are identified and actioned in accordance with workplace requirements.
- Work holding devices are prepared to hold a work piece in accordance with the job and manufacturer's specifications.

Outcome 4

Set a CNC joinery machine used to produce joinery work.

Performance criteria

4.1 Production aids and tooling are secured in place in accordance with the job and manufacturer's specifications.

Range production aids and tooling include – fences, safety guards, tables, rollers, jigs, clamping devices, supports.

- 4.2 Machine is set and checked in accordance with the job and manufacturer's specifications.
- 4.3 Routine maintenance of equipment is undertaken in accordance with the setter's responsibility and manufacturer's specifications.

Outcome 5

Operate a CNC machine used to produce joinery work.

Performance criteria

- 5.1 Machine output is monitored, and adjustments are made to ensure continuity of the process in accordance with workplace requirements.
- 5.2 Any defective materials are identified and rejected in accordance with the job specifications and workplace requirements.

5.3 Setting adjustments are made to the machine tools and implements within the operator's responsibility and in accordance with the manufacturer guidelines for rectifying out of specification materials.

Range tools and implements include – rollers, pads, plates, transport belts, pneumatics, vacuums.

- Faults that cannot be rectified are reported in accordance with workplace requirements.
- Joinery work is produced in accordance with the job specifications and workplace requirements.
- 5.6 Machine and work area are made clean, clear, and safe in accordance with workplace requirements.

Replacement information	This unit standard replaced unit standard 25161, unit standard 25162, and unit standard 25163.

Planned review date	31 December 2027

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 October 2014	31 December 2025
Review	2	30 March 2023	N/A

Consent and Moderation Requirements (CMR) reference	0073
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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 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.