

Title	Use cutting tools and machines in the performance of electrical installation and maintenance		
Level	2	Credits	2

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> – identify cutting tools and machines and describe their safety procedures; – set up and use a drill press; – set up and use a lathe; – set up and use a bench grinder; and – set up and use a power saw.
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Classification	Electrical Engineering > Electrical Installation and Maintenance
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for, but it is not restricted to, learning and assessment on-job.
- 2 Electrical safety and proper workshop practices are to be maintained at all times.

Outcomes and performance criteria

Outcome 1

Identify cutting tools and machines and describe their safety procedures.

Range drill press, lathe, bench grinder, power saw.

Performance criteria

- 1.1 Cutting tools and machines are identified by name.

Range actual machines, graphic representation.
- 1.2 Safety procedures and requirements are described.

Outcome 2

Set up and use a drill press.

Performance criteria

- 2.1 Material is secured tightly.
- 2.2 Drill bit is selected and secured in the chuck.
- 2.3 Required drill speed is selected.
Range pulley and belt, gearing, selector.
- 2.4 Drill is put to use in accordance with safe workshop practices.

Outcome 3

Set up and use a lathe.

Performance criteria

- 3.1 Material is secured tightly.
- 3.2 Cutting tool is selected and secured.
- 3.3 Required chuck speed is selected.
Range gearing, selector.
- 3.4 Lathe is put to use in accordance with safe workshop practices.

Outcome 4

Set up and use a bench grinder.

Performance criteria

- 4.1 Grinding wheel is inspected for cracks and to ensure that the edge is square.
- 4.2 Rest is set in accordance with manufacturer's directions.
- 4.3 Guard is checked for integrity and tightness.
- 4.4 Material is ground in accordance with safe workshop practices.

Outcome 5

Set up and use a power saw.

Performance criteria

- 5.1 Power saw blade is set up and tensioned.
- 5.2 Material is secured tightly.
- 5.3 Power saw is put to use in accordance with safe workshop practices.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 April 1996	31 December 2013
Revision	2	3 April 2001	31 December 2013
Review	3	26 May 2005	N/A
Rollover and Revision	4	15 March 2012	N/A
Revision	5	15 January 2014	N/A
Rollover and Revision	6	28 January 2021	N/A

Consent and Moderation Requirements (CMR) reference	0003
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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 The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.