

<b>Title</b>	<b>Operate mechanical production process machinery in a manufacturing environment</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>12</b>

<b>Purpose</b>	People credited with this unit standard are able to: perform mechanical process operations; and perform shut-down operations for mechanical production process machinery in a manufacturing environment.
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<b>Classification</b>	Manufacturing Skills > Manufacturing Processes
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the:
  - Health and Safety at Work Act 2015.
  - Resource Management Act 1991 and subsequent amendments.
  - Hazardous Substances and New Organisms Act 1996 and subsequent amendments.
  
- 2 Definitions
  - Accepted industry practice* refers to the approved codes of practice and standardised procedures accepted by the wider manufacturing industry as examples of best practice.
  - Basic machine maintenance* refers to routine actions that ensure operational integrity. Examples may include but are not limited to – cleaning, replenishing, lubricating, minor adjustments, and minor trouble shooting.
  - Job requirements* refer to specific requirements for the job at hand. These requirements may or may not be covered in the job documentation and may include special instructions, quality requirements expected by the customer, and/or production standards as set down by the workplace.
  - Workplace procedures* refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and procedures to comply with legislative and local body requirements.
  
- 3 Assessment information
  - a All activities and evidence must be in accordance with workplace procedures, and job requirements.
  - b This unit standard will be assessed on the basis of evidence of demonstrated and repeatable performance in the workplace.

#### 4 Range

Mechanical production process machinery may include but is not limited to – those used for: cutting, slitting, pressing, casting, turning, rolling, forming, grinding, welding, seaming, surface coating, flanging, swaging, riveting, screwing, component fitting, lining, beading, strapping, bonding, wrapping, or packaging.

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## Outcomes and performance criteria

### Outcome 1

Perform mechanical process operations in a manufacturing environment.

#### Performance criteria

1.1 Product specifications and drawings are interpreted to establish production requirements in accordance with accepted industry practice.

1.2 Machine safety devices and personal protective equipment are used in accordance with job requirements.

1.3 Personnel affected by the start-up procedure are advised.

Range may include but is not limited to – immediate location, neighbouring machines, team leader.

1.4 Machine is started.

1.5 Where required, minor machine adjustments are made to meet job requirements.

1.6 Machine faults are identified, and rectified or reported.

1.7 Correct material is checked.

Range may include but is not limited to – type, quality, quantity.

1.8 Correct material is loaded.

1.9 Product is checked, sorted, and processing faults are identified, and rectified or reported.

1.10 Conforming product is processed.

1.11 Non-conforming product is processed.

### Outcome 2

Perform shut-down operations for mechanical production process machinery in a manufacturing environment.

#### Performance criteria

- 2.1 Personnel affected by the shut-down procedure are advised.  
Range may include but is not limited to – immediate location, neighbouring machines, team leader.
- 2.2 Machine is shut down.
- 2.3 Basic machine maintenance or housekeeping is performed, and if required, machine isolation procedures are applied.
- 2.4 Scrap or waste processing are performed.
- 2.5 Recording or reporting is carried out, and production terminology is used in accordance with accepted industry practice.  
Range may include but is not limited to – hard copy, electronic, verbal.

<b>Planned review date</b>	31 December 2025
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	27 June 1995	31 December 2012
Revision	2	14 April 1997	31 December 2012
Revision	3	5 January 1999	31 December 2012
Review	4	26 July 2005	31 December 2012
Revision	5	24 August 2007	31 December 2014
Review	6	18 March 2011	31 December 2023
Review	7	26 August 2021	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0013
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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](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.