

<b>Title</b>	<b>Inspect, service, and repair tooling used in the metal forming industry</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	<p>This unit standard is intended primarily for use in the training of personnel in the metal forming industry.</p> <p>People credited with this unit standard are, under supervision, able to prepare to inspect, service, and repair; inspect; service; and repair tooling to original condition and dimensional accuracy in the metal forming industry.</p>
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<b>Classification</b>	Mechanical Engineering > Metal Forming
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Recommended unit standards for entry:  
Unit 21911, *Demonstrate knowledge of safety on engineering worksites*;  
Unit 21912, *Apply safe working practices on an engineering worksite*.
- 2 Legislation  
Health and Safety at Work Act 2015 and supporting regulations.  
Resource Management Act 1991 and subsequent amendments.  
Hazardous Substances and New Organisms Act 1996.
- 3 Definitions  
*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the metal forming industry sector as examples of best practice.  
*Metal forming* refers to the metalworking process of creating metal parts and objects through, for example sand casting, die casting, investment casting, continuous casting, centrifugal casting, forging, extrusion, three-dimensional additive metal manufacturing.  
*Workplace procedures* refer to documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, product quality specifications, references, Approved Codes of Practice, housekeeping standards, environmental considerations, and procedures to comply with legislative and local body requirements relevant to the industry sector.

- 4 Range  
Evidence of five inspections, three servicing, and three repairs is required.
- 5 Assessment Information
- a All activities must comply with relevant legislative and/or regulatory requirements.
  - b All activities must comply with applicable workplace procedures and must be consistent with accepted industry practice.

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## Outcomes and performance criteria

### Outcome 1

Prepare to inspect, service, and repair tooling in the metal forming industry.

#### Performance criteria

- 1.1 Tooling specifications are established in accordance with job sheet, drawings, or specification, and are verified with supervisor.
- 1.2 The different types of maintenance performed are described.
- Range reactive, preventive, predictive, proactive.
- 1.3 Tools, equipment, and materials for servicing and repairs are sourced and verified with supervisor.
- 1.4 Service area is set up.

### Outcome 2

Inspect tooling in the metal forming industry.

#### Performance criteria

- 2.1 Tooling is inspected for damage, and deterioration (wear and tear).
- Range dimensions, tolerance, finishing, damages.
- 2.2 Damages are identified and reported to the supervisor.
- 2.3 Any deterioration is identified and recorded.

### Outcome 3

Service tooling in the metal forming industry.

#### Performance criteria

- 3.1 Tooling is serviced.

- 3.2 Tooling is confirmed as functionally meeting the requirements of specification, and are verified with supervisor.

#### Outcome 4

Repair tooling in the metal forming industry.

#### Performance criteria

- 4.1 Tooling is repaired as instructed by the supervisor.
- 4.2 Dimensions of repaired tooling is measured to ensure dimensions are within specification, and are verified with supervisor.
- 4.3 Tooling surface finish is confirmed to be within specifications.
- 4.4 Tooling is confirmed as functionally meeting the requirements of specification, and is verified with supervisor.

<b>Planned review date</b>	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	22 August 2019	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.