

<b>Title</b>	<b>Finish metal castings</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	People credited with this unit standard are able to: prepare castings for finishing; clean and examine raw castings; and finish castings and complete documentation.
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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 Unit 2395, *Demonstrate and apply knowledge of the selection, use, and care of engineering hand tools*; and Unit 2396, *Demonstrate and apply knowledge of the selection, use, and care of portable hand held engineering power tools* are recommended for entry into this unit standard.
- 2 References and legislation  
 Health and Safety at Work Act 2015.  
 Hazardous Substances and New Organisms Act 1996.  
 Resource Management Act 1991.  
 WorkSafe New Zealand. *Health and Safety Guidelines on the Management of Hazards in the Metal Casting Industry*. Available at:  
<http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/metal-casting-industry-health-and-safety-guidelines-for-the-management-of-hazards-in/metal-casting-hs-guidelines.pdf>.
- 3 Definitions  
*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.  
*Workplace procedures* refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 4 Range  
 Cleaning may include – trimming and fettling using equipment such as hand and power tools, mechanical cutting, flame and air arc cutting equipment, and abrasive cleaning equipment.

## 5 Assessment Information

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 castings for finishing.

#### Performance criteria

- 1.1 Castings are stripped from moulding medium.
- 1.2 Castings are transported to cleaning area.  
Range manual and mechanical transportation aids.
- 1.3 Used moulding medium is recycled and/or disposed of.

### Outcome 2

Clean and examine raw castings.

#### Performance criteria

- 2.1 Cleaning process for the castings is selected.  
Range manual or automatic processes.
- 2.2 Castings are cleaned.
- 2.3 Castings are examined, and any castings not conforming to specification are segregated.

### Outcome 3

Finish castings and complete documentation.

#### Performance criteria

- 3.1 Material to be removed from castings is identified in accordance with component specification.
- 3.2 Excess material is removed using equipment relevant to task.
- 3.3 Castings are checked for conformance with component specification, and any non-conforming castings are identified.
- 3.4 Castings not complying with specification are processed.
- 3.5 Documentation is completed.

<b>Planned review date</b>	31 December 2021
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 1994	31 December 2012
Revision	2	14 April 1997	31 December 2012
Revision	3	5 January 1999	31 December 2012
Review	4	19 October 1999	31 December 2012
Review	5	19 May 2006	31 December 2016
Rollover and Revision	6	17 November 2011	31 December 2022
Review	7	15 September 2016	N/A
Revision	8	23 November 2017	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.