

Title	Demonstrate knowledge of abrasive blasting and protective coating		
Level	3	Credits	6

Purpose	People credited with this unit standard are able to: demonstrate knowledge of abrasive blasting media; describe protective coating materials; describe abrasive blasting equipment; describe equipment for applying protective coatings; and describe access equipment for abrasive blasting and protective coating operations.
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Classification	Manufacturing Skills > Manufacturing Processes
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes:
Health and Safety at Work Act 2015.
- 2 Definition
Workplace procedures refer to the procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, 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
All activities and evidence must be in accordance with workplace procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of abrasive blasting media.

Range four types.

Performance criteria

- 1.1 Abrasive blasting media are described in terms of their types, grades, and functions.

Range may include – garnet, glass bead, steel grit, steel shot, aluminium oxide, other.

1.2 Abrasive blasting media are explained in terms of their suitability for various substrates and surfaces.

Range substrates may include but are not limited to – stainless steel, sheet metal, aluminium, galvanised surfaces;
surfaces may include but are not limited to – coated, rusty, mill scale, welded joints, mechanical equipment.

1.3 Abrasive blasting media are described in terms of their optimum pressure at which to blast.

Outcome 2

Describe protective coating materials.

Performance criteria

2.1 Protective coatings are described in terms of their types and functions.

Range types – primer, buildcoat, topcoat.

2.2 Protective coatings are described in terms of their main composition.

Range evidence of four coating materials.

2.3 Protective coating materials are described in terms of their types and functions.

Range evidence of four coating materials.

2.4 Protective coating materials are described in terms of their recommended method of application.

Range evidence of four coating materials.

2.5 Multiple component protective coatings are described in terms of their mixing ratios and pot life.

Range evidence of two coatings.

Outcome 3

Describe abrasive blasting equipment.

Performance criteria

3.1 Air pressure equipment is described in terms of its types, components, and functions.

3.2 Wet blast equipment is described in terms of its types, components, and functions.

3.3 Extraction equipment is described in terms of its components and functions.

Range includes but is not limited to – dust scrubbers, filters.

3.4 Grinding equipment is described in terms of its types and functions.

Range may include but is not limited to – sanders, power wire buff.

3.5 Vacuum blasting equipment is described in terms of its types, components, and functions.

Outcome 4

Describe equipment for applying protective coatings.

Performance criteria

4.1 Spray equipment and guns are described in terms of their types and functions.

4.2 Needles are described in terms of their tip sizes and functions.

4.3 Brushes and rollers are described in terms of their types and functions.

4.4 Thickness gauge equipment is described in terms of its function.

Range dry thickness gauge, wet film thickness gauge.

Outcome 5

Describe access equipment for abrasive blasting and protective coating operations.

Performance criteria

5.1 Access equipment is described in terms of the situations it is used in for abrasive blasting and protective coating operations.

Range four types of access equipment.

5.2 Access equipment is described in terms of systems for ensuring the stability of ladders, platforms, and scaffolds.

5.3 Access equipment is described in terms of systems for preventing falls of objects and people.

Planned review date	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	28 August 2000	31 December 2012
Review	2	20 November 2006	31 December 2013
Review	3	18 October 2012	31 December 2016
Review	4	16 April 2015	31 December 2022
Rollover and Revision	5	13 December 2018	31 December 2023
Review	6	26 August 2021	N/A

Consent and Moderation Requirements (CMR) reference

0013

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 if you wish to suggest changes to the content of this unit standard.