

Title	Pre-treat metal structural work for subsequent surface finishing		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to identify job material and surface condition and pre-treat metal structural work for subsequent surface finishing.
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Classification	Mechanical Engineering > Metal Surface Finishing
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Available grade	Achieved
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Guidance Information

- 1 Unit 21911, *Demonstrate knowledge of safety on engineering worksites*; and Unit 21912, *Apply safe working practices on an engineering worksite*, are recommended for entry into this unit standard.
- 2 Legislation
Health and Safety at Work Act 2015 and supporting regulations.
- 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
Pre-treatment includes cleaning structural work using water and grit blasting, chemical treatment, flame cleaning, grinding and brushing.
Structural work may include but is not limited to – framing, bridges, machinery.
Evidence for one type of structural work is required.
- 5 Assessment information
All activities must comply with applicable workplace procedures and must be consistent with accepted industry practice.

Outcomes and performance criteria

Outcome 1

Identify job material and surface condition.

Performance criteria

1.1 Common metals and alloys, and non-metals are recognised as suitable for processing.

Range ferrous and non-ferrous metals, and alloys.

1.2 Common surface soils and conditions are recognised.

Range grease, oil, paint, dust, scale, rust, oxidation.

Outcome 2

Pre-treat metal structural work for subsequent surface finishing.

Performance criteria

2.1 Safety requirements for the process and work are complied with.

2.2 Work is cleaned using process selected in accordance with work instructions.

2.3 Work is checked for compliance with job requirements.

Planned review date	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 2016
Revision	2	14 April 1997	31 December 2016
Revision	3	5 January 1999	31 December 2016
Revision	4	23 May 2001	31 December 2016
Revision	5	15 May 2002	31 December 2022
Review	6	15 September 2016	N/A
Revision	7	13 December 2018	N/A

Consent and Moderation Requirements (CMR) reference	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 if you wish to suggest changes to the content of this unit standard.