

Title	Control a fragmentiser for scrap metal recycling		
Level	5	Credits	10

Purpose	<p>This unit standard is for people working in the scrap metal recycling industry.</p> <p>People credited with this unit standard are able to: prepare a fragmentiser for operation; control and monitor health and safety hazards and adverse effects on the environment associated with operating a fragmentiser; and control the operation of a fragmentiser.</p>
----------------	--

Classification	Resource Recovery > Scrap Metal Recycling
-----------------------	---

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 All work practices must comply with:
Hazardous Substances and New Organisms Act 1996;
Health and Safety at Work Act 2015;
Resource Management Act 1991;
The New Zealand Waste Strategy: Reducing Harm, Improving Efficiency 2010
Ministry for the Environment, available at <http://www.mfe.govt.nz>.
- 2 Hazard controls, safety procedures, and personal protective equipment must be used throughout operations in accordance with company procedures.
- 3 Definitions
Company procedures mean the documented methods for performing work activities and include health and safety, environmental, and quality management requirements. They may refer to manuals, codes of practice, or policy statements.
Operating manuals refer to the plant operating manual and manuals written for specific components or items of plant and equipment that may be published by the manufacturer or the company.

Outcomes and performance criteria

Outcome 1

Prepare a fragmentiser for operation.

Performance criteria

- 1.1 Fragmentiser is inspected for maintenance requirements, and minor adjustments are made in accordance with operating manuals.
- Range safety and first aid equipment, feed conveyor, shredder drum or hammer mill, shredder mill dust extraction and/or water injection system, exhaust stack, electrical instrumentation, hydraulic instrumentation, metering equipment, pneumatic separator, vibrating conveyor, magnetic separator, nonferrous metal separator, sorting controls.
- 1.2 Specialist maintenance requirements are reported in accordance with company procedures.
- 1.3 Control systems are set in accordance with feedstock type, specification requirements, operating manuals, and company procedures.
- 1.4 Prestart procedures are carried out in accordance with operating manuals and company procedures.

Outcome 2

Control and monitor health and safety hazards and adverse effects on the environment associated with operating a fragmentiser.

Performance criteria

- 2.1 Health and safety hazards are identified, assessed, controlled, and monitored in accordance with company procedures and legislation.
- Range includes but is not limited to – noise, vibration.
- 2.2 Atmospheric emission control systems are operated and monitored in accordance with company procedures, and controlled and documented in accordance with resource consent requirements.
- Range emissions include – wind-blown dust, exhaust dust, exhaust gases, odour, noise; may include – wet scrubber discharge water.
- 2.3 Spillage containment and treatment systems are operated in accordance with company procedures, and are controlled and recorded in accordance with resource consent requirements.
- Range includes but is not limited to – settling ponds, sumps, separators, drainage system, containment system.
- 2.4 Waste products are controlled, disposed of, monitored, and documented in accordance with company procedures and resource consent requirements.

Outcome 3

Control the operation of a fragmentiser.

Performance criteria

- 3.1 Control ensures that scrap metal is received on feed conveyor in accordance with operating manuals and company procedures.
- Range scrap metal includes but is not limited to – car bodies, mixed scrap, scrap bales; evidence is required of communications with the operator of equipment for feeding conveyor.
- 3.2 Fragmentiser is started up, operated, and shutdown in accordance with operating manuals, company procedures, resource consents, and legislation.
- 3.3 Shredding process and outputs are monitored and adjustments are made in accordance with plant operating manual and company procedures.
- 3.4 Separating, sorting, and storage of shredded products is controlled in accordance with company procedures.
- Range products include but are not limited to – iron, copper, rubber, one selected nonferrous metal, inert materials, mixed nonferrous metals, mixed non-metals.
- 3.5 Control ensures plant maintenance is undertaken in accordance with operating manuals, and company procedures.
- 3.6 Plant inspections, maintenance, and production are documented in accordance with company procedures.
- 3.7 Sampling and testing are completed and recorded in accordance with company procedures and resource consent requirements.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 January 2007	31 December 2025
Rollover and Revision	2	28 March 2019	31 December 2025
Review	3	27 March 2025	31 December 2025

Consent and Moderation Requirements (CMR) reference

0014

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.