Title	Sort material at a fragmentiser sorting station		
Level	3	Credits	4

Purpose	This unit standard is for people working in the scrap metal recycling industry.	
	People credited with this unit standard are able to: explain the functions, hazards, and uses of a fragmentiser; and prepare for, and carry out, sorting at a fragmentiser sorting station.	

Classification	Resource Recovery > Scrap Metal Recycling	
Available grade	Achieved	

Prerequisites	Unit 22649, Identify and separate ferrous metals for scrap metal recycling, or demonstrate equivalent knowledge and
	skills.

#### Guidance Information

- All work practices must comply with: Hazardous Substances and New Organisms Act 1996; Health and Safety at Work Act 2015; Resource Management Act 1991.
- 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

Explain the functions, hazards, and uses of a fragmentiser.

## Performance criteria

- 1.1 A fragmentiser is described in terms of layout, components, and functions.
  - Range includes but is not limited to electrics, conveyors, head drum, tail drum, magnetic separation, eddy current separation.
- 1.2 The hazards of fragmentiser operation are identified and their controls are explained in accordance with operating manuals and/or company procedures.
  - Range hazards include but are not limited to hygiene; controls include but are not limited to – safety equipment, conveyor shutdown, lockout and/or tag out system, communication system.
- 1.3 Fragmentiser emergency procedures are described in accordance with company procedures.
- 1.4 Output materials and their uses and/or disposal are identified in accordance with company procedures.
  - Range materials include but are not limited to ferrous metals, nonferrous metals, flock.
- 1.5 The sorting operation is described and the importance of quality separation is explained in accordance with company procedures.
  - Range separation ferrous metals, nonferrous metals.

### Outcome 2

Prepare for sorting at a fragmentiser sorting station.

## Performance criteria

- 2.1 Prestart checks of conveyor system are demonstrated in accordance with operating manuals and/or company procedures.
- 2.2 Work area is checked for hazards in accordance with legislation and company procedures.
- 2.3 Conveyor is inspected for maintenance requirements, and minor adjustments are made in accordance with operating manuals.
  - Range maintenance may include but is not limited to notifying person responsible for corrective action.

## Outcome 3

Carry out sorting at a fragmentiser sorting station.

Range sorting – ferrous metal, or nonferrous metal, or non-metal.

## **Performance criteria**

3.1 Health and safety hazards of sorting operations are controlled and monitored in accordance with legislation and company procedures.

Range includes but is not limited to – manual handling, dust, noise, vibration.

3.2 Conveyor system is operated in accordance with operating manuals.

Range includes but is not limited to – startup, shutdown.

3.3 Materials are sorted in accordance with operating manuals and company procedures.

Range one of – iron, copper, rubber, nonferrous metal, inert materials, mixed nonferrous metals, mixed non-metals.

3.4 Communications with control room are maintained in accordance with company procedures.

Range startup, operation, shutdown.

- 3.5 Material throughput is maintained in accordance with processing schedules.
- 3.6 Sorted materials are collected and removed for storage and/or disposal in accordance with company procedures.
- 3.7 Separation standards meet buyer and company requirements.

Range requirements – contamination limit, grade.

3.8 Conveyor faults are reported and/or acted on in accordance with company procedures.

Range faults may include but are not limited to – jamming, mechanical failure, electrical failure.

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

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	

#### Status information and last date for assessment for superseded versions

Consent and Moderation Requirements (CMR) reference	0014
This CMR can be accessed at http://www.nzga.govt.nz/framework/sea	rch/index.do.