

# Aluminum-Rich Concentrate from Municipal Waste



## Computerized Recovery System Separates Aluminum from Mixed Recyclable Streams

With assistance from the Department of Energy's Inventions and Innovation Program, MSS, Inc., developed a separation technology that electronically detects and removes aluminum cans from municipal solid-waste streams. The separation technology discriminates against tramp ferrous metals in the feed stream. Eddy current sensors first detect and identify aluminum, and after detection, a precisely metered air jet pulse removes the aluminum. The aluminum goes to secondary processing; the other goes to conventional recycling. This recovery system is an improvement over a previous version of the system (the *ELPAC System*) that had been proven in years of demanding service in solid-waste and glass cullet applications.

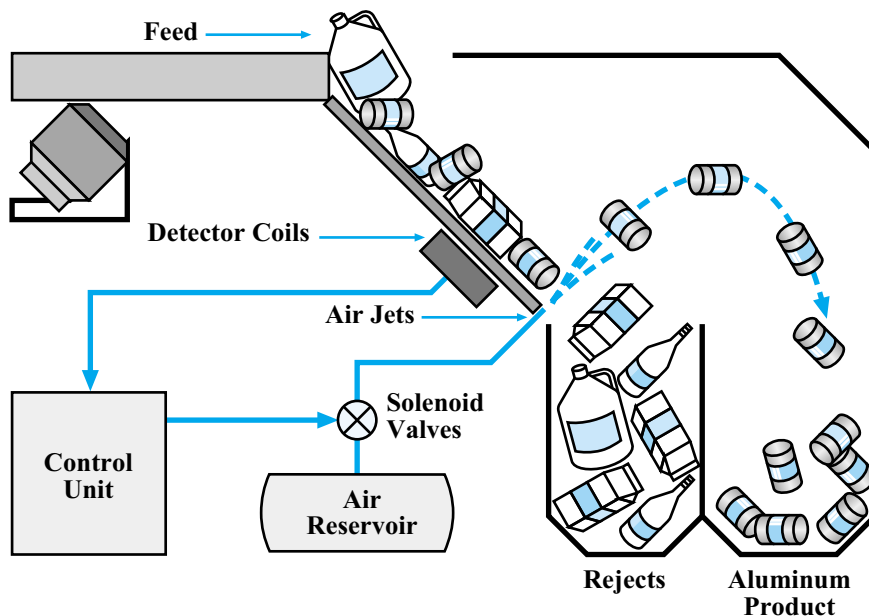
### Benefits

#### Energy Savings

Increases the useful yield of glass and aluminum recycled streams. Using recycled aluminum and glass in production reduces energy consumption compared with glass and aluminum from raw materials.

#### Emissions Reductions

Using recycled aluminum and glass in production lowers furnace emissions.



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### Overview

- ◆ Developed by MSS, Inc.
- ◆ Over 60 installations for glass recycling and aluminum recovery currently operating worldwide

### Applications

Glass and aluminum industries to remove metallic contaminants from recycled glass cullet and granulated plastics and to recover aluminum cans from mixed recyclable streams in materials recovery facilities (MRFs)

### Capabilities

- ◆ Operates automatically using a microprocessor that controls position, speed, and size of aluminum in waste.
- ◆ Available in modular units with capability to process 1200, 2000, and 3000 cubic feet/hour of commingled feed.
- ◆ Can control up to 256 detection channels and handle feed system widths of up to 256 inches.