RB-780T

Eddy Current Separators

FOR NONFERROUS RECOVERY

ERIEZ®

world authority

IN SEPARATION TECHNOLOGIES

A scrap yard in Ohio employs a number of Eriez' RevX-E Eddys to ensure maximum recovery in their facility

Side-by-Side Eddy Current Separators recover Zorba from ASR screened by an upstream trommel screen.

An auto scrap recycler in Arizona sorts nonferrous and fines using Eriez' RevX-E Eddys

Eddy Current Separators

Eriez patented the first eddy current separator in 1969. Since then, the company has manufactured a wide range of concentric and eccentric rotor designs to maximize nonferrous recovery in many different industries and applications. Today, Eriez designs and builds eddy current separators in eleven factories around the globe for any application where nonferrous metals need to be recovered.

Applications

- **Auto Shredding and Scrap Recycling**
- **Municipal Solid Waste Facilities**
- **Aluminum Can (UBC)**
- **Glass Cullet**
- **Foundry Sand**
- **Bottom Ash**
- **Plastics**
- **PET Flake**
- **Electronic Scrap (E-Scrap)**
- **Soil Remediation**

UBC or aluminum cans are recycled in a MSW facility.

PET Flake is processed to remove tiny aluminum contaminants.

Fine non-ferrous metals are recovered to produce a high value Zorba product at Auto Shredder Residue (ASR) plants.

Powerful Eriez LT2 RevX-E Eddys are reliable workhorses sorting high volumes of aluminum in scrap yards

RevX-E®

ECCENTRIC ROTOR EDDY CURRENT SEPARATORS

Eriez' RevX-E® Eddy Current Separators
The unit is designed with an eccentrically mounted magnetic rotor within the non-conductive larger diameter shell for separation of nonferrous metals. The rotor concentrates its eddy current forces into a zone of separation at the end of the belt. By focusing its field, this design ignores potentially damaging ferrous material in the flow.

RevX-E Eccentric Eddy Advantages

- **Rare Earth rotor produces a powerful focused field**
- **Rotor position is adjustable for optimum separation**
- **Reduces long-term wear from heated ferrous build up**
- **Compact design requires less space**
- **Access panels conveniently located for easy service**

Eddy Current Separator Rotor Models

RevX-E is offered in two models for coarse or fines material separation. For coarse material greater than one-inch, **model LT2** provides excellent separation with a deep field rotor designed for maximum trajectory. For nonferrous fines typically measuring less than one-inch, **model ST22** with its high-frequency rotor configuration concentrates the eddy currents closer to the belt's surface, improving separation of this difficult material.

Both models can be configured with a heavy-duty vibratory feeder, feeder support framework, separation shroud/splitter and controls for turn-key installation.

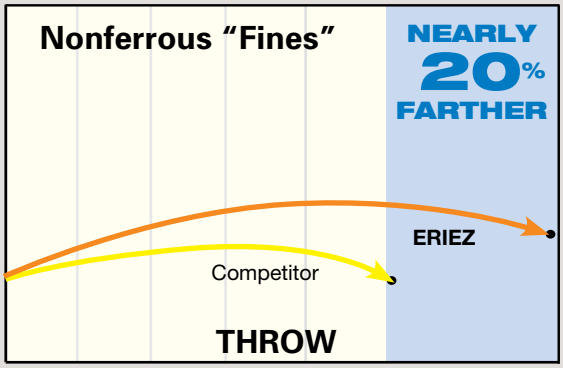
Stock Models

Model	Poles	RPM	Material Size	Width (Inches)	Feeder
LT2	8	3000	+1"	40	34 x 65
	8	3000	+1"	48	42 x 65
	8	3000	+1"	60	54 x 65
ST22	22	3000	+1/4" to -1"	40	34 x 65
	22	3000	+1/4" to -1"	48	42 x 65
	22	3000	+1/4" to -1"	60	54 x 65

Superior Performance

Independent tests show Eriez' Eddy Current Separators throw aluminum "fines" nearly 20% farther than other top selling brands. This extra distance is critical to improving separation and recovery.

SGS Report is available online at Recovery.Eriez.com



RevX-E Design Features

Quick Change Conveyor Belt

Eriez' design includes a unique cantilever frame to expedite conveyor belt maintenance. The quick change belt design is available exclusively on RevX-E models. A belt can easily be replaced in under ten minutes.

Loosen Support Blocks

Remove Support Blocks

Slide Off Belt

Replace Belt

Eccentric Rotors (Rare Earth)

Rack & Pinion Splitter Adjustment

Direct Drive Rotor

Controls

Brute Force Feeders

Emergency Stops

UHF – Ultra High-Frequency
EDDY CURRENT SEPARATORS

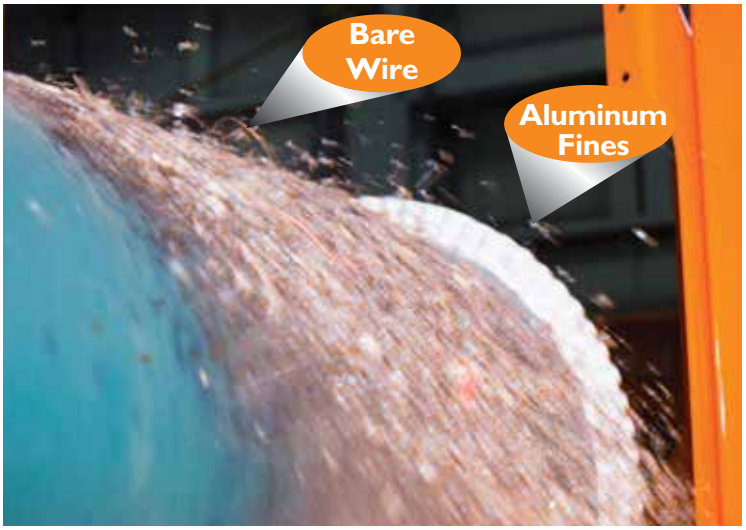
Recover Fine Nonferrous Metals

Eriez Ultra High-Frequency Eddy Current Separator recovers micro-fine aluminum, copper and other nonferrous fines materials typically missed on traditional eddy current separators from ASR. The UHF Eddy's combination of a rotor designed to produce exceptionally high gauss at the belt's surface, with a large number of magnetic poles operating at higher RPM creates ultra high-frequency changes resulting in superior separation of fine nonferrous as small as 2-3 mm and even bare copper wire. This UHF Eddy provides an economical solution to improve Zorba recovery without the need for additional expensive sensor based or optical sorting equipment.

Each unit ships with an Eriez Brute Force feeder to provide an even presentation of material across the rotor.

Features

- **Ultra High-Frequency Rotor**
- **High Surface Gauss for Superior Separation**
- **Large Number of Frequency Changes**
- **Rotor Spins at Higher RPM**
- **Carbon Fiber Shell**
- **Precise Fines Splitter Adjustments**



Process ASR Fines to Recover Bare Copper Wire & Micro-Fine Aluminum

UHF Models

Width (Inches)	Material Size	Feeder
40	-3/8"	34 x 65
48	-3/8"	42 x 65
60	-3/8"	54 x 65

Eddy Current Systems

Based on the application, Eriez offers a number of specialized eddys or configurations designed to produce a specific result. Below are just two examples of engineered solutions to produce a better grade and improve overall recovery adding value to the operators finished product.

FinesSort

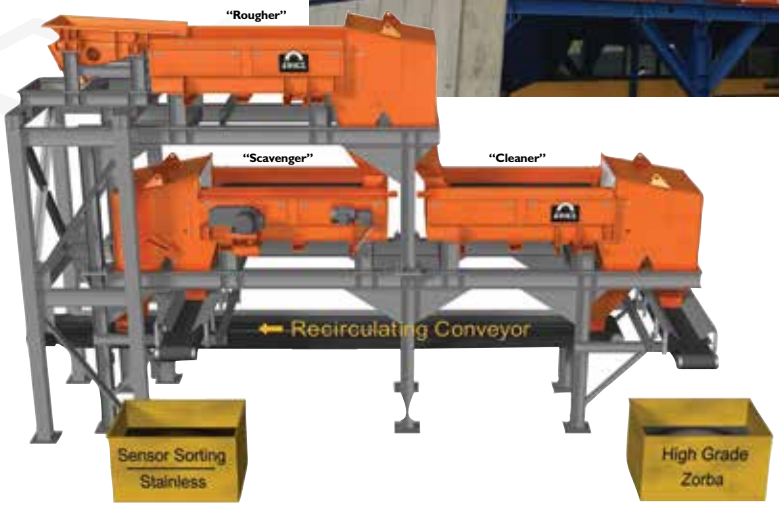
Eriez' FinesSort® Metals Recovery System uses powerful magnetic components to recover valuable ferrous and nonferrous metals from the fines waste stream in scrap yards. This system not only reduces the amount of waste destined for landfill, but reclaims thousands of valuable pounds of metals per day.

Features

- **Recover metals less than 1"**
- **Multi-stage separation process**
- **The most powerful magnetic circuits**
- **60" machine width**
- **Payback in as little as six months**

RCS – Rougher, Cleaner, Scavenger (98% Grade / 98% Recovery)

Positioned downstream of ferrous separation and screening equipment Eriez' ***Rougher, Cleaner, Scavenger (RCS)*** nonferrous processing system employs three ECS units in a specific sequence to produce a high-grade zorba while maximizing recovery. This type of processing circuit has been used successfully in high-value mineral processing and mining operations for decades. In an ASR environment, the ECS set up is shown below.



THE ERIEZ RCS ADVANTAGE

Through months of full-scale testing, Eriez' research revealed these averages:

- A single ECS at the "rougher" setting yields 81% recovery when producing a 90 grade zorba product;
- An RCS System with multi-stage "rougher," "cleaner," "scavenger" processing averaged 98% recovery while meeting the (Green Fence) 98% metals quality standard.

WORLD AUTHORITY IN SEPARATION TECHNOLOGIES

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Note: Some safety warning labels or guarding may have been removed before photographing this equipment.