

# EDDY CURRENT SEPARATORS



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RUGGED RELIABLE RECOVERY

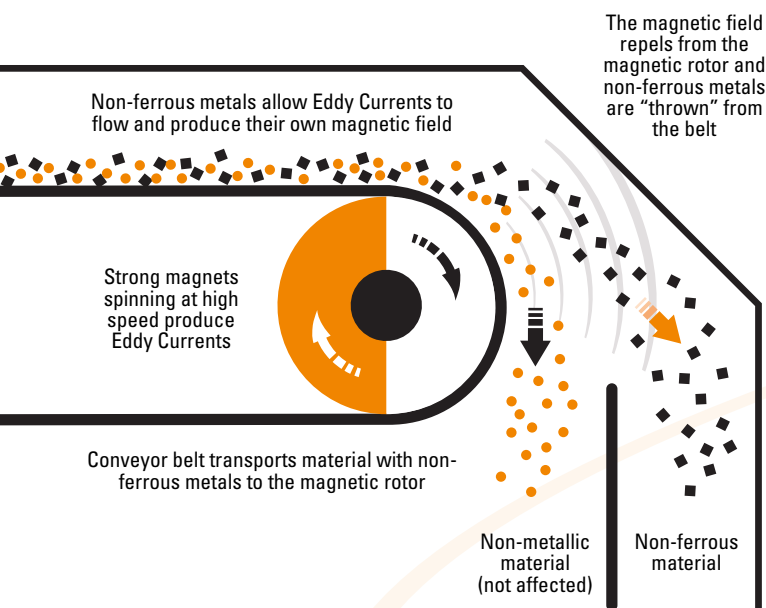
# EDDY CURRENT SEPARATORS



**Eddy Current Separators or ECS utilise powerful magnets to separate valuable non-ferrous metals such as aluminium, brass and copper from different waste types.**

**ECS are often used in combination with other magnetic separation equipment to provide optimum non-ferrous downstream recovery from shredders, granulators and crushers.**

## PRINCIPLE OF OPERATION



## FEATURES

- Range of magnetic designs to suit multiple applications from fine materials to coarse and large scrap processing
- Designed for installation into new and existing recycling plants
- Simple to operate with many adjustable settings
- Wide range of sizes from 300mm to 2000mm feed widths

## TYPICAL APPLICATIONS

- Recovery of aluminium cans from MSW
- Removal of non-ferrous metal from recycled glass and plastic
- Collection of valuable copper from WEEE (Waste Electronic and Electrical Equipment)
- Extraction of nails and screws from recycled wood and biofuel
- Removal of non-ferrous metal from incineration bottom ash

## MODELS / MAGNET DESIGNS

**Eriez has over 20 years of experience in the design of Eddy Current Separators and has developed the following 5 models to suit a full range of recycling applications.**

ERIEZ MODEL	PARTICLE SIZE (NON-FERROUS) FOR SEPARATION	APPLICATION EXAMPLES
Ultra-High Frequency (UHF)	2-10mm	Recovery of bare copper wire from ASR (Automotive Shredder Residue)
RevX-E ST22	3-15mm	PET Flake, Glass Cullet, IBA (Incineration Bottom Ash)
RevX-E ST2	15-35mm	Shredded Scrap, Woodchip, SRF
RevX-E LT2	+35mm	Car Frag, Woodchip, MSW (Municipal Solid Waste), RDF (Refuse - Derived Fuel)
LC09	+75mm	Can Separator for use in MSW type waste to recover whole aluminium cans

# OPTIONS AVAILABLE

## EDDY CURRENT SEPARATORS

Eriez Eddy Current Separators as standard are supplied with a Vibratory Feeder to ensure an even spread of material across the ECS belt.

A monolayer of material is required on the ECS to ensure maximum recovery of valuable non-ferrous metals from waste types, such as household refuse (MSW), shredded wood, PET flake and waste electronics (WEEE).

- Magnetic configuration and design to suit a range of application types, from coarse to ultra fine
- Robust and reliable
- Ease of maintenance



ECS with Vibratory Feeder



ECS with Magnetic Drum Separator

## EDDY CURRENT SEPARATOR MODULAR SYSTEMS

Eriez Eddy Current Separator modular systems are designed to incorporate additional separators into stand-alone systems.

These systems are easy to install and offer maximum levels of ferrous and non-ferrous metal recovery from different waste streams.

- Options to include overband magnet and magnetic drum separator
- Dual-stage recovery
- Ease of installation



ECS with Suspended Permanent Magnet

## ULTRA-HIGH FREQUENCY EDDY CURRENT SEPARATOR

Eriez' Ultra-High Frequency Eddy Current Separator recovers ultra-fine aluminium, copper and other non-ferrous 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 revolutions per minute (RPM) creates ultra-high frequency changes resulting superior separation of fine non-ferrous 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.

### Features:

- UHF 32 Pole Rare Earth Eccentric Rotor for fine (2-10mm) size fractions.
- High Surface Gauss for Superior Separation
- Large Number of Frequency Changes
- Rotor Spins at Higher RPM
- Carbon Fibre Shell
- Precise Rack and Pinion Splitter Adjustments

### EDDY CURRENT SEPARATOR SERVICE

- Eriez carries a full stock of critical spares at their European headquarters in the UK
- Service and support from time-served engineers
- Vast number of reference sites available across Europe and the UK





# ERIEZ RECYCLING TEST CENTRE



Eriez Europe's recycling test centre enables customers to determine which combination of equipment is the best fit for their waste processing needs. The centre is equipped with our full range of recycling machinery, including separation, vibratory feeding and metal detection equipment. It can handle bulk samples of any material, from coarse to very fine, and complements our equally well-equipped laboratory and testing facility.

## EFFICIENT TESTING SERVICE

The centre uses samples provided by the customer to conduct feasibility tests with various equipment combinations, based on a detailed analysis of the customer's requirements. Performance tests are used to confirm the machinery and settings and make a profitability assessment. A concise report is produced indicating the expected quantities and grade of recovered material as well as the most suitable equipment configuration.



Manufacturing Affiliates in: Australia, Brazil, Canada, China, India, Japan, Mexico, South Africa, United Kingdom, USA



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