



# ECCENTRIC ROTOR EDDY CURRENT SEPARATOR

*For Nonferrous Separation*





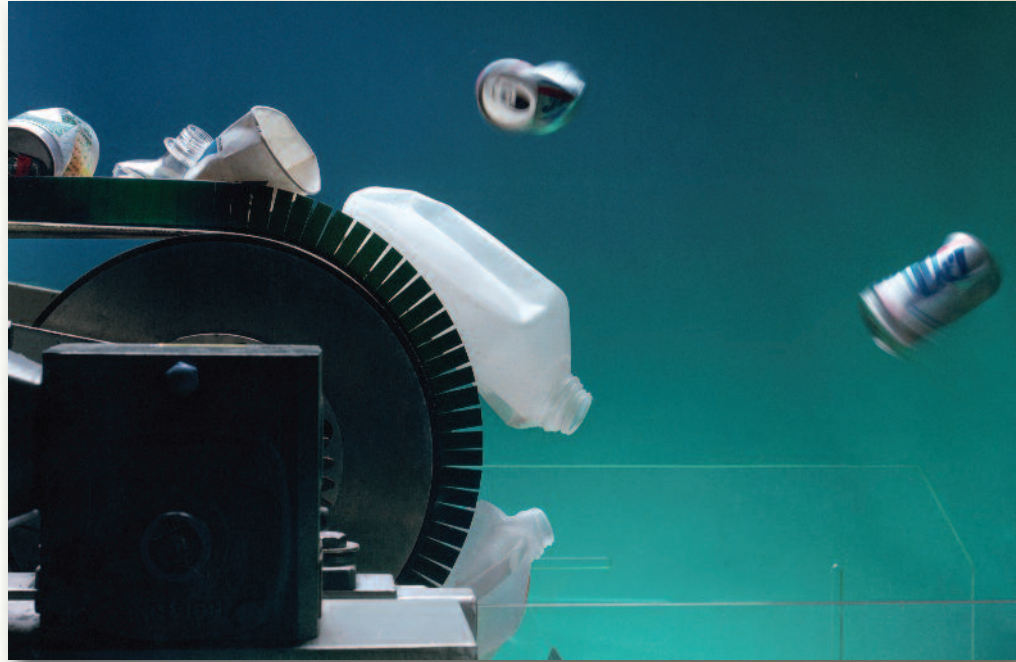
# ECCENTRIC ROTOR EDDY

Eriez' most recent addition to its extensive line up of Eddy Current Separators features an eccentric magnetic rotor for separation of nonferrous metals. This unit, the RevX-E, is designed with an eccentrically mounted magnetic rotor within the non-conductive larger diameter shell. This eccentric rotor concentrates its eddy current forces into a zone of separation at the end of the belt. By focusing its field, this design ignores ferrous material in the flow.

The eccentric rotor design reduces long-term wear due to heated ferrous build up.

## **RevX-E Eccentric Eddy advantages:**

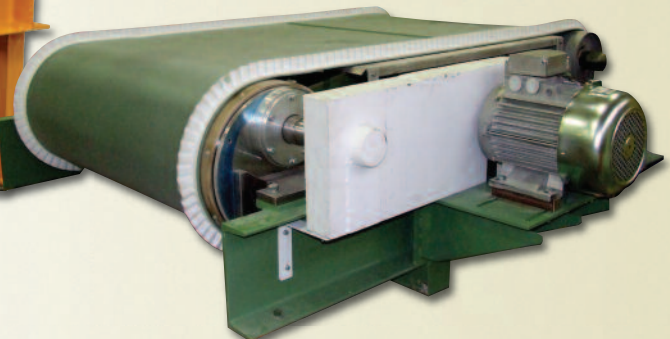
- Rare Earth rotor produces a powerful focused field
- Rotor position is adjustable for optimum separation
- Reduces long-term wear from ferrous build up
- Compact design requires less space
- Access panels conveniently located for easy service



*Eddy Current forces project nonferrous cans from waste.*



*The RevX-E's powerful, Rare Earth magnetic rotor is ideal for recovery of valuable nonferrous metals in ASR, cullet, plastics, secondary metals and incineration ash applications.*





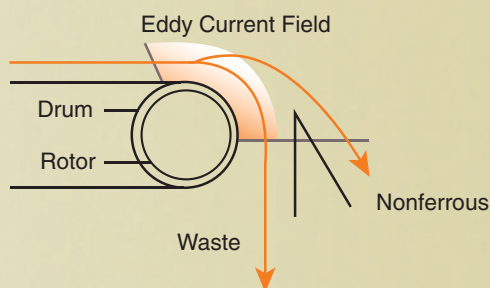
# EDDY CURRENT SEPARATOR



## Eddy Current Separator Rotor Designs

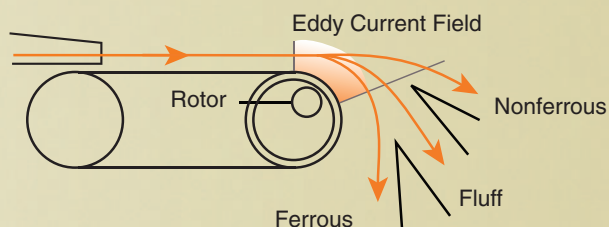
### Concentric Rotor

The concentric style rotor creates a “repelling” magnetic force equally around its shell’s entire circumference. This style arrangement provides the maximum surface area of repelling force offering the greatest opportunity of nonferrous separation. Concentric rotor Eddy Current Separators can achieve results eccentric units cannot such as PET flake processing.



### Eccentric Rotor

The eccentric rotor design employs a smaller diameter magnetic rotor offset at the top of the larger outer shell (as illustrated). This rotor’s “repelling” force is focused in the area closest to the outer shell. Although the eccentric rotor radiates a more focused surface area for separation, this design reduces ferrous build up by releasing it from the belt after it has passed through the field.



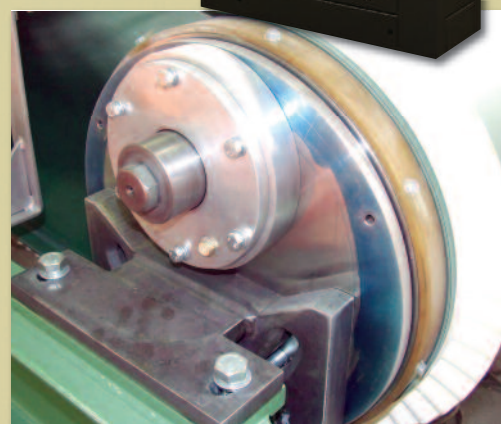
## Principles of Operation

An Eddy Current Separator consists of an external drum, an internal permanent magnetic rotor, a drive and belt conveyor. The external non-conductive shell operates as the head pulley and rotates at belt speed. The internal alternating-polarity magnetic rotor turns at much higher speed than the external shell creating a strong repelling force through the induction of eddy currents. This alternating magnetic field repels nonferrous metals projecting them out of the material flow.

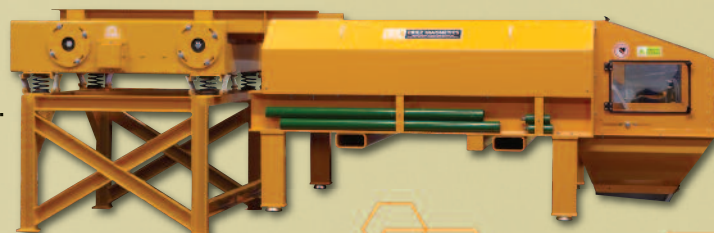
In typical applications, Eddy Current Separators are most often configured with other separation and sorting equipment to produce a clean, high quality recycled product.



Control Unit



Eccentric Rotor



# EDDY CURRENT SEPARATOR LINE UP

## **FERRITE** basic economical rotor

**Rotor:** Diameter: 12"  
Poles: 15  
Style: Concentric  
Material: Ferrite

Removes larger nonferrous metals in light duty applications like separating aluminum cans from trash.

## **REA** most popular Rare Earth rotor

**Rotor:** Diameter: 12"  
Poles: 22  
Style: Concentric  
Material: Rare Earth

Removes small to medium size nonferrous metals in e-scrap, plastics, glass cullet, foundry sand, wood waste, MRFs and municipal solid waste plants.

## **REO** powerful Rare Earth rotor

**Rotor:** Diameter: 12"  
Poles: 15  
Style: Concentric  
Material: Rare Earth

Heavy-duty model used to remove large nonferrous metals in high capacity auto shedding and municipal solid waste applications. Its higher recoveries provide quicker paybacks.

## **XTREME™** most versatile rotor

**Rotor:** Diameter: 14"  
Poles: 10  
Style: Concentric  
Material: Rare Earth

Powerful, heavy-duty unit features a long throw to recover very small and very large nonferrous in high capacity applications. Long throw improves separation delivering a better grade product.

## **SUPER** most powerful rotor

**Rotor:** Diameter: 12"  
Poles: 10  
Style: Concentric  
Material: Rare Earth

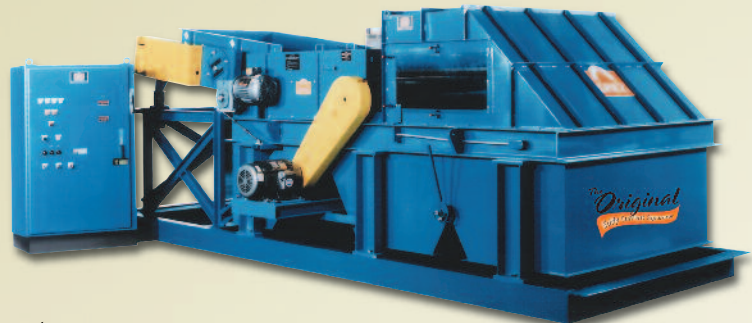
Huge magnetic poles used in select high tonnage applications where maximum recovery is required.

## **REX-E™** most powerful rotor

**Rotor:** Diameter: 10"  
Poles: 14  
Style: Eccentric  
Material: Rare Earth

The powerful Rare Earth rotor is mounted eccentrically within the shell which operates as the head pulley. A variety of eccentric rotor designs are available to match applications.

*The*  
**Original**  
Eddy Current Separator



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



## **World Authority in Advanced Technology for Magnetic, Vibratory and Inspection Applications**

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