

# Recycling

EQUIPMENT FOR THE RECYCLING INDUSTRY





## Course Material to Fines Recovery

Eriez' metal recovery equipment, either as individual units or complete systems, is designed for efficient and economical processing of municipal solid waste, comingled recyclables, shredded automobiles, electronic scrap, glass cullet, plastic (PET), foundry sand and many other resource recovery operations. Eriez equipment is helping to achieve better recovery and a higher-grade product while delivering it at a lower cost per ton.

## **Ferrous Magnetic Separation**

Eriez' CleanStream® ferrous process sets a new standard in scrap metal separation. The process begins with PokerSort® to remove troublesome pokers, uses the super strong P-Rex® permanent rare earth drum magnet to maximize ferrous extraction while loosening and removing waste, and then automatically concentrates the ferrous product into a low-copper premium shred through the new Shred1® ballistic separator.

### **Nonferrous & Metal Sorting**

Eriez' ballistic, gravity, magnetic and sensory equipment is specifically designed to optimize the recovery of different metals and mixed metal fractions to maximize their value. Eriez' innovative products make nonferrous metal recovery and sorting easy while maximizing your profits!









# Ferrous Metal Recovery & Sorting

Eriez' metal recovery and sorting equipment uses permanent magnets and electromagnets to sort, separate and retrieve metals in applications from municipal solid waste to foundry sand reclamation.

# **Applications**

- Municipal Solid Waste
- Comingled Recyclables
- · Shredded Automobiles
- Electronic Scrap
- Glass Cullet
- · Plastic (PET)
- Foundry Sand





#### Electro Drum Magnetic Separator

- Deep magnetic field
- · High Volume, Heavy Duty applications
- Agitating design provides cleaner ferrous
- · Long service, low maintenance
- Available in multiple sizes



#### Permanent P-Rex® Drum Magnet

- 40% stronger during operation
- · Wider pick-up zone
- Traction Plate™ Drum Wrap (optional) improves cleaning action
- No heat-induced strength loss
- No power required



#### Shred1® Ballistic Separator

- · Uses ballistics to separate ferrous
- · Delivers two fractions:
  - · Premium low-copper ferrous product
  - Traditional #2 shred
- Concentrates 75% of the post drum magnet flow into low-copper shred
- Reduces need for hand picking



#### PokerSort®

- Extracts troublesome pokers from shred
- · Uses Eriez' drum magnet technology
- 18" diameter
- Available in a range of sizes from 36" to 96"



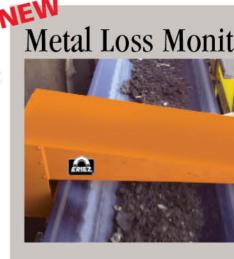
#### **Magnetic Pulleys**

- Attracts iron from nonmagnetic materials conveyed on a belt
- · Easy installation
- Self-cleaning operation
- 8" to 36" in diameter
- Belt widths from 8" to 60"
- Permanent and Electro models available



#### Suspended Electromagnet

- Removes damaging tramp iron in heavy burden depths
- Deep reach
- 5-year coil warranty



# Nonferrous Recovery & Sorting

Eriez' nonferrous metal recovery equipment uses innovative ways to sort and separate nonferrous metals in a variety of applications.

# **Applications**

- · Comingled Recyclables
- Plastic (PET)
- Scrap Recycling
- Electronic Waste
- Materials Recovery Facility
- Municipal Solid Waste
- Bottom Ash
- Construction & Demolition
- Glass Cullet





#### RevX-E® Eccentric Rotor Eddy Current Separator

- · Separates nonferrous metals
- Eccentric rotor produces powerful, focused field
- · Compact design requires less space
- · Adjustable rotor position
- · Easy service with access panels



#### Standard Eddy Current Separator Concentric

- Creates "repelling" magnetic force to separate nonferrous
- · Larger repelling field



#### ProSort II

- · Airless Metal Recovery System
- · No air compressor plant required
- Sensor-activated paddles deflect detected metals
- Double the sensors on one-inch centers
- · Better recovery of heavies and lights



Eriez' New **Metal Loss Monitor** continuously scans your residue stream, tracking metal that has escaped your process and is headed for landfill disposal.

- Analyzes Fluff Stream for missed metals
- · Online data collection
- · Remote reporting



#### DensitySort®

- · Sorts nonferrous fines using gravity
- Separates fines into Twitch and Zebra
- Improves fines value
- Recovers nearly 65% of red metal on the first pass
- High throughput of 6 to 8 tph/machine



#### FinesSort®

- · Separates ferrous fines
- Three products:
  - Clean ferrous
  - Small NonferrousWaste
- Recover metals less than 1" in diameter
- Powerful magnetic circuits

# Material Handling & 5-STAR Service

Eriez offers a broad range of vibratory feeders and conveyors to handle almost any dry bulk solid material. Whether your application requires the precise control of an electromagnetic feeder to meter plastic regrind or the vibratory power of a mechanical feeder to spread and singulate materials to your sorters, Eriez has the solution you need.

# **Applications**

- · Comingled Recyclables
- Plastic (PET)
- Municipal Solid Waste
- · Electronic Waste
- Glass Culled
- Bottom Ash
- Foundry Sand



## **Feeders**



#### **Brute Force**

- · Rugged, high capacity feeders
- Mechanical design
- · Available in multiple sizes
- Fast feeding
- Ideal for spreading material



#### **Electromagnetic Feeders**

- Heavy-duty
- Base or Suspension mounting
- Minimal maintenance
- Superior feed control
- · Excellent isolation of vibration



#### **Mechanical Feeders**

- · High volume, bulk material feeders
- · Low-profile, compact design
- Fast feeding
- · Excellent isolation of vibration

## 5-STAR Service & Repair Rebuild - Parts - Service



# **5-STAR SERVICE**

- 24/7 Service Hotline
- Original OEM Parts
- · On-Site Field service
- · Equipment Re-manufacturing
- Full "As New" Warranties









Technicians provide preventive maintenance evaluations and emergency repair service.



#### 5-Star Service Center

Eriez' 5-Star Service Center, located in Erie, PA, is staffed with an experienced team of professionals available through our 24/7 hotline, 1-888-300-ERIEZ. We use original OEM parts and offer on-site field testing, equipment re-manufacturing and full "as new" warranties.

#### EriezXpress™

EriezXpress products are always in stock and ready for next day shipment from Eriez USA. Eriez has identified those products most often ordered with fast shipment requirements. The EriezXpress program streamlines the order-to-ship process by simplifying product ordering, modifying inventory control and designating a dedicated team to make it all happen.

Upon credit approval, orders received at Eriez-USA by 4:00PM will be processed and shipped the next business day.



#### The Eriez Technical Center

Eriez maintains industry's largest magnetic, vibratory and inspection system test laboratory at its Technical Center, adjacent to the headquarters plant in Erie, Pennsylvania, U.S.A. More than 100 pieces of specialized test equipment are on hand. Here, customer products and raw materials are analyzed confidentially and ways to separate or move, screen or detect them more efficiently and economically are then suggested. Feasibility and definitive studies are also conducted.



#### World Authority in Separation Technologies

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