



Feeder, Conveyor & Screener

PRODUCT SELECTION GUIDE



FEEDERS • CONVEYORS • SCREENERS • BIN VIBRATORS



Feeders, Conveyors & Screeners for Every Application



A high-speed feeder meters material into a packaging machine



Sanitary vibratory conveyors move carrots past inspectors in a food packaging plant



A combination screener and feeder moves chocolate candies into a wrapping operation



A heavy-duty feeder meters material to a magnetic drum in an iron ore mine

A Wide Range of Applications

Whether your operation requires accurate, rugged performance in an underground mine or a sanitary rapid-cycling feeder to package snack foods, Eriez offers specific vibratory equipment and magnetic conveyors to meet your needs.

Compact Feeders

Our line of compact electromagnetic feeders are used for everything from simple metering to moving difficult leafy products like flour or gummies, as well as high-speed packaging and high material load applications. All electromagnetic drives are extremely energy efficient, low maintenance with no rotating parts, and can be provided with a range of sanitary and non-sanitary trays.

Heavy-Duty Feeders

In heavier-duty applications, Eriez offers the choice of either electromagnetic or mechanical vibratory units. These feeders provide accurate, rugged performance in even the harshest of environments.

Vibratory Conveyors

Eriez vibratory conveyors are rugged, efficient, high capacity units that move large volumes of bulk material reliably and economically. Mechanical and electromagnetic conveyors are available to handle your applications.

Vibratory Screeners

Most of the feeders or conveyors listed above can also be designed as a linear screener. Scalping, fines removal or sorting can be accomplished with the addition of a wire mesh, perforated plate or rod deck screen.



Superior Design, Service and Support

Feeders Fast 5-Day Program

Includes 32 electromagnetic vibratory drive and tray combinations. Tray sizes ranging from 4 x 20 to 14 x 60 in. and with capacities as high as 22 tons per hour.

Sample Testing

In many applications, it is imperative to have your product tested to ensure proper performance. Our test lab offers access to most of our vibratory equipment... just supply a quantity of your product. Contact us for details.

Eco-Certified Program

Eriez' Eco-Certified program blends cost savings with environmentally friendly products and technologies. Using permanent magnets with an AC electromagnetic drive creates significant energy savings over traditional DC-powered drives. The simplicity of a drive powered by alternatively magnetic forces assures low maintenance, power consumption and doesn't require a rectifier.



MARK FRAZIER

Frazier and Son

“...we rely on Eriez electromagnetic drives to accurately feed our bucket elevator systems. Although we use their entire range of feeder drives, the high deflection units are perfect for our most challenging applications.”



Bin Vibrators



Type	Bin Vibrators	Bin Vibrators	Compact Feeders	Volumetric Feeder Machine
Drive Mechanism	AC Electromagnetic	Electric Rotary motor ERV Models	AC Electromagnetic A and C Models	AC Electromagnetic VFM Models
Description	Attaches to steel or plastic hoppers, chutes and pipes to aid product flow. AC Electromagnetic drive provides years of trouble free operation. Vibrators can cycle up to 30 times per minute. • 12 models available for 5 cu ft to 60 tons/hr hoppers • Applications from tiny hopper to huge bunkers • Energy Efficient AC operation cuts power use • Optional solid state controls mounted in NEMA 12 or 4X enclosures	Attach these rugged vibrators to your hoppers or chutes to promote consistent material flow of your dry bulk solids. Vibrators available in a broad range of sizes and 900 to 3600 RPM. • 72 models available • Quiet operation • Suitable for dusty or wet environments • Certified for Class II, Div. 2, Group F, G Hazardous Environments by ETL	Ideal for regulated feeding from a hopper or from one process to another. Controls material flow rates from pounds to many tons per hour. Patented AC drive provides years of trouble free service with no belts or bearings to be replaced. • Light and medium-duty • Feed rates from 10 cu ft to 25 tons/hr (22.7 MT) • Smooth 100% linear control • Totally enclosed magnetic drives • Energy Efficient AC operation cuts power use • CE and CSA approved models available	A combination hopper, vibrator, feeder and control for general blending or metering. Meters products from dry granular to small lump material. • 2 models with feed rates of up to 15tph (13.6mtph) • Ideal for weigh scales, packaging and bagging equipment • Special models available for specific requirements
*Capacity	5 cu ft to 60 ton hopper	70 to 28,000 lb./force	.5 tons to 25 tons/hr	.5 to 12 tons/hr
Applications	• Powders • Flour • Sugar • Grain • Plastic Pellets • Coal • Glass • Cullet • Sand • Aggregates • Chemicals • Resins • Beans • Salt	• Powders • Flour • Sugar • Grain • Plastic Pellets • Coal • Glass • Cullet • Sand • Aggregates • Chemicals • Resins • Beans • Salt	• Any dry granular product 100 mesh to 2" in diameter	• Weigh scales • Packaging • Bagging equipment • Small batch operations • Additive feedings
Sizes	12 models for 18 GA to 9/16" hopper wall or chute wall thickness	72 Models Frame sizes 10 to 90	8 Drive models Trays: • Widths 2 to 16 inches • Lengths 12 to 60 inches on a single drive	15A with 4x20 tray & 1 cu ft Polyethylene hopper 56C with 10x38 tray & 4 cu ft Polyethylene hopper
Other	• Can be operated directly from line current without control • Dust tight units available		• Up to 5 cycles/minute • Class II, Div. I, Grp. F.G • Multiple drive configurations • Custom tray materials & sizes • Steel tip point	• Infinite custom configurations • Stainless steel trays & hoppers

* Capacity - the tons/hr rating is based on dry sand weighing 100lbs./cu ft.

Vibratory Selection

Feeders

					
High Speed	High Deflection	Heavy Duty	Brute Force	Heavy Duty	
AC Electromagnetic HS Models	30 cycle AC Electromagnetic HD Models	AC Electromagnetic B Models	Mechanical Twin rotary motor BF Models	Mechanical electric motor Driven eccentric shaft HVF Models	
Exceptionally high-speed feeding of light, bulky materials, capable of rapid cycling needed in filling and packaging applications. HS feeders provide up to 100 cycles/minute with no over deflection. Quick-stopping characteristic assures accurate handling of materials in mixing, weighing, batching, packaging and bagging operations. Drives have no moving parts to wear out. 10 High Speed models - Ideal for mixing, weighing, batching, packaging and bagging operations - Feed rates from 40 to 600 cu ft per hr - Energy Efficient AC operation cuts power use	High Deflection feeders combined a high amplitude (up to 3/16 inch) motion and the reliability of an electromagnetic drive for superior metering of powders (-100 mesh), leafy, malleable and slightly sticky products. These products can be difficult to feed in a typical electromagnetic feeder. - Designed for powders and leafy products 3 models from 40 to 700 cu. ft. per hr. - Feed rates of up to 80 ft/min (24m/min) are possible for products with a bulk density less than 10 lb/ft³ (.16 gm/cc) - AC operation cuts power	Heavy-duty feeders for precise blending and metering of granular to lumpy (less than 12 inch diameter) material. Patented AC drives use half the energy typical DC drives while offering unsurpassed linearity. Designed for large capacity and difficult material handling operations up to 850tph (765mtph). 10 large capacity models - Feed rates from 80 to 850 t/hr (765mt) - Optional Variable rate feeder control - AC operation cuts power	Single-mass mechanical feeder with twin rotary motors well suited for heavy impacting applications. They are very simply designed, easy to repair and handle shock loading well, but lose power under heavy head loading. - Low cost units - Easy maintenance - Good for heavy impacting	Eriez' HV feeder is the premier mechanical feeder for high volume applications. Lowest profile feeder with outboard adjustable drive angle springs for ease of maintenance and superior product flow. Low-horsepower, high-capacity mechanical feeders handle bulk materials in volumes up to 2,250tph (2,040mtph). - Low-profile design - Provide accurate control of flow rates - Requires minimum headroom - Simple, stable, variable speed controller	
40 to 600 cu ft/hr	10 to 700 cu ft/hr	900 to 1,700 cu ft/hr 80 - 850 tons/hr	6,000 - 28,000 cu ft/hr 300 - 1,400 tons/hr	3,800 - 36,000 cu ft/hr 190 - 1,820 tons/hr	
- Packaging & Filling - Gummy Candy - Cereals - Vegetables - Beans - Spices - Candy - Dried meats - Pellets - Pet foods - Fish flakes - Nuts - Jellybeans	- Fresh shrimp - Sliced fruit - Carbon black - Gummy Candy - String carrots - Powdered milk - Chopped fiberglass - Cereal - Cherries - Spices - Lettuce - Cement	- Metering and blending - Aluminum - Bronze chips - Glass batch - Cement clinker - Aggregate - Borax - Asphalt - Copper ore - Ashes - Granite - Bauxite - Coal - Coke - Iron ore - Quartz	- Glass cullet - Wood - Scrap steel - Coal - Iron ore - Borox - Aluminum - Coke - Bauxite - Asphalt - Ash	- Aluminum - Wood - Scrap steel - Coke - Glass cullet - Coal - Iron ore - Borox - Ash - Asphalt - Bauxite	
9 Drives models	5 Drive models	9 Drive models			
Trays: - Widths 2 to 16 inches - Lengths 16 to 60 inches on a single drive	Trays: - Widths 4 to 16 inches - Lengths 24 to 60 inches on a single drive	Trays: - Widths 14 to 54 inches - Lengths 36 to 96 inches on a single drive	Trays: - Widths 18 to 96 inches - Lengths 60 to 144 inches	Trays: - Widths 18 to 84 inches - Lengths 36 to 112 inches - Custom sizes available	
- White epoxy & Steel-It paint - Mild steel, stainless & rigidized trays	- Multiple drive configurations - Mild or stainless steel trays - Flat or tubular trays	- Multiple drive configurations - Offers covers and AR liners - Overhead or under drives - Base or suspension mounting		HV feeders use off-the-shelf motors, belts and bearings for easy maintenance	

ection Guide

Conveyors



Magnetic

30Hz Pulsed AC
Electromagnetic VMC Models

VMC offers the performance of a mechanical conveyor with the reliability of an electromagnet unit...no belts or bearings. Units cycle on and off without stressing components or going through wild vibrations from resonance.

- **AC electromagnetic drive**
- **Extremely efficient, accurate conveyors**

100 – 1,000 cu ft/hr

- Cereals
- Fruit
- Seafoods
- Pretzels
- Spices
- Vegetables
- Pasta
- Potato
- Wood products
- Chips
- Powders
- Candy

Trays:
• Widths 18 to 60 inches
• Lengths 60 inches to 10 feet
• Max 40 sq. ft of tray area

- Units are available with covers, perforated decks and with signal following controls

Single-Mass

Mechanical motor driven
Eccentric shaft

Single-Mass (SM) units are Eriez' least expensive mechanical conveyors, because they use the floor or base as their reaction mass. This allows for a low profile and efficient system to convey materials and parts. Highly efficient single mass conveyors designed to move bulk material reliably and economically.

- **Moves light loads of bulk materials**
- **Flow rates up to 18 tpm (16mtph)**
- **Economic price**

50 – 500 cu ft/hr
5,000 – 50,000 lbs./hr

- Cereals
- Pretzels
- Potato chips
- Candy
- Pasta
- Seafood
- Metal parts
- Powders
- Wood products
- Fasteners
- Frozen vegetables

Trays:
• Widths 8 to 48 inches
• Lengths 5 to 40 feet
• Custom size available

- Gates, covers and perforated decks

Two-Mass

Mechanical motor driven
Eccentric shaft

Two-Mass (TM) conveyors are low-horsepower, high-capacity units for the controlled transfer of bulk materials in rugged duty environments. Its tubular base and wide-open design make it ideal for food and pharmaceutical applications.

- **3 variable rate models for light and heavy duty**
- **Compact low profile design requires minimum headroom**
- **Flow rates up to 60 fpm (18mpm)**
- **Easy maintenance and access to components**

50 – 1,500 cu ft/hr
5,000 – 150,000 lbs./hr

- Granular products
- Coffee beans
- Seafood
- Cereals
- Raisins
- Potato chips
- Candy
- Dried meats
- Pasta
- Nuts
- Pretzels
- Wood products
- Powders
- Frozen vegetables

Trays:
• Widths 8 to 36 inches
• Lengths 5 to 30 feet
• Custom size available

- Gates, covers, screens, air-actuated drop gates and other application specific items

Heavy Duty

Motor driven
Eccentric shaft
HVC Models

High Volume (HV) conveyors are rugged, heavy-duty units designed to take punishment. They use a unique rubber spring that can be adjusted for the optimum drive angle. HV conveyors use replaceable AR liners in the tray and have outboard rubber springs for easy maintenance.

- **Durable rubber springs**
- **Ideal for: Mining, aggregate, power generation, foundry and mineral processing**

50 – 200,000 cu ft/hr
5,000 lbs – 100 tons/hr

- Aggregates
- Borax
- Glass cullet
- Dry clay
- Aluminum
- Brick
- Cast iron chips
- Coal
- Foundry sand
- Gravel
- Limestone
- Concrete
- Ash
- Coke
- Gypsum
- Cement
- Asphalt
- Iron ore
- Bauxite
- Cinders

Trays:
• Widths 8 to 36 inches
• Lengths from 5 to 25 feet

- Variable rate controls and optional liners and covers

Horizontal Motion

Mechanical motor driven
E-Z Slide

E-Z Slide™ conveyors use an eccentric weight motion with the motor mounted at the end or underneath the tray for ideal for gentle handling of snack foods or processing of friable products. The unique drive causes the tray to move forward slowly carrying the product, then reverse rapidly, causing the tray to slide back quickly. The slide action of the material on the tray also provides a self-cleaning action.

- **E-Z Slide motion for fragile products**
- **Food and pharmaceutical packaging lines**
- **Base or suspension mounting**
- **Low profile designs**

20 – 1,000 cu ft/hr
1,000 lbs – 50,000 lbs./hr

- Spice coated chips
- Dried fruit
- Pretzels
- Cocoa beans
- Cereals
- Potato chips
- Cookies
- Soy beans
- Peanuts
- Potato flakes
- Nuts
- Granular products

Trays:
• Widths 12 to 48 inches
• Lengths 8 to 60 feet

- Base or suspension mounted
- Optional covers and drop gates

Screeners

				
Electromagnetic	Mechanical	Brute Force	TMS/TMRS	Options
Electromagnetic	Motor driven eccentric	Twin rotary electric motors	Mechanical-rotary electric or motor driven eccentric	
Eriez' screeners use standard electro-magnetic drives and are well suited for restricted space locations using either overhead or base mounted drives. These linear screeners offer similar features as Eriez' electromagnetic feeders • From food handling to coin sorting • Scalping overs from good product such as clay or cereals • Sizing up to 3 screen decks or 4 separations • Dedusting or removing unwanted fines from a product flow	For large scale, heavy-duty applications, Eriez builds screeners using the TM and HV drives covered under the "conveyor" heading. These rugged units incorporate wire mesh, perforated plate, grizzly and wedge wire screen types. • Food to heavy-duty mining • Scalping overs from good product • Sizing products into 2, 3 or 4 fractions • Dedusting or removing unwanted fines • Dewatering separates solids from liquids	For applications requiring a rugged design and large screen area. The Brute Force Screener can be customized for light to heavy-duty applications. • Medium to heavy duty applications • Scalping over-sized products • Dewatering • Easy maintenance	Designed with light to medium duty applications in mind. These high amplitude machines offer excellent screening capability, sanitary design and are available with tool-less screen format. • Food to light duty applications • Fines removal from scalping over-sized material • Separations of 2, 3 fractions	Solid Sate Controllers • NEMA 12 through 4x enclosures • Accept analog signal • Bias/Gain potentiometers • Dual-rate of feed • Interlock for remote on/off • Optional over-deflection monitor protects feeder Tray Features • Special tray sizes • Bias discharge • Enclosed trays • Tool-less screen and cover removal • Base or mounting • Tube trays • Inspection parts/windows • Sanitary construction • Hazardous environment Class II, Div. I, Grp F, G acceptable
All screen rates are application dependent	All screen rates are application dependent	All screen rates are application dependent	All screen rates are application dependent	
• Powder • Flour • Plastic • Abrasives • Chemicals • Spices • Beans • Salt • Pellets	• Powders • Plastic • Abrasives • Chemicals • Spices • Aggregates • Coal • Steel • Pellets	• Food • Plastics • Wood • Mining • Recycling	• Pet food • Food • Powders • Plastics	
Tray: • Widths 4 to 48 inches • Lengths 20 to 72 inches	Tray: • Widths 24 to 48 inches • Lengths 60 to 120 inches	Tray: • Widths 18 to 60 inches • Lengths 48 to 120 inches	Tray: • Widths 12 to 36 inches • Lengths 48 to 300 inches	
• Screen mesh: 200 mesh to 4" mesh	• Custom sizes and special applications include open or enclosed units	• Custom sizes • Screen types: wire mesh, profile wire, perforated plate	• Customized for your application and include enclosed trays • Two-mass isolated design	



WORLD AUTHORITY IN SEPARATION TECHNOLOGIES

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