Belf Conveyors

... Only from Eriez.

Permanent Magnetic

Fast, safe and spacesaving systems with firm magnetic control to continuously convey parts or scrap for vertical, inclined or horizontal materialhandling situations.

Eriez' Magnetic Belt Conveyors provide an effective way to move and elevate ferrous materials such as parts, stampings and containers. Magnetic belt conveyors hold materials firmly and keep them moving, virtually eliminating the problem of jamming and reducing the need for manual handling.

No side rails or side wipers are required on Eriez conveyors because the magnetic field provided by Erium[®] 25 holds ferrous material on the center of the belt. Sharp scrap or small pieces are kept from beneath the belt where they could cause belt damage and downtime. Erium 25 is the powerful permanent magnetic material with a circuit designed and energized by Eriez.



LOW-PROFILE MAGNETIC SERIES

The Low-Profile Series of Magnetic Belt Conveyors is designed for use where space is a critical limiting factor. The 1-5/8 inch (41 mm) depth fits easily under dies and at the discharge of many production machines. Scrap, slugs, stampings, punchings and small finished parts

are moved quickly, gently and without spills to other operations.

In addition to use with punch presses, centerless grinders and high-speed stamping operations, Eriez Low-Profile Conveyors help increase productivity by removing pieces from work stations and in other specialized material-handling applications.





THE POWER OF MAGNETS

Most components made all, or in part, of steel can be conveyed, raised, lowered, turned over or oriented by magnetic forces during manufacturing. Stationary magnets mounted behind or under a moving belt provide a uniform attracting and holding force along the entire length of the conveyor.

Existing belt conveyors can often be adapted to magnetic handling. However, a magnetic conveyor system that's specifically designed for the application almost invariably is faster, more economical to operate and less likely to demand maintenance.

Magnets give you positive, nonslip control over the movement of metal containers, small machined parts and hundreds of other ferrous-based parts. They'll convey on the top, bottom and around curves of your line, from one operation to the next, from one floor to the next. They'll automatically turn parts over, change direction of flow, travel in and out of spray tanks and convey in ways that may be impractical by other methods. Magnets grip ferrous materials securely, even at high belt speeds. The constant, strong magnetic force keeps products-in-process from flying off the line on ascents and descents and improves safety conditions. In addition, damage and scrap are reduced because the products don't slide or change position. This prevents pile-ups and eliminates contact between items with sharp edges, close dimensions, highly polished or scratchable painted surfaces.

Permanent magnetic components of a conveyor system are inherently reliable and quiet in operation. They continue to hold securely when belts are started or stopped and can't be affected by outside power lags or failures. At work or at rest, they emit no sound.

Vertical magnetic

belt conveyor

used to elevate

bearing races.

Eriez warrants its magnetic elements against loss of magnetic strength for the life of the conveyor system.

> Magnetic belt conveyor and vibratory feeder system used to feed bearing races to heat treat furnace.

> > Magnetic conveyor and vibratory feeder system conveys fasteners to weigh scale and heat treat furnace.



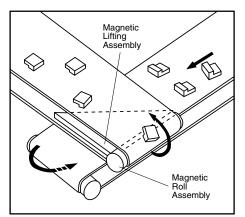
INDIVIDUAL DESIGNS TO SOLVE INDIVIDUAL PROBLEMS

Rarely are two magnetic conveying systems exactly alike. While many can and do incorporate standard, off-the-shelf components as a prudent economy measure, the design of each system should be dictated by the product to be handled, available floor space, type and performance of production machines, ambient temperatures—the list of restrictive influences goes on and on.

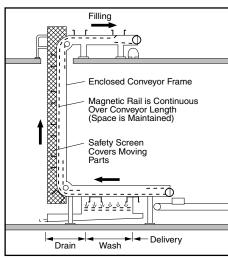
When limitations such as these are not considered before installation, problems can arise in meeting production schedules, and profits may not be what they could be.

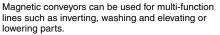
Since your product, plant, equipment and personnel are unlike those of others, your materials handling system must necessarily be unique too. It should be designed and engineered to conform to your special requirements by people who specialize in applying the forces of magnetism.

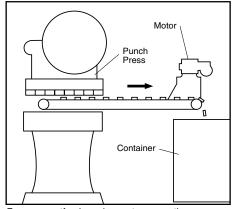
Starting in 1942, Eriez Magnetics has formed such a staff, on call at all times to work closely with you in designing and applying the most productive, economical methods of magnetic material handling.



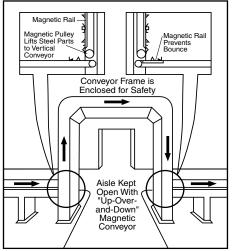
A cross-belt conveyor utilizing a triangular magnet provides a simple and space-saving parts inverter.







For press outfeed requirements, magnetic conveyors offer the advantage of continuous material removal.



Magnetic belt conveyors can take advantage of unused air space to transport parts across aisles. Conveyors can also be enclosed.



Magnetic belt conveyors are ideal for moving ferrous parts over busy aisles.

LOW-PROFILE MAGNETIC BELT CONVEYOR FEATURES

- Motor can be side mounted, top mounted or mounted beneath the conveyor.
- Sturdy 11-gauge steel frames are light enough to be moved easily.
- 3-1/2" (89 mm) diameter steel-drive pulley is grooved to dissipate oil and improve tracking.
- Sealed bearings eliminate the need for lubrication.
- Three standard lengths and four widths (with custom sizes available to meet specific applications).
- Standard belt speed of 60 fpm (18.3 mpm) can be varied by changing sprocket ratios.

1	
	L inches inches 3-1/2 H (Overall)

MODEL	L		W (BELT)		W (FRAME)		W* (Frame at Belt Snubber)		W (OVERALL)		H*		WEIGHT	
NUMBER	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	lb.	kg.
456 656 856 1056	66	1676	4 6 8 10	102 152 203 254	6 8 10 12	152 203 254 305	7 9 11 13	178 229 279 330	12-5/8 12-5/8 14-3/8 16-3/8	321 321 365 416	11	279	94 130 164 196	43 58 74 88
476 676 876 1076	90	2286	4 6 8 10	102 152 203 254	6 8 10 12	152 203 254 305	7 9 11 13	178 229 279 330	12-5/8 12-5/8 14-3/8 16-3/8	321 321 365 416	11	279	130 178 227 276	58 80 102 125
4106 6106 8106 10106	126	3200	4 6 8 10	102 152 203 254	6 8 10 12	152 203 254 305	7 9 11 13	178 229 279 330	12-5/8 12-5/8 14-3/8 16-3/8	321 321 365 416	11	279	180 247 315 385	81 112 142 174

LOW-PROFILE MAGNETIC BELT CONVEYOR SPECIFICATIONS

Belt: Oil-resistant PVC

Belt Speed: 60 fpm (18.3 mpm)

Frame:

One-piece 11 gauge stainless steel

Pulleys:

Drive pulley: 3-1/2" (89 mm) Tail pulley: 1-1/4" (32 mm) C.R.S.

Bearings: Sealed

Drive:

1/6 to 1/2 hp, 115V, 60 Hz TEFC gearmotor

W (Overall) and H based on standard 1/6 hp gearmotor.

Dimensions and specifications are subject to change without notice.

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

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