

Magnetic Scrap Drum Separator

Including:



Electro and Permanent Scrap Drum Magnets for automatic separation of heavy ferrous during scrap metal processing such as meatballs or armature assemblies

Principle of operation

As material reaches the Drum, the magnetic field attracts and pulls scrap ferrous up to the Drum shell. As the Drum revolves, it carries the material through the stationary magnetic field. The non magnetic material falls freely from the shell, while ferrous materials are held firmly until they are carried out of the magnetic field and deposited over the top of the separator.

Benefits

- State of the art electro or permanent magnetic circuits to provide maximum performance
- Ruggedly built to provide long service life
- Easy to install and requires a low level of maintenance
- Completely enclosed shell so reduced downtime due to jamming
- Suitable for outdoor installation
- Optional Traction Plate™ Drum Wrap to improve cleaning action



P-Rex[®], the strongest drum magnet on the market, has a new brother **eP-Rex[™]**.

These two scrap drum magnets represent great advancements in magnetic circuit design achieving ferrous recovery rates beyond what is possible with standard electromagnets.



A 40% stronger magnetic field during operation with twice the reach results in superior ferrous separation. P-Rex' deep reach and exceptionally large pick-up zone enable it to capture heavy spheres such as meatballs and knuckles at greater distance.

Benefits

- 40% Stronger during operation compared to an electro magnet
- Wide pick-up zone
- Edge to edge performance
- No heat induced strength loss
- Agitates and flips ferrous
- Optional retractable jaw to pull the magnets away from the drum shell



Eriez' new eP-Rex[™], Electro/Permanent Scrap Drum Magnet, provides deep reach, a wide pick-up zone and constant strength profile over time... suffering no heat loss. Typical "electros" lose 30% of their strength within hours of start up. eP-Rex is an economical workhorse extracting ferrous metals from the beginning to the end of its shift.

Benefits

- Electro/Permanent magnetic circuit
- Constant strength profile over time
- Deep reach magnetic field
- Economically priced



Deep reach and edge to edge pick-up are common to both P-Rex and eP-Rex



Electro Scrap Drums

Eriez offers two types of Electro Magnetic Drums

- The **All Electro Agitator type** utilizes a deep field rectangular-core pickup magnet to reach out and grab the ferrous, and a second rectangular-core agitator magnet to flip or agitate the ferrous, cleaning it of contaminants such as loose mud, paper and fluff.
- The **nonagitating transfer design** uses a deep field radial pickup magnet and pole shoes to convey or transfer the ferrous around the drum shell to the discharge area.

A magnet's toughest challenge

Spheres are the most difficult objects to capture magnetically. Add to that in scrap processing many of these objects contain nonferrous metals and wire making magnetic attraction even more difficult.



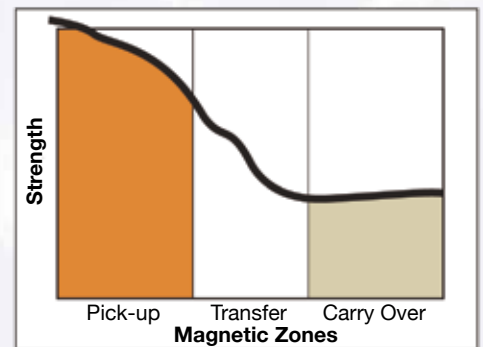
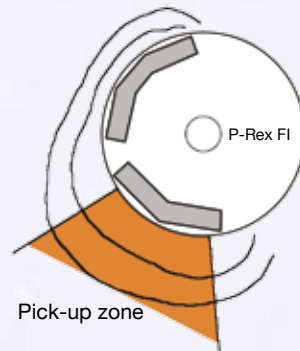
P-Rex is up to the challenge... able to reach into the shredded material and remove even these difficult meatballs (armature assemblies).

P-Rex Permanent vs Electro-Magnetic comparison

The magnetic profiles shown below provide a graphic illustration of the magnet's ability to extract ferrous and carry it to recovery. Large meatballs and knuckles require maximum strength to separate from the shred.

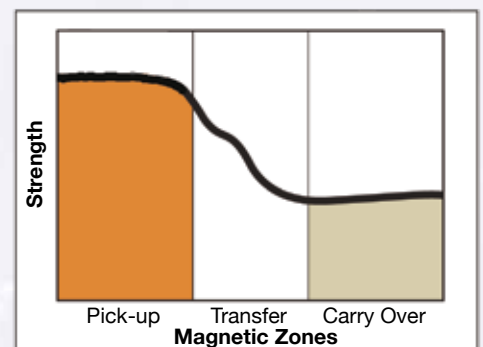
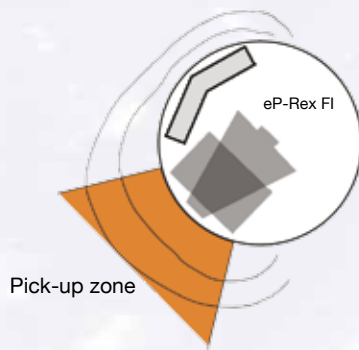
P-Rex Magnetic Profile

Exceptionally strong, wide pick-up zone for maximum ferrous recovery



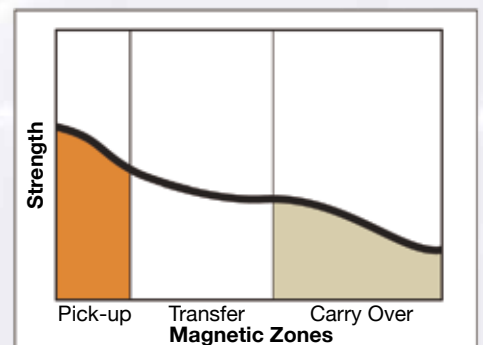
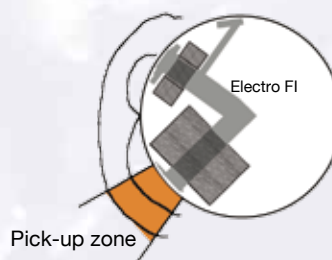
eP-Rex Constant Magnetic Profile

Deep reach, wide pick-up zone for superior ferrous recovery



Electro - Hot Magnetic Profile

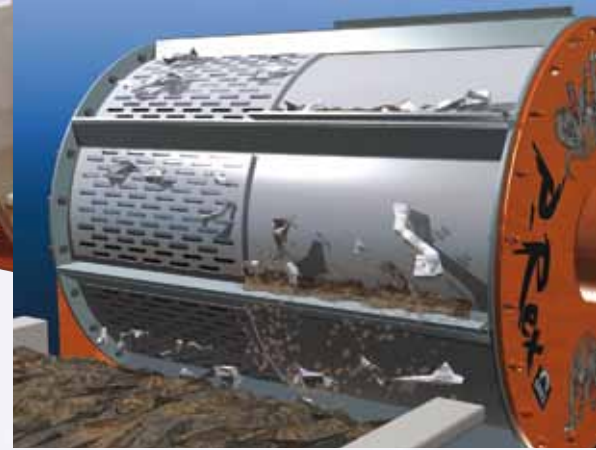
Degraded magnetic strength curve over time diminishes recovery rates



Traction Plate™ Drum Wrap

Eriez' new **Traction Plate™
Drum Wrap** significantly improves cleaning action by gripping ferrous, allowing it to agitate on the face of the drum and releasing fluff and dirt. The Traction Plate keeps the ferrous from sliding down and 'clumping' on the cleat, which entrains more dirt and fluff.

- Innovative deep recessed pattern
- Made of durable magalloy
- Shorter cleat height



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