Compact Forced Cooled SE Magnets

SUSPENDED ELECTROMAGNETIC SEPARATORS

Successfully removes damaging tramp from flows of coal, limestone, sand, gravel, municipal waste, wood products, recycled materials, other ores and almost any conveyed non-ferrous material

Benefits & Features

Eriez, a pioneer in the development of oil-cooled suspended electromagnetic separators, offers a line of magnets for difficult, heavy duty applications.

With the higher throughputs and larger capacities of today's processing plants, the need to remove damaging tramp metal prior to key unit operations is paramount. It only takes a small amount of downtime to eradicate any savings gained by installing sub-standard equipment.

The Compact Forced Cooled Suspended Magnets provide the traditional quality, performance, reliability and value of Eriez separators, but at a smaller size which leads to increased productivity and profitability.

THE INDUSTRY WORKHORSE

These separators are designed to capture tramp metal from both shallow or deep burden depths and are ideal for almost any application – wet, dry, fine, or coarse. As plants continue to increase in size to take advantage of economies of scale, the Eriez' force cooled electromagnets have been engineered to achieve better performance at a smaller size than traditional magnets.

Manual–cleaning magnets are available for simple installations while self–cleaning units provide for continuous tramp metal removal.

FEATURES

- Higher magnetic fields in a smaller footprint
- Wet-wound copper coils utilize Nomex insulation and fiberglass spacers to extend life
- Forced cooling allows the magnets to produce a higher field strength at lower temperatures
- Reduced suspended mass
- Exclusive oil expansion tank prevents condensation and keeps the coils submerged and cool
- Manganese bottom plate provides for superior durability in rugged applications
- 8 magnet sizes, 32 standard models and hundreds of special designs available for nearly every unique application
- Special features available such as elevation derated coils, high fire point coolants, oil temperature sensors, flow switches for monitoring heat exchanger operation, conveyor speed switches, guards, controls, permanent retention, monitoring devices and many more

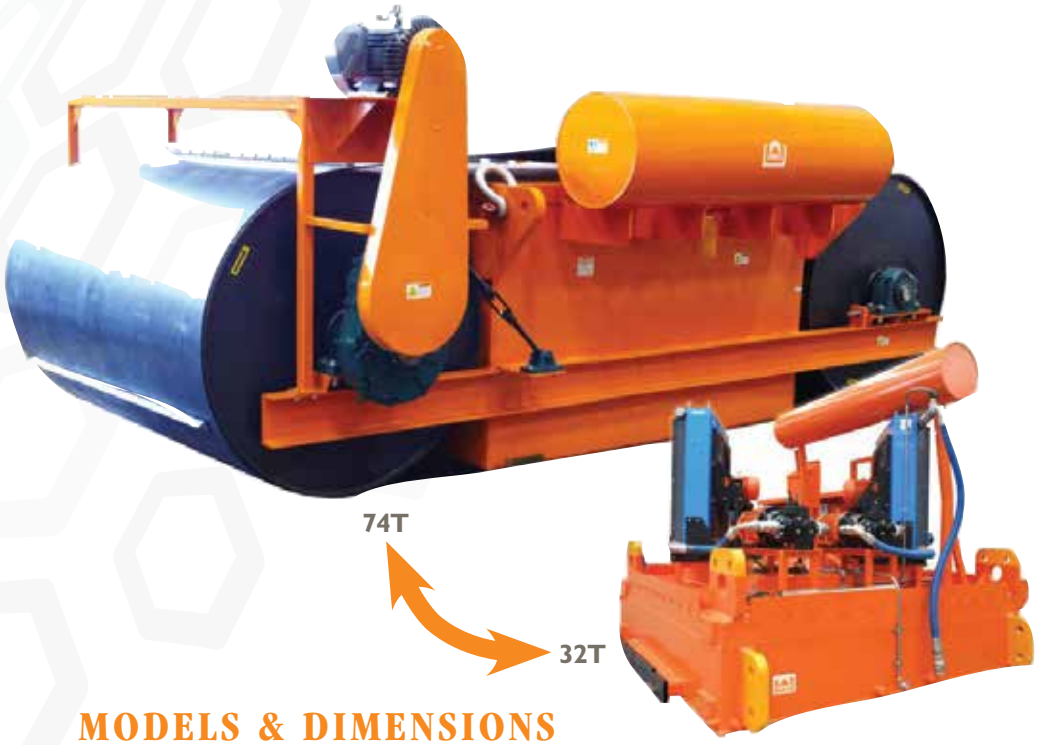
Force-Cooled Approach

Eriez provides significantly smaller sized compact "force-cooled" magnets that are able to provide the same strength as our biggest magnets. The key is in using a light-weight active cooling system which can be fully integrated or located remotely.

These units are preferred when the existing support structure does not have sufficient load capacity for a traditional suspended electromagnet. They are also nominated for installation in new plants due to the resulting lower overall capital cost stemming from the significant weight and size reduction which translate to a smaller superstructure and reduced foundation load.

Some application environments involve exposure to high ambient temperature or require smaller magnet assemblies due to limited space requirements. Eriez can optimize the performance of a typical oil cooled magnet assembly by re-circulating the oil coolant through a heat exchanger to improve heat dissipation and increase magnet strength. This maximises the magnets strength in the area provided.

While some prefer the 'plug and play, set and forget' approach afforded by traditional suspended electromagnets, the force-cooled approach provides our customers the option to take advantage of size and weight reductions leading to overall cost savings, while maintaining the best tramp metal protection offered by industry.



MODELS & DIMENSIONS

Name Eq	Dimensions (mm)	Weight (kg)	Amps
SE 28k	1744 x 1744 x 267	4,375	125 Series
SE 37k	1957 x 1957 x 311	6,745	100 Series
SE 48k	1955 x 1955 x 351	7,841	225 Parallel
SE 65k	1993 x 1993 x 417	9,675	250 Parallel
SE 72k	2133 x 2133 x 508	13,815	330 Parallel
SE 88k	2286 x 2286 x 568	17,149	350 Parallel
SE 110k	2600 x 2600 x 619	21,417	237 Series/Parallel
SE 125k	2845 x 2845 x 642	29,305	220 Series/Parallel

Note the weight shown is that of a manual clean unit.

WORLD AUTHORITY IN SEPARATION TECHNOLOGIES

HEADQUARTERS:
2200 Asbury Road • Erie, PA 16506-1402 U.S.A.
P: 814-835-6000 • 800-345-4946 • F: 814-838-4960 • International Fax: 814-833-3348
E-mail: eriez@eriez.com • www.eriez.com

AUSTRALIA
Eriez Magnetics Pty. Ltd.
Epping, Victoria
P: +61 (0)3-8401-7400

BRAZIL
Belo, Horizonte MG, Brazil
P: 55 11 4056-6644

CANADA
Eriez Flotation Division
Vancouver, BC, Canada
P: +1 604-952-2300

CHINA
Quinhuangdao and Tianjin, China
P: 86 10 64671690

INDIA
Athipet, Chennai, India
P: 91-44-26525000

JAPAN
Urayasu, Chiba, Japan
P: +81-47-354-6381

MEXICO
Querétaro, Tlalnepantla, Mexico
P: 52 555 321 9800

SOUTH AFRICA
Bramley, South Africa
P: 27-11-444-9160

UNITED KINGDOM
Eriez Magnetics Europe LTD
Caerphilly, United Kingdom
P: 44-29-2085-5854

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

PRINTED IN USA