

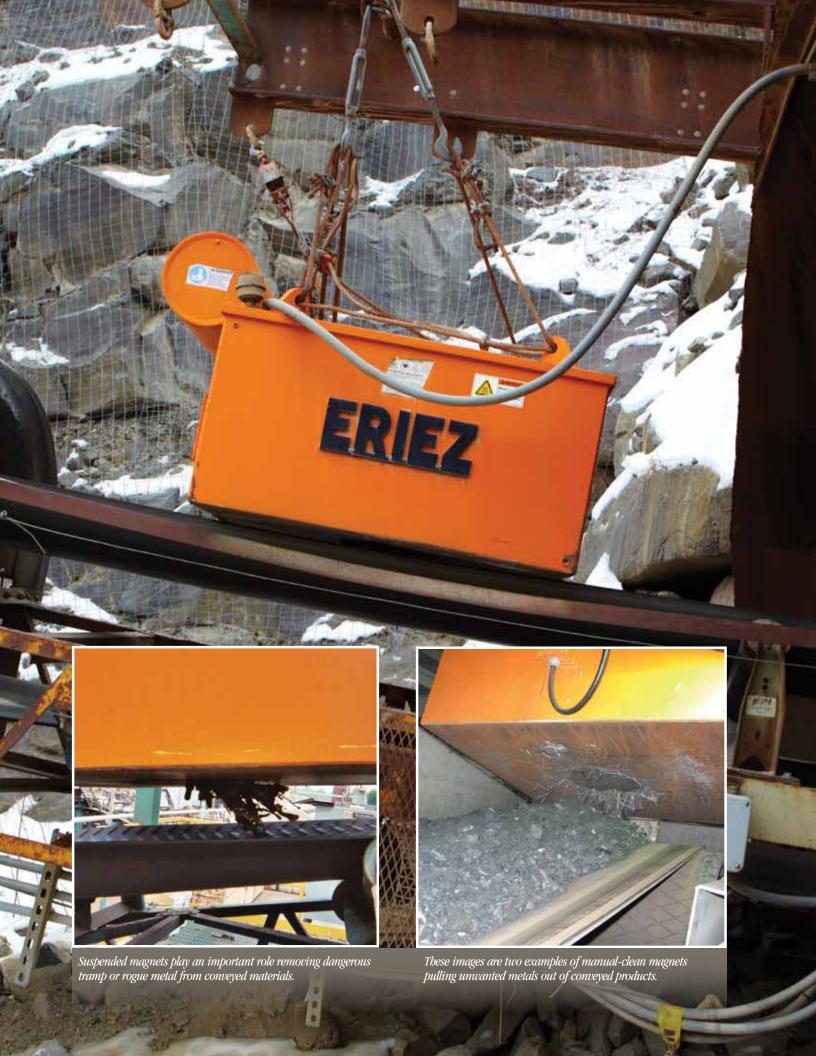
# Suspended Magnets

REMOVE TRAMP METALS FROM CONVEYED MATERIAL









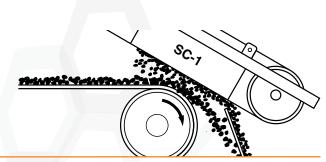


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# PES, FACTORS, INSTALLATION

Suspended magnets are widely used to remove damaging tramp metals (ferrous/iron) from conveyed materials. These magnets improve product purity and protect downstream crushers, mills, pulverizers and grinders, or remove sharp metal that can damage or tear expensive conveyor belts.

### ELECTRO OR PERMANENT MAGNETS

Suspended magnets are used in a wide range of applications, hence the need for an array of both permanent and electromagnetic designs.

#### **Permanent Magnets**

Suspended Permanent Magnets use ceramic magnetic material arranged in a very specific pattern to create a powerful magnetic field. Each model is designed for the application based on conveyor width and speed, material burden depth as well as the density or frequency of tramp iron present in the process. The magnets are permanently charged so they require no external power source to function. Typical applications involve light industrial applications like wood, tire chips or light aggregate recycling.

### **Electromagnets**

For larger industrial separation applications, an electromagnetic separator may be required. The popular round-core electromagnet uses round aluminum or copper wire in an oil-filled assembly to generate a powerful electromagnetic field. Eriez uses advanced, multidimensional finite element analysis to model each magnetic circuit ensuring optimum performance for each unique application.

These electromagnets efficiently remove ferrous metals in heavy industrial applications like coal, limestone, sand and other aggregates.

Eriez offers a variety of electromagnetic configurations including oil and air-cooled; round and rectangular core; explosion proof; even cryogenic superconducting magnets capable of producing the world's strongest magnetic force for separation applications.



Suspended Permanent Magnet – Manual-Clean



Suspended Electromagnet - Self-Clean

### MANUAL OR SELF-CLEANING

#### Manual-Cleaning (MC) Models

All MC models are cleaned of accumulated tramp iron by turning off magnet power periodically. MC models are recommended when occasional pieces or small amounts of iron may contaminate material flow.

### Self-Cleaning (SC) Models

SC models provide completely automatic iron removal and can be installed in an "in-line" or "cross belt" position. Both SC models have a short belt conveyor built around the magnet for automatic removal of tramp iron from the magnet face. This system features a rubber conveyor belt, bearings, rugged continuous channel frame, adjustable take-ups and shaft-mounted reducer with V-belt coupling to a TEFC motor.

### INSTALLATION AND USE

Preferred installation of a suspended magnet is over the trajectory of material discharged from a belt conveyor. This is referred to as Position 1 installation or "in-line".

If a trajectory well away from the belt is developed, this is the best way to utilize the full potential of the separator since the material being treated is moving directly toward the magnet face. Its momentum assists the separation of iron. At slower conveyor speeds, as the trajectory of the discharge material becomes nearly vertical, magnet position must be shifted back over the head pulley. At slow belt speeds a stainless steel head pulley may be required.

Installation with the separator over the moving bed of material before the discharge point of the conveyor is referred to as Position 2 mounting or "cross belt".

Position 2 mounting is not recommended where belt speeds are excessive.



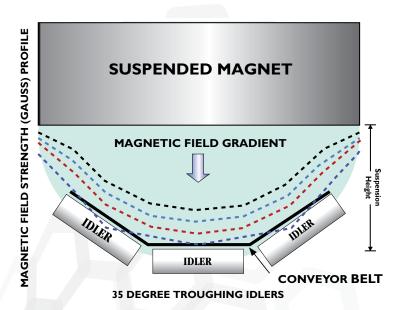
### FACTORS INFLUENCING TRAMP METAL COLLECTION

Belt Speed: As the belt speed increases, it becomes more difficult to remove ferrous components. Larger, stronger magnets may be required for faster belt speeds.

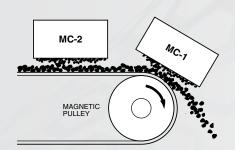
Burden Depth: As the burden depth on the conveyor belt increases, an increase in the magnetic field strength is needed to pull the tramp iron up through the deeper burden.

Ferrous Contaminant Size: Small pieces of tramp metal (i.e. 1/2" (13mm) hex nut, 1" (25mm) cube, etc.) may be extremely difficult to remove especially when they are covered by a heavy overburden of material, compared to large items like shovel teeth, rail spikes

Ferrous Contaminant Shape: Steel plate has a high surface area relative to its weight vs. a sphere which has the lowest surface area relative to its weight. Therefore, flat plates and rod shaped tramp metal are easier to remove than spherical or cube shaped tramp metal.

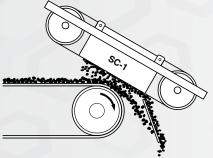


Typical magnetic field configuration of an electromagnet suspended over a conveyor belt. The magnetic field extends outward from the center of the magnet. The magnetic field is strongest at the center and diminishes towards the edges.



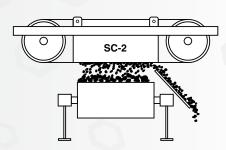
### Positions I and 2 (Manual-Cleaning/MC-I and MC-2)

This style unit consists of the magnet only. With manual-cleaning magnets, it is necessary to periodically remove the accumulated tramp iron either by hand picking or the optional mechanical stripper.



### Position I (Self-Cleaning/SC-I)

This unit consists of a short belt conveyor built around a magnet to provide selfcleaning. This unit is designed to be mounted in Position I, as illustrated, at the head end of a conveyor either over the trajectory of the discharged material or over the head pulley. It provides automatic removal of tramp iron in the direction of the main conveyor travel.



### Position 2 (Self-Cleaning/SC-2)

This style unit consists of Position I Self-Cleaning unit except the self-cleaning belt travels across the magnet face at right angles to the main conveyor, providing automatic tramp iron discharge perpendicular to the direction of the moving material burden. It is designed for mounting in Position 2, as illustrated, over a conveyor belt, picking table, vibrating screen etc.



### Model CP Series



#### PERMANENT SUSPENDED MAGNETS

### **FEATURES**

- Three models available
- Low operating cost
- Powerful, permanent magnet requires no power
- · Recommended suspension heights of 10" (250mm) or less
- Uninterrupted magnetic protection
- Simple installation
- 230V/480V input for drive
- · Hydraulic drive otions available for portable systems
- Turnbuckle suspension required for mounting (sold optionally)

Suspended Magnetic Separators are designed for applications where ferrous contaminants are to be removed from bulk products - either on a moving conveyor belt or chute.

The CP series utilizes a permanent magnet circuit to provide a continuous and uniform magnetic field across the feed belt to optimize separation efficiency of damaging tramp iron. The self-cleaning feature supplied with the unit provides for automatic removal of accumulated tramp metal.





### SP Series 6000

### PERMANENT SUSPENDED MAGNETS

### **FEATURES**

- No operating cost
- · No electrical maintenance
- No costly shutdowns
- Simple installation
- Uninterrupted magnetic protection

Suspended Magnetic separators have proven to be the most effective way to remove unwanted iron from heavy burdens of material being conveyed on fast moving belts. They are ideal for applications on wet or dry, fine or coarse materials, large or small tonnages. Previously, only electromagnets could deliver the highest level of performance. Now, this performance is available to you in new compact, lighter, permanent magnetic assemblies that require no power source and virtually maintenance free.

The circuit assures a deep-reaching field to grasp the most elusive tramp iron from fast moving belts. Field shaping principles permit these magnets to solve many specific and difficult problems. Permanent magnets designed even a few short years ago do not begin to share the performance standards of this line.

The uniquely designed magnetic circuit is long and flat, providing a greater area of magnetic coverage with a maximum depth of field and with less head room required than with an electromagnet. Operating advantages are many: the possibility of accidental shutdown and shutdown due to power failure is eliminated, and strength never varies. The unit operates at peak efficiency at all times because no heat is generated. Elevated temperatures in the 100° to 200°F (38° to 93°C) range have virtually no effect on these separators.

#### **OPTIONS**

- Drawer-type stripper for easy cleaning (manual-clean units only)
- Self-cleaning
- · Steel dust enclosures for magnet installation in dusty locations
- · Hazardous-duty motors
- Static-conducting belts
- Zero-speed switches
- · Special belts for abrasive, hot or difficult applications
- · Foundry package option—includes heavy duty belt, frame, bearings, shafts, and oversized drive







### STANDARD SIZES

	Model	Width Inches (mm)
	6112	12 (305)
SP-6100	6116	16 (406)
5" H x 13" L	6118	18 (457)
(127mm H x 330mm L)	6120	20 (508)
	6124	24 (610)
	6216	16 (406)
	6218	18 (457)
SP-6200	6220	20 (508)
7" H x 17" L (178mm H x 432 mm L)	6224	24 (610)
	6230	30 (762)
	6236	36 (914)
	6318	18 (457)
	6324	24 (610)
SP-6300 10" H x 24" L	6330	30 (762)
(254mm H x 610mm L)	6336	36 (914)
	6342	42 (1067)
	6348	48 (1219)
	6424	24 (610)
	6430	30 (762)
SP-6400 12" H x 32" L	6436	36 (914)
(305mm H x 813mm L)	6442	42 (1067)
	6448	48 (1219)
	6454	54 (1372)
	6530	30 (762)
	6536	36 (914)
SP-6500	6542	42 (1067)
15" H x 39" L (381mm H x 991mm L)	6548	48 (1219)
	6554	54 (1372)
	6560	60 (1524)



### SE Series 7000

### SUSPENDED ELECTROMAGNETS



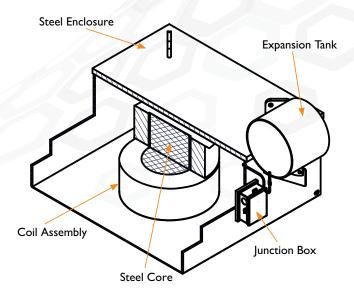
### FEATURES

- Aluminum coils use Nomex insulation and fiberglass spacers for extended coil life
- · Extremely tough manganese steel bottom plate to prevent cracks/leaks
- · Adjustable oil expansion tank design for any installation angle is mounted with slotted brackets, allowing the user to rotate the tank so the moisture drain is always on the low side
- · Five-year warranty on coil assembly
- Magnets require 115VDC (or 230 VDC) from **Rectifier Control (sold separately)**



Eriez Suspended Electromagnets (SE) are designed to generate the necessary magnetic force to extract large ferrous objects from deep material burden depths. These magnets extract everything from front-end loader bucket teeth to sections of railroad tracks and more.

Each magnet is designed to produce a magnetic field capable of attracting tramp iron from trough conveyors based on belt width, belt speed, type of material and expected burden depth. These SEs wrap insulated wire coils around a solid steel core, topped with a steel backbar enclosed in a steel enclosure to create a specific magnetic circuit profile.

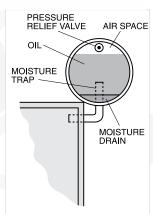


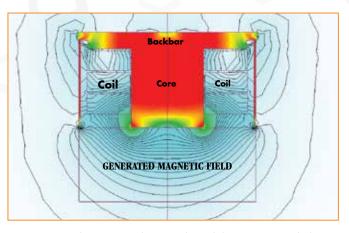


### EXTERNAL OIL EXPANSION TANK

This unique feature helps prevent coil burnout on thousands of Eriez oil-cooled electromagnets.

Heat and moisture, the greatest enemies of electromagnets, are effectively controlled by the expansion tank which assures that the coils are always fully immersed in cooling oil. Competitive units provide air space within the magnet housing where damaging condensation forms when moist air seeps in through the pressure relief valve as the magnet cools. Eriez' expansion tank traps this moisture and keeps it out of the magnet.





Finite element analysis and modeling a suspended electromagnet's magnetic field.

# SE Series 7000 Suspended electromagnets

### STANDARD SIZES

DANI	JOIL	LO	
Models		Box	
SC-1	SC-2	Dimensions inches (mm)	Watts
7110	7120	24 x 24 x 13 (610 x 610 x 330)	1646
7115	7125	30 x 30 x 14 (762 x 762 x 356)	2400
7210	7220	30 x 30 x 17 (762 x 762 x 432)	2657
7215	7225	36 x 36 x 18 (914 x 914 x 457)	3600
7310	7320	36 x 36 x 20 (914 x 914 x 508)	3806
7313	7323	42 x 42 x 20 (1067 x 1067 x 508)	4800
7315	7325	42 x 42 x 21 (1067 x 1067 x 533)	4920
7318	7328	42 x 42 x 22 (1067 x 1067 x 559)	5040
7412	7422	48 x 48 x 22 (1219 x 1219 x 559)	6171
7415	7425	48 x 48 x 23 (1219 x 1219 x 584)	6308
7510	7520	48 x 48 x 25 (1219 x 1219 x 635)	6583
7515	7525	54 x 54 x 25 (1372 x 1372 x 635)	7868
7610	7620	54 x 54 x 27 (1372 x 1372 x 686)	8177
7615	7625	60 x 60 x 27 (1524 x 1524 x 686)	9600
7710	7720	60 x 60 x 29 (1524 x 1524 x 737)	9943
7712	7722	60 x 60 x 30 (1524 x 1524 x 762)	10144
7715	7725	66 x 66 x 31 (1676 x 1676 x 787)	11880
7717	7727	66 x 66 x 32 (1676 x 1676 x 813)	12069
7810A	7820A	66 x 66 x 33 (1676 x 1676 x 838)	12257
7815A	7825A	72 x 72 x 35 (1829 x 1829 x 889)	14400
7910A	7920A	72 x 72 x 37 (1829 x 1829 x 940)	14811
7915A	7925A	78 x 78 x 39 (1981 x 1981 x 991)	17160
7918A	7928A	84 x 84 x 40 (2134 x 2134 x 1016)	19000
	Models  SC-1  7110  7115  7210  7215  7310  7313  7315  7318  7412  7415  7510  7515  7610  7615  7710  7712  7715  7717  7810A  7815A  7910A	Models           SC-1         SC-2           7110         7120           7115         7125           7210         7220           7215         7225           7310         7320           7313         7323           7318         7328           7412         7422           7415         7425           7510         7520           7515         7525           7610         7620           7615         7625           7710         7720           7712         7725           7717         7727           7810A         7820A           7915A         7925A	Box Dimensions inches (mm)           7110         7120         24 x 24 x 13 (610 x 610 x 330)           7115         7125         30 x 30 x 14 (762 x 762 x 356)           7210         7220         30 x 30 x 17 (762 x 762 x 432)           7215         7225         36 x 36 x 18 (914 x 914 x 914 x 457)           7310         7320         36 x 36 x 20 (914 x 914 x 508)           7313         7323         42 x 42 x 20 (1067 x 1067 x 508)           7315         7325         42 x 42 x 21 (1067 x 1067 x 533)           7318         7328         42 x 42 x 22 (1067 x 1067 x 559)           7412         7422         48 x 48 x 23 (1219 x 1219 x 559)           7415         7425         48 x 48 x 23 (1219 x 1219 x 584)           7510         7520         48 x 48 x 25 (1372 x 1372 x 635)           7610         7620         54 x 54 x 25 (1372 x 1372 x 635)           7610         7620         54 x 54 x 27 (1372 x 1372 x 636)           7615         7625         60 x 60 x 27 (1524 x 1524 x 737)           7712         7720         60 x 60 x 29 (1524 x 1524 x 762)           7715         7725         66 x 66 x 31 (1676 x 1676 x 813)           7810A         7820A         66 x 66 x 33 (1676 x 1676 x 813)           7810A         7825A<

### **MANUAL-CLEAN**



### **SELF-CLEAN**







### SE Series 2400



#### CHUTE AND SUSPENDED ELECTROMAGNETS

### **FEATURES**

- · Oil cooling of coils spaced for maximum coolant circulation provides increased efficiency and better heat transfer.
- · Aluminum coils are 30% lighter in weight than comparable copper-coil magnets.
- Oil expansion chamber with pressure relief valve eliminates moisture entering the coil cavity.
- · Eriez electromagnets operate on direct current only. When DC is not available, silicon diode-type solid state rectifiers can be supplied.
- · Furnished ready for installation and electrical hook-up to a 230V DC power source.

To meet the special needs of sugar cane processors, rendering plants and others who convey large volumes of material on wide, flat belts or chutes, Eriez developed the SE2400. This electromagnetic separator has a wide magnetic field that spreads deeply and evenly across its width. Drop-off at the edges is considerably less than in standard electromagnets. Protection against damaging tramp iron can be extended right to the edge of the conveyor without the need to purchase an oversized magnet.

### The wide-field magnet is available in two styles: suspended or chute.

The **suspended** separator can be equipped with turnbuckle suspension gear for ease of installation and adjustment to the most efficient operating height over wide at belts or flat feeders. Support legs are provided on the chute magnets for installation in the underside of chutes, and a special step on the magnet faceplate is used to maintain unrestricted material flow and prevent accumulated tramp iron from being forced off.

Double-gap three-pole construction, proved in hundreds of successful standard magnet installations throughout the world is combined with a center pole and rectangular core to give the SE2400 its unique capability. The powerful magnetic field reaches out and attracts tramp iron up to 24 inches (610 mm) away from the magnet face.



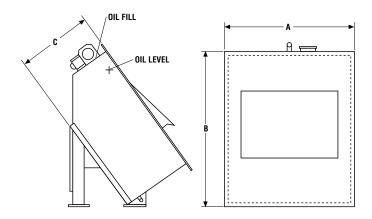
A stainless steel wearplate covers the face of the Eriez chute magnet. Tramp iron collects in the recess below the step so material flow is unimpeded. Installed in chutes inclined up to 60°, these powerful magnets protect valuable machinery by trapping and holding nuts, bolts, knife blades, cutting teeth and other ferrous trash present in products traveling down an angled chute.

The standard **chute** separator is equipped with support legs designed for installation in a 50° chute as shown, but can be easily modified for greater or lesser slopes as required. An access door built into the chute-work below the magnet is necessary for the periodic removal of accumulated tramp iron. The cooling oil fill and drain connections are readily accessible with the magnet in position.

# SE Series 2400

### CHUTE AND SUSPENDED ELECTROMAGNETS

### **Dimensions**



Magne	Magnet Width Flai		Width A)	Flange Length (B)		Height (C)		Watts	Weight		
in	mm	in	mm	in	mm	in	mm		lb	kg	
14	356	19	483	29	737	18	457	1,315	650	295	
18	457	22-1/4	565	38	965	17	432	1,750	925	420	
24	610	28-1/4	718	50	1,270	26-1/2	673	3,850	2,600	1,179	
30	762	34-1/4	870	50	1,270	26-1/2	673	4,300	4,600	2,086	
36	914	41-1/4	1,048	56	1,422	26-3/4	679	5,300	5,000	2,268	
42	1,067	47-1/2	1,206	56-1/2	1,435	26-3/4	679	6,150	5,500	2,495	
60	1,524	64	1,626	68	1,727	32	813	8,650	11,635	5,277	
72	1,829	76	1,930	68	1,727	32	813	10,600	13,555	6,148	
78	1,981	82	2,083	68	1,727	32	813	11,250	14,600	6,622	
84	2,134	88	2,235	68	1,727	32	813	12,000	15,875	7,201	
96	2,438	100	2,540	68	1,727	32	813	13,000	18,895	8,571	
108	2,743	112	2,845	68	1,727	32	813	14,650	21,025	9,537	

# Model SER



### SUSPENDED ELECTROMAGNETS

### **FEATURES**

- · Conveyor widths from 84" (2134mm) to 150" (3810mm)
- Manual- or Self-Cleaning Models
- Belts speed up to 1100 ft./min.

Eriez' SER series of large rectangular core suspended electromagnets are specifically engineered for 84" (2134mm) to 150" (3810mm) wide conveyor belts and feeders used to remove large, unwanted tramp metal objects in hard rock and coal mining applications. These magnets use similar technology found in the very successful 7000 Series.

The two most critical factors in sizing a suspended electromagnet are the width of the conveyor and the burden depth of the material being conveyed. The magnetic field must penetrate the burden depth as well as provide complete coverage across the width of the conveyor.

The SER series rectangular electromagnetic circuit provides cross-belt coverage of up to 150" (3810mm) while generating a powerful magnetic field capable of penetrating deep burdens on fast moving conveyor commonly found in today's most productive mines.





### **Dimensions**

Magnet Size	Inches (mm)	Conveyor Width	Suspension		Weight lbs (kg)			
Width	Length	Inches (mm)	Height Inches (mm)	Power (kW)	Manual Clean	Self-Cleaning		
90 (2286)	90 (2286)	72 - 84 (1829 - 2134)	26 (660)	18,000	47,000 (21,319)	52,000 (23,587)		
96 (2438)	90 (2286)	84 - 90 (2134 - 2286)	28 (711)	21,000	50,300 (22,816)	55,600 (25,220)		
102 (2591)	96 (2438)	90 - 96 (2286 - 2438)	30 (762)	23,900	56,800 (25,764)	62,800 (28,486)		
108 (2743)	96 (2438)	96 - 102 (2438 - 2591)	32 (813)	25,300	60,200 (27,306)	66,600 (30,209)		
114 (2896)	96 (2438)	96 - 108 (2438 - 2743)	34 (864)	26,700	63,500 (28,803)	70,400 (31,933)		
120 (3048)	96 (2438)	108 (2743)	36 (914)	28,100	66,800 (30,300)	74,200 (33,657)		
132 (3353)	102 (2591)	120 (3048)	38 (965)	32,800	78,000 (35,380)	86,600 (39,281)		
150 (3810)	112 (2845)	120 - 150 (3048 - 3810)	40 (1016)	41,100	118,000 (53,524)	131,000 (59,421)		

## Air Cooled for Hazardous Locations

HAZARDOUS-DUTY SUSPENDED ELECTROMAGNETS

### **FEATURES**

- UL-listed and CSA-approved for service in Class I, Division I, Groups C & D and Class II, Division I, Groups E, F, & G (Series 700 U)
- · Mill Mutual accepted for all grain dust locations
- MSHA certified for unrestricted use in hazardous gassy or dusty locations (Series 700 M)
- 68°F (20°C) cooler operating temperature than standard electromagnets reduces loss of magnetic strength from heat buildup, eliminates danger of igniting combustibles in the environment (Series 700)
- Special static-conducting self-cleaning belt eliminates sparking from static electricity.
- Completely dry construction, no combustible or environment-contaminating coolants required

### SERIES 700 U/M HAZARDOUS LOCATION AND SERIES 800 AIR COOLED **SEPARATORS**

To meet the high safety standards for operation in hazardous gassy or dusty locations without sacrificing performance, Eriez has developed this series of "dry" electromagnets. The Series 700U and 700M hazardous location, and Series 800 air cooled magnets provide the traditional quality, performance, reliability and value of Eriez electromagnets with added features to increase safety, productivity and profitability.

With these electromagnets, you get automatic, positive removal of tramp iron from large quantities of material on fast-moving conveyors and unparalleled protection against fires or explosions.



### CIRCUIT DESIGN

These dry, non-oil filled electromagnets employ a circuit scientifically balanced to make full use of the magnet's high permeability steel members for most efficient magnetic field distribution. This circuit produces maximum force density at a selected working distance from the magnet face. Combined with the application know-how available from Eriez' experienced magnetics engineers, this circuit assures optimum tramp iron separation.

Eriez air-cooled suspended electromagnet greatly reduced power consumption (up to 60 percent in some sizes) as compared to oil-cooled models. They use a smaller, less expensive rectifier to convert normal plant alternating current into the required direct current. Since they require no oil or other coolant fluids they eliminate possible leaks and the replacement of expensive fluids. The air-cooled magnets are on the average 13% lighter than oilcooled models, reducing shipping costs.

### CONSTRUCTION

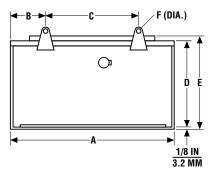
The magnets generate minimal heat and maximize heat transfer to outside convecting surfaces, eliminating the need for coolant fluid and an expansion tank. This is accomplished through the effective use of solid materials which heat transfer entirely by conduction. The steel case is seam-welded throughout, resulting in a structure that is dust-tight and explosion-proof by applicable standards of the approving agencies.

The Eriez air-cooled separators are available in magnet widths from 24 to 66 inches (610 to 1676mm) in two-inch (51mm) or three-inch (76mm) increments. Both the manual and selfcleaning units feature magnet end poles made of heavy steel plate and a heavy manganese steel bottom plate. A dust ignitionproof junction box is standard. Self-cleaning units also have an explosion-proof motor and static conducting belts.



## Series 700 U/M

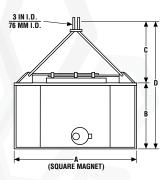
**Manual-Cleaning Dimensions** 



Model		A	В	C	D	E	F	W	eight
705.11	in	36	9	18	21-1/2	23-1/8	5/8	lb	2485
735 U	mm	914	229	457	546	587	16	kg	1128
745 11	in	42	9	21	21-3/4	23-3/8	5/8	lb	3675
745 U	mm	1067	229	610	552	594	16	kg	1665
755 U	in	48	9-1/2	29	22	24-1/8	7/8	lb	5100
755 U	mm	1219	241	737	559	613	22	kg	2310
705 11	in	54	9-1/2	35	22	24-5/8	7/8	lb	6610
765 U	mm	1372	241	889	559	625	22	kg	2994

# Series 800

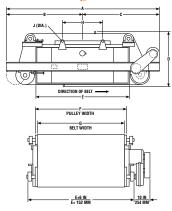
**Manual-Cleaning Dimensions** 



Model		A	В	C	D	W	eight	Watts	Volts	
	in	24	14	17-1/2	31-1/2	lb	490			
D810	mm	610	356	445	800	kg	22	860	115	
	in	27	16	19-3/4	35-3/4	lb	625			
D815	mm	686	406	502	908	kg	283	960	115	
_	in	30	17-1/2	21-3/4	39-1/4	lb	945			
D820	mm	762	445	552	997	kg	429	1200	115	
	in	33	18-3/4	22-1/2	41-1/4	lb	1215			
D825	mm	838	476	572	1048	kg	551	1450	115	
	in	36	20-1/4	24-1/2	44-1/4	lb	1475			
D830	mm	914	514	662	1036	kg	669	1680	115	
D.000	in	38	21-1/4	26	47-1/2	lb	1875	4000		
D832	mm	965	540	660	1200	kg	850	1900	115	
Door	in	40	22	27-1/2	49-3/4	lb	2225	2150	115	
D835	mm	1016	559	699	1258	kg	1009	2150	115	
D837	in	42	22-3/4	29	51-1/4	lb	2585	2450	115	
D037	mm	1067	578	737	1315	kg	1173	2450	115	
D843	in	44	23-3/4	31	55-1/4	lb	3190	2800	115	
D043	mm	1118	603	800	1403	kg	1447	2000	110	
D845	in	46	24-3/4	33	57-3/4	lb	3595	3000	115	
D043	mm	1168	629	838	1467	kg	1631	3000	115	
D850	in	48	25-3/4	34	59-3/4	lb	4175	3370	230	
	mm	1219	654	864	1518	kg	1894	0070	200	
D855	in	51	27	36	63	lb	5065	3630	230	
	mm	1295	686	914	1600	kg	2297	0000	200	
D860	in	54	28-1/2	38-1/2	67	lb	5915	4040	230	
	mm	1372	724	978	1702	kg	2683			
D865	in	56	29-1/4	40	69-1/4	lb	6480	4300	230	
	mm	1422	743	1016	1760	kg 	2939			
D870	in	60	31-1/4	43	74-1/4	lb	7640	4550	230	
	mm	1524	794	1092	1886	kg	3465			
D875	in	63	32-1/4	45	77-1/4	lb	9335	5355	230	
2070	mm	1600	819	1173	1962	kg	4234	0000	230	
D880	in	66	33-3/4	47	80-3/4	lb	11625	6000	230	
	mm	1676	857	1194	2051	kg	5273	0000	230	

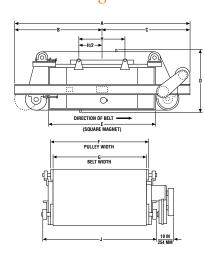
## Series 700 U/M

### **Self-Cleaning Dimensions**



Model		A	В	C	D	E	F	G	Н	ı	Motor		Weight	
	in	80	37	43	31	36	32	30	18	5/8	hp	2	lb	3190
735 U-SC	mm	2032	940	1092	787	914	813	762	457	16	kw	1.54	kg	1445
745 11 00	in	87	40	47	32	42	38	36	24	5/8	hp	3	lb	4420
745 U-SC	mm	2210	1016	1194	813	1067	965	914	610	16	kw	2.31	kg	2002
755 11 00	in	93	43	50	32-1/4	48	44	42	29	7/8	hp	5	lb	6000
755 U-SC	mm	2362	1092	1270	819	1219	1118	1067	737	22	kw	3.85	kg	2718
	in	99	46	53	32-1/4	54	51	48	35	7/8	hp	5	lb	7680
765 U-SC	mm	2515	1168	1346	819	1372	1295	1219	889	22	kw	3.85	kg	3479

### Series 800 **Self-Cleaning Dimensions**



0]	PT	10	NS

- Self-cleaning
- Zero-speed switch
- Dust hoods
- Surge suppression devices
- Mounting suspension gear

Model		A	В	C	D	Е	F	G	Н	1	Mo	otor	W	eight	Watts	Volts
	in	80	36	44	21-1/2	24	20	18	18	30	hp	3/4	lb	790		
D810	mm	2032	914	1118	546	610	508	457	457	762	kw	.56	kg	358	860	115
D01F	in	83	37-1/2	45-1/2	21-1/2	27	26	24	21	36	hp	1	lb	975	000	115
D815	mm	2108	953	1156	546	686	660	610	533	914	kw	.75	kg	442	960	115
	in	86	39	47	23-1/2	30	26	24	24	36	hp	1	lb	1335	4000	445
D820	mm	2184	991	1194	597	762	660	610	610	914	kw	.75	kg	606	1200	115
Door	in	76	35-1/2	40-1/2	29-1/4	33	32	30	18	42	hp	1-1/2	lb	1765	1/150	115
D825	mm	1930	902	1029	743	838	813	762	457	1067	kw	1.12	kg	801	1450	115
D	in	79	37	42	30-3/4	36	32	30	18	42	hp	1-1/2	lb	2055		
D830	mm	2007	940	1067	781	914	813	762	457	1067	kw	1.12	kg	392	1680	115
Dogo	in	81	38	43	31-3/4	38	32	30	20	44	hp	1-1/2	lb	2450	1900	115
D832	mm	2057	965	1092	806	965	813	762	508	1118	kw	1.12	kg	1111	1900	115
D835	in	83	39	44	32-1/2	40	38	36	22	48	hp	2	lb	2815	2150	1115
	mm	2108	991	1118	826	1016	965	914	559	1219	kw	1.49	kg	1277	2130	1113
D837	in	85	40	45	33-1/4	42	38	36	24	48	hp	2	lb	3190	2450	115
D037	mm	2159	1016	1143	845	1067	965	914	610	1219	kw	1.49	kg	1447	2430	115
D843	in	87	41	46	34-1/4	44	38	36	23	50	hp	2	lb	3810	2800	115
	mm	2210	1041	1168	870	1118	965	914	584	1270	kw	1.49	kg	1728	2000	113
D845	in	90	42	48	35-1/4	46	44	42	28	54	hp	3	lb	4255	3000	115
D010	mm	2286	1067	1219	895	1168	1118	1067	711	1372	kw	2.24	kg	1930	0000	113
D850	in	92	43	49	36-1/4	48	44	42	30	54	hp	3	lb	4835	3370	230
	mm	2337	1092	1245	921	1219	1118	1067	762	1372	kw	2.24	kg	2220	3370	230
D855	in	95	44-1/2	50-1/2	37-1/2	51	51	48	33	60	hp	3	lb	5920	3630	230
	mm	2413	1130	1283	952	1295	1295	1219	828	1524	kw	2.24	kg	2685	3030	200
D860	in	98	46	52	39	54	51	48	36	60	hp	5	lb	6915	4040	2320
D000	mm	2489	1168	1321	991	1372	1295	1219	914	1524	kw	3.73	kg	3137	4040	2320
	in	100	47	53	39-3/4	56	51	48	38	62	hp	5	lb	7480		
D865	mm	2540	1194	1346	1010	1422	1295	1219	965	1575	kw	3.73	kg	3393	4300	230
	in	104	49	55	41-3/4	60	57	54	42	66	hp	5	lb	8640		
D870	mm	2642	1245	1397	1060	1542	1448	1372	1067	1676	kw	3.73	kg	3919	4550	230
	in	107	50-1/2	56-1/2	42-3/4	62	63	60	45	72	hp	5	lb	10435	5355	
D875	mm	2718	1283	1435	1086	1600	1600	1524	1143	1829	kw	3.73	kg	4733		230
Doon	in	110	52	58	44-1/4	66	63	60	48	72	hp	5	lb	12825	6000	230
D880	mm	2794	1321	1473	1124	1676	1600	1524	1219	1829	kw	3.73	kg	5817	6000	230

# Accessories



# Magnet Load Monitor - series fs

### FEATURES

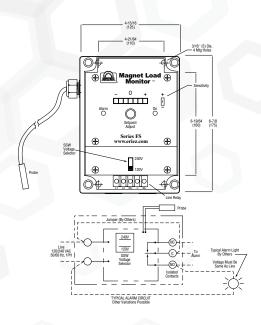
- Automatic monitoring optimizes system performance on most suspended electromagnets
- · Electronic zeroing capability, easy installation and set-up
- · Adjustable set-point, customize to unique applications
- Microprocessor control designed exclusively by Eriez
- NEMA 4X control panel
- LED display
- 25 ft. sensor cable with mounting plate standard
- For suspended electromagnets only

Protect the integrity of your magnetic separation system by monitoring ferrous loading on electromagnets.

The Series FS Magnet Load Monitor patrols the magnetic field for accumulation of ferrous contamination. As ferrous material accumulates on a manual-cleaning suspended electromagnet face, it shunts the magnet field, reduces separation efficiency and could plow good product off the conveyor belt.

The Magnet Load Monitor senses ferrous material build-up and alerts the operator when accumulations reach an operatorpredetermined level. The magnet can then be cleaned to improve separation performance.





# DC Power Supplies

### FEATURES

- Normal convection cooled
- Full wave bridge circuit with avalanche characteristics
- Fused AC switch







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