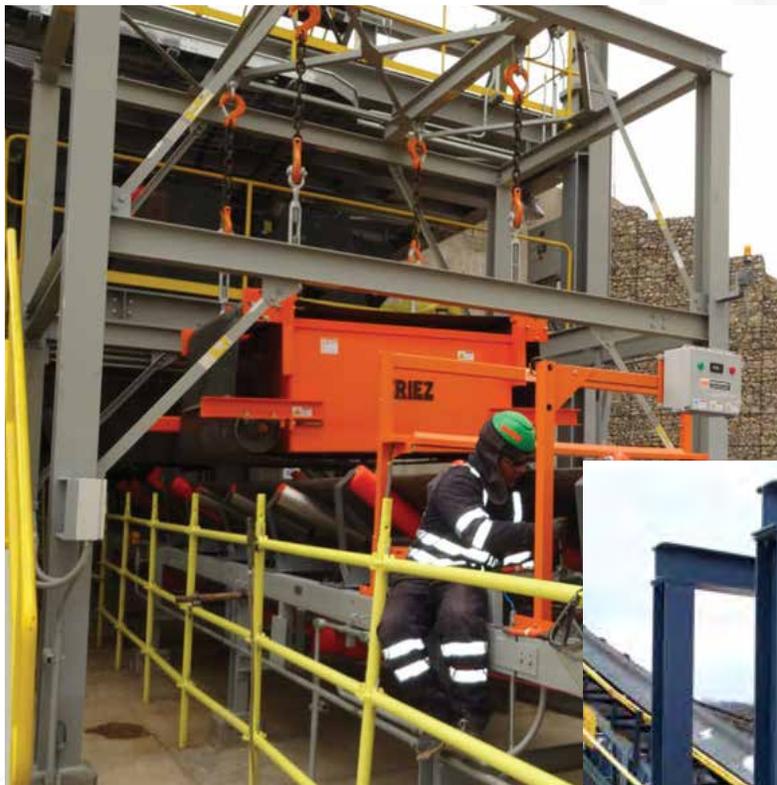


SB-305M

# Suspended Magnets

REMOVE TRAMP METALS FROM CONVEYED MATERIAL





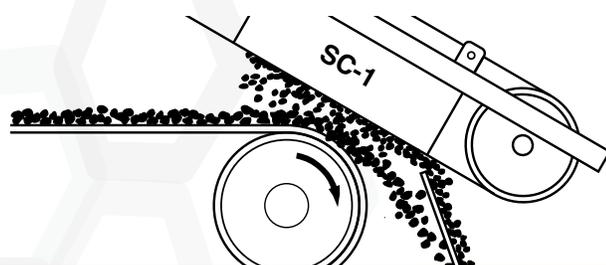
*Suspended magnets play an important role removing dangerous tramp or rogue metal from conveyed materials.*

*These images are two examples of manual-clean magnets pulling unwanted metals out of conveyed products.*



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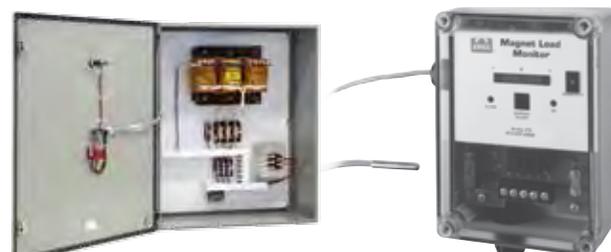
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# Magnets

## TYPES, 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, multi-dimensional 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.

### 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.



Suspended Permanent Magnet – Manual-Clean



Suspended Electromagnet – Self-Clean

### 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 more nearly vertical, magnet position must be shifted back more nearly 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.

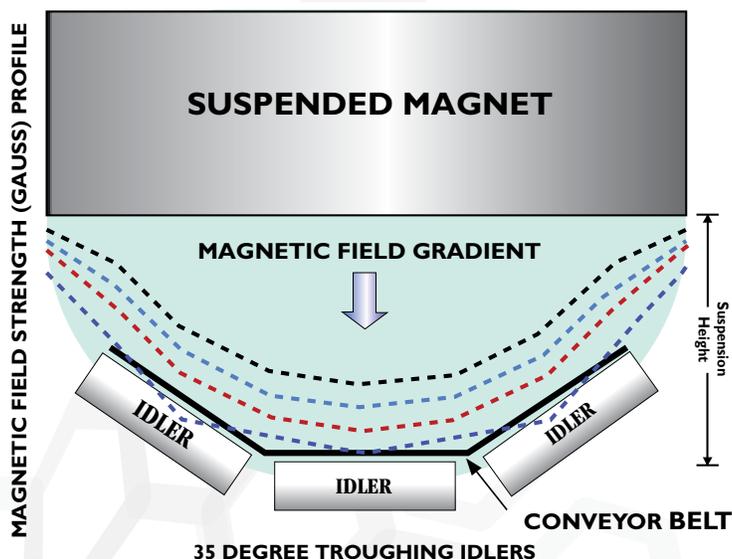
## FACTORS INFLUENCING TRAMP METAL COLLECTION

**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.

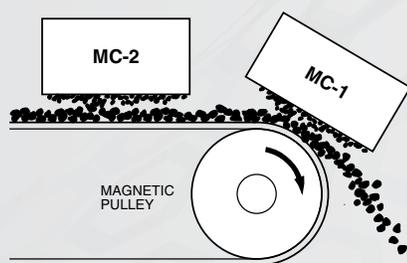
**Burden Depth:** As the burden depth on the conveyor belt increases, an increase in the magnetic field strength is needed to pull the tramp iron up through the deeper burden.

**Ferrous Contaminant Size:** Small pieces of tramp metal (i.e. 1/2" hex nut, 1" 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 or rebar.

**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.

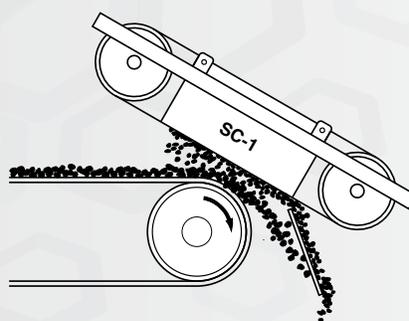


*Typical magnetic field configuration of an electromagnet suspended over a conveyor belt. The magnetic field extends outward from the center of the magnet. The magnetic field is strongest at the center and diminishes towards the edges.*



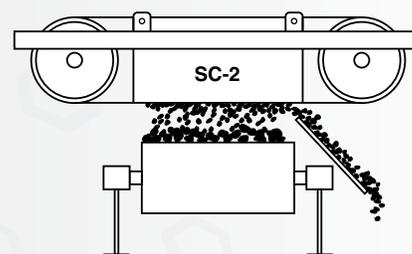
### Positions 1 and 2 (Manual-Cleaning/MC-1 and MC-2)

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 1 (Self-Cleaning/SC-1)

This unit consists of a short belt conveyor built around a magnet to provide self-cleaning. This unit is designed to be mounted in Position 1, 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 1 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.



*Permanent Suspended Magnets*

# Model CP Series

## PERMANENT SUSPENDED MAGNETS

### FEATURES

- Three models available
- Low operating cost
- Powerful, permanent magnet requires no power
- Recommended suspension heights of 10" (250 mm) or less
- Uninterrupted magnetic protection
- Simple installation
- 230V/480V input for drive
- Hydraulic drive options 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.



Item	Dimensions (in inches)					Weight		Part No.
	A	B	C	D	E	lbs	Kg	
X CP 20/80R	43-5/16	15-5/8	84-5/8	32-7/8	20.7	2,000	907	468337E
X CP 20/100	43-5/16	15-5/8	84-5/8	41-1/2	20.7	2,158	979	468690
X CP 20/120	43-5/16	15-5/8	94.5	50	20.7	2,579	1,170	468691
3/4" x 12 Jaw Turnbuckles	NA					8/ each	3.6/ each	239037

X Available in EriezXpress / Quick Ship Program. Contact us for details.

# 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



## MANUAL-CLEANING STRIPPER PLATE



## STANDARD SIZES

	Model	Width
SP-6100 5"H x 13"L	6112	12"
	6116	16"
	6118	18"
	6120	20"
	6124	24"
SP-6200 7"H x 17"L	6216	16"
	6218	18"
	6220	20"
	6224	24"
	6230	30"
	6236	36"
SP-6300 10"H x 24"L	6318	18"
	6324	24"
	6330	30"
	6336	36"
	6342	42"
	6348	48"
SP-6400 12"H x 32"L	6424	24"
	6430	30"
	6436	36"
	6442	42"
	6448	48"
	6454	54"
SP-6500 15"H x 39"L	6530	30"
	6536	36"
	6542	42"
	6548	48"
	6554	54"
	6560	60"



Item	Dimensions (in inches)			Weight		Part No.
	A	B	C	Lbs	Kg	
SP6330	30	10	24	1,305	592	125530E

Available in EriezXpress / Quick Ship Program. Contact us for details.



*For many years Eriez has provided oil-cooled electromagnets for heavy duty tramp iron separation applications. The parabolic shape of the field produced by these magnets makes them ideal for deep penetration of heavy burden depths conveyed on troughed belts or concentrated in a narrow flow.*

# *Suspended Electromagnets*

# SE Series 7000

## SUSPENDED ELECTROMAGNETS



### FEATURES

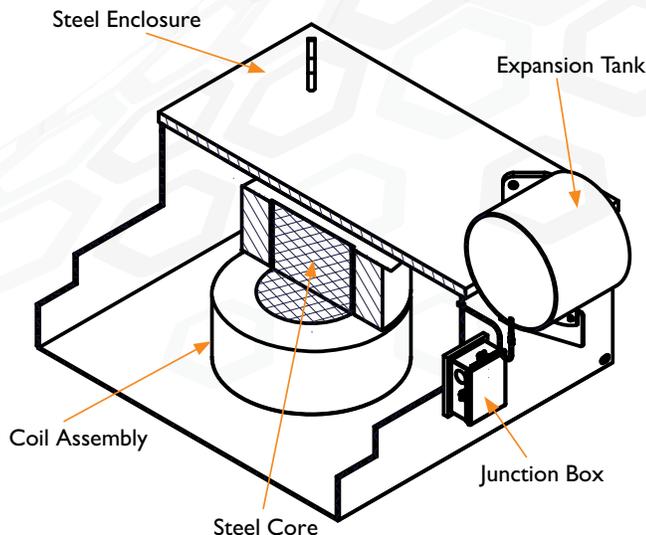
- Aluminum coils use Nomex insulation and fiberglass spacers for extended coil life
- Extremely tough manganese steel bottom plate to prevent cracks/leaks
- Adjustable oil expansion tank design for any installation angle is mounted with slotted brackets, allowing the user to rotate the tank so the moisture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



### MAGNET DESIGN

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.

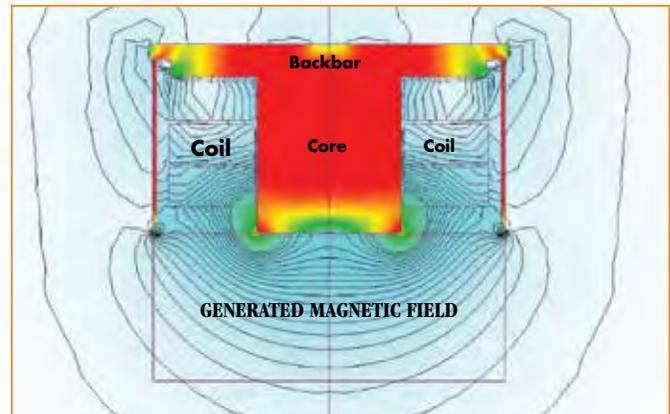
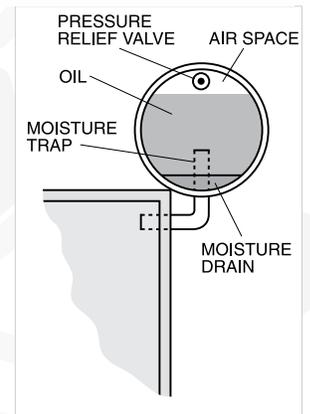
Each magnet is designed to produce a magnetic field capable of attracting tramp iron from trough conveyors based on belt width, belt speed, type of material and expected burden depth. These SEs wrap insulated wire coils around a solid steel core, topped with a steel backbar enclosed in a steel enclosure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

Models			Box Dimensions	Watts
MC	SC-1	SC-2		
7130	7110	7120	24x24x13	1646
7135	7115	7125	30x30x14	2400
7230	7210	7220	30x30x17	2657
7235	7215	7225	36x36x18	3600
7330	7310	7320	36x36x20	3806
7333	7313	7323	42x42x20	4800
7335	7315	7325	42x42x21	4920
7338	7318	7328	42x42x22	5040
7432	7412	7422	48x48x22	6171
7435	7415	7425	48x48x23	6308
7530	7510	7520	48x48x25	6583
7535	7515	7525	54x54x25	7868
7630	7610	7620	54x54x27	8177
7635	7615	7625	60x60x27	9600
7730	7710	7720	60x60x29	9943
7732	7712	7722	60x60x30	10144
7735	7715	7725	66x66x31	11880
7737	7717	7727	66x66x32	12069
7830	7810A	7820A	66x66x33	12257
7835	7815A	7825A	72x72x35	14400
7930	7910A	7920A	72x72x37	14811
7935	7915A	7925A	78x78x39	17160
7938	7918A	7928A	84x84x40	19000



Item	Box Dimensions (in.)			Weight		Control	Part No.
	A	B	C	lbs	Kg		
SE-7338	42	42	22	3,035	1,376	50C	136992E
SE-7535	54	54	25	5,800	2,631	10K	137000E

### 10-DAY ASSEMBLY

7635	60	60	27	9,020	4,091	10K	N/A
7735	66	66	31	12,420	5,633	12.5K	N/A
7835	72	72	35	16,950	7,688	15K	N/A
7935	78	78	39	23,300	10,568	20K	N/A

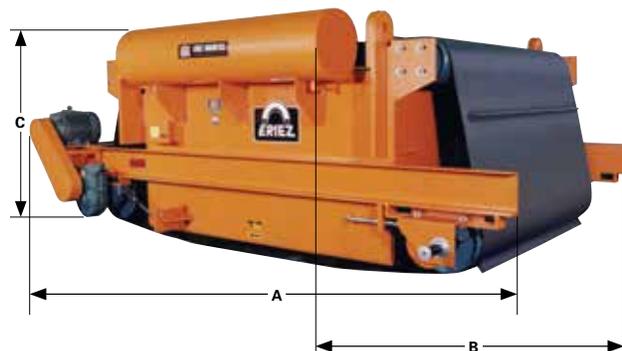
### MANUAL-CLEAN



### STOCK REQUIRES ASSEMBLY

Item	DC Volt.	Dimensions (in.)			Weight lbs	Belt Width	Susp. Height	Control	Part No.
		A	B	C					
SE-7328/7318	115	87-1/4	63-5/16	33-3/4	4,197	42"	13"	50C	163104
SE-7525/7515	115	99-1/4	78-3/8	39-1/4	7,448	54"	17"	10K	150687
SE-7625/7615	115	105-1/4	84-5/8	41-5/16	9,736	60"	19"	10K	150694
SE-7928/7918	230	133-1/4	120-5/8	58-5/8	30,085	84"	30"	20K	150753

### 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.

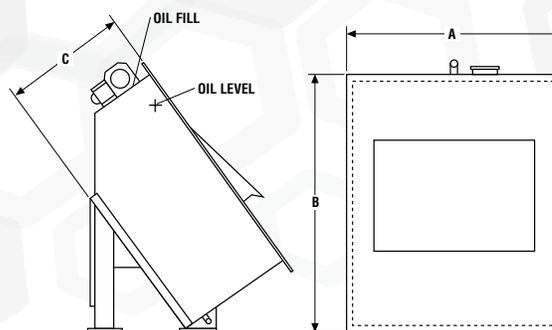


*Chute Magnet*

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.

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.

### Dimensions



**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.

Magnet Width		Flange 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 to 150 inches
- 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 to 150-inch 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-inches 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 (in.)		Conveyor Width (inches)	Suspension Height (inches)	Power (kW)	Weight (lbs)	
Width	Length				Manual Clean	Self-Cleaning
90	90	72 - 84	26	18,000	47,000	52,000
96	90	84 - 90	28	21,000	50,300	55,600
102	96	90 - 96	30	23,900	56,800	62,800
108	96	96 - 102	32	25,300	60,200	66,600
114	96	96 - 108	34	26,700	63,500	70,400
120	96	108	36	28,100	66,800	74,200
132	102	120	38	32,800	78,000	86,600
150	112	120 - 150	40	41,100	118,000	131,000

# Hollow Conductor

## SUSPENDED ELECTROMAGNETS

### FEATURES

- Flatter profile magnetic circuit provides for limited space applications
- More complete recovery of ferrous materials than conventional electromagnets in refuse/resource recovery operations

Advanced hollow conductor technology provides a dramatic increase in magnetic force over conventional air/oil-cooled magnets. These magnets run substantially cooler, allowing higher input energy, which increases magnetic strength by a factor of five in comparison to standard electromagnetic separators. The system consists of the magnet itself, heat exchanger, and power supply.

The magnet incorporates a series of liquid-cooled energizing coils which create an intense high gradient field through which the materials to be processed must pass maximizing separation efficiency.

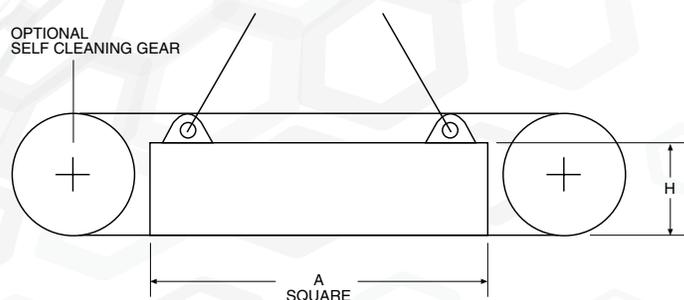
The hollow conductor suspended electromagnetic separators are constructed for maximum durability. The separator's steel case is seam-welded throughout, resulting in a dust-tight enclosure, and is available in both manual-cleaning and self-cleaning models.



Eight standard suspended electromagnetic models allow you to select the magnet ideally suited to your specific application. These models are cost efficient and will handle the automatic, positive removal of tramp iron from large quantities of material on fast-moving conveyors.

Other options available include: self-cleaning gear option; includes heavy-duty belt, frame, bearings, shafts and over-sized drive; explosion-proof motors; static-conducting belts; zero-speed switches; special belts for difficult, abrasive, or hot applications.

### Dimensions



Model	A Square		H		Weight		Power KW	Water	
	in	mm	in	mm	lbs	kg		gpm	lpm
HC-1	48	1220	12	305	3300	1500	37	7	27
HC-2	60	1524	15	381	5500	2500	53	7	27
HC-3	66	1676	18	457	8500	3900	57	11	42
HC-4	78	1981	21	533	13,600	6200	68	11	42
HC-5	84	2134	25	635	18,600	8460	69	11	42
HC-6	90	2186	28	711	24,200	11,000	80	11	42
HC-7	102	2591	31	787	33,600	15,200	83	11	42
HC-8	112	2845	35	889	46,000	20,900	92	15	57

# 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)
- 20°C (68°F) 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 oil-cooled models, reducing shipping costs.

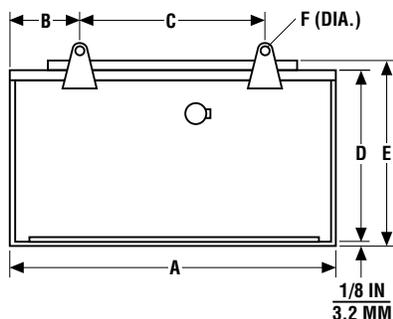
### CONSTRUCTION

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 1676 mm) in two-inch (51 mm) or three-inch (76 mm) increments. Both the manual and self-cleaning units feature magnet end poles made of heavy steel plate and a heavy manganese steel bottom plate. A dust ignition-proof junction box is standard. Self-cleaning units also have an explosion-proof motor and static conducting belts.

## Series 700 U/M

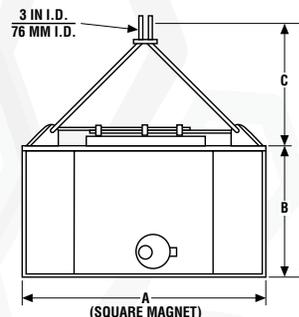
### Manual-Cleaning Dimensions



Model		A	B	C	D	E	F	Weight
735 U	in	36	9	18	21-1/2	23-1/8	5/8	lb 2485
	mm	914	229	457	546	587	16	kg 1128
745 U	in	42	9	21	21-3/4	23-3/8	5/8	lb 3675
	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
	mm	1219	241	737	559	613	22	kg 2310
765 U	in	54	9-1/2	35	22	24-5/8	7/8	lb 6610
	mm	1372	241	889	559	625	22	kg 2994

## Series 800

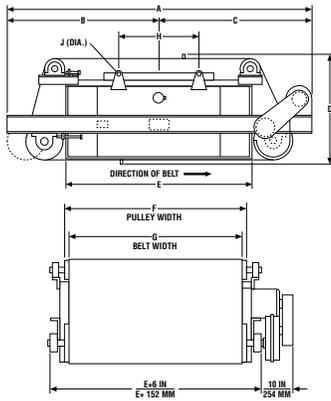
### Manual-Cleaning Dimensions



Model		A	B	C	D	Weight	Watts	Volts
D810	in	24	14	17-1/2	31-1/2	lb 490	860	115
	mm	610	356	445	800	kg 22		
D815	in	27	16	19-3/4	35-3/4	lb 625	960	115
	mm	686	406	502	908	kg 283		
D820	in	30	17-1/2	21-3/4	39-1/4	lb 945	1200	115
	mm	762	445	552	997	kg 429		
D825	in	33	18-3/4	22-1/2	41-1/4	lb 1215	1450	115
	mm	838	476	572	1048	kg 551		
D830	in	36	20-1/4	24-1/2	44-1/4	lb 1475	1680	115
	mm	914	514	662	1036	kg 669		
D832	in	38	21-1/4	26	47-1/2	lb 1875	1900	115
	mm	965	540	660	1200	kg 850		
D835	in	40	22	27-1/2	49-3/4	lb 2225	2150	115
	mm	1016	559	699	1258	kg 1009		
D837	in	42	22-3/4	29	51-1/4	lb 2585	2450	115
	mm	1067	578	737	1315	kg 1173		
D843	in	44	23-3/4	31	55-1/4	lb 3190	2800	115
	mm	1118	603	800	1403	kg 1447		
D845	in	46	24-3/4	33	57-3/4	lb 3595	3000	115
	mm	1168	629	838	1467	kg 1631		
D850	in	48	25-3/4	34	59-3/4	lb 4175	3370	230
	mm	1219	654	864	1518	kg 1894		
D855	in	51	27	36	63	lb 5065	3630	230
	mm	1295	686	914	1600	kg 2297		
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
	mm	1600	819	1173	1962	kg 4234		
D880	in	66	33-3/4	47	80-3/4	lb 11625	6000	230
	mm	1676	857	1194	2051	kg 5273		

# Series 700 U/M

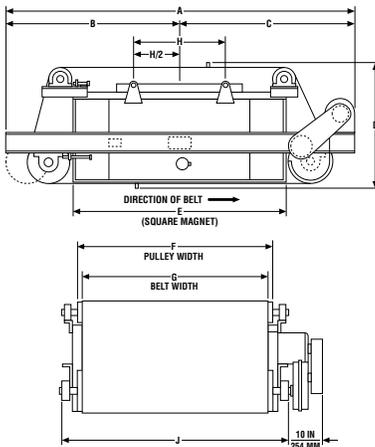
## Self-Cleaning Dimensions



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

# Series 800

## Self-Cleaning Dimensions



Model		A	B	C	D	E	F	G	H	I	Motor	Weight	Watts	Volts
D810	in	80	36	44	21-1/2	24	20	18	18	30	hp 3/4	lb 790	860	115
	mm	2032	914	1118	546	610	508	457	457	762	kw .56	kg 358		
D815	in	83	37-1/2	45-1/2	21-1/2	27	26	24	21	36	hp 1	lb 975	960	115
	mm	2108	953	1156	546	686	660	610	533	914	kw .75	kg 442		
D820	in	86	39	47	23-1/2	30	26	24	24	36	hp 1	lb 1335	1200	115
	mm	2184	991	1194	597	762	660	610	610	914	kw .75	kg 606		
D825	in	76	35-1/2	40-1/2	29-1/4	33	32	30	18	42	hp 1-1/2	lb 1765	1450	115
	mm	1930	902	1029	743	838	813	762	457	1067	kw 1.12	kg 801		
D830	in	79	37	42	30-3/4	36	32	30	18	42	hp 1-1/2	lb 2055	1680	115
	mm	2007	940	1067	781	914	813	762	457	1067	kw 1.12	kg 392		
D832	in	81	38	43	31-3/4	38	32	30	20	44	hp 1-1/2	lb 2450	1900	115
	mm	2057	965	1092	806	965	813	762	508	1118	kw 1.12	kg 1111		
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		
D837	in	85	40	45	33-1/4	42	38	36	24	48	hp 2	lb 3190	2450	115
	mm	2159	1016	1143	845	1067	965	914	610	1219	kw 1.49	kg 1447		
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		
D845	in	90	42	48	35-1/4	46	44	42	28	54	hp 3	lb 4255	3000	115
	mm	2286	1067	1219	895	1168	1118	1067	711	1372	kw 2.24	kg 1930		
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		
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		
D860	in	98	46	52	39	54	51	48	36	60	hp 5	lb 6915	4040	2320
	mm	2489	1168	1321	991	1372	1295	1219	914	1524	kw 3.73	kg 3137		
D865	in	100	47	53	39-3/4	56	51	48	38	62	hp 5	lb 7480	4300	230
	mm	2540	1194	1346	1010	1422	1295	1219	965	1575	kw 3.73	kg 3393		
D870	in	104	49	55	41-3/4	60	57	54	42	66	hp 5	lb 8640	4550	230
	mm	2642	1245	1397	1060	1542	1448	1372	1067	1676	kw 3.73	kg 3919		
D875	in	107	50-1/2	56-1/2	42-3/4	62	63	60	45	72	hp 5	lb 10435	5355	230
	mm	2718	1283	1435	1086	1600	1600	1524	1143	1829	kw 3.73	kg 4733		
D880	in	110	52	58	44-1/4	66	63	60	48	72	hp 5	lb 12825	6000	230
	mm	2794	1321	1473	1124	1676	1600	1524	1219	1829	kw 3.73	kg 5817		

## OPTIONS

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

# Accessories



## Magnet Load Monitor - SERIES FS

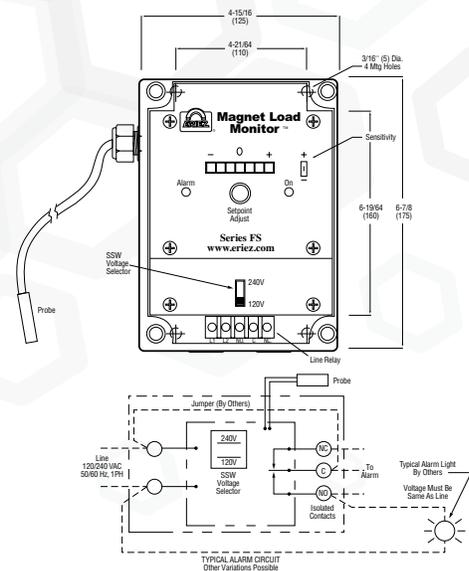
### FEATURES

- 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 operator-predetermined 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





## WORLD AUTHORITY IN SEPARATION TECHNOLOGIES



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