

MB-2300E

Electro-Lift Magnets

MAKE QUICK WORK OF DIFFICULT, TIME-CONSUMING STEEL HANDLING



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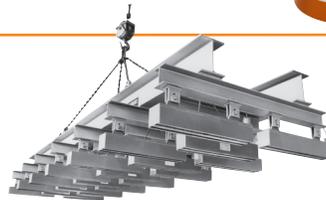
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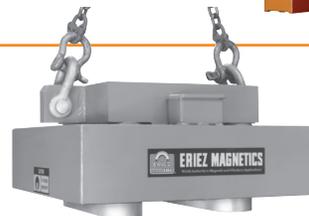
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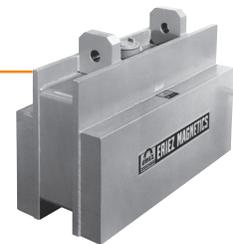
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Lifting Magnets

COMPLETE LINE



Lift, move or position regardless of size, weight or shape — in fewer man hours — reliably and economically. Lifting magnets make quick work of difficult, time-consuming steel handling. Magnets possess a unique property of attraction which can be harnessed to ease and speed one's work. The payoff is an immediate improvement in efficiency and operating economy. Magnets lift and transfer steel and iron without slings, hooks or cables — and without marring the surface. They require fewer operators and helpers, and when properly installed and operated, provide greater safety than many other mechanical material handling devices.

FEATURES & BENEFITS

Electric Lift Magnets

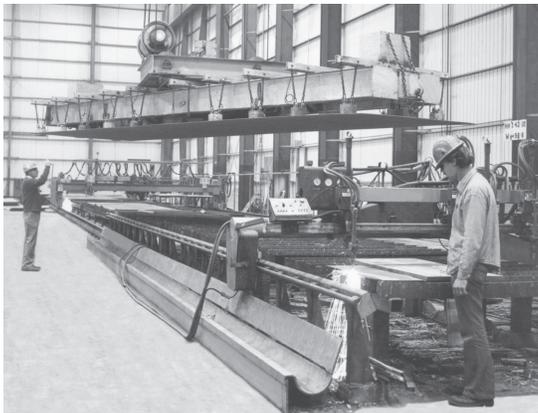
- Available in capacities up to 59,000 lbs (26,761 kgs)
- Wide range of models to lift various shapes and sizes

Lift Systems

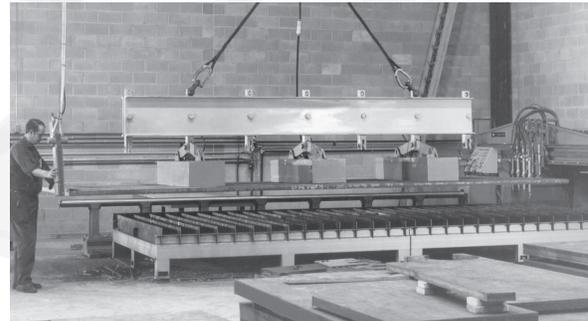
- Complete systems available, including lift beams with multiple magnets and controls



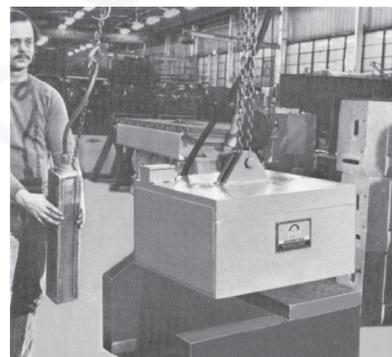
Eriez Bi-Polar Magnets, with a wide range of optional pole-plate configurations, are ideally suited for handling pipe, rounds, bundles, angles and shapes. They can be used in single or multiple-magnet applications.



Multiple Selecto Magnets on a lift beam efficiently handle large steel sheets. In this installation, plates up to 10' x 50' x 4" (3 m x 15 m x 102 mm) are sorted and transported. The operator has precise remote control of every magnet so those not in use can be turned off, and single sheets can be placed when desired from multiple-sheet lifts.



Heavy-Duty Rectangular Magnets provide maximum efficiency in multiple-plate handling applications like this.



The Eriez Heavy-Duty Rectangular Magnet is effective in single or multiple-magnet applications for handling heavy fabrications or for lifting several thicknesses of sheet or plate at one time.

Selecto[®] Continuous-Duty

ELECTRO LIFTING MAGNETS

Lightweight, power packed to provide reliable, fast lifts for hundreds of applications

FEATURES

- Easy to install, easy to use
- Eliminate hooks, slings or grabs
- Use individually or in multiples
- 100-percent duty cycle
- Fully encapsulated moisture-proof coil
- Built-in solid-state rectifier and drop-control circuit (Model ST)
- Standard voltage of the SL Selecto Magnet is 115VDC; standard voltage of the ST Selecto Magnet is 115VAC; other voltages available upon request
- Copper-wound coil

SL Series

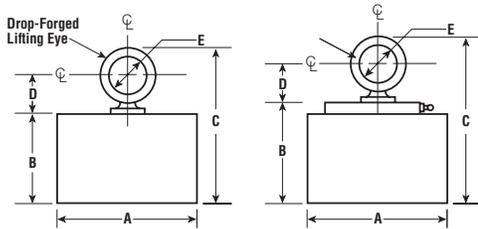
The SL Series requires a compact Eriez variable-voltage rectifier controller or a fixed-voltage rectifier to furnish the desired D.C. power from any A.C. source. The controller can be mounted in any convenient location near the area where the lifting magnet is used.

ST Series

The ST Series units have a miniaturized rectifier/drop control circuit with a “Lift-Off-Drop” switch attached to the magnet. This eliminates the need for a separate rectifier and can briefly cancel out any residual magnetism to allow the load to be easily discharged from the magnet.



Specifications



NOTES:

* Taken with magnet in hot condition

** 230VDC Optional - Wattage may vary with voltages

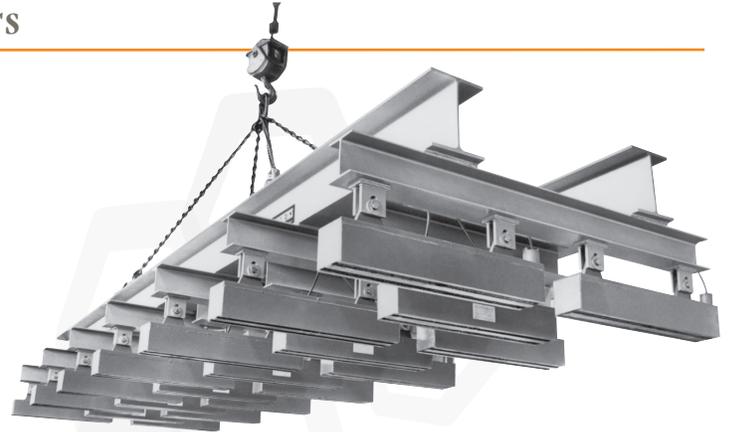
Model Number	Max Lifting Capacity w/2:1 Safety Factor*		Maximum Breakaway Force*		Test Plate Thickness		A		B		C		D		E		115 VDC** Watts	Weight	
	lb	kg	lb	kg	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		lb	kg
SL-4	375	170	750	340	1	25	4	102	2-3/4	70	4-7/16	113	1	25	7/8	22	38	9	4.1
SL-5	1,030	468	2,060	934	1	25	5-9/16	141	4-1/8	105	7-1/8	181	1-3/4	44	1-3/8	35	72	22	10.0
SL-8	2,800	1,270	5,600	2,540	2	50	8-5/8	219	5	127	9-1/4	235	2-3/8	60	1-13/16	46	150	74	33.5
SL-10	4,500	2,042	9,000	4,082	2	50	10-3/4	273	5-1/4	133	10-7/16	265	2-15/16	75	2-3/16	56	228	139	63.0
SL-12	8,600	3,900	17,200	7,802	3	76	12-3/4	324	6-9/16	167	11-3/4	298	2-15/16	75	2-3/16	56	250	240	109.0
SL-14	9,800	4,442	19,600	8,891	3	76	14	356	7-1/4	184	12-3/4	324	3-1/8	79	2-1/2	64	307	320	145
SL-16	12,125	5,500	24,250	11,000	3-3/4	95	16	406	8-1/8	206	14	356	3-1/8	79	2-1/2	64	382	470	213
ST-4D	375	170	750	340	1	25	4	102	4-1/2	114	5-5/8	143	1	25	7/8	22	38	10	5
ST-5D	1,030	468	2,060	934	1	25	5-9/16	141	5-5/16	135	8-5/16	211	1-3/4	44	1-3/8	35	72	25	11
ST-8D	2,800	1,270	5,600	2,540	2	50	8-5/8	219	6-1/4	159	10-1/2	267	2-3/8	60	1-13/16	46	150	80	36
ST-10D	4,500	2,042	9,000	4,082	2	50	10-3/4	273	6-1/2	165	11-11/16	297	2-15/16	75	2-3/16	56	228	145	66
ST-12D	8,600	3,900	17,200	7,802	3	76	12-3/4	324	7-13/16	198	13	330	2-15/16	75	2-3/16	56	250	247	112
ST-14D	9,800	4,442	19,600	8,891	3	76	14	356	9-1/4	235	14	356	1-1/8	29	2-1/2	64	307	330	150
ST-16D	12,125	5,500	24,250	11,000	3-3/4	95	16	406	10-1/8	257	15-1/4	387	1-1/8	29	2-1/2	64	382	480	218

Rectangular

ELECTRO LIFTING MAGNETS

Eliminate slings, hooks, cables and the manpower needed for dangerous attaching work.

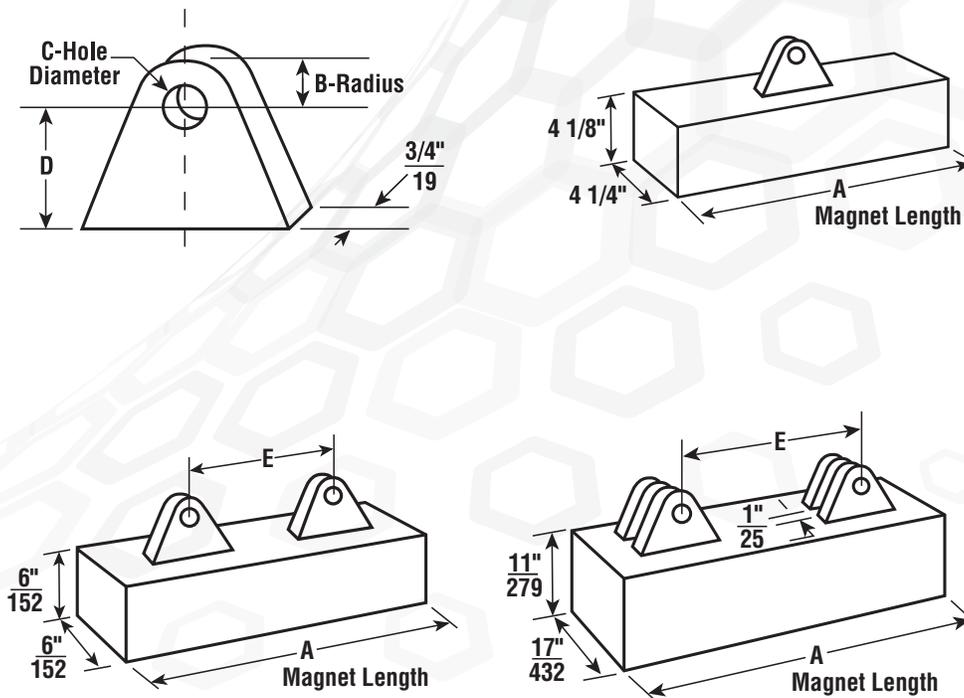
Three standard models and lengths from nine inches (229 mm) to 96 inches (2438 mm) allow you to size the magnet to the job. Eriez' smallest single unit has a holding power (with no safety factor) of 1860 pounds (845 kg); the largest, 38.8 tons (35,240 kg).



FEATURES

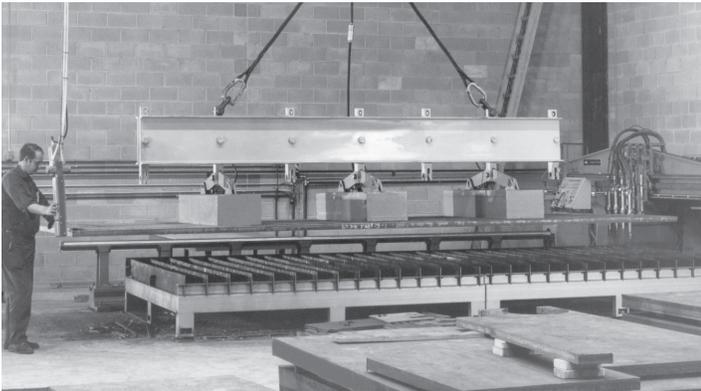
- Heavy-duty welded steel magnet body
- Magnet coil sealed against moisture
- Weather-resistant outlet box
- 50-percent duty cycle: 15 minutes maximum "on" time
- 100-percent duty cycle available
- Shallow, three-pole field for thin, flat loads
- Copper-wound coil

Specifications



Rectangular

ELECTRO LIFTING MAGNETS



Specifications

Model Number	Max Lifting Capacity w/2:1 Safety Factor*		Maximum Breakaway Force*		Test Plate Thickness		Lifting Lugs	A		B		C		D		E		115 VDC**		Weight	
	lb	kg	lb	kg	in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	Watts	Amps	lb	kg
4 49	930	422	1,860	845	1/2	13	1	9	229	1	25	3/4	19	1-1/2	38	—	—	162	1.41	30	13.6
4412	1,250	568	2,500	1,135	1/2	13	1	12	305	1	25	3/4	19	1-1/2	38	—	—	210	1.9	40	18.1
4418	1,870	850	3,740	1,698	1/2	13	1	18	457	1-1/4	32	1	25	2	51	—	—	302	2.6	60	27.2
4424	2,500	1,130	5,000	2,220	1/2	13	1	24	610	1-1/4	32	1	25	2	51	—	—	396	3.5	80	36.3
4430	3,120	1,416	6,240	2,834	1/2	13	1	30	762	1-1/4	32	1	25	2	51	—	—	489	4.3	100	45.4
4436	3,750	1,700	7,500	3,405	1/2	13	2	36	914	1-1/4	32	1	25	2	51	18	457	604	5.3	120	54.4
4448	5,000	2,270	10,000	4,541	1/2	13	2	48	1,219	1-1/4	32	1	25	2	51	30	762	792	6.9	160	72.6
669	1,200	546	2,400	1,092	1	25	1	9	229	1	25	3/4	19	1-1/2	38	—	—	250	2.2	65	29.5
6612	1,650	750	3,300	1,500	1	25	1	12	305	1	25	3/4	19	1-1/2	38	—	—	325	2.9	95	43.1
6618	2,470	1,120	4,940	2,243	1	25	1	18	457	1-1/4	32	1	25	2	51	—	—	450	3.9	140	63.5
6624	3,300	1,498	6,600	2,997	1	25	1	24	610	1-1/4	32	1	25	2	51	—	—	650	5.7	185	83.9
6630	4,120	1,870	8,240	3,742	1	25	1	30	762	1-1/4	32	1	25	2	51	—	—	740	6.5	235	106.6
6636	4,950	2,248	9,900	4,496	1	25	2	36	914	1-1/4	32	1	25	2	51	24	610	880	7.7	280	127.0
6642	5,770	2,620	11,540	5,240	1	25	2	42	1,067	1-1/4	32	1	25	2	51	30	762	950	8.3	325	147.4
6648	6,600	2,996	13,200	5,995	1	25	2	48	1,219	1-1/4	32	1	25	2	51	36	914	1,100	9.6	370	167.8
111718	7,250	3,300	14,500	6,603	3	76	1	18	457	1-3/4	45	1-1/16	27	3	76	—	—	746	6.5	690	313.0
111724	9,700	4,404	19,400	8,810	3	76	1	24	610	1-3/4	45	1-1/16	27	3	76	—	—	1,230	10.7	945	428.6
111736	14,550	6,608	29,100	13,215	3	76	2	36	762	1-3/4	45	1-1/16	27	3	76	24	610	1,836	16.0	1,460	662.2
111742	16,974	7,708	33,948	15,416	3	76	2	42	914	1-3/4	45	1-1/16	27	3	76	30	762	2,265	19.7	1,720	780.2
111748	19,400	8,810	38,800	17,620	3	76	2	48	1,067	1-3/4	45	1-1/16	27	3	76	36	914	2,540	22.1	1,975	895.8
111754	21,800	9,910	43,600	19,820	3	76	2	54	1,219	1-3/4	45	1-1/16	27	3	76	42	1,067	2,645	23.0	2,230	1,011.5
111760	24,250	11,012	48,500	22,025	3	76	2	60	1,524	1-3/4	45	1-1/16	27	3	76	48	1,219	2,930	25.5	2,485	1,127.2
111772	29,100	13,214	58,200	26,428	3	76	2	72	1,829	1-3/4	45	1-1/16	27	3	76	60	1,524	3,500	30.5	2,930	1,329.0
111784	33,950	15,418	67,900	30,836	3	76	2	84	2,134	1-3/4	45	1-1/16	27	3	76	72	1,829	4,000	34.8	3,440	1,560.4
111796	38,800	17,620	77,600	35,240	3	76	2	96	2,438	1-3/4	45	1-1/16	27	3	76	84	2,134	4,500	39.2	3,960	1,796.2

NOTES:

* Taken with magnet in hot condition

** 230VDC Optional - Wattage may vary with voltage



Heavy-Duty Rectangular

ELECTRO LIFTING MAGNETS

Powerful magnets up to 8' (2.4 m) long to lift, move and position heavy beams, channels, bars and flat steel plate.

These magnets are designed to give maximum efficiency in multiple plate handling applications, such as loading and unloading ships, barges, rail cars and trucks; and for transfer operations in storage yards, shipyards, steel mills and warehouses.

The rugged, deep-field construction also makes the magnet especially effective in handling billets, slabs and large fabrications.

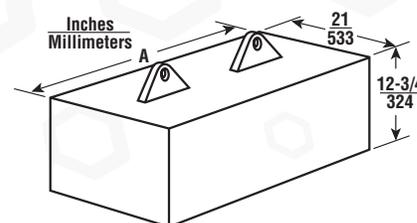
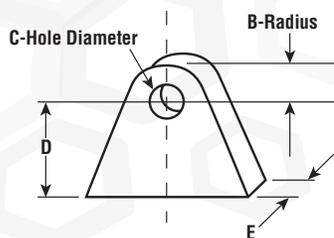
The Model 1321 lends itself to either single-magnet application or multiple-magnet lifting-beam installations.

Eriez has the capability to design and build complete Lifting Magnet Systems, including magnets, lift beams, power supplies, controls and battery backup systems which automatically take over and provide emergency handling in the event of electrical power failure.



FEATURES

- All models are of hefty 12-3/4" x 21" (324 mm x 533 mm) cross section
- Three-pole magnet for reliable, positive grip on flat surface
- Heavy-duty
- Deep field
- Aluminum coil
- Weatherproof welded construction
- Class H insulation
- 100-percent duty cycle
- Multiple-plate capacity
- Optional high-temperature models available



Specifications

Model Number	Max Lifting Capacity w/2:1 Safety Factor*		Maximum Breakaway Force*		Test Plate Thickness		A		B		C		D		E		115 VDC**		Weight	
	Number	lb	kg	lb	kg	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Watts	Amps	lb
132124	14,750	6,690	29,500	13,380	3	76	24	610	2-7/8	73	1-3/16	30	2-5/8	66	1-1/2	38	675	5.9	1,230	559
132136	22,130	10,036	44,260	20,072	3	76	36	914	2-7/8	73	1-11/16	43	2-5/8	66	2-1/4	57	1,000	8.7	1,900	864
132148	29,500	13,378	59,000	26,756	3	76	48	1,219	2-7/8	73	1-11/16	43	2-5/8	66	2-1/4	57	1,350	11.7	2,435	1,107
132160	36,880	16,726	73,760	33,452	3	76	60	1,524	2-7/8	73	1-11/16	43	2-5/8	66	2-1/4	57	1,450	12.6	2,995	1,361
132172	44,250	20,068	88,500	40,136	3	76	72	1,829	3-1/2	89	2-1/8	54	3-1/2	89	2-3/4	70	2,000	17.4	3,745	1,702
132184	51,630	23,414	103,260	46,828	3	76	84	2,134	3-1/2	89	2-1/8	54	3-1/2	89	2-3/4	70	2,250	19.6	4,245	1,930
132196	59,000	26,758	118,000	53,516	3	76	96	2,438	3-1/2	89	2-1/8	54	3-1/2	89	2-3/4	70	2,700	23.5	4,815	2,189

NOTES:

* Taken with magnet in hot condition

** 230VDC Optional - Wattage may vary with voltage

Square Bi-Polar

LIFTING MAGNETS

Specifically designed to provide greater holding on coils, bundles of bar, re-bar, tubes or pipes.

Eriez' line of Square Bi-Polar Magnets provides for lifting of banded coils and miscellaneous bundled shapes.

Bi-Polar magnets can be used in either single-magnet or multiple magnet applications and with a variety of suspension systems. Eriez designs and builds complete systems including magnets, lift beams, power supplies, controls and battery back-up units.

When the application is lifting bundles of pipe or re-bar, tapered pole shoes can be added.

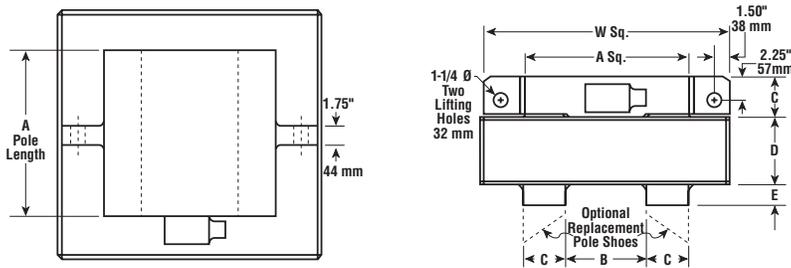
Radiused or contoured poles are available for large rounds. Extended poles are recommended for high-temperature applications and flat poles should be specified for thin and heavy loads.



FEATURES

- Six sizes available
- For handling of various bundled materials
- Special-shaped pole shoes available
- Deep, two-pole field for maximum holding on irregular shapes
- Computer-designed coil
- Weather-tight welded construction
- 50-percent duty cycle: 15 minutes maximum "on" time
- 100-percent duty cycle available
- Optional pole configurations available

Specifications



NOTES:

* Taken with magnet in hot condition

** 230VDC Optional - Wattage may vary with voltage

Model Number	Max Lifting Capacity w/2:1 Safety Factor*		Maximum Breakaway Force*		Test Plate Thickness		W		A		B		C		D		E		115 VDC**		Weight	
	lb	kg	lb	kg	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Watts	Amps	lb	kg
1616	5,000	2,268	10,000	4,536	2-1/2	64	16-1/2	419	10-1/2	267	5-1/2	140	2-1/2	64	4.7	119	1	25	1,300	11.3	260	118
2020	7,500	3,402	15,000	6,804	3	76	20	508	13	330	7	178	3	76	5.7	145	1-1/2	38	1,800	15.7	550	249
2424	12,000	5,443	24,000	10,886	4	102	24	610	16	406	8	203	4	102	6.7	170	2	51	3,200	27.9	980	445
3030	22,500	10,206	45,000	20,412	5-3/4	146	30	762	21	533	9-1/2	241	5-3/4	146	7.1	180	2	51	5,400	47.0	2,450	1,111
3737	33,000	14,969	66,000	29,938	6-3/4	171	37-1/2	953	26	660	12-1/2	318	6-3/4	171	7-3/4	197	2	51	7,800	67.9	3,400	1,542
4141	45,000	20,412	90,000	40,824	8	203	41-1/2	1,054	30	762	14	356	8	203	8-3/4	222	2	51	9,600	83.5	4,800	2,177



Rectangular Bi-Polar

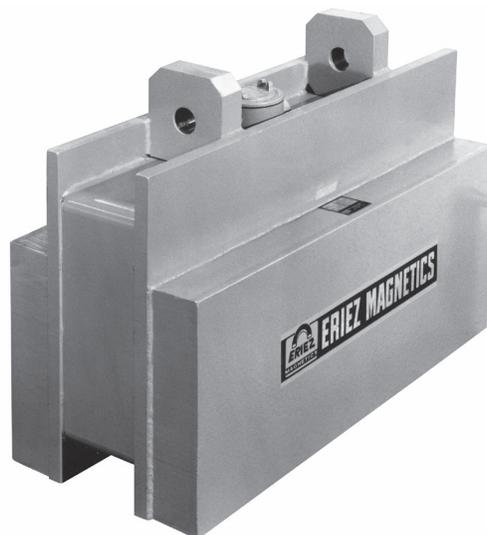
LIFTING MAGNETS

Specifically designed to provide greater contact and holding strength on castings, forgings, plates and structural shapes.

Eriez Magnetics' line of Rectangular Bi-Polar Magnets provides an optional variety of pole-plate configurations which permit maximum contact areas for pipe, rounds and odd shapes.

Bi-polar magnets can be used in either single-magnet or multiple magnet applications and with a variety of suspension systems. Eriez designs and builds complete systems including magnets, lift beams, power supplies, controls and battery back-up units.

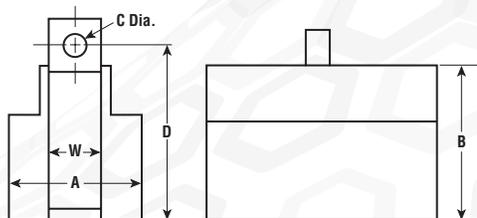
Radiused or contoured poles are available for large rounds. Extended poles are recommended for high-temperature applications and flat poles should be specified for thin and heavy loads.



FEATURES

- Three widths; 13 sizes
- For pipe handling, round bars, angles, flats and shapes
- Special-shaped pole shoes are available
- Deep, two-pole field provides better holding on round and irregular shapes
- Computer-designed coil
- Weather-tight welded construction
- 50-percent duty cycle (15 minutes maximum "on" time)
- 100-percent duty cycle available
- Optional pole configurations available

Specifications

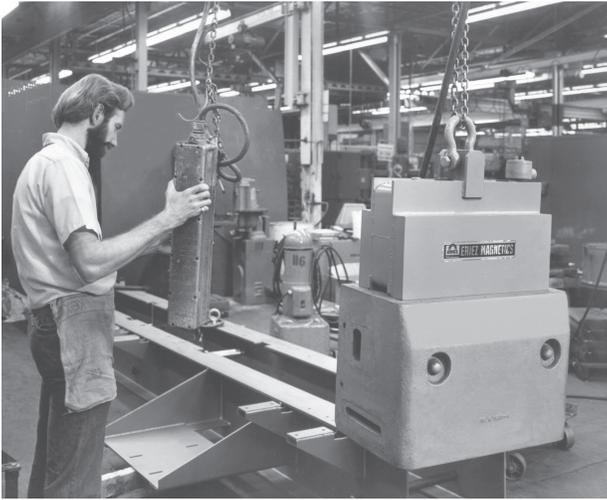


Models over 24" (610 mm) long have two lifting lugs; all others have one.

Model Number	A Magnet Width		B Magnet Height		C Lifting Lug Hole Diameter		D		W	
	lb	kg	lb	kg	in	mm	in	mm	in	mm
5 XX	5-1/4	133	8-3/8	213	1	25	9-5/8	245	2-1/4	57
10 XX	10-1/4	260	14-1/8	359	1-5/16	32	15-7/8	403	4-1/4	108
15 XX	15-1/4	387	22	559	1-3/4	44	22-1/2	572	6-1/4	159

Rectangular Bi-Polar

LIFTING MAGNETS



Specifications

Model Number	Max Lifting Capacity w/2:1 Safety Factor*		Maximum Breakaway Force*		Test Plate Thickness		Width		Length**		115 VDC**		Weight	
	lb	kg	lb	kg	in	mm	in	mm	in	mm	Watts	Amps	lb	kg
512	2,620	1,188	5,240	2,377	4-1/2	114	5-1/4	133	12	305	390	3.4	95	43
518	3,930	1,784	7,875	3,572	4-1/2	114	5-1/4	133	18	457	550	4.8	145	66
524	5,250	2,382	10,500	4,763	4-1/2	114	5-1/4	133	24	610	700	6.0	195	87
536	7,870	3,570	15,740	7,140	4-1/2	114	5-1/4	133	36	914	1,000	8.7	295	134
548	10,500	4,762	21,000	9,526	4-1/2	114	5-1/4	133	48	1,219	1,325	11.5	395	176
1018	8,880	4,028	17,760	8,056	4-1/2	114	10-1/4	260	18	457	1,125	9.8	435	198
1024	11,850	5,376	23,700	10,750	4-1/2	114	10-1/4	260	24	610	1,425	12.4	600	273
1036	17,770	8,060	35,540	16,121	4-1/2	114	10-1/4	260	36	914	2,000	17.4	925	420
1048	23,700	10,750	47,400	21,501	4-1/2	114	10-1/4	260	48	1,219	2,500	21.7	1,125	511
1524	16,800	7,620	33,600	15,241	4-1/2	114	15-1/4	387	24	610	2,400	20.9	1,335	607
1536	25,200	11,430	50,400	22,861	4-1/2	114	15-1/4	387	36	914	3,300	28.7	2,065	939
1548	33,600	15,240	67,200	30,482	4-1/2	114	15-1/4	387	48	1,219	4,200	36.5	2,685	1,220
1560	42,000	19,052	84,000	38,102	4-1/2	114	15-1/4	387	60	1,524	5,100	44.3	3,410	1,550

NOTES:

* Taken with magnet in hot condition

** 230VDC Optional - Wattage may vary with voltage



Circular

LIFTING MAGNETS

Circular magnets handle all kinds of steel, especially scrap, efficiently and inexpensively.

Eriez' Circular Lifting Magnets are general-purpose magnets with many applications: in steel mills, steel service centers, ball mills; for furnace charging and other material-handling jobs.

Their design provides a 75-percent duty cycle with a high lift-to-weight ratio. A triple-sealed terminal box and super-alloy steel chains are standard. Rectifiers, drop controllers and cable reels are available as accessories.

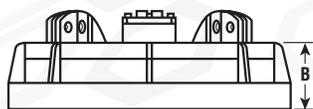
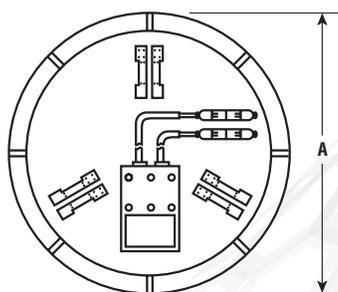
FEATURES

- Computer-designed aluminum coil
- Fabricated construction
- Ribbed, manganese-steel bottom plate
- Weatherproof construction
- Class H insulation
- Standard models 18" and 24" (457 mm and 610 mm) in diameter
- 75-percent duty cycle; 15 minutes maximum "on" time

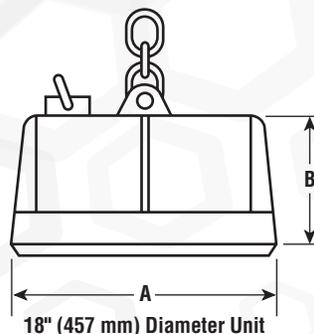


Eriez' Circular Lifting Magnets offer a high lift-to-weight capability in many applications: in steel mills, ball mills; for furnace charging and other materials handling jobs.

Specifications



24" (610 mm) Diameter Unit



18" (457 mm) Diameter Unit

The 18" diameter unit is furnished with a single-chain suspension assembly and single-lead two-conductor powercord.

Model Number	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
18	18	457	9	229	2-3/4	70	5-1/2	140
24	24	610	9-1/2	241	3-1/2	89	7	178

Magnet Diameter		Approximate Weight		Current Rating (Amps)		Recommended				Lifting Capacities - Approximate (All Day) Average									
						Generator kw*	Rectifier kw	Cable Size		Plates & Slabs		#1 Heavy Melting		#2 Heavy Melting		Plate Punchings		Cast Iron Borings	
in	mm	lb	kg	Cold	Operating			kw*	kw	14/3	1.80	lb	kg	lb	kg	lb	kg	lb	kg
18	457	405	184	7	4	1.5	1.5	14/3	1.80	4,000	1,814	175	79	100	45	250	113	90	41
24	610	725	329	9	5	2.5	2.5	14/3	1.80	10,000	4,536	280	127	200	91	425	193	170	77

NOTES:

Magnets operate on 230 VDC

* Based on operating current. For light duty use, size generator for the cold amperes.



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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