



# Scrap Handling Magnets Technical Information

Ohio Magnetics has been a worldwide leader in the development of Lifting Magnet Systems for the recycling industry since 1917. As a major supplier to the industry, Ohio Magnetics has established a long-standing reputation for quality and performance. Ohio Magnetics manufactures the complete Magnet System to include: 24V and 230V Scrap Lifting Magnets, Magnet Controllers, DC Power Generator Packages, and miscellaneous Magnetic Controls.



Magnet Controllers	Features/Requirements
24V LSM Controller	Minimum alternator output needed to power system
CDS 230VDC	5-20 amp operating range
MC-1A 230VDC	20-100 amp operating range
MC-1A w/2V Relay 230VDC	20-100 amp operating range, 24V interface relay for controls in cab
MC-1.5A 230VDC	65-130 amp operating range
MC-2A 230VDC	100-150 amp operating range
RD-3A 230VDC	100-200 amp operating range

Power Supply Options	Features/Requirements
24V Tool Box Package	• Complete with batteries, battery equalizer, control panel and disconnect switch
230V Hydramag Package	• Auxiliary pump required to maintain constant flow & pressure to DC generator • Available in sizes 5KW thru 33KW
230V Diesel Engine Driven Package	• Stand alone system with diesel engine driven generator • Available in sizes 5KW thru 33KW

Scrap Lifting Magnets	Sizes Available	Construction
24V LSM	25" - 43" diameter	Fabricated
230VDC	25" - 93" diameter	Cast or Fabricated



Made in U.S.A.



### 24 Volt LSM Magnet System

The 24 Volt LSM Magnet System is a portable lifting solution for ferrous materials where a dedicated generator is not economical. The system is ideal for railroad track sweeping, scrap & steel handling, and construction & demolition.

Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
LSM	25"	700	N/A	24VDC	80	75%	3,100	450	230	LSM
LSM	30"	990	N/A	24VDC	80	75%	6,000	650	390	LSM
LSM	34"	1,300	N/A	24VDC	80	75%	12,200	870	470	LSM
LSM	43"	2,900	N/A	24VDC	87	75%	26,200	1,293	775	LSM



### POW-R-LITE™ Magnets

The POW-R-LITE Series of magnets are fabricated magnets that are designed for rail, construction, and material handling. The smart choice for light duty scrap and general steel plate handling.

Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
PRL	25"	655	2.3	230VDC	10	50%	7,700	300	150	CDS
PRL	30"	960	3.7	230VDC	16	50%	10,000	550	300	CDS
PRL	34"	1,500	4.6	230VDC	20	50%	13,000	845	460	CDS
PRL	40"	2,030	6.9	230VDC	30	50%	16,500	1,220	580	MC-1A

### LOADSTAR™ Magnets

The LOADSTAR series of lifting magnets feature a deep field coil designed for production scrap handling. Available in heavy duty cast or fabricated case construction.



Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
LS	48"	2,900	9.7	230VDC	42	50%	23,000	1,800	1,200	MC-1A
LS	58"	4,300	12.4	230VDC	54	50%	23,940	2,900	1,900	MC-1A
LS	67"	5,600	18.0	230VDC	78	50%	28,570	4,200	2,700	MC-1A

Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
LSF	48"	3,100	9.7	230VDC	42	50%	23,000	1,800	1,200	MC-1A
LSF	58"	4,100	12.4	230VDC	54	50%	25,000	2,950	1,940	MC-1A
LSF	67"	5,400	17.3	230VDC	75	50%	32,600	4,200	2,700	MC-1A

\* "F" designates fabricated model



## Super LOADSTAR™ Magnets

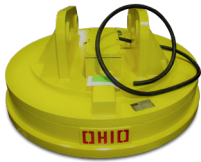
The SUPER Loadstar series offers Extra Deep field coil design for optimum lift performance. These magnets are available in heavy duty cast or fabricated case construction.

Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
SLS	48"	3,410	9.7	230 VDC	42	60%	23,000	2,200	1,470	MC-1A
SLS	58"	4,800	12.9	230 VDC	56	60%	24,000	3,240	2,170	MC-1A
SLS	67"	6,300	18.0	230 VDC	78	60%	30,150	4,585	3,250	MC-1A

Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
SLSF	58"	4,920	12.9	230 VDC	56	60%	25,000	3,260	2,180	MC-1A
SLSF	67"	6,690	18.0	230 VDC	78	60%	32,000	4,640	3,280	MC-1A
SLSF	72"	8,500	22.1	230 VDC	96	60%	41,130	5,650	3,535	MC-1A

## DAWF Magnets

The DAWF series of lifting magnets are designed for the most severe scrap handling applications.



Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	H.M. #2 (lbs.)	Controller
DAWF	83"	17,000	31.0	230 VDC	135	60%	85,000	9,660	6,500	MC-2A
DAWF	93"	19,000	40.0	230 VDC	173	60%	90,000	11,000	7,150	RD-3A

## SR Magnets

The SR series of magnets are designed for severe mill service applications.



Model	Size	Weight	Required DC Power	Volts	Amps	Continuous Duty Cycle	Slab (lbs.)	H.M. #1 (lbs.)	Drop Ball (lbs.)	Controller
SRDAF	40"	2,800	3.9	230 VDC	17	75%	28,200	1,170	13,500	CDS
SRDAF	47"	4,000	7.2	230 VDC	31	75%	37,000	2,000	18,000	MC-1A
SRDAF	57"	6,800	9.2	230 VDC	40	75%	56,500	3,200	22,000	MC-1A
SRDAF	65"	10,200	12.2	230 VDC	53	75%	71,200	4,800	35,000	MC-1A
SRDAF	68"	11000	13.3	230 VDC	58	75%	79,000	4,940	40,000	MC-1A

\* "F" designates fabricated model

## Fabricated Scrap Rectangular Magnets

Fabricated Scrap Rectangular Magnets are custom engineered for loading scrap buckets, loading and unloading rail cars, and for bulk scrap handling applications.



Size & Type	Wt. Lbs.	Cold Amps	Cold KW	Duty %	Type	Min. Cable Size	Plate Punchings	#1 Heavy Melt*	#2 Heavy Melt
63 x 126 DAWXRM	18,300	185	42.6	50	RD-3A	2- #1/0	14,600	12,540	8,410
68 x 136 DAWXRM	20,725	236	54.3	50	(2) MC-2A	4- #2	18,125	15,500	10,400
73 x 146 DAWXRM	29,820	238	54.7	50	(2) MC-2A	4-#2	21,900	18,590	11,990
83 x 166 DAWXRM	33,000	242	55.7	65	(2) MC-2A	4- #2	26,135	22,090	14,240

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