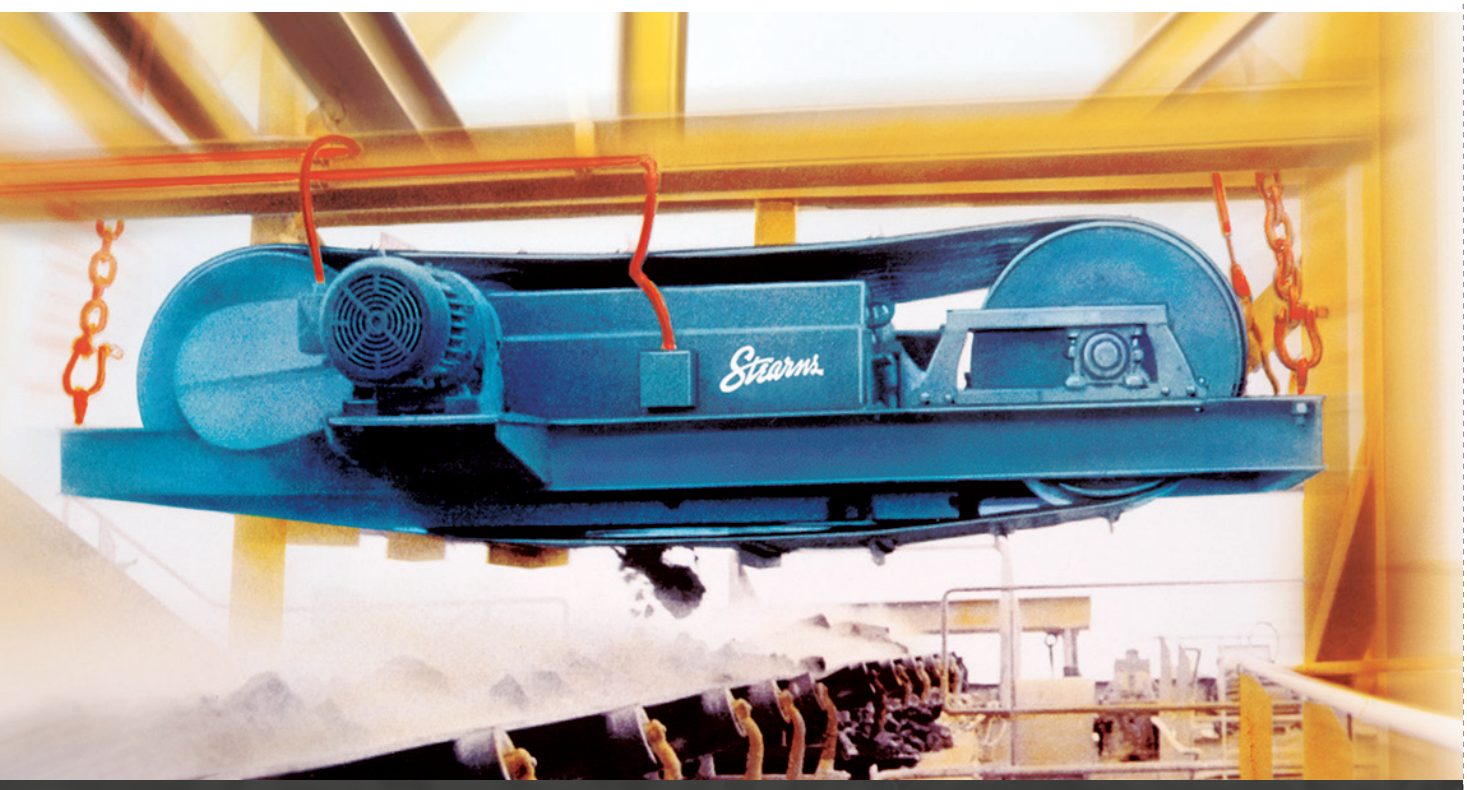
OHIO MAGNETICS

Stearns

SOLUTIONS FOR FERROUS MATERIAL SEPARATION



MADE IN U.S.A. www.ohiomagnetics.com

DRUMS | PULLEYS | SUSPENDED MAGNETS | CONTROLS | POWER SUPPLIES

INDEX

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

KEEP CLEAR OF PINCH POINTS HAZARDS WHILE MONITORING EQUIPMENT

CAUTION

Failure to observe the following warnings could create a risk of serious injury.

- **Keep the bolts tight.**
- **Anyone wearing a pacemaker should stay at least 10 feet away from large industrial lifting magnets. A magnet field with a strength of 8 to 10 gauss can be encountered within 5 feet and temporarily effect a pacemaker.**

All Designs for any system produced by Ohio Magnetics follow ASME BTH 30.20 standards.

STEARNS SUSPENDED MAGNETS

Stearns Suspended Magnets are custom engineered ferrous material separation solutions utilizing standard components that are offered in both permanent and electromagnet versions to meet specific application requirements.

Stearns Suspended Magnets are designed to remove occasional unwanted tramp metal or ferrous impurities from process flows. These magnets are suspended over conveyor belts to effectively remove tramp metal to prevent damage to downstream process equipment such as crushers, pulverizes and grinders.

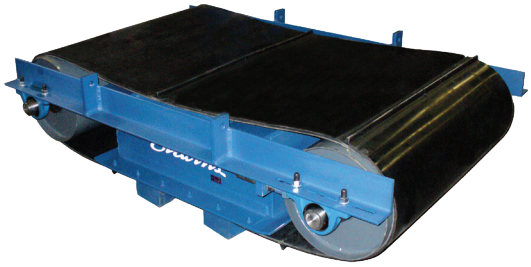
- Low or minimal maintenance required
- Permanent magnet version equipped with convenient wiper bar for material removal
- Simple installation over any process flow
- Available in Permanent and Electromagnetic (see details below)
- Self-Cleaning Feature (see details below)

Self-Cleaning Feature

Stearns Self-Cleaning Suspended Magnets are customized solutions for automatically removing ferrous material from process flows on crushers, pulverizes, conveyor belts, screens and other processing equipment.

- Application specific bearing and sealing arrangements for different environments
- Suspension and belt designs to accommodate multiple processes
- Optional belt guide system available
- Direct, belted or hydraulic drive options with guarding
- Configurations for cross belt and inline orientations
- Standard permanent magnet sizes ranging from 18 to 48 inches (457 to 1220 mm) to accommodate most belt widths

Standard electromagnet sizes ranging from 25 to 110 inches (635 to 2795 mm) to accommodate most belt widths.



STEARNS SUSPENDED PERMANENT MAGNETS

- Standard permanent magnet sizes ranging from 18 to 48 inches (457 to 1220 mm) to accommodate most belt widths
- Optimized for shallower burden depths with less dense material in mineral concentrators, shredders, consumer waste, wood, glass and tire recycling, grains, fertilizers and food industries
- Cost effective and low maintenance separation solution
- No power supply required
- Multiple installation options available
- Cross belt or in-line options
- Automatic or manual discharge options
- Ceramic magnet standard with rare earth magnet design available
- Magnetic circuit design maximizes magnetic penetration, provides positive and economic results
- Eliminates DC power requirements
- Eliminates coils, oil tanks and wiring
- Remain energized at 99% efficiency

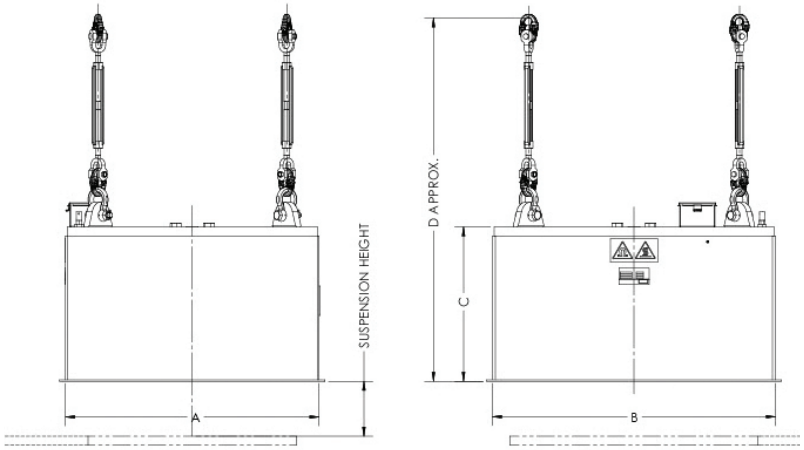
Applications

- Double pass system incorporates cross-belt separator which provides the initial tramp iron removal and a magnetic pulley at the head of the conveyor belt to remove any fine splatter and shot
- Used primarily in mining operations where some of the tramp is non-magnetic but is just as damaging. The magnet will remove the iron and steel objects.
- Combination magnetic units are frequently installed for foundry sand cleaning systems

STEARNS SUSPENDED PERMANENT MAGNETS - MANUAL CLEANING

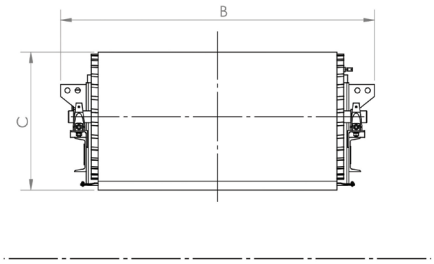
Rectangular Suspended Magnet Cross-Belt Position

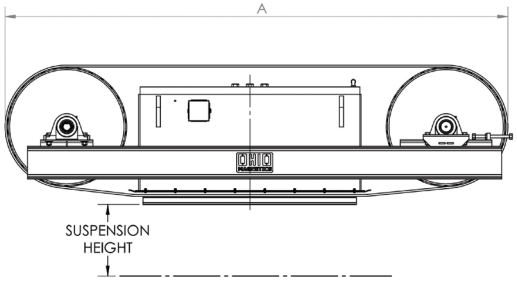
Note: Suspension height to be defined on customer approval drawing.



MODEL	DIMENSIONS (IN.)				APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)				APPROX. WT. (LBS.)
	A	B	C	D			A	B	C	D	
18-720P	18.75	25.38	9.50	38	900	30-1170P	30.75	39.88	14.00	54	3,500
24-720P	24.75	25.38	9.50	38	1,250	36-1170P	36.75	39.88	14.00	54	4,500
30-720P	30.75	25.38	9.50	38	1,600	42-1170P	42.75	39.88	14.00	54	5,400
36-720P	36.75	25.38	9.50	38	2,000	48-1170P	48.75	39.88	14.00	54	6,600
18-900P	18.75	31.50	11.75	45	1,300	18-1350P	18.75	46.88	16.50	61	2,700
24-900P	24.75	31.50	11.75	45	1,700	24-1350P	24.75	46.88	16.50	61	3,200
30-900P	30.75	31.50	11.75	45	2,200	30-1350P	30.75	46.88	16.50	61	4,000
36-900P	36.75	31.50	11.75	45	2,700	36-1350P	36.75	46.88	16.50	61	5,100
18-1170P	18.75	39.88	14.00	54	2,100	42-1350P	42.75	46.88	16.50	61	6,200
24-1170P	24.75	39.88	14.00	54	2,800	48-1350P	48.75	46.88	16.50	61	7,000

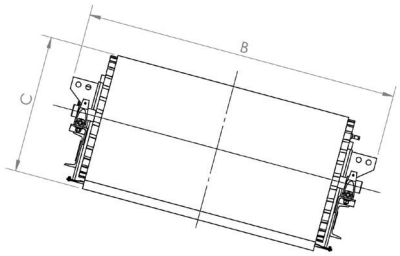
STEARNS PERMANENT CROSS-BELT SEPARATOR - SELF CLEANING

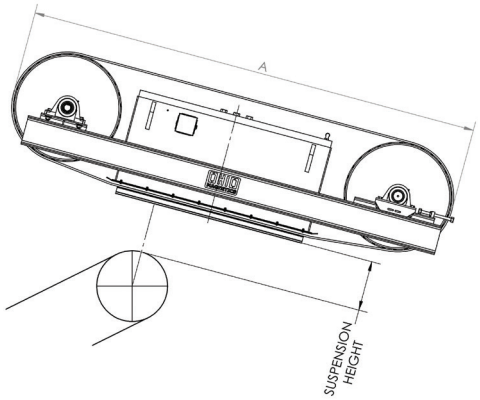




MODEL	DIMENSIONS (IN.)			BELT WIDTH (IN.)	DRIVE, HP	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			BELT WIDTH (IN.)	DRIVE, HP	APPROX. WT. (LBS.)
	A	B	C					A	B	C			
18-720P	56	42	15	32	1.50	1,700	30-1170P	80	57	20	47	3.00	5,100
24-720P	62	42	15	32	1.50	1,800	36-1170P	86	57	20	47	3.00	6,000
30-720P	68	42	15	32	1.50	2,000	42-1170P	92	57	20	47	3.00	7,000
36-720P	74	42	15	32	1.50	2,300	48-1170P	98	57	20	47	3.00	7,900
18-900P	60	46	19	36	1.50	2,000	18-1350P	71	65	22	50	5.00	4,200
24-900P	66	46	19	36	1.50	2,400	24-1350P	77	65	22	50	5.00	5,300
30-900P	72	46	19	36	1.50	2,900	30-1350P	83	65	22	50	5.00	6,400
36-900P	78	46	19	36	1.50	3,400	36-1350P	89	65	22	50	5.00	7,500
18-1170P	68	57	20	47	3.00	3,300	42-1350P	95	65	22	50	5.00	8,100
24-1170P	74	57	20	47	3.00	4,200	48-1350P	101	65	22	50	5.00	8,600

STEARNS PERMANENT IN-LINE SEPARATOR - SELF CLEANING





MODEL	DIMENSIONS (IN.)			BELT WIDTH (IN.)	DRIVE, HP	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			BELT WIDTH (IN.)	DRIVE, HP	APPROX. WT. (LBS.)
	A	B	C					A	B	C			
18-720P	63.00	35.00	15.00	24.00	1.00	1,700	30-1170P	89.00	48.00	20.00	36.00	2.00	5,000
24-720P	63.00	41.00	15.00	30.00	1.50	1,800	36-1170P	89.00	54.00	20.00	42.00	2.00	5,700
30-720P	63.00	47.00	15.00	36.00	1.50	2,000	42-1170P	89.00	60.00	20.00	48.00	2.00	6,600
36-720P	63.00	53.00	15.00	42.00	1.50	2,200	48-1170P	89.00	66.00	20.00	54.00	2.00	7,500
18-900P	72.50	33.50	19.00	24.00	1.00	2,100	18-1350P	99.00	37.00	22.00	24.00	3.00	4,000
24-900P	72.50	39.50	19.00	30.00	1.00	2,500	24-1350P	99.00	43.00	22.00	30.00	3.00	5,000
30-900P	72.50	45.50	19.00	36.00	1.50	2,900	30-1350P	99.00	49.00	22.00	36.00	3.00	6,000
36-900P	72.50	51.50	19.00	42.00	1.50	3,500	36-1350P	99.00	55.00	22.00	42.00	3.00	7,100
18-1170P	89.00	36.00	20.00	24.00	2.00	3,200	42-1350P	99.00	61.00	22.00	48.00	3.00	8,000
24-1170P	89.00	42.00	20.00	30.00	2.00	4,100	48-1350P	99.00	67.00	22.00	54.00	3.00	9,000

STEARNS SUSPENDED ELECTROMAGNETIC MAGNETS

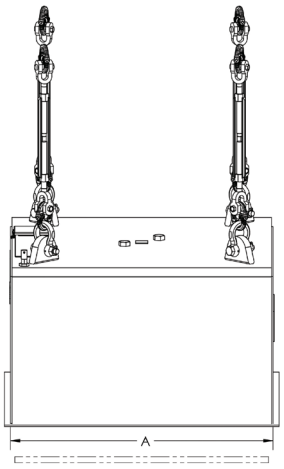
- Standard electromagnet sizes ranging from 25 to 110 inches (635 to 2795 mm) to accommodate most belt widths
- Efficiently removes ferrous material through denser process flows, greater burden depths and at higher belt speeds
- Continuous duty cycle of 100%
- Multiple installation options available
- Powerful, broad and deep-reaching magnetic field that probes and efficiently removes tramp iron from materials
- Iso-geometric design and construction, putting efficient coil cooling together with a deep, concentrated magnetic field in an extremely compact enclosure, resulting in powerful metal removal
- Magnet circuit design minimizes flux leakage, and gives you more usable magnetic power than permanent suspended magnets
- Handle hot materials more efficiently
- Cross belt or in-line options
- Automatic or manual discharge options
- Rugged, 100% duty cycle design and construction
- High efficiency means energy cost savings

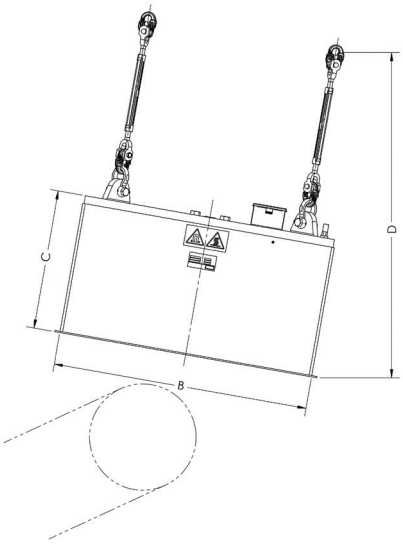
Applications

- Over-the-belt magnets can be suspended over belt conveyors or over non-magnetic sections of vibrating feeders, oscillating conveyors, chutes and screens
- Reliable tramp iron removal from fast-moving conveyors in processing industries for:
  - Purification of product or ingredient for higher-quality end products (e.g., foundry sand, glass cullet, grain, food products and chemicals)
  - Protection of processing equipment (e.g., crushers, pulverizes, conveyor belts and screens)
  - Reclamation of ferrous or non-ferrous material (e.g., open hearth and blast furnace slag, incinerators and garbage plants)
  - Salvage of valuable items (e.g., tools, cutter bits and machinery parts)

STEARNS SUSPENDED ELECTROMAGNETIC MAGNETS

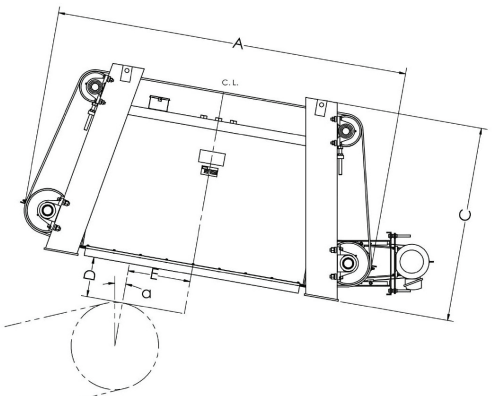
Rectangular Electro Suspended Magnet In-Line Position

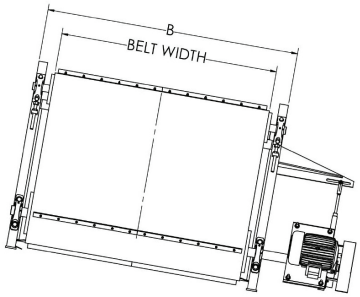




MODEL	DIMENSIONS (IN.)				STANDARD VOLTS DC	APPROX. WATTS	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)				STANDARD VOLTS DC	APPROX. WATTS	APPROX. WT. (LBS.)
	A	B	C	D					A	B	C	D			
25A	25	34	22.1250	45.00	115	2,320	2,000	54A	54	60	29.5000	71.50	230	7,560	10,580
30A	30	34	23.3750	47.50	115	2,750	2,560	61A	61	68	30.7500	77.25	230	9,260	13,930
36A	36	38	18.5625	50.75	115	4,290	2,600	68A	68	77	32.7500	85.00	230	11,200	19,000
38A	38	43	25.4375	55.50	115	4,120	4,430	72A	72	78	47.0000	105.00	230	13,900	26,000
43A	43	48	26.3125	60.00	115	5,060	5,680	80A	80	86	41.2500	103.00	230	15,930	29,000
48/54M	48	54	26.0000	64.25	115	6,200	6,500	90A	90	90	45.0000	104.00	230	20,000	37,000
48A	48	54	28.0625	65.75	115	6,200	7,740	100A	100	110	49.7500	107.00	230	23,400	48,500

STEARNS 4 PULLEY ELECTROMAGNETIC IN-LINE SEPARATOR

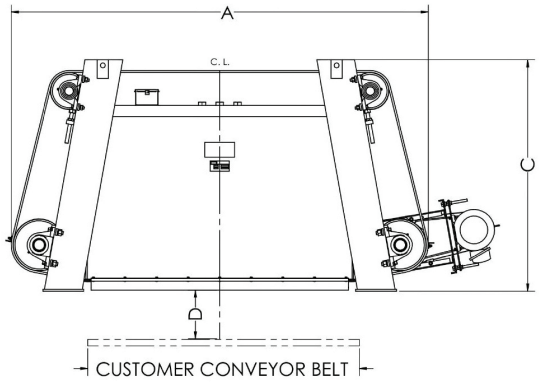


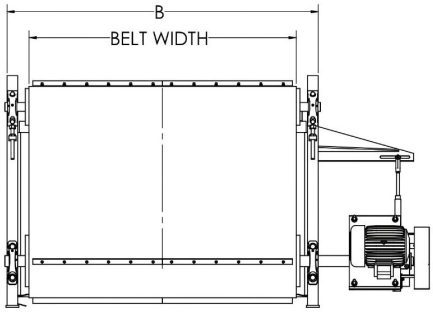


Dimensions D, E and Angle a will be defined on customer approval drawings.

MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)
	A	B	C							A	B	C					
25A	72.000	30.25	37.125	115	2,320	20	1.5	2,710	48A	97.000	53.50	43.125	115	6,200	42	3.0	8,990
30A	82.500	35.50	38.375	115	2,752	24	2.0	3,330	54A	103.250	59.50	44.500	230	7,560	48	5.0	12,160
36A	78.375	41.50	38.375	115	4,290	30	3.0	4,500	61A	111.000	66.75	45.750	230	9,260	54	5.0	15,660
38A	82.500	43.25	40.500	115	4,120	30	3.0	5,410	68A	120.375	73.75	47.750	230	11,200	60	7.5	20,880
43A	89.000	48.50	41.375	115	5,060	36	3.0	6,760	72A	120.750	78.00	57.000	230	13,900	66	10.0	28,500
48/54M	97.000	53.50	41.125	115	6,200	42	3.0	8,700									

STEARNS 4 PULLEY ELECTROMAGNETIC CROSS-BELT SEPARATOR

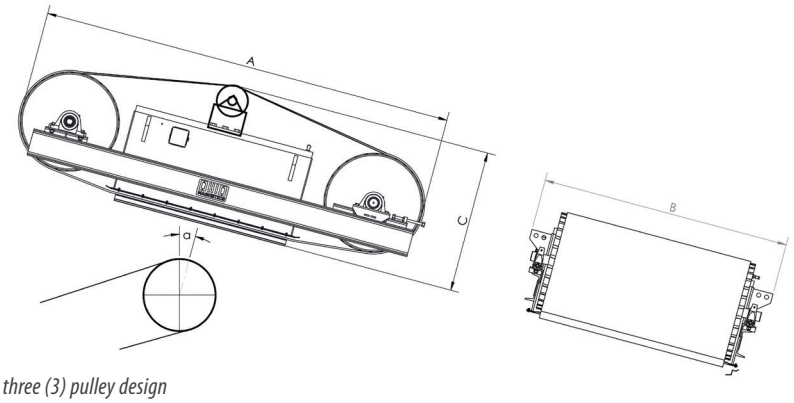




MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)
	A	B	C							A	B	C					
25A	63.000	39.25	37.125	115	2,320	30	2.0	2,860	48A	91.000	59.50	43.125	115	6,200	48	5.0	9,170
30A	68.000	39.25	38.375	115	2,752	30	2.0	3,430	54A	96.000	65.50	44.500	230	7,560	54	5.0	12,270
36A	76.375	43.50	38.375	115	4,290	32	3.0	4,600	61A	103.750	73.75	45.750	230	9,260	60	5.0	15,770
38A	78.000	48.50	40.500	115	4,120	36	3.0	5,500	68A	111.375	82.75	47.750	230	11,200	70	7.5	21,310
43A	84.500	53.50	41.375	115	5,060	42	3.0	6,900	72A	128.000	84.00	57.000	230	13,900	72	10.0	28,500
48/54M	91.000	59.50	41.125	115	6,200	48	5.0	8,900									

STEARNS SUSPENDED ELECTROMAGNETIC MAGNETS

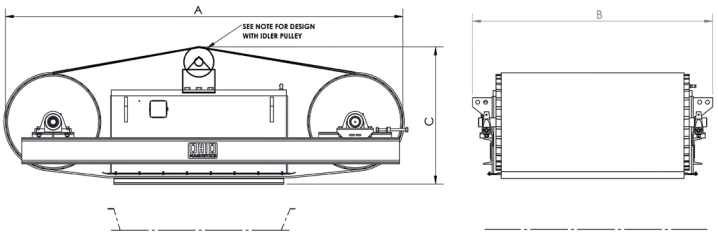
STEARNS 2 PULLEY ELECTROMAGNETIC IN-LINE SEPARATOR



*1) Models with * are three (3) pulley design*
2) Angle a is defined on customer approval drawing

MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)
	A	B	C							A	B	C					
25A	89.5	50.00	31.50	115	2,320	20	1.5	3,200	54A	148.0	85.00	39.50	230	7,560	48	5.0	12,800
30A	95.0	56.00	31.50	115	2,752	24	2.0	4,000	61A	145.0	92.00	36.00	230	9,260	54	5.0	16,000
36A	94.0	57.75	25.75	115	4,290	30	3.0	4,200	68A	165.0	101.00	39.50	230	11,200	60	7.5	23,000
38A	114.0	65.00	34.50	115	4,120	30	3.0	5,500	*72A	190.0	112.00	62.00	230	14,000	66	10.0	32,000
43A	120.0	68.00	36.00	115	5,060	36	3.0	8,400	*80A	198.0	120.00	56.00	230	15,900	72	10.0	38,000
48/54M	126.0	79.00	36.00	115	6,200	42	5.0	9,800	*90A	200.0	135.00	59.00	230	20,000	82	20.0	48,200
48A	126.0	79.00	38.00	115	6,200	42	5.0	10,000									

STEARNS 2 PULLEY ELECTROMAGNETIC CROSS-BELT SEPARATOR



*1) Models with * are three (3) pulley design*

MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)	MODEL	DIMENSIONS (IN.)			STANDARD VOLTS DC	APPROX. WATTS	BELT WIDTH (IN.)	DRIVE H.P.	APPROX. WT. (LBS.)
	A	B	C							A	B	C					
25A	86.5	58.25	31.50	115	2,320	30	2.0	3,100	54A	142.0	91.50	39.50	230	7,560	54	5.0	12,700
30A	91.0	59.50	31.50	115	2,752	30	2.0	3,900	61A	138.0	98.00	36.00	230	9,260	60	5.0	15,850
36A	92.0	63.50	25.75	115	4,290	32	3.0	4,100	68A	156.0	110.00	39.50	230	11,200	70	7.5	22,800
38A	109.0	70.00	34.50	115	4,120	36	3.0	5,400	*72A	184.0	118.00	62.00	230	14,000	72	10.0	31,800
43A	115.0	73.00	36.00	115	5,060	42	3.0	8,300	*80A	192.0	126.00	56.00	230	15,900	78	10.0	37,800
48/54M	120.0	85.00	36.00	115	6,200	42	5.0	9,700	*90A	200.0	135.00	59.00	230	20,000	82	20.0	48,200
48A	120.0	85.00	38.00	115	6,200	48	5.0	9,900									

STEARNS ELECTROMAGNETIC DRUMS

Stearns Electromagnetic Drums are designed to improve efficiency in handling heavy volumes of large size material encountered in today's scrap and slag processing and mineral concentration applications. The drum consists of an electromagnet assembly mounted inside an outer rotating drum assembly. The magnet assembly position, although stationary during operation, may be adjusted within certain limits to meet varying feed arrangements.

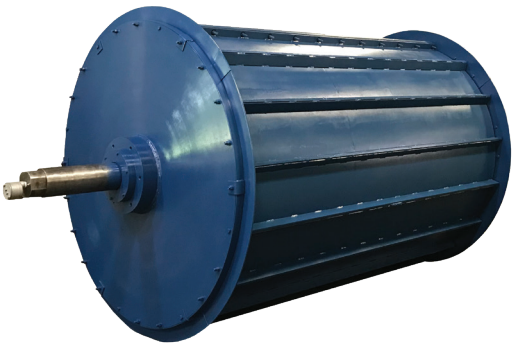
- Heavy duty manganese steel cylinders and knock-offs provide extended service life
- Axial or radial pole design allows for more efficient ferrous material separation from burden
- Heavy duty manganese steel cylinders and knockoffs provide extended service life
- Application specific bearing arrangements and knock-offs available
- Optional field replaceable wear covers
- Custom engineered shafts to meet all interface requirements
- Standard sizes ranging from 30 to 72 inches (762 to 1830 mm) in diameter and up to 110 inches (2795 mm) in length

Features

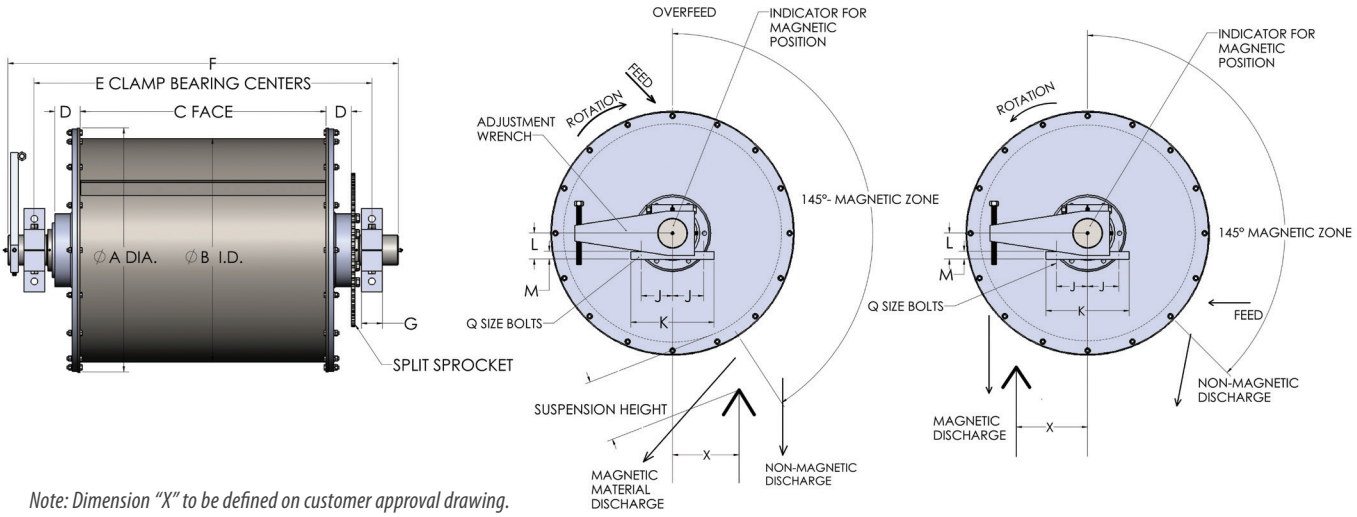
- LDA high-performance design offers a uniform, magnetic field across the full working width of the drum
- Superior deep field design
- Heavy duty manganese steel cylinders with knockoffs
- Rugged weatherproof construction
- Side shields bolted to the drumhead
- 2-piece, heavy duty split-wear covers available
- Various knock-off pattern options
- Permanent magnet designs available
- Coil construction produces a concentrated deep magnetic field to maximize ferrous recovery

Applications

- Scrap shredding
- Slag reclamation
- Tramp iron removal
- Ore cobbing



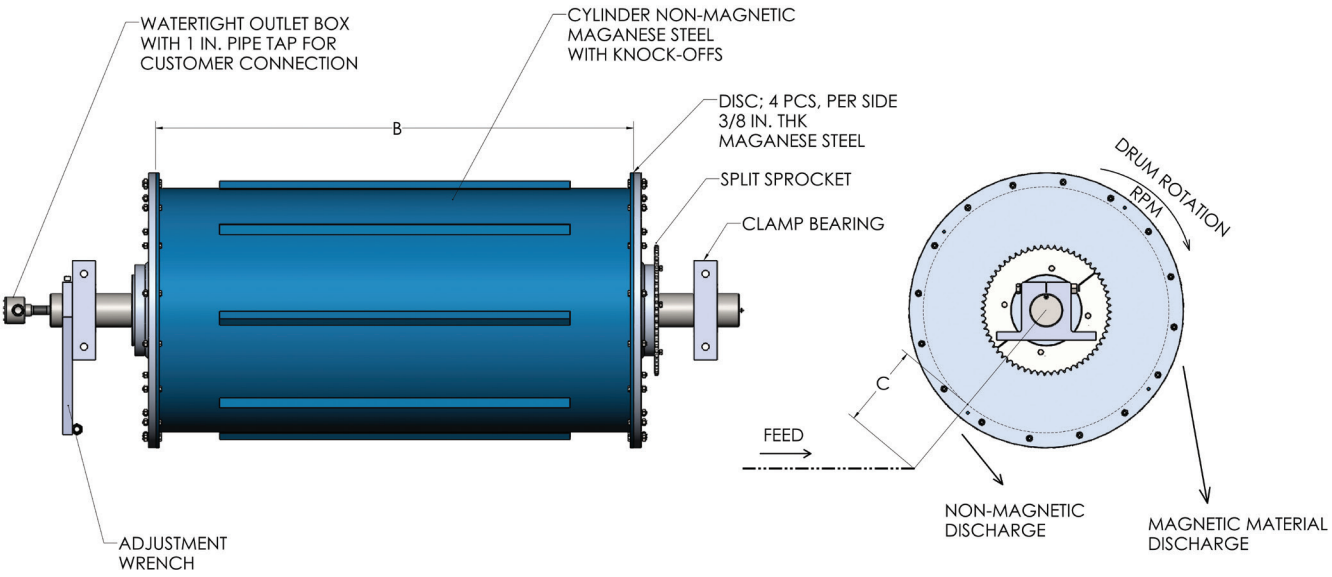
STEARNS ELECTROMAGNETIC DRUMS LD-RADIAL DESIGN



Note: Dimension "X" to be defined on customer approval drawing.

SIZE	WATTS	APPROX. SHIP WT. (LBS.)	DIMENSIONS (IN.)											DRUM SPEED (RPM) FEED	
			A DIA.	B I.D.	C	E	F	G	J	K	L	M	Q	UNDER	OVER
3036	1800	4400	33.00	30	35.25	54.75	66.75	3.50	4.50	11.00	3.50	1.25	0.75	35	30
3048	1825	5000	33.00	30	47.25	66.75	78.75	3.50	4.50	11.00	3.50	1.25	0.75	35	30
3060	2970	7100	33.00	30	59.25	78.75	90.75	3.50	4.50	11.00	3.50	1.25	0.75	35	30
3636	3200	4000	41.50	36	35.50	52.50	61.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
3642	3400	4520	41.50	36	41.50	58.50	67.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
3648	3800	5200	41.50	36	47.50	64.50	73.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
3654	4100	5800	41.50	36	53.50	70.50	49.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
3660	4400	6300	41.50	36	59.50	76.50	85.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
3672	5200	7600	41.50	36	71.50	88.50	97.50	3.50	5.50	15.00	4.50	1.25	1.00	35	25
4248	4600	6600	46.75	42	47.50	69.50	80.00	4.00	6.00	16.00	5.00	1.50	1.25	35	25
4254	5000	7300	46.75	42	53.50	75.50	86.00	4.00	6.00	16.00	5.00	1.50	1.25	35	25
4260	5400	8200	46.75	42	59.50	81.50	92.00	4.00	6.00	16.00	5.00	1.50	1.25	35	25
4272	6400	10000	46.75	42	71.50	93.50	104.00	4.00	6.00	16.00	5.00	1.50	1.25	35	25
4848	5500	9300	52.75	48	47.50	69.50	80.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
4854	5800	9200	52.75	48	53.50	75.50	86.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
4860	6300	10500	52.75	48	59.50	81.50	92.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
4872	7300	13000	52.75	48	71.50	93.50	104.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
4884	7500	14000	52.75	48	84.00	106.00	116.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
4896	9100	15000	52.75	48	96.00	118.00	128.00	4.00	6.00	16.00	5.00	1.50	1.25	30	23
5454	6900	10500	58.75	54	53.50	75.50	86.00	4.00	7.50	19.00	6.00	2.00	1.25	30	22
5460	7400	11500	58.75	54	59.50	81.50	92.00	4.00	7.50	19.00	6.00	2.00	1.25	30	22
5472	8500	16500	58.75	54	71.50	93.50	104.00	4.00	7.50	19.00	6.00	2.00	1.25	30	22
5484	8200	17000	58.75	54	83.50	104.00	117.00	4.00	7.50	19.00	6.00	2.00	1.25	30	22
5496	8200	17700	58.75	54	95.50	116.00	129.00	4.00	7.50	19.00	6.00	2.00	1.25	30	22
6060	8700	18000	64.75	60	59.50	81.50	92.00	4.00	7.50	19.00	6.00	2.00	1.25	30	21
6072	9500	19600	64.75	60	71.50	93.50	104.00	4.00	7.50	19.00	6.00	2.00	1.25	30	21
6084	9700	25000	64.75	60	83.50	104.00	116.00	4.00	7.50	19.00	6.00	2.00	1.25	30	21

STEARNS ELECTROMAGNETIC DRUMS LDA-AXIAL DESIGN



Note: Dimension "X" to be defined on customer approval drawing.

SIZE	WATTS		APPROX. SHIP WT. (LBS.)		DIMENSIONS (IN.)				DRUM SPEED (RPM)
	STANDARD	SUPER	STANDARD	SUPER	A I.D.	B	C	D	
4860	6,200	6,200	9,500	10,500	48	60	9-10	82.00	20-25
4872	8,200	8,550	12,000	13,800	48	72	9-10	93.25	20-25
4884	9,800	10,300	13,700	16,000	48	84	9-10	105.25	20-25
4896	11,900	12,500	15,200	17,200	48	96	9-10	115.25	20-25
5472		10,450		16,000	54	72	10-12	93.25	20
5484		10,100		18,000	54	84	10-12	105.25	20
5496		14,550		20,000	54	96	10-12	115.25	20
6060		9,230		14,500	60	60	12-14	80.00	17-20
6072		11,000		18,100	60	72	12-14	93.25	17-20
6084		14,223		20,000	60	84	12-14	105.25	17-20
6096		16,324		22,500	60	96	12-14	115.25	17-20
7296		18,000		33,000	72	96	14-16	115.25	17
72110		20,000		37,000	72	110	14-16	130.00	17

STEARNS MAGNETIC AND PERMANENT MAGNET PULLEYS

STEARNS MAGNETIC PULLEYS

Stearns Magnetic Pulleys provide automatic separation of unwanted tramp metal from most continuous material handling conveyor belt processes in scrap, steel and mining. Magnetic pulleys are self-cleaning, worry-free solutions to keep operations flowing smoothly.

- Optional contours including lagged, crowned or flat
- Custom engineered shafts to meet all interface requirements
- Head or tail pulley designs

STEARNS PERMANENT MAGNET PULLEYS

Stearns' continuous "Radial Pole" design incorporates the use of unique, wedge-shaped magnets that provide more lines of flux and a magnetic field of maximum intensity. Application-engineered pulleys give you exceptional performance and reliable, long-term service.

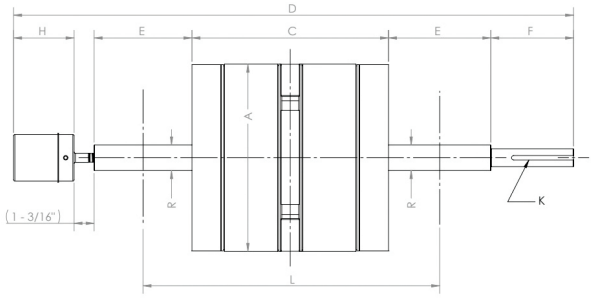
Super 710 Model Magnetic Pulleys

Stearns Series 710 Heavy-Duty Permanent Magnet Pulleys are specifically designed for deeper burdens and faster conveyor speeds.

Features

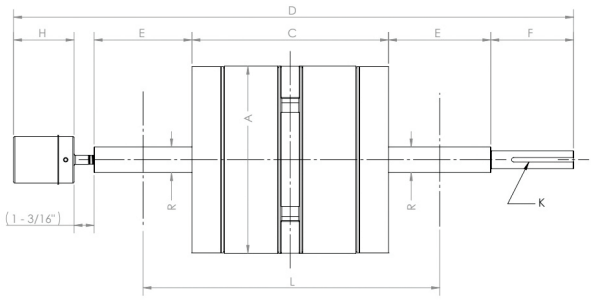
- Available in a variety of standard sizes up to 48 inches in diameter and 72 inches in width
- Non-magnetic stainless-steel shaft standard to produce maximum magnetic attraction force
- Minimum 24-inch diameter incorporates double stack wedge-shaped magnets
- Quality heavy duty design
- Ceramic 8 or Rare Earth magnet design available upon request
- Standard permanent magnet sizes for belt widths ranging from 6 to 48 inches (25 to 1219 mm)
  - Models from 12 to 48 inches in diameter
- Efficient, cost-saving recovery of harmful tramp metal; trouble-free operation
- Maximum power and separation, at belt speeds as high as 500 feet per minute (fpm)
- Develops especially powerful magnetic field at the center of the belt, where burden is deepest
- Deep Field Penetration
- No DC Power Required
- All welded body and face construction – no bolts or screws to work loose

STEARNS PERMANENT MAGNETIC PULLEYS



**For sizes not shown, contact factory.*

PULLEY MODEL	DIMENSIONS (IN.)			CAPACITY CU. FT/HR.	APPROX. WT. (LBS.)	DIMENSIONS (IN.)				
	A DIA.	B BELT WIDTH	C CROWNED FACE	SERIES 710		D DIA.	E	F	G	KEY SEAT
1212	12	12	14	1,100	222	1.9375	29.5	6.0	9.5	.50 X .25 X 3.75
1214	12	14	16	1,200	249	1.9375	31.5	6.0	9.5	.50 X .25 X 3.75
1216	12	16	18	1,425	274	1.9375	33.5	6.0	9.5	.50 X .25 X 3.75
1218	12	18	20	1,850	299	1.9375	35.5	6.0	9.5	.50 X .25 X 3.75
1220	12	20	22	2,300	348	1.9375	37.5	6.0	9.5	.50 X .25 X 3.75
1224	12	24	26	3,500	408	2.1875	42.5	6.5	10.0	.50 X .25 X 3.75
1512	15	12	14	1,350	295	2.1875	30.5	6.5	10.0	.50 X .25 X 3.75
1514	15	14	16	1,475	361	2.1875	32.5	6.5	10.0	.50 X .25 X 3.75



For sizes not shown, contact factory.

PULLEY MODEL	DIMENSIONS (IN.)			CAPACITY CU. FT/HR.	APPROX. WT. (LBS.)	DIMENSIONS (IN.)				
	A DIA.	B BELT WIDTH	C CROWNED FACE	SERIES 710		D DIA.	E	F	G	KEY SEAT
1516	15	16	18	1,750	365	2.1875	34.5	6.5	10.0	.50 X .25 X 3.75
1518	15	18	20	1,850	398	2.1875	36.5	6.5	10.0	.50 X .25 X 3.75
1520	15	20	22	2,700	479	2.4375	38.5	6.5	10.0	.625 X .3125 X 3.75
1524	15	24	26	4,000	560	2.6875	44.5	7.5	11.0	.625 X .3125 X 3.75
1530	15	30	32	6,250	731	2.9375	51.5	8.0	11.5	.75 X .375 X 3.75
1816	18	16	18	2,225	512	2.4375	35.5	7.0	10.5	.625 X .3125 X 3.75
1818	18	18	20	2,800	559	2.4375	37.5	7.0	10.5	.625 X .3125 X 3.75
1820	18	20	22	3,500	672	2.6875	40.5	7.5	11.0	.625 X .3125 X 3.75
1824	18	24	26	4,500	800	2.9375	45.5	8.0	11.5	.75 X .375 X 3.75
1830	18	30	32	7,100	1,024	2.9375	51.5	8.0	11.5	.75 X .375 X 3.75
1836	18	36	38	11,000	1,260	3.4375	60.5	9.0	13.5	.875 X .4375 X 4.75
1842	18	42	44	14,950	2,010	3.9375	68.5	10.0	14.5	1 X .50 X 4.75
1848	18	48	50	20,000	2,317	3.9375	74.5	10.0	14.5	1 X .50 X 4.75
2018	20	18	20	3,200	634	2.4375	37.5	7.0	10.5	.625 X .3125 X 3.75
2020	20	20	22	3,900	762	2.6875	40.5	7.5	11.0	.625 X .3125 X 3.75
2024	20	24	26	5,000	909	2.9375	45.5	8.0	11.5	.75 X .375 X 3.75
2030	20	30	32	8,000	1,218	3.4375	54.5	9.0	13.5	.875 X .4375 X 4.75
2036	20	36	38	11,750	1,475	3.4375	60.5	9.0	13.5	.875 X .4375 X 4.75
2042	20	42	44	17,000	2,108	3.9375	68.5	10.0	14.5	1 X .50 X 4.75
2048	20	48	50	23,000	2,415	3.9375	74.5	10.0	14.5	1 X .50 X 4.75
2418	24	18	20	3,850	807	2.9375	39.5	8.0	11.5	.75 X .375 X 3.75
2420	24	20	22	4,700	952	2.9375	41.5	8.0	11.5	.75 X .375 X 3.75
2424	24	24	26	5,800	1,165	3.4375	48.5	9.0	13.5	.875 X .4375 X 4.75
2430	24	30	32	9,000	1,529	3.9375	56.5	10.0	14.5	1 X .50 X 4.75
2436	24	36	38	13,250	1,800	3.9375	62.5	10.0	14.5	1 X .50 X 4.75
2442	24	42	44	19,000	2,742	4.4375	71.5	11.0	16.5	1.125 X .5625 X 5.75
2448	24	48	50	26,000	3,150	4.4375	77.5	11.0	16.5	1.125 X .5625 X 5.75
3024	30	24	26	6,600	1,515	3.9375	50.5	10.0	14.5	1 X .50 X 4.75
3030	30	30	32	10,500	2,040	4.4375	59.5	11.0	16.5	1.125 X .5625 X 5.75
3036	30	36	38	15,500	3,440	4.4375	69.5	11.0	16.5	1.125 X .5625 X 5.75
3042	30	42	44	21,000	4,100	4.9375	75.5	12.0	19.5	1.25 X .625 X 7.75
3048	30	48	50	30,500	4,700	4.9375	81.5	12.0	19.5	1.25 X .625 X 7.75
3624	36	24	26	7,500	1,990	4.4375	53.5	11.0	16.5	1.125 X .5625 X 5.75
3630	36	30	32	11,500	2,510	4.4375	59.5	11.0	16.5	1.125 X .5625 X 5.75
3636	36	36	38	17,000	4,400	4.9375	69.5	12.0	19.5	1.25 X .625 X 7.75
3642	36	42	44	24,500	5,200	4.9375	75.5	12.0	19.5	1.25 X .625 X 7.75
3648	36	48	50	32,750	5,950	5.4375	84.5	13.0	21.5	1.375 X .6875 X 8.75
4230	42	30	32	13,500	3,055	4.9375	63.5	12.0	19.5	1.25 X .625 X 7.75
4236	42	36	38	18,750	5,490	5.4375	72.5	13.0	21.5	1.375 X .6875 X 8.75
4242	42	42	44	26,750	6,300	5.9375	81.5	14.0	23.5	1.50 X .75 X 9.75
4248	42	48	50	37,000	7,280	6.4375	91.5	16.0	25.5	1.625 X .8125 X 9.75
4830	48	30	32	13,500	3,580	5.4375	66.5	13.0	21.5	1.375 X .6875 X 8.75
4836	48	36	38	20,500	6,700	5.9375	75.5	14.0	23.5	1.50 X .75 X 9.75
4842	48	42	44	29,000	7,400	5.9375	81.5	14.0	23.5	1.50 X .75 X 9.75
4848	48	48	50	40,000	8,460	6.9375	91.5	16.0	25.5	1.75 X .875 X 9.75

PULLEY DIAMETER (IN.)	12	15	18	20	24	30	36	42	48
MAXIMUM SPEED (RPM)	175	200	225	250	285	330	365	400	435

STEARNS ELECTROMAGNETIC PULLEYS

Electromagnetic Pulleys remove tramp Iron, even on fast conveyor lines. Stearns builds a complete line of electromagnetic pulleys for removal of tramp iron in bulk materials on conveyor belts.

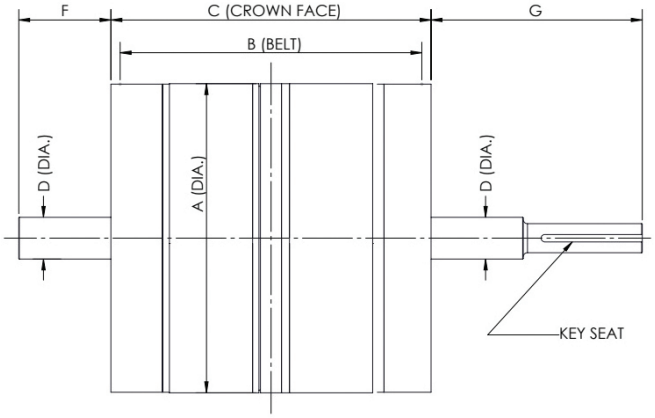
Features

- Standard electromagnet sizes for belt widths ranging from 24 to 48 inches (610 to 1219 mm)
  - Models from 18 to 36 inches in diameter
- Rugged heavy-duty designs
- Deep field penetration
- Specialized sizing available
- Variable voltage rectifier option

Applications

- Tramp Metal Removal from Conveyor Systems
- Purification and Concentration of Ores, Chemicals and Granular Products
- Lifting and Holding Equipment for Safe Handling of Parts and Materials

STEARNS ELECTROMAGNETIC PULLEYS



MODEL	DIMENSIONS (IN.)		WATTS CU	WATTS AL	APPROX. WEIGHT CU (LBS.)	APPROX. WEIGHT AL (LBS.)	DIMENSIONS (IN.)							
	A DIA.	B BELT WIDTH					C	D	E	F	R DIA.	K	H	L
24 IN. WIDTH BELT														
1824	18	24	1025	1275	1265	981	25	54.50	9	5	2.9375	0.7500 X 0.3750	6.25	36
2424	24	24	1640	1600	2210	1650	25	57.25	10	6	3.4375	0.8750 X 0.4375	6.25	37
3024	30	24	1735	1800	3080	2410	25	60.25	11	7	3.9375	1.0000 X 0.5000	6.25	38
3624	36	24	2055	2130	4000	3100	25	63.25	12	8	4.4375	1.1250 X 0.5625	6.25	39
30 IN. WIDTH BELT														
1830	18	30	1470	1550	1610	1110	31	60.25	9	5	2.9375	0.7500 X 0.3750	6.25	42
2430	24	30	1770	1830	2460	1800	31	66.25	11	7	3.9375	1.0000 X 0.5000	6.25	44
3030	30	30	2210	2320	3580	2740	31	69.25	12	8	4.4375	1.1250 X 0.5625	6.25	45
3630	36	30	2700	2580	4390	3300	31	69.25	12	8	4.4375	1.1250 X 0.5625	6.25	45
36 IN. WIDTH BELT														
1836	18	36	1675	1765	1890	1290	37	69.25	10	6	3.4375	0.8750 X 0.4375	6.25	49
2436	24	36	2215	2270	2830	2000	37	72.25	11	7	3.9375	1.0000 X 0.5000	6.25	50
3036	30	36	2390	2430	4370	3150	37	75.25	12	8	4.4375	1.1250 X 0.5625	6.25	51
3636	36	36	3200	3520	4900	3790	37	79.50	13	9	4.9375	1.2500 X 0.6250	6.25	52
42 IN. WIDTH BELT														
3642	36	42	3610	4030	6430	4305	43	85.50	13	9	4.9375	1.2500 X 0.6250	6.25	58
48 IN. WIDTH BELT														
2448	24	48	3435	3470	4180	2800	49	87.25	12	8	4.4375	1.1250 X 0.5625	6.25	63
3048	30	48	3775	3700	5935	4025	49	91.50	13	9	4.9375	1.2500 X 0.6250	6.25	64
3648	36	48	4660	4630	7480	5085	49	95.25	15	10	5.4375	1.3750 X 0.6875	6.25	66

Model MSI (light-duty)

The light-duty Model MSI Floor Sweeper is ideal for quick pick-up of nails, staples, wire and any discarded ferrous metal debris. These magnetic floor sweepers come with durable rubber wheels and powerful magnets that feature a pulling force of up to 8 Lbs. Standard widths: 24", 36" and 48".

Model YSI

Save costly tire damage and maintenance with Stearns Permanent Magnet Yard sweepers. Collect hazardous tramp metal while you work. These magnetic yard sweepers attach to any vehicle bumper in seconds and are equipped with eye bolts for easy mounting. Standard Sizes: 48" through 96".

Model FLS

This clamp-on permanent magnet readily adapts to any forklift to become a magnetic floor sweeper in seconds. The magnet can then maneuver around machines and under overhanging obstacles. Use indoors or outdoors and unit is easily installed by one person. Standard Sizes: 36" through 96".

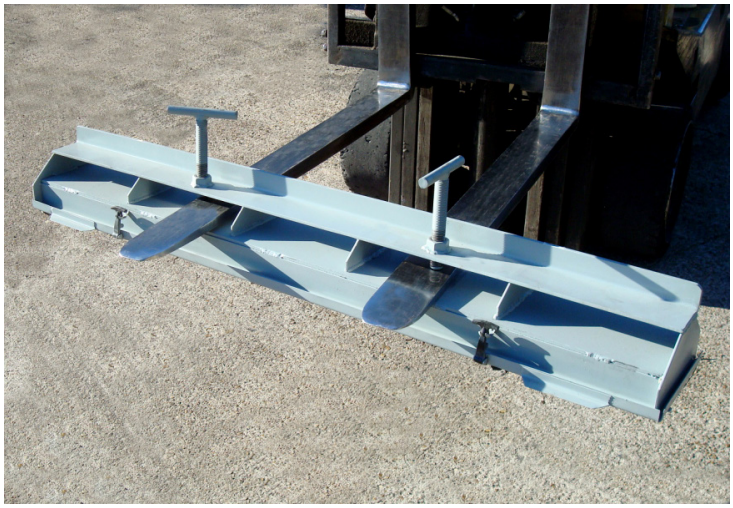
SELF-CONTAINED ROAD SWEEPERS

Model MRS

Keep your rolling equipment maintenance costs down with these simple to operate and cost-effective road sweepers. Easily towed behind vehicles, these permanent magnet road sweepers keep loading dock areas, paved or unpaved roadways free of nails and other harmful tramp iron.

Features include:

- Adjustable 2-6 inch Clearance
- Self-Contained Debris Carrying Pans
- Adjustable Towbar
- All Weather Resistant Construction
- Standard Sizes: 72 and 96 inches



Model ERS-96

Ideal for large surfaces, these extra-large 96" powerful electro-magnets remove all sizes of harmful tramp metals. Completely self-contained, powered by either a gas or diesel generator, this unit can be towed in and around a plant or other area to clean floor surfaces that can't be cleaned by smaller road sweeper designs. Made to operate in all weather conditions and easy to maintain, Stearns electromagnetic road sweepers feature:

- Remote Controls allow operator to energize or de-energize magnet without stopping tow vehicle
- Compact Design with its low center of gravity makes this unit ideal for use at airports, shipyards, warehouses and plant floors

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