



CONVEYOR LINE MAGNETS

SUSPENDED ELECTROMAGNET OVERHEAD SEPARATORS

Overhead (Overband) Separation Magnets

Suspended magnets are designed for separation of ferrous metal from a variety of over-the-belt conveyor applications. Proven in industries such as Mining, Aggregate, Recycling, Tire Shredding, Foundry, Wood Chip, Pulp & Paper, Power Generation, Construction and Demolition.

These powerful Suspended Electromagnet Overhead Separators (SEMO) are designed to deliver peak ferrous metal separation performance. The "Deep Reaching" magnetic field is ideal for applications that require increased suspension heights for the magnet or that have a deep product burden.

Manual Clean SEMOs

Manual Clean SEMOs are best suited for applications with a lower volume of ferrous metal in the product flow or in applications where the system is only run intermittently. Ferrous material is pulled out of the product flow and held to the face of the magnet. The captured tramp metal is held in place for as long as the unit has power. To clean the unit, the power source is simply turned off, instantly releasing the metal from the magnet's hold. These units can also be converted at a later time to a Self-cleaning version with the purchase and installation of an upgrade package. Upgrade packages are excellent options when tramp metal collection exceeds expectations or the magnet is in a difficult to access location.

Self-Clean SEMOs

The Self-Cleaning Suspended Electromagnet offers optimum separation capacity by removing collected metal from the magnet face instantly and discharging it out of the product flow. This continuous cleaning functionality allows the magnetic circuit to maintain maximum magnetic strength at all times. As the product on a conveyor belt flows under the powerful magnetic field, ferrous material is pulled out of the product flow up to the face of the magnet. With Self-Cleaning models, continuous cleaning of the magnet face is made possible by a heavy duty belt that encircles the magnet on a series of rotating pulleys. As ferrous metal is attracted and held by the magnet, the moving belt carries the collected metal outside of the magnetic field where it is then released beyond the product flow.



SEMO
(Manual Clean)



SEMO (Self-Clean)

OPTIONS:

- » Start/Stop Contactors available for Magnet, Meter Package, field loss relay, and/or Self-clean Belt Motor
- » Self-Clean Upgrade Kit (Manual Clean Models)
- » Turnbuckles (Self-Clean Models)
- » Stainless steel clad belt (Self-Clean Models)



FEATURES:

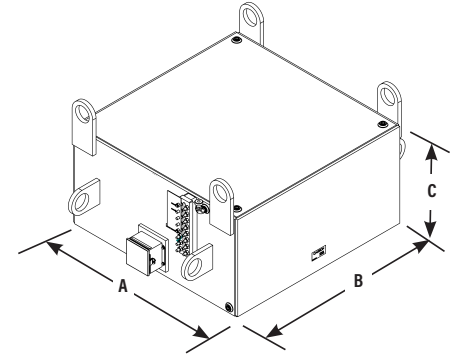
- » Industry-leading drive components
- » 240/480 volt, 3 phase, AC motor
- » Shaft mounted gear motor
- » Anodized Aluminum coils with Glastic™ Spacers
- » Non-combustible coolant
- » 2" high stainless steel cleats
- » Multi-layer industrial grade rubber belting
- » Standard industrial bearings and take-ups
- » Heavy duty steel channel framework
- » Manganese impact plate
- » Oil level sight glass
- » **10 year limited coil warranty on SEMOs 72" or less

TOLL FREE **1.888.582.0821** imi@magnetics.com



Manual Clean SEMO Standard Specifications:

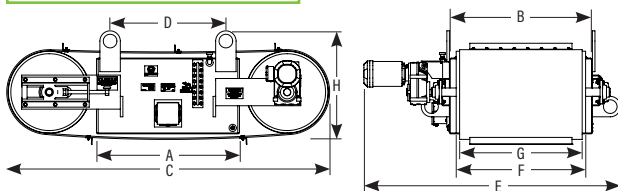
MODEL	DIMENSIONS (A X B X C)	VOLTAGE VDC	WATTS	WEIGHT (LBS.)	OIL CAPACITY (GALLONS)
SEM0241	24 x 24 x 16	115	1,650	960	24
SEM0301	30 x 30 x 18	115	2,700	1,460	43
SEM0361	36 x 36 x 22	115	3,800	2,332	82
SEM0422	42 x 42 x 23	230	5,000	3,768	107
SEM0482	48 x 48 x 25	230	6,600	4,790	162
SEM0542	54 x 54 x 26	230	8,000	6,634	207
SEM0602	60 x 60" x 32	230	10,000	8,704	341
SEM0662	66 x 66 x 33	230	12,250	11,116	415
SEM0722	72 x 72 x 38	230	14,500	15,101	602
SEM0782	78 x 78 x 41	230	16,700	21,600	740
SEM0842	84 x 84 x 42	230	19,000	27,100	841
SEM0962	96 x 96 x 45	230	23,500	38,050	1220
SEM01082	108 x 108 x 49	230	28,000	49,050	1672
SEM01202	120 x 120 x 51	230	32,500	60,000	2066



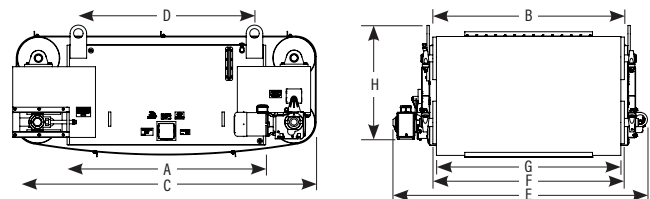
Note: All dimensions are stated in inches. Coolant oil levels must be checked regularly.

Self-Clean SEMO Standard Specifications:

Models SEM0241SC to SEM0422SC



Models SEM0482SC to SEM01202SC



MODEL	MAGNET (A X B)	LENGTH (C)	LIFT LUGS CENTERS (D)	OVERALL WIDTH (E)	PULLEY WIDTH (F)	BELT WIDTH (G)	OVERALL HEIGHT (H)	PULLEY QTY.	PULLEY DIA.	MOTOR H.P.	WEIGHT (LBS.)
SEM0241SC	24 x 24	64	16	55	20	18	23	2	16	2	1,704
SEM0301SC	30 x 30	74	22	58	26	24	25	2	20	2	2,204
SEM0361SC	36 x 36	88	28	63	32	30	29	2	24	2	3,071
SEM0422SC	42 x 42	94	34	72	38	36	31	2	24	3	4,805
SEM0482SC	48 x 48	91	40	77	44	42	35	4	12	3	6,260
SEM0542SC	54 x 54	97	46	84	51	48	37	4	12	3	7,721
SEM0602SC	60 x 60	95	52	91	57	54	43	4	12	5	10,849
SEM0662SC	66 x 66	101	58	97	63	60	45	4	12	5	13,574
SEM0722SC	72 x 72	114	64	109	69	66	49	4	12	7.5	18,625
SEM0782SC	78 x 78	135	42.5	116	72	41	53	4	18	7.5	25,650
SEM0842SC	84 x 84	141	48.5	122	78	42	54	4	18	7.5	32,675
SEM0962SC	96 x 96	153	60.5	134	90	45	57	4	18	10	46,725
SEM01082SC	108 x 108	165	72.5	146	102	49	61	4	18	10	60,775
SEM01202SC	120 x 120	177	84.5	158	114	51	63	4	18	15	74,825

Note: All dimensions are stated in inches. Coolant oil levels must be checked regularly.

SEMO Power Supply Specifications:

SEMO MODEL	3 PHASE POWER SUPPLY MODEL		DIMENSIONS	OUTPUT VOLTAGE	SUPPLY WATTS
	240VAC	480VAC			
SEM0241(SC)	PSS43200	PSS53200	24 x 24 x 12	115VDC	2,000
SEM0301(SC)	PSS43300	PSS53300	24 x 24 x 12	115VDC	3,000
SEM0361(SC)	PSS43400	PSS53400	24 x 24 x 12	115VDC	4,000
SEM0422 (SC)	PSS44500	PSS54500	36 x 30 x 16	230VDC	5,000
SEM0482(SC)	PSS44700	PSS54700	36 x 30 x 16	230VDC	7,000
SEM0542(SC)	PSS44800	PSS54800	36 x 30 x 16	230VDC	8,000
SEM0602(SC)	PSS441000	PSS541000	36 x 30 x 16	230VDC	10,000
SEM0662(SC)	PSS441250	PSS541250	36 x 30 x 16	230VDC	12,500
SEM0722(SC)	PSS441500	PSS541500	36 x 30 x 16	230VDC	15,000
SEM0782(SC)	PSS441700	PSS541700	24 x 24 x 12	230VDC	17,000
SEM0842(SC)	PSS442000	PSS542000	24 x 24 x 12	230VDC	20,000
SEM0962(SC)	PSS442400	PSS542400	24 x 24 x 12	230VDC	24,000
SEM01082(SC)	PSS442800	PSS542800	36 x 30 x 16	230VDC	28,000
SEM01202(SC)	PSS443300	PSS543300	36 x 30 x 16	230VDC	33,000

Note: All dimensions are stated in inches. Power supplies are available in VAC single phase, 240/480/575 3-Phase.

POWER SUPPLY FEATURES:

- » Standard enclosures meet NEMA 4 & 12 specifications
- » Three-phase, full-wave bridge rectifier on heat sink
- » Allowable ambient temperature: -22°F (-30°C) to 104°F (40°C).
- » Isolation transformer with secondary fusing (SEM0241 to SEM0722)
- » Oversized Transformer for added protection (SEM0241 to SEM0722)
- » Through-door disconnect with Type J fuses (SEM0782 & up)
- » Bussmann FWX high-speed series rectifier fusing (SEM0782 & up)
- » Externally mounted transformer in vented enclosure on capacities 20kW and up (SEM0782 & up)