



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)
- » T304 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
- » 2" high T304 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

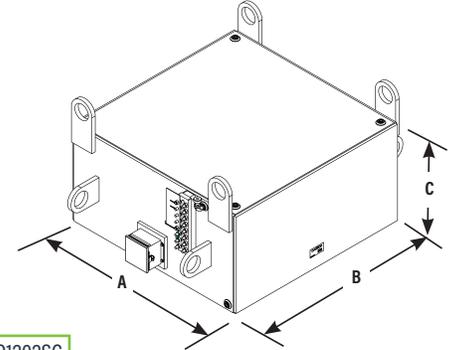
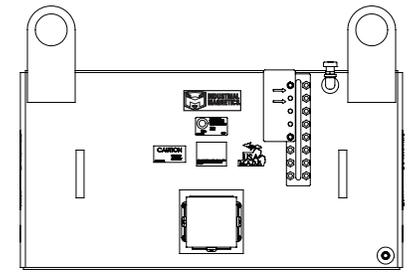
TOLL FREE 1.888.582.0821 imi@magnetics.com



Manual Clean SEMO Standard Specifications:

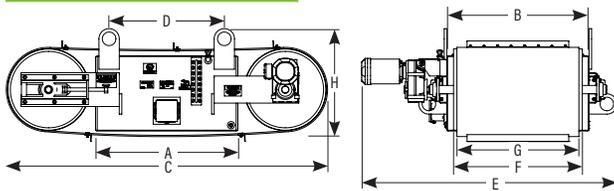
MODEL	DIMENSIONS (A X B X C)	VOLTAGE VDC	WATTS	WEIGHT (LBS.)	OIL CAPACITY (GALLONS)
SEMO241	24 x 24 x 16	115	1,650	960	24
SEMO301	30 x 30 x 18	115	2,700	1,460	43
SEMO361	36 x 36 x 22	115	3,800	2,332	82
SEMO422	42 x 42 x 23	230	5,000	3,768	107
SEMO482	48 x 48 x 25	230	6,600	4,790	162
SEMO542	54 x 54 x 26	230	8,000	6,634	207
SEMO602	60 x 60 ⁹ x 32	230	10,000	8,704	341
SEMO662	66 x 66 x 33	230	12,250	11,116	415
SEMO722	72 x 72 x 38	230	14,500	15,101	602
SEMO782	78 x 78 x 41	230	16,700	21,600	740
SEMO842	84 x 84 x 42	230	19,000	27,100	841
SEMO962	96 x 96 x 45	230	23,500	38,050	1220
SEMO1082	108 x 108 x 49	230	28,000	49,050	1672
SEMO1202	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.

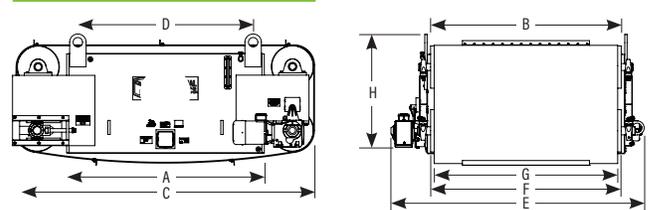


Self-Clean SEMO Standard Specifications:

Models SEMO241SC to SEMO422SC



Models SEMO482SC to SEMO1202SC



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.)
SEMO241SC	24 x 24	64	16	55	20	18	23	2	16	2	1,704
SEMO301SC	30 x 30	74	22	58	26	24	25	2	20	2	2,204
SEMO361SC	36 x 36	88	28	63	32	30	29	2	24	2	3,071
SEMO422SC	42 x 42	94	34	72	38	36	31	2	24	3	4,805
SEMO482SC	48 x 48	91	40	77	44	42	35	4	12	3	6,260
SEMO542SC	54 x 54	97	46	84	51	48	37	4	12	3	7,721
SEMO602SC	60 x 60	95	52	91	57	54	43	4	12	5	10,849
SEMO662SC	66 x 66	101	58	97	63	60	45	4	12	5	13,574
SEMO722SC	72 x 72	114	64	109	69	66	49	4	12	7.5	18,625
SEMO782SC	78 x 78	135	42.5	116	72	69	53	4	18	7.5	25,650
SEMO842SC	84 x 84	141	48.5	122	78	75	54	4	18	7.5	32,675
SEMO962SC	96 x 96	153	60.5	134	90	87	57	4	18	10	46,725
SEMO1082SC	108 x 108	165	72.5	146	102	99	61	4	18	10	60,775
SEMO1202SC	120 x 120	177	84.5	158	114	111	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 480VAC	DIMENSIONS	OUTPUT VOLTAGE	SUPPLY WATTS	WEIGHT LBS.
SEMO241(SC)	PSS53200	24 x 24 x 12	115VDC	2,000	125
SEMO301(SC)	PSS53300	24 x 24 x 12	115VDC	3,000	150
SEMO361(SC)	PSS53400	24 x 24 x 12	115VDC	4,000	175
SEMO422(SC)	PSS54500	36 x 30 x 16	230VDC	5,000	200
SEMO482(SC)	PSS54700	36 x 30 x 16	230VDC	7,000	200
SEMO542(SC)	PSS54800	36 x 30 x 16	230VDC	8,000	200
SEMO602(SC)	PSS541000	36 x 30 x 16	230VDC	10,000	225
SEMO662(SC)	PSS541250	36 x 30 x 16	230VDC	12,500	225
SEMO722(SC)	PSS541500	36 x 30 x 16	230VDC	15,000	300
SEMO782(SC)	PSS541700	24 x 24 x 12	230VDC	17,000	300
SEMO842(SC)	PSS542000	24 x 24 x 12	230VDC	20,000	350
SEMO962(SC)	PSS542400	24 x 24 x 12	230VDC	24,000	350
SEMO1082(SC)	PSS542800	36 x 30 x 16	230VDC	28,000	400
SEMO1202(SC)	PSS543300	36 x 30 x 16	230VDC	33,000	400

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
- » Extra capacity transformer for added protection
- » Through-door disconnect with Type J fuses (SEMO842 & up)
- » Bussmann FWX high-speed series rectifier fusing (SEMO842 & up)
- » Externally mounted transformer in vented enclosure on capacities 20kW and up (SEMO842 & up)