LIFTON®
MAGNETS

CATALOGUE
2016 / 2017

PRODUCT CODE

Page	Product Code	Description	Product Name
2	EPME	Long pole / Transverse pole Electropermanent magnet chuck	Turbo Max-Entry
3	EPMD	EPM chuck for Drilling machines	Turbo Max-Drill
3	NG	Manual Permanent magnetic chuck	Neogrip
4	Various	Multipurpose EPM clamp	Turbo Max-Duble'
5	EMILL	Standard pole Electromagnet chuck	E-Mill
6	EPMM	Square pole EPM chuck	Turbo Max-Mill
8	EPMT	Square pole EPM chuck	Turbo Max-Tomb
9		Square pole EPM - Turbo Max-Rail	Turbo Max-Rail
9		Square pole EPM - Turbo Max-Flame	Turbo Max-Flame
10	EPMR	Radial pole EPM chuck	Turbo Max-Radial
11	NEG	Micro and standard pole permanent magnet chuck	NeoEDMGrind
12	FEG	Double pole permanent magnet chuck	FerroEDMGrind
13	SS	Uniaxial Permanent magnet sine table	SS
13	DS	Biaxial Permanent magnet sine table	DS
14	EPED	EPM chuck for grinding and EDM	Turbo Max-EDMGrind
15	EMF	Microfine pole Electromagnet chuck	Electromicro
16	EF	Fine pole Electromagnet chuck	Electrofine
17	EG	Universal pole Electromagnet chuck	Electrogrip
18	NR	Microfine pole round Permanent magnet chuck	NeoGrind Round
18	FR	Fine pole round chuck Permanent magnet	FerroGrind Round
19	SR	Universal pole round Permanent magnet chuck	StrongGrind Round
19	PR	Radial pole round Permanent magnet chuck	Powergrind Round
20	NML-P, PR, PF	Manual Permanent magnet lifter	Neolifter
23	EMLC	Circular Electro lifting magnet	Electro Maxlift Circular
24	EMLR	Rectangular Electro lifting magnet	Electro Maxlift Rectangular
27	EPML-BAT-SC	Battery operated EPM Lifter	EPML-BAT-SC
29	EPML-P	EPM Plate lifter	EPML-Plate
32	EPML-P/X	EPM Plate lifting module	EPML-Plate Module
32	EPML-R	EPM Rectangular module	EPML-Rectangular Module
33	EPML-SLAB	Mains operated EPM slab lifter	EPML-SLAB
34	EPMLT	Vertical plate lifting EPM system	EPML-Plate-Tilt
34	EPML-BAT-PLATE	Vertical plate lifting EPM system	EPML-BAT-Plate
35	HL	Hand operated sheet lifter	Handlift
35	SL	Crane operated sheet lifter	Sheetlift
35	TL	Hand operated gripper	Touchlift
36	MP	Press-fit Welding Fabrication	MAG-PRESS
36		Press-fit Welding Fabrication	MAG-PRY
37	MITEE-BITE	Multipurpose gripper	MITEE-BITE
37	BEAR-CLAW	Multipurpose gripper	BEAR-CLAW
38	RBM	Multipurpose holding and anchoring magnets	RBM-NA, NB, NC, ND, NE
40	ALCO	AlNiCo Pots & Horseshoe magnets	ALCO Series
42	MS	Stronghand Strongmag welding tools	
45	PM-MC-A	Permanent magnet suspended separator	Overhead Separator
45	PM-MC-B	Permanent magnet suspended separator	Overhead Separator
46	EM-S	Electromagnet suspended separator	Overhead Separator
46	PM-SC	Self-cleaning Permanent Magnet suspended separator	Overhead Separator
47	EM-SC	Self-cleaning Electromagnet suspended separator	Overhead Separator
47	EM-SCO	Self-cleaning oil-cooled Electromagnet suspended separator	Overhead Separator
48	WDS	Direct flow, Half and counter current type wet drum separator	Wet Drum Separator
49	HD	Hopper Drawer magnet	Hopper Drawer magnet
50	RGS	Rotary Grate Separator	Rotary Grate Separator
51	PM	Plate Magnet	Plate Magnet
52	GM	Grate Magnet	Grate Magnet
53	MRR, MRS	Magnet Rod	Magnet Rod
53	FS	Floor Sweeper	Floor Sweeper
54	RS	Road Sweeper	Road Sweeper
55	LT	Liquid Trap	Liquid Trap
56	BM	Bullet Magnet	Bullet Magnet
56	HM	Hump Magnet	Hump Magnet
57	PMH	Plate Magnet Housing	Plate Magnet Housing
58	HS	Hand Separator	Hand Separator
58	SB	Swarf Buster	Swarf Buster
59	DM	Ditch Magnet	Ditch Magnet
60		Demagnetizers	
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TURBO MAX-ENTRY EPM

LONG POLE / TRANSVERSE POLE ELECTRO PERMANENT RECTANGULAR CHUCK

FEATURES

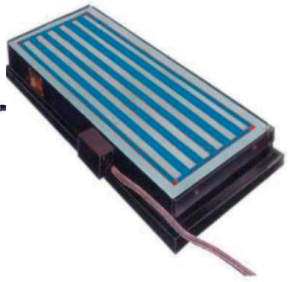
- Energy saving: electricity is required only for switching On/Off.
- High clamping force is supplied by the super powerful NdFeb magnets.
- Uniformity of clamping over the entire contact surface.
- Drastically reduces the setup time of work pieces.
- Power from entire pole is induced to components for maximum magnetisation.
- Standard model comes with Resin separator. Optional all metal surface where Resin replaces brass provides stable working area for heavy duty machining.

APPLICATIONS

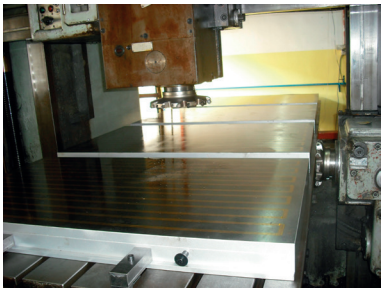
- For roughing / squaring / facing / sizing application of medium and large sizes of jobs.
- Suitable for roughing / squaring / facing / sizing operations ofplates / castings / flats / strips having flat smooth surface and thickness > 10mm.
- Optional pole extensions raise the workpiece above the chuck to provide clearance for the cutters.
- Dovel holes can be made on working surface for location of work piece.
- These chucks are also available in transverse pole design.
- These chucks can also be designed for job thickness < 10mm.

Cross pole design

Special construction for machining round parts



Long pole design



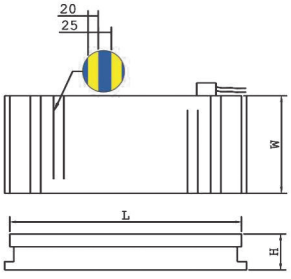
Array of Long Pole milling magnets

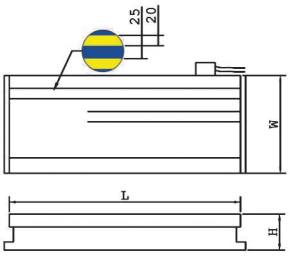
Product Code – EPME

All dimensions are in mm

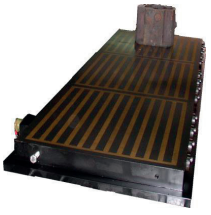
Model No.	L	W	Height	Weight (Kgs)	Pitch
EPME-4525	450	250	70	43	65 (15 + 50)
EPME-5025	500			48	
EPME-6025	600			58	
EPME-7025	700			67	
EPME-8025	800			76	
EPME-10025	1000			95	
EPME-4530	450	300		52	
EPME-5030	500			58	
EPME-6030	600			68	
EPME-10030	1000			115	
EPME-6040	600	400	75	98	
EPME-7040	700			114	
EPME-8040	800			131	
EPME-10040	1000			163	
EPME-12040	1200			196	
EPME-15040	1500			245	
EPME-20050	2000	500		409	

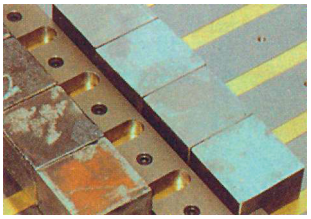
Due to continuous upgradation in design there could be changes in specification. Other sizes on request.Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.





Long Pole





Number of small components can be machined using simple pole extension fixtures.

Side milling can be performed using raised blocks for free cutter movement.

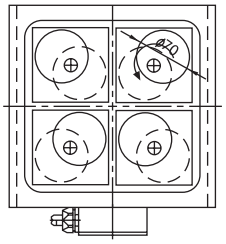
SQUARING / FACING

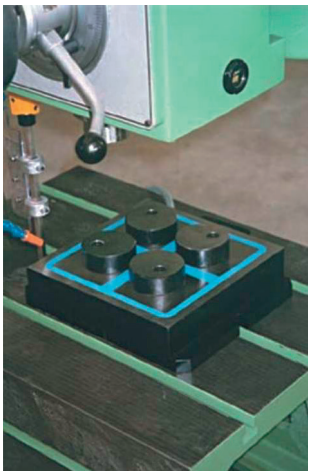
EPM TURBO MAX-DRILL

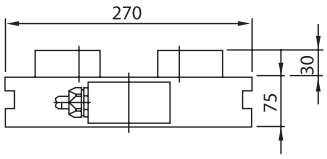
FAST CLAMPING EPM CHUCK FOR BENCH, PILLAR, RADIAL DRILLING MACHINES

FEATURES

- A smaller version of the Turbo Max-Mill.
- Energy saving as electricity is used only for switching on and off.
- High clamping force is supplied by the super powerful NdFeB magnets.
- All metal surface provides stable working area.
- Ideal for quick setup for drilling with top or side clamping.
- Standard model comes with 4 Off-centered rotary pole extension blocks.







APPLICATIONS

- Drilling applications on bench, pillar and radial drilling machines.
- Pole extensions blocks raise the work piece above the chuck to provide clearance for drill through.

Product Code : EPMDD Dimensions are non-binding and can be custom designed

Model No.	L	W	Height	Poles	Pole Dimensions	Weight (Kgs)
EPMDD -2727	270	270	75	4	70 x 70	25

Due to continuous upgradation in design there could be changes in specification. Other sizes on request.Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

Pole Extension :30mm dia off-centred counterbore

PM NEOGRIP

MANUAL PERMANENT MAGNETIC CHUCK

FEATURES

- Made with super powerful NdFeB new generation magnets.
- Steel and brass laminated top plate.
- Rigid construction.
- Accurate and stable working face.

Product Code – NG All dimensions are in mm

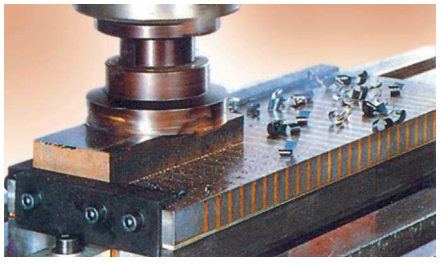
Part No	Top Plate		Pole Pitch	Height H
	L	W		
NG-1510	150	100	19 (15+4)	70
NG-1810	185	115		75
NG-2512	250	125		
NG-3015	300	150		
NG-3515	350			
NG-4015	400			
NG-4515	450			
NG-3020	300	200		
NG-4020	400			78
NG-4520	450			
NG-5020	500			
NG-6020	600			

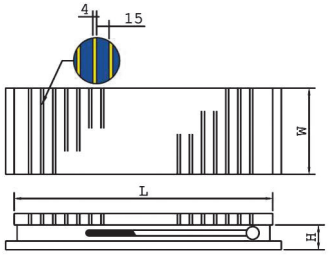
Due to continuous upgradation in design there could be changes in specification.Larger size chucks are made with two operating handles. Other sizes on request.Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

- Incorporates universal pole pitch to accommodate variety of work pieces.
- Clamping force up to 16Kg/Cm^2

APPLICATIONS

- Ideal for milling applications.
- Through drilling with laminated blocks is also possible.

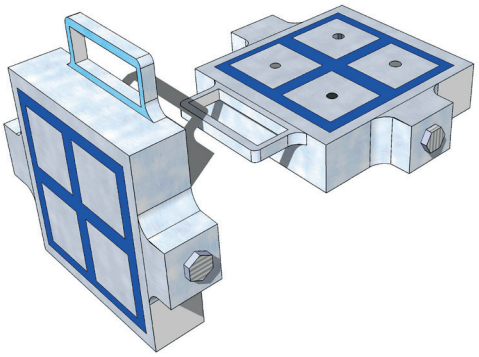




TURBO MAX-DUBLE' EPM

QUICK SETUP, MULTI-PURPOSE ELECTROPERMANENT MAGNET CLAMP

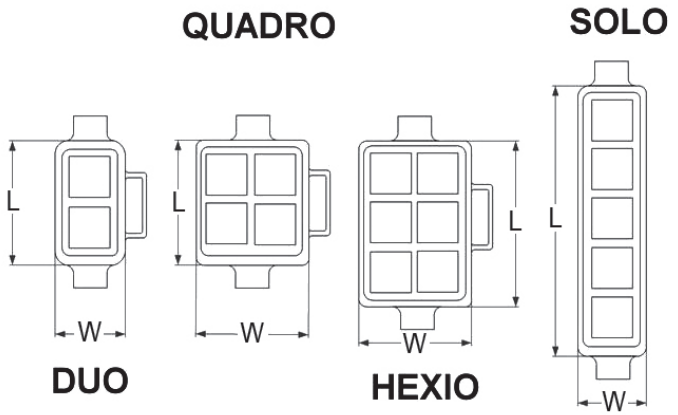
FEATURES



- A special variation of the Turbo Max-Mill.
- Magnetic Power over 80 MT/SqM.
- Energy saving design : Electricity is required only for ON/OFF.
- Both primary faces are magnetic. The bottom face clamps to the steel platform or machine table. The top face clamps the job.
- Quickest setup time for drilling, welding, or unique clamping applications.
- Flexibility is maximum as the unit can be positioned anywhere on the table with ease.
- Waterproof construction, can be designed for 110/220/440 VAC, 2-15 Amp.

Product Code : EPMD

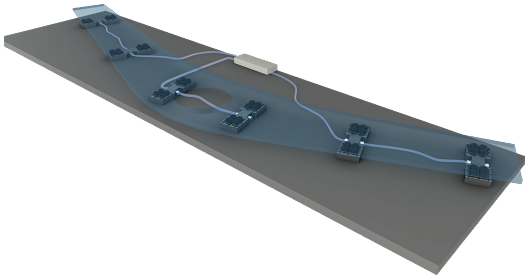
Model No.	L	W	T	Weight
50 X 50MM SQ POLE			Height without extension block	Weight of the module in Kgs
DUO-50	170	110	50	7
QUADRO-50	170	170	50	10
HEXIO-50	230	170	50	14
SOLO-50	Specify no. of squares	110	50	~
75 X 75MM SQ POLE				
DUO-75	220	135	65	11
QUADRO-75	220	220	65	22
HEXIO-75	305	220	65	31
SOLO-75	Specify no. of squares	135	65	~

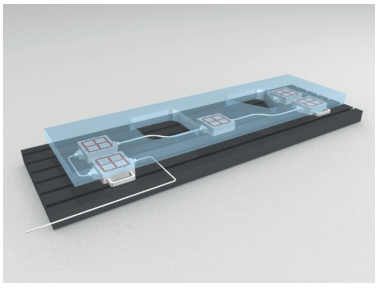


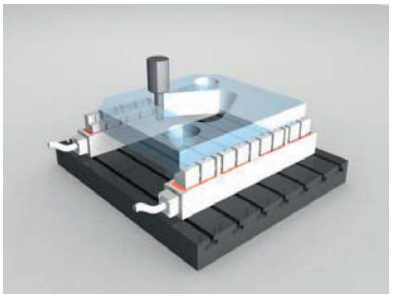
Dimensions are non-binding, in 'mm' and can be custom designed

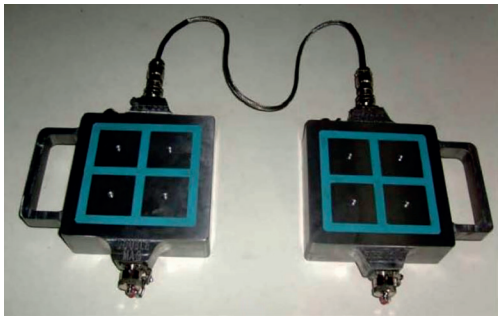
APPLICATIONS

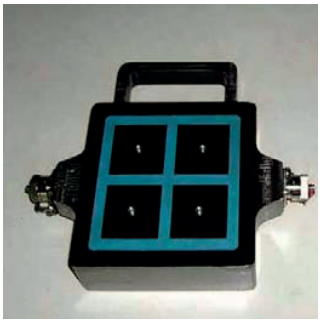
- Mold base machining .
- Radial, bench, pillar drilling applications.
- Large plate welding & machining applications.

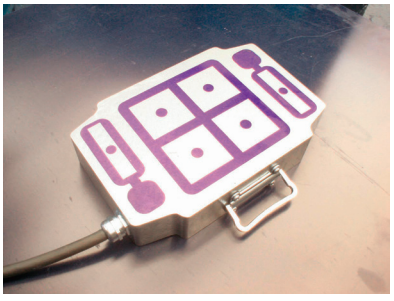






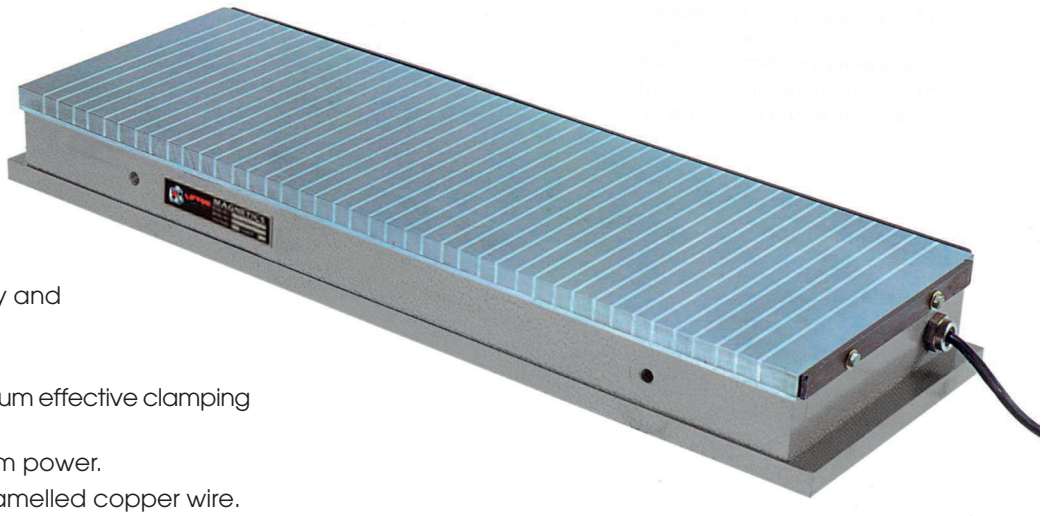






E-MILL

STANDARD POLE ELECTROMAGNET CHUCK



FEATURES

- Has high mechanical rigidity and proven robustness.
- Guaranteed water proof.
- Full extended pole for maximum effective clamping area.
- Multicoil design for maximum power.
- The coils are made with enamelled copper wire.
- All steel top plate is machinable upto 6 mm.
- Clamping Force Upto 16 Kg/cm^2

Product Code : EMILL-C or L

All dimensions are in mm

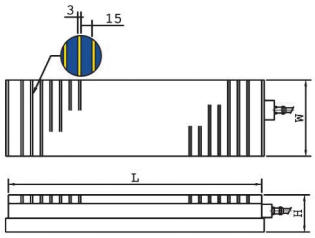
Model No.	L	W	H	V	Amp (A)	Wt (Kgs)
EMILL-3015	300	150	85	110	0.53	23
EMILL-3515	350	150	85	110	0.55	27
EMILL-4015	400	150	85	110	0.60	32
EMILL-4515	450	150	85	110	0.61	36
EMILL-4020	400	200	85	110	0.60	42
EMILL-4520	450	200	85	110	0.65	48
EMILL-5020	500	200	85	110	0.70	53
EMILL-6020	600	200	85	110	0.90	63
EMILL-5025	500	250	85	110	1.36	65
EMILL-6025	600	250	85	110	1.37	78
EMILL-8025	800	250	85	110	1.40	105
EMILL-10025	1000	250	85	110	1.55	131
EMILL-15025	1500	250	85	110	1.58	197
EMILL-6030	600	300	85	110	1.40	94
EMILL-9030	900	300	85	110	1.50	142
EMILL-10030	1000	300	85	110	1.90	157
EMILL-12030	1200	300	85	110	2.10	189
EMILL-15030	1500	300	85	110	2.70	236
EMILL-6040	600	400	85	110	1.60	126
EMILL-9040	900	400	85	110	1.92	189
EMILL-10040	1000	400	85	110	2.10	210
EMILL-12040	1200	400	85	110	2.50	252
EMILL-15040	1500	400	85	110	3.00	315
EMILL-6050	600	500	85	110	1.70	126
EMILL-9050	900	500	85	110	1.90	189
EMILL-10050	1000	500	85	110	2.33	210
EMILL-12050	1200	500	85	110	3.60	252
EMILL-15050	1500	500	85	110	3.80	315

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

APPLICATIONS

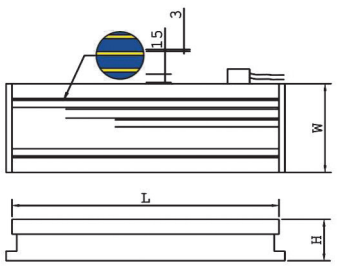
Cross pole series EMILL - C

- They are powerful and most suitable for medium and big components for grinding, planing, milling and various other operations.
- Knife grinding holding from sides.



Long pole Series EMILL - L

- These chucks are suited for long work pieces, and are used in additional applications such as buff and belt grinding of large quantities of work pieces which are difficult to hold on cross pole magnetic chucks.
- Most suitable for holding hardened and small components positioned between alternate poles.



- Can be designed for other operating voltages.
- Long pole chucks are also made and its ordering series for the same is EMILL-L.
- Chuck with brass separation is available at extra cost.

TURBO MAX-MILL EPM

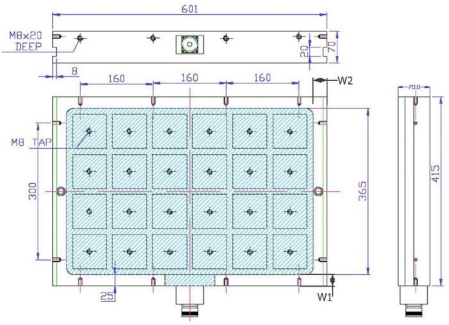
SQUARE POLE ELECTROPERMANENT CHUCK

FEATURES

- Square pole pattern Electropermanent magnets available in standard construction of 50mm & 75mm squares. Alternative patterns of 47mm, 65mm, 100mm squares also can be constructed to cater to specific requirements.
- Holding force above 80 MT/SqM for the 50mm square pole version and 110 MT/SqM for the 75mm Square pole version.
- Perfect safety in case of power failure. No electricity needed to keep the Magnetic chuck ON.
- Uniform clamping over entire area, no chattering of tools, improves finish and tool life.
- High and uniform magnetic power, with choice to vary and control strength.
- Modular and sturdy construction.
- Easily integrated with pallet changing and FMS systems.
- Unobstructed movement of cutters during machining as all five faces of the job can be machined in the same setting.
- Drastically reduces the loading, unloading and controlling the work pieces.
- Better machining accuracy - as the chattering of tools reduces, the finish and tool life is improved.

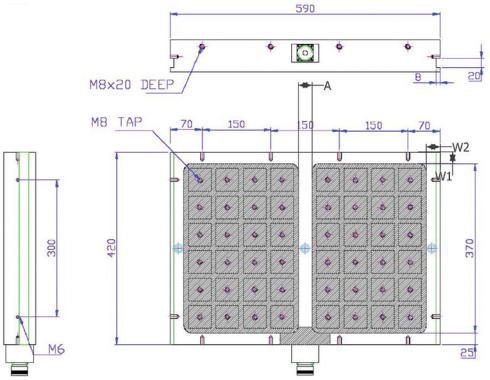
EPMM 50 SHD: Standard high density resin 50mm 400x300

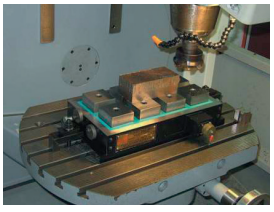
EPMM 75 SHD: Standard high density resin 75mm 400x300

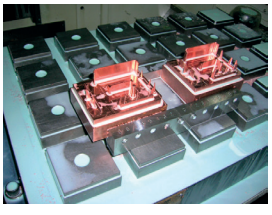


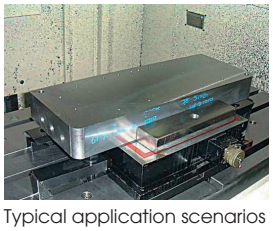
APPLICATIONS

- For heavy duty roughing, milling and finishing applications on large and tall parts from 30mm to 600mm thickness and beyond, choose the 75mm type. For milling and finishing applications on parts from 7mm to 100mm, choose the 50mm type.
- A minimum contact of 4 alternate poles is required for the 75mm type and 8 for the 50mm type. In case of reduced contact, increase coverage by placing parallel bar side supports to simulate wider contact.
- Easily integrated with Pallet changing and FMS Systems.
- AUTOMATIC SHIMMING : Sliding pole extensions allow to clamp and to support uniformly work pieces even with bent surfaces achieving high accuracies of planarity.

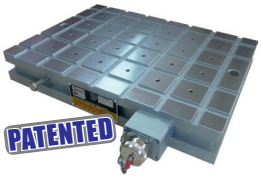






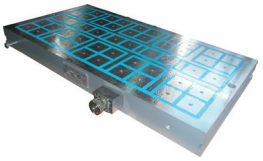


Typical application scenarios



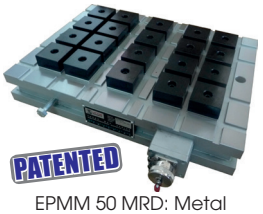
EPMM 50 MHD: Metal high density 50mm 400x300

Variation for rotary grinding



EPMM 50 SRD: Standard reduced density 50mm 800x400

High density T-slot solid top



EPMM 50 MRD: Metal reduced density 50mm 400x300

Enquiries: sales@supermagnet.xyz

LIFTON

www.supermagnet.xyz

TURBO MAX-MILL

SQUARE POLE ELECTROPERMANENT CHUCK

Model No.	'X' = 50MM SQUARE									
Standard Resin (S) or Patented all Solid Metal (M)	L	W	H	N (HD)	N (RD)	W1	W2	V	A	WT (Kgs)
EPMM'X'3020 – YZ	310	240	67	12	10	25	30	220 380 400 415 440		33
EPMM'X'4020 – YZ	430			18	14					46
EPMM'X'5020 – YZ	500			21	16					58
EPMM'X'6020 – YZ	590			24	20				30/1	71
EPMM'X'8020 – YZ	750			30	24				30/2	85
EPMM'X'3030 – YZ	310	300		16	12					52
EPMM'X'4030 - YZ	430			24	20					59
EPMM'X'6030 - YZ	590			32	26				30/1	91
EPMM'X'8030 –YZ	750			40	32				30/2	108
EPMM'X'10030 - YZ	990			56	44				30/2	142
EPMM'X'4040 - YZ	430	420		36	28					84
EPMM'X'5040 – YZ	480			42	34					92
EPMM'X'6040 – YZ	590			48	38				30/1	129
EPMM'X'8040 – YZ	750			60	48				30/2	154
EPMM'X'10040 – YZ	990			80	64				30/2	202
EPMM'X'5050 – YZ	500	480		49	38					130
EPMM'X'6050 – YZ	590			56	44				30/1	162
EPMM'X'8050 – YZ	750			70	56				30/2	193
EPMM'X'10050 – YZ	990			98	78				30/2	253
EPMM'X'6060 – YZ	590	600		72	58				30/1	200
EPMM'X'8060 – YZ	750			90	72				30/2	239
EPMM'X'10060 – YZ	990			126	100				30/2	313

All dimensions are in mm.

Model No.	'X' = 75MM SQUARE									
Standard Resin (S) or Patented all Solid Metal (M)	L	W	H	N (HD)	N (RD)	W1	W2	V	A	WT (Kgs)
EPMM'X'3020 – YZ	337	239	67	6	4	25	30	220 380 400 415 440		44
EPMM'X'4020 – YZ	425			8	6					56
EPMM'X'5020 – YZ	513			10	8					68
EPMM'X'6020 – YZ	601			12	10					80
EPMM'X'8020 – YZ	815			16	14				30/1	124
EPMM'X'3030 – YZ	337	327		9	6					62
EPMM'X'4030 - YZ	425			12	10					77
EPMM'X'6030 - YZ	601			18	16					111
EPMM'X'8030 –YZ	815			24	20				30/1	145
EPMM'X'10030 - YZ	1029			30	24				30/2	178
EPMM'X'4040 - YZ	425	415		16	12					99
EPMM'X'5040 – YZ	513			20	16					120
EPMM'X'6040 – YZ	601			24	20					145
EPMM'X'8040 – YZ	815			32	26				30/1	182
EPMM'X'10040 – YZ	1029			40	30				30/2	228
EPMM'X'12040 – YZ	1205			48	36				30/3	266
EPMM'X'5050 – YZ	513	503		25	20					149
EPMM'X'6050 – YZ	601			30	24					160
EPMM'X'8050 – YZ	815			40	30				30/1	226
EPMM'X'10050 – YZ	1029			50	40				30/2	278
EPMM'X'15050 – YZ	1469			75	60				30/3	439
EPMM'X'20050 – YZ	1960			100	80				30/3	585
EPMM'X'6060 – YZ	601	591		36	30					204
EPMM'X'8060 – YZ	815			48	36				30/1	266
EPMM'X'10060 – YZ	1029			60	48				30/2	328
EPMM'X'15060 – YZ	1469			90	72				30/3	518
EPMM'X'20060 – YZ	1960			120	96				30/2	691

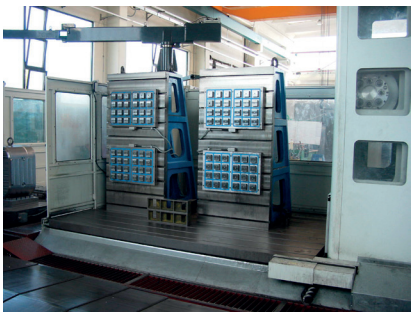
All dimensions are in mm.

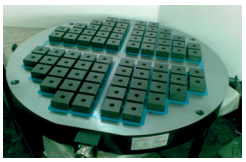
Instructions to select your Model: Replace X for the Square Pole size. Choices are either 50 or 75mm
Replace Y for S (Standard Resin type) or M (Patented all Metal type). Y indicates Construction technique
Replace Z for HD (High Density) or RD (Reduced Density). Z indicates Pole density.
N : Number of Poles for High Density (HD) model & Reduced density (RD) model.
Eg EPMM506040-MHD : Indicates a 50mm 600x400 Solid Metal with High Density,
EPMM754030-SRD : Indicates a 75mm Sq 400x300 Standard Model with Reduced Density

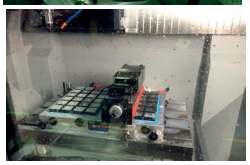
TURBO MAX-MILL / CONTD EPM

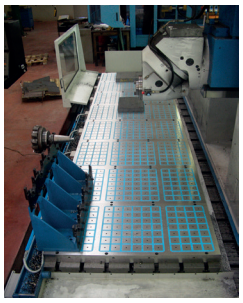
SQUARE POLE ELECTROPERMANENT CHUCK

APPLICATION POSSIBILITIES OF TURBO-MAX MILL









TURBO MAX-TOMB EPM

SQUARE POLE ELECTROPERMANENT CHUCK

FEATURES

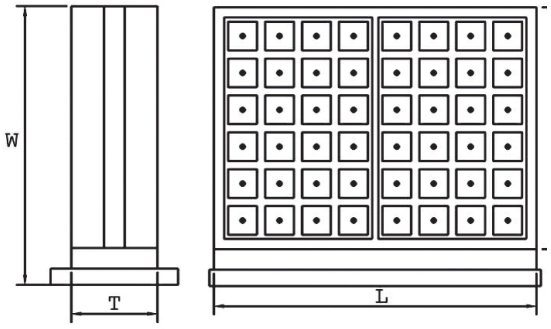
- Variation of Turbo Max-Mill.
- Unobstructed movement of the cutter during machining, as all five faces of the job can be machined at the same setting.
- Single or multiple work pieces get clamped ergonomically and easily by the operator outside the machining area.
- Standard pole patterns of 75x75 and 50x50.

Power connection from detachable bayonet connector, position can be changed.

APPLICATIONS

- Achievement of total flexibility to clamp work pieces of different shapes and sizes, even larger than those of the clamping area.
- Easily integrated with Pallet clamping and FMS Systems.
- AUTOMATIC SHIMMING : Sliding pole extensions allow to clamp and to support uniformly work pieces even with bent surfaces achieving high accuracies of planarity.

Different designs of the Turbo Max Tomb



Product Code : EPMT

All dimensions are in mm

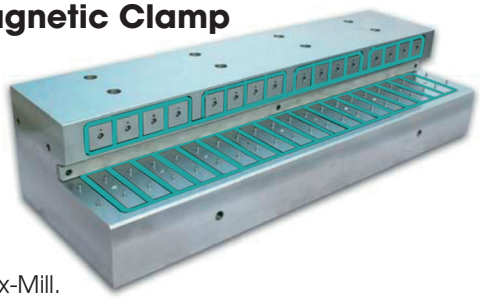
Model No.	L	W	T	No. of Poles
EPMT-4050	425	475	180	16
EPMT-6050	595		200	24
EPMT-7060	665	625	200	42

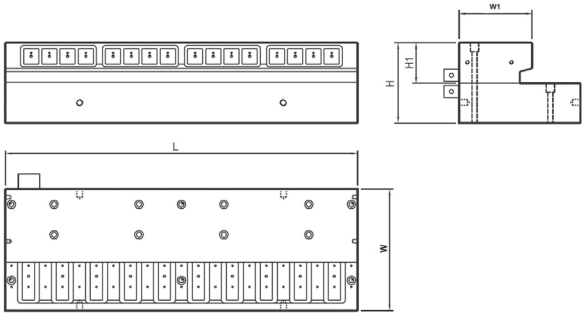
Due to continuous upgradation in design there could be changes in specification. Other sizes on request.Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

EPM TURBO MAX-RAIL

SQUARE & LONG-POLE ELECTROPERMANENT MAGNET CLAMP

Rail Machining Magnetic Clamp





FEATURES

- A variation of Turbo Max-Mill.
- One set-up, quick-clamp with clamping force of 18 T/M.
- no electricity consumed during actual operation.
- Vibration-free, strong and uniform clamping.
- Zero stray magnetic fields and zero magnetization of the cutting tool.

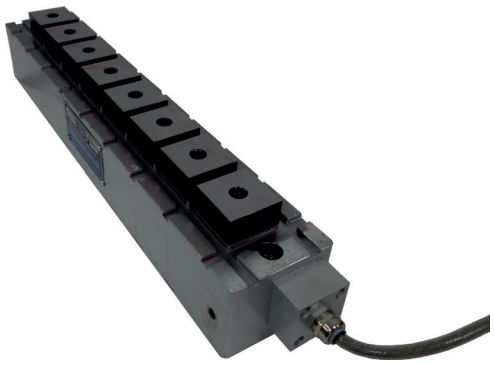
APPLICATIONS

Uniform machining of Rails, crossings & rail switching elements.

EPM TURBO MAX-FLAME

ELECTROPERMANENT MAGNET CLAMP

Magnetic Clamp for Flame cutting applications



FEATURES

- Enhanced High temperature tolerance with Samarium Rare-Earth magnets.
- A variation of Turbo Max-Mill or Turbo Max-Entry.
- One set-up, quick-clamp with clamping force of 14 Kg/cm2.
- no electricity consumed during actual operation.
- Vibration-free, strong and uniform clamping.
- Zero stray magnetic fields and zero magnetization of the cutting tool.

APPLICATIONS

- Underplate support for welding levelling.
- CNC flame cutting material support.

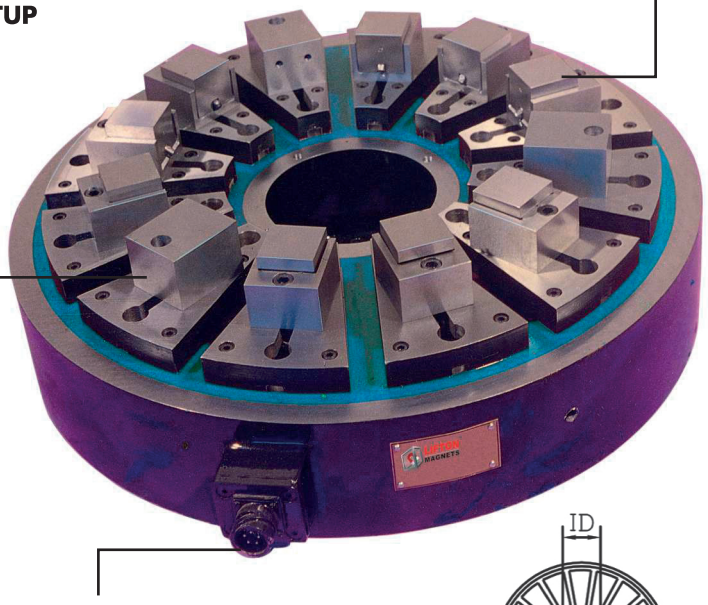
TURBO MAX-RADIAL EPM

RADIAL POLE ELECTROPERMANENT ROUND CHUCK

FEATURES

- Perfect safety in case of power failure. No electricity needed to keep the Magnetic chuck ON.
- Power from all poles transferred to Rings / Plates held in concentric.
- High resistance to coolant.
- It has high mechanical rigidity and proven robustness.
- High resistance to both Axial and Radial forces enabling application of Heavy cuts.

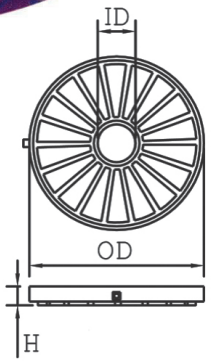
ID, OD AND FACE MACHINING IN ONE SETUP



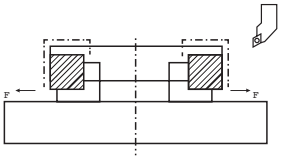
APPLICATIONS

- Clamps ferromagnetic Rings on vertical and horizontal turning lathes.
- Radially movable location blocks will help to position and secure work pieces (bearing rings, thrust bearings, etc.); this is also necessary for clearance of the cutting tool or wheel.
- Mobile Pole extensions ensures perfect clamping of irregular work pieces.

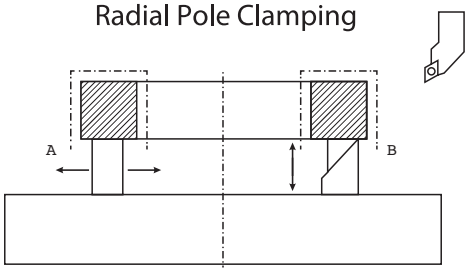
For power connection bayonet connector is recommended, when the chuck is intended to be used in different machines.
Carbon Brush Holder with Brass collector slip rings for fitting on the machine spindle for Power supply is recommended when the chuck is for specific machine.

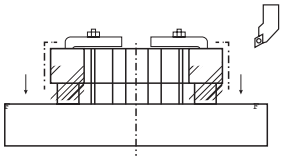


Chuck Jaw Clamping



Radial Pole Clamping

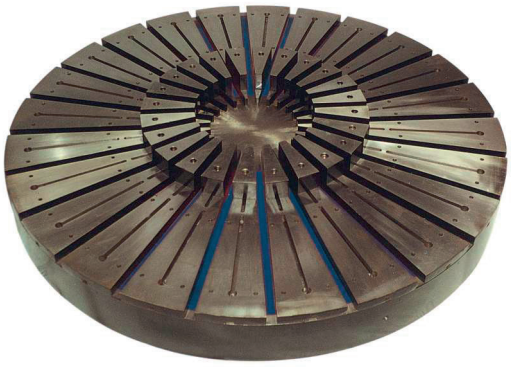




Product Code : EPMR

Model No.	O D	H	I D	Wt
EPMR-30	300	90	90	32
EPMR-45	450		150	70
EPMR-50	500		175	85
EPMR-60	600		200	124
EPMR-80	800		250	223
EPMR-100	1000	100	250	403
EPMR-120	1250		300	632
EPMR-150	1500	110	500	945
EPMR-170	1750		500	1328
EPMR-200	2000	115	500	1850
EPMR-250	2500		600	2905

All dimensions are in 'mm', weights in 'kgs', non-binding & subject to change due to custom design or manufacturer's discretion



Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

MICROFINE AND STANDARD POLE MANUAL PERMANENT MAGNET CHUCK

FEATURES

- Steel and brass solidly pressed laminated top plate.
- Extremely low height for better job accommodation and easy disposal of grinding dust.
- Made with super powerful NdFeB, new generation magnets.
- Progressive power is obtained by rotating the lever from 0° to 180°.
- Unique design of the chuck minimizes the movement of top plate when switched on, resulting in better job accuracy.

TOP SELLER

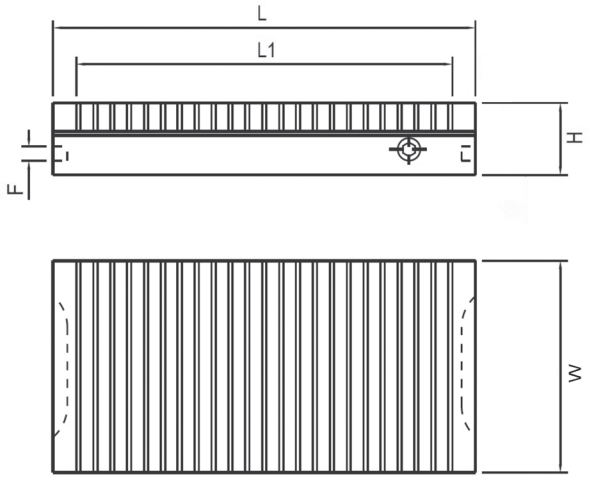
APPLICATIONS

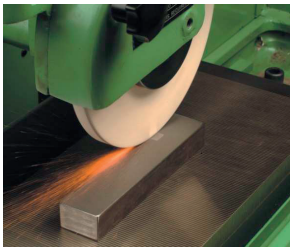
- Most suitable for EDM, grinding and similar applications.
- Enables grinding of thin and small work pieces that hitherto presented problems in holding.
- Stable magnet grid movement provides highest precision grinding.

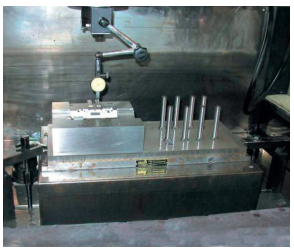
Package includes Allen Key, Bolts, Toe-clamp & T-nut
Pole Pitch : Fine - 0.5mm brass + 1.5mm steel
Clamping force: Up to 12 kg/cm² for larger components

Product Code : NEG — All dimensions are in mm

Model No.	L	W	H	L1	F	WT (Kgs)
NEG-1370	130	70	49	101	10	3
NEG-1710	175	100	49	140	10	7
NEG-2510	250	100	49	206	10	10
NEG-2512	250	120	49	206	10	11
NEG-4012	400	120	49	357	10	18
NEG-1515	150	150	51	108	10	9
NEG-2515	250	150	51	206	10	15
NEG-3015	300	150	51	257	10	18
NEG-3515	350	150	51	305	10	21
NEG-4015	400	150	51	357	10	24
NEG-4515	450	150	51	407	10	27
NEG-3020	300	200	51	257	10	24
NEG-3520	350	200	51	305	10	28
NEG-4020	400	200	51	357	10	32
NEG-4520	450	200	51	407	10	36
NEG-5020	500	200	51	454	10	40
NEG-6020	600	200	51	556	10	48
NEG-3525	350	250	56	305	10	38
NEG-4025	400	250	56	357	10	44
NEG-5025	500	250	56	454	10	55
NEG-6020	600	250	56	556	10	67
NEG-3030	300	300	56	257	10	36
NEG-4030	400	300	56	357	10	52
NEG-5030	500	300	56	454	10	79
NEG-6030	600	300	56	556	10	83







Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Height of the unit may vary based on size. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

FERROEDMGRIND PM

DOUBLE POLE MANUAL PERMANENT MAGNET CHUCK

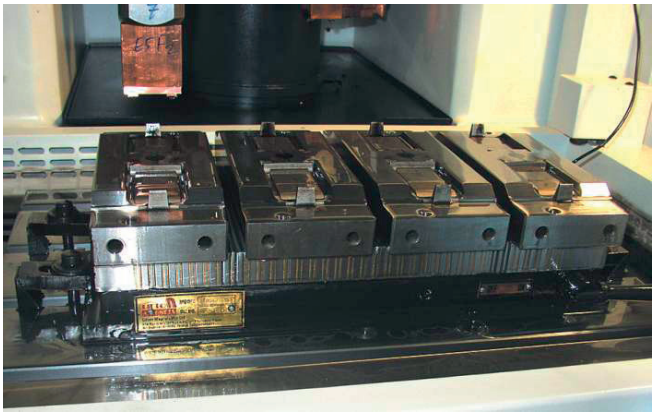
FEATURES

- Steel and brass laminated top plate.
- Poles are individually magnetized.
- Double magnet system for maximum power.
- Use of ferrite magnets ensures that the magnetic force will not reduce even on long use.
- Low magnetic field: no magnetization of tools.
- Smooth and simple actuating mechanism.
- Rugged construction: exceptional longevity.
- Holding power - 14 kg/cm^2.
- Low flux height of 6mm.

Package includes Allen Key, Bolts, Toe-clamp & T-nut
Pole Pitch : Fine 11mm
1.5mm Brass + 2mm Steel + 1.5mm Brass + 6mm Steel
Clamping force: Up to 16 kg/cm^2 for larger components

APPLICATIONS

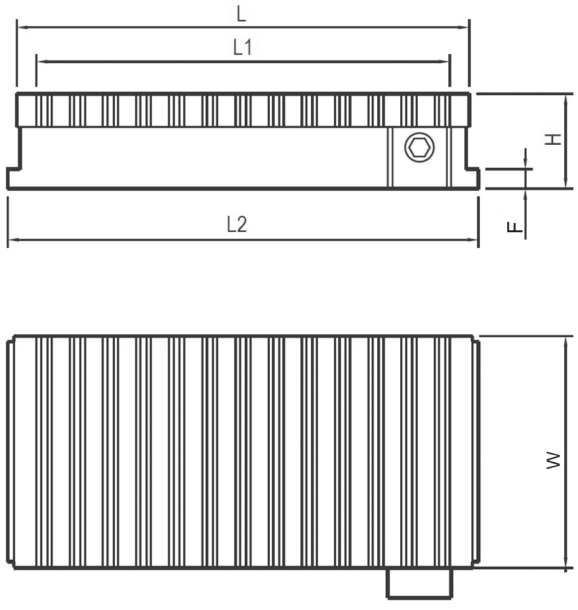
- Ideal for grinding / EDM applications.
- Provides powerful holding for medium and thick work pieces.
- Suitable for all kinds of job sizes / thickness.



Product Code : FEG — All dimensions are in mm

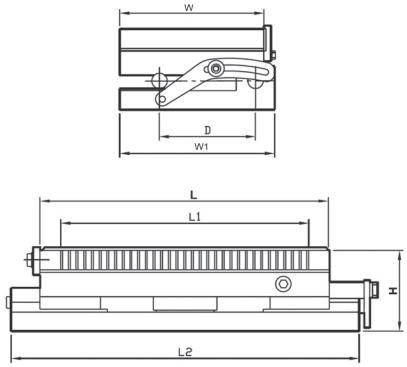
Model No.	L	W	H	L1	F	Weight (Kgs)
FEG-1370	130	70	52	82	10	3
FEG-1710	175	100	52	126	10	6
FEG-2510	250	130	52	203	10	12
FEG-1515	150	150	49	115	10	10
FEG-2515	250	150	49	203	10	16
FEG-3015	300	150	51	258	10	19
FEG-4515	450	150	51	401	10	28
FEG-4020	400	200	51	357	10	34
FEG-4520	450	200	51	401	10	38
FEG-5020	500	200	51	456	10	42
FEG-6020	630	200	51	588	10	53
FEG-3525	350	250	51	302	10	37
FEG-4025	400	250	51	357	10	42
FEG-6025	630	250	51	588	10	67

Larger (*) size chucks are made with two operating handles. Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.



PM SINGLE SINE

UNIAXIAL SINE TABLE



FEATURES

- A positive locking device is mounted on the base.
- Easy to use and a large effective area is provided for machining the works.
- This device provides positive locking at any angle without distortion.
- Constructed of hardened alloy tool steel.
  * Angle precision: +5˚
  * Parallelism: 0.002/100mm ex-Factory.
  Angle Range: 0 - 45˚.
- Clamping Force: Up to 12 kg/cm^2.

APPLICATIONS

- Flat type for wide range of uses.
- Ideal for high accuracy grinding operations, EDM operations.
- Measurement of Angle accuracy.

Product Code : SS All dimensions are in mm according to the effective magnetic area

Model No.	L	W	W1	L1	L2	D	H	Wt (Kgs)
SS-1370	130	70	70	101	171	75	84	5
SS-1710	175	100	115	140	216	75	84	10
SS-2510	250	130	141	206	311	100	84	19
SS-1515	150	150	161	108	191	125	84	13
SS-2515	250	150	161	206	311	125	84	22
SS-3015	300	150	161	257	361	125	84	26
SS-3515	350	150	161	305	411	125	84	30
SS-4015	400	150	161	357	461	125	84	35
SS-4515	450	150	161	407	511	125	84	40

PM DOUBLE SINE

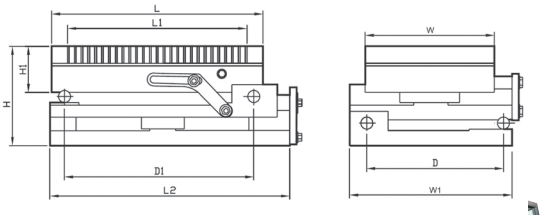
BI-AXIAL SINE TABLE

FEATURES

- A positive locking device is mounted on the base.
- Easy to use and a large effective area is provided for machining the works.
- Constructed of hardened alloy tool steel.
- Effective area of compound sine chuck is enlarged by employing the thin type permanent magnetic chuck.
- This increases the range of types usable by tilting works in length, breadth or composite angle.
- Double way sine plate, can grind two way angle at the same time.
  * Angle precision: +5˚ | * Parallelism: 0.002/100mm ex-Factory
  Angle Range: 0 - 45˚
- Clamping Force: Up to 12 kg/cm^2.

APPLICATIONS

- Flat type for wide range of uses.
- Ideal for high accuracy grinding, EDM & angle measurement operations.
- This is suitable for high precision angle grinding on a grinding machine and so on.



Product Code : DS All dimensions are in mm according to the effective magnetic area

Model No.	L	W	W1	L1	L2	D	H	Wt (Kgs)
DS-1370	130	70	100	101	160	80	105	8
DS-1710	175	100	140	140	205	110	105	14
DS-2510	250	130	190	206	285	160	110	24
DS-2512	150	150	190	108	185	160	110	18
DS-4012	250	150	190	206	285	160	115	30
DS-1515	300	150	190	257	335	160	115	36
DS-3515	350	150	190	305	385	160	115	41
DS-3015	400	150	190	357	435	160	115	48
DS-3515	450	150	190	407	485	160	120	54

TURBOMAXEDMGRIND EPM

ELECTROPERMANENT CHUCK FOR GRINDING AND EDM

FEATURES

- Same principle as the other members of the TURBO MAX family Electropermanent (EPM) technology.
- Can be used for EDM or Grinding application.
- No electricity required during actual operation.
- Standard model now comes with an all metal top plate of Brass and Steel with a normal/fine/microfine pitch. To specify the pitch upon order.
- Variable power control to adjust magnetic force.
- All sizes and types of jobs can be held securely and firmly.
- No heat build-up, no deformation and mechanical components.
- High accuracy during EDM & Grinding processes.

The work surface made of steel combined with high tensile epoxy resin (or brass) ensures cost-effectiveness and durability. The modules can be combined to form very large magnetic tables. The electronic control unit ensures power adjustment and a total elimination of residual magnetic flow from the clamped piece. A remote control enables all functions.

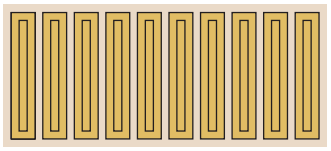
APPLICATIONS

- Cost effective and long lasting solution for larger grinding & EDM tables where mechanical / manual permanent magnet chucks are unsuitable due to reliability issues.
- Substantial electricity savings over medium to long term compared to regular Electro chucks.

Flux Transfer blocks provided optionally

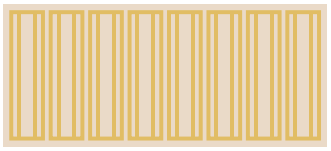
Standard Pole Version

- 12mm steel / 10mm brass.
- Suitable for large jobs (for EDM).
- Very high power version.



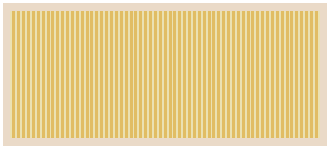
Fine Pole Version

- 4mm steel / 3mm brass / 6mm steel / 3mm brass.
- High power version.
- Suitable for medium size jobs (for EDM).
- Optional all metal top plate (to specify).



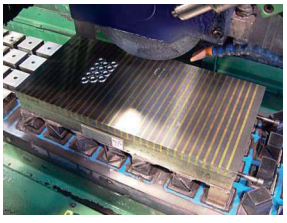
Microfine Pole Version

- 1.5mm steel / 0.5mm brass.
- Adequate power version for extra thin parts and universal job sizes.
- Most common choice.
- This product is machined out of a solid block of steel.

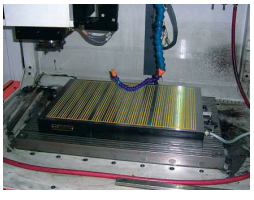


Product Code : EPED All dimensions are in mm

Model No.	A	B	H	W
EPED-5020	500	200	66	65
EPED-5030	500	300	66	70
EPED-6020	600	200	66	75
EPED-6030	600	300	66	84
EPED-6040	600	400	66	111
EPED-6060	600	600	66	167
EPED-6540	650	400	66	120
EPED-6550	650	500	66	150
EPED-6560	650	600	66	180
EPED-7540	750	400	66	139
EPED-7550	750	500	66	173
EPED-7560	750	600	66	208
EPED-8030	800	300	66	111
EPED-8040	800	400	66	148
EPED-8050	800	500	66	185
EPED-8060	800	600	66	222



Machined out of solid body



Due to continuous upgradation in design there could be changes in specification. Other sizes on request.Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

EM ELECTROMICRO

MICROFINE POLE ELECTROMAGNET CHUCK

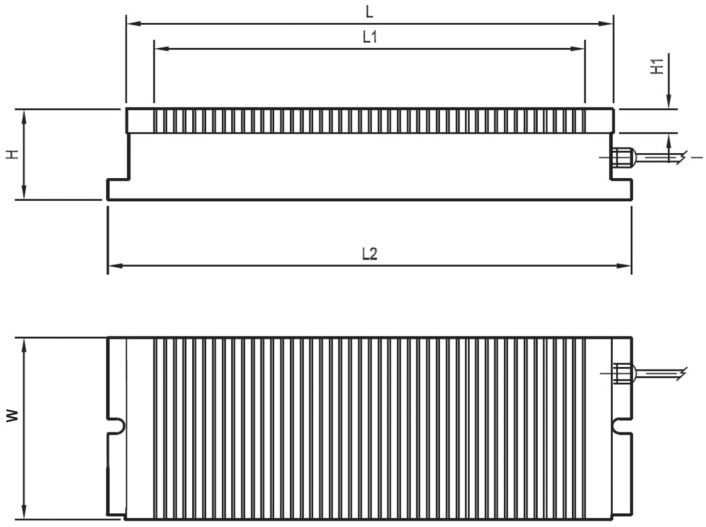
FEATURES

- All metal brass and steel laminated top plate.
- High resistance to coolant and corrosion.
- High mechanical rigidity and proven robustness.
- 100% water proof.
- Top plate is machinable up to 8 mm.
- Clamping force up to 12 kg/cm^2 for large components.
- Pole pitch of 0.5 + 1.5mm and low magnetic field height of 4mm.

APPLICATIONS

- Ideal for thin components and for precision grinding.
- The low magnetic flux does not interfere with the grinding operation there by giving higher accuracy.

- The operating voltage is 110 VDC up to EMF 6040; beyond that 220 VDC.
- Can be designed for other operating voltages.
- EM Controller sold separately.



Product Code : EMF

All dimensions are in mm

Model No.	L	W	H	H1	L1	L2	V	Amp (A)	Weight (Kgs)
EMF-3015	300	150	75	20	267	330	110	0.50	23
EMF-3515	350	150	75	20	317	380	110	0.53	27
EMF-4015	400	150	75	20	367	430	110	0.55	32
EMF-4515	450	150	75	20	417	480	110	0.60	36
EMF-4020	400	200	75	20	367	430	110	0.66	42
EMF-4520	450	200	75	20	417	480	110	0.62	48
EMF-5020	500	200	75	20	467	530	110	0.65	53
EMF-6020	600	200	75	20	567	630	110	1.12	63
EMF-5025	500	250	75	20	467	530	110	1.65	65
EMF-6025	600	250	75	20	567	630	110	1.80	78
EMF-8025	800	250	75	20	745	830	110	1.40	105
EMF-6030	600	300	75	20	567	630	110	1.80	94
EMF-9030	800	300	75	20	745	830	110	1.55	142
EMF-10030	1000	300	75	20	967	1052	110	1.80	157
EMF-6040	600	400	75	20	567	630	110	1.65	126
EMF-9040	800	400	75	20	745	830	110	1.76	189
EMF-10040	1000	400	75	20	967	1052	110	2.00	210

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

ELECTROFINE EM

FINE POLE ELECTROMAGNET CHUCK

FEATURES

- Rigid steel / brass laminated top plate.
- High resistance to coolant.
- High mechanical rigidityand proven robustness.
- 100% water proof.
- These chucks have a multi energized magnetic circuit, consisting of a number of adjacent, reversed coils making up a magnetizing core which is small pole pitch.
- The multitude of exciting windings increases dissipation of electrical energy which becomes magnetic energy, while limiting both temperature rise caused by Joule effect and distortion of the chuck.
- Top plate is machinable up to 8 mm.
- Uniform clamping force up to 13 kg/cm^2 for large components.
- Pole Pitch of 3 + 1 mm. Suitable for grinding a variety of material.

APPLICATIONS

Cross pole series EF-C

- These chucks are suited for a wide range of work pieces.
- For grinding application of small to big size components.

Long pole Series EF-L

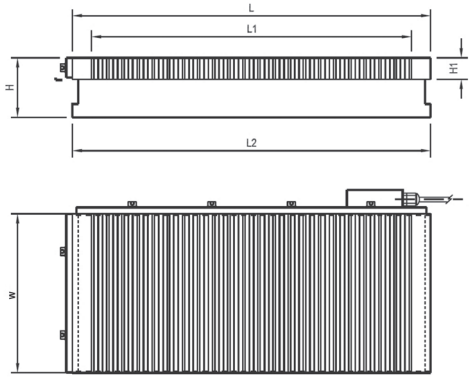
- Since it produces stale attractive force in the lengthwise direction, it is possible to move the work piece along the belt while maintaining the attractive force.
- The plate design makes it easy to design and locate fixtures correctly for effective holding of intricately shaped work pieces.

Product Code : EF - C or L

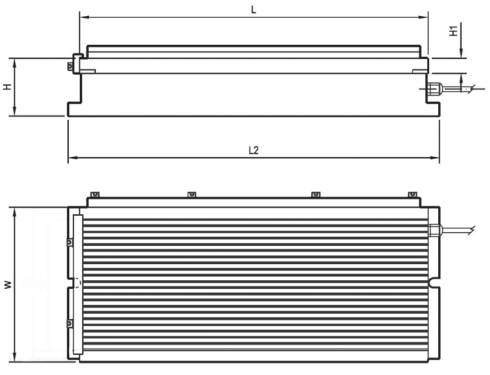
All dimensions are in mm

Model No.	L	W	H	H1	L1	L2	V	Amp (A)	Weight (Kgs)
EF-3015	300	150	75	27	275	300	110	0.50	22
EF-3515	350	150	75	27	320	350	110	0.53	26
EF-4015	400	150	75	27	364	400	110	0.55	30
EF-4515	450	150	75	27	402	450	110	0.60	33
EF-4020	400	200	75	27	364	400	110	0.66	42
EF-4520	450	200	75	27	402	450	110	0.62	48
EF-5020	500	200	75	27	440	500	110	0.65	53
EF-6020	600	200	75	27	554	600	110	1.12	63
EF-5025	500	250	75	27	440	500	110	1.65	68
EF-6025	600	250	75	27	554	600	110	1.80	80
EF-8025	800	250	75	27	744	800	110	1.40	105
EF-6030	600	300	75	27	554	600	110	1.80	95
EF-8030	800	300	75	27	744	800	110	1.55	127
EF-10030	1000	300	75	27	934	1000	110	1.80	159
EF-6040	600	400	75	27	554	600	110	1.65	127
EF-9040	800	400	75	27	744	800	110	1.76	170
EF-10040	1000	400	75	27	934	1000	110	2.00	227
EF-12040	1200	400	75	27	1124	1200	110	2.47	260
EF-15040	1500	400	75	27	1428	1500	110	3.15	347
EF-6050	600	500	75	27	554	600	110	1.77	159
EF-8050	800	500	75	27	744	800	110	1.83	212
EF-10050	1000	500	75	27	934	1000	110	2.50	265
EF-12050	1200	500	75	27	1124	1200	110	3.70	318
EF-15050	1500	500	75	27	1428	1500	110	3.80	397
EF-8060	800	600	75	27	744	800	110	1.80	254
EF-10060	1000	600	75	27	934	1000	110	3.40	318
EF-12060	1200	600	75	27	1124	1200	110	3.90	382
EF-15060	1500	600	75	27	1428	1500	110	4.40	477
EF-120100	1200	1000	80	27	1124	1200	110	4.56	678
EF-150100	1500	1000	80	27	1428	1500	110	5.64	848
EF-120120	1200	1200	80	27	1124	1200	110	5.85	880
EF-150120	1500	1200	80	27	1428	1500	110	6.00	1017
EF-120150	1200	1500	80	27	1124	1200	110	7.50	1200
EF-150150	1500	1500	80	27	1428	1500	110	8.00	1310

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.



Cross pole EF-C



Long pole EF-L

- EM Controller sold separately
- Operating voltage is 110 VDC

EM ELECTROGRIP

UNIVERSAL POLE ELECTROMAGNET CHUCK

FEATURES

- Single solid piece body construction.
- 100% leak proof construction.
- Lowest height electro magnetic chucks.
- Low power consumption with little temperature rise.
- Possibility of combining several chucks for a large uninterrupted work surface.
- Low profile enables more grinding wheel head clearance.
- Uniform clamping force up to 14 kg/cm^2 for large components.
- Pole Pitch of 5 + 0.5 + 5 + 0.5 + 5 + 3 mm.

APPLICATIONS

- Ideal for standard components and for precision grinding.
- The low magnetic flux does not interfere with the grinding operation thereby giving higher accuracy.
- Designed to meet the demands of the latest grinding operations which require both heavy duty grinding and high precision.

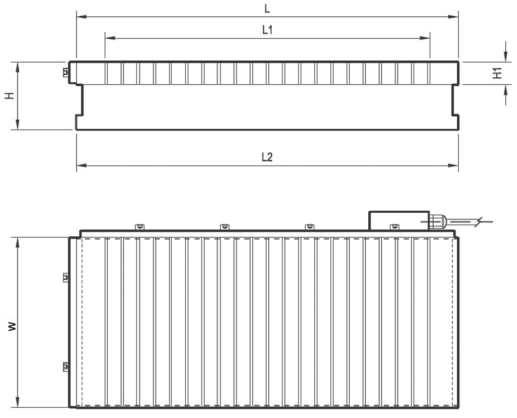
- The operating voltage is 110 VDC.
- EM Controller sold separately.

Product Code : EG

All dimensions are in mm.

Model No.	L	W	H	H1	L1	L2	V	Amp (A)	Weight (Kgs)
EG-6030	600	300	85	27	554	600	110	1.40	108
EG-8030	800	300	85	27	744	800	110	1.50	144
EG-10030	1000	300	85	27	934	1000	110	1.90	180
EG-12030	1200	300	85	27	1124	1200	110	2.10	216
EG-15030	1500	300	85	27	1428	1500	110	2.70	270
EG-6040	600	400	85	27	554	600	110	1.60	144
EG-9040	800	400	85	27	744	800	110	1.82	192
EG-10040	1000	400	85	27	934	1000	110	2.10	240
EG-12040	1200	400	85	27	1124	1200	110	2.50	288
EG-15040	1500	400	85	27	1428	1500	110	3.00	360
EG-6050	600	500	85	27	554	600	110	1.70	180
EG-8050	800	500	85	27	744	800	110	1.80	240
EG-10050	1000	500	85	27	934	1000	110	2.33	300
EG-12050	1200	500	85	27	1124	1200	110	3.60	360
EG-15050	1500	500	85	27	1428	1500	110	3.80	450
EG-8060	800	600	85	27	744	800	110	1.90	288
EG-10060	1000	600	85	27	934	1000	110	3.70	360
EG-12060	1200	600	85	27	1124	1200	110	3.60	432
EG-15060	1500	600	85	27	1428	1500	110	3.80	540
EG-120100	1200	1000	85	27	1124	1200	110	4.56	678

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.



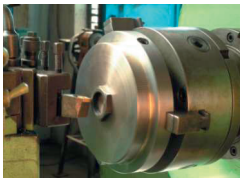
NeoGrind Round PM

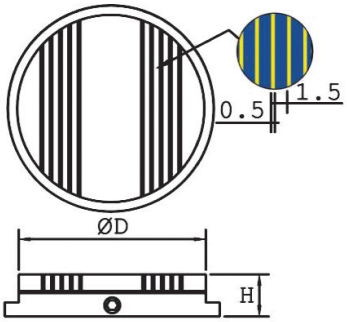
MICROFINE POLE ROUND MAGNETIC CHUCK

Product Code : NR All dimensions are in mm

Model No.	DIA (OD)	Pole Pitch	H
NR-10	100	2 (1.5+0.5)	45
NR-13	130		
NR-16	160		
NR-20	200		
NR-25	250		
NR-30	300		
NR-35	350		
NR-40	400		48
NR-45	450		
NR-50	500		

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.





FEATURES

- Steel and brass laminated top plate.
- Fully extended poles- minimum loss of working area.
- Standard Allen Key for easy use.
- Extremely low profile for wheel area.
- Made with super powerful NdFeB new generation magnets.
- Extension plate is suitable for clamping directly by 3 jaw chuck.
- Unique design of the chuck minimizes the deflection of top plate when switched ON/ OFF,resulting in better job accuracy.

APPLICATIONS

- Ideal for cylindrical or rotatory grinding.
- Enables the grinding of thin objects and small objects that has hitherto been difficult.

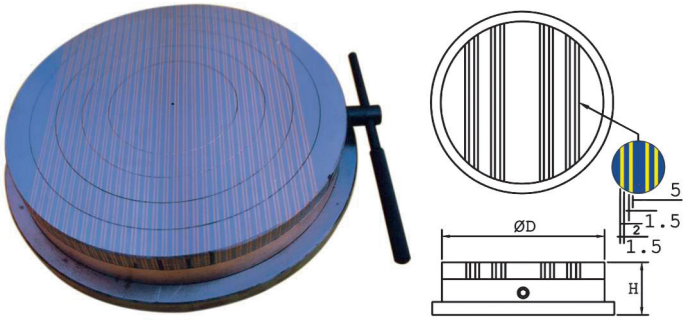
- Attached to rotary grinders for operation.
- Back plate with tapped hole can be made on request.

FerroGrind Round PM

FINE ROUND POLE MAGNETIC CHUCK

FEATURES

- Steel and brass laminated top plate.
- Poles individually magnetized.
- Double magnet system for maximum power.
- Magnetic force will not weaken with long use.
- Low magnetic field- no magnetization of tools.
- Simple and smooth actuating mechanism.
- Rugged construction: exceptional longevity.



Product Code : FR All dimensions are in mm

Model No.	DIA (OD)	Pole Pitch	H
FR-20	200	10 (5+1.5+2+1.5)	78
FR-25	250		80
FR-30	300		
FR-35	350		83
FR-40	400		
FR-45	450		

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

APPLICATIONS

- Adaptable to wide range of work pieces.
- Ideal for many tool room applications.
- Provides powerful holding power for thinner work pieces as well as for thicker work pieces.
- Powerful and suitable for grinding and turning operations.

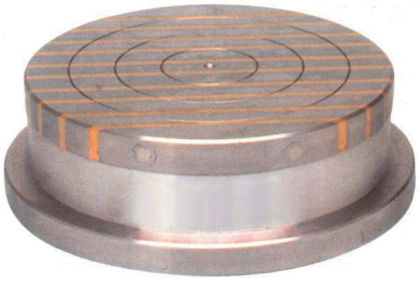
- Back plate with tapped hole can be made on request.

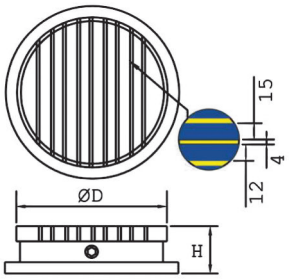
PM StrongGrind Round

UNIVERSAL POLE ROUND MAGNETIC CHUCK

FEATURES

- Steel and brass laminated top plate.
- Fully extended poles- minimum loss of working area.
- Made with high power permanent magnets.
- Detachable handle for easy use.





Product Code : FR All dimensions are in mm

Model No.	DIA (OD)	Pole Pitch	H
FR-10	100	31 (15+4+12)	70
FR-12	120		
FR-15	150		
FR-18	180		
FR-20	200		
FR-25	250		
FR-30	300		73
FR-35	350		
FR-40	400		

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

APPLICATIONS

- Suitable for medium and big components for grinding, lathe and even special milling operations.

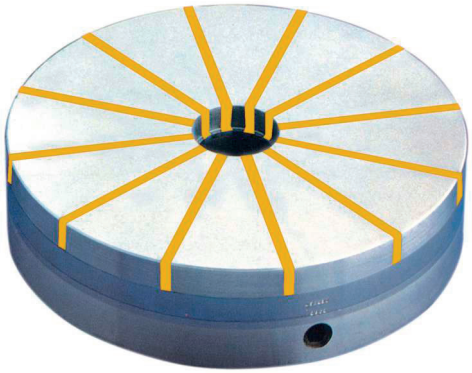
- Back plate with tapped hole can be made on request.

PM PowerGrind Round

RADIAL POLE ROUND MAGNETIC CHUCK

FEATURES

- Homogeneous magnetic field throughout the top plate.
- The power is adjustable from 0% to 100% by positing the handle.
- Top plate is machinable upto 8 mm.
- Detachable handle for easy use.



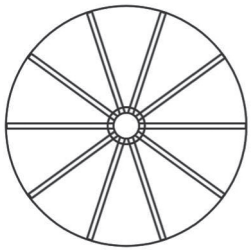
Product Code : PR All dimensions are in mm

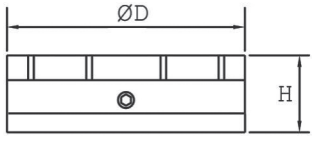
Model No.	DIA (OD)	No. of Poles	H
PR-10	100	6	54
PR-13	130	8	
PR-16	160	10	
PR-20	200	14	
PR-22	225		
PR-25	250		
PR-30	300	18	60
PR-35	350		
PR-40	400		
PR-45	450	20	
PR-50	500		
PR-60	600	30	

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

APPLICATIONS

- Ideal for disc and ring shaped components.
- Powerful and most suitable for components of all sizes for grinding and light turning.
- Made with centre through holes for internal grinding and boring operations.



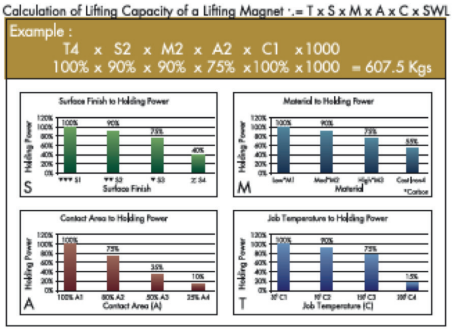


NeoLifter 'P', 'PR', 'PF' Series PM

MANUAL PERMANENT MAGNET LIFTER RANGE

GENERAL INFORMATION

The manual permanent magnet Neolifter series is suitable for general purpose loads of both flat and round material. There are 3 models in the series and each are particularly adapted for different load characteristics.



FEATURES

- Safety Factor > 3x Rated Lifting Capacity for ideal conditions.
- State-of-the-art design, compact dimensions with low weight.
- Made with high energy rare earth NdFeB (Neo) magnets.
- Easily transportable, Single hand operating lever with positive spring lock for quick lock and release.

APPLICATIONS

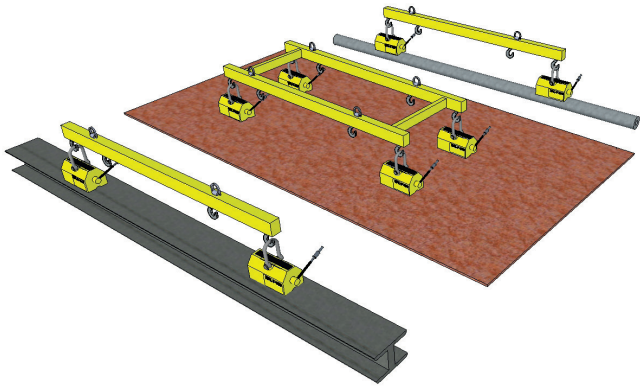
- For handling of steel plates, blocks, rounds, press moulds and loading/ unloading in machines.
- Commonly used in machine tools and oxygen cutting operations.
- Can handle finished components without leaving any scratch marks, unlike binding and slinging.
- Can be used with spreader beam hanging multiple magnets for handling long plates/pipes/bars.
- Application temperatures of upto 80 Deg C Max.

For hot-handling applications of upto 300 Deg C, ask for our High temperature version of the P, PR or PF Series.

THICKNESS		RATED CAPACITY (Safe Lifting or SWL)							
	(mm)	5000Kg	3000Kg	2000Kg	1000Kg	500Kg	300Kg	200Kg	100Kg
T1	70	100%							
T2	60	90%	100%						
T3	50	85%	90%	100%	100%				
T4	45	80%	85%	90%		100%			
T5	40	70%	80%	85%	90%				
T6	35	60%	70%	75%	85%	90%			
T7	30	50%	60%	65%	80%		100%		
T8	25	40%	50%	55%	70%	80%			
T9	20	30%	40%	45%	60%	75%	90%	100%	100%
T10	15	20%	30%	35%	50%	60%	70%	90%	90%
T11	10	10%	20%	25%	35%	45%	50%	70%	70%
T12	5	5%	10%	15%	20%	25%	30%	40%	40%

- Testing plate thickness 55mm
- Lifting capacity depends with - Thickness of load - Roughness of job surface - Hardness of material - Contact area of magnet - Temperature of the load

Tip : Select a suitable model from the Neolifter family depending on the type of your load and consider whether your application suits the manual operation required of these models.



Note : Thin and long ferrous material are not suitable to be lifted by single units of similar capacities of permanent magnetic lifters. In other words, a 2 Ton plate of 9 Meters length cannot be lifted by a single 2 Ton capacity lifter.

TAKE NOTE

When working with the permanent magnet range a few points must be noted.

Factors to Watch Out For : Surface Condition of Workpiece, Temperature, Material property, Contact area and thickness

There is a slight reduction in the lifting capacity due to the quality of surface finish or air gap of the ferrous material due to rust, painting or coating as the pole face does not contact the ferrous material surface due to the quality of surface finish. Similarly, there is a reduction in magnetic force or lifting capacity if the material is at a high temperature in excess of 80 Deg C as the neo magnets are susceptible to high temperatures. Further, there is a reduction in lifting capacity depending on the grade and type of ferrous material; mild steel being the best for magnetic attraction. Equally importantly, full contact of the magnetic pole face area to the workpiece surface is imperative for safe magnetic lifting just as thickness of the ferrous material.

SAFETY FACTOR

To compensate for potential deration of lifting capacity due to the factors above, Lifton Magnets generally adheres to a safety factor of at least 3:1 for all lifting magnets.

PROPERTIES AND DIRECTIONS OF USE :

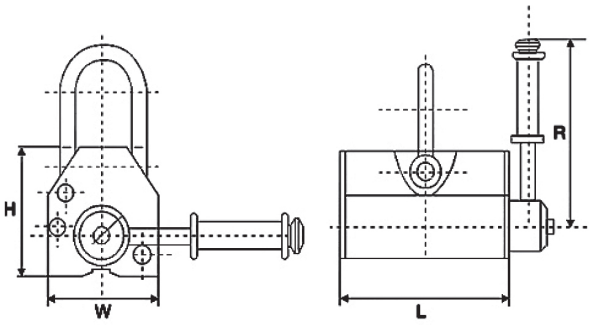
While the surface condition i.e. the area of contact is very important, in general; a smooth flat surface is good enough. The magnet should always be hung from the centre of the job i.e. used in equilibrium as far as possible. Should two (2) or more magnets be used to lift longer and larger loads (see sketch, right) these in-turn must be suspended from spreader beams. Depending on the nature of the load, lifting magnets may be distributed appropriately to prevent bending of the load as in case of a thin plate. Bear in mind however, that each magnet must be turned ON & OFF before and after every operation rendering this method impractical sometimes.

PM NeoLifter 'P' Series

MANUAL PERMANENT MAGNET LIFTER

FEATURES

- Safety Factor > 3x Rated Lifting Capacity for ideal conditions.
- State-of-the-art design, compact dimensions with low weight, made with high energy rare earth NdFeB (Neo) magnets.
- Easily transportable, Single hand operating lever with positive spring lock for quick lock and release.



- Easily removed Shackle hook for multi-purpose clamping application.
- Ideal for general purpose lifting of both flat & round material.

Product Code : NML-P

All dimensions are in mm

Model No. (P Series)	Rated		Self Weight	Tested Flat Load	Dimensions (mm)				Job Size Range (mm)			
	Flat	Dia							Flat		Dia	Thk
	(Kg)	(Kg)	(Kg)	(Kg)	L	W	H	R	L	W	Ø	(Min)
NML-P-100	100	50	3	>300	92	64	67	123	1200	800	40 - 100	10
NML-P-300	300	150	7.5	>900	162	92	91	155	2000	1200	40 - 160	15
NML-P-600	600	300	23	>1800	233	122	118	196	2500	1500	40 - 200	20
NML-P-1000	1000	500	56	>3000	268	179	164	255	3000	2000	60 - 350	25
NML-P-2000	2000	1000	125	>6000	378	234	212	426	3500	2000	80 - 400	30
NML-P-3000	3000	1500	220	>9000	497	310	252	505	4000	2500	80 - 400	50
NML-P-6000	6000	NA	420	>18000	621	422	355	548	6000	2500	NA	70

Tip : Select the 'P' model if the material you handle is both flat & round in even proportions. Flat material must be at least of 10mm thicknesss.

PM NeoLifter 'PR' Series

MANUAL PERMANENT MAGNET LIFTER

FEATURES

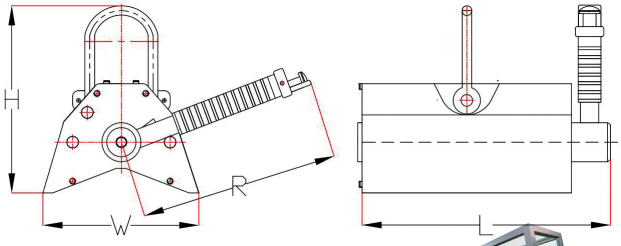
- Safety Factor > 3x Rated Lifting Capacity for ideal conditions.
- State-of-the-art design, compact dimensions with low weight, made with high energy rare earth NdFeB (Neo) magnets.
- Easily transportable, Single hand operating lever with positive spring lock for quick lock and release.
- Easily removed Shackle hook for multi-purpose clamping application.
- Ideal for better performance in handling round material and some flat material with more emphasis on round.

Product Code : NML-PR

All dimensions are in mm

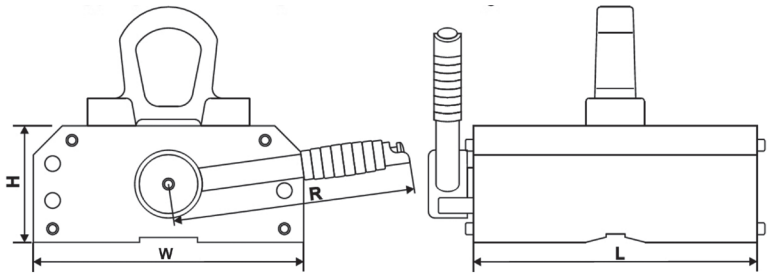
Model No. (PR Series)	Rated		Self Weight	Tested Flat Load	Dimensions (mm)				Job Size Range (mm)			
	Flat	Dia							Flat		Dia	Thk
	(Kg)	(Kg)	(Kg)	(Kg)	L	W	H	R	L	W	Ø	(Min)
NML-PR-100	100	70	3	>300	125	85	127	145	1200	800	40 - 100	10
NML-PR-300	300	210	12.5	>900	200	123	179	195	2000	1200	40 - 160	15
NML-PR-600	600	420	32.5	>1800	278	194	246	220	2500	1500	40 - 200	20
NML-PR-1000	1000	700	80	>3000	330	279	333	315	3000	2000	60 - 350	25
NML-PR-2000	2000	1400	200	>6000	450	371	444	460	3500	2000	80 - 400	30
NML-PR-3000	3000	2100	350	>9000	525	444	531	735	4000	2500	80 - 400	50

Tip : If you are handling mostly round material, select the 'PR' model with its enhanced V-face and better capacity for handling curved faces.



NeoLifter 'PF' Series PM

MANUAL PERMANENT MAGNET LIFTER



FEATURES

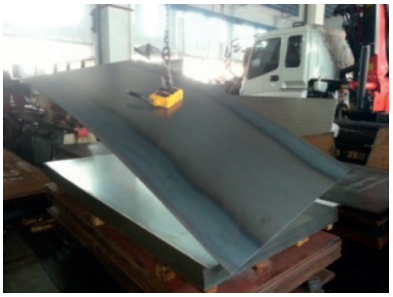
- Safety Factor > 3x Rated Lifting Capacity for ideal conditions.
- State-of-the-art design, compact dimensions with low weight, made with high energy rare earth NdFeB (Neo) magnets.
- Easily transportable, Single hand operating lever with positive spring lock for quick lock and release.
- Easily removed Shackle hook for multi-purpose clamping application.
- Ideal for better performance in handling thin and flat material and some flat material with more emphasis on round.

Tip : If you are handling mostly thin & flat material, select the 'PF' model with its flat bottom, double circuit face with better capacity for handling thinner plates.

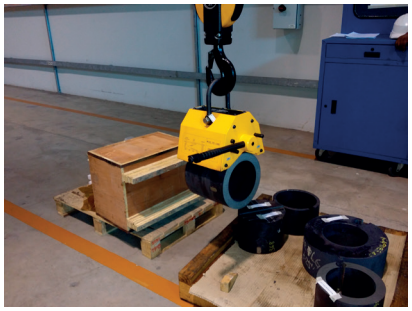
Product Code : NML-PF

All dimensions are in mm

Model No. (PF Series)	Rated		Self Weight	Tested Flat Load	Dimensions (mm)				Job Size Range (mm)			
	Flat	Dia							Flat		Dia	Thk
	(Kg)	(Kg)	(Kg)	(Kg)	L	W	H	R	L	W	Ø	(Min)
NML-PF-300	300	100	9.5	>900	163	133	60	180	1200	800	40 - 100	8
NML-PF-600	600	200	21	>1800	234	162	74	220	2000	1200	40 - 160	10
NML-PF-1000	1000	300	37.5	>3000	302	190	87	265	2500	1500	40 - 200	15
NML-PF-2000	2000	600	77	>6000	341	231	107	380	3000	2000	60 - 350	20
NML-PF-3000	3000	X	165	>9000	416	417	146	450	3500	2000	80 - 400	40
NML-PF-6000	6000	X	410	>18000	584	422	206	820	4000	2500	80 - 400	50



Thin sheet handling is better with the PF model

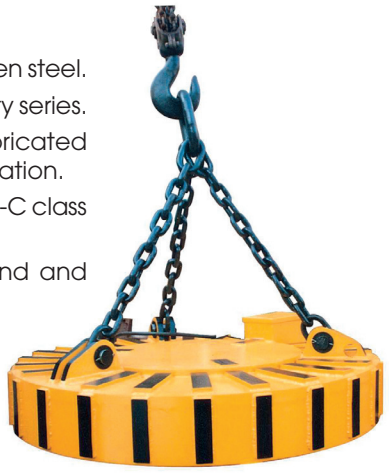


EM CIRCULAR MODULE ELECTRO MAXLIFT

CIRCULAR ELECTRO LIFTING MAGNET

FEATURES

- Easy & Speedy handling of scrap, cast iron, pig iron, broken steel.
- Available in Normal duty, Heavy-duty & Super-heavy-duty series.
- Manufactured in monobloc casted construction or fabricated welded construction depending on budget and application.
- Choice of Aluminum or Copper conductor with special H-C class insulation.
- Completely sealed with thermal conductive compound and protected terminal box.
- Operates on 220 VDC.
- Duty cycle available from 50% to 75%.

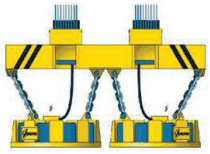


- Optional battery back up can be supplied.
- Control panels with over-excitation controls are also supplied for higher duty cycle operation and lifting extra load from smaller magnets thus enhancing the economic aspects of the lifting capacity, particularly for scrap handling.

 Normal Duty Type	• Suitable for ferrous scrap recovery • For general handling of scrap in yards, stores etc • Lightweight & convenient to handle • Welded & Fabricated construction • 50 to 75% ED : To specify
 Heavy Duty Type	• Suitable for any ferrous material handling needs • For use in yards to heavy-duty steel industries • High-strength ribs and two protection shield of non-magnetic steel • High strength alloy steel suspension chains • Fabricated or Monobloc construction • 50 to 75% ED : To specify
 Super Heavy Duty Type	• Suitable for high temperature ferrous material handling at 600 deg, handling of slabs, blast furnace feeding • For use in heavy-duty steel industries • High-strength ribs and two protection shield of non-magnetic steel • High strength alloy steel suspension chains • Monobloc construction • Manganese bottom plate • 50 to 75% ED : To specify

APPLICATIONS

- Loading/unloading of steel scraps/ pig irons/ cast iron boring/broken steel from trucks.
- Handles slabs, blooms and ingots.
- Handle plates/angle/channels.
- Used in smelt mixing operation.
- Can be used with mobile cranes.
- Direct feeding in the furnace.
- Sweeping/cleaning of mill area.



Product Code EMLC - N, H or SHD depending on Normal, Heavy-duty or Super Heavy-duty
Table below is for Normal Duty type (EMLC-N) at Cold Operation. All dimensions are in mm and Kgs

Model No.	Current	Power (KW)	D	H	Weight (Kgs)	Approx lifting capacity (Kgs)			
						steel ball	steel ingot	steel scrap	solid bloom
EMLC-700	15	3.3	700	800	490	2500	380	120	5000
EMLC-800	18	3.96	800	800	620	3000	480	150	6500
EMLC-900	26.6	5.85	900	1090	800	4500	600	250	8000
EMLC-1100	35	7.7	1100	1140	1350	6500	1000	450	10000
EMLC-1200	45.5	10	1200	1180	1700	7500	1300	600	14000
EMLC-1300	54	11.9	1300	1240	2060	8500	1400	700	19000
EMLC-1500	71.2	15.6	1500	1250	2830	11000	1900	1100	24500
EMLC-1650	75	16.5	1650	1590	3200	12500	2300	1300	30000
EMLC-1800	102.4	22.5	1800	1690	4230	14500	2750	1600	35000
EMLC-2100	129	28.4	2100	1860	7000	21000	3500	2200	45000
EMLC-2400	154	33.9	2400	2020	9000	26000	4800	2850	54000

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

Specially reinforced Normal duty type" for temperatures upto 200 Deg C

ELECTRO MAXLIFT RECTANGULAR MODULE EM

RECTANGULAR ELECTRO LIFTING MAGNET

FEATURES

- Easy & Speedy handling of Plates / Billets / Bundles / Rails / Coils / Beams.
- Available in Normal duty & Heavy-duty series.
- Manufactured in monobloc casted construction or fabricated welded construction depending on budget and application.
- Choice of Aluminum or Copper conductor with special H-C class insulation.
- Completely sealed with thermal conductive compound and protected terminal box.
- Operates on 220 VDC.
- Duty cycle available from 50% to 75%.

APPLICATIONS

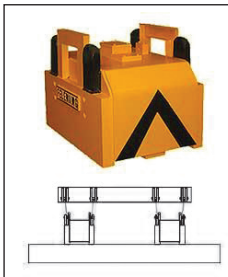
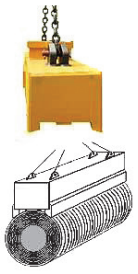
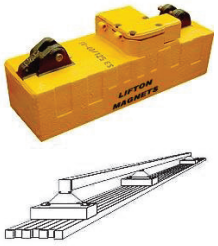
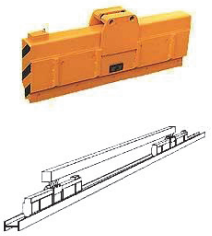
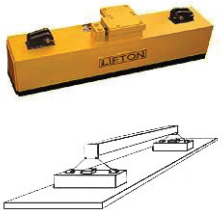
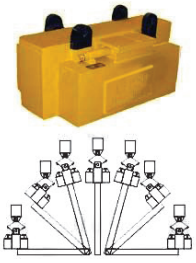
- Useful for production and stock yards.
- Loading/unloading of steel plates/ billets/ bars / blooms from trucks.
- Handles slabs, blooms and ingots.
- Can be used with mobile cranes.
- Can be used in tandem from spreader beam.
- Special design for handling large coils.

Normal Duty Construction

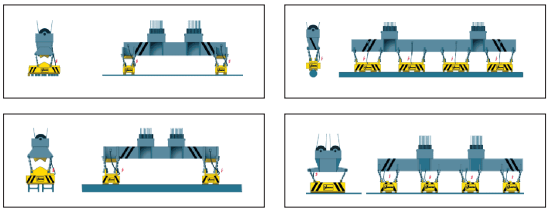
- Suitable for any ferrous material handling needs.
- For use in yards to heavy-duty steel industries.
- High-strength ribs and two protection shield of non-magnetic steel.
- Fabricated or Monobloc construction.
- 50 to 75% ED : To specify.

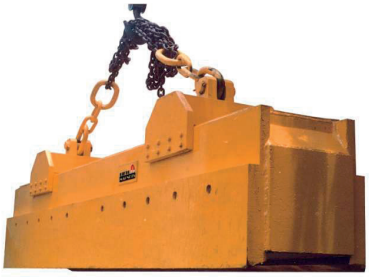
Heavy Duty Construction

- Suitable for high temperature ferrous material handling at 600 deg.
- For use in heavy-duty steel industries.
- High-strength ribs and two protection shield of non-magnetic steel.
- High strength alloy steel suspension chains.
- Monobloc construction.
- 50 to 75% ED : To specify.

					
For billet handling - one variation	For coiled bar handling	For high temperature applications	For I Beam handling	For normal temperature applications	For slab turning applications

Different configurations for different types of load





- Bi-polar magnet for coil handling upto dia 1200 x 3000mm long.

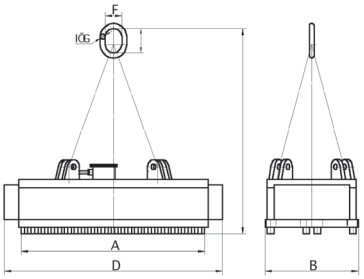
Enquiries: sales@supermagnet.xyz

LIFTON™

EMLR-Billets

FEATURES

- Special pole extension blocks can stretch out and draw back freely after contacting the attached material.
- Consequently it can obtain the maximum contacting area.
- Suitable for lifting many pieces of different length of blooming billets, pipe billets and stagger arrangement cast ingots.



25 Ton Billet Lifter undergo load test

Product Code : EMLR-B

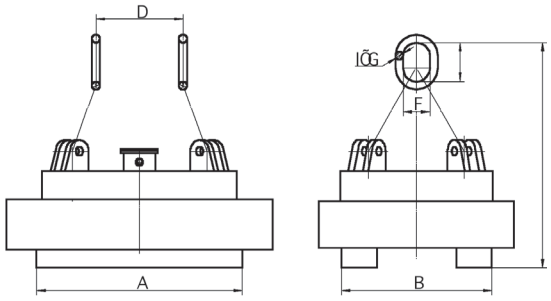
All dimensions are in mm

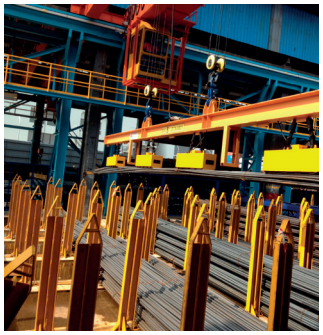
Model No.		Overall Dimension (mm)						Mass (kg)	Current (A)	power (kW)	Lifting Capacity Length(m) × number of piece			
		A	B	C	D	E	F				110×110 (mm)	130×130 (mm)	150×150 (mm)	200×200 (mm)
Normal temperature type	EMLR-B-10060N	100	600	1180	1200	125	45	970	20.6	4.58	4.0×8	3.4×6	3.0×5	2.2×4
	EMLR-B-14060N	1400	600	1200	1610	125	38	1248	32.4	7.13	4.0×11	3.4×9	3.0×8	2.2×6
	EMLR-B-16065N	1600	650	1100	1800	125	45	1740	36.4	8	5.0×13	4.3×11	3.7×12	2.7×9
	EMLR-B-19065N	1900	650	1246	2100	175	50	1996	45.5	10	5.0×16	4.3×14	3.7×12	2.7×9
	EMLR-B-21070N	2100	700	1300	2300	175	50	2800	45.5	10	6.0×18	5.0×15	4.0×13	3.3×10
High temperature type	EMLR-B-10060H	100	600	1000	1200	125	38	1160	14.9	3.3	4×8	3.4×6	3.0×5	2.2×4
	EMLR-B-12084H	1200	840	1050	1510	125	38	1580	18.5	4.07	4×10	3.4×9	3.0×8	2.2×6
	EMLR-B-14060H	1400	600	1025	1610	125	38	1300	25	5.5	4×11	3.4×9	3.0×8	2.2×6
	EMLR-B-16065H	1600	650	1200	1800	125	38	1800	30.5	6.7	5.0×13	4.3×11	3.7×10	2.7×7
	EMLR-B-16090H	1600	900	1300	1860	175	45	3650	25.7	5.65	5.0×14	4.3×11	3.7×10	3.0×7
	EMLR-B-19065H	1900	650	1300	2100	175	50	2100	36.4	8	5.0×16	4.3×14	3.7×12	2.7×9
	EMLR-B-21070H	2100	700	1400	3200	175	50	3000	36.4	8	6.0×18	5.0×15	4.5×13	3.3×10

EMLR-Bundles

FEATURES

- This series is designed with a strong permeable magnetic circuit which can penetrate several layers of air-gap
- Suitable for lifting and transferring bundled bar material as well as heavy duty steel ingots or steel moulds.





Single bundle lifter

Product Code : EMLR-B'

All dimensions are in mm

Model No.		EMLR-B'-11060L/2-6	EMLR-B'-12060L/2-6	EMLR-B'-15090L/2-6	EMLR-B'-15095L/2-6	EMLR-B'-18060L/2-6	EMLR-B'-26060L/2-6
overall dimension (mm)	A	1140	1200	1500	1500	1800	2600
	B	600	600	930	950	605	605
	C	1050	1100	1020	1020	1750	1700
	D	400	400	650	650	1200	2000
	E	210	210	250	250	280	280
	F	125	125	175	175	175	175
	G	40	40	50	50	70	70
Mass (kg)		1515	1680	1980	2160	2180	3139
Cold-state current(A)		37.5	40.4	43.1	43.2	44	51.5
Cold-state Power(kW)		8.25	8.89	9.55	9.5	9.68	11.3
Examples for lift capacity of four unit	Bar material Diameter	15 ~ 51	15 ~ 51	12 ~ 50	15 ~ 51	15 ~ 51	15 ~ 51
	Single bundle diameter	230 ~ 300	300	300 ~ 350	300	230 ~ 300	300
	Length	6~12m	8000	9~12m	9~12m	6~12m	9~12m
	Weight per bundle	2~3	2.6	2~3.5	2.5	2	3
	Bundle amount for lifting	3	3	2~4	4	6	8

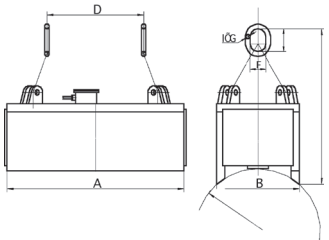
ELECTRO MAXLIFT RECTANGULAR MODULE EM

RECTANGULAR ELECTRO LIFTING MAGNET

EMLR-Coils

FEATURES

- Special magnetic pole is suitable for coiled bar of different diameter.
- The choice of electromagnet depends on the length of coiled bar.
- A long enough electromagnet can lift several coils of coiled bar in the direction of the length.



Product Code : EMLR-C

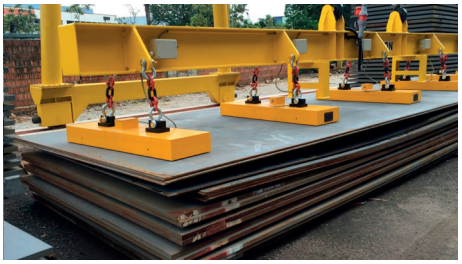
All dimensions are in mm

Model No.	Overall Dimension (mm)							Mass(kg)	current(A)	power(KW)
	A	B	C	D	E	F	G			
EMLR-C-10054	1000	540	1250	500	180	110	32	1520	30	6.6
EMLR-C-16054	1600	540	1210	700	180	110	32	2350	45.5	10
EMLR-C-20054	2000	540	1200	700	180	110	32	2480	58.2	12.8
EMLR-C-26054	2600	540	1220	800	210	125	40	3210	68.2	15
EMLR-C-30054	3000	540	1230	100	210	125	40	3800	80	17.7
EMLR-C-34054	3400	540	1230	1200	210	125	40	4250	86.4	19
EMLR-C-36054	3600	540	1250	1300	250	175	50	4450	89.5	19.7
EMLR-C-40054	4000	540	1250	1550	250	175	50	5000	99.5	21.9
EMLR-C-46054	4600	540	1250	1800	250	175	50	5650	120	26.4
EMLR-C-55054	5500	540	1250	3000	250	175	50	7100	126.4	27.8

EMLR- Multiple Plates

FEATURES

- Designed for lifting and transporting steel plates of medium-thicknesses safely, accurately and quickly.
- A combination of several electromagnets when handling long steel plates are used to overcome possible bending and deforming that may happen to affect safe transportation.
- High temperature type products for handling steel plates below 700°C can be designed and manufactured upon specific requirements of the customers.

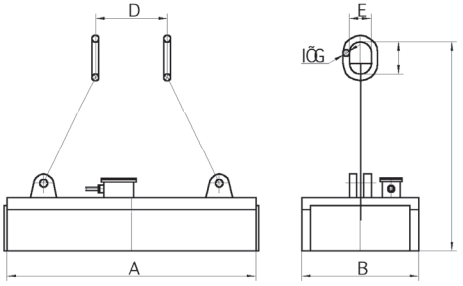


Product Code : EMLR-MP

All dimensions are in mm

Width of steel plate	1500 (mm)							2500 (mm)							4000 (mm)						
Pieces / Model No.	6	8	10	12	16	20	32	6	8	10	12	16	20	32	6	8	10	12	16	20	32
EMLR-MP-10535	3	3	3	3	2	2	1	1	1	1	1	1	1	1	/	/	/	/	1	1	1
EMLR-MP-14035	4	4	3	3	2	2	1	3	2	2	2	2	1	1	/	/	/	/	1	1	1
EMLR-MP-17535	4	4	3	3	2	2	1	4	3	3	3	2	2	1	/	/	1	1	1	1	1
EMLR-MP-21035	4	4	4	3	2	2	1	4	3	3	3	2	2	1	/	2	2	2	1	1	1
EMLR-MP-24035	4	4	4	3	2	2	1	4	3	3	3	2	2	1	2	2	2	2	2	1	1
EMLR-MP-12040	6	4	4	4	3	3	1	3	3	3	2	2	2	1	2	1	1	1	1	1	1
EMLR-MP-16040	7	5	5	5	3	3	1	6	4	4	4	3	2	1	2	1	1	2	2	2	1
EMLR-MP-20040	7	5	5	5	3	3	1	6	5	4	4	3	3	1	2	2	3	3	2	2	1
EMLR-MP-24040	7	5	5	5	3	3	1	7	5	5	4	3	3	1	3	3	3	3	3	2	1

Model No.	Overall Dimension (mm)							Mass (kg)	Power (kW)	Lifting Width (mm)				
	A	B	C	D	E	F	G			6	8	10	12	16
EMLR-MP-9030	900	300	900	300	110	180	32	185	0.41	2300	2700	3000	3200	3600
EMLR-MP-10535	1050	350	960	400	110	180	32	330	0.9	2650	3150	3350	3550	4050
EMLR-MP-14035	1400	350	940	500	110	180	32	430	1.2	3000	3500	3700	3900	4400
EMLR-MP-17535	1750	350	940	700	110	180	32	510	1.5	3350	3850	4050	4250	4750
EMLR-MP-21035	2100	350	920	800	110	180	32	600	1.8	3850	4200	4400	4600	5100
EMLR-MP-24535	2450	350	980	900	110	180	32	720	2.5	4200	4550	4750	4950	5450
EMLR-MP-12040	1200	400	1017	400	110	180	32	550	3	3000	3500	3700	4000	4500
EMLR-MP-16040	1600	400	996	700	110	180	32	690	3.2	3400	3900	4100	4400	4900
EMLR-MP-20040	2000	400	970	800	110	180	32	840	5	3800	4300	4500	4800	5300
EMLR-MP-24040	2400	400	890	700	110	180	32	910	6	4200	4700	4900	5200	5700
EMLR-MP-13042	1260	420	1040	500	110	180	32	650	2.4	3060	3560	3760	4060	4560
EMLR-MP-17042	1680	420	1045	700	110	180	32	850	3.7	3480	3980	4180	4480	4980
EMLR-MP-21040	2100	420	1010	800	110	180	32	1050	4	3900	4400	4600	4900	5400
EMLR-MP-25042	2520	420	1050	900	110	180	32	1250	4.8	4320	4820	5020	5320	5820



EPML-BAT-SC

SELF CONTAINED BATTERY OPERATED ELECTROPERMANENT LIFTING MAGNET

FEATURES

- Revolutionary technique for safe magnetic lifting.
- Electro Permanent Magnetic Lifter - battery powered.
- Light weight and robust construction.
- Safety factor of 2 is maintained for each magnet.
- No battery power is needed to keep magnet on.
- 2 Pole design for lifting both round and flat components.
- Maintenance free completely sealed rechargeable batteries.
- With battery fully charged- can switch On/Off approximately 300 times.
- Warning signal when battery charge level is low.
- Inbuilt battery charger with over charge protection.
- Battery Charging cable is in built in a sliding case.

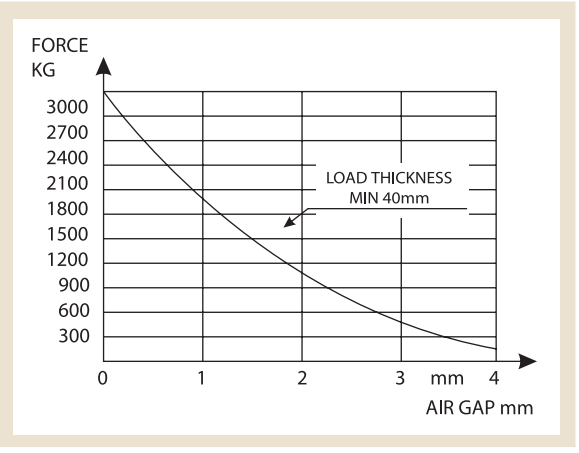
EPML-BAT-SC-P300
(3 Ton SC-P model)

EPML-BAT-SC-600
(6 Ton SC model, 3 Ton round bar)

EPML-BAT-SC-P100
(1 Ton SC-P model)

APPLICATIONS

- For handling off-cuts and small plates from & to CNC plate cutting tables. For loading & unloading plates from Vertical CNC machines.
- In stock yards for handling flats, plates, rounds.
- For loading/unloading in difficult environmental conditions.
- Since no mechanical lever is actuated, it is very comfortable for the operator even while working at odd site conditions.
- Automatic Sequential switching On/Off using contactless relay. The magnet initially is in Off condition, after placing on the load, when the hoist pulls up, it actuates a contactless relay and the magnet is automatically switched On. When it is hoisted down, the magnet remains On. And now when it is lifted the same is Off and releases the job.
- Ready to use magnets can be hooked to crane giving incredible flexibility and unbeaten cost reduction for moving ferrous load.



EPML-BAT-SC

SELF CONTAINED BATTERY OPERATED ELECTROPERMANENT LIFTING MAGNET

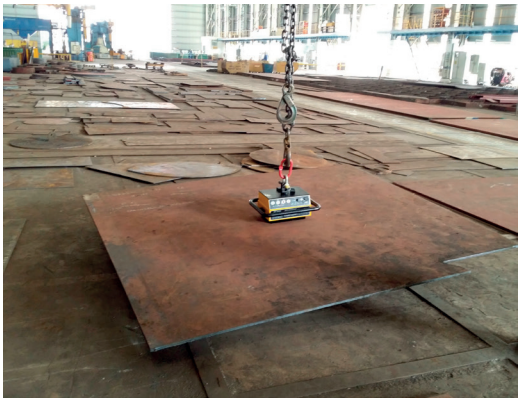
SC : Battery operated self-contained model for plates and rounds.
SC-P : Battery operated self-contained model for steel plates.

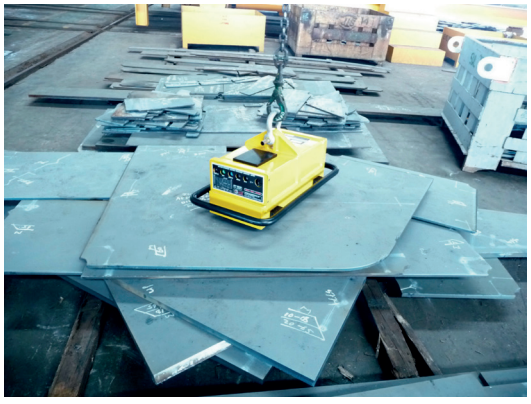
Product Code: EPML-BAT-SC (or EPML-BAT-SC-P)

All dimensions are in mm

Model No.	Flat Load (Kgs)	Round Load (Kgs)	Magnet Area (L x W)	Gross Area (L x W)	Height mm	Battery VDC	Charging VAC	Unit Weight (Kgs)
EPML-BAT-SC-100	1000	500	150 x 125	250 x 275	200	1 x 24	230	55
EPML-BAT-SC-200	2000	1000	250 x 225	350 x 375	400	1 x 24	230	120
EPML-BAT-SC-300	3000	1500	350 x 325	450 x 475	600	1 x 24	230	235
EPML-BAT-SC-500	5000	2500	650 x 425	750 x 575	800	1 x 24	230	425

Nominal non-binding dimensions. (Due to continuous upgradation in design, there could be changes in specifications. Other sizes are available on request.)





EPML-PLATE

ELECTROPERMANENT PLATE LIFTING MAGNET

FEATURES

- These lifting magnets are designed to be compact, low weight, high strength and reliable with full respect to industrial safety.
- Unique EPM technique using double magnet system.
- EPM needs electricity only during switching magnet ON and OFF.
- Can be controlled by a single operator staying at a safe distance.
- No battery back up is needed.
- Over 95% saving of electricity as compared to conventional electro magnets.
- Can be supplied with fixed structure having provision for shifting magnets to handle plates with various sizes.
- Special safety - Will not drop when load is hanging due to incorporation of safety contact-less switch.
- Each magnet is hanged from suspension springs to adjust to the bendness of plates.

Latest technology for handling and lifting single plates of length upto 16mtr and width upto 4mtr. Completely eliminates the older electromagnetic conventional technology and its associated liabilities such as heavy electricity consumption, duty cycle adherence, battery backup, coil burnout and frequent maintenance.

Requiring hardly any maintenance and does not consume electricity during actual lift operation, the highly reliable LIFTON EPML P series represents the answer to plate lifting operations in shipyards, stockyards, flame-cutting environments and similar single plate handling environments.

The magnetic power is generated by a double magnet combination driven by a brief electrical impulse only during charging and discharging. This generates a concentrated and controlled power during the period of actual operation while requiring no electricity and therefore saves nearly 95% power.

APPLICATIONS

- Ideal for handling single plates in stock yard of large fabrication shops.
- Loading of plates on flame cutting machines.
- Most effective in ship building industries.
- Can handle both small plates and large plates by selectively choosing the magnets in contact with plate.
- Telescopic spreader beam with adjustable arm for lifting plates 12M long and above and weighing 25 MT are available.

- Suitable for indoor and outdoor use.
- Control Panel with operator pendant control wired or wireless.
- Can be made to any size and capacity.

EPML-PLATE

EPM

ELECTROPERMANENT PLATE LIFTING MAGNET

VARIOUS MODELS FOR DIFFERENT APPLICATIONS CAN BE SUPPLIED AS MENTIONED BELOW

- Fixed beams with steel tube structure having 2/4/6 cross beams with 2 magnets on each cross beam.
- Fixed or telescopic beam for handling wide plates to long sections.
- Special modular systems are tailor made by adapting them to the size of the plate and flame cut pieces. This allows easy and fast loading and unloading operation on any type cutting machine like plasma, oxyacetylene, laser. It quickly clears the table from cut plates and skeleton in single move to make machine available for next loading, thus saving space and time.

FLEXIBILITY

- Compact Modules (Single magnet modules can be added for added capacity to existing beam). No need to overhaul existing crane infrastructure.
- Electropermanent (EPM) Technology does not require constant supply of electricity to sustain magnetism thereby 95% savings in electrical consumption compared to older Electro Lifters.
- No more coil burnout due to operator forgetfulness to adhere to concept of Duty cycle of 60% or 70% in older Electro Lifters.
- No more downtime and frequent maintenance or repair of the lifting magnets as the magnets themselves hardy spoil due to the above reasons.

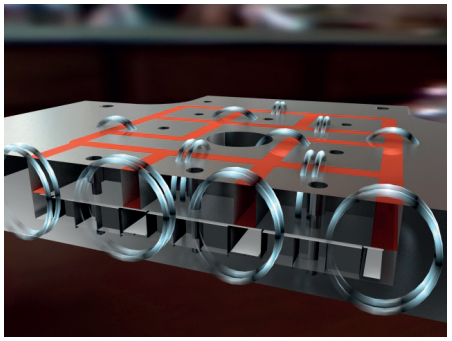
CONFIGURATION GUIDELINES

- Upto 6 Mtr Long Plates from thickness 5mm onwards.

  Use the EPML P/4 system comprising of 2 magnet modules totaling 4 magnets. Each module consisting of 2 magnets each either in a chain/sling suspension or spring enabled housing suspended from a fixed beam structure.
- Upto 12 Mtr Long Plates from thickness 5mm onwards.

  Use the EPML P/10 system comprising of 10 magnets. Each module consisting of 2 magnets either in a chain/sling suspension or spring enabled housing suspended from a fixed beam structure or telescopic beam. For smaller plate sizes of 6 Mtr or 9 Mtr, selective activation of the magnets are possible.The decision to recommend a single housing or individual suspended magnets will depend on plate handling characteristics and behavior. If the plates are loosely stacked, individual magnet suspension performs better. If the plates are neatly stacked, a double magnet housing is suitable.
- Upto 16 Mtr Long Plates from thickness 5mm onwards.

  Use the EPML P/12 system comprising of 6 magnet modules totaling 12 magnets. Each module consisting of 2 magnets either in a chain/sling suspension or spring enabled housing suspended from a telescopic beam.
- Can handle both small plates and large plates by moving telescopic arm which hangs magnets.



EPML-PLATE

ELECTROPERMANENT PLATE LIFTING MAGNET

TECHNICAL AND DIMENSION DATA : SUBJECT TO MODIFICATION

Every plate lifting requirement requires a near custom construction and field characteristics may require alteration of dimension data. LIFTON reserves the right to alter/amend any of the below data to suit the application at hand.

PROPERTIES AND DIRECTIONS OF USE

If the thickness is less and the length is more than 2000 mm, then, instead of a single high capacity magnet, more than one magnet of lower capacity is used, making sure that the overhanging on width is not more than 800 mm and length 1000 mm. For Example if you have to lift a plate of say 6000 x 2000 x 12 mm thick, you need to hang atleast 4 Sets of magnets (Each set consist of 2 Nos. magnet, side ways) and they are hanged from a spreader beam of 4000 mm x 1000 mm.

For handling plates of larger sizes, we recommend Telescopic Plate Handling System which is basically a spreader beam having 2 sets of fixed magnets and 2 set of magnets moving between 800 to 1100 mm each side. The magnets are hanged by Spring suspension box with loose chain so that it takes care of the bend of the plates available in market.

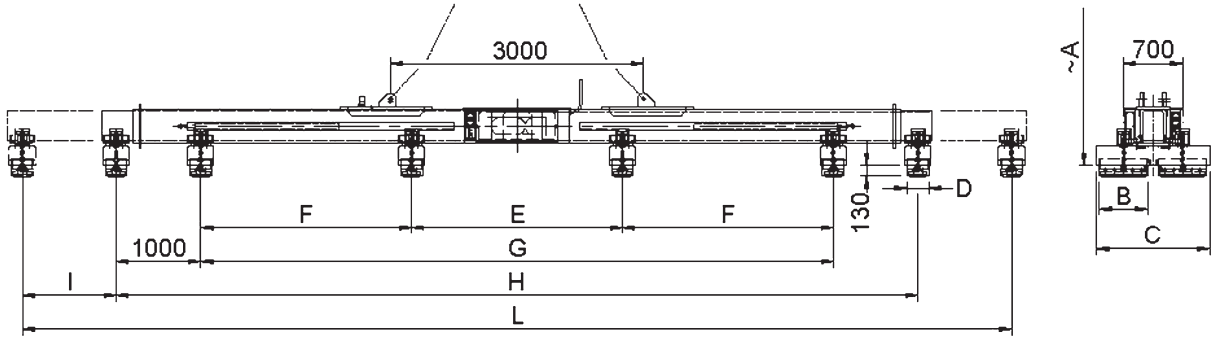
STANDARD / OPTIONS

- Switch selectable capability for selecting 4/8/6/10/12 magnets (STANDARD, depending on model).
- Radio Remote Control with PICK-UP/FULL-MAG / DEMAG / SAFE / OPEN / CLOSE functions (OPTION).
- Optional INTEGRATION WITH Operator Pendant.
- Integration into existing / new Crane Remote possible (OPTION).
- Cable Spring Drum with 12m cable, plug and socket (OPTION) Lamp block, pendant and T/R Control Panel with Saturation control system (STANDARD).

SAFETY FACTOR

LIFTON strictly adheres to a safety factor of 3:1 for all individual EPML lifting magnets. The total system with Fixed beam in its complete assembly will sustain a load of 1.5 : 1 for MILD STEEL plates and these are in conformity with the provisions of the Machinery Directive 98/37/EG, harmonized standards EN-292-1, EN-292-2 and with national implementing legislation.

CAUTION : The maximum rated lift is based upon lifting clean, smooth, flat, low-carbon steel plate, with the full area of the magnet's lifting surface in contact with the load. De-rating is required for round jobs, rusted jobs or alloy steels. Do not use on material less than 5mm thickness. Safety Manual contains more detailed ratings.



Product Code: EPML P

All dimensions are in mm

Model No.	A	B	C	D	E	F	G	H	I	L	WEIGHT	LENGTH	WIDTH	MIN THICK	SWL
EPML P/4	System of 4 magnets with spring dampers hanging from a Spreader Beam														
4T	2000	325	1250	235	3000	3050					1200	6000	3500	5	4000
8T	2000	600	1250	230	3000	3050					1200	6000	3500	8	8000
10T	2000	600	1550	250	3000	4000					1500	6000	3500	10	10000
EPML P/8 & P/10	System of 8 or 10 magnets with spring dampers hanging from a Spreader Beam. 8 Magnets for 9 Mtr Plate & 10 Magnets for 12 Mtr Plates														
6T	2500	330	1250	240	2500	1450		5000	1250	7500	2750	9000	3500	5	6000
8T	2500	330	1250	240	2500	1650		6000	1700	9500	2950	12000	3500	6	8000
10T	2500	350	1250	250	2500	1650		6000	1700	9500	2950	12000	3500	8	10000
12T	2500	415	1250	235	2500	1650		6000	1700	9500	2950	12000	3500	10	12000
15T	2500	505	1250	235	2500	1650		6000	1700	9500	2950	12000	3500	15	15000
EPML P/12	System of 12 magnets with spring dampers hanging from a Spreader Beam														
10T	2500	330	1250	240	2500	1650	6000	8000	1350	10000	3850	16000	3500	5	10000
12T	2500	350	1250	250	2500	1650	6000	10000	1650	12500	4250	16000	3500	8	12000
15T	2500	415	1250	235	2500	1650	6000	10000	1650	12500	4250	16000	3500	10	15000
20T	2500	505	1250	235	2500	1650	6000	10000	1650	12500	5450	16000	3500	15	20000
25T	2500	630	1500	250	2500	1850	6000	10000	1650	12500	6000	16000	3500	15	25000

EPML-PLATE MODULE EPM

ELECTROPERMANENT PLATE LIFTING MAGNET MODULE

FEATURES

- Multiple units of this module combine to make the EPML-PLATE system for single plate handling.
- Most suitable for Crane and system integration fabricators to construct your own EPML-PLATE system. Determine your customer's lifting capacity requirement, design your own spreader beam and just buy the modules and control system from us.
- Compact, lightweight and waterproof, high strength and reliable with full adherence to industrial safety with 3 times Safety factor.
- Units come with their own hooking point kit, spring sets.
- Single units of these Lifting modules combine to make the EPMPLATE MAXLIFT product.
- These lifting magnet modules are available in various safe lifting capacities of 500Kg, 750Kg, 1000Kg, 1500Kg, 1750Kg, 2000kg, 2500Kg, 2750Kg and 3000kgs.
- Each module comes with its own hooking point, hanging pin, suspension spring and stopper plate.
- Single control system to control from 2 to 40 lifting modules of suitable capacity in each spreader.

Tip : If you are a Crane supplier with your own fabrication capability, you can opt to build your own Electropermanent lifting system by integrating several units of this module into your spreader. Just buy the modules and the control system from us.

Product Code: EPML-P/X

All dimensions are in mm

Model No. & Capacity	Poles A	Amps (A)	Dimensions (mm)	Weight
EOML-P/X-500	6	6	320 x 230 x 75	30
EOML-P/X-750	8	8	320 x 230 x 85	45
EOML-P/X-1000	10	10	410 x 230 x 75	50
EOML-P/X-1250	12	12	410 x 230 x 85	55
EOML-P/X-1500	14	15	500 x 230 x 75	65
EOML-P/X-1750	16	18	500 x 230 x 85	72
EOML-P/X-2000	18	20	600x 230 x 75	90
EOML-P/X-2500	20	22	600 x 230 x 85	110
EOML-P/X-3000	26	30	800 x 330 x 75	120

EPML RECTANGULAR MODULE EPM

ELECTROPERMANENT RECTANGULAR LIFTING MAGNET

FEATURES

- Single units of these Lifting modules are combined to lift medium to long loads of billets, bars, I beams, pipes, cylinders and other solid and rigid loads with a clear contact to magnet face.
- Pole design and orientation depends on nature of load to be lifted.
- Single units available in various safe lifting capacities from 500Kg, to 5000 Kgs.
- Compact, low weight, high strength and reliable with full adherence to industrial safety with 3 times Safety factor.
- Single control system to control multiple modules of suitable capacity in each spreader.

An example specification table for EPML-R for Cold billet handling

Model No.	Billet Specs		Magnet Dimensions L x W (mm)	Number of Magnets	Magnet Structure weight (Kgs)
	Weight (Kg)	Length (mm)			
EPML-R-3T	3000	3000	945 x 650	1	845
EPML-R-5T	5000	6000	945 x 550	2	1450
EPML-R-8T	8000	12000	1300 x 650	2	1850
EPML-R-10T	10000	12000	1750 x 650	2	2950

Specifications for Cold Billet Handling only MODEL EPML-R

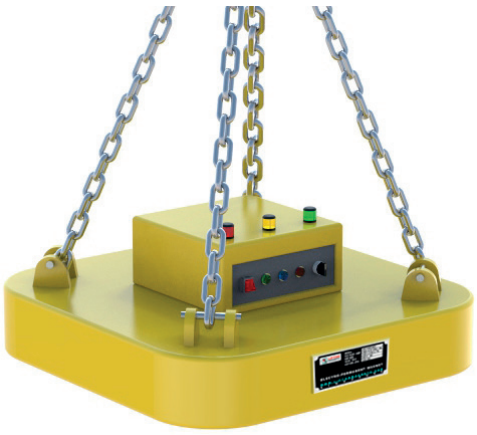
Tip : If you are a Crane supplier with your own fabrication capability, you can opt to build your own Electropermanent lifting system by integrating several units of this module into your spreader. Just buy the modules and the control system from us.

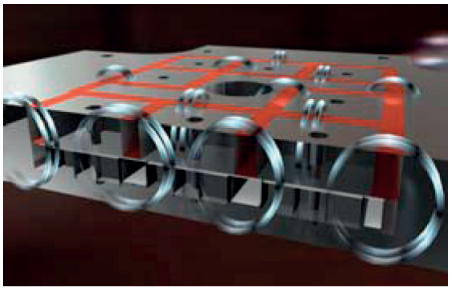
EPML-SLAB

ELECTROPERMANENT SLAB LIFTING MAGNET

Features

- LIFTON MAGNETS® EPML-Slab series employs the dynamic Electro Permanent magnet technology which generates a consistently powerful magnetic flux at a controlled depth through a workpiece with just a short impulse of electric current.
- Electropermanent lifting systems are suitable for flat contact surfaces on solid type of jobs such as Slabs, Bil-lets, Beams, Pipes, Plates and Blocks.
- The EPMR series are designed to operate singly or in groups and ideal for lifting heavy loads of solid slabs and blocks. These are avail-able in capacities from 5 Tons to 40 Tons.
- The standard range of EPMR series uses 4 poles of double magnet circuit to produce the most powerful gripping force in the EPM range.
- The clamping force generated is more than 1260 N/M^2.
- Constructed out of machined steel & flawless X-Ray grade contiguous welding, these EPML-Slab series constructions are designed for a safety factor of at least 7.
- The Lifting capacity is at 3:1 safety factor. The control systems are integrated into the structure of each lifting module and are operable by wireless remote as a standard option.
- The electrical operations are driven by 380~440 VAC, dual phase input power and include, 3/4 MAG—INCHING-FULL MAG—DEMAG.
- Safety features include a 2 button operation and ADPREM sensor to prevent accidental demagnetization while in operation. Power Control is also provided as a default. The EPML-Slab Series are also optionally capable of being driven by a bank of lead-acid maintenance-free batteries.





Product Code: EPML-Slab (EPML-S)

All dimensions are in mm

Model No.	A	B	C	D	E	F	T (Thickness)	Lift Capacity (Kg)	Nett Weight (Kg)	Job Size Max.
EPML-S-5T	600	500	950	700	100	100	200	5000	680	6500x3000
EPML-S-10T	600	500	920	900	100	100	250	10000	975	6500X3000
EPML-S-15T	700	600	1080	1100	100	100	300	15000	1390	6500X3000
EPML-S-20T	700	600	1290	1200	100	100	350	20000	1800	6500X3000
EPML-S-25T	700	600	1100	1400	150	150	400	25000	2250	6500X3000
EPML-S-30T	800	700	1660	1600	150	150	450	30000	2850	6500X3000
EPML-S-35T	800	700	1900	1800	200	200	500	35000	3350	6500X3000
EPML-S-40T	800	700	2100	2000	200	200	550	40000	3850	6500X3000

EPML Plate-Tilt

EPM

ELECTROPERMANENT VERTICAL PLATE HANDLING MAGNET

FEATURES

- Includes all the features of the EPMPLATE MAXLIFT.
- Handles single steel plates upto 12 Mtr long.
- Specially mounted magnets to enable swivel of upto 80 deg from horizontal .
- Unique EPM technique using double magnet system to handle single steel plates.
- EPM needs electricity only during switching magnet ON and OFF.
- Can be controlled by a single operator staying at a safe distance.
- No battery back required.
- Over 95% saving of electricity as compared to conventional electro magnets.
- System is configurable and modular and draws 2 or 3 phase mains AC power from 380 to 440 VAC.

Product Code : EPMLT

All dimensions are in mm.

Model No.	Plate Specifications (Max) in mm Minimum Thickness of 5mm			No. of Magnets	Magnet Dimensions	Structure weight (Kgs)
	Length (mm)	Width (mm)	Capacity (Kgs)		L x W (mm)	
EPMLT-P/4-3T	6000	2500	4000	4	600 x 400	1850
EPMLT-P/4-7.5T	12000	3000	7500	4	600 x 400	2850
EPMLT-P/4-10T	12000	3500	10000	4	800 x 300	3100
EPMLT-P/4-12T	12000	3500	12000	4	950 x 350	3450
EPMLT-P/6-16T	12000	3500	16000	6	950 x 450	3940

EPML-Bat Plate

EPM

100% BATTERY OPERATED ELECTROPERMANENT PLATE LIFTING MAGNET

FEATURES

- All the features of the EPMPLATE MAXLIFT except that this model is powered by batteries.
- The power from 24 VDC to 200 VDC depending upon the capacity of the lifting system is supplied by a bank of lead-acid maintenance free dry cells.
- Option of a secondary battery bank for continuous operation.
- These lifting magnets are designed to be compact, low weight, high strength and reliable with full adherence to industrial safety.
- Unique EPM technique using double magnet system to handle single steel plates.
- EPM needs electricity only during switching magnet ON and OFF.
- Can be controlled by a single operator staying at a safe distance.
- Over 95% saving of electricity as compared to conventional Electromagnets.
- Usually supplied with a fixed spreader beam structure. Option to construct your own spreader beam under our guidance also available.
- Plate lengths from 4 Mtr to 16 Mtr and from 5mm thickness onwards can be handled.
- Special safety - Will not demagnetise when load is hanging and spreader is in tension suspension due to incorporation of safety contact-less sensor.
- Special safety - Will not handle load when battery power is below critical level or drop load upon sudden battery power drop.
- Each magnet is hanged from suspension spring dampeners to adjust to the bendness of plates.

PM HANDLIFT

HAND OPERATED SHEET LIFTER

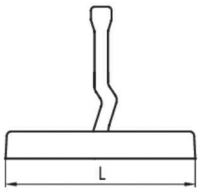
FEATURES

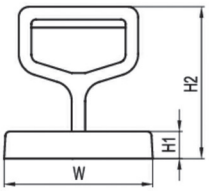
- Easy grip powerful magnet with handle.
- Can lift/ drag top sheet from stack for pulling out without any damage.
- Optimum flux density – effectively lifts thick/ thin sheets.
- Magnets are always ON. To release a cam mechanism pushes down the sheet at contact point.

Caution : Do not use it as a hoistFor handling finished components after grinding operation, use thin plastic sheet to avoid scratch.

APPLICATIONS

- Useful for press shop for feeding one sheet at time in machine.
- These are used in single or in pairs for carrying sheets for either horizontal or vertical transportation.
- Most suitable for pulling or carrying small steel sheets.





Product Code : HL

All dimensions are in mm

Model No.	L	W	H	W	Rated Cap (Vertical)	Max Pull (Vertical)	Wt (Kg)
HL-30	158	148	180	25	30	100	2

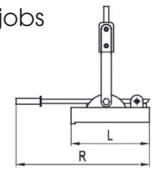
PM SHEETLIFT

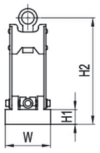
CRANE OPERATED SHEET LIFTER

FEATURES

- Simple, easy, flexible, economical and very light weight.
- Can swivel 150° and lift sheets vertically and horizontally.
- Can lift non homogeneous parts with unbalanced weight and load.
- Optimum flux density effectively lifts thick/ thin sheets.
- Magnets always remain ON.
- Cam mechanism jack up lever releases the jobs easily with the help of long handle.

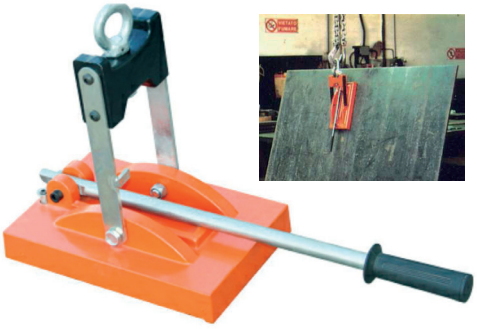
Caution :For handling finished components after grinding operation, use thin plastic sheet to avoid scratch.





APPLICATIONS

- Useful in shop floor for stacking of sheets size 1000 x 2000 mm.
- Suitable for loading/unloading of plates from horizontal milling machine.
- Most suitable near flame cutting machines.



Product Code : SL

All dimensions are in mm

Model No.	L	W	H	R	T	Rated Cap (Vertical)	Max Pull (Vertical)	Wt (Kg)
SL-25	190	120	260	290	40	250	625	5
SL-50	300	200	300	590	40	500	1500	15

PM TOUCHLIFT

HAND OPERATED GRIPPER

FEATURES

- Handy with easy gripper.
- Attracts and removes with one touch jack up lever.
- Low field magnetic power to handle finished components.
- Can handle oily/ warm components.

TL-H Hot plate handling version for temperatures upto 250 Deg C

APPLICATIONS

- To hold small/complex shaped components while polishing/grinding.
- To lift oily finished grinded jobs from surface grinding machine.
- Useful during critical welding application.

Product Code : TL

All dimensions are in mm

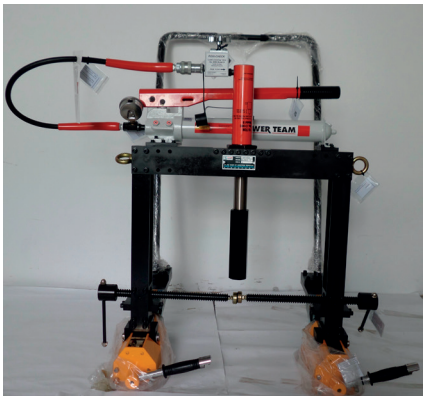
Model No.	W	L	H	Lifting Capacity (Kgs)	Wt (Kg)
TL-10	100	60	40	25	1.2

MAG-PRESS™ PM

MAGNETIC PRESS-FIT WELDING FABRICATION MACHINE

FEATURES

- Compact and relatively light-weight Stiffener Welding aid.
- Clamping forces of upto 4 Tons. Technically, higher forces are possible by upgrading the clamp.
- Complete hydraulic ram and Jack kit for 10 Tons & 10000 psi pressure.
- Set of three Extension Rods of 50, 100 & 200mm Length.
- Side Alignment screw pins for fine alignment of the profiles.
- Wheel and handle for easy movement of the machine along the length of the profile.
- Secure upto 3 meters of profile with one clamping point.



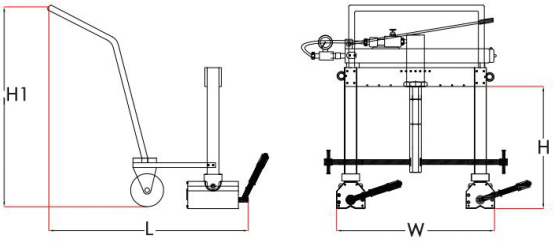
APPLICATIONS

- Eliminate costly & time consuming steps to weld U clamps, hammer shims etc to weld stiffeners & profiles on plates.
- Effectively deploy human resources, make a laborious task easy & enjoyable.
- Easily increase productivity by 50 to 80%.

Product Code : MP

All dimensions are in mm

Model No.	L	W	H	H1	Max Clamping Force (Vertical, [Kgs] on 50mm Grinded MS Plate	Pressing Force / Stroke (Tons / mm)	Stiffener / Profile Height (mm)	Wt (Kg)
MP-III	700	500	480	850	1800	5 / 127	75 - 300	42
MP-IV	800	600	580	900	3600	10 / 152	75 - 550	65
MP-V	1200	800	650	950	7000	10 / 152	150 - 600	115

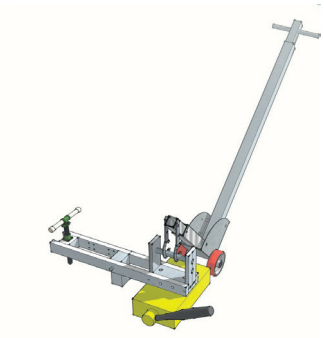


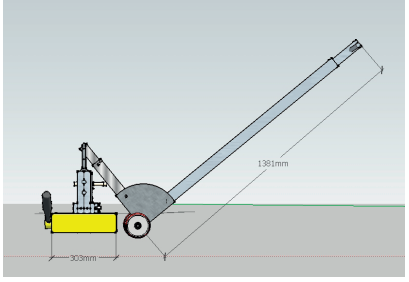
MAG-PRY™ PM

PLATE LEVELING AND FIT-UP TOOL

FEATURES

- Convenient Handle operated wheeled dolly tool.
- Maximum vertical clamping force of 3000 Kg or 6000 Kg (on 50mm thick MS Plate).
- Compact & light-weight permanent Magnet clamp.
- Position the magnet part on one plate and the vise-screw part on the adjacent plate.
- Switch ON the magnet and start turning the screw to obtain the desired leveling.
- Easy & convenient to operate!
- Overall dimensions of 1300 x 650mm.





Enquiries: sales@supermagnet.xyz

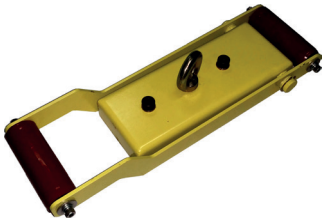
LIFTON™

PM MITEE-BITE™

MULTI PURPOSE GRIPPER WITH EYE-BOLT

FEATURES

- Compact light-weight CAM operated low-profile versatile anchoring, clamping & gripping permanent magnet.
- Ideal for underwater salvage, pilot ladder anchor, buoy marking operations, temporarily suspending bulky equipment & machinery underwater & for quick clamping & anchoring to steel parts.
- Tough construction, Steel, power-coated, Nickel-Copper-Nickel coating for corrosion resistance, marine grade, anti-corrosion treatment.
- To be used as a supplementary anchor for easy removal after job is complete.
- Maximum vertical pull forces of 400 Kg (MB400 : SWL 200Kg at 2xSafety), 600 Kg (MB600 : SWL 300Kg at 2xSafety) or 800 Kg (MB800 : SWL 400Kg at 2xSafety) on 50mm MS Plates.



Product Code : MB

All dimensions are in mm.

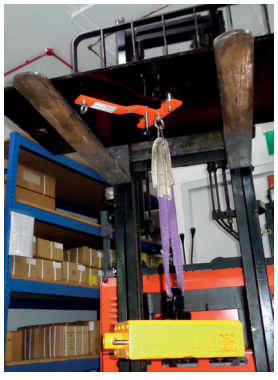
Model No.	Overall Dimensions (mm)	Magnet contact area (mm)	Max Pull Force (Kgs)	Rated Capacity (Kgs) at 2:1 Safety	Nett Weight (Kgs)
MB-400	400 x 110 x 40	250 x 90	400	200	4
MB-600	400 x 200 x 40	180 x 180	600	300	6
MB-800	450 x 250 x 40	200 x 200	800	400	8

PM BEAR-CLAW™

UNDERWATER SALVAGE AND GENERAL PURPOSE ANCHORING MAGNET

FEATURES

- Compact & Lightweight anchor magnet, ideal for underwater salvage operations,
- Hang various tools & equipment overhead without need for welding any temporary hooks.
- Clamping force can be designed from 100 to 400 Kg (on 50mm thick MS Plate).
- Simply lift the lever handle to separate the magnet from the steel. Use the screw-pin for forcing an air-gap if the lever operating force is too much.
- Comes with M10 & M8 eye-bolts for hanging convenience. Easy to operate!
- Dimensions: L 300mm (handle) x W 200mm (cross-bar) - T-shape.
- Nett Weight: 1.5 Kg.



Round Base Magnets™ PM

VERSATILE MULTI-PURPOSE, HOLDING, ANCHORING & CLAMPING POT MAGNET

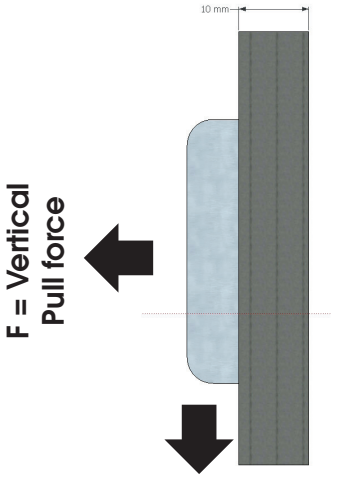
FEATURES

- Compact & Lightweight powerful pot magnet, ideal for absolutely any clamping application.
- An invaluable fixturing tool for fabricators and engineers who may be looking for attractive mechanism to clamp any item to a steel base.
- Hang various tools & equipment overhead without need for welding any temporary hooks.
- Fabricate your own unique clamping solution.
- Clamping force from 4 to 160 Kg (on 50mm thick MS Plate).
- Suitable for application upto 80Deg C only.

Instructions :

The adhesive force indicated for each part are under ideal conditions and refer to the Vertical pulling force on a 10mm thick mild steel grinded finish wall. Sliding forces are typically a quarter of Vertical forces. Thinner steel walls or platforms will also derate the pulling forces.

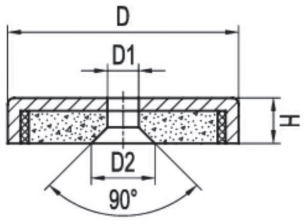
Therefore you should design your application suitably, taking account of the forces in play. For eg., you will fail trying to hang a bucket of water weighing 37 kgs using an RBM NA-42 (37 Kg Adhesive force) from a 10mm thick steel wall. The NA-42 has only about 9 Kgs Sliding force resistance (37/4 Kg). You should try using the NA-75 (162/4) or 4 units of NA42 (4 x 37/4) instead.



V = Sliding force
= ¼ Vertical Force
= ¼ F

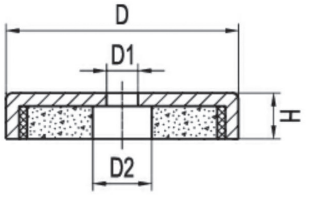
RBM-NA : Round Base Magnet with Countersunk Hole

Type	D	D1	D2	H	Weight (gms)	Adhesive Force (kg)
RBM-NA16	16	3.5	6.5	5.5	7	5
RBM-NA20	20	4 .5	8.6	7.2	15	6
RBM-NA25	25	5.5	10.4	7.7	24	14
RBM-NA32	32	5.5	10.4	7.8	39	25
RBM-NA36	36	6.5	12	7.6	50	29
RBM-NA42	42	6.5	12	8.8	77	37
RBM-NA48	48	8.5	16	10.8	120	68
RBM-NA60	60	8.5	16	15	243	112
RBM-NA75	75	10.5	19	17.8	480	162



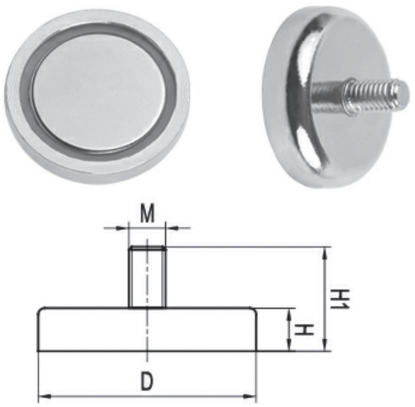
RBM-NB : Round Base Magnet with Cap Screw Hole

Type	D	D1	D2	H	Weight (gms)	Adhesive Force (kg)
RBM-NB16	16	3.5	6.5	5.2	6.5	4
RBM-NB20	20	4 .5	8	7.2	13	6
RBM-NB25	25	5.5	9	7.7	22	14
RBM-NB32	32	5.5	9	7.8	38	23
RBM-NB36	36	6.5	11	7.6	48	29
RBM-NB42	42	6.5	11	8.8	75	32
RBM-NB48	48	8.5	15	10.8	114	63
RBM-NB60	60	8.5	15	15	235	95
RBM-NB75	75	10.5	18	17.8	460	155



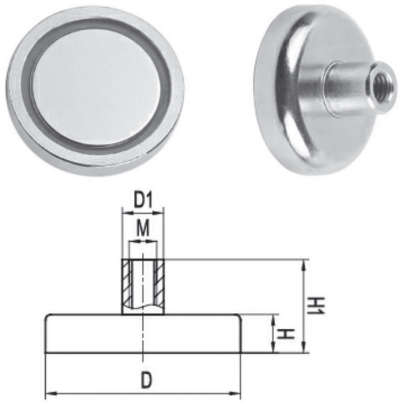
RBM-NC : Round Base Magnet with Bolt

Type	D	M	H1	H	Weight (gms)	Adhesive Force (kg)
RBM-NC10	10	3	12	5	3.5	2.2
RBM-NC12	12	3	12	5	5	3.2
RBM-NC16	16	4	14	5.2	9	5.5
RBM-NC20	20	4	16	7.2	16	9
RBM-NC25	25	5	17	7.7	26	22
RBM-NC32	32	6	18	7.1	43	34
RBM-NC36	36	6	17.6	7.6	54	41
RBM-NC42	42	6	18.7	8.8	83	68
RBM-NC48	48	8	24	10.8	130	81
RBM-NC60	60	8	31.5	15	256	113
RBM-NC75	75	10	35	17.8	510	164



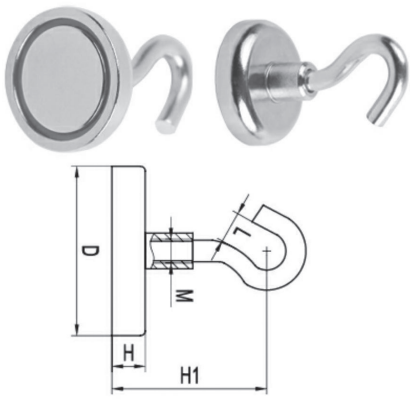
RBM-ND : Round Base Magnet with Stud

Type	D	D1	M	H1	H	Weight (gms)	Adhesive Force (kg)
RBM-ND10	10	6	3	12	5	4	2.2
RBM-ND12	12	6	3	12	5	6	3.2
RBM-ND16	16	6.5	4	13.5	5.2	9	5.5
RBM-ND20	20	6.5	4	15	7.2	17	9
RBM-ND25	25	7.5	5	17	7.7	28	22
RBM-ND32	32	10	6	18	7.8	45	34
RBM-ND36	36	10	6	18.5	7.6	55	41
RBM-ND42	42	10	6	18.8	8.8	84	68
RBM-ND48	48	12	8	24	10.8	130	81
RBM-ND60	60	12	8	28	15	263	113
RBM-ND75	75	17	10	35	17.8	515	164



RBM-NE : Round Base Magnet with Hook

Type	D	M	H1	H	L	Weight (gms)	Adhesive Force (kg)
RBM-NE10	10	3	27	6	6	6	2.2
RBM-NE12	12	3	27	5	6	8	3.2
RBM-NE16	16	4	14	5	7.5	11	5.5
RBM-NE20	20	4	14	7	7.5	21	9
RBM-NE25	25	5	32	7.7	8.5	33	22
RBM-NE32	32	6	36	7.8	10	54	34
RBM-NE36	36	6	36	7.8	10	64	41
RBM-NE42	42	6	31	8.8	10	93	68
RBM-NE48	48	8	45	10.8	11	150	81
RBM-NE60	60	8	50	15	11	283	113
RBM-NE75	75	10	62	17.8	16	555	164



AlNiCo Pots & HorseShoe Magnets

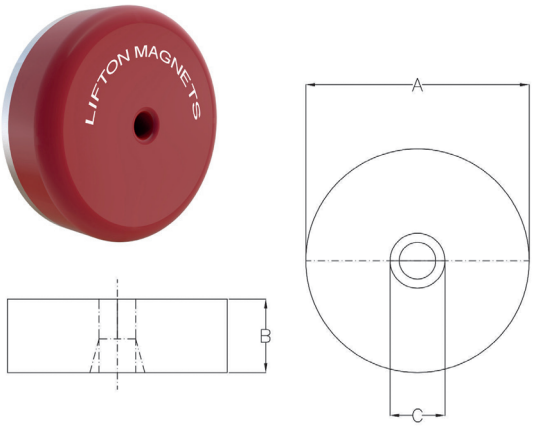
PM

HIGH TEMPERATURE, VERSATILE HOLDING & CLAMPING POT MAGNET

AlNiCo Shallow Pot

FEATURES

- Compact & lightweight AlNiCo Grade 5 magnets ideal for high temperature holding and clamping application.
- Temperature Upto 350° C.
- Red Painted coating.



Product Code : ALCO-SP

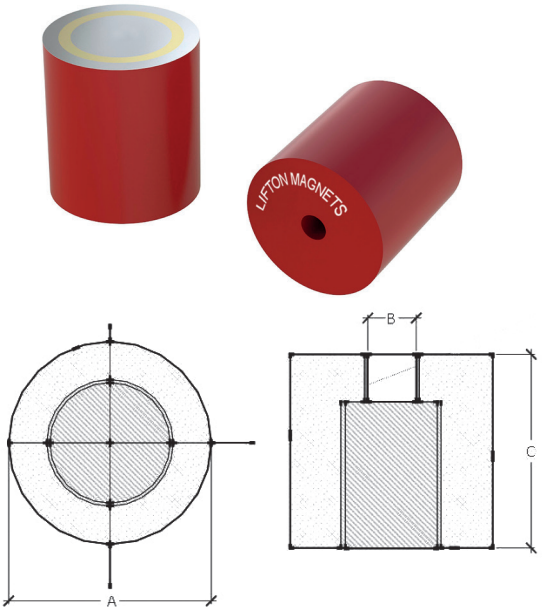
All dimensions in mm

Model No.	Size			Force	Weight
	A	B	C	N	G
ALCO-SP-19	19.1	7.5	3.7	28	13
ALCO-SP-28	28.6	8.5	4.8	45	36
ALCO-SP-38	38.1	10.4	4.8	125	80

AlNiCo Deep Pot

FEATURES

- Compact & lightweight AlNiCo Grade 5 magnets ideal for high temperature holding and clamping application.
- Temperature Upto 350° C.
- Red Painted coating.



Product Code : ALCO-DP

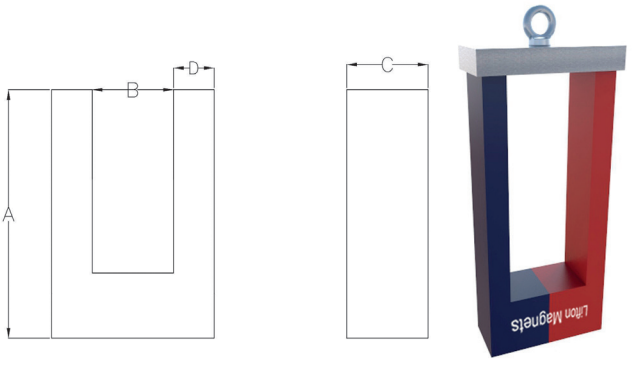
All dimensions in mm

Model No.	Dimensions			Force N	Weight G
	Dia (A)	B	C		
ALCO-DP-10	9.5	M3	15.1	10	5
ALCO-DP-12	12.7	M4	15.9	20	15
ALCO-DP-18	17.6	M6	16	26.5	23
ALCO-DP-20	20.5	M6	19	40	40
ALCO-DP-27	27	M6	25	61	85
ALCO-DP-35	35	M6	30	150	184
ALCO-DP-65	65	M12	43	400	460

AlNiCo HorseShoe Yoke

FEATURES

- Compact & lightweight AlNiCo Grade 5 magnets ideal for high temperature holding and clamping application.
- Temperature Upto 350° C.
- Red Painted coating.



Product Code : ALCO-HSA

All dimensions in mm

Model No.	Dimensions (mm)				Force (N)	Weight (Gms)
	A	B	C	D		
ALCO-HSA -85	85	48	15	6	58	230
115	115	43.5	20	8	82	560

AlNiCo Pots & HorseShoe Magnets

HIGH TEMPERATURE, VERSATILE HOLDING & CLAMPING POT MAGNET

AlNiCo HorseShoe

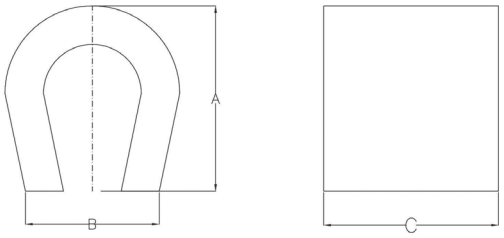
FEATURES

- Compact & lightweight AlNiCo Grade 5 magnets ideal for high temperature holding and clamping application.
- Temperature Upto 350° C.
- Red Painted coating.

Product Code : ALCO-HSB

All dimensions in mm

Model No.	Dimensions (mm)			Force N	Weight G
	A	B	C		
ALCO-HSB-8	22	11	8.5	21	13.5
ALCO-HSB-16	20	11	16	24	20



AlNiCo HorseShoe

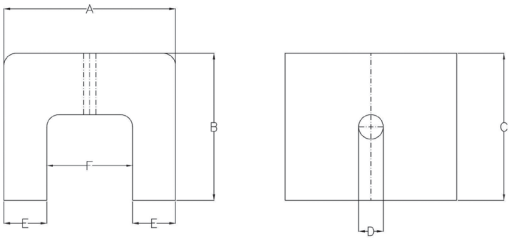
FEATURES

- Compact & lightweight AlNiCo Grade 5 magnets ideal for high temperature holding and clamping application.
- Temperature Upto 350° C.
- Red Painted coating.

Product Code : ALCO-HSC

All dimensions in mm

Model No.	Dimensions (mm)							Force N	Weight G
	A	B	C	D	E	F	G		
ALCO-HSC-22	22	17	25	7	7	8	9	42	75
ALCO-HSC-30	30	20	20	5.2	7.5	15	11	45	60
ALCO-HSC-40	40	25	25	5	10	20	13	86	120
ALCO-HSC-45	45	30	30	5	11	23	17	118	180



Third-Party Tools

StrongHand Inc

Adjust-O™ Magnet Square

Strong-Mag Pro

MULTI PURPOSE FABRICATION AND WELDING TOOL

FEATURES

- Strongest grip in the market in its class, Turn ON & Off with Ease.
- Holds ferrous metal pieces at 30°,45°,60°and 90°.
- Pull force from 30 to 65 Kgs.
- Precision machined flat and V faces.
- Ideal for round, square tubing, angle and flat stock.
- Invaluable for shipyards, fabrication shops and general workshops.

Product Code : MSA

All dimensions are in mm

Model No.	Max. Pull Force	Angles	Dimensions (mm)	Weight (Kg)
MSA-45	30	45°, 90°	111x95x25	0.5
MSA-46-HD	40	45°, 90°	111x95x29	0.7
MSA-47	35	45°, 90°	152x130x32	1.0
MSA-48-HD	75	45°, 90°	152x130x35	1.4
MSA-53-HD	65	30°, 45° 60°, 90°	152x130x35	1.4

Use 3rd-Axis Magnetic Posts for all MSA squares to setup 3 sided work such as tank and gusset

Adjust-O™ 90° Dual Switch Magnet Square

Strong-Mag Jumbo

MULTI PURPOSE FABRICATION AND WELDING TOOL

FEATURES

- Strongest grip in the market in its class.
- Two ON/OFF switches to control the two 90° faces separately.
- Turns ON & Off with Ease.
- Holds ferrous metal pieces at 45°and 90°.
- Pull force from 55 to 120 Kgs.
- Precision machined flat and V faces.
- Ideal for round, square tubing, angle and flat stock.
- Invaluable for shipyards, fabrication shops and general workshops.

Product Code : MS2

All dimensions are in mm

Model No.	Max. Pull Force	Angles	Dimensions (mm)	Weight (Kg)
MS2-80	55	45°, 90°	152x152x38	1.2
MS2-90	120	45°, 90°	197x197x48	2.7

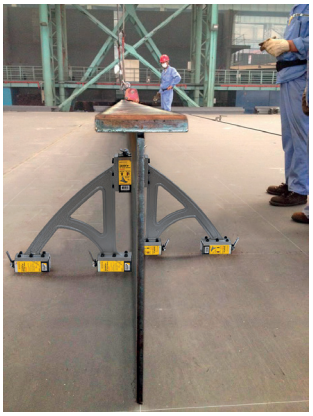
A-Frame HD Magnet

Strong-Mag Uprite

MULTI PURPOSE FABRICATION AND WELDING TOOL

FEATURES

- Hold Stiffeners upright, eg. Angle Bars, T-Bars, Bulb Profiles prior to welding.
- Invaluable for shipyards, fabrication shops and general workshops.



Enquiries: sales@supermagnet.xyz

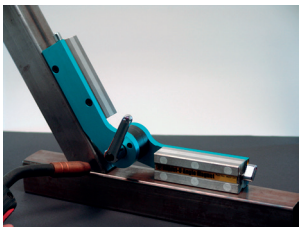
LIFTON™

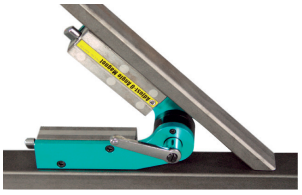
www.supermagnet.xyz

Adjust-O™ Angle Dual Switch Magnet Squares

Strong-Mag Flexi

MULTI PURPOSE FABRICATION AND WELDING TOOL





FEATURES

- Strongest grip in the market in its class.
- Two ON/OFF switches to control the 2 faces separately.
- Adjustable from 30° to 275°, Pull force of 50 Kgs.
- Precision machined flat and V faces.
- Ideal for round, square tubing, angle and flat stock.
- Invaluable for shipyards, fabrication shops and general workshops.

Product Code : MS2 — All dimensions are in mm

Model No.	Max. Pull Force	Angles	Dimensions (mm)	Weight (Kg)
MS2-120	50	30°- 275°	197x197x95	2.4

Mini Magnet Squares

Strong-Mag MiniLite

MULTI PURPOSE FABRICATION AND WELDING TOOL

FEATURES

- Strongest grip in the market in its class.
- Low profile and compact holding of stock in tight & difficult spaces.
- Angles of from 30°, 45°, 60° & 90°.
- Invaluable for machine tool fabrication shops and general workshops.

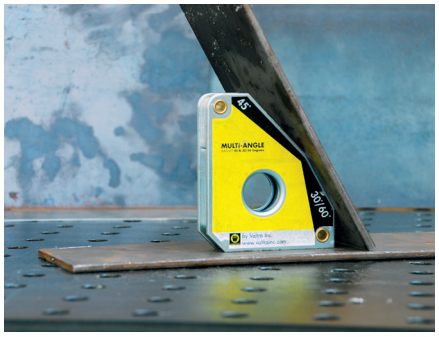
Product Code : MS — All dimensions are in mm

Part No	Max. Pull Force	Angles	Dimensions (mm)	Weight (Kg)
MS-346AT (Twin pack)	10	30˚, 45˚, 60˚, 90˚	59x50x16	0.3
MS-346AK(6-pack)	10	30˚, 45˚, 60˚, 90˚	59x50x16	0.8
MS-350A	13.6	30˚, 45˚, 60˚, 90˚	86x75x16	0.3

Standard Magnet Squares

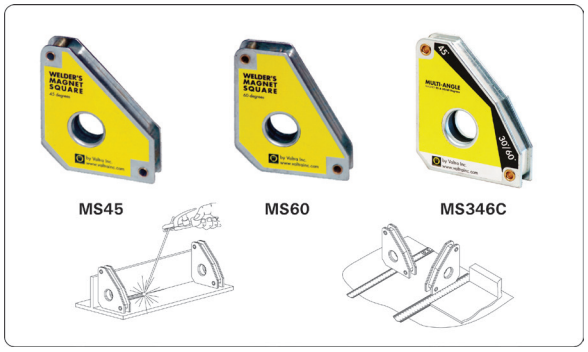
Strong-Mag Lite

MULTI PURPOSE FABRICATION AND WELDING TOOL



FEATURES

- Strongest grip in the market in its class.
- Low profile and compact holding of stock in tight & difficult spaces.
- Angles handled from 30°, 45°, 60° & 90°.
- Invaluable for machine tool fabrication shops and general workshops.



Product Code : MS — All dimensions are in mm

Model No.	Max. Pull Force	Angles	Dimensions (mm)	Wt (Kg)
MS-45	30	30˚, 45˚, 60˚, 90˚	111x95x19	0.5
MS-60	25	30˚, 45˚, 60˚, 90˚	111x95x19	0.5
MS-346C	40	30˚, 45˚, 60˚, 90˚	140x111x19	0.5

Third-Party Tools

StrongHand Inc

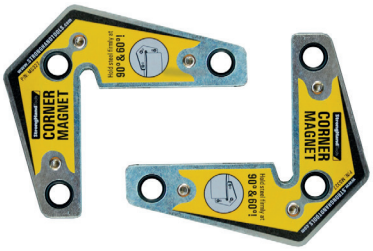
Corner Magnet

Strong-Mag Corner

MULTI PURPOSE FABRICATION AND WELDING TOOL

FEATURES

- Good grip in the market in its class. Unique design.
- Create 90° corners by holding from the outside & use the outer edges for setting materials at 60°.
- Angles handled from 60° & 90°.
- Invaluable for machine tool fabrication shops and general workshops.



Product Code : MST

All dimensions are in mm

Model No.	Max. Pull Force	Angles	Dimensions (mm)	Weight (Kg)
MST-327	14	30°, 60°	83x95x16	0.4

PowerBase™ Grounding Magnet

Strong-Mag GroundBase

GROUNDING WELDING TOOL

FEATURES

- The grounding magnet sets up easily.
- Heavy-duty holding power with Copper connector.

Product Code : GM

All dimensions are in mm

Model No.	Max. Pull Force	Ampere	Dimensions (mm)	Weight (Kg)
GM-203	20	300A @ 60% DC	50x50x64	0.4
GM-205	50	500A @ 60% DC	50x74x64	1.1

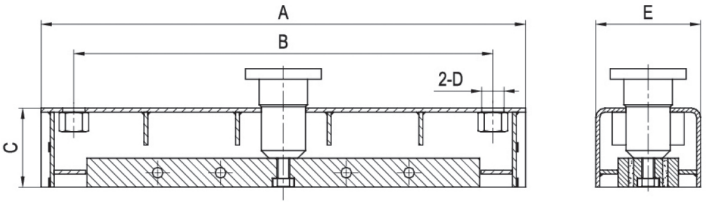
Pre-Cast PowerMag

Pre-Cast

CONCRETE FABRICATION MAGNET

FEATURES

- Also called Shuttering magnets, these are solid welded U profile with pommel pin and threaded hole for fixture plates & custom attachments.
- Designed to work with forming materials to hold the external casting shape.
- Heavy-duty construction and holding power.
- To use, push the pommel down to complete the magnetic circuit on the steel platform of the formwork structure. To release, use a crowbar to force lift the pommel upwards.



Product Code : PC MAG

All dimensions are in mm

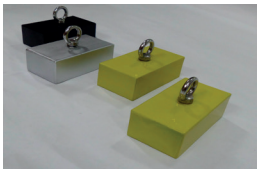
Model No.	Max. Pull Force (Kg)	Dimensions (mm)				
		A	B	C	D	E
PC MAG-900	900	280	230	60	M12	70
PC MAG-1350	1350	380	230	60	M14	70
PC MAG-1800	1800	480	430	60	M14	70
PC MAG-2100	2100	320	270	60	M16	120
PC MAG-3100	3100	320	270	60	M16	180

Holding Magnet

MULTI-PURPOSE HOLDING MAGNET

FEATURES

- For use as normal retriever magnets to extract scrap & tramp from water bodies.
- For use as a basic impurity pickup tool.
- Combine with more than 1 unit to develop your own custom clamp.
- Able to sustain upto 350 Deg C and packed with Samarium RE magnets.
- M6 or M8 threaded hole for suspending from chain, rope, adapter fixture plates or eye-bolts.



Product Code : GM

All dimensions are in mm

Model No.	Pull Force (kgs)	Dimensions (mm)	Weight (Kg)
GM-5	50	80x50x30	0.4
GM-10	100	100x50x30	1.5
GM-15	150	100x80x50	2.0

Enquiries: sales@supermagnet.xyz

PM OVERHEAD SEPARATOR

MANUAL CLEANING PERMANENT MAGNET SUSPENDED SEPARATOR

PERMANENT MAGNET MANUAL CLEANING - TYPE A

FEATURES

- Simple, cost-effective and low cost solution to impurity separation from conveyor belts.
- Ideal for low intensity impurities that can be manually cleaned off with a glove or scraper.
- Works continuously with low maintenance & reliable operation.
- Constructed from high-power Rare Earth magnets and comes with eye-bolts for suspending above conveyor or work area.
- Suitable for Food & Recycling industries with low impurity content and intermittent duty cycle.

Model : PM-MC-A

All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <	Magnetic Field Intensity >mT	Unit Weight (Kg)	L X W X H
PM-MC-A-400	400	125	4.5 m/s	60	115	400 x 300 x 230
PM-MC-A-500	500	150		70	206	500 x 350 x 260
PM-MC-A-650	650	200		70	450	650 x 600 x 300
PM-MC-A-800	800	250		70	680	950 x 950 x 380
PM-MC-A-1000	1000	300		70	1180	1100 x 1000 x 380
PM-MC-A-1200	1200	350		70	1670	1300 x 1340 x 420
PM-MC-A-1400	1400	400		70	2350	1500 x 1500 x 420
PM-MC-A-1600	1600	450		70	2850	1750 x 1750 x 460

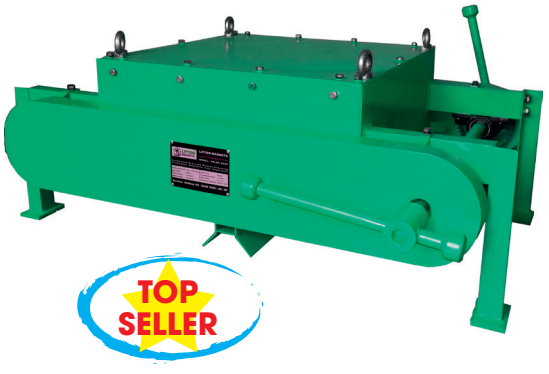
PM OVERHEAD SEPARATOR

MANUAL CLEANING PERMANENT MAGNET SUSPENDED SEPARATOR

PERMANENT MAGNET MANUAL CLEANING - TYPE B

FEATURES

- Higher-end version of the Type A with a gear and chain handle driven manual cleaning mechanism.
- Comes with a belt and stopper to discharge the tramp.
- Ideal for low to medium intensity impurities that can be manually cleaned off.
- Works continuously with low maintenance & reliable operation.
- Constructed from high-power Rare Earth magnets.
- Suitable for Food & Recycling industries with low impurity content and almost continuous duty cycle.



Model : PM-MC-B

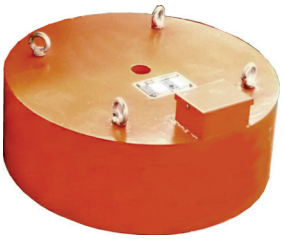
All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <	Magnetic Field Intensity >mT	Unit Weight (kg)	L X W X H
PM-MC-B-400	400	125	4.5 m/s	70	310	915 x 865 x 415
PM-MC-B-500	500	150		70	460	1015 x 890 x 445
PM-MC-B-650	650	200		70	630	1160 x 1125 x 468
PM-MC-B-800	800	250		70	910	1375 x 1245 x 510
PM-MC-B-1000	1000	300		70	1240	1585 x 1395 x 525

OVERHEAD SEPARATOR EM

ELECTROMAGNET SUSPENDED SEPARATOR

ELECTRO MAGNET STATIONARY SUSPENSION TYPE



FEATURES

- Sealed structure driven by Electromagnetic field intensity to separate tramp.
- Suitable for harsh environments and able to pick up tramp particles upto 35 kgs.
- Ideal for medium to high intensity impurities that can be cleaned off at the press of a button.
- Works continuously with low maintenance & reliable operation.
- Suitable for intense applications with an almost continuous duty cycle.

Model : EM-S

All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <m/s	Magnetic Field Intensity >mT	Driving Power (kw)	Unit Weight (Kg)	Ø x H
EM-S-300	300	75	4.5	50	0.4	185	400 x 250
EM-S-400	400	100		50	0.6	300	500 x 280
EM-S-500	500	150		60	1	430	610 x 325
EM-S-650	650	200		70	2	680	816 x 325
EM-S-800	800	250		70	3.6	950	960 x 355
EM-S-1000	1000	300		70	5	1520	1200 x 360
EM-S-1200	1200	350		70	6.8	2250	1400 x 365
EM-S-1400	1400	400		70	9	2950	1650 x 485
EM-S-1600	1600	450		70	13	4800	1900 x 540
EM-S-1800	1800	500		70	18	6900	2150 x 610

Model EM-MC
All dimensions
in 'mm'

OVERHEAD SEPARATOR PM

SELF CLEANING PERMANENT MAGNET SUSPENDED SEPARATOR

PERMANENT MAGNET SELF CLEANING OVERBAND TYPE

FEATURES

- Highest end Permanent Magnet based continuous cleaning model.
- Ideal for high intensity impurities that can be continuously cleaned while process in operation.
- Works continuously with low maintenance & reliable operation.
- Constructed from double pole magnetic circuit for deep penetration and removal of tramp of upto 35Kg particle.
- Suitable for Recycling, chemical & process industries with high impurity content and continuous duty cycle.

Model : PM-SC

All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <m/s	Magnetic Field Intensity >mT	Driving Power (kw)	Unit Weight (Kg)	L X W X H
PM-SC-500	500	150	4.5	70	1.5	750	1900 x 735 x 935
PM-SC-650	650	200		70	2.2	1200	2165 x 780 x 1080
PM-SC-800	800	250		70	2.2	1400	2350 x 796 x 1280
PM-SC-1000	1000	300		70	3	2120	2660 x 920 x 1550
PM-SC-1200	1200	350		70	4	3350	2860 x 1010 x 1720
PM-SC-1400	1400	400		70	4	4450	3225 x 1050 x 1980
PM-SC-1600	1600	450		70	5.5	6200	3350 x 1180 x 2160
PM-SC-1400	1400	400		70	9	2950	1650 x 485
PM-SC-1600	1600	450		70	13	4800	1900 x 540
PM-SC-1800	1800	500		70	18	6900	2150 x 610

EM OVERHEAD SEPARATOR

SELF CLEANING ELECTROMAGNET SUSPENDED SEPARATOR

ELECTRO MAGNET SELF CLEANING OVERBAND TYPE

FEATURES

- Driven by Electromagnetic field intensity to separate tramp.
- Suitable for harsh environments and able to pick up tramp particles up to 35 kgs.
- Ideal for high intensity impurities that is continuously cleaned automatically.
- Works continuously with reliable operation and requires continuous power supply to remain activated.
- Suitable for intense applications with an continuous duty cycle.
- Metal belt cladding available for sharp & jagged tramp particles.

Model : EM-SC

All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <m/s	Magnetic Field Intensity >mT	Driving Power (kw)	Unit Weight (Kg)	L X W x H
EM-SC-500	500	150	4.5	60	1.5	950	2020 x 1040 x 775
EM-SC-650	650	200		70	2.2	1490	2275 x 1190 x 820
EM-SC-800	800	250		70	2.2	1770	2540 x 1480 x 865
EM-SC-1000	1000	300		70	3	2380	2750 x 1635 x 940
EM-SC-1200	1200	350		70	3	3170	3000 x 1800 x 1010
EM-SC-1400	1400	400		70	4	4800	3500 x 2050 x 1050
EM-SC-1600	1600	450		70	5.5	6300	3900 x 2450 x 1180
EM-SC-1800	1800	500		70	7.5	7800	4400 x 2850 x 1290

In the EM-SC Overhead Separator, a heavy-duty neoprene, or optional Armor Clad belt travels around the magnet and carries the ferrous material that is drawn upward, away and into collecting hoppers or onto the ground. These units are typically installed either in-line, (parallel with the conveyor belt, above the head pulley) or cross-belt (as in the photo). They are ideal for removing miscellaneous metallic debris from crushed and recycled material and are designed to provide long-term, trouble free operation. All units come with the required rectifier to power the magnet.

EM OVERHEAD SEPARATOR

OIL-COOLED SELF CLEANING ELECTROMAGNET SUSPENDED SEPARATOR

ELECTRO MAGNET SELF CLEANING – OIL COOLING OVERBAND TYPE

FEATURES

- Driven by Electromagnetic field intensity to separate tramp.
- Suitable for harsh and high temperature environments and high burden depth.
- Ideal for high intensity impurities that is continuously cleaned automatically.
- Works continuously with reliable operation and requires continuous power supply to remain activated.
- Suitable for intense applications with an continuous duty cycle.
- Metal belt cladding available for sharp & jagged tramp particles.

EM-SCO Oil cooled type Overhead Separator consist of a magnet body and exciter coil. Cross sections, shape and size of the magnet body are specially designed for magnet coil and power input. Thus despite compact construction, low weight and low power input, high efficiency is reached. The magnet body is a welded steel construction of high permeability. The standard exciter coil consists of an aluminium conductor and it is manufactured by using insulating material of class `H' and mounted into the magnet body. If specially requested we can also supply coils wound with copper conductor. The coil is covered by a non-magnetic plate. Transformer oil is used for the cooling arrangement. Suspension lugs and one set of turn buckles and suspension rod with bull ring are normally supplied.

Electric connection is by a terminal box. The entrance for cable fixing is fitted with a suitable cable gland.

Model : EM-SCO

All dimensions are in mm

Model No.	Belt Width	Minimum Suspension Height	Belt Speed <m/s	Magnetic Field Intensity >mT	Material depth (mm)	Driving Power (kw)	Unit Weight (Kg)	L X W x H
EM-SCO-500	500	150	4.5	60	100	1.5	1100	1980 x 1120 x 1020
EM-SCO-600	600	175		60	130	1.5	1500	2140 x 1270 x 1070
EM-SCO-650	650	200		70	150	2.2	1800	2270 x 1380 x 1080
EM-SCO-800	800	250		70	200	2.2	2500	2650 x 1570 x 1100
EM-SCO-1000	1000	300		70	250	3	3550	2960 x 1620 x 1200
EM-SCO-1200	1200	350		70	300	4	4650	3250 x 1950 x 1300
EM-SCO-1400	1400	400		70	350	4	6290	3550 x 2190 x 1400
EM-SCO-1600	1600	450		70	400	5.5	7770	3650 x 2210 x 1250
EM-SCO-1800	1800	500		70	450	7.5	8900	3950 x 2400 x 1500

WET DRUM SEPARATOR PM

DIRECT FLOW, HALF AND COUNTER CURRENT WET DRUM SEPARATOR

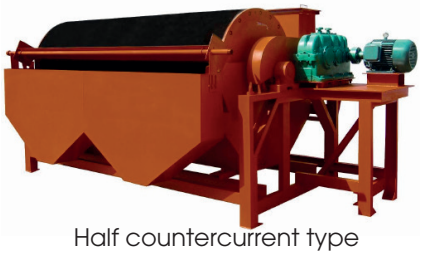
WET DRUM SEPARATOR

FEATURES

- These roller separators are used in mines and coal processing facilities to separate wet & fine magnetic particles.
- There are 3 types of tanks : half-counter current, direct flow and counter current which are used depending on the granular dimensions.
- Evenly distributed magnetic circuit, strong coercive force and high remanence permanent magnets which can work for long periods.
- Suitable for harsh and high temperature environments and operates outdoors.
- Suitable for intense applications with an continuous duty cycle.
- Metal belt cladding available for sharp & jagged tramp particles.

Direct Flow type

Direct Flow type with Metal shield



Half countercurrent type

Roller Permanent Magnet Separator

Product Code : WDS

All dimensions are in mm

Model No.	Roller Dimensions Dia x L	Magnetic Induction mT			Processing capacity		Driven Power	Roller Speed r/min	Weight (Kgs)
		Geometric Centre	Average surface	High	t/h	m3/h			
WDS-718	750 x 1800	120	155	180	20-45	72	3	35	2100
WDS-918	900 x 1800	148	165	190	25-55	90	4	28	2900
WDS-924	900 x 1800	148	165	190	35-70	110	4	28	3600
WDS-1018	1050 x 1800	148	165	190	40-70	120	5.5	22	4000
WDS-1021	1050 x 2100	160	165 / 240	190 / 280	45-88	140	5.5	22	4500
WDS-1024	1050 x 2400	160	165 / 240	190 / 280	52-100	140	5.5	22	5000
WDS-1030	1050 x 3000	160	240	280	65-125	160	7.5	22	6200
WDS-1218	1200 x 1800	160	240	240	47-90	200	5.5	22	5800
WDS-1224	1200 x 2400	148	165	165	82-120	140	7.5	19	6200
WDS-1230	1200 x 3000	148	165	165	80-150	240	7.5	19	7200
WDS-1530	1500x 3000	180	240	240	90-170	270	11	14	8900
WDS-1540	1500 x 4000	180	240	240	115-220	350	11	14	9900

Metal shell roller separator

Metal shell double roller

Enquiries: sales@supermagnet.xyz

LIFTON™

PM HOPPER DRAWER MAGNET

FEATURES

- High power Drawer magnets with standard 75mm to 300mm inlet and outlet in Round or Square profile for easy retrofit to Hoppers.
- Choice of single or double layered magnetic drawers.
- Magnetic drawer made from powerful Rare Earth magnets for ambient temperature operations.
- Drawers are either of standard or Easy cleaning type.
- High temperature magnets available optionally.
- Food grade Stainless Steel construction.

APPLICATIONS

- Attracts tramp iron pieces from inflow of materials in hopper.
- Used particularly in plastic, chemicals, grains, cosmetics processing for powder separation.
- Concentrated magnetic field in the magnetic rod provides high grade attraction.

Round Flange Easy cleaning type

Square Flange Easy cleaning type

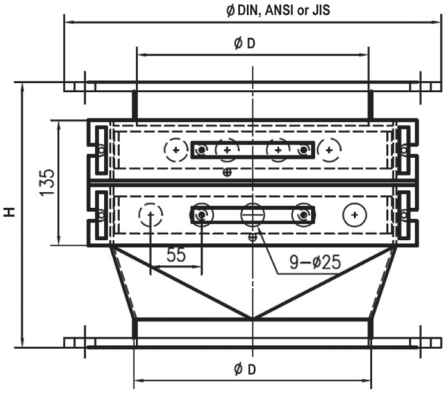
Square Flange standard type

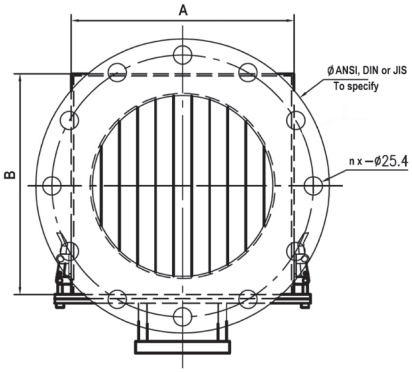
Product Code : HDM

All dimensions are in mm

Model No.		H	A	B
HDMd-NR-150	150	286	208	208
HDMd-NR-200	200	286	258	258
HDMd-NR-250	250	286	308	308
HDMd-NR-300	300	286	358	358
HDMs-NR-150	150	216	208	208
HDMs-NR-200	200	216	258	258
HDMs-NR-250	250	216	308	308
HDMs-NR-300	300	216	358	358
HDMd-NS-2020		270	208	208
HDMd-NS-2525		270	258	258
HDMd-NS-3030		270	308	308
HDMd-NS-3535		270	358	358
HDMd-NS-4040		270	408	408
HDMs-NS-2020		200	208	208
HDMs-NS-2525		200	258	258
HDMs-NS-3030		200	308	308
HDMs-NS-3535		200	358	358
HDMs-NS-4040		200	408	408

s =single row, d=double row, R=Round flange, S= Square flange, N=Neodymium





Easy cleaning type

Standard type

When dismantled for cleaning

Lifton Magnets' Hopper Drawers are by default constructed for sanitary grade (SS304) or food grade (SS316, upon asking).

Downgraded construction for non-sanitary application upon request

Product specification varies with specific application needs. Discuss your requirement with us for the most suitable product.

Rotary Grate Separator PM

FINE PARTICLE SEPARATION

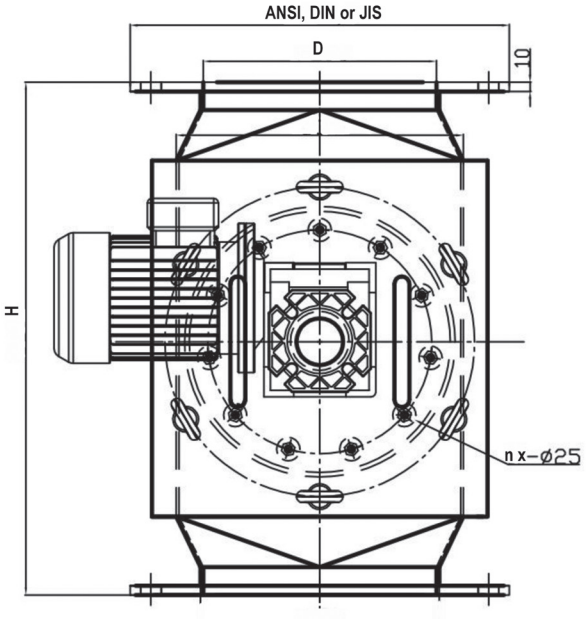
FEATURES

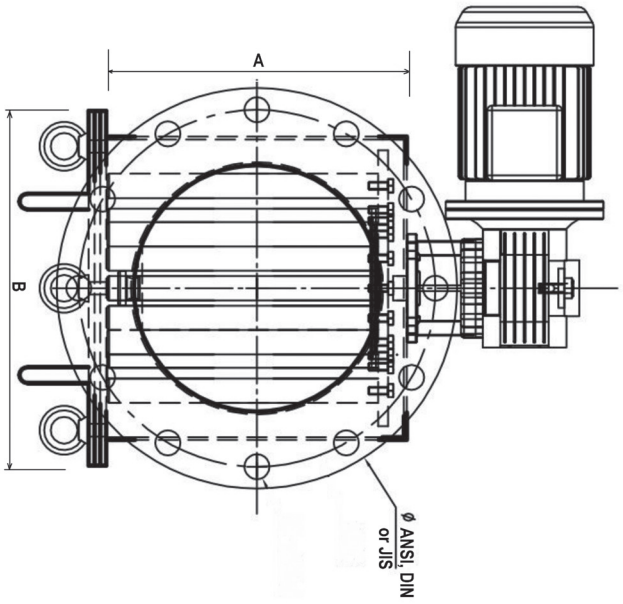
- Unique solution for high volume flow of powdery granules, high viscosity flow of fluidS and dry grains with micro impurities. The rotating movement of the magnetic cartridge aids in material flow and prevents caking.
- Depending on the size of raw materials, the annular configuration & number of magnet rods can be increased or decreased.
- The magnetic cartridge can be easily removed for cleaning.

Product Code: RGS

All dimensions are in mm

Model No.	Dimensions (mm)				Motor (KW)	No. of Rods	Weight (Kg)
	Ø D	A	B	H			
RGS-R-150	150	205	208	450	0.25	7	30
RGS-R-200	200	255	258	500	0.25	9	38
RGS-R-250	250	305	308	550	0.25	11	50
RGS-R-300	300	355	358	600	0.37	13	62
RGS-R-350	350	405	408	650	0.37	15	78
RGS-S-2020	-	205	208	270	0.25	7	28
RGS-S-2525	-	255	258	320	0.25	9	35
RGS-S-3030	-	305	308	370	0.25	11	47
RGS-S-3535	-	355	358	420	0.37	13	58
S-4040	-	405	408	450	0.37	15	70



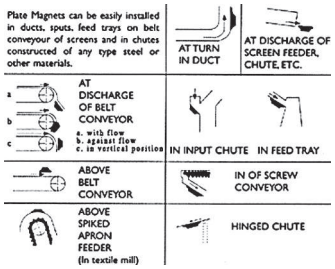


IMPURITY SEPARATION

PM PLATE MAGNET

FEATURES

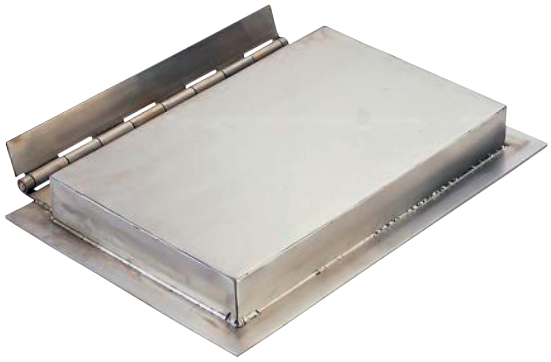
- High power, low cost magnetic plates for inflow separation in chutes.
- Can be mounted under the flow by bolting.
- Can be hanged over the flow from from top with hinge/latch.
- Magnet poles are saturated for maximum power.
- Made with Strontium Ferrite/Rare Earth NdFeB magnets.
- Magnet can be easily removed for cleaning.



APPLICATIONS

- Can attract tramp iron pieces by suspending overconveyer belt or under chute. Used particularly inflour, plastic, glass, chemicals, grains, cosmetics processing for powder separation.

Product specification varies with specific application needs.Discuss your requirement with us for the most suitable product.



Flush Face (FF)

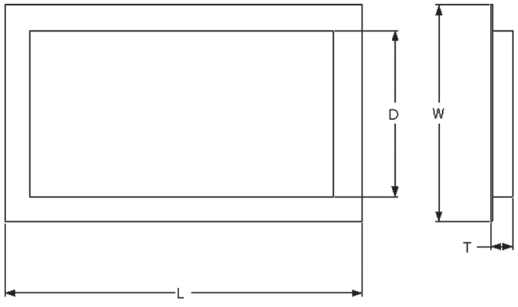
Flush Face Plate Magnets deliver optimum tramp metal separation performance when used in above-the flow chute or belt applications. When installed over the material flow, the powered Flush Face plate magnets deliver continuous magnetic protection for down stream processing equipment by lifting ferrous tramp out of the product flow stream.

Exposed Pole (EP)

Exposed Pole (EP) Plate Magnets are engineering to deliver high performance tramp metal separation in low volume applications. These applications are for below-the-flow installations where the product flows over the magnet face.

Spout Magnet(SM)

Diverter Spout provide maximum ferrous tramp metal separation in high volume chute applications where wash-off can be a problem.



Product Code: PM

All dimensions are in mm

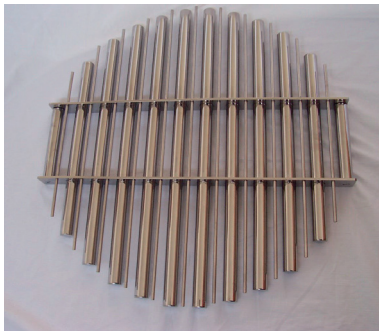
Model No	Length L	Dimensions (mm)			Suspension Distance (mm)	Weight (Kg)
		W	D	T		
PMF-60-FF/EP/SM	To specify	250	175	51	60	6
PMF-120-FF/EP/SM	To specify	300	225	76	120	7
PMF-150-FF/EP/SM	To specify	450	360	111	150	10
PMN-60-FF/EP/SM	To specify	190	125	36	60	8
PMN-120-FF/EP/SM	To specify	250	175	46	120	9
PMN-150-FF/EP/SM	To specify	330	240	56	150	11

F : Ferrite Magnet N: Neo Magnet FF : Flushed Face EP : Exposed Pole SM : Spout Magnet

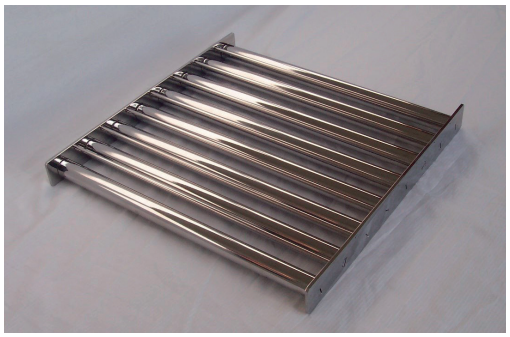
Grate Magnets PM

Magnetic Grates are used in bins, chutes, drawers and hoppers. They are designed to remove ferrous metal and tramp iron from free-flowing materials such as plastics, foods, cosmetics, grains and minerals.

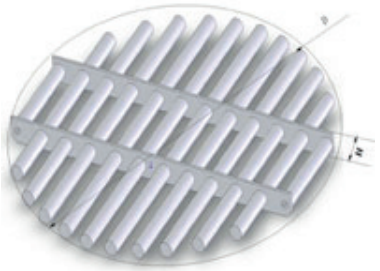
Standard magnetic grates feature 25mm (1 inch) diameter round bars filled with either high grade Ceramic or Rare Earth Magnets, arrayed on 50mm centers and welded into grid configurations. Both round and square shapes of single or double layers are available with or without angular or rod baffles to direct product flow.

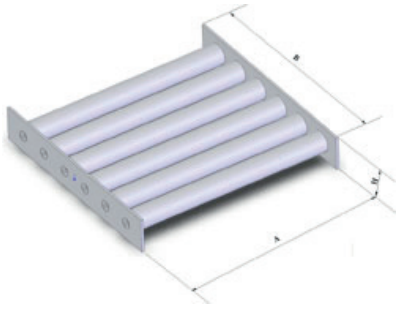


Round Grate



Square Grate





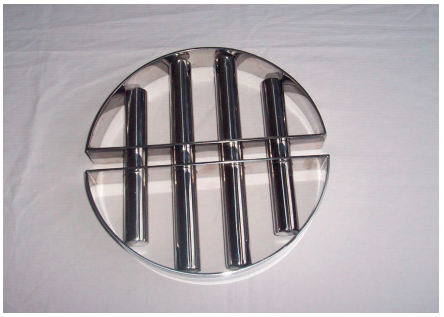
Product Code: GM

Table Specs for single layer rods

Round Shape		Square Shape	
Specifications (mm)	Bars	Specifications (mm)	Bars
Dia. 100 x 40	2	100 x 100 x 40	2
Dia. 150 x 40	3	150 x 150 x 40	3
Dia. 200 x 40	4	200 x 200 x 40	4
Dia. 250 x 40	5	250 x 250 x 40	5
Dia. 300 x 40	6	300 x 300 x 40	6
Dia. 350 x 40	7	350 x 350 x 40	7
Dia. 400 x 40	8	400 x 400 x 40	8
Dia. 450 x 40	9	450 x 450 x 40	9
Dia. 500 x 40	10	500 x 500 x 40	10

Different variations of single or double layer Grate Magnets

Special design round grate for funnel shape

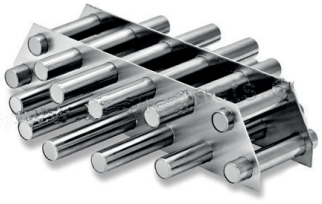


Variation of round grate

Another variation round grate for funnel shape

Single layered round grate

Double layered round grate



Easy cleaning type grate

Double layered round grate

Lifton Magnets' Grate Magnets are by default constructed for sanitary grade (SS304) or food grade (SS316, upon asking).

Downgraded construction for non-sanitary application upon request

Enquiries: sales@supermagnet.xyz

LIFTON™

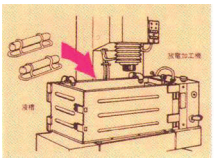
PM MAGNET RODS

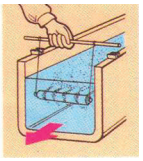
FEATURES

1. Standard Magnetic Rods are of 25mm (1 inch) in diameter and any length up to 98" with threaded hole mounting.
2. Square or other magnetic tubes with different shapes, dimensions & mounting options such as nail head, thread hole, double screw bolt are available.
3. Magnetic Rods are usually made of seamless 304 stainless steel tubes or 316 stainless steel tubes and can be fine polished and full welded to meet food grade or pharmacy application.
4. The usual max working temperature is 80°.
5. Option to produce up to 350° to meet your special applications by using ferrite magnets or Samarium rare earth magnets.
6. The highest recorded Field intensity at ideal condition is 13000 G or 1.3T.

- Useful for separation of fine & coarse impurities from liquids, plastics processing and most other common process industry applications.

APPLICATIONS

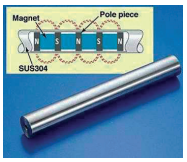




Buy just the rods from us and custom make your own grid. Knowhow will be shared.

Product specification varies with specific application needs. Discuss your requirement with us for the most suitable product.

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

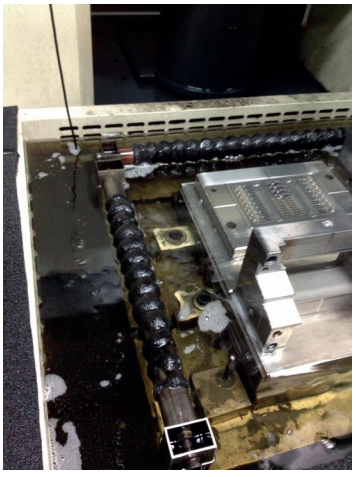


Product Code: MR

Dia : 25mm is standard. Available in Lengths of 4" to 98". Usually 4" to 20" lengths are standard and ex-stock.

Dia (mm)	Length	0.25T	0.5T	0.7T	0.9T	1T	1.1T	1.3T
10	To Specify : Varies from 4" to 30"	*EH	*E	N.A.	N.A.	N.A.	N.A.	N.A.
16		*EH	*EH	*EH	*H	*H	N.A.	N.A.
19		*EH	*EH	*EH	*H	*H	N.A.	N.A.
20		*EH	*EH	*EH	*SH	*H	*H	N.A.
22		*EH	*EH	*EH	*EH	*EH	*H	N.A.
23		*EH	*EH	*EH	*EH	*EH	*H	N.A.
25	To Specify: Varies from 4" to 98"	*EH	*EH	*EH	*EH	*EH	*EH	*H
28		*EH	*EH	*EH	*EH	*EH	*EH	*H
32		*EH	*EH	*EH	*EH	*EH	*EH	*H
38		*EH	*EH	*EH	*EH	*UH	*H	*H
50		*EH	*EH	*EH	*UH	*H	*H	*H
76		*EH	*EH	*EH	*H	*H	*H	*H
100		*EH	*EH	*H	*H	N.A.	N.A.	*H

*Refers to manufacturability I N.A Refers to non-manufacturability I The related Max working temperature from different series. H series: 120 °C // SH series: 150 °C // UH series: 180 °C // EH series: 350 °C



FLOOR SWEEPER PM

FEATURES

- Easy to operate and quickly cleans floor of scattered iron particles.
- Magnet housing with powerful Strontium Ferrite magnets.
- Supported on rubber wheels on ball beraing for long life.
- Easily lift the handle lever to discharge the tramp iron of lever for discharging of iron particles.

APPLICATIONS

- Very useful in machine shop..
- Cost effective in packing department to retrieve costly raw materials like nuts/bolts/balls/ bearings etc.
- Prevents damage to shoes and avoids accidents.

Product Code: FS

All dimensions are in mm

Model	Length	Width	Clearance	Weight (kg)
FS-75	750	180	60	18.5

Road Sweeper PM

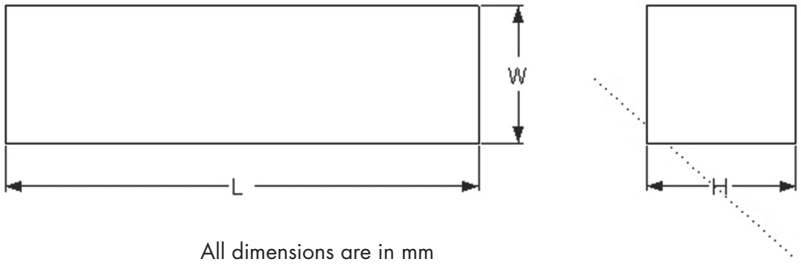
FEATURES

- Available in hanging and trolley mounted type models
- Operating height from 75-150mm.
- Sweeps the roads/shop floor and removes scattered iron particles.
- Magnets used are powerful Strontium Ferrite magnets.
- Hanging type with provision for jeeps, fork lifts, behind vans.
- Trolley type on 300mm dia tyres and can be towed by truck/tracktors.
- Quick actuation of lever for discharging of iron particles.

APPLICATIONS

- Ideal for airport, parking lots and factory roads.
- Very useful for repair shops, garage, fabrication, structural and assembling plants.
- Available upto 3000mm width.
- Larger units with built in diesel generator or battery operated can be made for effective cleaning and easier operation.

These are manufactured as per customers' specification



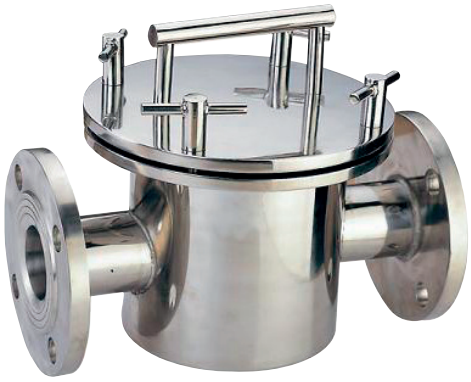
Product Code: RS

All dimensions are in mm

Diameter (mm)	L X W X H	Suspension Height (mm)
50	500 x 200 x 250	75-100
100	1000 x 250 x 500	100-150
150	1500 x 250 x 500	100-150
200	2000 x 250 x 500	100-150
250	2500 x 250 x 500	100-150
300	3000 x 250 x 500	100-150

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

Liquid Trap



Description

- Liquid Traps are suitable for heavy duty, high volume liquid & semi-liquid line flow systems.
- These provide magnetic protection for liquid lines and processing equipments by removing small contaminants.
- Standard SS304 housing with a design maximizing exposure of contamination to the high power magnet rods without compromising the flow speed.
- Easy removal of magnet cage from the top access flange via quick release clamp.
- Easy cleaning option for magnet cage also available.

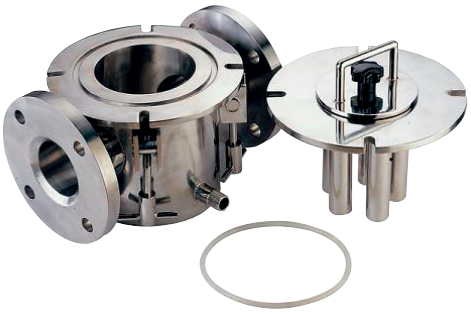


Figure 1:Easy cleaning type

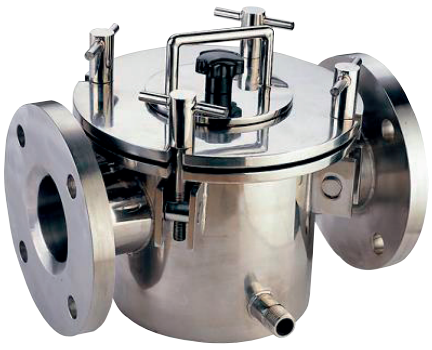
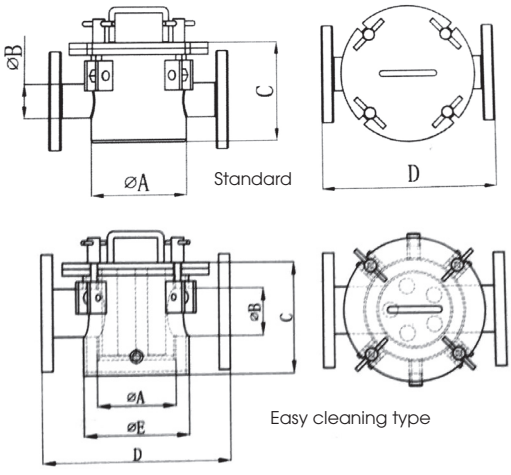


Figure 2:
Temperature-controlled type

Product Code: LT

All dimensions are in mm

Model No.	Ø A	ØB	C	D	Rods	W (Kg)
LT150/25	150	32	150	300	5	12
LT150/32	150	38	150	300	5	13
LT150/40	150	45	150	300	5	14
LT150/50	150	57	150	300	5	15
LT150/65	150	76	150	300	5	18
LT200/50	200	57	200	350	7	20
LT200/65	200	76	200	350	7	22
LT200/80	200	89	200	350	7	24
LT200/100	200	108	200	350	7	26
LT250/80	250	89	250	400	7	30
LT250/100	250	108	250	400	7	33
LT250/125	250	138	250	400	7	36
LT250/150	250	159	250	400	7	39
LT300/125	300	138	300	450	9	45
LT300/150	300	159	300	450	9	48
LT300/200	300	219	300	450	9	55



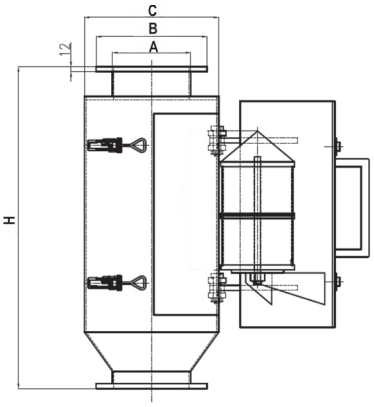
Bullet Magnet PM

Description

- Efficient, cost-effective device for extracting ferrous particles from free-flowing granular products.
- Designed for installation in pipelines or ducted systems.
- As material flows over the magnetic bullet, any ferrous particles are attracted & retained by the highly magnetic surface.
- Quick & Easy cleaning.
- Fully TIG welded, crack and crevice free with welds ground smooth. Construction for the sanitary or food industry.
- SS304 construction.

Applications

- Flour processing & milling
- Grain processing
- Plastics & granular processing

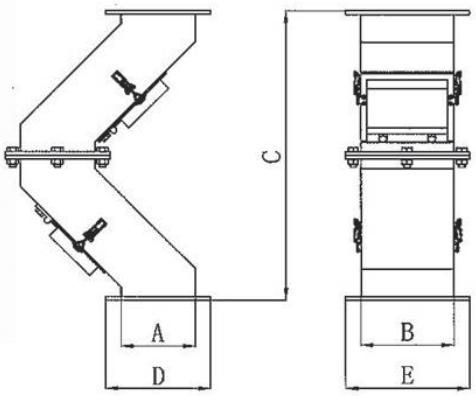


Product Code: BM — All dimensions are in mm

Model No.	Ø A	Ø B	Ø C	H	W (Kg)
BM-50	51	150	114	380	9
BM-65	76	185	168	540	18
BM-100	100	165	220	586	35
BM-150	150	225	275	655	55
BM-200	198	275	345	760	85
BM-250	248	325	430	850	130
BM-300	298	395	485	880	150
BM-400	395	484	600	1100	250
BM-500	500	584	780	1200	500
BM-600	600	700	935	1450	600
BM-700	700	800	1000	1650	800

Hump Magnet PM

Magnetic Humps are used where the flow of material is vertical. The material falling strikes directly on the first magnet changes direction and falls over the second magnet, ensuring clean outflow of material. The Magnets are of Hinged type and can be easily opened for periodic cleaning.Hump Magnets can be supplied to suit any size of Pipe/Duct.



Product specification varies with specific application needs.Discuss your requirement with us for the most suitable product.

Product Code: HM — All dimensions are in mm

Model No.	A	B	C	D	E
HM-120	120	150	470	170	200
HM-150	150	178	750	250	220
HM-200	200	178	750	300	220
HM-250	250	178	750	350	220
HM-300	300	178	750	400	220
HM-350	350	200	1110	450	300
HM-400	400	200	1110	500	300
HM-450	450	200	1110	550	300
HM-500	500	200	1110	600	300

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

PM PLATE MAGNET HOUSING

Product Code: PMH

All dimensions are in mm

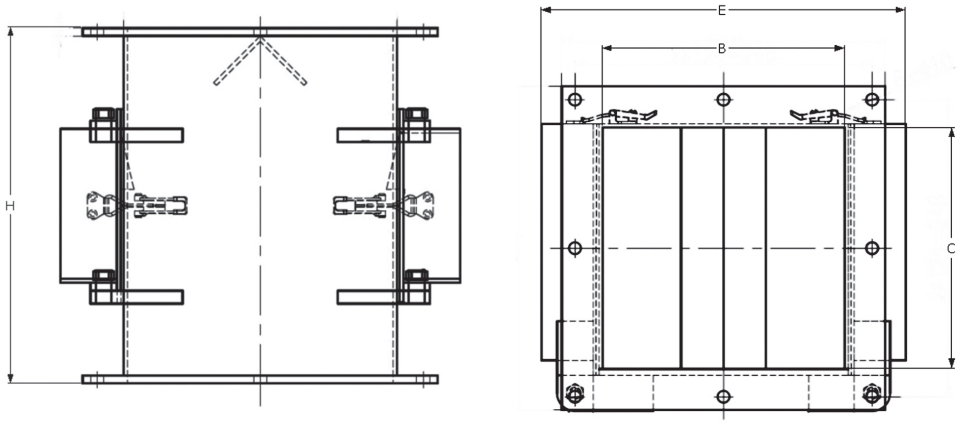
Model No.	Dimension (mm)					Weight (Kg)
	Ø A	B	C	E	H	
PMH-150	150	208	208	322	470	42.5
PMH-200	200	208	258	322	470	53
PMH-250	250	258	358	372	500	65
PMH-2020	-	208	208	322	300	51
PMH-2025	-	208	258	322	300	60
PMH-2525	-	258	258	372	300	66
PMH-2530	-	258	308	372	300	71
PMH-2535	-	258	308	372	300	80
PMH-2540	-	208	408	372	300	90
PMH-2545	-	258	458	372	300	100
PMH-2550	-	208	508	372	300	110
PMH-2555	-	258	558	372	300	120
PMH-2560	-	258	608	372	300	130

Features

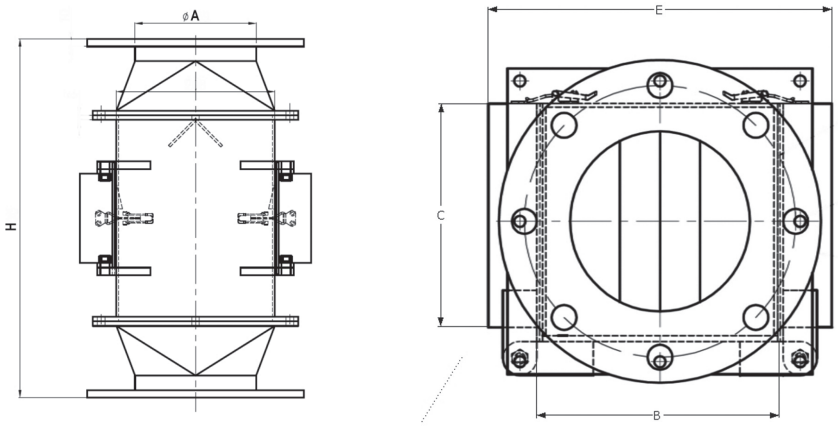
- The Plate Magnet Housing is a complete solution, consisting of Plate Magnets (Page 51) hinged to the housing like doors for easy cleaning in a self contained housing with an inlet and outlet for raw material entry and egress.
- A wedge-shaped baffle at the top of the housing helps to break up aggregated products and direct material flow over the unit's two powerful Plate Magnets
- The high power rare earth plate magnets ensure capture of all sizes of contamination
- Available in Square or Round flange as desired and SS304 or 316 construction

Applications

Plate Magnet Housing are widely used in food, pharmacy, tobacco, chemical industries to remove tramp iron and ferrous fines from flow-resistant bulk materials that are easy to aggregate and choke. The stainless steel housings can be easily installed to enclosed spouting line or directly mounted on processing equipment.

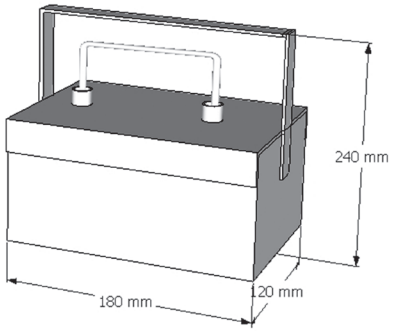


Square Flange



Round Flange

Hand Separator PM



Product Code: HS

All dimensions are in mm

Model No.	Dimension (mm)			Max. Capacity (Kg)	Rated Capacity (Kg)	Nett. Weight (Kg)
	L	W	H			
HS-200	180	120	240	20*	6	3

*Steel Slab of 20 Kgs

Features

- Featuring powerful deep penetration magnets in a stainless steel housing.
- Overall dimensions of standard model - 180mm L x 120mm W x 240mm H.
- Ideal for hand held impurity separation or small component lifting.
- Very suitable for tool room or production operations.
- Useful for lifting small steel components for downstream assembly.
- Ergonomic design and easy to separate lifted components or iron tramp particles.

Applications

- The power hand separator magnet is used in tool room for in-process fitting or assembly, iron part lifting in a batch, tramp iron collection, lifting and handling small components.
- Quick pick and discharge of steel and iron parts, handling of hot iron articles of upto 120°C.
- Discharge the components easily by simply lifting the lever handle.

Swarf Buster PM

Features

- Very handy tool for the factory or workshop and suitable for general purpose cleaning and separation applications.
- Available in 3 sizes, 200mm, 300mm & 400mm excluding the handle with standard diameter of 32mm (larger than industry average).

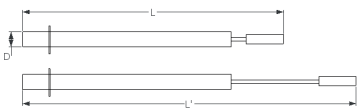
Applications

- Just pass the Rod magnet separator around the waste scrap and pick up ferrous particle impurities at the tip of the rod.
- The Rod magnet separator can attract iron/steel pieces or iron substances in liquids, in powder or among grains and/or granules, such as attracting iron substances from lathes, attracting small iron needles and pieces fallen on the ground or separating iron/steel scrap from other materials.
- Once enough scrap is picked up, just pull the piston handle and release the waste in a bin or some desired location.
- Ideal for picking up swarf, handling sharp parts or off cuts, cleaning non-ferrous scrap and recovering steel items from non-ferrous scrap.
- Made from stainless steel tube and powerful neo magnets in a special dual, tri & quad circuitry.

Product Code: SB

All dimensions are in mm

Model No.	Dimension (mm)		
	Ø D	L	L'
SB-200	32	350	510
SB-300	32	440	680
SB-400	32	540	880

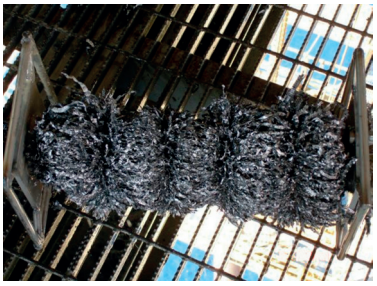


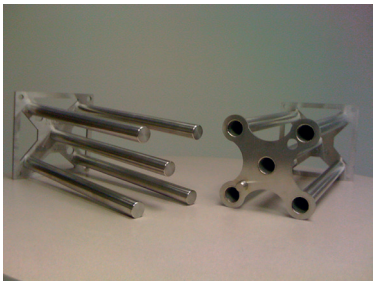
Ditch Magnet

Features

- Ditch magnets are used in drilling fluid recirculating operations.
- Drilling fluids are pumped to the surface, where cuttings and ferrous metal debris are extracted and captured so that the fluids can be treated for viscosity and recirculated downhole.
- Ditch magnets are designed to remove ferrous metal debris as part of the fluid surface treatment system. If the metal debris is not removed from the drilling mud, it is recirculated and reintroduced downhole when the fluids are recycled, resulting in damage to drill bits, pumps and pose general obstruction.

Lifton Standard and Easy Clean ditch magnets fully made from Stainless Steel are suitable for easy tramp removal from such harsh environments.



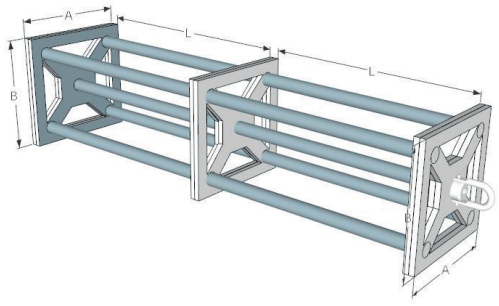


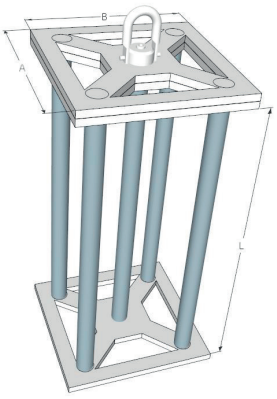
Applications

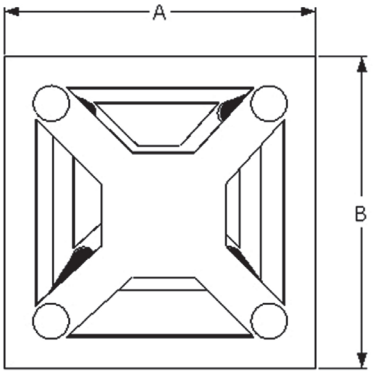
- Just place the ditch magnet in the desired location and wait for it to perform its miracle.
- Depending upon the degree of tramp concentration, the ditch magnet may be required to be removed for cleaning once a day or more.
- If it is desired to ease the process of tramp removal, the Easy Clean model may be suitable.
- If longer lengths are required, these modules may be combined back to back upto any desired length.
- All units c/w lifting Eye-bolt for easy handling & also for cartridge removal in the Easy clean model.

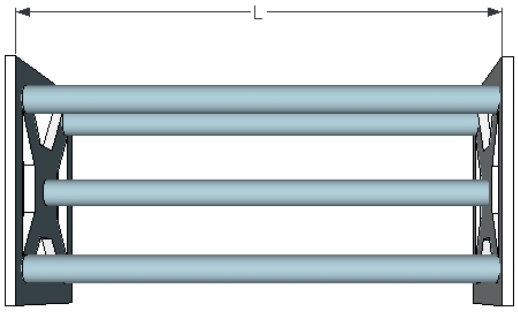
Product Code: DM All dimensions are in mm

Model No.	Dimension (mm)		
	A	B	L
DM-S-300	200	200	380
DM-S-450	200	200	450
DM-S-500	200	200	500
DM-EC-300	200	200	380
DM-EC-450	200	200	450
DM-EC-500	200	200	500





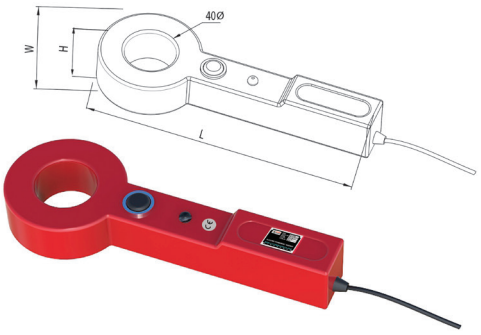




HANDY JUNIOR DEMAGNETIZER

FEATURES

- Compact, hand held, totally insulated.
- Strong AC demagnetizing field inside aperture window.
- Flexible enough to be manipulated through narrow gaps and openings.
- Best effect is realized by passing long, thin & narrow material through the aperture.
- The unit is turned ON when the push button is pressed and OFF when the button is released.
- Duty cycle of 20% means that in a 5 minute operation, the unit may be kept ON for 1 minute but MUST be allowed to cool for 4 minutes.



APPLICATIONS

- Can demagnetize deep local area inside pockets of dies and moulds.
- Useful for demagnetizing drills, taps etc.

Product Code : HJD

All dimensions are in mm, Voltage in 'V' AC, Current in 'A' Amp

Model No.	L	W	H	Aperture / Active Surface Dimensions	Duty Cycle D.C (%)	Voltage (Current)	Weight (Kgs)
HJD-1010	230	90	40	40	20	110/220 (0.8)	0.9

HANDY-SENIOR DEMAGNETISER

FEATURES

- Compact and easy to carry.
- AC demagnetizing field on the SS face.
- Auto temperature cut-off when the unit gets heated.
- Best effect is realized by passing the unit over molds, large parts & mold bases.
- The unit is turned ON & OFF when the switch is turned ON & OFF.
- Duty cycle of 20% means that in a 5 minute operation, the unit may be kept ON for 1 minute but MUST be allowed to cool for 4 minutes.

Product Code : HSD

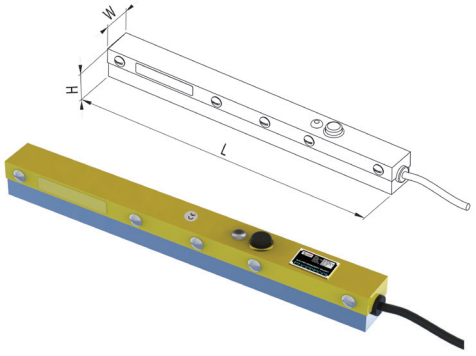
All dimensions are in mm, Voltage in 'V' AC, Current in 'A' Amp

Model No.	L	W	H	Aperture / Active Surface Dimensions	Duty Cycle D.C (%)	Voltage (Current)	Weight (Kgs)
HSD-123	123	83	83	123 x 60	20	110/220 (0.9)	1.8

HANDY-PRO DEMAGNETISER

FEATURES

- Easy to carry.
- AC demagnetizing field on the SS face.
- Best effect is realized by passing the unit over molds, large parts & mold bases and through narrow gaps to hard to reach zones.
- The unit is turned ON & OFF when the push button switch is pressed ON & OFF.
- Duty cycle of 20% means that in a 5 minute operation, the unit may be kept ON for 1 minute but MUST be allowed to cool for 4 minutes.



Product Code : HPD

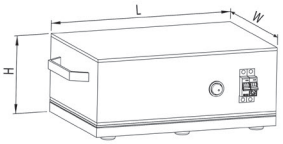
All dimensions are in mm, Voltage in 'V' AC, Current in 'A' Amp

Model No.	L	W	H	Aperture / Active Surface Dimensions	Duty Cycle D.C (%)	Voltage (Current)	Weight (Kgs)
HPD-210	345	35	25	340 x 25	20	110/220 (1.2)	1.0

TABLETOP HEAVY DUTY DEMAGNETISER

FEATURES

- Strong AC demagnetizing field on the SS face.
- Best effect is realized by passing small, standard and large components, washers, drill-bits, tools, high speed steel, bearing steel over the surface in a to & fro direction along the length to be repeated as many times as necessary. The size of the unit will determine the component handling ability.
- Auto temperature cut-off when the unit gets heated
- The unit is turned ON & OFF when switch is pressed ON & OFF
- Duty cycle of 50% means that in a 10 minute operation, the unit may be kept ON for 5 minutes but MUST be allowed to cool for 5 minutes. The 100% duty cycle units may be adapted for conveyor belt operations.



Product Code : HDD

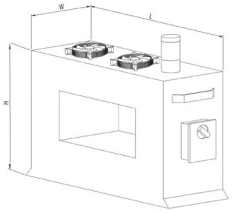
All dimensions are in mm, Voltage in 'V' AC, Current in 'A' Amp

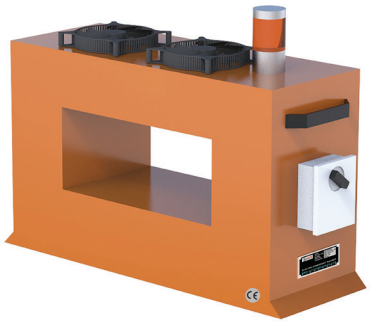
Model No.	L	W	H	Aperture / Active Surface Dimensions	Duty Cycle D.C (%)	Voltage (Current)	Weight (Kgs)
HDD-180	180	127	90	180 X 80	50	110/220 (2.0)	4.0
HDD-200	200	150	100	200 x 110	100	110/220 (3.3)	8.5
HDD-280	280	200	130	280 x 160	100	110/220 (5.0)	15.0
HDD-500	585	335	285	400 x 335	100	220/380/415 (10.0)	69.5

APERTURE DEMAGNETISER

FEATURES

- Strong AC demagnetizing field within the aperture window
- Best effect is realized by passing suitably sized components inside the aperture to be repeated as many times as necessary. The size of the unit will determine the component handling ability.
- Auto temperature cut-off when the unit gets heated. Fan mounted to dissipate heat.
- The unit is turned ON & OFF when switch is pressed ON & OFF
- The 100% duty cycle units may be suitably adapted for conveyor belt operations.





Product Code : AD

All dimensions are in mm, Voltage in 'V' AC, Current in 'A' Amp

Model No.	L	W	H	Aperture / Active Surface Dimensions	Duty Cycle D.C (%)	Voltage (Current)	Weight (Kgs)
AD-1015	370	200	370	100 x 150 x 200	50	220/380/415 Single Ph - (5.0)	31.0
AD-1525	470	200	370	150 x 250 x 200	100	220/380/415 Single Ph - (12.0)	52.0
AD-2545	700	200	500	250 x 450 x 200	100	220/380/415 Three Ph - (18.0)	80.0

FLEXI MAGNETS PM

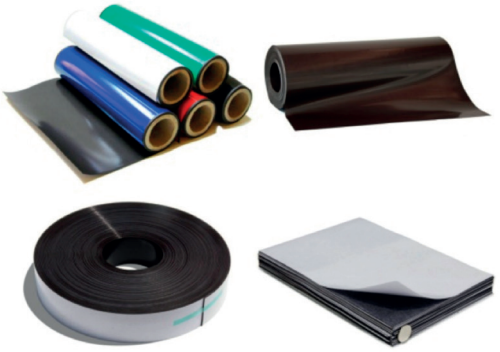
ANISOFLEX™ FLEXIBLE RUBBER MAGNET

General Information

Flexible rubber magnets have physical properties that allow them to be used in a variety of ways that would not be possible with more brittle magnets. Flexible magnetic materials can be coiled, twisted, or cut into shapes without any loss of magnetic capability.

The flexibility and ease of machining of these materials permit design innovations and automated manufacturing techniques. They offer product designers a uniquely desirable combination of properties at lower cost than other magnetic materials.

Flexible magnets are used in many applications including small motors, position/angle sensors, advertising signs, magnetic filtering, posters and signs etc. Lifton Magnets offers only Aniso flexible magnets in the available grades and sizes. The Flex-12 grade is on offer in the E-store mall. These are available in rolls, tapes, A3 or A4 size, plain brown or self-adhesive material, cut and scored to length, or made to your exact specifications. The nature of the material makes it possible to achieve very tight tolerances.



Material Information

- Made by consolidating Strontium or Barium ferrite powder with polymer matrix.
- Form in profiles, strips and sheets by extrusion / calendaring method.
- Product can be stamped, slit, punched and laminated.
- Good demagnetization resistance & reasonable resistance to chemical agents.
- Material is readily available and low in cost.
- BHmax = 1 to 1.5 MGOe.
- Can be multipole magnetized freely.
- Working temperature from -40 degree to 100 degree.
- Good flexible properties.
- Good stability and reliability, which has been proven by systemic testing.
- Available in thicknesses from 0.5 to 5.0mm.
- Available in widths upto 700mm & Length as desired.
- Available in various shapes — Long & narrow strips, large area thin sheets, rolls, tapes, rings etc.
- Available in choice of backing : self-adhesive, plain.
- Available in choice of color—Vinyl coated.
- 3M self-adhesive tape 9471 or 9448 is normally used. Other models of 3M may be used upon request. Other adhesives may be used upon request.

Typical Physical Properties

Anisotropic Magnetic Sheet is made from a different powder grade compared to the usual Isotropic (Iso) type and generally has a Maximum Energy Product of 1.0 to 1.5 MGOe and undergoes a slightly different manufacturing process to ensure alignment of the magnetic particles. Anisotropic flexible magnetic sheet comes into its own when stuck to a mild steel sheet of at least equal thickness which prevents any flux leakage and focuses all of the magnetic force on the working face.

Tensile Strength (kg/cm3)	20 < f < 100
Elongation (%)	60 < l < 300
Hardness (Hv)	95 ± 5
Density (g/cm3)	3.70 ± 0.2
Saturation Field Strength	10 KOe, 800 KA/m
Flexibility	No crack when twisting around a testing bar diameter 20-60mm
Twist	No crack at twist with 180° twice

Lifton Aniso flexible magnets are made by binding strontium ferrite magnet into a flexible thermo-plastic binder which is then calendered into sheet or extruded into strip form. Any colour can be achieved by laminating the material. Colour faced sheet is laminated with a PVC film on the non-magnetic face. When using 1.5mm Anisotropic Sheet on 1.5mm Mild Steel, the pull strength will be more than 40% greater than that of 1.5mm Isotropic Sheet.

APPLICATIONS

Lifton Anisoflex is a versatile flexible rubber magnet material that may be used for an unimaginable variety of applications, including display advertisements, micro-motors, sensors, speakers, gaskets, novelties, signages and many more. Further features include;

- In sheet, roll and strip form.
- Can be cut or shaped easily.
- Silk screening or digital printing techniques can be used in imprinting sheet materials laminated with vinyl or those with adhesive backed sides.
- Adheres to products easily.

MAGNET FLUX DISTRIBUTION

Multipolar on a single surface, the Lifton Anisoflex™ is made by applying the Halbach array to eliminate the effective surface gauss on one surface and multiplying the effective gauss on the other surface in an alternating array of N-S-N-S-N etc.

Magnetic Properties of Flexible Rubber Magnets

Material	Isotropic / Anisotropic	Remanence		Coercivity		Intrinsic Coercivity		Max Energy Product	
		Br (mT)	Br (Gs)	bHc (kA/m)	bHc (Oe)	iHC (kA/m)	iHc (Oe)	(BH)max (kJ/ m3)	(BH)max (MGOe)
Flex-7L	Isotropic	165 ± 10	1650 ± 100	108 ± 8	1350 ± 100	132 ± 8	1650 ± 100	5.2 ± 0.4	0.65 ± 0.05
Flex-7H	Isotropic	170 ± 10	1700 ± 100	112 ± 8	1400 ± 100	136 ± 8	1700 ± 100	5.6 ± 0.4	0.70 ± 0.05
Flex-10	Semi-aniso	220 ± 5	2200 ± 50	136 ± 8	1700 ± 100	160 ± 8	2000 ± 100	8.0 ± 0.4	1.0 ± 0.5
Flex-12	Anisotropic	245 ± 5	2450 ± 50	140 ± 8	1750 ± 100	148 ± 8	1850 ± 100	11.2 ± 0.4	1.40 ± 0.05
Flex-12BH	Anisotropic	247.5 ± 2.5	2475 ± 25	168 ± 8	2100 ± 100	224 ± 8	2800 ± 100	12.0 ± 0.4	1.50 ± 0.05

Binder and Coating Selection of Flexible Rubber Magnets

Binder Type	Description
CPE	Most common and economical material with good fabrication properties
NBR	Good resistance to organic solvents such as thinners and petroleum.

Coating Type	Description
PVC	Suitable for various kind of printing methods
Self-Adhesive Tape	Available in pressure sensitive or foam-backing

Other Physical & Magnetic Properties of Lifton AnisoFlexTM Rubber Magnets

Material	Units	Aniso Flex
Temperature Coefficient of Br	%/°C	-0.18
Max Operating Temperature	°C	100
Heat-Resistance	(100°C/72h)	***
Cold-Resistance	(-40°C/72h)	***
Wet-Resistance	(60°C*90%RH/72h)	***
Motor-Oil Resistance	(23°C/72h)	***
Cold-Heat-Impact Resistance	(-40~85°C*0.5h*5/Cycle)	**
Density(g/cm^3)		3.6~3.8
Hardness(Shore D, ASTM)		40~65
Elongation Rate (%, JIS K6301)		50
Tensile Strength(Mpa, JIS K6301)		6.9
Temperature Range (°C)		-40 °C ~ 100°C
Surface Flux Density (Max. Gauss on Surface)		400 to 1000
Attractive Force (g/cm2) depending on thickness		30-100 (0.5 to 2.0mm T)

FLEXI MAGNETS PM

NEOFLEX™ FLEXIBLE RUBBER MAGNET

Lifton Neoflex rubber magnet is a type of flexible permanent magnet material with ultra high power, whose performance is far superior compared to the standard Ferrite Isotropic, the slightly improved Anisotropic Ferrite rubber magnet material or even the Samarium Nitrogen flexible magnet. The NeoFlex is made by mixing Neodymium magnet powders with synthetic or natural rubber binders and subsequently rolling (calendaring) or extrusion. Lifton Neoflex is a versatile flexible rubber magnet material that may be used for an unimaginable variety of applications, including display advertisements, micro-motors, sensors, speakers, gaskets, novelties, signages and many more. These can be manipulated in sheet and strip form and can be cut or shaped easily. The R5 grade of NeoFlex rubber magnet is on offer at the E-store Mall from Lifton Magnets.

- Higher energy flexible materials may sometimes replace Ceramic 1 materials
- Adheres to products easily
- Silk screening or digital printing techniques can be used in imprinting sheet materials laminated with vinyl

Magnet Flux Distribution

Multipolar on a single surface, the Lifton Neoflex is made by applying the Halbach array to eliminate the effective surface gauss on one surface and multiplying the effective gauss on the other surface in an alternating array of N-S-N-S-N etc.

General Characteristics

- BHmax = 80KJ/m3 (3.0 to 10.0 MGO).
- Can be multipole magnetized freely.
- Working temperature from -40 degree to 120 degree.

Material Information

- Good flexible properties.
- Good stability and reliability, which has been proven by systemic testing.
- Available in thicknesses from 0.5 to 3.0mm.
- Available in widths upto 200mm & Length as desired.
- Available in various shapes — Long & narrow bars, large area thin sheets, rings etc.
- Available in choice of backing : self-adhesive, plain.
- Available in choice of color—Vinyl coated.
- 3M self-adhesive tape 9471 or 9448 is normally used. Other models of 3M may be used upon request.
- Other adhesives may be used upon request.

Applications

- For unusually strong adhesive power requirements.
- Great holding force in a small footprint.

Measurement Parameter	NeoFlex™
Tensile Strength (Mpa)	3.8 (JIS K6301)
Elongation Rate (%)	55 (JIS K6301)
Hardness (Shore D)	30 (ASTM)
Volume Resistivity (Ω . M)	4.75 x 1016 (JIS K7194)
Heat Resistance (Deg C)	-40 to +120 (depending on Grade)
Max Gauss (Surface Flux Density) G	750 (0.5mm) / 1240 (1.0mm)
Attractive Force (g/cm2)	70 (0.5mm) / 130 (1.0mm)

Flexi Magnets

Material	Units	Neoflex (Grades)					
		R3	R4	R5	R6	R7	RE4
Residual Flux Density (Br)	Gs	3300 ± 500	4300 ± 500	4800 ± 500	5300 ± 500	5800 ± 500	6000 ± 500
	Mt	330 ±50	430 ±50	480 ±50	530 ± 50	580 ± 50	600 ± 50
Coercive Force (Hcb)	Oe	2600 ±500	3200 ± 500	3700 ± 500	4200 ± 500	4800 ± 500	2200 ± 500
	KA/m	207 ± 40	255 ± 40	295 ± 50	334 ± 50	382 ± 50	179 ± 20
Intrinsic Coercive Force (Hcj)	Oe	5800 ± 1000	7800 ± 1000	8500 ± 1000	9000 ± 1000	9000 ± 1000	2800 ± 500
	KA/m	462+80	621+80	677±80	716±80	716±80	223+40
Maximum (BH Max)	MGOe	3 ± 0.5	4 ± 0.5	5 ± 0.5	6 ± 0.5	7 ± 0.5	4 ± 0.5
	KJ/m³	24 ± 4	32 ± 4	40 ± 4	48 ± 4	56 ± 4	32 ± 4
Flux Irreversible Loss	%	<5					
Temperature Coefficient of Br	%/°C	-0.11					-0.17
Max Operating Temperature	°C	80	80	80	80	80	120
Heat-Resistance	(100°C/72h)	**	**	**	**	**	***
Cold-Resistance	(-40°C/72h)	***	***	***	***	***	***
Wet-Resistance	(60°C*90%RH/72h)	**	**	**	**	**	**
Motor-Oil Resistance	(23°C/72h)	**	**	**	**	**	**
Cold-Heat-Impact Resistance	(-40~85°C*0.5h*5/ Cycle)	**	**	**	**	**	**
Density(g/cm³)				4.8~5.5	4.8~5.5	5.0~5.6	
Hardness(Shore D, ASTM)		40~80					
Elongation Rate (%, JIS K6301)		55					
Tensile Strength(Mpa, JIS K6301)		3.8					
Temperature Range (°C)		-40 °C ~ 120°C					
Surface Flux Density (Max. Gauss on Surface)		1200 to 1550					
Attractive Force (g/cm2) depending on thickness		100-250 (0.5 to 2.0mm)					

RAW MAGNETS PM

AlNiCo : ALUMINUM NICKEL COBALT

Alnico magnet material is an alloy of aluminium -nickel-cobalt with minor amounts of other elements such as titanium and copper. Alnico magnets are characterized by excellent temperature stability over a wide temperature range and high residual induction.

They are candidates for continuous duty applications where temperature extremes up to 500°C can be expected. However, the coercive force and maximum energy product are not high.

They limit their applications in many cases. Casting and sintering are two major processes used to manufacture the Alnico magnets. Alnico magnets with complex shapes may be manufactured by casting.

Widely used in magnetic holding assemblies, meters, instruments etc.

Material Information

- Production by casting or powder metallurgical techniques.
- An alloy composed of matrix of Al-Ni-Fe-Co.
- Excellent stability over a wide temperature range higher than 500°C.
- Strong corrosion resistance capability without coating for surface protection.
- Good resistance to demagnetization from vibration and shock.
- Good flux density at an reasonable cost.
- Very hard & brittle.

Typical Physical Properties

Curie Temperature (°C)	860
Maximum Operating Temperature (°C)	525-550
Resistivity (μ ohm.cm)	47-54
Hardness (Hv)	520-630
Density (g/cm3)	6.90-7.30
Relative Recoil Permeability (μrec)	1.70-4.70
Saturation Field Strength, kOe (kA/m)	2.7-6.3 (215-500)
Temperature Coefficient of Br (%/°C)	-0.025 ~ -0.02
Temperature Coefficient of iHc (%/°C)	+0.01 ~ +0.03

Magnetic Properties of Casted Alnico

Ref. No.	Material Grade	Remanence		Intrinsic Coercivity		Max. Energy Product	
		Br (mT)	Br (kGs)	iHc (kA/m)	iHc (kOe)	(BH)max (KJ/m³)	(BH)max (MGOe)
Alnico 3	*LN9	680	6.8	30	0.38	9.0	1.13
	*LN10	600	6.0	39.8	0.50	10.0	1.20
Alnico 2	*LNG12	720	7.2	39.8	0.5	12.4	1.55
	*LNG13	700	7.0	48.0	0.60	12.8	1.60
Alnico 5	LNG37	1200	12.0	48.0	0.60	37.0	4.65
	LNG40	1250	12.5	48.0	0.60	40.0	5.0
	LNG44	1250	12.5	52.0	0.65	44.0	5.5
Alnico 5DG	LNG52	1300	13.0	56.0	0.70	52.0	6.5
Alnico 5-7	LNG60	1350	13.5	59.0	0.74	60.0	7.5
Alnico 6	LNGT28	1000	10.0	58.0	0.72	28.0	3.5
Alnico 8HC	LNGT36J	700	7.0	140.0	1.75	36.0	4.5
Alnico 8	*LNGT18	580	5.8	100.0	1.25	18.0	2.2
Alnico 8	LNGT32	800	8.0	100.0	1.25	32.0	4.0
	LNGT40	800	8.0	110.0	1.38	40.0	5.0

Magnetic Properties of Sintered Alnico

Material Grade	Remanence		Coercivity		Intrinsic Coercivity		Max. Energy Product	
	Br (mT)	Br (kGs)	bHc (kA/m)	bHc (kOe)	iHc (kA/m)	iHc (kOe)	(BH)max (KJ/m^3)	(BH)max (MGOe)
*FLN8	520	5.2	40	0.5	43	0.54	8-10	1.0-1.25
*FLNG12	700	7.0	40	0.5	43	0.54	12-14	1.5-1.75
*FLNGT14	570	5.7	76	0.95	78	0.98	14-16	1.75-2.00
*FLNGT18	560	5.6	88	1.1	90	1.13	18-22	2.25-2.75
FLNG28	1050	10.5	46	0.58	47	0.59	28-33	3.5-4.15
FLNG34	1100	11.0	50	0.63	51	0.64	34-38	4.3-4.8
FLNGT28	1000	10.0	56	0.7	57	0.71	28-30	3.5-3.8
FLNGT31	780	7.8	104	1.3	90	1.13	31-36	3.9-4.5
FLNG33J	650	6.5	135	1.7	150	1.88	33-36	4.15-4.5
FLNGT38	800	8.0	123	1.55	126	1.58	38-42	4.75-5.3
FLNGT42	880	8.8	120	1.5	122	1.53	42-48	5.3-6.0

Dimension Range / Nominal Tolerance of AlNiCo Magnets

RING MAGNET	OUTER DIA (mm)	INNER DIA (mm)	THICKNESS (mm)
Maximum	100	80	100
Minimum	4	2	5
Tolerance	±0.01	±0.01	±0.01
BLOCK MAGNET	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
Maximum	100	80	50
Minimum	2	2	2
Tolerance	±0.01	±0.01	±0.01
DISC MAGNET	DIAMETER (mm)	THICKNESS (mm)	
Maximum	100	100	
Minimum	2	2	
Tolerance	±0.01	±0.01	

RAW MAGNETS PM

NdFeB : NEODYMIUM IRON BORON

Rare earth permanent magnet NdFeB is a new kind of magnetic material developed in the 1980's with excellent magnetic characteristics (high energy product and high coercive force etc.) and relatively low cost.

It is getting to replace the traditional magnets of hard ferrite, AlNiCo and SmCo in many fields such as electro-acoustic devices, electric motors, sensors/transducers, instruments and meters, auto industry, petro-chemical industry and magnetic health-care products etc.

Widely used in various electrical appliances, hard disk, generators, magnetic assemblies, etc.

Material Information

- Produced by powder metallurgical method with chemical composition of Nd2Fe14B.
- High resistance to demagnetization.
- High magnetic values (Br, bHc, iHC und (BH)max).
- Excellent cost to performance ratio.
- Reasonable temperature stability.
- Very brittle & hard.
- Poorest corrosion resistance of all commercial magnetic materials.
- Not suitable for application which exposed in high temperature conditions.

Typical Physical Properties

Curie Temperature (°C)	310-370
Maximum Operating Temperature (°C)	80-240
Resistivity (μ ohm.cm)	160
Hardness (Hv)	560-580
Density (g/cm3)	7.40
Relative Recoil Permeability (μrec)	1.05
Saturation Field Strength, kOe (kA/m)	30-40 (2400-3200)
Temperature Coefficient of Br (%/°C)	-0.12 ~ -0.10
Temperature Coefficient of iHc (%/°C)	-0.6

Dimension Range / Nominal Tolerance of NdFeB Magnets

RING MAGNET	OUTER DIA (mm)	INNER DIA (mm)	THICKNESS (mm)
Maximum	160	140	50
Minimum	2.6	1.8	0.5
Tolerance	±0.1	±0.1	±0.1
BLOCK MAGNET	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
Maximum	150	50	30
Minimum	2.0	1.5	0.5
Tolerance	±0.1	±0.1	±0.1
DISC MAGNET	DIAMETER (mm)	THICKNESS (mm)	
Maximum	200	35	
Minimum	1.2	0.5	
Tolerance	±0.1	±0.1	

Magnetic Properties of Sintered NdFeB Magnets

Grade	Max. working Temp.	Remanence				Coercivity				Intr. Coercivity		Max. Energy Product			
		Br(T)		Br(kGs)		bHc(kA/m)		bHc(kOe)		iHc (kA/m)	iHc (kOe)	(BH)max (KJ/m^3)		(BH)max (MGOe)	
		Nom	Min	Nom	Min	Nom	Min	Nom	Min			Nom	Min	Nom	Min
N30	80	1.12	1.08	11.2	10.8	836	780	10.5	9.8	955	12	239	223	30	28
N33	80	1.17	1.14	11.7	11.4	876	820	11.0	10.3	955	12	263	247	33	31
N35	80	1.21	1.17	12.1	11.7	915	860	11.5	10.8	955	12	279	263	35	33
N38	80	1.26	1.22	12.6	12.2	915	860	11.5	10.8	955	12	303	287	38	36
N40	80	1.29	1.26	12.9	12.6	876	836	11.0	10.5	955	12	318	303	40	38
N42	80	1.30	1.27	13.0	12.7	876	836	11.0	10.5	955	12	334	318	42	40
N45	80	1.38	1.32	13.8	13.2	924	876	11.6	11.0	955	12	366	342	46	43
N48	80	1.42	1.38	14.2	13.8	890	835	11.19	10.5	876	11	390	366	49	46
N50	80	1.47	1.41	14.7	14.1	1035	829	13.0	10.5	876	11	414	382	52	48
N52	80	1.48	1.44	14.8	14.4	955	876	11.4	10.5	876	11	414	394	52	49.5
N30M	100	1.12	1.08	11.2	10.8	836	780	10.5	9.8	1114	14	239	223	30	28
N33M	100	1.17	1.14	11.7	11.4	876	820	11.0	10.3	1114	14	263	247	33	31
N35M	100	1.21	1.17	12.1	11.7	915	860	11.5	10.8	1114	14	279	263	35	33
N38M	100	1.26	1.22	12.6	12.2	915	860	11.5	10.8	1114	14	303	287	38	36
N40M	100	1.29	1.26	12.9	12.6	915	860	11.5	10.8	1114	14	318	303	40	38
N42M	100	1.32	1.28	13.2	12.8	1010	955	12.7	12.0	1114	14	342	318	43	40
N45M	100	1.38	1.32	13.8	13.2	1050	994	13.2	12.5	1114	14	366	334	46	42
N48M	100	1.43	1.37	14.3	13.7	1090	1035	13.7	13.0	1120	14	392	360	49	45
N50M	100	1.47	1.41	14.7	14.1	1138	1043	14.3	13.1	1114	14	414	382	52	48
N27H	120	1.06	1.02	10.6	10.2	796	740	10.0	9.3	1353	17	215	199	27	25
N30H	120	1.12	1.08	11.2	10.8	836	780	10.5	9.8	1353	17	239	223	30	28
N33H	120	1.17	1.14	11.7	11.4	876	820	11.0	10.3	1353	17	263	247	33	31
N35H	120	1.21	1.17	12.1	11.7	915	860	11.5	10.8	1353	17	279	263	35	33
N38H	120	1.26	1.22	12.6	12.2	955	915	12.0	11.5	1353	17	303	287	38	36
N40H	120	1.28	1.24	12.8	12.4	955	915	12.0	11.5	1353	17	334	311	42	39
N42H	120	1.32	1.28	13.2	12.8	1010	955	12.7	12.0	1353	17	342	318	43	40
N45H	120	1.36	1.32	13.6	13.2	1050	1000	13.2	12.5	1360	17	376	344	47	43
N27SH	150	1.06	1.02	10.6	10.2	796	740	10.0	9.3	1595	20	215	199	27	25
N30SH	150	1.12	1.08	11.2	10.8	836	780	10.5	9.8	1595	20	239	223	30	28
N33SH	150	1.17	1.14	11.7	11.4	876	820	11.0	10.3	1595	20	263	247	33	31
N35SH	150	1.21	1.17	12.1	11.7	915	860	11.5	10.8	1595	20	279	263	35	33
N38SH	150	1.26	1.22	12.6	12.2	924	870	11.6	10.9	1595	20	311	286	39	36
N40SH	150	1.28	1.24	12.8	12.4	989	939	12.4	11.8	1592	20	326	302	41	38
N42SH	150	1.35	1.30	13.5	13.0	1013	963	12.7	12.0	1600	20	344	312	43	39
N44SH	150	1.37	1.32	13.7	13.2	>=963		>=12.1		1600	20	358	326	45	41
N25UH	180	1.02	0.98	10.2	9.8	764	732	9.6	9.2	1990	25	199	183	25	23
N28UH	180	1.08	1.04	10.8	10.4	812	780	10.2	9.8	1990	25	223	207	28	26
N30UH	180	1.10	1.08	11.0	10.8	812	780	10.2	9.8	1990	25	247	223	31	28
N33UH	180	1.17	1.13	11.7	11.3	836	804	10.5	10.1	1990	25	270	247	34	31
N35UH	180	1.22	1.17	12.2	11.7	891	836	11.2	10.5	1990	25	279	263	35	33
N38UH	180	1.29	1.21	12.9	12.1	>915		>11.6		1990	25	318	287	40	36
N40UH	180	1.32	1.25	13.2	12.5	>836		>10.5		1990	25	334	303	42	38
N27EH	200	1.08	1.02	10.8	10.2	784	752	9.8	9.4	2388	30	223	191	28	25
N28EH	200	1.09	1.04	10.9	10.4	825	780	10.4	9.8	2388	30	231	207	29	26
N30EH	200	1.13	1.08	11.3	10.8	804	772	10.1	9.7	2388	30	247	223	31	28
N33EH	200	1.18	1.14	11.8	11.4	885	835	11.1	10.5	2400	30	272	248	34	31
N35EH	200	1.25	1.18	12.5	11.8	>875		>11.0		2388	30	295	263	37	33
N28AH	240	1.08	1.04	10.8	10.4	828	796	10.4	10.0	2785	35	223	207	28	26
N30AH	240	1.12	1.08	11.2	10.8	851	828	10.7	10.4	2785	35	239	223	30	28
N33AH	240	1.17	1.14	11.7	11.4	891	867	11.2	10.9	2785	35	263	247	33	31
N35AH	240	1.21	1.17	12.1	11.7	915	860	11.5	10.8	2785	35	271	247	34	31

Raw Magnets

SmCo : SAMARIUM COBALT

SmCo magnets (Samarium Cobalt) have also a very strong magnetic field. They tend to resist demagnetization extremely well. Unlike Neodymium magnets, it is also very corrosion resistant. SmCo magnets can operate at higher temperatures up to 300°C and are widely used in applications in which higher operating temperature and higher corrosion and oxidation resistance are crucial. The temperature coefficient of remanence is usually less than ±0.05%.

Two common compositions of SmCo magnets are SmCo5 and Sm 2Co17. They can be sintered and bonded. Generally, the cost of SmCo magnets is higher than NdFeB magnets. But NdFeB magnets are stronger than SmCo magnets.

Widely used in instruments, watches, generators, transducers, jig, moulds, etc

Material Information

- An alloy compose of SmCo5/Sm2Co17 produce by powder metallurgical method.
- Extremely hard & brittle.
- High demagnetization resistance.
- Excellent anti-corrosion properties.
- More expensive than NdFeB magnets because of limited raw material supply.
- Outstanding thermal stability.

Typical Physical Properties

Curie Temperature (°C)	700-800
Maximum Operating Temperature (°C) for Sm2Co17	250 for SmCo5, 350
Resistivity (μ ohm.cm)	50-90
Hardness (Hv)	450-600
Density (g/cm3)	8.0-8.5
Relative Recoil Permeability (μrec)	1.10
Saturation Field Strength, kOe (kA/m)	37.5 (3000)
Temperature Coefficient of Br (%/°C)	-0.05 ~ -0.03
Temperature Coefficient of iHc (%/°C)	-0.25 ~ -0.19

Dimension Range / Nominal Tolerance of SmCo Magnets

RING MAGNET	OUTER DIA (mm)	INNER DIA (mm)	THICKNESS (mm)
Maximum	100	80	50
Minimum	2.6	1.8	0.5
Tolerance	±0.1	±0.1	±0.1
BLOCK MAGNET	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
Maximum	100	80	50
Minimum	2.0	1.5	0.5
Tolerance	±0.1	±0.1	±0.1
DISC MAGNET	DIAMETER (mm)	THICKNESS (mm)	
Maximum	100	50	
Minimum	1.2	0.5	
Tolerance	±0.1	±0.1	

Magnetic Properties of SmCo Magnets (Samarium Cobalt)

Material	Grade	Remanence		Coercivity		Intrinsic Coercivity		Max. Energy Product	
		Br(mT)	Br(kGs)	bHc(kA/m)	bHc(kOe)	iHc (kA/m)	iHc (kOe)	(BH)max (KJ/m^3	(BH)max (MGOe)
$SmCo_5$	S16	750-800	7.5-8.0	557-637	7.0-8.0	1989	25	111-143	14-18
	S18	800-930	8.0-9.3	597-677	7.5-8.5	1432	18	127-159	16-20
	S20	850-980	8.5-9.8	597-677	7.5-8.5	1273	16	143-175	18-22
	S24	1000	10.0	680	8.5	1195	15	175-190	22-24
Sm_2Co_{17}	S180	900-1030	9.0-10.3	597-677	7.5-8.5	1194	15	127-159	16-20
	S22A	900-1030	9.0-10.3	613-693	7.7-8.7	1989	25	159-191	20-24
	S22B	900-1030	9.0-10.3	613-693	7.7-8.7	1432	18	159-191	20-24
	S240	980-1080	9.8-10.8	636-716	8.0-9.0	1432	18	175-207	22-26
	S26A	1000-1130	10.0-11.3	676-756	8.5-9.5	1194	15	191-223	24-28
	S26B	1000-1130	10.0-11.3	676-756	8.5-9.5	796	10	191-223	24-28
	S280	1030-1130	10.3-11.3	716-796	9.0-10.0	1432	18	207-239	26-30
	S270	1000-1100	10.0-11.0	357-516	4.5-6.5	413	5.2	183-223	24-28
	S300	1100-1200	11.0-12.0	438-517	5.5-6.5	454	5.7	223-255	28-32

HARD FERRITE (CERAMIC MAGNETS)

As important parts of magnetic materials, hard ferrite (ceramic) magnets play an important role in electrical, electronic information, car, motorcycle industries etc.
They are also widely used in medical treatment, mining and metallurgy, industrial automation, oil energy and civil industries.

Ceramic magnets are composed of iron oxide, barium and strontium elements. This class of magnets has a higher magnetic flux density, higher coercive force, and higher resistance to demagnetization and oxidation compared to other non-rare earth permanent magnets. The biggest advantage of such magnets is the low cost, which makes the hard ferrite magnets very popular in many permanent magnet applications. Due to their ceramic nature, ferrite magnets are very hard and brittle. Special machining techniques must to be utilized for these magnets. Ceramic or hard ferrite magnets come in discs, cylinders, rings, blocks and arcs and are charcoal grey.

Widely used in electrical appliances, educational instruments, magnetic assemblies, toys etc.

Material Information

- Produced by powder metallurgical method with chemical composition of Ba/SrO.6 Fe2 O3.
- Relatively brittle & hard.
- Good resistance to demagnetization.
- Excellent corrosion resistance.
- Raw material is readily available and low in cost.
- Good temperature stability.
- high coercive force and high electric resistance.
- Most widely used permanent magnets.

Typical Physical Properties

Curie Temperature (°C)	450
Maximum Operating Temperature (°C)	250
Hardness (Hv)	480-580
Density (g/cm3)	4.8 - 4.9
Relative Recoil Permeability (μrec)	1.05 - 1.20
Saturation Field Strength, kOe (kA/m)	10 (800)
Temperature Coefficient of Br (%/°C)	-0.2
Temperature Coefficient of iHc (%/°C)	0.3
Tensile Strength (N/mm)	<100
Transverse Rupture Strength (N/mm)	300

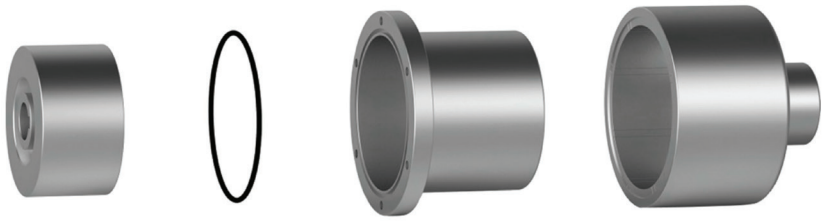
Dimension Range / Nominal Tolerance of Ceramic / Hard Ferrite Magnets

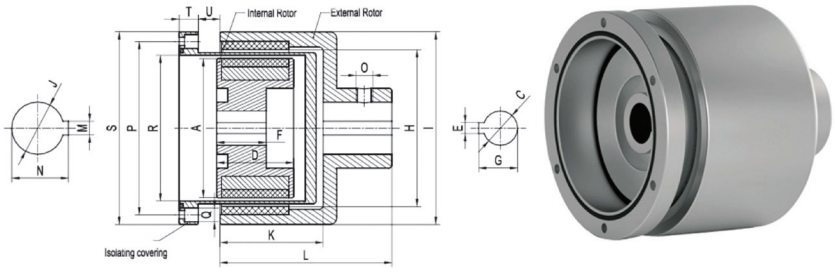
Ring Magnet	Outer Diameter (mm)	Inner Diameter (mm)	Thickness (mm)
Maximum	220	110	40
Minimum	2.6	1.8	0.5
Tolerance	±0.2	±0.15	±0.1
Block Magnet	Length (mm)	Width (mm)	Thickness (mm)
Maximum	220	200	40
Minimum	2.0	1.5	0.5
Tolerance	±0.2	±0.15	±0.1
Disc/Cylinder Magnet	Diameter (mm)	Thickness (mm)	±0.1
Maximum	220	40	
Minimum	1.2	0.5	
Tolerance	±0.2	±0.1	

Magnetic Properties of Hard Ferrite (Ceramic) Magnets

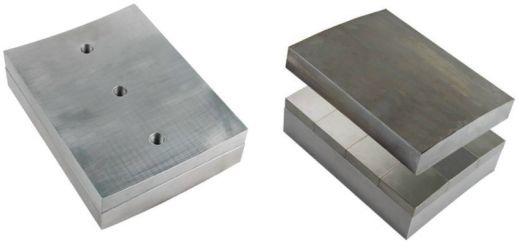
Material	Remanence		Coercivity		Intrinsic Coercivity		Max. Energy Product	
	Br (mT)	Br (kGs)	bHc (kA/m)	bHc (kOe)	iHc (kA/m)	iHc (kOe)	(BH)max (KJ/m^3)	(BH)max (MGOe)
Y10	200-235	2.00-2.35	125-160	1.57-2.01	210-280	2.64-3.52	6.5-9.5	0.8-1.2
Y10T	>200	>2.00	128-160	1.60-2.00	128-160	1.60-2.00	6.4-9.6	0.8-1.2
Y20	320-380	3.20-3.80	135-190	1.70-2.38	140-195	1.76-2.45	18.0-22.0	2.3-2.8
Y22H	310-360	3.10-3.60	220-250	2.77-3.14	280-320	3.52-4.02	20.0-24.0	2.5-3.0
Y23	320-370	3.20-3.70	170-190	2.14-2.38	190-230	2.39-2.89	20.0-25.5	2.5-3.2
Y25	360-400	3.60-4.00	135-170	1.70-2.14	140-200	1.76-2.51	22.5-28.0	2.8-3.5
Y25BH	360-390	3.60-3.90	176-216	2.20-2.70	215-231	2.70-2.90	23.9-27.1	3.0-3.4
Y26H	360-390	3.60-3.90	220-250	2.77-3.14	225-255	2.83-3.21	23.0-28.0	2.9-3.5
Y27H	370-400	3.70-4.00	205-250	2.58-3.14	210-255	2.64-3.21	25.0-29.0	3.1-3.7
Y28	370-400	3.70-4.00	175-210	2.20-2.64	180-220	2.26-2.77	26.0-30.0	3.3-3.8
Y30	385-405	3.85-4.05	176-224	2.20-2.80	184-226	2.30-2.84	27.5-30.5	3.45-3.95
Y30BH	380-400	3.80-4.00	230-275	2.89-3.46	235-290	2.95-3.65	27.0-32.5	3.4-4.1
Y32	400-420	4.00-4.20	160-190	2.01-2.38	165-195	2.07-2.45	30.0-33.5	3.8-4.2
Y33	410-430	4.10-4.30	220-250	2.77-3.14	225-255	2.83-3.21	31.5-35.0	4.0-4.4
Y35	400-420	4.00-4.20	160-190	2.01-2.38	165-195	2.07-2.45	30.0-33.5	3.8-4.2
Y35H1	395-415	3.95-4.15	251-259	3.15-3.25	255-271	3.20-3.40	29.6-32.8	3.7-4.1
Y35H2	390-410	3.90-4.10	236-295	3.30-3.70	275-299	3.45-3.75	28.8-32.0	3.6-4.04
Y35H3	405-425	4.05-4.25	223-247	2.80-3.10	231-255	2.90-3.20	30.2-35.4	3.8-4.4
Y35H-4H	370-390	3.70-3.90	270-302	3.40-3.80	326-358	4.10-4.50	25.6-28.8	3.2-3.6
Y38B	410-430	4.10-4.30	251-275	3.15-3.45	255-279	3.20-3.50	31.8-35.0	4.0-4.4
Y38H	395-415	3.95-4.15	287-309	3.60-3.90	311-333	3.90-4.20	29.5-32.7	3.7-4.1
Y40E	370-390	3.70-3.90	279-301	3.50-3.80	382-414	4.80-5.20	25.6-29.4	3.2-3.6
Y40B	410-430	4.10-4.30	290-324	3.65-3.95	307-329	3.85-4.15	32.6-34.4	4.0-4.4
Y45E	420-440	4.20-4.40	318-342	4.00-4.30	386-410	4.85-5.15	33.5-36.5	4.2-4.6
Y45B	430-450	4.30-4.50	247-271	3.10-3.40	251-275	3.15-3.45	35.1-38.3	4.4-4.8

Special Constructions



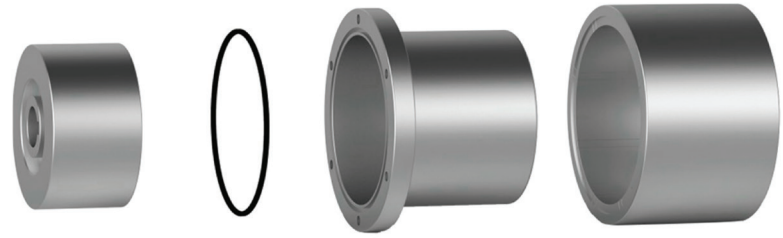


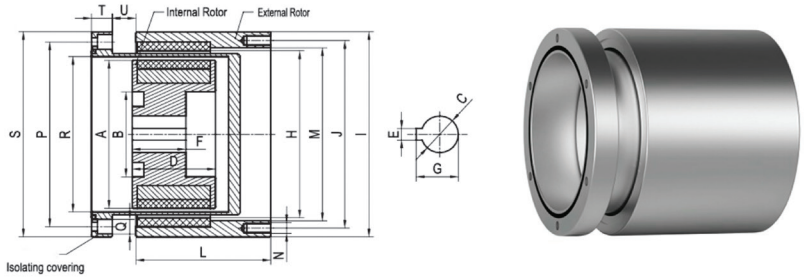
Axial type Magnetic coupling (To specify the dimensions)



Wind Turbine Assemblies

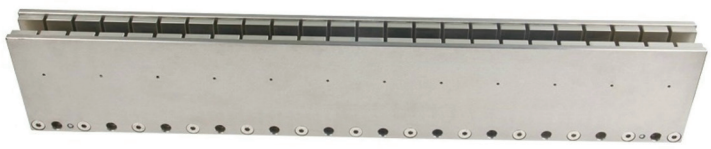
Internal Rotor





Flange type Magnetic coupling (To specify the dimensions)

External Rotor



Linear Motor Assembly

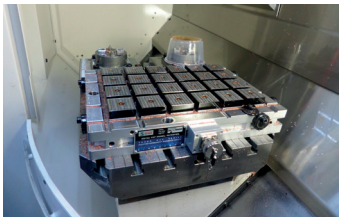
DC Motor Assembly

Magnetic Clamping Applications

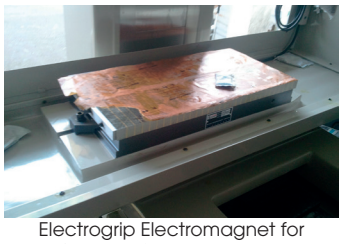
LIFTON MAGNETS

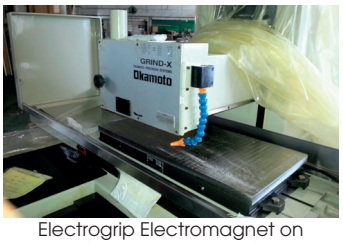

All Metal-top 75mm Turbo Max-Mill 800 x 500 with round blocks


All Metal-top 75mm Turbo Max-Mill single row clamp


All Metal-top Turbo Max-Mill 600x400


Conventional milling with four Turbo Max-Entry magnetic tables


Electrogrip Electromagnet for Grinding freshly delivered

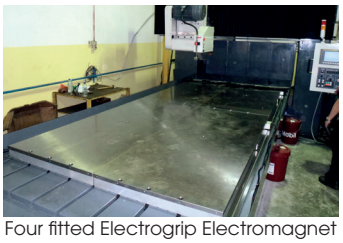


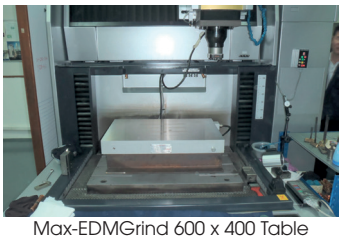
Electrogrip Electromagnet on Grinding machine-2

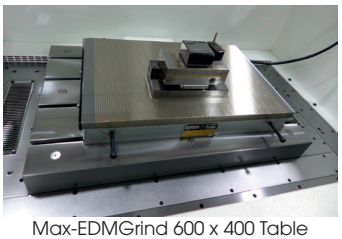

Electrogrip Electromagnet table on a Grinding machine

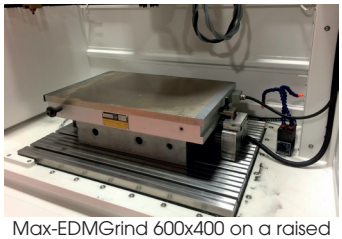
Electrogrip injects life into an old Grinding machine

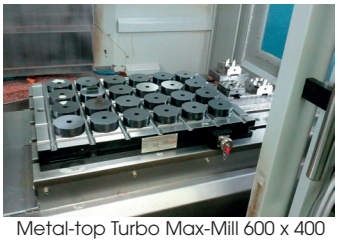

Electromicro Electromagnet on Grinding machine

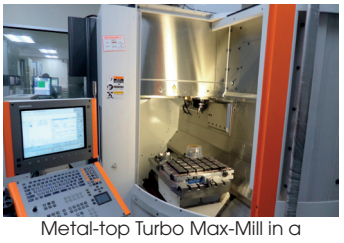

Four fitted Electrogrip Electromagnet tables


Max-EDMGrind 600 x 400 Table


Max-EDMGrind 600 x 400 Table

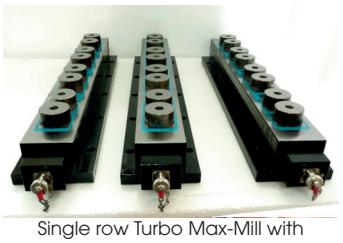

Max-EDMGrind 600x400 on a raised block

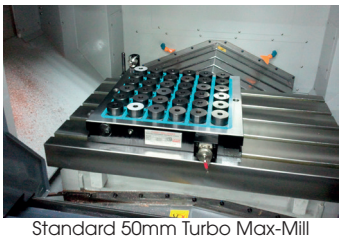

Metal-top Turbo Max-Mill 600 x 400 with round extension blocks

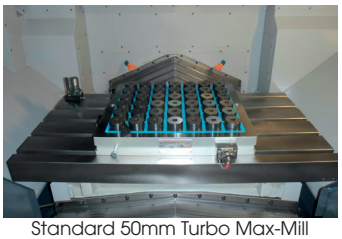

Metal-top Turbo Max-Mill in a machine centre

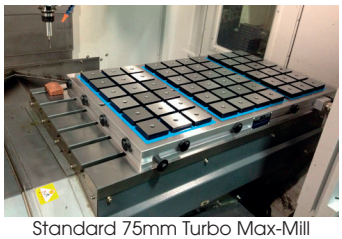

NeoEDM Grind Permanent Magnet table on Grinding machine

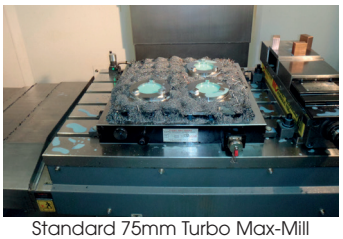

Turbo Max-Mill with a traditional vise

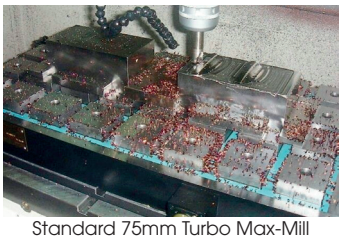

Single row Turbo Max-Mill with round pole extensions

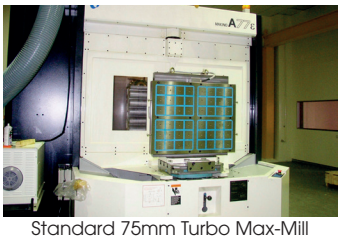

Standard 50mm Turbo Max-Mill 400 x 400 with round blocks


Standard 50mm Turbo Max-Mill 500 x 400 with round blocks

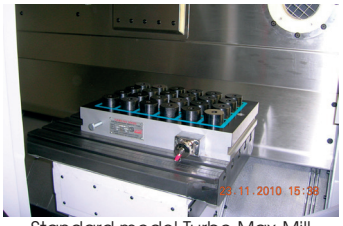

Standard 75mm Turbo Max-Mill 1000 x 600 on new VMC


Standard 75mm Turbo Max-Mill 600 x 600 completed machining

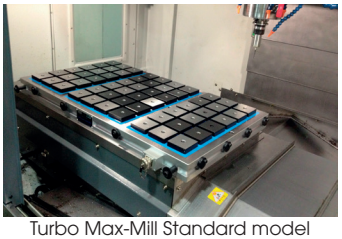

Standard 75mm Turbo Max-Mill 800 x 400 in machining operation


Standard 75mm Turbo Max-Mill 800 x 600 in vertical mount


Standard Turbo Max-Mill 600 x 400 with a vise on top

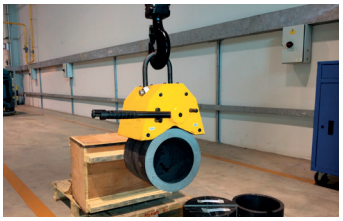

Standard model Turbo Max-Mill 400 x 300 with round pole blocks


Standard model Turbo Max-Mill 600x400


Turbo Max-Mill Standard model 1000 x 600 in a VMC

Magnetic Lifting Applications


1T-PM-PF Model


1T-PM-PR Model


2T-Fixed-General-4Mtr-thin


2T-Fixed-General-6Mtr


2T-Frame-PM-General


3T Round-Battery-EPM


3T-Fixed-Blasting-10Mtr-Thin


3T-Fixed-EM-Single bundle


3T-Fixed-General-12Mtr-thin


3T-Flat-Battery-EPM-2


3T-Flat-Battery-EPM


5T-Fixed-Battery-SolarCharge-Beam


5T-Fixed-Battery-SolarCharge-Single Pipe


5T-Fixed-General-12Mtr


5T-Fixed-SolarCharge-Single Pipe


6T Flat-3T Round-Battery-EPM


6T-Flat-PM-Block


6T-Flat-PM-Slab


7T-Fixed-General-9Mtr


8T-EM-3 Bundle-12Mtr


8T-EM-CDircular-Scrap

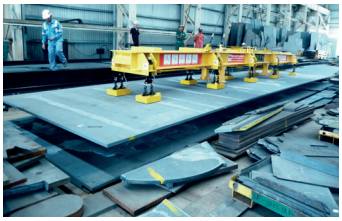

8T-Fixed-Blasting-12Mtr


8T-Fixed-CNC-12Mtr-10 Magnets


8T-Fixed-CNC-General-12Mtr

8T-Fixed-General-12Mtr


10T-EM-5 Billets-6 Mtr


10T-Fixed-Battery-CNC-12Mtr


10T-Fixed-Battery-General-10Mtr

Magnetic Lifting Applications

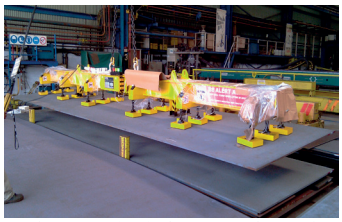
LIFTON MAGNETS

10T-Fixed-Blasting-12Mtr-2

10T-Fixed-Blasting-12Mtr


10T-Fixed-CNC-10Mtr-15 magnets


10T-Fixed-CNC-12Mtr-10 Magnets


10T-Fixed-CNC-General-12Mtr-18 Magnets-New


10T-Fixed-CNC-General-12Mtr-18 Magnets-Profiles


10T-Fixed-CNC-General-12Mtr-18 Magnets

10T-Fixed-CNC-General-12Mtr-21 Magnets

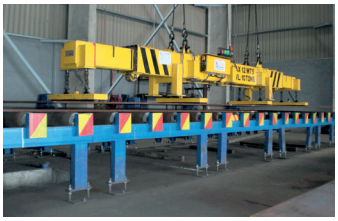

10T-Fixed-EPM-Single layer small Pipe

10T-Fixed-General-9Mtr-Multi


10T-Fixed-General-12Mtr-21 magnets


10T-Keppel-18Mag


10T-Telescopic-Blasting-12Mtr-Single Pipe


10T-Telescopic-Blasting-12Mtr


10T-Telescopic-General-12Mtr


12T-Fixed-CNC-12Mtr-36Mag-PLC


15T-Fixed-EM-5 Bundle-12Mtr


15T-Fixed-EM-Single layer Pipe-2


15T-Fixed-EM-Single layer Pipe


15T-Fixed-Hybrid-General-12Mtr


15T-Fixed-Special Profiles-12Mtr


15T-Telescopic-General-12M

15T-Telescopic-Special-12M


18T-Fixed-EM-Billet-Load Test


20T-Fixed-General-12Mtr

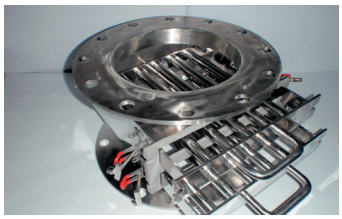

20T-Fixed-General-15Mtr

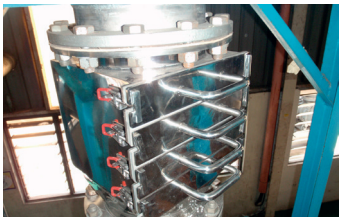

25T-Battery-General-12Mtr


30T-Fixed-Slab-6Mtr

Magnetic Separation Applications

LIFTON MAGNETS


2 Layer Hopper Drawer magnet


4 Layer Hopper Drawer in a Petro plant


4 Layer Hopper Drawer magnet


Angle baffle grate magnet


Continuous Full Welding for Food grade


Forklift mounted magnet sweeper

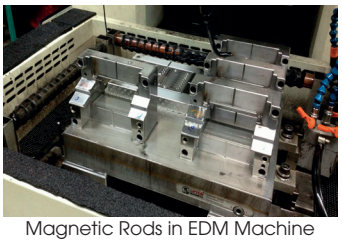

Forklift road sweeper


Grate Magnet in Hopper


Hand Separators awaiting dispatch


High Intensity Wet Drum Separator


Liquid Trap in a flow line


Magnetic Rods in EDM Machine


Manual cleaning PM inclined installation


Manual cleaning PM over conveyor


Manual cleaning PM over conveyor


Manual cleaning PM over conveyor


Manual cleaning PM Separator


Mobile table semi-suto seperator


Oil-cooled EM Separator


Oil-cooled Self-Cleaning EM Separator


Plain square grate magnet


Round profile grate magnet


Self Cleaning Electromagnet Separator EM-SC


Self-Cleaning PM Separator


Special design round grate


Square flange hopper drawer


Manual cleaning PM over conveyor

Miscellaneous Fixtures, Tools, R&D

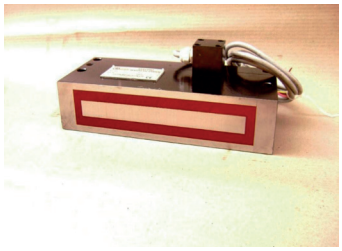
LIFTON MAGNETS

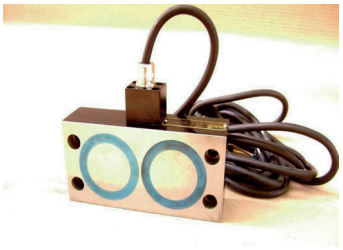

Bear Claw at work

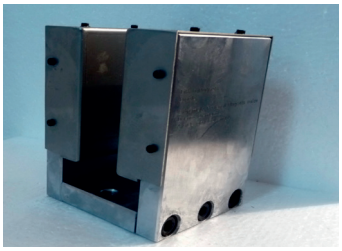

DeGausser at 7000 Gauss


Double-Mag Fixture for Flange Clamping


EM Circular Pot for profile lifting


EM Rectangular Pot


EM Rectangular Pot


High Intensity PM Yoke for Biomagnetic application


Mag-Press IV in use

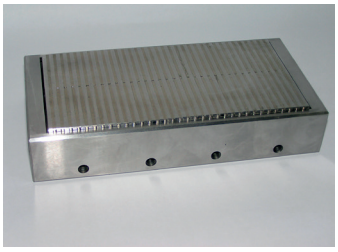

Mag-Press IV under deployment training


Mag-Pry Plate boundary Leveling tool


Mag-Pry under deployment at shipyard


Manhole Cover Lifting Fixture


Mitee-Bite waiting for Load


Supermagnet clamping fixture


Stiffener Alignment Fixtures


Stiffener Alignment Fixtures


Vertical Profile Lifting Magnet


We're hanging around with the Mitee-Bite!!


Automatic Pick-Place Lifter for Robot applications


Elebia Autohook lifting


Elebia Autohook


Elebia Autohook in open position


Elebia Autohook in closed position

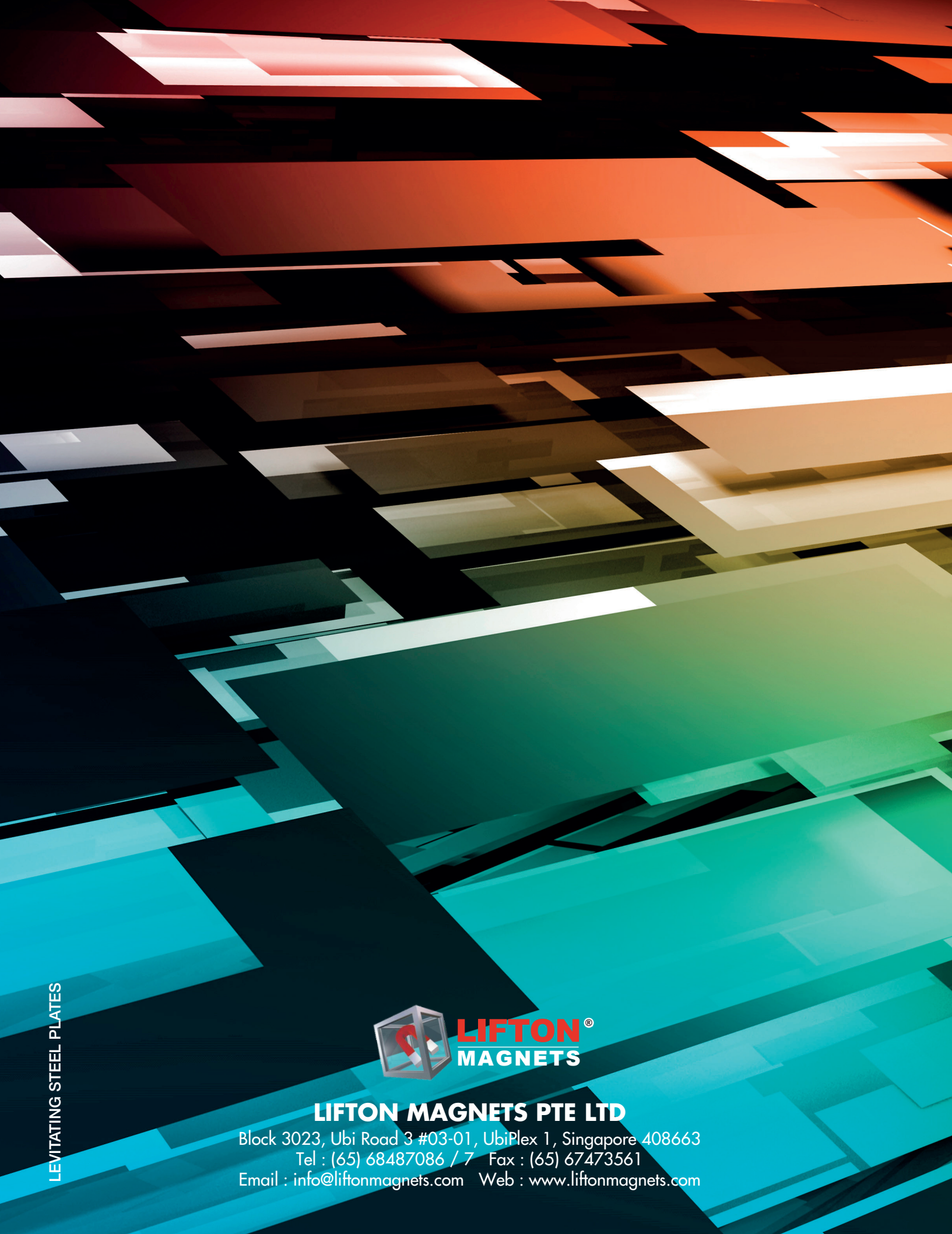
36 Magnet PLC System - LCD Screen - Touch & wireless control

Solar Cell charging Battery Powered 5 Ton profile lifting system

Electro magnet Rebar handling system

Electro Permanent magnet Hot billet lifter undergoing load test

Our Presence



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