

EMNIN *MAGNETICS*

Emnin Magnetic provide high quality magnetic systems intended for metal separation, recycling, metal handling, conveying and lifting in various branches of industry.

Types of Systems



Plate



Grate



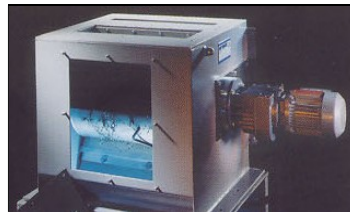
Liquid/Ferrous



Bullet



Suspension



Drum



Rotary



Pulley

Typical Industries

• Automotive • Food • Recycling • Metal • Pharmaceutical • Offshore • Chemical • Oleochemical • Aerospace industries • Ceramics • Animal Feed

Material of Constructions

Neodymium-Iron-Boron (Rare earth)	: Very powerful, lower resistance to corrosion
Ferrite / Ceramic	: High corrosion resistance, affordable
Samarium-Cobalt	: High stability and corrosion resistance.
AlNiCo	: Complex shapes possible, high temperature resistance.

Besides providing standard equipment/systems, we also provide customized solution and services based on your unique applications.

Further information, please contact us.

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EMNIN *MAGNETICS*

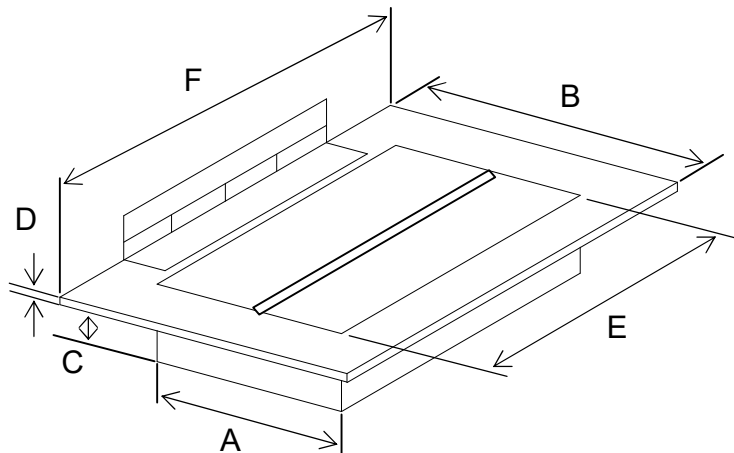
PLATE MAGNET

Plate magnets are used to remove iron from product flows on conveyor belts, vibratory feeders, during free fall, in vertical or inclined pipes, under slide plates, etc. The magnet system is brought in as close as possible contact with the raw material. The system can achieve an extremely high efficiency, depending on the product, the particle size and the conveying velocity. The standard product range encompasses models of a variety of lengths.

SPECIFICATIONS

Execution	Manual cleaning Permanent magnet Waterproof
Housing	Surface with center bar for holding of contaminants Stainless Steel 304
Finishing	With extended sides and hinges for mounting Matt

TYPICAL SIZES



TYPE	DIMENSIONS mm/in											
	A		B		C		D		E		F	
EPM10X7	178	7	216	8.5	50	2	2	0.08	250	10	290	11.4
EPM12X7	178	7	216	8.5	50	2	2	0.08	300	12	340	13.4
EPM14X7	178	7	216	8.5	50	2	2	0.08	350	14	390	15.4
EPM16X7	178	7	216	8.5	50	2	2	0.08	400	16	440	17.3
EPM18X7	178	7	216	8.5	50	2	2	0.08	450	18	490	19.3

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GRATE/GRID MAGNET

Permanent grid magnets fitted in hoppers or pipes can be used for the removal of iron particles from raw-material flows. These grid magnets are comprised of powerful magnetic bars which guarantee the thorough removal of iron particles from products passing through the grid in free fall. The grid magnets are cleaned by removing them from the product flow and then manually removing the iron particles.

Grid magnets are usually employed in free-flowing products contaminated with small amounts of iron. In many situations a number of grid magnets are installed above each other; to this end two different versions are available in which the magnetic bars are positioned out of line with each other. This “staggered configuration” improves the contact between the product and the magnetic bars. The sophisticated magnet configuration guarantees an extremely powerful and intense magnetic field. The design is based on an optimum combination of a field which is as powerful as possible at the surface with a working depth which is as deep as possible.

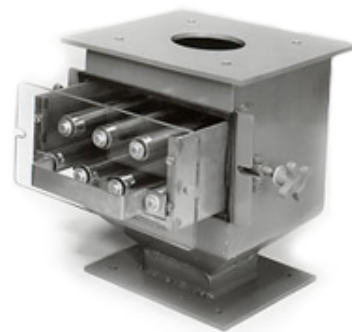
SPECIFICATIONS

Execution	Easy manual cleaning Permanent magnet Waterproof
Magnet rods	25mm diameter with various length
Housing	Stainless Steel 304 Customised to brackets/housing depending on application
Finishing	Matt / Polished

TYPICAL DESIGN



Open mounted brackets



Mounted within a housing

Housing and brackets are based on customer requirements such as application, product flow, hopper or bin sizes, outlet sizes/flanges, available space and cleaning requirement.

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CHUTE MAGNET

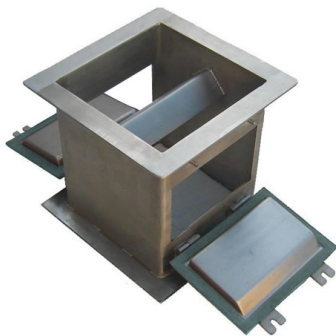
The chute magnet system has been developed for the efficient removal of iron particles from raw materials which do not flow freely, such as powders, and tacky or oily products, and/or scrap. The system is installed in one of the pipes used to transport the raw materials during the production process. The unit is located in a fully-welded stainless-steel housing which can be installed in the pipe in a manner such that it in effect constitutes an integral part of the pipe.

Chute magnets are characterized by the location of the magnet poles outside rather than inside the product flow. Extremely powerful plate magnets located on opposite sides of the housing capture iron particles contaminating the product flow. These magnet plates are actually of strength such that the external core is suitable for use with a column of material. Another design of chute magnet will be a centralised cylindrical magnetic plate within the housing drawing the contaminants to the center while allowing the product to flow pass around the cylindrical magnet.

SPECIFICATIONS

Execution	Simple manual cleaning Permanent magnet
Magnet section	Plate magnet with flanges and quick clamps for opening Cylindrical type secured in the center of housing
Housing	Stainless Steel 304 Customised to housing/magnetic plate depending on application and spacing requirement
Finishing	Matt / Polished

TYPICAL DESIGN



CHUTE MAGNET



BULLET MAGNET



HUMP MAGNET

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MAGNETIC FERROUS TRAP / LIQUID FILTER

Iron particles can also be present in liquid products. The permanent magnetic filter offers an effective means of removing these particles. The magnet system is comprised of rare earth magnets which are fitted into stainless steel housing equipped with inlet and outlet ports for the liquid. The magnet system can rapidly be removed for cleaning by releasing a number of quick-action couplings. Cleaning is considerably simplified by the extractor principle used in the design of the filters. Once the magnet unit has been removed from the extractor both components can readily rinsed clean.

Viscous liquids can be pumped through the filter under pressure. The extremely powerful magnetic field is capable of filtering particles of a size of 10-15 μ upwards from the liquid. A drain-plug fitted to the base of the housing simplifies cleaning the filter. A model is also available for iron separation from rapidly solidifying fluids (chocolate, molten cheese, etc.). These units are equipped with a jacketed housing which can be connected to a hot-water circuit, thereby reducing temperature losses during the iron-separation process to negligible levels.

SPECIFICATIONS

Execution	Simple manual cleaning Permanent magnet
Magnet rods	25mm diameter with various length
Housing	Stainless Steel 304 Connecting flanges are provided in DIN/ANSI/JIS standard Customised to housing/magnetic plate depending on application and spacing requirement
Max pressure	10 bar
Finishing	Matt / Polished

TYPICAL DESIGN



Connecting flanges could be DIN/ANSI/JIS flanges, Tri-clamp, SMS Union.