



## **ELECTRO AND PERMANENT SUSPENSION MAGNETS**



The **Master Magnets** range of **permanent and electro suspension magnets** are specifically designed for the removal of occasional tramp iron from conveyed materials. Commonly used in the mining, quarrying and recycling industries, suspension magnets are an invaluable solution to the protection of processing machinery and for upgrading the quality of the final product.

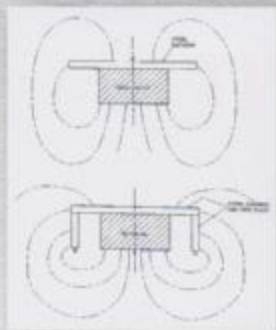
**[www.mastermagnets.com](http://www.mastermagnets.com)**



## PERMANENT SUSPENSION MAGNETS

The Master Magnets range of permanent magnets provide customers with an indefinite, maintenance-free service life, if not mistreated and also benefit from not requiring a power source. Permanent suspension magnets are manufactured using individual magnet blocks, which are pre-assembled before they are energised to give maximum magnetic performance.

For applications that require a magnet to be installed at an operating gap of 300mm or higher, our Tri-polar magnet system is incorporated into the design. The Tri-polar design utilises large steel side members as shown in the illustration, to effectively give three poles across the bottom face of the magnet. With the Tri-polar range of suspension magnets, an 8mm thick manganese steel impact plate is fitted to the system to reduce product damage to the magnet from the larger sized tramp metals that the units are able to extract.



### The Tri-Polar Advantages;

- Prevents magnetic leakage
- Results in a cleaner frame
- Achieves a better extraction

An easy clean system can also be fitted to the permanent magnet range to ensure the safe removal of any collected tramp metal from the face of the magnet, avoiding injury to operating personnel.

## ELECTRO SUSPENSION MAGNETS

Our electro range of suspension magnets has been extended over the past few years to cater for the ever increasing conveyor speeds, size of conveyors and deeper belt troughing.

As with the permanent suspension magnets, the electro range also requires manual cleaning, however the cleaning process of an electromagnet is much simpler as any collected materials can simply be removed by switching off the power supply to the magnet.



The Mastermag range accommodates both air and oil cooled coils depending on a customer's specific application. The coils are ducted to maximise heat dissipation by allowing either the oil or air to circulate within the winding. Each electromagnet is supplied with a custom built transformer rectifier to BS EN 60076.



For Electromagnets that are supplied to regions with high ambient temperatures or that will be installed at high altitudes, Master Magnets de-rate their units to dissipate heat and ensure maximum efficiency as well as the longest possible service life.

### OPTIONAL EXTRAS

#### Geared Travelling Trolley

To enable easier cleaning of the magnet system, suspension magnets can be supplied with geared travelling trolleys. The trolley system allows the magnet to be moved to the side of a conveyor for easy removal of collected iron.

#### RSA Supports

As an alternative to sling chains, RSA supports can be supplied with the Mastermag range of suspension magnets, allowing the magnet to be statically mounted to the customer's support structure.



Master Magnets have over thirty years experience providing innovative magnetic solutions to industries involved in recycling, demolition and reclamation, mining and quarrying, food processing, ceramics production and powders and minerals processing. The MasterMag range of systems are known for high performance and reliable operations including magnetic separators for metals reclamation, tramp metal protection and high intensity mineral separation.

Please visit our Website at [www.mastermagnets.com](http://www.mastermagnets.com) to view the entire range of Master Magnets Equipment where brochure and video downloads are available.



**Master Magnets Ltd** Incorporating Integrated Recycling Systems Ltd and Metal Detection Ltd.

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