



Newsletter of Master Magnets Ltd

Issue 4

NEW MAN AT THE HELM

Master Magnets Ltd is delighted to announce the appointment of Adrian Coleman as our new Managing Director.

Having joined Master Magnets during its infancy some 23 years ago, Adrian knows the company and its products inside out. He now heads up a team of over 30 employees, based at the Redditch site.

Adrian began his career at Master Magnets as a Technical Apprentice and has served time in all departments having fulfilled the roles of Design Engineer, Drawing Office Manager, Purchasing Manager and Production Manager. It is this career path that has given him such a broad wealth of knowledge and experience.

Master Magnets are planning to expand their product range still further and with Adrian's drive and leadership qualities the future looks bright. Adrian has already been instrumental in achieving reductions in product lead times, increases in output and improved profitability. The Company are expecting the next few years to be very exciting, expanding capabilities and expertise to become even more dominant in a very competitive global market.

Said Adrian: "Globally, Master Magnets is aiming to become the number one manufacturer of magnetic separation, metal

detection and recycling equipment. We have an enviable reputation, solid expertise and the kind of vision that makes that achievable."

Adrian will be happy to answer your questions. Contact him or send him an email:

adrian.coleman@mastermagnets.co.uk.



Chairman Geoff Worley (left) congratulates new MD, Adrian Coleman, outside the Master Magnets site in Redditch.

NEW PRODUCT



Ultra Compact Overband Separator

Master Magnets' new ultra compact Overband Separator (6 PCB 5), is going down a storm in the construction sector.

Specifically designed for operation on mini mobile crushers, the overall length of the Overband measures 1.5 metres and operates over a 750mm wide belt, making it ideal for separating small throughputs.

Mini mobile crushers are generally used at smaller sites and within cities where space is often limited, and where high throughputs aren't required. Smaller Overband Separators are cheaper and lighter than the standard, reducing costs and the overall weight of the mobile crusher.

Last year Master Magnets Ltd supplied Global Construction Plant Ltd, near Oxford, with the new ultra compact Overband Separator. They specialize in supplying mini mobile crushers, and a range of plant and construction equipment, and are dealers for other major manufacturers, such as Komatsu, Lifton, Neuson, Guidetti, Messers, Indeco & Rotair.

The Overband magnet has been installed on Global Construction Plant's mini mobile crusher, and it is now undergoing full operation at various sites within the UK. Due to the low cost of the Overband Magnet, Global Construction Plant should expect to see a quick financial return.

OVERBAND MAGNETS NOW IN STOCK!

Master Magnets now hold in stock Overband Separators ready for a next day delivery.

This facility will enable our customers to reduce downtime and lost revenue while waiting for an Overband magnet to be manufactured.

This latest initiative responds to customer demand and is part of the Master Magnets push to further increase competitiveness in a global market.

Common sizes and models will be held in stock, and throughout 2007 and 2008 Master Magnets will aim to produce many more stock items across the product range. Please contact the Master Magnets Sales Team to check stock availability. More uncommon sizes and bespoke designs can still be produced on short delivery periods - in addition to our capability to custom design specific solutions for clients.

Please visit our online product page (www.mastermagnets.com), where you can view our complete range, download a brochure for more technical details and watch the product demonstration videos.



Product demonstration videos now available: www.mastermagnets.com

NEW 'FRAGGY' DRUM FOR MINSK



Master Magnets Ltd has recently designed, manufactured and delivered an innovative 7.8 tonne magnetic 'fraggy' drum to function within an ELV (End of Life Vehicle) plant in Belarus.

Korpak JSC, situated in the Belarus capital Minsk, purchased a second hand ELV plant last year from Scotland but, unfortunately, not all of the equipment in the used plant worked. Korpak needed to replace a second hand drum.

Korpak came to Master Magnets with their problem. They needed a magnetic drum with a high efficiency, and a heavy duty design to give an increased working life.

A Fragmentiser Electro Magnetic Drum, our 'fraggy' drum, was recommended for this application, which was dimensionally similar to the previous drum used in the original plant.

'Fraggy' drums are used for the continuous separation of ferrous from

non-ferrous material, handling mainly fist-sized objects.

We were able to provide Korpak with a custom-designed drum – with a transformer/rectifier to transfer the Belarus local electricity supply to direct current to power the electro magnet - with the added advantages of a:

- **Longer working life** than the average drum, due to the heavy-duty structure and advanced air-cooling system.
- **Higher magnetic intensity** because of an improved cooling system and the specialised internal magnetic arrangements.

■ **Greater separation of Ferrous and Non Ferrous** due to an alternate pole arrangement which allows only ferrous material to be carried over the drum, preventing non-ferrous material from getting trapped.

Our 'fraggy' drums are in full operation at over a hundred sites throughout the world, including China and Australia, and customer feedback supports our success and expertise in this area.

The drums also have great longevity, as Operations Manager at Sims Bird Ltd testifies:

"We purchased a 60/90 rotary fragmentiser magnet in January 1995. It has performed exceptionally well, processing approximately 240,000 tonnes and to date has had no electrical or mechanical defects/breakdown. We have in the past used Steinert and Eriez fragmentiser magnets on both large and small applications, and although they performed well, we have no hesitation in choosing Master Magnets."

SUSPENSION FOR INDONESIAN COAL EXPORTER

One of the largest coal exporters in Indonesia has been so pleased with the Electro Suspension Magnet we supplied five years ago that they have written to tell us - and to say they would like to buy another one.

The Electrical Superintendent at the Bulk Terminal in Indonesia, wrote: "This Bulk Terminal purchased two type 125 OCW 40 suspension electro magnets from Master Magnets in 2002. These magnets have performed extremely well in the time they have been installed. Therefore, I wish to enquire as to the price and availability of an additional magnet of the same type."

The terminal receives coal by barge from

the mine sites, one of a few bulk coal terminals in Kalimantan, Indonesia, that is capable of loading directly to vessels. It needed a magnetic separator to help process coal, which was occasionally contaminated with ferrous materials that came from mining machinery, such as drill bits, rods, and loader teeth.

Special design

Master Magnets built an Electro Suspension Magnet to efficiently extract ferrous contamination from the coal supply line. Capable of operating across a 1600mm wide conveyor belt, and producing in excess of 540 gauss, it was specially designed to operate continuously at a temperature of 30-40 °C.

The magnet enabled the terminal to produce 2500 TPH and, during the first year of operation, was able to produce 10 million tonnes of clean coal.

Electro Suspension Magnets are generally suspended above a conveyor with sling chains giving correct angle incline with the conveyor. An electro suspension magnet can be de-energized and repositioned away from the conveyor belt to allow for cleaning the magnet.

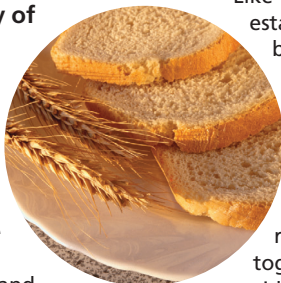
As the magnet only needs to extract the occasional tramp ferrous it doesn't require constant cleaning. An Electro Suspension Magnet is also oil cooled to keep the magnet operating efficiently and to disperse the heat and operate in high ambient temperatures.



BAPS WITHOUT THE BITE!

One of the oldest Italian Bakeries in London, Ticino Bakery Ltd, are making sure their bread, buns and cakes are metal free – thanks to equipment supplied by Metal Detection Ltd, a subsidiary of Master Magnets.

The high class bakery that helped bring Ciabatta bread to the UK has invested in a custom built Discovery Metal Detector and Conveyor to ensure their high quality products are free of ferrous, non-ferrous and stainless steel contamination and that they can perform quality checks on



bread coming straight out of the oven.

The Metal Detector is now working within the Ticino production line, allowing them to guarantee product quality and meet the latest health and safety standards.

Like Ticino, Metal Detection Ltd, is a long established business, with a reputation built over 40 years and the bakery liked our engineers' approach, our in-depth understanding of what was required and our competitive quote.

Master Magnets Ltd also supplies the food industry with magnets to remove metal contamination and, together with Metal Detection Ltd can provide a wide range of solutions for the food processing industry.



The Discovery Metal Detector



Permanent Overband - the Big One!

18 Inches. Now that's a big 'un!

Master Magnets Ltd has recently weighed in with one of the largest Permanent Overband Magnets ever supplied in the UK.

The magnet, custom-designed, manufactured and supplied to metal recycler Lowmac Alloy Ltd, weighs five tonnes and operates at an 18 inch working gap.

Lowmac Alloys operate a large site at Irvine in Scotland, incorporating ferrous and non-ferrous recycling, green waste processing, wood recycling, general waste recycling and the re-use of all types of soils and rubble.

They had been presented with the task of supplying a skip waste and commercial trade waste processing plant for another location in Scotland.

However, they were struggling to find a reliable manufacturer who could custom design a large Overband magnet to operate at an 18 inch working gap, across a 2 metre wide conveyor to handle skip waste and commercial trade waste.

Fortunately, they visited the Master Magnets stand at the Recycling and Waste Management Exhibition in Birmingham – and their struggle was over.

Our engineers recommended the model 16 PCB 13, the largest Permanent Overband Magnet in the Master Magnets range.

The Overband magnet is now undergoing performance tests in the skip waste and commercial trade waste processing plant. When fully operational it will be capable of processing 200 tonnes per day, and is forecast to pay for itself within 12 months.

More Agents Wanted



Master Magnets has established a very successful network of agents worldwide, who promote and sell our products in their own local markets. As a company we offer full support with regular sales visits by company representatives, and assistance with trade shows and marketing processes.

We are always looking to expand our representation and welcome any enquiries from countries not listed on our website.

Contact us now to share in our continued success.



Product demonstration videos now available: www.mastermagnets.com

EDDY GOES TO CHINA

One of the main steel recyclers in China, Ghangzhou Asia Steel Ltd, has welcomed our Eddy Current Separator plant – which comes with a vibratory feeder and drum magnet – as the ideal solution for sorting fine particles.

Based in the region of Whampoa, the company operate an ELV (End of Life Vehicle) plant and needed to efficiently recycle the finer scrap materials.

Particles that measure between 12mm-30mm are more difficult for the Drum Magnet and Over Band Magnet to extract. However, sorting the fines can increase overall product value - and profit margins.

Ghangzhou Asia Steel Ltd required a separator that could sort the metal fines into



three different types of material; ferrous, non-ferrous and non metallic.

These materials have a high product value in China as well as the UK, and Ghangzhou Asia Steel Ltd was very keen to take advantage of the high material prices and save landfill costs.

The Eddy Current Separation Plant is now fully operational, and Ghangzhou Asia Steel can now recycle and reclaim more valuable materials at 10 TPH.

The ECS Plant includes:

- ◆ 'Master Mag' Eddy Current Separator unit with a 300 mm diameter x 1000 mm wide neodymium iron boron rare earth permanent magnetic rotor.
- ◆ 'Master Mag' Rare Earth Drum Separator with a 350mm diameter x 1000mm wide drum complete with a Master Magnets drive motor.
- ◆ Vibratory Feeder which gives a controlled even feed of material to the machine.

15 MINUTES OF FAME FOR MAGNETS

Master Magnets have premiered a 15-minute movie featuring 'action' scenes from the best magnets in the business and starring hotshot double act, Eddy Current Separator and the Overband Magnet.

Strong performances from our full product range of magnets, together with their services and capabilities make this movie a 'must see' for all fans of metal separation.

Contact the Master Magnets sales team for your free copy.

You'll be on the edge of your seats!



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PRODUCT SELECTION CHART

This chart is a guide to our range of products and the industries we cover. However, many factors will influence the type of equipment needed for specific applications and our engineers are on hand to help you make a choice that is exactly right for you. Please contact Master Magnets for expert information and advice, or visit our website for more information on our products. www.mastermagnets.com

Product

Industry

	Mining and Minerals Industry	Recycling Industry	Ceramic and Powder Handling Industry	Food Processing & Pharmaceutical Industry	Metal Detection	Plastic and Glass Manufacturing	Laboratory Equipment	Aggregate / Quarrying Industry	Steelworks and Slag Processing Industry	Mini MRF'S Plants	Wood Processing Industry	Packaging Industry	Power Stations
Eddy Current Separator		•	•			•	•			•	•	•	
Suspension Magnets	•	•	•	•		•		•	•		•	•	•
Whim Magnetic Separator	•		•			•	•						
Disc Separator			•			•							
Induced Roll Separator	•		•			•	•						
Wet Drum Separator	•					•	•						
Rare Earth Roll	•	•	•	•		•	•						
Electro Magnetic Filters	•		•			•							
Liquid Pipeline Separator			•	•									
Bullet Separator			•	•		•					•		
Magnetic Grids			•	•									
Plate Magnets		•	•	•		•					•		
Drum Magnets	•	•	•	•		•	•	•	•	•	•	•	•
Pulley Magnets	•	•		•		•		•	•	•	•	•	•
Overband Magnets	•	•				•		•	•	•	•	•	•
Magnetic Sweepers				•					•		•		•
Laboratory Equipment	•					•		•					
Metal Detectors	•	•	•	•	•	•		•			•	•	•
Can Flatteners		•								•			
Shredders		•		•		•				•	•	•	
Vibratory Equipment	•	•	•	•	•	•		•	•	•	•	•	•
Trommel Screens		•								•			
Conveyors	•	•		•	•	•		•	•	•	•	•	•
Fork Lift Stabilising Magnets									•				
Integrated Plants and Systems		•								•			