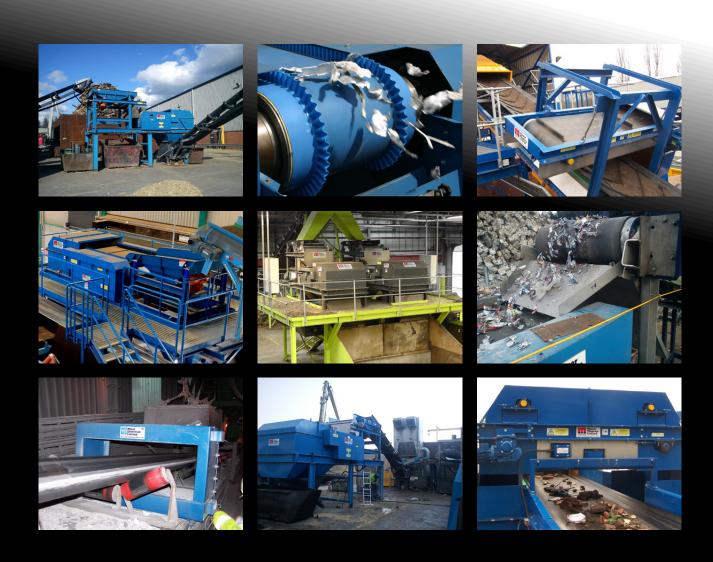


A Bunting<sub>®</sub> Magnetics Company

# **RECYCLING INDUSTRY GUIDE**



The process of recycling and reclamation invariably involves end-of-life products that may be shredded, crushed or fragmentised and require separation. Master Magnets supply the widest range of industrial magnetic equipment for the separation of ferrous and non-ferrous metals from aggregate, lumber, demolished construction material, plastics, rubber and shredded wood as well as end of life goods including cars, computers and any application where ferrous or non-ferrous metal is to be separated and reclaimed.



# **OVERBAND MAGNETS**

Overbands are designed for the continuous separation of general tramp iron from various recyclable materials. The self-cleaning Overband Magnets are available with either Permanent or Electro magnet systems depending on the specific application requirements.

Typical applications include separation and recovery of ferrous metals from MSW, Shredded Wood, C&D waste and shredded PVC.

With models to suit all conveyor widths, the Master Magnets range of Overbands are manufactured to be of solid and robust construction in order to withstand the most arduous conditions.

## **SUSPENSION MAGNETS**

Suspension Magnets are used for the extraction of occasional tramp iron from deep product burdens. These magnetic separators are available with either a permanent magnet system or as an air-cooled or oil-cooled electro magnet, depending on a client's application. Suspension Magnets

are typically installed over conveyors but can also be used to extract ferrous materials from above vibratory feeders or gravity chutes.



# **PULLEY MAGNETS**

The Pulley Magnet is installed as a direct replacement for the existing head drum of a belt conveyor for the continuous extraction of iron contamination. The 360 magnet system retains extracted iron, discharging it behind the centre line of the pulley, whilst the clean product follows its natural

trajectory. All units are available with either ferrite or rare earth magnet systems, depending on specific extraction requirements. Electro magnet systems are also available and are typically used for heavyduty applications.



## **DRUM MAGNETS**

Often used in applications where the extraction of very small ferrous materials is required. Typically supplied with a permanent magnet system, the drums can be used for a wide range of applications within the mining and quarrying industries. The Drums can be fitted into totally enclosed housings where product must be kept from external contamination and for more demanding applications, the Drum Magnet is also available with a Rare Earth or Electro magnet system.



## **EDDY CURRENT SEPARATORS**

Used for the separation and recovery of non-ferrous metals from all types of recyclable material, Master Magnets manufactures a range of Non-ferrous separators, each designed to suit varying application requirements. Typical applications include separation of non-ferrous metals from construction materials, glass cullet, shredded wood and end of life vehicles.



#### **ECCENTRIC EDDY CURRENT SEPARATORS**



For applications that require separation of finer non-ferrous particles, Eccentric ECS units can be supplied. The Eccentric rotor differs in that the magnet system is of a smaller diameter and is located in an eccentric position to the outer rotor drum. The magnet system is positioned close to the surface, giving maximum repulsion where the conveyed materials discharge from the rotor.

## **R TYPE**

The 'RType' fits into the Master Magnets ECS range between the Can Sorter and the High Intensity units, incorporating features of both machines. Fitted with a 12 pole rotor, the 'R Type' is designed for sorting non-ferrous metals from dry recyclables.



## **CAN SORTER**



The Can Sorter is specifically designed for the separation of non-ferrous beverage cans from dry recyclable materials. The Can Sorter ECS is a low-cost alternative to larger Eddy Current unit, for applications that do not require high specification machines.

The Can Sorter is a simplistic and cost effective unit with pre-set belt and rotor speeds to provide optimum can separation.

## STAINLESS STEEL SEPARATORS

Our extensive range of metal sorting solutions is complemented by our newly developed Stainless Steel Separators. With models specifically designed for small or large stainless steel fractions and available in widths up to 1800m wide, we can offer the most cost-effective machine for a client's specific application.



# **METAL DETECTORS**

Metal Detection Ltd (part of the Master Magnets group of companies) has over 40 years experience in providing a range of equipment for the inspection of various recyclable materials. Typical products to be inspected include animal bedding & wood chip, food packaging, glass cullet and aggregate.



## **REPAIR AND REFURBISHMENT SERVICE**

Master Magnets offer a full repair and refurbishment service for all types of magnetic equipment. The range of services offered includes:

**Appraisal:** Site Visit and preliminary report.

**Inspect and Report:** Equipment stripped down and inspected in our works facility and a detailed quotation of refurbishment or repair.

**Repair Service:** Mechanical, electrical and fabrication repairs carried out in our comprehensive workshops.







