



Eddy Current Separator

For non-ferrous metal separation

Innovative Recycling Technology

Our history of creating the highest quality products in the industry has now been extended to the new Bunting® Magnetics' Eddy Current Separators (ECS). Our ECS products feature an innovative rotor which maximises gauss intensity on the belt surface and provides superior separation of non-ferrous materials.

Our clean, low profile streamlined design has been crafted by using advanced magnetic finite element design software to optimise the gauss flux density in the working area above the belt. The combination of a powerful rotor and compact design optimises the eddy current forces, separation efficiency and product throw.

Superior Engineering

The Bunting® ECS core is designed to provide a high level of gauss intensity to enhance separation on a wide range of non-ferrous materials and

part sizes. It is protected with the tough urethane belt and the carbon fiber epoxy shell. From aluminium cans to kitchen pots and pans, our ECS units do an excellent job of throw and separation.

Our ECS attains a high recovery rate and provides our customers with cleaner materials, which is the bottom line result everyone is seeking. Also, the eccentric core is designed to be rotated to provide the most effective amount of product throw based on the material and application being used.



Maintenance Friendly

One of the key design features of the Bunting® Eddy Current Separator is how easy it is to maintain. Our efficient design includes a drop down side panel which can easily be lowered by one person for a quick and easy belt change. In fact, only one tool is required to loosen the belt, drop the side panel, replace the belt, re-track the belt and be back up and running in minutes!

The rubber lagged inverter duty motorised drive pulley at the in-feed provides for exceptional driving force, variable speed drive and a clean out-of-the-way design. It is easy to work on when needed, and it provides a variable 30.5 to 91.4 metres per min. (100 to 300 fpm) belt speed to maximise your separation. The ECS drive comes complete with two variable frequency drives (VFD) to program the ramp up of starting the machine.



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Built to Last

The ECS unit has the highest quality urethane endless belt with 38 mm (1 1/2") urethane flex-wall and three (3) sweeper cleats to help kick off ferrous contamination. In addition to the flex-wall, the ECS has a secondary brush seal outside the flex-wall which serves as a double seal of protection to prevent material from getting inside the conveyor frame.

Bunting® ECS units are available in 61 cm, 91 cm, 122 cm and 152 cm widths and 244 cm long (24", 36", 48" and 60" widths and 96" long).

The 61 cm (24") wide may be common in the Glass Recycling industry and the other 3 sizes in Council, Plastic, E-Scrap and Metal Recycling Industries depending on the capacity requirement.

How It Works

Eddy Current separation combines the use of a magnetic rotor, with alternating polarity, spinning quickly inside a non-conductive drum which is driven by a conveyor belt. The external drum operates as the head pulley and rotates at belt speed. The internal rotor moves at a higher speed than the drum which creates a strong repelling force through the induction of eddy currents.

This alternating magnetic field rejects non-ferrous metals by throwing them out of the product flow. In most applications, the ECS are set up with other separation equipment to ensure a clean recycled product.

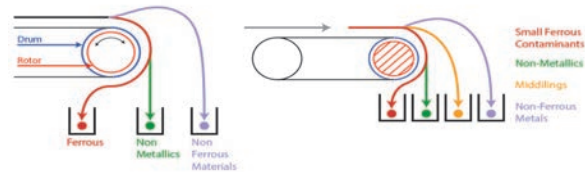
How It Works

Eddy Current separation combines the use of a magnetic rotor, with alternating polarity, spinning quickly inside a non-conductive drum which is driven by a conveyor belt.

The external drum operates as the head pulley and rotates at belt speed. The internal rotor moves at a higher speed

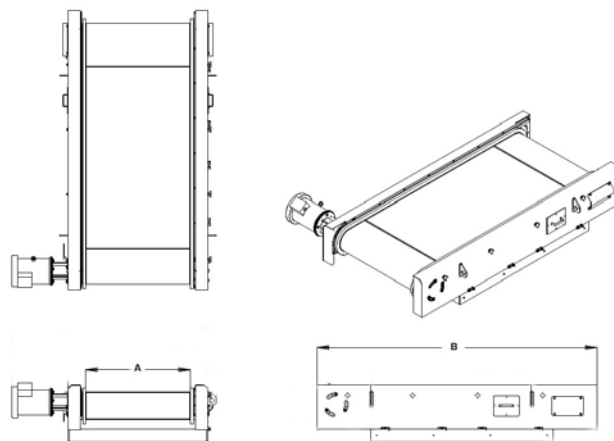
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ECS Model Number Selection Guide

Model	A	B
ECS-08-24	610	2450
ECS-08-36	914	2450
ECS-08-48	1220	2450
ECS-08-60	1525	2450



Types of Applications

- Plastics
- Glass
- e-Scrap
- Council Solid Waste – 97% recovery rates of aluminium cans from commingled recyclables
- Mixed Metals
- Incineration
- Auto Shredding

