eddy current separator

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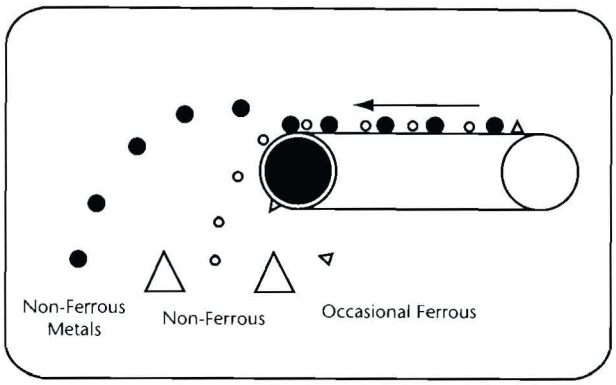
Test Facility

We have a complete test facility to determine the recovery you can achieve from the Magnapower ECS. You are welcome to visit us and witness these tests and confirm that we have the right machine for your application. Or send us a sample of your material and we will process and return it to you.

Belt Changing

A cantilever framework turns belt changing into a simple operation without having to strip the machine. This considerably reduces any possible down time.



Standard Parts

All bearings and drive gear are standard proprietary items that can be obtained from either Magnapower or most bearing suppliers.

Operation

A high speed, high intensity magnetic rotor inside the head drum of the ECS conveyor induces a magnetic field into non-ferrous metals on the belt surface.

These magnetically induced metals react with the magnetic field of the rotor causing them to be propelled forward further than the other material on the belt.

Typical Applications include:

- MSW metal recovery
- Fragmentiser residue recovery
- Kerbside collection separation
- Wood waste processing
- Fridge Recycling Plant Al & Cu recovery
- Aluminium extrusion recycling
- Incinerator Bottom Ash recovery
- Glass cullet recycling

We offer a complete range of magnetic separation equipment including:
Can Sorters - Overband Magnets
Magnetic Head Pulleys - Drum Magnets

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Maximise Recovery of Non-Ferrous Metals

High performance rotor design allows for maximum metal recovery of non-ferrous metals such as aluminium, copper and brass.

Minimise Maintenance

A comprehensive belt seal guarding system and sidewall belt keep material on the belt surface and prevent damage to rotor drum. The rotor is built using high intensity rare earth non-deteriorating permanent magnets, so not only is no power required to the magnet, but it will also provide maximum magnetic force for the lifetime of the machine. Our unique rotor design will separate occasional ferrous metal without damage to the drum.

Optimise Throughput

We offer a high-speed belt conveyor, wide range of belt widths and maximum magnetic performance. This combines to provide the best throughput available with the most efficient width of rotor to suit your application.

Maximum Magnetic Force

We always recommend and provide the maximum magnetic intensity available for each application. Larger items such as empty drinks cans do not require as much magnetic force induced into them for separation compared to small pieces of non-ferrous metal. We have designed a range of magnetic systems that provide the highest levels of separation required depending on the requirements. This ensures that precise separation is achieved.

Ferrous Metal Tolerance

The Magnapower ECS will tolerate and remove low levels of ferrous metal without causing the problems of a conventional ECS (e.g. belt, drum and rotor damage). This development is critical in providing a separator that will provide long lasting trouble free and reliable performance.

Maximum Frequency

The frequency of the Eddy Current Separator (ECS) rotor is critical to ensure that good separation is achieved. This is why we have developed a rotor that not only has a high number of poles but also rotates at up to 3000 rpm to achieve maximum frequency and thus maximum separation of even small pieces of non-ferrous metal.

Throughput Variations

Most of our ECS machines are supplied with variable rotor and belt speed. This is to enable the optimum throughput and separation for any variations in quantity and material size / type to be separated. We are always on-hand to provide any back up required so that your ECS always gives the best separation possible.

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