



# Eddy Current Separator

Series: ECS

**Recovery and removal of non-ferrous metals including aluminum, copper, zinc etc.**



## Application

Eddy Current Separators remove nonferrous metals such as aluminum, die-cast metal, and copper from nonmetallic material. MPI's proven eddy current technology ensures high separation rates. State-of-the-art system controls and features combined with technological advances result in improved nonferrous metal removal, particularly when trying to separate smaller particles such as aluminum and brass from non-conductive waste streams.

## Operation

An ultra-high-strength magnetic rotor that houses rare earth magnets spins at a high RPM. The magnetic rotor, attached to a motor driven shaft, spins independently and at a much higher speed than the conveyor belt pulley, creating a high-frequency reversing magnetic field. Commingled material flows along the belt. When nonferrous product, such as aluminum, passes over the rotor, the spinning magnets generate an eddy current. This causes the aluminum to be repelled and "thrown" by the separator. Product, such as plastic, glass or other materials which are not conductive, simply fall off the end of the separator into a bin.

## Free Testing for ECS Applications

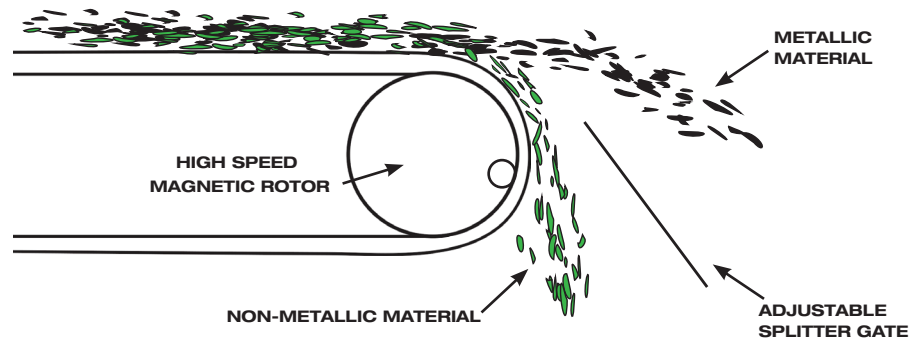
Let us show you how far we can "throw." MPI's laboratory houses an Eddy Current Separator and offers free product testing for all applications. You will receive a report with an overview of the findings and equipment recommendations specific to your product and application.

*\*Specifications subject to change*

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**MPI**

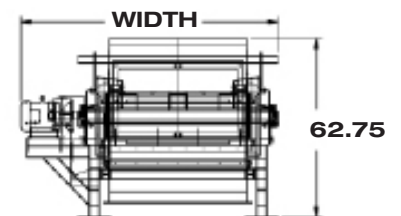
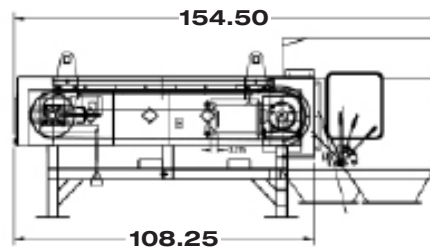
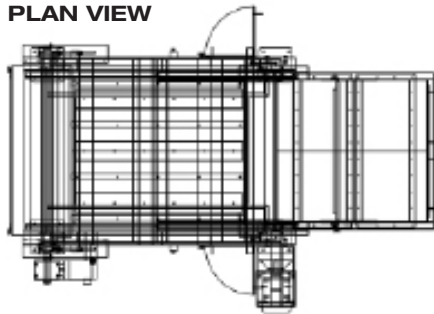
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## ECS - Selection Guide

MODEL NUMBER	APPROX. CAPACITY	USABLE BELT WIDTH	APPROX. OVERALL WIDTH	DRIVE MOTOR HP	ROTOR MOTOR HP	ROTOR PULLEY DIA.
<b>ECS ROTOR</b>						
<b>ECS-20</b>	4 TONS/HR	20"	78"	1.5	5	12"
<b>ECS-30</b>	6 TONS/HR	30"	89"	2	7.5	12"
<b>ECS-40</b>	8 TONS/HR	40"	99"	3	10	12"
<b>ECX ROTOR</b>						
<b>ECX-20</b>	4 TONS/HR	20"	78"	1.5	5	16"
<b>ECX-30</b>	6 TONS/HR	30"	89"	2	7.5	16"
<b>ECX-40</b>	8 TONS/HR	40"	99"	3	10	16"

**PLAN VIEW**



## Standard Features

- Removable back panel
- Side door for easy access to rotor
- External grease fitting
- See-through lexan side panel
- Splitter gate adjustment indicator
- Control panel with soft start
- Hard-wired electrical box
- E-stop buttons
- Adjustable belt speed
- Oversized rotor bearings
- Ceramic coated head pulley resists damage from ferrous fines extending pulley life
- Non-conductive composite drum shell coated in corrosion resistant material
- Ultra high-strength rare earth magnetic rotor provides maximum efficiency
- Magnet material ensures maximum field strength—magnets will not demagnetize
- High sorting accuracy
- Adjustable speed drive motor allowing changeable rotor speeds for targeted separation
- Tough urethane belt with thermo-welded cleats to reduce wear
- Programmable breaking with AC inverter

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