# Eddy Current Separator:

Eccentric 9900 Model

- Polyurethane wear resistant belt with corrugated side walls for material containment and long life.
- Belt motor moves with take-up assembly for easy tracking and adjustment
- Easy to remove panels give access to bearings and makes endless belt replacement simple.
- ♦ Oversized, high speed rotor bearings & shaft
- Stainless steel rotor shell with fiberglass wear shield.



# **Eddy Current Separators**

An Eddy Current Separator is designed to recover non-ferrous metal from non-metallic material such as commingled recyclables, plastics, glass, material processed at composting or waste-to-energy facilities, auto shredder residue, and various other industries. Our Eddy Current Separators provide significant savings on labor costs by reducing the man hours required for manual sorting. They are engineered for dirty, dusty and severe outdoor surroundings found at many job sites. The permanent rare earth magnets used in our Eddy Current Separators provide larger and deeper magnetic fields that are well-suited for industrial applications. Dings' 9900 Eccentric Model's patented features and customer service and support separate us from the rest.

## **Eddy Current Separation Operation**

When a piece of non-ferrous metal such as aluminum, passes over the separator, the magnets inside the rotor rotate past the aluminum at high speed. This forms eddy currents in the aluminum, creating a magnetic field inside the piece of aluminum. The polarity of that magnetic field is the same as the rotating magnet, causing the aluminum to be repelled away from the magnet. This repulsion makes the trajectory of the aluminum greater

than that of the nonmetallic material, allowing the two material streams to be separated.

# **Dings Current Eccentric Design**

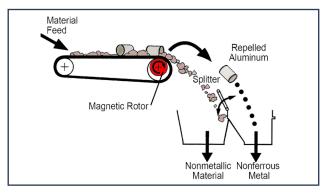
Ideal for separating non-ferrous from fractional sizes up to the size of aluminum cans from paper and plastic product streams. The off center "eccentric" magnet design of the rotor allows ferrous metal that made it past the upstream magnetic separator to be released from the belt as it leaves the magnetic area of the outer rotor shell. This reduces the likelihood that ferrous metal will cling to and damage the belt and shell, extending rotor life.

- ♦ Generate income by recovering non-ferrous metals.
- ♦ Save on costs of manual sorting.
- ♦ Fits easily into your existing line.
- ♦ Rare earth magnets provide high strength & long life.
- Heavy Duty Steel Cantilevered Frame makes endless belt replacement simple, 15 minutes or less.
- Easy to remove panels give access to bearings and belt reducing maintenance time.
- Optional integrated adjustable splitter with clear inspection doors provide access to the splitter.

## Eddy Current 9900 Eccentric Model Operation

Separates non-ferrous from fractional sizes up to the size of aluminum cans from a paper and plastic product stream in a low to medium level throughput.

The off center "eccentric" magnet design of the rotor allows ferrous metal that made it past the upstream magnetic separator to be released from the belt as it leaves the magnetic area of the outer rotor shell. This reduces the likelihood that ferrous metal will cling to and damage the belt and shell, extending rotor life.



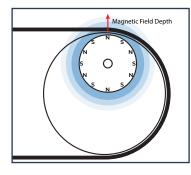
9900 Eccentric Model Sizes

Magnetic Pulley Diameter: 16" (Rotor 8")

Belt Width: up to 60"

Rotor Speed: up to 3000 rpm

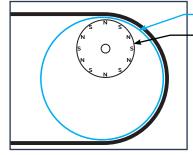
# **Eddy Current Eccentric Design** Magnetic Field



High frequency magnetic pole change & high magnetic strength provide superior product separation.

The 9900 Model's magnetic field is the same as the 9100 version. However, it's off-center rotor design allows ferrous metal to be released rather than cling to the magnetic pulley causing damage.

# **Dual Layer Shell Design**



Fiberglass Wear Shield

Heavy-Duty Stainless Steel Cover

This dual layer design provides maximum rotor protection that gives the equipment longer life, lower maintenance and repair costs and simplifies maintenance of the equipment.

# More Dings Company Magnetic Separation Equipment



Severe Duty Overhead Self-Cleaning

Electromagnet

### **Magnetic Head Pulley** Available in 3 different strength series





# Overhead Self-Cleaning Electromagnet

20-year warranty on coil burnout



MRF (Material Recovery Facility) Overhead Self-Cleaning Electromagnet



ver. 1/25

# **Engineering Driven - Customer Service Focused**



Dings Company Magnetic Group engineering and sales staff work together from our Milwaukee, WI factory to provide outstanding customer service from experts in magnetic separation. First, we listen to our customers to gain an understanding of their needs. Then we apply our experience in their trade to provide magnetic separation equipment that is sized and positioned for the best possible performance in their specific application.