

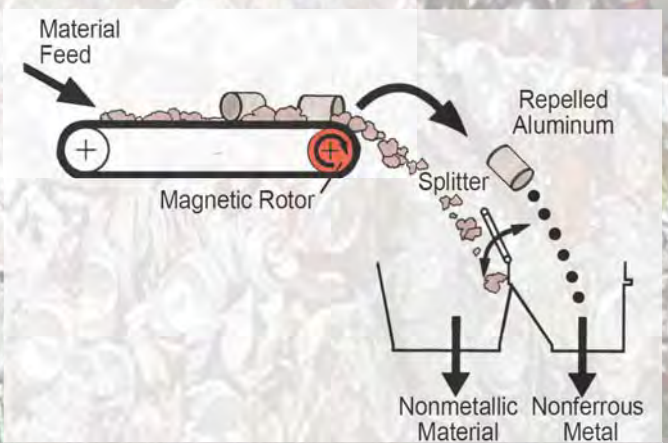


ECCENTRIC ROTOR EDDY CURRENT SEPARATORS NON-FERROUS SEPARATION



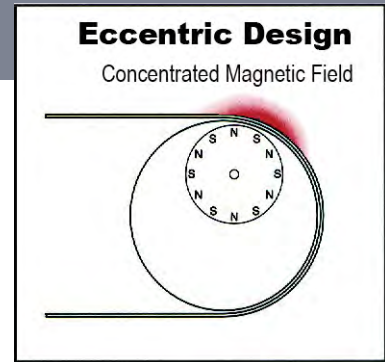
Separate aluminum, die-cast metal, or copper from nonmetallic material.

Dings continues its tradition of innovative design offering new features that optimize separation and simplify maintenance. The new eddy current separator is engineered to withstand severe outdoor environments and dirty, dusty surroundings found at many job sites. Permanent rare earth magnets used in the separator are well-suited to industrial environments.



ALUMINUM CAN RECYCLING | MUNICIPAL WASTE | WOOD WASTE | PLASTICS | E-SCRAP
AUTOMOTIVE SHREDDING | GLASS CULLET | MATERIAL RECOVERY FACILITIES

NON-FERROUS SEPARATION



The eccentric rotor design allows ferrous to discharge easily from the rotor, making the rotor more resistant to damage from ferrous pieces in the material stream. Since the field of magnetism is concentrated, ferrous material is released from the belt sooner, reducing damage to the belt and the shell and extending product life.

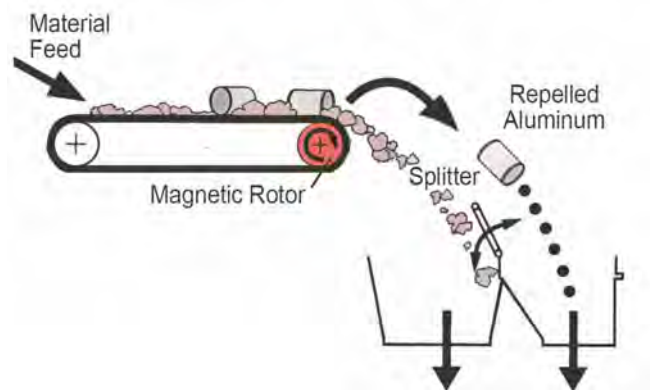
OPERATION

Material is fed onto the conveyor belt of the eddy current separator, which moves it across the magnetic rotor where separation occurs. The two streams of material discharge into a housing. The housing has a splitter to divide the nonferrous metal from the nonmetallic material, such as paper, plastic, wood or fluff.

The key component of the eddy current separator is the magnetic rotor, which has a series of permanent rare earth magnets mounted on a support plate attached to a shaft.

The magnetic rotor is surrounded by (but not attached to) a wear shell which supports the conveyor belt. This allows the rotor to spin independently and at a much higher speed than the wear shell and belt. When a piece of nonferrous 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 which in turn create a magnetic field around 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 nonmetallics, allowing the two material streams to be separated.



- DESIGNED FOR DURABILITY, EASY MAINTENANCE AND LOW COST OPERATION
- GREATER POLE REVERSAL FREQUENCY & MAXIMUM MAGNETIC STRENGTH PROVIDE SUPERIOR PRODUCT SEPARATION
- EASY ADJUSTMENTS OPTIMIZE SEPARATION EFFICIENCY
- DESIGNED FOR QUICK FIELD SET UP AND INSTALLATION
- MAXIMUM SEPARATION EFFICIENCY

Engineered, designed & fabricated in the USA.

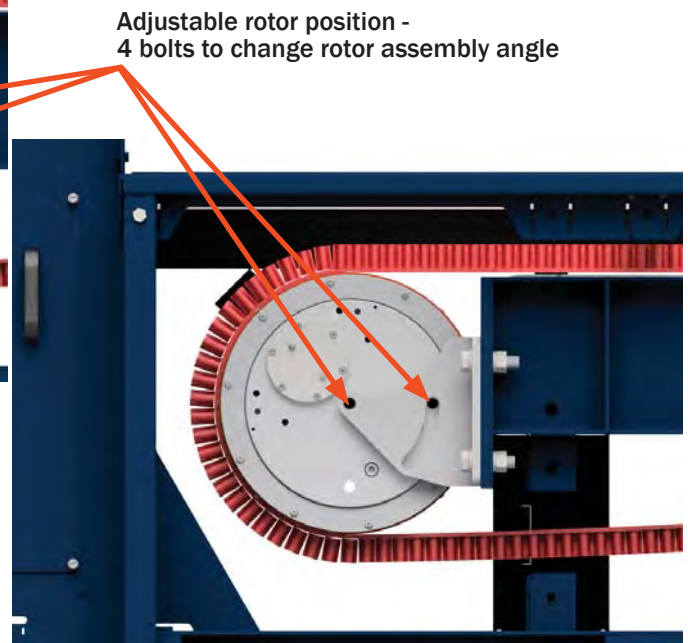
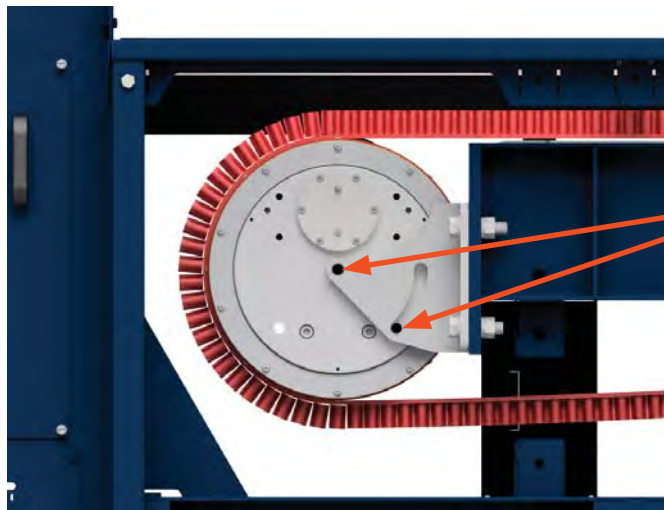


NON-FERROUS SEPARATION

ECENTRIC DESIGN FEATURES & SPECIFICATIONS

ROTOR:

- Adjustable rotor speed
- Rotor construction optimized for:
 - High speed operation - up to 3600 RPM
 - Quiet operation / low vibration
- Stainless steel rotor heads
- Easily adjustable rotor position to optimize separation efficiency
- Oversized, high-speed, self-aligning rotor bearings designed for more than 10 years of service life
- Epoxy encapsulated magnets eliminate possibility of rotor imbalance due to magnet movement
- High temperature filament wound outer shell
- 11 gauge, 304 stainless rotor shell

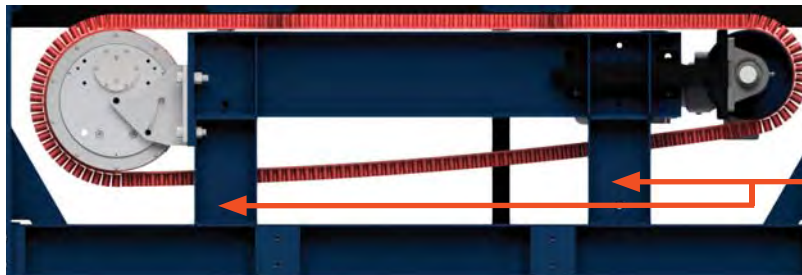


Adjustable rotor position -
4 bolts to change rotor assembly angle

FEATURES & SPECIFICATIONS

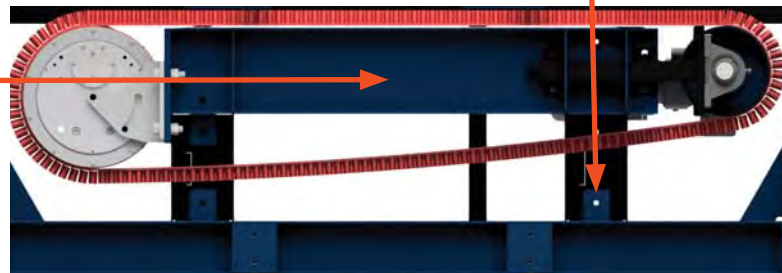
BELT:

- **EASY TO REPLACE - Less than 15 minutes :**
 - Move drive pulley take-up, remove 8 bolts & 2 supports
- High quality, endless polyurethane belt
- Corrugated sidewalls for long life and material containment
- Belt sizes 36, 48, and 60 inch widths
- Adjustable belt speed



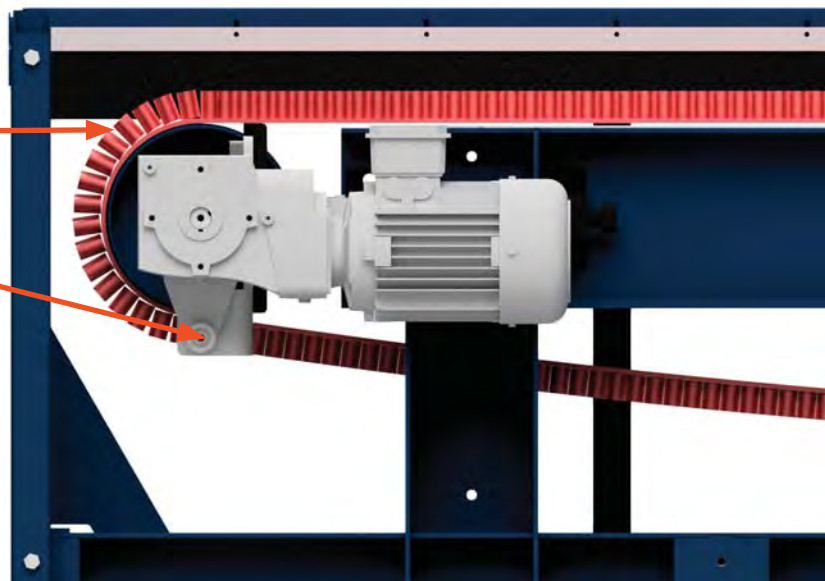
Easy-to-remove supports

Cantilevered frame makes endless belt replacement simple - 15 MINUTES OR LESS



Corrugated sidewalls for material containment

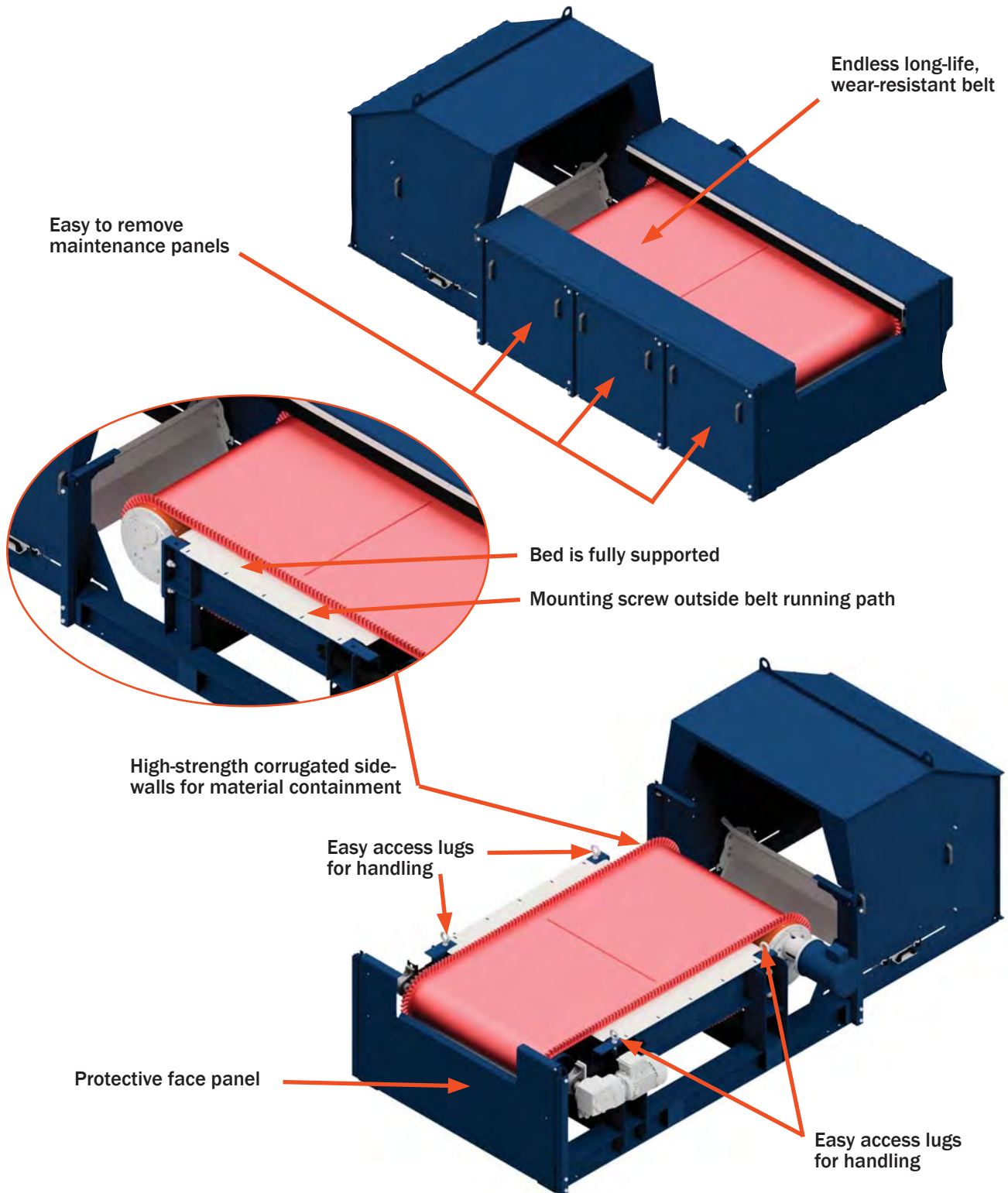
Belt motor mounted to take-up: Moves with take-up for easier belt adjustment



FEATURES & SPECIFICATIONS

GENERAL CONSTRUCTION:

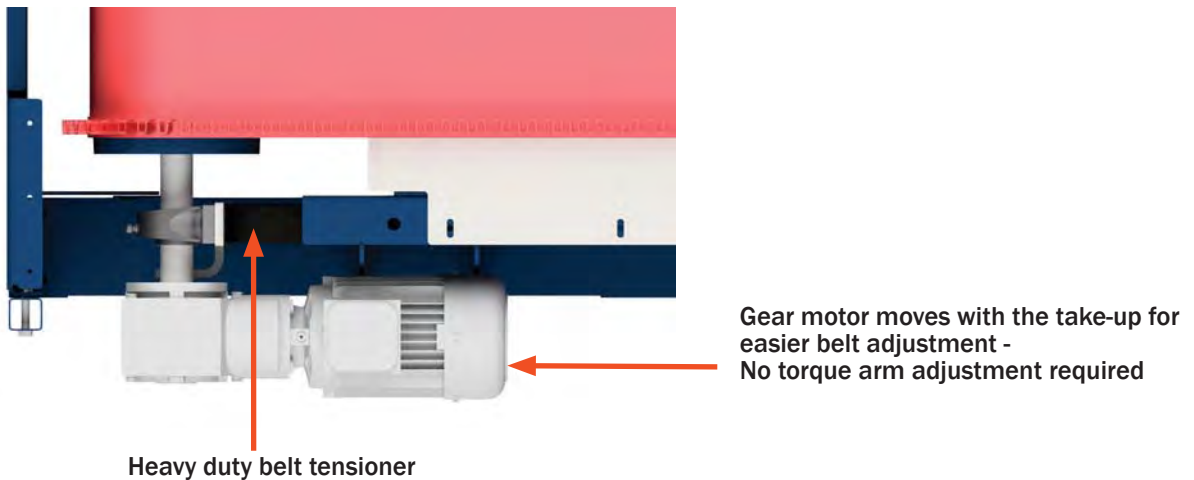
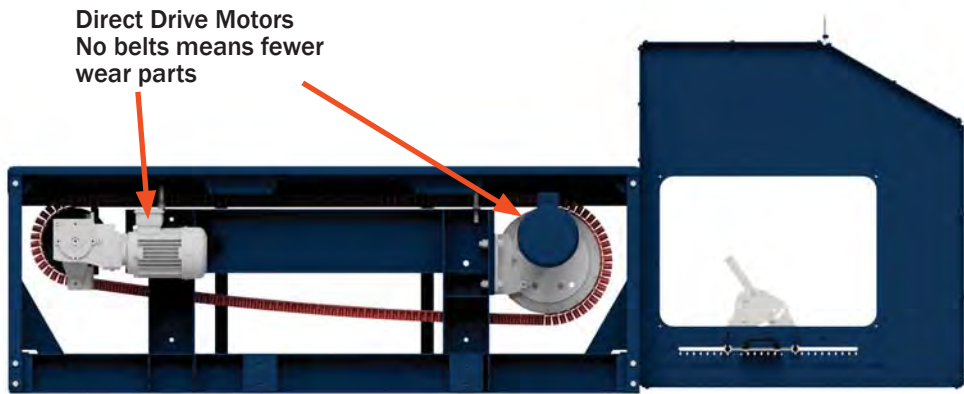
- Easy to remove access panels with captured bolt and nut - reduces maintenance time/cost
- Door design is self-aligning and self-supporting
- Door handles standard
- Stainless steel heads



FEATURES & SPECIFICATIONS

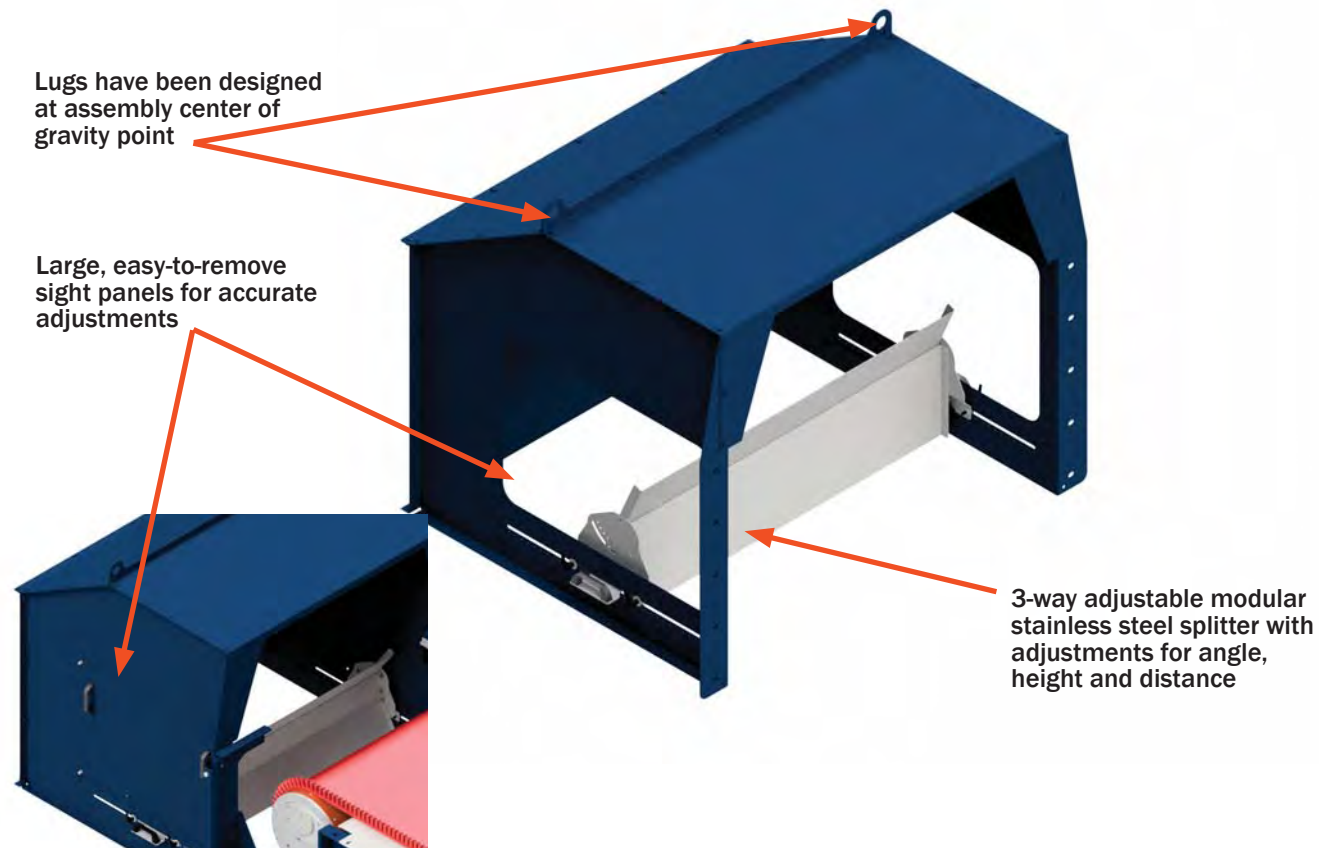
MOTORS / DRIVE SYSTEM:

- Direct drive rotor and belt motors
- Class II gear motor with synthetic oil for high & low ambients
- Belt motor moves with the take-up for easier belt adjustment
- Curve-crowned belt drive pulley for better belt tracking
- Easy to adjust, sealed, telescoping take-up frames, designed to prevent freeze-up in dirty environments

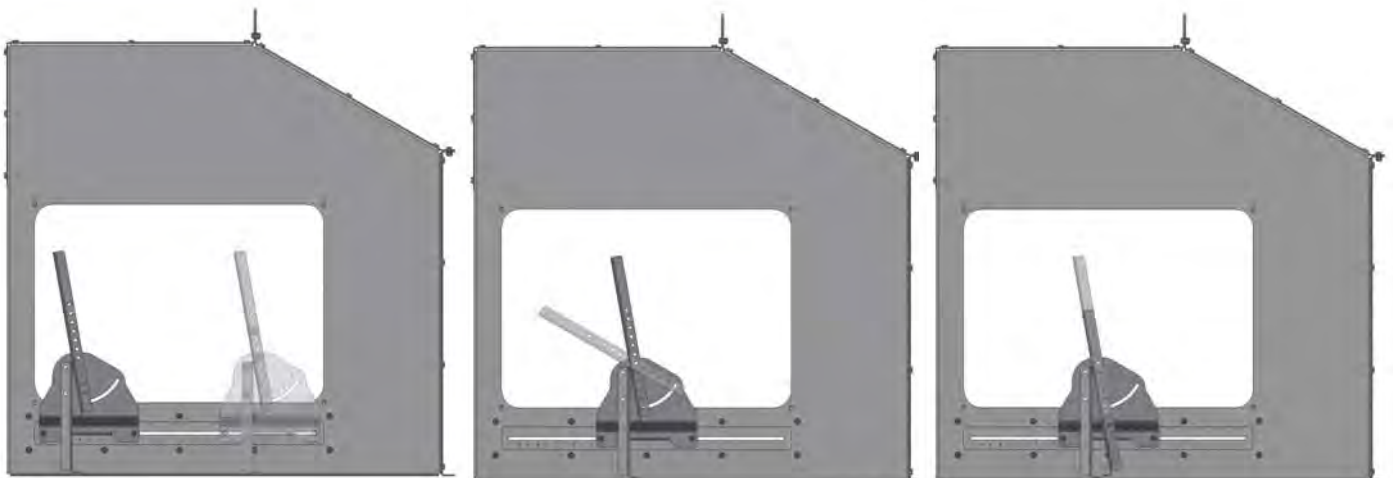


SPLITTER/HOPPER:

- Three degrees of adjustability for optimized separation (angle, height, and distance)
- Bolt-together design - assembly is detachable for easy shipment and assembly in the field
- Large easy-to-remove sight panels for accurate adjustments
- Lifting lugs have been designed at splitter assembly center of gravity point
- Stainless steel splitter construction



SPLITTER ADJUSTMENTS



1. Distance adjustment

2. Angle adjustment

3. Height adjustment

AVAILABLE MODELS

MODEL 9900

Belt Widths: 36", 48", 60"

Applications: Aluminum can recycling,
Electronic scrap metal processors,
Small particle processing & recovery operations



OPTIONS

Belt tracking sensors
Non-Standard Voltages
Custom lengths and heights
Low cost control panels
UL/CSA control panels

DINGS ADDITIONAL PRODUCTS



Overhead Permanent Magnets

Belt widths 24 to 72 inch
7 different strengths for different suspension heights
Stainless steel frame
Dings patented flux control circuit



Overhead Electromagnets

Belt widths 24 to 108 inch
12 different strengths
10-year coil warranty
No need for external expansion tank



Magnetic Drums

24 to 60 inch diameter
24 to 84 inch lengths
Magnetism is permanent - never weakens
Dings patented flux control circuit



PROVIDING SEPARATION
SOLUTIONS SINCE 1899

 **Dings**_{co.} magnetic group

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