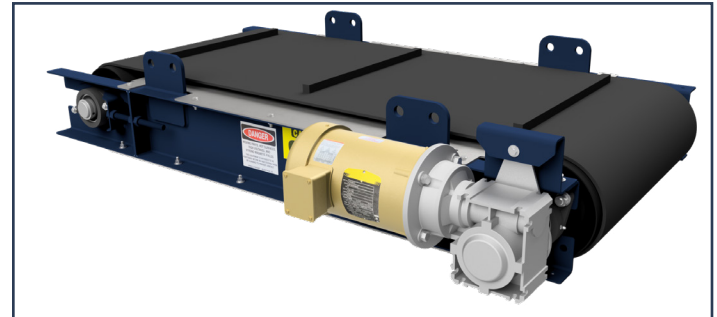


## Overhead Self-Cleaning Magnet:

## For Recycling Applications

Dings self-cleaning electro and permanent magnets are ideal for recovering valuable ferrous metal and improving the purity of recycled materials.



### Self-Cleaning Overhead Electromagnets

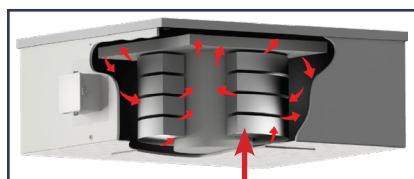
- ◇ Balanced magnetic circuit for maximum efficiency and equal distribution of length, width and depth of magnetic field.
- ◇ Stainless steel bottom and center wear plate provides extra protection in the main impact area
- ◇ IP56 AGMA Class II Motor
- ◇ Terminal connection box is NEMA 4 weather tight
- ◇ 9 different field strengths available

### Self-Cleaning Overhead Permanent Magnets

- ◇ Unique construction - smaller, lighter magnet for a given strength than any other in the industry!
- ◇ Magnet housing filled with Ceramic VIII magnet material
- ◇ Non-magnetic stainless steel frame construction that prevents collection of ferrous metals
- ◇ IP56 AGMA Class II Motor
- ◇ 5 different field strengths available

### Dings Electromagnetic Coils

- ◇ No insulation is needed with anodized aluminum straps—eliminating the major cause of coil failure (insulation breakdown)
- ◇ More magnetism and separating power - generated by extra turns
- ◇ Each turn is exposed to cooling oil - assuring a stronger, more efficient magnet
- ◇ Eliminates the need for external oil expansion pipes or tanks that require maintenance and can be damaged



Oil Flow =  Anodized Aluminum Strap



**20-Year Warranty on Coil Burnout**

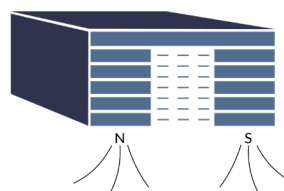
### Dings DFC Design improves the overall performance of the magnet in 3 ways

- ◇ The magnetic field is stronger
- ◇ The magnetic field extends deeper
- ◇ The magnetic field pattern is more uniform



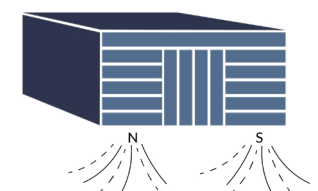
**On Magnetism**

**Conventional Magnetic Circuit**  
With "filler" between the poles



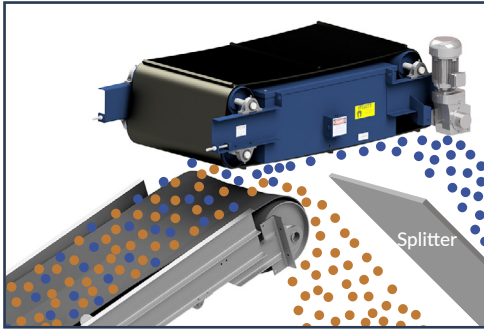
--- Indicates flux leakage in airspace

**Dings Magnetic Circuit**  
with blocking magnets between the poles

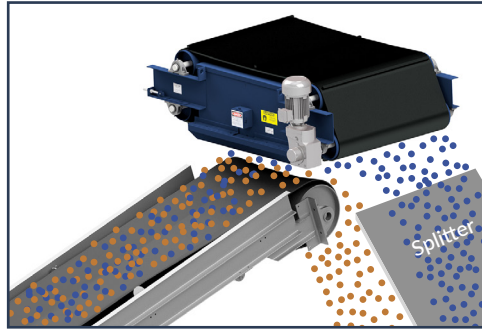


--- Indicates leakage converted to work force

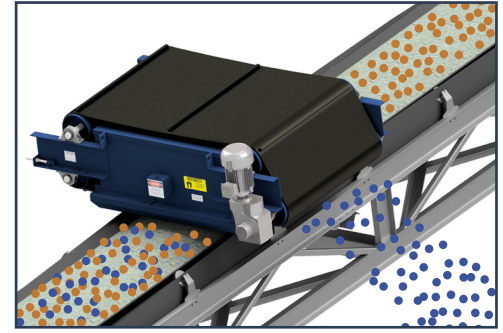
### Inline Mounting Position



### Crossbelt Over the Head Pulley



### Crossbelt Over the Conveyor Belt



Non-Magnetic Material ■ Magnetic Material ■

Inline orientation is a more efficient mounting position than Crossbelt over the conveyor belt. With an inline mounted magnet, ferrous metal is liberated from the material as it is discharged from the conveyor making it easier to separate. Inline orientation sometimes permits the use of a smaller more economic magnet compared to cross-belt over the conveyor belt because the suspension height is reduced.

Cross-belt over the head pulley orientation is a more efficient option than mounting over the belt. One reason for this is the conveyor belt flattens as it reaches the pulley allowing for a reduced suspension height. Another is as the material leaves the conveyor it becomes airborne liberating the tramp metal and making it easier to separate. This orientation may permit the use of a smaller more economic magnet.

In a cross-belt over the conveyor belt mounting position the magnet is installed at a right angle to the travel direction of the material on the belt. Tramp metal is collected by the magnet and discharged by the magnet's self-cleaning belt into a collection bin along side the conveyor. This orientation is commonly used when the magnet is being installed on an existing conveyor.

## More Dings Company Magnetic Separation Equipment

**MRF (Material Recovery Facility)  
Overhead Self-Cleaning  
Electromagnet**  
3" high cleats

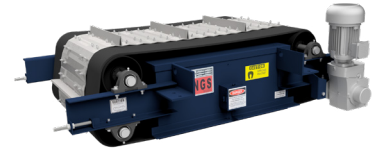


**Magnetic Head Pulley**  
Available in 3 different strength series

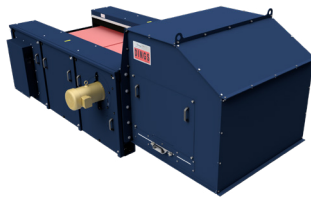


**Severe Duty Overhead  
Self-Cleaning Electromagnet**

Stainless steel pads and cleats to protect against damage caused by sharp metal



**Eddy Current Separator**  
Separate non-ferrous metal

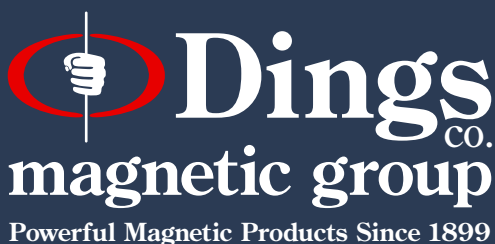


**Deep Draw Drum**



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## 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.

# **Dings magnetic group** Overhead Magnet Quote Request for Recycling

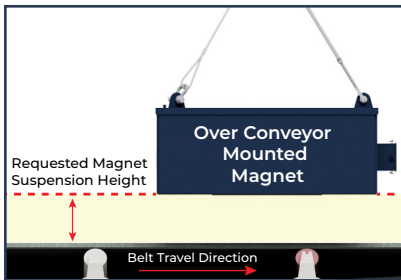
Company: \_\_\_\_\_ Quote Required Date: \_\_\_\_\_  
 Address: \_\_\_\_\_ Contact Person: \_\_\_\_\_  
 City, State, ZIP: \_\_\_\_\_ Contact Email: \_\_\_\_\_  
 Phone/Cell: \_\_\_\_\_ Email Completed RFQ to: magsales@dingsco.com  
 Date Equipment Required by: \_\_\_\_\_

\*You Must Select One to Print:    **Imperial**    **Metric**

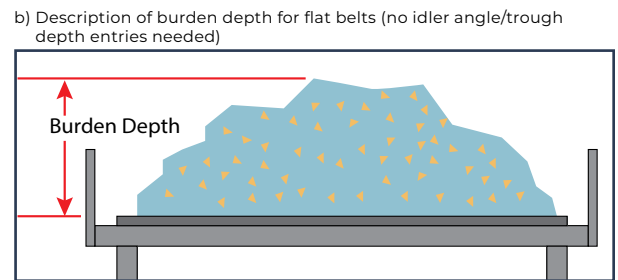
## Information for Aggregate Applications

Type of Material Being Conveyed: \_\_\_\_\_

Belt Width: \_\_\_\_\_      Belt Speed: \_\_\_\_\_      Belt Capacity: \_\_\_\_\_  
 Bulk Density: \_\_\_\_\_      Max Lump Size: \_\_\_\_\_      Max. Burden Depth: \_\_\_\_\_ (b)  
 Requested Magnet Suspension Height: \_\_\_\_\_ (a)  
 Conveyor Inclined?    Yes      No      Inclined: \_\_\_\_\_ ° degrees  
 Supply Requirements:      Volts: \_\_\_\_\_      Phase: \_\_\_\_\_      Cycles Per Second (Hz): \_\_\_\_\_  
 Description of Largest & Smallest Size of Metal to be Removed: \_\_\_\_\_



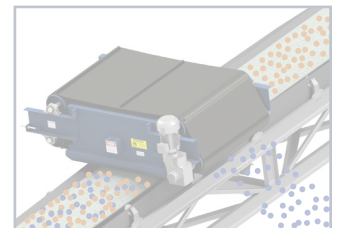
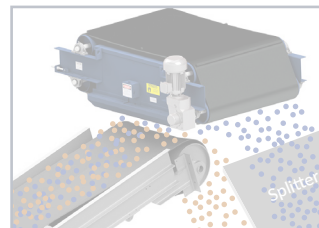
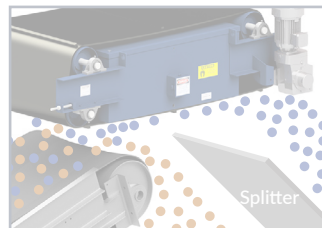
a) Description of magnet suspension height.



b) Description of burden depth for flat belts (no idler angle/trough depth entries needed)

## Overhead Magnet Selection

Electromagnet       Permanent  
 Overhead Mounting Selection:  
 Inline  
 Cross-Belt Over Head Pulley  
 Cross-Belt Over Conveyor



Non-Magnetic Material ■    Magnetic Material ■

## Overhead Magnet Options

Dust Cover       Hazardous Location  
 Pulley Guard       CSA Approved Model  
 High Temp. Belt       Zero Speed Switch  
 Armor-Clad Durabelt  
 Special Requirements: \_\_\_\_\_

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## Rectifier Options

\*Note: Electromagnets Require a Rectifier for Operation:  
 Rectifier:  
 Yes:      No:  
 ETL Listed Model  
 Hazardous Location

Call us for Expert Support of Dings Co. Equipment - Regardless of its Age