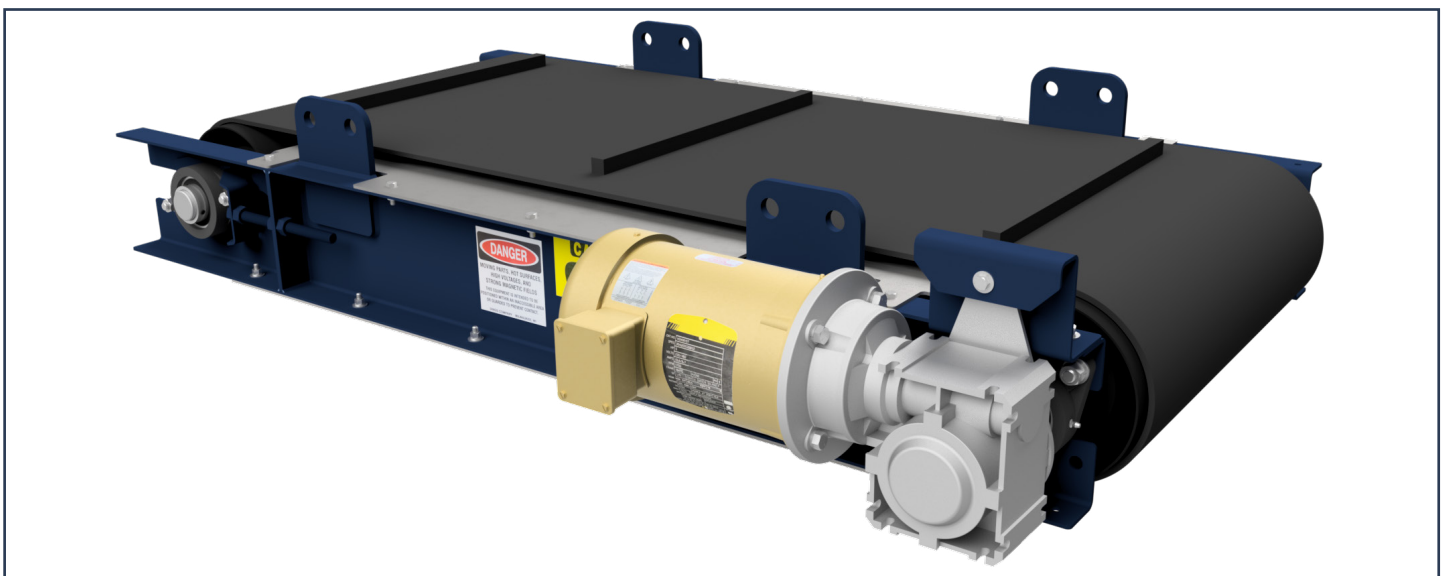


## Overhead Self-Cleaning Permanent Magnet

- ◇ Unique construction - the best ratio of field strength produced per size & weight of any in the industry!
- ◇ Magnet housing filled with Ceramic VIII magnet material.
- ◇ Multi-ply rubber belt with hot vulcanized 1" cleats for superior adhesion
- ◇ Non-magnetic stainless steel construction that prevents collection of ferrous metals on the magnet frame.



### Dings Self-Cleaning Permanent Magnet

Dings Self-Cleaning Models' belt continuously travels across the face of the magnet to automatically discharge tramp iron. This save time and labor costs.

The Self Cleaning Permanent Model comes equipped with a standard multi-ply rubber belt with 1 inch vulcanized cleats. A material recovery facilities (MRF) model is also available with a belt That has 3 inch cleats. For more severe applications, an armor clad "Durabelt" made of stainless steel pads and cleats is also available.

### Dings Flux Control (DFC) Circuit

Dings Flux Control (DFC) Circuit design eliminates internal leakage between magnetic poles and improves separating performance. Other 'conventional' magnetic circuits contain air or filler material between the magnetic poles; this allows flux (magnetism) to escape (leak out) and be wasted. In Dings DFC design - blocking magnets are strategically positioned in the spaces between the magnetic poles. These redirect the flux outward, into your product, converting the wasted flux into working force - making the magnet more efficient.

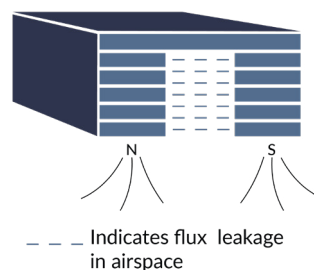
### Dings DFC Design improves the overall performance of the magnet in 3 ways

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

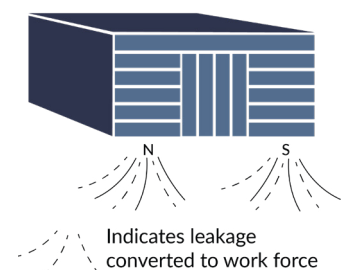


**On Magnetism  
for all Permanent  
Magnets**

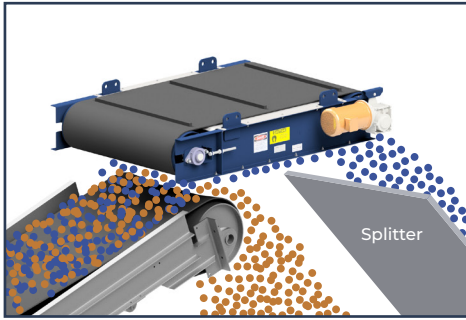
Conventional Magnetic Circuit  
With "filler" between the poles



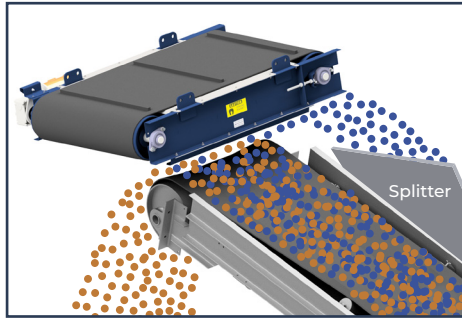
Dings Magnetic Circuit  
with blocking magnets  
between the poles



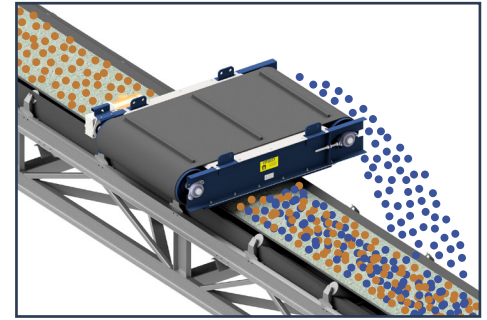
### Inline Mounting Position



### 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

#### Magnetic Head Pulley

Available in 3 different strength series



#### MRF (Material Recovery Facility) Overhead

Self-Cleaning Electromagnet  
3" high cleats



#### Overhead Self-Cleaning Electromagnet

20-year warranty on coil burnout



Eddy Current Separator  
Separate non-ferrous metal



#### Deep Draw Drum Magnet



ver. 4/25

# 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.

# **Dings magnetic group**

## Overhead Self-Cleaning Permanent Magnet Quote Request

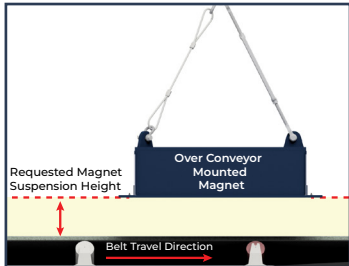
Company: \_\_\_\_\_ Quote Required Date: \_\_\_\_\_  
 Address: \_\_\_\_\_ Contact Person: \_\_\_\_\_  
 City, State, ZIP: \_\_\_\_\_ Contact Email: \_\_\_\_\_  
 Phone/Cell: \_\_\_\_\_ Email Completed RFQ to: magsales@dingsco.com  
 Date Equipment Required by: \_\_\_\_\_ **\*You Must Select One to Print: Imperial Metric**

### Application Information

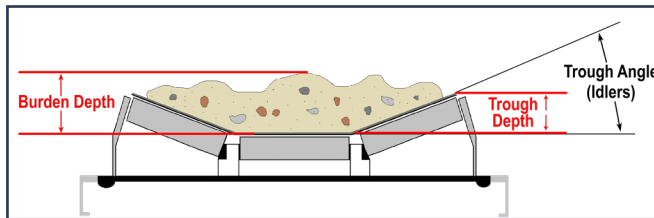
Application: \_\_\_\_\_  
 Type of Material Being Conveyed: \_\_\_\_\_  
 Belt Width: \_\_\_\_\_ Belt Speed: \_\_\_\_\_ Belt Capacity: \_\_\_\_\_  
 Bulk Density: \_\_\_\_\_ Max Lump Size: \_\_\_\_\_ Max. Burden Depth: \_\_\_\_\_ (b)  
 Requested Magnet Suspension Height: \_\_\_\_\_ (a) Trough Depth (if known): \_\_\_\_\_ (b)  
 Conveyor Inclined? Yes No Inclined: \_\_\_\_\_ ° degrees  
 Trough Idlers: 0° degrees 20° degrees 35° degrees 45° degrees (b)  
 Supply Requirements: Volts: \_\_\_\_\_ Phase: \_\_\_\_\_ Cycles Per Second (Hz): \_\_\_\_\_

Description of Largest & Smallest Size of Metal to be Removed: \_\_\_\_\_

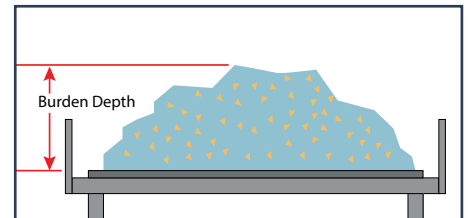
a) Description of magnet suspension height.



b) Description burden depth for troughed belt (idler angle and trough depth indicated).



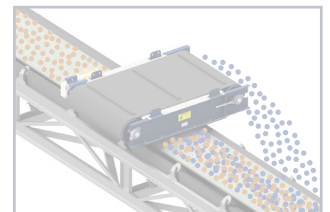
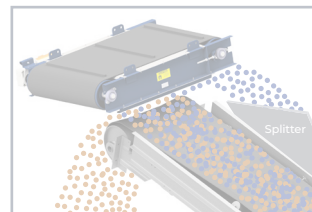
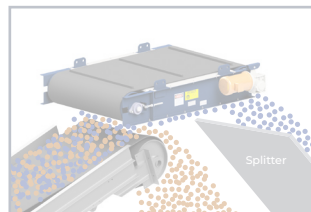
b) Description of burden depth for flat belts (no idler angle/trough depth entries needed)



### Overhead Magnet Mounting Selection

- Inline Over the Head Pulley
- Crossbelt Over the Head Pulley
- Crossbelt over the Conveyor

Non- Magnetic Material =  Magnetic Material = 



### Overhead Magnet Options

- |                 |                    |                  |
|-----------------|--------------------|------------------|
| Dura Belt       | Hazardous Location | Hydraulic Motor  |
| Dust Cover      | CSA Approved Model | Flow Rate: _____ |
| High Temp. Belt | Pulley Guard       | Pressure: _____  |

Special Requirements: \_\_\_\_\_

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