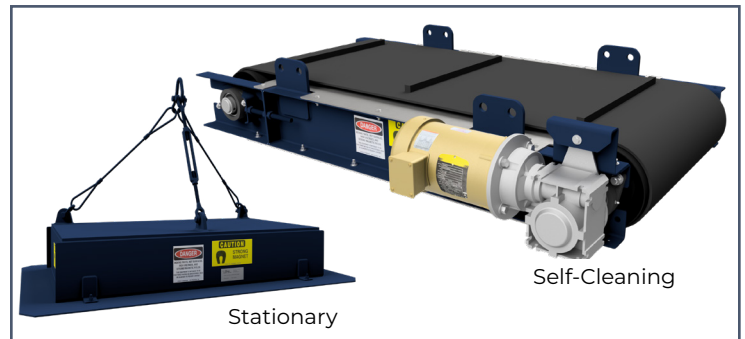
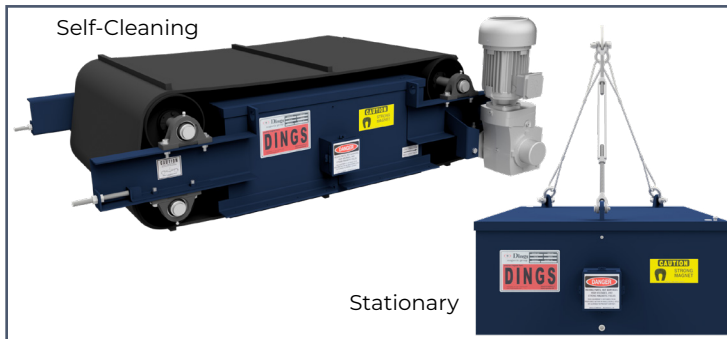


## Overhead Magnets Electro and Permanent

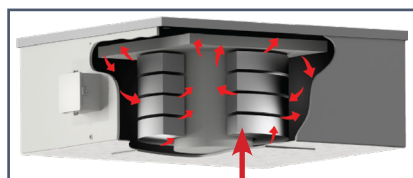
## Aggregate & Mining Applications

Dings overhead magnets provide the industry's best performance and the durability that's required to prevent damage to processing equipment and costly down-time



### Dings Electromagnets

- ◇ Balanced Magnetic Circuit for maximum efficiency and equal distribution of length, width and depth of magnetic circuit
- ◇ Multi-ply rubber belt with hot vulcanized 1" cleats for superior adhesion (Self-cleaning models)
- ◇ Severe Duty Model with stainless steel Durabelt pads and cleats to protect underlying rubber belt (Self-cleaning)
- ◇ Stationary Model is virtually maintenance-free with no moving parts. (except cooling oil changes as needed)
- ◇ Stainless steel bottom and center wear plate provides extra protection in the main impact area



Oil Flow =  Anodized Aluminum Strap



20-Year Warranty on Coil Burnout

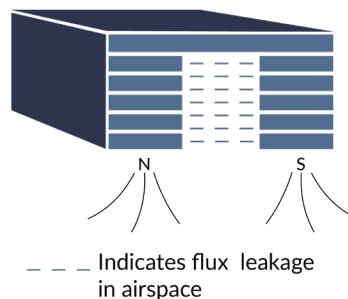
### Dings Electromagnetic Coils

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

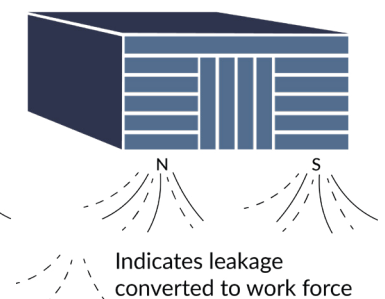
### Dings Permanent Magnets

- ◇ No power supply needed for magnet (Stationary Model)
- ◇ Maintenance-free design (Stationary Model)
- ◇ 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
- ◇ Full stainless steel bottom plate
- ◇ 8 point mounting lugs (self-cleaning models)

Conventional Magnetic Circuit With "filler" between the poles



Dings Magnetic Circuit with blocking magnets between the poles



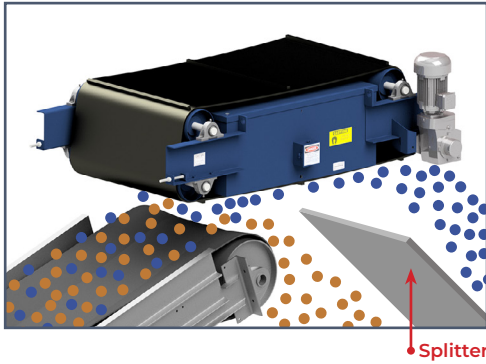
### Dings DFC Design improves the overall performance of the magnet in 3 ways

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

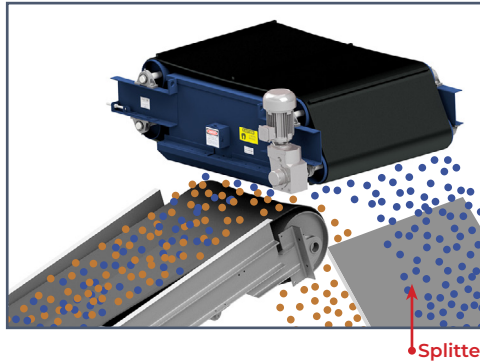


On Magnetism for Permanent Magnets

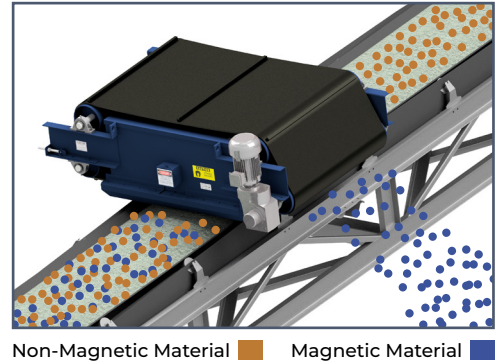
### Inline Mounting Position



### Crossbelt Over the Head Pulley



### Crossbelt Over the Conveyor Belt



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.



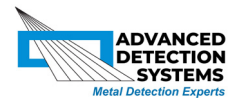
### Dings Electromagnetic Rectifier

- ◇ Maintenance-free
- ◇ Overload capacity for short infrequent periods
- ◇ Corrosion protection in extreme environments

Note: All electromagnets require a DC power supply. Rectifiers converts alternating current (AC) from your local power source to the necessary direct current (DC) needed by electromagnets.

**Web:** dingsmagnets.com  
**Email:** magsales@dingsco.com  
**Phone:** (414)672-7830

### Advanced Detection Systems Aggregate & Mining Equipment



**Advanced Detection Systems**  
 a Dings co. Magnetic Group  
 sister company.

**SurroundScan Protector HD**  
 Reliable heavy-duty  
 metal detectors

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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. We listen to our customers to gain an understanding of their needs and 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.

## Overhead Magnet Quote Request for Aggregate & Mining

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) Trough Depth (if known): \_\_\_\_\_ (b)

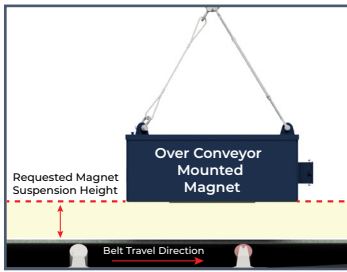
Conveyor Inclined? Yes No Inclined: \_\_\_\_\_ ° degrees

Trough Idlers: 0° degrees 20° degrees 35° degrees 45° degrees (b)

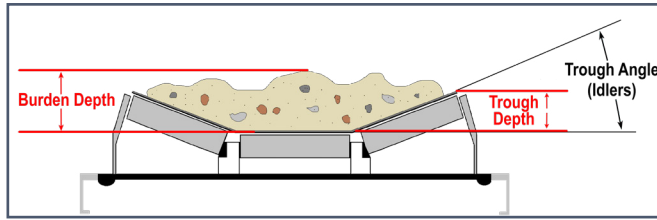
Supply Requirements: Volts: \_\_\_\_\_ Phase: \_\_\_\_\_ Cycles Per Second (Hz): \_\_\_\_\_

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

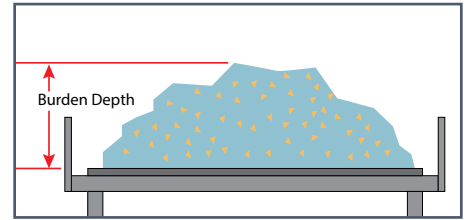
a) Description of magnet suspension height.



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

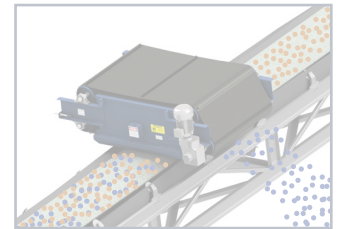
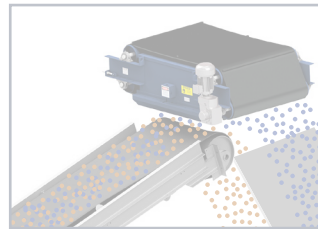
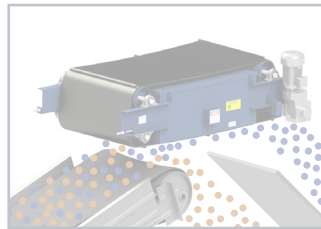


b) Description of burden depth for flat belts (no idler angle/trough depth entries needed)



### Overhead Magnet Selection

- Electromagnet      Permanent
- Self-Cleaning      Stationary
- 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      4-Point Suspension System

Armor-Clad Durabelt

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

\*Stationary Model Only

### Rectifier Options

\*Note: Electromagnets Require a Rectifier for Operation:

Rectifier:

Yes:      No:

ETL Listed Model

Hazardous Location

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