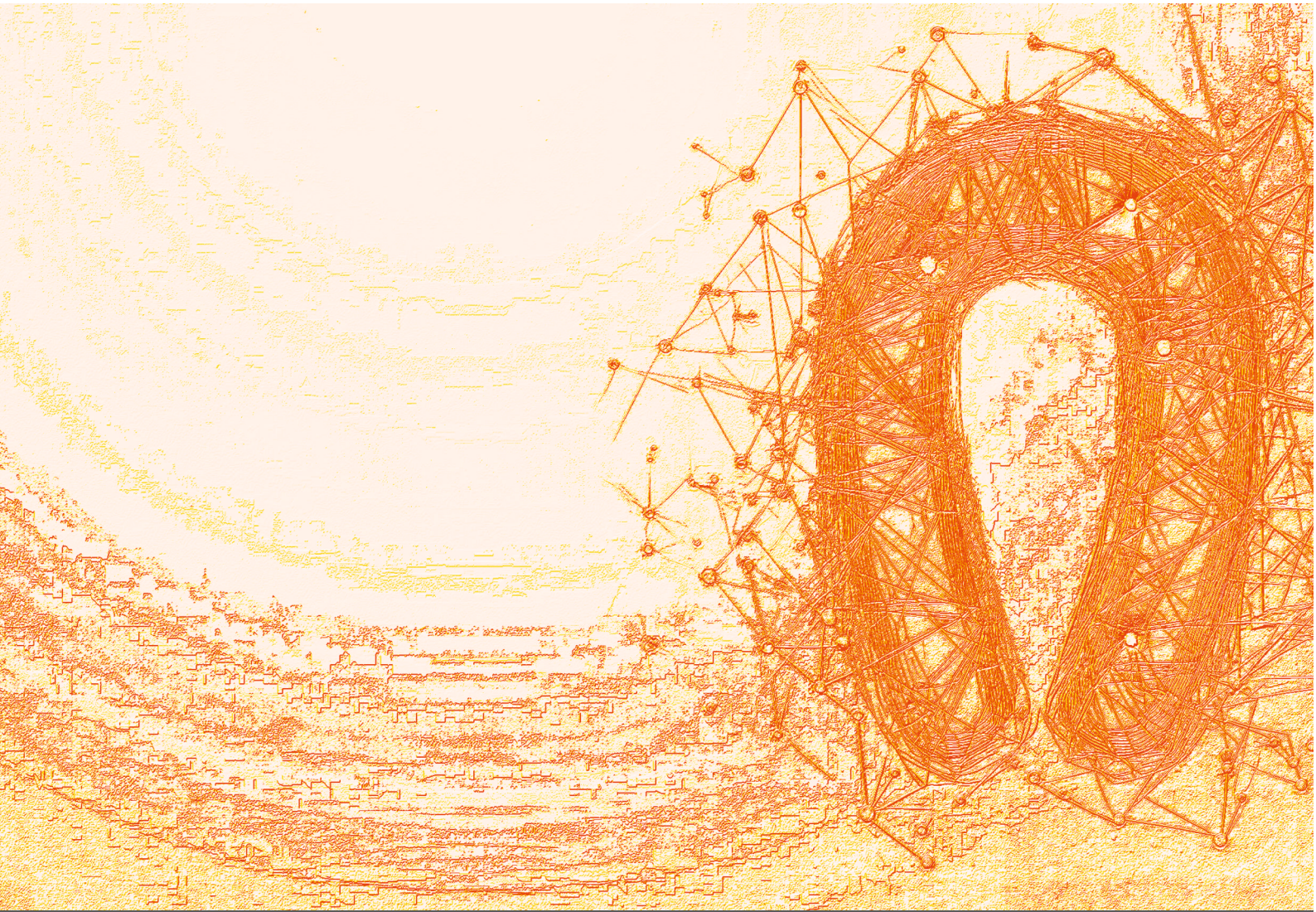




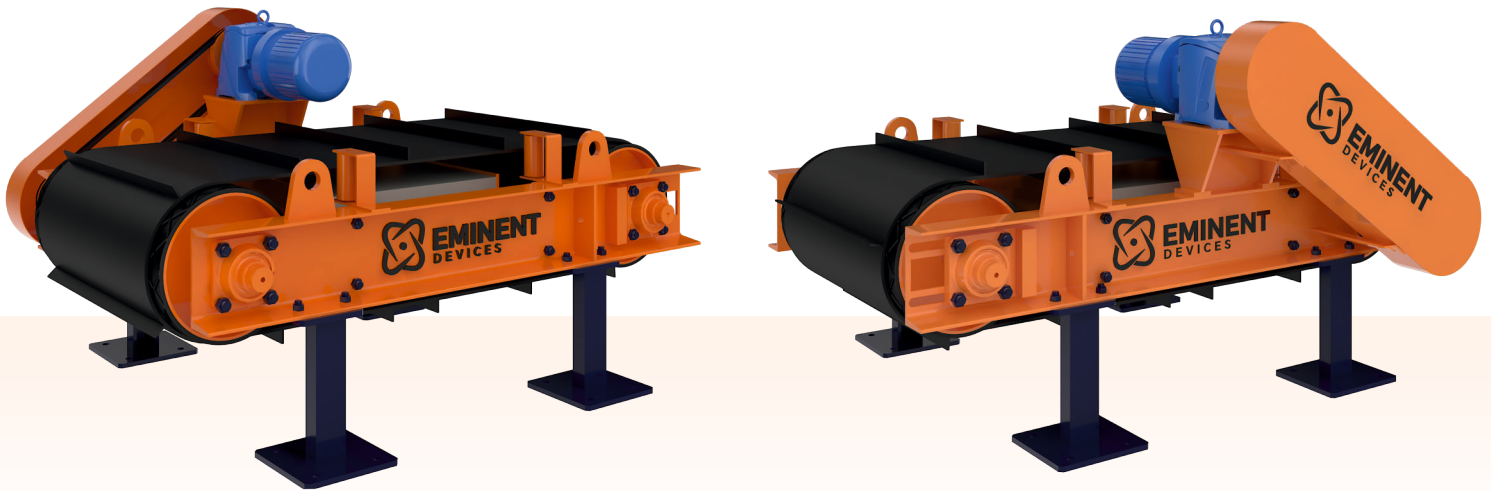
**EMINENT**  
DEVICES



**INDUSTRIALIZING**  
**MAGNETIC**  
**SOLUTIONS**

## PERMANENT OVERBAND MAGNETIC SEPARATOR ▶▶▶

Overband Magnetic Separators that are designed to Separate tramp iron from the product carried by a belt, vibratory feeders or by inclined planes. Overbands are mainly used to protect machines such as crushers, shredders, and others, to remove ferrous particles and purify products ( Industries like Foundries, Coal Mines, Stone, Cement Works, Food, Sponge Iron, Charcoal, Glass Domestic waste recycling Plants). Permanent Magnetic Over Band Separators are used when an automatic removal of iron tramp iron. If not, then permanent suspension magnets are more preferable.



Overband Magnetic Separator is made with high-quality materials and advanced technology, ensuring reliable performance and long service life. The Overband Magnetic Separator is widely used in mining, cement, recycling, and other industries for the efficient separation of magnetic particles.

### Cross Type

In practice, installation at right angles to the conveyor belt is most common, because this is the simplest solution in an existing line. An additional advantage is that the pieces of ferrous metal are discharged to the side. From the logistical standpoint, this makes processing simpler.

### Inline Type

If you have the option of placing the overband magnet in line with the conveyor belt, this is always preferable. The advantage of this is that the transported material 'flies apart' at the end of the belt, where the pulley is located, and is completely separated for several milliseconds. This allows the magnet to easily pull the ferrous metal out of the product flow.

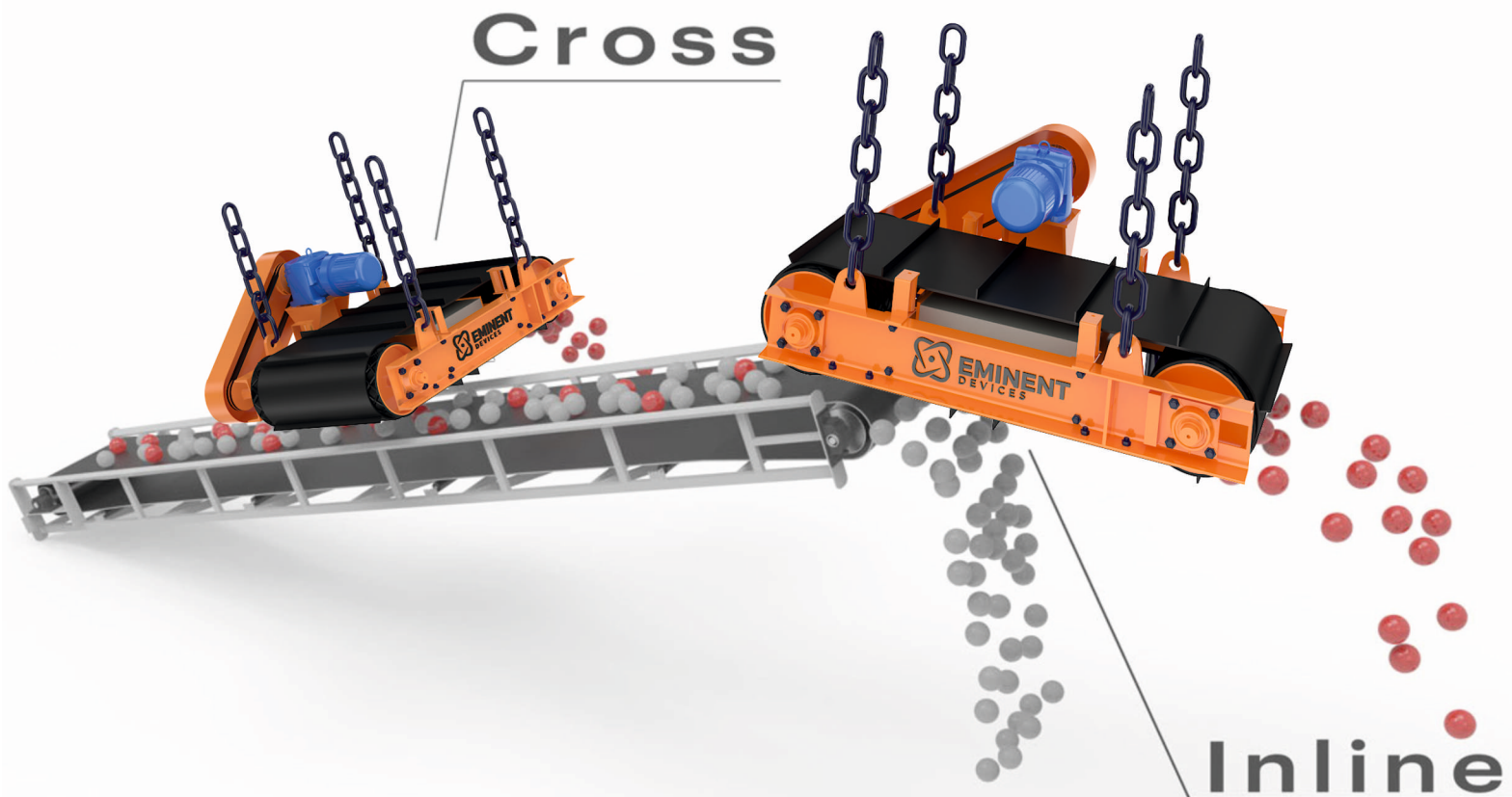
## Advantages

- ▶ Low power consumption; just the conveyor belt motor. - Continuously self-cleaning.
- ▶ Low maintenance; just belt and bearings.
- ▶ Pure iron fraction.
- ▶ Suitable for low and high temperatures.

## Characteristics

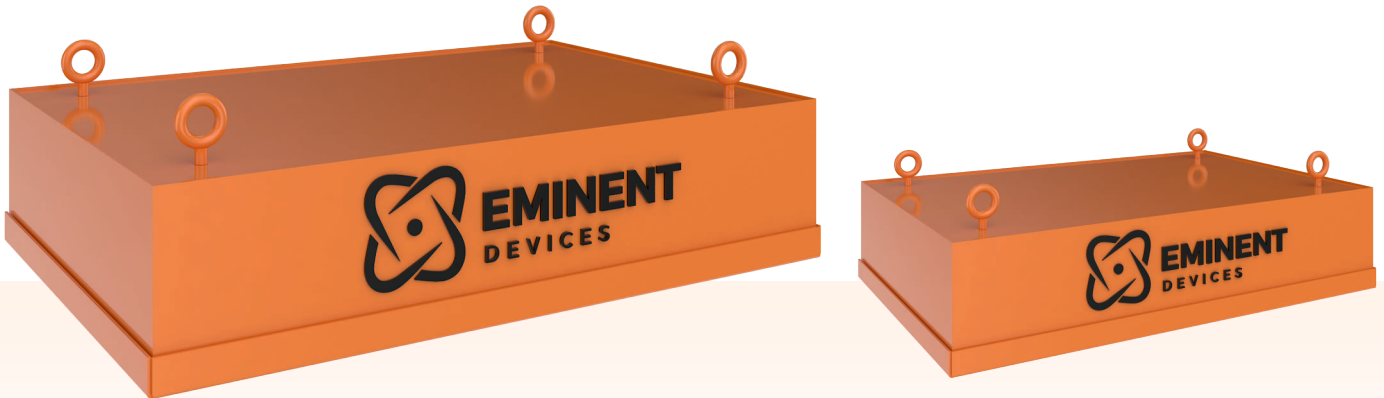
Construction near the magnet must be made of stainless steel or non-magnetic material.

- ▶ Located above the conveyor belt or reversing pulley.
- ▶ Relatively large and heavy



## PERMANENT SUSPENSION MAGNET ▶▶▶

A permanent suspension magnet, also known as a suspended magnetic separator, is a magnetic separator suspended over a conveyor belt or a vibrating feeder to remove ferrous contaminants from the conveyed material. It offers an efficient and continuous solution for separating unwanted magnetic materials from bulk materials in various industries.



### Advantages

- ▶ Constructed using non-deteriorating, high power magnet components.
- ▶ Optional Rare Earth models available.
- ▶ Intensely durable construction resisting moisture, corrosion, and heat.
- ▶ Inexpensive to operate with no cables or wires required.
- ▶ Ferrous material is extracted and held in place until manually cleaned off.
- ▶ Optional stainless steel slider plate simplifies clearing of ferrous.
- ▶ Suspension magnets come standard with suspension chains and hardware.
- ▶ Can be suspended horizontally or on an incline.
- ▶ Available sizes cover a full range of conveyor widths

## PERMANENT MAGNETIC DRUM SEPARATOR ▶▶▶

The Permanent Magnetic Drum Separator consists of a stationary magnetic assembly with a revolving drum that is enclosed in a stainless steel housing. The magnetic drum is made of high-quality materials and is designed to rotate at a fixed speed to ensure maximum magnetic separation efficiency. As the material flows through the housing, the ferrous and para-magnetic particles are attracted and held to the surface of the rotating drum. The non-magnetic material is discharged through the bottom of the housing, while the magnetic particles are carried along with the drum and discharged at the rear end of the separator.



### Advantages

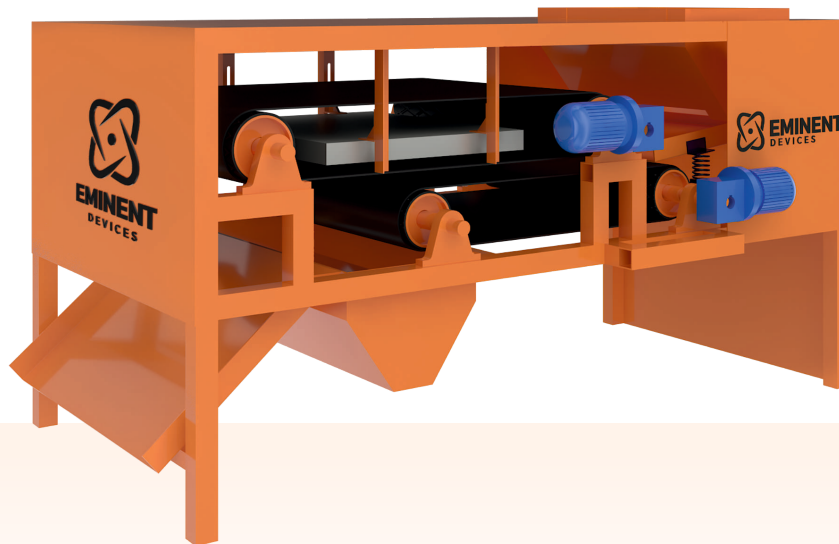
- ▶ High degree of separation.
- ▶ Continuous separation.
- ▶ Relatively little installation space required.
- ▶ Complete system or add-on module.
- ▶ Various options available (wear shells, magnet segment rotation etc.)

### Characteristics

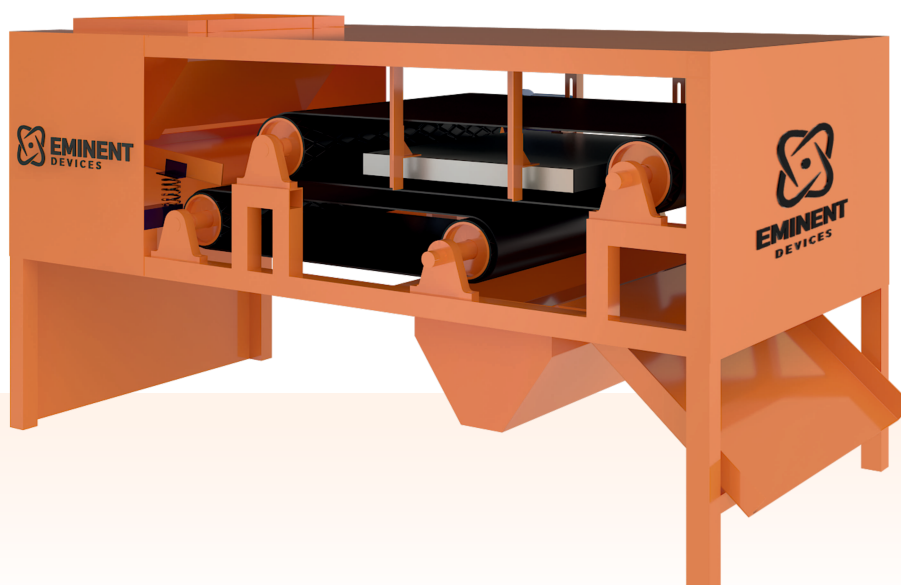
- ▶ Incoming product flow must be spread evenly (by a vibratory feeder, for example).
- ▶ Not suitable for damp product flows.
- ▶ The cleats enable it to pull the material along

## CONCENTRATOR MAGNETIC SEPARATOR ▶▶▶

Permanent Magnetic Concentrator Separators is extensively used for advancing or concentrating material containing a very high percentage of magnetic or where magnetic/mechanical agitation is required for the separation of many difficult materials. It is perfect for the improving Sponge Iron/Cast Iron borings, Steel/Brass Aluminum turnings, Chips and for mineral beneficiation application such as the purification of dry ceramic and refractory materials, reclamation of abrasive grains, removal of iron contamination from chemical powders and grains and for many other such applications requiring maximum separation with minimum production loss. There are two type of concentrator magnetic separator. Inline magnetic separator and cross line magnetic separator.

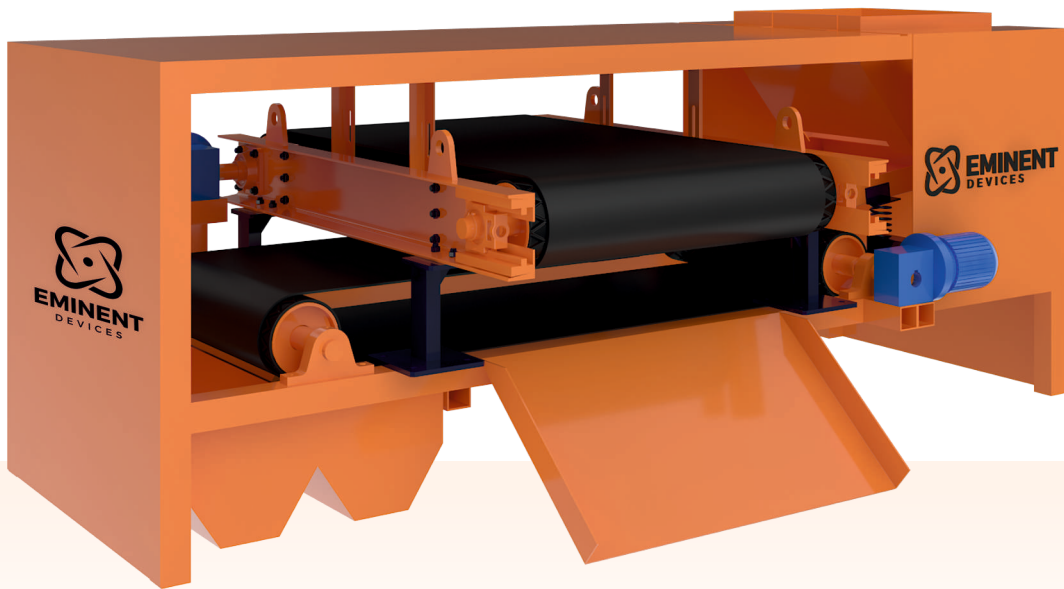


## INLINE MAGNETIC SEPARATOR

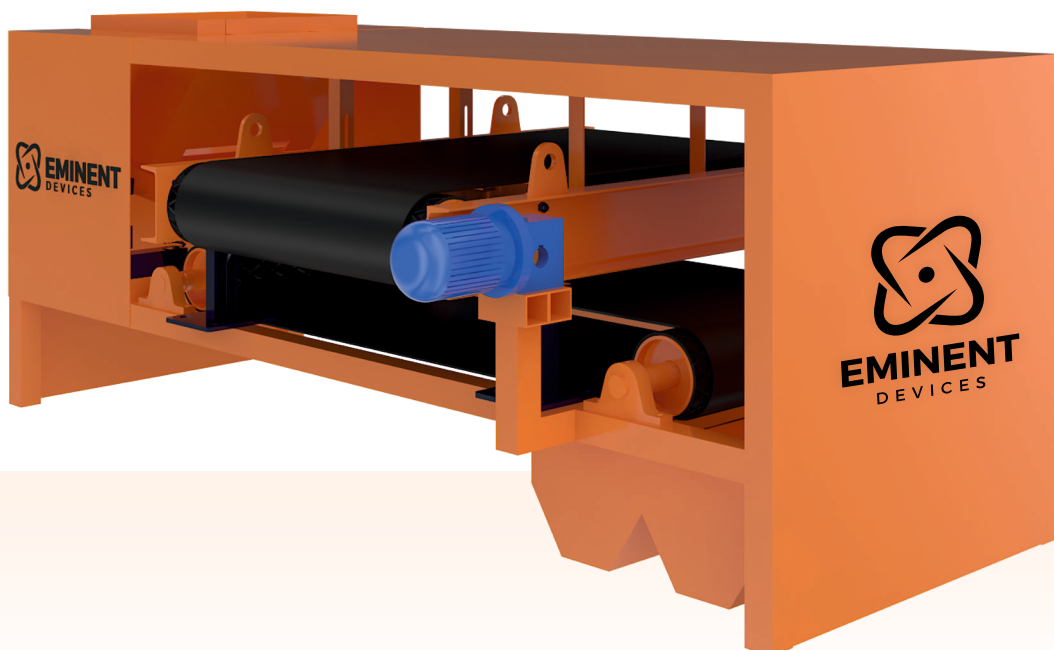




**EMINENT**  
DEVICES

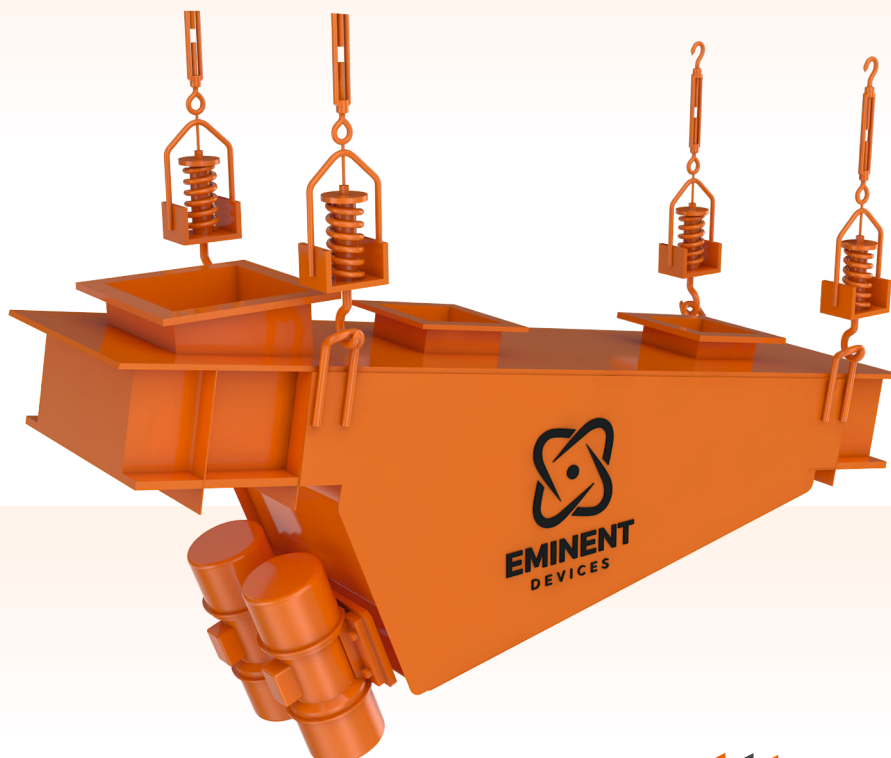
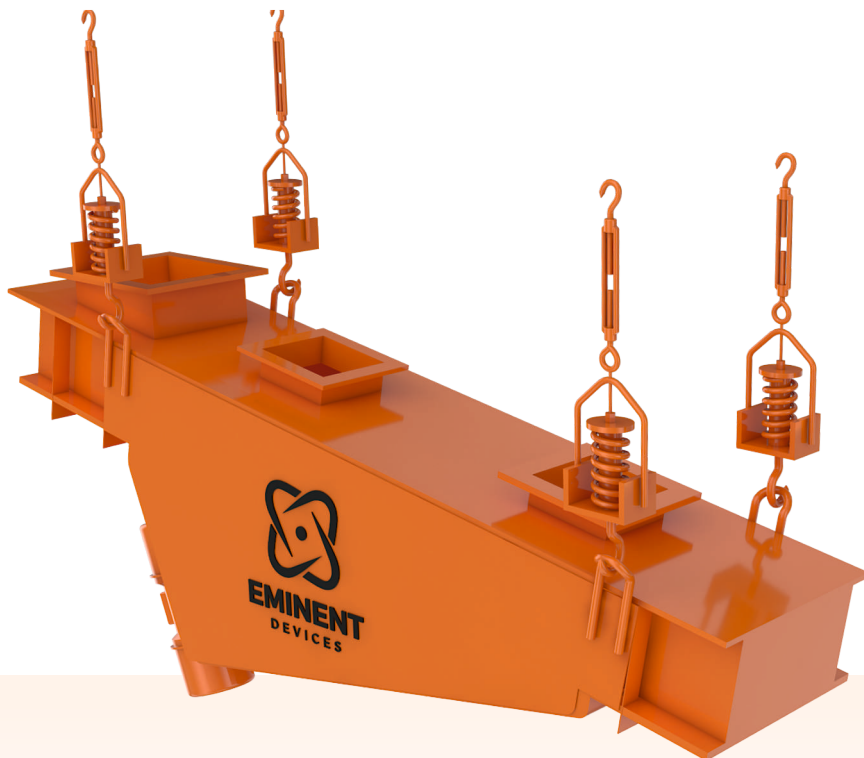


## CROSSLINE MAGNETIC SEPARATOR



## VIBRATING FEEDER ▶▶▶

The vibrating feeder utilizes the rotation of the vibrator's eccentric to generate centrifugal force, causing movable components such as the sieve compartment and vibrators to engage in continuous circular or near-circular motion. As the materials interact with the sieve compartment, they undergo a continuous throwing motion, which facilitates their ongoing transfer to the discharge port.



## PERMANENT MAGNETIC PULLEY ▶▶▶

A magnetic pulley is a specialized type of pulley used in conveyor systems to separate and remove ferrous contaminants from materials being conveyed. It consists of a pulley with a magnetic surface that attracts and holds ferrous particles, preventing them from being carried further along the conveyor belt.



### Advantages

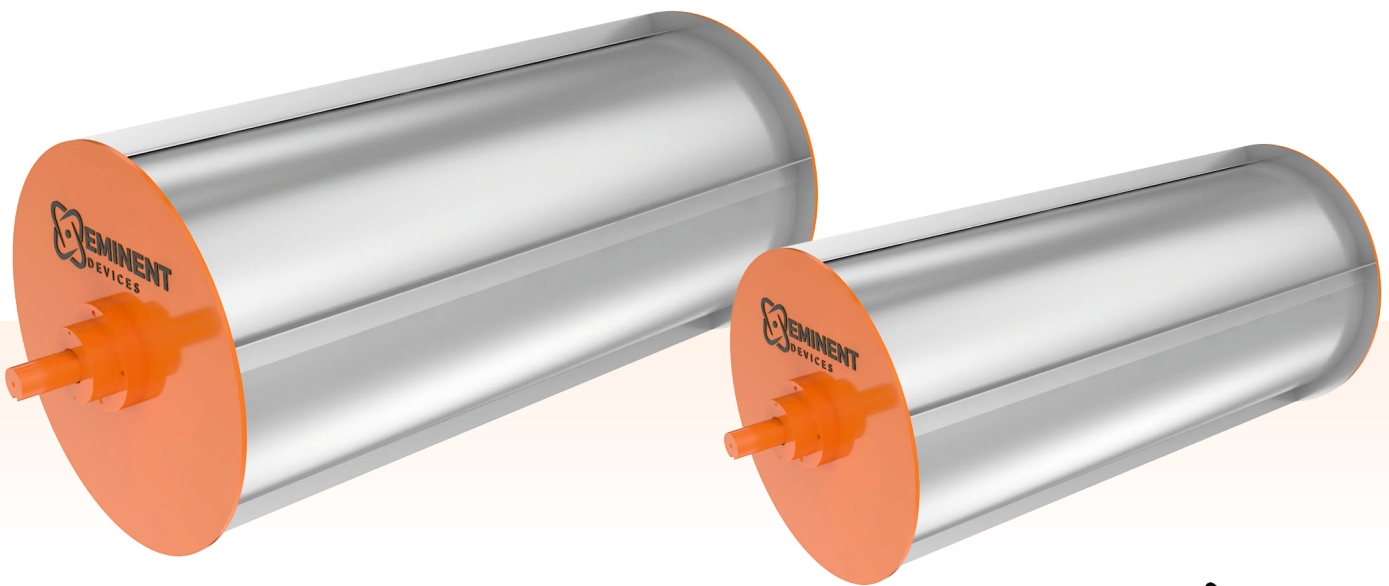
- ▶ High degree of separation.
- ▶ Easy to integrate/install.
- ▶ Many sizes (working widths, diameters and shaft types).
- ▶ No additional power consumption.
- ▶ Suitable for wet or damp product flows.
- ▶ Cost-efficient.

### Characteristics

- ▶ Incoming product flow must be spread evenly (by a vibratory feeder, for example).
- ▶ Not suitable for damp product flows.
- ▶ The cleats enable it to pull the material along

## PERMANENT MAGNETIC DRUM ▶▶▶

Permanent drum magnets are versatile, robust magnetic separators that are well suited to a wide range of applications, including those in the food, plastics, powder and bulk, grain and milling, and metal recycling industries. They excel at separating small ferrous and paramagnetic particles from dry granular materials, in addition to being highly efficient at recovering and separating larger sized particles of ferrous metal. Permanent drum magnets are available in a wide range of diameters, feed widths, and magnetic strengths—available in standard ferrite and high-intensity rare earth.



## FLOOR MAGNETIC SWEEPER ▶▶▶

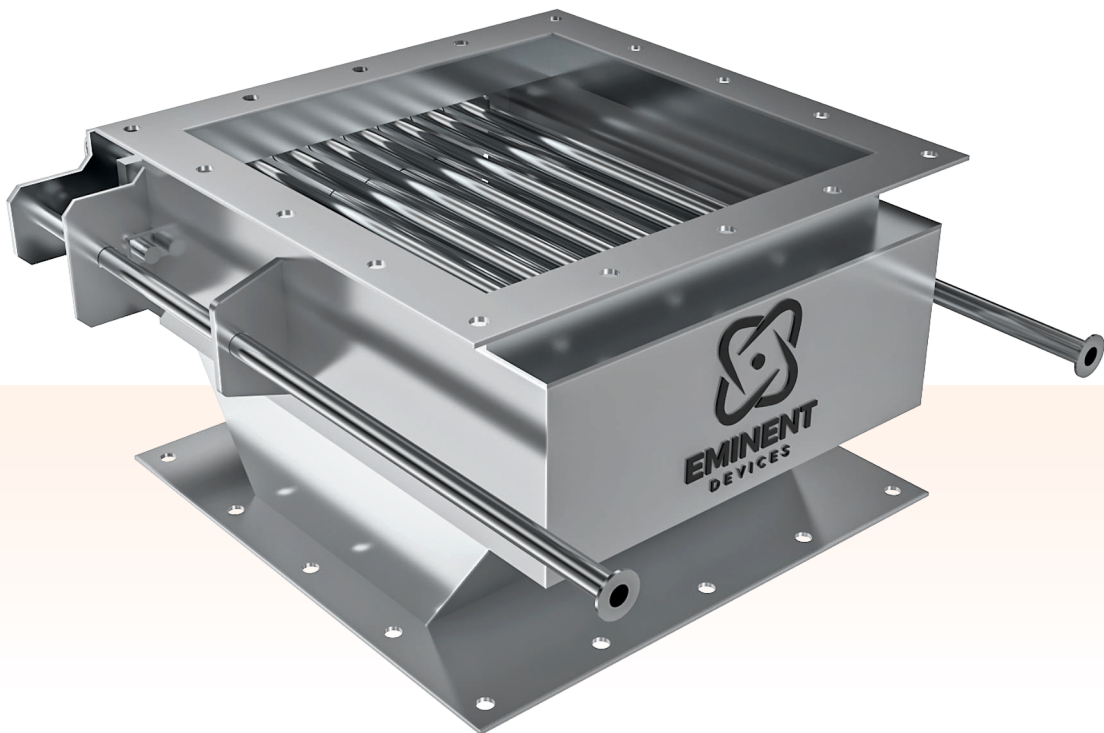
Floor magnetic sweeper used for collecting iron pieces scattered on the floor or mixed in the medium for different operations. It has demand in Machining, Food, and Casting & Parma Industries and more, for ensuring free-flowing powder, granules and liquids.



## **DRAWER MAGNET ▶▶▶**

The Eminent Devices Drawer Magnet has been a staple in the plastics, food and chemical industry. Specifically designed to target the removal of ferrous contaminants from materials in free-fall applications, this drawer magnet is integral to maintaining the integrity of your products and protecting your machinery. The Drawer Magnet features powerful rare earth magnetic grills that capture and hold even the smallest ferrous particles, offering superior protection against contamination in processing.

Constructed with a durable stainless steel housing, the Eminent Devices Drawer Magnet is seamlessly integrated into existing material processing lines. This versatile drawer magnet accommodates various flow rates and can handle a wide range of materials, making it the ideal solution for manufacturers aiming to enhance product quality and adhere to stringent safety standards.



**EFFECTIVE METAL SEPARATION:** The Drawer Magnet effectively separates and holds metal contaminants, preventing them from entering processing equipment.

**EASY CLEANING:** The stainless-steel dust tight welded housing allows for easy cleaning and maintenance, ensuring minimal downtime.

**CUSTOMIZABLE:** Customization options are available to meet specific application requirements.

## PIPE MAGNET ▶▶▶

The purpose of a permanent magnetic pipeline magnet is to remove ferrous particles, like rust, from fluids that are transported through pressured pipelines. The unit, which is made of 304 stainless steel, is easily attached to the pipeline by using threaded or flanged ends. The flow is filtered and the undesirable ferrous metal is extracted using sealed high intensity rare earth magnetic rods. The fast release lid makes access simple and straightforward. produced using rare earth magnets with high intensities of 10,000–12,000 Gauss.



## Magnet Strength

Uses high-intensity neodymium magnets, which are among the strongest available. This allows them to capture even the smallest ferrous particles, including work-hardened stainless steel.

## Versatility

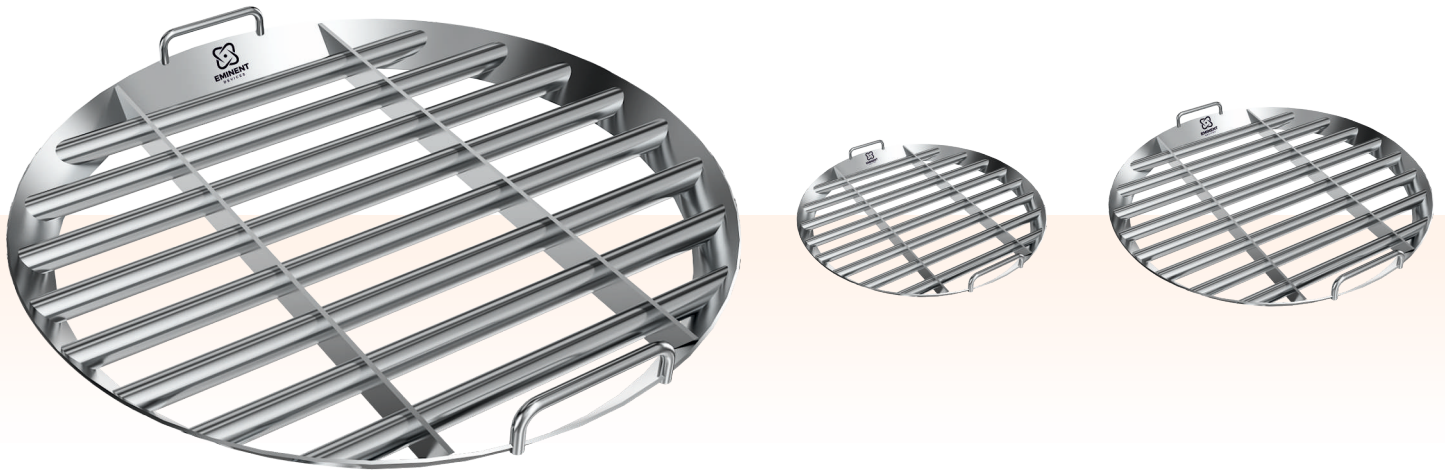
Eminent Device's liquid separators are designed to handle a wide range of liquids, from acidic juices to heavy oils and chunky soups.

## Durability

Constructed with 316 stainless steel and complies with food grade regulations.

## HIGH INTENSITY PERMANENT GRILL ▶▶▶

Magnetic grills also known as magnetic rods or tube magnets, are engineered to achieve the optimum balance between magnetic reach-out and holding force. Our magnetic grills can be mounted individually or in multi-row arrays, giving you a versatile product to be implemented in your gravity free-fall magnetic separation applications. Eminent devices offers magnetic grill in both standard and heavy-duty models, and all of our magnetic grills are constructed of durable 304 stainless steel tubing. Additionally, we offer magnetic grills in 316 stainless steel. Magnetic grills are available with plain water tight sealed end plugs. The end plugs are fully welded. Exclusively available on Eminent devices products are NUHI™ Neo Ultra High Intensity Magnetic grills, which utilize neodymium rare earth magnets to deliver intense power..



## HUMP MAGNETIC SEPARATOR ▶▶▶

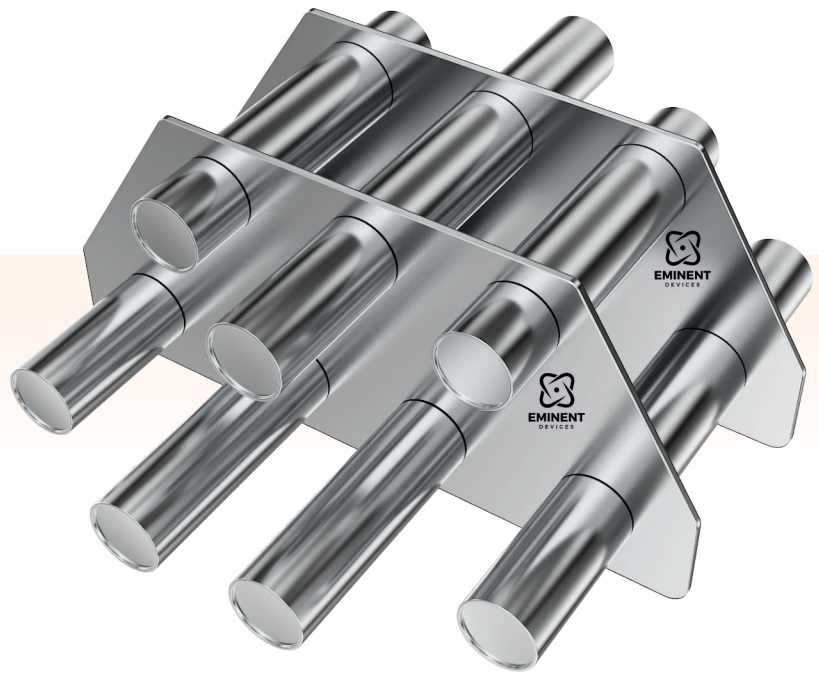
The Hump Magnetic Separator, Magnets, is a powerful and efficient magnetic separation system designed to remove ferrous and para-magnetic particles from gravity fed, free-flowing materials. This separator is ideal for use in various industries including plastics, food, chemical, and pharmaceutical.



## HOPPER MAGNET ▶▶▶

Hopper magnet is a unique device used to protect all kind of machines from iron contamination like nuts, nails, and iron bits. These ensure the hassle free and smooth operation of the machine. There are total four standard sizes, both in round and square are available and can be selected on the basis of the size and shape of the hoppers.

High power magnetic rods are provided which prevents any iron material while entering into the machine. We also offer special size hopper magnets. A Hopper Magnet is an industrial magnet system that is used to remove ferrous impurities from free-flowing powders and granular materials. It is designed to be placed directly over the inlet, hopper, or conveying line of the processing machinery to attract and remove ferrous impurities, such as iron nails, screws, nuts, and bolts.

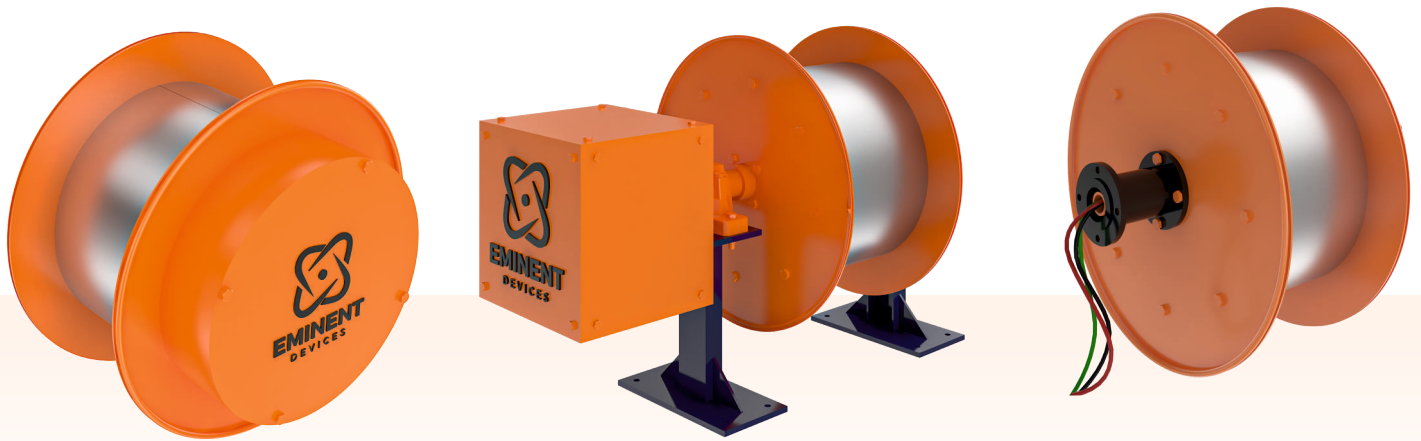


## Advantages

- ▶ They are designed to fit in any size of hopper.
- ▶ No need to make any cumbersome attachment or alteration to fix it in your hopper.
- ▶ Easy to clean and no maintenance cost which makes it really a very convenient and reliable
- ▶ Filter, providing constant magnetic protection at a low cost to your equipment and preventing expensive shut downs and delays.

## CABLE REELING DRUM ▶▶▶

Cable reeling drums (also known as cable reels or cable drums) are cylindrical spools designed to store, manage, and deploy various types of electrical cables and wires. They find use in a variety of industries and applications requiring mobility or cable extension. The specifications of a cable reeling drum can vary depending on its intended application, but some common specifications include:



## TYPES OF CABLE REELING DRUMS

**SPRING OPERATED:** These drums are powered by springs and rotate on sealed bearings, offering a convenient and cost-effective way to supply power to moving machinery. They are suitable for both AC and DC applications and can recover and store the cable in multiple layers on the drum.

**MOTORIZED:** Motorized cable reeling drums are designed for automatic reeling and unreeling of cables and are suitable for handling long lengths of cable. They use standard AC or DC motors and are ideal for applications requiring higher speeds or continuous operation. Examples include gantry cranes, stackers, reclaimers, and other heavy-duty machinery.

**SPROCKET DRIVEN:** Sprocket driven cable drums are recommended for single cable layer winding and are used in vertical operations, such as with lifting magnets.

**CONTROL DRIVE:** This type of drive unit, offered by manufacturers like Elecon, is known for its simple construction and ability to produce less tension in the reeled cable compared to other drives like stall torque motors. They utilize a unique slipping interface immersed in oil, providing constant torque and are suitable for continuous duty.

**SPRINGLESS:** These drums use two drums with no intermediate slings or contacts, making them ideal for hazardous environments where special certifications are not required.

# INDUSTRIALIZING MAGNETIC SOLUTIONS



**EMINENT**  
DEVICES

## EMINENT DEVICES

📍 Plot No.-44, Paavan Industrial Park Gate-1, Opp. Goapl Charan Estate, Indore Highway,  
Bakrol-Bujrang Road, Bakrol, TA.-Daskroi, Ahmedabad, Gujarat-382433

☎ + 91 96243 39973 | +91 85115 17780 | 99044 62784 | 72288 30666

✉ info@eminentdevices.com | sales@eminentdevices.com

🌐 [www.eminentdevices.com](http://www.eminentdevices.com)