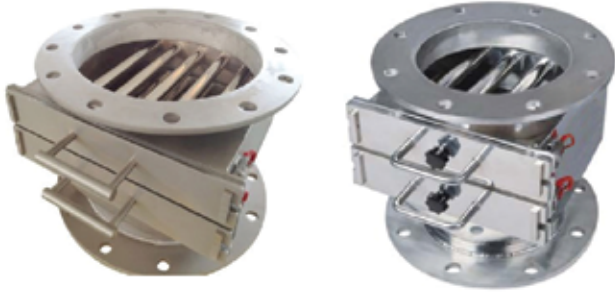




Optimal Contaminant Detection for PROCESSING INDUSTRIES

Magnet Separator, Metal Detector
& Checkweigher

Free Fall MAGNET SEPARATOR



N STYLE: NORMAL MAGNETIC DRAWER

Magnetic Drawers are designed for efficient fine iron and ferromagnetic contamination removing from a range of dry free flowing powdery, scarp, granule product such as sugar, grain, tea, etc.

They are widely used in field of ceramics, chemicals, pharmacy, food, plastic, rubber, dyestuff, mining, environmental protection, etc.



E STYLE: EASY-CLEANING MAGNETIC GRATE

Magnetic grate is installed or simply laid-inside of hoppers, housings and bins to trap and hold ferrous fine, fragments and small metal objects and these grates are built for low-abrasion materials.

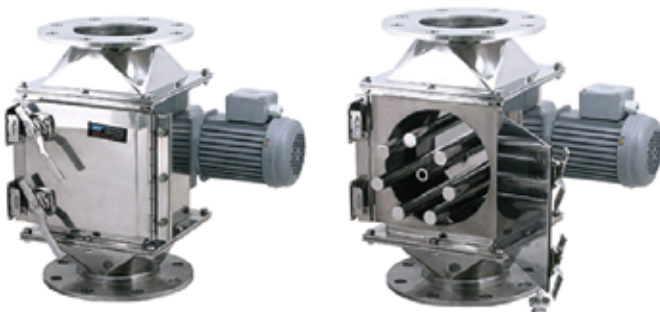
Additional Accessories:

1. Our marking is using engrave method.
2. Our magnet bar can be coated by ceramic / tungsten carbide for long life spend to prevent from wear and tear.



P STYLE: PLATE MAGNET

Suspended plate magnet are designed for effective tramp metals extraction from the high volume material by installation above conveyors, using big size ferrite and properly designed configuration ensure the tramp iron can be taken from thick layer material flow by heavy duty plate. Plate magnets can be used for separating ferrous contamination from material flows on conveyor belts, during free fall, in vertical or sloping pipes and chutes, over slides, etc.



R STYLE: ROTARY GRATE MAGNET SEPARATOR

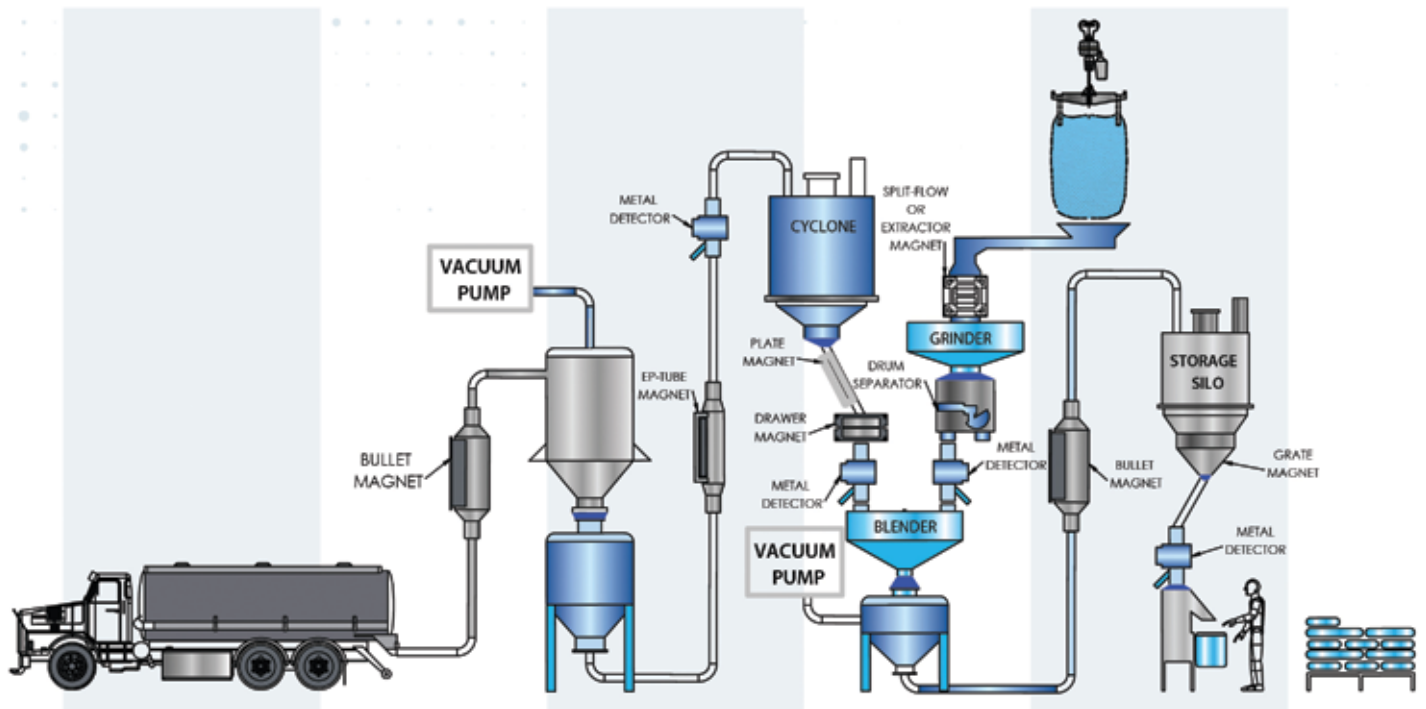
Suitable for removing iron scrap or micro ferromagnetic contamination from powdery or granule materials, especially from high viscosity or poor fluidity materials that is prone to caking or bridging widely used in building. This suitable for chemical, coal, food, refractory, pharmacy, etc.



B STYLE: CROSS BELT MAGNET SEPARATOR

Cross Belt Magnet Separator is a suspended magnet with a continuously running belt that strips off captured tramp metal and discharges off the side or end of the conveyor. The permanent magnetic forces provide continuous and effective removal of unwanted tramp metal and waste material recycling, food, lumber, grain, chemical building, materials, mining, light manufacturing, etc.

WHAT IS METAL DETECTOR AND MAGNET SEPARATOR?



Metal Detectors and Magnet Separators are widely used in industry to ensure product quality and process equipment longevity. They can be integrated in either horizontal or vertical or indined vacuum and pressure conveyor type. These systems generally comes in to tackle the ferrous contamination in product line. Metal separator for free-fall application with high throughput rates or bad flowing behavior of material and metal detector for free-fall application with highest requirement regarding scanning sensitivity.

Magnet separator is the process of separating components of mixtures by using a magnet to attract magnetic substances. The process that is used for magnetic separation to separates non-magnetic substances from those which are magnetic. This technique is useful for the select few minerals which are ferromagnetic (iron-, nickel-, and cobalt-containing minerals) and paramagnetic. Magnet separator is functional for removing ferrous metals from bulk materials from bar magnet, through to grid magnet and even complex magnet system with automatic cleaning. This are specifically designed to satisfy the stringent demand of the food industry. Outstanding features include powerful magnets (Neodymium/SmCo type) stable at extremes of temperature (up to 350°C) and resistance to corrosion. Another distinct advantages is the ease which can be integrated into existing production faculties (eg pipelines, free fall section or material hoppers).

Metal separators preferred option for removing metal contaminants in free-fall applications is a system with reject flaps or swivel hoppers (depending on the bulk material). This system are supplied with standard connections which enable them to be easily integrated in existing pipelines. Sophisticated design prevents product build-up, blockages and material deposits and also ensures units are quick and easy to clean. Metal separators for free-fall preferred option removing metal contaminants in free-fall application is a system with reject flaps or swivel hoppers (depending on the bulk material). System are supplied with standard connections which enable them to be easily integrated in existing pipelines. Sophisticated design prevents product build-up, blockages and material deposits and also ensures units are quick and easy to clean.

Metal detectors that are integrated in conveyor lines primarily are used for the incoming and outgoing inspection of packaged bulk materials and of individually packed materials. It can be combined with many type of customer-specific separating units (air blast nozzles, pusher, separating slides). Complete system-comprising conveyor belt, metal detector and separating unit guarantee highest operating reliability and detection accuracy.

METAL DETECTOR GRAVITY / FREE FALL TYPE

Working Principle:

- Incoming inspection (product purity and machine protection of raw spices ingredients, raw materials, etc. prior to the mill).
- Quality inspection (product purity) of herbs, tea, spices, chemical additives (e.g. ascorbic acid, surfactants), etc. directly before filling in big bags and silos.
- Quality inspection of milk powder, flour, sugar, etc. directly before a bag-forming, filling and sealing machine.

Functions:

Metal separator is used for the inspection of bulk materials in free-fall conveyor pipes. It detects all magnetic and non-magnetic metal contamination (steel, stainless steel, aluminium, etc.) - even if such contamination are embedded in the product.

Advantages:

- Effective and reliable detection and removal magnetic & non-magnetic, metals, contamination.
- Highest benefit of consumer protection.
- Seamless integration into every stage of the process.



Free Fall Type METAL SEPARATOR



RAPID 5000

Metal separator for high hygiene free-fall applications with reject flap. This separation principle has proved to be especially suitable for powdery and fine-grained bulk materials.



RAPID 6000

Metal separator for free-fall applications with swivel funnel. This separation principle has proved to be specially suitable for coarse-grained, flaky, light, fibrous, brittle and moist bulk materials.



GF METAL SEPARATOR

These metal separator are designed to be installed in horizontal, vertical or inclined vacuum and pressure pipes. Detection and removal of contaminants is effective even at high speeds and rejected material is removed into a container with no interruption to material flow.

METAL DETECTOR CONVEYOR TYPE

Combination Metal Detector With In-Motion Checkweigher Allows For Installation Into Tight Spaces.

1. Pacer Conveyor
2. Infeed/Metal Detector Conveyor
3. Metal Detector Tunnel Type
4. Checkweigher
5. X-Ray/Scale Data System (SDS) Touchscreen
6. Divert Mechanism
7. 90° Rotation Conveyor



Metal detector keep the products safe and the special conveyor design incorporates a metal-free zone and motor mounted away from aperture to minimize interference.

Conveyor inspection systems detect and eject magnetic, non-magnetic and stainless steel metal contaminants in food products while satisfying the most stringent requirements for functionality, hygiene, accuracy and reliability.

Features & Benefits:

- Can be used almost anywhere in the food processing line.
- Operates over a wide range of speeds of accomodate a variety of food lines.
- Long life in harsh environments, especially washdown.
- In-process and end-of-life metal contaminant protection to copy with IFS, BRC, HACCP, ISO 22000 requirements, etc.
- Detects ferrous and non-ferrous metals, including stainless steel.

Conveyor Type METAL DETECTOR



VARICON+ & UNICON+

Metal detection systems with conveyor belt for dry and wet areas. VARICON+ can be loaded with individually packed materials weighing up to 30kg and UNICON+ with individually packed materials weighing up to 130kg.



INTUITY

Metal detector with highest metal detection performance and a high level of usability.



VARICON COMPACT

The short metal detection system with conveyor belt and GLS metal detector.

Liquid Contamination DETECTION & SEPARATION



Features & Benefits:

- Various of styles are available for different materials
- The max magnetic strength can reach 12,000 GS for N style, 8000GS for E style
- Standard working temperature $\leq 80^{\circ}\text{C}$, max working temperature can be chosen from 80°C to 350°C as the same with magnetic bars if needed.
- Connection can be through ferrule, bolt plate, flange or uneven head, etc.
- Stainless steel 304 or 316L are available for shell material.
- Pressure design or other special requirement can be custom made.

T STYLE: EASY-CLEAN MAGNETIC LIQUID TRAP



Magnetic Liquid Traps or Magnetic Liquid Filters are designed for liquid or semi-liquid systems to remove ferrous contamination from liquid with different viscosity level. They preserve product purity by removing small contaminants, provide magnetic protection for liquid lines and processing equipment's.

SELF CLEANING MAGNETIC GRATE SEPARATOR

Program Controlled Pneumatic Magnetic Separator, also named Self Cleaning Magnetic Grate Separator, is designed to continuously remove contamination from the materials without any interruption.



Features & Benefits:

- Automatic self-cleaning
- Touch screen control
- No interruption to process flow
- Super ability of removing ferrous scraps, standard power up to 10,000GS at room temperature as listed specification.
- Magnetic grids for the standard model as listed, if needed, custom specification is also available.



Bulk And Fluids Engineering Sdn Bhd 200401031585 (670093-D)

MALAYSIA (HQ)

No 21, Jalan Cassia Selatan 3/3,
Taman Perindustrian Batu Kawan,
14110 Batu Kawan, Pulau Pinang.

JOHOR (Office)

Parc Regency, Residensi Masai,
#09-19 Menara B, Jalan Masai Jaya 2,
81750 Masai, Johor.

+6 04-588 0072
+6 016-449 0932

marketing@bafe.com.my

KUALA LUMPUR (Office)

B-8-6, Era Novum,
No.12A, Jalan Kerinchi Kiri 2,
59200 Kuala Lumpur, Malaysia.

THAILAND

Bafe System Engineering Co. Ltd.
123/61 Moo. 4 T.Krocksomboon
A.Srimahaphot, Prachinburi 25140

www.bafe.com.my