Celebrating 100 YEARS Manufacturing excellence 1914 - 2014

Foreign Body Removal

Magnetic Separation & Metal Detection Systems

ECLIPSE MAGNETICS

In-house ATEX Certification

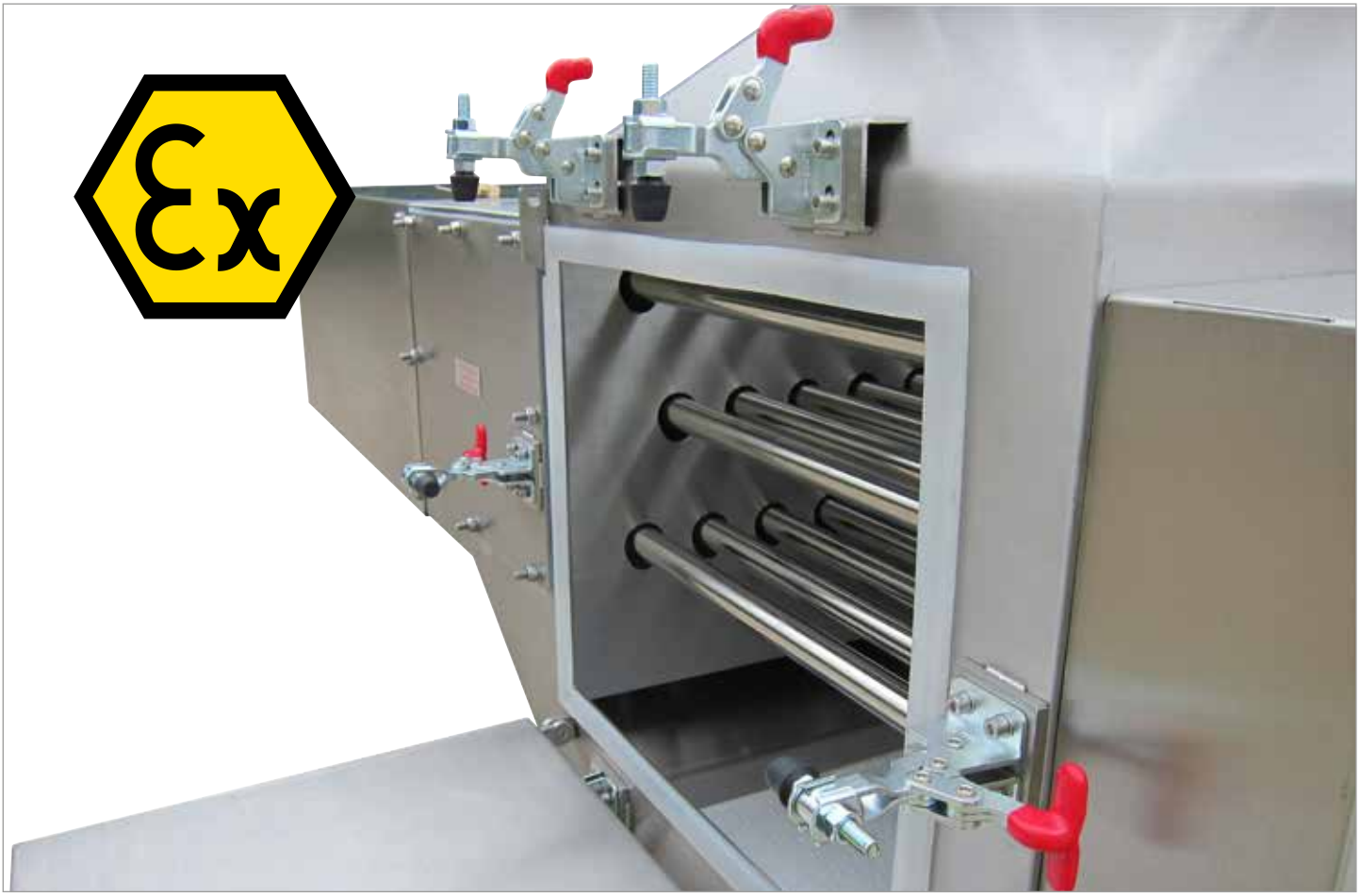
EU Directive 94/9/EC

In addition to high performance products, a major benefit of working with Eclipse Magnetics is that we are one of the few manufacturers who manufacture and certify ATEX approved equipment in-house. Most manufacturers have to submit to an external independent test house, thereby incurring additional cost and extending lead times.

We supply fully certified equipment for use in zones 20, 21, 22 or gas zone 0, 1 and 2 environments. ATEX product certification (or EC Type Examination) is a check on the design specification of a product in relation to a series of relevant standards laid out under the directive.

It involves detailed examination, testing and assessment of equipment intended for use in potentially hazardous areas, with the end result being the issue of an ATEX certificate and report, confirming and demonstrating that the product is safe to use (within certain parameters) within potentially explosive atmospheres.

The certification process must be undertaken by an approved organisation such as Eclipse Magnetics.



Foreign Body Removal

Find Your Solution

Our range of Foreign Body Removal systems encompasses products for a variety of applications.

Use the chart below to find the most suitable system for your application.

Secondary Separators

Secondary separators guarantee product purity and quality by removing sub-micron ferrous particles e.g, process equipment wear. This includes paramagnetic stainless steel particles. Secondary separators also remove residual primary contamination

	Typical Applications						Selection Criteria						
Product	Food	Chemical	Pharmaceutical	Plastics	Recycling	Wood	ATEX Approved	Gravity Feed	Pneumatic Feed	Conveyor Feed	Manual Clean	Automatic Clean	Page
Magnetic Rod	✔	✔	✔	✔	—	—	✔	✔	✔	—	✔	—	P9
Sampling Probe	✔	✔	✔	✔	—	—	—	—	—	—	✔	—	P10
Square / Circular Grid	✔	✔	✔	✔	—	—	✔	✔	—	—	✔	—	P11
Sieve Magnet	✔	✔	✔	—	—	—	✔	✔	—	—	✔	—	P12
Easy Clean Grid	✔	✔	✔	✔	—	—	✔	✔	—	—	✔	—	P13
Housed Easy Clean Grid	✔	✔	✔	✔	—	—	✔	✔	—	—	✔	—	P14
Auto Shuttle	✔	✔	✔	✔	—	—	✔	✔	—	—	—	✔	P16
Rota-Grid	✔	✔	✔	✔	—	—	✔	✔	—	—	✔	—	P18
Auto-Rota Shuttle	✔	✔	✔	✔	—	—	✔	✔	—	—	—	✔	P20
Pneumag	✔	✔	✔	✔	—	—	✔	—	✔	—	✔	—	P22
In-line Liquid Filter	✔	✔	✔	N/A	N/A	N/A	✔	N/A	N/A	N/A	✔	✔	P24

Primary Separators

Primary separators prevent machinery damage by removing 'Tramp' type contamination such as nuts, bolts and screws. Typically installed at bulk intake points, our range is shown below

	Typical Applications						Selection Criteria						
Product	Food	Chemical	Pharmaceutical	Plastics	Recycling	Wood	ATEX Approved	Gravity Feed	Pneumatic Feed	Conveyor Feed	Manual Clean	Automatic Clean	Page
Strip Magnet	✔	✔	✔	✔	✔	✔	✔	—	—	✔	✔	—	P26
Hinged Strip Magnet	✔	✔	✔	✔	✔	✔	✔	—	—	✔	✔	—	P27
Underflow Magnet	✔	✔	✔	✔	✔	✔	✔	✔	—	✔	✔	—	P28
Housed Underflow Magnet	✔	✔	✔	✔	✔	✔	✔	✔	✔	—	✔	—	P29
Bullet Magnet	✔	✔	✔	✔	✔	✔	—	✔	✔	—	✔	—	P30
Chute Magnet	✔	✔	✔	✔	✔	✔	✔	✔	✔	—	✔	—	P31
Drum Magnet	✔	✔	✔	✔	✔	✔	—	✔	—	✔	—	✔	P32
Housed Drum Magnet	✔	✔	✔	✔	✔	✔	✔	✔	—	✔	—	✔	P33
Permanent Head Roller	✔	✔	✔	✔	✔	✔	—	—	—	✔	—	✔	P34
Permanent Plate Magnet	✔	✔	✔	✔	✔	✔	✔	—	—	✔	✔	—	P35
Permanent Magnetic Overband	✔	✔	✔	✔	✔	✔	—	—	—	✔	—	✔	P36

A Choice Of Systems

Primary & Secondary Separators

The following pages detail our range of options which protect against all types of ferrous contamination.

Featured Products

Our most popular separation options are highlighted below:

Easy Clean Housed Grids

Ideal for the removal of fine iron and para-magnetic contamination from a range of dry free flowing or gravity fed products such as grain, flour, granulates and powders. Available in a range of sizes and multi-row magnet configurations.

Find out more on page 14

Autoshuttle

With an automated cleaning function, the Autoshuttle enables 24/7 screening of processed free flowing dry granulates and powders such as sugar and salt.

Find out more on page 16

Pneumag Separator

A high intensity separator, designed to operate on pneumatic dry powder or granulate conveying lines to provide protection against ferrous and para-magnetic contamination.

Find out more on page 22

High Intensity Liquid Filter

Designed to operate in pressurised transfer lines to remove ferrous and para magnetic particles from liquid processing lines. For items such as chocolate, syrup, jam, pastes and beverages.

Find out more on page 24

Rota-Grid

High intensity separator which removes ferrous contamination from substances which are prone to caking or bridging e.g. starch and proteins. The rotating action ensures a continued flow with no blockages.

Find out more on page 18

Magnetic Rod

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity rare earth magnetic rods are extremely efficient at removing ferrous and para-magnetic contamination, down to sub-micron size, from free flowing products including powders and liquids.

Rods are of particular interest to OEMs who wish to incorporate them into their machinery with the minimal amount of re-design. Each rod is tapped with an M6 thread at both ends as standard for ease of installation, or alternatively without threaded detail or with studs, which can be specified on ordering. Many sizes are held in stock to allow for same day despatch.

Cleaning

Depending on the configuration, rod magnets can be cleaned in seconds by simply pushing the attracted contamination to one end, this will release it enabling further analysis to be conducted.

Suitable Products

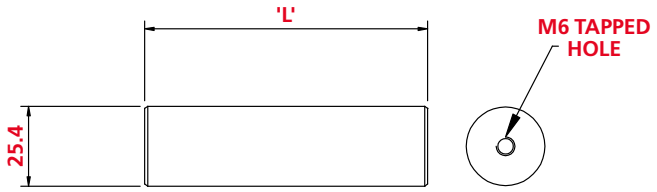
All powders, granulates and liquids etc.

Suitable Locations

Any process area.

Benefits

- Easy to clean
- Simple to use
- Enables flexible design
- Removes micron sized contaminants
- Meets audit requirements
- Rare earth, choice of four magnetic strengths



Technical Data

Performance

Magnetic performance	7,000, 9,000, 11,000 and 12,000 Gauss
Performance reading	On tube surface
Magnetic material	Rare Earth Neodymium Iron Boron
Magnet grade	N35 and N45 – Inspected and confirmed via hysterograph prior to use
Temperature	-20°C / +90°C

Material

Tubing	316 grade stainless steel - Aerospace Quality
Other parts	316 grade stainless steel
Surface finish	Polished to 0.6µm
Rod end detail	Tapped M6 x 8mm both ends

Options

- High temperature Samarium Cobalt magnetic material (+220°C)
- Any thread size and detail
- Supplied without tapped detail or studded
- ATEX certified
- Pharmaceutical specification

Part Number	L mm	Weight kg
SR100	100	0.35
SR150	150	0.53
SR200	200	0.70
SR250	250	0.88
SR300	300	1.05
SR350	350	1.23
SR400	400	1.40
SR450	450	1.58
SR500	500	1.75
SR550	550	1.93
SR600	600	2.10
SR650	650	2.28
SR700	700	2.45
SR750	750	2.63
SR800	800	2.80
SR850	850	2.98
SR900	900	3.15
SR950	950	3.33
SR1000	1000	3.50

Sampling Probe

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity magnetic sampling probe is ideal for quality control personnel to quickly and easily carry out product purity inspections on any powder, granulate or liquid for ferrous or para-magnetic contamination.

The probe should be used for sample inspection of product at goods inward, prior to despatch and at critical control points throughout the process line for batch testing. Simply allow the processed product to pass over the magnetic section of the probe or agitate in any static product. Any ferrous or para-magnetic contamination present will be highly visible when concentrated on the probe's surface.

Cleaning

Cleaning can be conducted in seconds. Remove the unit from the sampling area and, while holding the body of the probe, simply pull the rear handle backwards. This will release any attracted contamination enabling further analysis to be conducted.

Suitable Products

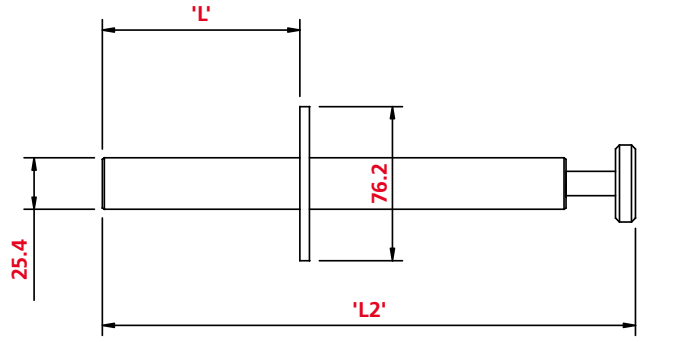
Any powders, granulates, liquids, sauces, juices, chocolate e.t.c.

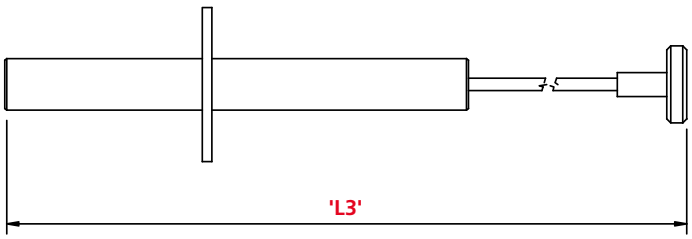
Suitable Locations

Existing sampling points.

Benefits

- Easy to clean
- Simple to use
- Indicates if contamination is present
- Removes micron sized contaminants
- Meets audit requirements
- Rare earth 9,000 Gauss





Technical Data

Performance

Magnetic performance	9,000 Gauss
Performance reading	On tube surface
Magnetic material	Rare Earth Neodymium Iron Boron
Magnet grade	N45 – Inspected and confirmed via hysterograph prior to use
Temperature	-20°C / +90°C

Material

Tubing	316 grade stainless steel - Aerospace Quality
Other parts	316 grade stainless steel
Surface finish	Polished to 0.6µm

Options

- High temperature Samarium Cobalt magnetic material (+220°C)
- Pharmaceutical specification
- Magnet lengths up to 1000mm
- ATEX certified

Part Number	L mm	L2 mm	L3 mm	Weight kg
MSP100	100	270	400	0.9
MSP200	200	470	700	1.2
MSP300	300	670	100	1.6

Square / Circular Grid

High Intensity — Rare Earth Secondary Protection

Introduction

High intensity grids are very versatile and can be used in most powder, granulate and liquid applications for the removal of ferrous and para-magnetic contamination down to sub-micron size. These units can be manufactured to any size and with any number of rods to meet most application requirements. The grids' low profile side frame means they can be installed into existing chute work or machinery where height is restricted. Grids are of particular interest to OEMs who wish to incorporate them into their machinery with the minimal amount of redesign.

Cleaning

Due to the high intensity magnetic field and simple design, fixed grids require more effort to clean than the Eclipse Magnetics 'easy clean' design (see page 13). Remove the grid from its process position and, using a gloved hand, push the contamination down each rod. This will release the majority of all attracted contamination. Adhesive tape can be used to remove remaining or very fine contaminants.

Suitable Products

Dry powders and granulates.

Suitable Locations

Vertical or angled process lines.

Benefits

- Simple to install
- Reduces 'spark' risk
- Removes sub-micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000, 10,000 and 12,000 Gauss options

Part Number	Diameter mm	Centres C mm	No. Rods	Weight kg
Round				
CG100	100	45	2	1.2
CG150	150	50	3	1.5
CG200	200	60	3	2.2
CG250	250	60	4	3.7
CG300	300	60	5	5.0
CG350	350	60	6	7.0
CG400	400	60	7	9.5
CG450	450	60	7	14
CG500	500	60	8	17

Part Number	A mm	B mm	C mm	No. Rods	Weight kg
Square					
GM1515	150	150	60	2	3.2
GM2020	200	200	60	3	3.8
GM2525	250	250	55	4	6.2
GM3030	300	300	55	5	8.0
GM3535	350	350	55	6	11.0
GM4040	400	400	55	7	14.8
GM4545	450	450	55	8	19.2
GM5050	500	500	55	9	21.0

Technical Data

Performance

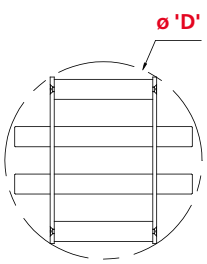
Magnetic performance	7,000, 9,000, 10,000, 11,000 and 12,000
Performance reading	On tube surface
Magnetic material	Rare Earth Neodymium Iron Boron
Magnet grade	N35 and N45 – Inspected and confirmed via hysterograph prior to use
Temperature	-20°C / +90°C

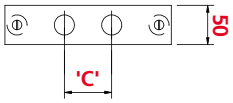
Materials

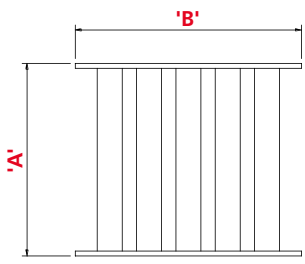
Grid frame	316 grade stainless steel
Tubing	316 grade stainless steel – Aerospace Quality
Other parts	316 grade stainless steel
Surface finish	Polished to 0.6µm

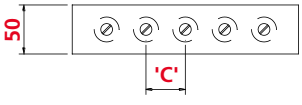
Options

- High temperature Samarium Cobalt magnetic material (+220°C)
- Sizes up to 1000mm x 1000mm
- ATEX certified
- Pharmaceutical specification









Sieve Magnet

High Intensity — Rare Earth Secondary Protection

Introduction

Our sieve magnet is a unique lightweight, full stainless steel design which reduces the stress on the sieve that other types often cause. The unit is positioned beneath the sieve screen allowing excellent separation to be achieved. Due to the high intensity of the magnetic field within the unit, even sub-micron sized particles generated by the wear of the sieve screen can be successfully attracted.

Cleaning

Simply remove the top pan and screen from the sieve. The magnet can now be removed from the bottom pan and placed onto a non-magnetic surface. Using the supplied cleaning tool, simply scrape all attracted contamination to each rod end where it can be removed.

Suitable Products

Dry powders, granulates and liquids etc.

Suitable Locations

Post sieve screen.

Benefits

- Easy to clean
- Reduces 'spark' risk
- Meets audit requirements
- Removes sub-micron sized contaminants
- Protects against screen wear and failure
- Rare earth, 9,000, 7,000, 11,000 and 12,000 Gauss
- Static dissipative all metal construction

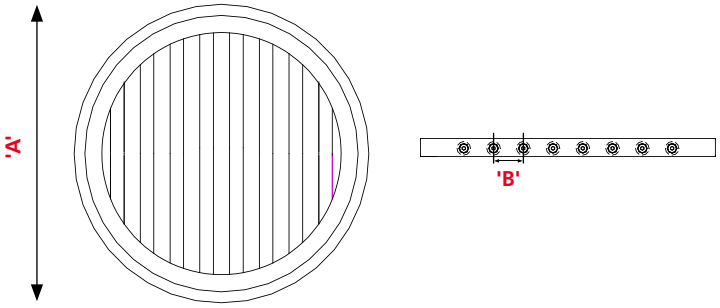
Technical Data

Performance

Magnetic performance	7,000, 9,000, 11,000 and 12,000 Gauss
Performance reading	On tube surface
Magnetic material	Rare Earth Neodymium Iron Boron
Magnet grade	N35 and N45 – Inspected and confirmed via hysterograph prior to use
Temperature	-20°C / +90°C

Material

Frame	316 grade stainless steel
Tubing	316 grade stainless steel - Aerospace Quality
Surface finish	Polished to 0.6µm
Sealing	Please see options below



Part Number	A mm	B mm	Number of Rods	Weight kg	To be used in types
SMRF	545	55	8	14	RussellFinex - Compact
SMFG	545	55	8	14	Farleygreene - Sievemaster

Options

- High temperature Samarium Cobalt magnetic material (+220°C)
- Magnet and screen metal detectable silicon rubber seal
- Pharmaceutical specification
- ATEX certified

Metal Detectable Seal

The Eclipse Magnetics metal detectable sieve magnet and screen seal is a patented rubber seal that allows for easy detection in case of breakage due to excessive sieve wear. The magnet and screen seal differ in size and can be fitted to the patented sieve magnet. These seals can also be retro fitted to existing sieve magnets and screens from leading manufacturers. All materials used to manufacture these seals are listed in the FDA regulations.

Easy Clean Grid

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity easy clean grid is very versatile and can be utilised in most powder and granulate applications for the removal of ferrous and para-magnetic contamination down to sub-micron size. These units can be manufactured to any size and with any number of rods to meet most application requirements.

The grid's low profile side frame allows these units to be installed into existing chute work or machinery where height is restricted. Easy clean grids can be cleaned in under fifteen seconds, so are of particular interest to those companies that run 24/7 operations or where downtime is minimal. These grids can also be supplied in housings for ease of installation into existing process lines (see page 14).

Cleaning

These grids can be cleaned in seconds. Simply move the swing clamp to the 'open' position, pull the magnetic cores out of the stainless steel tube assembly and the contamination simply falls away. It is at this stage that all attracted contamination can be easily removed allowing for inspection or further analysis.

Suitable Products

Dry powders and granulates.

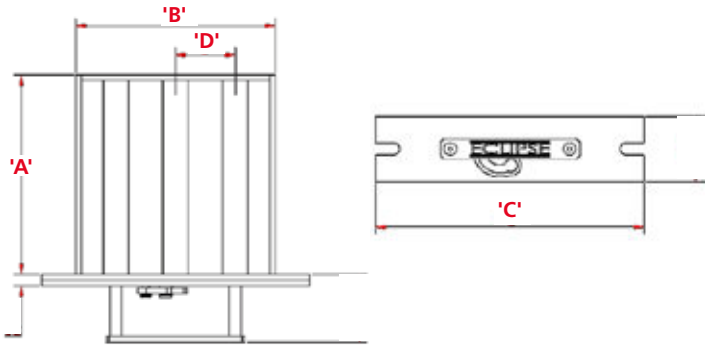
Suitable Locations

Any vertical or slightly angled process line.

Benefits

- Simple to install
- Reduces 'spark' risk
- Removes sub micron sized contaminants
- Meets audit requirements
- Rare Earth, 7,000, 9,000 and 10,000 Gauss options

Technical Data



Performance

Magnetic Performance	7,000, 9,000 and 10,000 Gauss
Performance Reading	On tube surface
Magnetic Material	Rare Earth Neodymium Iron Boron
Magnet Grade	N35 & N45 – Inspected & confirmed via hystergraph prior to use
Temperature	-20° C/ + 90° C

Material

Grid Frame	316 Grade Stainless Steel
Tubing	316 Grade Stainless Steel – Aerospace Quality
Other Parts	316 Grade Stainless Steel
Surface Finish	Polished to 0.6µm
Swing Clamps	304 grade stainless steel

Options

- High temperature Samarium Cobalt magnetic material (+220°C)
- Sizes up to 1000mm x 1000mm
- Pharmaceutical specification
- Safety relay switch
- ATEX certified

Part Number	A mm	B mm	C mm	D mm	No. Of Rods	Weight kg
EC1515	150	150	220	60	2	3.8
EC2020	200	200	270	60	3	4.2
EC2525	250	250	320	55	4	6.8
EC3030	300	300	370	55	5	8.6
EC3535	350	350	420	55	6	12.0
EC4040	400	400	470	55	7	16.3
EC4545	450	450	520	55	8	21.1
EC5050	500	500	570	55	9	25.0

Housed Easy Clean Grid

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity magnetic easy clean housed grids offer unsurpassed levels of contamination removal, removing sub-micron ferrous and para-magnetic contamination from the most demanding and arduous of process environments. The unit contains one high intensity easy clean magnetic grid. The grid is secured into the housing by tri-cone locking nuts which ensure even pressure is generated around the food grade seal.

Units can be supplied with quick release toggle clamps if cleaning time is to be kept to a minimum. Alternatively, consider the Auto-Shuttle unit, which requires no intervention (see page 16).

It is common to have numerous units installed throughout a processing facility to ensure contamination is removed at source of generation.

All dry powders and granular type materials can be processed through the unit. Electrical safety interlocks can be fitted to the grid to stop the process should it be accidentally opened.

Cleaning

This unit uses the Eclipse Magnetics 'easy clean' system.
This design allows all attracted contamination to be easily and quickly collected for further inspection or analysis.

When the unit requires cleaning, simply remove the outer grid securing tri-cone locking nuts and remove the grid from the housing. Remove the central tri-cone locking nut and separate the grid assembly allowing all attracted contamination to simply fall away.

Suitable Products

Dry powders and granulates.

Suitable Locations

Inlet / outlet points, pre- / post-silo and machinery points.

Benefits

- Easy to clean
- High collection capacity
- Reduces 'spark' risk
- Removes sub-micron sized contamination
- Meets audit requirements
- Rare earth 7,000, 9,000, 10,000 and 12,000 Gauss

Multi-row models & track systems available

Auto-Shuttle

High Intensity — Rare Earth Secondary Protection

Introduction

Our Auto-Shuttle magnetic separator enables screening of processed products 24 hours a day, seven days a week, without the need for manual intervention. The system can even carry out a full clean without the need to stop the process. The unit is supplied with a pre-programmed PLC that can either work independently or connected to the central control rooms system for remote activation or monitoring etc.

There are reed switches fitted to each end of the separator tubes to indicate the position of each magnetic core. The full system remains air tight throughout normal operation making it suitable for environments where ATEX equipment is required.

Cleaning

The magnetic cores remain in the process chamber until a cleaning signal is given. Then compressed air is fed into each separator tube forcing the core to the other end of the unit.

The contamination follows the core, which first passes through the product return chamber, which prevents loss of good product, and into the cleaning chamber where the collected contamination is deposited.

The cleaning chamber is fitted with a transition piece, which allows a collection container to be fitted. It is this container that is removed to assess the collected contamination.

Suitable Products

Dry powders and granulates, flour, sugar, herbs and salt, etc

Suitable Locations

Any vertical process line.

Benefits

- Fully autonomous in operation
- Reduces 'spark' risk
- Suitable for control room connection
- Removes micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000 Gauss

Rota-Grid

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity magnetic Rota-Grid separator has been designed specifically to process difficult products that are prone to bridging and/or caking. The unit contains a centrally mounted magnetic 'rota' assembly: numerous 'easy clean' magnetic rods are arranged in a 'wheel' around and parallel to the axis of rotation. The number of rods used depends on the inlet and outlet size.

The assembly rotates, gently agitating the product being processed. It is this agitation that prevents blockages occurring.

All dry and semi-dry powders and granular type materials, such as starch etc., can be processed through the unit. The Rota-Grid can be supplied to the most stringent of standards, such as required in the pharmaceutical industry.

Cleaning

As the Rota-Grid uses the Eclipse Magnetics 'easy clean' system, cleaning can be completed in a matter of minutes.

To clean, simply remove the door and remove the assembly from the housing. Remove the magnetic cores from the assembly. All attracted contamination will then be released allowing for inspection or further analysis.

Suitable Products

Dry and semi-dry powders and granulates, starch, protein etc.

Suitable Locations

Any vertical process line.

Benefits

- Easy to clean
- Allows difficult products to be screened
- Reduces 'spark' risk
- Removes sub-micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000, 10,000, 11,000 and 12,000 Gauss options

Auto-Rota Shuttle

High Intensity — Rare Earth Secondary Protection

Introduction

Our Auto-Rota Shuttle combines the benefits of our Auto-Shuttle and Rota-Grid unit in one. The Auto-Rota Shuttle enables screening of difficult bridging and or caking products 24/7 without the need for manual intervention. The system can even carry out a full clean without the need to stop the process, thereby enabling continuous production.

The unit is supplied with a pre-programmed PLC that can either work independently or connected to the central control rooms system for remote activation or monitoring etc.

The full system remains air tight throughout normal operation making it suitable for environments where ATEX equipment is required.

Cleaning

The magnetic cores remain in the process chamber. When a cleaning signal is given, compressed air is fed into each separator tube forcing the core to the other end of the unit.

The contamination follows the core, first through the product return chamber, which prevents loss of good product, and into the cleaning chamber, where the collected contamination is deposited.

The cleaning chamber is fitted with a transition piece, which allows a collection container to be fitted. This container is removed to assess the collected contamination.

Suitable Products

Dry and semi-dry powders and granulates, starch, protein etc.

Suitable Locations

Any vertical process line.

Benefits

- Fully autonomous in operation
- Reduces 'spark' risk
- Suitable for control room connection
- Removes sub-micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000 and 10,000 Gauss options
- Allows difficult products to be screened

Auto-Rota Shuttle
Nuclear Fuel Application

Pneumag

High Intensity — Rare Earth Secondary Protection

Introduction

Our Pneumag high intensity magnetic separator has been designed to operate in lean / dilute conveying lines to provide protection against ferrous and para-magnetic contamination. The unit contains a single double row high intensity magnetic cartridge. It is secured into its housing by quick release toggle clamps, which ensure even pressure is generated around the unique silicon-based metal-detectable seal.

The Pneumag can be incorporated into any form of pneumatic conveying line, from lean to dense phase, and can be installed at any angle from vertical to horizontal. A common installation location is at tanker discharge to inspect incoming materials.

All dry powders and granular type materials can be processed through the unit. Pneumag can operate in line pressures of 1 bar, units are available up to 5 bar on request, with a maximum processing line speed of 35m/sec.

A lockable tamper proof cover plate is provided to ensure only authorised personnel have access to the unit.

Cleaning

The Pneumag uses our 'easy cean' system.To clean, simply release the quick release toggle clamps, remove the contaminated cartridge from the housing and then remove the magnetic cores from the tube assembly. All attracted contamination will be released allowing for inspection or further analysis.

Suitable Products

Dry powders and granulates.

Suitable Locations

All.

Benefits

- Easy to clean
- Tamper poof guard
- Metal detectable seal
- Reduces 'spark' risk
- Removes sub-micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000, 10,000, 11,000 and 12,000 Gauss options

Liquid Filter

High Intensity — Rare Earth Secondary Protection

Introduction

Our high intensity liquid filter magnetic separator has been designed to operate in pressurised transfer lines to provide protection against ferrous and para-magnetic contamination.

The housing comprises a vessel, magnetic lid assembly and band clamp, which secures the unit together. The filter is available in two versions, single wall and double wall (jacketed for heated pipelines).

The filter can be used in any line that processes liquids at all viscosity levels and can be installed at any angle from vertical to horizontal. A common installation location is tanker loading and discharge to inspect outgoing and incoming materials.

The filter can be supplied to suit various processing volumes, pressures, temperatures and specifications.

Cleaning

The filter uses our 'easy clean' system.
To clean, simply release the quick release band clamp, remove the contaminated cartridge from the housing and remove the magnetic cores from the tube assembly. All attracted contamination can be easily removed allowing for inspection or further analysis.

Suitable Products

Chocolate, molasses, jam, syrup, juice, sauce, pastes, soup, pickles, spreads, beverages etc.

Suitable Locations

All, vertical, horizontal or angled.

Benefits

- Easy to clean
- Removes sub-micron sized contaminants
- Meets audit requirements
- Rare earth 7,000, 9,000, 10,000, 11,000 and 12,000 Gauss - Easy clean or Fixed
- No consumables
- No pressure drop

Customised Solutions

High performance Foreign Body Removal systems to bespoke specifications

Our 100 years' of magnetic expertise and our deep knowledge of processing industries enable us to work with our clients to provide the optimum solution.

If a standard product is not the answer we can offer a tailor-made solution. This could be an adaptation of a standard separation system or a complete new system. With in-house design expertise and the latest CAD and FEA software we can provide bespoke Foreign Body Removal systems in condensed lead times.

Our consultation service involves visiting your site, assessing your application or process and identifying the optimum solution. We can offer bespoke designs, different grades of magnet material, surface finishes, ancillary equipment or cleaning methods.

Pharmaceutical specification double row housed easy clean grid, pre and post sifter protection.

Housed easy clean grid with 4 rows and track system designed for large bulk flow applications.

Pneumag installed at bulk material intake, ATEX rated.

High capacity magnetic liquid filter finished to pharmaceutical specification.

Housed easy clean grid manufactured to fit an inclined gravity chute.

Easy Clean Grid Separator acts as a sack rip and tip station.

Equipment Testing & Site Surveys

Satisfy your audit requirements with our testing and validation service

Our dedicated site inspection and validation service provides the necessary information to comply with external BRC or customer audit requirements. Our site inspection service includes:

- Visual inspection of magnetic equipment
- Magnetic performance testing (by Gauss meter)
- Appraisal of installations and applications
- Issue of test certification (where pass rate achieved)
- Assessment report and recommendations

In line with HACCP procedures it is vital that critical Foreign Body Removal equipment such as magnetic separators and metal detectors are assessed annually.

The performance of magnetic equipment can vary depending on the age, design, product type or operating conditions. It is important to have annual performance tests to maintain high levels of protection.

Our dedicated mobile service team provide a comprehensive assessment and certification for audit requirements by a qualified engineer. In addition, if you take out one of equipment service contracts we will plan your service schedule and contact you when the equipment service is due and arrange a time to visit.

Gauss Meter

The Eclipse Magnetics digital Gauss Meter can be used to assess the strength of existing magnetic separation equipment either pre- or post-audit. This unit has many beneficial features and is supplied, ready to use, fully calibrated and complete with a transverse probe. Supplied in a robust carry case the meter can be used in the most arduous of environments.

Specification

+ / - 2% or 10 Gauss (whichever is the greater)
Units, Gauss, Tesla, Ampere Metres or Oersted
Operating temperature 0°C to +50°C
20 hours battery life, continual use
LCD Display, 16 characters
Weight 0.42 (kg)
Size 195mm × 101mm × 44mm