

FOOD INDUSTRY

Prevent Machinery Damage

Safeguard product from contamination | Improves Quality of products

PMT offers complete line of Magnetic Separators for the Food Processing Industry. **PMT** designs and manufactures variety of magnetic separators used throughout food processing industry: flour mill, seed crushing/processing, edible oil, animal feed, malt processing, chocolate, baking, sugar, starch, spices, tea, coffee etc., to remove tramp iron from products and prevent damaging of processing machines & equipment.

The global food safety standards reminds of the importance of maintaining product quality and ensuring finished goods for end user are free from contaminants. In the Food processing, raw ingredients are processed and transformed into consumable products for consumers. The aim of the manufacturer is to produce a product of high quality and purity whilst maintaining control of costs. PMT Magnetic Separators will assist in meeting the manufacturer objectives of (a) quality products, (b) compliance of food safety norms and (c) achieving (a) & (b) at minimum costs/investment.

Magnetic Separators are the first line of defence to remove damaging tramp iron in the process flow that can damage equipment or contaminate product. Our magnetic separators can be installed for any type of material (solid/liquid/dry or slurry) and in any type of process including gravity or free-flowing, belt or conveyor fed, pneumatic conveyors or liquid lines.

Basically, Separation of Tramp Iron can be introduced at three levels:

1) At the time of Receiving the material 2) Processing of the Raw material 3) Final packaging of Finished Goods

If any unwanted iron makes into the production line it will go on to travel through the end of the process and will be found in the finished goods. The tramp iron will cause damage to the processing machines/ equipment which will lead to unwanted downtime and repairs resulting in loss of money for the company.

One of the major problems of the unwanted iron will be if it is present in finished goods, this contaminated product is ingested by the consumer / end user, it will be harmful for the consumer and damage the reputation of company resulting in reduction of sales and profits.

The damaging iron / unwanted iron problems can be solved using **PMT** Magnetic Separators. **PMT** have developed a range of Magnetic Separators for Food Processing Industry: Plate Magnet, Grill Magnet, Rod Magnet, Hump Magnet, Drawer Magnet, Drum Magnet, Box Type Drum Magnet, Dual Door Magnet, Suspension Magnet, Overband Suspension Magnet, Pipe Magnet, Liquid In line Magnetic Separator, Magna Roll and Rotary Grill Magnetic Separator. The magnetic separators are made up of permanent magnets of different strengths and designs depending on the application.

PMT's vast experience of almost 3 decades in the area of Iron Separation will help in selection of Magnetic Separator suitable for a specific application and area in your process line for efficient and effective solution of iron separation.

PMT ENGINEERS & CONTRACTORS

Manufacturers of Magnetic Separators & Equipments.

TYPICAL SEED PROCESSING - WITH MAGNETIC SEPARATORS

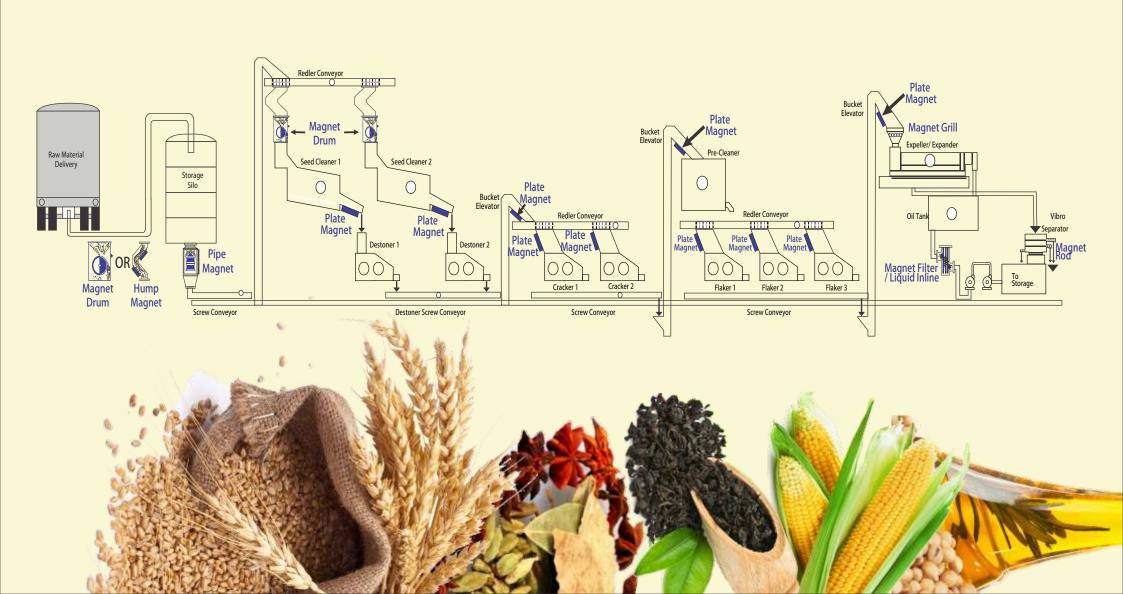




Plate Magnet

Economical & Maintenance Free - No operating cost **Simple & Easy installation –** Existing processing line/system

Versatile - Standard and Customized sizes

Durability - SS 304 Construction also available

High intensity Gemini Rare Earth Powerful Magnets –

Removal of fine iron

Easy Cleaning - Handle & Bearing arrangement option



Grill Magnet

3P - Ensures product purity, protects equipment & prevents costly downtime

Heavy Duty & High strength- SS 304 Rugged construction & Gemini Rare earth Powerful Magnets

Flexibility – Customized Spacing of magnetic tubes and number of layers/deck

Easy installation – In the existing processing line (Hoppers/Chutes/feeders)

Easy to Clean - Fast and easy cleaning of iron particles3E - Economical, Efficient & Effective Magnetic Separator



Maintenance Free, very low Capex requirement & no operating cost

Durability - SS 304 Rugged construction & Gemini Rare earth Powerful Magnets

Easy installation & Less space requirement - In the existing processing line

Easy to clean - Fast and easy cleaning of iron particles3E - Economical, Efficient & Effective Magnetic Separator



Drawer Magnet

Maintenance Free & No Operating cost – No Power Consumption

Easy installation – In the existing setup & availability of flanged housing

Durability - SS 304 Rugged construction for Drawers and Magnetic Rods

Effective & Efficient – High Strength Gemini Rare earth Powerful Magnets

Easy to clean - Easy access to Magnetic Rods ensures fast and easy

cleaning of iron particles

Hump Magnet

Easy to Clean - Hinged Magnet Plates - swung open for cleaning **Zig-Zag Design** - Slows down the product flow volume for effective iron separation

Easy Installation – Existing processing line/system

Flexible – Flexibility to select half hump or larger structure

Dual protection – 2 Magnet Plates for better performance

in capturing of iron particles



PMT

Suspension

Maintenance Free & No Operating cost – No Power Consumption
Easy installation - In the existing setup over the belt conveyor
Powerful Strontium Ferrite Magnets with reach of up-to 5 inches
Flexibility – Customized size available as per the width
of the belt and specific needs of end user

Rotary Grill

Rotary Movement - Ensures no bridging or choking of sticky/ semi dry material

Easy Installation - Flanged housing enables installation without additional setup

Durability (Long usage) - Gun metal bush, SS 304 structure for Rotary end

plates & tubes

Safety - Lockable door ensures only authorized operator would unlock the rotary unit

Magnetic Tubes - Assembled in circular/cylindrical arrangement to capture sub-micron sized ferrous particles

Gemini Rare Earth Powerful Magnets - Ensuring optimum reach and holding strength.

Easy Cleaning – Flexible Rotary grate unit for easy removal & re arrangement with bearing/coupling and bush setup



Drum Magnet

Self-Cleaning Magnetic Separator - Automatic cleaning

No Bridge/Choke of the process material

Continuous working - 24/7 operation

High Intensity and Gemini Rare Earth Powerful magnets -

Greater level of iron separation

Durability - SS 304 outer drum and gun metal bush

Flexibility – Customized size available as

per the specific needs of end user



Maintenance Free & No Operating cost – No Power Consumption

Easy installation – In the existing setup & availability of flanged housing

No Bridge/Choke – Centre deflector and ease of flow

Easy to Clean - Dual Magnet Doors for cleaning

Dual protection – 2 Magnet

Plates for better performance in capturing of iron particles



Overband Suspension Magnet

Self-Cleaning Magnetic Separator - Automatic cleaning & continuous working - 24/7 operations

Low maintenance & Easy Installation with adjustable belt arrangement

Durability - Rugged and heavy construction for long usage life

2 Mild steel construction pulley used with shafting and bearing arrangement

Heavy duty 2ply /3 ply rubber belt &

3phase gear motor



Liquid In Line Magnet _

Easy Installation – To be installed easily in existing fluid flow line without any major structural changes

High Intensity and Gemini Rare Earth Powerful Magnets –

Separation of iron particles of fine iron particles

Flexibility - Customized size available for different pipelines

to suit specific requirements

Durability - SS 304 construction & high

intensity powerful magnets

Maintenance Free - No operating cost



Self-Cleaning Magnetic Separator - Automatic cleaning

Continuous working - 24/7 operation

Plug & Play – Ready for operation from Day 1

Durability – SS 304 Outer Drum and Gun Metal Bush

Flow of Material – Adjustable Hopper tray

Flexibility - Customized size available as per the

specific needs of end user





Pulley Magnet

Self-Cleaning Magnetic Separator - Automatic Cleaning

Continuous working - 24/7 operation

Easy installation - No Additional Setup

(Replace the existing MS pulley with PMT Magnet Pulley)

High Intensity and Gemini Rare Earth Powerful Magnets -

Greater level of iron separation

Flexibility – Customized size available as per the specific needs of the end user



Pipe Magnet

Easy access for cleaning and easy to inspect
Easy installation – in the existing pipeline with flange arrangement

High Intensity and Gemini Rare Earth

Powerful Magnets

Greater level of iron separation

Flexibility – Customized size available

as per the specific needs of the end user

Uniformity – Cone shaped design directs material around magnet cylinder for efficient iron separation



Magna Roll_

Self-Cleaning Magnetic Separator Automatic Cleaning **Continuous working** - 24/7 operation

High Intensity and Gemini Rare Earth Powerful Magnets -

Greater level of iron separation

Flexibility – Customized size available as per the specific needs of the end user



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