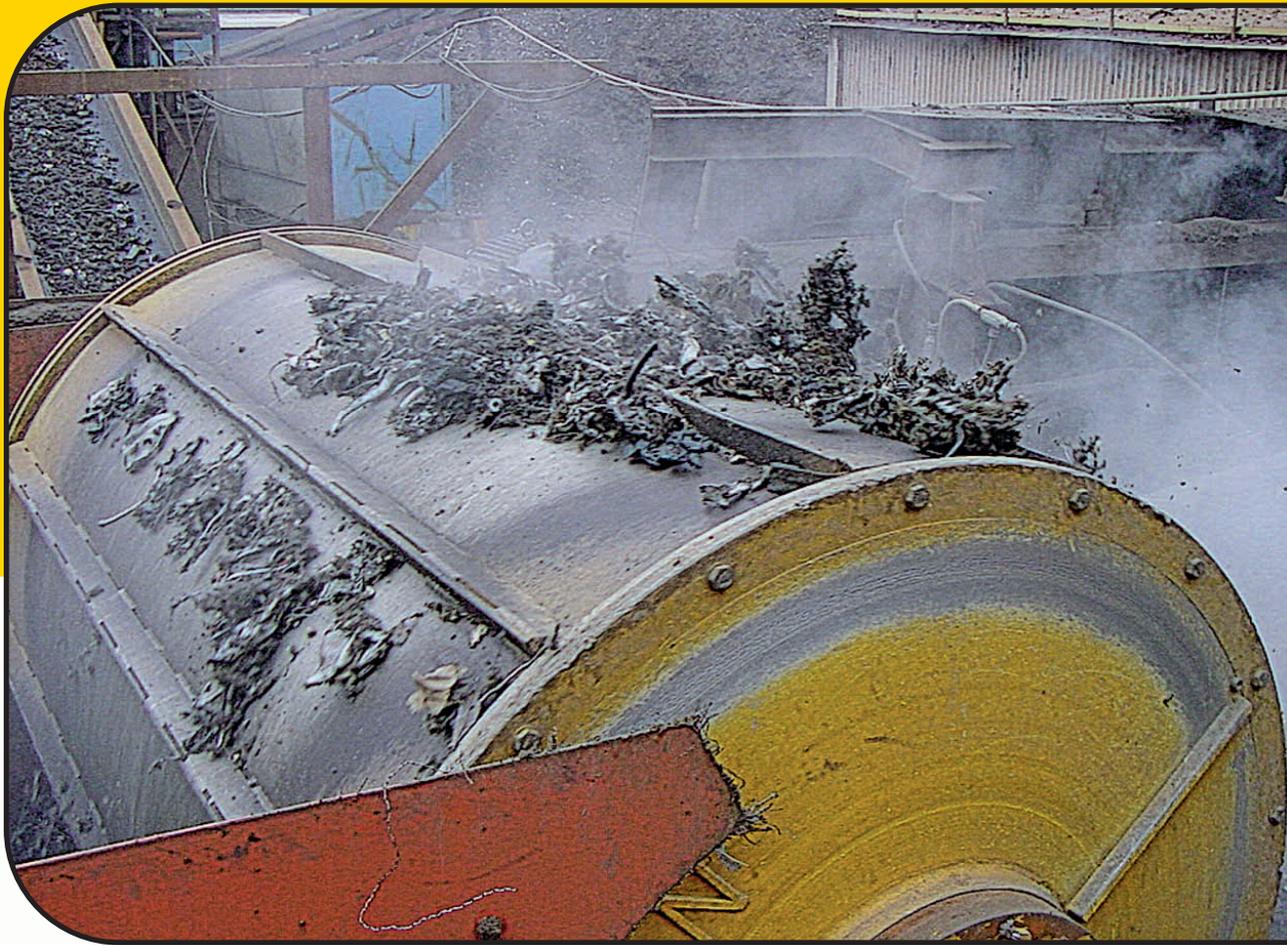


Magnetic Drum MT



Shredders • Municipal Scrap • WEEE • Incinerator Ash Steel Mill Slag • Mining • Aggregate • Wood Processing

STEINERT Magnetic Drums MT excel at ferrous removal in all applications. They have no dead spots and work with larger operating gaps. They yield a clean ferrous product and clean bulk materials. They protect processing equipment from damage by tramp iron.

STEINERT offers both electromagnetic (E) and permanent magnet (P) cores. They can be fed from the top or from below.

STEINERT has over 112 years of experience in design and improvement. Trademarks of STEINERT Magnets are increased efficiency, durability, and long operating life.

Application

Magnetic Drums are a good idea whenever the production is high, or if the belt of your over band magnet is over burdened or wearing out quickly. **STEINERT's** robust core adjustment arm only hints of the huge magnetic core inside.



the drum design to recover ferrous in line without reducing through-put. Removal of tramp iron from coal or glass is also done easily. **STEINERT** axial pole (Q) electromagnetic drums out perform all other drums on the market. **STEINERT** drums give years of trouble free service.



Applications such as pre-separation of ferrous before Eddy-Current separators and recovery of slightly magnetic material found in crushed batteries or electronic scrap take advantage of

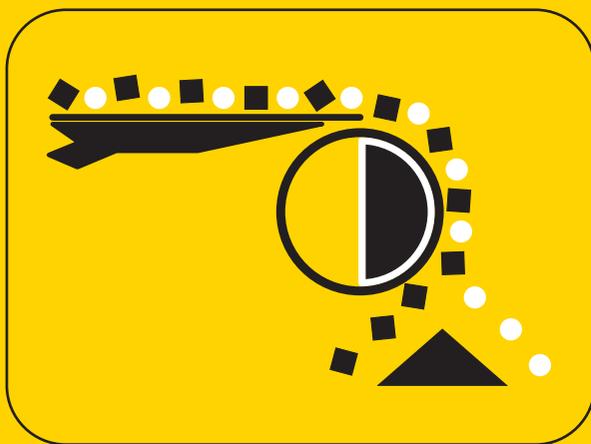


Working Principles

Overfed Drum

Bulk material is distributed evenly with a feed system onto a rotating magnetic drum. Any magnetic piece is attracted to the drum shell and is carried to the point where the magnetic core ends. The non-magnetic particles have fallen off before this point. With material and drum going in the same direction, the flow is easy to handle and ferrous losses are small. Even when the material is large, small or mixed, the size of the particles usually determines the diameter of the drum.

Overfed Radial Pole Drum



Underfed Axial Pole Drum



semicircle around the shaft. The field is constant in the drum's direction of travel. Axial poles (Q) are arranged parallel to the axis and the shaft. The field is constant the entire width, but alternates in the drum's direction of travel.

The underfed magnetic drum shell is rotating opposite to the material's travel. Along with the alternating internal poles, this produces agitation and cleaning. Positioned above the discharge and in line with the material flow, the drum draws up the ferrous material and carries it over the drum until the core ends and it is released.

A larger working gap is possible with a larger drum diameter, or a stronger Drum Magnet... from **STEINERT**.

Installation Principles

There is a difference between radial pole magnetic drums (S) and axial pole magnetic drums (Q):
Radial poles (S) are arranged in a



Benefits:

The first axial pole is stronger than the others to draw up the ferrous items, then the other poles flip and clean the material. This means the knuckles are not missed and the drum edges are fully utilized.

Technology

Better than traditional side plate mounted bearings, **STEINERT** uses larger shafts and drum bearings with independent housings. These provide increased durability under severe conditions and excellent maintenance accessibility.



Along with the larger size and greater attraction forces of our magnetic cores, **STEINERT** has designed stronger drum shells, side plates and torque arms to compliment the increased capability of these severe duty drums.

Versatile

STEINERT can provide custom arrangements of drive, power and support components, as well as accessories (wear covers and skirts) to suit your individual needs.

The magnetic core in all **STEINERT** magnetic drums is adjustable, making it possible to choose the exact pick up point of the magnetic material. This assures clean material.

Instead of the traditional iron core, **STEINERT**'s electromagnets use a combination of cast steel cores and highly compact and heat resistant coils of aluminium strip **ANOFOL**, also a Steinert product, that out-performs ordinary electromagnets. By dissipating heat faster, **STEINERT** drums remain stronger longer during extended operation periods.

Instead of ordinary magnets, **STEINERT** Permanent Magnetic Drums can also be made of neodymium iron boron

magnets when very strong magnetic fields are required.

Better quality **STEINERT** drums will reduce or eliminate the need for using tramp iron suspension magnets or re-processing of your material.



Models

There are a number of designs available, depending on the material size and task to be done.

MTE Q Axial Pole Electromagnetic Drum

Designed to be underfed, the MTE Q can recover very clean ferrous material, depending on the volume and size of material. **STEINERT** offers widths from 800 mm to 2800 mm (32" – 110") and diameters from 800 mm to 1800 mm (32" – 72").



MTE S Radial Pole Electromagnetic Drum

The MTE S produces a deep attraction field. The ferrous particles once attracted, remain attached to the drum until reaching the end of the magnetic field.

MTP Permanent magnetic Drums

Available in axial (Q) or radial (S) design, this drum is suitable for medium to fine bulk material. Working widths from 220 mm to 2000 mm (9" - 80"),



and diameters from 200 mm to 800 mm (8" – 32").

Magnetic Separator Systems

The best separation results are achieved by a coordinated feeding system with discharge chute and a fully integrated support system from **STEINERT**. As a pre-separation a magnetic drum separator system eliminates ferrous, reduces burden depth and increases down stream efficiency.





Circular Lifting Magnet



Suspension Magnet



Magnetic Drum



Magnetic Head Pulley



High Gradient Magnetic Separator



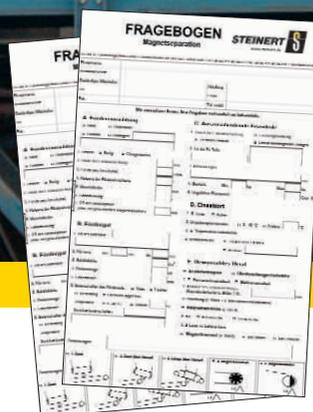
Eddy Current Separator



Induction Sorting System



Colour Sorting System



Interested?

Download our questionnaire!

Our R&D department is glad to conduct tests of your material.

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