

Drum Separators



With the MSI's drum separator, the product being processed enters the housing and flows across the drum. As the product flows, the outer shell rotates around the magnet material. All non-magnetic product falls into the ferrous-free zone, while all magnetic material remains on the drum until it is moved past the magnetic field and released into the ferrous collection area.

DRUM-IN-HOUSING MAGNETS

The drum magnet design allows for continuous cleaning of the magnet system, accomplished by the rotation of the drum itself around the magnetic element. Similar to cleaning belts on MSI's self-cleaning suspended magnet, the rotating drum features wipers that clear away ferrous collected on the drum surface. Like MSI's pulleys, drum-in-housing magnets are available in two difference configurations: radial and axial designs.

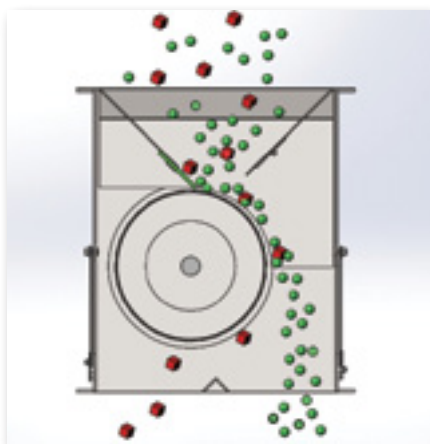
- AXIAL DESIGN is the work horse for magnetic drum applications and is used widely through a number of industries. This design provides agitation, improves separation, and can provide good reach out into deep burdens, as needed.
- RADIAL DESIGN is typically used for the separation of fine ferrous from fine burdens, like magnetic particles from sand.

Separation behavior for both axial and radial designs are similar to magnetic head pulleys with added advantages: 1) the separator does not require a conveyor system, saving money; 2) in larger diameters, drum separators can be built stronger and more economically than pulleys; 3) the damper can be adjusted and the magnet can be used both to separate and to meter burden flow, and 4) *optional removable shell consideration*: the magnetic element is separate from the rotating shell, so in abrasive applications the design allows for shell replacement.

MSI's **FREE TESTING** allows our customers to make informed decisions and purchase with confidence.

DRUM-ONLY MAGNETS

Drum magnets (with out the housing) are also available. These magnets are often used at the end of pulleys or vibratory conveyors, when customers already have existing chutes, and in some other specialized situations where stationary separators are inadequate.



■ Ferrous ● Non-Ferrous

MATERIAL

- Ceramic
- Rare earth
- Alnico
- Hybrids and combinations

SIZING

- 12" to 48" diameters
- 8" to 72" face width
- Custom sizes available

OPTIONS

- Radial or axial circuits
- Customized magnetic circuits for specific applications
- Welded or bolt-on configurations
- Standard 180- to 220-degree magnetic coverage with custom options available