



All models available with Ceramic or Rare Earth tube assemblies.  
Rare Earth models feature IMI's exclusive UHI-52™ Rare Earth circuit

### Application Introduction:

- Designed for ferrous metal separation in dry processing systems
- Magnetic separation is achieved with magnetic tubes assembled in a drawer
- Tubes are aligned on alternating centers for multiple row drawer configurations forcing the product flow in a zig-zag pattern while contacting the magnetic tubes
- The cascade effect ensures maximum tramp metal separation by causing product to have repeated and intimate contact with magnetic tubes
- As ferrous metal enters the magnetic field, it is captured by the tubes and separated from the product flow
- The tubes must be cleaned regularly to prevent build-up and wash-off of the collected ferrous metal

### SimpleClean™ Manual Drawer-In-Housings:

The SimpleClean™ Manual Drawer-In-Housing is an economical solution for applications with low levels of tramp metal contamination. The flanged housing comes with two or more banks of magnetic grate tube assemblies on alternating centers. Each tube is designed with a non-magnetic area located outside of the product stream for substantially easier cleaning/removal of tramp metal than traditional "manual clean" models on the market.



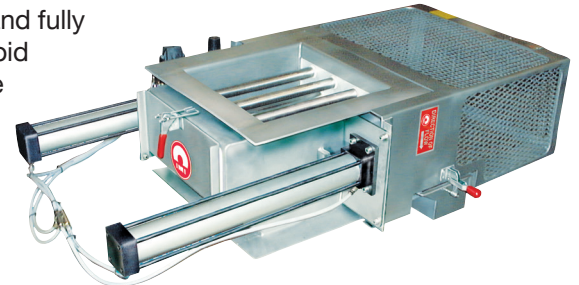
### EZ-Clean Drawer-In-Housings:

The EZ-Clean design speeds up and simplifies the cleaning process, making frequent cleaning requirements user-friendly. To clean the tubes, the operator pulls two handles on the front of the housing which slides the magnetic drawer out of the product flow. As the drawer is pulled out, the tubes pass through special seals which wipe off accumulated metal into a catch pan located under the wiper seal plate for proper disposal.



### Self-Cleaning Drawer-In-Housings:

IMI's Self-Cleaning Housings are ideal for remote magnet installation locations, applications requiring frequent cleaning and fully automated processing systems. The cleaning process is solenoid activated and can be controlled from a remote location with the flip of a switch. The cleaning cycle is completed in a matter of seconds. The air-actuated stripper seal assembly discharges collected tramp metal into a catch pan as the drawer opens.



### Continuous-Cleaning Drawer-In-Housings:

IMI's Continuous-Clean Housings are ideal for remote magnet installation locations, applications requiring frequent cleaning and fully automated processing systems. The patented design and cleaning process (U.S. PATENT NO. 8,132,674) is continuous and does not require the product flow to be stopped. The cleaning cycle is completed in a matter of seconds. The air-actuated stripper seal assembly discharges collected tramp metal into a leak-proof enclosure with a discharge chute that ensures clean operation and isolation of possible hazardous materials.



### Key Markets

Mid-stream magnets for dry, free flow powders to granular products; i.e. food, feed, grain, plastics, chemical

### Related Products

Magnetic Tubes & Grates, Large Tube Housings, The Ox, Clean-Flows, Pipe Magnets

All Photos And Drawings Represent The Products At The Time Of Publication (11/16)

## SimpleClean™ Manual Drawer-In-Housings

SimpleClean™ magnetic row(s) have extended tubes that contain a non-magnetic area. This non-magnetic area is outside of the product stream. To clean a row of magnetic tubes, open the hinged door; remove one row of tubes at a time. Over a container, simply wipe collected metal on the tubes until it reaches the non-magnetic area located at the end of the tubes. Collected metal falls off.

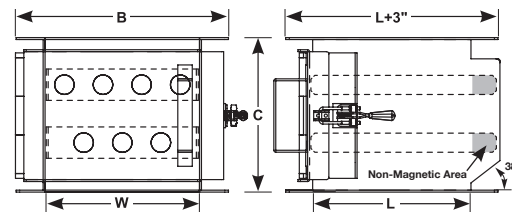
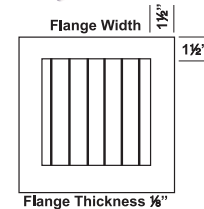


### SimpleClean™ (MC) Features & Specifications:

- All welded stainless steel housing
- Leak resistant, Food Grade, Silicone gasket material
- Hinged door with lock out and DE-STA-CO door latch for positive seal
- Standard inlet/outlet lengths and widths from 6" to 24" in 2" increments
- Ceramic or Rare Earth grate magnet assemblies
- Available in 2 or 3 row magnet configurations
- Magnetic tubes are located on 2" centers within each row
- Rows are offset with the tubes on alternating centers of 2" from row to row

### SimpleClean™ Options:

- Food grade finish and construction
- Custom designed inlet and/or outlet transitions
- Tubes located on 3" centers for difficult flow products
- Wear resistant coating for abrasive products
- Custom designed housings (round or rectangular)



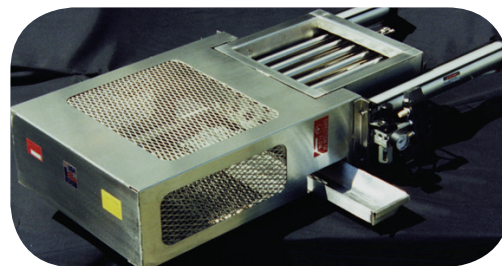
## EZ-Clean, Self-Cleaning & Continuous Clean Drawer-In-Housings

EZ-Clean, Self-Cleaning & Continuous Clean Drawer-In-Housings are ideal for ferrous metal separation in a wide variety of dry processing applications. As ferrous metal passes through the magnetic field, it is held to the tubes and separated from the product. The metal must be cleaned from the tubes on a regular basis to prevent build-up and subsequent wash-off back into the product flow.

These designs features a seal plate with specially designed wiper seals to remove collected metal from the magnetic tubes. When the drawer is unclamped (EZ-Clean) or actuated (Self-Cleaning) compression springs open the drawer and move the seal plate out over the collection pan. Once the seal plate has moved, the drawer is opened until it stops. This opening motion wipes collected metal from the tubes until it reaches a non-magnetic area located at the end of the tubes. The metal then falls off into the collection pan for proper disposal. The drawer must then be returned to the closed position before restarting the product flow.

### EZ, SC & CC Features & Specifications:

- Reduced height, designed for replacing manual clean housings
- 12 Gauge or 3/16", stainless steel housing and flanges
- Ceramic 8 or UHI-52™ (52 MgOe) Rare Earth magnetic tubes
- 1" diameter tubes on 2" vertical and horizontal centers
- Food Grade Silicone gasket material
- Compression springs for seal plate positioning
- Air cylinders, regulator, pneumatic solenoid valve (SC Only)
- All cylinders include magnetic pistons
- FDA white BUNA wiper seals
- Drawer and/or Guard Lock-Out
- Hinged Rear Access Door with Lock-Out
- Collection pan for metal
- Positive locking clamps for drawer (EZ Only)
- Expanded metal guards (SC Only)
- Tool Free Guard Removal
- 80-100 psi minimum to operate (SC & CC Only)
- Leak-Proof enclosure with Discharge Chute (CC Only)

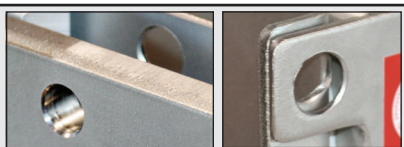


### EZ, SC & CC Options:

- Wear resistant tube treatment and special wiper seals for abrasive products (request Ox® literature for more information)
- Custom sizes and transitions available
- Food grade gasket material
- Finish and welding treatments available for food and sanitary grade applications
- Alternate tube spacing for special applications
- Other Stainless Steel Grades available
- Custom housing designs for magnet in hopper or angled chute installations
- Individual cleaning drawers (adds to height)
- Nema 9 solenoids (SC & CC Only)

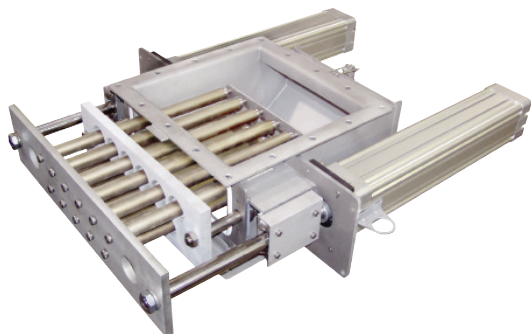
#### Pictured:

Examples of the Drawer and the Rear Access Door Lock-Out





## Typical Drawer-In-Housing Modifications



### Finishes and Protective Coatings

IMI offers a variety of product coatings and finishes for tramp metal separation products, including Hydrex® wiper seals for removing sticky product residue, Nedox® coated tubes to protect against abrasive materials and to prevent build-up and galling and MAGnanoSHIELD® coating that offers 99.9999% microbe resistance to assorted bacteria and fungus strains.

The standard finish for Drawer-In-Housings is Customary Grade. This finish features external seam welded construction with all welds free of slag, soot, spatter and burn marks. Customary Grade housings are bead blasted inside and out for a clean flat finish. Food Grade and Sanitary Grade treatments are also available. For more information on IMI's finishes request our "Finishing Grades" flyer.

### Multiple Drawer Units

Drawer-In-Housings can be constructed with multiple drawers of magnetic tubes to meet the specific needs of your application. Multiple drawers can be used to clean one bank of tubes at a time during production while still offering magnetic protection. EZ-Clean units are sometimes configured with multiple drawers to reduce the pulling force required to clean the tubes on larger models.

### Custom Transitions and Flanges

Custom transitions and flanges are the two most common modifications specified for IMI's housings. Transitions allow for direct fit and easy installation into existing chutes and pipelines. IMI can provide inlet and outlet transitions for round to square, rectangular to square, angled chutes and more. Flanges are custom fabricated for customer specified mounting and coupling requirements.

### Engineered Housings for Special Applications

At IMI we specialize in providing customer driven solutions. This has given IMI the opportunity to design and build a wide variety of custom housings and separators. Some of our unique solutions include angled wall Self-Cleaning Housings and custom fabricated hoppers with EZ-Clean Drawer-In-Housing assemblies built right into the base. No matter what your needs, we welcome the challenge of creating the solution that works best for you.

### Sealed Cleaning Zones for On-The-Fly Operation

Sealed cleaning zones can be provided to allow for drawer operation during production. These sealed cleaning zones are also used to isolate hazardous materials from entering the air during the cleaning cycle.

Pictured on Left from Top to Bottom: Ox® Finished Housing, Multi-Drawer Self-Cleaning Housing with Sealed Cleaning Zone and Custom Transitions, Two Drawer EZ-Clean Housing, Single Row Manual Clean Housing with Bolt-On Outlet, EZ-Clean Housing with Access Door for Removable Diverter, and Custom Transitions.

