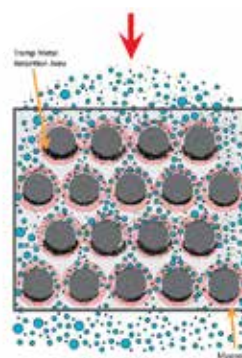
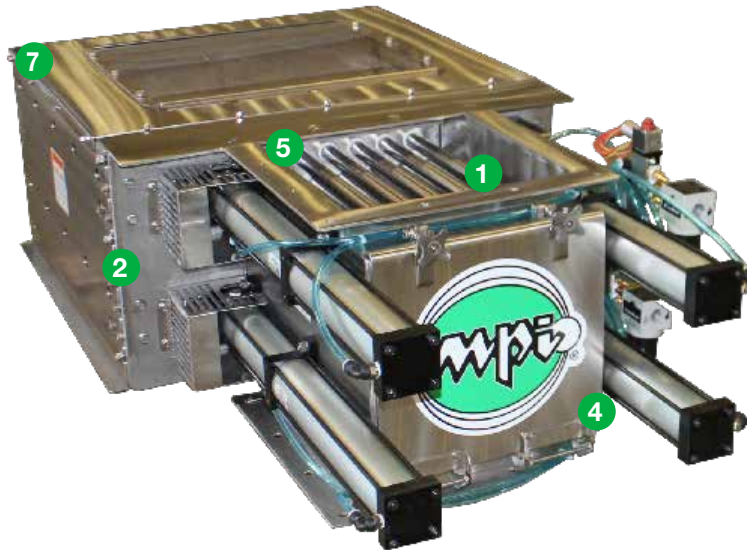




**MAGNETIC PRODUCTS, INC.**  
ENGINEERED METAL CONTROL SOLUTIONS

# Continuous Self-Cleaning Drawer Magnet

**Series: CFDMU-400-SC**



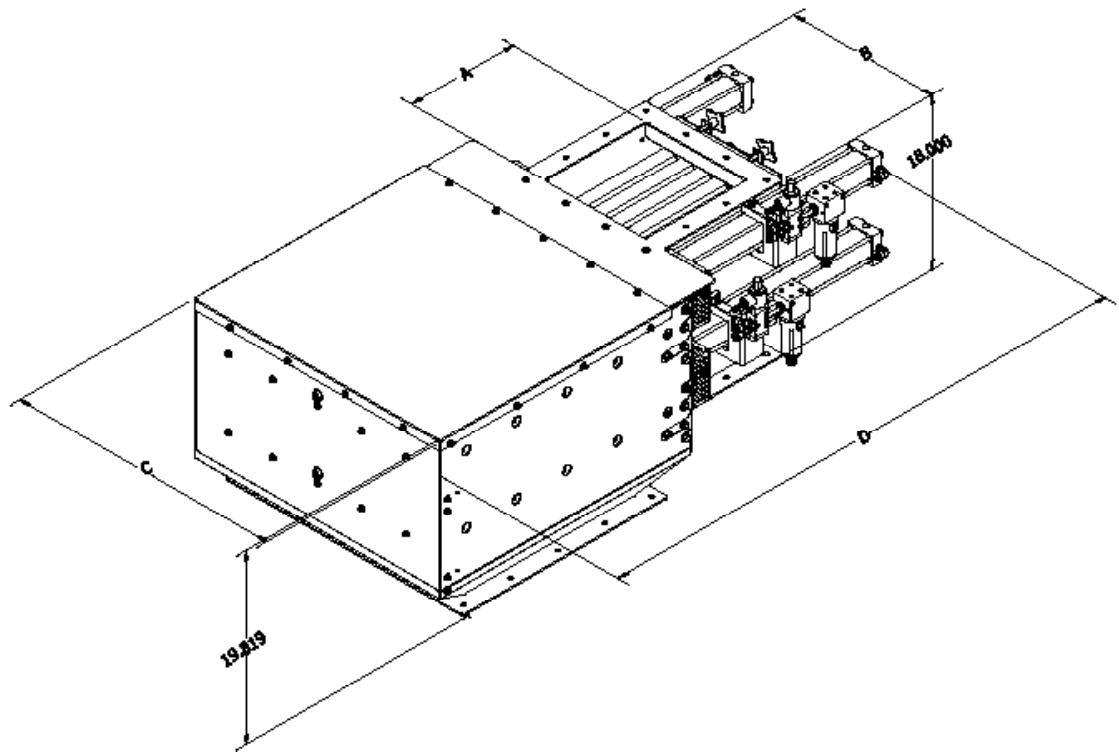
*\*Specifications subject to change*

- 1 Magnetic Tubes:**
  - MPI continuous flow drawer magnets feature four tiers of high intensity rare earth magnetic tubes that ensure the highest levels of magnetic filtration through direct product contact on the tubes, removing all ferrous tramp metal from the product stream
- 2 Continuous Flow Design:**
  - Terminating product flow is not required to cycle magnets
  - The four tier design cleans only 2 rows at any time ensuring that the product is still protected while the magnets are cleaning
- 3 Internal Drawer Support:**
  - Provides drawer support when cycling magnet while product is still running so tubes are not cantilevered into the product flow unsupported, which would lead to misalignment
- 4 Extended Drawer Front:**
  - Helps reduce product leakage when cycling magnet with uninterrupted product flow
- 5 Floating Stripper Seal:**
  - Adjusts to tube resulting in even wear and longer life between replacements
  - Held in place by machined and fastened laminated stripper plate assembly
- 6 Rear Access Panel:**
  - For easy inspection and maintenance
- 7 Bolt-On Stainless Steel Safety Cage:**
  - Removable cover for magnet maintenance and testing
  - Multiple options for tramp metal recovery
- Sani-TIGHT Seal™ Gasket:**
  - Type: Compression style "O-ring" cord gasket
  - Sealing plate: ½" thick machined stainless plate
  - 100% Positive seal, cannot be over-compressed
  - Sanitary: Gasket can be removed and replaced for wash-down, no adhesive required
- Grounding Strap:**
  - Provides a discharge path for static buildup
- Cleaning Cycle:**
  - Start: After manually or electrically actuating the solenoid, the cylinders retract, pulling the magnetic tubes through the stripper assembly to deposit the collected tramp iron outside of the product flow area
  - Finish: The cylinders return to the run position, pushing the magnetic tubes back through the stripper assembly into the housing (working position)
- Stripper Latch:**
  - Releases stripper plate assembly once the plate has been clearly pulled away from the sealing plate
  - Prevents accidental cleaning of the tubes in the product flow area, commonly caused when the stripper assembly is stuck to the sealing plate

Series CF-DMU-400-SC Version 4.0 © MPI

**MPI**

683 Town Center Drive, Highland, MI 48356 | p. 248.887.5600  
info@mpimagnet.com | www.mpimagnet.com



## CF-DMU-400-SC Selection Guide

| MODEL NUMBER | PRODUCT FLOW OPENING AREA A |                 | FLANGE WIDTH B |       | OVERALL WIDTH C |       | OVERALL LENGTH D |        | # OF TUBES | APPROX. WEIGHT |     |
|--------------|-----------------------------|-----------------|----------------|-------|-----------------|-------|------------------|--------|------------|----------------|-----|
|              | IN <sup>2</sup>             | CM <sup>2</sup> | IN             | CM    | IN              | CM    | IN               | CM     | 4-ROW      | LBS            | KG  |
| CF-DMU408-SC | 64                          | 162.56          | 12.25          | 31.12 | 25.2            | 64.01 | 49.5             | 125.73 | 14         | 421            | 191 |
| CF-DMU410-SC | 100                         | 254             | 14.25          | 36.2  | 27.2            | 69.09 | 53.5             | 135.89 | 18         | 469            | 212 |
| CF-DMU412-SC | 144                         | 365.76          | 16.25          | 41.86 | 29.2            | 74.15 | 57.5             | 146.05 | 22         | 517            | 234 |
| CF-DMU414-SC | 196                         | 497.84          | 18.25          | 46.46 | 31.2            | 79.25 | 61.5             | 156.21 | 26         | 565            | 256 |
| CF-DMU416-SC | 256                         | 650.24          | 20.25          | 51.43 | 33.2            | 84.33 | 65.5             | 166.37 | 30         | 613            | 278 |
| CF-DMU418-SC | 324                         | 822.96          | 22.25          | 56.52 | 35.2            | 89.41 | 69.5             | 176.53 | 34         | 661            | 300 |
| CF-DMU420-SC | 400                         | 1016            | 24.25          | 61.60 | 37.2            | 94.49 | 73.5             | 186.69 | 38         | 709            | 321 |

## CF-DMU Selectable Options

### Cleaning Method:

- Manual clean [reference datasheet DM]
- Manual quick-clean [reference datasheet DMU-QC]
- Automated self-cleaning [reference datasheet DMU-SC]
- **Continuous automated self-cleaning (standard)**

### Number of Tiers of Tubes:

- 200 Series with 2 tiers of tubes
- **400 Series with 4 tiers of tubes (standard)**
- 600 Series with 6 tiers of tubes

### Material Construction:

- **304 Stainless Steel (standard)**
- 316 Stainless Steel

### Magnetic Tubes [reference datasheet MT]:

- Ceramic
- **REN Rare Earth (standard)**
- Hi-G high performance Rare Earth
- TW Thin Wall high performance Rare Earth

### Magnetic Material Temperature:

- 400° @ 3.5 MGO (ceramic)
- **176 F @ 52+ MGOe (rare earth) (standard)**
- 248° @ 48 MGO (rare earth)
- 356° @ 38 MGO (rare earth)
- 662° @ 30 MGO (rare earth)

\*Specifications subject to change

Series CF-DMU-400-SC Version 4.0 © MPI

**MPI**

683 Town Center Drive, Highland, MI 48356 | p. 248.887.5600  
info@mpimagnet.com | www.mpimagnet.com

### Tube Spacing:

- **2" horizontal and vertical spacing (standard)**
- 3" (approx.) horizontal and vertical for increased flowability (recommended for products that bridge or choke) (adds 2" to OAH)
- 3" (approx.) horizontal only for increased flowability (available for height restrictions only)
- Custom configurations available

### Tube Coatings:

- **Stainless steel with no coating (standard)**
- Synergistic Coating  
[reference datasheet Synergistic Coating]

### Gasket Material:

- **White silicon, FDA approved (standard)**
- Buna, FDA approved
- Metal detectable blue silicon, FDA approved

### Stripper Material:

- **UHMW material (standard)**
- Maximum temperature: 180° F
- Hydrex material
  - Higher wear resistance compared to UHMW
  - Higher maximum temperature: 221° F
- Metal detectable Hydrex
- Teflon material
  - Higher wear resistance compared to UHMW
  - Higher maximum temperature: 500° F

**Transitions:** Stainless steel transitions for easy installation

- **Not included (standard)**
- Inlet, outlet or both, configured as required for installation

**Companion Flanges:** Matching companion flanges for customer to weld onto existing chute work for easy installation

- **Not included (standard)**
- Stainless steel companion flanges
- Carbon steel companion flanges

**Housing Vibrator:** Housing mounted vibrators improve product flowability over magnetic tubes

- **Mounting holes only (standard)**
- Pneumatic vibrator - quantity 2

**Reed Switches:** For position verification of cylinders in open and closed position

- **Not included (standard)**
- Quantity 2 bolt on magnetic reed switch for unit closed confirmation (120VAC/VDC 500MA)
- Quantity 4 bolt on magnetic reed switches for unit open and closed confirmation (120VAC/VDC 500MA)

### Valve Packages (Quantity 2):

- **120VAC explosion proof rated (standard)**
- 240VAC explosion proof rated
- 12VDC explosion proof rated
- 24VDC explosion proof rated
- Manual lever to actuate magnet cycle

### Safety Cage Design:

- **Safety cage with removable cover for magnet access (standard)**
- Safety cage with hinged cover for easy magnet access
- Safety cage with hinged cover, Lexan viewing window and DESTACO latches for easy magnet access and visual drawer position monitoring

### Tramp Metal Collection Method:

- **Open bottom safety cage with MPI standard flange (standard)**
- Removable collection tray (split tray for sizes 16" and larger)
- Bolt on tramp iron collection transition to 4" pipe with sock bead to attach collection pipe or bag

**Rack and Pinion System:** Large drawers, adhesive and abrasive products can benefit from the added alignment provided by the rack and pinion system. The RP system provides smooth and jam free cleaning of the magnetic tubes ensuring that all magnet tubes travel the exact same distance, at the same time, from left to right, top to bottom, resulting in reduced system wear and improved magnetic tube cleaning.

- **Not included (standard)**
- Included

**Visual Position Indicators:** Mechanical color coded flags move with drawer and indicate drawer position

- **Not included (standard)**
- Included