



# DRUM SEPARATORS

## WITH HOUSINGS

TRAMP MTL 6A (6/98)

### BENEFITS:

- Improve Product Purity
- Protect Processing Equipment from Ferrous Metal Damage

### INTRODUCTION:

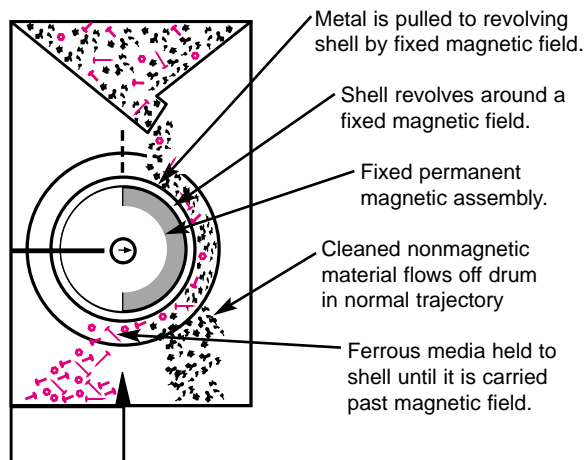
IMI's Drum Separators provide ferrous metal removal from dry, bulk products in free-flowing processing systems.

Due to the nature of their design, Drum Separators are continuously self-cleaning units. These separators can be provided as a complete assembly with the housing and the drive package included, or as the magnetic drum only (refer to Drum Separators: Drum Only Brochure).

### OPERATION:

Material to be processed enters the top of the housing and flows across the surface of the drum. As the drum shell rotates around the stationary magnetic field, all non-ferrous product which is unaffected by the magnet, falls free from the drum into the cleaned material flow.

Any ferrous tramp metal is captured by the magnetic field and is held on the drum's surface. As the drum rotates, the metal is carried past the diverter and released outside of the magnetic field.



\*Photo represents product at date of publication.

### FEATURES:

- Powerful Ceramic or Rare Earth Permanent Magnet Material
- Over 180° of Magnetic Arc Protection
- Manually adjustable magnetic arc position
- Drum diameters from 12" to 24" available
- Drum Widths Available from 12" to 60"
- Inlet and Discharge Mounting Flanges
- Inlet transition to direct product flow
- Fixed diverter to separate cleaned product and collected tramp metal.
- Flex Seal to Prevent Product from Flowing Around the Backside of the Drum
- Access Doors for Inspection and Drum Removal
- Sealed Bearings for Drum Support and Drive
- Direct Drive Mounting with Worm Speed Gear Reducer

### SPECIAL CONSIDERATIONS:

Smooth, uniform, and consistent presentation of the product to the drum's surface has a direct effect on the on the separators ability to efficiently separate tramp metal from the product flow. For the best separation results a vibratory feeder is often recommended.

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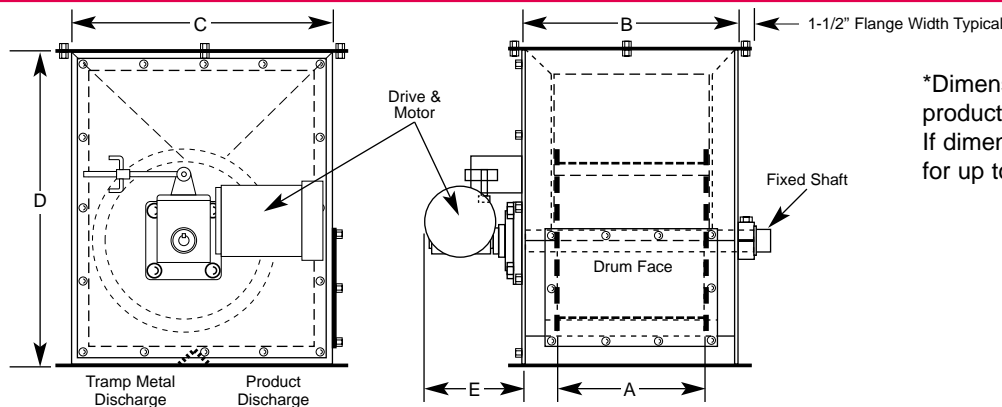
**SPECIFICATIONS:**

- Rare Earth= 40 MGO<sub>e</sub> material, Ceramic= 8 material
- 304 Stainless Steel Drum Shell
- Three (3), 1/2" Wiper Strips
- Sealed Ball Bearings for Shell Rotation
- Fixed TG & P Mild Steel Shaft
- 240/480V AC Motor
- Direct Drive Worm Gear Speed Reducer
- Industrial Welded Housings:
  - Mild Steel for Ceramic Drums
  - 304 Stainless Steel for Rare Earth Drums

**OPTIONS:**

- Custom Diameters and Widths
- Stainless Steel Drum Shaft
- Adjustable Inlet Opening
- Special Magnetic Circuits for Reach Out or Holding
- Stainless Steel Housings for Ceramic Drums
- Special Inlet for Vibratory Fedded Interface
- Multiple Drum Assemblies
- Fine Particle Discharge
- Custom Inlet and Discharge Transitions
- Special Voltage Motors and Drive Packages
- Abrasion Resisting Facing
- Speed Switch

**DRUM SEPARATOR DIMENSIONS:**



\*Dimensions representative of product at date of publication. If dimensions are critical call for up to date changes.

**Note:** All dimensions are stated in inches. Add "C" for Ceramic or "R" for Rare Earth magnet material. Example: MDS1212R for a Rare Earth Drum Separator

**12" DIAMETER DRUM**  
(1-1/2" Standard Inlet Opening) 45 RPM

Model	A	B	C	D	E	Weight	HP
MDS1212	12	16-1/4	22	26	9	280	1/3
MDS1214	14	18-1/4	22	26	9	320	1/3
MDS1216	16	20-1/4	22	26	9	390	1/3
MDS1218	18	22-1/4	22	26	9	460	1/3
MDS1220	20	24-1/4	22	26	9	510	1/3
MDS1224	24	28-1/4	22	26	9	560	1/3
MDS1230	30	34-1/4	22	26	9	600	1/3
MDS1236	36	40-1/4	22	26	9	660	1/2
MDS1242	42	46-1/4	22	26	9	700	1/2

**15" DIAMETER DRUM**  
(2" Standard Inlet Opening) 40 RPM

Model	A	B	C	D	E	Weight	HP
MDS1512	12	16-1/4	25	30	9	350	1/3
MDS1514	14	18-1/4	25	30	9	400	1/3
MDS1516	16	20-1/4	25	30	9	490	1/3
MDS1518	18	22-1/4	25	30	9	585	1/3
MDS1520	20	24-1/4	25	30	9	650	1/3
MDS1524	24	28-1/4	25	30	9	700	1/3
MDS1530	30	34-1/4	25	30	9	750	1/2
MDS1536	36	40-1/4	25	30	9	825	1/2
MDS1542	42	46-1/4	25	30	9	875	3/4
MDS1548	48	52-1/4	25	30	9	940	3/4

**18" DIAMETER DRUM**  
(2-1/2" Standard Inlet Opening) 35 RPM

Model	A	B	C	D	E	Weight	HP
MDS1812	12	16-1/4	28	36	9	435	1/3
MDS1814	14	18-1/4	28	36	9	470	1/3
MDS1816	16	20-1/4	28	36	9	510	1/3
MDS1818	18	22-1/4	28	36	9	550	1/2
MDS1820	20	24-1/4	28	36	9	590	1/2
MDS1824	24	28-1/4	28	36	9	750	1/2
MDS1830	30	34-1/4	28	36	9	860	3/4
MDS1836	36	40-1/4	28	36	9	970	3/4
MDS1842	42	46-1/4	28	36	9	1080	3/4
MDS1848	48	51-1/4	28	36	9	1200	3/4

**24" DIAMETER DRUM**  
(3" Standard Inlet Opening) 30 RPM

Model	A	B	C	D	E	Weight	HP
MDS2418	18	25	38	48	12	1265	3/4
MDS2420	20	27	38	48	12	1300	3/4
MDS2424	24	31	38	48	12	1375	3/4
MDS2430	30	37	38	48	12	1470	1
MDS2436	36	43	38	48	12	1800	1
MDS2442	42	49	38	48	12	2055	1-1/2
MDS2448	48	55	38	48	12	2300	1-1/2
MDS2454	54	61	38	48	12	2540	1-1/2
MDS2460	60	67	38	48	12	2885	1-1/2

**For Flow Rate Capacities, Refer to Tech Sheet 6B.**

