



Magnets | Material Handling
Electronic Inspection | Service

Magnetic Drum Separator

Series: DSH



1 Industry Leading Magnetic Performance:

- High performance Hi-G rare earth neodymium magnetic circuit generates 5400 gauss on the surface of the drum resulting in the highest separation rates (optional)

2 High Separation Rates:

- 220 Degrees of magnet material around the surface of the drum increases magnetic field exposure for better separation rates and less good product carry over
- Oversized drivetrain for exponential service factor for reliable long term performance

3 Minimize Carryover:

- Adjustable pant leg distribution system for fine tuning the drum separator to minimize carryover

4 Adjustable Flow Rate:

- Adjustable feed gate for fine tuning feed into the system to optimize magnetic separation for flow rates

5 Hassle Free Maintenance:

- Inspection doors for easy access into the drum for maintenance
- Easy removal of drum from drive side access panel for service and maintenance without removing housing from line (required for abrasive products shell replacement)

Reinforced Seals:

- Fully sealed design features double sealed bearings with external shield and sealed magnetic drum design to prevent damage from product ingress

Flexible Positioning:

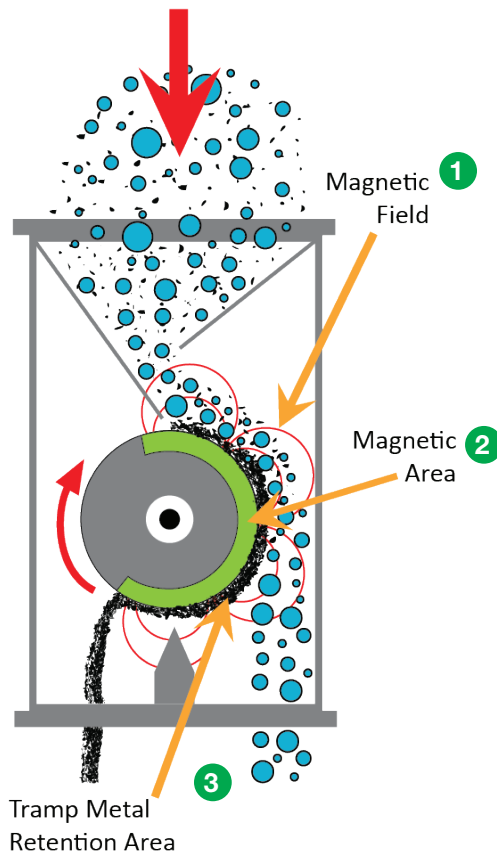
- Adjustable magnetic arc position for fine tuning drum performance

Made in USA:

- American manufacturing

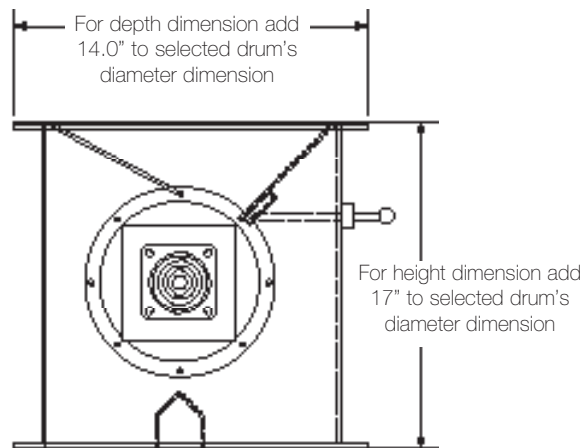
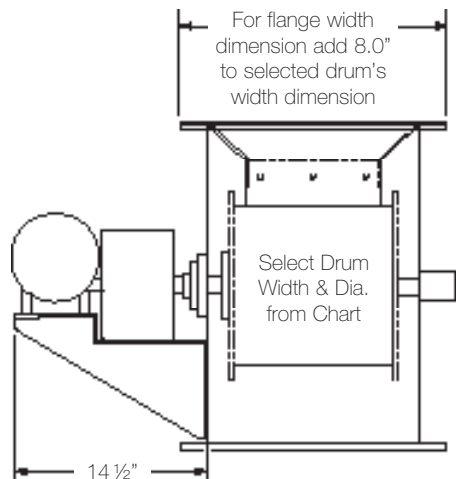
MPI's Magnetic Drum Separators (DSH) are designed to provide trouble-free automatic extraction of tramp iron from heavy flows of large size and abrasive materials such as coal, aggregates, ores, sugarcane etc.

When the product stream contacts the drum, the powerful permanent magnetic field attracts and retains ferrous particles on a revolving shell. As the product stream flows by the shell, any non-ferrous product falls unhindered from the shell, while tramp metal particles are retained and carried away from the product stream by the drum, out of the magnetic field, past a divider and deposited into a tramp metal collection container.



*Specifications subject to change

Series DSH Version 3.0 © MPI



Drum Diameter (Inches)	Drum Width		Capacity		Drum Diameter (Inches)	Drum Width		Capacity	
	IN	MM	Cubic feet per hour	Cubic meters per hour		IN	MM	Cubic feet per hour	Cubic meters per hour
12" 305 mm 45 rpm	12	305	1000	28	24" 610 mm 30 rpm	18	457	3700	105
	14	356	1200	34		20	508	4200	119
	16	406	1400	40		24	610	5100	145
	18	457	1600	45		30	762	6500	185
	20	508	1800	50		36	915	7800	220
	24	610	2200	62		42	1067	9200	260
	30	762	2800	80		48	1219	10500	300
	36	915	3300	93		54	1372	11900	340
	42	1067	3900	110		60	1524	13200	375
15" 380 mm 40 rpm	12	305	1250	35	30" 762 mm 25 rpm	24	610	7200	205
	14	356	1500	42		30	762	9200	260
	16	406	1750	50		36	915	11100	315
	18	457	2000	57		42	1067	13000	370
	20	508	2200	62		48	1219	14900	420
	24	610	2700	76		54	1372	16800	475
	30	762	3400	96		60	1524	18700	530
	36	915	4100	116		24	610	9800	280
	42	1067	4800	136		30	762	12500	350
18" 457 mm 35 rpm	48	1219	5500	156	36" 915 mm 20 rpm	36	915	15200	430
	12	305	1600	45		42	1067	17800	500
	14	356	1900	54		48	1219	20400	580
	16	406	2200	62		54	1372	23000	650
	18	457	2500	71		60	1524	25600	725
	20	508	2800	79					
	24	610	3400	96					
	30	762	4300	122					
	36	915	5200	147					
	42	1067	6100	173					
48	1219	7000	198						

Drum Separator Options

Drum Diameter: Available diameters are 12", 15" 18", 24", 30" and 36"

Drum Width: Sizes available from 12" to 60" wide in 2" increments

Housing:

- Drum and shaft only
- **Drum with 304 stainless steel housing (Standard)**

Magnetic Circuit Design:

- Axial pole ceramic magnet (400° @ 3.5 MGO) measuring 1200 gauss on surface of drum for large and medium target tramp metal
- Axial pole rare earth magnet (176 F @ 52-55 MGOe) measuring 3300 gauss on surface of the drum
- Axial pole rare earth magnet (176 F @ 52-55 MGOe) measuring 5400 gauss on surface of the drum
- Checkerboard pole, agitator design, with rare earth magnet (176 F @ 52-55 MGOe) for highly commingled materials

Shell Material:

- **12 gauge stainless steel (Standard)**
- 7 gauge manganese for high abrasion and large tramp metal applications. Extra shell thickness reduces gauss on surface of drum. Also includes manganese wipers, diverter and inlet.

Drum Wipers:

- Single drum wiper for applications with low ferrous metal content and reduced product carryover
- **3 evenly spaces wipers for applications with medium to high ferrous metal content (Standard)**

Drive Design:

- Chain drive with torque limiter at fixed RPM
- Chain drive with torque limiter XP motor at fixed RPM
- Chain drive with torque limiter and VFD for adjustable RPM for fine tuning system

Input Voltage:

- **230/460 Volts, 3 Phase, 60 Hz (Standard)**
- 575 Volts, 3 Phase, 60 Hz for Canada

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