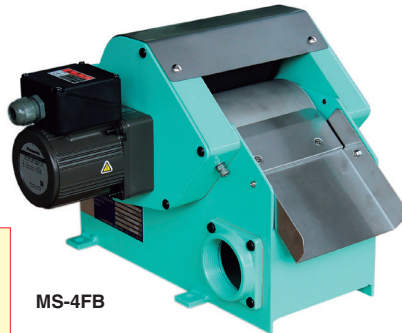


CHIP & SLUDGE CONVEYANCE EQUIPMENT

Model MS-F·FH·FHP MAGCLEAN*

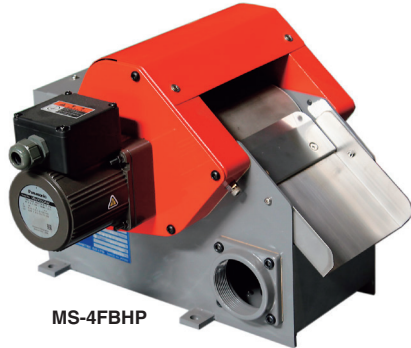
Magnetic coolant separator



MS-4FB

A type having a motor on the right side (MS-F-R) is also available.

Maintenance parts available



MS-4FBHP

[Application]

This unit is incorporated in the grinding fluid purification and circulation system for grinders to remove iron powder, a major part of purification. When this is used together with a tank in which particles other than iron powder such as abrasive grains are separated by floating and precipitation, repurified and regenerated grinding fluid can be supplied to grinders again.

[Features]

- The construction of a stationary magnet and a rotary outer drum shell has no magnet in the area of the rake plate to allow smooth discharge of sludge. (The life of the rake plate is also prolonged.)
- The magnetic drum rotation drive construction has been modified to improve durability significantly.
- The squeezing roller tensioning mechanism has been designed anew to improve the squeezing performance.
- The squeezing roller and inlet areas are covered to enhance safety as well as to prevent grinding fluid from splashing/scattering.
- The outlet location can be selected by the user, right, left or bottom, to allow flexible change of the circulation system layout.
- The high magnetic force type (MS-FaH: drum surface max. flux density 0.3T (3000G))/super high magnetic force type (MS-FHP: 0.5T (5000G)) are most suitable for collection of weak magnetic and minute sludge.
- A type having a motor on the right side (MS-F-R) is also available.



Precaution for use

This is dedicated to grinding fluid (water soluble) only. If you plan to use the Magclean under the following conditions or if you cannot decide a suitable model, please fill the Magclean inquiry sheet at the end of this catalog and consult with us in advance.

- Grinding fluid is oil based.
- Liquid other than grinding fluid is used (such as fresh water and chemical liquid).
- The squeezing roller forced drive type is used.
- KANETEC MS-D type is to be updated.
- Liquid to use is not at normal temperature.

※ Please see the Facsimile Communication Form (Selection Data) on page 173 also.

Applications of Magclean

Machine Tools and Equipment	Iron Powder (Sludge) and Chips	Magclean	Chip Magclean	Paper Filter after Treatment by Magclean	Magclean after Separation and Collection by Chip Conveyor	(Ref.) Chip Conveyor
Precision grinding machine Honing machine	Sludge Fine iron powder	△	×	*1 △	—	×
Cylindrical grinding machine Surface grinding machine Rotary grinding machine	Flocculent fine iron powder Fine iron powder	*3 ○ ○	△ △	*1 ○ ○	— —	× ×
Machining center Milling machine Lathe Gear cutting machine Broaching machine Drilling machine Special machine	Crushed chips End milling Spiral helical shape 60 mm or less Cylindrical helical shape 60 mm or less Tangled chips 60 mm or less	×	○ ×	×	*2 ○ ○ ○	○ ○ ○
Washing machine	Fine iron powder about 100 μm	○	△	*1 ○	—	×
Hardening equipment	Fine iron particles of various shapes	△	△	*1 △	×	×

○: Effectively functions and high collection rate.

△: Functions but collection rate and processing amount expected to drop.

×: Not suitable.

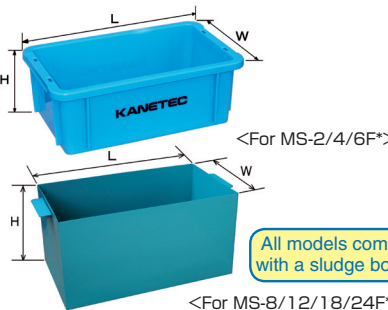
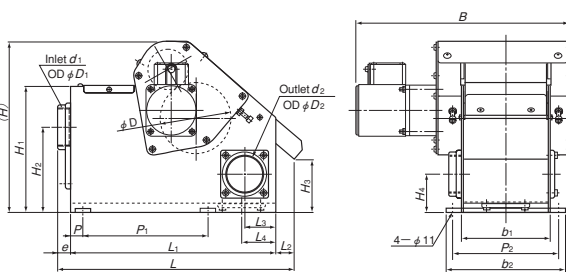
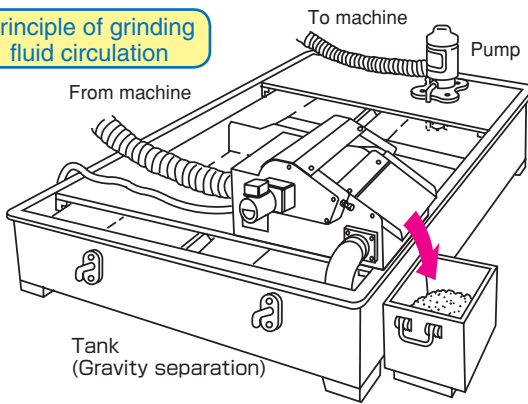
*1: Nonmagnetic fine particles such as abrasives can be collected.

*2: Two steps of chip collection and fine iron powder collection are possible.

*3: May not be collected by the standard type. Please contact us.

Drum surface max. flux density 0.5T!

Principle of grinding fluid circulation



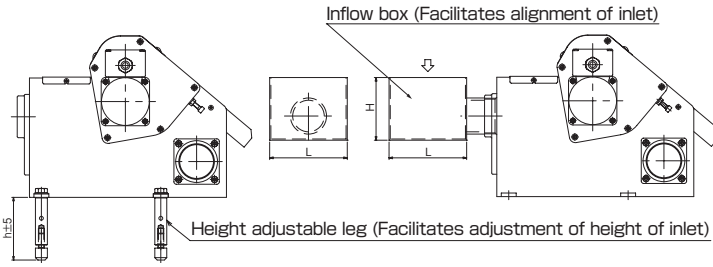
All models come with a sludge box.

Model	Dimensions [mm (in)]		
	L	W	H
MS-2F*	193 (7.59)	148 (5.82)	82 (3.22)
MS-4F*	267 (10.5)	165 (6.49)	95 (3.74)

Model	Dimensions [mm (in)]		
	L	W	H
MS-8F*	308 (12.1)	170 (6.69)	210 (8.26)
MS-12F*	410 (16.1)	230 (9.05)	
MS-18F*	460 (18.1)		
MS-24F*	510 (20.0)		

Standard	Model			Processing Capacity	Power Source	Motor	Dimensions																Mass							
	High mag. force	Super high mag. force	Model				L	B	H	L ₁	L ₂	L ₃	L ₄	e	P	P ₁	P ₂	b ₁	b ₂	H ₁	H ₂	H ₃		H ₄	D	D ₁	d ₁	D ₂	d ₂	
MS-2FB	MS-2FBH	MS-2FBHP	20L/min	3-phase 200 VAC/ 220 VAC, 50/60 Hz	25W	375 (14.7)	278 (10.9)					15 (0.59)												57 (2.24)	PS-1* 1/2	70 (2.75)	PS-2	15kg/ 33 lb		
MS-4FB	MS-4FBH	MS-4FBHP	40L/min			380 (14.9)	328 (12.9)	271 (10.6)	330 (12.9)			50 (1.96)	55 (2.16)			200 (7.87)	170 (6.69)	141 (5.55)	191 (7.52)	200 (7.87)	135 (5.31)	84 (3.30)		60 (2.36)						
MS-6FB	MS-6FBH	MS-6FBHP	60L/min	40W	510 (20.2)	505 (19.8)	286 (11.2)	460 (18.1)	30 (1.18)	65 (2.55)	65 (2.55)		20 (0.78)	270 (10.6)	320 (12.6)	291 (11.4)	341 (13.4)	215 (8.46)	142 (5.59)	60 (2.36)		67 (2.63)	114 (4.48)							
MS-8FB	MS-8FBH	MS-8FBHP	80L/min		515 (20.2)	605 (23.8)					86 (3.38)	86 (3.38)			400 (15.7)	420 (16.5)	391 (15.3)	441 (17.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)								
MS-12FB	MS-12FBH	MS-12FBHP	120L/min			655 (25.7)	321 (12.6)	600 (23.6)			80 (3.14)	95 (3.74)	25 (0.98)		470 (18.5)	441 (17.3)	491 (19.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)									
MS-18FB	MS-18FBH	MS-18FBHP	180L/min											400 (15.7)	520 (20.4)	491 (19.3)	541 (21.3)													
MS-24FB	MS-24FBH	MS-24FBHP	240L/min																											

Model MS MAGCLEAN* HEIGHT ADJUSTABLE LEGS/INFLOW BOX (Optional)



[Application]

An optional unit to enable the Magclean to be mounted on a machine easily.

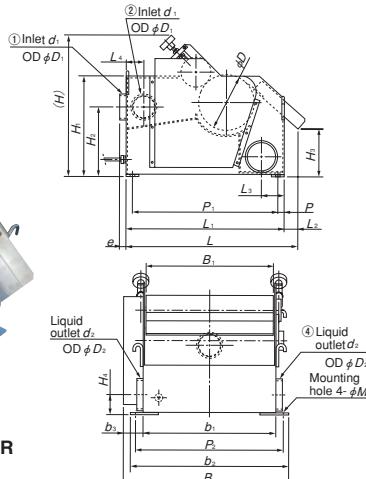
Model			Dimensions [mm (in.)]		
Standard	High mag. force	Super high mag. force	h	L	H
MS- 2FB	MS- 2FBH	MS- 2FBHP	105 (4.13)	110 (4.33)	105 (4.13)
MS- 4FB	MS- 4FBH	MS- 4FBHP		130 (5.11)	
MS- 6FB	MS- 6FBH	MS- 6FBHP		150 (5.90)	
MS- 8FB	MS- 8FBH	MS- 8FBHP	155 (6.10)	170 (6.69)	115 (4.52)
MS-12FB	MS-12FBH	MS-12FBHP		190 (7.48)	

※For MS-18FB/FBH/FBHP and MS-24FB/FBH/FBHP, please contact us.

Model MS-BS MAGCLEAN*



MS-24BS-BR



[Application]

Suitable for removal of iron powder from grinding fluid.

If you plan to use this model for washing purpose (fresh water and other liquids), please contact us.

Model designation of MS-BS

When ordering MS-BS Series, be sure to specify the direction of the inlet and liquid outlet in the model designation as follows:

MS-24BS-B L

Direction of liquid outlet

L: Left when viewed from the sludge discharge direction. (Liquid outlet ③ in the following figure)

R: Right when viewed from the sludge discharge direction. (Liquid outlet ④ in the following figure)

Direction of the inlet

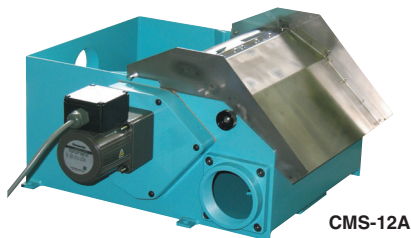
B: Backside (Inlet ① in the following figure)

R: Right when viewed from the sludge discharge direction. (Inlet ② in the following figure)

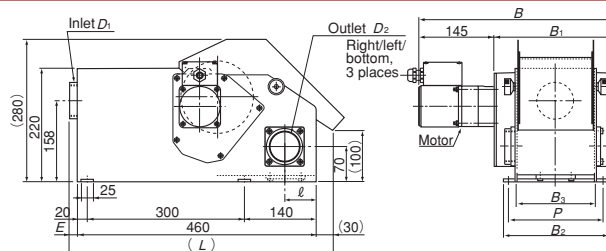
Model	Inlet Direction	Liquid Discharge Direction	Processing Capacity	Power Source	Motor	Dimensions [mm (in.)]																				Mass												
						L	B	H	L ₁	L ₂	L ₃	L ₄	e	P	P ₁	P ₂	B ₁	b ₁	b ₂	b ₃	H ₁	H ₂	H ₃	H ₄	M		D	D ₁	d ₁	D ₂	d ₂							
MS-24BS-BL	①	③	240L/min	3-phase 200 VAC, 50/60 Hz	90W	670	645	534	620		90	—	25	570	572	495	515	615	80	386	268	189	77	17	214	102	PS-3	127	PS-4	115kg/ 253 lb								
MS-24BS-BR	②	④				70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
MS-24BS-RL	①	③				839	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
MS-24BS-RR	②	④				70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
MS-36BS-BL	①	③	360L/min	3-phase 200 VAC, 50/60 Hz	100W	830	839	670	780		50	105	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
MS-36BS-BR	②	④				80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
MS-36BS-RL	①	③				830	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
MS-36BS-RR	②	④				70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MS-50BS-BL	①	③	500L/min	3-phase 200 VAC, 50/60 Hz	100W	1139	—	—	—		120	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
MS-50BS-BR	②	④				90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
MS-50BS-RL	①	③				1030	930	968	1090	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MS-50BS-RR	②	④				70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

※The numbers in "Inlet Direction" and "Liquid outlet" correspond to No. ① to ④ in the figures above. Be sure to check the directions.

Model CMS CHIP MAGCLEAN*



CMS-12A



[Application]

This Chip Magclean is designed to remove/collect chips in coolant that is discharged from cutting operations by machine tools.

[Features]

- The employment of a magnetic drum with special magnetic pole array ensures a high rate of collection.
- The newly designed scrapper improves performance to separate and remove chips from the magnetic drum.
- The expanded discharge space helps stable discharge. The higher side wall helps prevent overflowing.
- The overall height has been reduced by 80 mm by changing the motor mounting position, enabling the Chip Magclean to be mounted in places where it could not be mounted.

Model	Processing Capacity	Power Source	Motor	Dimensions [mm (in.)]										Mass
				L	B	E	l	B ₁	B ₂	B ₃	P	D ₁	D ₂	
CMS-4A	40L/min	3-phase 200 VAC	25W	505 (19.8)	380 (14.9)	20 (0.78)	70 (2.75)	234 (9.21)	200 (7.87)	152 (5.98)	180 (7.08)	PS-2	PS-2	22kg/ 48 lb
CMS-8A	80L/min	220 VAC, 50/60 Hz		430 (16.9)	—	—	—	284 (11.1)	250 (9.84)	202 (7.95)	230 (9.05)	PS-2-1/2	PS-2-1/2	27kg/ 59 lb
CMS-12A	120L/min	50/60 Hz		515 (20.2)	580 (22.8)	25 (0.98)	60 (2.36)	434 (17.0)	400 (15.7)	352 (13.8)	380 (14.9)	PS-2-1/2	PS-3	41kg/ 90 lb