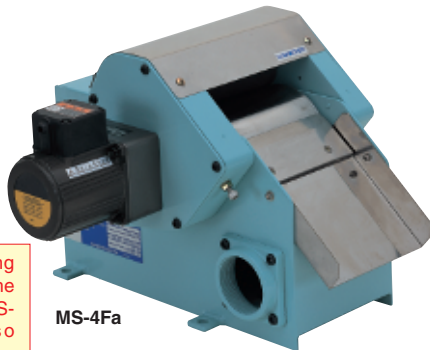


CHIP & SLUDGE CONVEYANCE EQUIPMENT

Model MS-F·FH·FHP MAGCLEAN*

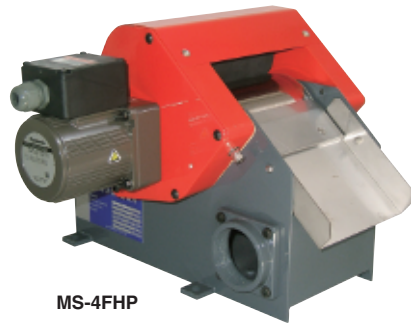
Magnetic coolant separator



MS-4Fa

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

Maintenance parts available



MS-4FHP

[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 can be located on the 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 171 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 Centerless grinding machine	Flocculent fine iron powder	※3 ○	△	※1 ○	—	×
Surface grinding machine Rotary grinding machine	Fine iron powder	○	△	※1 ○	—	×
Machining center Milling machine Lathe	Crushed chips End milling	×	○	×	※2 ○	○
Gear cutting machine Broaching machine Drilling machine Special machine	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.

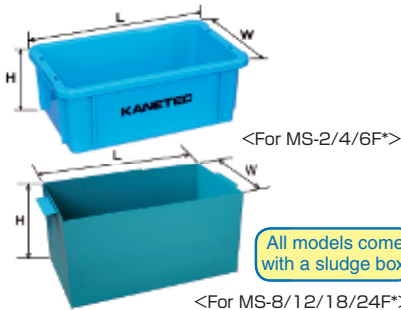
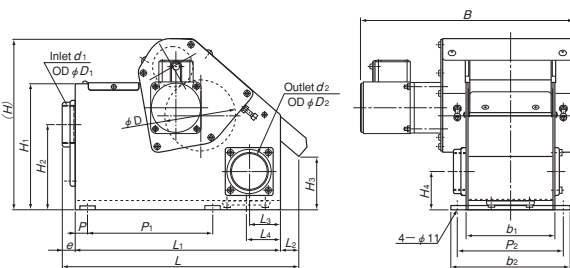
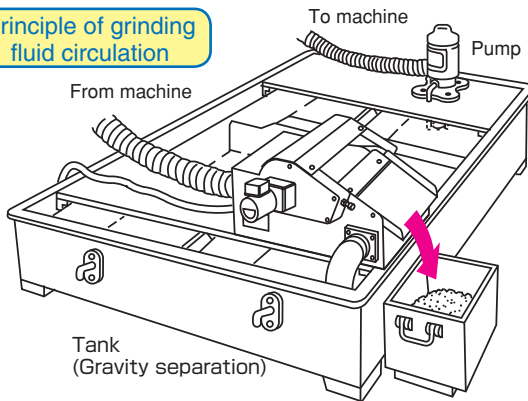
※1: Nonmagnetic fine particles such as abrasives can be collected.

※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



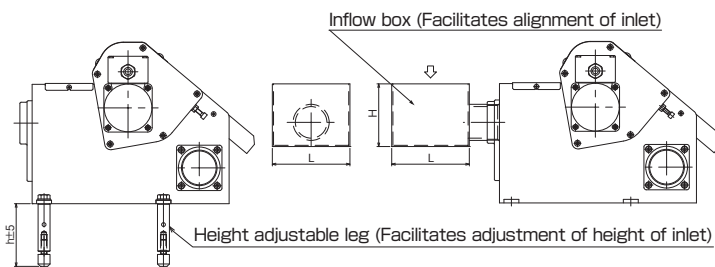
All models come with a sludge box.

Model	Dimensions		
	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)
MS-6F*	267 (10.5)	165 (6.49)	95 (3.74)

Model	Dimensions		
	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	MS-2FHP				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
MS-2Fa	MS-2FaH	MS-2FHP	20L/min	3-phase 200 VAC/ 220 VAC, 50/60 Hz	25W	375 (14.7)	278 (10.9)	271	330	50 (1.96)	55 (2.16)	15 (0.59)	200 (7.87)	120 (4.72)	91 (3.58)	141 (5.55)	200 (7.87)	135 (5.31)	84 (3.30)	60 (2.36)	114 (4.48)	57 (2.24)	PS-1-1/2	70 (2.75)	PS-2	15kg/ 33 lb
MS-4Fa	MS-4FaH	MS-4FHP	40L/min			380 (14.9)	328 (12.9)	271 (10.6)	330 (12.9)					30	65 (2.55)	65 (2.55)		20 (0.78)				270 (10.6)				170 (6.69)
MS-6Fa	MS-6FaH	MS-6FHP	60L/min	40W	510 (20.0)	505 (19.8)	286 (11.2)	460 (18.1)	30	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)	70 (2.75)	PS-2	85 (3.34)	102 (4.01)	PS-3	21kg/ 46 lb
MS-8Fa	MS-8FaH	MS-8FHP	80L/min		515 (20.2)	605 (23.8)	321 (12.6)	600 (23.6)	30	80 (3.14)	95 (3.74)	25 (0.98)	400 (15.7)	420 (16.5)	391 (15.3)	441 (17.3)	491 (19.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)	102 (4.01)	PS-3	—	PS-4	32kg/ 70 lb
MS-12Fa	MS-12FaH	MS-12FHP	120L/min	40W	655 (25.7)	655 (25.7)	321 (12.6)	600 (23.6)	30	80 (3.14)	95 (3.74)	25 (0.98)	400 (15.7)	470 (18.5)	441 (17.3)	491 (19.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)	102 (4.01)	PS-3	—	PS-4	38kg/ 83 lb	
MS-18Fa	MS-18FaH	MS-18FHP	180L/min		655 (25.7)	705 (27.7)	321 (12.6)	600 (23.6)	30	80 (3.14)	95 (3.74)	25 (0.98)	400 (15.7)	520 (20.4)	491 (19.3)	541 (21.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)	102 (4.01)	PS-3	—	PS-4	45kg/ 99 lb	
MS-24Fa	MS-24FaH	MS-24FHP	240L/min	40W	655 (25.7)	705 (27.7)	321 (12.6)	600 (23.6)	30	80 (3.14)	95 (3.74)	25 (0.98)	400 (15.7)	520 (20.4)	491 (19.3)	541 (21.3)	250 (9.84)	165 (6.49)	95 (3.74)	77 (3.03)	102 (4.01)	PS-3	—	PS-4	50kg/ 110 lb	

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



[Application]

An optional unit to enable the Magclean to be mounted on a machine easily. [mm (in.)]

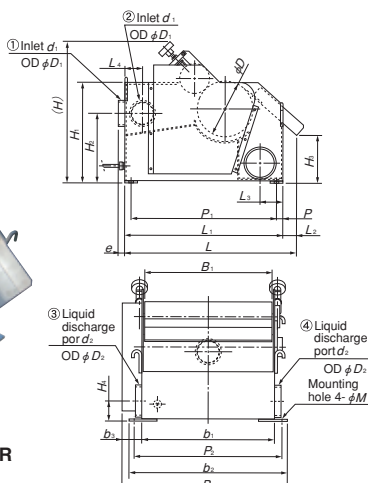
Model			Dimensions		
Standard	High mag. force	Super high mag. force	h	L	H
MS- 2Fa	MS- 2FaH	MS- 2FHP	105 (4.13)	110 (4.33)	105 (4.13)
MS- 4Fa	MS- 4FaH	MS- 4FHP		130 (5.11)	
MS- 6Fa	MS- 6FaH	MS- 6FHP		150 (5.90)	
MS- 8Fa	MS- 8FaH	MS- 8FHP	155 (6.10)	170 (6.69)	115 (4.52)
MS-12Fa	MS-12FaH	MS-12FHP		190 (7.48)	

*For MS-18Fa/FaH/FHP and MS-24Fa/FaH/FHP, 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 discharge port in the model designation as follows:

MS-24BS-B L

Direction of liquid discharge port

L: Left when viewed from the sludge discharge direction. (Liquid discharge port ③ in the following figure)
R: Right when viewed from the sludge discharge direction. (Discharge port ④ in the following figure)

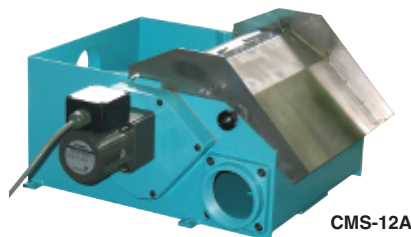
Direction of the inlet

B: Backside (Inlet ① in the following figure)
R: Right when viewed from the sludge discharge direction. (Inlet ② in the following figure)

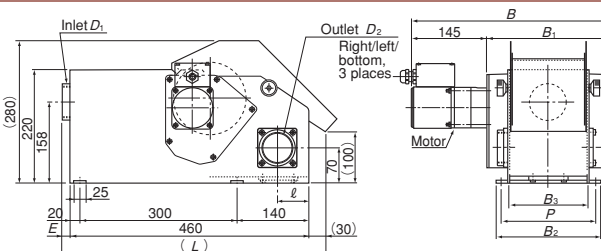
Model	Inlet Direction	Liquid Discharge Direction	Processing Capacity	Power Source	Motor	Dimensions																				Mass									
						L	B	H	L ₁	L ₂	L ₃	L ₄	e	P	P ₁	P ₂	B ₁	b ₁	b ₂	b ₃	H ₁	H ₂	H ₃	H ₄	M		D	D ₁	d ₁	D ₂	d ₂				
MS-24BS-BL	①	③	240L/min	3-phase 200 VAC/50/60 Hz	90W	670	645	534	620					25 (0.98)	25	570	572	495	515	615	80	386	268	189	77	17	214	102	PS-3	127 (5.00)	PS-4	115kg/ 253 lb			
MS-24BS-BR	②	④				70 (2.75)																													
MS-24BS-RL	①	③	360L/min	3-phase 200 VAC/50/60 Hz	100W	830	839 (33.0)	670	780					35 (1.37)																					
MS-24BS-RR	②	④				80 (3.15)																													
MS-36BS-BL	①	③	500L/min	3-phase 200 VAC/50/60 Hz	100W	830	839 (33.0)	670	780					35 (1.37)																					
MS-36BS-BR	②	④				80 (3.15)																													
MS-50BS-BL	①	③	500L/min	3-phase 200 VAC/50/60 Hz	100W	1139	1139 (44.8)	670	780					35 (1.37)																					
MS-50BS-BR	②	④				90 (3.54)																													
MS-50BS-RL	①	③	500L/min	3-phase 200 VAC/50/60 Hz	100W	1139	1139 (44.8)	670	780					35 (1.37)																					
MS-50BS-RR	②	④				90 (3.54)																													

*The numbers in "Inlet Direction" and "Liquid Discharge Direction" 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.

[mm (in.)]

Model	Processing Capacity	Power Source	Motor	Dimensions										Mass
				L	B	E	ℓ	B ₁	B ₂	B ₃	P	D ₁	D ₂	
CMS-4A	40L/min	3-phase 200 VAC/220 VAC, 50/60 Hz	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			430 (16.9)		284 (11.1)	250 (9.84)	202 (7.95)	230 (9.05)	PS-2·1/2	PS-3			27kg/ 59 lb
CMS-12A	120L/min			515 (20.2)	580 (22.8)	25 (0.98)	60 (2.36)	434 (17.0)	400 (15.7)			352 (13.8)	380 (14.9)	41kg/ 90 lb

MAGNETIC TOOLS & EQUIPMENT FOR WELDING OPERATION
 LIFTING MAGNET
 MAGBORE*
 CHIP & SLUDGE CONVEYANCE EQUIPMENT
 MAGNETIZER AND ENVIRONMENTAL EQUIPMENT
 DEMAGNETIZER
 MAGNETIC EQUIPMENT FOR CONVEYANCE
 MAGNETIC SEPARATORS
 POWERFUL MAGNETIC SEPARATORS
 MEASURING INSTRUMENTS
 MEASURING TOOLS
 MAGNETIC MATERIALS