Model MS-F·FH MAGCLEAN*

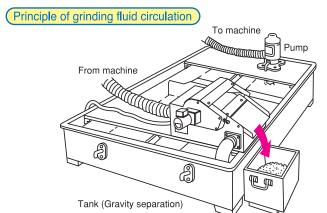
MAGNETIC TOOLS

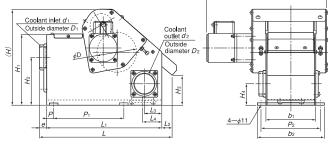
MAGNETIC TOOLS FOR WELDING OPERATION

MAGBORE

Magnetic coolant separator







(Model MS-F/FH dimensions)

[Application]

This unit is incorporated in the coolant purification and circulation system for grinders to remove iron particles, a major part of purification.

When it is used together with a tank in which particles other than iron powder such as abrasive grains are separated by floating and precipitation, re-purified and regenerated coolant 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 and allows 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 are covered to enhance safety as well as to prevent grinding coolant from splashing/scattering.
- The outlet can be located on the right, left or bottom thanks to a good circulation system layout.
- ●The high magnetic force MAGCLEAN (MS-EH: rare earth magnet) works efficiently for collecting weak magnetic sludge and minute sludge.
- A type having a motor on the right side (MS-F-R) is also available.

Precautions for use

This model is specialized for grinding coolant (water soluble). If the grinding fluid used is oil type, the squeezing rollers may slip. When using oil type or chemical coolant, please consult with us. A special type equipped with squeezing roller forced drive is also available. Please note that when you update from out old type model MS-D, model MS-F may not be capable of the same performance depending on materials to treat. Please consult with us in advance.

Applications of Magclean

	Machine Tools and Equipment	Iron powder (Sludge) and Chips	Magclean	Chip Magclean	Paper Fil- ter after Treatment by Mag- clean	Magclean after Separa- tion and Col- lection by Chip Convey- or	(Remarks) Chip Conveyor
	Precision grinding machine Honing machine	Sludge, fine iron powder	Δ	×	* 1 △	_	×
	Cylindrical grinding machine Centerless grinding machine	Flocculent fine iron powder	0	Δ	*1	_	×
	Surface grinding machine Rotary grinding machine	Fine iron powder	0	Δ	*1	_	×
- -	Machining center	Crushed chips End milling	×	0	×	*2	0
ŀ	Milling machine Lathe Gear cutting machine	Spiral helical shape 60 mm or less	×	×	×	*2	0
- -	Broaching machine	Cylindrical helical shape 60 mm or less	×	×	×	*2	0
	Drilling machine Special machine	Tangled chips 60 mm or less	×	×	×	*2	0
	Washing machine	Fine iron powder about 100 μm	0	Δ	*1	_	×
	Hardening equipment	Fine iron particles of various shapes	Δ	Δ	 *1 △	×	×

- O: Effectively functions at high collection rate.
- △: Functions but decreases in collection rate and process amount expected.
- X: 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.

[mm (in)]

M	lodel													Dim	ension	s										(,
Standard	High Magnetic Force	Flow Capacity	Power Source	Motor	L	В	Н	L 1	L 2	L 3	L4	е	Р	P 1	P ₂	B ₁	Нı	H ₂	Нз	H ₄	D	<i>D</i> ₁	d ₁	D 2	d ₂	Mass
MC OF	MS- 2FH	20L/min			375	292						15			120	141						57	PS-1·			15kg/
W3- 2F	WIS- ZFR	201/111111			(14.7)	(11.5)						(0.59)			(4.72)	(5.55)						(2.24)	1/2			33 lb
MC 4E	MS- 4FH	40L/min		25W		342	271	330		50	55			200	170	191	200	135	84					70	PS-2	18kg/
W5- 4F	WIS- 4FR	40L/IIIII		2500	380	(13.4)	(10.6)	(12.9)		(1.96)	(2.16)			(7.87)	(6.69)	(7.52)	(7.87)	(5.31)	(3.30)	60				(2.75)	P3-2	39 lb
MC CE	MC CELL	001 /:-			(14.9)	392	1					20			220	241				(2.36)		70	PS-2			21kg/
W5- 6F	MS- 6FH	60L/min				(15.4)						(0.78)			(8.66)	(9.48)						(2.75)	P5-2			46 lb
MO 0E	MO 0511	001 (3P-200/220		510	528			30	65	65		20		320	341		142			114			85	PS-2*	32kg/
MS- 8F	MS- 8FH	80L/min			(20.0)	(20.8)	286	460	(1.18)	(2.55)	(2.55)		(0.78)	270	(12.6)	(13.4)	215	(5.59)	60		(4.48)			(3.34)	1/2	70 l b
MC 40E	MC 40EII	1001 /:-	50/60Hz		515	628	(11.2)	(18.1)		86	86			(10.6)	420	441	(8.46)	151	(2.36)	67		85	PS-2·	102	DC 0	38kg/
WS-12F	MS-12FH	120L/min			(20.2)	(24.7)				(3.38)	(3.38)				(16.5)	(17.3)		(5.94)		(2.63)		(3.34)	1/2	(4.01)	PS-3	83 lb
		4001 / 1	1	40W		678			1			25			470	491										45kg/
IVI5-18F	MS-18FH	180L/min			655	(26.6)	321	600		90	95	(0.98)		400	(18.5)	(19.3)	250	165	95	77		102				99 lb
			1		(25.7)	728	(12.6)	(23.6)		(3.54)	(3.74)			(15.7)	520	541	(9.84)	(6.49)	(3.74)	(3.03)		(4.01)	PS-3	_	PS-4	50kg/
IVIS-24F	MS-24FH	240L/min				(28.6)									(20.4)	(21.3)										110 lb

(Option) Inlet box Leg to adjust height

(Option table)

			Firmin (ii
Model		Dimensions	
Model	h	L	Н
MS- 2F		110 (4.33)	
MS- 4F	105 (4.13)	130 (5.11)	105 (4.13)
MS- 6F		150 (5.90)	
MS- 8F	155 (6,10)	170 (6.69)	115 (4.52)
MS-12F	155 (6.10)	190 (7.48)	115 (4.52)

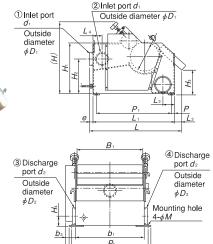
*The legs to adjust the height and the inlet box are optional.

Model MS-BS MAGCLEAN*

An example of special fabrication



(MS-BS Series External Dimension Drawing)



[Application]

Super Magclean designed for larger capacity applications. This model can also be used to remove iron particles from coolant.

■Model designation of MS-BS

When ordering MS-BS Series, be sure to specify the directions of the inlet port and discharge port in the model designation as follows:

MS-24BS-BL

Direction of discharge port

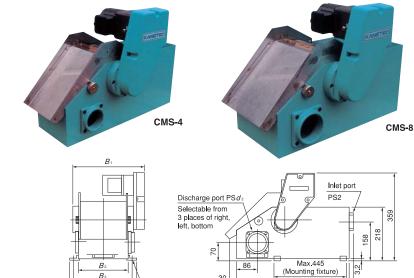
- L: Left when viewed from the sludge discharge direction. (Discharge port 3 in the following external dimension draw-
- R: Right when viewed from the sludge discharge direction. (Discharge port 4) in the following external dimension drawina)

Direction of the inlet port

- B: Backside (Inlet port 1) in the following external dimension drawing)
- R: Right when viewed from the sludge discharge direction. (Inlet port 2 in the following external dimension drawing)

Model Flow Capacity Power Source Motor L B H L L L L L L L L L														'																[mm (in)]
MS-24BS-** 240L/min 90W 695 645 534 620 90 70 25 25 570 572 495 515 615 80 386 288 189 77 17 214 102 PS-3 127 S-3 15 15 16 18 MS-36BS-** 360L/min 3P-200 VAC 50/60Hz 100W 34.0 1139 (26.3) (3.07) 780 (1.96) (4.13) (3.15) 35 30 720 (28.7) (24.8) (26.3) (31.1) 110 500 (13.5) 264 (3.93) 22 317 (5.00) 78-4 (6.06) 78-5 643 1b MS-50BS-** 500L/min	Model	Flow	Power	Motor													Dimen	sions												Mass
MS-24BS-** 240L/min 90W (27.3) (25.3) (21.0) (24.4) (3.54) (2.75) (0.98) (0.98) (22.4) (22.5) (19.4) (20.2) (24.2) (3.15) (15.2) (10.5) (7.4) (3.03) (0.66) (8.42) (4.01) PS-3 (5.00) PS-4 (253 lb) PS-4 (253 lb) PS-6 (33.0) 670 780 (1.96) (4.13) (3.15) 35 30 720 (28.7) (24.8) (26.3) (31.1) 110 500 (43.5) (26.3) (31.1) 110 500 (43.5) (15.2) (10.5) (7.4) (3.03) (0.66) (8.42) (4.01) PS-3 (5.00) PS-4 (5.0	iviodei	Capacity	Source	MOTOL	L	В	Н	L ₁	L ₂	Lз	L4	е	Р	P 1	P ₂	В	b₁	b₂	b₃	H₁	H ₂	Нз	Н₄	М	D	D ₁	d ₁	D 2	d ₂	Mass
MS-36BS-** 500L/min 3P-200 VAC 50/60Hz 100W 34.0 1139 (26.3) (3.0) (77 80 (1.96) (4.13) (3.15) (3.54) (2.75) (0.98) (0.98) (2.24) (22.5) (19.4) (20.2) (24.2) (3.15) (15.2) (10.5) (7.4) (3.03) (0.66) (8.42) (4.01) (5.00) 253 lb (5.00) (7.00)	MS-24BS-**	2401 /min		0014/	695	645	534	620		90	70	25	25	570	572	495	515	615	80	386	268	189	77	17	214	102	DC 2	127	DC 1	115kg/
MS-36BS-** 360L/min 50/60Hz 100W 865 (33.0) 670 780 (1.96) (4.13) (3.15) 35 30 720 (28.7) (24.8) (26.3) (31.1) 110 500 (13.5) 264 (3.93) 22 317 (5.00) PS-4 (6.06) PS-5 643 lb MS-50BS-** 500L/min 95.06 (1.24) 1139 (26.3) (3.07) 120 90 (1.37) (1.18) (28.4) 1030 930 968 1090 (4.33) (19.6) 358 (10.4) 115 (0.86) (12.4) 154 PS-5 182 PS-6		240L/IIIII		9000	(27.3)	(25.3)	(21.0)	(24.4)		(3.54)	(2.75)	(0.98)	(0.98)	(22.4)	(22.5)	(19.4)	(20.2)	(24.2)	(3.15)	(15.2)	(10.5)	(7.4)	(3.03)	(0.66)	(8.42)	(4.01)	F 3-3		- 3-4	253 lb
50/60Hz 100W 865 33.0 670 780 (1.96) (4.13) (3.15) 35 30 720 (28.7) (24.8) (26.3) (31.1) 110 500 (13.5) 264 (3.93) 22 317 (5.00) (6.06) 643 lb MS-50BS-*** 500L/min	MS-36BS-**	2601 /min	3P-200 VAC			839			50	105	80				730	630	668	790			345		100			127	DC 4	154	DC E	292kg/
MS-50BS-** 500L/min 34.0 1139 26.3 (30.7) 120 90 (1.37) (1.18 (28.4) 1030 930 968 1090 (4.33) (19.6) 358 (10.4) 115 (0.86 (12.4) 154 PS-5 PS-6		300L/IIIII	50/60Hz	10014	865	(33.0)	670	780	(1.96)	(4.13)	(3.15)	35	30	720	(28.7)	(24.8)	(26.3)	(31.1)	110	500	(13.5)	264	(3.93)	22	317	(5.00)	F 3-4	(6.06)	-3-3	643 lb
WS-9063-4- 900L/IIIII	MS-50BS-**	FOOL /min		10000	(34.0)	1139	(26.3)	(30.7)		120	90	(1.37)	(1.18)	(28.4)	1030	930	968	1090	(4.33)	(19.6)	358	(10.4)	115	(0.86)	(12.4)	154	DC E	182	DC C	375kg/
		SUUL/MIN				(44.8)				(4.72)	(3.54)				(40.5)	(36.6)	(38.1)	(42.9)			(14.0)		(4.52)			(6.06)	P3-5		15-6	826 lb

Model CMS CHIP MAGCLEAN*



[Application]

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

[Features]

- Ocan be used for both water soluble coolant and oil coolant.
- ●The strong magnet and its unique magnetism array ensure a high collection rate.
- The construction that allows for large amounts of chip inflow without causing overflows
- ■The drive section is installed outside for easy maintenance and inspection.
- The discharge section is so constructed as to cause counter flow of oil to minimize the amount of discharge of oil sticking to chips.
- The inflow tank has a sufficient capacity. Coolant can be introduced to the tank directly from the top.
- ●The discharge port can be installed on either the right/left side or bottom side according to the layout of the recycle/ circulation system.

				[mm (in)]	
Dimer	nsions			Mass	
R.	R.	B.	d.	IVIdSS	

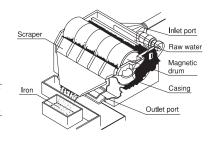
Model	Flow	Power Source	Motor	Drum			Dime	nsions			Mass
Wodel	Capacity	Fower Source	IVIOLOI	Revolution	L	B 1	B 2	B 3	B 4	d ₂	IVIdSS
CMS-4	40L/min	3P-200/220 VAC	25W	3.4/4.2rpm	505 (19.8)	245 (9.64)	153 (6.02)	195 (7.67)	223 (8.77)	PS-2	23.2kg/51 lb
CMS-8	80L/min	50/60Hz	2500	50/60Hz	510 (20.0)	295 (11.6)	203 (7.99)	245 (9.64)	273 (10.7)	PS-2·1/2	27.9kg/61 lb

460-

Model FMS SUPER MAGCLEAN*







[Application]

Suitable for removing iron from waste water and cooling water for rolling in steel making plants. This model is also used to remove/collect iron from washing water from blast furnaces, sintering furnaces, dust collectors and other industrial waste water.

[Features]

- Large capacity ranging from 60 t/h to 360 t/h and a wide variety of models. Highly economical.
- ●A high rate of collection of iron from waste water for economical operations. A collection rate of 94.5% from waste water of 5% concentration (mixture ratio) of rolled scales of 0.02 to 2 mm in grain size.
- ●Highly effective, simple design/ mechanism, results in less trouble. Long lasting, unchangeable magnetic effect.
- Smooth inflow and outflow of raw water. As a secondary effect, part of oily substances is also removed.

[mm (in)]

Model	Treating	Power	Motor	Drum Revolution				Dime	nsions					Mass
Wodel	Capacity	Source	Capacity	Diam rievolation	D	В	B ₁	L	l 1	h ₂	d ₁	Н	h ₁	IVIASS
FMS- 60	60t/h		0.4 kW	4.1/4.8rpm (50/60Hz)		650 (25.5)	1130 (44.4)	2020 (79.5)	1700		280 (11.0)	1450 (57.1)		2100kg/ 4630 lb
FMS-120	120t/h	3-phase	0.75kW	4.2/5.0rpm (50/60Hz)		1300 (51.2)	1780 (70.0)	2300 (90.5)	(66.9)		305 (12.0)	1530 (60,2)		3500kg/ 7716 lb
FMS-180	180t/h		0.75KW	4.2/5.0(piii (50/60H2)	800	1950 (76.7)	2470 (97.2)	2300 (90.5)	(66.9)	900	330 (12.9)	1530 (60.2)	1150	5300kg/11685 lb
FMS-240	240t/h	200/220 VAC (50/60Hz)	1.5 kW	4.3/5.2rpm (50/60Hz)	(31.5)	2600 (102.4)	3140 (123.6)	2600 (102.4)	1800	(35.4)	330 (12.9)		(45.2)	7350kg/16204 lb
FMS-300	300t/h	(30/60H2)	1.5 KW	4.3/3.2(piii (30/60HZ)		3250 (128.0)	3820 (150.4)	2800 (110.2)	(70.9)		350 (13.7)	1591 (62.6)		9450kg/20834 lb
FMS-360	360t/h		2.2 kW	3.9/4.7rpm (50/60Hz)		3900 (153.5)	4490 (176.8)	2900 (114.2)	(70.9)		330 (13.7)			11300kg/24912 lb

Examples of data

B₁

В

Fluid to Treat	Iron Scale Grain Size (mm)	Super Magclean Model	Amount to Treat	Raw Water Concentration	Treating Water Concentration	Collection Rate
Rolling cooling water	0.04 —5	FMS-240 (4000L/min)	3000L/min	20000P.P.M.	909P.P.M.	95.5%
Continuous casting cooling water	0.04 —0.3	FMS-180 (3000L/min)	1500L/min	14800P.P.M.	784P.P.M.	94.7%
Sand filter washing water	0.005-0.04	FMS-120 (2000L/min)	200L/min	41600P.P.M.	1780P.P.M.	95.7%

^{*}The collection rate varies according to the concentration of raw water, grain size distribution and selection of models.

SPIRAL MAGNETIC CONVEYOR



A guide for selection of models

Machine Tool	Drilling	machine	Lathe	Mi ll ing i	machine	Gear cutti	ng machine	Broaching machine	Special	machine	Grinding machine
Shape of Chips	Ribbon- shaped	Tangled	Flat and spiral	Skew and spiral	Long cylindrical and spiral	Short cylindrical and spiral	Horn shaped and spiral	Horn shaped	Curled	Crushed	Fine iron
Magnetic Chip Conveyor			~~~~	XXXXX	40000000000000000000000000000000000000	~~	₹ 6 4	@@Q	CD C	800000	powder
Magnetic Chip Conveyor MCO·MCOL	0	0	0	0	0	0	0	0	0	0	
Spiral Magnetic Conveyor KSC·KSCT							0	0	0	0	
Magclean MS—F·MS—BR											0
Chip Magclean						0	0	0	0	0	

Unit: mm

85

[Application]

Widely used as a means to transfer chips produced from machining by machine tools to a point of collection. If oil is sticking to chips, they can be degreased by letting oil drop naturally when chips are being

In particular, this model is suitable for transferring chips from gear cutting machines, end milling machines and milling machines.

This model can also be used for continuous transfer of granular parts.

Superb durability and safety

Simple construction and practically no maintenance required. Since there are no exterior moving parts, (the mechanically moving (rotating) parts are housed in the enclosed cylinder) there is no fear of accidents due to collision.

Economical functions

High treating capacity and high transfer efficiency is maintained for long time periods.

As chips are carried away by the spiral slide movement, their movement also causes waste oil to drop off effectively.

There is no place where oil stays and therefore oil drops naturally to improve the efficiency of collection of fluid.

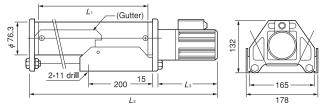
Low running cost

Very little power is required for the motor drive. Most of the work is handled by the permanent magnets.

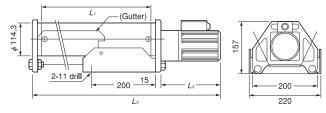


(Small Size Series) (Gutter) 2-7 drill 127.5 174

(Medium Size Series)



(Large Size Series)



(Construction)

The spiral magnetic conveyor motor slowly rotates the internal shaft with attached, spirally arranged magnets, inside the nonmagnetic stainless steel cylinder. Steel chips/pieces are attracted to the outside of the cylinder and slide laterally in spiral to the end where it is deposited.

Small S	ıze Ser	ies							[mm (in)]
Model	Type	Nominal	Dime	nsions	Treating	Power Source	Motor	Revolution	Approx.Mass
wodel	туре	Dimensions	L ₁	L ₂	Capacity	Power Source	IVIOLOI	nevolution	Approx.iviass
KSC -0505	Standard	450 (1.06) × 500 (10.6)	530 (20.8)	722 (28.4)					Approx. 5.0kg/ 11.0 lb
KSCT-0505	With gutter	φ50 (1.96) × 500 (19.6) φ50 (1.96) ×1000 (39.3) φ50 (1.96) ×1500 (59.0)	530 (20.6)	722 (20.4)					Approx. 6.0kg/ 13.2 lb
KSC -0510	Standard		1020 (40.1)	1212 (47.7)	60kg/h	3-phase	25W	30/36rpm	Approx. 9.0kg/ 19.8 lb
KSCT-0510	With gutter		1020 (40.1)	1212 (47.7)	60kg/II	200/220 VAC	2500	(50/60Hz)	Approx.10.0kg/ 22.0 lb
KSC -0515	Standard		1510 (59.4)	1702 (67.0)]				Approx.13.0kg/ 28.6 lb
KSCT-0515	With gutter	φ50 (1.96) Δ1500 (59.0)	1510 (59.4)	1702 (67.0)					Approx.15.0kg/ 33.0 lb

Medium Size Series

IVICUIUII	I DIZE C	JEI 163									[mm (in)]
Model	Type	Nominal		Dime	nsions		Treating	Power Source	Motor	Revolution	Approx.Mass
Wodel	Туре	Dimensions	L ₁	Lz	L₃	L4	Capacity	1 ower source	IVIOLOI	rievolation	Approximass
KSC -0705	Standard	φ75 (2.95) ×1000 (39.3) ((φ75 (2.95) ×1500 (59.0) ((σ75 (2.95) ×2000 (78.7)	514	656	85	42					Approx. 6.5kg/ 14.3 lb
KSCT-0705	With gutter		(20.2)	(25.8)	(3.34)	(1.65)			25W		Approx. 8.5kg/ 18.7 lb
KSC -0710	Standard		1014	1156	85	42			2500		Approx.12.5kg/ 27.5 lb
KSCT-0710	With gutter		(39.9)	(45.5)	(3.34)	(1.65)	90kg/h	3-phase		30/36rpm	Approx.17.5kg/ 38.5 lb
KSC -0715	Standard		1514	1694	105	60	90kg/II	200/220 VAC		(50/60Hz)	Approx.19.0kg/ 41.8 lb
KSCT-0715	With gutter		(59.6)	(66.6)	(4.13)	(2.36)			40W		Approx.27.0kg/ 59.4 lb
KSC -0720	Standard		2014	2194	105	60			4000		Approx.25.0kg/ 55.0 lb
KSCT-0720	With gutter		(79.2)	(86.3)	(4.13)	(2.36)					Approx.36.0kg/ 79.2 lb

Large Size Series

										E111111 (1117 3
Model	Type	Nominal		Dimensions		Treating	Power Source	Motor	Revolution	Approx.Mass
Wodel	Туре	Dimensions	L ₁	L ₂	Lз	Capacity	rower Source	IVIOLOI	Nevolution	Approx.iviass
KSC -1115	Standard	/11E (4 EQ) V1EQQ (EQ Q)	1470 (57.8)	1696 (66.7)						Approx.38.0kg/ 83.6 lb
KSCT-1115	With gutter	\$115 (4.52) \times 2000 (78.7) 19 \$115 (4.52) \times 2500 (98.4) 24	1470 (57.8)	1090 (00.7)	165 (6.49)			40W		Approx.46.0kg/101.2 lb
KSC -1120	Standard		1965 (77.3)	2191 (86.2)	100 (0.49)			4000		Approx.48.0kg/105.6 lb
KSCT-1120	With gutter		1965 (77.3)	2191 (86.2)		250kg/h	3-phase		30/36rpm	Approx.59.0kg/129.8 lb
KSC -1125	Standard		2460 (96.8)	2708 (106,6)		250kg/II	200/220 VAC		(50/60Hz)	Approx.59.0kg/129.6 lb
KSCT-1125	With gutter		2460 (96.8)	2708 (106.6)	187 (7.36)			60W		Approx.73.0kg/160.6 lb
KSC -1130	Standard		2955 (116.3)	3203 (126.1)	10/ (7.36)			6000		Approx.70.0kg/154.0 lb
KSCT-1130	With autter	φ115 (4.52) \$3000 (118.1)	2955 (116.3)	3203 (126.1)						Approx.87.0kg/191.4 lb

^{*}The treating capacity is a measured value in conveying chips of SS400 in a horizontal posture produced from a gear cutting machine.

^{*}The drive posture is allowed up to an inclination of 60 degrees with the motor on top. (However, the treating capacity drops as the inclination angle increases.)

*Model KSCT is equipped with a gutter to receive oil that drops from chips during conveyance.

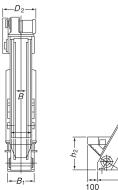
Model MCO MAGNETIC CHIP CONVEYOR

[Application]

This model is designed to effectively attract, convey and remove chips produced from machine tools by a magnetic force while letting oil sticking to chips drop naturally. (This model is suitable for chips shorter than 60 mm.)

[Features]

- ●As chips are held by magnets, they can be conveyed on a sharp inclination. This feature enables it to shorten the line and reduce the floor area and thus contributes to effective three-dimensional utilization of factory space.
- Fine chips can be attracted and oil can be removed efficiently.
- ●The optimum design by use of high performance permanent magnets and little attenuation of the magnetic force. Simplified mechanism for trouble-free operation.



[Application]

100

l mm	

Model	Transporting Coord	Motor	Dimensions								Mass		
Model	Transporting Speed	Source	Motor	В	L 1	Н	B ₁	b₂	l ₁	h ₁	h ₂		
MCO-1515A			1500 (59.0) 1270 (50.0)	1270 (50.0)	284	284 375	004 075	925 (36.4)	1620 (63.7)		140kg/308 lb		
MCO-1520A		150 (5,90) 2000 (78.7) 1700 (66.9) (11.1)	(14.7)	1180 (46.4)	2060 (81.0)	. [155kg/341 lb						
MCO-1530A	Approx.8/9.5m/min (50/60Hz)			(5.90)	3000 (118.1)	2570 (101.2)	(11.1) (14.7)	1675 (65.9)	2905 (114.4)	. [190kg/418 lb		
MCO-2015A		Annual O/O Frame	3-phase		200	1500 (59.0)	1270 (50.0)	334	425	925 (36.4)	1620 (63.7)	l [150kg/330 lb
MCO-2020A		200 VAC	400W	(7.87)	2000 (78.7)	1700 (66.9)	(13.1)	(16.7)	1180 (46.4)	2060 (81.0)	350 (13.7)	175kg/385 lb	
MCO-2030A					3000 (118.1)	2570 (101.2)			1675 (65.9)	2905 (114.4)	(10.77	210kg/463 lb	
MCO-2515A				260	1500 (59.0)	1270 (50.0)	394	475	925 (36.4)	1620 (63.7)		160kg/352 lb	
MCO-2520A			(10.2)		2000 (78.7)	1700 (66.9)	(15.5)		1180 (46.4)	2060 (81.0)		190kg/418 lb	
MCO-2530A				(10.2)	3000 (3000 (118.1)	2570 (101.2)	(13.5)	5) (18.7)	1675 (65.9)	2905 (114.4)		230kg/507 lb

Model MCOL MAGNETIC CHIP CONVEYOR

This model is installed in front of a tank to which cutting fluid flows from a machine tool to attract (pick up) chips by a An example of fabrication of MCOL-2535 magnetic force in cutting fluid to remove and transport them. (This model is suitable for chips shorter than 60 mm.) [Features] A model that plays two roles of horizontal conveyor and inclined conveyor in one unit. Can be installed directly on an oil tank or machine tool. MCOL-1510A

	Transporting	Power	Motor	Dimensions								
Model	Gel Speed	Source		В	L	Н	B ₁	b ₂	l 1	h ₁	h ₂	Mass
MCOL-151	DA			150 (5.90)	1000 (39.3)		284 (11.1)	375 (14.7)	1600 (62.9)			160kg/352 lb
MCOL-151	5A			150 (5.90)	1500 (59.0)		204(11.1)	3/3(14.7)	2100 (82.7)			190kg/418 lb
MCOL-201	Approx.8/9.5m/min	3-phase	400W	200 (7.87)	1000 (39.3)	1000 (39.3)	334 (13.1)	425 (16.7)	1600 (62.9)	1390 (54.7)	275 (10.8)	175kg/385 lb
MCOL-201	5A (50/60Hz)	200 VAC	40000	400W 200(7.87)	1500 (59.0)	1000 (39.3)	334 (13.1)	425 (16.7)	2100 (82.7)	1390 (54.7)	2/5(10.6)	220kg/485 lb
MCOL-251	DA			260 (10.2)	1000 (39.3)		004/455)	475 (18.7)	1600 (62.9)			200kg/440 lb
MCOL-251	5A			200 (10.2)	1500 (59.0)		394 (15.5)	4/3(18.7)	2100 (82.7)			250kg/551 lb

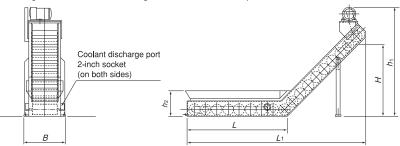
MCOL-R

[Application]

This model uses a strong magnetic force generated on the surface of rollers to attract, remove and transport chips produced from drilling machines, multi-axis auto lathes, and a mixture of long and thin chips produced from gear cutting machines and broaching machines.

[Features]

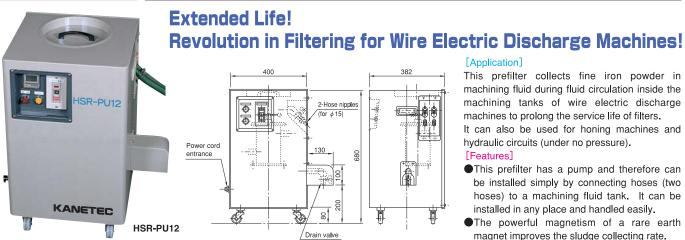
- As coolant passes between the rollers, fine chips can be caught.
- Can be installed directly on an oil tank or machine tool.
- Transportation on a sharp inclination is possible.



[mm (in)]

Model	Roller	Roller	Power	Motor	Dimensions						Mass
iviodei	nollei	Revolution	Source	Source		В	Н	L ₁	h ₁	h ₂	IVIASS
MCOL-R1505	φ100×150 13 pcs				440 (17.3)	320		1220 (48.0)			110kg/242 lb
MCOL-R1510	φ100×150 18 pcs	15/18rpm	3-phase	100W	1000 (39.3)	(12.6)	700	1780 (70.0)	1000	250	150kg/330 lb
MCOL-R2505	φ100×250 13 pcs	(50/60Hz)	200/220 VAC	10000	440 (17.3)	420	(27.5)	1220 (48.0)	(39.3)	(9.84)	160kg/352 lb
MCOL-R2510	φ100×250 18 pcs				1000 (39.3)	(16.5)		1780 (70.0)			190kg/418 lb

Model HSR-PU MAGNETIC PREFILTER WITH PUMP



■Model: HSR-PU12 ■Processing capacity: Approx. 1.50 /min. ■Pump rating: 3-phase, 200 VAC, 0.4 kW Weight: Approx. 60 kg (133 lb)

Caution: For use for kerosene machining fluids, please contact us.

[Application]

This prefilter collects fine iron powder in machining fluid during fluid circulation inside the machining tanks of wire electric discharge machines to prolong the service life of filters.

It can also be used for honing machines and hydraulic circuits (under no pressure).

[Features]

- This prefilter has a pump and therefore can be installed simply by connecting hoses (two hoses) to a machining fluid tank. It can be installed in any place and handled easily.
- The powerful magnetism of a rare earth magnet improves the sludge collecting rate.
- The safe construction with the powerful magnet fixed facilitates cleaning.
- The incorporated integrating timer tells when to clean.

MAGNETIC PREFILTER



This prefilter removes fine iron powder from discharging liquid of wire cut electro discharge machine (WCEDM).

Install this prefilter between a wire electric discharge machine and a pump unit.

[Features]

- ●Powerful magnet prefiltrates fine iron powder from the discharging liquid and thus extends, two times, the service life of paper filter.
- Prefilter recovers other impurities as well as it attracts fine iron powder.
 - Consequently, paper filter can be replaced with such filter with more coarse mesh than conventionally.
- Its duplex construction facilitates removal of fine iron powder.

			[mm (in)]
Model	Dimensions	Connecting Port	Mass
HS-17	φ190 (7.48) ×190 (7.48)	1 1/2	11kg/24 lb

**Hose nipple 1-1/2, and 3/4, bushing 1-1/2X3/4 are optionally supplied