

MAGNETIC SEPARATORS



Types of magnetic separators

Type	Product Name	Model	Features
Eccentric pole type	Nonferrous separator	BMR	Assists recycling by separating and collecting shredded dust.
Aluminum separation	Conveyor type aluminum separator	MES	Assists recycling by separating crushed wastes and hand-sorted wastes.
Suspension	Suspended plate magnet	KPMD	Larger attractive force than KPMF.
		KPMJ	Powerful type having larger attractive force than KPMD.
	Round electromagnet for iron removal	HEM-C	Natural air cooling and enclosed type for less mixture of iron pieces.
	Suspended electromagnet for iron removal	HEM-BC	Oil cooling type for less mixture of iron pieces.
	Suspended electromagnetic separator	BST	Natural discharge type and continuous operation.
Suspended permanent magnetic separator	SPM	Energy saving and auto discharge type for shallow conveyors.	
Plate	Plate magnet	KPMF	Chute-mounted type with stainless steel surface.
		KPMT	Chute-mounted type. Attracted iron pieces held firmly.
Tubular	Tubular separator	CPM	Removal of iron pieces during transfer of bulk materials in a pipe.
Small	Magnetic bar	KGM (Round, rectangular)	Capable of being incorporated in any place.
	Grid type magnet	KGM/KGM-C	For collection of small iron pieces mixed in small amount. Installed at hopper outlet port or in duct.
Pulley	Electromagnetic pulley	KER	Usable as a conveyor head pulley and high iron removal rate.
	Permanent magnetic pulley	KPR	Usable as a conveyor head pulley. For a large diameter, the electromagnetic type is recommended.
Drum	Barrel separator	KBS	For barrel polishing.
	Drum separator	KDS	Casing provided for easy installation.
	Large permanent magnetic drum	KPDL	Works well for large iron pieces and a large amount of iron pieces to collect.
	Permanent magnetic drum	KPD	Most suitable for removing iron from bulk materials and can be incorporated in equipment.
Comb	Comb type magnet	KCM	For removal of iron from bulk materials.
High magnetic force electromagnetic	Induction type high magnetic force separator	KID-R	For removal of weak magnetic bulk materials. 2.6 T (26 kg) max.
	Cross belt type high magnetic force separator	KID-B	Small capacity and less mixture of raw materials in removed iron.
	Induction type separator	KID	Effective for removing iron from casting sand.
	Electromagnetic filter	KIF	Effective for removing iron from fine materials (powder).
High speed drum	High speed drum separator	KHDS	For high grade sorting and collection of magnetic substances.

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MAGNETIC SEPARATORS

HIGH GRADE MAGNETIC SEPARATORS

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MAGNETIC MATERIALS

Examples of application of magnetic separators in various fields

Removal of iron and collection of iron powder from various kinds of raw materials and semi-finished products are called magnetic separation. Kanetec offers a wide variety of magnetic separators for use with lump materials, bulk materials, clay-like materials and liquids.

Examples of usage in various fields

Steel making and mining	Separation of steel materials and collection of iron in residues.
Machine, press, plant	Treatment of scraps and collection of flux.
Food, candy, can making	Removal of iron from raw materials and foreign matter in manufacturing processes.
Pulp, paper, stone crushing	Removal of iron from raw materials and protection of crushers.
Chemicals	Removal of iron from raw materials and waste fluid.
Casting and nonferrous	Removal of iron from casting sand and chips.
Sand and cement	
Feed and fertilizer	Removal of iron from raw materials and mixed machined parts.
Textile and fabric	
Sugar, salt and tobacco	Removal of iron from raw materials.

Selection of magnetic separators and notes for inquiry

A magnetic separator to select must be suitable for the purpose of use and have a sufficient capacity. To select such a most suitable separator, when inquiring about separators, conditions such as the purpose of use and property of materials need to be informed, as detailed below:

- Application (improving the grade, collecting useful magnetic substances, etc.)
- Kind, composition and components of raw materials
- Grain size of raw materials (□□ mm - □□ mm, □□ mesh - □□ mesh)
- Water content, raw material temperature
- Apparent specific gravity (bulk density)
- Kind, shape and grain size of mixed magnetic substances
- Amount of raw materials to treat per hour (kg/h, m³/h)
- Amount and ratio of mixed magnetic substances
- Other special conditions



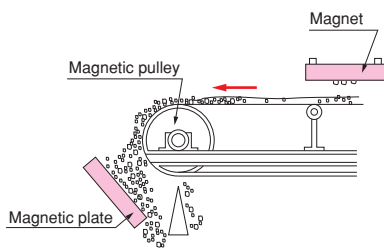
Testing of separation available

Please contact your nearest sales office. Then we will do separation tests and model selection for you.

※Please use a facsimile transmission form (Magnetic Separator Selection Data) included at the end of this general catalog.

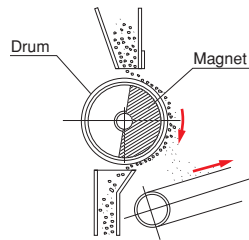
Separation on conveyor (dry)

- A magnetic pulley is used.
- A magnet is suspended over the conveyor.
- A plate magnet is installed on the discharge side of a conveyor.
- A grid type magnet is installed on the discharge side of a conveyor.
- A comb type magnet is installed on the conveyor.



Separation by magnetic drum (dry)

- A magnetic drum is installed at the bottom of the hopper chute.
- A magnetic drum is installed at the exit of a vibrator feeder.
- A magnetic drum is installed on the discharge side of a conveyor.
- A magnetic drum is installed at the raw material exit.

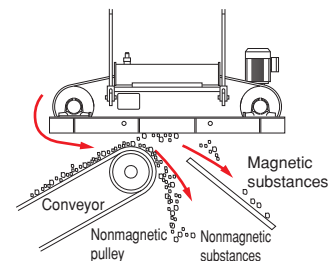


Separation by suspended separator (dry)

To automatically remove iron pieces, bolts and nuts on a conveyor, a suspended magnetic separator is installed to attract and remove iron pieces.

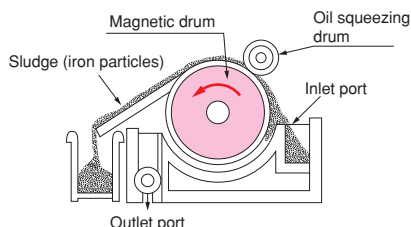
For fully automatic removal and discharge:
BST, SPM, etc.

For fully automatic removal and manual discharge:
HEM-BC, HEM-C, KPM-J, KPM-D, etc.



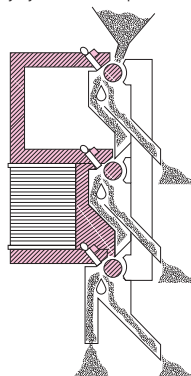
Separation in fluid (wet)

Used for a coolant separator (removal of iron particles in grinding fluid, waste oil, cooling oil), drum separator (collection of iron ores, iron sand materials) and MAGFIN (removal of iron particles deposited in oil tanks).



High magnetic force separator (dry)

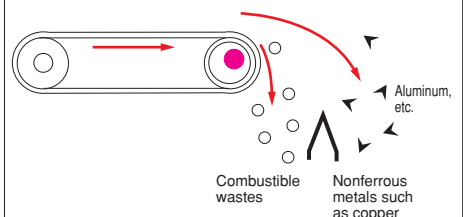
A magnetic separator generating a high magnetic force of 2.6 T (26000 G). Used for weak magnetic substances which cannot be removed sufficiently by a standard separator.



Aluminum separator

Aluminum items can be sorted and separated from noncombustible wastes and large crushed wastes efficiently.

A permanent magnet is used as a source of magnetic field for sorting, which is rotated at high speed to cause eddy current to sort materials.



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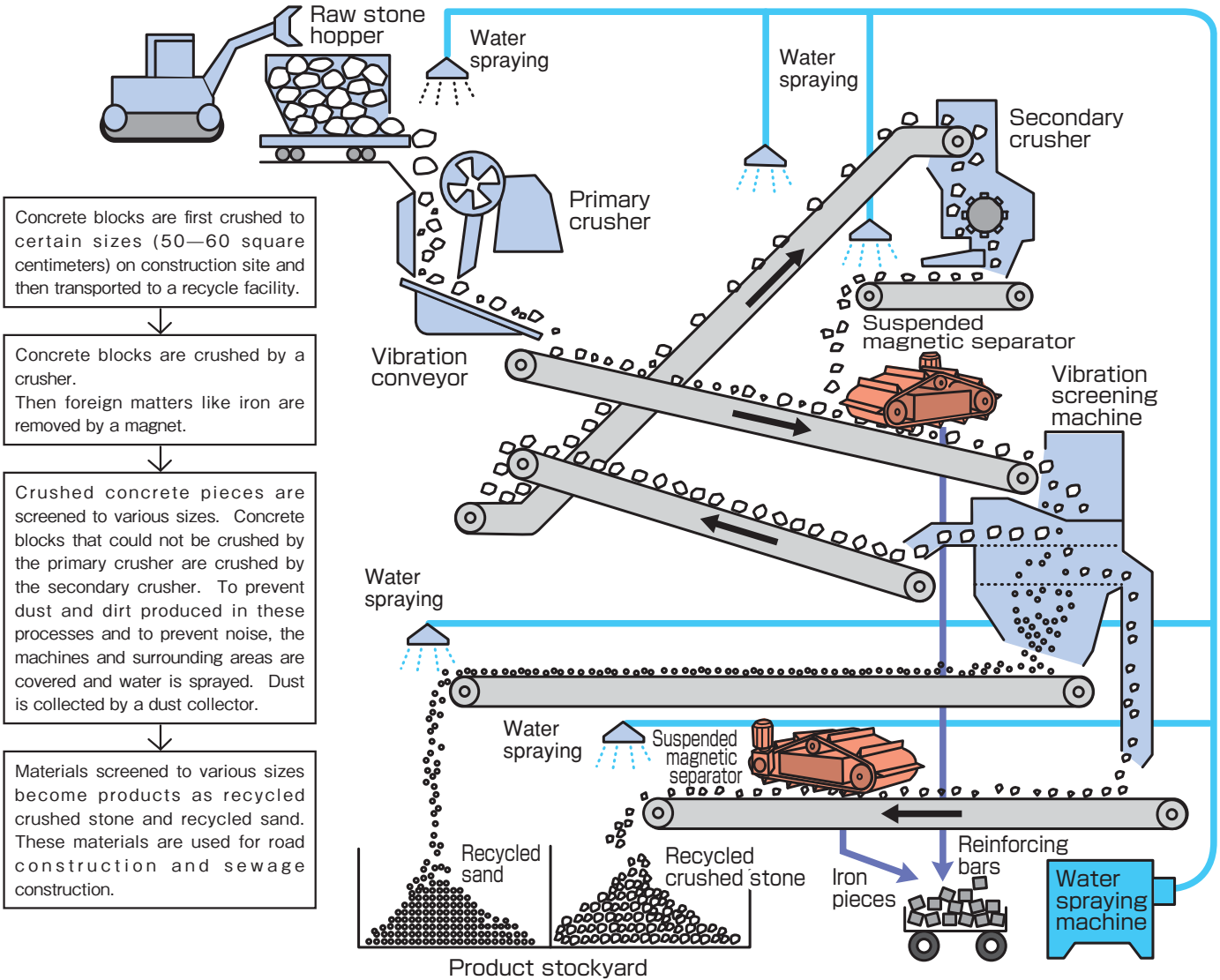
HIGH GRADE MAGNETIC SEPARATORS

MEASURING TOOLS

MEASURING INSTRUMENTS:

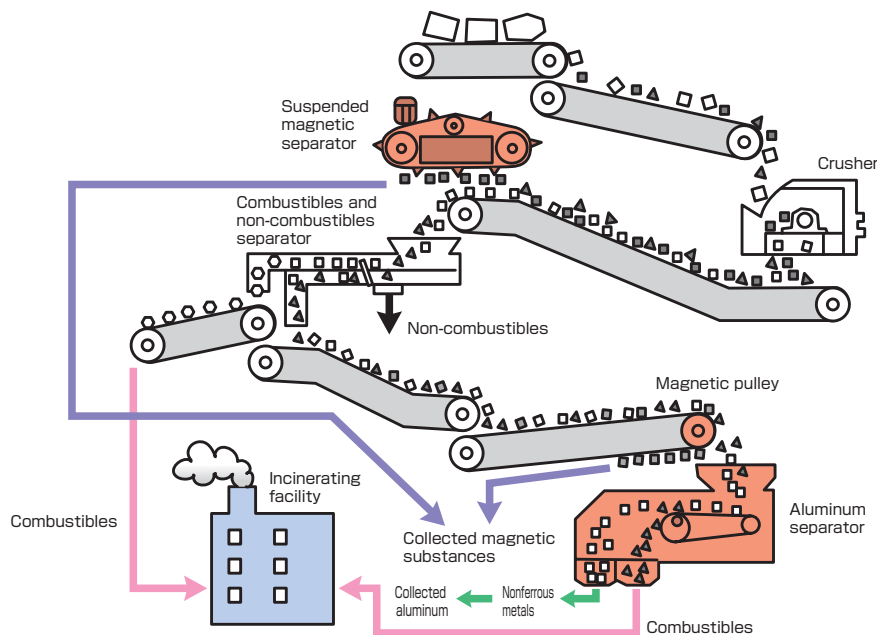
MAGNETIC MATERIALS

Construction Scrap Materials Recycling System



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Non-Industrial Large Recyclables Processing System



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Model BMR Model MES-J NONFERROUS METAL SEPARATORS

For use to Reduce, Reuse, and Recycle our limited natural resources

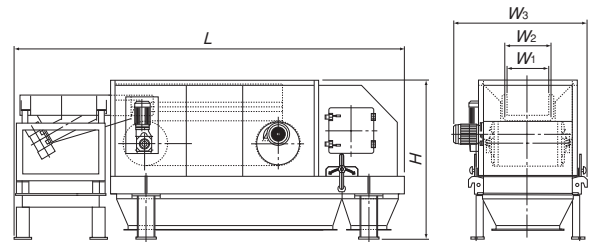
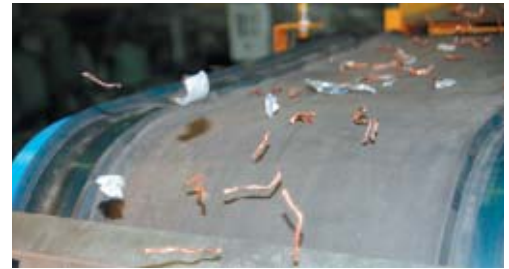
With eccentric magnet structure and high speed rotation, separation of material from aluminum, copper, as well as brass is made with high efficacy separation ratio!

Environmentally Friendly

As for separation in wood material for biomass power generator!

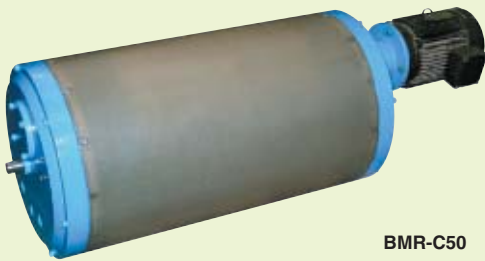


BMR-C50

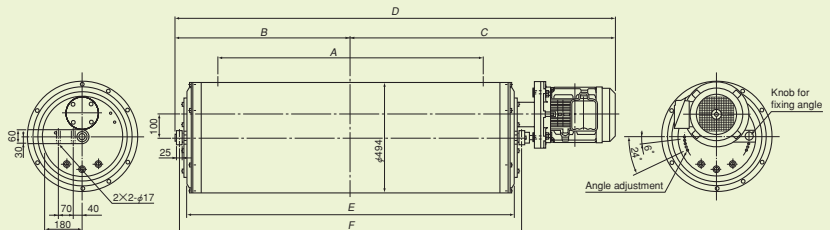


〈Outline drawing of BMR-C casing included〉

Kanetec can provide complete units or separate rotating magnets only.



BMR-C50



〈Outline drawing of BMR-rotating unit〉

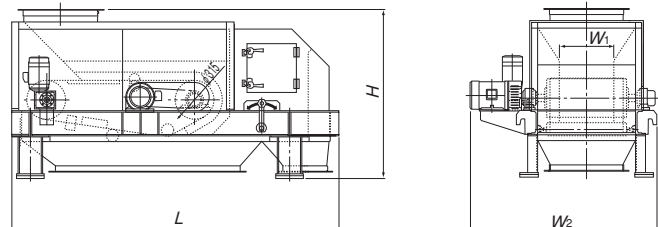
Equipment for collecting aluminum cans exclusively is also available.



Most suitable to collect cylindrical cans.



MES-J



〈Outline drawing of aluminum separator〉

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Eccentric magnetic pole system that has a high separating capacity and prevents crushed pieces from getting caught

Separation of nonferrous metals is achieved when a high velocity AC frequency of the magnetic field produces a strong eddy current in nonferrous metals, which in turn generates a magnetic field having repulsive action against the external magnetic field.

This system employs an eccentric pole system to completely separate nonferrous metals from other materials.

This system can prevent finely shredded or crushed nonferrous metal pieces from getting caught by the belt or drum shell and if they get caught in a gap between the belt and the shell, they are forced to move to a place where no magnetic field exists and thus can be removed easily.

There is no fear of trouble from the system point of view. No cases of failures have been reported when the system has been used for car shredding, which is considered to be one of the severest conditions of use.

[Application]

Suitable for separation of nonferrous metals from small pieces shredded by car shredders, electronic equipment wastes, waste slugs, waste glass (cullet), batteries, etc.

⟨Other applications⟩

- Molding sand for aluminum casting and nonferrous metal casting
 - Refrigerators, washers and other scrapped appliances
 - Screening of aluminum from bulky refuses and recyclables.
 - Separation of aluminum from plastics such as plastic bottles and screw tops.
 - Screening of aluminum from sludge discharged from fluidized beds.
- ※ This system is installed not only in wastes processing plants, materials feeders and materials discharge machines with adjust splitter, but also as part of plants such as nonferrous metal separators.

[Features]

- Collection of high rate separation can now be achieved.
- Designed with eccentric magnet structure!
It can prevent biting iron plates and so on, life of drum shell and belt life improve.
- Maintenance performance is improved.

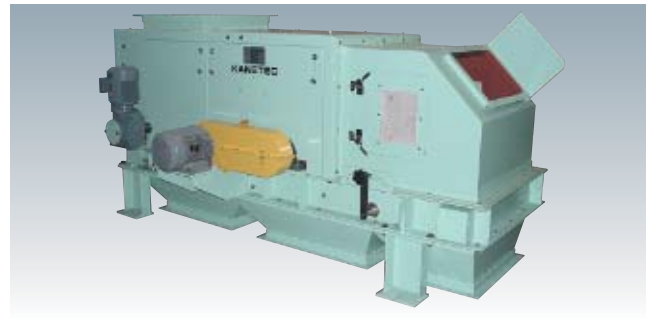
※ Also refer the Facsimile Communication Form (inquiries data) at the end of this Catalog.



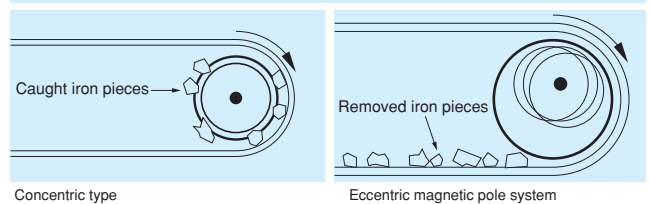
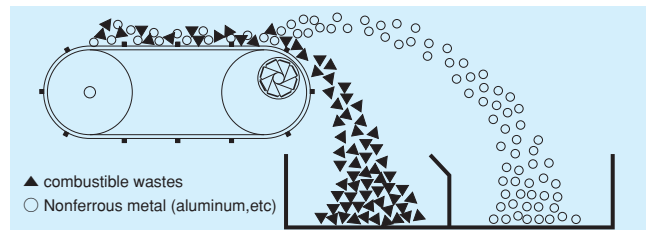
⟨An example of fabrication①⟩ BMR-C50-S special specification



⟨An example of fabrication②⟩ BMR-C50-S special specification



⟨An example of fabrication③⟩ MES-J345-S special specification



BMR rotating unit only

[mm (in)]

Model	Driving motor	Dimensions						Mass	Standard accessory
		A	B	C	D	E	F		
BMR-5050	3.7kW	500 (19.6)	453 (17.8)	823 (32.4)	1275 (50.1)	795 (31.2)	867 (34.1)	500kg/ 1102 lb	• motor • coupling • mounting bracket
BMR-5075		750 (29.5)	578 (22.7)	948 (37.3)	1525 (60.0)	1045 (41.4)	1117 (43.9)	650kg/ 1433 lb	
BMR-50100		1000 (39.3)	703 (27.6)	1073 (42.2)	1775 (69.8)	1295 (50.9)	1367 (53.8)	800kg/ 1764 lb	
BMR-50125	5.5kW	1250 (49.2)	828 (32.5)	1249 (49.1)	2076 (81.7)	1545 (60.8)	1617 (63.6)	970kg/ 2138 lb	
BMR-50150		1500 (59.0)	953 (37.5)	1374 (54.0)	2326 (91.5)	1795 (70.6)	1867 (73.5)	1120kg/ 2469 lb	

BMR with casing

[mm (in)]

Model	Dimensions					Rotation Motor	Conveyor Motor	Feeder motor	Mass
	W ₁	W ₂	W ₃	L	H				
BMR-C 50	450 (17.7)	500 (19.6)	1485 (58.4)	4375 (172)	1760 (69.2)	3.7kW	2.2kW	0.5kW × 2	2400kg/5292 lb
BMR-C 75	700 (27.5)	750 (29.5)	1735 (68.3)	4525 (178)					2800kg/6174 lb
BMR-C100	950 (37.4)	1000 (39.3)	1000 (39.3)	5445 (214)					3400kg/7497 lb
BMR-C125	1200 (47.2)	1250 (39.3)	1250 (39.3)	5410 (212)		4100kg/9040 lb			
BMR-C150	1450 (57.0)	1500 (59.0)	1500 (59.0)	5435 (213)		4300kg/9481 lb			

Exclusive type for collection aluminum cans.

[mm (in)]

Model	Dimensions				Rotation Motor	Conveyor Motor	Mass
	W ₁	W ₂	L	H			
MES-J345	450 (17.7)	1510 (59.4)	2650 (104)	1375 (54.1)	3.7kW	1.5kW	1300kg/2866 lb
MES-J360	600 (23.6)	1660 (65.3)			1450kg/3197 lb		
MES-J390	900 (35.4)	2010 (79.1)			1700kg/3748 lb		

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MEASURING TOOLS

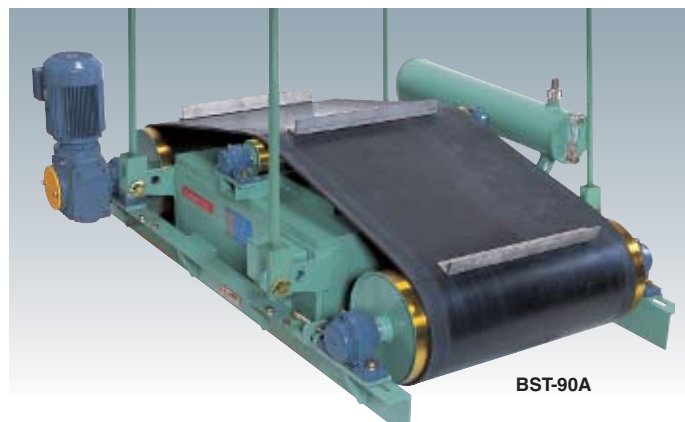
MEASURING INSTRUMENTS

MAGNETIC MATERIALS

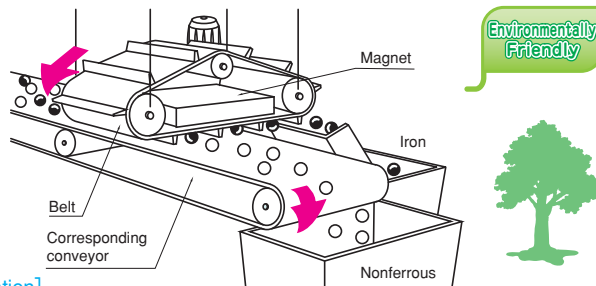
Model BST SUSPENDED ELECTROMAGNETIC SEPARATOR

“BST Series” renewed based on many years of manufacture and marketing experience and computer-aided magnetic field analysis with significantly reduced weight and volume!

Fully automatic discharge As for separation in wood material for biomass power generator!



BST-90A



[Application]

A suspended magnetic separator is suspended above a belt conveyor to continuously separate such magnetic substances as iron pieces and lumps mixed in materials being transported on the conveyor. This separator is best suited for removing and collecting iron from such raw materials as slug, ore and coal and from casting sand, bulky wastes, industrial wastes and ash after waste incineration.

■ Ideal magnet configuration realized!

Our achievements in magnetic design and our pursuit to develop an optimum magnet based on magnetic field analysis, has resulted in a magnet configuration that exhibits the best separation and collection performance.

To lengthen the iron piece discharge length, a general practice is to use permanent magnets together, but our original pole construction (patent pending) has eliminated the need of such magnets.

■ A wide variety of models available!

A wide variety of models are available according to any belt specifications of belt conveyors. Thus, you can find the optimum model for your specifications. Cross suspension as well as overhead pulley suspension (parallel suspension) is available. (The corresponding conveyor belt width is the same.)

■ Can be installed in any environment!

Compared with Kanetec's previous model designs, the weight and volume have been reduced significantly, for example, mass reduced by 30% to 40% and cooling water amount by 10% to 50%, as a result of minimizing the overall length and magnet height. Thus, this model can be installed in any environment and under any conditions of installation.

■ Easy maintenance for significant reduction in work time and running cost!

As the iron piece discharge belt drive system is directly coupled, such maintenance as chain tension adjustment and lubrication, that need to be conducted periodically with existing products, are no longer necessary and as the amount of cooling oil has been reduced, replenishing needs to be conducted less frequently. Thus, maintenance load work has been reduced significantly.

■ Trouble-free, robust magnetic separator!

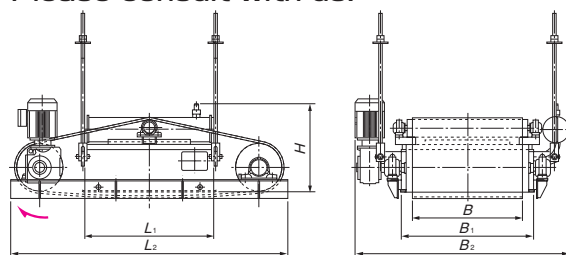
This highly rated effective oil cooling system can be used continuously, day and night. Minimizing the temperature rise of the electromagnet maintains the effective separation performance. Also, our original pole construction is designed to reduce belt wear and ensures a long service life.

■ A wide range of applications!

The robust construction allows this separator to be used outdoors under any conditions of use. It can be used in a wide range of applications.

We also provide air cooling type, which does not use coolant oil. Please contact us.

* We can configure a suitable magnetic separator for various kinds of substances. Please consult with us.



[mm (in.)]

Model	Corresponding Conveyor Belt Width		Corresponding Conveyor Installation Distance	Belt Width B	Overall Dimensions			Electromagnet Dimensions		Power Consumption		Mass	Applicable Power Source
	Crosssuspension	Parallel suspension			L ₁	L ₂	B ₂	H	L ₁	B ₁	Electromagnet*		
BST-65A-1.2.3	450 (17.7) — 650 (25.5)	300 (11.8) — 450 (17.7)	150 (5.90) — 200 (7.87)	450 (17.7)	1640 (64.5)	1170 (46.0)	610 (24.0)	650 (25.5)	650 (25.5)	1.5kW	1.5kW	680kg/ 1499 lb	BSTR-65I
BST-80A-1.2.3	600 (23.6) — 800 (31.5)	450 (17.7) — 600 (23.6)	150 (5.90) — 250 (9.84)	600 (23.6)	1790 (70.4)	1320 (51.9)	585 (23.0)	800 (31.5)	800 (31.5)	2.4kW	2.4kW	970kg/ 2138 lb	BSTR-80I
BST-90A-1.2.3	700 (27.5) — 900 (35.4)	600 (23.6) — 750 (29.5)	200 (7.87) — 300 (11.8)	750 (29.5)	1900 (74.8)	1500 (59.0)	645 (25.3)	900 (35.4)	900 (35.4)	3.1kW	3.1kW	1370kg/ 3020 lb	BSTR-90I
BST-100A-1.2.3	800 (31.5) — 1000 (39.3)	750 (29.5) — 900 (35.4)	250 (9.84) — 350 (13.7)	900 (35.4)	2250 (88.5)	1720 (67.7)	825 (32.4)	1000 (39.3)	1000 (39.3)	4.0kW	2.2kW	2070kg/ 4564 lb	BSTR-100I
BST-115A-1.2.3	950 (37.4) — 1150 (45.2)	850 (33.4) — 1050 (41.3)	300 (11.8) — 350 (13.7)	1050 (41.3)	2400 (94.4)	1865 (73.4)	820 (32.2)	1150 (45.2)	1150 (45.2)	5.2kW	5.2kW	3100kg/ 6834 lb	BSTR-115I
BST-130A-1.2.3	1100 (43.3) — 1300 (51.1)	1000 (39.3) — 1200 (47.2)	300 (11.8) — 400 (15.7)	1200 (47.2)	2800 (110)	2150 (84.6)	910 (35.8)	1300 (51.1)	1300 (51.1)	6.6kW	3.7kW	4500kg/ 9921 lb	BSTR-130I
BST-150A-1.2.3	1300 (51.1) — 1500 (59.0)	1200 (47.2) — 1400 (55.1)	300 (11.8) — 450 (17.7)	1400 (55.1)	3000 (118)	2350 (92.5)	805 (31.6)	1500 (59.0)	1500 (59.0)	8.7kW	8.7kW	5500kg/ 12125 lb	BSTR-150I
BST-170A-1.2.3	1500 (59.0) — 1700 (66.9)	1400 (55.1) — 1600 (62.9)	400 (15.7) — 550 (21.6)	1600 (62.9)	3200 (126)	2570 (101.2)	865 (34.0)	1700 (66.9)	1700 (66.9)	10.4kW	5.5kW	7500kg/ 16535 lb	BSTR-170I

*A type that uses permanent magnets together is also available.

*A type with dustproof cover is also available.

*For overhead pulley suspension (parallel suspension), suspension fixtures need to be changed partially.

*Belt conveyor width for each model is just reference.

As the model to be selected can be different depending on flow width and volume to be treated, please consult with us.

*The electromagnet power consumption applies to the use of 200 VAC (50 Hz).

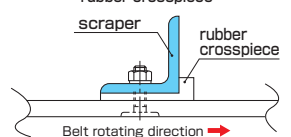
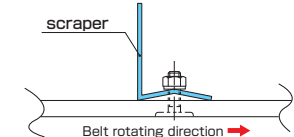
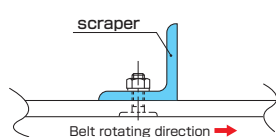
*For use in combination with a vibrator like vibration conveyor, a special type of vibration-proof specification needs to be used.

■ Depending on models, the shape of the scraper is different.

Model : BST-**-A-1
Shape : Angle scraper

Model : BST-**-A-2
Shape : Scraper with folded SUS plate

Model : BST-**-A-3
Shape : Angle scraper with L-shaped rubber crosspiece



MAGNETIC TOOLS FOR WELDING OPERATION, LIFTING MAGNET, MAGBORE, CHIP & SLUDGE TRANSPORTERS, ENVIRONMENTAL MAGNETIZERS AND DEMAGNETIZERS, MAGNETIC EQUIPMENT FOR TRANSPORTATION SEPARATORS, HIGH GRADE MAGNETIC SEPARATORS, MEASURING INSTRUMENTS, MAGNETIC MATERIALS

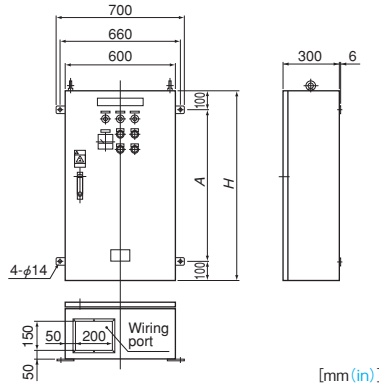
Model BSTR CONTROL UNIT

Indoor type

New design slims the unit in size and volume by one third!
Space saving and wall mountable!



BSTR-90I



[mm (in.)]

Exchanging of electromagnet cooling oil
Models and required amount of oil

Model	Amount(L)	Model	Amount(L)	Model	Amount(L)	Model	Amount(L)
BST- 65A	80	BST- 90A	120	BST- 115A	265	BST- 150A	450
BST- 80A	100	BST-100A	235	BST- 130A	415	BST- 170A	570

※Exchange oil once every five years.(It varies slightly de-pending on models and run hours.)
 As for special models, the amount depends on sizes of electromagnets. (Increased)

Types of cooling oil (JIS C2320 Electrical Insulating Oils Type 1, No. 2, No. 4)

※The values are JIS Standard values.

Manufacturer (Brand)	Property	Total Acid Number (mgKOH/g)	Flashing Point (PM) °C	Specific Gravity 15 / 4°C	Breakdown Voltage (KV)
Idemitsu Kosan (Transformer Oil G)		0.02 max.	130 min.	0.91 max.	30 min.
Showa Shell Sekiyu (High Voltage Insulating Oil)					
Nippon Oil (Nippon Oil High Voltage Insulating Oil A)					
Exxon Mobile (Insulating Oil No. 2)					
JOMO (JOMO HS Trans N)					

※Cooling oil used by Kanetec (Idemitsu Kosan Transformer Oil G)
 ※A type, using a cooling oil having a high flashing point, may also be available.

We also provide air cooling type, which does not use coolant oil. Please contact us.

Model	Power Source	Electromagne Output	Drive Motor Output	Dimensions		Construction	Mass			
				H	A					
BSTR-65I	50/60Hz 3 φ	90 VDC 1.5kW	200VAC1.5kW	1000 (39.3)	800 (31.5)	Indoor, dustproof, wall mounting type	Approx. 70kg/154 lb			
BSTR-80I		90 VDC 2.4kW								
BSTR-90I		90 VDC 3.1kW								
BSTR-100I		180 VDC 4.0kW	200VAC2.2kW							
BSTR-115I		180 VDC 5.2kW								
BSTR-130I		270 VDC 6.6kW	200VAC3.7kW							
BSTR-150I		270 VDC 8.7kW								
BSTR-170I		180 VDC 10.4kW	200VAC5.5kW					1200 (47.2)	1000 (39.3)	Approx. 90kg/198 lb

※The outdoor type has partially different specifications.

Model SPM SUSPENDED PERMANENT MAGNETIC SEPARATOR

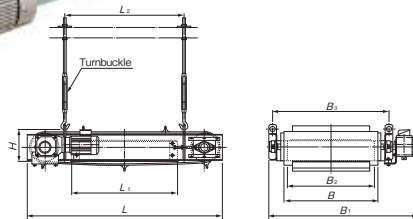
Fully automatic discharge type

Environmentally Friendly

As for separation in wood material for biomass power generator!



SPM-60F



※The shape of hanging bracket is different among SPM-100F, 120F, 65120~65160.

The suspended permanent magnetic separator employs a fully automatic discharge system by using a powerful permanent magnet. The operating method is similar to that of the suspended electromagnetic separator. This model is suitable for removing iron from relatively thin layer of materials on a belt conveyor.

[Application]

Suitable for removing iron from raw materials used in the food industry, chemical industry and various other industries, and can also be installed in wastes sorting systems to remove iron.

[Features]

- Permanent magnet type, no DC power source is needed.
- Simple but robust construction for easy maintenance.
- The weather resistant construction allows this separator to be easily installed on existing outdoor conveyors.
- The permanent magnet system requires minimal maintenance cost.
- New line up has a longer body discharge and larger width for wider conveyor belts.
- An extra powerful type is also available.
- An overhead pulley suspension (parallel suspension) type is also available.
- An optional intrusion preventing plate is also available.

[mm (in.)]

Model	Corresponding Conveyor Belt Width ^(※1)		Corresponding Conveyor Installation Distance ^(※2)	Belt Width			Overall Dimensions					Magnet Dimensions		Power Consumption	Mass
	Crosssuspension	Parallel suspension ^(※2)		B	L	B ₁	H	L ₂	B ₃	L ₁	B ₂	Drive motor			
SPM-30F	— 400 (15.7)	—	90 (3.54) — 130 (5.11)	300 (11.8)	1000 (39.3)	677 (36.6)	248 (9.76)	440 (17.3)	470 (18.5)	400 (15.7)	250 (9.84)	0.4 kW	170kg/ 374lb		
SPM-40F	300 (11.8) — 500 (19.6)	— 350 (13.7)	100 (3.93) — 150 (5.90)	400 (15.7)	1100 (43.3)	777 (30.6)		540 (21.2)	570 (22.4)	500 (19.6)	350 (13.7)			270kg/ 595lb	
SPM-60F	500 (19.6) — 650 (25.5)	300 (11.8) — 450 (17.7)	150 (5.90) — 200 (7.87)	600 (23.6)	1270 (50.0)	1015 (39.9)	242 (9.52)	700 (27.5)	770 (30.3)	650 (25.5)	490 (19.2)	0.75kW	390kg/ 859lb		
SPM-80F	650 (25.5) — 800 (31.5)	500 (19.6) — 650 (25.5)	—	700 (27.5)	1470 (57.8)	1115 (43.9)		900 (35.4)	870 (34.2)	800 (31.5)	650 (25.5)			610kg/1344lb	
SPM-100F	800 (31.5) — 1000 (39.3)	650 (25.5) — 800 (31.5)	—	900 (35.4)	1900 (74.8)	1435 (56.5)	312 (12.2)	1100 (43.3)	1170 (46.0)	1000 (39.3)	800 (31.5)	1.5 kW	1150kg/2535lb		
SPM-120F	1100 (43.3) — 1300 (51.1)	800 (31.5) — 950 (37.4)	200 (7.87) — 250 (9.84)	1050 (41.3)	2200 (86.6)	1605 (63.1)		1400 (55.1)	1320 (51.9)	1300 (51.1)	950 (37.4)			1600kg/3527lb	
SPM-65120	— 1050 (41.3)	—	—	700 (27.5)	1870 (73.6)	—	258 (10.1)	1000 (39.3)	—	1200 (47.2)	—	0.75kW	880kg/1940lb		
SPM-65140	— 1200 (47.2)	—	—	700 (27.5)	2070 (81.5)	1147 (45.1)		1200 (47.2)	890 (35.0)	1400 (55.1)	650 (25.5)			990kg/2182lb	
SPM-65160	— 1400 (55.1)	—	—	—	2270 (89.3)	—		1400 (55.1)	—	1600 (62.9)	—			1100kg/2425lb	

※The outdoor specification is the standard.

(※1) Belt conveyor width for each model is just reference. As the model to be selected can be different depending on flow width and volume to be treated, please consult with us.

(※2) The parallel suspension specification is optional.

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Model HEM-C CIRCULAR ELECTROMAGNET FOR IRON REMOVAL

Air cooling type



HEM-70C



[Application]

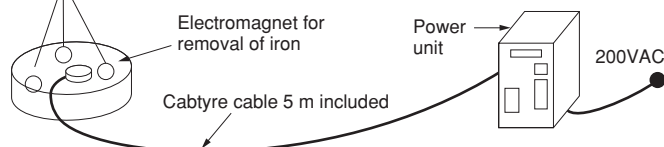
The standard suspended electromagnet designed for removing iron from above conveyors. This model is suitable for removing iron from ores and various materials (glass, ceramics, sugar, paper, chemicals, etc.) as well as from crushed stone in crushing plants and from casting sand in casting plants.

[Features]

- Light weight and compact for easy handling.
- Minimum maintenance and weather resistant.



Connection diagram



[mm (in)]

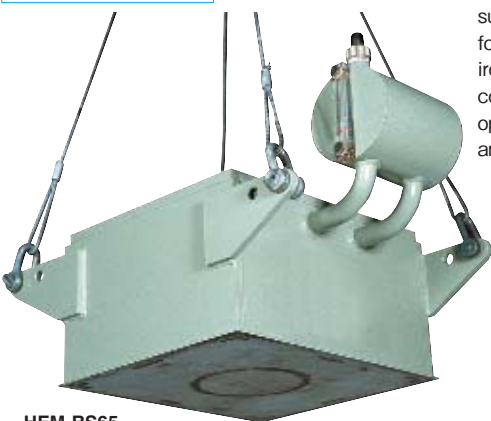
Model	Area Width	Area Height	Dimensions			Power Consumption	Mass	Applicable Rectifier
			ϕD	H	d			
HEM-40C	350 (13.7)	120 (4.72)–150 (5.90)	400 (15.7)	240 (9.44)	16 (0.62)	0.51kW	170kg/ 375 lb	KR-A208
HEM-50C	400 (15.7)	130 (5.11)–180 (7.08)	500 (19.6)	300 (11.8)		0.82kW	310kg/ 683 lb	KR-A208
HEM-60C	500 (19.6)	150 (5.90)–200 (7.87)	620 (24.4)	305 (12.0)	22 (0.86)	1.2 kW	350kg/ 771 lb	HEMR-60CI
HEM-70C	600 (23.6)	150 (5.90)–250 (9.84)	720 (28.4)	345 (13.5)		1.7 kW	480kg/1058 lb	HEMR-70CI
HEM-90C	750 (29.5)	200 (7.87)–300 (11.8)	920 (36.2)	398 (15.6)		3.2 kW	850kg/1874 lb	HEMR-90CI
HEM-110C	900 (35.4)	250 (9.84)–350 (13.7)	1120 (44.0)	421 (16.5)	32 (1.25)	5.0 kW	1350kg/2976 lb	HEMR-110CI
HEM-130C	1050 (41.3)	300 (11.8)–450 (17.7)	1320 (51.9)	490 (19.2)	36 (1.41)	7.4 kW	2200kg/4850 lb	HEMR-130CI
HEM-150C	1200 (47.2)	400 (15.7)–550 (21.6)	1520 (59.8)	563 (22.1)	42 (1.65)	9.2 kW	3400kg/7496 lb	HEMR-150CI

※ The electromagnet power consumption applies to the use of 200 VAC (50 Hz).

※ For use in combination with a vibrator like vibration conveyor, a special type of vibration-proof specification needs to be used.

Model HEM-BS SUSPENDED ELECTROMAGNET FOR IRON REMOVAL

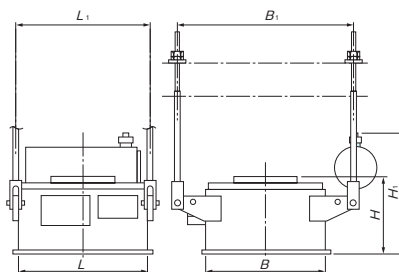
Oil cooling



HEM-BS65

[Application]

This model utilizes the electromagnet design taken from the suspended electromagnetic separator and is recommended for use where there is a relatively small amount of mixed iron pieces on the conveyor. This model is for use on large conveyors as with Model BST, but is most suitable for operations where the amount of mixed iron pieces is small and attracted iron pieces can be removed periodically.



[Features]

- There are no moving parts and the construction is simple for trouble-free operation.
- The oil cooling system can keep temperature rise below a certain level, when in a continuous use operation. (For cooling oil used, see page 126.)
- The separating capacity is about the same as Model BST.
- Magnetic separation effectiveness is high because effective magnetic field is generated all over the attractive face.
- Corresponding belt width is now wider.

[mm (in)]

Model	Area Width	Area Height	Dimensions						Power Consumption	Mass	Applicable Rectifier
			L	B	H	L ₁	B ₁	H ₁			
HEM-BS65	450 (17.7)	150 (5.90)–200 (7.87)	650 (25.5)	650 (25.5)	347 (13.6)	755 (29.7)	1025 (40.3)	605 (23.8)	1.5Kw	590kg/ 1300 lb	HEMR-BS 65
HEM-BS80	600 (23.6)	150 (5.90)–250 (9.84)	800 (31.4)	800 (31.4)	328 (12.9)	905 (35.6)	1175 (46.2)	570 (22.4)	2.4Kw	870kg/ 1918 lb	HEMR-BS 80
HEM-BS90	750 (29.5)	200 (7.87)–300 (11.8)	900 (35.4)	900 (35.4)	349 (13.7)	1005 (39.5)	1360 (53.5)	600 (23.6)	3.1Kw	1200kg/ 2646 lb	HEMR-BS 90
HEM-BS100	900 (35.4)	250 (9.84)–350 (13.7)	1000 (39.3)	1000 (39.3)	485 (19.0)	1115 (43.8)	1583 (62.3)	790 (31.1)	4.0Kw	1820kg/ 4013 lb	HEMR-BS100
HEM-BS115	1050 (41.3)	300 (11.8)–350 (13.7)	1150 (45.2)	1150 (45.2)	496 (19.5)	1265 (49.8)	1733 (68.2)	785 (30.9)	5.2Kw	2800kg/ 6174 lb	HEMR-BS115
HEM-BS130	1200 (47.2)	300 (11.8)–400 (15.7)	1300 (51.1)	1300 (51.1)	593 (23.3)	1431 (56.3)	1926 (75.8)	890 (35.0)	6.6Kw	4100kg/ 9040 lb	HEMR-BS130
HEM-BS150	1400 (55.1)	300 (11.8)–450 (17.7)	1500 (59.0)	1500 (59.0)	498 (19.6)	1643 (64.6)	2126 (83.7)	775 (30.5)	8.7Kw	4900kg/10804 lb	HEMR-BS150
HEM-BS170	1600 (62.9)	400 (15.7)–550 (21.6)	1700 (66.9)	1700 (66.9)	575 (22.6)	1843 (72.5)	2326 (91.5)	840 (33.0)	10.4Kw	6500kg/14332 lb	HEMR-BS170

※ The electromagnet power consumption applies to the use of 200 VAC (50 Hz).

※ For use in combination with a vibrator like vibration conveyor, a special type of vibration-proof specification needs to be used.

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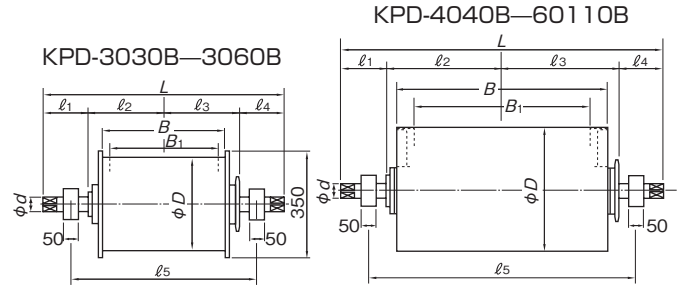
Model KPD PERMANENT MAGNETIC DRUM



KPD-4080B

[Application]

Suitable for sorting wastes and removing iron from bulk materials used in mining, ceramic, chemical and food industries.



[Features]

- A powerful permanent magnet is used and thus no power source is required.
- The outside nonmagnetic drum is rotated to automatically discharge iron.
- The drum shell is made of nonmagnetic stainless steel.
- KPD-HA 180 mT (1800 G), HB 250 mT (2500 G), HC 300 mT (3000 G) and HE 500 mT (5000 G) Series are also available.
- In addition to the permanent magnet type, an electromagnet type (KED) is also available.

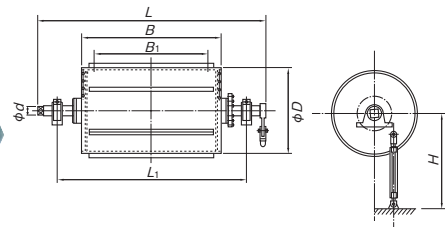
[mm (in.)]

Model	Flow Capacity	Dimensions										Magnetic Flux Density	Revolution	Motor	Mass
		D	B ₁	B	l ₂	l ₃	L	l ₅	l ₄	l ₁	φd				
KPD-3030B	025m ³ /h	300 (11.8)	268(10.5)	300(11.8)	200(7.87)	225(8.85)	690(27.1)	580(22.8)	120 (4.72)	145 (5.70)	45 (1.77)	100mT (1000G)	30—45rpm	0.4kW	60kg/ 132 lb
KPD-3040B	035m ³ /h		368(14.4)	400(15.7)	250(9.84)	275(10.8)	790(31.1)	680(26.7)							80kg/ 176 lb
KPD-3050B	045m ³ /h		468(18.4)	500(19.6)	300(11.8)	325(12.8)	890(35.0)	780(30.7)							100kg/ 220 lb
KPD-3060B	055m ³ /h	568(22.3)	600(23.6)	350(13.7)	375(14.7)	990(38.9)	880(34.6)	120kg/ 264 lb							
KPD-4040B	045m ³ /h	330(12.9)	430(16.9)	260(10.2)	292(11.5)	830(32.6)	710(27.9)	55 (2.16)	25—40rpm	150kg/ 330 lb					
KPD-4050B	060m ³ /h	430(16.9)	530(20.8)	310(12.2)	342(13.4)	930(36.6)	810(31.8)				200kg/ 440 lb				
KPD-4065B	075m ³ /h	580(22.8)	680(26.7)	385(15.2)	417(16.4)	1080(42.5)	960(37.8)				250kg/ 551 lb				
KPD-4080B	090m ³ /h	730(28.7)	830(32.6)	460(18.1)	492(19.3)	1230(48.4)	1110(43.7)	60 (2.36)	20—35rpm	280kg/ 617 lb					
KPD-5080B	080m ³ /h	430(16.9)	530(20.8)	310(12.2)	342(13.4)	930(36.6)	810(31.8)				345kg/ 760 lb				
KPD-5065B	105m ³ /h	580(22.8)	680(26.7)	385(15.2)	417(16.4)	1080(42.5)	960(37.8)				410kg/ 903 lb				
KPD-5095B	125m ³ /h	730(28.7)	830(32.6)	460(18.1)	492(19.3)	1230(48.4)	1110(43.7)	65 (2.55)	15—30rpm	335kg/ 738 lb					
KPD-6065B	150m ³ /h	580(22.8)	680(26.7)	385(15.2)	417(16.4)	1080(42.5)	950(37.4)				410kg/ 903 lb				
KPD-6080B	190m ³ /h	730(28.7)	830(32.6)	460(18.1)	492(19.3)	1230(48.4)	1100(43.3)				490kg/ 1080 lb				
KPD-6095B	220m ³ /h	880(34.6)	980(38.5)	535(21.0)	567(22.3)	1380(54.3)	1250(49.2)	60 (2.36)	0.75kW	490kg/ 1080 lb					
KPD-60110B	240m ³ /h	1030(40.5)	1130(44.4)	610(24.0)	642(25.2)	1530(60.2)	1400(55.1)			570kg/ 1257 lb					

Model KPDL LARGE SIZE PERMANENT MAGNETIC DRUM



KPDL-3048A



[mm (in.)]

Model	Flow Capacity (Magnetized substance × 75%)	Dimensions							Magnetic Flux Density	Revolution		Motor	Mass
		B ₁	B	L ₁	L	D	φd	H		Over Feed	Under Feed		
KPDL-3026A	12—17t/h	460 (18.1)	660 (25.9)	1140 (44.8)	1420 (55.9)	760 (29.9)	100 (3.93)	1190 (46.8)	100mT (1000G)	25—30 rpm	1.5kW	700kg/ 1543 lb	
KPDL-3048A	20—32t/h	1020 (40.1)	1220 (48.0)	1700 (66.9)	1980 (77.9)							1000kg/ 2205 lb	
KPDL-3060A	28—40t/h	1320 (51.9)	1520 (59.8)	2000 (78.7)	2280 (89.7)							1200kg/ 2646 lb	
KPDL-3636A	16—24t/h	660 (25.9)	930 (36.6)	1430 (56.3)	1730 (68.1)	930 (36.6)	120 (4.72)	1260 (49.6)		26—35 rpm		2.2kW	1350kg/ 2976 lb
KPDL-3648A	25—36t/h	950 (37.4)	1220 (48.0)	1720 (67.7)	2020 (79.5)								1700kg/ 3748 lb
KPDL-3660A	35—50t/h	1250 (49.2)	1520 (59.8)	2020 (79.5)	2320 (91.3)								2000kg/ 4409 lb
KPDL-3672A	42—60t/h	1550 (61.0)	1820 (71.6)	2320 (91.3)	2620 (103.1)	1080 (42.5)	120 (4.72)	1260 (49.6)	20—25 rpm	3.7kW	2500kg/ 5512 lb		
KPDL-4260A	40—56t/h	1250 (49.2)	1520 (59.8)	2180 (85.8)	2520 (99.2)						3000kg/ 6614 lb		
KPDL-4272A	40—65t/h	1550 (61.0)	1820 (71.6)	2480 (97.6)	2820 (111.0)								

[Application]

This model is recommended for removal of large iron pieces and iron lumps from various raw materials as well as from bulky wastes.

[Features]

- The super powerful, large magnet generates uniform and strong magnetic force.
- The robust construction can withstand impacts by large iron pieces when they are collected.
- Scrapers for complete removal and collection are mounted.
- The magnet position adjusting turnbuckle allows adjustment of the collection position as desired.
- In addition to the permanent magnet type, an electromagnet type (KEDL) is also available.

Measurements of magnet attractive force (attraction distance)

No.	Test Piece	Weight	Attraction Distance
1	12-cm nail	10g/0.02 lb	400(15.7)
2	Hexagon bolt M10 × 70	40g/0.09 lb	325(12.8)
3	◇ M16 × 100	60g/0.13 lb	300(11.8)
4	◇ M20 × 100	280g/0.61 lb	275(10.8)
5	Hexagon nut M20	30g/0.06 lb	150(5.90)
6	Round bar φ20 × 200	480g/1.06 lb	350(13.7)
7	Steel 25 × 30 × 65	350g/0.87 lb	200(7.87)
8	Steel 6 × 55 × 280	720g/1.59 lb	400(15.7)
9	Angle 40 × 40 × 350	930g/2.05 lb	400(15.7)

*The values by KPDL-3660A.

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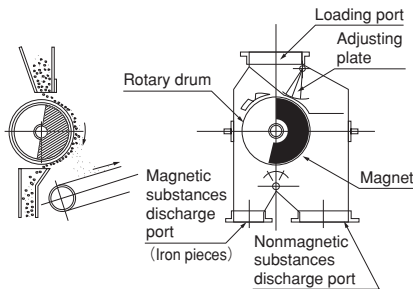
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Model KDS DRUM TYPE MAGNETIC SEPARATOR



KDS-300C



[Application]

A motor-driven magnetic separating system designed with a permanent magnetic drum housed in a casing, automatically removes and collects iron pieces, bolts, etc. from raw materials loaded from a hopper.

[Features]

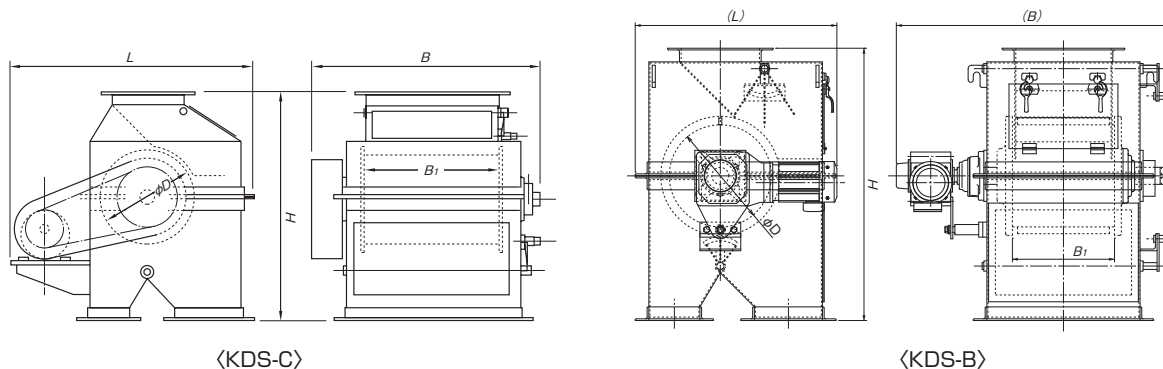
- Very easy to handle.
- Compact and light weight for easy relocation and installation.
- The powerful magnetic force type having a large processing capacity.
- Series below are also available.
 - KDS-HA-C 180mT (1800G)
 - HC-C 300mT (3000G)
 - HE-C 500mT (5000G)

[mm (in)]

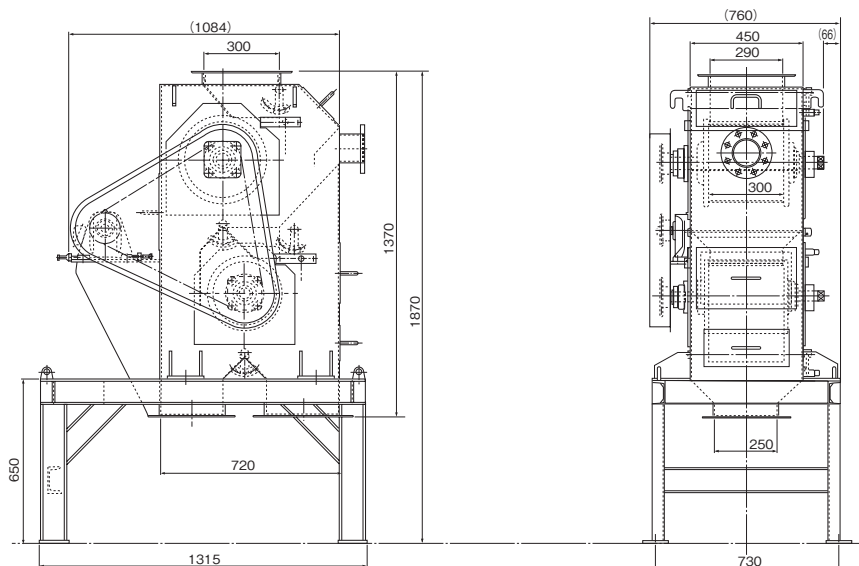
Model	Flow Capacity	Dimensions			Drum		Magnetic Flux Density	Motor	Mass
		L	B	H	ϕD	B_1			
KDS-250C	15m ³ /h	540 (21.2)	700 (27.5)	725 (28.5)	250 (9.84)	250 (9.84)	90mT (900G)	0.2kW	125kg/ 275 lb
KDS-300C	25m ³ /h		800 (31.4)		300 (11.8)	300 (11.8)			150kg/ 330 lb
KDS-500C	40m ³ /h	590 (23.2)	950 (37.4)	800 (29.5)	300 (11.8)	450 (17.7)	100mT (1000G)	0.4kW	230kg/ 507 lb
KDS-600C	50m ³ /h		1100 (43.3)		600 (23.6)	600 (23.6)			350kg/ 771 lb
KDS-800B	75m ³ /h		1000 (39.3)	850 (33.4)	680 (26.7)	680 (26.7)			450kg/ 992 lb
KDS-900B	90m ³ /h	930 (36.6)	1150 (45.2)		830 (32.6)	830 (32.6)			550kg/ 1213 lb
KDS-1100B	105m ³ /h		1000 (39.3)	1100 (43.3)	680 (26.7)	680 (26.7)			600kg/ 1323 lb
KDS-1200B	125m ³ /h	1150 (45.2)	1150 (45.2)		830 (32.6)	830 (32.6)			740kg/ 1631 lb

※ These models can be tested in advance.

※ Volume for treatment is just a standard/target. Depending of materials to be treated, it can be smaller/ fewer than the described volume.



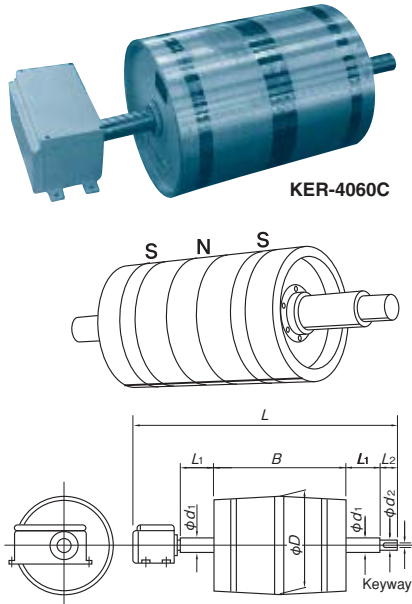
An example of fabrication of KDS-300B-2-S 2-stage drum magnetic separator



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Model KER ELECTROMAGNETIC PULLEY

These pulleys have been widely used in wastes processing systems, and used to remove iron from bulk materials in chemical, steel making, coal, food and mining industries. The electromagnetic pulley is equipped with a rectifier having an ammeter. The power source is single-phase 200 VAC and the output is 180 VDC.



KER-4060C

Model	Belt Width	Dimensions								Power Consumption	Mass	Applicable Rectifier
		ϕD	B	L	ϕd_1	ϕd_2	L ₁	L ₂	Keyway			
KER-3030C	300(11.8)	300 (11.8)	350(13.7)	880(34.6)	50(1.96)	45(1.77)	130(5.11)	60(2.36)	14(0.55) x 5.5(0.21)	300W	140kg/ 308 lb	KR-A203
KER-3035C	350(13.7)		930(36.6)	360W						155kg/ 341 lb		
KER-3040C	400(15.7)		980(38.5)	400W						175kg/ 385 lb		
KER-3045C	450(17.7)	500(19.6)	1030(40.5)	55(2.16)	50(1.96)	140(5.51)	70(2.75)	16(0.62) x 6(0.23)	450W	195kg/ 429 lb	KR-A208	
KER-3050C	500(19.6)		1110(43.7)						490W	210kg/ 463 lb		
KER-4040C	400(15.7)		1030(40.5)						550W	380kg/ 837 lb		
KER-4045C	450(17.7)	400 (15.7)	1140(44.8)	60(2.36)	55(2.16)	150(5.90)	80(3.15)	18(0.70) x 7(0.27)	620W	430kg/ 948 lb	KR-A215	
KER-4050C	500(19.6)		1240(48.8)						680W	475kg/ 1047 lb		
KER-4060C	600(23.6)		1240(48.8)						800W	560kg/ 1235 lb		
KER-4075C	750(29.5)	500 (19.6)	1430(56.3)	65(2.55)	60(2.36)	160(6.29)	90(3.54)	20(0.78) x 7.5(0.29)	1000W	700kg/ 1543 lb	KR-A230	
KER-5050C	500(19.6)		1169(46.0)						950W	730kg/ 1609 lb		
KER-5060C	600(23.6)		1279(50.3)						1000W	900kg/ 1984 lb		
KER-5075C	750(29.5)	600 (23.6)	1449(57.0)	70(2.75)	65(2.55)	170(6.69)	100(3.93)	25(0.98) x 9(0.35)	1300W	1130kg/ 2491 lb	KR-A215	
KER-5090C	900(35.4)		1649(64.9)						1500W	1300kg/ 2866 lb		
KER-6060C	600(23.6)		1299(51.1)						1200W	1320kg/ 2910 lb		
KER-6075C	750(29.5)	750 (29.5)	1479(58.2)	80(3.15)	75(2.95)	180(7.08)	100(3.93)	28(1.10) x 10(0.39)	1500W	1580kg/ 3483 lb	KR-A230	
KER-6090C	900(35.4)		1679(66.1)						1800W	1900kg/ 4189 lb		
KER-7590C	900(35.4)		1810(71.2)						2800W	1800kg/ 3968 lb		
KER-75100C	1000(39.3)	750 (29.5)	2020(79.5)	100(3.93)	90(3.54)	230(9.05)	180(7.08)	32(1.26) x 11(0.43)	3400W	2200kg/ 4850 lb	KR-A230	
KER-75120C	1200(47.2)		2170(85.4)						3800W	2600kg/ 5732 lb		
KER-75150C	1500(59.0)		2570(101.2)						4200W	3100kg/ 6834 lb		
KER-90100C	1000(39.3)	900 (35.4)	2050(80.7)	110(4.33)	95(3.74)	280(11.0)	250(9.84)	36(1.41)	4300W	3000kg/ 6614 lb	LMT-A240	
KER-90120C	1200(47.2)		2280(89.7)						4700W	3500kg/ 7716 lb		
KER-90150C	1500(59.0)		2670(105.1)						5200W	4400kg/ 9700 lb		
KER-100120C	1200(47.2)	1000 (39.3)	2490(98.0)	135(5.31)	110(4.33)	330(12.9)	360(14.1)	36(1.41)	5500W	4200kg/ 9259 lb	LMT-A240	
KER-100150C	1500(59.0)		2900(114.2)						6500W	5000kg/ 11023 lb		
KER-120120C	1200(47.2)		2490(98.0)						6500W	5400kg/ 11905 lb		
KER-120150C	1500(59.0)	2900(114.2)	7600W	6500kg/ 14330 lb	LMT-A250							

Note: The slip ring SRB-100 is used for 3030C — 4060C and SR-20 for 4075C and over.

Model KPR PERMANENT MAGNETIC PULLEY

Environmentally Friendly

As for separation in wood material for biomass power generator!



KPR-3560C

KPR-2235

Model	Belt Width	Dimensions								Max. Flux Density	Mass
		ϕD	B	L	d_1	d_2	L ₁	L ₂	Keyway		
KPR-2230	300(11.8)	214 (8.42)	350(13.7)	660(25.9)	40(1.57)	35(1.37)	130(5.11)	50(1.96)	10(0.39) x 5(0.19)	80mT (800G) 以上	45kg/ 99 lb
KPR-2235	350(13.7)		710(27.9)	52kg/ 114 lb							
KPR-2240	400(15.7)		760(29.9)	68kg/ 149 lb							
KPR-2735	350(13.7)	265 (10.4)	400(15.7)	710(27.9)	45(1.77)	40(1.5)	130(5.11)	50(1.96)	12(0.47) x 5(0.19)	80mT (800G) 以上	77kg/ 169 lb
KPR-2740	400(15.7)		760(29.9)	86kg/ 189 lb							
KPR-2745	450(17.7)		810(31.8)	100kg/ 220 lb							
KPR-3240	400(15.7)	315 (12.4)	450(17.7)	780(30.7)	50(1.96)	45(1.77)	135(5.31)	60(2.36)	14(0.55) x 5.5(0.21)	80mT (800G) 以上	110kg/ 242 lb
KPR-3245	450(17.7)		830(32.6)	122kg/ 269 lb							
KPR-3250	500(19.6)		880(34.6)	135kg/ 297 lb							
KPR-3260	600(23.6)	350 (13.7)	980(38.5)	1000(39.3)	60(2.36)	55(2.16)	140(5.51)	70(2.75)	16(0.62) x 6(0.23)	80mT (800G) 以上	140kg/ 308 lb
KPR-3540C	400(15.7)		790(31.1)	190kg/ 418 lb							
KPR-3545C	450(17.7)		850(33.4)	210kg/ 463 lb							
KPR-3550C	500(19.6)	400 (15.7)	900(35.4)	1000(39.3)	55(2.16)	50(1.96)	140(5.51)	80(3.15)	18(0.70) x 7(0.27)	300mT (3000G) 以上	230kg/ 507 lb
KPR-3560C	600(23.6)		1000(39.3)	280kg/ 617 lb							
KPR-4045C	450(17.7)		860(33.8)	270kg/ 595 lb							
KPR-4050C	500(19.6)	500 (19.6)	920(36.2)	1020(40.1)	60(2.36)	55(2.16)	145(5.70)	80(3.15)	20(0.78) x 7.5(0.29)	300mT (3000G) 以上	300kg/ 661 lb
KPR-4060C	600(23.6)		1020(40.1)	355kg/ 782 lb							
KPR-4075C	750(29.5)		1200(47.2)	450kg/ 992 lb							
KPR-5060C	600(23.6)	500 (19.6)	1040(40.9)	1040(40.9)	70(2.75)	65(2.55)	150(5.90)	90(3.54)	18(0.70) x 7(0.27)	300mT (3000G) 以上	480kg/ 1058 lb
KPR-5075C	750(29.5)		1210(47.6)	630kg/ 1389 lb							
KPR-5090C	900(35.4)		1400(55.1)	750kg/ 1653 lb							
KPR-6075C	750(29.5)	600 (23.6)	1300(51.1)	1500(59.0)	80(3.15)	75(2.95)	190(7.48)	100(3.93)	20(0.78) x 7.5(0.29)	300mT (3000G) 以上	900kg/ 1984 lb
KPR-6090C	900(35.4)		1500(59.0)	1070kg/ 2359 lb							
KPR-60105C	1050(41.3)		1670(65.7)	1230kg/ 2712 lb							
KPR-60120C	1200(47.2)	750 (29.5)	1820(71.6)	120(4.72)	85(3.34)	120(4.72)	200(7.87)	150(5.90)	25(0.98) x 9(0.35)	300mT (3000G) 以上	1450kg/ 3197 lb
KPR-7575C	750(29.5)		1370(53.9)	1200kg/ 2646 lb							
KPR-75105C	1050(41.3)		1700(66.9)	1650kg/ 3638 lb							
KPR-75120C	1200(47.2)	900 (35.4)	1950(76.7)	110(4.33)	95(3.74)	120(4.72)	200(7.87)	200(7.87)	28(1.10) x 10(0.39)	300mT (3000G) 以上	1900kg/ 4189 lb
KPR-75140C	1400(55.1)		2150(84.6)	2150kg/ 4740 lb							
KPR-90105C	1050(41.3)		1750(68.9)	2150kg/ 4740 lb							
KPR-90120C	1200(47.2)	1000 (39.3)	2000(78.7)	135(5.31)	110(4.33)	250(9.84)	250(9.84)	250(9.84)	32(1.26) x 11(0.43)	300mT (3000G) 以上	2450kg/ 5401 lb
KPR-90140C	1400(55.1)		2350(92.5)	3050kg/ 6724 lb							

[Application]

These pulleys are utilized to remove iron as with electromagnetic pulleys.

[Features]

- The powerful magnetic force and its effect last almost perpetually.
- No power source is required to generate the magnetic force.
- Robust construction and easy handling and installation
- Max. Flux Density 0.5T(5000G)(type(KPR-H2850,etc)) is also available.

MAGNETIC TOOLS FOR WELDING OPERATION

LIFTING MAGNET

MAGBORG

CHIP & SLUDGE TRANSPORTERS

MAGNETIZERS AND DEMAGNETIZERS FOR TRANSPORTATION EQUIPMENT

MAGNETIC EQUIPMENT FOR TRANSPORTATION

MAGNETIC SEPARATORS

HIGH GRADE MAGNETIC SEPARATORS

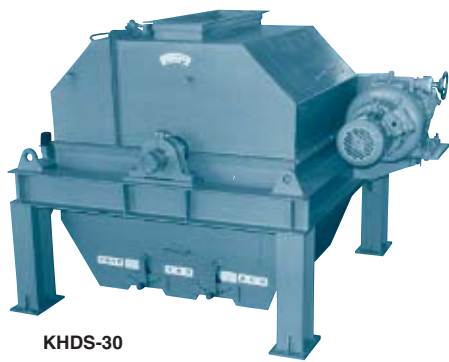
MEASURING INSTRUMENTS

MEASURING TOOLS

MAGNETIC MATERIALS

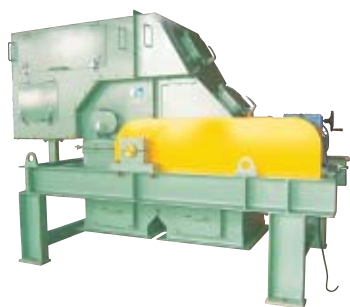
Model KHDS DRUM TYPE MAGNETIC SEPARATOR

MAGNETIC TOOLS FOR WELDING OPERATION
LIFTING MAGNET
MAGBORE



KHDS-30

An example of fabrication of KHDS



Gasification melting furnaces and slug processing

These are high performance magnetic separators designed to easily separate and collect magnetized fine powder and fine particles that are difficult to separate with other dry type magnetic separators. The effect of the magnetic force created by a unique pole layout together with adjustment of the centrifugal force, varying the rotation, enables collection and separation of magnetized substances without taking in impurities.

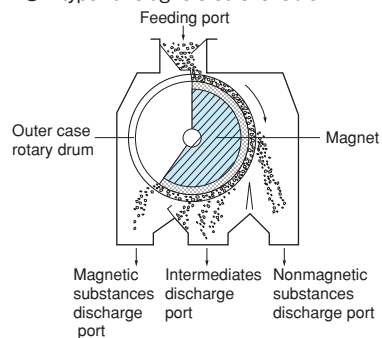
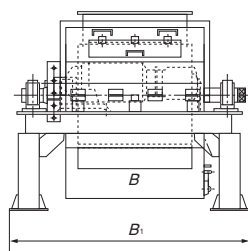
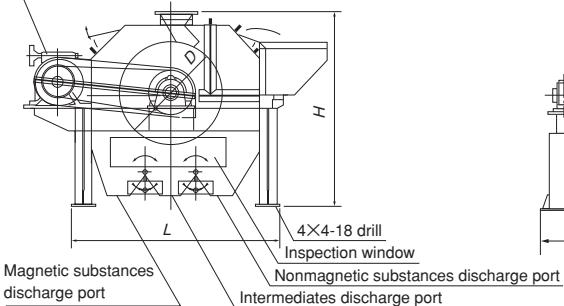
[Application]

Suitable for separation of mine smalls, sorting of weak magnetic ores and separation of iron from aluminum, copper and brass chips. In addition, these separators are also useful for separation of dust, waste sand, casting sand and shots.

[Features]

- The unique pole construction enables separation without taking in impurities.
- The drum speed can be varied according to substances to separate, which enables these separators to be used under various conditions of separation.
- A type for slug is also available.

Bayer cyclo variable speed changer
3-phase 200 V, 5.5 kW



Relation between amounts to process and substances to process

In general, these parameters vary according to the specific gravity of substances to process, and such conditions of processing as the grain size, magnetized state, water content, etc.

Amount to process by KHDS-30 (Example)

Grain Size, etc.	Amount
Grain size 15 — 6 mm	15—7 (t/h)
Grain size 6 — 2 mm	7—5 (t/h)
Grain size less than 2 mm	5—1 (t/h)
Separation of iron wastes from nonferrous metallic chips	1—2 (t/h)

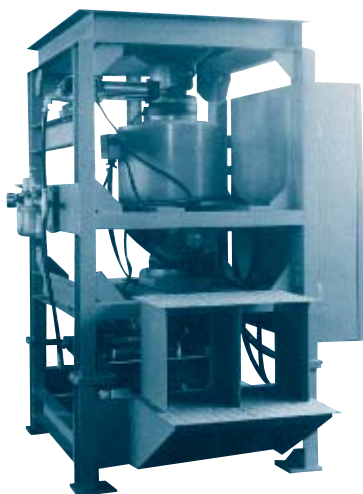
Model	Flow Capacity	Dimensions			Drum		Mass
		B ₁	L	H	φD	B	
KHDS-15	2.2—12.0t/h	900 (35.4)	1470 (57.8)	1500 (59.0)	930 (36.6)	150 (5.90)	1800kg/3968 lb
KHDS-30	4.5—24.0t/h	1000 (39.3)				300 (11.8)	2200kg/4850 lb
KHDS-45	6.7—36.0t/h	1150 (45.2)	1300 (51.1)	1500 (59.0)	930 (36.6)	450 (17.7)	2600kg/5732 lb
KHDS-60	9.0—48.0t/h	1300 (51.1)				600 (23.6)	3300kg/7275 lb
KHDS-75	11.0—60.0t/h	1500 (59.0)	1700 (66.9)	1500 (59.0)	930 (36.6)	750 (29.5)	3600kg/7937 lb
KHDS-90	13.0—72.0t/h	1700 (66.9)				900 (35.4)	4000kg/8818 lb

※The power source is 3-phase, 200 VAC.

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MAGNETIC EQUIPMENT FOR TRANSPORTATION
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Model KIF ELECTROMAGNETIC FILTER

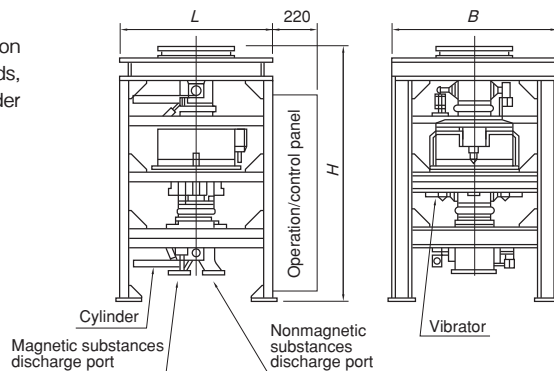
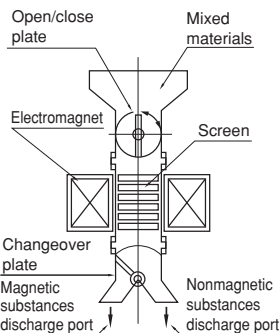
MEASURING INSTRUMENTS - MATERIALS
MEASURING INSTRUMENTS - MATERIALS



KIF-30

[Application]

These filters work well in removing fine iron powder from pigments, glass materials, foods, chemicals and other various kinds of powder materials.

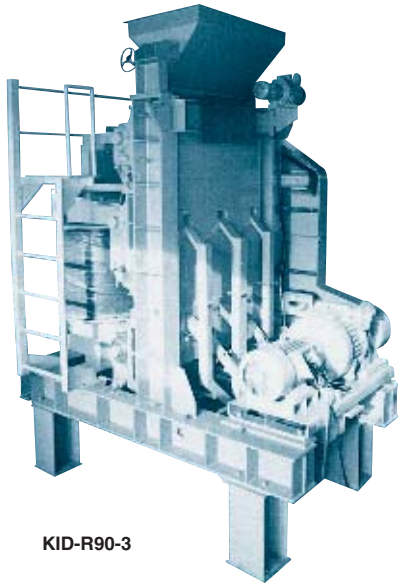


Model	Flow Capacity	Dimensions			Magnet	Mass
		B	L	H		
KIF-16	1.0m³/h	800 (31.5)	800 (31.5)	1300 (51.1)	0.8kW	540kg/1190 lb
KIF-20	1.5m³/h	1100 (43.3)	1000 (39.3)	1550 (61.0)	1.0kW	1000kg/2205 lb
KIF-30	3.5m³/h	1200 (47.2)	1100 (43.3)	1850 (72.8)	1.5kW	1500kg/3307 lb

※Accessory: DC power unit (Input 3-phase 200 VAC)

The high magnetic force separators are designed to generate a magnetic force as large as 2.6 T (26000 G) for separation of weak magnetic substances. In addition to the "induction roll type KID-R" and "cross belt type KID-B" that have a large processing capacity, a smaller capacity "induction type KID" and "electromagnetic filter KIF" are also available.

Model KID-R INDUCTION TYPE MAGNETIC SEPARATOR



KID-R90-3

[Application]

These separators are suitable for separation of weak magnetic substances that exist in powder and bulk materials of quartz sand (glass material), high grade casting sand and chromite sand. In addition, these separators are used to remove iron ores from such nonferrous minerals as tungsten, manganese ore, titanium ore, monazite, garnet and ilmenite, to remove weak magnetic oxides from casting sand (quartz sand) and to separate weak magnetic substances from other powder and bulk materials.

[Features]

- The induction roller generates 2.6 T max. (Tesla) at a sharp gradient and high magnetic flux density.
- The magnetic force can easily be adjusted according to magnetic substances in raw materials.
- The roller revolution can be varied steplessly. According to properties of raw materials, the influence of the centrifugal force by the roller can be adjusted to optimum separation. (Optional)
- When the 2-stage or 3-stage type is used, highly efficient separation is possible.
- These separators are of dry type that does not need auxiliary equipment for pre- and post-treatment.
- These separators are designed to contain dust to prevent pollution by dust.

Conditions of substances to process

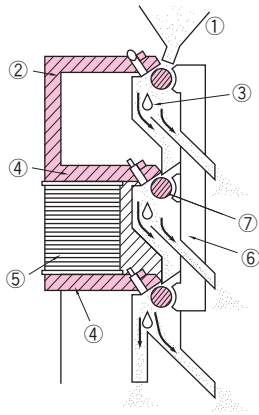
Optimum substances to process are dry and flow freely and their grain size is from 8 to 150 mesh.

Capacity

The amount to process is about 200 kg/h to 1000 kg/h per induction roller width 100 mm, though it varies according to kinds and grain sizes of substances to separate and required level of separation.

One-stage or 2-stage according to applications

Because a high magnetic force is required, the magnetomotive force is induced by the roller by use of yoke so that weak magnetic substances can be separated from flowing raw materials. The figure shows the 3-stage type. One-stage, 2-stage and 3-stage are determined by the number of induction rollers.



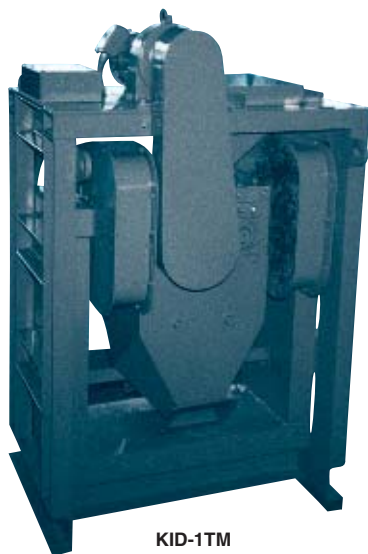
<3-stage>

- ① Hopper
- ② Magnetic pole for rough separation
- ③ Branch plate
- ④ High magnetic force pole
- ⑤ Coil
- ⑥ Yoke
- ⑦ Induction roller magnetic roller

Model	Loller	Flow Capacity	Dimensions			Power Consumption			Mass			
			Length	Width	Height	Magnet	Motor 1	Motor 2				
KID-R35-1	1-stage	2.4m ³ /h	1650	1000	2300	1.5kW	3.7kW	250VA	2.5—3.0 ton 5512—6614 lb			
KID-R35-2	2-stage		(64.9)	(39.3)	(90.5)							
KID-R35-3	3-stage											
KID-R60-1	1-stage	4.0m ³ /h	1700	2300	2500	5.5kW	7.5kW	750VA	7.0—7.5 ton 15430—16530 lb			
KID-R60-2	2-stage									(66.9)	(90.5)	(98.4)
KID-R60-3	3-stage											
KID-R90-1	1-stage	6.0m ³ /h	2600	2600	2600	10.0kW	11.0kW		9.0—10.0ton 19840—22050 lb			
KID-R90-2	2-stage									(102.4)	(102.4)	(102.4)
KID-R90-3	3-stage											

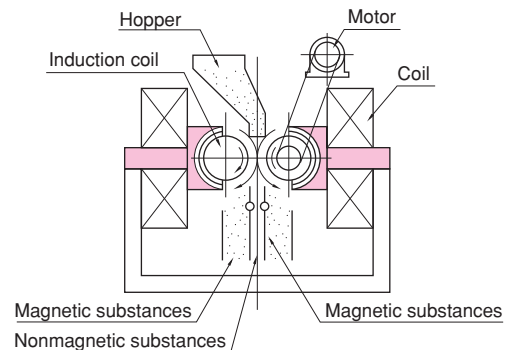
*Magnetic separators dedicated for weak magnetic substances. If strong magnetic substances are mixed, they need to be removed at the preceding stage.

Model KID INDUCTION TYPE MAGNETIC SEPARATOR



KID-1TM

Suitable for removing weak magnetic substances from glass raw materials, ceramic raw materials and chemical products. In particular, these separators work best with fine particles smaller than 1 mm. Weak magnetic substances in bulk materials are separated by a strong magnetic force.



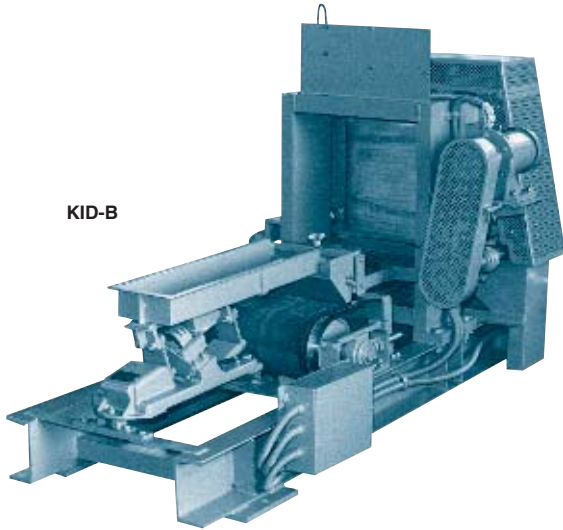
Model	Flow Capacity	Dimensions			Motor	Electro Magnet	Mass	Material
		Width	Depth	Height				
KID-250	0.15m ³ /h	665 (26.1)	350 (13.7)	750 (29.5)	0.2 kW	0.2kW	300kg/ 661 lb	Sand & powder smaller than 1mm (0.03)
KID-1TM	1.0 m ³ /h	810 (31.8)	650 (25.5)	1300 (51.1)	0.4 kW	0.6kW	900kg/1984 lb	Sand & powder smaller than 3mm (0.11)
KID-3TM	3.0 m ³ /h		850 (33.4)	1500 (59.0)	0.75kW	1.2kW	1700kg/3748 lb	Sand & powder smaller than 3mm (0.11)

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Model KID-B CROSS BELT TYPE MAGNETIC SEPARATOR

MAGNETIC TOOLS FOR WELDING OPERATION
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MAGNETIC SEPARATORS
HIGH GRADE MAGNETIC SEPARATORS
MEASURING TOOLS
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MAGNETIC MATERIALS

KID-B



[Application]

Suitable for separating weak magnetic substances from powder and bulk materials such as glass raw materials, casting sand and ceramic raw materials at a high collection rate.

This model works well with dry materials of grain size 3 mm or less and the optimum grain size is about 20 mesh.

[Features]

- High magnetic force and sharp gradient for effective separation of weak magnetic substances from bulk materials.
- The conveyor belt speed can be varied steplessly for efficient separation at an optimum speed.
- The use of a magnetic pole mechanism placed above the conveyor attracts/separates magnetic substances in raw materials, and discharges them ensures a high collection rate. In particular, high-grade collection of useful magnetic substance is possible.
- By increasing the number of magnetic poles on the conveyor belt to make a multi-stage construction, separation can be carried out according to the magnetic property of magnetic substances.
- Easily installable in the existing lines.

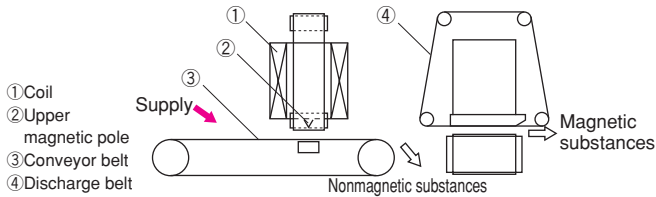
Examples of separation

Removal of iron oxide from lime stone (desiccating agent)

Removal rate 99.5%

Collection of biotite (weak magnetic substance) from feldspar

Collection rate 95% or over

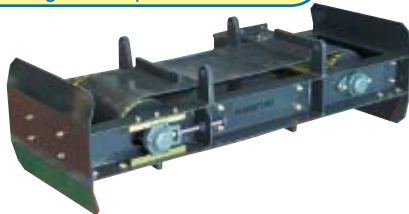


Examples of fabrication of various recycle magnetic separators



Nonferrous metal separator

An example of fabrication of suspended permanent magnetic separator



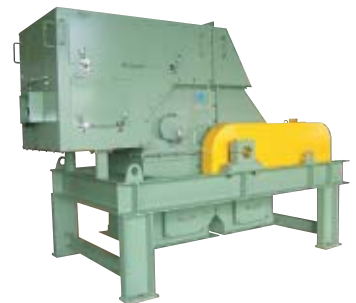
An example of fabrication of high-magnetic force drum magnetic separator



An example of fabrication of drum magnetic separator



An example of fabrication of large electromagnetic drum



An example of fabrication of high-speed drum magnetic separator

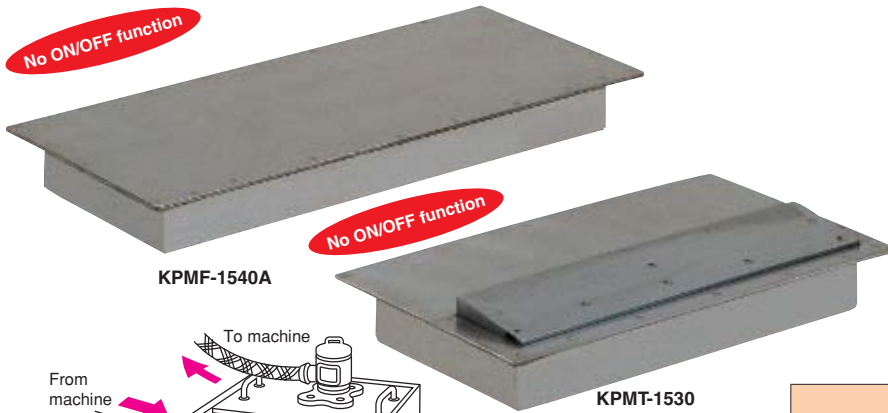
An example of fabrication of drum magnetic separator



An example of fabrication of 2-stage drum magnetic separator



Model KPM PLATE MAGNET



[Application]

These magnets are installed on chutes and hoppers to attract and separate magnetic substances such as iron powder from raw materials used in chemical, drug and other fine particle industries.

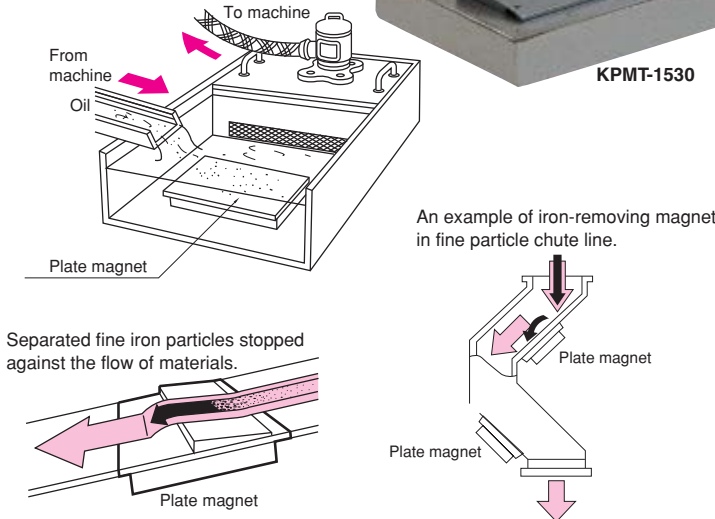
[Features]

- Strong attractive force. Compact and robust.
- Easy installation in any place as no power source is required.



Precautions for use

To use these magnets in liquids (e.g. water) other than oil, please specify "enclosed type."



Model KPMF

- The whole surface is made of stainless steel (SUS304).
- Large attractive force over a long distance.
- The flange area can be worked partially.

Model KPMT

- An iron magnetic plate mounted on the attractive face of Model "F."
- The holding power is applied to the attracted iron pieces by the magnetic plate so that they will not be pushed forward by following materials.

Standard Models

Flat type

Model	Dimensions				Holding Capacity (Length)			Mass
	B	L	H	h	15-cm nail	M10 nut	M10×25 bolt	
KPMF-1515A	150 (5.90)	150 (5.90)	42.2 (1.66)	3.2 (0.12)	80—100 (3.15—3.93)	40— 60 (1.57—2.36)	60— 80 (2.36—3.15)	6kg/ 13.2 lb
KPMF-1530A		300 (11.8)						11kg/ 24.2 lb
KPMF-1535A		350 (13.7)						13kg/ 28.6 lb
KPMF-1540A		400 (15.7)						15kg/ 33.0 lb
KPMF-1545A		450 (17.7)						17kg/ 37.4 lb
KPMF-1550A		500 (19.6)						18kg/ 39.6 lb
KPMF-1560A		600 (23.6)						22kg/ 48.5 lb
KPMF-2020A		200 (7.87)						13kg/ 28.6 lb
KPMF-2030A		300 (11.8)						20kg/ 44.0 lb
KPMF-2040A		400 (15.7)						27kg/ 59.5 lb
KPMF-2050A	500 (19.6)	33kg/ 72.7 lb						
KPMF-2060A	600 (23.6)	40kg/ 88.1 lb						
KPMF-2080A	800 (31.5)	54kg/ 119.0 lb						
KPMF-3030A	300 (11.8)	300 (11.8)	55.5 (2.18)	3.5 (0.13)	100—130 (3.93—5.11)	60— 80 (2.36—3.15)	80—100 (3.15—3.93)	29kg/ 63.9 lb
KPMF-3040A		400 (15.7)						39kg/ 85.9 lb
KPMF-3050A		500 (19.6)						49kg/ 108.0 lb
KPMF-3060A		600 (23.6)						59kg/ 130.1 lb
KPMF-3080A		800 (31.5)						79kg/ 174.2 lb

Surface magnetic flux density 130 mT (1300 G) max.

With magnetic plate

Model	Dimensions				Holding Capacity (Length)			Mass
	B	L	H	h	15-cm nail	M10 nut	M10×25 bolt	
KPMT-1515	150 (5.90)	150 (5.90)	43.5 (1.71)	3.2 (0.12)	80—100 (3.15—3.93)	40— 60 (1.57—2.36)	60— 80 (2.36—3.15)	7kg/ 15.0 lb
KPMT-1530		300 (11.8)						12kg/ 26.4 lb
KPMT-1540		400 (15.7)						16kg/ 35.2 lb
KPMT-1550		500 (19.6)						20kg/ 44.0 lb
KPMT-1560		600 (23.6)						24kg/ 52.9 lb
KPMT-2020		200 (7.87)						14kg/ 30.8 lb
KPMT-2030		300 (11.8)						21kg/ 46.3 lb
KPMT-2040		400 (15.7)						29kg/ 63.9 lb
KPMT-2050		500 (19.6)						35kg/ 77.1 lb
KPMT-2060		600 (23.6)						42kg/ 92.5 lb
KPMT-3030	300 (11.8)	300 (11.8)	56.5 (2.22)	3.5 (0.13)	100—130 (3.93—5.11)	60— 80 (2.36—3.15)	80—100 (3.15—3.93)	32kg/ 70.5 lb
KPMT-3040		400 (15.7)						42kg/ 92.5 lb
KPMT-3050		500 (19.6)						53kg/ 116.8 lb
KPMT-3060		600 (23.6)						63kg/ 138.9 lb
KPMT-3080		800 (31.5)						84kg/ 185.2 lb

Surface magnetic flux density 250 mT (2500 G) max.

Powerful type Powerful plate magnets using rare earth magnets

Flat type

Model	Dimensions				Holding Capacity (Length)			Mass
	B	L	H	h	15-cm nail	M10 nut	M10×25 bolt	
KPMF-H1510	150 (5.90)	100 (3.93)	25 (0.98)	3.2 (0.12)	100—130 (3.93—5.11)	60— 80 (2.36—3.15)	80—100 (3.15—3.93)	3.0kg/ 6.61 lb
KPMF-H1515		150 (5.90)						4.5kg/ 9.92 lb
KPMF-H1520		200 (7.87)						5.5kg/ 12.1 lb
KPMF-H1530		300 (11.8)						8.5kg/ 18.0 lb
KPMF-H2020		200 (7.87)						8.0kg/ 17.6 lb
KPMF-H2025		250 (9.84)						10.0kg/ 22.0 lb
KPMF-H2030		300 (11.8)						11.5kg/ 25.0 lb
KPMF-H2040		400 (15.7)						15.5kg/ 34.1 lb

Surface magnetic flux density 300 mT (3000 G) max.

With magnetic plate

Model	Dimensions				Holding Capacity (Length)			Mass
	B	L	H	h	15-cm nail	M10 nut	M10×25 bolt	
KPMT-H1510	150 (5.90)	100 (3.93)	25 (0.98)	3.2 (0.12)	100—130 (3.93—5.11)	60— 80 (2.36—3.15)	80—100 (3.15—3.93)	4.0kg/ 8.80 lb
KPMT-H1515		150 (5.90)						6.0kg/ 13.2 lb
KPMT-H1520		200 (7.87)						8.0kg/ 17.6 lb
KPMT-H1530		300 (11.8)						12.0kg/ 26.4 lb
KPMT-H2020		200 (7.87)						10.0kg/ 22.0 lb
KPMT-H2025		250 (9.84)						12.5kg/ 27.5 lb
KPMT-H2030		300 (11.8)						15.0kg/ 33.0 lb
KPMT-H2040		400 (15.7)						20.0kg/ 44.0 lb

Surface magnetic flux density 500 mT (5000 G) max.

※Magnets with handle and hinge are optionally available upon request.

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Model KPMF-C PLATE MAGNET WITH COVER



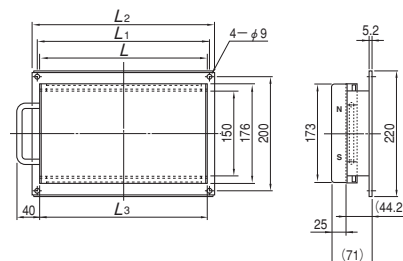
KPMF-C1530

[Application]

These magnets are installed on chutes and hoppers to attract/collect magnetic substances.

[Features]

- Attracted magnetic substances can be removed and cleaned very easily by pulling out the iron-removal cover.



[mm (in)]

Slide direction



Model	Dimensions				Mass
	L	L ₁	L ₂	L ₃	
KPMF-C1530	300 (11.8)	310 (12.2)	330 (12.9)	303 (11.9)	Approx. 12.5kg/27.5 lb
KPMF-C1535	350 (13.7)	360 (14.1)	380 (14.9)	353 (13.9)	Approx. 14.5kg/31.9 lb
KPMF-C1540	400 (15.7)	410 (16.1)	430 (16.9)	403 (15.8)	Approx. 16.5kg/36.3 lb
KPMF-C1545	450 (17.7)	460 (18.1)	480 (18.9)	453 (17.8)	Approx. 19 kg/41.8 lb
KPMF-C1550	500 (19.6)	510 (20.0)	530 (20.8)	503 (19.8)	Approx. 21 kg/46.3 lb

*Max.flux density surface:magnet surface:130mT (1300G) cover surface:100mT (1000G)

Model KPM SUSPENDED PLATE MAGNET

No ON/OFF function

KPMD-2550



[Application]

These permanent magnets are suspended above a chute or conveyor belt to attract and separate magnetic substances such as small iron pieces and particles from raw materials used in chemical, drug and other fine particle industries.

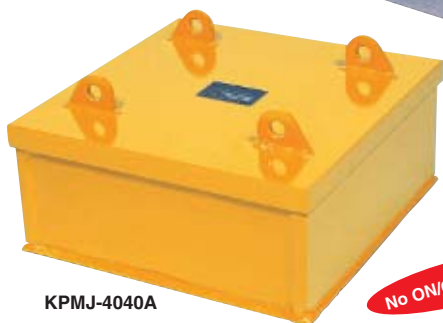
[Features]

- Powerful attractive force. Compact and robust.
- As a permanent magnet is used, no power source is required and therefore these magnets can be used in any place.
- Very easy installation.



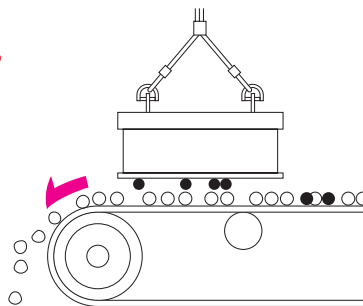
Precautions for use

To use these magnets in liquids (e.g. water) other than oil, please specify "enclosed type."



KPMJ-4040A

No ON/OFF function



Environmentally Friendly

As for separation in wood material for biomass power generator!



Model KPMD

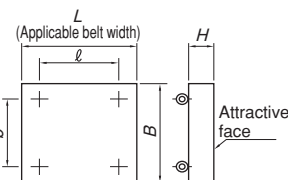
[mm (in)]

Model	Dimensions					Holding Capacity (Length)			Mass
	B	L	b	ℓ	H	15-cm nail	M10 nut	M10×25 bolt	
KPMD-2525	250 (9.84)	250 (9.84)	170 (6.69)	170 (6.69)	64 (2.52)	130—170 (5.11—6.69)	60—90 (2.36—3.54)	100—130 (3.93—5.11)	22kg/48.5 lb
KPMD-2530		300 (11.8)		220 (8.66)					27kg/59.5 lb
KPMD-2540		400 (15.7)		320 (12.6)					35kg/77.1 lb
KPMD-2550		500 (19.6)		420 (16.5)					44kg/97.0 lb
KPMD-2560	600 (23.6)	520 (20.4)	54kg/119.0 lb						
KPMD-3530	350 (13.7)	300 (11.8)	270 (10.6)	220 (8.66)	82 (3.22)	160—200 (6.29—7.87)	80—120 (3.15—4.72)	110—140 (4.33—5.51)	49kg/108.0 lb
KPMD-3540		400 (15.7)		320 (12.6)					64kg/141.1 lb
KPMD-3550		500 (19.6)		420 (16.5)					80kg/176.4 lb
KPMD-3560		600 (23.6)		520 (20.4)					100kg/220.5 lb

Model KPMJ

KPMJ-3030	300 (11.8)	300 (11.8)	200 (7.87)	172 (6.76)	200—250 (7.87—9.84)	100—150 (3.93—5.90)	180—220 (7.08—8.66)	87kg/191.8 lb
KPMJ-3040		400 (15.7)	260 (10.2)					120kg/264.5 lb
KPMJ-3050		500 (19.6)	360 (14.1)					150kg/330.7 lb
KPMJ-4040A	400 (15.7)	400 (15.7)	250 (9.84)	124 (4.87)	200—250 (7.87—9.84)	100—150 (3.93—5.90)	180—220 (7.08—8.66)	90kg/198.4 lb
KPMJ-4060A		600 (23.6)	380 (14.9)					140kg/308.7 lb
KPMJ-4080A		800 (31.5)	500 (19.6)					185kg/407.9 lb

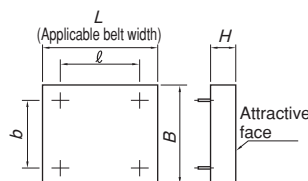
Model KPMD



Suspended permanent magnet

- Suspended above a chute of a conveyor belt to attract and remove iron pieces.
- Larger attraction distance than "F."
- Stainless steel (SUS304) surface.
- Eyebolts in four places.

Model KPMJ



Suspended permanent magnet

- Suspended above a chute of a conveyor belt to attract and remove iron pieces.
- More powerful than "D."
- Stainless steel (SUS304) surface.
- Lifting hinges in four places.

Model KPM-BW MAGNETIC PLATE

Excellent model for collecting sludge.

[Application]

Most suitable for collecting sludge in a circulating liquid tank.

[Features]

- As it is hinge type, it can be installed at any of such variable locations as corner in a tank or overflow part of separation plate.
- By attaching wire or chain through a hook hole of hinge, it becomes easy to be taken out from the inside of a tank.
- Not only sunk but also floating sludge can be collected.

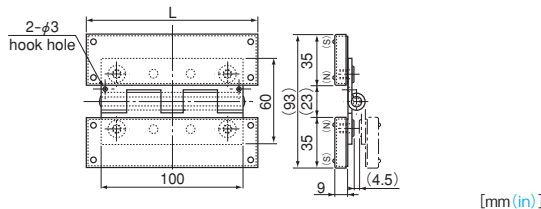


Example of collection sludge.



No ON/OFF function

Can be placed on any location.



Model	Dimensions			Max. Flux Density	Face	Mass	Remarks
	L	Depth	Height				
KPM-BW12	120 (4.72)			150mT (1500G) or more	SUS304	0.75kg/1.65 lb	Temperature for use: lower than 60 °C /Usable in a liquid.(except other than neutral medical products)
KPM-BW18	180 (7.08)	93 (3.66)	23 (0.90)			1.1kg/2.42 lb	
KPM-BW24	240 (9.44)					1.5kg/3.30 lb	

*Guarantee is not granted in case hinge is removed. Please use wire or chain of non magnetic substances for hook hole.

Model KPM SMALL SIZE MAGNETIC PLATE

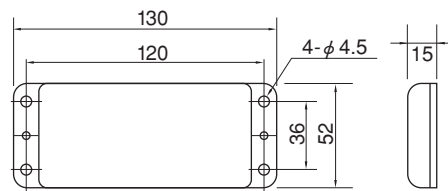
Simple type



No ON/OFF function

Holding Power 60N

KPM-1005



[Application]

This model can be used to catch and collect iron pieces as a small plate magnet or can also be used as a large magnetic holder. A powerful type using a rare earth magnet is also available.

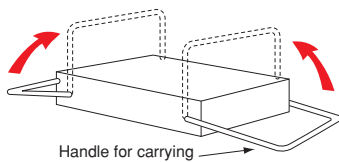
Model	Type	Holding Power	Max. Flux Density	Mass
KPM-1005	Standard type	60N (6kgf)	Approx. 100mT (1000G)	Approx. 350g/0.77 lb
KPM-H1005	Powerful type	150N (15kgf)	Approx. 200mT (2000G)	

*The holding power applies to SS400, 6 mm thick and ground surface held by the whole face.

Model PF MAGFIN*



PF-F1

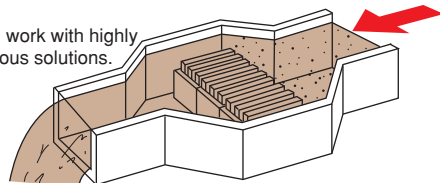


No ON/OFF function



PF-1A

Can work with highly viscous solutions.

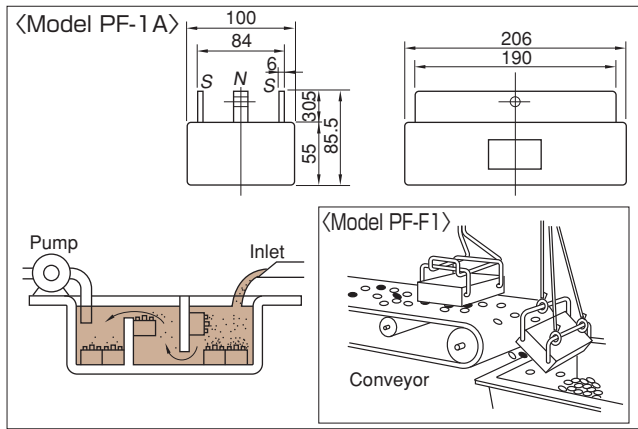


[Application]

Suitable for removing iron from liquids (cooling liquid, electric discharge liquid, etc.) in tanks and passages and as an attracting plate to remove iron in powder. They can be used both dry and wet.

[Features]

- A magnet block of a construction to cause a strong magnetic force to be concentrated on the magnetic pole.

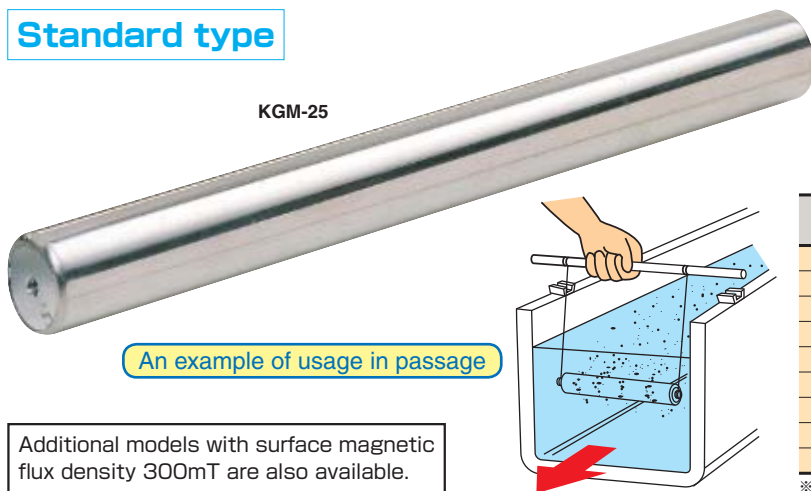


Model	Dimensions	Max. Flux Density	Mass
PF-F1	120 (4.72) × 90 (3.54) × 30 (1.18)	120mT (1200G)	1.5kg/ 3.3 lb
PF-HF1	122 (4.80) × 90 (3.54) × 26 (1.02)	250mT (2500G)	1.4kg/ 3.1 lb
PF-HF2	122 (4.80) × 45 (1.77) × 26 (1.02)		0.7kg/ 1.5 lb
PF-1A	206 (8.11) × 100 (3.93) × 86 (3.38)	120mT (1200G)	5.7kg/12.6 lb

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Model KGM MAGNETIC BAR

Standard type



An example of usage in passage

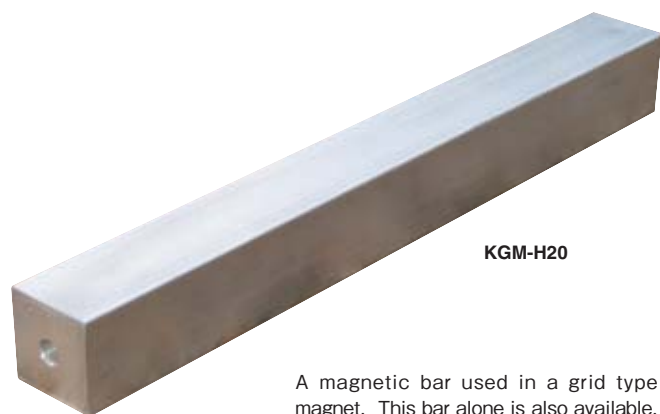
Additional models with surface magnetic flux density 300mT are also available.

A magnetic bar used in a grid type magnet. This bar alone is also available. A round bar type having tapped holes on both ends for mounting. Casing is made of stainless steel. These bars come in various lengths for use in a wide range of applications.

[mm (in)]					
Model	Length	Dia	Max. Flux Density	Temperature Limit	Mass
KGM-20	194 (7.63)	φ 25 (0.98)	130mT (1300G)	Approx. 60°C (140° F)	0.5 kg/1.10 lb
KGM-25	244 (9.60)				0.55kg/1.21 lb
KGM-30	295 (11.6)				0.65kg/1.43 lb
KGM-35	343 (13.5)				0.8 kg/1.76 lb
KGM-40	393 (15.4)				0.9 kg/1.98 lb
KGM-45	442 (17.4)				1.0 kg/2.20 lb
KGM-50	493 (19.4)				1.1 kg/2.42 lb
KGM-55	543 (21.3)				1.24kg/2.73 lb
KGM-60	592 (23.3)				1.34kg/2.95 lb

※The tapped holes are 2-M5, depth 6.

Model KGM-H POWERFUL MAGNETIC BAR



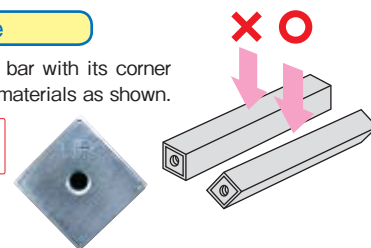
A magnetic bar used in a grid type magnet. This bar alone is also available. Casing is made of stainless steel.

How to Use

Set a square magnetic bar with its corner in the flow direction of materials as shown.

Cannot be used in fluid.

※The corner marked by "UP" must be up.

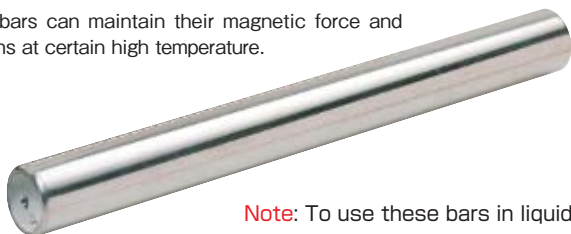


[mm (in)]					
Model	Length	Side Length	Max. Flux Density	Temperature Limit	Mass
KGM-H20	195 (7.67)	22 (0.86)	320mT (3200G)	Approx. 60°C (140° F)	0.6 kg/1.32 lb
KGM-H25	245 (9.64)				0.75kg/1.65 lb
KGM-H30	295 (11.6)				0.9 kg/1.98 lb
KGM-H35	345 (13.5)				1.1 kg/2.42 lb
KGM-H40	395 (15.5)				1.2 kg/2.64 lb

※The tapped holes are 2-M5, depth 6.

Model KGM-T HEAT-RESISTANT MAGNETIC BAR

These bars can maintain their magnetic force and functions at certain high temperature.

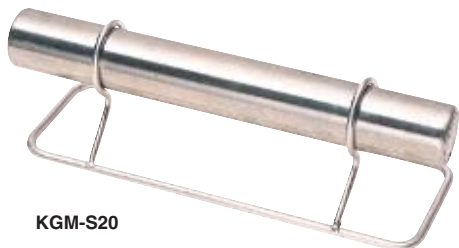


Note: To use these bars in liquids (e.g. water) other than oil, please specify "enclosed type."

[mm (in)]					
Model	Length	Dia	Max. Flux Density	Temperature Limit	Mass
KGM-T20	194 (7.63)	φ 25 (0.98)	130mT (1300G)	Approx. 150°C (302° F)	0.5 kg/1.10 lb
KGM-T25	244 (9.60)				0.55kg/1.21 lb
KGM-T30	295 (11.6)				0.65kg/1.43 lb

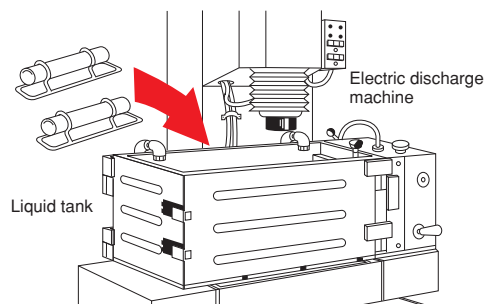
※The tapped holes are 2-M5, depth 6.

Model KGM-S STAND TYPE MAGNETIC BAR



[Application]

This magnetic bar is equipped with a stand which permits placing it in a tank to remove iron in the tank fluid. We recommend packing the unit in a polyethylene or vinyl bag beforehand for convenience in removing the iron sticking to the unit.



[mm (in)]							
Model	Magnetic Bar			Stand			Mass
	Length	Dia	Max.Flux Density	Height	Depth	Width	
KGM-S20	194 (7.63)	φ 25 (0.98)	130mT (1300G)	54 (2.12)	60 (2.36)	170 (6.69)	約0.6kg/1.32 lb

※outer material : SUS304

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Model KGM MAGNETIC BAR UNIT



KGM-2025

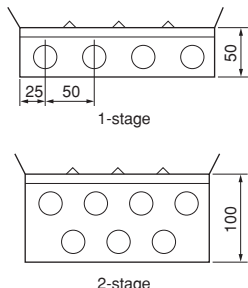
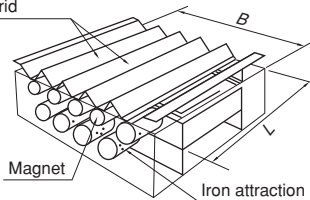
[Application]

A unit consisting of powerful permanent magnets. These units are essential for removal of iron from bulk materials in the fine particle and chemical industries to enhance the work efficiency.

[Features]

- The grid layout exhibits the excellent iron-removal performance.
- Easy installation for a wide range of applications.
- Two-stage models having a higher iron-removal capacity are also available.

Separating grid



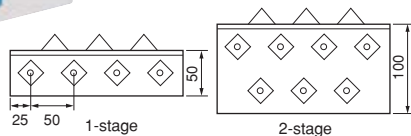
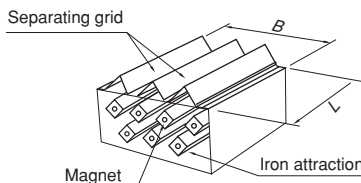
Model	Type	Flow Capacity	Number of Magnets	Dimensions		Mass
				B	L	
KGM-2020	1-stage	6m³/h	4	200	200 (7.87)	3.5kg/ 7.7 lb
KGM-2020W	2-stage		7		6.0kg/13.2 lb	
KGM-2025	1-stage	8m³/h	4	(7.87)	250 (9.84)	4.2kg/ 9.2 lb
KGM-2025W	2-stage		7		6.5kg/14.3 lb	
KGM-2525	1-stage	10m³/h	5	250	250 (9.84)	5.0kg/11.0 lb
KGM-2525W	2-stage		9		8.4kg/18.5 lb	
KGM-2530	1-stage	12m³/h	5	(9.84)	300 (11.8)	5.6kg/12.3 lb
KGM-2530W	2-stage		9		9.5kg/21.0 lb	
KGM-3030	1-stage	14m³/h	6	300	300 (11.8)	6.7kg/14.7 lb
KGM-3030W	2-stage		11		11.2kg/24.6 lb	
KGM-3040	1-stage	18m³/h	6	(11.8)	400 (15.7)	9.0kg/19.8 lb
KGM-3040W	2-stage		11		15.7kg/34.6 lb	
KGM-4040	1-stage	24m³/h	8	400	400 (15.7)	11.0kg/24.2 lb
KGM-4040W	2-stage		15		19.8kg/43.6 lb	
KGM-4050	1-stage	30m³/h	8	(15.7)	500 (19.6)	13.1kg/28.8 lb
KGM-4050W	2-stage		15		23.6kg/52.0 lb	

*Surface magnetic flux density 130 mT (1300 G) max.

Model KGM-H POWERFUL MAGNETIC UNIT



KGM-H2025



[Application]

Suitable for removing iron from bulk materials by strong magnetic force. Two-stage models having a higher iron-removal capacity are also available.

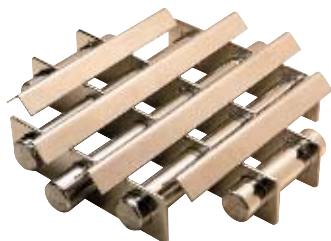
Model	Type	Flow Capacity	Number of Magnets	Dimensions		Mass
				B	L	
KGM-H2020	1-stage	4.5m³/h	4	200	200	3.0kg/6.61 lb
KGM-H2020W	2-stage		7		(7.87)	5.0kg/11.0 lb
KGM-H2025	1-stage	6.0m³/h	4	(7.87)	250	3.6kg/7.90 lb
KGM-H2025W	2-stage		7		(9.84)	6.0kg/13.2 lb

*Surface magnetic flux density 320 mT (3200 G) max.

Model KGM-C MAGNETIC BAR UNIT



KGM-CF25 (With outer frame)



KGM-C25 (Without outer frame)

[Application]

A round type that can easily be installed at the feeding port of machines and hoppers or chutes as a gate for iron removal.

[mm (in.)]

Model	Type	Flow Capacity	Dimensions		Mass
			Frame Dia	Height	
KGM-C20	Without outer frame	4.5m³/h	(φ 200 (7.87))	55 (2.16)	2.1kg/4.63 lb
KGM-CF20	With outer frame			60 (2.36)	2.3kg/5.07 lb
KGM-C25	Without outer frame	7.0m³/h	(φ 250 (9.84))	55 (2.16)	3.3kg/7.27 lb
KGM-CF25	With outer frame			60 (2.36)	3.6kg/7.90 lb

*Surface magnetic flux density 130 mT (1300 G) max.

Model KGM-HC POWERFUL MAGNETIC UNIT



KGM-HCF20 (With outer frame)



KGM-HC20 (Without outer frame)

A round type combined with powerful magnetic bars that can easily be set on hoppers and chutes.

[mm (in.)]

Model	Type	Flow Capacity	Dimensions		Mass
			Frame Dia	Height	
KGM-HC20	Without outer frame	4.5m³/h	(φ 200 (7.87))	60	1.6kg/3.52 lb
KGM-HCF20	With outer frame				(2.36)
KGM-HC25	Without outer frame	7.0m³/h	(φ 250 (9.84))		2.0kg/4.41 lb
KGM-HCF25	With outer frame				2.4kg/5.29 lb

*Surface magnetic flux density 130 mT (1300 G) max.

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