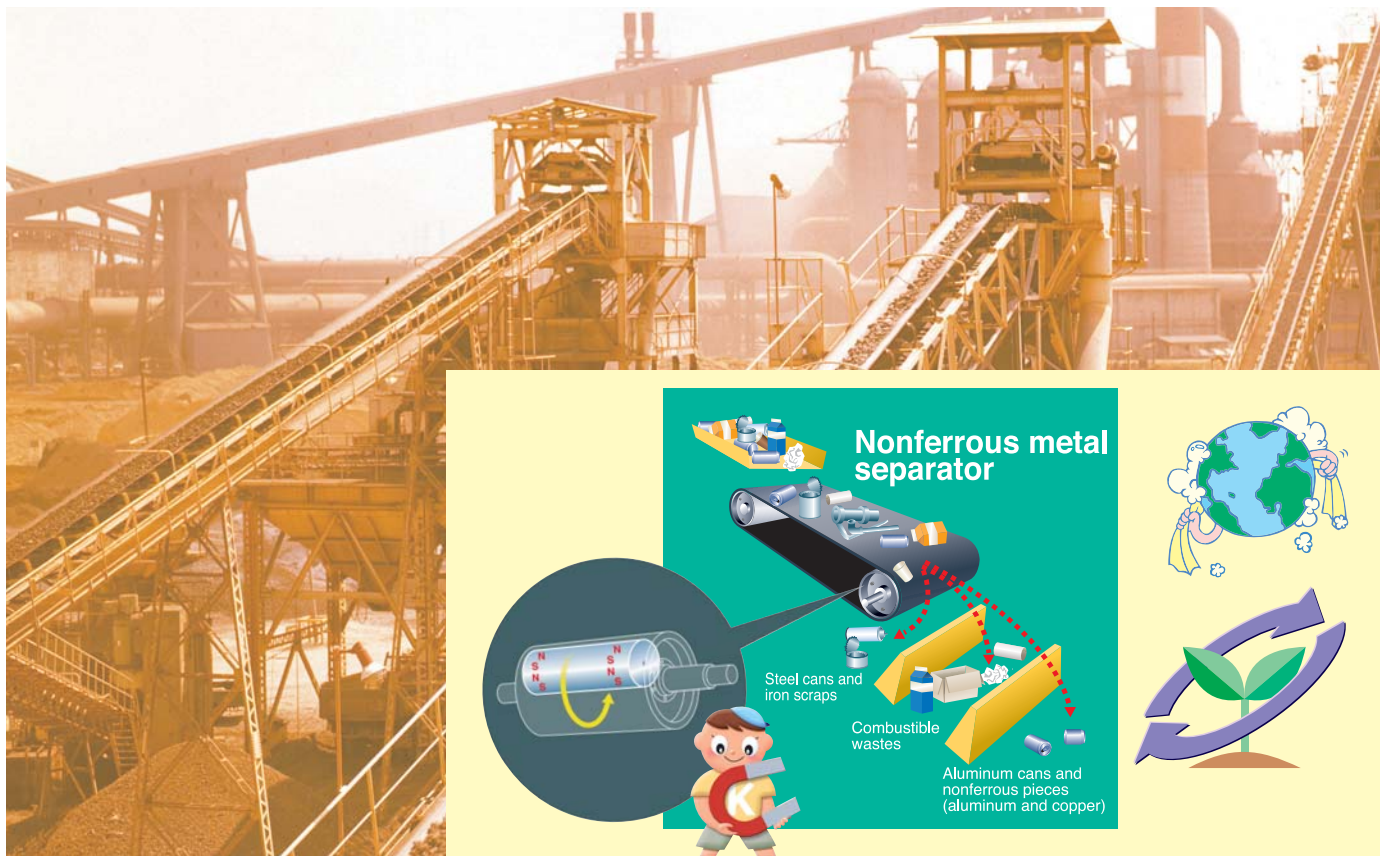


MAGNETIC SEPARATORS



Types of magnetic separators

Type	Product Name	Model	Features
Eccentric pole type	Nonferrous separator	NFS	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.

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

MEASURING
INSTRUMENTS

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	Removal of iron from raw materials and mixed machined parts.
Feed and fertilizer	Removal of iron from raw materials and mixed machined parts.
Textile and fabric	Removal of iron from raw materials.
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



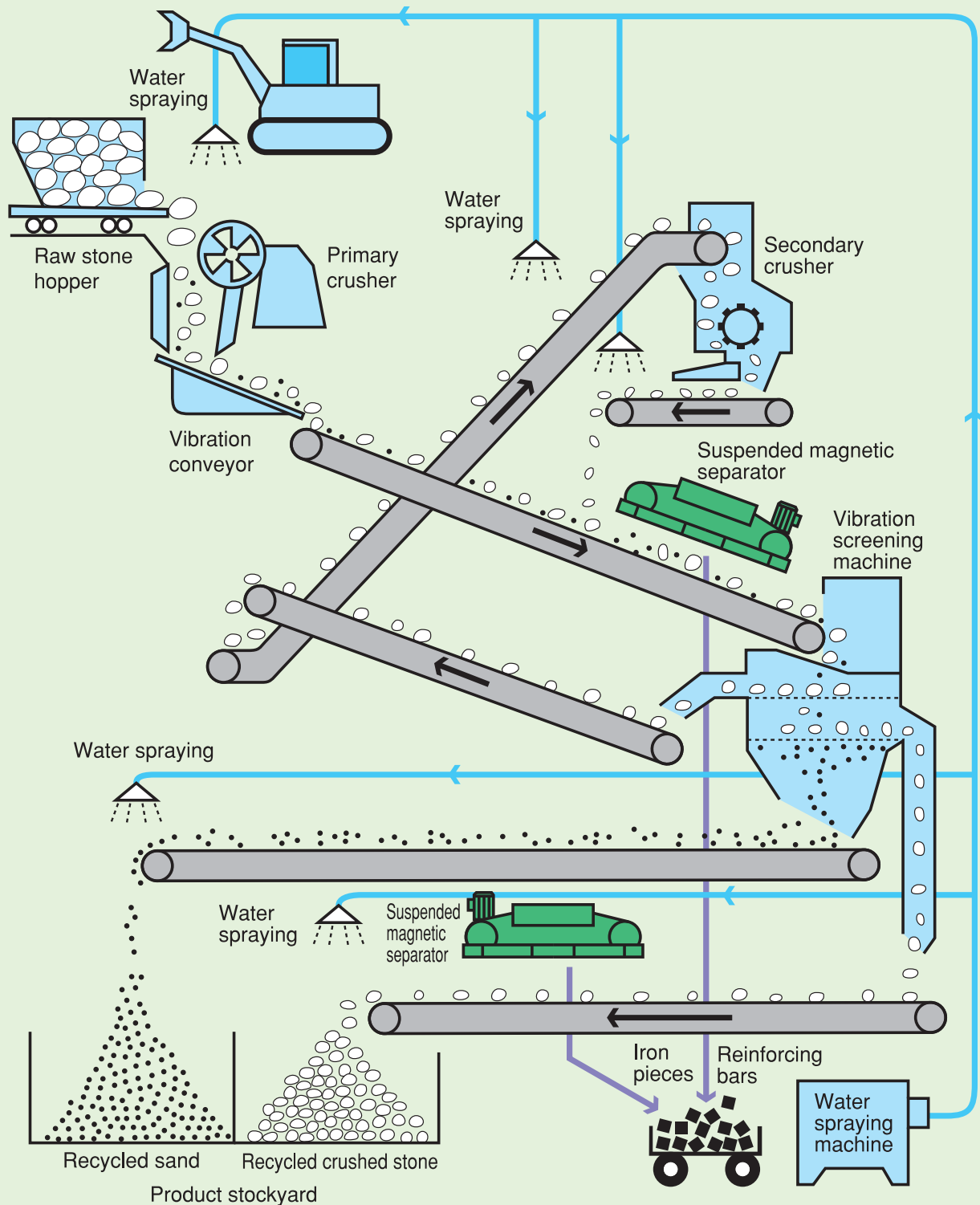
Testing of separation available

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)	Separation by magnetic drum (dry)	Separation by suspended separator (dry)
<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● 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. 	<p>To automatically remove iron pieces, bolts and nuts on a conveyor, a suspended magnetic separator is installed to attract and remove iron pieces.</p> <p>For fully automatic removal and discharge: BST, SPM, etc.</p> <p>For fully automatic removal and manual discharge: HEM-BC, HEM-C, KPM-J, KPM-D, etc.</p>
Separation in fluid (wet)	High magnetic force separator (dry)	Aluminum separator
<p>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).</p>	<p>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.</p>	<p>Aluminum items can be sorted and separated from noncombustible wastes and large crushed wastes efficiently.</p> <p>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.</p>

Construction Scrap Materials Recycling System



Concrete blocks are first crushed to certain sizes (50—60 square centimeters) on construction site and then transported to a recycle facility.



Concrete blocks are crushed by a crusher. Then foreign matters like iron are removed by a magnet.



Crushed concrete pieces are screened to various sizes. Concrete blocks that could not be crushed by the primary crusher are crushed by the secondary crusher. To prevent dust and dirt produced in these processes and to prevent noise, the machines and surrounding areas are covered and water is sprayed. Dust is collected by a dust collector.



Materials screened to various sizes become products as recycled crushed stone and recycled sand. These materials are used for road construction and sewage construction.

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

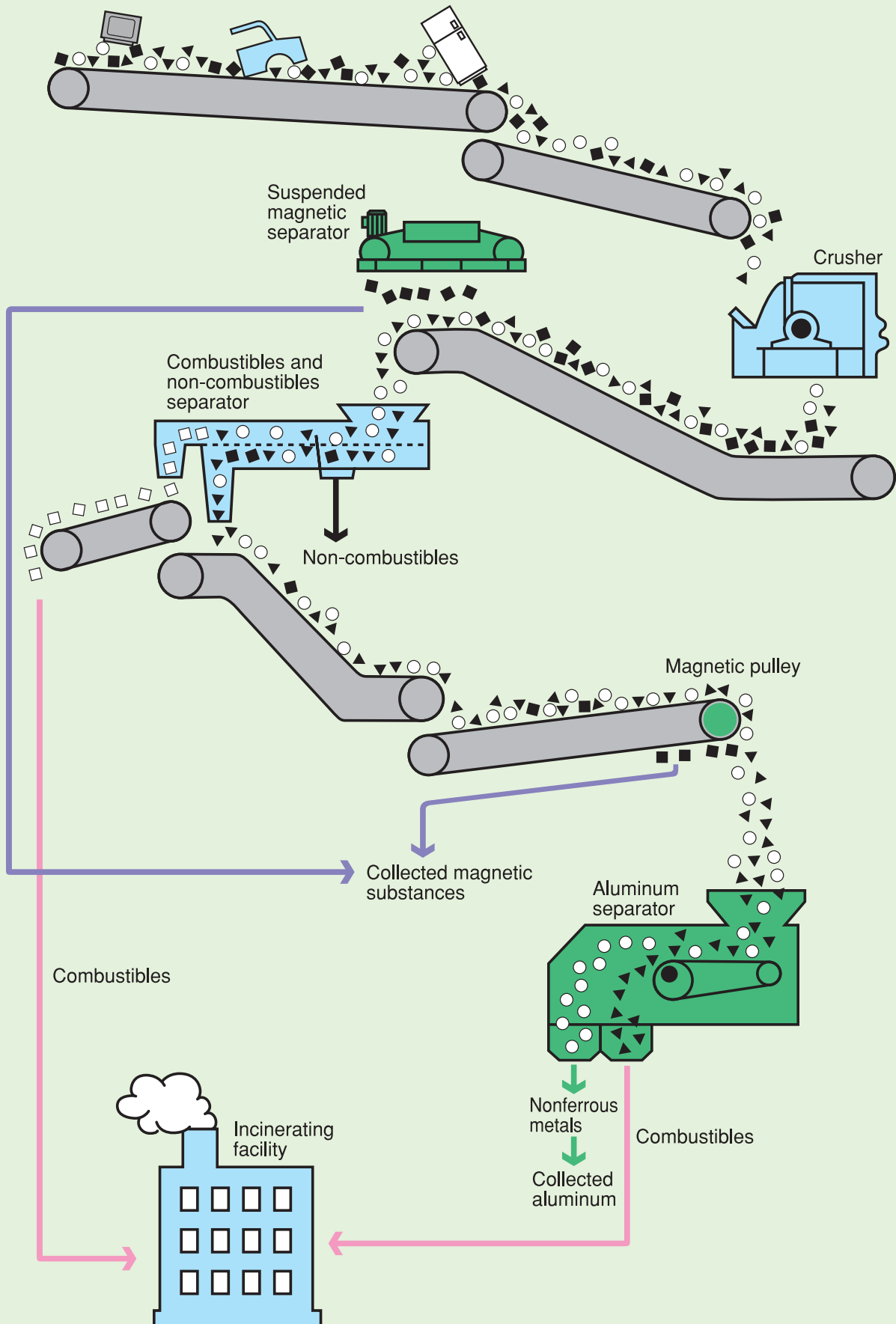
MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS

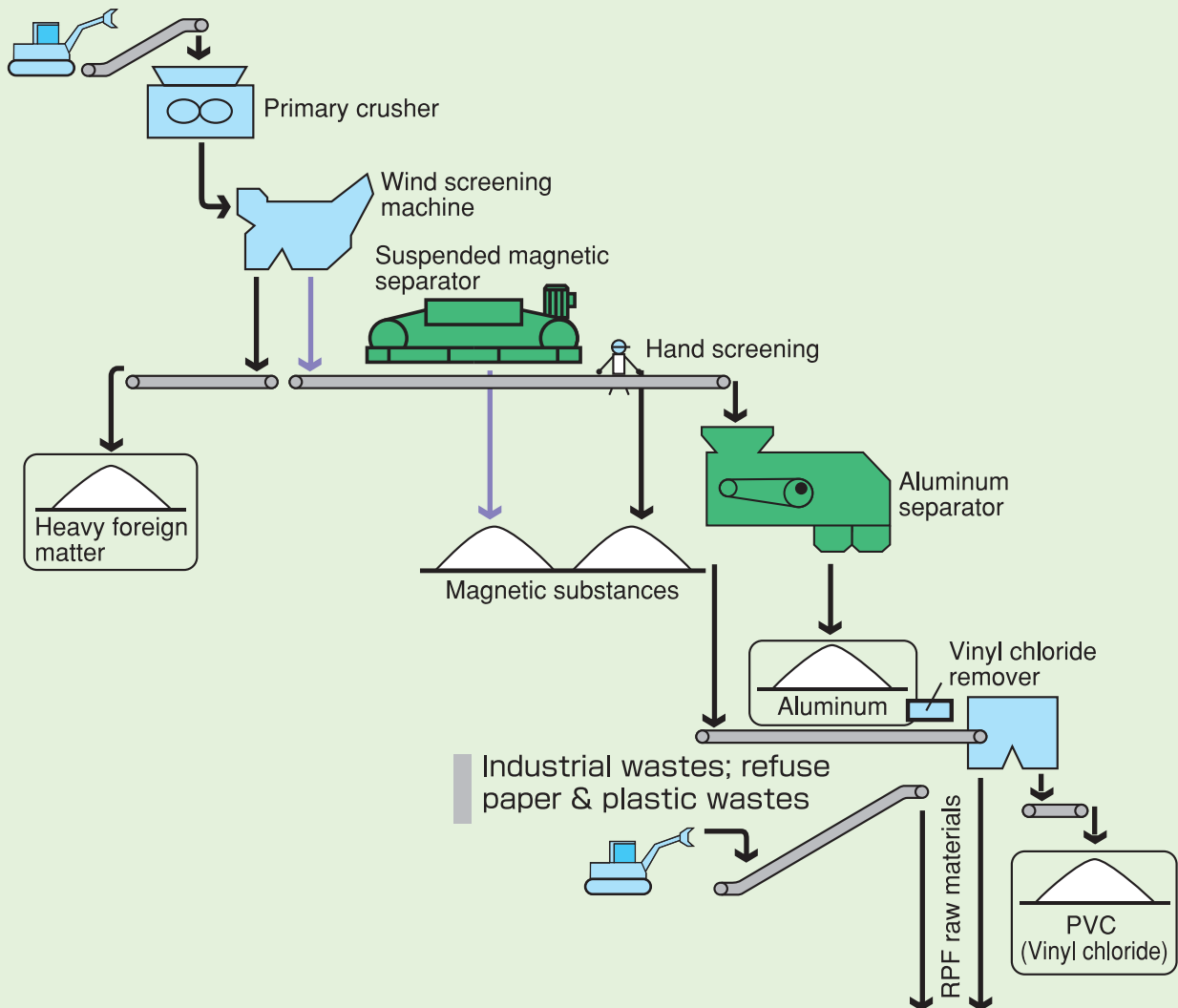
Non-Industrial Large Recyclables Processing System



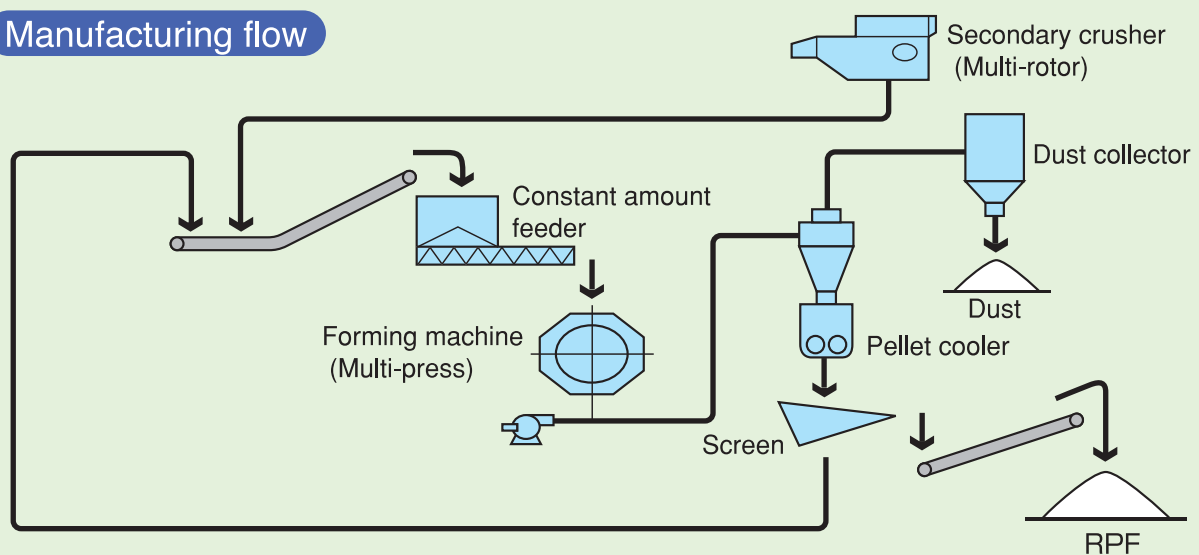
RPF (Refuse Paper & Plastic Fuel) Manufacturing Flow

Pretreatment flow

Non-industrial wastes; refuse paper & plastic wastes



Manufacturing flow



MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

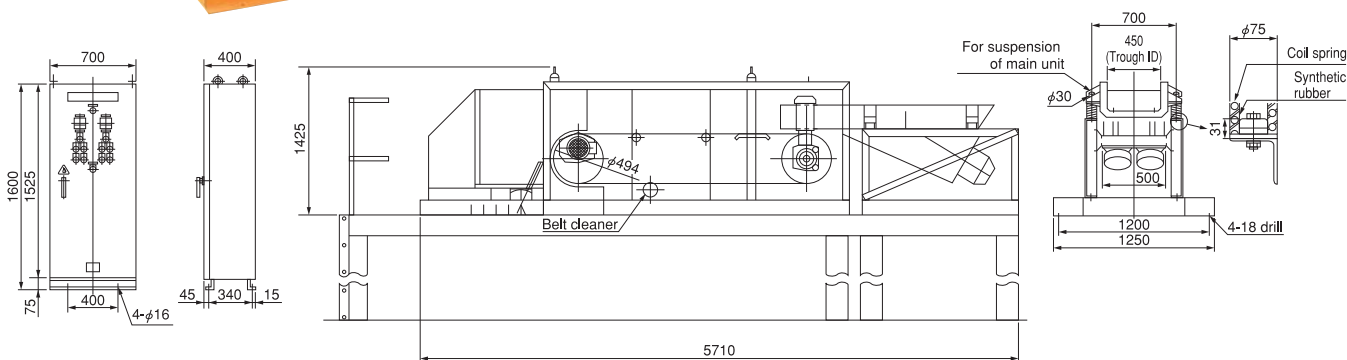
MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS

Model NFS-F / MES-W NONFERROUS METAL SEPARATORS

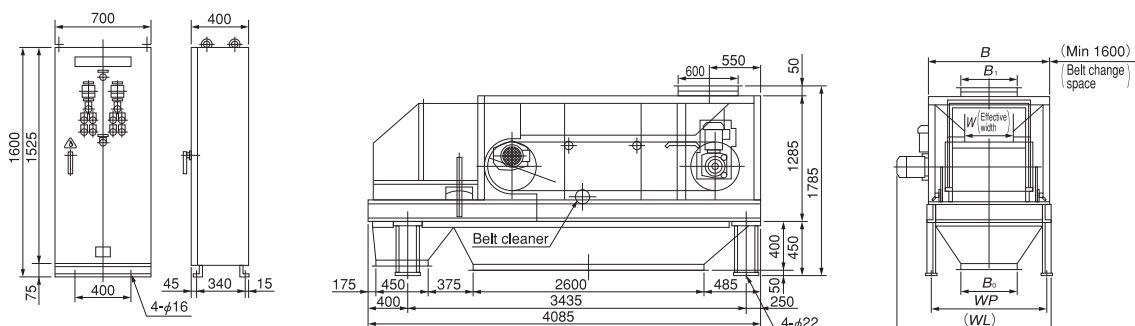
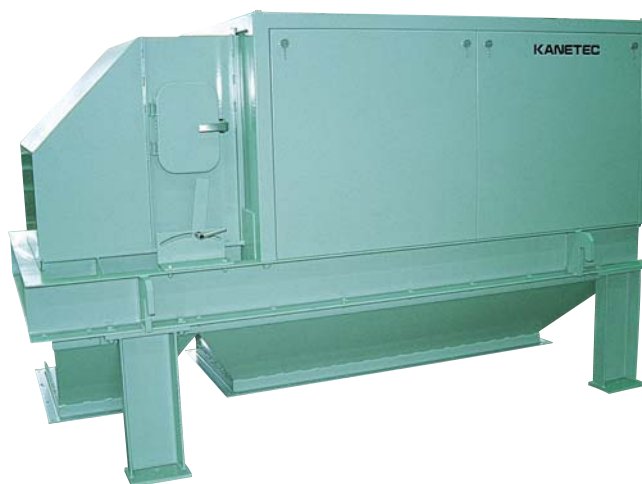
Original eccentric magnetic pole system developed by technical tie-up with Steinert! (Patent No. 2137154)

NFS-F



〈External view of nonferrous metal separator〉

MES-W



〈External view of aluminum separator〉

■ 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.

This system is a new model developed by technical tie-up with Steinert in Germany. This system is designed to completely separate and collect finely shredded and crushed nonferrous metals, which are very difficult to handle by conventional systems.

[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]

- 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.
- The angle (location) of the magnet can be adjusted finely according to materials to process.

[mm (in.)]

Model		Effective Width	Power Source	Power Capacity
Automobiles, bulky crushed wastes	Recyclables			
NFS-F50	MES-W550	500 (19.6)	Single-phase 200 VAC 50/60Hz	8kVA
NFS-F75	MES-W575	750 (29.5)		
NFS-F100	MES-W5100	1000 (39.3)		10kVA
—	MES-W5125	1250 (49.2)		
NFS-F150	MES-W5150	1500 (59.0)		

■ Automobiles & bulky crushed wastes

[mm (in.)]

Model	W	WL	WP	B	Rotation Motor	Conveyor Motor	Mass
NFS-F50	490 (19.2)	1560 (61.4)	1220 (48.0)	1250 (49.2)	3.7kW	2.2kW	Approx. 1685kg/3715 lb
NFS-F75	740 (29.1)	1694 (66.7)	1350 (53.1)	1380 (54.3)			Approx. 2000kg/4409 lb
NFS-F100	990 (38.9)	1944 (76.5)	1600 (62.9)	1630 (64.2)			Approx. 2200kg/4850 lb
NFS-F150	1490 (58.6)	2510 (98.8)	2100 (82.7)	2130 (83.9)	5.5kW		Approx. 2700kg/5952 lb

■ Recyclables

[mm (in.)]

Model	W	WL	WP	B	B ₁	B ₂	Rotation Motor	Conveyor Motor	Mass
MES-W550	490 (19.2)	1640 (64.5)	1300 (51.2)	1250 (49.2)	600 (23.6)	600 (23.6)	3.7kW	2.2kW	Approx. 2000kg/4409 lb
MES-W575	740 (29.1)	1780 (70.0)	1440 (56.7)	1390 (54.7)	850 (33.4)	850 (33.4)			Approx. 2100kg/4630 lb
MES-W5100	990 (38.9)	2030 (79.9)	1690 (66.5)	1640 (64.5)	1100 (43.3)	1100 (43.3)			Approx. 2350kg/5181 lb
MES-W5125	1240 (48.8)	2280 (89.7)	1840 (72.4)	1890 (74.4)	1350 (53.1)	1350 (53.1)	5.5kW		Approx. 2600kg/5732 lb
MES-W5150	1490 (58.6)	2530 (99.6)	2190 (86.2)	2140 (84.2)	1600 (62.9)	1600 (62.9)			Approx. 2850kg/6283 lb

※ A special system (concentric type) for collection of aluminum cans is also available.



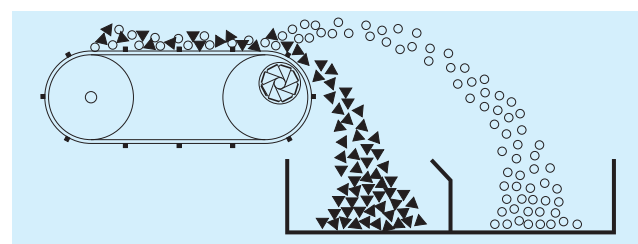
Non-ferrous metal separator used in combination with suspended magnetic separator installed in separating plant



Non-ferrous metals



Cullet



Concentric type

Eccentric magnetic pole system

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

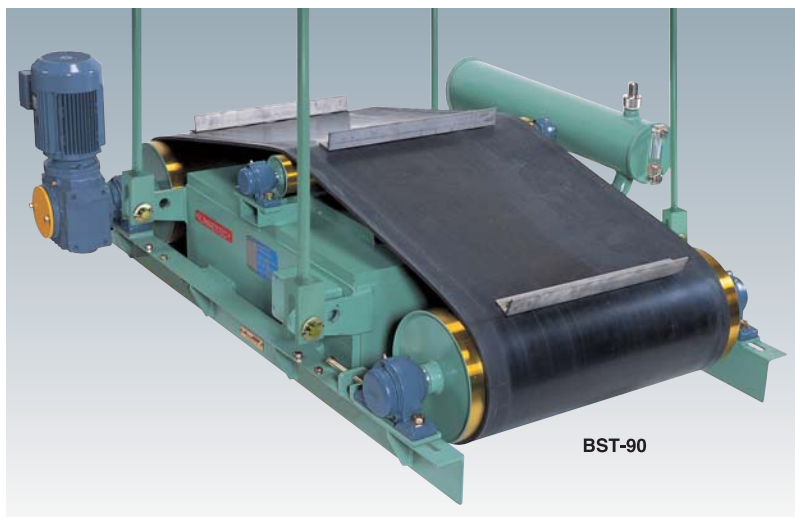
MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS

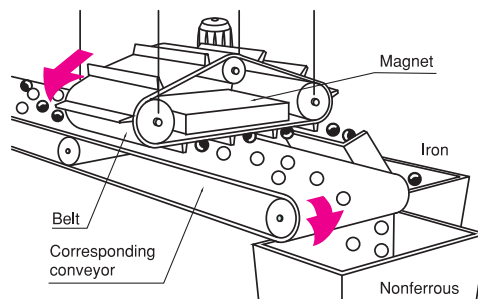
Model **BST** SUSPENDED ELECTROMAGNETIC SEPARATOR

Fully automatic discharge

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



BST-90



[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.

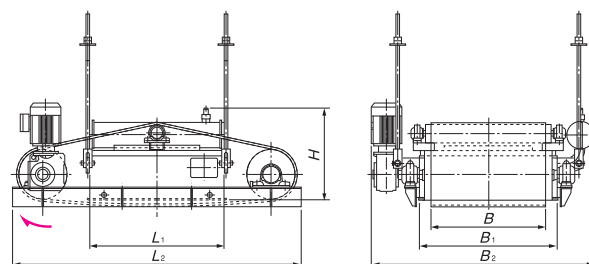
■ Trouble-free, robust magnetic separator!

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



[mm (in)]

Model	Corresponding Conveyor Width	Corresponding Conveyor Installation Distance	Belt Width	Overall Dimensions				Electromagnet Dimensions		Power Consumption		Mass	Applicable Power Source
			B	L ₂	B ₂	H	L ₁	B ₁	Electromagnet※	Drive motor			
BST-65	450 (17.7)	150 (5.90)—200 (7.87)	450 (17.7)	1640 (64.5)	1150 (45.2)	610 (24.0)	650 (25.5)	650 (25.5)	1.5kW	1.5kW	680kg/ 1499 lb	BSTR-65I	
BST-80	600 (23.6)	150 (5.90)—250 (9.84)	600 (23.6)	1790 (70.4)	1305 (51.3)	585 (23.0)	800 (31.5)	800 (31.5)	2.4kW		970kg/ 2138 lb	BSTR-80I	
BST-90	750 (29.5)	200 (7.87)—300 (11.8)	750 (29.5)	1900 (74.8)	1500 (59.0)	660 (25.9)	900 (35.4)	900 (35.4)	3.1kW	2.2kW	1370kg/ 3020 lb	BSTR-90I	
BST-100	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		2070kg/ 4564 lb	BSTR-100I	
BST-115	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	3.7kW	3100kg/ 6834 lb	BSTR-115I	
BST-130	1200 (47.2)	300 (11.8)—400 (15.7)	1200 (47.2)	2800 (110.2)	2115 (83.2)	910 (35.8)	1300 (51.1)	1300 (51.1)	6.6kW		4500kg/ 9921 lb	BSTR-130I	
BST-150	1400 (55.1)	300 (11.8)—450 (17.7)	1400 (55.1)	3000 (118.1)	2315 (91.1)	805 (31.6)	1500 (59.0)	1500 (59.0)	8.7kW		5500kg/12125 lb	BSTR-150I	
BST-170	1600 (62.9)	400 (15.7)—550 (21.6)	1600 (62.9)	3200 (126.0)	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.

*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.

Exchanging of electromagnet cooling oil

Models and required amount of oil

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

※Exchange oil once every five years. (It varies slightly depending 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.

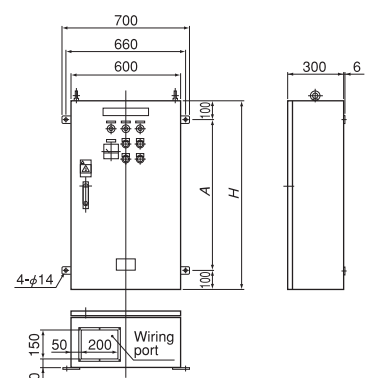
Model BSTR CONTROL UNIT

Indoor type

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



BSTR-90I



Model	Power Source	Electromagnet Output		Drive Motor Output		Dimensions		Construction	Mass
						H	A		
BSTR-65I	200 VAC 50/60Hz 3φ	90 VDC	1.5kW	200 VAC	1.5kW	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	200 VAC	2.2kW				
BSTR-115I		180 VDC	5.2kW						
BSTR-130I		270 VDC	6.6kW	200 VAC	3.7kW				
BSTR-150I		270 VDC	8.7kW						
BSTR-170I		180 VDC	10.4kW	200 VAC	5.5kW	1200 (47.2)	1000 (39.3)		

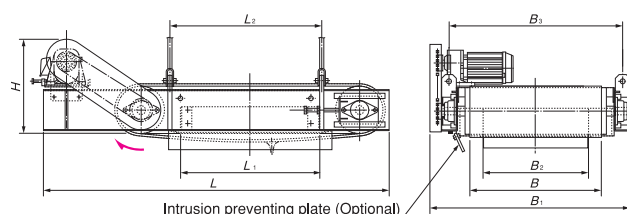
※The outdoor type has partially different specifications.

Model SPM SUSPENDED PERMANENT MAGNETIC SEPARATOR

Fully automatic discharge type



SPM-60E



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.
- An extra powerful type is also available.
- An overhead pulley suspension (parallel suspension) type is also available.

The figure shows a separator with optional intrusion preventing plate.

Model	Corresponding Conveyor Belt Width		Corresponding Conveyor Installation Distance	Belt Width B	Overall Dimensions			Magnet Dimensions		Power Consumption Drive motor	Mass
	Cross suspension	Parallel suspension (※)			L	B ₁	H	L ₁	B ₂		
SPM-30D	350 (13.7)	—	90 (3.54)—130 (5.11)	300 (11.8)	1274 (50.1)	640 (25.2)	510 (20.0)	400 (15.7)	250 (9.84)	0.4 kW	190kg/ 418 lb
SPM-40D	450 (17.7)	350 (13.7)	100 (3.93)—150 (5.90)	400 (15.7)	1374 (54.1)	740 (29.1)		500 (19.6)	350 (13.7)		290kg/ 639 lb
SPM-60E	600 (23.6)	450 (17.7)	150 (5.90)—200 (7.87)	600 (23.6)	1612 (63.4)	910 (35.8)	435 (17.1)	650 (25.5)	490 (19.2)	0.75kW	400kg/ 881 lb
SPM-80E	750 (29.5)	600 (23.6)		700 (27.5)	1812 (71.3)	1010 (39.7)		800 (31.5)	650 (25.5)		650kg/1433 lb
SPM-100E	900 (35.4)	750 (29.5)	200 (7.87)—250 (9.84)	900 (35.4)	2000 (78.7)	1430 (56.3)	525 (20.6)	1000 (39.3)	800 (31.5)		1200kg/2646 lb
SPM-120E	1200 (47.2)	900 (35.4)		1050 (41.3)	2300 (90.5)	1609 (63.3)	566 (22.2)	1300 (51.1)	950 (37.4)	1.5 kW	1700kg/3748 lb

※The outdoor specification is the standard. (※) The parallel suspension specification is optional.

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

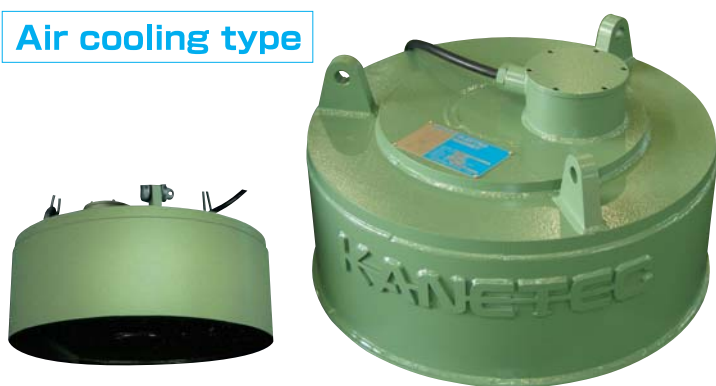
HIGH GRADE MAGNETIC
SEPARATORS

MEASURING
INSTRUMENTS

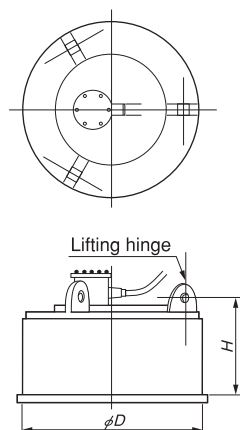
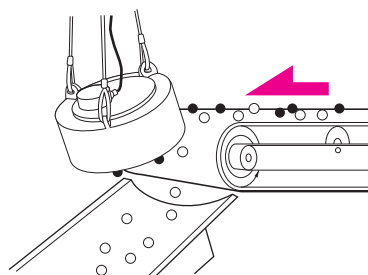
MAGNETIC
MATERIALS

Model HEM-C CIRCULAR ELECTROMAGNET FOR IRON REMOVAL

Air cooling type



HEM-70C



[Application]

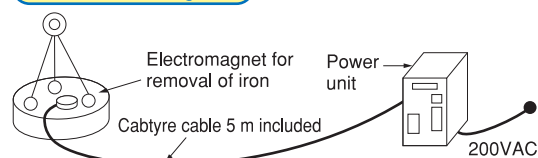
The standard suspended electromagnet designed for removing iron from above conveyors. This model is suitable for removing iron from ores and various materials (glass, ceramics, sugar, paper, chemicals, etc.) as well as from crushed stone in crushing plants and from casting sand in casting plants.

[Features]

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



Connection diagram



[mm (in)]

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

Model HEM-BC SUSPENDED ELECTROMAGNET FOR IRON REMOVAL

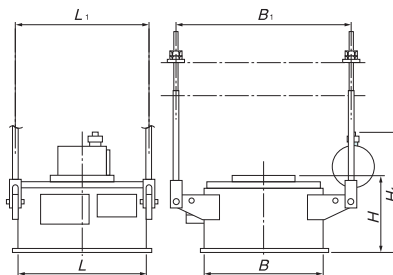
For large conveyor = Oil cooling



HEM-60BC

[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.
- Compared with Model HEM-C, heat generation can be reduced and a drop in performance can be avoided.
- The effective magnetic field is generated over the full width for higher separating efficiency.

[mm (in)]

Model	Conveyor Belt Width	Conveyor Installation Distance	Dimensions						Power Consumption	Mass	Applicable Rectifier
			L	B	H	H ₁	L ₁	B ₁			
HEM-60BC	500 (19.6)	150 (5.90) — 200 (7.87)	648 (25.5)	556 (21.8)	395 (15.5)	680 (26.7)	670 (26.3)	860 (33.8)	1.2kW	550kg/ 1213 lb	HEMR-6BB
HEM-80BC	600 (23.6)	150 (5.90) — 250 (9.84)	798 (31.4)	692 (27.2)	464 (18.2)	790 (31.1)	820 (32.2)	1030 (40.5)	2.0kW	950kg/ 2094 lb	HEMR-8BB
HEM-100BC	750 (29.5)	200 (7.87) — 300 (11.8)	940 (37.0)	840 (33.1)	541 (21.3)	860 (33.8)	975 (38.3)	1230 (48.4)	3.0kW	1600kg/ 3527 lb	HEMR-10BB
HEM-120BC	900 (35.4)	250 (9.84) — 350 (13.7)	1140 (44.8)	986 (38.8)	611 (24.0)	976 (38.4)	1180 (46.4)	1400 (55.1)	4.5kW	2550kg/ 5622 lb	HEMR-12BB
HEM-140BC	1050 (41.3)	300 (11.8) — 400 (15.7)	1340 (52.7)	1128 (44.4)	673 (26.5)	1030 (40.5)	1367 (53.8)	1600 (62.9)	5.5kW	3800kg/ 8378 lb	HEMR-14BB
HEM-160BC	1400 (55.1)	300 (11.8) — 450 (17.7)	1590 (62.6)	1332 (52.4)	763 (30.0)	1120 (44.0)	1620 (63.7)	1800 (70.8)	7.5kW	5750kg/12680 lb	HEMR-16BB
HEM-190BC	1600 (62.9)	400 (15.7) — 550 (21.6)	1850 (72.8)	1492 (58.7)	935 (36.8)	1300 (51.1)	1880 (74.0)	2000 (78.7)	10.0kW	9300kg/20500 lb	HEMR-19BB

Model KPD PERMANENT MAGNETIC DRUM



KPD-4080B

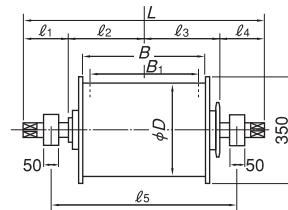
[Application]

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

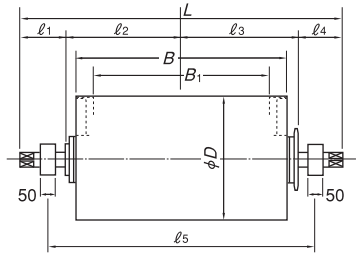
[Features]

- 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.

KPD-3030B—3060B



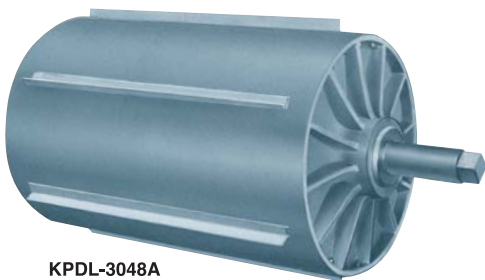
KPD-4040B—60110B



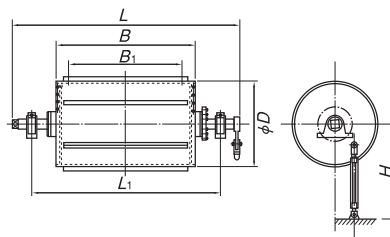
[mm (in.)]

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	25m³/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	35m³/h		368 (14.4)	400 (15.7)	250 (9.84)	275 (10.8)	790 (31.1)	680 (26.7)							80kg/ 176 lb
KPD- 3050B	45m³/h		468 (18.4)	500 (19.6)	300 (11.8)	325 (12.8)	890 (35.0)	780 (30.7)							100kg/ 220 lb
KPD- 3060B	55m³/h		568 (22.3)	600 (23.6)	350 (13.7)	375 (14.7)	990 (38.9)	880 (34.6)							120kg/ 264 lb
KPD- 4040B	45m³/h	400 (15.7)	330 (12.9)	430 (16.9)	260 (10.2)	292 (11.5)	830 (32.6)	710 (27.9)	123 (4.84)	155 (6.10)	55 (2.16)		25—40rpm	0.4kW	150kg/ 330 lb
KPD- 4050B	60m³/h		430 (16.9)	530 (20.8)	310 (12.2)	342 (13.4)	930 (36.6)	810 (31.8)							200kg/ 440 lb
KPD- 4065B	75m³/h		580 (22.8)	680 (26.7)	385 (15.2)	417 (16.4)	1080 (42.5)	960 (37.8)							250kg/ 551 lb
KPD- 4080B	90m³/h		730 (28.7)	830 (32.6)	460 (18.1)	492 (19.3)	1230 (48.4)	1110 (43.7)							215kg/ 474 lb
KPD- 5050B	80m³/h	500 (19.6)	430 (16.9)	530 (20.8)	310 (12.2)	342 (13.4)	930 (36.6)	810 (31.8)	123 (4.84)	155 (6.10)	60 (2.36)		20—35rpm	0.75kW	280kg/ 617 lb
KPD- 5065B	105m³/h		580 (22.8)	680 (26.7)	385 (15.2)	417 (16.4)	1080 (42.5)	960 (37.8)							345kg/ 760 lb
KPD- 5080B	125m³/h		730 (28.7)	830 (32.6)	460 (18.1)	492 (19.3)	1230 (48.4)	1110 (43.7)							410kg/ 903 lb
KPD- 5095B	150m³/h		880 (34.6)	980 (38.5)	535 (21.0)	567 (22.3)	1380 (54.3)	1260 (49.6)							410kg/ 903 lb
KPD- 6065B	150m³/h	600 (23.6)	580 (22.8)	680 (26.7)	385 (15.2)	417 (16.4)	1080 (42.5)	950 (37.4)	123 (4.84)	155 (6.10)	65 (2.55)		15—30rpm	0.75kW	335kg/ 738 lb
KPD- 6080B	190m³/h		730 (28.7)	830 (32.6)	460 (18.1)	492 (19.3)	1230 (48.4)	1100 (43.3)							410kg/ 903 lb
KPD- 6095B	220m³/h		880 (34.6)	980 (38.5)	535 (21.0)	567 (22.3)	1380 (54.3)	1250 (49.2)							490kg/ 1080 lb
KPD-60110B	240m³/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)							1000kg 2205 lb	
KPDL-3648A	25—36t/h	950 (37.4)	1220 (48.0)	1720 (67.7)	2020 (79.5)	930 (36.6)	120 (4.72)	1260 (49.6)		26—35 rpm	2.2kW	1350kg 2976 lb	
KPDL-3660A	35—50t/h	1250 (49.2)	1520 (59.8)	2020 (79.5)	2320 (91.3)							1700kg 3748 lb	
KPDL-3672A	42—60t/h	1550 (61.0)	1820 (71.6)	2320 (91.3)	2620 (103.1)							2000kg 4409 lb	
KPDL-4260A	40—56t/h	1250 (49.2)	1520 (59.8)	2180 (85.8)	2520 (99.2)							2500kg 5512 lb	
KPDL-4272A	40—65t/h	1550 (61.0)	1820 (71.6)	2480 (97.6)	2820 (111.0)							3000kg 6614 lb	

[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.

MAGNETIC HOLDERS

MAGNETIC TOOLS

MAGNETIC TOOLS FOR WELDING OPERATION

LIFTING MAGNET

MAGBORE

CHIP & SLUDGE TRANSPORTERS

ENVIRONMENTAL EQUIPMENT

MAGNETIZERS AND DEMAGNETIZERS FOR TRANSPORTATION

MAGNETIC EQUIPMENT

MAGNETIC SEPARATORS

HIGH GRADE MAGNETIC MATERIALS

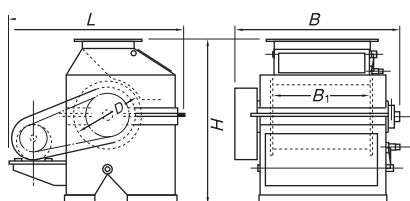
MEASURING INSTRUMENTS

MAGNETIC MATERIALS

Model KDS DRUM TYPE MAGNETIC SEPARATOR



KDS-500B

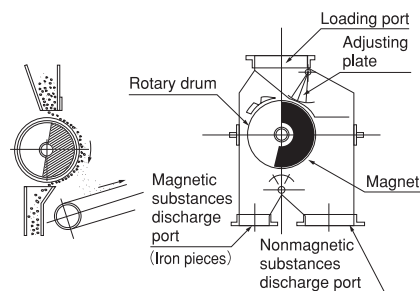


[Application]

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.
- KDS-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.

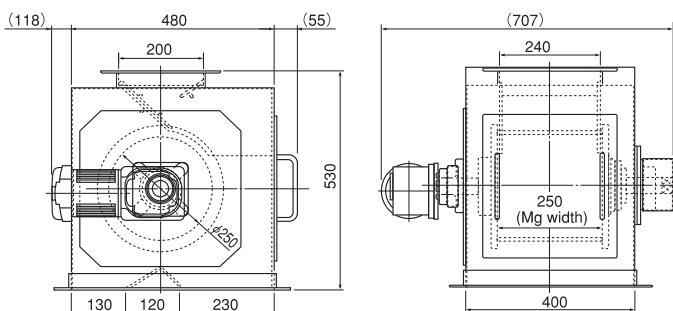


[mm (in.)]

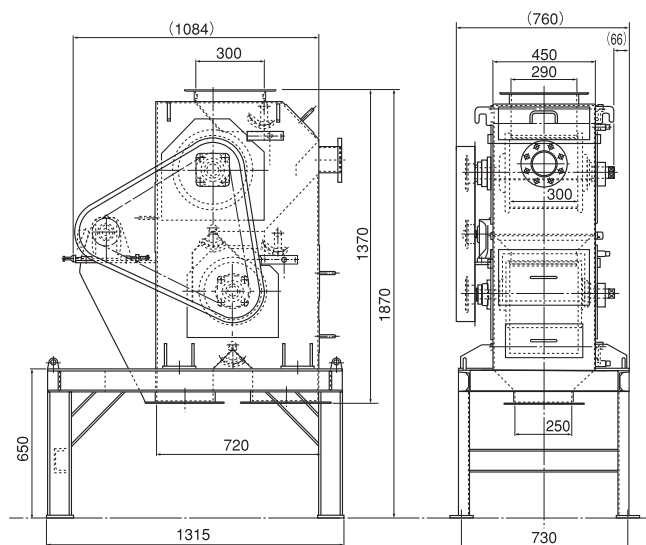
Model	Flow Capacity	Dimensions			Drum		Motor	Mass
		L	B	H	ϕD	B_1		
KDS- 250B	15m³/h	695 (27.3)	624 (24.5)	700 (27.5)	250 (9.84)	250 (9.84)	0.2kW	110kg/ 242 lb
KDS- 300B	25m³/h	750 (29.5)	715 (28.2)	750 (29.5)	300 (11.8)	300 (11.8)	0.4kW	130kg/ 286 lb
KDS- 500B	40m³/h		865 (34.0)		450 (17.7)	450 (17.7)		210kg/ 463 lb
KDS- 600B	50m³/h	760 (29.9)	1015 (39.9)	850 (33.4)	600 (23.6)	600 (23.6)		330kg/ 727 lb
KDS- 800B	75m³/h	930 (36.6)	1000 (39.3)		680 (26.7)	680 (26.7)	0.75kW	450kg/ 992 lb
KDS- 900B	90m³/h		1150 (45.2)		830 (32.6)	830 (32.6)		550kg/ 1213 lb
KDS-1100B	105m³/h	1150 (45.2)	1000 (39.3)	1100 (43.3)	680 (26.7)	680 (26.7)		600kg/ 1323 lb
KDS-1200B	125m³/h		1150 (45.2)		830 (32.6)	830 (32.6)		740kg/ 1631 lb

※ These models can be tested in advance.

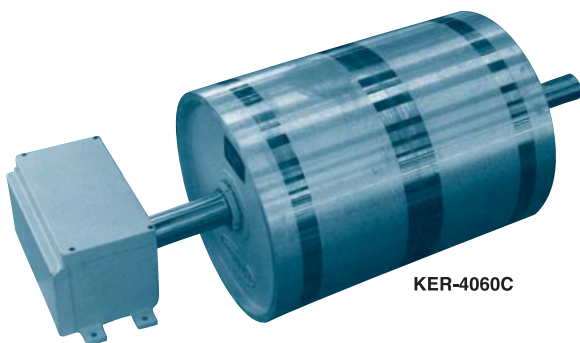
An example of fabrication of KDS-250B-S drum magnetic separator



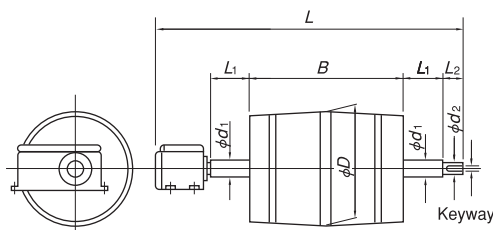
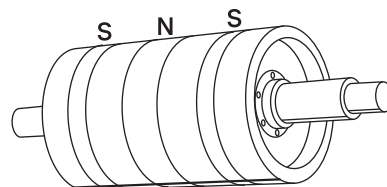
An example of fabrication of KDS-300B-2-S 2-stage drum magnetic separator



Model KER ELECTROMAGNETIC PULLEY



KER-4060C



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.

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) × 5.5 (0.21)	300W	140kg/ 308 lb	KR-A203
KER- 3035C	350 (13.7)		400 (15.7)	930 (36.6)						360W	155kg/ 341 lb	
KER- 3040C	400 (15.7)		450 (17.7)	980 (38.5)						400W	175kg/ 385 lb	
KER- 3045C	450 (17.7)		500 (19.6)	1030 (40.5)						450W	195kg/ 429 lb	
KER- 3050C	500 (19.6)		550 (21.6)	1110 (43.7)						490W	210kg/ 463 lb	
KER- 4040C	400 (15.7)	400 (15.7)	450 (17.7)	1030 (40.5)	55 (2.16)	50 (1.96)	140 (5.51)	70 (2.75)	16 (0.62) × 6 (0.23)	550W	380kg/ 837 lb	KR-A208
KER- 4045C	450 (17.7)		500 (19.6)	1080 (42.5)						620W	430kg/ 948 lb	
KER- 4050C	500 (19.6)		550 (21.6)	1140 (44.8)						680W	475kg/ 1047 lb	
KER- 4060C	600 (23.6)		650 (25.5)	1240 (48.8)						800W	560kg/ 1235 lb	
KER- 4075C	750 (29.5)		820 (32.2)	1430 (56.3)						1000W	700kg/ 1543 lb	
KER- 5050C	500 (19.6)	500 (19.6)	550 (21.6)	1169 (46.0)	65 (2.55)	60 (2.36)	160 (6.29)	80 (3.15)	18 (0.70) × 7 (0.27)	950W	730kg/ 1609 lb	KR-A215
KER- 5060C	600 (23.6)		650 (25.5)	1279 (50.3)						1000W	900kg/ 1984 lb	
KER- 5075C	750 (29.5)		820 (32.2)	1449 (57.0)						1300W	1130kg/ 2491 lb	
KER- 5090C	900 (35.4)		1000 (39.3)	1649 (64.9)						1500W	1300kg/ 2866 lb	
KER- 6060C	600 (23.6)		650 (25.5)	1299 (51.1)						1200W	1320kg/ 2910 lb	
KER- 6075C	750 (29.5)	600 (23.6)	820 (32.2)	1479 (58.2)	75 (2.95)	70 (2.75)	170 (6.69)	90 (3.54)	20 (0.78) × 7.5 (0.29)	1500W	1580kg/ 3483 lb	KR-A215
KER- 6090C	900 (35.4)		1000 (39.3)	1679 (66.1)						1800W	1900kg/ 4189 lb	
KER- 7590C	900 (35.4)		1100 (43.3)	1810 (71.2)						2800W	1800kg/ 3968 lb	
KER- 75100C	1000 (39.3)		1100 (43.3)	2020 (79.5)						3400W	2200kg/ 4850 lb	
KER- 75120C	1200 (47.2)		1300 (51.1)	2170 (85.4)						3800W	2600kg/ 5732 lb	
KER- 75150C	1500 (59.0)	900 (35.4)	1600 (62.9)	2570 (101.2)	110 (4.33)	95 (3.74)	280 (11.0)	250 (9.84)	25 (0.98) × 9 (0.35)	4200W	3100kg/ 6834 lb	KR-A230
KER- 90100C	1000 (39.3)		1100 (43.3)	2050 (80.7)						4300W	3000kg/ 6614 lb	
KER- 90120C	1200 (47.2)		1300 (51.1)	2280 (89.7)						4700W	3500kg/ 7716 lb	
KER- 90150C	1500 (59.0)		1600 (62.9)	2670 (105.1)						5200W	4400kg/ 9700 lb	
KER-100120C	1200 (47.2)		1300 (51.1)	2490 (98.0)						5500W	4200kg/ 9259 lb	
KER-100150C	1500 (59.0)	1000 (39.3)	1600 (62.9)	2900 (114.2)	135 (5.31)	110 (4.33)	360 (14.1)	360 (14.1)	32 (1.26) × 11 (0.43)	6500W	5000kg/ 11023 lb	LMT-A240
KER-120120C	1200 (47.2)		1300 (51.1)	2490 (98.0)						6500W	5400kg/ 11905 lb	
KER-120150C	1500 (59.0)		1600 (62.9)	2900 (114.2)						7600W	6500kg/ 14330 lb	
KER-120150C	1500 (59.0)		1600 (62.9)	2900 (114.2)						7600W	6500kg/ 14330 lb	
KER-120150C	1500 (59.0)		1600 (62.9)	2900 (114.2)						7600W	6500kg/ 14330 lb	

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

Model KPR PERMANENT MAGNETIC PULLEY

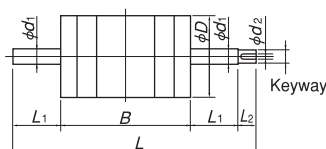


[Application]

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

[Features]

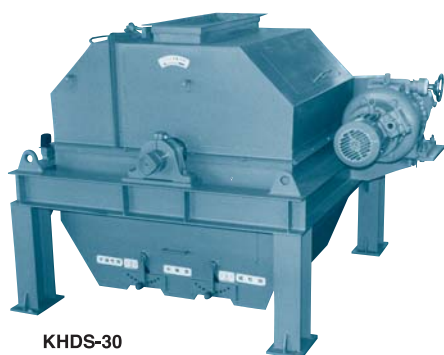
- The powerful magnetic force and its effect last almost perpetually.
- No power source is required to generate the magnetic force.
- Robust construction and easy handling and installation.



Model	Belt Width	Dimensions								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) × 5 (0.19)	45kg/ 99 lb
KPR- 2235	350 (13.7)		400 (15.7)	710 (27.9)						52kg/ 114 lb
KPR- 2240	400 (15.7)		450 (17.7)	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)	135 (5.31)	60 (2.36)	12 (0.47) × 5 (0.19)	77kg/ 169 lb
KPR- 2740	400 (15.7)		450 (17.7)	760 (29.9)						86kg/ 189 lb
KPR- 2745	450 (17.7)		500 (19.6)	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)	140 (5.51)	70 (2.75)	14 (0.55) × 5.5 (0.21)	110kg/ 242 lb
KPR- 3245	450 (17.7)		500 (19.6)	830 (32.6)						122kg/ 269 lb
KPR- 3250	500 (19.6)		550 (21.6)	880 (34.6)						135kg/ 297 lb
KPR- 3260	600 (23.6)	350 (13.7)	650 (25.5)	980 (38.5)	60 (2.36)	55 (2.16)	145 (5.70)	80 (3.15)	16 (0.62) × 6 (0.23)	140kg/ 308 lb
KPR- 3540C	400 (15.7)		450 (17.7)	790 (31.1)						190kg/ 418 lb
KPR- 3545C	450 (17.7)		500 (19.6)	850 (33.4)						210kg/ 463 lb
KPR- 3550C	500 (19.6)	400 (15.7)	550 (21.6)	900 (35.4)	60 (2.36)	55 (2.16)	150 (5.90)	90 (3.54)	18 (0.70) × 7 (0.27)	230kg/ 507 lb
KPR- 3560C	600 (23.6)		650 (25.5)	1000 (39.3)						280kg/ 617 lb
KPR- 4045C	450 (17.7)		500 (19.6)	860 (33.8)						270kg/ 595 lb
KPR- 4050C	500 (19.6)	450 (17.7)	550 (21.6)	920 (36.2)	70 (2.75)	65 (2.55)	160 (6.29)	100 (3.93)	20 (0.78) × 7.5 (0.29)	300kg/ 661 lb
KPR- 4060C	600 (23.6)		650 (25.5)	1020 (40.1)						355kg/ 782 lb
KPR- 4075C	750 (29.5)		820 (32.2)	1200 (47.2)						450kg/ 992 lb
KPR- 5060C	600 (23.6)	500 (19.6)	650 (25.5)	1040 (40.9)	80 (3.15)	75 (2.95)	170 (6.69)	110 (4.33)	25 (0.98) × 9 (0.35)	480kg/ 1058 lb
KPR- 5075C	750 (29.5)		820 (32.2)	1210 (47.6)						630kg/ 1389 lb
KPR- 5090C	900 (35.4)		1000 (39.3)	1400 (55.1)						750kg/ 1653 lb
KPR- 6075C	750 (29.5)	600 (23.6)	820 (32.2)	1300 (51.1)	90 (3.54)	85 (3.34)	200 (7.87)	250 (9.84)	28 (1.10) × 10 (0.39)	900kg/ 1984 lb
KPR- 6090C	900 (35.4)		1000 (39.3)	1500 (59.0)						1070kg/ 2359 lb
KPR-60105C	1050 (41.3)		1300 (51.1)	1820 (71.6)						1230kg/ 2712 lb
KPR- 7575C	750 (29.5)	750 (29.5)	820 (32.2)	1370 (53.9)	100 (3.93)	90 (3.54)	210 (8.27)	260 (10.24)	32 (1.26) × 11 (0.43)	1450kg/ 3197 lb
KPR-75105C	1050 (41.3)		1150 (45.2)	1700 (66.9)						1650kg/ 3638 lb
KPR-75120C	1200 (47.2)		1300 (51.1)	1950 (76.7)						1900kg/ 4189 lb
KPR-75140C	1400 (55.1)	900 (35.4)	1500 (59.0)	2150 (84.6)	110 (4.33)	100 (3.93)	220 (8.69)	270 (10.63)	36 (1.42) × 12 (0.47)	2150kg/ 4740 lb
KPR-90105C	1050 (41.3)		1150 (45.2)	1750 (68.9)						2150kg/ 4740 lb
KPR-90120C	1200 (47.2)		1300 (51.1)	2000 (78.7)						2450kg/ 5401 lb
KPR-90140C	1400 (55.1)	900 (35.4)	1500 (59.0)	2350 (92.5)	120 (4.72)	110 (4.33)	230 (9.04)	280 (11.02)	40 (1.57) × 13 (0.51)	3050kg/ 6724 lb
KPR-90150C	1500 (59.0)		1600 (62.9)	2650 (103.7)						3050kg/ 6724 lb
KPR-90150C	1500 (59.0)		1600 (62.9)	2650 (103.7)						3050kg/ 6724 lb

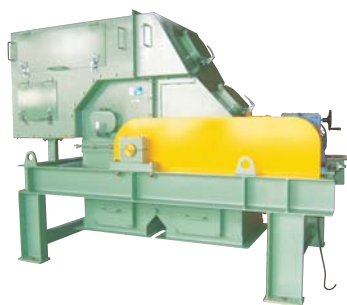
MAGNETIC HOLDERS
MAGNETIC TOOLS
MAGNETIC TOOLS FOR WELDING OPERATION
LIFTING MAGNET
MAGBORE
CHIP & SLUDGE TRANSPORTERS
ENVIRONMENTAL EQUIPMENT
MAGNETIC EQUIPMENT FOR TRANSPORTATION
MAGNETIC SEPARATORS
HIGH GRADE MAGNETIC SEPARATORS
MEASURING INSTRUMENTS
MAGNETIC MATERIALS

Model KHDS DRUM TYPE MAGNETIC SEPARATOR



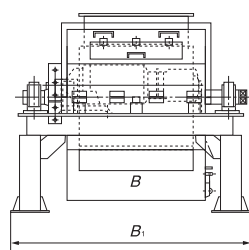
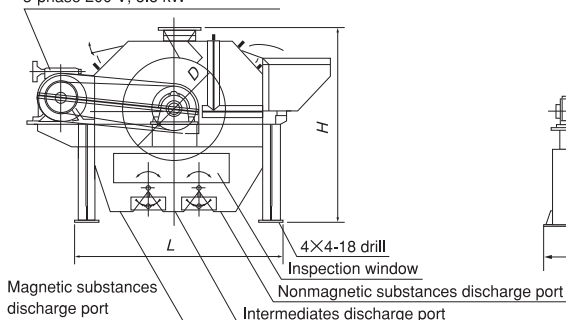
KHDS-30

An example of fabrication of KHDS



Gasification melting furnaces and slug processing

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



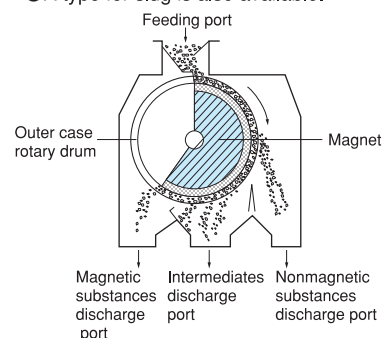
These are high performance magnetic separators designed to easily separate and collect magnetized fine powder and fine particles that are difficult to separate with other dry type magnetic separators. The effect of the magnetic force created by a unique pole layout together with adjustment of the centrifugal 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.



[mm (in.)]

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.

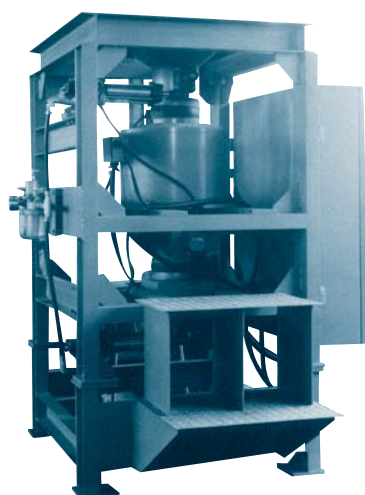
Amount to process by KHDS-30 <Example>

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)				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)				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.

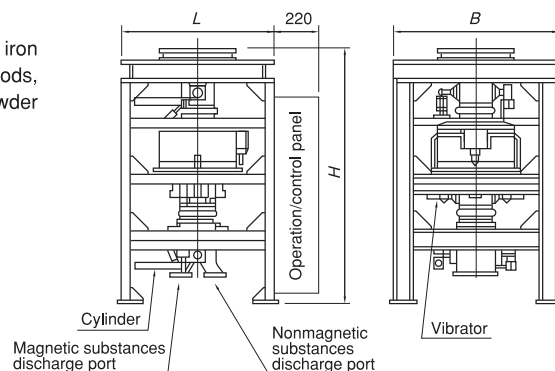
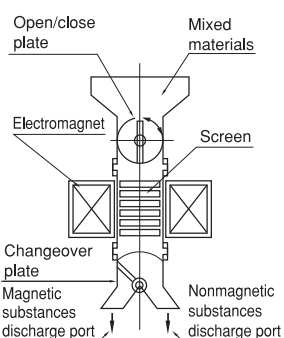
Model KIF ELECTROMAGNETIC FILTER



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.



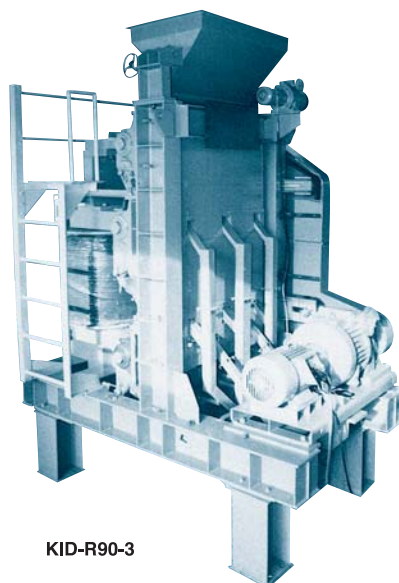
[mm (in.)]

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.

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.

[Features]

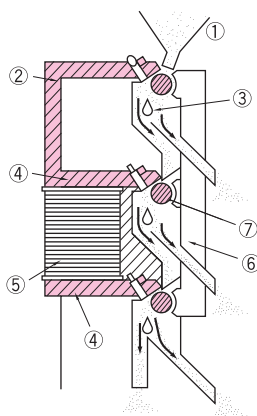
- The induction roller generates 2.6 T max. (Tesla) at a sharp gradient and high magnetic flux density.
- The magnetic force can easily be adjusted according to magnetic substances in raw materials.
- The roller revolution can be varied steplessly. According to properties of raw materials, the influence 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.

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>

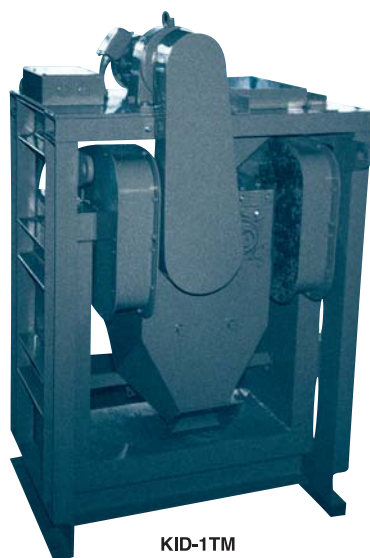
- ① Hopper
- ② Magnetic pole for rough separation
- ③ Branch plate
- ④ High magnetic force pole
- ⑤ Coil
- ⑥ Yoke
- ⑦ Induction magnetic roller



Model	Roller	Flow Capacity	Dimensions			Power Consumption			Mass
			Length	Width	Height	Magnet	Motor 1	Motor 2	
KID-R35-1	1-stage	2.4m³/h	1650 (64.9)	1000 (39.3)	2300 (90.5)	1.5kW	3.7kW	250VA	2.5—3.0 ton 5512—6614 lb
KID-R35-2	2-stage								
KID-R35-3	3-stage								
KID-R60-1	1-stage	4.0m³/h	1700 (66.9)	2300 (90.5)	2500 (98.4)	5.5kW	7.5kW	750VA	7.0—7.5 ton 15430—16530 lb
KID-R60-2	2-stage								
KID-R60-3	3-stage								
KID-R90-1	1-stage	6.0m³/h	2600 (102.4)			10.0kW	11.0kW		9.0—10.0ton 19840—22050 lb
KID-R90-2	2-stage								
KID-R90-3	3-stage								

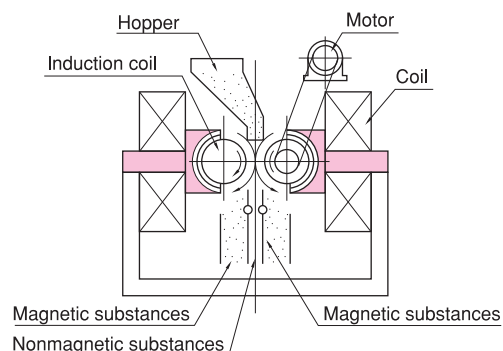
*Magnetic separators dedicated for weak magnetic substances. If strong magnetic substances are mixed, they need to be removed at the preceding stage.

Model KID INDUCTION TYPE MAGNETIC SEPARATOR



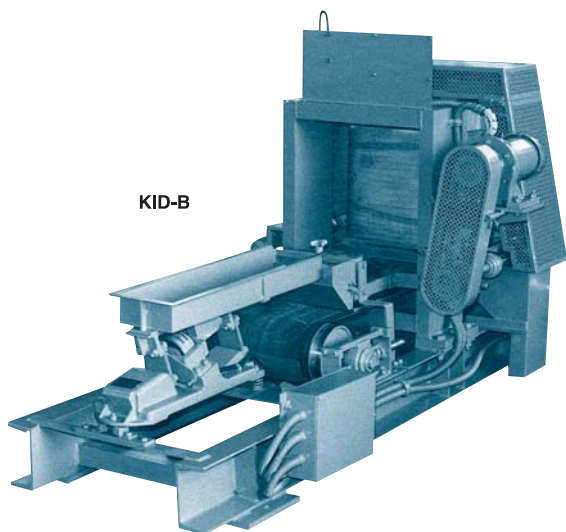
KID-1TM

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	0.15m³/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 m³/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 m³/h		850 (33.4)	1500 (59.0)	0.75kW	1.2kW	1700kg/3748 lb	Sand & powder smaller than 3mm (0.11)

Model KID-B CROSS BELT TYPE MAGNETIC SEPARATOR



KID-B

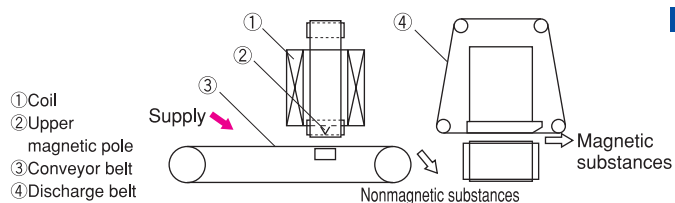
[Application]

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 ensuring 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 large electromagnetic drum



An example of fabrication of 2-stage drum magnetic separator



An example of fabrication of drum magnetic separator

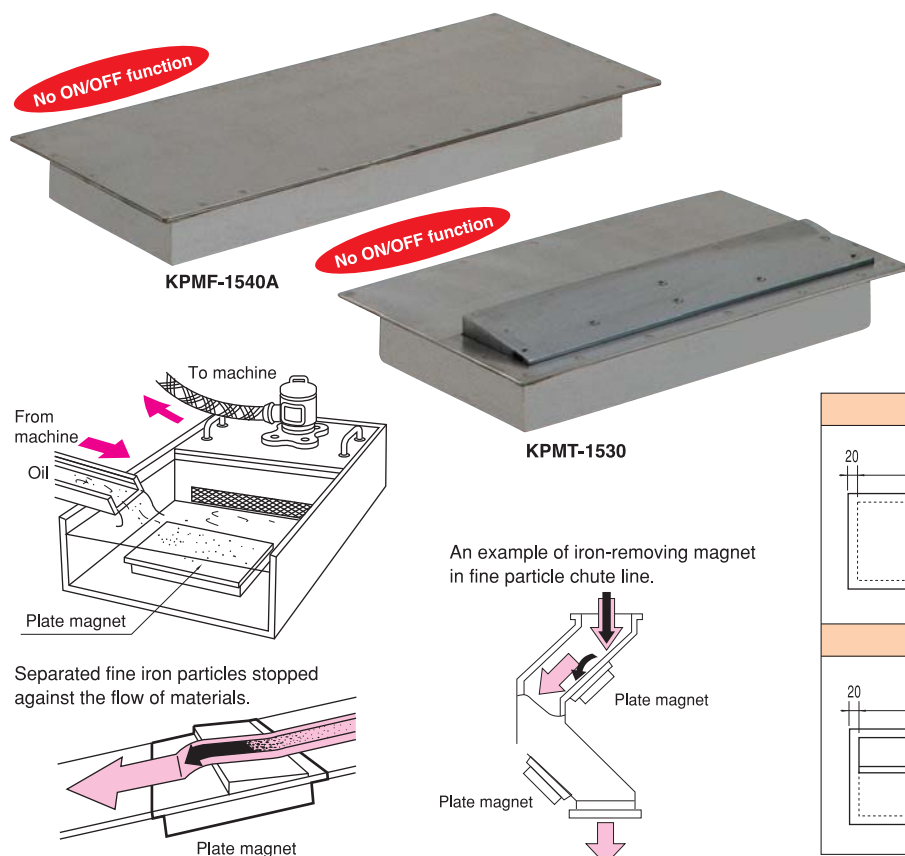


An example of fabrication of high-speed drum magnetic separator

An example of fabrication of 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]

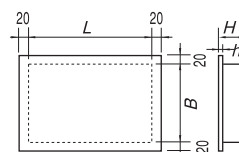
- Strong attractive force. Compact and robust.
- Easy installation in any place as no power source is required.



Precautions for use

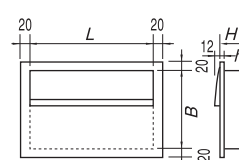
To use these magnets in liquids (e.g. water) other than oil, please specify "enclosed type."

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	200 (7.87)	500 (19.6)	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)	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	300 (11.8)	500 (19.6)	55.5 (2.18)	3.5 (0.13)	120—160 (4.72—6.29)	70—100 (2.75—3.93)	100—120 (3.93—4.72)	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)						29kg/ 63.9 lb
KPMF-3040A		400 (15.7)						39kg/ 85.9 lb
KPMF-3050A	400 (15.7)	500 (19.6)	55.5 (2.18)	3.5 (0.13)	120—160 (4.72—6.29)	70—100 (2.75—3.93)	100—120 (3.93—4.72)	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.

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/ 6.6 lb
KPMF-H1515		150 (5.90)						4.5kg/ 9.9 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)	200 (7.87)	25 (0.98)	3.2 (0.12)	120—160 (4.72—6.29)	70—100 (2.75—3.93)	100—120 (3.93—4.72)	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-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)	200 (7.87)	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)	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)	120—160 (4.72—6.29)	70—100 (2.75—3.93)	100—120 (3.93—4.72)	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.

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/ 8.8 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)	200 (7.87)	25 (0.98)	3.2 (0.12)	120—160 (4.72—6.29)	70—100 (2.75—3.93)	100—120 (3.93—4.72)	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.

MAGNETIC HOLDERS

MAGNETIC TOOLS

MAGNETIC TOOLS FOR WELDING OPERATION

LIFTING MAGNET

MAGBORG

CHIP & SLUDGE TRANSPORTERS

ENVIRONMENTAL EQUIPMENT

MAGNETIZERS AND DEMAGNETIZERS

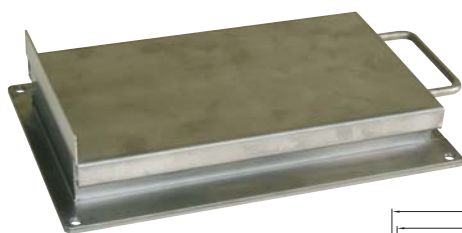
MAGNETIC SEPARATORS

HIGH GRADE MAGNETIC SEPARATORS

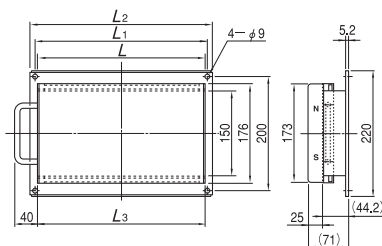
MEASURING INSTRUMENTS

MAGNETIC MATERIALS

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

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

Model KPM SUSPENDED PLATE MAGNET



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

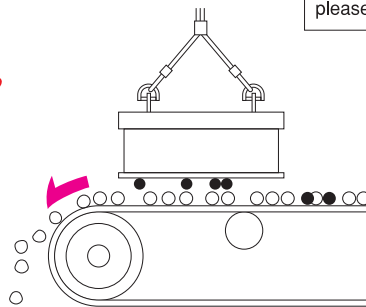
To use these magnets in liquids (e.g. water) other than oil, please specify "enclosed type."



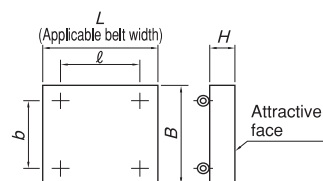
KPMJ-4040

No ON/OFF function

No ON/OFF function



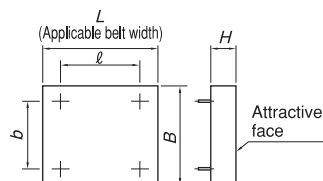
Model KPMD



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 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	350 (13.7)	600 (23.6)	270 (10.6)	520 (20.4)	82 (3.22)	160—200 (6.29—7.87)	80—120 (3.15—4.72)	110—140 (4.33—5.51)	54kg/119.0 lb
KPMD-3530		300 (11.8)		220 (8.66)					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	400 (15.7)	600 (23.6)	250 (9.84)	500 (19.6)	172 (6.77)	200—250 (7.87—9.84)	100—150 (3.93—5.90)	180—220 (7.08—8.66)	100kg/220.5 lb
KPMJ-3030		300 (11.8)		200 (7.87)					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-4040	400 (15.7)	400 (15.7)	250 (9.84)	250 (9.84)	172 (6.77)	200—250 (7.87—9.84)	100—150 (3.93—5.90)	180—220 (7.08—8.66)	160kg/352.7 lb
KPMJ-4060		600 (23.6)		380 (14.9)					230kg/507.1 lb
KPMJ-4080		800 (31.5)		500 (19.6)					310kg/683.4 lb

Model KPMJ

[mm (in)]

Model	Dimensions					Holding Capacity (Length)			Mass
	B	L	b	ℓ	H	15-cm nail	M10 nut	M10×25 bolt	
KPMJ-3030	300 (11.8)	300 (11.8)	200 (7.87)	200 (7.87)	172 (6.77)	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-4040		400 (15.7)		250 (9.84)					160kg/352.7 lb
KPMJ-4060	400 (15.7)	600 (23.6)	250 (9.84)	380 (14.9)	172 (6.77)	200—250 (7.87—9.84)	100—150 (3.93—5.90)	180—220 (7.08—8.66)	230kg/507.1 lb
KPMJ-4080		800 (31.5)		500 (19.6)					310kg/683.4 lb

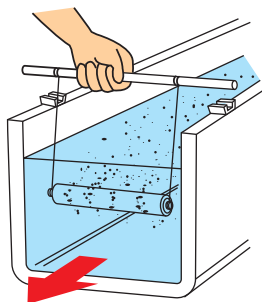
Model KGM MAGNETIC BAR

Standard type



KGM-25

An example of usage in passage



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)	φ25 (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



KGM-H20

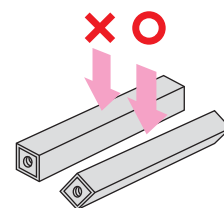
A magnetic bar used in a grid type magnet. This bar alone is also available. Casing is made of stainless steel.

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.

[mm (in.)]					
Model	Length	Dia	Max. Flux Density	Temperature Limit	Mass
KGM-T20	194 (7.63)	φ25 (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.

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

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

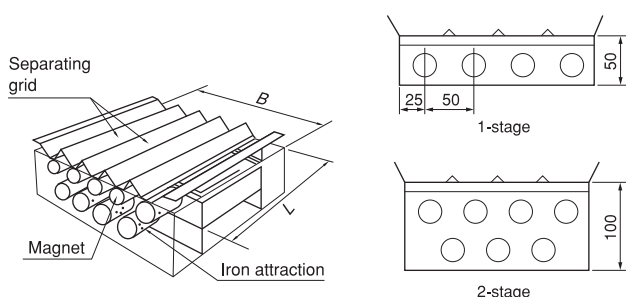
MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS

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.

[mm (in.)]

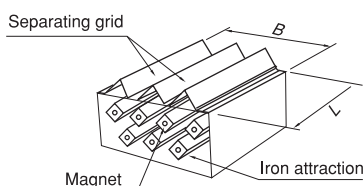
Model	Type	Flow Capacity	Number of Magnets	Dimensions		Mass
				B	L	
KGM-2020	1-stage	6m³/h	4	200 (7.87)	200 (7.87)	3.5kg/ 7.7 lb
KGM-2020W	2-stage		7			6.0kg/13.2 lb
KGM-2025	1-stage	8m³/h	4	250 (9.84)	250 (9.84)	4.2kg/ 9.2 lb
KGM-2025W	2-stage		7			6.5kg/14.3 lb
KGM-2525	1-stage	10m³/h	5	250 (9.84)	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	300 (11.8)	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 (11.8)	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	400 (15.7)	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 (15.7)	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	500 (19.6)	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.

[mm (in.)]

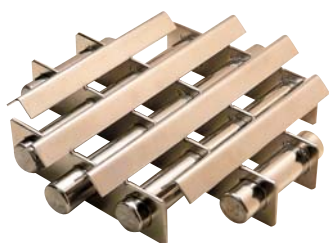
Model	Type	Flow Capacity	Number of Magnets	Dimensions		Mass
				B	L	
KGM-H2020	1-stage	4.5m³/h	4	200 (7.87)	200	3.0kg/6.61 lb
KGM-H2020W	2-stage		7			5.0kg/11.0 lb
KGM-H2025	1-stage	6.0m³/h	4	250 (9.84)	250	3.6kg/7.90 lb
KGM-H2025W	2-stage		7			6.0kg/13.2 lb

※ 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	(ϕ200 (7.87))	55 (2.16)	2.1kg/4.63 lb
KGM-CF20	With outer frame				2.3kg/5.07 lb
KGM-C25	Without outer frame	7.0m³/h	(ϕ250 (9.84))		3.3kg/7.27 lb
KGM-CF25	With outer frame				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)

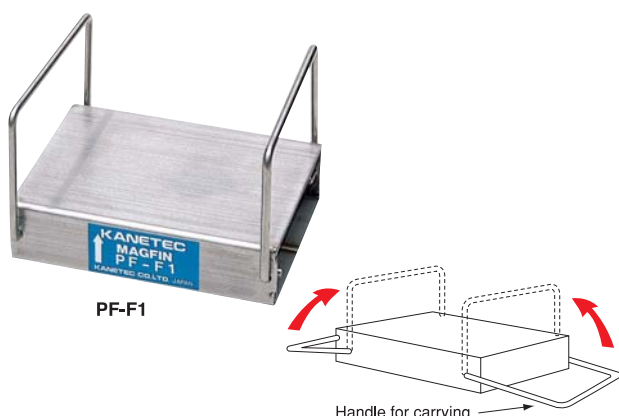
A round type combined with powerful magnetic bars that can easily be set on hoppers and chutes.

[mm (in.)]

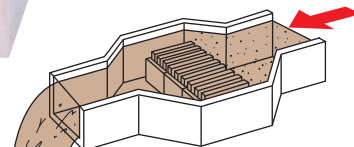
Model	Type	Flow Capacity	Dimensions		Mass
			Frame Dia	Height	
KGM-HC20	Without outer frame	4.5m³/h	(ø200 (7.87))	55 (2.16)	2.1kg/4.63 lb
KGM-HCF20	With outer frame				2.3kg/5.07 lb
KGM-HC25	Without outer frame	7.0m³/h	(ø250 (9.84))		3.3kg/7.27 lb
KGM-HCF25	With outer frame				3.6kg/7.90 lb

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

Model PF MAGFIN*



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.

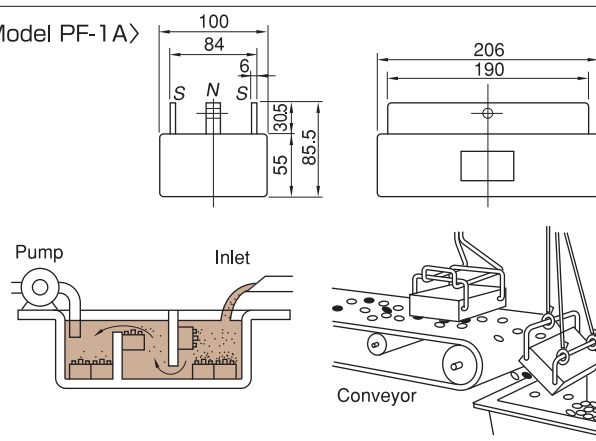
[Features]

- 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

[mm (in.)]

<Model PF-1A>



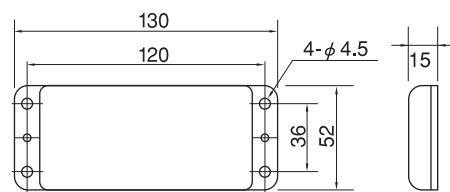
Model KPM SMALL SIZE MAGNETIC PLATE

Simple type



No ON/OFF function

Holding Power
60N



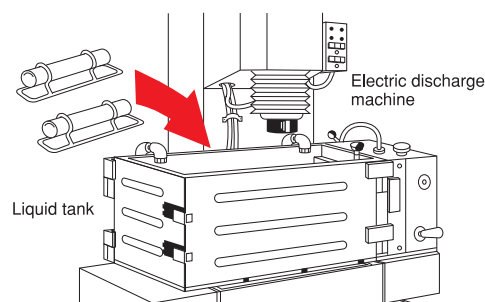
[Application]

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 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.

MAGNETIC
HOLDERS

MAGNETIC
TOOLS

MAGNETIC TOOLS FOR
WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS