

# POWERFUL MAGNETIC SEPARATORS

## Model PCMB Comparison of sanitary magnetic bars

Type	Model	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Remarks
Powerful	PCMB	0.8 Tesla	80°C (176° F)	Standard type.
Fine pitch	PCMB-AM	1.0 Tesla		Pole area increased by 1.5 times. Catch amount and collection rate increased.
Super powerful	PCMB-A PCMB-UA	1.2 Tesla		
Semi heat-resistant	PCMB-QT	0.8 Tesla	150°C (302° F)	Low cost type.
Heat-resistant powerful	PCMB-T PCMB-AT		1.0 Tesla	240°C (464° F)
Wear resistant	PCMB-J	1.3 Tesla	80°C (176° F)	Highly resistant to wear and corrosion and longer life.
Double-pipe	PCMBD-A	0.8 Tesla		Double-pipe for easy cleaning of attracted iron powder.

\*Note that if the separators are used in environment exceeding the working temperature upper limit, the attraction and holding power may drop due to reduction of magnetism.

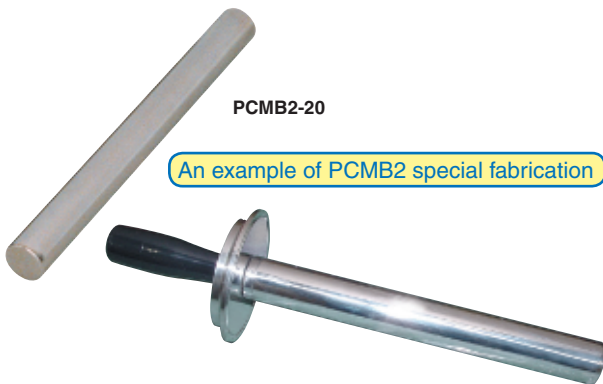
## Model PCMB SANITARY MAGNETIC BAR

### [Application]

Suitable for installation as an iron-removing gate in powder materials transfer ducts or liquid passages and tanks. Can be incorporated flexibly to expand a range of applications.

### [Features]

- High grade finish of sanitary specification.
- Various lengths are available for a desired combination.
- High power magnetic bars: a powerful rare earth magnet having a property value of 1.2 T (12,000 G) or 1.35 T (13,500 G) or over is incorporated and the surface maximum magnetic flux density is 0.8 T (8,000 G) or 1 T (10,000 G) or over.
- Since a permanent magnet that maintains a strong magnetic force almost perpetually is used, the running cost can be reduced significantly.
- These are of waterproof construction to allow installation in liquid.
- To increase the rate of removal of metallic powder of very weak magnetism, PCMB-U type that has a surface magnetic flux density of 1.2 T (12,000 G) is also available.
- Special sizes are also available.



## Powerful magnetic bar

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-10	PCMB2-10	95 (3.74)	φ25*1 (0.98)	SUS304	#400 buffed	Nd rare earth type  Property value 1.2T(12,000G)	0.8T (8000G)	80°C (176° F)	0.35kg/0.77 lb
PCMB-15	PCMB2-15	145 (5.70)							0.5 kg/1.10 lb
PCMB-20	PCMB2-20	194 (7.63)							0.7 kg/1.50 lb
PCMB-25	PCMB2-25	244 (9.60)							0.85kg/1.87 lb
PCMB-30	PCMB2-30	295 (11.6)							1.05kg/2.31 lb
PCMB-35	PCMB2-35	343 (13.5)							1.2 kg/2.64 lb
PCMB-40	PCMB2-40	393 (15.4)							1.4 kg/3.08 lb
PCMB-50	PCMB2-50	493 (19.4)							1.75kg/3.85 lb
PCMB-60	PCMB2-60	592 (23.3)							2.1 kg/4.63 lb

\*A casing pipe of SUS316 is also available. \*1 A casing pipe of φ19 is also available.

\*\*For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

\*\*In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

## Super powerful magnetic bar

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass					
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish									
PCMB-A15	PCMB2-A15	145 (5.70)	φ25 (0.98)	SUS304	#400 buffed	Nd rare earth type  Property value 1.35T(13,500G)	1T (10000G)	80°C (176° F)	0.5 kg/1.10 lb					
PCMB-A20	PCMB2-A20	194 (7.63)							0.7 kg/1.54 lb					
PCMB-A25	PCMB2-A25	244 (9.60)							0.9 kg/1.98 lb					
PCMB-A30	PCMB2-A30	295 (11.6)							1.1 kg/2.42 lb					
PCMB-A35	PCMB2-A35	343 (13.5)							1.2 kg/2.64 lb					
PCMB-A40	PCMB2-A40	393 (15.4)							1.4 kg/3.08 lb					
PCMB-A50	PCMB2-A50	493 (19.4)							1.8 kg/3.96 lb					
PCMB-A60	PCMB2-A60	592 (23.3)							2.1 kg/4.63 lb					
PCMB-U10A	PCMB2-U10A	95 (3.74)							φ25.1 (0.99)	SUS316L	#400 buffed	Nd rare earth type  Property value 1.38T(13,800G)	1.2T (12000G)	0.3 kg/0.66 lb
PCMB-U15A	PCMB2-U15A	145 (5.70)												0.5 kg/1.10 lb
PCMB-U20A	PCMB2-U20A	194 (7.63)	0.7 kg/1.50 lb											
PCMB-U25A	PCMB2-U25A	244 (9.60)	0.9 kg/1.98 lb											
PCMB-U30A	PCMB2-U30A	295 (11.6)	1.1 kg/2.42 lb											
PCMB-U35A	PCMB2-U35A	343 (13.5)	1.2 kg/2.64 lb											
PCMB-U40A	PCMB2-U40A	393 (15.4)	1.4 kg/3.08 lb											
PCMB-U50A	PCMB2-U50A	493 (19.4)	1.8 kg/3.96 lb											
PCMB-U60A	PCMB2-U60A	592 (23.3)	2.1 kg/4.63 lb											

\*A casing pipe of SUS316 is also available. (Models PCMB-A)

\*\*For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

\*\*In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

**Fine pitch powerful magnetic bar**

[mm (in)]

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-AM10	PCMB2-AM10	95 (3.74)	φ25.1 (0.99)	SUS316L	#400 buffed	Nd rare earth type  Property value 1.35T (13,500G)	1T (10000G)	80°C (176° F)	0.3kg/0.66 lb
PCMB-AM15	PCMB2-AM15	145 (5.70)							0.5kg/1.10 lb
PCMB-AM20	PCMB2-AM20	194 (7.63)							0.7kg/1.50 lb
PCMB-AM25	PCMB2-AM25	244 (9.60)							0.9kg/1.98 lb
PCMB-AM30	PCMB2-AM30	295 (11.6)							1.1kg/2.42 lb
PCMB-AM35	PCMB2-AM35	343 (13.5)							1.2kg/2.64 lb
PCMB-AM40	PCMB2-AM40	393 (15.4)							1.4kg/3.08 lb
PCMB-AM50	PCMB2-AM50	493 (19.4)							1.8kg/3.96 lb
PCMB-AM60	PCMB2-AM60	592 (23.3)							2.1kg/4.63 lb

※A casing pipe of SUS316 is also available. ※For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

※In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

**Semi heat-resistant powerful magnetic bar**

[mm (in)]

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-QT10	PCMB2-QT10	95 (3.74)	φ25 (0.98)	SUS304	#400 buffed	Nd rare earth type  Property value 1.1T (11,000G)	0.8T (8000G)	150°C (302° F)	0.35kg/0.77 lb
PCMB-QT15	PCMB2-QT15	145 (5.70)							0.5 kg/1.10 lb
PCMB-QT20	PCMB2-QT20	194 (7.63)							0.7 kg/1.50 lb
PCMB-QT25	PCMB2-QT25	244 (9.60)							0.85kg/1.87 lb
PCMB-QT30	PCMB2-QT30	295 (11.6)							1.05kg/2.31 lb
PCMB-QT35	PCMB2-QT35	343 (13.5)							1.2 kg/2.64 lb
PCMB-QT40	PCMB2-QT40	393 (15.4)							1.4 kg/3.08 lb
PCMB-QT50	PCMB2-QT50	493 (19.4)							1.75kg/3.85 lb
PCMB-QT60	PCMB2-QT60	592 (23.3)							2.1 kg/4.63 lb

※A casing pipe of SUS316 is also available. ※For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

※In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

**Heat-resistant powerful magnetic bar**

[mm (in)]

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-T10	PCMB2-T10	95 (3.74)	φ25 (0.98)	SUS304	#400 buffed	Sm rare earth type  Property value 1.1T (11,000G)	0.8T (8000G)	240°C (464° F)	0.35kg/0.77 lb
PCMB-T15	PCMB2-T15	145 (5.70)							0.5 kg/1.10 lb
PCMB-T20	PCMB2-T20	194 (7.63)							0.7 kg/1.50 lb
PCMB-T25	PCMB2-T25	244 (9.60)							0.85kg/1.87 lb
PCMB-T30	PCMB2-T30	295 (11.6)							1.05kg/2.31 lb
PCMB-T35	PCMB2-T35	343 (13.5)							1.2 kg/2.64 lb
PCMB-T40	PCMB2-T40	393 (15.4)							1.4 kg/3.08 lb
PCMB-T50	PCMB2-T50	493 (19.4)							1.75kg/3.85 lb
PCMB-T60	PCMB2-T60	592 (23.3)							2.1 kg/4.63 lb

※A casing pipe of SUS316 is also available. ※For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

※In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

**Heat-resistant super powerful magnetic bar**

[mm (in)]

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-AT10	PCMB2-AT10	95 (3.74)	φ25.1 (0.99)	SUS316L	#400 buffed	Sm rare earth type  Property value 1.2T (12,000G)	1T (10000G)	240°C (464° F)	0.35kg/0.77 lb
PCMB-AT15	PCMB2-AT15	145 (5.70)							0.5 kg/1.10 lb
PCMB-AT20	PCMB2-AT20	194 (7.63)							0.7 kg/1.50 lb
PCMB-AT25	PCMB2-AT25	244 (9.60)							0.85kg/1.87 lb
PCMB-AT30	PCMB2-AT30	295 (11.6)							1.05kg/2.31 lb
PCMB-AT35	PCMB2-AT35	343 (13.5)							1.2 kg/2.64 lb
PCMB-AT40	PCMB2-AT40	393 (15.4)							1.4 kg/3.08 lb
PCMB-AT50	PCMB2-AT50	493 (19.4)							1.75kg/3.85 lb
PCMB-AT60	PCMB2-AT60	592 (23.3)							2.1 kg/4.63 lb

※A casing pipe of SUS316 is also available. ※For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face. A model of M5, M8, M10 or M12 is also available.

※In order to increase the surface magnetic flux density, the wall thickness of the pipe needs to be decreased. If it is decreased, however, the strength may drop or the pipe may be deformed or broken. Therefore, for the safety reason, pipes of thickness thinner than the current thickness will not be manufactured.

**Model PCMB-J WEAR-RESISTANT SANITARY MAGNETIC BAR**

**Magnetic force exceeding 1.3 Tesla!**



PCMB2-J20A

An example of incorporation of PCMB-J

**[Features]**

- The stainless steel surface has been treated by KANETEC's original technology to provide high resistance to wear and corrosion.
- The surface is hardly susceptible to scratches and thus remains polished and glossy, requiring less frequent replacement for economical operations.

[mm (in)]

Model		Casing Pipe				Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
Without tapped hole	With tapped hole	Length	Diameter	Material	Surface finish				
PCMB-J10A	PCMB2-J10A	95 (3.74)	φ24.8 (0.97)	SUS316L	#400 buffed + Titanium coating	Nd rare earth type  Property value 1.4T (14,000G)	1.3T (13000G)	80°C (176° F)	0.3kg/0.66 lb
PCMB-J15A	PCMB2-J15A	145 (5.70)							0.5kg/1.10 lb
PCMB-J20A	PCMB2-J20A	194 (7.63)							0.7kg/1.50 lb
PCMB-J25A	PCMB2-J25A	244 (9.60)							0.9kg/1.98 lb
PCMB-J30A	PCMB2-J30A	295 (11.6)							1.1kg/2.42 lb
PCMB-J35A	PCMB2-J35A	343 (13.5)							1.2kg/2.64 lb
PCMB-J40A	PCMB2-J40A	393 (15.4)							1.4kg/3.08 lb

※For the models with tapped holes, the tapped hole is M6-P1.0 and 7 mm deep, located in the center on each end face.

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

## Model PCMBD-A SUPER POWERFUL MAGNETIC BAR (DOUBLE-PIPE)



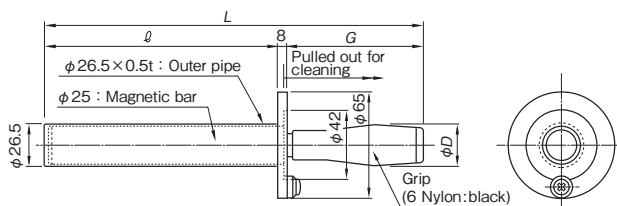
PCMBD-A20

### [Application]

Most suitable for cleaning places where a relatively large amount of iron powder, etc. is mixed.

### [Features]

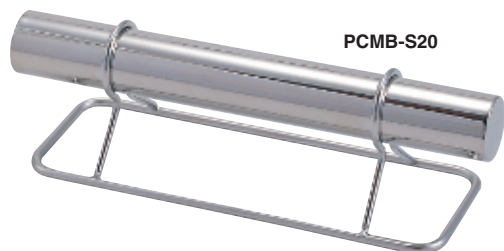
- Since these bars are of double-pipe type, attracted iron powder smoothly drops when the magnetic bar is pulled out.
- The outer pipe and the magnetic bar have a flange. When the magnetic bar is housed, the two flanges become one piece to prevent intrusion of foreign matter to the inside of the magnetic bar and to prevent the magnetic bar from coming out.
- The magnetic bar has an easy-to-hold plastic grip.



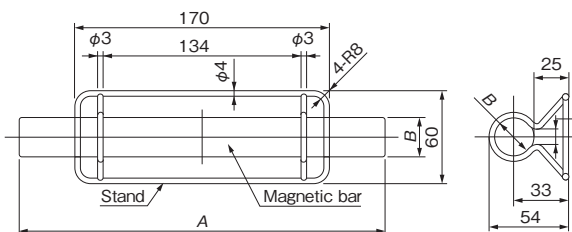
Model	Surface Material	Surface Finish	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Dimensions				Mass
					L	ℓ	G	D	
PCMBD-A13					216 (8.50)	125 (4.92)	83	24	0.8kg/ 1.7 lb
PCMBD-A20	SUS 304	#400 buffed	0.8 T (8000 G) min.	80°C (176°F)	285 (11.2)	194 (7.63)	83 (3.26)	24 (0.94)	1.1kg/ 2.4 lb
PCMBD-A25					352 (13.8)	244 (9.60)	100	28	1.3kg/ 2.8 lb
PCMBD-A30					403 (15.8)	295 (11.6)	100 (3.93)	28 (1.10)	1.5kg/ 3.3 lb

※A type having a surface maximum magnetic flux density of 0.95 T (9500 G) is also available. (Optional)

## Model PCMB-S SANITARY MAGNETIC BAR WITH STAND



PCMB-S20



### [Features]

The sanitary magnetic bar (PCMB) is provided with a stand. Can be installed in a liquid tank for collection and removal of iron particles.

### Powerful type

Model	Dimensions		Material	Surface Finish		Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
	A	B		Magnetic bar	Stand				
PCMB-S20	194 (7.63)	φ 25 (0.98)	SUS304	#400 buffed	Electrolytic polishing	Nd rare earth type Property value 1.2 T (12,000 G)	0.8T (8000G)	80°C (176°F)	0.6kg/1.32 lb
PCMB-S25	244 (9.60)								0.65kg/1.43 lb
PCMB-S30	295 (11.6)								0.7kg/1.50 lb

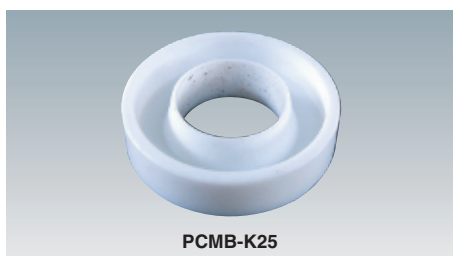
### Heat-resistant powerful type

Model	Dimensions		Material	Surface Finish		Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
	A	B		Magnetic bar	Stand				
PCMB-TS20	194 (7.63)	φ 25 (0.98)	SUS304	#400 buffed	Electrolytic polishing	Sm rare earth type Property value 1.1 T (11,000 G)	0.8T (8000G)	240°C (464°F)	0.6kg/1.32 lb
PCMB-TS25	244 (9.60)								0.65kg/1.43 lb
PCMB-TS30	295 (11.6)								0.7kg/1.50 lb

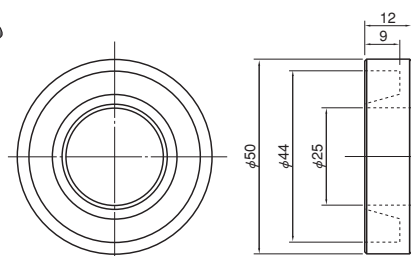
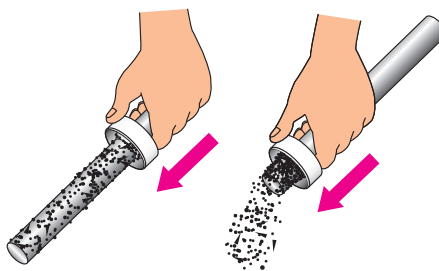
### Super powerful type

Model	Dimensions		Material	Surface Finish		Built-in Permanent Magnet	Surface Max. Magnetic Flux Density	Working Temp. Upper Limit	Mass
	A	B		Magnetic bar	Stand				
PCMB-AS20	194 (7.63)	φ 25 (0.98)	SUS304	#400 buffed	Electrolytic polishing	Nd rare earth type Property value 1.35 T (13,500 G)	1T (10000G)	80°C (176°F)	0.6kg/1.32 lb
PCMB-AS25	244 (9.60)								0.65kg/1.43 lb
PCMB-AS30	295 (11.6)								0.7kg/1.50 lb

## Model PCMB-K CLEANER TO REMOVE IRON POWDER ON MAGNETIC BAR



PCMB-K25



### [Application]

A cleaner to remove iron powder on a sanitary magnetic bar.

### [Features]

- A groove is provided to receive iron powder so that it does not scatter.
- When this is installed on each end of a sanitary magnetic bar, they serve as a stand also.

Model	Casing (Material)	Applicable Magnetic Bar Dia.
PCMB-K25	Teflon	φ 25 (0.98)

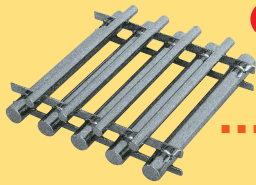
# POWERFUL MAGNETIC SEPARATORS

An example of flow of removing magnetized foreign matter

See the examples of fabrication on pages 147 and 148 also.

Rectangular grid type magnetic bar unit

Model **PCMG**  
P153



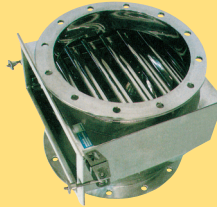
**Beverages** Juice, coffee, dairy products, tea  
**Seasoning powder** Red pepper, powder wasabi, flavored rice sprinkles  
**Seasoning liquid** Miso, soy source, soup  
**Candy raw materials/Medicine/Chemicals/Glass**

Round grid type magnetic bar unit

Model **PCMG-C**  
P154



Magnetic pipe  
Model **PCMP**  
P157



**Seasoning powder** Red pepper, powder wasabi, flavored rice sprinkles  
**Medicine/Cosmetics/Plastic pellets**

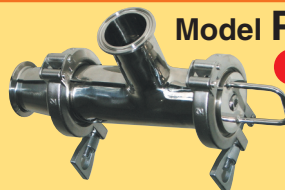
Magnetic filter  
P155-156 Model **PCMH2**



**Beverages** Juice, coffee, dairy products, tea  
**Seasoning liquid** Miso, soy source, soup

L-type magnetic filter

Model **PCML**  
P158

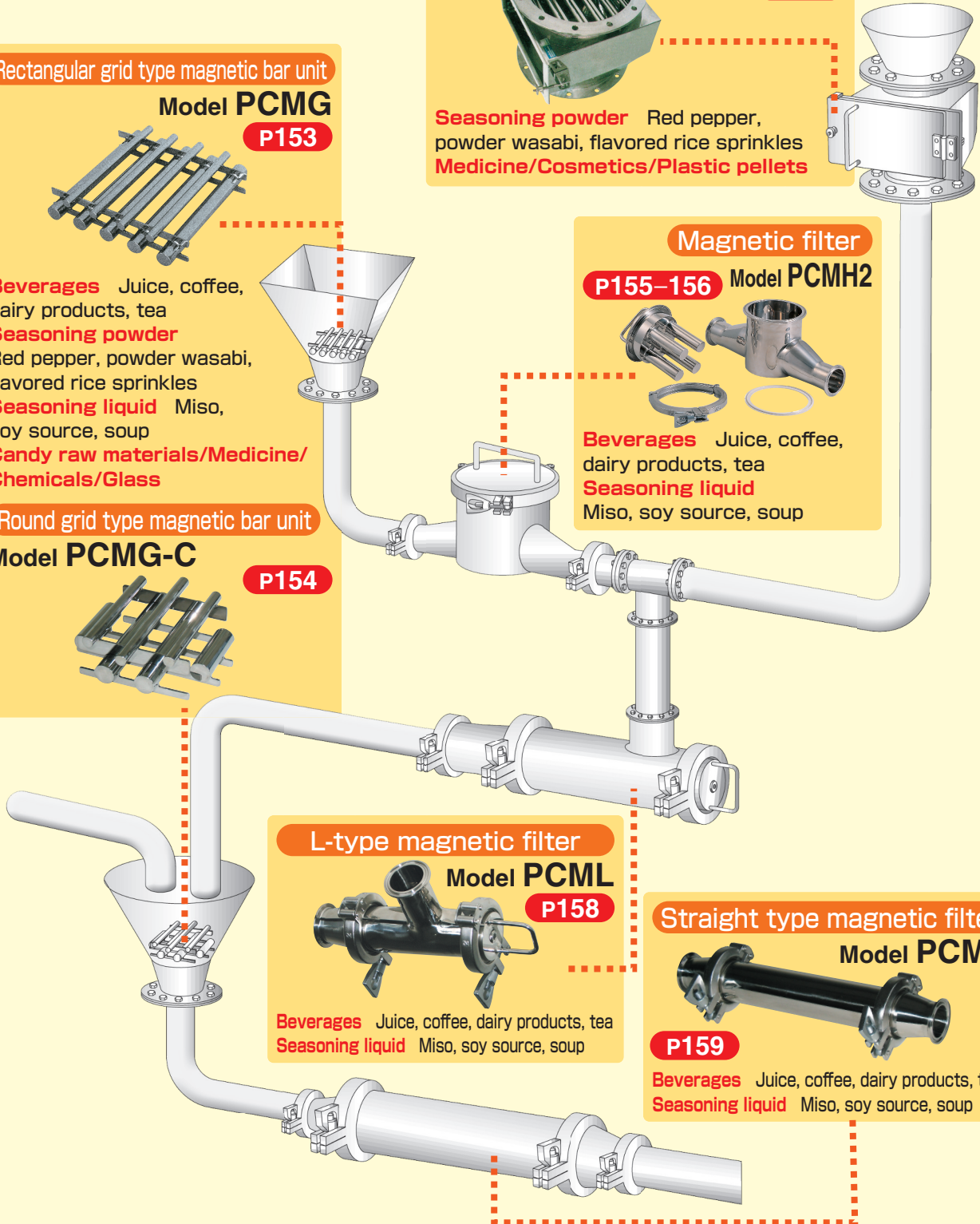


**Beverages** Juice, coffee, dairy products, tea  
**Seasoning liquid** Miso, soy source, soup

Straight type magnetic filter  
Model **PCMS**



P159  
**Beverages** Juice, coffee, dairy products, tea  
**Seasoning liquid** Miso, soy source, soup



MAGNETIC TOOL SEPARATOR  
FOR FEEDING OPERATION

LIFTING  
MAGNET

MAGBORE\*

CHIP & SLUDGE  
CONVEYANCE EQUIPMENT

ENVIRONMENTAL  
EQUIPMENT

MAGNETIZER AND  
DEMAGNETIZER

MAGNETIC EQUIPMENT  
FOR CONVEYANCE

MAGNETIC  
SEPARATORS

POWERFUL MAGNETIC  
SEPARATORS

MEASURING  
TOOLS

MEASURING  
INSTRUMENTS

MAGNETIC  
MATERIALS