



# KYLE MAGNETICS CO.,LTD



## Experience

With over 12 years' experience, Kyle Magnetics are perfectly placed to offer a range of separation and detection systems which are integral to process safety in several fields.



## High quality manufacturing

Using the latest magnetic technology and surface treatment, KM produce high quality systems suitable for using in food or pharmaceutical environments.



## Flexibility

The ability to offer a flexible and responsive solutions, enabling 10-15 days lead time for manufacturing to reactive requirements for process quality is never compromised.



## 磁棒 Magnetic Bar

### 磁棒

磁棒内部采用超强稀土永磁体或铁氧体磁铁作为磁源，表面包裹304或316不锈钢管，两端密封焊接而成。利用其极强的磁力从物料中分拣出细小铁杂质，从而起到保护下流设备和提高物料纯度的作用。磁棒可以单独使用，也是制作磁格栅、抽屉式除铁器、流体除铁器、旋转式除铁器的基本元素。



### 产品特点

1. 高强磁力强度，直径25mm的磁棒表面磁场强度可达12000高斯以上；
2. 表面均由SUS304、SUS316或者SUS316L的钢管焊接密封并经抛光，可以用来处理干粉、潮湿或者液体物料；
3. 表面经过镜面抛光处理，可达食品卫生级要求；
4. 磁棒的常用直径是25mm(1英寸)，直径、长度可根据要求定制，直径25mm的长度最大可以制作2500mm。也可提供特殊的磁棒，如正方形或长方形截面的磁棒。
5. 常规产品的工作温度为<80℃，其他根据具体的使用要求，可以制作耐温100℃、120℃、150℃、180℃等，最高可达350℃。
6. 磁棒两端可以根据要求制作成螺纹孔、螺杆、吊环、锥形、尖头等，方便安装固定。

### 订购时需要提供的信息

1. 尺寸：直径和长度；
2. 工作温度；
3. 磁力强度；
4. 两端设计，螺纹孔、螺杆等

### Magnetic Bar

Magnetic Bar is used for removing ferrous contaminants from free flowing material. All the ferrous particles like bolts, nuts, chips, damaging tramp iron can be caught and held effectively. So it provides a good solution of material purity and equipment protection



### Features

1. **Magnetic strength:** Up to 12000gauss.
2. **Shell:** Can be chosen from SS304, SS316 and SS316L
3. **Finishing:** High polishing.
4. **Size:** Standard 25mm (1 inch) in diameter with any length up to 2500mm. Customer-sizes can be offered on request.
5. **Working Temperature:** Ordinary working temperature is under 80 degree C. High temperature up to 350 degree C can be offered to meet special applications
6. **Type of Ends:** Nail head, eye nuts, thread hole, threaded rod and other kind of ends for necessary mounding.

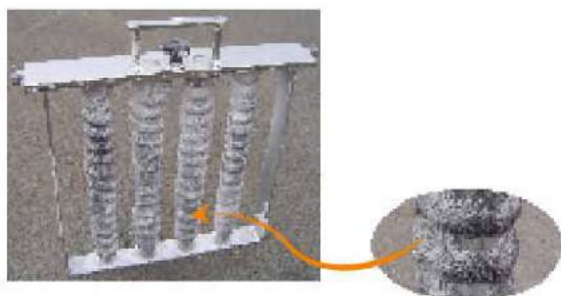
### How to select our products

Please advise us above necessary information to make inquiry, like dimension, magnetic strength, stable working temperature, type of ends.

If you are not in a position to offer these information and need our professional suggestions, please fill in the table on the last page and finished it with the application environment and material condition.

### 磁格栅

磁格栅是用来过滤粉料、液体物料、气体中夹带的细小铁杂质。通常安装在投料口、出料口或输送管道，当物料流经磁格栅时，铁杂质就会被吸附到磁棒上。



### 构造

磁格栅由磁棒和固定磁棒的不锈钢板组成，由多根磁棒根据使用要求排列组成，可加工成多种形状，正方形、长方形、圆形、菱形、椭圆形、三角形或不规则多边形。磁棒与磁棒的中心距通常是2英寸，所有的框架和外壳都是不锈钢材料。

### 产品特点

1. 表面处理：抛光和焊接缝隙可按照要求达到食品级要求；
2. 表面材质：SS304, SS316；
3. 工作温度：标准工作温度 $<80^{\circ}\text{C}$ ，针对特殊环境需要，我们能提供的最高工作温度是 $350^{\circ}\text{C}$ 。
4. 多种设计：标准类型，易清洁型，单层，多层，也可按照客户要求增加辅助设计，如方便操作的提手、便于固定的挂钩或改善过滤效果的导流棒等。

### Magnetic Grate

Magnetic grates are designed for product purity of free flowing materials such as carbon black, drugs, chemicals, cosmetics, plastics, food industries and so on. These units are easily installed in any hopper or floor opening, chute or duct. When free-flowing material containing iron substances passes through the framework, iron particles are attracted to the bar magnets by magnetic fields. By this solution, your equipment and facilities will be protected, while your products will be safe for consumption.

### Construction

Magnetic Grate are constructed by a row of magnetic bars which are fixed to frames in various shape. It can be square, rectangle, round, oval, triangle, rhombus or irregular polygon, to suit different installation. Center distance of bars is usually 2 inches. All the frames and shells are 100% stainless steel.

### Features

1. **Finishing:** Well polishing and welding to meet food grade.
2. **Material of shell:** SS304, SS316 and SS316L seamless steel tube
3. **Working Temperature:** Standard working temperature is under 80 Degree C. High temperature up to 350 degree C can be offered on request to meet special applications
4. **Various designs available:** Standard , Easy clean , one layer, multilayer and Custom designs, specifications can be fulfilled.

### 常用设计

1. 易清洁型：此设计更加方便清洗，抽出磁棒，吸附在不锈钢套管表面的铁杂质就会脱落。如图01，02。
2. 多层设计：在产品流动性和安装空间等条件允许的情况下，磁格栅层数越多，产品的纯度就会越高。如图06
3. 导流装置：可引导物料尽量从磁棒表面流经，这样的话，物料会更充分的接触磁棒表面，更细小的杂质就会被吸附，导流装置可以是90°角铁或者是圆棒。如图03，05
4. 加装把手便于操作清理，尤其是规格较大、较重的磁格栅，此设计的另一个优势是可以避免普通磁格栅清理时，手接触磁棒，碰落铁杂质到物料中。



图01



图02



图03



图04



图05



图06

### Special Design

Easy-clean design: This design is more expedient to do cleaning. Just take out the magnetic core, the iron impurities will fall from the outer shell. As shown in Figure 01,02.

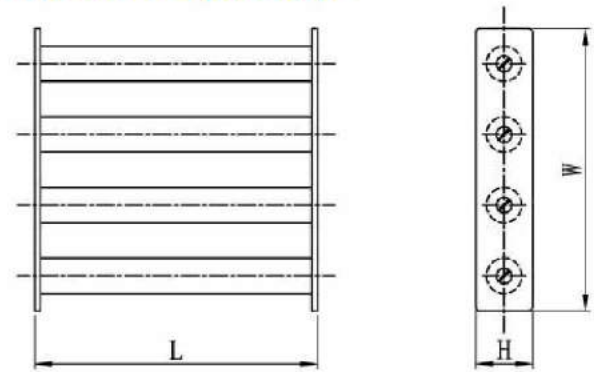
Multiple layers design: The one in the picture is double layers. Of course, more layers, better filter effect. As shown in Figure 06

Add baffle to direct the material onto or close the rods when it flows down. By this way, more contaminants will be attracted. Baffle can be either small rods or 90 degree angle. As shown in Figure 03, 05

Adding handles aims for easy operator. Especially with big size which is too heavy to handle. Another advantage of this design is to avoid contaminants dropping down when touched by hand.

设备参数 Specification

方形磁力架 Square Shape



Specification	Size (mm)			No. of rods
	L	W	H	
MGS 10/10	100	100	40	2
MGS 15/15	150	150	40	3
MGS 20/20	200	200	40	4
MGS 25/25	250	250	40	5
MGS 30/30	300	300	40	6
MGS 35/35	350	350	40	7
MGS 40/40	400	400	40	8
MGS 45/45	450	450	40	9
MGS 50/50	500	500	40	10
MGS20/10	200	100	40	2
MGS30/10	300	100	40	2
MGS30/20	300	200	40	4
MGS40/10	400	100	40	2
MGS40/20	400	200	40	4
MGS40/30	400	300	40	6
MGS50/10	500	100	40	2
MGS50/20	500	200	40	4
MGS50/30	500	300	40	6
MGS50/40	500	400	40	8

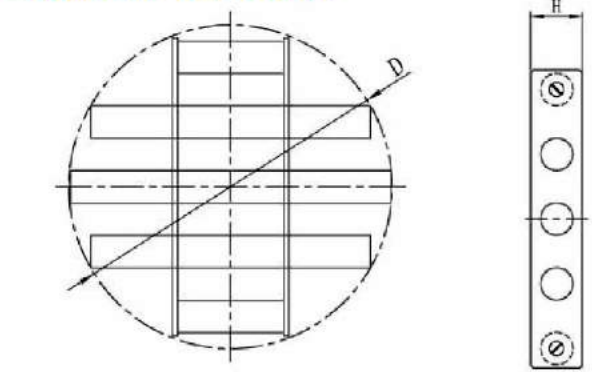
适用领域

由于磁格栅结构简单、设计多样性等特点，相对于其他成套除铁设备，具有性价比高、安装操作方便、对安装条件要求低等特性，所以应用较为广泛。磁格栅适用于处理粉末状物料、液体物料、气体物料，广泛应用于食品、制药、化工、热电厂、塑料、炭黑、陶瓷、锂电池材料等行业的生产线。

选购需要提供的信息

规格尺寸，耐温，设计构造，磁力强度

圆形磁力架 Round Shape



Specification	Size (mm)		No. of rods
	D	H	
MGR100	100	40	2
MGR150	150	40	3
MGR200	200	40	4
MGR250	250	40	5
MGR300	300	40	6
MGR350	350	40	7
MGR400	400	40	8
MGR450	450	40	9
MGR500	500	40	10

Application

Products are of dry powder and granular, while contaminants are relatively small and fine.

How to select our products?

Please advise us the above necessary information to make inquiry, like dimension, magnetic strength, stable working temperature

If you are not in a position to offer these information and need our professional suggestions, please fill in the table on the last page and finished it with the application environment and material condition

## 流体管道式除铁器 Magnetic Liquid Traps

### 流体管道式除铁器

流体管道式除铁器主要应用于过滤液体、浆料、风送管道输送的粉体、气体等物料中的细小铁杂质。在磁棒组的超强磁场作用下，可以有效的去除物料中的铁杂质。



### 构造

流体管道式除铁器是由磁棒组和不锈钢桶体组成，通过法兰、卡箍等方式将进出料口和生产线管道连接起来。

### 特性

1. 表面处理：镜面抛光和拉丝处理，可达到食品级标准；
2. 外壳材料：SS304, SS316；
3. 工作温度：标准工作温度是低于80℃，针对客户特殊需要，我们能提供的最高工作温度是350℃
4. 耐压性：法兰一般≤10公斤(1.0 mpa)，卡箍一般≤5公斤(0.5 mpa)。如有特殊需要，可另行设计。
5. 根据清理方式，我司提供普通型跟易清洗型供选择
6. 为满足保温要求，我司可提供设计保温层。
7. 可根据客户量身定制方案。

### Magnetic Liquid Traps

Designed to extract the ferrous material from the liquid, semi-liquid and air conveying powder in order to purify the material in the production process. Strong magnetic tubes inside the housing filtrates the flow and picks out the unwanted ferrous metal. The unit is simply mounted to the existing pipeline via flanged or threaded ends. Easy access is also possible using the quick release clamp.

### Construction

Magnetic Liquid Traps consist of a group of Magnetic bar and a housing outside. An inlet and outlet makes it possible to simply mounted to the existing pipeline via various connection type, flange, Union and quick release clamp.

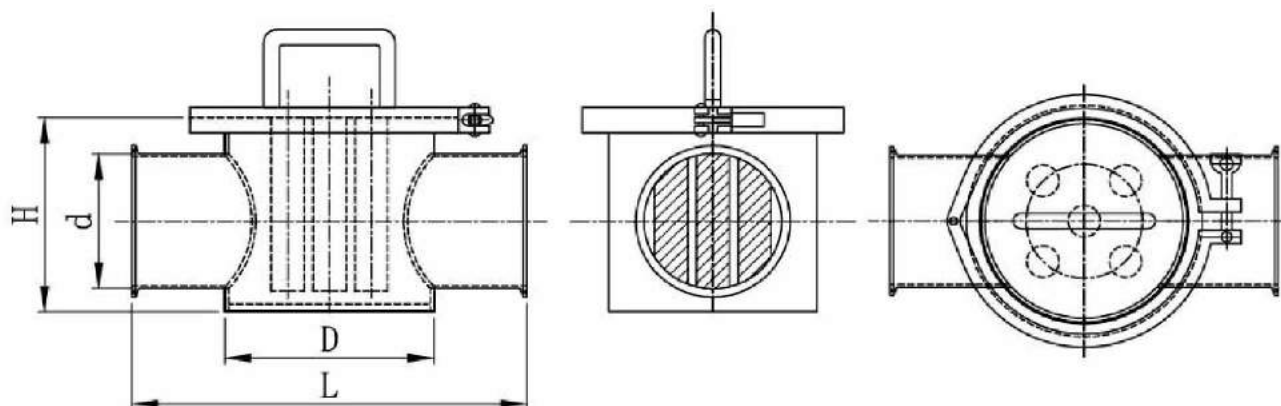
### Features

1. **Finishing:** Fine polishing and well welding to meet food grade.
2. **Material of shell:** SS304, SS316 and SS316L seamless steel tube
3. **Working Temperature:** Standard working temperature is under 80 Degree C. High temperature up to 350 degree C can be offered on request to meet special applications
4. **Pressure resistance:** 5 kilograms (0.5Mpa) with quick release clamp while 10 kilograms (1.0Mpa) with flange. High pressure resistance is designed on request.
5. As rare earth magnets are extremely powerful and tramp metal is very difficult to remove by hand. We are ready to offer you an easy-clean design.
6. To meet the demand of heat-preserving, we offer you a special jacket design.
7. Customer designs, specifications can be fulfilled.

## 设备参数 Specification

### 卡箍型流体管道式除铁器

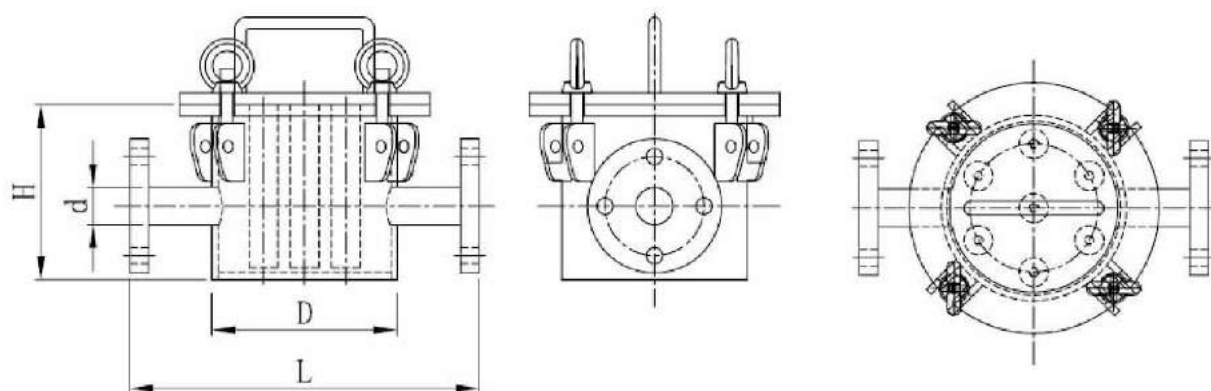
#### Quick Release Clamp Style



Specification	Size(mm)				No. of rods
	D	d	H	L	
FT100/25CC	100	25.4	150	220	3
FT100/38CC	100	38.1	150	220	3
FT100/50CC	100	50.8	150	220	3
FT100/76CC	100	76.2	150	220	3
FT114/25CC	114	25.4	150	250	5
FT114/38CC	114	38.1	150	250	5
FT114/50CC	114	50.8	150	250	5
FT114/76CC	114	76.2	150	250	5
FT150/25CC	159	25.4	150	300	5
FT150/38CC	159	38.1	150	300	5
FT150/50CC	159	50.8	150	300	5
FT150/76CC	159	76.2	150	300	5
FT150/100CC	159	101.6	150	300	5
FT200/25CC	219	25.4	200	360	7
FT200/38CC	219	38.1	200	360	7
FT200/50CC	219	50.8	200	360	7
FT200/76CC	219	76.2	200	360	7
FT200/100CC	219	101.6	200	360	7
FT150/25CF	159	32	150	300	5
FT150/32CF	159	38	150	300	5
FT150/40CF	159	45	150	300	5
FT150/50CF	159	57	150	300	5
FT150/65CF	159	76	150	300	5
FT200/50CF	219	57	200	350	7
FT200/65CF	219	76	200	350	7
FT200/80CF	219	89	200	350	7
FT200/100CF	219	108	200	350	7

## 流体管道式除铁器 Magnetic Liquid Traps

### 法兰盘流体管道式除铁器 Flange Style



Specification	Size(mm)				No. of rods
	D	d	H	L	
FT150/25	159	32	150	300	5
FT150/32	159	38	150	300	5
FT150/40	159	45	150	300	5
FT150/50	159	57	150	300	5
FT150/65	159	76	150	300	5
FT200/50	219	57	200	350	7
FT200/65	219	76	200	350	7
FT200/80	219	89	200	350	7
FT200/100	219	108	200	350	7
FT250/80	250	89	250	400	9
FT250/100	250	108	250	400	9
FT250/125	250	133	250	400	9
FT250/150	250	159	250	400	9
FT300/125	300	133	300	450	11
FT300/150	300	159	300	450	11
FT300/200	300	219	300	450	11

### 备注

“FT” 表示铁质收集器，即流体管道除铁器。

“CC” 表示快速接口型流体管道除铁器,进出料口为快速卡箍接口。

“CF” 表示快速接口型流体管道除铁器,进出料口为圆形法兰接口。

### Remark

“FT” stand for ferrous traps

“CC” stand for quick release clamp style, inlet and outlet is quick release clamp

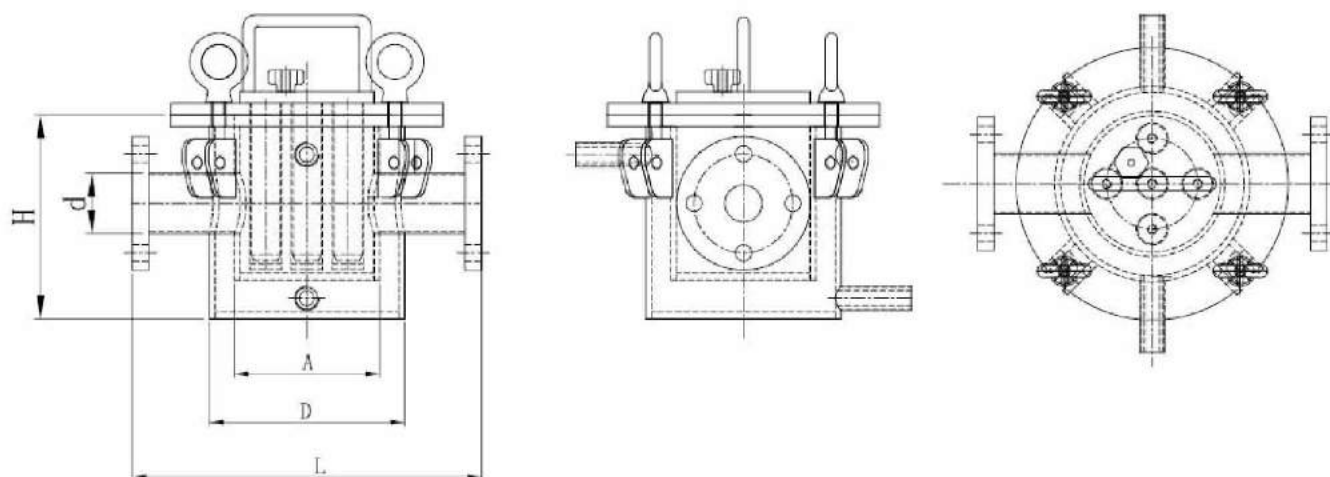
“CF” stand for quick release clamp style, inlet and outlet is round flange

## 保温型流体管道除铁器

许多液体因温度下降会结晶或凝固，为了获得良好的输送性能，通常在过滤时对其保温，以使过滤更加容易进行或满足下道工序对温度的要求，这时保温夹层式过滤器便是您的上佳之选。夹层可以通蒸汽、热水或导热油，以保持或提高流体的温度，防止流体凝固，提高粘性液体的过滤速度，或满足下一道工序对温度的要求。外壳采用304/316L不锈钢制造，适合处理各种液体、溶剂；

## Jacket design for Temperature-preservation

Many products will coagulate when the temperature decreasing. Like Chocolate, it need to preserve high temperature to ensure the free-flowing status. So a design of temperature-preserving Magnetic separator is necessary to obtain an ideal result in filtering ferrous contaminants. That is Jacket design.



Specification	Size(mm)					No. of rods
	A	D	d	H	L	
FT125/25	133	168	32	185	300	5
FT125/32	133	168	38	185	300	5
FT125/40	133	168	45	185	300	5
FT125/50	133	168	57	185	300	5
FT125/65	133	168	76	185	300	5
FT150/50	159	219	57	220	360	7
FT150/65	159	219	76	220	360	7
FT150/80	159	219	89	220	360	7
FT150/100	159	219	108	220	360	7

# Information required for R&D

物料特性 (流体) For Liquid		物料特性 (颗粒对粉体) For Powder/Granular	
流量		物料大小	
Volume:		Size of material:	
流速		物料处理量	
Velocity of flow		volume:	
	是 <input type="checkbox"/> 否 <input type="checkbox"/>	粘性	是 <input type="checkbox"/> 否 <input type="checkbox"/>
Viscoslty:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Viscosity:	Yes <input type="checkbox"/> No <input type="checkbox"/>
耐温		含水量	
Temperature:		Moisture	
耐压		腐蚀性	是 <input type="checkbox"/> 否 <input type="checkbox"/>
Pressure Resistanc		Corrosion	Yes <input type="checkbox"/> No <input type="checkbox"/>
PH值			是 <input type="checkbox"/> 否 <input type="checkbox"/>
PH value		Abrasion	Yes <input type="checkbox"/> No <input type="checkbox"/>
腐蚀性	是 <input type="checkbox"/> 否 <input type="checkbox"/>	耐温	
Corrosion	Yes <input type="checkbox"/> No <input type="checkbox"/>	Temperature	
		铁杂质性状	
		Character of tramp iron	
磁板选购 For Plate Magnet		磁率昆选购 For Magnetio Pulley	
安装位置			
Mounting Posltiorl		Keyway	
悬挂高度		转轴直径	
Suspension Distance		Diameter of Shaft	
裁货量		转轴的长	
Material Burden		Length of Shaft	