## Metal Separation Equipment

It applies to plastic, pharmaceutical, food, chemical, electronic, electrical and other industries of raw materials, degraded materials, reclaimed materials for metal detection and separation.It is able to quickly detect and automatically separate iron, copper, aluminum, stainless steel and other metal impurities from materials.It can also be installed on injection molding machine, extruder and other equipment.

## The advantages of using metal separator

1.Protection of production equipments

2.Impove efficiency greatly

3.Improve raw material utilization ratio

4.Improve quality of production

5.Decrease cost of maintaining and loss of downtime

PEC2005 Series metal separator

1..**PEC2005A　Free fall pipeline metal separator(manual feed)**



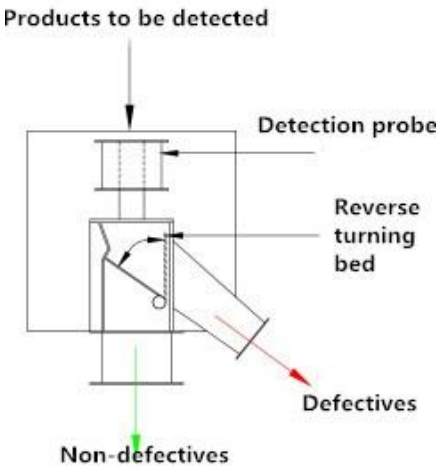
PEC2005A metal separator




SUS Shell




Paint Shell




schematic diagram

PEC2005A metal separator adopts German technology, and it has high sensitivity and reliability; it is used to separate magnetic and non-magnetic metals from free fall bulk materials and ensure product quality;Integrated metal foreign body rapid elimination system, it's suitable for testing bulk products.

**Application**

It applies to plastic, pharmaceutical, food, chemical, electronic, electrical and other industries of raw materials, degraded materials, reclaimed materials for metal detection and separation.It is able to quickly detect and automatically separate iron, copper, aluminum, stainless steel and other metal impurities from materials.It can also be installed on injection molding machine, extruder and other equipment.

**Product features**

1.Included detection coil and separation device, controller and host can not be separated, it's easy to install and operate.

2.Through the elimination system to eliminate quickly, it can reduce the loss of materials and does not interfere with the normal production process.

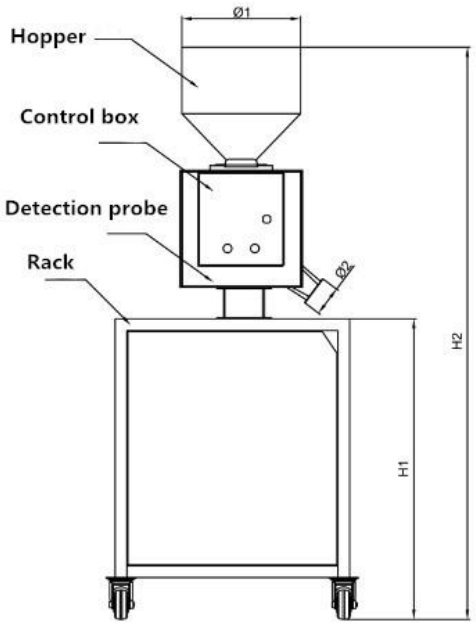
3.A variety of apertures can be chosen, which can meet all practical applications,including product specification,requests of sensitivity,working flow.

4.Detected material characteristics:Bulk material, dry, good flowability, powder particle

5.Quick connector and air tight flange can be chosen to achieve quick installation and disassembly

6.It's compact and easy to install and integrate into existing pipelines conveniently

**Product structure：**




**Specification parameters:**

| Model | Dimension （Φmm） | Sensitivity | | air compression | Max.through put(L/h) | Material temperature | Defectives eliminated time | Installation height （mm） |
|---|---|---|---|---|---|---|---|---|
| | | FeΦ | SUSΦ | | | | | |
| PEC2005-35 | 35 | 0.3mm | 0.5mm | 3～5Bar | 400 | < 80℃ | 0.3～5s | |
| PEC2005-50 | 50 | 0.5mm | 1.0mm | 3～5Bar | 2000 | < 80℃ | 0.3～5s | |
| PEC2005-70 | 70 | 0.7mm | 1.2mm | 3～5Bar | 5000 | < 80℃ | 0.3～5s | |
| PEC2005-100 | 100 | 1.0mm | 1.5mm | 3～5Bar | 12000 | < 80℃ | 0.3～5s | 473 |
| PEC2005-120 | 120 | 1.2mm | 2.0mm | 3～5Bar | 16000 | < 80℃ | 0.3～5s | |
| PEC2005-150 | 150 | 1.5mm | 2.5mm | 3～5Bar | 25000 | < 80℃ | 0.3～5s | 600 |
| PEC2005-200 | 200 | 2.0mm | 3.0mm | 3～5Bar | 44000 | < 80℃ | 0.3～5s | 922 |
| PEC2005-250 | 250 | 2.5mm | 3.5mm | 3～5Bar | 69000 | < 80℃ | 0.3～5s | 948 |

**Notes:**

1.The sensitivity in the table is the test block falling freely through the detection of the pipeline,the actual detection sensitivity may be different according the characteristics of the product or the working environment,it should be based on the actual detection sensitivity;2. The above list is only part of the common technical parameters,for more technical parameters, please contact our customer service staff.3. The company's products will continue to upgrade,if the above technical parameters are changed without notice, please refer to the latest parameters.

**2.PEC2005F Series automatic feeding metal separator combination**



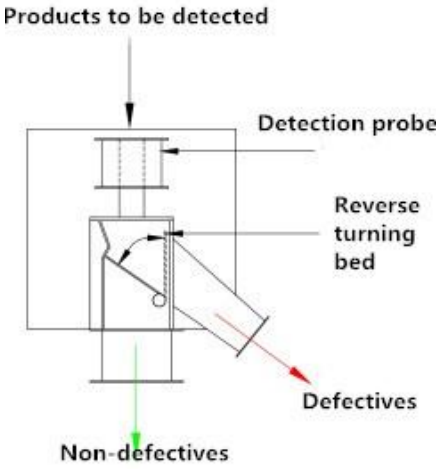
PEC2005F2 automatic vibration feeding metal separator

(including vibration feeding machine and suction machine)



PEC2005F1automatic feeding metal separator

(including suction machine)




schematic diagram

Automatic feeding metal separator combination(can be equipped with a variety of vibration feeding machine and vacuum suction machine)is used to detect and separate all the metals in plastic material, including iron and non-ferrous metals (such as copper, aluminum, stainless steel) and so on.In the process of recycling the old material, there will be some metal impurities mixed in it and enter production. As a result, it will cause accident and increase downtime so that increase costs and affect production efficiency. This equipment can save the labor cost of manual feeding, and is suitable for the customers with large material requirement. It has the advantages of durable, large suction force, long service life, etc. And it can realize automatic feeding.

**Application**:Separating all raw materials mixed in raw materials or recycled materials, including iron and non-ferrous metals such as copper, aluminum, stainless steel and so on

## Product features

1 Using automatic feeding metal separator combination can save labor cost of manual feeding, it can be equipped

with different types of suction machine, according to the requirements of the customer's material quantity and the parameters of the metal separator, it can achieve automatic feeding .

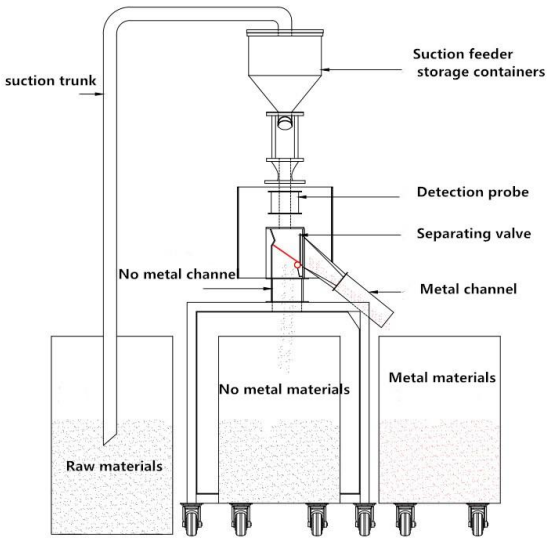
2This combination machine has the advantages of portability, durability, strong suction force, convenient installation and easy operation;

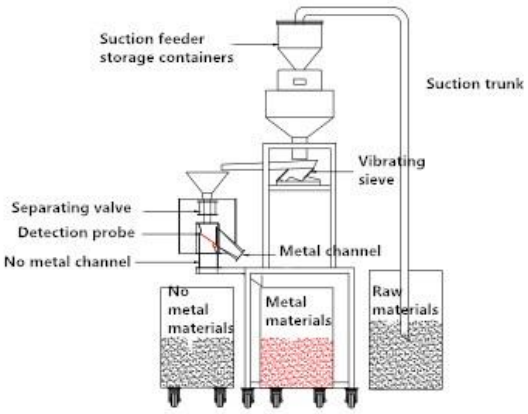
3.The rapid elimination of system can reduce the loss of material, and will not interfere with the normal production process.

4.A variety of apertures can be chosen, which can meet all practical applications.(Product specification,requests of sensitivity,working flow)

5.Detected material characteristics:Bulk material, dry, good flowability, powder particle

## Product structure：




## Specification parameters：

| Model | Dimension （Φmm) | Sensitivity | | air compression | Max.through put(L/h | Material temperature | Defectives eliminated time |
|---|---|---|---|---|---|---|---|
| | | FeΦ | SUSΦ | | | | |
| PEC2005A-35 | 35 | 0.3mm | 0.5mm | 3～5Bar | 400 | < 80℃ | 0.3～5s |
| PEC2005A-50 | 50 | 0.5mm | 1.0mm | 3～5Bar | 2000 | < 80℃ | 0.3～5s |
| PEC2005A-70 | 70 | 0.7mm | 1.2mm | 3～5Bar | 5000 | < 80℃ | 0.3～5s |
| PEC2005A-100 | 100 | 1.0mm | 1.5mm | 3～5Bar | 12000 | < 80℃ | 0.3～5s |
| PEC2005A-120 | 120 | 1.2mm | 2.0mm | 3～5Bar | 16000 | < 80℃ | 0.3～5s |
| PEC2005A-150 | 150 | 1.5mm | 2.5mm | 3～5Bar | 25000 | < 80℃ | 0.3～5s |
| PEC2005A-200 | 200 | 2.5mm | 3.5mm | 3～5Bar | 44000 | < 80℃ | 0.3～5s |
| PEC2005A-250 | 250 | 3.5mm | 4.5mm | 3～5Bar | 69000 | < 80℃ | 0.3～5s |

**Notes:**1. The sensitivity in the table is the test block falling freely through the detection of the pipeline,the actual detection sensitivity may be different according the characteristics of the product or the working environment,it should be based on the actual detection sensitivity;

2. The above list is only part of the common technical parameters,for more technical parameters, please contact our customer service staff.3. The company's products will continue to upgrade,if the above technical parameters are changed without notice, please refer to the latest parameters.

### 3.PEC2005B　Free fall pipeline metal separator （Main body）

PEC2005B economical metal separator adopts German technology.It has high sensitivity and reliability; it is used to separate magnetic and non-magnetic metals from free fall bulk materials and ensure product quality;Integrated metal foreign body rapid elimination system, it’s suitable for testing bulk products.



（LCD Screen Metal Separator）

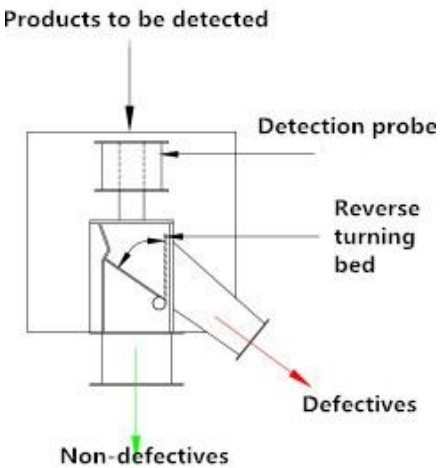




Rejection System For Powder



Rejection System For Flakes



schematic diagram

**Application**

It applies to plastic particles,degraded materials,reclaimed materials for metal detection and separation.It is able to quickly detect and automatically separate iron, copper,aluminum,stainless steel and other metal impurities from materials.It can also be installed in the injection molding machine,extruder and other equipment.

**Product features**

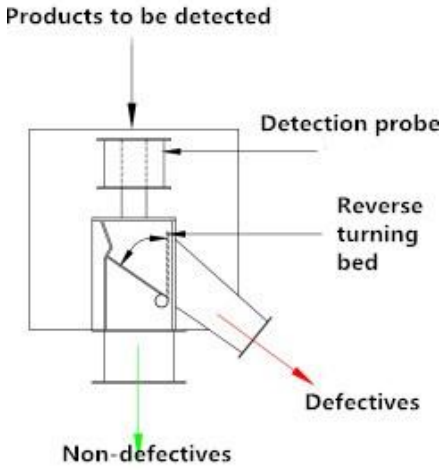
1.Avariety of apertures can be chosen, which can meet all practical applications,including product specification,requests of sensitivity,working flow.
2.Detected material characteristics:Bulk material, dry, good flowability, powder particle
3.Quick connector and air tight flange can be chosen to achieve quick installation and disassembly.
4. It's compact and easy to install and integrate into existing pipelines.
5. It can also work with the injection molding machine, extruder and other equipment.

**Specification parameters:**

| Model | Dimension （Φmm） | Sensitivity | | air compression | Max.through put(L/h) | Material temperature | Defectives eliminated time | Installation height （mm） |
|---|---|---|---|---|---|---|---|---|
| | | FeΦ | SUSΦ | | | | | |
| PEC2005B-30 | 30 | 0.2mm | 0.4mm | 3～5Bar | 400 | ＜80℃ | 0.3～5s | |
| PEC2005B-50 | 50 | 0.3mm | 0.6mm | 3～5Bar | 2000 | ＜80℃ | 0.3～5s | |
| PEC2005B-70 | 70 | 0.7mm | 1.2mm | 3～5Bar | 5000 | ＜80℃ | 0.3～5s | |
| PEC2005B-100 | 100 | 0.8mm | 1.2mm | 3～5Bar | 12000 | ＜80℃ | 0.3～5s | 473 |
| PEC2005B-120 | 120 | 1.0mm | 1.5mm | 3～5Bar | 16000 | ＜80℃ | 0.3～5s | |
| PEC2005B-150 | 150 | 1.2mm | 2.0mm | 3～5Bar | 25000 | ＜80℃ | 0.3～5s | 600 |
| PEC2005B-200 | 200 | 2.0mm | 2.5mm | 3～5Bar | 44000 | ＜80℃ | 0.3～5s | 922 |
| PEC2005B-250 | 250 | 3.0mm | 3.5mm | 3～5Bar | 69000 | ＜80℃ | 0.3～5s | 948 |

## 4.PEC2005C high sensitivity free fall pipeline metal separator






schematic diagram

PEC2005C high sensitivity free fall pipeline metal separator adopts German technology, high-end products, it has high sensitivity and reliability and reliability. It is used to separate magnetic and non-magnetic metals from free fall bulk materials, the special software is used to improve the detection performance. It has product effect automatic or manual learning function;Integrated metal foreign body rapid elimination system, it's suitable for testing bulk products.Even if the metal is sealed in the product can also be detected.

**Application**

Food industry, pharmaceutical industry, plastic industry, chemical industry, other industries of bulk metal foreign body detection.

**Product features**

1.Shell and the direct contact with products' metal parts are made of stainless steel 304
2.A variety of apertures can be chosen, which can meet all practical applications
3.With counter, it can record the number of rejection records of contamination so as to know the product percent of pass
4.With learning function, product effect inhibition function, it can adapt to the detection of different products
5.With 200 kinds of product storage function, it can be quickly changed the product parameters
6.The frame structure is suitable for cleaning parts of the body;Compact structure, it's easy to install
7.The rapid elimination of the system can reduce the material loss to the greatest extent, and will not interfere
with the normal production process;
8.Detected material characteristics:Bulk material, dry, good flowability, powder particle.(Size not greater than 8mm)

**Specification parameters**

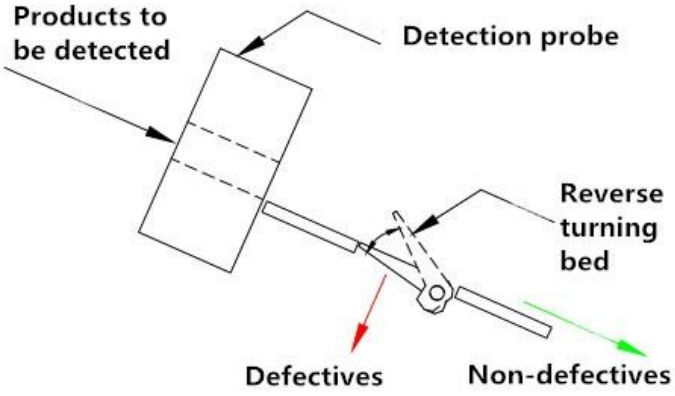
| Dimension（Φmm) | Sensitivity | | | Direction | air compression | Max.throughput(L/h | Material temperature |
|---|---|---|---|---|---|---|---|
| | Fe | SUS | No Fe | | | | |
| 45mm | 0.2 | 0.3 | 0.25 | Free fall | 3～5Bar | 2000 | < 80℃ |
| 80mm | 0.45 | 0.64 | 0.5 | Free fall | 3～5Bar | 8000 | < 80℃ |
| 100mm | 0.57 | 0.8 | 0.63 | Free fall | 3～5Bar | 12000 | < 80℃ |
| 116mm | 0.6 | 0.85 | 0.67 | Free fall | 3～5Bar | 16000 | < 80℃ |
| 150mm | 0.77 | 1.08 | 0.85 | Free fall | 3～5Bar | 25000 | < 80℃ |
| 194mm | 0.95 | 1.34 | 1.05 | Free fall | 3～5Bar | 44000 | < 80℃ |
| 240mm | 1.2 | 1.69 | 1.33 | Free fall | 3～5Bar | 69000 | < 80℃ |

**Notes:**

1.The sensitivity in the table is the test block falling freely through the detection of the pipeline,the actual detection sensitivity may be different according the characteristics of the product or the working environment,it should be based on the actual detection sensitivity;2. The above list is only part of the common technical parameters,for more technical parameters, please contact our customer service staff.3. The company's products will continue to upgrade,if the above technical parameters are changed without notice, please refer to the latest parameters.

**5.PEC2005G3 High precision pharmaceutical metal separator**





schematic diagram

**Product description**

PEC2005G3 economical pharmaceutical metal separator adopts German technology, it has stable performance. Specifically designed for the pharmaceutical and health care industry, and it has the rapid integration and removal of metal foreign body detection system.

**Application**

It is applicable to the pharmaceutical industry, such as tablets, capsules, powder and other metal impurities

**Product features**

1.Processing speed can reach about 15000 pellets per minute
2.it can handle a variety of categories of drugs, in order to save space, it take a more compact frame design
3.In order to keep health and safety, using SUS316# stainless steel material in the metal detection part
4.The PVC part is used in the automatic sorting device
5.The detection sensitivity is higher than the industry standard, the highest can be detected is greater than the diameter of 0.2mm ball;
6.With memory and learning function, it can automatically understand the characteristics of the product, effectively eliminate the product effect;
7.With its all stainless steel structure ,it is waterproof (IP66) and anti vibration, it has strong adaptability to the environment and temperature changes, it's easy to clean;
8.Self diagnostic function;
9.Modular component replacement, it's easy to maintain
10.In order to facilitate the management, it can be set password by users, managers,sales, etc.
11.Multi language function selection (Chinese, English, Korean, Japanese, etc., other languages can be customized according to demand);
12. Comply with HACCP, GMP, GAMP, FDA, IFS, ISO9001 and other related certification standards
13.

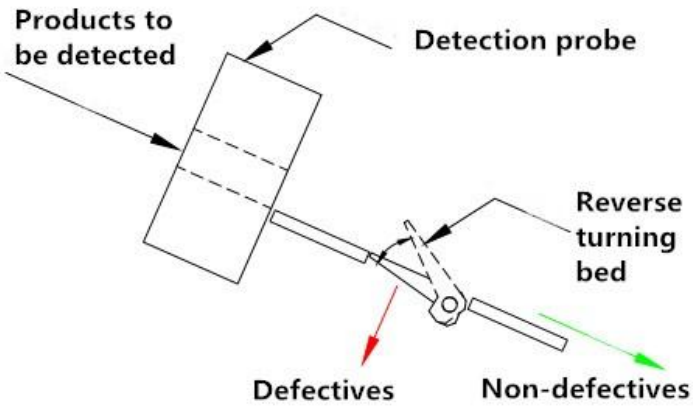
**Specification parameter**

| appellation | parameter |
|---|---|
| Adjustable angle | 30°～40° |
| Input port size | 150mm * 100mm |
| Tunnel size | 60*30mm（W*H） |
| input Height adjustable | 800(MAX+150)mm |
| Exit height adjustable | 350(MAX+150)mm |
| sensitivity | FeΦ：0.2mm |
| | SUSΦ：0.4mm |

Notes: The sensitivity in the table is the test block falling freely through the detection of the pipeline,the actual detection sensitivity may be different according the characteristics of the product or the working environment,it should be based on the actual detection sensitivity;

**6.PEC2005G2 Pharmaceutical metal separator**






PEC2005G1 economical pharmaceutical metal separator adopts German technology, it has stable performance. Specifically designed for the pharmaceutical and health care industry and it has the rapid integration and removal of metal foreign body detection system

**Application**

It is applicable to the pharmaceutical industry, such as tablets, capsules, powder and other metal impurities

**Product features**

1.Processing speed can reach about 15000 pellets per minute

2.It can handle a variety of categories of drugs, in order to save space, it take a more compact frame design

3.The food grade PVC material is used in the automatic sorting device;；

4.The detection sensitivity is higher than the industry standard, the highest can be detected is greater than the diameter of 0.3mm ball;

5.The sensitivity can be adjusted according to the characteristics of the product, and the number of detection and elimination can be recorded in real time;Manual clear record

6.All stainless steel structure, waterproof (IP66), anti vibration, strong adaptability to the environment and temperature changes, easy to clean;

7.Modular component replacement, it’s easy to maintain

8.Multi language function selection (Chinese, English, Korean, Japanese, etc., other languages can be customized according to demand);

9.Comply with HACCP, GMP, GAMP, FDA, IFS, ISO9001 and other related certification standards

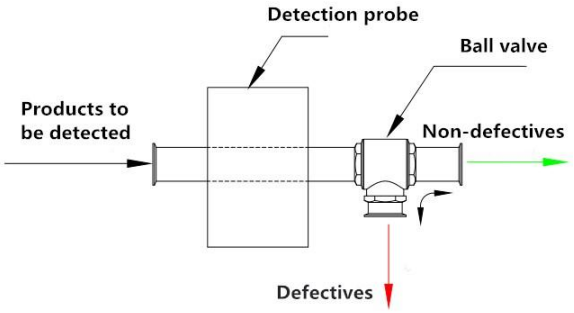
**Specification parameters**

| appellation | parameter |
|---|---|
| Adjustable angle | 30° ~ 40° |
| Input port size | 150mm * 100mm |
| Pipe diameter | Φ50mm |
| input Height adjustable | 800(MAX+150)mm |
| Exit height adjustable | 350(MAX+150)mm |
| sensitivity | FeΦ: 0.3mm |
| | SUSΦ: 0.5mm |

Notes:The sensitivity in the table is the test block falling freely through the detection of the pipeline,the actual detection sensitivity may be different according the characteristics of the product or the working environment,it should be based on the actual detection sensitivity;

**7.PEC2005E Liquid metal separator**






PEC2005E Liquid metal separator adopts digital intelligent technology to realize the full digitalization and intellectualization of the metal detection so that the performance is excellent, the operation is simple, and the production efficiency is greatly improved

**Application**

It applies to the food industry, chemical industry, pharmaceutical industry, liquid and paste materials, pump pump delivery or fill in the application of jam, chocolate, soup or sauce and other liquid substances of metal foreign matter detection.

**Product features：**

1.The metal separation system can remove magnetic or nonmagnetic metal impurities from the pumped liquid or paste products (steel, stainless steel, aluminum, etc.)

2.After the detection of the metal, the valve will be removed from the contaminated material into the waste bin, arc valve removal device designed specifically for viscous materials

3.The metal separator picking joint in stainless steel frame, is used to install the desktop or wall. If necessary, it can also be installed to the movable and adjustable bracket

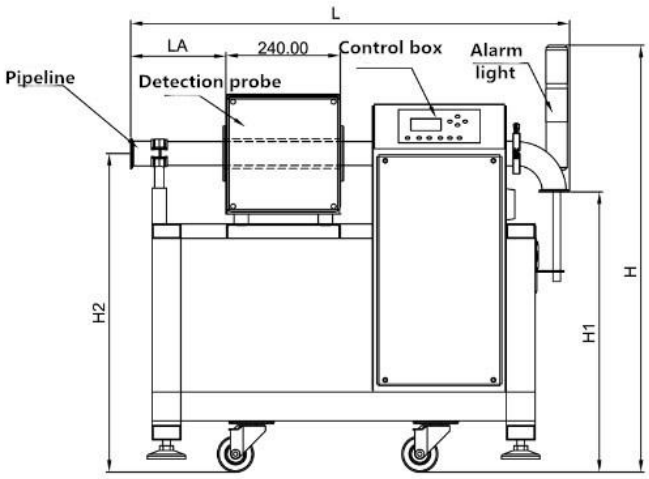
4.By using a quick connector, it can be conveniently integrated into an existing pipeline system

5.High strength stainless steel material, it's easy to clean

6.With self-learning function, up to 100 kinds of product storage function

7.A variety of caliber can be chosen, the highest sensitivity can detect 0.3mm diameter ball

**Product structure**




**Specification parameters**

| | | | | | | |
|---|---|---|---|---|---|---|
| dimension | diameter | 50mm | 80mm | 100mm | 120mm | 150 |
| sensitivity | Fe | 0.5mm | 0.6mm | 0.8mm | 1.0mm | 1.2mm |
| | SUS | 0.8mm | 1.0mm | 1.2mm | 1.5mm | 2.0mm |

| | | | | | | |
|---|---|---|---|---|---|---|
| Dimension | Diameter | 50mm | 80mm | 100mm | 120mm | 150 |
| Sensitivity | Fe | 0.5mm | 0.6mm | 0.8mm | 1.0mm | 1.2mm |
| | SUS | 0.8mm | 1.0mm | 1.2mm | 1.5mm | 2.0mm |

Power Supply：Single phase AC220V 60VA 50/60Hz

Alarm mode: Audible and visual alarm
Grade:IP 65
Special note:The above detection sensitivity is the parameter value in laboratory, the actual detection sensitivity will be different due to the characteristics of the detected products, the operating environment and characteristics (such as magnetic interference, flow velocity, etc.), and should be based on the actual detection sensitivity.