

# ▶ Conveyor Metal Detector

Metal foreign object detection machine

## PRODUCT ADVANTAGES



- ✓ 1) Applicable to detecting magnetic and non-magnetic metals
- ✓ 2) Conveyor belt system
- ✓ 3) Rejection methods: air blowing, push rod, flip plate (limited to small packaging and lightweight). Upon metal detection, the rejection device automatically removes products containing metal.
- ✓ 4) The detection coil is made of stainless steel and has a completely sealed internal structure.
- ✓ 5) Cleanroom design for easy cleaning.
- ✓ 6) Complies with IFS and HACCP standards.
- ✓ 7) Uses the latest microprocessor control system with automatic learning and setting function.
- ✓ 8) Control system: LCD display, 4 operation buttons, 200 product storage entries, 1500 event logs.



**DETECTION RANGE**

Utilizing German technology and featuring an imported German control unit, this product boasts superior performance. It is suitable for detecting metal impurities in products, both bulk and packaged, within the food, pharmaceutical, and chemical industries.

## PRODUCT TECHNICAL PARAMETERS

Model	Channel diameter (valid mm)	Detection accuracy	Model	Channel diameter (valid mm)	Detection accuracy
DD-720-200/100	200*70	Fe 0.5mm SUS 0.7mm	DD-720-400/200	400*165	Fe 1.0mm SUS 1.4mm
DD-720-200/150	200*125	Fe 0.7mm SUS 1.0mm	DD-720-500/50	500*50	Fe 0.5mm SUS 0.8mm
DD-720-350/150	300*100	Fe 0.8mm SUS 1.2mm	DD-720-500/100	500*100	Fe 0.7mm SUS 1.0mm
DD-720-300/200	300*165	Fe 1.0mm SUS 1.4mm	DD-720-600/150	600*150	Fe 1.2mm SUS 1.6mm
DD-720-400/150	400*115	Fe 0.8mm SUS 1.2mm	DD-720-600/300	600*265	Fe 1.5mm SUS 2.0mm

Product model	DD-720
Control system	INBOARD-STEAWE8206
Display	OCM12864-2(customizable)
Connecting wire (shielded wire)	Coil and control system (customizable)
Bracket/control box/sheet metal part	Stainless steel 304 (customizable)

Note: The detection sensitivity is obtained by placing the test card in the middle of the conveyor belt and passing it through the detection channel. The actual detection sensitivity may vary depending on the characteristics of the product being tested or the working environment. The actual detection sensitivity should be taken as the standard.

# Digital Conveyor Metal Detector

Metal foreign object detection machine



## PRODUCT ADVANTAGES

- ✔ The operating system features a user-friendly and intelligent design, with a high-definition 7-inch touchscreen for intuitive and convenient operation.
- ✔ It stores and displays user access logs and detection logs.
- ✔ A unique detection signal strength display clearly reflects the signal strength of metallic foreign objects in the product.
- ✔ It has a memory function for over 200 product parameters, capable of storing detection parameters for more than 200 products, enabling rapid product switching on the production line.
- ✔ Multiple languages, including Chinese and English, are available.
- ✔ The probe is manufactured using unique materials and processes, resulting in high sensitivity, strong anti-interference capabilities, stable performance, and a service life of over 10 years.



## DETECTION RANGE

The DD-500 (touchscreen version) conveyor-type intelligent metal detector is used to detect various metal impurities such as metal shavings, broken needles, iron wires, lead, copper, aluminum, tin, and stainless steel that are mixed in or lost in raw materials or products.

## PRODUCT TECHNICAL PARAMETERS

Product Model	Overall machine dimensions (mm)				Probe dimensions (mm)				Detection sensitivity (mm)		
	H3	H4	L	W	W1	W2	H1	H2	FE	NO-FE	SUS
DD-500-3008	700	880	1200	650	300	250	110	80	0.5	0.8	1.0
DD-500-3010	700	900	1200	650	300	250	130	100	0.6	0.8	1.2
DD-500-3012	700	920	1200	650	300	250	150	120	0.8	1.0	1.5
DD-500-3015	700	950	1200	650	300	250	180	150	1.0	1.2	2.0
DD-500-4010	700	900	1330	750	400	350	130	100	0.6	1.0	2.0
DD-500-4012	700	920	1330	750	400	350	150	120	0.8	1.2	1.5
DD-500-4015	700	950	1330	750	400	350	180	150	1.0	1.5	2.0
DD-500-5010	700	900	1330	850	500	450	130	100	0.8	1.2	2.0
DD-500-5012	700	920	1330	850	500	450	150	120	1.0	1.5	2.3
DD-500-5015	700	950	1330	850	500	450	180	150	1.2	2.0	2.5
Maximum transportable weight					0-25KG						
The conveying speed					25m/m constant speed or custom speed adjustable						
power supply					AC220V+10% 50-60Hz, customizable voltage.						
Usage environment					Temperature -20°C to 50°C, humidity below 90%						
Heavy-duty models											
Product Model	Overall machine dimensions (mm)				Probe dimensions (mm)				Detection sensitivity (mm)		
	H3	H4	L	W	W1	W2	H1	H2	FE	NO-FE	SUS
DD-500-5030	700	1100	1600	850	500	450	330	300	2.0	2.5	3.0
DD-500-6030	400	800	1600	950	600	550	330	300	2.5	3.0	3.5
DD-500-6035	400	850	1800	950	600	550	380	350	3.0	3.5	4.0
DD-500-6040	400	900	1800	950	600	550	430	400	3.5	4.0	4.5
DD-500-6050	400	950	1800	950	600	550	530	500	4.0	4.5	5.5
Maximum transportable weight					25-200KG						
The conveying speed					25m/m constant speed or custom speed adjustable						
power supply					AC220V+10% 50-60Hz, customizable voltage.						
Usage environment					Temperature 0°C~40°C, humidity below 80%						

H3: Conveyor belt surface height from the ground

H4: Overall machine height

L: Conveyor belt length

W: Overall machine width

W1: Inspection channel opening width

W2: Inspection channel pass-through width

H1: Inspection channel opening height

H2: Inspection channel pass-through height

# ▶ End of Line Conveyor Metal Detector



## PRODUCT ADVANTAGES

- ✔ Metal detection record database management function; metal detector parameter settings and viewing, and downloading of its detection history data via USB flash drive.
- ✔ User permission settings: factory setting permissions, engineer usage permissions, operator usage permissions.
- ✔ The metal detector's conveyor speed can be directly adjusted on the operation screen interface, making speed adjustment convenient and quick.
- ✔ The metal detector software screen has a built-in oscilloscope interface, allowing for intuitive display of equipment malfunctions and facilitating maintenance.
- ✔ Features product quantity statistics, defective product quantity statistics, and a perpetual calendar function; operation logs are traceable.



**DETECTION  
RANGE**

Detects metallic impurities that may have been introduced into products or raw materials during the production process. These include iron and non-magnetic metals (gold, silver, copper, aluminum, stainless steel, and other non-ferrous metals can be detected), thereby improving product safety and reducing hazards.

## PRODUCT TECHNICAL PARAMETERS

Product Model		DD-360 series
Passing Height		80 ~1000 (customizable)
Passing Width		300 ~ 1200 (customizable)
Standard detection sensitivity	FE(ΦMM)	≥0.6
	NON-FE(ΦMM)	≥0.8
	SUS304(ΦMM)	≥1.2
Protection level		IP67
Memory product quantity		100 kinds
Display mode		LED LCD
Operation mode		Touch button input (touch optional)
Alarm mode		Alarm shutdown, buzzer alarm, or rejection mechanism are optional.
Machine material		The entire machine is made of carbon steel with baked enamel or 304 stainless steel, and complies with HACCP, GMP, CAS and other standards.
Machine weight		≥120KG
Power supply		AC200V±10% 50-60HZ (AC110V or AC380V can be customized) Other options available
Usage environment		Temperature: -180~ 50°C, Relative Humidity: 30~90°C

Note: The detection sensitivity is obtained by placing the test card in the middle of the conveyor belt and passing it through the detection channel. The actual detection sensitivity may vary depending on the characteristics of the product being tested or the working environment. The actual detection sensitivity should be taken as the standard.

# ▶ Dual-frequency Conveyor Metal Detector

## PRODUCT ADVANTAGES



- ✔ The core component utilizes leading digital technology, with the detection coil molded in one piece using a potting process, resulting in high detection accuracy, stable performance, and strong resistance to external interference.
- ✔ It can be manufactured using multiple frequencies according to product characteristics and has a product detection data storage function, capable of storing multiple product detection data.
- ✔ Employing intelligent recognition technology, it has self-learning and memory functions, automatically recognizing and memorizing product characteristics. Operating speed range is 1-1000 meters/minute (speed adjustment required).
- ✔ Constructed entirely of stainless steel, the entire machine has excellent dustproof and waterproof performance.



### DETECTION RANGE

Our newly designed metal detectors can be customized to meet your unique needs and achieve lower operating costs than upgrading or repairing existing systems. Metal detectors can be used in conveyor, reverse loading, and assembly line systems designed to your required specifications.

## PRODUCT TECHNICAL PARAMETERS

Product model	DD-390 (4012)
External dimensions	1350x802x950(LxWxH) customizable
Effective detection channel	W 400 mm*H 120 mm
Belt width	350mm
Sensitivity (empty belt surface)	FE(Φ0.8mm),NON-FE(Φ1.2mm),SUS316(Φ1.5mm)
Production speed	1~1000m/min, fixed speed 25/min
Operation indication method	Flat touch buttons
Frame height	700+50mm
Conveyor belt material	Food grade PU belt
Structure	SUS304, Comply with HACCP, GMP, FDA, CAS and other standards
Protection	IP 66 (probe) Others are IP54, optional
Relative humidity	20 - 80%, non-condensing
Power supply	AC220V±10%, single phase, grounded; 47 Hz to 65 Hz, 100 W (max)
Operating temperature	Ambient temperature -10°C to 40°C (14°F to 104°F); Product temperature in well -10°C to 55°C (14°F to 131°F).
Language	English, Spanish, French, German, Italian, Chinese, Czech, Russian, Polish, Thai, Korean, Brazilian, Portuguese
Output type	6 relay outputs; Relays: 250 volt AC 2 amp (max); 50 volt DC 1 amp (max)
Output allocation	Reject 1, Reject 2, Fault, Alarm, Warning, QA Light

Note: The detection sensitivity is obtained by placing the test card in the middle of the conveyor belt and passing it through the detection channel. The actual detection sensitivity may vary depending on the characteristics of the product being tested or the working environment. The actual detection sensitivity should be taken as the standard.

# ▶ Metal Detector For Aluminum Foil Packaging

## PRODUCT ADVANTAGES



- ✔ Metal detectors can detect ferrous metal impurities in products packaged with aluminum foil or aluminized film. Once metal is detected, the detector alarms and stops, allowing manual removal of the product containing the metal impurity. The high-precision detection device utilizes new detection coil technology, resulting in a compact system without compromising detection accuracy. Its short body also facilitates integration into existing conveyor belt systems.
- ✔ The new coil technology also allows for a shorter conveyor body with a maximum load capacity of 5kg. It meets IFS and HACCP certification requirements, and various rejection mechanisms (such as flip-plate, reversing, and push-bar) are available to suit different applications.



**DETECTION  
RANGE**

Metal detection machines for aluminum foil packaging are installed on conveyor belt production lines to inspect products packaged with aluminum foil or aluminum foil, such as loose materials after packaging.

## PRODUCT TECHNICAL PARAMETERS

Product model DD-220 series		3008	3012	4008	4010	4012	4015	4020	4025
Passing height		300 (customizable)							
Passing width		100	120	150	200	250	300	350	400
Standard detection sensitivity	Magnetic ball	0.6	0.8	1.0	1.2	1.5	2.0	2.5	3.0
	Stainless steel ball	2.5	3.0	3.0	3.5	3.5	3.5	4.0	4.0
Alarm mode		The conveyor belt stops automatically when the sound and light alarm is sounded. When the automatic rejection structure is selected, the conveyor belt stops automatically.							
Machine materials		304 stainless steel							
Belt speed		27m/min							
Applicable environment		Temperature: 18-50°C, Humidity: 30-90%							
Body size		1400x750x1100mm							
Machine weight		About 200KG							

Note: The detection sensitivity is obtained by placing the test card in the middle of the conveyor belt and passing it through the detection channel. The actual detection sensitivity may vary depending on the characteristics of the product being tested or the working environment. The actual detection sensitivity should be taken as the standard.

# ▶ Metal Detector for Bulk Materials



## PRODUCT ADVANTAGES

- ✓ 1) Detection Material: Bulk materials (powder, granules, rhomboid shapes, etc.) should be dry and have good flowability.
- ✓ 2) Feeding Methods: hopper discharge, lifting feed, pipeline discharge, manual unloading.
- ✓ 3) Flip-plate rejection: The system performs rapid rejection, reducing material loss and not interfering with normal production processes.
- ✓ 4) The detection coil is made of stainless steel with a completely sealed internal structure, cast in one piece for permanent solidification.
- ✓ 5) Compact structure, easy to integrate, and easy to install.
- ✓ 6) Cleanroom design for easy cleaning, suitable for industries with high hygiene standards such as pharmaceuticals and food.
- ✓ 7) Complies with IFS and HACCP standards.



**DETECTION  
RANGE**

Used for detecting and separating magnetic and non-magnetic metallic impurities (screen wire, metal shavings, welding slag, screws, etc.) from freely falling bulk materials. Applicable to industries with high hygiene standards, such as food (milk powder, additives), pharmaceuticals (pharmaceutical intermediates), and chemicals, to avoid material contamination caused by metallic foreign impurities and to minimize contamination.

## PRODUCT TECHNICAL PARAMETERS

Product model	HC-700
Feeding method	Free-fall detection of raw materials
Temperature Environment	-8 to 80 degrees
Machine shell	SUS304
Detect material temperature	≤80 degrees
Part in contact with raw materials	Nylon, stainless steel, aluminum
Compressed air	3~6bar, Φ8mm
Total power	10W
Power cord	3m
Gas consumption	0.4 liters per separation action
Detection accuracy	The volume of the metal particles is 0.4mm in diameter and can be adjusted according to actual conditions.
Body Metal Separator Dimensions (Except racks and hoppers)	323*245*363 (mm)
Reaction time	0.3 to 5s, the longer the time, the more waste will be discharged
Processing volume	700-800kg/hr

Note: The detection sensitivity is obtained by placing the test card in the middle of the conveyor belt and passing it through the detection channel. The actual detection sensitivity may vary depending on the characteristics of the product being tested or the working environment. The actual detection sensitivity should be taken as the standard.

# ▶ Checkweigher Metal Detector Combination

## Product Features

- ① It has automatic fault detection and prompt function at startup, which can effectively prevent invalid detection;
- ② Built-in report statistics, reports can be generated in EXCEL format, and USB flash drive can be inserted to export data in real time;
- ③ The system is highly integrated, integrating metal and weight detection, effectively saving space and simplifying production lines;
- ④ It can achieve efficient automation, automatically detect, classify and remove unqualified products;
- ⑤ The system has functions such as danger notification, emergency stop button and protective device.



## Product technical parameters

Product model	SCM-4530L2	Storage Formula	100 types
Display division	0.1g	Belt Speed	5-28 m/minute
Inspection weight range	1-2000g	Power Supply	AC220V±10%
Weight checking accuracy	±0.3-1g	Shell Material	Stainless steel 304
Size of goden inspection	H 120mm*W 300mm	Data Transmission	USB data export
Suitable product size	L≤350mm; W≤300mm; H≤100mm	Size Of Inspection Section	L 450mm*W 230mm
Elimination method	Push rod type、sliding type optional		
Detection method	Electromagnetic induction/digital weighing sensor		
Sensitivity of metal detection empty machine	Fe:0.6-1.2mm、Not Fe:0.8-1.5mm、Sus:1.2-2.0mm		

Note \* The maximum speed and precision of weight checking vary according to the actual products and installation environment.  
Type selection should pay attention to the movement direction of the product on the belt line. For transparent or translucent products, please contact us.

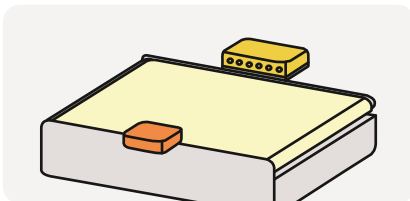
# ▶ Sorting And Rejection Device

## PRODUCT ADVANTAGES

- ✔ Driven by pneumatic or electric cylinders, multiple sorting methods are available to suit a variety of products.
- ✔ High precision and fast rejection speed improve product pass rate.
- ✔ Reinforced stainless steel frame with high waterproof rating.
- ✔ All contact parts are made of food-grade materials to ensure product contamination.
- ✔ Suitable for various automated production lines and logistics conveying systems.
- ✔ Can directly replace manual sorting, improving production efficiency and reliability.

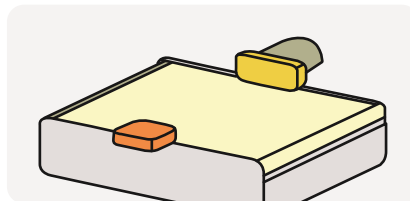
When used in conjunction with an inspection/checkweighing system, the inspection system provides alarm signals to control the sorting machine to remove defective products from the conveyor line, preventing them from flowing into the next production stage.

### Air Blow Rejection



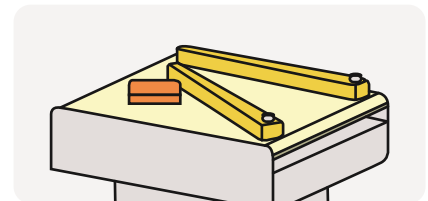
Suitable for products that are small in size, light in weight, and have a high production line speed.

### Push Rod Rejection



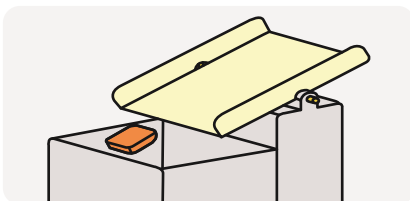
Applicable to most products, but not to sheet and liquid products.

### Push Rejection



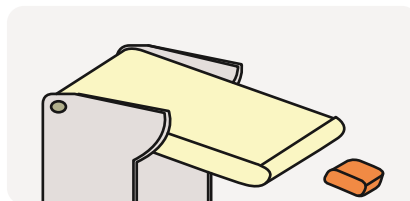
Applicable to most products, but not to sheet and liquid products.

### Flip-type rejection



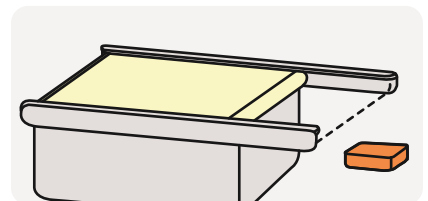
Defective products can be removed using a flip-over mechanism, suitable for thin sheets and small-sized products.

### Drop rejection



Defective products can also be removed using a conveyor belt system, suitable for thin sheets and small-packaged liquids.

### Telescopic rejection



Defective products can be removed using a telescopic and extending conveyor belt, suitable for fragile foods and products whose appearance needs to be protected during the removal process.