Conveyor Belt Metal Detector

The first DSP metal detector with Intellectual Property Rights in China

Suitable for metal contaminants detection in various industries like: Aquatic Products, Meat & Poultry, Salted Products, Pastry, Nuts, Vegetables, Chemical Raw Materials, Pharmacy, Cosmetics, Toys.

Metal Detector IMD-I Series

Detecting all metal contaminants in packaged and non−packaged food, including ferrous metal(Fe), non−ferrous metals(Copper, Aluminum etc.) and Stainless Steel.

Test Samples

Stable and high sensitivity

- Mature phase adjustment technology, avoiding shortcomings like no phase of LC analog circuit, low stability, without products suppression function and machine aging caused by time and temperature.

Auto−setting function

- Fast learn product character automatically and finish Auto− setting process.

User friendly function

- Automatic rewind function, dispense with handling large products.
- 52 products can be restored in database.
- LCD, Chinese−English menu, easy operation.

Dust and water proof, easy to be cleaned

Metal Detectors IMD-II Series

Based on IMD−I series, IMD−II series increase the functions of phase tracking, product tracking, auto−balanced calibration, and the craft of stainless steel mirror surface processing etc, which has improved sensitivity and stability greatly.

On−line Detection

New Function

- Phase tracking function, which can maintain the stable high−sensitivity detection ability.
- Product tracking function, which can do adjustment and compensation according to the changes of the product effect automatically.
- Auto−balanced calibration function, which can ensure the service life of the machine.
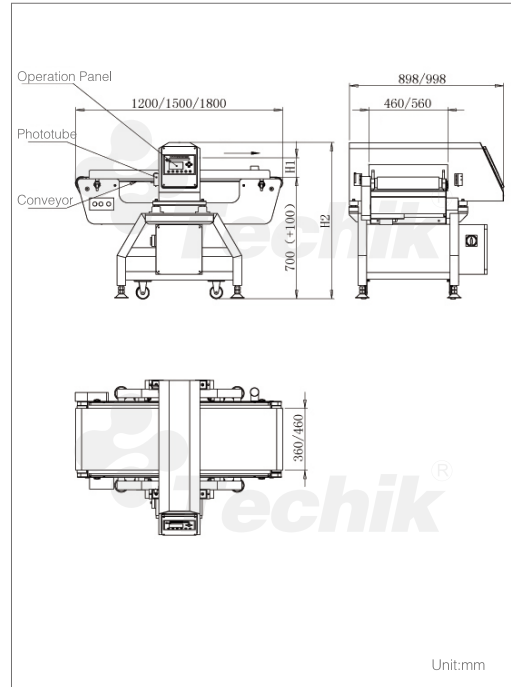
Hardware Structure Optimization

- Applying high functional FPGA plan with single chip machine.

User Friendly Function

- Stainless steel mirror surface, easy design.
- Above 100 products can be restored in product database.
- USB and Ethernet interfaces are available.

IP66 Dust and Water Proof

Operation Panel

Phototube

Conveyor

1200/1500/1800

898/998

460/560

H1

700 (+100)

H2

360/460

Unit:mm

Model	IMD-I		IMD-II	
Specifications	4008, 4012 4015,4018	5020,5025	4008,4012 4015,4018	5020,5025
Detection Width	400mm	500mm	400mm	500mm
Detection Height	80mm,120mm 150mm,180mm	200mm 250mm	80mm,120mm 150mm,180mm	200mm 250mm
Sensitivity — Fe	Φ0.5mm,Φ0.6mm Φ0.7mm,Φ0.8mm	Φ1.0mm Φ1.2mm	Φ0.5mm,Φ0.6mm Φ0.7mm,Φ0.8mm	Φ1.0mm Φ1.2mm
Sensitivity — SUS304	Φ1.0mm,Φ1.2mm Φ1.5mm,Φ2.0mm	Φ2.0mm Φ2.5mm	Φ0.8mm,Φ1.0mm Φ1.2mm,Φ1.5mm	Φ1.5mm Φ2.0mm
Belt Width	360mm	460mm	360mm	460mm
Loading Capacity	5kg~10kg	20kg~100kg	5kg~10kg	20kg~100kg
Display Mode	LCD Liquid Crystal (FDM touch screen is optional)			
Operation Mode	Button Input (touch input is optional)			
Product Storage Quantity	52 kinds			
Packing Form	Standard plastic or cardboard, metal film (aluminum) and bulk			
Conveyor Belt	Food Grade PVC (PU and Chain Conveyor are optional)			
Belt Speed	Fixed 25m/min (Variable speed is optional)			
Alarm	Alarm and belt stops (Alarm lamp and rejecter are optional)			
Power Supply	AC220V (Optional)			
Main Material	SUS304			

Note:

1 The technical parameter above namely is the result of sensitivity by detecting only the test sample on the belt. The concrete sensitivity would be affected according to the products being detected, working condition and also the different positions the metal mixed with.

2 Requirements for different sizes by customers can be fulfilled.

Gravity Fall Metal Detector

The first digital gravity fall metal detector in China, suitable for the Powder, Granule or other forms of products.

Metal Detector IMD-I-P Series

- Compact design, small occupied space.
- Rapid rejecting mechanism, to reduce the waste of the materials.
- In line with the GMP requirements, easy to install and to clean.
- Circuit design is more stable than traditional analog machine and also a higher sensitivity.
- Special design of the mechanical structure, to effectively avoid the external interference like vibration, noise, product effect, etc.
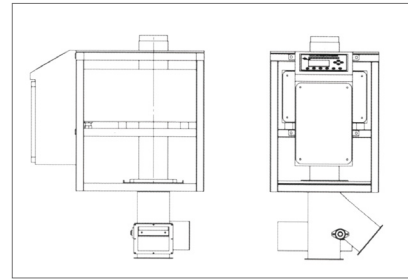
Model	IMD-I-P						
Detection Diameter[mm]	Detection Capacity t/h[2]	Alarm Mode	Pressure Requirements	Power Supply	Main Material	Sensitivity[1] Φd [mm]	
						Fe	SUS
75	3	Automatic Flap Rejecter	0.5Mpa≥	AC220V (Optional)	Stainless Steel (SUS304)	0.5	1.2
100	5					0.7	1.5
150	10					0.8	1.5

Note:
1 The technical parameter above namely is the result of sensitivity by detecting only the test sample on the belt. The sensitivity would be affected according to the products being detected, working condition and also the different positions the metal mixed with.
2 Detecting capacity per hour is related with product weight, the value of the table is according to the density of water (1000kg /m3).
3 Requirements for different sizes by customers can be fulfilled.

Metal Detector for Sauce

High stability and sensitivity, suitable for the Pump Pressure Fluid and Semi–fluid Product, Sauce, Liquid etc.

Metal Detector IMD-I-L Series

- Automatic product identification technology, powerful ability to suppress product effect.
- Easy to be integrated in existing sealed pipe system.
- Compact design, small occupied pipe length.
- Teflon food grade inner tube, high temperature and pressure resistance.
- Fast and accurate rejection valve, not only suitable for the high speed fluid, but also for slow viscous products, less material loss.
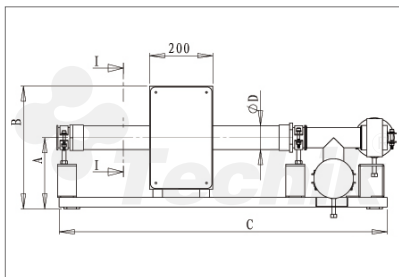
Model	IMD-I-L						
Detection Diameter[mm]	Alarm Mode	Pressure Requirements	Power Supply	Main Material	Inner Pipe Material	Sensitivity[1] Φd [mm]	
						Fe	SUS
50	Automatic Valve Rejecter	0.5Mpa≥	AC220V (Optional)	Stainless Steel (SUS304)	Food Grade Teflon Tube	0.5	1.2
63						0.6	1.5
80						0.8	2.0

Note:
1 The technical parameter above namely is the result of sensitivity by detecting only the test sample on the belt. The sensitivity would be affected according to the products being detected, working condition and also the different positions the metal mixed with.
2 Detection volume per hour is related with product weight and speed.
3 Requirements for different sizes by customers can be fulfilled.
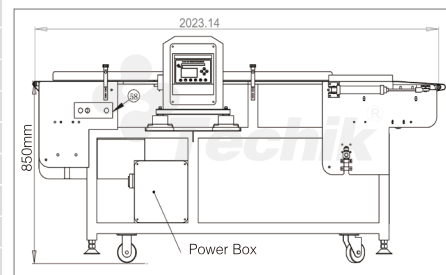
Metal Detector for Biscuits

Professional metal detection in bakery, special design for the concrete biscuit production line, high sensitivity and stability detection of Ferrous metal(Fe), Non–Ferrous metals(Copper, Aluminum) and Stainless Steel.

Metal Detector IMD-I-B Series

- Seamless connection for docking with the various types of production lines .
- Unique design of pneumatic retracting band type rejecter, parallel reject ing to prevent the products from being disordered.
- High temperature resistance.
- Simple to disassemble, easy to clean .

Model	IMD-I-B	
Specifications	60、 80、 100、 120	
Detection Width	600mm、 800mm、1000mm、1200mm	
Detection Height	50~80mm	200mm
Sensitivity — Fe	Φ0.8mm	Φ1.2mm
Sensitivity — SUS304	Φ1.5mm	Φ2.0mm
Belt Width	560mm、760mm、960mm、1160mm	
Conveyor Belt	Food Grade PVC(PU and Chain Conveyor optional)	
Belt Speed	Fixed 15m/min（Variable speed is optional）	
Rejecter	Pneumatic Retracting Band Type	
Power Supply	AC220V（Optional）	
Main Material	SUS304	

Note:
1 The technical parameter above namely is the result of sensitivity by detecting only the test sample on the belt. The sensitivity would be affected according to the products being detected, working condition and also the different positions the metal mixed with.
2 Requirements for different sizes by customers can be fulfilled.

Metal Detector for Medicine

Suitable for being installed after some pharmaceutical equipments like the tablet press machine, the capsule filling machine and the sieve machine. High sensitivity and stability detection of Ferrous metal (Fe),Non–Ferrous metals (Copper, Aluminum) and Stainless Steel.

Metal Detector IMD-I-M Series

- High frequency running mode, greatly enhance the detection sensitivity.
- Accurate and efficient rejecter, less material loss.
- In line with pharmaceutical standards and regulations, in accordance with the GMP standard.
- Touch–screen displays, easy to set up and operate.
- Adjustable height and angle of the device, easy to be moved casters.

Model	IMD-I-M		
Detection Width	70mm	100mm	150mm
Detection Height	20mm	25mm	35mm
Sensitivity — Fe	≥Φ0.6mm		
Sensitivity — SUS304	≥Φ0.8mm		
Display Mode	TFT Touch Screen		
Operation Mode	Touch Input		
Product Storage Quantity	99kinds		
Channel Material	Food Grade Plexiglass		
Rejecter	Automatically Rejected		
Power Supply	AC220V (Optional)		
Pressure Requirements	0.5Mpa ≥		
Main Material	SUS304		

Note:
1 The technical parameter above namely is the result of sensitivity by detecting only the test sample on the belt. The sensitivity would be affected according to the products being detected, working condition and also the different positions the metal mixed with.
2 Requirements for different sizes by customers can be fulfilled.