



## *SG-M150 Metal Detector Food Industry*



The metal detector food industry relies heavily on advanced technology to ensure product safety and compliance with stringent regulatory standards. Among the essential equipment in this sector are metal detectors for food processing, which play a vital role in detecting metal contaminants in food products.

The performance of a metal detector for food is paramount in maintaining consumer safety and brand reputation. These machines are equipped with highly sensitive sensors capable of detecting even tiny traces of metal contaminants, such as ferrous, non-ferrous, and stainless-steel particles, ensuring that contaminated products are promptly identified and removed from the production line.

In the realm of metal detector machine for food industry, performance is not solely about accuracy but also speed and efficiency. Modern food metal detector machine are designed to operate seamlessly within high-speed production environments, inspecting products as they move along the processing line without causing delays or interruptions.

Additionally, metal detector machine food should be versatile enough to accommodate various types of food products, packaging materials, and production environments. Whether it's detecting metal contaminants in bulk products, packaged goods, or liquids, these machines must offer flexibility and adaptability to meet the diverse needs of food manufacturers.

Advanced features further enhance the performance of metal detector machine for the food industry. Automatic rejection systems swiftly remove contaminated products from the production line, preventing them from reaching consumers. Meanwhile, data logging capabilities enable

detailed record-keeping for traceability and quality assurance purposes, ensuring compliance with regulatory requirements.

Furthermore, metal detector machine for food often come equipped with sophisticated software and user-friendly interfaces, allowing operators to monitor performance, adjust settings, and generate reports easily. This enhances operational efficiency and facilitates quick decision-making in response to detected contaminants or production anomalies.

In summary, the performance of metal detector machine for the food industry is critical for ensuring product safety, regulatory compliance, and operational efficiency. By investing in high-quality equipment and leveraging advanced technologies, food manufacturers can uphold the highest standards of quality and protect consumer health and trust.

### **Applications:**

1. Used on various automated assembly lines and logistics delivery systems to identify metal foreign matter (such as iron, stainless steel, aluminum, etc.) mixed in the production process of food, medicine, cosmetics, textiles, etc., even if fine metal is embedded in the product. Can be detected and identified.
2. In addition, it can directly replace manual inspection to improve production efficiency and product consistency and reliability.

### **Features:**

1. It has the function of automatically identifying product characteristics, 100 product information storage functions, automatic phase tracking function, and signal processing is automatically calculated by the digital chip, which can quickly and automatically learn to obtain the best detection phase.
2. Using advanced digital signal processing technology, it has the function of automatic learning of product effects. Products containing sugar, salt, and meat will produce metal-like signals to the metal detector. This effect will affect the detection effect. This function reduces the product effect. , to achieve the best results.
3. Digital sensitivity control mode and a variety of manual setting functions; a variety of specifications are available to adapt to different material detection sensitivity requirements.
4. Designed using European and American safety standards, the whole machine design meets the requirements of food machinery and is suitable for connection to assembly line inspection operations.
5. The whole machine frame is made of 304 stainless steel laser cutting and welding technology and wire drawing process.
6. High-speed digital signal processing devices and intelligent algorithms improve detection accuracy and stability.
7. Special design of the conveyor belt to avoid deviation of the conveyor belt
8. The belt adopts food-grade PU belt, which has passed FDA food-grade certification, which greatly improves the belt's resistance to pollution and dirt.
9. The probe of the metal detector is filled with epoxy resin and porcelain balls to ensure the stability and service life of the equipment.
10. The simple detachable rack is convenient for users to clean.

## Technical parameter

Model	SG-M150
Detection sensitivity	When the machine is empty: Fe $\geq\phi$ 0.8mm, Non-Fe $\geq\phi$ 1.2mm, Sus304 $\geq\phi$ 1.5mm
Effective detection hole width	150mm
Effective detection hole height	200mm
Conveying capacity	5kg/time
Maximum speed of conveyor belt	30m/min
Transmission direction	left to right (facing the screen)
Conveyor belt height	750 $\pm$ 50mm (can be customized)
Alarm mode	Alarm shutdown, buzzer alarm or rejection mechanism optional
Conveyor belt material	Food grade PU belt
Protection grade	IP65
Display and operation mode	LED LCD flat button input
Power requirements	AC220V 50-60Hz
Main body material	All stainless steel (SUS304)
Note	The metal that can be detected depends on the type of the object being inspected (size, shape, conductivity, etc.), the type of metal (material, shape, etc.) and the installation environment. It is subject to actual testing.