FOTON-X

FOOD X-RAY QUALITY CONTROL DEVICE

High Precision X-Ray Technology in the Food Industry

FOTON-X 4525F is a dedicated inspection device for food manufacturers, equipped with an advanced foreign object detection system. It distinguishes defects and foreign materials that are difficult to detect with traditional methods, ensuring maximum safety and effective quality control on the production line.

The device detects a variety of foreign objects such as stainless steel, metal, glass, plastic, stone, bone, and rubber with high precision. The integrated automatic detection, warning, and rejection system ensures defective products are automatically removed from the production line, improving product quality.

The FOTON-X 4525F is designed to work seamlessly with fresh or frozen products, in both packaged and unpackaged formats, and on single or multi-lane production lines. It can be easily integrated into production processes and improves production line performance with high efficiency.

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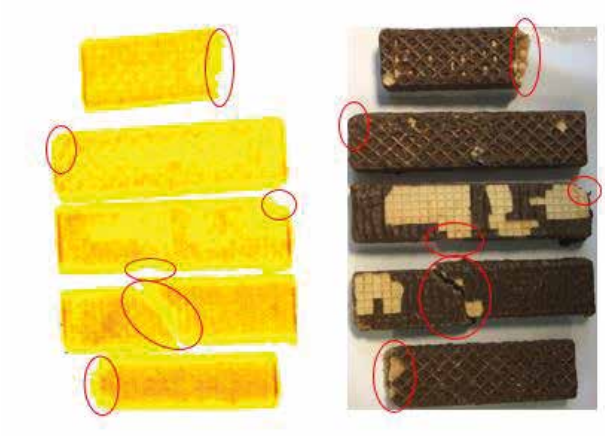
SYSTEM FEATURES

Foreign Matter Detection	Metal, stone, plastic, glass, bone, etc.
Operating Temperature	0°C / +40°C
Conveyor Belt Speed	0.2 m/s (1 m/s optional)
Imaging Technology	X-Ray
Rejection System	According to need
Foreign Matter Classification	Yes
Single/Dual Energy	Dual Energy
Energy Consumption	1.5 kW

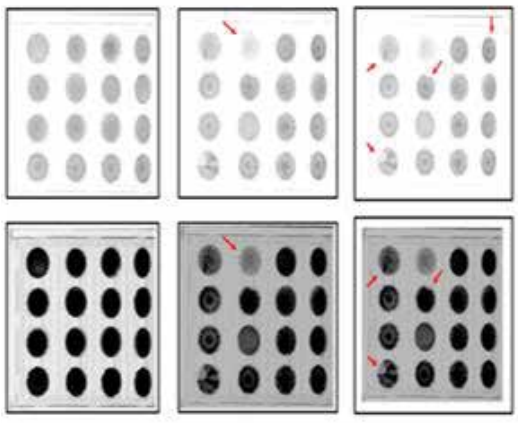
- Versatile inspection for fresh or frozen packaged or unpackaged food products, even on multi-lane production lines
- High precision for foreign object detection including stainless steel, metal, glass, plastic, stone, bone, and rubber
- Automatic foreign object detection, warning, and rejection system
- Compliance with food standards

CASE STUDIES

Our Food X-Ray Inspection System is also used to reduce waste in products. You can examine images of defective or missing products below.



Detection of defects and fractures in the front and back layers of chocolate wafer product



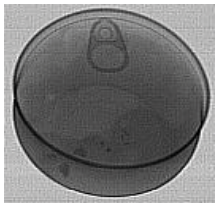
Detection of obsolete product in packaged chocolate

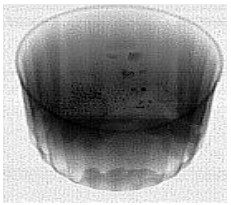
Web Site

Hacettepe Teknokent Beytepe Kampüsü 5.AR-GE Binası
No:16/06800 Beytepe, Çankaya-ANKARA / TÜRKİYE
+90 312 299 0000 / +90 534 225 6368
www.msspektral.com

CASE STUDIES

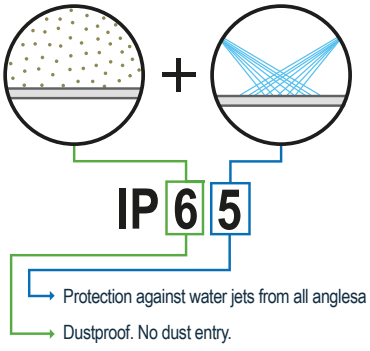
Below are images of foreign objects detected by our Food X-Ray Inspection System across various food products.





COMPARISON OF METAL DETECTOR AND FOOD X-RAY INSPECTION SYSTEM

Metal Detector	Food X-Ray Systems
High moisture content or wetness of the food product affects the success of foreign matter detection	Foreign material detection performance is not affected by the high moisture content of the food product or the wetness of the product.
Shape uniformity (sphere) is important.	Shape or smoothness is not important.
It is possible to detect copper, steel, iron	It is possible to detect copper, steel, iron.
Detection sensitivity is very low in metals such as aluminum, nickel, chromium, etc. Conformality affects success	It easily detects metals such as aluminum, nickel, chrome, etc. even in small sizes.
Steel detection sensitivity is low.	Steel detection sensitivity is high.
It cannot detect foreign materials such as stone, glass, plastic, bone.	It can easily detect foreign materials such as stone, glass, plastic, bone.



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