

# Food and Pharmaceutical Industry Contamination Inspection Solution



- X-Ray Inspection Solution
- Metal Detection
- Checkweigher



Innovation



High Efficiency



Cost Save



Good Service

**TTPACK TRADING & TECHNICAL SERVICES COMPANY LIMITED**

Sales: 0869 833 002    Hotline: 0334 487184    Email: [marketing@ttpack.com.vn](mailto:marketing@ttpack.com.vn)

# About TTPACK



Conducting the philosophy of developed and manufactured in Vietnam with world quality, TTPACK strictly adhere to high indicators and quality to help customers create more value, by providing international advanced intelligent detection technology and system solutions.

- National New Technology Enterprise.
- Focus on high-resolution intelligent identification and detection technology.
- Transformation of advanced technological achievements of Vietnam Institute of Atomic Energy.
- The TTPACK core team has nearly 20 years of experience in the field of X-ray inspection.
- The company owns dozens of intellectual property rights.
- High-tech Enterprise.

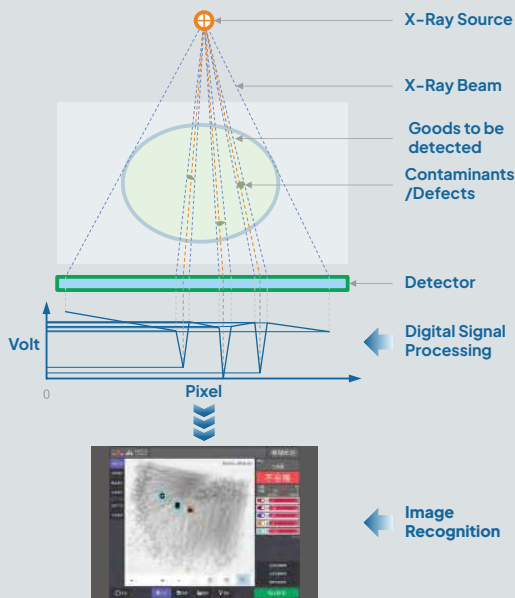
# X-Ray Inspection Technology



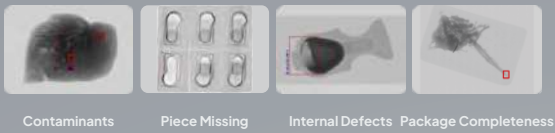
X-Ray systems are widely used in food and pharmaceutical industries to ensure product safety and quality. Using X-Ray systems, food contaminants, shape and composition of goods, packaging completeness, etc. will be detected and rejected, whether the goods are packaged, in bulk state, in bottles or in cans. Food contaminants such as metal, glass, stone, bone, hard plastic, resin, shell, etc. can be detected, which are not affected by temperature, humidity, salt, or aluminum foil packaging.



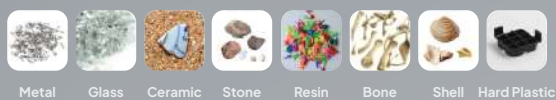
## Principle of X-Ray System



Detection of packaging, bulk goods, bottles, cans and other forms of food or pharmaceutical



## Multi contaminants can be detected



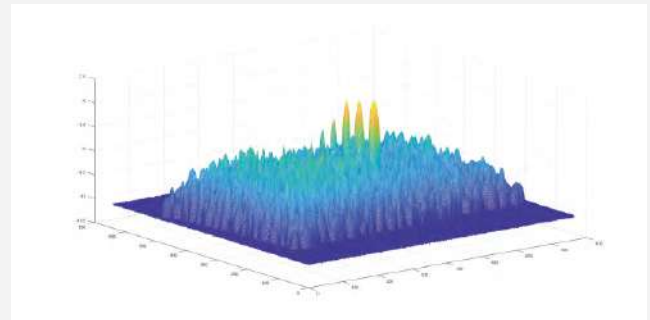
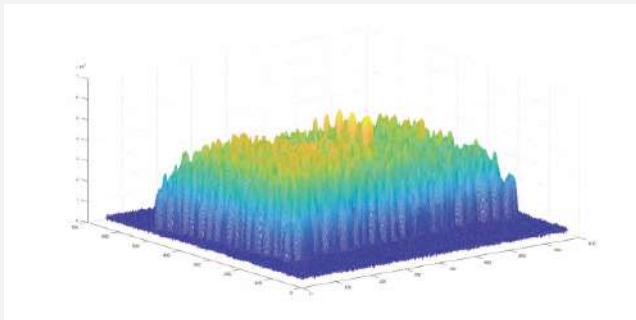
- ① Highly visible lamp stock
- ② 4G Antenna for remote support
- ③ Three X-Ray condition indicator light
- ④ Lock key
- ⑤ Radiation shield curtains
- ⑥ Conveyor
- ⑦ Safety Interlock Design





**TTPACK has developed a highly sophisticated detection algorithm platform, to meet the HIGH-RESOLUTION detection requirements of the food and pharmaceutical industry.**

The system is based on neural network. Using dynamic features recognition method, it adopts the best algorithm parameters automatically to detect really small contaminants in goods .



### Safety

- Transformation of technical achievements of China Atomic Energy Institute.
- Three-dimensional simulation verification of X-ray space radiation leakage.
- Integrated multiple optical motor mechanical safety interlock.

### Intelligent

- Based on AI neural network model.
- Highly sophisticated algorithm platform.
- Fully automatic learning process, user-friendly
- Preset standard AI algorithm, complete training in 15 seconds.
- Customized AI algorithm can be selected to improve detection accuracy.
- Wireless networking function, support remote technical support.

### Stability

- Server - level Linux system, natural virus immunity.
- Fully enclosed design for food and drug environments.
- Double layer thermal cycle and anti-condensation module.
- High reliable design of industrial grade component machine ensures long-term stable operation.



# Packed Inspection | Standard



TTPACK X-ray standard contaminants detection system includes a variety of models, which can achieve accurate and reliable contaminants detection for packaging products with different specifications, such as, medium and so on. The system is in products, medicines and chemicals. It has been applied in many different fields, and the detection result will not be affected by temperature, humidity, salt or aluminum foil packaging, and can effectively detect packaging products. Metal, glass, ceramics, hard rubber, resin, head, shell, and other foreign bodies, to help enterprises effectively improve the stability of production quality.



- VXD-C2412-S
- VXD-C4016-S
- VXD-C5025-S
- VXD-C6030-S
- VXD-C7040-S

## Advantages

- Based on the advanced algorithm platform, the precision detection can be realized.
- The standard AI algorithm is simple and intelligent, requiring any experience, and can quickly add new products according to the guided learning
- Customized AI algorithms are suitable for special products, and standard algorithms and customized algorithms can be tested together.
- Step up the detection accuracy.
- According to the product form, a variety of elimination methods can be selected to accurately eliminate unqualified products.
- Wifi, 4G cable connection, remote fast technology, dynamic push equipment failure.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- The conveying system and the main machine can be separated, and can be directly washed and cleaned.
- It is superior to the international radiation safety standards and specifications, and has the function of safety interlock monitoring.

## Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

## Specification

Model	VXD-C2412-S	VXD-C4016-S	VXD-C5025-S	VXD-C6030-S	VXD-C7040-S
X-Ray Source	Max 150W	Max 210W/350W	Max 210W/350W	Max 350W/480W	Max 350W/480W
Sensitivity	SUS Ball: 0.3mm SUS WWire: 0.2*2mm Glass/Ceramic: 1.0mm	SUS Ball: 0.3mm SUS WWire: 0.2*2mm Glass/Ceramic: 1.0mm	SUS Ball: 0.3mm SUS WWire: 0.2*2mm Glass/Ceramic: 1.0mm	SUS Ball: 0.3mm SUS WWire: 0.2*2mm Glass/Ceramic: 1.0mm	SUS Ball: 0.5mm SUS WWire: 0.4*2mm Glass/Ceramic: 1.5mm
OS	Linux				
HMI	17-inch touch screen				
Conveyor Speed	5~60 m/ min				
Product Weight	Max 5kg	Max 10kg	Max 20kg	Max 30kg	Max 40kg
Product Dimension	Max Width 240mm Max Height 120mm	Max Width 400mm Max Height 160mm	Max Width 500mm Max Height 250mm	Max Width 600mm Max Height 300mm	Max Width 700mm Max Height 400mm
Power	AC220V, 50~60Hz				
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation				
IP Grade	IP66 for Conveyor, IP54 for other parts				
Machine Material	304 SUS, Mirror/Sandblasted				

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard



## Application

- Snacks
- Baked and Steamed Food
- Meat
- Frozen Food
- Dairy Food
- Sauces and condiments



Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard

# Packed Inspection | TDI



Utilizing multi-line pixel, high-resolution Time Delay Integration (TDI) imaging technology, it satisfies the demanding requirements for higher precision inspections or high-speed production lines while maintaining high accuracy in detection.



VXD-C4016-T280

## Advantages

- Equipped with an 8-line pixel, 0.28mm high-resolution TDI (Time Delay Integration) detector, this system meets the stringent demands for higher precision inspections under conditions of either heightened detection accuracy or elevated production line speeds.
- Based on TTPACK Wise-Eye algorithm platform, it enables users to quickly add new products without any prior experience, following an automated learning guide, thereby achieving remarkable high-precision detection performance.
- Employing Artificial Intelligence (AI) algorithms, this equipment has the capability to detect low-density and extremely minute foreign objects by analyzing a variety of characteristics present in the contaminants.
- Wifi, 4G cable connection, remote fast technology, dynamic push equipment failure.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- The conveying system and the main machine can be separated, and can be directly washed and cleaned.
- It is superior to the international radiation safety standards and specifications, and has the function of safety interlock monitoring.

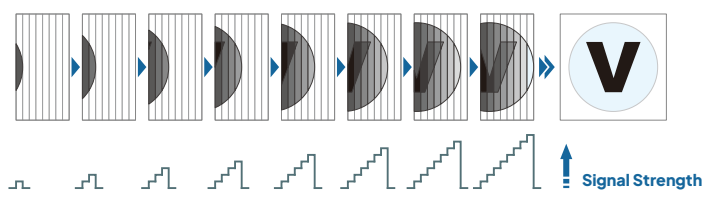
## To Detect

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

## Specification

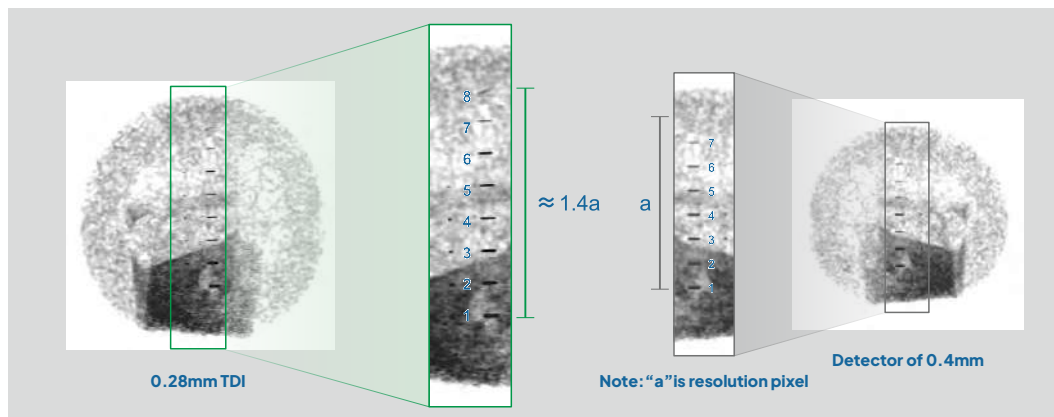
Model	VXD-C4016-T280
Detector Resolution	0.28mm
X-Ray Source	Max 150W/210W/350W
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 10kg
Product Dimension	Max Width 400mm, Max Height 160mm
Power	AC220V, 50-60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

## TDI Sensor (Imaging Principle)



## Product to be detect

Under high-speed and low-power conditions, the TDI type can achieve higher precision detection.



# Packed Inspection | Basic



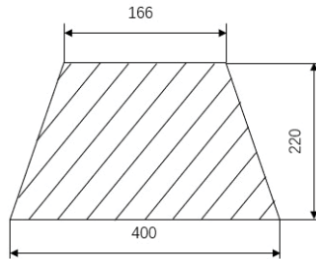
Detecting metals and non-metals contaminants, including metals, glass, ceramics, hard rubber, shelves, bones, stones etc.



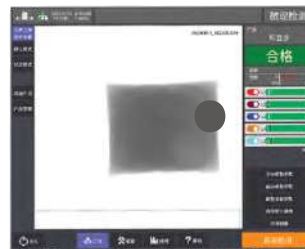
AJD-E4022-S

## Product Dimension

Height	Width
0	400
20	378
40	357
60	336
80	314
100	293
120	272
140	251
160	229
180	208
200	187
220	166

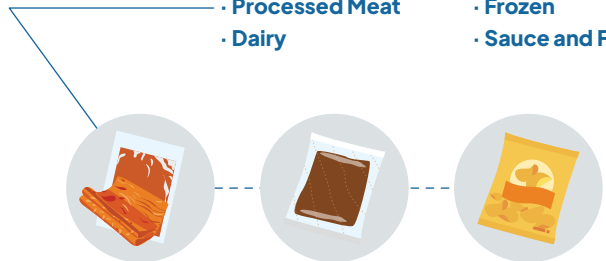


Unit mm



## Application

- Snacks
- Processed Meat
- Dairy
- Baked
- Frozen
- Sauce and Flavor



## Specification

Model	AJD-E4022-S
X-Ray Source	Max 150W
Sensitivity	SUS Ball: 0.6mm, SUS Wire: 0.5*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 10kg
Product Dimension	Max Width 400mm, Max Height 220mm
Power	AC220V, 50-60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS

Note: The size of the contaminants of the minimum detectable substance is closely related to the composition of the substance in the product, the packaging material, the thickness and other parameters. In the actual production environment, the actual product test results prevail. International standard test piece of ceramic glass is minimum 1.0mm, the actual glass and ceramic sensitivity accuracy will be better than this standard.

# Vision and X-Ray Inspection Combination



This food inspection equipment utilizes a technique that integrates visible light images with X-ray images to detect edge inclusion flaws in a variety of packaged goods, encompassing both single-unit and multi-unit conveyor passthrough inspection regimes.



VID-V1X1-C4016

## Application

- Employing multi-spectral technology, the equipment integrates visible light and X-Ray detection, ensuring precise sealing position identification.
- Regardless of the thickness, even the thinnest plastic pouches can be inspected as effortlessly as thicker aluminum foil pouches for their seals.
- Based on the advanced Wise-Eye algorithm platform, it delivers exceptional high-precision inspection capabilities.
- An integrated parallel deep learning mechanism allows for customizable appearance inspection functions.
- Equipped with 4G wireless network connectivity, it offers remote rapid technical support and automatically pushes notifications for equipment malfunctions.
- Powered by a server-grade Linux operating system, the equipment is immune to computer viruses and designed not to lose data in the event of unexpected power outages.
- It surpasses internationally accepted radiation safety standards and incorporates a safety interlock monitoring function.



## Application

Aluminum foil, aluminized film, and PE bag packaging for various food products



## To Detect

Packaging defects such as inclusion of product contents or oil leakage at the seal area, while inspecting for product contaminants.

## Specification

Model	VID-V1X1-C4016
X-Ray Source	Max 350W
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.2*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~50 m/ min
Product Weight	Max 2kg
Product Dimension	Max Width 400mm, Max Height 160mm
Power	AC220V, 50~60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.



## For Bulk Goods



Comprehensive detection of foreign bodies and defects before packaging of bulk materials can effectively detect a variety of foreign bodies such as metal, glass, ceramic, hard rubber, resin, bone, shell, stone, as well as product defects such as wormholes and debris, helping manufacturers to effectively improve the stability of production quality.



VXD-BL4016-S  
VXD-B6030-S  
VXD-BL6016-S  
VXD-B12030-D

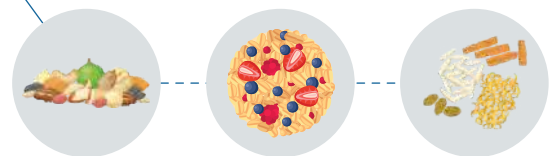
### Advantages

- Based on the advanced algorithm platform of Vixdetect, excellent high-precision detection can be achieved.
- Standard AI algorithm is simple and intelligent, with the automatic learning operators can add new products fast.
- Customized AI algorithm is suitable for special products. Standard algorithm and customized algorithm can detect together to further improve the detection accuracy.
- The main engine is integrated with 48-96 way array injection valve, which can accurately eliminate and reduce the good products out.
- 4G network wireless connection, remote and fast technical support.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- The conveying system and main machine can be split, can be washed directly, clean and sanitary.
- It is superior to the internationally accepted radiation safety standard and has the safety interlock monitoring function.



### Application

- Nuts
- Tea leaves
- Fruit and veges
- Herbs
- Multi-grain beans
- Tobacco leaves
- Spices



### Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

### Specification

Model	VXD-BL4016-S	VXD-BL4016-S	VXD-BL4016-S	VXD-BL4016-S
X-Ray Source	210W/350W			
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.2*2mm, Glass/Ceramic: 1.0mm			
OS	Linux			
HMI	17-inch touch screen			
Conveyor Speed	5~1100 m/ min			
Product Weight	Max 10kg			
Product Dimension	Max Width 400mm Max Height 160mm	Max Width 600mm Max Height 300mm	Max Width 600mm Max Height 160mm	Max Width 1200mm Max Height 230mm
Power	AC220V, 50-60Hz			
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation			
IP Grade	IP66 for Conveyor, IP54 for other parts			
Machine Material	304 SUS, Mirror/Sandblasted			

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

# X-Ray Inspection System



Comprehensive detection of foreign bodies for canned, boxed and bottled products transmitted upright can effectively detect and eliminate defective products containing metal, glass, ceramic, hard rubber, resin, bone, shell, stone and other foreign bodies.



VXD-D1623-S  
VXD-D1825-S

## Advantages

- Based on the advanced algorithm platform of Vixdetect, excellent high-precision detection can be achieved.
- Standard AI algorithm is simple and intelligent, without any experience, according to the wizard automatic learning can quickly add new products.
- Customized AI algorithm is suitable for special products. Standard algorithm and customized algorithm can detect in parallel to further improve the detection accuracy.
- The main engine is integrated with fast pneumatic push rod, and the high-speed production line can be accurately excluded.
- 4G network wireless connection, remote and fast technical support.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- Conveyor system adopts belt or chain plate structure, flexible adaptation to the field production line.
- It is superior to the internationally accepted radiation safety standard and has the safety interlock monitoring function.



## Application

- Packed goods delivered upright, Canned and boxed products



## Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

## Specification

Model	VXD-D1623-S	VXD-D1825-S
X-Ray Source	210W/350W	
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.2*2mm, Glass/Ceramic: 1.0mm	
OS	Linux	
HMI	17-inch touch screen	
Conveyor Speed	5~80 m/ min	
Product Weight	Max 10kg	
Product Dimension	Max Width 100mm, Max Height 240mm	Max Width 210mm, Max Height 310mm
Power	AC220V, 50~60Hz	
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation	
IP Grade	IP66 for Conveyor, IP54 for other parts	
Machine Material	304 SUS, Mirror/Sandblasted	

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

## For Goods in Bottle | Dual View



Comprehensive detection of foreign bodies for canned, boxed and bottled products transmitted upright can effectively detect and eliminate defective products containing metal, glass, ceramic, hard rubber, resin, bone, shell, stone and other foreign bodies. For high-demand products, dual view synchronous imaging technology is used to reduce blind areas and improve detection rate.



VXD-D2253-D

### Advantages

- Dual ray source and dual detection box synchronous imaging, eliminate detection blind areas, foreign bodies at the bottom of the bottle can also be detected and identified.
- Based on the advanced algorithm platform of Vixdetect, excellent high-precision detection can be achieved.
- Standard AI algorithm is simple and intelligent, with the wizard automatic learning operators can quickly add new products.
- Customized AI algorithm is suitable for special products. Standard algorithm and customized algorithm can detect together to further improve the detection accuracy.
- The main engine is integrated with fast pneumatic push rod, and the high-speed production line can be accurately excluded.
- 4G network wireless connection, remote and fast technical support.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- Conveyor system adopts chain plate structure, flexible adaptation to the field production line.
- It is superior to the internationally accepted radiation safety standard and has the safety interlock monitoring function.



### Application

- Packed goods delivered upright
- Canned and boxed products



### Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

### Specification

Model	VXD-D2253-D
X-Ray Source	350W/480W
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.1*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 10kg
Product Dimension	Max Width 180mm, Max Height 270mm
Power	AC220V, 50-60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

## For Baking Goods



In view of the product defects and quality problems that may occur in the automated production of mooncakes and other foods containing fillings, such as the wrong amount of egg yolk in double yellow mooncakes, Weexiao has developed an innovative X-ray detection system VXD-C4016-CBI, which can detect whether the products contain foreign bodies and detect the defects of the products themselves. Micro defect detection technology directly hit the industry pain points, help food production enterprises to ensure stable food quality.



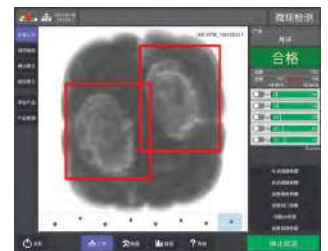
VXD-T4016-U03

### Advantages

- Multi - use of one machine, foreign body detection and product internal defect detection synchronization.
- Based on the advanced algorithm platform of Vixdetect, excellent high-precision detection can be achieved.
- Standard AI algorithm is simple and intelligent, without any experience, according to the wizard automatic learning can quickly add new products.
- Customized AI algorithm is suitable for special products. Standard algorithm and customized algorithm can detect in parallel to further improve the detection accuracy.
- Adopt the trapezoidal conveyor structure for baking products.
- 4G network wireless connection, remote and fast technical support.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- It is superior to the internationally accepted radiation safety standard and has the safety interlock monitoring function.

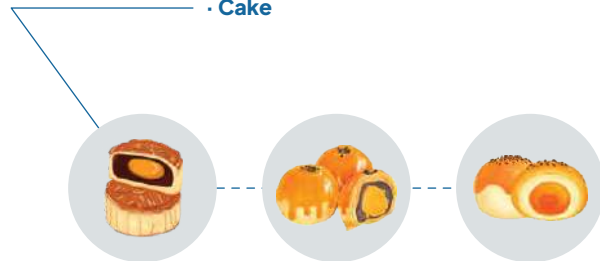
### Contaminants

In addition to the detection of foreign bodies in the product, can simultaneously detect the number of egg yolk product defects.



### Application

· Cake



### Specification

Model	VXD-T4016-U03
X-Ray Source	210W
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.2*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 10kg
Product Dimension	Max Width 400mm, Max Height 160mm
Power	AC220V, 50~60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

# Detect Needle in Pork



In the process of raising pigs, multiple injections of multiple vaccines are required, which may cause the needle to break in the pig because the pig resizes the injection. Broken needles may cause harm in the subsequent slaughter and processing of live pigs, or even into the hands of consumers and cause serious food safety problems.

To ensure that there are no broken needles left in the pork, the Micro-appearance Broken Pork Needle detection system can detect the whole pork, accurately identify broken needles from other bones and soft tissues, and remove the pork segment containing broken needles from the production line.



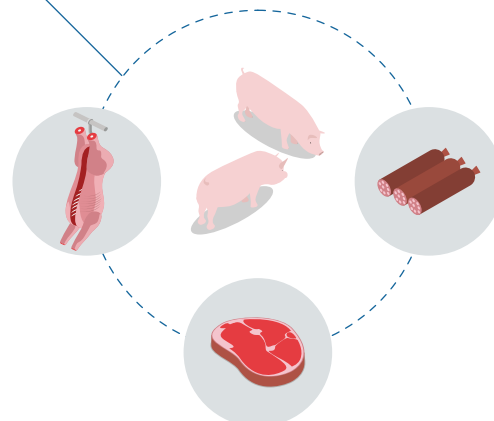
VXD-C6030-U05

## Advantages

- Pork body analysis algorithm based on AI technology can accurately identify broken needles and bones.
- Multi-purpose, conventional foreign bodies other than needles can also be detected.
- Simple and intelligent, without complex parameters, production line maintenance personnel can debug.
- 4G network wireless connection, remote and fast technical support, automatic push of equipment failure.
- Server-level Linux system, computer virus immunity, no data loss after abnormal power outage.
- The conveying system and the main machine can be split, washed directly and easy to maintain.
- High reliability industrial testing equipment, double-layer thermal cycle, can run 7\*24 hours.
- Better than the internationally accepted radiation safety standards and specifications, with safety interlock monitoring function.

## Application

- Pig slaughtering and processing industry
- Pork deep processing industry
- Application of hidden needles in detection of other meat products



## Specification

Model	VXD-C6030-U05
X-Ray Source	350W/480W
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.1*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 25kg
Product Dimension	Max Width 600mm, Max Height 300mm
Power	AC220V, 50~60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

# Customized Inspection



Standard algorithm and custom algorithm are parallel to realize synchronous detection of foreign bodies, product defects, and omissions, and efficiently meet customers' custom detection needs.



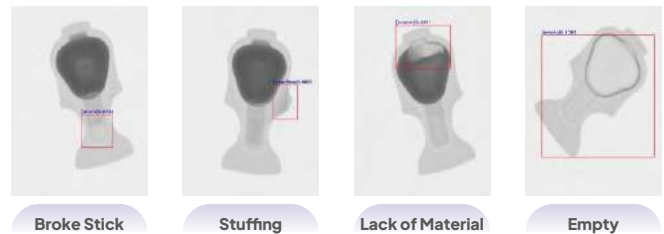
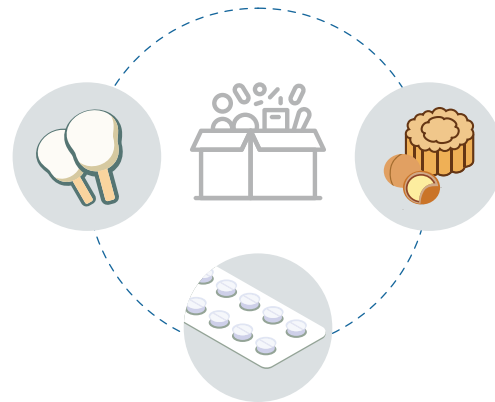
VXD-B4016-UXX

- Cheese Stick: stick missing, broken stick, cheese meat shortage, extrusion deformation and empty shell
- Nut detection: Detect wormholes and wizens in coffee beans, macadamia nuts, Pattan nuts, etc
- Tablet or needle crack detection: detection of cracks inside the tablet, needle cracks
- Detection of sand and tiny bones: detection of low-density foreign body sand in food such as pumpkin and plum, detection of tiny bones in pork processing products
- Parts defect: Can detect the missing parts and deformation inside the product packaging
- Other customized detection: Customized defect detection schemes based on customers' actual requirements

## Advantages

- Online detection, the dual-energy detection algorithm developed for chicken breast can effectively distinguish between chicken and bone ingredient.
- Multi-purpose with one machine, foreign body detection and internal defect detection are carried out simultaneously.
- High detection accuracy, based on Vixdetect patent algorithm platform, to achieve accurate positioning and identification.
- The main machine can be equipped with 48-96 array injection valve, which can accurately eliminate and reduce the good products out.
- 4G network wireless connection, remote and fast technical support.
- Simple and intelligent, the system is easy to maintain and debug.
- Server-level Linux system, computer virus immunity, no data loss after abnormal power outage.
- The conveying system and main machine can be detachable, and can be washed directly, clean and hygienic.

## Application



## Specification

Model	VXD-C4016-UXX
X-Ray Source	210W/350W
Sensitivity	SUS Ball: 0.3mm, SUS Wire: 0.1*2mm, Glass/Ceramic: 1.0mm
OS	Linux
HMI	17-inch touch screen
Conveyor Speed	5~60 m/ min
Product Weight	Max 10kg
Product Dimension	Max Width 400mm, Max Height 100mm
Power	AC220V, 50-60Hz
Environment	Working Temperature 0~45 °C, Relative Humidity 30~85% no condensation
IP Grade	IP66 for Conveyor, IP54 for other parts
Machine Material	304 SUS, Mirror/Sandblasted

Remarks: The most detectable foreign body ruler is closely related to the material composition, packaging material, thickness and other parameters in the product. In the actual production environment, please refer to the actual product test results. The international standard tests that the ceramic glass is 1.0mm at most, and the actual accuracy of empty glass ceramics will be better than this standard.

# X-Ray Inspection and Checkweigher Combination



The x-ray inspection and checkweigher combination is an integrated contaminants detection and weighing device designed to ensure product quality and compliance. It is capable of simultaneously detecting and weighing all types of contaminants in the product, effectively detecting any potential quality issues. This equipment is the most widely used inspection model and is stable and easy to maintain.



VXW-C4016-4050-1200G

## Advantages

- Based on the advanced algorithm platform, the precision detection can be realized.
- The standard AI algorithm is simple and intelligent, requiring any experience, and can quickly add new products according to the guided learning.
- Customized AI algorithms are suitable for special products, and standard algorithms and customized algorithms can be tested together
- Step up the detection accuracy.
- According to the product form, a variety of elimination methods can be selected to accurately eliminate unqualified products.
- Wifi, 4G cable connection, remote fast technology, dynamic push equipment failure.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- The mainframe integrates a high-precision weighing platform, and a single unit performs both X-ray and weighing inspection functions.
- It is superior to the international radiation safety standards and specifications, and has the function of safety interlock monitoring.

## Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

Weight detection

## Application

- Snack
- Meat
- Dairy Food
- Baked and Steamed Food
- Frozen Food
- Sauces and condiments



## Specification

Model	VXW-C4016-4050-1200G
Product Dimension	Max Width 400mm, Max Height 160mm
IP Grade	Complete machine Ip55, Detection channel Ip66, Built-in condensate pipe
Sensitivity	SUS Ball: $\varnothing$ 0.3mm, SUS Wire: $\varnothing$ 0.2 * 2 mm, Ceramic/Glass Ball: $\varnothing$ 0.8mm
Conveyor Speed	10-60m/min
Conveyor Height	800±50mm
Direction	From right to left
Products Weight	Max 1.2kg
Temperature/Humidity	Working Temperature-10~45°C, Relative Humidity 30~90% Built-in industrial air conditioner
Weighing Platform Size	500mm (Height) * 400mm (Width)
Highest Accuracy	±1g
X-Ray Source	350W
X-Ray Leakage	< 1 $\mu$ Sv/h
HMI	17-inch touch screen
OS	Linux
Detector size	0.4mm Multi-Row high sensitivity receiver
Software	X-Ray Inspection System
Radiation Protection	≤1 u Sv/h

# Movable Model



Inspection model that can be moved by hand push. Small size, stable performance and easy maintenance.



VXD-M4016-S

X-RAY Inspection System

Metal Detector

Check Weigher

## Advantages

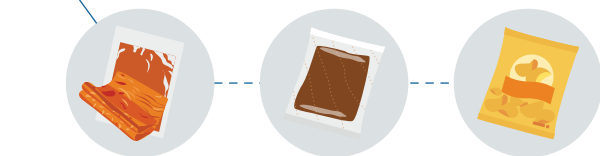
- Based on the advanced algorithm platform, the precision detection can be realized.
- The standard AI algorithm is simple and intelligent, requiring any experience, and can quickly add new products according to the guided learning.
- Customized AI algorithms are suitable for special products, and standard algorithms and customized algorithms can be tested together
- Step up the detection accuracy.
- According to the product form, a variety of elimination methods can be selected to accurately eliminate unqualified products.
- Wifi, 4G cable connection, remote fast technology, dynamic push equipment failure.
- Server-level Linux system, computer virus immunity, abnormal power failure without data loss.
- The conveying system and the main machine can be separated, and can be directly washed and cleaned.
- It is superior to the international radiation safety standards and specifications, and has the function of safety interlock monitoring.

## Contaminants

Metals, Glass, Ceramic, Hard Plastic, Resin, Bones, Shells, etc.

## Application

- Snack
- Meat
- Dairy Food
- Baked and Steamed Food
- Frozen Food
- Sauces and condiments



## Specification

Model	VXD-M4016-S
Product Dimension	Max Width 400mm, Max Height 160mm
IP Grade	Complete machine Ip55, Detection channel Ip66, Built-in condensate pipe
Sensitivity	SUS Ball: $\phi$ 0.3mm, SUS Wire: $\phi$ 0.2 * 2 mm, Ceramic/Glass Ball: $\phi$ 0.8mm
Conveyor Speed	10-60m/min
Conveyor Height	800±50mm
Direction	From right to left
Products Weight	Max 10kg
Temperature/Humidity	Working Temperature-10~45°C, Relative Humidity 30~90% Built-in industrial air conditioner
Weighing Platform Size	500mm (Height) * 400mm (Width)
Highest Accuracy	±1g
X-Ray Source	210W
X-Ray Leakage	< 1 $\mu$ Sv/h
HMI	17-inch touch screen
OS	Linux
Detector size	0.4mm Multi-Row high sensitivity receiver
Software	X-Ray Inspection System
Radiation Protection	≤1 u Sv/h



## ● Rejector

The sorting machine is used together with the food foreign matter detection system. The contaminants detection system provides an alarm signal to control the rejector to remove the defective products from the conveyor line and avoid flowing into the next production link.

Use cylinder or electric cylinder drive, a variety of sorting methods are optional, suitable for a variety of products.

High precision, eliminate fast, improve the qualified rate of products, reduce user complaints.

Reinforced stainless steel frame with high waterproof rating.

All contact parts are made of food grade materials to ensure that the product is not contaminated.

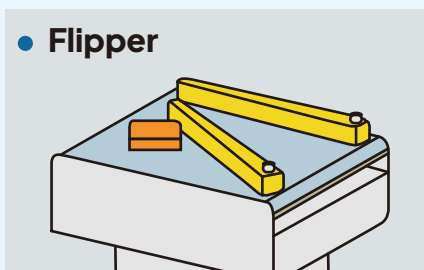
Used in all kinds of automatic assembly line and logistics conveying system.

Widely used in pharmaceutical, food and other industries online sorting.

It can directly replace manual sorting to improve production efficiency and reliability.

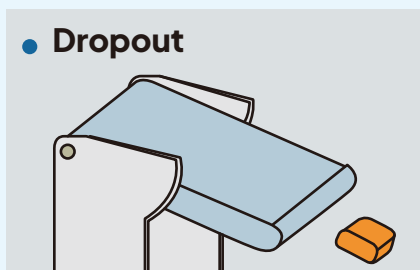
## ■ Type of Rejectors

### ● Flipper



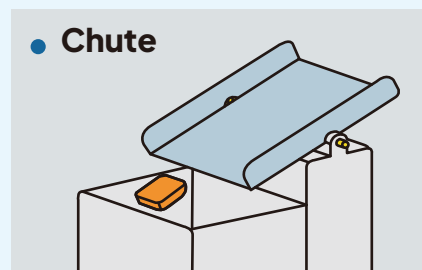
Use left and right swinging arm to sort the product under test, suitable for thicker products.

### ● Dropout



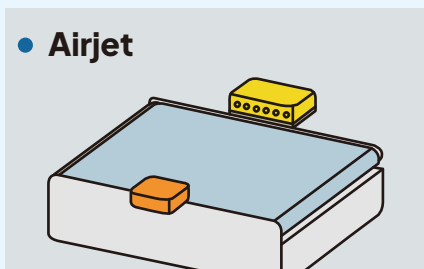
Use up and down swinging conveyor to sort the products under test, suitable for lighter products.

### ● Chute



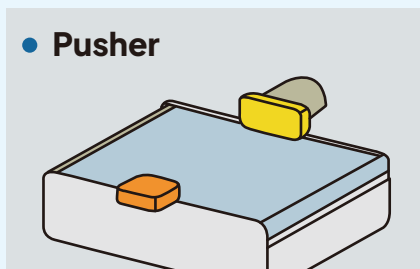
Use an up-and-down flip plate to sort the product under test, suitable for bulk food.

### ● Airjet



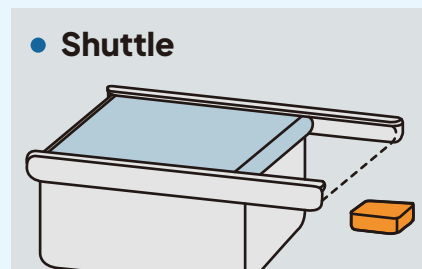
Use high pressure air to separate the tested products, suitable for light food or bulk food.

### ● Pusher



The push rod driven by the cylinder is used to sort the product under test, which is suitable for medium and large packaging products.

### ● Shuttle



Use a telescopic conveyor to sort the product under test, suitable for small packaging or sticky bulk food