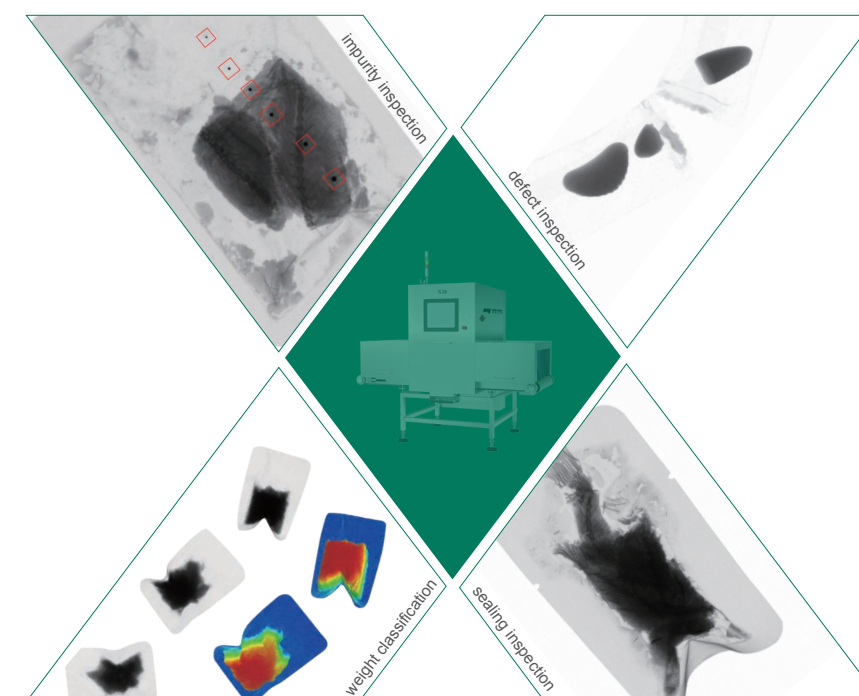THE ART OF NUT AND SEED PROCESSING

MEYER

Meyer X-ray
Inspection Machine

HEFEI MEYER OPTOELECTRONIC TECHNOLOGY INC.

Add:NO.668,West Wangjiang Rd,Hefei,China
Email:sales@meyer-corp.com
Tel/Fax:0086-551-65317548/65306653
Website:www.meyer-corp.com

Web for Color Sorter   @meyersorter   Meyer Marketing

April 2022

MASETO TECHNOLOGIES

MEYER X-RAY INSPECTION SOLUTIONS

Meyer, deeply engaged in the field of intelligent identification for nearly 30 years, always walks at the forefront of the industry and is committed to providing intelligent, professional sorting and detection solutions for users. For improving "performance, reliability" and other key factors of products, Meyer research & manufacture innovation platform is building now. Meyer strives to build a high-level R&D talent team, increases investment in technical innovation, enhances engineering ideas, promotes intelligent manufacturing, thus making Meyer tire X-ray inspection machine to the best.

Adhering to the idea of "bring everyone a safe and healthy life", Meyer has expanded X-ray detection applications to cover packaged food inspection, canned food, aquatic products inspection, fish bone, sealing oil leak detection, etc., mainly provide X-ray foreign body detection, defect detection, weight, and the sealing solution, create greater value for customers.

Food Material

beans	nuts	preserved fruit	vegs	cashew	seasoning

Packaged Food

leisure food	barrelled instant noodles	jelly	pickled cabbage	additives	yeast powder

Aquatic Products

clam	fillet	scallop	squid arms	octopus	shrimp paste

Meat

pork	ham	ham sausage	meat ball	beef	luncheon meat

Canned Food

milk powder	fruit & vegs can	pickles can	TCM particles

Application field

metal	stonesing material	ceramics	glass	rubber & plastics
fish bones	oil leakage	content leakage	weight classification	mis
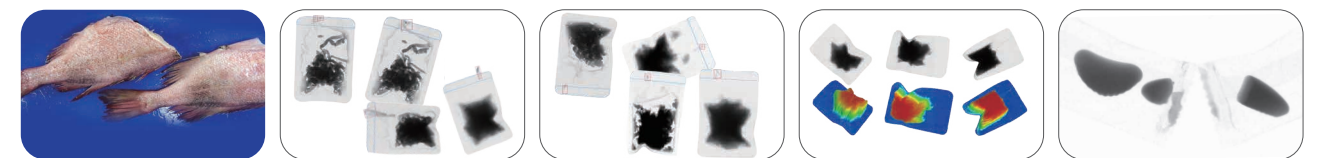
MASETO TECHNOLOGIES

DRIVEN BY TECHNICAL INNOVATION

FOCUS ON X-RAY DETECTION, SAFEGUARD PRODUCTS'SAFETY

Meyer X-ray inspection machine

Advanced X-ray imaging technology with intelligent recognition algorithm can accurately detect metal impurities and more dense non-metal impurities, product defects, packaging damage and weight detection.
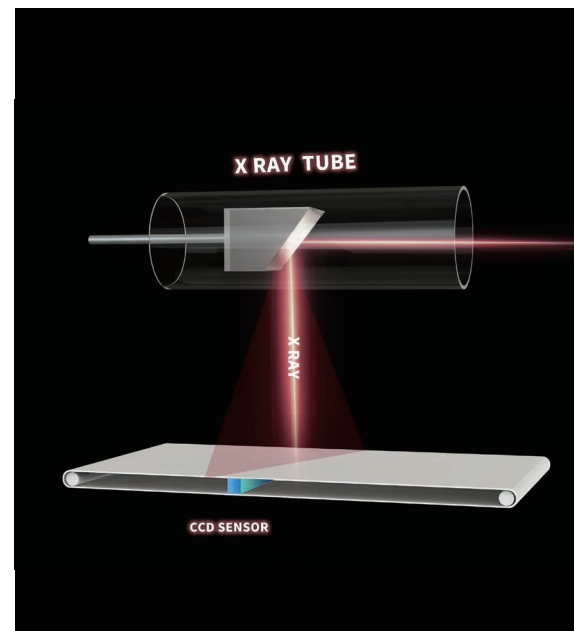
RECOGNITION DYSTEM

X-ray HD Imaging System
The ultra-high resolution sensor combined with Meyer patented enhanced algorithm can identify the gray level difference of the image to ensure that there is no hiding of impurities.

Beryllium Window Emitter
High-definition imaging, tiny impurities and impurities of density similar to each other can be easily identified.

Ultra High-definition Sensor
The max detection width up to 600mm, equipped with high frequency vibrator, meets the requirements of large output processing.

Microfocal Imaging Technology
The imaging resolution is 20% higher than ordinary X-ray, and the imaging of impurities in packaging is clearer.

SNIPER SYSTEM

Maglev Ejector 3.0
Long service life, the key rejection device. Core patent, intelligent production.

Flexible Removal
Precise positioning of impurity center point, more gentle removal, less breakage.

Rich Removal Devices
Rich removal devices like blowing removal, swing removal, crawler push plate out, ejector removal, roller push plate removal, etc. are free to apply to different scenes.
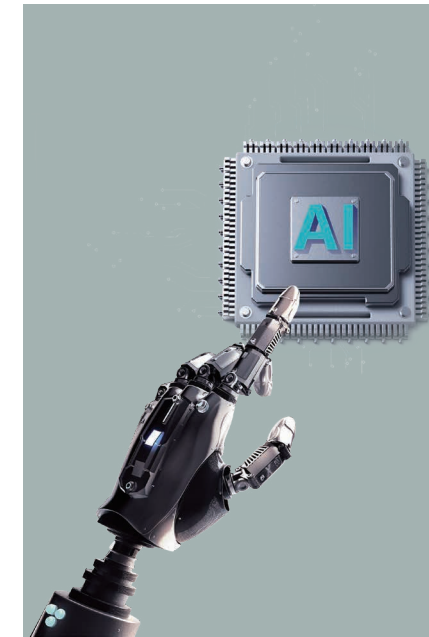
INTELLIGENT SYSTEM

One-key Self-learning
Support deep learning, imitation of human brain recognition, matching optimal recognition algorithm, higher detection accuracy.

Anti-deviation Design
Effectively avoid conveyor belt deviation, more durable and stable operation.

INTERACTIVE SYSTEM

Extra-simple Interface
The extremely simplified interface makes the operation more worry-free. Built-in learning package, easy access to massive learning content.

Remote Contactless Service
Remote debugging, remote control, smart backup, smart checkup.

Smart Alarm
Visual LED alarm panel shows the abnormal situation clearly. Fault self-checking, no manual troubleshooting is required.

INTEGRATED STRUCTURE DESIGN MORE PRECISE AND RELIABLE

Precise Identification
350W Beryllium window emitter show clear imaging, easy to identify impurities of similar density

Outstanding Yields
Special wide range detection sensor and high-frequency vibrator satisfy large yields requirement

Low Consumption, High Profits
creative high speed ejector removal device accurately removes impurities

Wide Application
Widely used in the sorting and detection of nuts, kernels, peanuts, beans, dehydrated vegetables, tea, herbs and other bulk materials

Meyer x-ray inspection machine for food material

PACKAGED FOOD INSPECTION EXPERT

Precise Identification
350W Beryllium window emitter show clear imaging, easy to identify impurities of similar density

Rich Removal Devices
Equipped with swing removal, turning removal, pushing removal, blowing removal, etc., meet different needs

Wide Application
Apply to impurity inspection in leisure food, baked food, meat, dairy products, frozen food, veg products and packaged products missing detection

All new multi-use Meyer X-ray inspection machine

Apply To

Red Beans · Seed Kernel · Pistachio · Chilli · Raisin · Dehydrated Vegs · Tea · Cashew · Peanut

Inspection Impurity

Ceramics · Glass · Clod · Sand · Rubber & Plastics · Shell · Metal · Almond Wormhole · Shrunken Nuts

Packaged Nuts · Inspection Image · Barreled Instant Noodle · Inspection Image

Jelly · Inspection Image · Meat · Inspection Image · Ham · Inspection Image · Meat Balls · Inspection Image

Name	60XS/80XS	Name	60XS/80XS	Name	60XS/80XS
Model	MY8045-60XS/MY8060-80XS	X-Ray output(W)	350 (Max)80kV/8.0mA adjustable	Conveyor belt speed (m/min)	90-120 adjustable
Sensitivity (no-load)	SUS ball≥φ0.3	Conveyor belt width(mm)	470/620	Removal device	60/80Spray valve
	SUS wire≥φ0.2×2	Net weight(kg)	850/950	Main material	SUS 304
	Glass ball≥φ1.0	Configuration(mm)(LxWxH)	3450x1320x2370/ 3450x1460x2380	Power supply (V)	Single phase AC220±10%, 50/60Hz, 2kw/2.5Kw
	Ceramic ball≥φ1.0				
Service environment		(Ambient temperature)-10~40℃, Relative humidity30-90%, No condensation,no freezing,upheaval		Protection Level	Transmission part IP65, Other IP54

Name	400XM	Name	400XM	Name	400XM
Model	MY8045-XM	Size of materials(mm)	Width≤445, Height≤200	X-Ray output(W)	350 (Max)80kV/8.0mA adjustable
Sensitivity (no-load)	SUS ball≥φ0.3	Conveyor belt width(mm)	510	Conveyor belt speed (m/min)	10-80 adjustable
	SUS wire≥φ0.2x2	Configuration(mm)(LxWxH)	1100x1200x2050	Removal device	Selected according to material
	Glass ball≥φ1.0	Net weight(kg)	500	Main material	SUS 304
	Ceramic ball≥φ1.0	Load(kg)	10	Power supply (V)	Single phaseAC220V±10%, 50/60Hz, 2kw
Service environment		(Ambient temperature)-10~40℃, Relative humidity30-90%, No condensation,no freezing,upheaval		Protection Level	Transmission part IP66, Other IP65

FOR LARGE PACKAGED FOOD INSPECTION

■ **Wide Detection Range**
480W high-power high-pressure emitter, stronger to penetrate heavy materials, support large packaged food detection ≤25kg

■ **High Inspection Accuracy**
Ultra clear image recognition algorithm is designed for impurity inspection in heavy material, outstanding effect

■ **Stable Operation**
Automatic anti-deviation conveyor belt design avoids the belt deviation

Meyer x-ray inspection machine for large packaged food

DOUBLE LIGHT SOURCE IMAGING DESIGNED FOR CANNED FOOD INSPECTION

■ **Wide Detection Range**
Equipped with dual high-power emitter, eliminate blind area of detection, and the impurity at the bottom can be easily inspected

■ **Reliable Structure**
Integrated design of main part, more stable operation

■ **Wide Application**
Suitable for detecting impurities in bottles, cans and boxes delivered in upright form

Meyer X-ray inspection machine for canned food

Addictives

Inspection Image

Yeast Powder

Inspection Image

Milk Powder Can

Inspection Image

Tin

Inspection Image

Canned Asparagus Dpear

Inspection Image

Glass Jar Bottom Inspection Image

Name	580XM	Name	580XM	Name	580XM
Model	MY12060-XM	Size of materials(mm)	Width≤580, Height≤300 Trapezoidal detection area	X-Ray output(W)	480W(Max)120kV/8.0m adjustable optional350W(Max)80kV/8.0m adjustable
Sensitivity (no-load)	SUS ball≥φ0.3	Conveyor belt width(mm)	700	Conveyor belt speed (m/min)	10-40
	SUS wire≥φ0.2x2	Configuration(mm)(LxWxH)	2250x1380x2110	Removal device	Alarm and pneumatic push plate rejection
	Glass ball≥φ1.0	Net weight(kg)	700	Main material	SUS 304
	Ceramic ball≥φ1.0	Load(kg)	50	Power supply (V)	Single phase AC220V±10%, 50/60Hz, 2.5kw
Service environment		(Ambient temperature)-10~40℃，Relative humidity30-90%, No condensation,no freezing,upheaval		Protection Level	Transmission part IP65, Other IP54

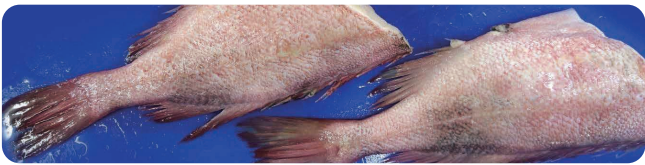| Name	2XLG/XLG	Name	2XLG/XLG	Name	2XLG/XLG
Model	MY12015D-XL	Size of materials(mm)	Diameter≤150, Height≤250	X-Ray output(W)	480(Max)120kV/8.0mA adjustable
Sensitivity (no-load)	SUS ball≥φ0.3	Conveyor belt width(mm)	150	Conveyor belt speed (m/min)	10-50adjustable
	SUS wire≥φ0.2x2	Configuration(mm)(LxWxH)	5000x1460x1980	Removal device	Alarm and pneumatic push plate rejection
	Glass ball≥φ1.0	Net weight(kg)	900	Main material	SUS 304
	Ceramic ball≥φ1.0	Load(kg)	10	Power supply (V)	Single phaseAC220V±10%, 50/60Hz, 4.5kw
Service environment		(Ambient temperature)-10~40℃，Relative humidity30-90%, No condensation,no freezing,upheaval		Protection Level	Transmission part IP65, Other IP54

REVEAL THE HIDDEN FISHBONE

High Inspection Accuracy
Equipped with ultra-high resolution sensor, the minimum detection accuracy can reach 0.05mm

Faster Recognition Of Impurities
Equipped with 4K HD screen, clearer image display

Wide Application
Suitable for impurity detection of fish bone, infant food and other products with high standards

Meyer Ultra HD X-ray inspection machine

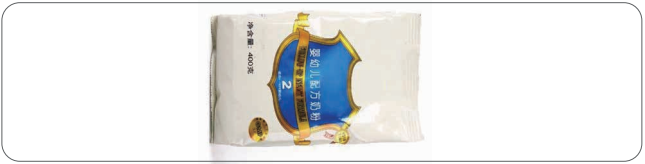## ACCURATE OIL & CONTENT LEAKAGE ELIMINATION ONE FOR VARIOUS APPLICATION

High Inspection Accuracy
Microfocus imaging system achieves higher X-ray imaging resolution, more clear to see the packaging

Fast Imaging Speed
X-ray high resolution imaging speed up to 40m/min, higher efficiency

Multiple Use
Oil leakage, content leakage, weight classification, impurity detection, suitable for multiple scenarios
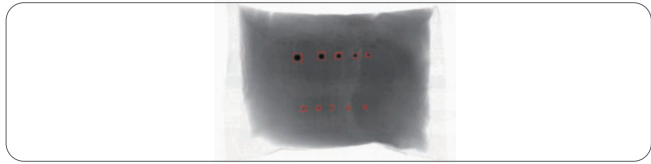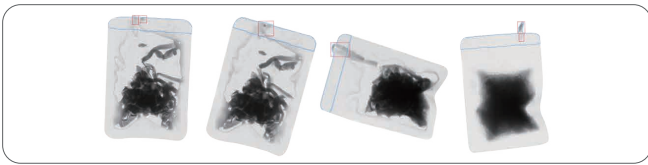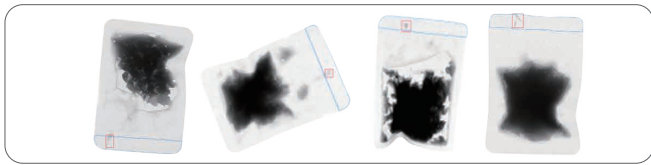
New Meyer X-ray inspection machine for oil leakage

Fillet

Inspection image

Baby milke

Inspection imag

Oil leakage Inspection

Content Leakage Inspection

Weight Classification

Impurity Detection
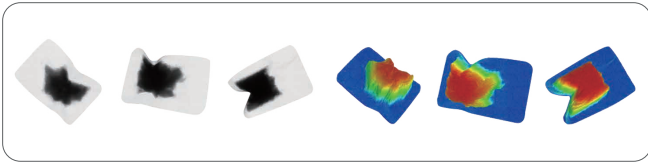
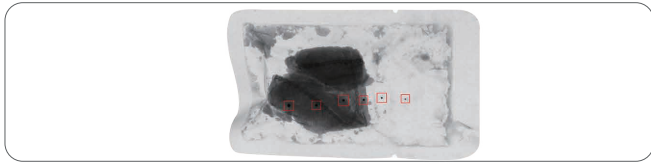| Name	2XMF/XMF	Name	2XMF/XMF	Name	2XMF/XMF
Model	MY8045-XM	Size of materials(mm)	Narrow type width≤190, Wide type width≤390, Height≤200	X-Ray output(W)	350(Max)80kV/8.0mA adjustable
Sensitivity (no-load)	可辨识铁线 ≥φ0.05	Conveyor belt width(mm)	440	Conveyor belt speed(m/min)	10-20
		Configuration(mm)(LxWxH)	1000x1150x2100	Removal device	(fishbone detection) Auxiliary manual, automatic identification of fishbone assistance optional, other detections can be equipped with rejecting devices
		Net weight(kg)	500	Main material	SUS 316L
		Load(kg)	10	Power supply (V)	Single phase AC220V±10%, 50/60Hz, 2kw
Service environment	(Ambient temperature)-10~40℃, Relative humidity30-90%, No condensation,no freezing,upheaval			Protection Level	Transmission part IP65, Other IP54

Name	200XMM	Name	200XMM
Model	MY4022-XM	Belt speed(m/min)	40 adjustable
Configuration(mm)(LxWxH)	1175x980x1900	Throughput	(Max)220packs/min
Detected material(mm)	About 100x70, Aluminum foil small package	Human-computer interaction	17-inch LCD screen
Function	Sealing oil leakage, weight classification, foreign object detection	X-ray leak	< 1μSV/h
Size of materials(mm)	Width≤200, Height ≤50	Waterproof level	Transmission part IP66, Other IP65

MASETO TECHNOLOGIES®

X-RAY SECURITY AND RELEVANT REGULATIONS

Food Safety

According to relevant regulations, X-ray dose for food should be lower than 0.1Gy, that will not affect the quality of food. As the statement of Food Health Organization in 1980, "there is no problem about toxicity, nutrition and microorganism for the food under X-ray dose below 10KGy".

▶ Meyer X-ray Inspection Machine
Maximum X-ray dose is **0.001G**

▶ Operation staff whole body exposure
5mSv*1000/(365 days*8 hours)=**1.71uSv/h**

Personal safety

According to *Ionizing Radiation Failure Prevention Rules Japan*, administrative areas and operation managers need to be set up when accumulative X-ray leakage dose reaches 1.3mSv in three months.

The X-ray leakage of our machine is 1μ Sv/h or less. For the value is lower than 1.35 mSv/3 months, there is no need to set up administrative areas and operation managers.
(example)
Three months' X-ray leakage calculation.
The same staff works 5 days a week and 10 hours a day 3 months, 13 weeks:
1 Sv/h*10 hours*5 days*13weeks=0.65 mSv/3 months

★ In accordance with Chinese national standards

CUSTOMER CASE

Thanks for your smart choice.

Cashew ▶

Leisure Food ▶

Aquatic Products ▶

Meat Products ▶

Canned Food ▶

Fast Food ▶

Spice ▶

Grains ▶

Tea&Fruits ▶

Diary Products ▶

![MASETO TECHNOLOGIES logo]

ABOUT MEYER

CUSTOMER PRODUCTION LINES

THE 1ST SMART FACTORY IN THE INDUSTRY

STANDARDIZATION MODULARIZATION INTELLIGENTIZATION DIGITALIZATION

Meyer

——China's leading X-ray inspection machine supplier

World leading intelligent inspection equipment supplier

China 500 Most Valuable Listed Companies

Hurun China 500 Most Valuable Private Companies

Major High Technology Expertise under China Torch Program

60,000+ equipment are in operation worldwide

Products cover 100+ countries and regions

National Science & Technology Progress Award (second award)

National Innovative Enterprise

National Technological Innovation Model Enterprise

National Intellectual Property Demonstration Enterprise

National Post-doctoral Research Workstation

National Certified Enterprise Technology Center

Sheet metal flexible processing production line

Color sorter final assembly line

Unmanned maglev ejector production line

Chute assembly robot workstation

Automatic circuit board SMT production line

Automatic frame powder spraying production line

· Over 20 automatic intelligent production lines and unmanned core component workshops
· World-leading machining equipment ensure high consistency and precision of parts
· Advanced production technology and strict debugging ensure the stable performance of core components
· The only high-standard intelligent painting workshop in the industry makes Meyer color sorter more corrosion-resistant and more environment-friendly
· The only final assembly line in the industry, with the CNC system automatically monitoring the whole process, boosts production's efficiency
· Making products to the best, whether 1 or 10,000 sets, always with the consistent quality.