Techik®

Techik Instrument (Shanghai) Co., Ltd

Techik®

PRODUCT CATALOG

• Metal Detector   • Checkweigher   • X-ray Inspection System   • Optical Sorting System

Contents

Techik ®

Company Introduction

Techik Instrument (Shanghai)Co., Ltd is the leading manufacturer of X-ray inspection, check-weighing, metal detection system and optical sorting system with IPR in China and pioneer in indigenously developed Public Security. Techik designs and offers the art products and solutions to meet the demands of global standards, features and quality. Our products fully comply with CE, ISO9001, ISO14001 management systems and OHSAS18001 standards which will bring you great confidence and reliance. With years of accumulation of X-ray inspection, metal detection and optical sorting technology, Techik's fundamental mission is to answer every customer's need with technological excellence, strong design platform and continuous improvement in quality and service. Our goal is to ensure Safe with *Techik*.

Techik

TECHIK INSTRUMENT (SHANGHAI) CO., LTD

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, etc.

Bearing

Green button

Alarm light

Shaft

Inverter

Motor

Relay

Photo tube

Metal Detector IMD Series

Detecting all metal contaminants in packaged and non-packaged food, including ferrous metal (Fe), non-ferrous metals (Copper, Aluminum etc.) and stainless steel.

Stable and High Sensitivity

- Special phase adjusting technology
- High sensitivity with stable performance
- Auto balance function
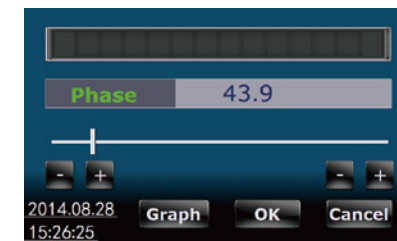
High Configuration

- Touch screen
- USB port
- Dual-frequency
- Customized rejecter system
- Different surface treatment

User-friendly Function

- Multi languages
- Customization
- Large memory capacity

Auto-learning Function

- Auto-learning product character
- Finish auto-learning process very soon

Conveyor Belt Metal Detector

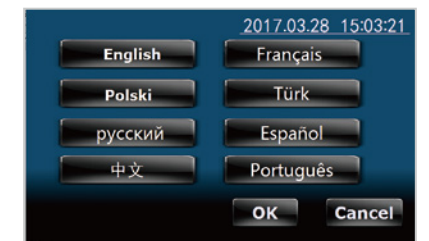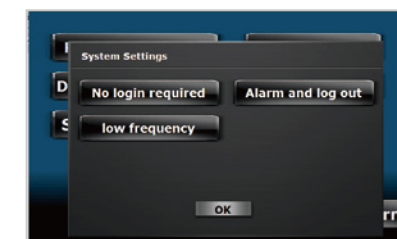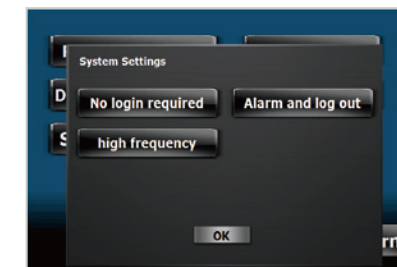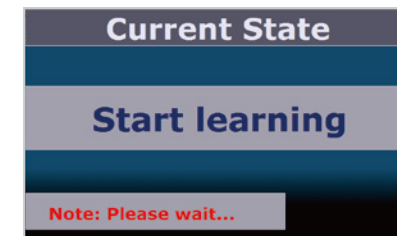| Model	IMD		
Specifications	4008,4012 4015,4018	5020,5025 5030,5035	6025,6030
Detection Width	400mm	500mm	600mm
Detection Height	80mm,120mm 150mm,180mm	200mm,250mm 300mm,350mm	250mm 300mm
Sensitivity — Fe	Φ0.5mm,Φ0.6mm Φ0.7mm,Φ0.8mm	Φ0.8mm, Φ1.0mm Φ1.2mm, Φ1.5mm	Φ1.2mm Φ1.5mm
Sensitivity — SUS304	Φ1.0mm,Φ1.2mm Φ1.5mm,Φ2.0mm	Φ2.0mm, Φ2.5mm Φ2.5mm, Φ3.0mm	Φ2.5mm Φ3.0mm
Belt Width	360mm	460mm	560mm
Loading Capacity	5kg~10kg	20kg~50kg	25kg~100kg
Display Mode	LCD display panel (FDM touch screen optional)		
Operation Mode	Button input (Touch input optional)		
Product Storage Quantity	52 kinds (100 kinds with touch screen)		
Conveyor Belt	Food Grade PU(chain conveyor optional)		
Belt Speed	Fixed 25m/min (Variable speed optional)		
Rejecter Mode	Alarm and belt stop (Rejecter optional)		
Power Supply	AC220V (Optional)		
Main Material	SUS304		
Surface Treatment	Brushed SUS, Mirror polished, Sand blasted		

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 speed.
2. Requirements for different sizes by customers can be fulfilled.

Metal Detector for Biscuits

With unique design of pneumatic retracting band type rejecter to prevent the product from being disordered, this type of metal detector is widely used in different biscuits and sweets production lines.

Model	IMD-B			
Specifications	60	80	100	120
Detection Width	600mm	800mm	1000mm	1200mm
Detection Height	50~80mm			
Sensitivity — Fe	Φ0.7mm	Φ0.8mm	Φ1.0mm	Φ1.2mm
Sensitivity — SUS304	Φ1.5mm	Φ1.5mm	Φ2.0mm	Φ2.5mm
Belt Width	560mm	760mm	960mm	1160mm
Conveyor Belt	Food grade PU			
Belt Speed	15m/min (Variable speed optional)			
Rejecter Mode	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 speed.
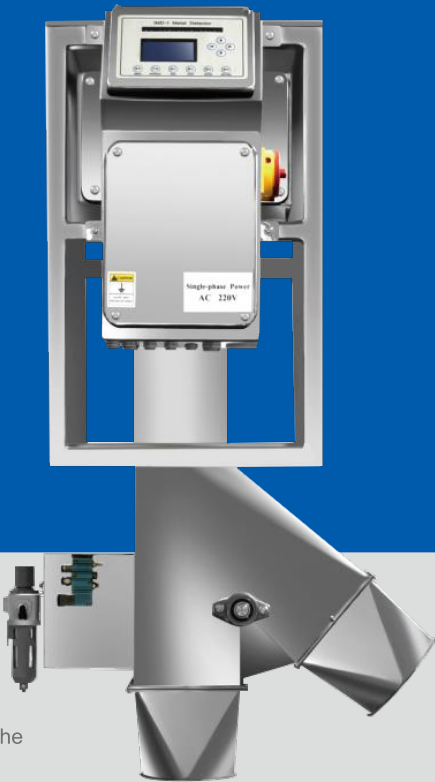2. Requirements for different sizes by customers can be fulfilled.

Metal Detector for Pharmacy

High sensitivity and stability detection of ferrous metal (Fe), non-ferrous metals (Copper, Aluminum) and stainless steel, this type of machine is suitable to be installed after some pharmaceutical equipment like the tablet press machine, the capsule filling machine and the sieve machine.

Gravity Fall Metal Detector

With compact design and small occupied space, this type of metal detector is suitable for the detection of powder, granule or other forms of bulk products.

Model		IMD-M80	IMD-M100	IMD-M150
Detection Width		72mm	87mm	137mm
Detection Height		17mm	15mm	25mm
Sensitivity	Fe	Φ0.3-0.5mm		
	SUS304	Φ0.6-0.8mm		
Display Mode		TFT touch screen		
Operation Mode		Touch input		
Product Storage Quantity		100kinds		
Channel Material		Food grade plexiglass		
Rejecter Mode		Automatic rejection		
Power Supply		AC220V (Optional)		
Pressure Requirement		≥0.5Mpa		
Main Material		SUS304(Product contact parts: SUS316)		

Note:

1. The technical parameter above namely is the result of sensitivity by detecting only the test sample inside the channel. The sensitivity would be affected according to the products being detected and working condition.

2. Requirements for different sizes by customers can be fulfilled.

Model				IMD-P			
Detection Diameter (mm)	Detection Capacity t/h[2]	Rejecter Mode	Pressure Requirement	Power Supply	Main Material	Sensitivity[1]Φd (mm)	
						Fe	SUS
50	1	Automatic flap rejecter	0.5Mpa≥	AC220V (Optional)	Stainless steel (SUS304)	0.5	1.2
75	3					0.5	1.2
100	5					0.7	1.5
150	10					0.7	1.5

Note:

1. The technical parameter above namely is the result of sensitivity by detecting only the test sample inside the pipe. The sensitivity would be affected according to the products being detected and working condition.

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

Easy to be integrated in existing sealed pipe system, this type of metal detector is suitable for the pump pressure fluid and semi-fluid product like sauce, liquid, etc.

Model	IMD-L						
Detection Diameter (mm)	Rejecter Mode	Pressure Requirement	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						0.7	1.5

Note:
1. The technical parameter above namely is the result of sensitivity by detecting only the test sample inside the pipe. The sensitivity would be affected according to the products being detected and working condition.
2. Detecting volume per hour is related with product weight and speed.
3. Requirements for different sizes by customers can be fulfilled.

High Configuration Conveyor Belt Metal Detector
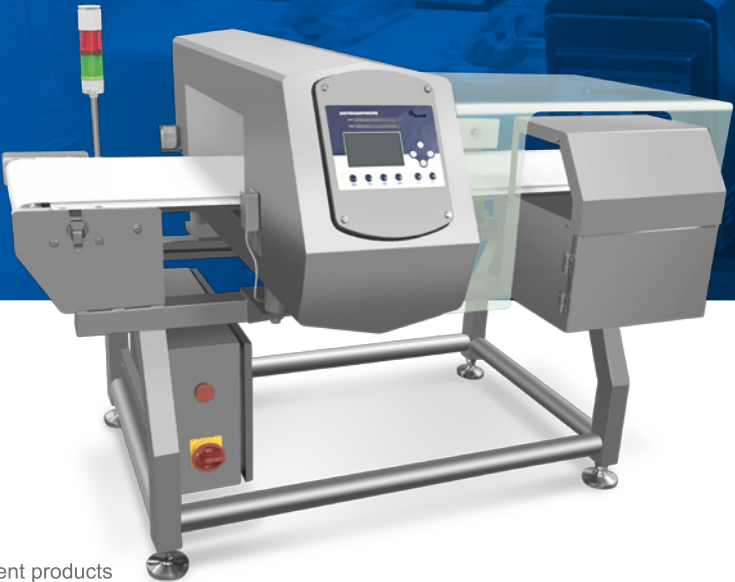
• Frequency-selecting function, two frequencies can be chosen to match different products
• Dual-detection system ensures Fe and Sus achieve its best sensitivity
• Auto-balance function ensures stable detection

Model		IMD-H		
Specifications		4008,4012 4015,4018	5020,5025 5030,5035	6025,6030
Detection Width		400mm	500mm	600mm
Detection Height		80mm,120mm 150mm,180mm	200mm,250mm 300mm,350mm	250mm 300mm
Sensitivity	Fe	Φ0.5mm,Φ0.6mm Φ0.7mm,Φ0.8mm	Φ0.8mm, Φ1.0mm Φ1.2mm, Φ1.5mm	Φ1.2mm Φ1.5mm
	SUS304	Φ0.9mm,Φ1.2mm Φ1.5mm,Φ2.0mm	Φ2.0mm, Φ2.5mm Φ2.5mm, Φ3.0mm	Φ2.5mm Φ3.0mm
Belt Width		360mm	460mm	560mm
Loading Capacity		≤10kg	≤50kg	≤100kg
Display Mode		Touch screen		
Operation Mode		Touch input		
Product Storage Quantity		100 kinds		
Frequency		Dual-frequency		
Checking Channel		Double channel checking		
Belt Speed		Variable speed		
Rejecter Mode		Alarm and belt stop (Rejecter optional)		
IP Level		IP54/IP65		
Mechanical Design		Round frame, easy wash		
Surface Treatment		Brushed stainless steel, Sand blasted		

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 speed.
2. Requirements for different sizes by customers can be fulfilled.

Low Frequency
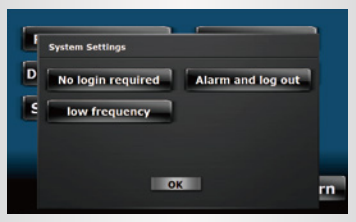
High Frequency
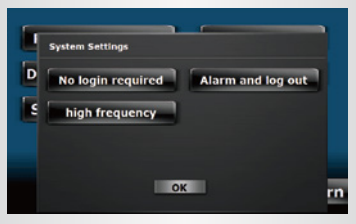
Checkweigher System

Suitable for weight checking for packaged products, to ensure quality standards.

Alarm light　　**Green button**　　**Load cell**　　**Motor**　　**Panasonic inverter**　　**Touch screen**　　**Photo tube**

Checkweigher IXL Series

Suitable for weight checking for packaged products, to ensure quality standards.

• High speed, high sensitivity, high stability dynamic weight checking
• Easy to clean, simple to disassemble
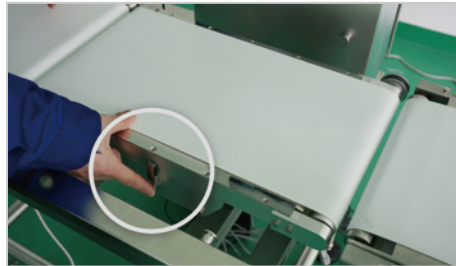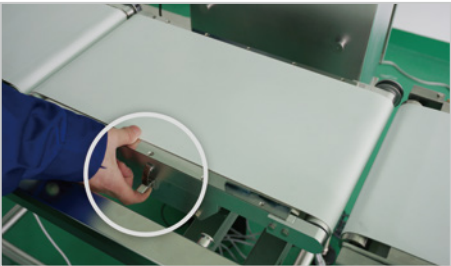
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User-friendly Function

• Multi languages
• Data storage
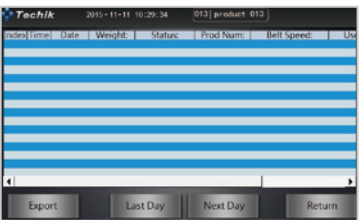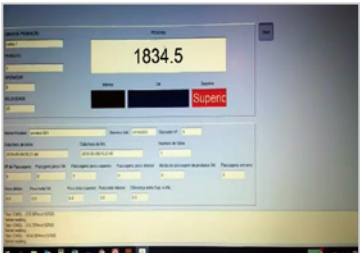• Large memory capacity

High Configuration

• Touch screen
• USB port, Ethernet function
• Real time monitoring on PC

Brief User Parameter Setting

Checkweigher
for Small Package

Checkweigher
for Large Package

Model	IXL-160	IXL-230S	IXL-230L	IXL-300	IXL-400
Detecting Range	5~600g	20~2000g	20~2000g	20~5000g	0.2~10kg
Scale Interval	0.05g	0.1g	0.1g	0.2g	1g
Accuracy (3σ)	±0.1g	±0.2g	±0.2g	±0.5g	±1g
Max Speed	250pcs/min	200pcs/min	155pcs/min	140pcs/min	105pcs/min
Belt Speed	70m/min	70m/min	70m/min	70m/min	70m/min
Weighed Product Size — Width	150mm	220mm	220mm	290mm	390mm
Weighed Product Size — Length	200mm	250mm	350mm	400mm	500mm
Weigher Platform Size — Width	160mm	230mm	230mm	300mm	400mm
Weigher Platform Size — Length	280mm	350mm	450mm	500mm	650mm
Operation Screen	7" touch screen				
Product Storage Quantity	100 kinds				
Segments Number	3				
Rejecter Mode	Rejecter optional				
Power Supply	220V (Optional)				
IP Rate	IP54/IP66				
Main Material	Mirror polished/Sand blasted				

Note:
1. The technical parameter above namely is the result of accuracy by checking only the test sample on the belt. The accuracy would be affected according to the detecting speed and product weight.
2. The detecting speed above will be affected according to the product size to be checked.
3. Requirements for different sizes by customers can be fulfilled.

Model	IXL-500	IXL-600
Detecting Range	0.5-25kg	1~50kg
Scale Interval	1g	5g
Accuracy (3σ)	±2g	±5g
Max Speed	75pcs/min	50pcs/min
Belt Speed	60m/min	60m/min
Weighed Product Size — Width	490mm	590mm
Weighed Product Size — Length	700mm	1000mm
Weigher Platform Size — Width	500mm	600mm
Weigher Platform Size — Length	800mm	1200mm
Operation Screen	7" touch screen	
Product Storage Quantity	100 kinds	
Segments Number	1	
Rejecter Mode	Rejecter optional	
Power Supply	220V (Optional)	
IP Rate	IP30/IP54	
Main Material	Mirror polished/Sand blasted	

Note:
1. The technical parameter above namely is the result of accuracy by checking only the test sample on the belt. The accuracy would be affected according to the detecting speed and product weight.
2. The detecting speed above will be affected according to the product size to be checked.
3. Requirements for different sizes by customers can be fulfilled.

High-speed Checkweigher

• High speed. The Max.speed can reach 90m/min
• It can ensure good accuracy with high speed

Model		IXL-H-160	IXL-H-230S	IXL-H-230L	IXL-H-300
Detecting Range		10~600g	20~2000g	20~2000g	20~5000g
Accuracy (3σ)		±0.1g	±0.2g	±0.2g	±0.5g
Max Speed		400pcs/min	300pcs/min	250pcs/min	200pcs/min
Belt Speed		115m/min			
Weighed Product Size	Width	150mm	220mm	220mm	290mm
	Length	200mm	250mm	350mm	400mm
Weigher Platform Size	Width	160mm	230mm	230mm	300mm
	Length	280mm	350mm	450mm	500mm
Operation Screen		7" touch screen			
Product Storage Quantity		100 kinds			
Segments Number		3			
Rejecter Mode		Rejecter optional			
Power Supply		220V (Optional)			
IP Rate		IP54/IP66			
Body Material		Mirror polished/Sand blasted			

Note:
1. The technical parameter above namely is the result of accuracy by checking only the test sample on the belt. The accuracy would be affected according to the detecting speed and product weight.
2. The detecting speed above will be affected according to the product size to be checked.
3. Requirements for different sizes by customers can be fulfilled.

Combo Metal Detector and Checkweigher

Widely used in workshop with compact space.

• Compact design, saving space and installation cost
• Metal detector and checkweigher is perfectly connected in one frame, to install the machine in workshop conveniently and effectively

Model		IMC-230L	IMC-300
Detecting Range		20~2000g	20~5000g
Scale Interval		0.1g	0.2g
Accuracy (3σ)		±0.2g	±0.5g
Detecting Speed (Max Speed)		155pcs/min	140pcs/min
Maximum Belt Speed		70m/min	70m/min
Weighed Product Size	Width	220mm	290mm
	Length	350mm	400mm
	Height	70mm, 110mm, 140mm, 170mm	
Weigher Platform Size	Width	230mm	300mm
	Length	450mm	500mm
	Height	80mm, 120mm, 150mm, 180mm	
Sensitivity	Fe	Φ0.5mm, Φ0.7mm, Φ0.7mm, Φ0.7mm,	
	SUS	Φ1.2mm, Φ1.5mm, Φ1.5mm, Φ2.0mm	
Product Storage Quantity		100 kinds	
Segments Number		3	
Rejecter		Rejecter optional	
Power Supply		AC220V (Optional)	
IP Rate		IP54/IP66	
Main Material		Mirror polished/Sand blasted	

Note:
1. The technical parameter above namely is the result of accuracy by checking only the test sample on the belt. The accuracy would be affected according to the detecting speed and product weight.
2. The detecting speed above will be affected according to the product size to be checked.
3. Requirements for different sizes by customers can be fulfilled.

Multi-sorting Checkweigher

Widely used in seafood, poultry, aquatic products, frozen products, etc.

Multi-tray Weight Sorting Machine

The dynamic weight sorting equipment is a device which sorts the products automatically with a high speed and a high accuracy according to their weights ranged by the user's requirements. Cumulative weight and quantity are optional functions.

• Replacing labor sorting, saving cost, improving efficiency and optimizing the production process
• Accurate rejector systems with multi-weight zones
• Various fast rejector systems, to satisfy rejecting unqualified products with different speed
• 9 standard weight sorting zones, 12 weight sorting zones is available

Model		IXL-SG-160	IXL-SG-230S	IXL-SG-230L	IXL- SG -300
Detecting Range		10~600g	20~2000g	20~2000g	20~5000g
Scale Interval		0.05g	0.1g	0.1g	0.2g
Accuracy (3σ)		0.4g	0.8g	0.8g	1.5g
Detecting Speed (Max Speed)		200pcs/min	160pcs/min	130pcs/min	110pcs/min
Maximum Belt Speed		60m/min	60m/min	60m/min	60m/min
Weighed Product Size	Width	150mm	220mm	220mm	290mm
	Length	200mm	250mm	350mm	400mm
Weigher Platform Size	Width	160mm	230mm	230mm	300mm
	Length	280mm	350mm	450mm	500mm
Operation Screen		7" touch screen			
Product Storage Quantity		100 kinds			
Maximum Weight Range		12 levels			
Rejecter		Air Jet, Flipper, Pusher			
Power Supply		AC220V (Optional)			
IP Rate		IP54/IP66			
Main Material		Mirror polished/Sand blasted			

Note:
1, The technical parameter above namely is the result of accuracy by checking only the test sample on the belt, The accuracy would be affected according to the detecting speed and product weight.
2. The detecting speed above will be affected according to the product size to be checked.
3. Requirements for different sizes by customers can be fulfilled.

Model		IXL-GWS-S-8R	IXL-GWS-S-16R	IXL-GWM-S-8R	IXL-GWM-S-16R	IXL-GWL-S-8R	IXL-GWL-S-12R
Weight Range（Note 1）		≤8	≤16	≤8	≤16	≤8	≤16
Accuracy（Note 2）		±0.5g		±1g		±2g	
Maximum Speed		≤300PPM		≤280PPM		≤260PPM	
Detecting Range		2~500g				2~3000g	
Power Consumption		AC220V，0.75KW					
Main Material		Stainless steel (SUS304) & food grade resin					
Machine Size	L	3800mm		4200mm		4500mm	
	W	800mm		800mm		800mm	
	H	1500mm		1500mm		1500mm	
Operation Height		800mm~950mm（can be customized）					
Machine weight		280kg	350kg	290kg	360kg	350kg	45kg
IP Rate		IP66					
Suitable Products		Wing, thigh, leg meat, sea cucumber, abalone, shrimp, fish, etc.		Thigh, breast, upper leg meat, melon and fruit, etc.		Large chunk of meat, fish, etc.	
Scale Quantity		1 scale platform					
Tray sizes	L	170mm, 190mm, 220mm		260mm		300mm	
	W	95mm		130mm		150mm	

Note :
1: Other weight ranges can be customized (but can't over the max weight range);
2: The Weighing accuracies are variables, which are depended on the product characters, shape, quality, detecting speed and size.

X-ray Inspection System

X-ray Inspection System takes advantages of the penetrating power of X-ray to detect contamination. It can achieve a full range of contaminants inspection including metallic, non-metallic contaminants (glass, ceramic, stone, bone, hard rubber, hard plastic, etc.). It can inspect metallic, non-metallic packaging and canned products, and the inspection effect will not be affected by temperature, humidity, salt content, etc.

Alarm lamp

Main power switch

USB and Ethernet ports

Military connecter

X-ray generator

HD touch screen

Industrial computer

Detector

X-ray locker

Air conditioner

Simple to Disassemble, Easy to Clean, and Reliable Security

- Good environment adaptability
- Equipped with industrial air conditioner
- Completely sealed structure to avoid dust
- Environmental humidity can reach 90%
- Environmental temperature can reach -10~40℃

Excellent Product Applicability

- Up to eight grade image processing technology to achieve the best product adaptability and stability

High Configuration of Hardware

- Spare parts are well-known imported brands to ensure the performance and service life of the machine

OMRON   Panasonic   CKD   Schneider Electric
PHILIPS   MISUMI   Pfannenberg   VJ GROUP

Excellent Operability

- 15-inch touch screen display, easy to operate,
- Auto-learning function. Equipment will automatically remember qualified product parameters
- Automatically save the product images, which is convenient for user's analysis and tracking
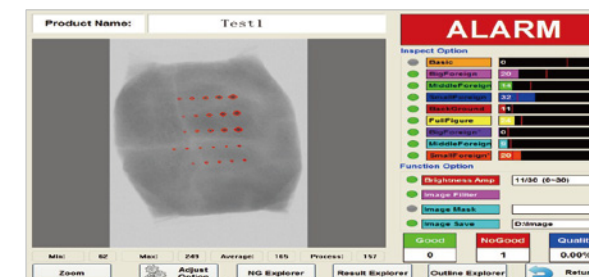
Shielding Function

- Cans shielding
- Desiccant shielding
- Boundary shielding
- Sausage aluminum buckle shielding
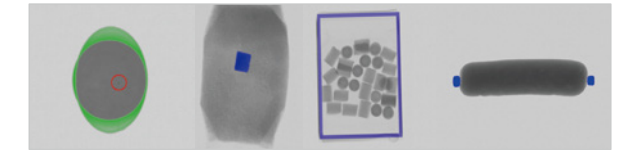
Defects Inspection Function

- The system will detect and inform tablet crack, tablet lacking, and tablet with contamination

  - Defective Tablets
  - Normal Tablets
  - None
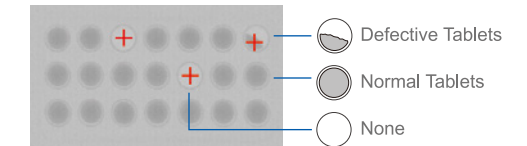
Comprehensive and Reliable Security

- X-ray leakage meets FDA and CE standards
- Perfect safe operation monitoring to prevent the leakage from mis-operation

Standard X-ray Inspection System

Compact Economical X-ray Inspection System

• Competitive price
• Good sensitivity and stability

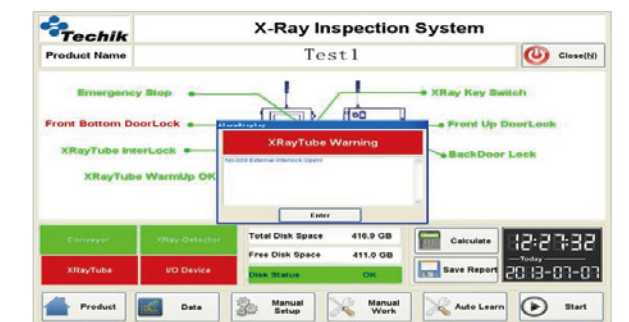| Model	Standard TXR Series							
Standard	2480	4080	4080L	4080S	4080SL	4080SH	5080SH	6080SH
X-ray Tube	MAX.80kV, 150W	MAX.80kV, 210W			MAX. 80kV, 350W			
Inspection Width	240mm		400mm				500mm	600mm
Inspection Height	100mm	160mm	100mm	160mm	100mm	220mm	250mm	300mm
Best Inspection Sensitivity	Stainless steel ball Φ0.3mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm				Stainless steel ball Φ0.4mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm			
Conveyor Speed	5-60m/min				10-40m/min			
O/S	Windows 7							
Protection Method	Soft curtain							
X-ray Leakage	< 1 μSv/h (CE Standard)							
IP Rate	IP66 (Under belt)							
Working Environment	Temperature: -10~40℃							
	Humidity: 30-90% no dew							
Cooling Method	Industrial air conditioning							
Rejecter Mode	Sound and light alarm, belt stops (Rejecter optional)							
Air Pressure	0.6 Mpa							
Power Supply	1.5kW							
Main Material	SUS304							
Surface Treatment	Mirror polished/Sand blasted							

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Model		TXE-1815	TXE-2815	TXE-3815
X-ray Tube		MAX. 80W/65kV		
Inspection Width		180mm	280mm	380mm
Inspection Height		150mm		
Best Inspection Ability		Stainless steel ball Φ0.5mm Stainless steel wire Φ0.3*2mm Glass/Ceramic ball Φ1.5mm		
Conveyor Speed		5-90m/min		
O/S		Windows 7		
Protection Method		Soft curtain		
X-ray Leakage		< 1 μSv/h		
IP Rate		IP54（IP65 Optional）		
Working Environment	Temperature	-10~40°C		0~40°C
	Humidity	30~90%, no dew		
Cooling Method		Industrial air conditioning		
Reject Mode		Sound and light alarm, belt stops (Rejecter optional)		
Air Pressure		0.8Mpa		
Power Supply		0.8kW		
Main Material		SUS304		
Surface Treatment		Brushed SUS		

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Economical X-ray Inspection System for Large Packages

It is specialized for the inspection of large size packages like big bags, cartons, boxes, etc.

Model	TXR-6080XH
X-ray Tube	MAX. 80kV, 210W
Inspection Width	650mm
Inspection Height	500mm
Best Inspection Sensitivity (Without Product)	Stainless steel ball Φ0.5mm Glass/Ceramic ball Φ1.5mm
Conveyor Speed	10-40m/min
O/S	Windows 7
Protection Method	Soft curtain
X-ray Leakage	< 1 μSv/h(CE Standard)
Working Environment	Temperature:-5~40℃
	Humidity:40-60%, no dew
Cooling Method	Fan
Rejecter Mode	Sound and light alarm, belt stops (Rejecter optional)
Air Pressure	0.6Mpa
Power Supply	1.5kW
Surface Treatment	Carbon Steel

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Single Beam X-ray Inspection System for Bottles, Jars and Cans (Inclined Downward)

Single beam X-ray inspection system with software specifically tailored to inspect objects in all regions of cans, tins and bottles.

• Adjustable inspection range based on different dimensions of cans and bottles
• I It can achieve the inspection of filling levels
• I It can achieve better performance for contaminants sinking at the bottom part of the cans and bottles

Model	TXR-1630SO
X-ray Tube	MAX. 120kV, 480W
Max Detecting Width	160mm
Max Detecting Height	280mm
Best Inspection Ability	Stainless steel ball Φ0.5mm Stainless steel wire Φ0.3*2mm Glass/Ceramic ball Φ1.5mm
Conveyor Speed	10-60m/min
O/S	Windows 7
Protection Method	Protective tunnel
X-ray Leakage	< 0.5 μSv/h
IP Rate	IP54 (Standard), IP65 (Optional)
Working Environment	Temperature: -10~40℃
	Humidity:30~90%, no dew
Cooling Method	Industrial air conditioning
Rejecter Mode	Push rejecter
Air Pressure	0.8Mpa
Power Supply	3.5kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Single Beam X-ray Inspection System for Bottles, Jars and Cans (Inclined Upward)

With special design, suitable for bottles or jars in standing conditions.
• Strong X-ray power, suitable for inspection of jars, bottles, etc.
• High capacity, competitive price

Model	TXR-1630SH
X-ray Tube	MAX. 120kV, 480W
Max Detecting Width	160mm
Max Detecting Height	260mm
Best Inspection Ability	Stainless steel ball Φ0.5mm Stainless steel wire Φ0.3*2mm Glass/Ceramic ball Φ1.5mm
Conveyor Speed	10~60m/min
O/S	Windows 7
Protection Method	Protective tunnel
X-ray Leakage	< 0.5 µSv/h
IP Rate	IP54 (Standard), IP65 (optional)
Working Environment	Temperature: -10~40°C
	Humidity:30~90%, no dew
Cooling Method	Industrial air conditioning
Rejecter Mode	Push rejecter
Air Pressure	0.8Mpa
Power Supply	3.5kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Dual-beam X-ray Inspection System for Bottles, Jars and Cans

Dual-beam X-ray inspection system with software specifically tailored to inspect objects in all regions of cans, tins and bottles.
• It can achieve inspection in double visual angles and avoid missing inspection of blind area
• It can achieve better inspection ratio for irregular fragments
• Intelligent zoning to ensure optimal sensitivity for different areas

Model	TXR-2080BDX
X-ray Generator	MAX. 120kV, 480W(two for each)
Inspection Width	160mm
Inspection Height	260mm
Best Inspection Sensitivity	Stainless steel ball Φ0.5mm Stainless steel wire Φ0.3*2mm Glass/Ceramic ball Φ2.0mm
Conveyor Speed	10~60m/min
O/S	Windows 7
Protection Method	Protective tunnel
X-ray Leakage	< 0.5 µSv/h
IP Rate	IP54 (Standard), IP65 (optional)
Working Environment	Temperature: -10~40℃
	Humidity:30~90%, no dew
Cooling Method	Industrial air conditioning
Rejecter Mode	Push rejecter
Air Pressure	0.8Mpa
Power Supply	4kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Triple-beam X-ray Inspection System for Bottles, Jars and Cans

The most reliable X-ray inspection system with
"adjustable point of view" on 3 X-ray beams for any kind of jars, bottles, tins, etc.

• Three X-ray Beams ensure high detection accuracy
• Three X-ray Beams avoid inspection blind area

Model	TXR-20250
X-ray Generator	MAX. 120kV, 480W (three for each)
Inspection Width	160mm
Inspection Height	260mm
Best Inspection Sensitivity	Stainless steel ball Φ0.4mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm
Conveyor Speed	10-60m/min
O/S	Windows 7
Protection Method	Protective tunnel
X-ray Leakage	< 0.5 μSv/h
IP Rate	IP Rate: IP54（Standard), IP65(Optional)
Working Environment	Temperature: -10~40℃
	Humidity:30~90%, no dew
Cooling Method	Industrial air conditioning
Rejecter Mode	Push rejecter
Air Pressure	0.8Mpa
Power Supply	4.5kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

X-ray Inspection System for Fish Bones

• TDI camera, high resolution, tiny fish bones also can be clearly shown
• External HD screen, high identification of fish bones

Model	TXR-2080F	TXR-4080F
X-ray Tube	MAX. 80kV, 350W	
Inspection Width	200mm	400mm
Inspection Height	100mm	100mm
Best Inspection Sensitivity (Without Product)	Stainless steel ball Φ0.2mm Stainless steel wire Φ0.15*2mm (Auto Alarm) Fish bone Φ0.2*2mm（Non-automatic Alarm）	
Conveyor Speed	10-18m/min	
O/S	Windows 7	
Protection Mode	Protection tunnel	
X-ray Leakage	< 0.5 μSv/h	
IP Rate	IP66 (Under belt)	
Working Environment	Temperature: -10~40℃	
	Humidity:30~90%, no dew	
Cooling Method	Industrial air conditioning	
Rejecter Mode	Sound and light alarm, belt stop (Rejecter optional)	
Air Pressure	0.8Mpa	
Power Supply	1.5kW	
Main Material	SUS304	
Surface Treatment	Mirror polished/Sand blasted	

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

X-ray Inspection System for Residual Bone Fragments

Suitable for in-line inspection of the residual bone fragments in meat processing, for instance, inspecting residual collarbones, shoulder blades in chicken.

• Compared with traditional single-energy inspection, the TXR-BDE series applies to dual-energy X-ray inspection technology, achieving higher sensitivity and inspection rate

• TXR-BDE series can indentify cartilage and ignore the product effect of irregular shape

Model	TXR-4080BDE
X-ray Tube	MAX. 80kV,210W & 350W
Inspection Width	400mm
Inspection Height	100mm
Best Inspection Sensitivity	Stainless steel ball Φ0.3mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm
Conveyor Speed	10-40m/min
O/S	Windows 7
Protection Method	Soft curtain
X-ray Leakage	< 1 μSv/h (CE Standard)
IP Rate	IP66 (Under belt)
Working Environment	Temperature: -10~40℃
	Humidity:30~90%, no dew
Cooling Method	Industrial air conditioning
Rejecter Mode	Sound and light alarm, belt stops (Rejecter optional)
Air Pressure	0.8Mpa
Power Supply	2.0kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

X-ray Inspection System for Sauce and Liquid

Easy to be integrated in existing sealed pipe system, this type of X-ray inspection system is suitable for the pump pressure fluid and semi-fluid product like sauce, liquid, etc.

Model	TXR-2480Pi
X-ray Generator	MAX. 80kV, 150W
Pipe Diameter	50mm, 63mm, 80mm
Best Inspection Sensitivity	Stainless steel ball Φ0.4mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.5mm
O/S	Windows 7
X-ray Leakage	< 1 μSv/h (CE Standard)
IP Rate	IP66 (For tunnel)
Working Environment	Temperature: -10~40℃
	Humidity:0~90% no dew
Cooling Method	Industrial air conditioning
Air Pressure	0.8MPa
Power Supply	1.5kW
Main Material	SUS304
Surface Treatment	Mirror polished/Sand blasted

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

X-ray Inspection System for Bulk Products

It is widely used to inspect product like nuts, grains, corns, raisins, sunflower seeds, beans, frozen fruits etc in pre-packaging detection.

High Configuration
X-ray Inspection System for Bulk Products

• Optimized structure. With extended drive platform, the material can pass through the inspection tunnel smoothly
• Improved sensitivity. With faster CPU processing technology and big power X-ray generator, the sensitivity has been increased
• Faster speed and mass production. With Max 120m/min belt speed, the output has been greatly improved
• With high-speed air valve and 48 air jet rejecter system, the rejecter accuracy has been increased and the quantity of waste has been decreased a lot

Model	TXR-4080LP	TXR-4080P
X-ray Tube	MAX. 80kV, 210W	
Inspection Width	400mm	
Inspection Height	50mm(MAX)	160mm(MAX)
Best Inspection Sensitivity	Stainless steel ball Φ0.3mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm	
Conveyor Speed	60m/min	
O/S	Windows 7	
Protection Method	SUS Shield	
X-ray Leakage	< 1 μSv/h (CE Standard)	
IP Rate	IP66 (Under belt)	
Working Environment	Temperature: 0~40℃	
	Humidity:30~90% no dew	
Cooling Method	Industrial air conditioning	
Rejecter Mode	32 tunnel air jet rejecter or 4/2/1 channels flap rejecter	
Air Pressure	0.8Mpa	
Power Supply	1.5kW	
Main Material	SUS304	
Surface Treatment	Mirror polished/Sand blasted	

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

| Model	TXR-4080GP	TXR6080GP
X-ray Tube	MAX. 80kV, 350W	MAX. 80kV, 210W
Inspection Width	400mm	600mm(MAX)
Inspection Height	50mm	
Best Inspection Sensitivity	Stainless steel ball Φ0.3mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ1.0mm	Stainless steel ball Φ0.6mm Stainless steel wire Φ0.4*2mm Glass/Ceramic ball Φ1.5mm
Conveyor Speed	90m/min	
O/S	Windows 7	
Protection Method	SUS Shield	
X-ray Leakage	< 1 μSv/h (CE Standard)	
IP Rate	IP66 (Under belt)	
Working Environment	Temperature: -10~40℃	Temperature: 0~40℃
	Humidity:30~90% no dew	
Cooling Method	Industrial air conditioning	
Rejecter Mode	48 tunnel air jet rejecter or 4/2/1 channels flap rejecter	72 tunnel air jet rejecter
Air Pressure	0.8Mpa	
Power Supply	1.5kW	
Main Material	SUS304	
Surface Treatment	Mirror polished/Sand blasted	

Note:
The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

Optical Sorting System

The Optic Sorting System is a device for automatically sorting out the defective material by using the optoelectronic detecting technology according to the difference of the optical characteristics of the materials.
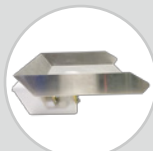
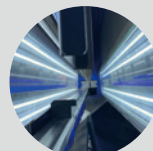**Camera Lens** **Feeder** **Solenoid valve** **Filter Set** **Display Screen** **Lighting System**

Optical Sorting System

The Optic sorting machine is a device for automatically sorting out the defective material by using the optoelectronic detecting technology according to the difference of the optical characteristics of the materials.
Optic color sorting machines generally consist of 4 Principle systems plus a user interface.

• Feed System   • Inspection System   • Signal Processing   • Separation System   • User Interface (GUI)

Depending on the types of sensors used and the software-driven intelligence of the image processing system, Optic sorters can recognize objects' color, size and shape and are able to compare objects to user-defined accept/reject criteria to identify and remove defective products and foreign material (FM) from the production line, or to separate product of different grades or types of materials.

Features and Advantages

1. High resolution full color and state of the art CCD ensures enhanced sorting accuracy and is optimal for sorting of grain crops, beans, pulses, spices, nuts, rice, veg., fruits, etc. as well as non-food products such as plastics, minerals.
2. LED and broad spectrum lighting ensures ultra-clear imaging and consistent high performance.
3. High precision ejection system minimizes false rejects of good grains, delivering a very highly-concentrated reject stream.
4. Professional high speed FPGA, sustain the most advanced algorithm.

Applications

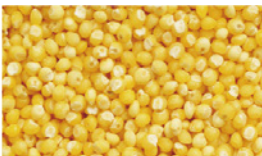seed   coffee   food   fruits   grain

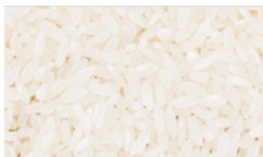nuts   oil crops   beans   plastics   rice
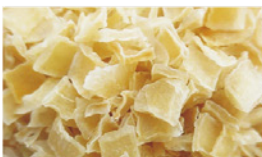
spices   snacks   tea   dehydrated vegetables   frozen vegetables

Multifunctional Full-Color Sorter

Customized industrial wide-angle lens; ultra clear 5400 Pixels CCD sensors delivers fully enhanced imaging; Combining color sorting & shape sorting, maximizes sorting accuracy.

Full color belt sorter

The TCS Belt sorter is exquisite in structure and flexible in configuration, it is available from 300mm width belt to 1200mm width belt; Besides, single layer or double layers, carbon steel machine body or stainless steel machine body is optional.

Model	TCS-3T	TCS-5T	TCS-7T	TCS-8T
Channel number	192	320	448	512
Throughput (t/h)	2-3	3-8	5-10	6-11
Voltage	180-240(50HZ)	180-240(50HZ)	180-240(50HZ)	180-240(50HZ)
Power consumption (kw)	2.0	3.0	3.6	4.2
Air pressure (MPa)	0.6-0.8	0.6-0.8	0.6-0.8	0.6-0.8
Air consumption (m³/min)	<=3.0	<=4.5	<=6.0	<=8.0
Weight (kg)	650	1080	1500	1720
Dimension (L*D*H)(mm)	1450*1600*2100	1765*1600*2100	2700*1600*2100	3015*1600*2100

Note:

• Above parameters are based on testing on peanut (contamination 20%); The throughput varies along with different input commodity and its rate of contamination.

• Auxiliary equipment like elevator, heater, compressor system, etc. are not included in the machine unit.

• Specifications are subject to change without prior notice.

Model	TCS-300S	TCS-600S	TCS-900S	TCS-1200S	TCS-300D	TCS-600D	TCS-900D	TCS-1200
Belt Width(mm)	300	600	900	1200	300	600	900	1200
Voltage				220/50				
Power(kw)	1.5	2.0	3.0	4.5	3.0	4.0	4.5	5.0
Air Consumption(m³/min)	0.6-1	1.2-2	1.8-3	2.4-4	0.6-1	1.2-2	1.8-3	2.4-4
Throughput(soy bean) T/H	0.2-2	0.5-3.0	0.8-3.8	1.0-4.0	0.5-2	1.3-3.0	2-4.5	2.5-6.0
Weight(Kg)	700	900	1200	1500	900	1200	1500	1800
Dimension(LxWxH)(mm)	3660*900*2110	3660*1220*2110	3660*1500*2110	3500*1500*2140	3660*900*2400	3660*1220*2400	3660*1500*2400	3660*1500*2400

Note:

• The throughput varies along with different input material and its rate of contamination.

• Extra attention should be paid to capacity of air compressor when input commodity with high rate of contamination as more compressed air is required.

• Auxiliary equipment like elevator, heater, compressor system are not included in the machine unit.

• Specifications are subject to change without prior notice.

Special Application Color Sorter

M series color sorter delivers precise and standard sorting especially for fine granules, like quartz sand, virgin plastic pellets, salt, etc. Industrial products.

■ High-resolution custom-made 4096-pixel sensor

■ Customized high-precision ejectors

■ Friendly Graphical User Interface (GUI)

■ Advanced long-life LED illumination

■ Automatic alarm function-maximising uptime and ensuring faster service responses.

Model	TCS-2M	TCS-3M	TCS-5M	TCS-8M
Power (kw)	1.8	2.1	2.7	3.5
Weight (kg)	500	660	970	1400
Dimension(L*W*H)(mm)	1350*1590*1850	1520*1590*1850	2300*1590*1850	3220*1590*1850
Throughput (t/h)	1~2	2~4	3.5~8	5.5~12

Note:

• The capacity per listed above is based on tests of input Grain with 5% contamination. Throughput varies along with different input material and its rate of contamination.

• Be aware that extra attention should be paid to capacity of air compressor when input raw in high contaminant rate and more compressed air required.

• Auxiliary equipment like elevator, heater, compressor system are not included in the machine unit.

• Specifications are subject to change without prior notice.

Mini Full-Color Sorter

The mini sorter is tailor-made for small seeds processors, coffee roasters, scientific research institutes, universities, labs, etc.

It has small footprint and is mobile! With the combination of color & shape sorting, it is able to recognize shells, split and broken commodities.

Model		TCS-1T-MI
Voltage		220VAC，50HZ
Channels		32
Power Supply	Main body	0.4kw
	Heater(optional)	0.4kw
Air Consumption		200~600 ltr/min
Throughput		0.3~0.6T/H
Weight		160KG
Dimension (LxWxH)		400mmx1110mmx1200mm

Note:

• The handling capacity varies along with different input material and its rate of contamination.

• Auxiliary equipment like elevator, heater, compressor and compressed air pipes are not included in the machine unit.

• Specifications are subject to change without prior notice.

Rejecter Series
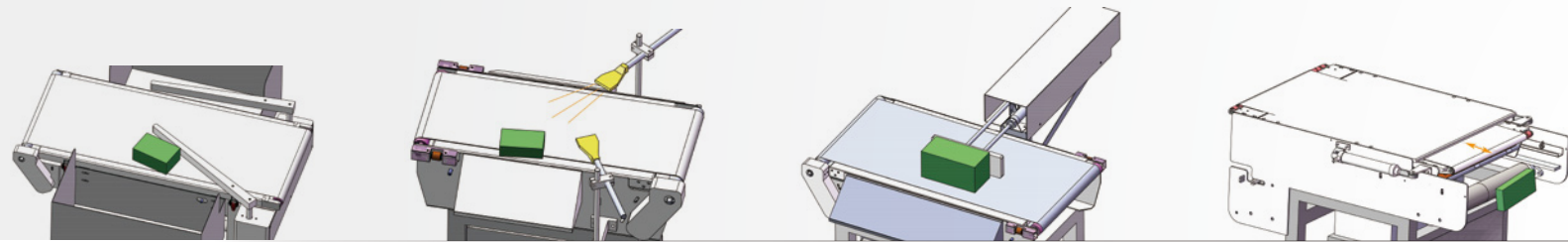
Flipper Type

To reject the products detected to different directions by 1~2 arm levers, which is suitable for the boxed, bag products.

Air Jet Type

To reject the products detected by using the blowing air, which is suitable for the high-speed sorting of the small and light weight products.

Push Type

To reject the products detected by pushing lever, which is suitable for small and large packing products.

Pneumatic Retracting Band Type

To reject the products by two active baffles, which is suitable for the small packed and non-packed products.
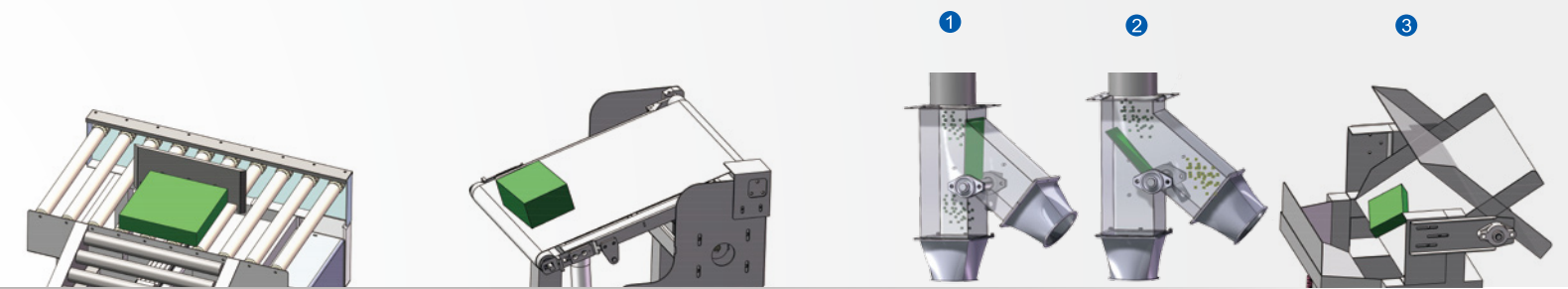
Heavy Push Rejecter

To reject products by pushing lever, especially suitable for the product with big size and heavy weight.

Drop Out Rejecter

To reject the products detected by partial belt flap, which is suitable for packed and non-packed products.

Flap Rejecter

To reject the products detected by the active flap, which is suitable for the dry products in bulk.