Techik®

PRECISION & INTELLIGENT
SORTING SERIES
PRODUCT MANUAL

INTELLIGENT   HIGH DEFINITION
HIGH PRECISION HIGH YIELD

Techik®

TECHIK INSTRUMENT (SHANGHAI) CO., LTD

Color Sorter   X-ray Inspection System   Metal Detector   Checkweigher

Please visit www.techikgroup.com for more information!

TECHIK INSTRUMENT (SHANGHAI) CO., LTD

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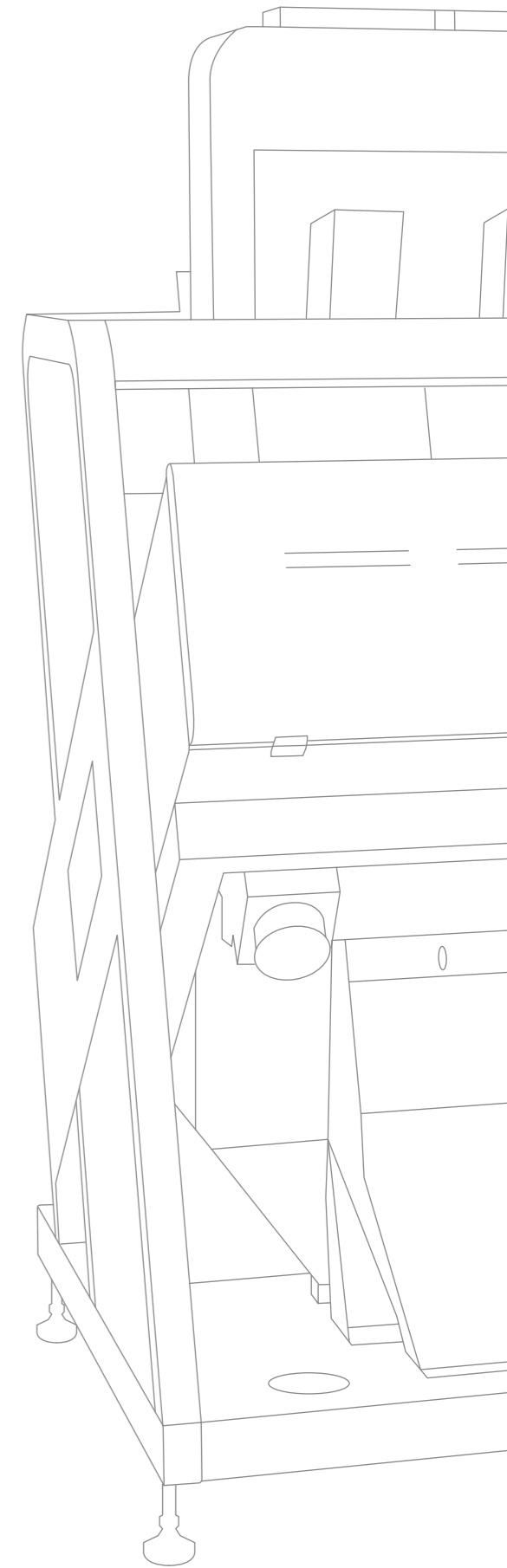
Techik ®

NEW GENERATION

FULLY UPGRADED PERFORMANCE,
FUNCTION & APPEARANCE

ENTERPRISE PROFILE

Established in 2008, Techik Instrument (Shanghai) Co., Ltd. (hereinafter referred to as Shanghai Techik) is a high-tech enterprise focusing on research and development of spectrum online detection technology and product. Its products cover the fields of dangerous goods detection, foreign body detection, substance classification and sorting, etc. . Through the application of multi-spectrum, multi-energy spectrum, and multi-sensor technology, it provides efficient solutions for industries such as public safety, food and drug safety, food processing and resource recovery.

Relying on its profound technical research and development strength, Shanghai Techik owns more than one hundred kinds of intellectual property rights, and has successively won many honorary titles such as Shanghai Specialized and Special New Enterprise, Shanghai Small Giant Enterprise, Shanghai Xuhui District Technology Center.

Shanghai Techik has three holding subsidiaries, has established service organizations and sales offices covering Chinese market, and has service organizations and agency partners in more than 50 countries and regions around the world, to provide customers with technical support and after sales service.

Shanghai Techik adheres to the corporate mission of "making life secure and quality". Continuously improve around customer needs and improve customer experience; Take the striver as the foundation, dedicate to innovation and continuously create value. Shanghai Techik is committed to growing into a globally competitive supplier of intelligent high-end inspection equipment and solutions.

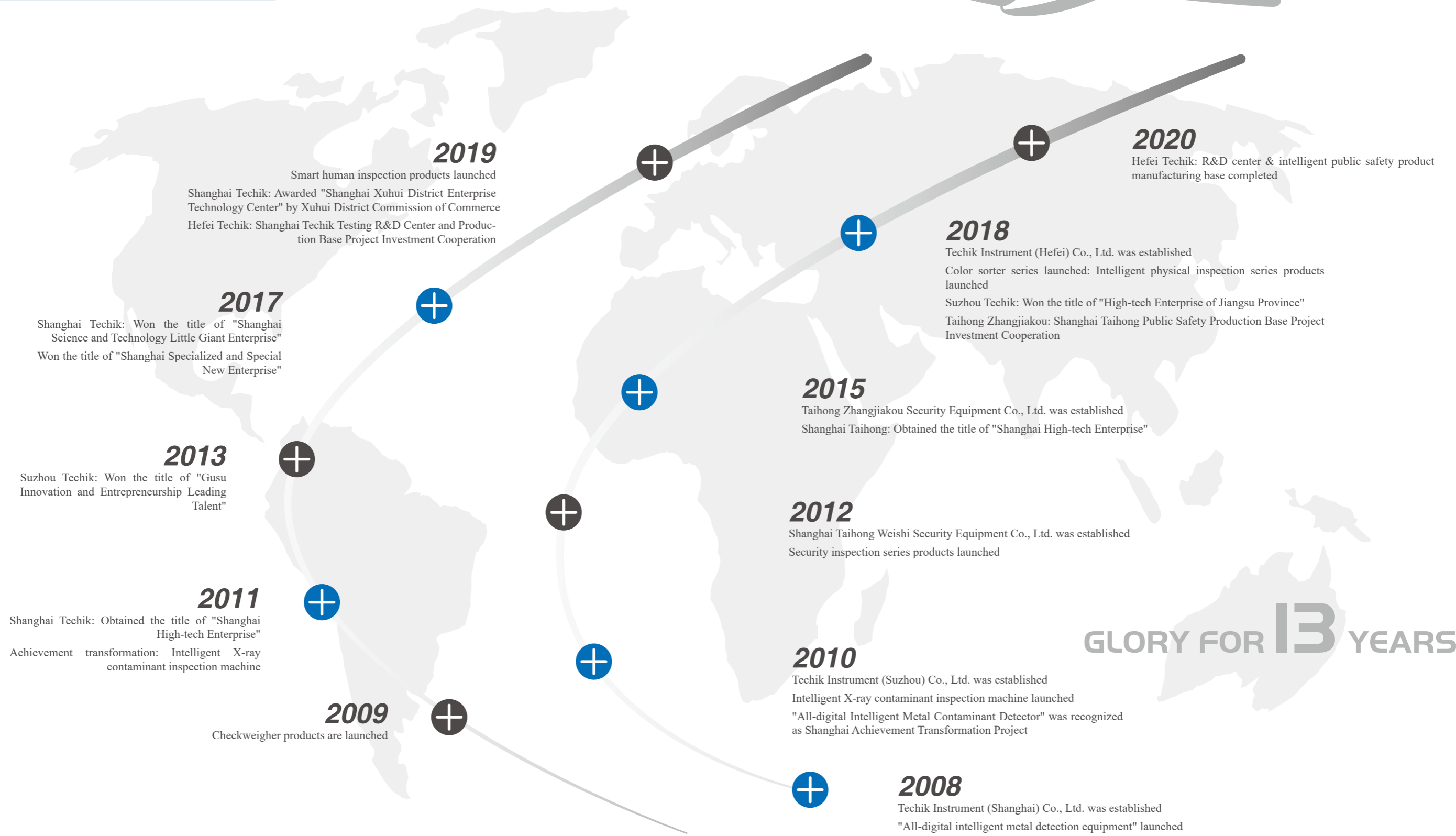**Techik®**

PROVIDE A COMPLETE SET OF SORTING & DETECTION SOLUTIONS

BUILD A PERFECT ANTI-CONTAMINANT SYSTEM TO HELP FULLY REALIZE 0 IMPURITY

● Metal Detector ⟶ ● Color Sorter ⟶ ● X-ray Inspection System ⟶ ● Weighing & Filling ⟶ ● Checkweigher

DEVELOPMENT HISTORY

2020
Hefei Techik: R&D center & intelligent public safety product manufacturing base completed

2019
Smart human inspection products launched
Shanghai Techik: Awarded "Shanghai Xuhui District Enterprise Technology Center" by Xuhui District Commission of Commerce
Hefei Techik: Shanghai Techik Testing R&D Center and Production Base Project Investment Cooperation

2018
Techik Instrument (Hefei) Co., Ltd. was established
Color sorter series launched: Intelligent physical inspection series products launched
Suzhou Techik: Won the title of "High-tech Enterprise of Jiangsu Province"
Taihong Zhangjiakou: Shanghai Taihong Public Safety Production Base Project Investment Cooperation

2017
Shanghai Techik: Won the title of "Shanghai Science and Technology Little Giant Enterprise"
Won the title of "Shanghai Specialized and Special New Enterprise"

2015
Taihong Zhangjiakou Security Equipment Co., Ltd. was established
Shanghai Taihong: Obtained the title of "Shanghai High-tech Enterprise"

2013
Suzhou Techik: Won the title of "Gusu Innovation and Entrepreneurship Leading Talent"

2012
Shanghai Taihong Weishi Security Equipment Co., Ltd. was established
Security inspection series products launched

2011
Shanghai Techik: Obtained the title of "Shanghai High-tech Enterprise"
Achievement transformation: Intelligent X-ray contaminant inspection machine

2010
Techik Instrument (Suzhou) Co., Ltd. was established
Intelligent X-ray contaminant inspection machine launched
"All-digital Intelligent Metal Contaminant Detector" was recognized as Shanghai Achievement Transformation Project

2009
Checkweigher products are launched

2008
Techik Instrument (Shanghai) Co., Ltd. was established
"All-digital intelligent metal detection equipment" launched

GLORY FOR 13 YEARS

HARDWARE ADVANTAGE

01 PROFESSIONAL ANTI-BREAKAGE TECHNOLOGY

02 INDEPENDENT CLEANING SYSTEM

03 HIGH PERFORMANCE REJECTING SYSTEM

04 FULL SPECTRUM SHADOWLESS LED LIGHTING

05 ULTRA HD CCD SENSOR + CUSTOM INDUSTRIAL LENS

06 ▸ STEPLESS DIMMING

07 ▸ LARGE TOUCH SCREEN

Techik®
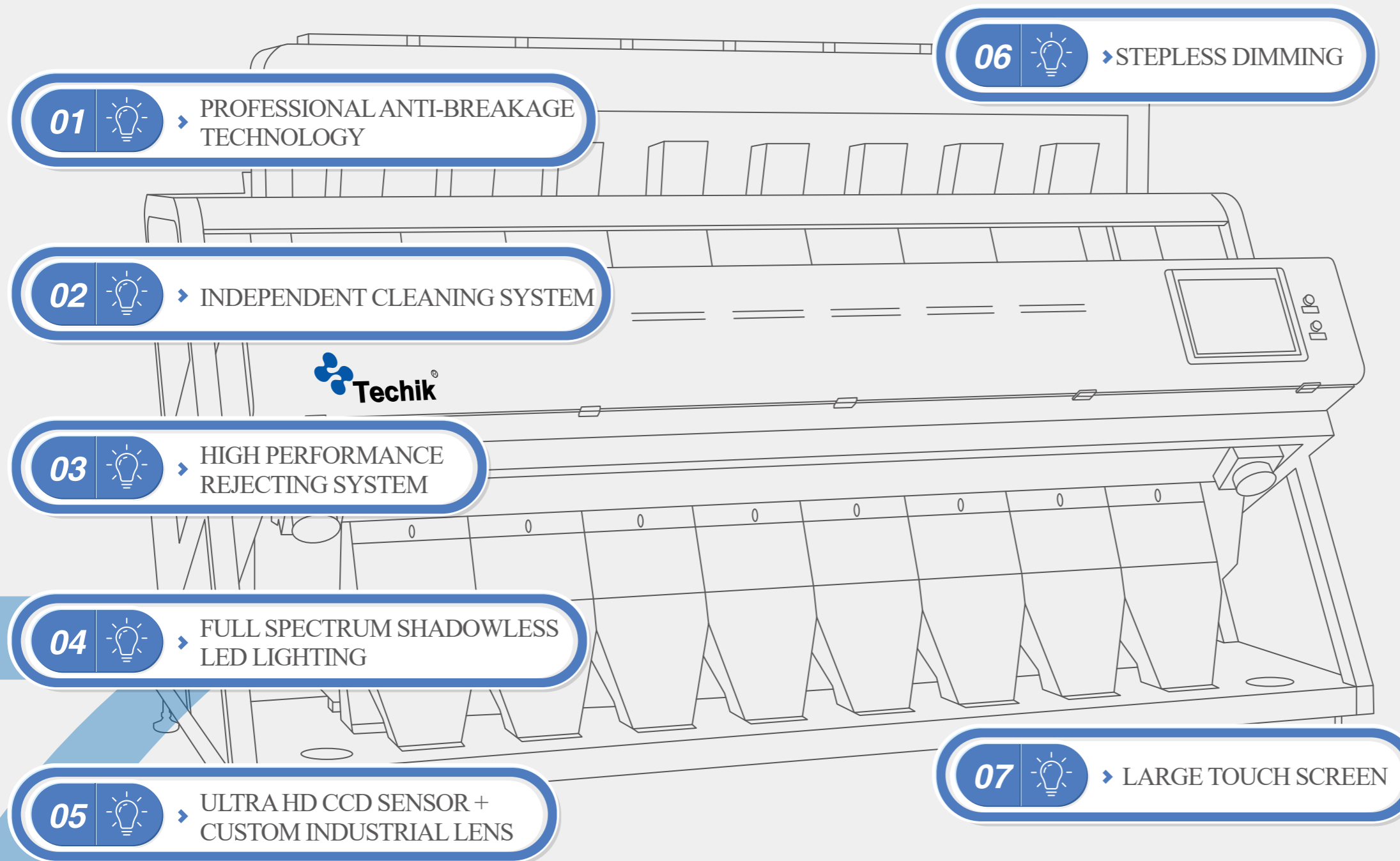
CORE TECHNOLOGY

DEVICE DEEP LEARNING

Mode set up without manual intervention, matching the optimal sorting method, scientifically restoring the customer's psychological prototype of material sorting, realizing a variety of easy operation modes, and providing customers with the best and most economical sorting solutions.

INTELLIGENT SETTING OF PRODUCT PARAMETERS

Autonomous calculation, intelligent identification and intelligent sorting according to the sorting algorithms . Free choice, self resolution of the color, shape, size, and defect area of the material, one-key intelligent automatic control technology, automatic judgement and accurate matching with optimal sorting plan.

AUTOMATIC CALIBRATION

Real-time dynamic image calibration, which greatly improves machine stability and anti-interference performance.

SMART CLOUD CONTROL

Real-time remote control, operation and maintenance, software upgrades, diagnosis and resolution of light source, electric, machinery and proofreading problems, online product operation monitoring, data collection, online guidance. Maximizing the product application value for customers, and sharing the convenience and commercial value of big data era.

SHAPE/SIZE SORTING

Multi-dimensional coordinate algorithm, intelligently identifying the subtle shape differences of materials, easily classifying materials of different shape categories such as size, length, fineness, round square, single and double, enabling simultaneous sorting on color and shape, and the finely divided materials, perfectly realizing the maximum value of quality sorting .

ADVANTAGE

HIGH QUALITY RICE
FROM HIGH QUALITY SORTING
EQUIPMENT

TCS-GR-T SERIES
RICE COLOR SORTER

SHAPE SELECTION   SMART SETTING   AUTO RECOGNITION

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify small defects and Yellowish .
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-GR-T Series	GR2T-BS	2 × 63	1.4 kW	180～240V 50Hz	0.6～0.8MPa	≤1.2 m³/min	1240x1650x1630	550 kg
	GR3T-BS	3 × 63	2.0 kW			≤2.0 m³/min	1680x1600x2020	750 kg
	GR4T-BS	4 × 63	2.5 kW			≤2.4 m³/min	1990x1600x2020	900 kg
	GR5T-BS	5 × 63	3.0 kw			≤2.8 m³/min	2230x1600x2020	1200 kg
	GR6T-BS	6 × 63	3.4 kW			≤3.2 m³/min	2610x1600x2020	1400 kg
	GR7T-BS	7 × 63	3.8 kW			≤3.6 m³/min	2970x1600x2040	1600 kg
	GR8T-BS	8 × 63	4.2 kW			≤4.0 m³/min	3280x1600x2040	1800 kg
	GR10T-BS	10 × 63	4.8 kW			≤4.8 m³/min	3590x1600x2040	2200 kg
	GR12T-BS	12 × 63	5.3 kW			≤5.4 m³/min	4290x1600x2040	2600 kg

Note: 1. This parameter takes gummi as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.

2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description
15-inch LCD Display	★
Visible Light Ultra-clear Sensor	★
Infrared Imaging System	——
InGaAs Composite Infrared Imaging System	——
Shape Sorting Function	★
Spectral Confocal System	——
Geometric Center Positioning	——
Ejector Life	>5 Billion Times

Item	Performance Description
LED Light Source Life	>50000 h
Total Power Life	>50000 h
Malignant Impurity Sorting	Glass, Desiccant, Plastic, Stone
Point-to-point Vacuum System	★
High-efficiency Air System	——
Channel Cover	☆
Feeding Protective Cover	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

🗨 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

TCS-DR-R SERIES
RICE COLOR SORTER

SHAPE SELECTION   SMART SETTING   AUTO RECOGNITION   INFRARED TECHNOLOGY

- Equipped with a high resolution 5400 pixel full-color sensor, high- resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Transparent, plastic and non-metallic particles and particles of different colors, sizes, shapes and even physical properties can be sorted. Infrared sensor has been widely used in color sorting when there is material overlap. After effective perspective, the culled object can be efficiently sorted.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DR-R Series	DR2R-BS	2 × 63	1.4 kW	180～240V 50Hz	0.6～0.8MPa	≤1.2 m³/min	1240x1650x1630	550 kg
	DR3R-BS	3 × 63	2.0 kW			≤2.0 m³/min	1680x1600x2020	750 kg
	DR4R-BS	4 × 63	2.5 kW			≤2.4 m³/min	1990x1600x2020	900 kg
	DR5R-BS	5 × 63	3.0 kw			≤2.8 m³/min	2230x1600x2020	1200 kg
	DR6R-BS	6 × 63	3.4 kW			≤3.2 m³/min	2610x1600x2020	1400 kg
	DR7R-BS	7 × 63	3.8 kW			≤3.5 m³/min	2970x1600x2040	1600 kg
	DR8R-BS	8 × 63	4.2 kW			≤4.0 m³/min	3280x1600x2040	1800 kg
	DR10R-BS	10 × 63	4.8 kW			≤4.8 m³/min	3590x1600x2040	2200 kg
	DR12R-BS	12 × 63	5.3 kW			≤5.4 m³/min	4290x1600x2040	2600 kg

Note: 1. This parameter takes gummi as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.

2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description		
	Standard Edition	Platinum Edition	Diamond Edition
15-inch LCD Display	★	★	★
Visible Light Ultra-clear Sensor	★	★	★
Infrared Imaging System	——	★	☆
InGaAs Composite Infrared Imaging System	——	——	★
Shape Sorting Function	★	★	★
Spectral Confocal System	★	★	★
Geometric Center Positioning	★	★	★
Ejector Life	>5 Billion Times		

Item	Performance Description		
	Standard Edition	Platinum Edition	Diamond Edition
LED Light Source Life	>50000 h		
Total Power Life	>50000 h		
"Malignant Impurity Sorting Glass, Desiccant, Plastic, Stone"	☆☆☆	☆☆☆☆	☆☆☆☆☆
Point-to-point dust extraction System	★	★	★
High-efficiency Air System	★	★	★
Channel Cover	——	☆	☆
Feeding Protective Cover	☆	☆	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

🗨 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

3 TCS-GZ-T SERIES
MULTIFUNCTION COLOR SORTER

SHAPE SELECTION | SMART SETTING | AUTO RECOGNITION

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Targeted dust removal system and anti- breakage system.

📋 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-GZ-T Series	GZ2T-BS	2 × 63	1.4 kW	180~240V 50Hz	0.6~0.8MPa	≤1.2 m³/min	1240x1650x1630	550 kg
	GZ3T-BS	3 × 63	2.0 kW			≤2.0 m³/min	1680x1600x2020	750 kg
	GZ4T-BS	4 × 63	2.5 kW			≤2.4 m³/min	1990x1600x2020	900 kg
	GZ5T-BS	5 × 63	3.0 kw			≤2.8 m³/min	2230x1600x2020	1200 kg
	GZ6T-BS	6 × 63	3.4 kW			≤3.2 m³/min	2610x1600x2020	1400 kg
	GZ7T-BS	7 × 63	3.8 kW			≤3.6 m³/min	2970x1600x2040	1600 kg
	GZ8T-BS	8 × 63	4.2 kW			≤4.0 m³/min	3280x1600x2040	1800 kg
	GZ10T-BS	10 × 63	4.8 kW			≤4.8 m³/min	3590x1600x2040	2200 kg
	GZ12T-BS	12 × 63	5.3 kW			≤5.4 m³/min	4290x1600x2040	2600 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

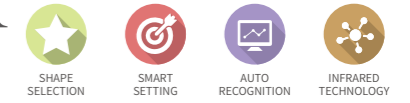| Item	Performance Description	Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	Easy Human-machine Operation Screen	★	Ambient Lighting Life	>50000 h
Full Color Ultra-definition Sensor	★	Shape sorting Recognition	★	Design Life of Whole Machine	>50000 h
Natural Cold Lighting System	★	High-speed Shape sorting and Drive-off Technology	☆	Part in Contact with Material	★
Colorful Backlight	★	Tracking and Rejecting Function	★	Anti-fragmentation Treatment	★
High Frequency Solenoid Valve	★	High Pressure and Low Pulse Width Spray Valve System	★	Equipment Body	☆
Linear High Frequency Vibration Plate Feeding	★	24V Solenoid Valve Power Supply System	★	Imported Industrial Power Supply	★
Easy to Choose Technology	★	Air Curtain View Zone Dustproof Technology	★	SMC Pneumatic Unit	☆
HD Snapshot	★	Ejector Life	>5 Billion Times	YSC Pneumatic Unit	★

Note: The above parameters are measured under the conditions of room temperature 25°C and 2% impurity content in the raw materials.
The specific indicators may vary with the environment, materials and impurity content.
★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

❗ SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

4 TCS-DZ-R SERIES
MULTIFUNCTION COLOR SORTER

SHAPE SELECTION | SMART SETTING | AUTO RECOGNITION | INFRARED TECHNOLOGY

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Targeted dust removal system and anti- breakage system.
- Distinguish the characteristics of objects of different materials, and be able to sort impurities such as stone/glass.

📋 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DZ-R Series	DZ2R-BS	2 × 63	1.4 kW	180~240V 50Hz	0.6~0.8MPa	≤1.2 m³/min	1240x1650x1630	550 kg
	DZ3R-BS	3 × 63	2.0 kW			≤2.0 m³/min	1680x1600x2020	750 kg
	DZ4R-BS	4 × 63	2.5 kW			≤2.4 m³/min	1990x1600x2020	900 kg
	DZ5R-BS	5 × 63	3.0 kw			≤2.8 m³/min	2230x1600x2020	1200 kg
	DZ6R-BS	6 × 63	3.4 kW			≤3.2 m³/min	2610x1600x2020	1400 kg
	DZ7R-BS	7 × 63	3.8 kW			≤3.5 m³/min	2970x1600x2040	1600 kg
	DZ8R-BS	8 × 63	4.2 kW			≤4.0 m³/min	3280x1600x2040	1800 kg
	DZ10R-BS	10 × 63	4.8 kW			≤4.8 m³/min	3590x1600x2040	2200 kg
	DZ12R-BS	12 × 63	5.3 kW			≤5.4 m³/min	4290x1600x2040	2600 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

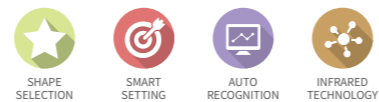| Item	Performance Description	Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	HD Snapshot	★	Ejector Life	>50000 h
Full Color Ultra-definition Sensor	★	Easy Human-machine Operation Screen	★	Ambient Lighting Life	>50000 h
Infrared Imaging System	☆	Shape sorting Recognition	★	Design Life of Whole Machine	>50000 h
InGaAs Composite Infrared Imaging System	☆	High-speed Shape sorting and Drive-off Technology	★	Part in Contact with Material	★
Natural Cold Lighting System	★	Tracking and Rejecting Function	★	Anti-fragmentation Treatment	★
Colorful Backlight	★	Geometric Center Positioning	★	Equipment Body	☆
High Frequency Solenoid Valve	★	High Pressure and Low Pulse Width Spray Valve System	★	Imported Industrial Power Supply	☆
Linear High Frequency Vibration Plate Feeding	★	24V Solenoid Valve Power Supply System	>5 Billion Times	SMC Pneumatic Unit	★
Easy to Choose Technology	★	Air Curtain View Zone Dustproof Technology	>50000 h	YSC Pneumatic Unit	☆

Note: The above parameters are measured under the conditions of room temperature 25°C and 2% impurity content in the raw materials.
The specific indicators may vary with the environment, materials and impurity content.
★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

❗ SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

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TCS-DB-B SERIES
BELT TYPE COLOR SORTER

SHAPE SELECTION　SMART SETTING　AUTO RECOGNITION　INFRARED TECHNOLOGY

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Efficient and stable transmission system, convenient for belt replacement, good for protecting fragile materials, with wide range of use and high sorting efficiency.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DB-B Series	DB300-BS	63	1.5 kW	180～240V 50Hz	0.6～0.8MPa	≤1.2 m³/min	3780x1270x2000	950 kg
	DB600-BS	126	2.0 kW			≤2.0 m³/min	3780x1580x2000	1100 kg
	DB900-BS	189	2.5 kW			≤2.5 m³/min	3780x1890x2000	1250 kg
	DB1200-BS	252	3.0 kW			≤3.0 m³/min	3780x2200x2000	1400 kg
	DB600-BD	252	3.0 kW			≤3.0 m³/min	4950x1800x2400	2050 kg
	DB1200-BD	504	4.0 kW			≤4.0 m³/min	4950x2420x2400	2650 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	Pine Nuts	Yellow particles, black particles, stones, broken particles
Visible Light Ultra-clear Sensor	★	Pistachio	Closed Pistachio
Infrared Imaging System	☆	Malignant Impurity Sorting	Plastic, Stones, Insect corpses, Glass
InGaAs Composite Infrared Imaging System	☆	ejector Life	>5 Billion Times
New Prism Spectroscopic Imaging System	☆	Visible Light Source Life	>50000h
Compound Eye Lighting System	★	Whole Machine Power Life	>50000h
Anti-fragmentation Spray Valve	★	Enhanced Point-to-point Vacuum System	☆
Geometric Center Positioning	★	Remote Protection of Sorting Room	——
Flexible Rejection	☆	Waterproof Seal IP65	☆
Shape sorting Recognition	★	Worry-free Transmission Structure	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

💡 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

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TCS-DB-L SERIES
SLOW SPEED BELT COLOR SORTER

SHAPE SELECTION　SMART SETTING　AUTO RECOGNITION　INFRARED TECHNOLOGY

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Efficient and stable transmission system, convenient for belt replacement, good protection for fragile materials & good practicability for dusty occasions.
- Widely used in the sorting of ore, puffed food, and fragile materials (such as pine nuts, walnut kernels, and fresh fruits).

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DB-L Series	DB600-LS	126	2.0 kW	180～240V 50Hz	0.6～0.8MPa	≤2.0 m³/min	3810x1340x2200	900kg
	DB1200-LS	252	3.0 kW			≤3.0 m³/min	3810x1940x2200	1200kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

| Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	Open Pine Nuts	Yellow particles, black particles, stones, broken particles
Visible Light Ultra-clear Sensor	★	Pistachio	Closed Pistachio
Infrared Imaging System	☆	Malignant Impurity Sorting	Plastic, Stones, Insect corpses, Glass
InGaAs Composite Infrared Imaging System	☆	ejector Life	>5 Billion Times
New Prism Spectroscopic Imaging System	☆	Ambient Lighting Life	>50000h
Compound Eye Lighting System	★	Whole Machine Power Life	>50000h
Anti-fragmentation Spray Valve	★	Enhanced Point-to-point Vacuum System	☆
Geometric Center Positioning	★	Remote Protection of Sorting Room	★
Flexible Rejection	☆	Waterproof Seal IP65	☆
Shape sorting Recognition	★	Worry-free Transmission Structure	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

💡 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

7

TCS-DB-C SERIES
SUPER SHAPE-SORTING COLOR SORTER

48 SHAPE SELECTION | SMART SETTING | AUTO RECOGNITION | INFRARED TECHNOLOGY
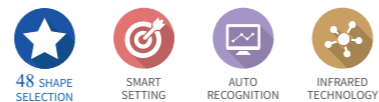
- A strong shape sorting function, including 48 types of selection algorithms. It can realize the shape sorting function under high-volume conditions, and has a strong ability to identify products with similar or the same color and different shapes.
- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, normal sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DB-C Series	DB600-BS-C	126	2.0 kW	180～240V 50Hz	0.6～0.8MPa	≤2.0 m³/min	3780x1580x2000	1100 kg
	DB1200-BS-C	252	3.0 kW			≤3.0 m³/min	3780x2200x2000	1400 kg
	DB600-BD-C	252	3.0 kW			≤3.0 m³/min	4950x1800x2400	2050 kg
	DB1200-BD-C	504	4.0 kW			≤4.0 m³/min	4950x2420x2400	2650 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

| Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	Pine Nuts	Yellow particles, black particles, stones, broken particles
Visible Light Ultra-clear Sensor	——	Pistachio	Closed Pistachio
Infrared Imaging System	☆	Malignant Impurity Sorting	Plastic, Stones, Insect corpses, Glass
InGaAs Composite Infrared Imaging System	☆	Ejector Life	>5 Billion Times
New Prism Spectroscopic Imaging System	☆	Visible Light Source Life	>50000h
Compound Eye Lighting System	★	Whole Machine Power Life	>50000h
Anti-fragmentation Spray Valve	★	Enhanced Point-to-point Vacuum System	☆
Geometric Center Positioning	★	Remote Protection of Sorting Room	★
Flexible Rejection	☆	Waterproof Seal IP65	☆
Shape sorting and Size Recognition	Super Configuration	Worry-free Transmission Structure	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

💬 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Super Configuration	Super Configuration	Super Configuration	Super Configuration	Super Configuration

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8

TCS-DS SERIES
CHUTE TYPE COMPACT COLOR SORTER

SHAPE SELECTION | SMART SETTING | AUTO RECOGNITION | INFRARED TECHNOLOGY
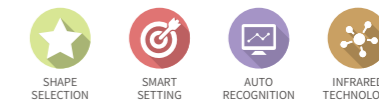
- Small size, small space occupation, 5400 pixel camera, strong applicability for occasions with low output.
- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- Intelligent multiple-type and easy-sorting algorithm system, with one-key setting of sorting modes. Equipped with a quadruple quick-installation high-frequency injection valve, which reduces the installation space, increases productivity, has a wide range of applications, and is highly flexible.
- The whole machine can be equipped with stainless steel full anti-corrosion treatment body, which is suitable for food, seafood, condiment, mineral industries and laboratories.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DS Series	DS1-BS	1 × 63	1.0 kW	180～240V 50Hz	0.6～0.8MPa	≤0.8 m³/min	930x1650x1630	400 kg
	DS2-BS	2 × 63	1.4 kW			≤1.2 m³/min	1240x1650x1630	550 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description	Item	Performance Description
15-inch LCD Display		LED Light Source Life	>50000 h
Visible Light Ultra-clear Sensor	★	Total Power Life	>50000 h
Infrared Imaging System	☆	Malignant Impurity Sorting	Glass, Desiccant, Plastic, Stone
InGaAs Composite Infrared Imaging System	☆		
Shape Sorting Function	★	Point-to-point Vacuum System	★
Spectral Confocal System	★	High-efficiency Air System	——
Geometric Center Positioning	★	Channel Cover	☆
Ejector Life	>5 Billion Times	Feeding Protective Cover	☆

Note: ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

💬 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

9 | TCS-DS-Q/H SERIES
CHUTE TYPE MINI COLOR SORTER

SHAPE SELECTION · SMART SETTING · AUTO RECOGNITION

- It is small in size and does not take up space. It can be used in scientific research institutes, small processing households and other occasions where production requirements are not high.
- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- Intelligent multiple-type and easy-sorting algorithm system, with one-key setting of sorting modes. Equipped with a quadruple quick-installation high-frequency injection valve, which reduces the installation space, increases productivity, has a wide range of applications, and is highly flexible.
- The whole machine can be equipped with stainless steel full anti-corrosion treatment body, which is suitable for food, seafood, condiment, mineral industries and laboratories.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DS Series	DSH-BS	1 × 32	0.6 kW	180~240V 50Hz	0.6~0.8MPa	≤0.8 m³/min	450x1250x1450	315 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description	Item	Performance Description
10-inch LCD Display	★	High Pressure and Low Pulse Width Spray Valve System	★
Flipper Type Display Structure	——	Low Pressure and High Pulse Width Spray Valve System	——
Full Color Ultra-definition Sensor	★	24V Solenoid Valve Power Supply System	★
Natural Cold Lighting System	★	Air Curtain View Zone Dustproof Technology	
Colorful Backlight	☆	Ejector Life	>5 Billion Times
High Frequency Solenoid Valve	★	Ambient Lighting Life	>50000 h
Linear High Frequency Vibration Plate Feeding	★	Design Life of Whole Machine	>50000 h
Easy to Choose Technology	★	Part in Contact with Material	★
HD Snapshot	★	Anti-fragmentation Treatment	★
Easy Human-machine Operation Screen	★	Equipment Body	☆
Shape sorting Recognition	★	Imported Industrial Power Supply	★
High-speed Shape sorting and Drive-off Technology	☆	SMC Pneumatic Unit	——
Geometric Center Positioning	★	YSC Pneumatic Unit	——
Tracking and Rejecting Function	☆		

Note: The above parameters are measured under the conditions of room temperature 25°C and 2% impurity content in the raw materials.
The specific indicators may vary with the environment, materials and impurity content.
★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

🧠 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

10 | TCS-DZ SERIES
MULTIFUNCTIONAL MULTILAYER COLOR SORTER

SHAPE SELECTION · SMART SETTING · AUTO RECOGNITION

- Equipped with a high resolution 5400 pixel full-color sensor, high resolution snapshot function, perfect restoration of the true color of the material, 8 times magnification of photos, ultra-high-speed linear scanning speed, improvement of the ability to accurately identify little defects.
- The intelligent multiple-type easy-sorting algorithm system enhances parallel analysis and processing capabilities, with one-key setting of sorting modes, which can realize multiple color independent sorting, positive sorting, reverse sorting, multiple sorting, etc., so eventually achieving the durable and stable sorting with more prominent effect.
- High-brightness LED cold light source, shadowless lighting, to ensure stable and durable lighting environment.
- Targeted dust removal system and anti- breakage system.

📝 TECHNICAL INDEX LIST

Series	Model	Channel Number	Total Power	Voltage	Air Pressure	Air Consumption	Dimension (LxDxH)(mm)	Weight
TCS-DZ Series	DZ900-BT	900	5 kW	340~420V 50Hz	0.6~0.8MPa	≤5.4 m³/min	3290x2360x3710	2000 kg

Note: 1. This parameter takes peanuts as an example (the impurity content is 2%), and the above parameter indicators may vary due to different materials and impurity content.
2. If the product is updated without notice, the actual machine shall prevail.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	High Pressure and Low Pulse Width Spray Valve System	★
Full Color Ultra-definition Sensor	★	24V Solenoid Valve Power Supply System	★
Natural Cold Lighting System	★	Air Curtain View Zone Dustproof Technology	★
Colorful Backlight	★	Ejector Life	5 Billion Times
High Frequency Solenoid Valve	★	Ambient Lighting Life	>50000 h
Linear High Frequency Vibration Plate Feeding	★	Design Life of Whole Machine	>50000 h
Easy to Choose Technology	★	Part in Contact with Material	★
HD Snapshot	★	Anti-fragmentation Treatment	★
Easy Human-machine Operation Screen	★	Equipment Body	☆
Shape sorting Recognition	★	Imported Industrial Power Supply	★
High-speed Shape sorting and Drive-off Technology	☆	SMC Pneumatic Unit	☆
Tracking and Rejecting Function	★	YSC Pneumatic Unit	★

Note: The above parameters are measured under the conditions of room temperature 25°C and 2% impurity content in the raw materials.
The specific indicators may vary with the environment, materials and impurity content.
★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

🧠 SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

11 TCS-DM SERIES
SPECIAL-PURPOSE CUSTOMIZED COLOR SORTER

SHAPE SELECTION   SMART SETTING   AUTO RECOGNITION   INFRARED TECHNOLOGY
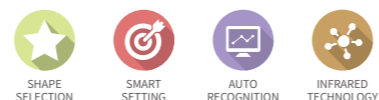
- The M series color sorter launched by Techik is a newly designed color sorter with high output, high precision and high stability, which is especially suitable for fine industrial products such as ore, virgin plastic particles and salt.

⚙ PERFORMANCE INDEX LIST

Item	Performance Description	Item	Performance Description
15-inch LCD Display	★	High Pressure and Low Pulse Width Spray Valve System	★
Full Color Ultra-definition Sensor	★	24V Solenoid Valve Power Supply System	★
Natural Cold Lighting System	★	Air Curtain View Zone Dustproof Technology	★
Colorful Backlight	★	ejector Life	5 Billion Times
High Frequency Solenoid Valve	★	Ambient Lighting Life	>50000 h
Linear High Frequency Vibration Plate Feeding	★	Design Life of Whole Machine	>50000 h
Easy to Choose Technology	★	Part in Contact with Material	★
HD Snapshot	★	Anti-fragmentation Treatment	★
Easy Human-machine Operation Screen	★	Equipment Body	☆
Shape sorting Recognition	★	Imported Industrial Power Supply	★
High-speed Shape sorting and Drive-off Technology	☆	SMC Pneumatic Unit	☆
Tracking and Rejecting Function	★	YSC Pneumatic Unit	★

Note: The above parameters are measured under the conditions of room temperature 25°C and 2% impurity content in the raw materials.
    The specific indicators may vary with the environment, materials and impurity content.
    ★ stands for standard configuration; ☆ stands for optional configuration; - stands for N/A.

⚠ SMART INDEX LIST

Simple Operation	Terminal Operation	Cloud Assistance	Equipment Self-check	Multi-level Program Settings
Standard Configuration	Optional Configuration	Optional Configuration	Standard Configuration	Standard Configuration

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12 TXR SERIES
X-RAY INSPECTION SYSTEM FOR BULK PRODUCTS

- Techik 32-channel air blowing X-ray machine can simultaneously perform online detection of foreign objects with different attributes. The unique 27-level image analysis technology separates the foreign objects from the product layer by layer, so as to achieve the effect of accurate and efficient detection of foreign objects. The addition of 32-channel high-speed spray valve rejection system achieves greater output, lower losses, and higher returns.
- Suitable for the sorting and detection of bulk materials such as peanuts, nuts, beans and other agricultural products and of small-bag packaging materials, bringing greater output, higher precision, and less raw materials to carry out.

TXR-B2-4010SG

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13 TXR SERIES
X-RAY INSPECTION SYSTEM FOR BULK PRODUCTS

- Techik 48-channel air blowing X-ray machine can simultaneously perform online detection of foreign objects with different attributes. The unique 27-level image analysis technology separates the foreign objects from the product layer by layer, so as to achieve accurate and efficient detection of foreign objects. The addition of 48-channel high-speed spray valve rejection system achieves greater output, lower losses, and higher returns.
- Suitable for the sorting and detection of bulk materials such as peanuts, nuts, beans and other agricultural products and of small-bag packaging materials, bringing greater output, higher precision, and less raw materials to carry out.

TXR-G3-4010G

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14 IMD SERIES
CONVEYOR BELT METAL DETECTOR

- Made of all stainless steel materials, with the original phase tracking, product tracking and automatic balance correction functions, the detection sensitivity and stability of the metal detector have been improved, and the detection range is wider. The optimized circuit structure can keep the detection accuracy constant in a wide speed range.
- Based on the II-generation machine, new functions such as dual-channel detection, high and low frequency switching, etc., have improved the detection performance and adaptability of the equipment. For products with more types and greater differences, different frequency detection can be replaced to improve the detection effect. The panel adopts double-row LED strips, which is simple and beautiful.

IMD-IIS-4015

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15 IMD SERIES
GRAVITY FALL METAL DETECTOR

- Detecting and rejecting metal contaminants in powder and particles.
- Using flip-type rejection, increasing production capacity and production efficiency.
- A variety of probes are available for option, which is an indispensable testing equipment on the particle production line.
- Optimized the main board circuit parameters, compared with the previous accuracy and stability have been significantly improved

IMD-II-P50

16 IMD SERIES
CONVEYOR BELT METAL DETECTOR

- Using a small tablet machine to modify the operation mode to realize the detection of powder, granules, and small packaging items.
- Equipped with soft edges to prevent materials from being spilled or caught in the gap of the belt.
- The flip plate which is used to reject defective products can effectively reject defective products and improve production efficiency.

IMD-II-4008

17 IMC SERIES
COMBO METAL DETECTOR AND CHECKWEIGHER

- High-speed, high-precision, high-stability dynamic detection, with German imported HBM high-precision sensor.
- Compact design, saving space and installation cost.
- The metal detector and the checkweigher are perfectly integrated on a cantilever frame, which minimizes the space requirement of the production line, and can be easily and effectively installed in the existing workshop.
- Providing a variety of fast rejection mechanisms to meet the rejection of various products and production speeds.
- The quick disassembly mode makes the machine easier to clean, and the stainless steel surface of the whole machine is mirrored/brushed.
- Humanized function. Product database which can store 100 kinds of products. The password protection function ensures that unauthorized personnel cannot change the data. It has data statistics function and supports data export. The USB and Ethernet interfaces can be equipped with various expansion devices (printers, inkjet printers and other serial port communication devices) according to user needs.
- Non-standard functions such as leak detection, air pressure detection, full waste detection, front and back end blocking detection, etc. are optional.

IMC-II-400L

18 IXL SERIES
CHECKWEIGHER FOR LARGE PACKAGES

- High-speed, high-precision, high-stability dynamic detection, with high-precision sensors.
- Widely used in online weight detection in food, medicine, consumables and other industries.
- Providing a variety of fast rejection mechanisms to meet the rejection of various products and production speeds.
- Professional man-machine interface design, simple operation, automatic zero tracking technology, effectively guarantee the detection accuracy of aquatic products.
- The quick disassembly method is easier to clean, and the stainless steel surface of the whole machine is mirrored/brushed.
- Humanized function. Product database which can store 100 kinds of products. The password protection function ensures that unauthorized personnel cannot change the data. It has data statistics function and supports data export. The USB and Ethernet interfaces can be equipped with various expansion devices (printers, inkjet printers and other serial port communication devices) according to user needs.
- Non-standard functions such as leak detection, air pressure detection, full waste detection, front and back end blocking detection, etc. are optional.

IXL-II-600

INDUSTRY APPLICATION

RICE

| Japonica rice | Long grain rice | Brown rice | Black rice | Parboiled rice |

BEANS

| Kidney Beans | Adzuki Beans | Mung Beans | Soybeans | Chickpeas |

TREE NUTS

| Cashew Nuts | Walnuts | Almonds | Pistachios | Pine Nuts |

CEREALS

| Barley rice | Quinoa | Millet | Flaxseed | Buckwheat |

SEED KERNEL

| White melon seeds | Pumpkin seeds | Sunflower seeds | Watermelon seeds | Peanuts |

SEASONING

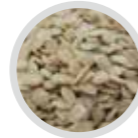| Pepper | Star anise | Flower pepper | Chili | Cumin |

CROP SEEDS

| Radish seeds | Leek seeds | Tomato seeds | Pepper seeds | Cotton seeds |

FROZEN & DEHYDRATED VEGETABLES

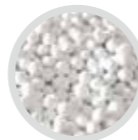| Quick-frozen bowl of beans | Green onions | Raisins | Quick-frozen corn | Blueberries |

MINERALS & INDUSTRIAL PRODUCTS

| Salt | Monosodium glutamate | Quartz sand | Desiccant | Plastic |

CHINESE HERBAL MEDICINE

| Chinese wolfberry | Cassia seed | Ophiopogon japonicus | Black wolfberry | Yellow wolfberry |

TEA & COFFEE

| Green tea | Black tea | Fresh fruit coffee | Raw beans | Cooked coffee beans |