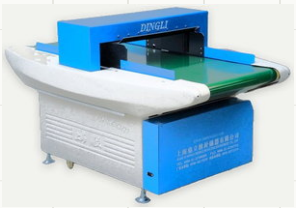
PRODUCT MANUAL

DINGLI

NEEDLE DETECTOR INSTRUMENTS

SHANGHAI DINGLI NEEDLE DETECTOR INSTRUMENT CO., LTD.

A tripod of quality, standing for the world.



JZQ-630(K)
Needle Detector



MD-8500
Metal Detector



SL Series
Checkweigher



RJX5030
X-Ray FOD

PRODUCT LINES

19 MODELS · 4 PRODUCT LINES

Needle Detector · Metal Detector · Checkweigher · X-ray Foreign Object Detection

SHANGHAI DINGLI · 19 MODELS · 2026

EU CE certified · Drafter of the light industry standard (needle detector)

Format A4 · Version A · 2026

PRODUCT CATALOGUE · 2026

Contents

01 Needle Detector

NEEDLE DETECTOR · 9 models

JZQ-630(K)	Automatic Conveyor Needle Detector	01.1
DN-8500-2	Automatic Conveyor Needle Detector	01.2
JZQ-600S(K)	Automatic Dual-Head Conveyor Needle Detector	01.3
DN-8500-2C	Pillow & Cushion Compression Needle Detector	01.4
JZQ-710(K)	Shoe Factory Assembly Line Needle Detector	01.5
JZQ-2000	Wide-Width Conveyor Needle Detector	01.6
JZQ-2000-2	Non-Transmission Wide-Width Needle Detector	01.7
DN-8500	Large-Aperture Custom Needle Detector	01.8
DFZ-10	Fully Automatic Flipping Device	01.9

02 Metal Detector

METAL DETECTOR · 4 models

MD-8500	Chain-Belt Metal Detector	02.1
MD-8500S	Dual-Head Digital Metal Detector	02.2
MD-9500	Digital Metal Detector	02.3
MD-7000-F	Drop-Type Metal Detection Separator	02.4

03 Checkweigher

CHECKWEIGHER · 2 models

SL Series	High-Performance Online Checkweigher	03.1
MD-SL	Metal Detection & Checkweighing Integrated Machine	03.2

04 X-Ray Inspection

X-RAY INSPECTION · 4 models

RJX5030	X-Ray Foreign Object Detection System	04.1
DL-C6550	Standalone Intelligent X-Ray Contaminant Detection System	04.2
DL-C4015 / DL-C6035	X-Ray Foreign Object Detector	04.3
DL-C6550	Full-Case Intelligent X-Ray Inspection System	04.4

19 models across 4 product lines. Specifications are taken from each product sheet; detection sensitivity is measured with an empty belt.

① Standard models listed; other sizes and special requirements can be customized on request.

② Detection sensitivity is measured without product effect or environmental interference.

AUTOMATIC CONVEYOR NEEDLE DETECTOR

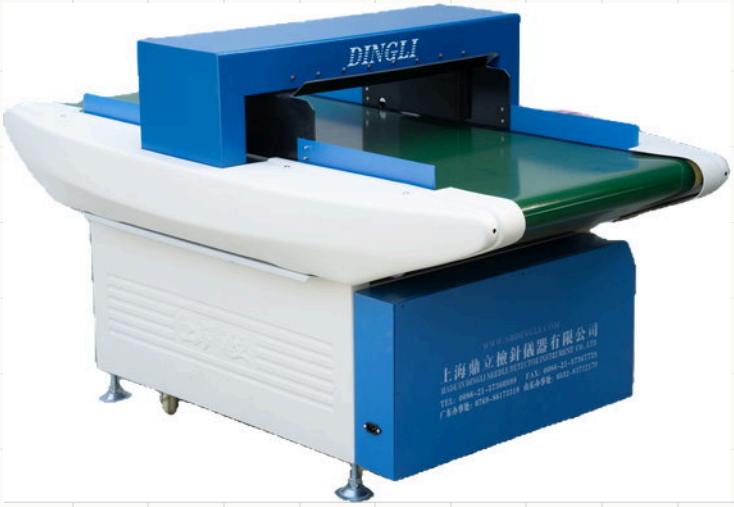
JZQ-630(K)

Automatic Conveyor Needle Detector

Fully automatic continuous · Four models

OVERVIEW

The JZQ-630(K) is a fully automatic continuous needle detector with an effective detection width of 600 mm and four height options from 100 to 200 mm. With an empty belt it detects ferrous Fe ≥ ϕ0.8 - ϕ1.5 mm; the conveyor runs at 26 m/min with a load capacity of 10 - 20 kg.



JZQ-630(K) · Models 6010 / 6012 / 6015 / 6020

KEY FIGURES

600 mm
Effective detection width

26 m/min
Belt speed (fixed)

ϕ0.8 mm
Fe sensitivity · 6010

20 kg
Load capacity · 6020

APPLICATIONS

- **Apparel** — Screening garments and accessories for broken needles
- **Home textiles** — Screening quilts and pillow fillings
- **Toys** — Screening fillings and finished products for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	6010	6012	6015	6020
Voltage	AC 220V, 50 - 60 Hz			
Motor power	60 W	60 W	90 W	90 W
Construction	High-strength carbon steel, ABS engineering plastic			
Effective detection width	600 mm			
Effective detection height	100 mm	120 mm	150 mm	200 mm
Detection sensitivity · Ferrous Fe (empty belt)	≥ ϕ0.8 mm	≥ ϕ1.0 mm	≥ ϕ1.2 mm	≥ ϕ1.5 mm
Belt height above floor	680 mm			
Belt width	560 mm			
Load capacity	10 KG	10 KG	15 KG	20 KG
Belt direction	Left to right			
Max. belt speed	Fixed speed 26 m/min			
Belt material	Needle-detector PVC conveyor belt			
Display and control	Control panel key input			
Alarm mode	Buzzer alarm and automatic belt stop when broken needles or magnetic metal foreign objects are detected			
Overall length	1650 mm			
Overall width	1050 mm			
Overall height	900 mm	920 mm	950 mm	1000 mm

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

AUTOMATIC CONVEYOR NEEDLE DETECTOR

DN-8500-2

Automatic Conveyor Needle Detector

High uniformity · Four models

OVERVIEW

The DN-8500-2 is a high-uniformity needle detector with detection widths of 500 - 600 mm and heights of 100 - 200 mm by model. With an empty belt it detects ferrous Fe ≥ ϕ0.8 - ϕ1.2 mm; protection rating IP54, load capacity 15 - 30 kg.



DN-8500-2 · Models 5010 / 5015 / 5020 / 6010

KEY FIGURES

500–600 mm

Effective detection width

ϕ0.8 mm

Fe sensitivity · 5010

IP54

Protection rating

30 kg

Load capacity · 6010

APPLICATIONS

- **Apparel** — Screening garments and accessories for broken needles
- **Home textiles** — Screening quilts and pillow fillings
- **Toys** — Screening fillings and finished products for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	5010	5015	5020	6010
Voltage	AC 220V, 50 - 60 Hz			
Motor power	60 W	60 W	90 W	90 W
Construction	High-strength carbon steel, ABS engineering plastic			
Effective detection width	500 mm	500 mm	500 mm	600 mm
Effective detection height	100 mm	150 mm	200 mm	100 mm
Detection sensitivity · Ferrous Fe (empty belt)	≥ ϕ0.8 mm	≥ ϕ1.0 mm	≥ ϕ1.2 mm	≥ ϕ0.8 mm
Belt height above floor	680 mm			
Belt width	460 mm	460 mm	460 mm	560 mm
Load capacity	15 KG	15 KG	25 KG	30 KG
Belt direction	Left to right			
Max. belt speed	Fixed speed 26 m/min			
Belt material	Needle-detector PVC conveyor belt			
Protection rating	IP54			
Display and control	Control panel key input			
Alarm mode	Buzzer alarm and automatic belt stop when broken needles or magnetic metal foreign objects are detected			
Overall length	1800 mm			
Overall width	950 mm	950 mm	950 mm	1050 mm
Overall height	900 mm	920 mm	950 mm	1000 mm

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

AUTOMATIC DUAL-HEAD CONVEYOR NEEDLE DETECTOR

JZQ-600S(K)

Automatic Dual-Head Conveyor Needle Detector

Dual-head · Touch-screen control

OVERVIEW

The JZQ-600S(K) is an intelligent dual-head needle detector with a 600 × 150 mm detection aperture. With an empty belt it detects ferrous Fe ≥ ϕ0.8 - 2.5 mm; conveying capacity 25 kg per load, belt speed 26 m/min, touch-screen control.



JZQ-600S(K) · Model 6015

KEY FIGURES

600 mm

Aperture width

150 mm

Aperture height

25 kg/pass

Conveying capacity

200 kg

Net weight

APPLICATIONS

- **Apparel** — Screening garments and accessories for broken needles
- **Home textiles** — Screening quilts and pillow fillings
- **Toys** — Screening fillings and finished products for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Model	6015
Detection aperture width	600 mm
Detection aperture height	150 mm
Detection sensitivity (empty belt)	Ferromagnetic Fe ≥ ϕ0.8 - 2.5 mm
Belt height above floor	Default 680 mm (adjustable ±50 mm)
Conveying capacity	25 kg per load
Belt direction	Left to right
Max. belt speed	26 m/min
Belt material	Needle-detector conveyor belt
Display and control	Touch-screen control
Power supply	AC 220 V
Alarm mode	Buzzer alarm and belt stop or reverse when a defective (metal) item is detected
Dimensions	Approx. 2500 × 1030 × 950 mm
Net weight	Approx. 200 kg

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

PILLOW & CUSHION COMPRESSION NEEDLE DETECTOR

DN-8500-2C

Pillow & Cushion Compression Needle Detector

Compression · For pillows and cushions

OVERVIEW

The DN-8500-2C is a pillow and cushion compression needle detector with detection widths of 500 - 600 mm and heights of 100 - 200 mm. With an empty belt it detects ferrous Fe ≥ ϕ0.8 - ϕ1.2 mm; belt speed 26 m/min, load capacity 15 - 30 kg.



DN-8500-2C · Models 5010 / 5015 / 5020 / 6010

KEY FIGURES

500–600 mm

Effective detection width

ϕ0.8 mm

Fe sensitivity · 5010

30 kg

Load capacity · 6010

680 mm

Belt height above floor

APPLICATIONS

- **Home textiles** — Screening quilt and pillow fillings
- **Bedding** — Inspecting mattresses and cushions
- **Toys** — Screening stuffed toys for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	5010	5015	5020	6010
Voltage	AC 220V, 50 - 60 Hz			
Motor power	60 W	60 W	90 W	90 W
Construction	High-strength carbon steel, ABS engineering plastic			
Effective detection width	500 mm	500 mm	500 mm	600 mm
Effective detection height	100 mm	150 mm	200 mm	100 mm
Detection sensitivity · Ferrous Fe (empty belt)	≥ ϕ0.8 mm	≥ ϕ1.0 mm	≥ ϕ1.2 mm	≥ ϕ0.8 mm
Belt height above floor	680 mm			
Belt width	460 mm	460 mm	460 mm	560 mm
Load capacity	15 KG	15 KG	25 KG	30 KG
Belt direction	Left to right			
Max. belt speed	Fixed speed 26 m/min			
Belt material	Needle-detector PVC conveyor belt			
Protection rating	IP54			
Display and control	Control panel key input			
Alarm mode	Buzzer alarm and automatic belt stop when broken needles or magnetic metal foreign objects are detected			
Overall length	1800 mm			
Overall width	950 mm	950 mm	950 mm	1050 mm
Overall height	900 mm	920 mm	950 mm	1000 mm

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

SHOE FACTORY ASSEMBLY LINE NEEDLE DETECTOR

JZQ-710(K)

Shoe Factory Assembly Line Needle Detector

For shoe-factory assembly lines

OVERVIEW

The JZQ-710(K) is a needle detector for shoe-factory assembly lines, with a 600 × 150 mm detection aperture and ferrous Fe ≥ ϕ1.2 mm sensitivity. Belt speed 35 m/min, 15 kg per load, 100 W power.



JZQ-710(K) · Model 6015

KEY FIGURES

600 mm
Aperture width

35 m/min
Belt speed

ϕ1.2 mm
Sensitivity · ferrous (Fe)

150 kg
Net weight

APPLICATIONS

- **Footwear** — Inspecting uppers, outsoles and shoe materials
- **Shoe materials** — Screening insoles and accessories for broken needles
- **Apparel** — Screening garments and accessories for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Model	6015
Detection aperture width	600 mm
Detection aperture height	150 mm
Detection sensitivity	Ferrous Fe ≥ ϕ1.2 mm
Conveying capacity	15 kg per load
Belt direction	Left to right
Max. belt speed	35 m/min
Belt material	Needle-detector conveyor belt
Display and control	Control panel key input
Power supply	AC 220 V / 50 Hz
Power	100 W
Alarm mode	Buzzer alarm and belt stop when metal is detected
Dimensions	1600 × 1040 × 500 mm
Net weight	150 kg

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

WIDE-WIDTH CONVEYOR NEEDLE DETECTOR

JZQ-2000

Wide-Width Conveyor Needle Detector

Wide 1500 mm · Fabric rolls

OVERVIEW

The JZQ-2000 is a wide-width conveyor needle detector with an effective detection width of 1500 mm and height of 120 mm. It detects ferrous Fe ≥ ϕ1.2 mm; belt speed 26 m/min, load capacity 50 kg.



JZQ-2000 · Model 1500 × 120 mm

KEY FIGURES

1500 mm
Effective detection width

120 mm
Effective detection height

50 kg
Load capacity

26 m/min
Belt speed

APPLICATIONS

- **Apparel**
  Inspecting full rolls of wide fabric
- **Home textiles**
  Inspecting fabric and non-woven rolls
- **Toys**
  Screening stuffed toys for broken needles

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Model	1500 × 120 mm
Voltage	AC 220 V, 50 - 60 Hz
Motor power	180 W
Construction	High-strength carbon steel + ABS engineering plastic
Effective detection width	1500 mm
Effective detection height	120 mm
Effective detection precision	Ferrous Fe ≥ ϕ1.2 mm
Belt height above floor	680 mm
Load capacity	50 kg
Belt direction	Left to right
Max. belt speed	26 m/min
Conveyor belt	Needle-detector conveyor belt
Display and control	Control panel key input
Alarm mode	Buzzer alarm and belt stop or reverse when broken needles or ferromagnetic foreign objects are detected

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

NON-TRANSMISSION WIDE-WIDTH NEEDLE DETECTOR

JZQ-2000-2

Non-transmission

Non-Transmission Wide-Width Needle Detector

Non-transmission · easy retrofit

OVERVIEW

The JZQ-2000-2 is a non-transmission wide-width needle detector with a customizable detection range of 1 - 5 m and 1 - 12 sensitivity levels. Without a conveyor, it retrofits easily into existing lines; detection height 100 - 250 mm in five steps, max ferrous Fe ≥ ϕ0.8 - ϕ2.0 mm.

KEY FIGURES

1–5 m
Detection range (custom)

ϕ0.8 mm
Fe sensitivity · 100 mm

250 mm
Max. detection height

1–12 levels
Sensitivity adjustment



JZQ-2000-2 · Non-transmission · Detection width 1 - 5 m custom

APPLICATIONS

- **Wide fabrics** — Inspecting fabric and microfiber without a conveyor
- **Home textiles** — Inspecting quilts and non-woven rolls
- **Apparel** — Inspecting full-width garment fabric

Specifications

TECHNICAL DATA

Sensitivity is the empty-belt maximum.

Parameter / Specification	Spec
Detection range	1 - 5 m (custom)
Sensitivity adjustment	1 - 12 levels
Detection height	100 / 120 / 150 / 200 / 250 mm
Max. detection sensitivity (empty belt)	Ferrous Fe ≥ ϕ0.8 / ϕ1.0 / ϕ1.2 / ϕ1.5 / ϕ2.0 mm
Alarm mode	Audible-visual alarm
Conveyor	None (non-transmission, easy retrofit into existing lines)
Power supply	AC 100 - 240 V, 50 - 60 Hz

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

LARGE-APERTURE CUSTOM NEEDLE DETECTOR

DN-8500

Large-Aperture Custom Needle Detector

Large aperture · Built to order

OVERVIEW

The DN-8500 is a large-aperture custom needle detector with a detection tunnel built to the customer's product size, for whole-carton inspection of large ferromagnetic foreign objects such as scissors and utility knife blades.



DN-8500 · Detection tunnel built to the customer's product size

KEY FIGURES

On request

Tunnel size

Whole carton

Application

Ferrous objects

Target objects

Heavy load

Capacity

APPLICATIONS

- **Whole-carton inspection**
  Inspecting whole cartons of finished products
- **Large packaging**
  Inspecting large-size packages
- **Apparel**
  Inspecting packed garments before shipment

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Detection tunnel size	Built to order (to the customer's product size)
Detection target	Scissors, utility knife blades and other large ferromagnetic metal foreign objects
Application	Whole-carton inspection of finished products
Suitable products	Large-pack products, finished cartons
Customization	Detection tunnel built to the customer's product size
Machine capability	Large size and load-bearing capacity

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

FULLY AUTOMATIC FLIPPING DEVICE

DFZ-10

Fully Automatic Flipping Device

Flipping accessory · Second inspection

OVERVIEW

The DFZ-10 is a fully automatic flipping device with a speed of 0 - 150 r/min. It pairs with needle detectors for a second, flipped-side inspection, reducing manual turning.



DFZ-10 · Dimensions 1960 × 1325 × 1270 mm

KEY FIGURES

0–150 r/min

Flipping speed

330 W

Output power

1960 mm

Machine length

220 V

Input power

APPLICATIONS

- **Apparel**
  Re-inspecting garments after flipping
- **Knitwear**
  Double-side inspection of knitwear
- **Home textiles**
  Inspecting blankets and towels after flipping

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Belt speed	0 - 150 r/min
Working voltage	220 V AC
Power input	1P / 220 V
Output power	330 W
Dimensions	1960 × 1325 × 1270 mm
Function	Automatically flips products for a second inspection, reducing manual labor

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

CHAIN-BELT METAL DETECTOR

MD-8500

Chain-Belt Metal Detector

Chain-belt · All stainless steel 304

OVERVIEW

The MD-8500 is a chain-belt metal detector with a 600 × 200 mm detection aperture and an all-stainless-steel-304 body. With an empty belt it detects ferrous Fe ≥ ϕ1.2, SUS304 ≥ ϕ2.5 and non-ferrous ≥ ϕ2.0 mm; protection rating IP65.



MD-8500 · Detection aperture 600 × 200 mm, food-grade PP chain belt

KEY FIGURES

600×200 mm

Aperture size (W × H)

ϕ1.2 mm

Ferrous (Fe) sensitivity

IP65

Protection rating

20 kg/pass

Conveying capacity

APPLICATIONS

- **Aquatic products** — Inline inspection of high-moisture products
- **Food** — Inspecting fresh and frozen products
- **Pharmaceuticals** — Inspecting raw materials and finished products

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Model	6020
Detection aperture size (W × H)	600 × 200 mm
Construction	All stainless steel (304)
Detection method	Dual balanced-coil induction
Detection sensitivity (empty belt)	Ferrous Fe ≥ ϕ1.2 · SUS304 ≥ ϕ2.5 · non-ferrous ≥ ϕ2.0 mm
Belt height	Default 700 mm (adjustable up 50 mm; special sizes built to order)
Conveying capacity	20 kg per load
Belt direction	Left to right
Max. belt speed	26 m/min
Belt material	Food-grade PP chain belt
Protection rating	IP65
Display and control	LED LCD flat-panel key input
Power supply	AC 220 V, 50 Hz
Power	100 W
Alarm mode	Alarm and belt stop when metal is detected
Net weight	Approx. 200 kg
Dimensions	Approx. 1600 × 980 × 1000 mm

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

DUAL-HEAD DIGITAL METAL DETECTOR

MD-8500S

Dual-Head Digital Metal Detector

Dual-head · All stainless steel 304

OVERVIEW

The MD-8500S is a dual-head digital metal detector with a 600 × 200 mm detection aperture. With an empty belt it detects ferrous Fe ≥ ϕ1.2, SUS304 ≥ ϕ2.5 and non-ferrous ≥ ϕ2.0 mm; protection rating IP65.



MD-8500S · Detection aperture 600 × 200 mm

KEY FIGURES

600×200 mm

Aperture size (W × H)

ϕ1.2 mm

Ferrous (Fe) sensitivity

IP65

Protection rating

20 kg/pass

Conveying capacity

APPLICATIONS

- **Food** — Inline inspection of raw materials and finished products
- **Pharmaceuticals** — Inspecting blister packs and bottles
- **Packaging** — Inspecting sealed finished products

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Model	6020
Detection aperture size (W × H)	600 × 200 mm
Construction	All stainless steel (304)
Detection method	Dual balanced-coil induction
Detection sensitivity (empty belt)	Ferrous Fe ≥ ϕ1.2 · SUS304 ≥ ϕ2.5 · non-ferrous ≥ ϕ2.0 mm
Belt height	Default 700 mm (adjustable up 50 mm; special sizes built to order)
Conveying capacity	20 kg per load
Belt direction	Left to right
Max. belt speed	26 m/min
Belt material	Food-grade PP chain belt
Protection rating	IP65
Display and control	LED LCD flat-panel key input
Power supply	AC 220 V, 50 Hz
Power	100 W
Alarm mode	Alarm and belt stop when metal is detected
Net weight	Approx. 200 kg
Dimensions	Approx. 1600 × 980 × 1000 mm

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

DIGITAL METAL DETECTOR

MD-9500

Digital Metal Detector

Digital · Three tunnel heights

OVERVIEW

The MD-9500 is a digital metal detector with an effective detection width of 500 mm and three height options of 200 - 300 mm. Maximum detection sensitivity ferrous Fe ϕ1.5 - ϕ2.5 mm; belt speed 26 m/min.



MD-9500 · Models 5020 / 5025 / 5030

KEY FIGURES

500 mm
Effective detection width

200–300 mm
Effective detection height

ϕ1.5 mm
Fe sensitivity · 5020

20 kg
Load capacity · 5030

APPLICATIONS

- **Food** — Inspecting foil-packaged products
- **Pharmaceuticals** — Inspecting blister packs and bottles
- **Packaging** — Inspecting whole packs and cartons

Specifications

TECHNICAL DATA

Detection sensitivity is the theoretical maximum with an empty belt.

Parameter / Specification	5020	5025	5030
Effective detection width	500 mm		
Effective detection height	200 mm	250 mm	300 mm
Max. detection sensitivity · Ferrous Fe	ϕ1.5 mm	ϕ2.0 mm	ϕ2.5 mm
Max. detection sensitivity · SUS304	ϕ3.0 mm	ϕ3.5 mm	ϕ4.0 mm
Belt width	470 mm		
Belt height	Default 680 mm (adjustable ±50 mm; built to order)		
Belt load capacity	10 kg	10 kg	20 kg
Belt speed	Default 26 m/min (built to order)		
Belt material	Food-grade PU / PVC conveyor belt		
Display and control	7-inch color touch screen (optional)		
Power supply	AC 220 V, 50 - 60 Hz (built to order)		
Alarm mode	Alarm and belt stop when metal is detected (alarm light and rejection device optional)		
Construction	Stainless steel SUS304		

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

DROP-TYPE METAL DETECTION SEPARATOR

MD-7000-F

Drop-Type Metal Detection Separator

Drop type · Six diameters

OVERVIEW

The MD-7000-F is a drop-type metal detection separator for six pipe diameters from Φ50 to Φ200 mm. Ferrous Fe sensitivity ϕ0.6 - ϕ1.5 mm; non-ferrous ϕ0.8 - ϕ2.5 mm.



MD-7000-F · Fits Φ50 / Φ80 / Φ100 / Φ120 / Φ150 / Φ200

KEY FIGURES

Φ50-200 mm

Pipe diameter range

ϕ0.6 mm

Fe sensitivity · Φ50

ϕ2.5 mm

Non-ferrous sensitivity · Φ200

850 mm

Min. installation length · Φ50

APPLICATIONS

- **Powder** — Inline inspection of powder materials
- **Granules** — Free-fall detection of granular materials
- **Flake materials** — Inspecting flake and lump materials

Specifications

TECHNICAL DATA

Parameter / Specification	Φ50	Φ80	Φ100	Φ120	Φ150	Φ200
Detection sensitivity (ferrous Fe)	ϕ0.6 mm	ϕ0.7 mm	ϕ0.8 mm	ϕ1.0 mm	ϕ1.2 mm	ϕ1.5 mm
Detection sensitivity (non-ferrous)	ϕ0.8 mm	ϕ1.2 mm	ϕ1.5 mm	ϕ1.8 mm	ϕ2.0 mm	ϕ2.5 mm
Min. installation length	850 mm	920 mm	920 mm	1100 mm	1100 mm	1200 mm
Suitable materials	Powder / granule / flake / lump materials					
Product-contact parts	PP plastic and PTFE					
Alarm mode	Audible-visual alarm with automatic rejection					
Power supply	220 V 50 - 60 Hz, 1P (built to order)					

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

HIGH-PERFORMANCE ONLINE CHECKWEIGHER

SL Series

High-Performance Online Checkweigher

Online weighing · Five models

OVERVIEW

The SL Series is a high-performance online checkweigher covering a weighing range of 5 g - 50 kg by model, with accuracy down to ±0.05 g and throughput up to 180 packs/min.



SL-350 and up · Large



SL-150 / 220 · Compact

KEY FIGURES

180 packs/min

Throughput · SL-120

±0.05 g

Weighing accuracy · SL-120

50 kg

Max. capacity · SL-800

1200 mm

Platform length · SL-800

APPLICATIONS

- **Food**
  Weight control of fixed-quantity packages
- **Pharmaceuticals**
  Detecting missing items in bottles and cartons
- **Daily chemicals**
  Weight grading on filling lines

Specifications

TECHNICAL DATA

Parameter / Specification	SL-120	SL-210	SL-300	SL-500	SL-800
Weighing range	5 - 200 g	5 - 1000 g	5 - 3000 g	On request	500 g - 50 kg
Weighing accuracy	±0.05 - 0.1 g	±0.3 - 1 g	±0.5 - 2 g	±10 g	±10 g
Throughput	180 packs/min	120 packs/min	80 packs/min	40 packs/min	27 packs/min
Weighing platform length	250 mm	400 mm	450 mm	800 mm	1200 mm
Rejection device	Pusher / air-jet / flapper rejection, per model				
Belt height	750 ± 50 mm (built to order)				
Operator interface	7-inch LCD color touch screen				
Power supply	220 V 50 - 60 Hz, 1P (built to order)				

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

METAL DETECTION & CHECKWEIGHING INTEGRATED MACHINE

MD-SL Integrated

Metal Detection & Checkweighing Integrated Machine

Metal detection + weighing · integrated

OVERVIEW

The MD-SL series is an integrated metal-detection and checkweighing machine, combining the MD-8500 metal detection unit with the SL checkweighing unit; one pass performs both metal and weight checks. Ferrous Fe sensitivity 0.7 - 2.0 mm, weighing accuracy up to ±0.05 g.



MD-SL · MD-8500 metal detection + SL weighing

KEY FIGURES

0.7 mm
Fe sensitivity · 4008

3.5 mm
Sus sensitivity · 5025

±0.05 g
Weighing accuracy · SL-120

180 packs/min
Throughput · SL-120

APPLICATIONS

- **Food** — Metal and weight double-checking
- **Pharmaceuticals** — Blister and bottle double-checking
- **Seafood** — Fresh and frozen double-checking

Specifications

TECHNICAL DATA

Metal detection: MD-8500 · Weighing: SL series.

Parameter / Specification	4008	4010	4012	5015	5020	5025
Effective detection width	400 mm	400 mm	400 mm	500 mm	500 mm	500 mm
Effective detection height	80 mm	100 mm	120 mm	150 mm	200 mm	250 mm
Detection sensitivity · Fe	0.7 mm	0.8 mm	1.0 mm	1.2 mm	1.5 mm	2.0 mm
Detection sensitivity · Non-Fe	1.2 mm	1.5 mm	1.5 mm	2.0 mm	2.5 mm	3.0 mm
Detection sensitivity · Sus	1.5 mm	1.5 mm	2.0 mm	2.5 mm	3.0 mm	3.5 mm
Belt width	370 mm	370 mm	370 mm	470 mm	470 mm	470 mm
Belt speed	Default 26 m/min, customizable					
Display & control	LCD monochrome backlight, keypad control					
Alarm mode	Audible-visual alarm, belt stop; optional rejector					
Power supply	220 V 50 - 60 Hz 1P, customizable					
Weighing unit	SL-120 / SL-210 / SL-300 / SL-500 / SL-800					
Max. weighing accuracy	±0.05 - 0.1 g / ±0.3 - 1 g / ±0.5 - 2 g / ±10 g / ±10 g					
Max. throughput	180 / 120 / 80 / 40 / 27 packs/min					

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

X-RAY FOREIGN OBJECT DETECTION SYSTEM

RJX5030 A / C

X-Ray Foreign Object Detection System

General-purpose · Standalone intelligent

OVERVIEW

The RJX5030 series is a tunnel X-ray foreign object detection system with a 500 × 300 mm detection tunnel. Models A and C achieve 12 mm and 40 mm steel-plate penetration respectively; 1.0 mm spatial resolution imaging, belt speed 25 m/min, 21.5-inch display.



RJX5030A / RJX5030C · Detection tunnel 500 × 300 mm (W × H)

KEY FIGURES

12 / 40 mm
Steel penetration · A / C

1.0 mm
Spatial resolution · H / V

220 kg
Net weight

500 W
Power consumption

APPLICATIONS

- **Food** — Screening raw materials and finished products for foreign objects
- **Pharmaceuticals** — Inline inspection of blister packs and bottles
- **Packaging** — Inspecting sealed products and whole cartons

Specifications

TECHNICAL DATA

Models A and C differ in penetration and X-ray source; other parameters are shared.

Parameter / Specification	RJX5030A	RJX5030C
Detection tunnel size	500 × 300 mm (W × H)	
Penetration	12 mm steel plate	40 mm steel plate
X-ray source	80 - 100 kV, 0.5 mA	140 - 160 kV, 0.5 - 1.25 mA
Spatial resolution	Horizontal 1.0 mm; vertical 1.0 mm	
Leakage dose	<0.5 μSv/h (50 mm from the unit)	
Belt height	660 mm (above floor)	
Belt speed	25 m/min	
Display	21.5-inch color display (1920 × 1080)	
Power consumption	500 W	
Power supply	AC 220 V, 50 Hz	
Net weight	220 kg	

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

STANDALONE INTELLIGENT X-RAY CONTAMINANT DETECTION SYSTEM

DL-C6550

Standalone Intelligent X-Ray Contaminant Detection System

Standalone intelligent · AI vision recognition

OVERVIEW

The DL-C6550 is a standalone intelligent X-ray contaminant detection system using AI vision to recognize foreign objects: metal ball ≥ ϕ0.6 mm, stainless wire ≥ ϕ0.4 × 2 mm, glass ≥ ϕ1.5 mm, ceramic and stone ≥ ϕ1.0 mm.



DL-C6550 · AI vision recognition → automatic alarm → online rejection

KEY FIGURES

ϕ0.6 mm
Metal ball

ϕ0.4×2 mm
Stainless wire

ϕ1.5 mm
Glass

ϕ1.0 mm
Ceramic / stone

APPLICATIONS

- **Food**
  Detecting foreign objects inside packaged products
- **Pharmaceuticals**
  Detecting foreign objects in blister packs and bottles
- **Packaging**
  Inspecting whole packs after sealing

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Detection sensitivity (metal ball)	≥ ϕ0.6 mm
Detection sensitivity (stainless wire)	≥ ϕ0.4 × 2 mm
Detection sensitivity (glass)	≥ ϕ1.5 mm
Detection sensitivity (ceramic / stone)	≥ ϕ1.0 mm
Foreign object recognition	AI vision recognition
Rejection mechanism	AI recognition → automatic alarm → online rejection

① Specifications shown are for standard models; other sizes and special requirements are built to order.
② Detection sensitivity is measured with no product effect or environmental interference.

X-RAY FOREIGN OBJECT DETECTOR

DL-C4015 / DL-C6035

X-Ray Foreign Object Detector

Dual tunnel sizes · High-precision imaging

OVERVIEW

The DL-C4015 / DL-C6035 are X-ray foreign object detectors with 400 × 150 mm and 600 × 350 mm detection tunnels. The C4015 detects a metal ball of ϕ0.3 mm, stainless wire of ϕ0.2 mm and glass of ϕ0.1 mm.



DL-C4015 / DL-C6035 · Detection tunnel 400 × 150 / 600 × 350 mm

KEY FIGURES

400×150 mm

Tunnel · C4015

600×350 mm

Tunnel · C6035

ϕ0.3 mm

Metal ball · C4015

60 m/min

Conveying speed · C4015

APPLICATIONS

- **Food**
  High-precision inspection of small packages
- **Packaging**
  Inspecting sealed products and whole packs
- **Pharmaceuticals**
  Inspecting blister packs and bottles

Specifications

TECHNICAL DATA

Parameter / Specification	DL-C4015	DL-C6035
Detection tunnel size	400 × 150 mm	600 × 350 mm
Detection width	400 mm	600 mm
Conveying speed	10 - 60 m/min	10 - 50 m/min
Conveying weight	≤10 kg	≤20 kg
X-ray power	150 W	350 W
Detection sensitivity (metal ball)	ϕ0.3 mm	On request
Detection sensitivity (stainless wire)	ϕ0.2 mm	On request
Detection sensitivity (glass)	ϕ0.1 mm	On request
Detection sensitivity (ceramic)	ϕ0.6 mm	On request
Display	21.5-inch TFT touch screen	
Power supply	220 V 50 - 60 Hz, 1P (built to order)	

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

FULL-CASE INTELLIGENT X-RAY INSPECTION SYSTEM

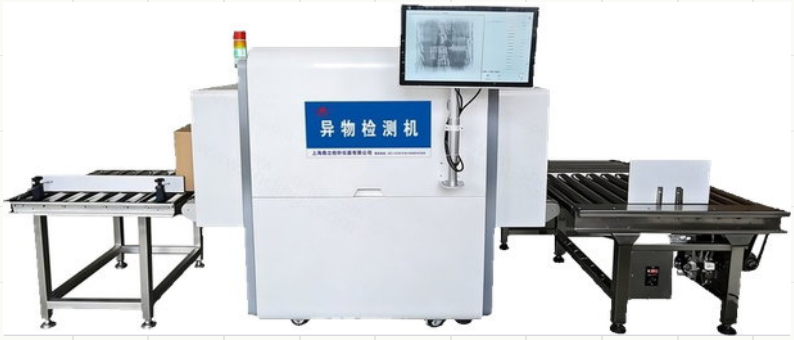
DL-C6550

Full-Case Intelligent X-Ray Inspection System

Whole-carton pass-through · AI vision recognition

OVERVIEW

The DL-C6550 is a full-case intelligent X-ray inspection system for whole-carton pass-through detection: metal ball ≥ ϕ0.6 mm, stainless wire ≥ ϕ0.4 × 2 mm, glass ≥ ϕ1.5 mm.



DL-C6550 · Whole-carton pass-through inspection

KEY FIGURES

ϕ0.6 mm
Metal ball

ϕ0.4×2 mm
Stainless wire

ϕ1.5 mm
Glass

ϕ1.0 mm
Ceramic / stone

APPLICATIONS

- **Whole-carton inspection** — Inspecting whole cartons without unpacking
- **Food** — Detecting foreign objects inside packed cartons
- **Pharmaceuticals** — Inspecting whole cartons before shipment

Specifications

TECHNICAL DATA

Parameter / Specification	Model
Detection method	Whole-carton pass-through inspection
Detection sensitivity (metal ball)	≥ ϕ0.6 mm
Detection sensitivity (stainless wire)	≥ ϕ0.4 × 2 mm
Detection sensitivity (glass)	≥ ϕ1.5 mm
Detection sensitivity (ceramic / stone)	≥ ϕ1.0 mm
Foreign object recognition	AI vision recognition
Rejection mechanism	AI recognition → automatic alarm → online rejection

① Specifications shown are for standard models; other sizes and special requirements are built to order.

② Detection sensitivity is measured with no product effect or environmental interference.

Shanghai Dingli Needle Detector Instrument Co.,

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