

Product Catalog 2025

Synergy & Brighten



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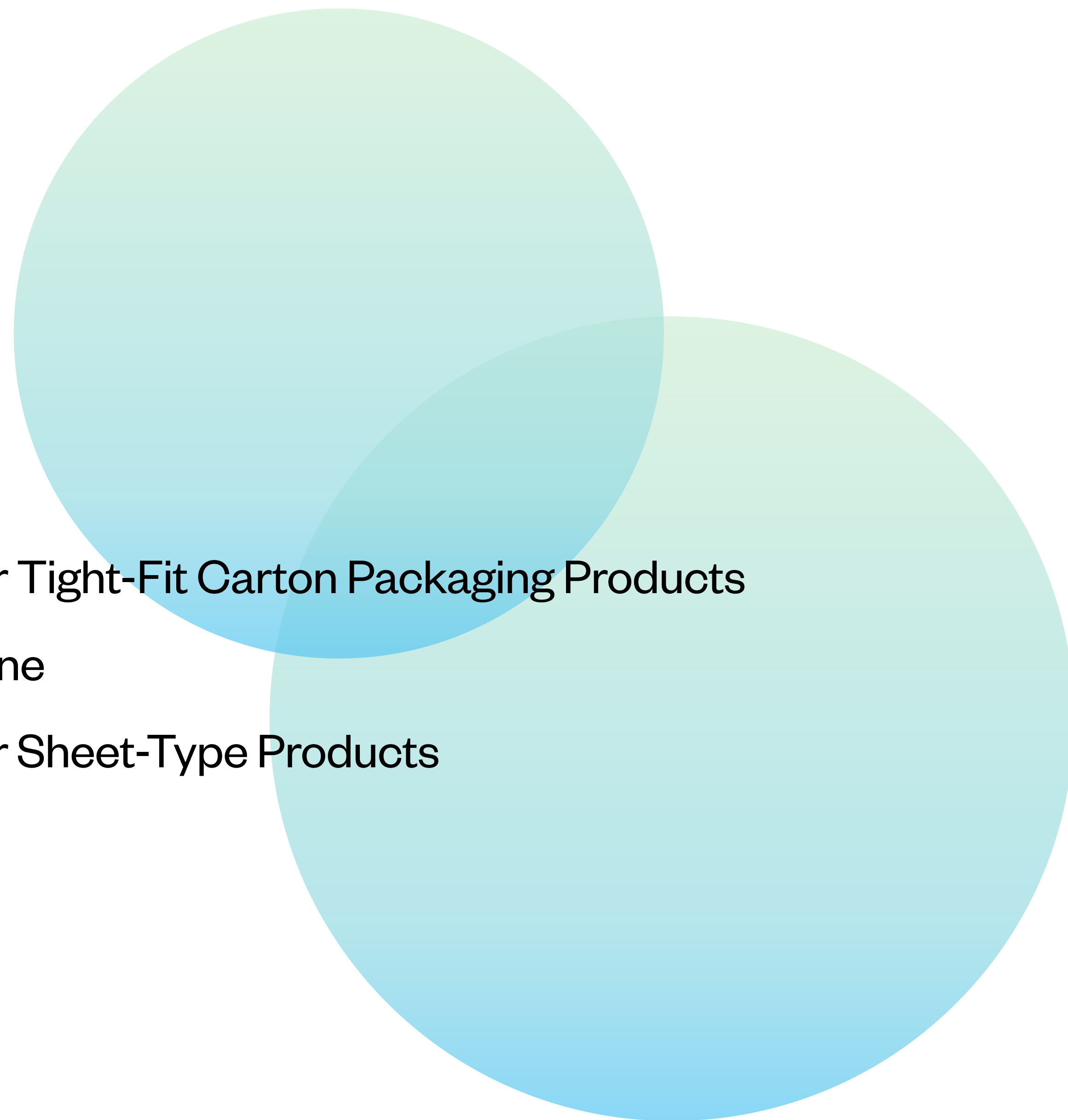
Six-Dimension Visual Inspection Machine

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Our System Criteria



MODEL: BLT-001

Glass Disk Surface Inspection Machine



APPLICABLE INDUSTRIES
METALS, FORGING (FORMERS), COPPER TUBE PROCESSING,
MACHINING, SILICON, PLASTICS

- Automatically classifies and processes detection results
- Manages product classification files and data storage
- Remotely connects for maintenance online
- Optional add-ons available: supply and discharge equipment

EXAMPLES



Inspecting Item	Metals, Resin Components, and More
Inspectable Defects	Thickness, Diameter, Outer Diameter, Openings, Irregularities, Cracks, Dimensional and Visual Defects, etc.
Inspectable Size	Diameter: 2-30mm, Length: 2-55mm
Inspection Speed	600pcs/sec~
Hardware Size	1060(L)×1060(W)×2100mm(H)

Linear-Direct Surface Inspection Machine

APPLICABLE INDUSTRIES
FORGING (FORMERS), COPPER TUBE
PROCESSING, MACHINING



- Automates supply control and material shortage alert system
- Automatic brightness adjustment for light sources
- Automated classification and processing of detection results
- Management of product classification files and data storage
- Remote network connection for maintenance
- Includes feeder, inspection system, and pallet changer

Instantly detects scratches, contaminants, and cracks in forged and resin components, ensuring precise quality control. Defective and non-defective products are efficiently sorted using a pallet changer, streamlining the inspection process.

Inspecting Item	Metals, Resin Components, and More
Inspectable Defects	Cracks, Scratches, Contaminants, etc.
Inspection Speed	Max 1.2 secs/pc
Hardware Size	1670(L)x816(W)x1500(H)

Rubber Tube Dimension Inspection Machine

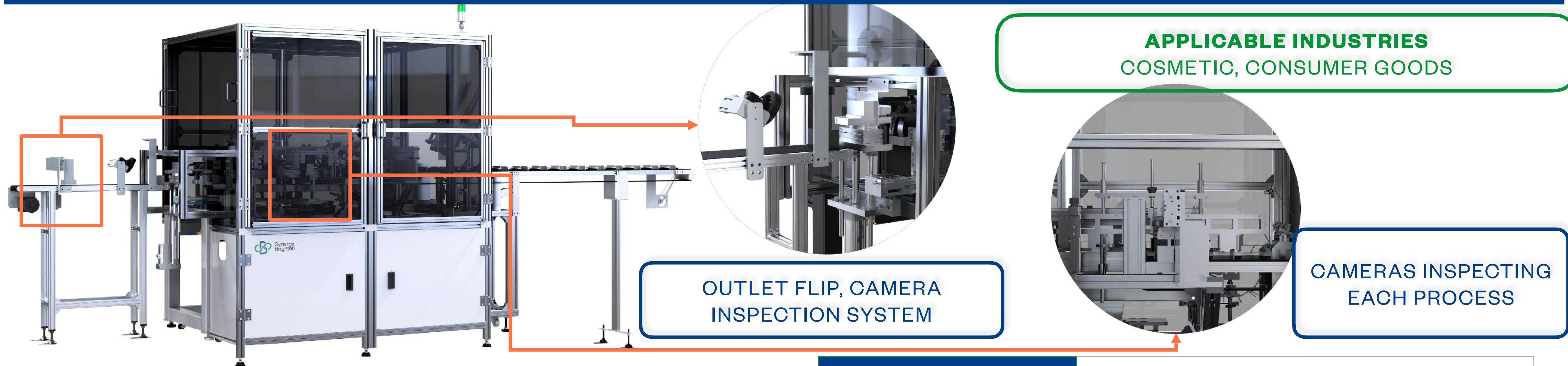
- Measures the outer diameter, inner diameter, and wall thickness variation of rubber tubes
- Compact, desktop-sized design
- Measurement starts instantly by pressing the end face against the inspection surface
- Capable of measuring multiple products at once
- AI independently analyzes image clarity and ignores blurry photos
- Inspection table on the device is made of reinforced glass
- Automatically calculates CPK capability based on measurement data
- Equipped with a 20-megapixel camera



Inspecting Item	Automotive Rubber Tube
Inspectable Defects	Inner Diameter, Outer Diameter, Thickness
Inspection Quality	±0.1 (customizable)
Inspection Speed	1pc/sec
Hardware Size	365(L)x365(W)x467(W)

MODEL: BZJ-3S

Automated Packaging/Inspection Machine for Tight-fit Carton Packaging Products



OUTLET FLIP, CAMERA INSPECTION SYSTEM

APPLICABLE INDUSTRIES
COSMETIC, CONSUMER GOODS

CAMERAS INSPECTING EACH PROCESS

- Automatically package items with quick changeover capability
- Changeover Time: 30 Minutes
- Automatically inspects the packaged items' condition with AI image-processing
- Equipped with a directional adjustment function
- Real-time preview enabled through integration with printing systems

Packaging Size	Minimum: 34x33x23 Maximum: 53x53x85
Packaging Speed	5 sec/pc
Hardware Size	3500(L)x1280(W)x1900(H)
Voltage	220V/50Hz
Air Pressure	0.5-0.8Mpa
Inspectable Defects	Inner Diameter, Outer Diameter, Wire Diameter, Thickness

MODEL: JCHX-2

Sheet-Type Products Visual Inspection Machine

- Detects contaminants, clumps, and scratches in sheet-type products
- Displays defect records on the monitor with alarm alerts
- Compatible with existing equipment for seamless integration
- Illumination: 12W Lux, ensuring clear detection of impurities
- Constructed entirely from Food-Grade Stainless Steel (SUS304)



APPLICABLE INDUSTRIES
FOOD, RESIN ETC.



EXAMPLE



Inspecting Item	Spring-Roll Wrappers
Inspectable Defects	Impurities, Color Irregularities, Air Bubbles, Clumps
Inspection Speed	50mm/sec ~
Hardware Size	384(L)x252(W)x1100(H)

Automated Packaging/Inspection Machine for Sheet-Type Products

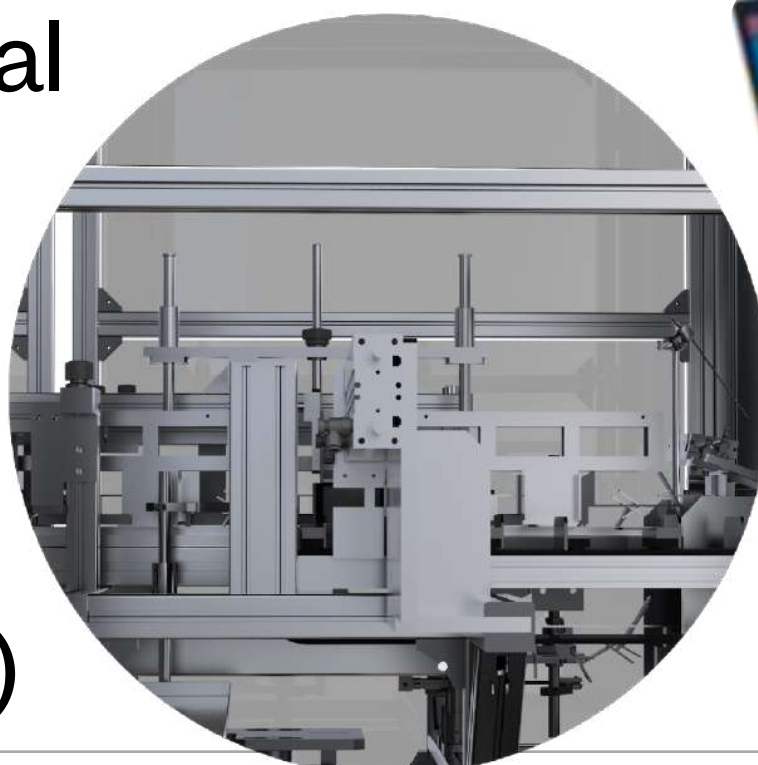


- Automatically, inspects contaminants, clumps, and scratches in sheet-type products at over 50mm per second, cuts, and package into plastic bags.
- Displays defect records on monitor with alarm alerts
- Seamlessly integrates with existing equipment
- Illumination: 12W Lux for clear detection of impurities
- Constructed Entirely from Food-Grade Stainless Steel (SUS304)

Inspecting Item	Sheet-Type Products
Inseparable Defects	Impurities, Color Irregularities, Air Bubbles, Clumps
Inspection Speed	50mm/sec ~
Hardware Size	384(L)x252(W)x1100(H)

Gearwheel Visual Inspection Machine

- Equipped with Five 2K Color Gigabit Industrial Scan Cameras
- Automated Feeding System (Compatible with Industrial or Collaborative Robots)



APPLICABLE INDUSTRIES
AUTOMOBILES, TWO-WHEELERS,
AGRICULTURAL MACHINERY, ETC.

EXAMPLE



Inspecting Item	Internal Transmission Gears, Reducer Gears, Helical Gears, Gear
Inspectable Defects	Tooth Surfaces, Crest, Chamfering
Inspectable Size	Diameter: 30–200mm, Tooth Width: 2–50mm
Hardware Size	1200×1200×2100mm
Inspection Speed	10s/pc
Voltage	220V/50Hz
Air Pressure	0.5-0.7MPa

TOOTH CREST

TOOTH SURFACE

CHAMFER MARKS

Six-Dimension Visual Inspection Machine

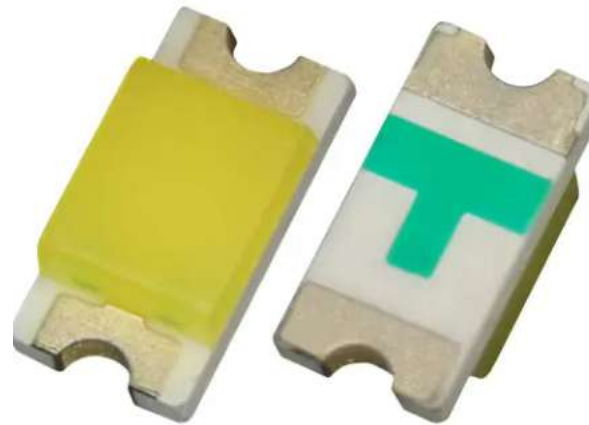


APPLICABLE INDUSTRIES

3C ELECTRONIC PRODUCTS (COMPUTERS, COMMUNICATION, CONSUMER ELECTRONICS)

- Equipped with AI algorithms, achieving zero-leakage inspection with a low false judgment rate
- Integrated open deep learning platform
- Utilizes imported DD motor

EXAMPLES



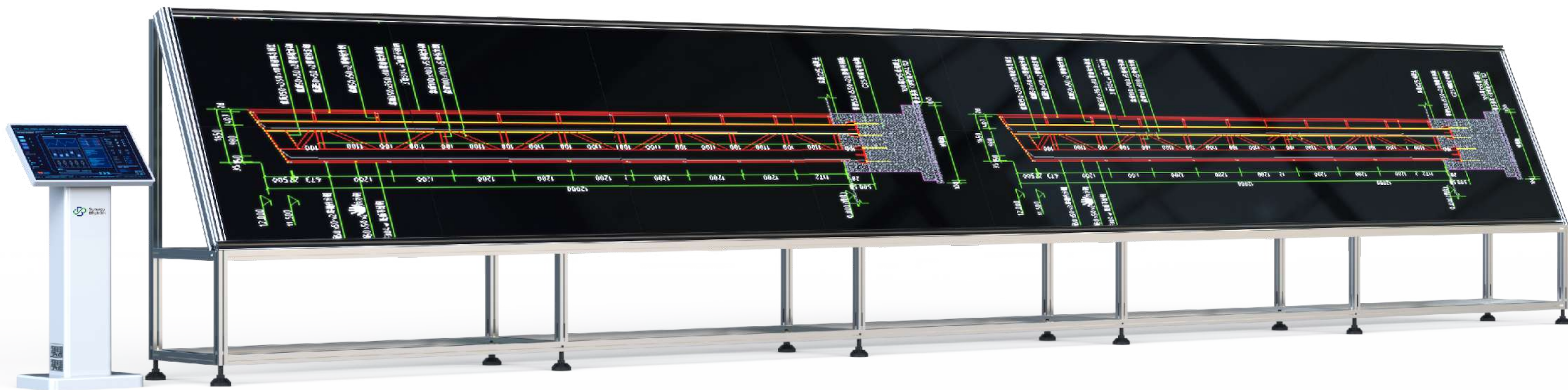
LED CHIP BULB



CHIP DIODE

Inspecting Items	Chip Resistors, Capacitors, Transistors, LED Chip Bulbs, Resistor Matrix Ceramics, Cores, etc.
Inspectable Defects	Dimensions, Scratches, Damage, Discoloration, Chipping,
Inspection Speed	13000pcs/min
Hardware Size	1000×1000×1900mm
Voltage	220V/50Hz
Air Pressure	0.5-0.8MPa

Intelligent Wiring Station



- Proprietary Software Operates on Windows with One-Click Drawing Import (PDF, JPG)
- Freely Adjustable Drawing Positioning on Screen with Real-Time Preview
- **Automatically Blocks Gaps in the Monitor** to Prevent Interference with Actual Size Display
- Calculates Screen Size Based on Actual Monitor Dimensions and Resolution for True-to-Size Display
- Equipped with a Durable Reinforced Glass Monitor with 3.5mm Joint Width for Enhanced Wear Resistance

Pixel	1920x1080
Display Size	Custom
Display Quality	4K
Voltage	100V~220VAC
Power Consumption	220W~250W
Usage Time	7x24h
Durability	60000h

Our System Criteria



AI image processing is a technology that utilizes **artificial intelligence (AI)** to automatically **extract and analyze useful information** from images and videos. In the manufacturing industry, this enables high-speed, high-precision quality inspection and defect detection, performing at a level equal to or even surpassing human visual inspection.

We take pride in only offering systems that meet our strict pass/fail criteria, ensuring reliability and effectiveness.

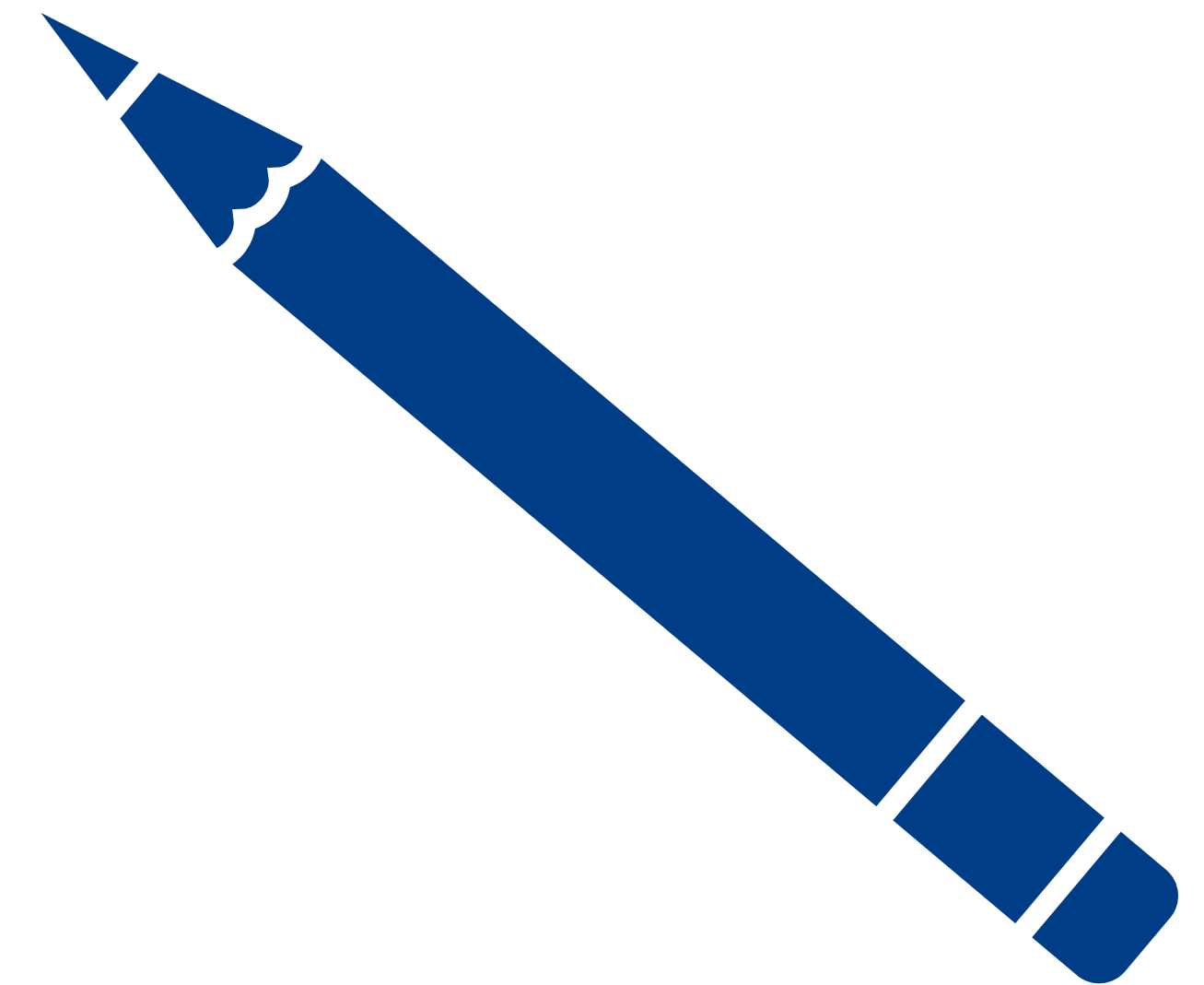
Criteria		Product (Non-Defective / Defective)	
		Non-Defective	Defective
AI Inspection Results	Pass	<div>True Positive</div> <div>✓ Non-defective products correctly classified as Pass</div>	<div>False Positive</div> <div>✗ Defective products incorrectly classified as Pass</div>
	Fail	<div>False Positive</div> <div>△ Non-defective products incorrectly classified as Fail</div>	<div>True Negative</div> <div>✓ Defective products correctly classified as Fail</div>

✓ True positives and true negatives represent accurate judgments.

△ False negatives (over-detection) can be manually checked and reclassified from the “Fail Pile” if necessary.

If false positives are present, defective products may be incorrectly judged as Pass, making it impossible to retrieve them later. Ultimately, the equipment is unusable.

Thank you!



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