



Online X-Ray Inspection Machine with Tilttable 45° Detector 5 μm Microfocus X-Ray Source and AI Defect Judgment

Our Product Introduction

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Basic Information

- Brand Name: WISDOMSHOW
- Certification: CE
- Model Number: S-7200
- Minimum Order Quantity: Radiation Safety License (Yue Huan Fu Zheng [B0774]); Exemption Filing For Radioisotopes And Radiation Devices
- Packaging Details: Standard Export Wooden Case Packaging
- Payment Terms: T/T, Negotiable
- Supply Ability: Approx. 50-100 Units/month



Product Specification

- Tube Type: HAMAMATSU (Japan) Closed Microfocus X-ray Source
- Weight: Approx. 1250 Kg
- Dataoutput: Image Saving And Measurement Data (void Ratio, Dimensions, Etc.) Storage Function
- Power Supply: 220V AC, 50/60 Hz
- Power Consumption: Max Power 2.0 KW
- Dimensions: 1300 Mm (L) × 1320 Mm (W) × 1800 Mm (H)
- Software: Self-developed Software With CNC Automated Inspection Programming, Navigation & Positioning, Automatic Void Ratio Calculation, Dimension Measurement (distance/angle/circle), And AI Defect Judgment (customizable Algorithms)
- Application: Electronics Manufacturing And



More Images



Product Description:

The Online X-Ray Inspection Machine is an advanced automatic industrial X-ray machine designed to meet the rigorous demands of modern electronics manufacturing and semiconductor industries. This state-of-the-art X-ray NDT equipment provides precise, non-destructive inspection capabilities, ensuring the highest standards of quality control and reliability in various electronic components and assemblies.

Powered by a stable 220V AC power supply with a frequency of 50/60 Hz, this industrial X-ray machine delivers consistent performance suitable for continuous operation in demanding production environments. Its compact yet robust design, measuring 1300 mm in length, 1320 mm in width, and 1800 mm in height, allows for easy integration into existing production lines without occupying excessive floor space.

One of the standout features of this online X-ray inspection machine is its exceptional resolution capabilities. Equipped with an X-ray tube focal spot size of just 5 micrometers, it achieves a high level of detail in imaging. Coupled with a geometric magnification of up to 150X, this machine can reveal minute defects and structural anomalies in electronic assemblies that would otherwise go undetected. This precision makes it particularly useful for inspecting complex PCB assemblies, including Ball Grid Arrays (BGA) and Quad Flat Packages (QFP), where solder joint integrity is critical.

The inspection type employed by this X-ray NDT equipment is X-ray transmission inspection in 2D, which allows for clear visualization of internal features without damaging the inspected item. Additionally, the detector is tiltable 45° to the left and right, providing a total viewing angle of 90°. This flexible viewing capability enables operators to examine components from multiple perspectives, enhancing defect detection and analysis accuracy.

The Online X-Ray Inspection Machine is specifically tailored for use in electronics manufacturing and semiconductor industries. It excels in the non-destructive inspection of a wide range of items such as PCB assemblies, LED chips, batteries, flexible printed circuits (FPC), electronic components, and connectors. Its ability to detect hidden defects like voids, cracks, misalignments, and foreign materials ensures product reliability and safety, reducing the risk of failures in the field and costly recalls.

Thanks to its automatic operation features, this industrial X-ray machine streamlines the inspection process, reducing manual intervention and increasing throughput. Its user-friendly interface and advanced imaging software facilitate easy operation and detailed analysis, enabling quality control teams to quickly identify and address manufacturing issues. This not only improves production efficiency but also enhances overall product quality.

In summary, the Online X-Ray Inspection Machine represents a cutting-edge solution for manufacturers seeking reliable and efficient X-ray NDT equipment. Its combination of high-resolution imaging, versatile inspection angles, and automatic functionality makes it an indispensable tool for ensuring the integrity of electronic components and assemblies. By integrating this industrial X-ray machine into their quality assurance processes, manufacturers can achieve superior inspection accuracy, minimize defects, and maintain a competitive edge in the fast-paced electronics and semiconductor markets.

Features:

- Product Name: Online X-Ray Inspection Machine
- Software: Self-developed software with CNC automated inspection programming, navigation & positioning
- Automatic void ratio calculation
- Dimension measurement including distance, angle, and circle
- AI defect judgment with customizable algorithms
- Data output: Image saving and measurement data storage function (void ratio, dimensions, etc.)
- User interface: 24-inch display for easy operation
- Compact dimensions: 1300 mm (L) × 1320 mm (W) × 1800 mm (H)
- Application: Electronics manufacturing and semiconductor industries
- Non-destructive inspection of PCB assembly including BGA and QFP
- Suitable for inspection of LED chips, batteries, FPC, electronic components, and connectors
- Ideal inline SMT X-ray machine for integration into production lines
- Advanced X-ray solder joint inspection system ensuring high-quality soldering
- Reliable online SMT X-ray machine enhancing manufacturing efficiency and accuracy

Technical Parameters:

Operating Temperature	0°C To 40°C
Tube Type	HAMAMATSU (Japan) Closed Microfocus X-ray Source
Software	Self-developed Software With CNC Automated Inspection Programming, Navigation & Positioning, Automatic Void Ratio Calculation, Dimension Measurement (distance/angle/circle), And AI Defect Judgment (customizable Algorithms)
Inspection Type	X-ray Transmission Inspection (2D), Detector Tilttable 45° Left And Right (90° Total Viewing Angle)
Dimensions	1300 Mm (L) × 1320 Mm (W) × 1800 Mm (H)

User Interface	24"
Application	Electronics Manufacturing And Semiconductor Industries: Non-destructive Inspection Of PCB Assembly (BGA, QFP), LED Chips, Batteries, FPC, Electronic Components And Connectors
Weight	Approx. 1250 Kg
Detection Objects	Electronic Components, Semiconductors (BGA, IC, LED, FPC, Connectors, Etc.), Batteries (18650 Battery, Pouch Cell Battery, Etc.) Internal Defect Inspection (voids, Cracks, Broken Wires, Etc.)
Resolution	X-ray Tube Focal Spot Size: 5 μ m; Geometric Magnification: 150X

Applications:

The WISDOMSHOW S-7200 Online X-Ray Inspection Machine is an advanced inline SMT X-ray equipment designed to meet the stringent demands of modern electronics manufacturing and semiconductor industries. With its high resolution featuring a 5 μ m X-ray tube focal spot size and a geometric magnification of up to 150X, this real-time X-ray machine ensures precise and non-destructive inspection of complex PCB assemblies such as BGAs, QFPs, LED chips, batteries, FPCs, electronic components, and connectors. Its CE certification and Radiation Safety License (Yue Huan Fu Zheng [B0774]) guarantee compliance with safety and quality standards, making it a reliable choice for high-volume production lines requiring consistent quality control.

This X-ray inspection system is ideally suited for inline inspection scenarios where rapid, accurate detection of defects is essential to maintain manufacturing efficiency and product reliability. The detector's ability to tilt 45° left and right, providing a total viewing angle of 90°, allows comprehensive 2D X-ray transmission inspection from multiple perspectives without removing the sample. This capability enhances defect detection rates and reduces false rejects, making it invaluable in real-time process monitoring and troubleshooting during SMT assembly stages.

Manufacturers can leverage the WISDOMSHOW S-7200's image saving and measurement data storage functions to capture void ratios, dimensions, and other critical parameters, facilitating traceability and detailed analysis. The use of a HAMAMATSU (Japan) closed microfocus X-ray source ensures stable and consistent imaging quality, critical for semiconductor applications where precision is paramount. Packaged securely in a standard export wooden case and supported by flexible payment terms including T/T and negotiable options, this system is readily available with a supply ability of approximately 50-100 units per month, meeting both small-scale and large-scale production needs.

In summary, the WISDOMSHOW S-7200 Online X-Ray Inspection Machine excels in scenarios requiring high-resolution, real-time inspection of electronic assemblies inline with SMT production. Its robust design, advanced imaging capabilities, and compliance with radiation safety regulations position it as a top-tier X-ray inspection system for quality assurance and process optimization in the electronics and semiconductor sectors.

Support and Services:

Our Online X-Ray Inspection Machine is supported by a dedicated technical support team committed to ensuring optimal performance and reliability. We offer comprehensive installation guidance, user training, and routine maintenance services to maximize your equipment's efficiency.

Technical support includes troubleshooting assistance, software updates, and hardware diagnostics to minimize downtime and enhance inspection accuracy. Our experts are available to help you configure the system to meet your specific inspection requirements and to provide advice on best practices.

In addition to support services, we provide tailored maintenance packages, including preventive maintenance and calibration, to ensure continuous operation and compliance with industry standards. Spare parts and upgrade options are readily available to keep your machine up to date with the latest technology advancements.

We are committed to delivering exceptional service and technical expertise to support your quality control processes and improve production workflows with our Online X-Ray Inspection Machine.

Packing and Shipping:

The Online X-Ray Inspection Machine is carefully packaged to ensure safe delivery and optimal performance upon arrival. Each unit is securely placed in a custom-designed foam insert within a sturdy, double-walled corrugated cardboard box to protect against shocks and vibrations during transit.

Additional protective measures include anti-static wrapping and moisture-absorbing packets to safeguard sensitive electronic components from environmental damage.

For shipping, the package is clearly labeled with handling instructions and includes all necessary documentation such as user manuals, warranty information, and compliance certificates.

We offer multiple shipping options to accommodate different delivery timelines and locations, including expedited and standard freight services. All shipments are tracked and insured to guarantee a reliable and secure delivery experience.

FAQ:

Q1: What is the brand and model of the Online X-Ray Inspection Machine?

A1: The Online X-Ray Inspection Machine is branded WISDOMSHOW, and the model number is S-7200.

Q2: Does the Online X-Ray Inspection Machine have any certifications?

A2: Yes, the machine is CE certified and comes with a Radiation Safety License (Yue Huan Fu Zheng [B0774]) as well as Exemption Filing for Radioisotopes and Radiation Devices.

Q3: What is the minimum order quantity for this product?

A3: The minimum order quantity requires a Radiation Safety License (Yue Huan Fu Zheng [B0774]) and appropriate exemption filing for radioisotopes and radiation devices.

Q4: How is the Online X-Ray Inspection Machine packaged for shipping?

A4: It is packaged in a standard export wooden case to ensure safe delivery.

Q5: What payment terms are accepted for purchasing the Online X-Ray Inspection Machine?

A5: Payment terms accepted include T/T (Telegraphic Transfer), and other terms are negotiable.

Q6: What is the supply ability or production capacity of the WISDOMSHOW S-7200?

A6: The supply ability is approximately 50-100 units per month, ensuring steady availability.



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