



S-7200 X-ray inspection equipment Joystick Mouse Keyboard Combined Control X-ray inspection equipment measuring 1300 Mm L 1320 Mm W 1800 Mm H ideal for assurance

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

- Detectionobjects: Electronic Components, Semiconductors (BGA, IC, LED, FPC, Connectors, Etc.), Batteries (18650 Battery, Pouch Cell Battery, Etc.) Internal Defect Inspection (voids, Cracks, Broken Wires, Etc.)
- Power Consumption: Max Power 2.0 KW
- Weight: Approx. 1250 Kg
- Resolution: X-ray Tube Focal Spot Size: 5 μ m; Geometric Magnification: 150X
- 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

Product Description:

The Online X-Ray Inspection Machine is a state-of-the-art X-ray inspection system designed to meet the rigorous demands of modern electronic manufacturing and quality control processes. This advanced automatic X-ray machine is specially engineered to provide precise, efficient, and reliable inspection of a wide range of electronic components and batteries, ensuring product integrity and performance. Whether you are working with semiconductors, electronic components, or batteries, this online SMT X-ray machine offers unparalleled detection capabilities to identify internal defects that are otherwise invisible to the naked eye.

One of the key strengths of this online X-ray inspection system lies in its versatility in detecting various objects. It is expertly calibrated to inspect electronic components such as BGAs (Ball Grid Arrays), ICs (Integrated Circuits), LEDs, FPCs (Flexible Printed Circuits), connectors, and more. Additionally, the machine is capable of handling battery inspections, including 18650 batteries and pouch cell batteries, which are critical in many high-performance applications. Its robust detection capabilities allow it to identify internal defects such as voids, cracks, broken wires, and other structural anomalies that could compromise product quality and safety.

The power consumption of this automatic X-ray machine is optimized for efficiency, with a maximum power usage of just 2.0 KW. This low power consumption not only reduces operational costs but also contributes to a more sustainable and environmentally friendly manufacturing process. Despite its energy efficiency, the machine does not compromise on performance, delivering high-quality inspection results consistently.

At the heart of this X-ray inspection system is the HAMAMATSU closed microfocus X-ray tube sourced from Japan, renowned for its reliability and precision. This advanced tube type enables the machine to produce high-resolution X-ray images, essential for detecting minute defects within complex electronic assemblies and batteries. The closed microfocus design ensures enhanced safety and stability during operation, making it suitable for continuous online inspection in demanding industrial environments.

The inspection type employed by this online SMT X-ray machine is X-ray transmission inspection (2D), which provides clear and detailed two-dimensional images of the internal structure of the inspected items. To enhance the inspection capability, the detector is tiltable 45° left and right, offering a total viewing angle of 90°. This feature significantly improves defect detection rates by enabling multi-angle inspection without repositioning the sample, thus streamlining the inspection process and increasing throughput.

Operator interaction with the machine is intuitive and user-friendly, facilitated by a high-definition 24" HD monitor that displays crisp and detailed images for thorough analysis. The control system integrates a joystick, mouse, and keyboard, offering a combined control interface that is both flexible and ergonomic. This combination allows operators to navigate the system with ease, manipulate inspection parameters, and analyze results efficiently, resulting in faster decision-making and improved productivity.

In summary, the Online X-Ray Inspection Machine is an indispensable tool for manufacturers seeking a reliable, efficient, and precise X-ray inspection system. Its ability to automatically inspect a broad spectrum of electronic components, semiconductors, and batteries for internal defects makes it a critical asset in quality assurance and failure analysis. The integration of advanced features such as the HAMAMATSU microfocus X-ray tube, 2D transmission inspection, and a versatile tiltable detector ensures comprehensive inspection capabilities. Coupled with its user-friendly interface and low power consumption, this automatic X-ray machine stands out as a leading solution for online SMT X-ray inspection needs in modern electronics manufacturing.

Features:

- Product Name: Online X-Ray Inspection Machine
- Application: Electronics Manufacturing and Semiconductor Industries
- Non-destructive inspection of PCB assembly including BGA and QFP
- Inspection of LED chips, batteries, FPC, electronic components, and connectors
- Tube Type: HAMAMATSU (Japan) Closed Microfocus X-ray Source
- Detection Objects: Electronic Components, Semiconductors (BGA, IC, LED, FPC, Connectors, etc.)
- Batteries Inspection: 18650 Battery, Pouch Cell Battery, and others
- Internal Defect Inspection: voids, cracks, broken wires, and more
- User Interface: 24" HD Monitor with Joystick, Mouse, and Keyboard combined control
- Power Consumption: Maximum power 2.0 KW
- Includes advanced X-ray solder joint inspection system capabilities
- Equipped with 3D X-ray inspection system for detailed analysis
- Designed as inline SMT X-ray equipment for seamless integration into production lines

Technical Parameters:

Tube Type	HAMAMATSU (Japan) Closed Microfocus X-ray Source
Power Consumption	Max Power 2.0 KW
Resolution	X-ray Tube Focal Spot Size: 5 µm; Geometric Magnification: 150X
Power Supply	220V AC, 50/60 Hz
User Interface	24" HD Monitor, Joystick + Mouse + Keyboard Combined Control

Operating Temperature	0°C To 40°C
Weight	Approx. 1250 Kg
Data Output	Image Saving And Measurement Data (void Ratio, Dimensions, Etc.) Storage Function
Inspection Type	X-ray Transmission Inspection (2D), Detector Tilttable 45° Left And Right (90° Total Viewing Angle)
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.)

Applications:

The WISDOMSHOW S-7200 Online X-Ray Inspection Machine is an advanced piece of x-ray inspection equipment designed to meet the stringent demands of modern electronics manufacturing and semiconductor industries. Originating from China and certified with CE, this automatic industrial x-ray machine offers reliable and precise non-destructive testing solutions. Its self-developed software integrates CNC automated inspection programming, navigation and positioning, automatic void ratio calculation, dimension measurement (distance, angle, circle), and AI defect judgment with customizable algorithms, making it ideal for a wide range of inspection scenarios.

This x-ray inspection equipment is perfectly suited for the continuous online inspection of PCB assemblies, including BGA (Ball Grid Array) and QFP (Quad Flat Package) components, ensuring product quality without interrupting production flow. It is also extensively used for inspecting LED chips, batteries, flexible printed circuits (FPC), electronic components, and connectors. The machine's capability to save images and measurement data such as void ratios and dimensions facilitates thorough quality control and traceability, which is critical in high-precision manufacturing environments.

Typical application occasions for the WISDOMSHOW S-7200 include high-volume electronics manufacturing lines where rapid and accurate defect detection is essential to maintain production efficiency and reduce costly recalls. Semiconductor fabs can leverage this equipment for in-line inspection of delicate components, identifying defects such as voids, misalignments, or structural inconsistencies with unparalleled accuracy. Its HAMAMATSU (Japan) closed microfocus X-ray source ensures high-resolution imaging, supporting detailed analysis in demanding industrial settings.

The machine's robust design, weighing approximately 1250 kg and packaged in a standard export wooden case, guarantees durability and safe transportation. With a supply capability of approximately 50-100 units per month and flexible payment terms including T/T, this equipment is accessible to various enterprises seeking to upgrade or expand their quality control capabilities. Additionally, it complies with radiation safety requirements, holding a Radiation Safety License (Yue Huan Fu Zheng [B0774]) and exemption filing for radioisotopes and radiation devices, ensuring safe operation in compliance with regulatory standards.

In summary, the WISDOMSHOW S-7200 online x-ray inspection machine serves as a critical tool in diverse inspection scenarios, such as production lines in electronics manufacturing plants, semiconductor assembly facilities, and quality assurance laboratories. Its advanced features, reliable performance, and adherence to safety certifications make it an indispensable solution for companies striving for excellence in product integrity and manufacturing efficiency.



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