2μm Focal Spot Size 64W Max Power Offline X-Ray Inspection Machine with 0.01–1 MA Current X-Ray Inspection System

Our Product Introduction

Basic Information

- Brand Name: Wisdomshow
- Model Number: S8800



Product Specification

- X-ray Source: Open Micro-focus, 20–160KV
- Focal Spot Size: 2μm
- Min Defect Resolution: 1μm
- Max Power: 64W
- Current: 0.01–1 MA
- Detector: IRAY A-Si Flat Panel, 130mm×130mm
- Highlight: **2μm Focal Spot Offline X-Ray Inspection Machine**, **64W Max Power X-Ray Inspection System**, **0.01–1 MA Current Offline X-Ray Inspection Machine**

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Product Description

Product Description:

The Offline X-Ray Inspection Machine is a state-of-the-art inspection tool designed to provide exceptional imaging capabilities for a wide range of applications, particularly in the electronics manufacturing industry. Engineered with precision and reliability in mind, this machine is ideal for users who require detailed and accurate inspection of complex assemblies such as printed circuit boards (PCBs), solder joints, and electronic components. It is especially well-suited for use as an SMT X Ray Machine and a BGA X Ray Inspection Machine, enabling thorough evaluation of surface mount technology (SMT) and ball grid array (BGA) components with ease.

One of the key features of this Offline X-Ray Inspection Machine is its impressive focal spot size of 2μm. This ultra-fine focal spot enables the machine to generate high-resolution X-ray images, allowing users to detect even the smallest defects in solder joints, component placement, and internal structures. With such a small focal spot size, the machine delivers clear and sharp images that are critical for ensuring product quality and reliability.

The machine operates with a powerful X-ray source, characterized as an open micro-focus type with a voltage range of 20–160KV. This flexible voltage range allows for the inspection of a variety of materials and component sizes, from delicate SMT parts to larger assemblies. The micro-focus X-ray source ensures precise targeting of the inspection area, minimizing image distortion and maximizing the detection of hidden flaws.

In addition to its advanced X-ray source, the machine boasts a maximum power output of 64W and a current range from 0.01 to 1 milliamperes (MA). This combination of power and current control enables users to fine-tune the imaging conditions based on specific inspection requirements, optimizing contrast and penetration depth. Such control is essential when inspecting multilayer PCBs or densely packed BGA components, where different materials and thicknesses demand variable X-ray intensities.

The detector system of the Offline X-Ray Inspection Machine is equipped with the IRAY A-Si Flat Panel, measuring 130mm by 130mm. This flat panel detector is renowned for its high sensitivity and rapid image acquisition capabilities. It converts the transmitted X-rays into high-quality digital images that can be analyzed in real time. The large detection area allows comprehensive coverage of the inspection target, reducing the need for multiple scans and enhancing overall inspection efficiency.

As an inspection tool, this machine offers a user-friendly interface and robust software solutions that facilitate image processing, defect analysis, and reporting. Operators can easily manipulate images, zoom into areas of interest, and compare results against predefined criteria. This makes the Offline X-Ray Inspection Machine an indispensable asset for quality control departments and manufacturing lines that demand precise and repeatable inspection results.

Furthermore, the versatility of this machine extends to its application in various industries beyond electronics, including automotive, aerospace, and medical device manufacturing. However, its specialization as an SMT X Ray Machine and BGA X Ray Inspection Machine underscores its core strength in addressing the challenges of modern electronic assembly inspection. By identifying hidden defects such as voids, solder bridging, and misalignments, it helps manufacturers reduce failure rates and improve overall product reliability.

In summary, the Offline X-Ray Inspection Machine combines a finely tuned focal spot size of 2μm, a powerful 64W micro-focus X-ray source with a voltage range of 20–160KV, and a sensitive IRAY A-Si Flat Panel detector measuring 130mm*130mm. These features, coupled with precise current control from 0.01 to 1 MA, make it an exceptional inspection tool for detailed analysis of SMT and BGA components. Its advanced imaging capabilities and user-centric design make it a valuable investment for any facility seeking to enhance their quality assurance processes through reliable and efficient X-ray inspection technology.

Features:

Product Name: Offline X-Ray Inspection Machine

Current Range: 0.01–1 MA

Detector: IRAY A-Si Flat Panel, 130mm*130mm

Maximum Power: 64W

Focal Spot Size: 2μm

X-ray Source: Open Micro-focus, 20–160KV

Equipped with an Industrial X Ray Tube for high precision imaging

Designed as an Electronics X Ray Machine suitable for detailed electronic component inspection

Specialized BGA X Ray Inspection Machine capabilities for effective solder joint analysis

Technical Parameters:

X-ray Source	Open Micro-focus, 20–160KV
Focal Spot Size	2μm
Max Power	64W
Detector	IRAY A-Si Flat Panel, 130mm*130mm
Current	0.01–1 MA
Min Defect Resolution	1μm

Applications:

The Wisdomshow S8800 Offline X-Ray Inspection Machine is a state-of-the-art device designed to meet the rigorous demands of modern industrial inspection. Equipped with an Industrial X Ray Tube featuring a focal spot size of just 2μm and a current range from 0.01 to 1 MA, this machine offers exceptional precision and reliability for various inspection tasks. Its advanced IRAY A-Si Flat Panel detector, measuring 130mm*130mm, ensures high-resolution imaging with a minimum defect resolution of less than 1μm, making it ideal for

detecting even the smallest imperfections.
This SMT X Ray Machine is perfectly suited for use in electronics manufacturing environments where quality control is paramount. It excels in inspecting printed circuit boards (PCBs), solder joints, and components without causing any damage, thereby improving production yield and reducing the risk of failures in the field. The maximum power output of 64W provides sufficient energy to penetrate complex assemblies, enabling detailed analysis of multilayer boards and densely packed electronic components.
The Wisdomshow S8800 is widely applied in various industrial scenarios, including semiconductor fabrication, automotive electronics, aerospace component inspection, and medical device manufacturing. Its offline mode allows for flexible inspection workflows, making it an invaluable tool in both research and development settings as well as in production quality assurance. By utilizing this Electronics X Ray Machine, companies can ensure compliance with industry standards and enhance product reliability through non-destructive testing methods.
Additionally, this machine is ideal for educational institutions and training centers focused on electronic engineering and quality management. Its precision and ease of use make it a perfect instrument for demonstrating advanced inspection techniques and for training personnel in the latest nondestructive testing technologies. Overall, the Wisdomshow S8800 Offline X-Ray Inspection Machine is an indispensable asset for any organization seeking cutting-edge inspection capabilities in the electronics and industrial sectors.

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