XB8100

Cylinder Battery X-Ray Inspection Machine

This device achieves online fully automatic detection of various types of cylindrical batteries, interfaces with upstream and downstream logistics lines, efficiently flows through the equipment for detection, and automatically sorts NG products, outputs OK products, outputs logistics lines, and enters downstream equipment (optional automatic reflux secondary retest).

Device Functions

- Automatic docking of loading and unloading, MES interaction, and data upload;
- Corner Overhang detection, resistance value, conductivity and other tests;
- NG automatic reflux retest (optional).

Product Features

Fully Automatic Detection:
Connect upstream and downstream equipment, conduct online automatic detection and judgment, and automatically sort out defective products; Equipped with in-situ retesting function, optional with automatic reflux retesting function.

Real Time Monitoring:
All actions, signals and hardware status of the equipment are monitored in real time to facilitate product quality data analysis and safety production control.

Safety and Environmental Protection:
The device has safety interlocking and multiple protection functions, and any component on the surface of the body meets national safety radiation standards.
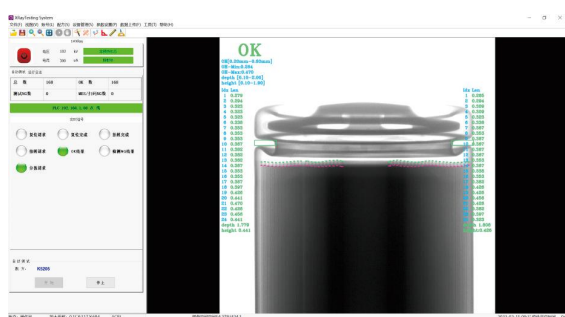
Easy to Operate:
The software interface is user-friendly, with one click model replacement and troubleshooting, and configured with permission management functions, making it easy to get started and improving work efficiency.

Image and Detection Data:
The battery test images and test data are saved together and can be displayed together in the software interface for easy viewing and analysis.

Operational Applications

X-ray Tube Parameters

Tube Type	Reflective Sealed Micro-Focus X-Ray Tube
Tube Voltage Range	110KV/130KV
Tube Current Range	455uA/300uA
Maximum Output Power	50W/39W
Microfocal Size	5-15μm

Detector Parameters

Type	Flat Panel Detector / Linear Array Detector TDI
Field of View	130mm×130mm/205mmx6mm
Resolution	5.8Lp/mm / 5Lp/mm
Ad Conversion Bits	16bits

Efficiency Parameters

Inspection Accuracy	15μm
Repetitive Testing Accuracy	±30μm
Detection Efficiency	≥90ppm/≥200ppm
False Detection Rate	≤1.5%
Loss Detection Rate	0.0%
Excellent Product Rate	≥99.5%

Other Parameters

International Radiation Safety Standards	≤1μsv/hr
Control System	Industrial Computer Win10 (64 bit)
Weight	2500Kg/4000Kg
Size	1300×1660×1900mm / 5000×1800×1900mm
Power Supply	3-phase 380V/50HZ, approximately 3000W 3-phase 380V/50HZ, approximately 4500W
Detection Range	14450/18650/21700/26650/32700/4680

Applications