



DS3000 Automatic HD 17inch Screen X Ray Counter Machine For 80mm Thickness Tray

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: WDS
- Certification: CE
- Model Number: DS3000
- Minimum Order Quantity: 1 UNIT
- Packaging Details: Wooden case
- Delivery Time: 8-15 working days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 150 UNITS PER MONTH



Product Specification

- Counting Speed: 4-8s
- Detection Size Range: Mini Unlimited
- Thickness Of Tray: 80mm
- Barcode Recognition: Automatic
- Highlight: 17inch Screen X Ray Counter Machine, Automatic X Ray Counter Machine, 17inch Screen X Ray Reel Counter



More Images



DS3000 Offline X-ray counter machine

High detection accuracy:

Based on the AI intelligent recognition algorithm, the detection accuracy is excellent. The calculation accuracy of conventional devices reaches more than 99.99%. It uses high-definition cameras and self-developed intelligent algorithms to achieve high code scanning recognition rate.

2. Strong detection adaptability:

Suitable for various types of chip components, SMD devices; high product compatibility, can quickly and accurately detect materials such as 7-15-inch trays (can be upgraded to 17-inch YJedec Tray/IC moisture-sensitive packages; material label error-proofing mechanism, Material tray induction recognition, real-time docking with the printer, pick up any tray of materials and print the tray material information.

3. The detection is easy to use:

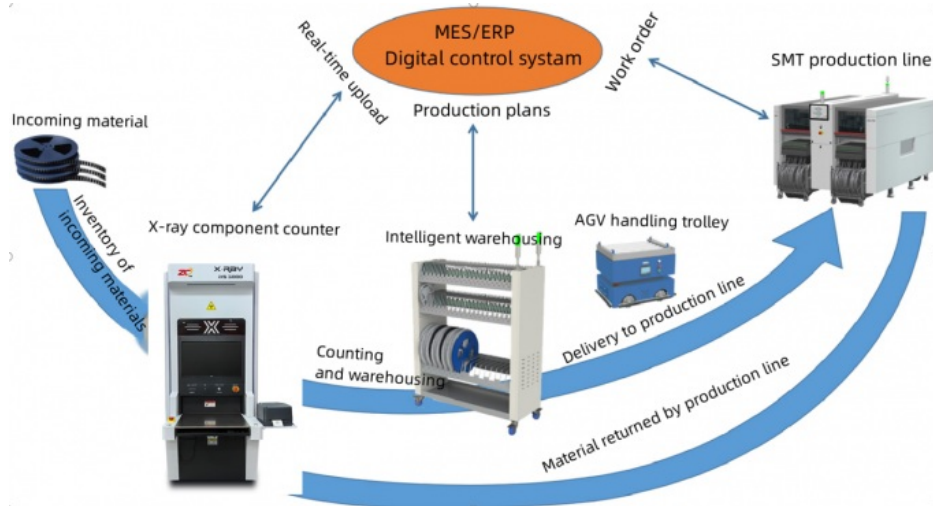
Automatic statistical output of ordering data supports docking with ERP, MES and NMS systems; the design is based on ergonomic mechanics and can be operated in a sitting position. The monitor is kept at the same height as the human eye, protecting the cervical spine, occupying a small space and reducing working space; the software operation is user-friendly, Guided menu structure makes it easy for employees to operate.

4. High detection efficiency:

The detection speed is 8-10 seconds/single plate, which is highly efficient and can save multiple labors, truly reducing manpower and increasing efficiency.

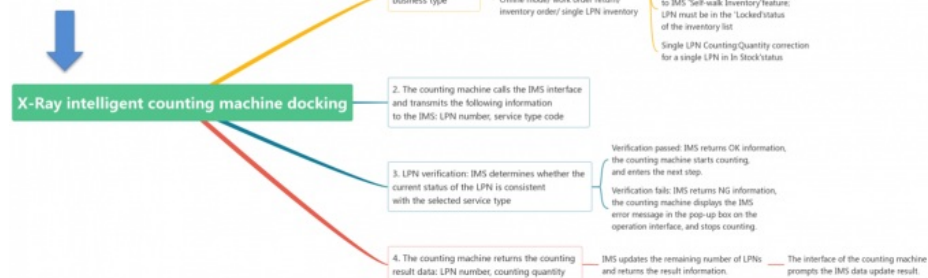
5. Equipment related qualifications:

This product has obtained an exemption certificate, and radiation safety is guaranteed. At the same time, users can be exempted from occupational health examinations for operators, participation in the "Radiation Safety and Protection Assessment of Nuclear Technology Utilization" certification and employment, and equipment placement in specific areas.



- Usage requirements and application scenarios**
1. After the X-ray intelligent counting machine completes direct counting, the result data of the counting will be uploaded to the digital control system for update.
 2. Main application scenarios: ① Work order return; ② Single LPN inventory; ③ Initial inventory / Re-inventory.

Docking plan and process



P/N: 803414260 QTY: 48 PCS
 RID: SLN220718000032
 D/C: 2228 L/N: 2228
 Vendor: 苏州 科技有限公司
 Name: XLKRNT4850C2D1-A
 Desc: 500*352*89mm, ADC12/A380.

SUPLET

QR code content

V1016&2228&2228&803414260
 &48&2022710&SLN220718000032&M00773

| line number | field name | Field type | paragraph separator |
|-------------|-------------------|------------|---------------------|
| ① | Supplier Code | character | & |
| ② | D/C | character | & |
| ③ | Production Batch | character | & |
| ④ | Material Code | character | & |
| ⑤ | Reel ID Count | character | & |
| ⑥ | Production Date | character | & |
| ⑦ | Reel ID | character | & |
| ⑧ | Manufacturer Code | character | & |

Analysis details

1. The equipment can be used without connecting to the digital control system to achieve direct counting in offline mode.




2. Offline mode can realize fully automatic counting, automatic label printing, and automatic generation of point reports.

Offline mode label printing rules

| Serial number | Tag meaning | Description |
|---------------|-------------|-------------------------|
| ① | barcode | material quantity |
| ② | quantity | counting quantity |
| ③ | number | the station of the tray |
| ④ | time | counting time |

DS-3000 Intelligent Counting Machine

| X-ray source | | Flat panel detector | | Counting parameters | | Equipment Specifications | |
|-----------------------|-------------------------------------|---------------------|----------------------------|--------------------------------|-----------------------------|--------------------------|---------------------|
| Tube voltage | 80KV | Detector category | Non-silicon 17-inch tablet | Maximum size of tray | 15inch | Total power | 800W |
| Tube current | 0.2mA | Pixel matrix | 3072*3072pixels | Maximum thickness | 86mm | Equipment size | 908mm*1335mm*1968mm |
| Cooling method | air cooling | Pixel size | 140μm | Compatible mini component size | Imperial 01005 | Equipment weight | About 800KG |
| Focus size | 35μm | Image size | 430mm*430mm | Counting speed | About 6-8s/4trays (7inches) | Supply voltage | 220V 50-60Hz |
| X-ray radiation angle | 30° | Detector size | 470mm*470mm*35mm | Counting accuracy | 99.99% (01005 example) | | |
| radiation safety | < 1uSv/hr (international standards) | Drawing time | 1s | Table size | 430mm*430mm | | |
| | | | | Table load bearing | 10KG | | |

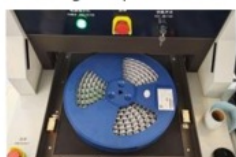
Order 4 plates at a time.

Four cameras automatically scan codes and automatically upload to MES/ERP and other systems.

To be fool-proof, label which plate you take.

| | | | | |
|-------------|-----------------|-------------------------|-------------------|----------------|
| 7 inch tray | 13/17 inch tray | Automatic code scanning | Manual complement | label printing |
|-------------|-----------------|-------------------------|-------------------|----------------|

Counting one plate at a time



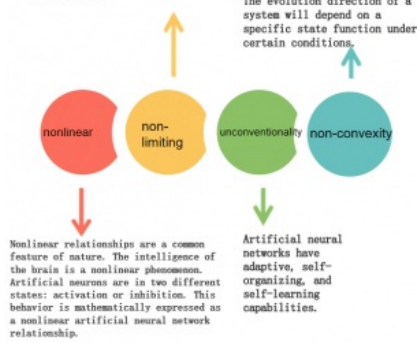
For labels that are damaged or unclear



1. Software Neuron Algorithm

A neural network is usually composed of multiple neurons that are widely connected. The overall behavior of a system not only depends on the characteristics of a single neuron, but may also be mainly determined by the interactions and interconnections between units.

The evolution direction of a system will depend on a specific state function under certain conditions.

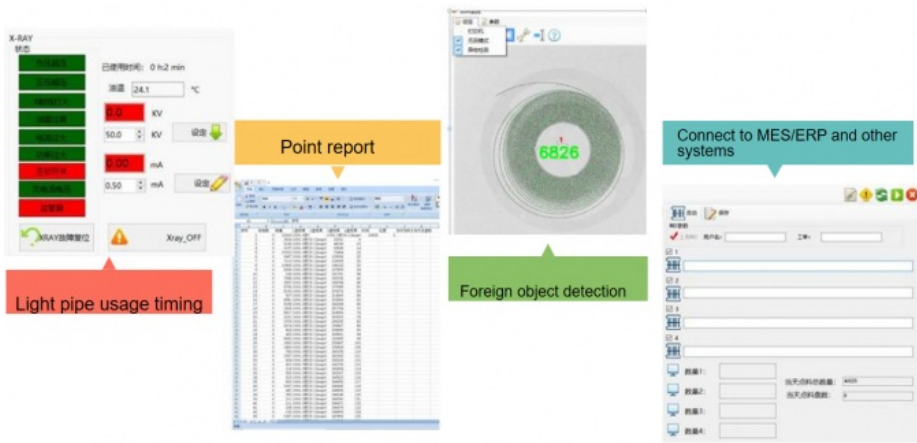


2. Artificial Intelligence Deep Learning Algorithm

1. The ordering software adopts artificial intelligence deep learning algorithm.
2. There is no need to bind components and algorithms.
3. Instead, use AI to automatically identify components and automatically apply algorithms.
4. The algorithm can learn the clicked component data like:
 - ① Length-to-width ratio;
 - ② The angle of each corner of the component;
 - ③ The slope from inside to outside components;
 - ④ The deformation rules of component images from inside to outside, etc.
 As components are counted more and more times, the results of counting materials become more and more accurate. When encountering similar components and larger material trays, we can easily handle them.

3. Intelligent database

1. The equipment software adopts machine automatic learning algorithm.
2. Analyze a large number of data records and automatically update and tune them to the database.
3. Over time, the accuracy of equipment ordering will become closer and closer to 100%.
4. The coverage of component types will also become wider and wider.



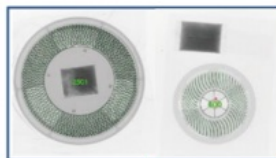
3-3 Speed and accuracy

1. The X-RAY intelligent counting machine can cooperate with SMT tail material counting and improve intelligent warehousing;
2. It can count four trays of materials at the same time, and it only takes 8S at the fastest. A single device can save 5-7 people in labor;
3. Make tailings counting and material warehousing more efficient, more secure, and more digitally managed;
4. For unconventional materials that cannot be accurately identified, model algorithm optimization updates will be provided, and optimization can be completed within 24 hours.
5. Up to now, the ordering time and accuracy of materials of various sizes are as follows:

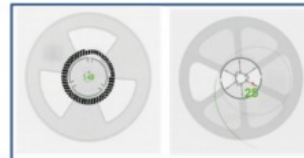
| Name | Material Dimensions | Accuracy | Name | Material Dimensions | Accuracy | Name | Material Dimensions | Accuracy | Name | Material Dimensions | Accuracy |
|-----------------------|---------------------|----------|------------|---------------------|----------|----------|---------------------|----------|--------------------|---------------------|----------|
| Resistor | 01005 | 99.95% | Capacitor | 01005 | 99.99% | Inductor | CD32 | 99.99% | MOS | 2N7000 | 100.00% |
| | 0201 | 99.99% | | 0201 | 99.99% | | CD43 | 99.99% | | 2N7002 | 100.00% |
| | 0402 | 100.00% | | 0402 | 100.00% | | CD52 | 100.00% | | 2N7004 | 100.00% |
| | 0603 | 100.00% | | 0603 | 100.00% | | CD54 | 100.00% | | BGA | 100.00% |
| | 0805 | 100.00% | | 0805 | 100.00% | | CD73 | 100.00% | IC | QFN | 100.00% |
| | 1206 | 100.00% | | 1206 | 100.00% | | CD75 | 100.00% | | QFP | 100.00% |
| | 1210 | 99.99% | | 1210 | 100.00% | | CD104 | 100.00% | | 4025B | 100.00% |
| | 1812 | 99.99% | | 1608 | 100.00% | | CD105 | 100.00% | Crystal Oscillator | 2016B | 100.00% |
| | 2010 | 99.99% | | 2125 | 100.00% | | M1 | 100.00% | | 1612B | 99.99% |
| | 2512 | 99.99% | | 3612 | 100.00% | | M2 | 100.00% | | HC-49 | 99.99% |
| Tantalum Capacitor or | TANT 4525 | 100.00% | Transistor | SOT 23 | 100.00% | Diode | M4 | 100.00% | Optocoupler | | 99.99% |
| | TANT 6640 | 100.00% | | SOT 89 | 100.00% | | M5 | 100.00% | | Switch | 99.99% |
| | TATN 7343 | 100.00% | | SOT 363 | 100.00% | | 4148 | 100.00% | Terminal Block | TATN 7343 | 100.00% |



Automatic ordering of SMD chip components such as capacitors, resistors, inductors, diodes, transistors, etc.



Automatic counting of materials when full (moisture-proof bag with desiccant)



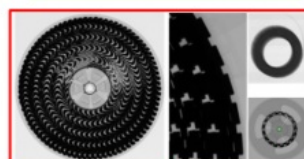
Automatic counting of small quantities of materials at the end of the plate



Automatic ordering of bulk materials



Jedec Tray material automatic ordering



Due to the X-ray (2D imaging) detection principle, stacked or non-tiled materials cannot be counted. Currently, for the entire industry, materials such as ultracaps cannot be accurately counted by the X-ray counting machine.



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