

Hawkeye 2000

Revolutionary 2.0 X-ray component counter



Automated X-ray counter

- © 99,9 % accuracy while counting up to 4 reels simultaneously
- © Counts 4 reels in only 8 seconds
- © Many new features



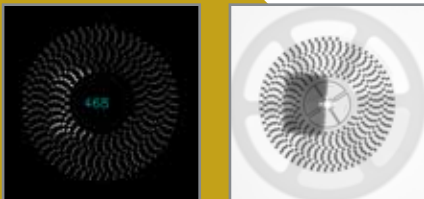
© Reel counting



© Tape strip counting



© ESD bag counting



Hawkeye 2000

The inventor of the revolutionary X-ray component counter Hawkeye 1000, now presents its advanced successor; Hawkeye 2000. Component counting at an even higher level.

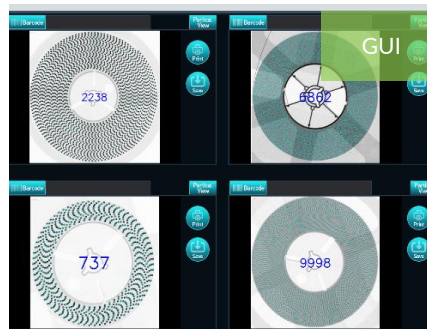


How does Hawkeye 2000 work?

With Hawkeye 2000 you only need to push a single button to count various components automatically in only seconds.

Example:

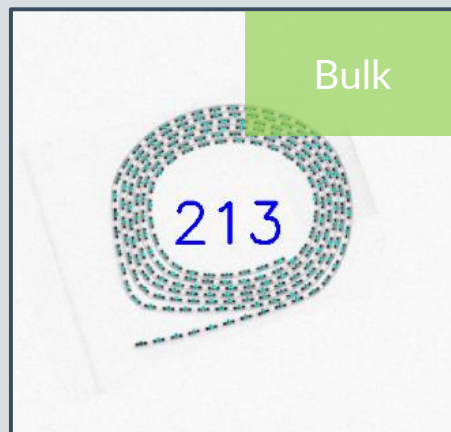
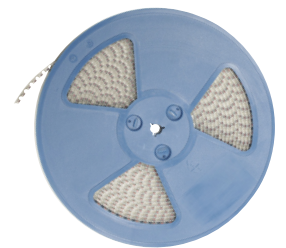
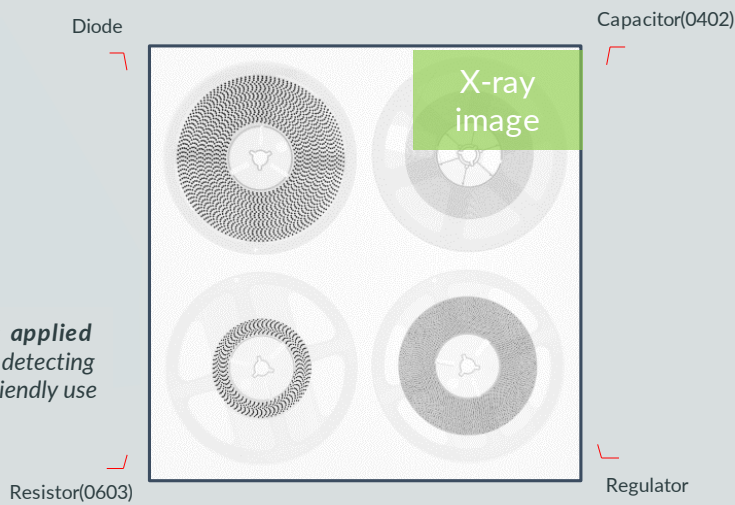
Counts 4 reels simultaneously in only 8 seconds.



Components counting opportunities

- Chip Capacitor
- Resistor
- Inductor
- Stick
- Tubes
- SMT Connector
- Diode
- From 0201 metric / 008004" sized chips
- Shield can
- Loose Reel
- Cut Reel
- Odd shaped Chips
- ESD bags
- Vacuum Shield Bags
- JEDEC Tray
- Splicing

*4 reels sensors applied
Smart quad reels detecting
system for user friendly use*



New features

Black & white list | Manual Q'ty adjustment
Automatic barcode reader | Polygon 'Region Of Interest' drawing

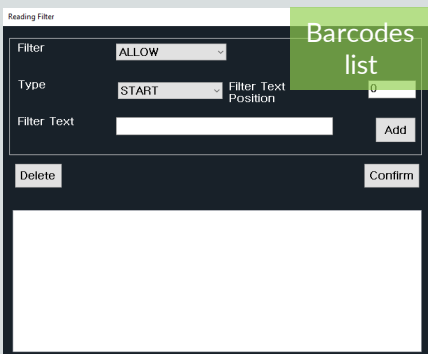


Black & white list

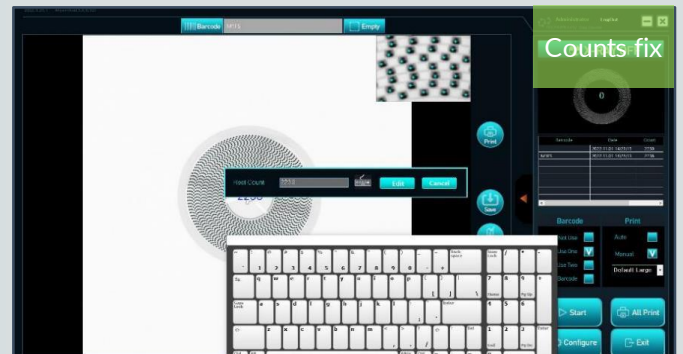
- Protection of vulnerable components from X-ray exposure
- Banning list (black) of reels for counting
- Allowance list (white) of reels for counting
- Barcode contents selection
- Reduction of human errors

Manual Q'ty adjustment | count fix

- Immediate counting error adjustment
- Prompt results change applicable
- Reduction of counting error
- Applicable to ERP / MES integration



Barcodes list

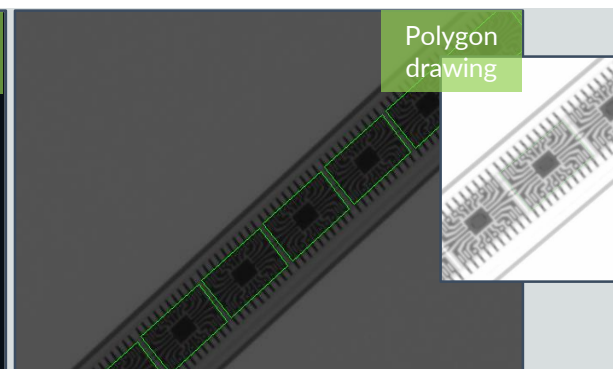


Automatic barcode reader | option

- Automated barcode reading system
- Compatible with black & white list function
- Barcode contents selection available
- One click on & off function
- Reduction of wrong barcode reading

Polygon 'Region Of Interest' drawing

- No limit on shape of 'ROI'
- Precise 'ROI' setting available for counting
- Reduction of counting error
- Easier counting setting on ETC mode



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X-Ray Tube	
Type	Sealed
Voltage	55kV
Power	110W
Max. resolution	200µm
Detector	
Type	FPXD
Resolution	9.4 Mega Pixels
Colours	16 Bits
Manipulator	
Stage size	430 x 430 mm
Max. sample size (1 reel)	380 Φ
Max. sample size (4 reels)	180 Φ
Min. Edge Clearance	3 - 10mm
Installation	
Dimension	900 x 1579 x 1828mm
Weight	660kg
Power	220-240VAC, 50/60Hz
Air requirement	None
Safety features	Real-time radiation measurement (<1 µSv/h)
Inspection	
Tact time per counting	8 Secs
Accuracy	99.9 %
Min. component size	0201 (008004)
Display	24" FHD
Operation	Touch screen / OP Panel /Keyboard and mouse
Software	
Inspection methods	1 Reel, 4 Reels, ETC Mode
Counting result fix	One button upload, Manual counting result adjustment
Type of defects	Reel (Diode, capacitor, resistor, regulator etc.), tube, tray, bulk, splicing, ESD bag etc.
Functions	Components counting Black & white list Manual Q'ty adjustment MES / ERP integration X-ray image capture Automatic barcode scanner (Optional)
Operation Station	Chip counter programme
Counting method	Deep learning, threshold

