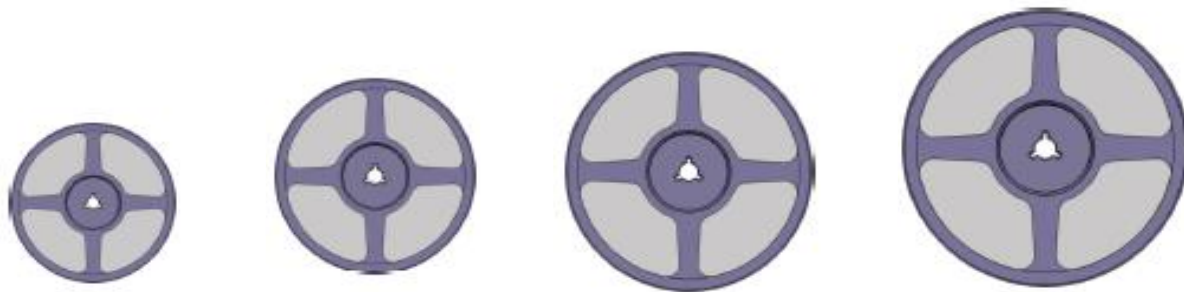




# Unicomp Technology

## Brief Introduction of Unicomp CX7000L X-Ray Chip Counter





1. **Efficiency loss** : Average 3-5 minutes for a tape & Reel with traditional semi-auto counter.
2. **Material loss** : Approximate 6-10 pcs components will be lost (at the head & end of carrier).
3. **Low accuracy** : Part counter accuracy is low, less than **90%** or even lower.
4. **Missing information** : Roll to empty tape without original component package information.
5. **Headcount** : Need 4 dedicated materials handlers to count for day and night shift (10 lines).
6. **Data Update** : Quantity data not able to updated in real time with ERP & MES system.
7. **Quality Issue**: With risk of tape film losing after rolling caused Pick & Place failure.

# Necessity of X-ray Chip Counter Machine

- Materials receiving & Incoming inspection & In-house labeling
- Components quantity verification for customer consignment project
- Remaining quantity counting after production changeover
- Monthly inventory in production line and warehouse
- High Operators turn over rate & difficulty of recruitment
- Components inventory dynamic system updating importance for operations
- Non-destructive touch on the tape & components





# X-Ray Chip Counter Vs. Traditional Counter

Features Comparison	X-ray Chip Counter	Traditional Counter
Efficiency	9-10 Seconds/ Reel	3-5 Minutes / Reel
Daily Output	4000 reels	240 reels
Accuracy	≥ 99.99%	≤ 90%
Components Loss	No any loss	6-10 pcs loss / reel ( <b>\$\$ Loss</b> )
Labeling	Right quantity & new Label	Quantity marking manually
Headcount (10 lines)	1 operator	4 operators
Data Update	Real-time with ERP & MES	Manual Key-in/no error-proof
R.O.I (only Labor cost)	1.5 Years	





CX7000L

Home Hardware ManualControl RunningLog SignalInfo MESInfo UserManager SoftSettings About

SignalInfo

TubeInterlock ●

DrawerInterlock ●

SidedoorInterlock ●

BackdoorInterlock ●

HardwareConnectedStatus

Device...	Device...
Barcode...	Conne...
PLC	Conne...
Tube	Conne...
FPD	Conne...

Home

ShowResults

Show Sigle

Wait for Barcode

4000

3798

Wait for Barcode

8125

9587

Save

TestResult

Category	Qty	Print
T1	8125	Print
T2	9587	Print
T3	3798	Print
T4	4000	Print

PatternInfo

**NormalWork**

WorkOrder

Status

**Waiting**

Init Capture Close Open

Current barcode

Wait for Barcode

ChooseTray

Wait for Barcode	Wait for Barcode
4	3
1	2

Wait for Barcode

Wait for Barcode

RunningLog

```

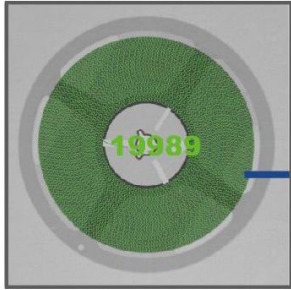
1041 :begin
GetImageAndCalculate
4179 :FPD on
2022-06-22 19:26:28
4209 :Grab Start Frame
Index:1 Grab Frame Count:3
2022-06-22 19:26:29
1649 :Frame:1
2022-06-22 19:26:29
6098 :Frame:2
2022-06-22 19:26:30
1104 :Frame:3
2022-06-22 19:26:30
6181 :Frame:4
2022-06-22 19:26:31
1087 :Frame:5
2022-06-22 19:26:32
2537 :Begin Count Cal_Alg
index:999|position:-1
2022-06-22 19:26:32
4751 :Process pos:3
2022-06-22 19:26:32
4771 :Process pos:2
2022-06-22 19:26:32
4791 :Process pos:4
2022-06-22 19:26:32
4811 :Process pos:1
2022-06-22 19:26:32 6317 :I
AM223
2022-06-22 19:26:33
2221 :Process pos:3
finished!
2022-06-22 19:26:33
6500 :Process pos:1
finished!
2022-06-22 19:26:34
0768 :Process pos:4
finished!
2022-06-22 19:26:34
5047 :Process pos:2
finished!
2022-06-22 19:26:34 5077 :All
Process task finished!
    
```

admin English

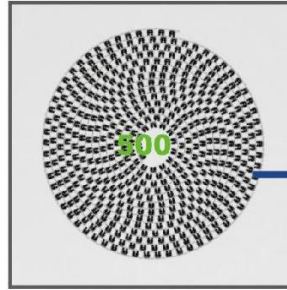
Copyright©2022Wuxi Unicomp Co., Ltd

Restore Save current

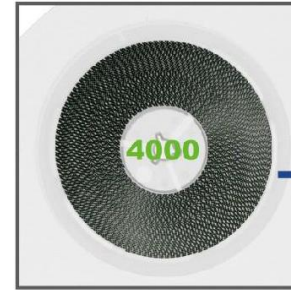
19:26:44



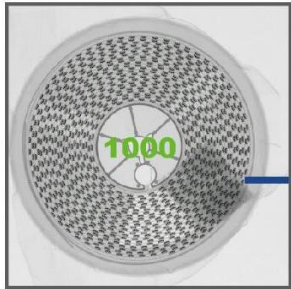
01005



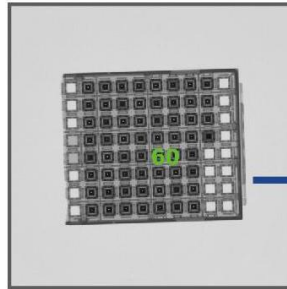
CHIPS



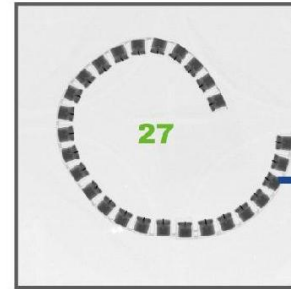
ABNORMAL SHAPED  
COMPONENTS



ESD/HSC

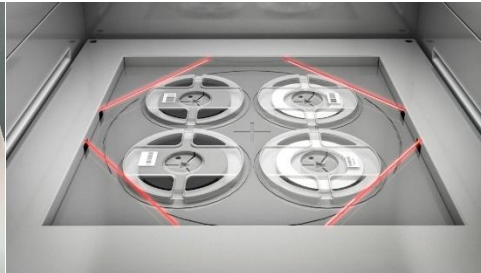
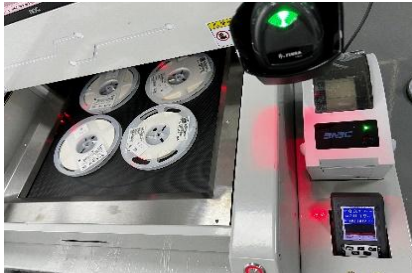
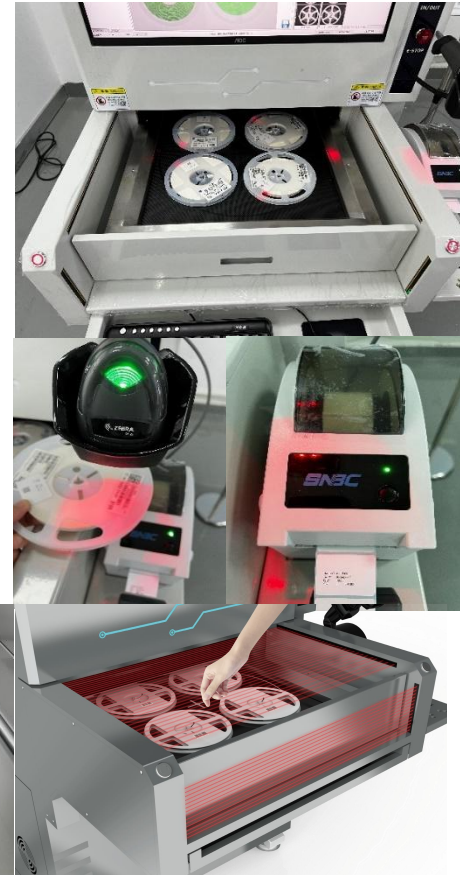


TRAY/JEDEC

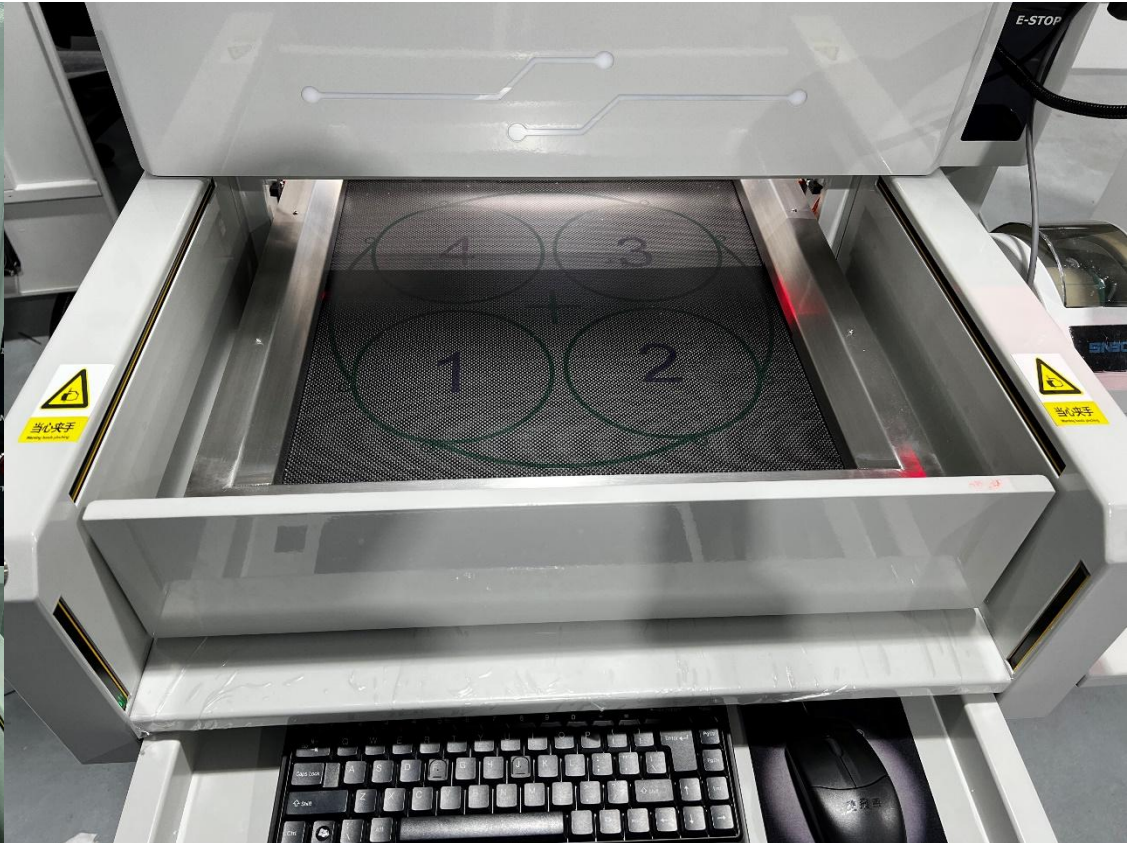
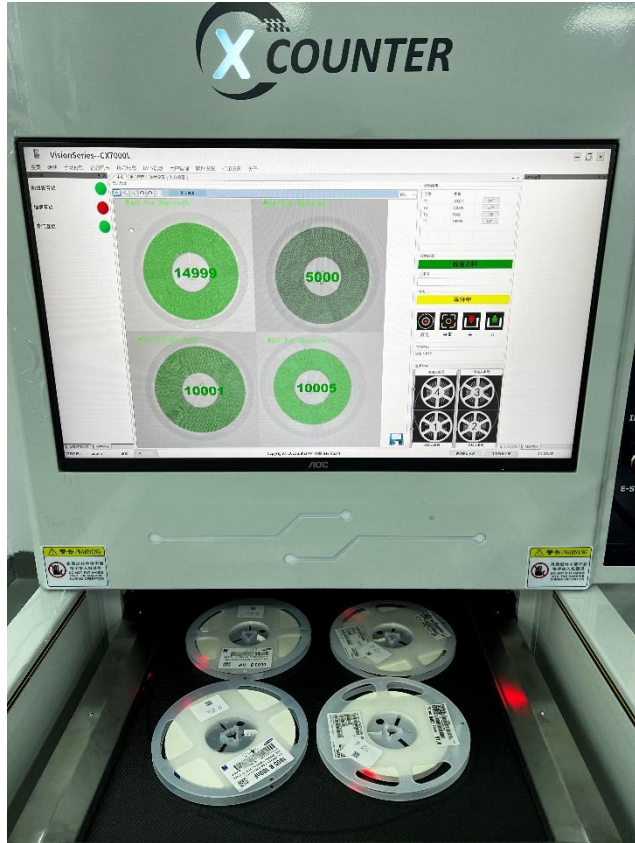


BULKS

- Fast speed & high accurate Chip counting, reducing labor cost
- One-button operation, Automatic counting .
- Minimum component size 01005
- System Accuracy >99.99%
- Count time<10s 7" -17" Tape & Reel (Quad of 7" T &R)
- Auto-scan barcode with scanner or camera
- New label printing with P/N and quantity ( Editable)
- Integration to ERP & MES system (csv. or xml)
- Real time radiation dose meter surveillance



# Drawer and Software Interface







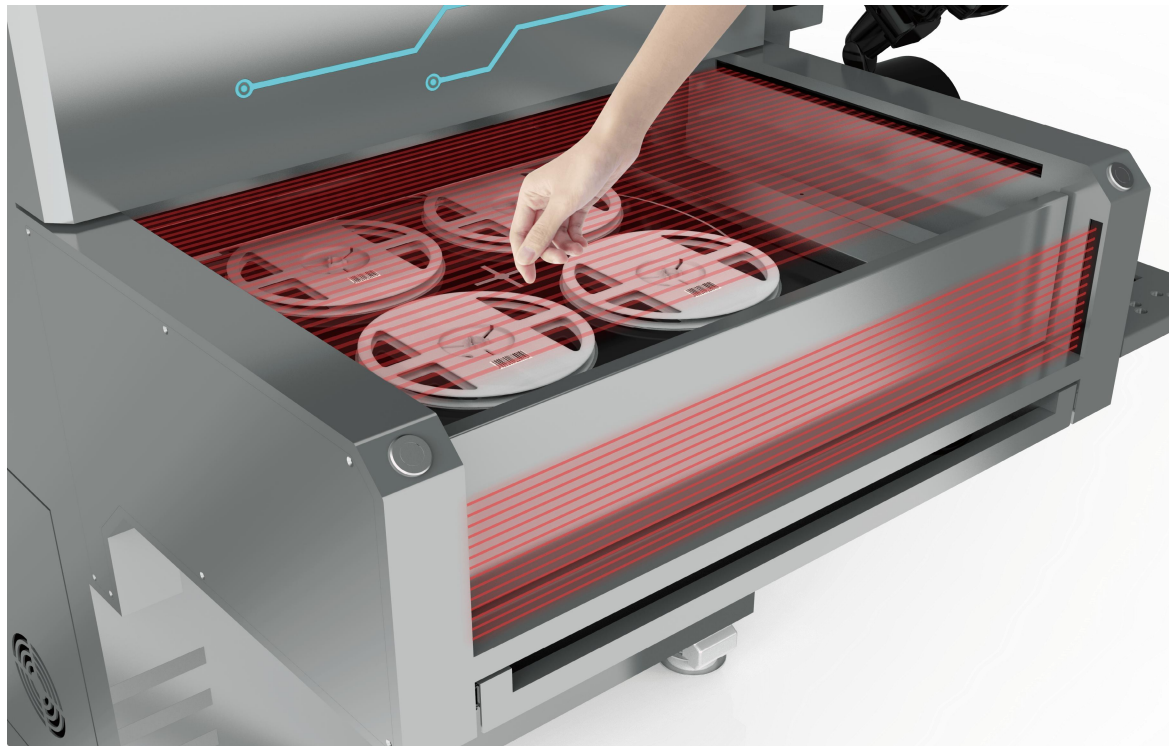


# Assembly & Installations





# Safety Protection





# CX7000L X-Ray Counter



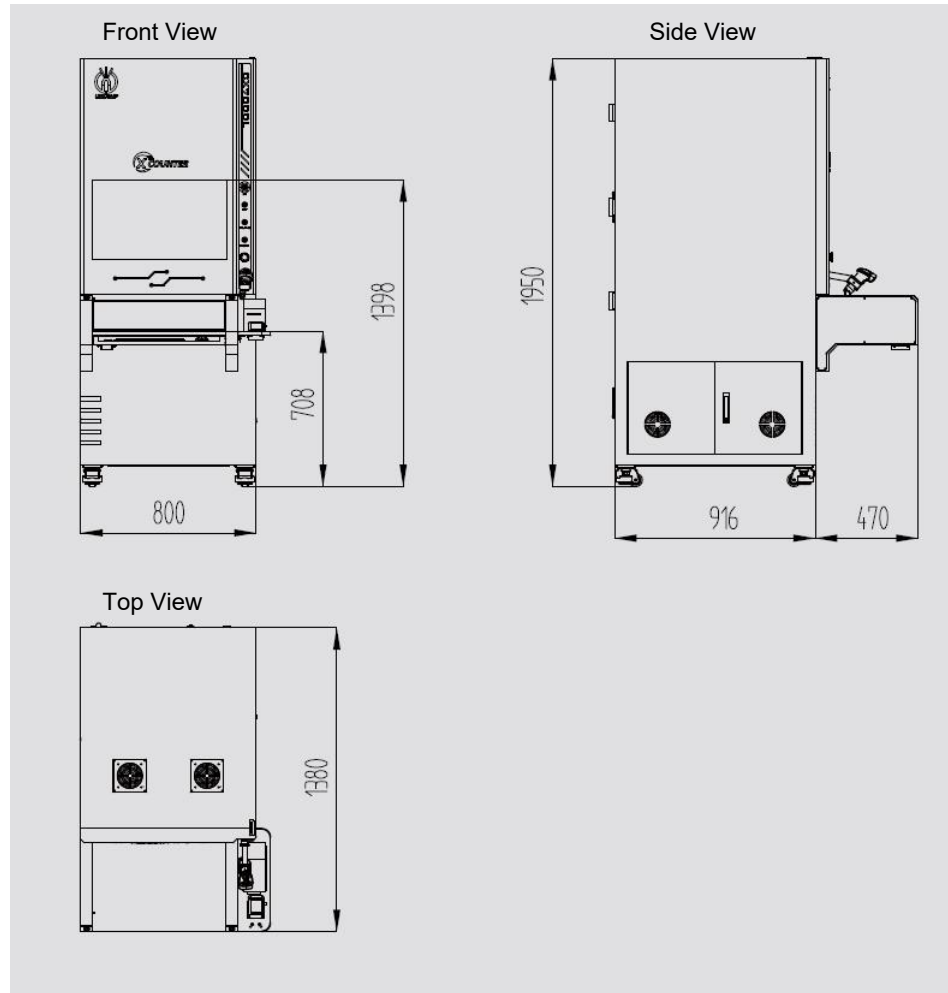
SMD Chip Counter

Main Item	Specifications
X-Ray Tube	50kV or 80kV 0.03mm Closed Tube (Option)
Image Detector	FPD 430mm*430mm
Tape Size	7"-17" tape & reel
Counting Accuracy	≥ 99.99%
Min. component	01005
Max. reel height	88mm
Counting Speed	< 10s (7-17 " Single Reel with any size)
Counting Speed	< 10s (Quad with 7" reel)
Package	Chip, ESD with Desiccant, JEDEC Tray, Tube, Snippets
Database	MES, ERP, Warehouse, Component Tower
Accessories	Barcode Scanning, Label Printer, Fingerprint Access, Dose Meter
Industrial Computer	Win 10 (64), I7, RAM:16GB, HDD:1TB +512G
Monitor	21.5" FHD LCD Display
Machine Size/Weight	1000*1380*1950mm 800kg



# CX7000L X-Ray Counter

Footprinter (mm)



# Thank You



[www.global-xray.com](http://www.global-xray.com)

[www.unicomp.cn](http://www.unicomp.cn)

UNICOMP TECHNOLOGY