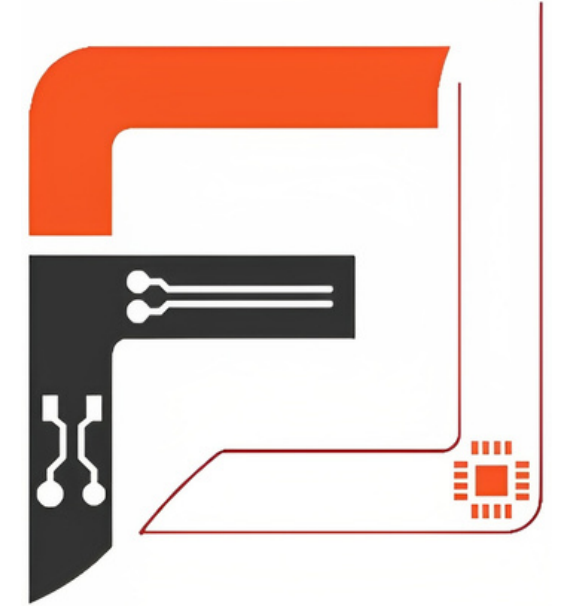


Manufacturing Infrastructure & Equipment Portfolio

Technology that Delivers Precision

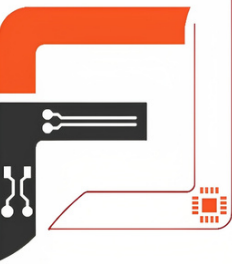


Revision 1.0
July 2026



Technology Highlights

Advanced manufacturing technologies supporting prototype, NPI and volume production with high precision, quality and traceability.



Two Fully Automated SMT Lines

High-throughput automated surface mount assembly.



3D SPI Inspection

Precise solder paste inspection for quality control.



3D AOI Inspection

Advanced optical inspection for placement accuracy.



Shimadzu X-Ray Inspection

Internal inspection for hidden solder and assembly defects.



Fuji AIMEX III Placement Systems

Flexible high-speed placement for complex builds.



Selective Wave Soldering

Controlled soldering for through-hole and mixed assemblies.



MYCRONIC Conformal Coating

Protective coating application for harsh environments.



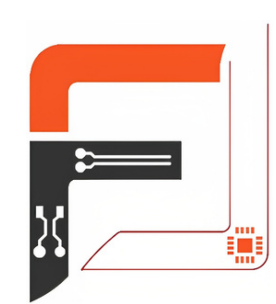
UNICOMP X-Ray Reel Counter

Accurate component counting and inventory control.



Thermal Chamber

Environmental stress testing for product reliability.



MANUFACTURING INFRASTRUCTURE OVERVIEW

A 40,000 sq.ft advanced electronics manufacturing facility engineered for prototype, NPI, high-mix and volume production with world-class automation and inspection technologies.



40,000 Sq.ft
Manufacturing Facility



2 Fully Automated
SMT Lines



200,000 CPH
Placement Capacity



01005 Component
Capability



4 Fuji AIMEX III
Placement Systems



100% Inline
3D SPI & AOI



Shimadzu
X-Ray Inspection



ZSW PRO-S51
Selective Wave Soldering



MYCRONIC
Conformal Coating



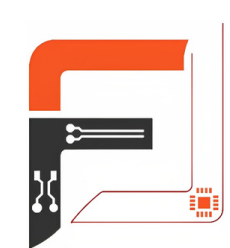
Environmental
Stress Test Chamber



UNICOMP CX7000L
X-Ray Reel Counter



**ISO 9001, ISO 13485
& AS9100 Certified**



DUAL SMT MANUFACTURING LINES

Two automated lines configured for flexible, high-quality electronics assembly



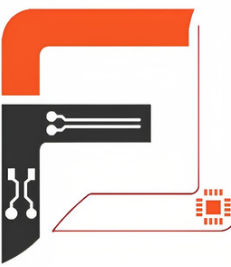
LINE 1



LINE 2



PRINTING & PASTE INSPECTION



GKG GL-STAR PRINTER



Key Features

- High-precision stencil alignment ($\pm 12.5\mu\text{m}$)
- Support for PCBs up to **510×460mm**
- Automatic stencil cleaning system
- Closed-loop printing process control

KOH YOUNG KY8080 3D SPI



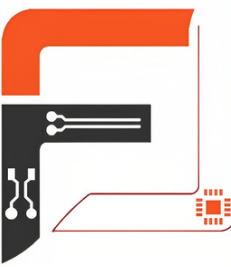
Key Features

- Full 3D solder paste volume measurement
- High-speed inspection up to **120 cm²/sec**
- Sub-micron height measurement accuracy
- Real-time SPC & closed-loop feedback

Why It Matters

Accurate solder paste deposition verified by 100% inline 3D inspection ensures consistent solder quality, minimizes defects, and establishes a reliable foundation for high-yield SMT assembly.

PLACEMENT & REFLOW



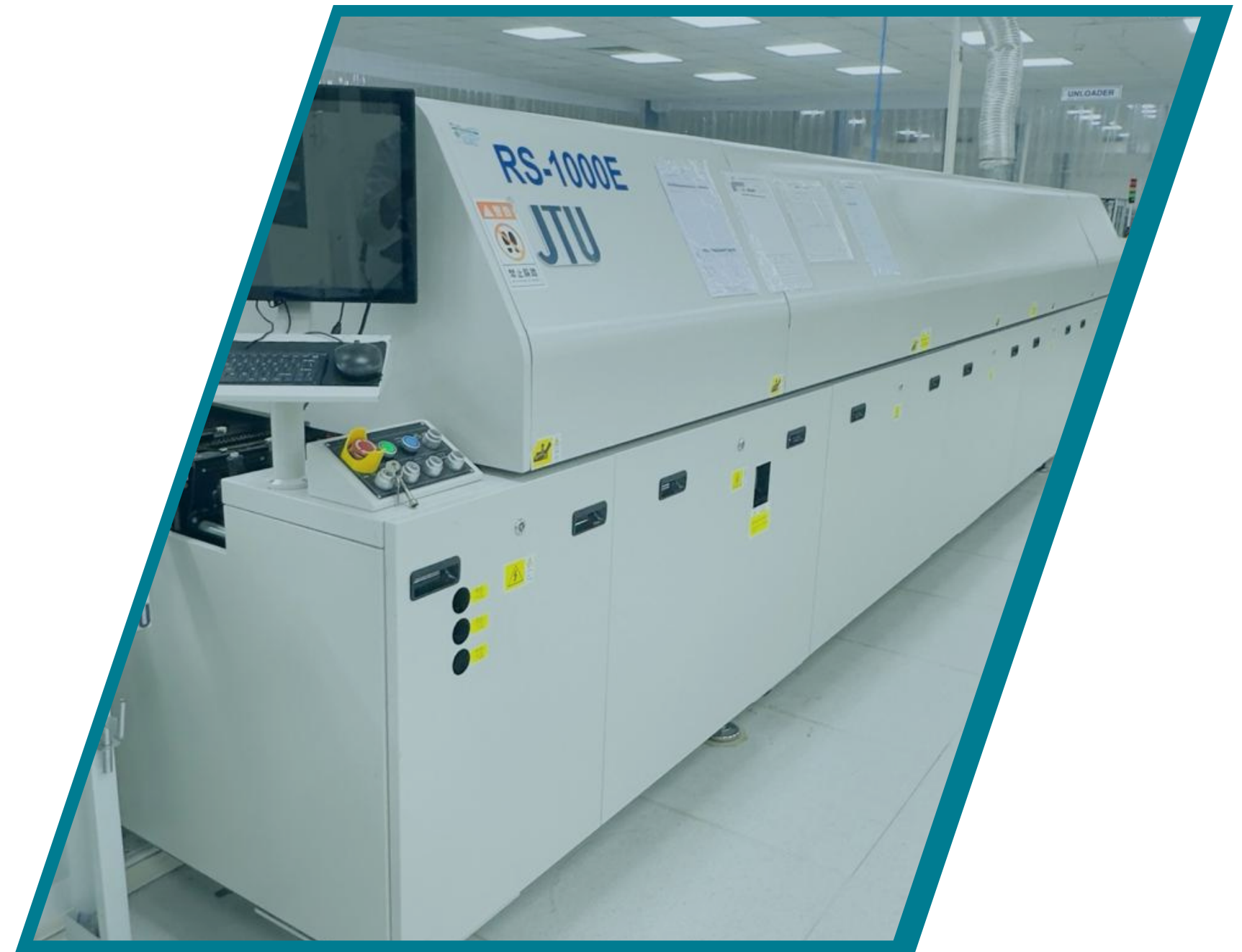
FUJI AIMEX III MOUNTER



Key Features

- High-speed flexible placement system
- Supports 01005 to large connectors
- Optimized for High-Mix / Low-Volume and Volume Manufacturing
- Fast changeover

JTU RS-1000E REFLOW



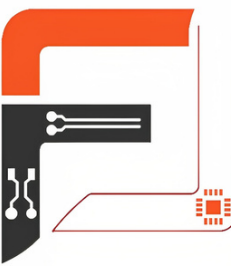
Key Features

- 12 zone convection reflow process
- Precise thermal profile control
- Nitrogen compatible
- Uniform solder joint quality

Why It Matters

Accurate component placement combined with controlled reflow profiles delivers consistent solder joints and high first-pass yield.

AUTOMATED INSPECTION



KOHYOUNG ZENITH ALPHA 3D AOI



Key Features

- 100% inline inspection
- Missing & Misaligned Component Detection
- Polarity detection
- Solder defect detection

SHIMADZU Xslicer 3D X-RAY



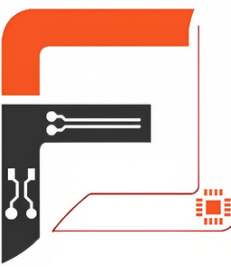
Key Features

- BBGA, QFN and bottom-terminated component analysis, CT Scan base
- Solder void, bridge and open connection detection
- Non-destructive inspection of hidden solder joints
- High-resolution digital imaging for process validation & failure analysis

Why It Matters

Combining AOI with X-Ray inspection ensures both visible and hidden defects are detected before shipment, supporting zero-defect manufacturing.

THROUGH-HOLE ASSEMBLY



ZSW PRO-S51 SELECTIVE WAVE SOLDER



Key Features

- Precision soldering for mixed-technology PCBs
- Flux, preheat and soldering in one automated process
- Minimal thermal stress on nearby SMT components
- High repeatability and reduced manual touch-up

CONVENTIONAL WAVE SOLDERING



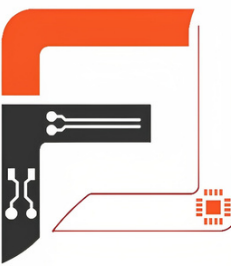
Key Features

- Efficient soldering for high-volume through-hole assemblies
- Stable solder wave for consistent joint quality
- Suitable for connectors and large through-hole components
- Optimized conveyor speed and process control

Why It Matters

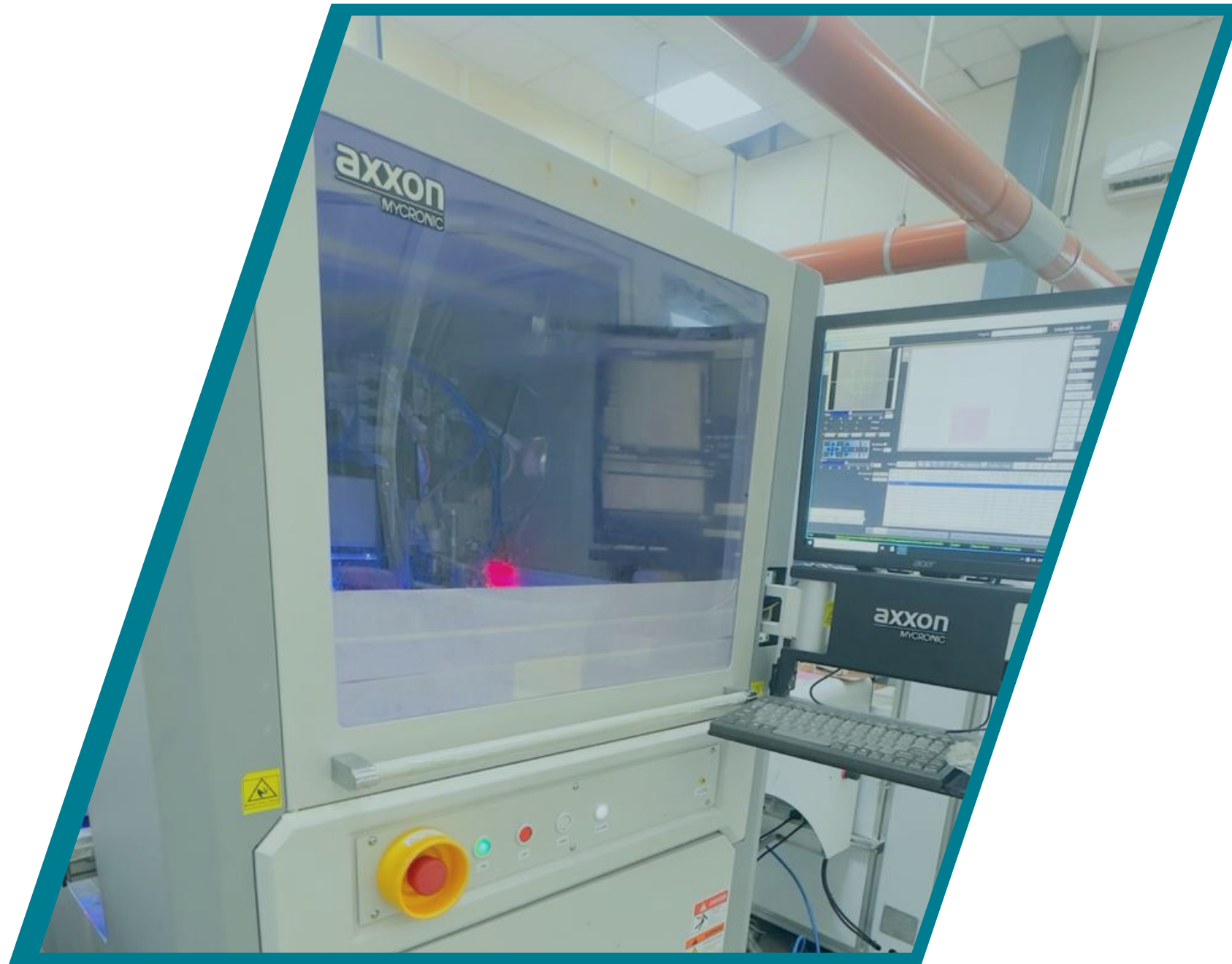
Automated soldering improves consistency, reduces operator dependency and increases production efficiency.

CONFORMAL COATING & RELIABILITY TESTING



MICRONIC AXXON

SELECTIVE CONFORMAL COATING SYSTEM



Key Features

- Selective automated coating application
- High repeatability and coating thickness control
- Protects against moisture, dust and corrosion
- Suitable for automotive, medical and industrial products

JOEL THERMAL CHAMBER



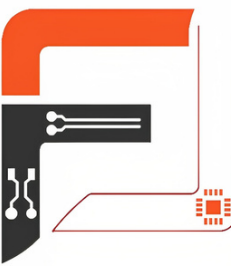
Key Features

- Programmable temperature cycling
- Wide operating temperature range
- Accelerated reliability verification
- Supports product qualification and validation

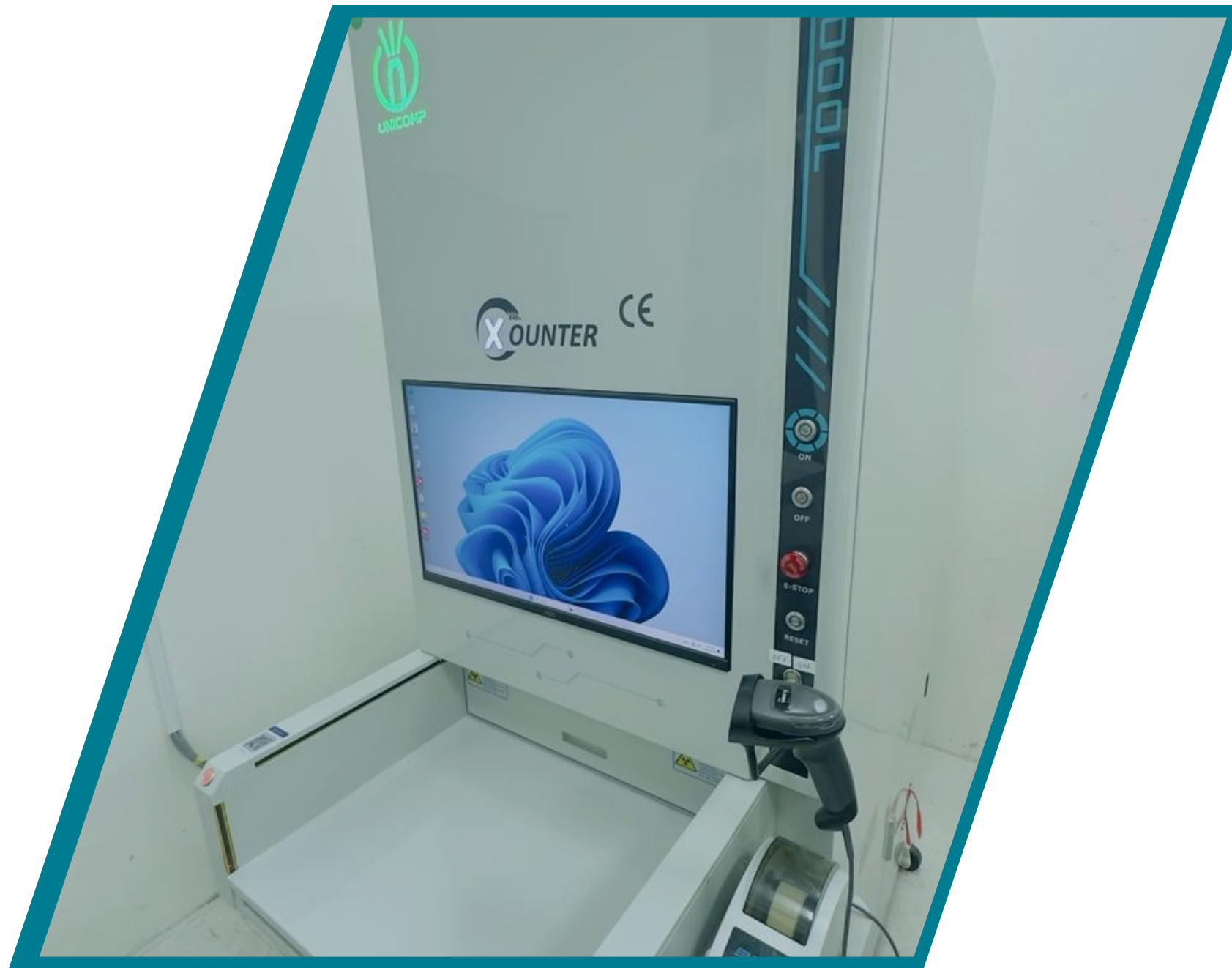
Why It Matters

Protective coating and environmental testing improve long-term product reliability in harsh operating environments.

MATERIAL CONTROL & SUPPORTING EQUIPMENT



UNICOMP X-RAY REEL COUNTER



Key Features

- Non-contact component counting
- Fast and highly accurate reel verification
- Supports inventory control and traceability
- Eliminates manual counting errors

SUPPORTING EQUIPMENT



BGA Rework Station



Solder Paste Mixer



Dry Cabinet



Vacuum Seal Machine

Why It Matters

Supporting equipment enhances material control, traceability, rework capability and overall manufacturing efficiency.



WHY FLASHLINE EMS?

Precision Process Control

Advanced closed-loop systems ensure repeatable accuracy across every build

Traceability & Quality

Full lot traceability with inline inspection at every critical process step

Fast & Reliable Support

Dedicated engineering team with rapid response and technical expertise

High-Yield Assembly

Optimized SMT lines deliver consistent first-pass yields above industry benchmarks

ISO9001 | ISO13485 | AS9100D

Certified for semiconductor, medical, aerospace and industrial applications

Scalable Manufacturing

Flexible capacity from prototype through high-volume production runs

CONTACT US

◆ Flashline EMS Private Limited, S 58-59, E City, Maheshwaram, Ranga Reddy District, Hyderabad, Telangana State - 501 359

○ www.flashlineems.com

✉ sales@flashlineems.com

☎ +91-8121020371

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