



Sinvo Automation

Intelligent Manufacturing Solutions and Services Provider

Make Manufacturing Simple

Innovation | Profession | Efficiency | Responsibility

About Us

Sinvo Automation, founded in 2006, is headquartered in Harbor Town, Zhongshan City, Guangdong. The company has production bases in Zhongshan, Guangdong, and Jintan, Jiangsu, along with an R&D center in Bao'an, Shenzhen. We also have subsidiaries in Cheonan, Korea, and Austin, Texas.

Our main business includes intelligent production equipment for EV&ESS battery, 3C battery, battery PACK module line, 3C electronic assembly line and micro inverter assembly line .

Sinvo Automation insist the principle of "Make Manufacturing Simple", focusing on modular design and high-quality, consistent, and compatible equipment. And in-house machining accelerates equipment development and quality improvement.



Jiangsu Sinvo



Mission and Vision

Our mission is to "Make Manufacturing Simple". We focus on customers, encourage innovation and collaboration, and uphold integrity and professionalism to create value and advance intelligent manufacturing.

Commitment to Cooperation

We ensure transparent execution, legal compliance, and equipment safety. Focused on innovation and cost control, we deliver optimal solutions and create lasting value with our customers.

Precision Manufacturing, Fast Response — Your Trusted Global Partner



140K+ m²
Production Base

2600+
Facility

70%+
In-house Machining

1400+
Employee

600+
Patents

We operate globally to deliver high-quality services. With over 160,000 m² of delivery bases and service points across the U.S., Korea, Brazil, the U.K., Poland, Romania, Japan, Vietnam, Singapore, and India, we provide precise, customized solutions backed by a strong international network.

Oversea Production Base — New Journey in 2025

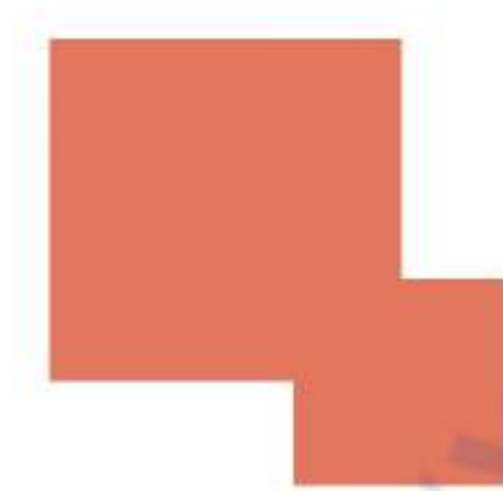
Exceptional Quality, Global Delivery
— Your Worldwide Partner!

In Korea's key industrial hub, we've built a smart, efficient manufacturing base empowered by advanced technology and localized service:

- ◆ Global Strategic Hub — Located in Northeast Asia with access to global markets across Europe, America, and Asia, enabling a fast, agile supply chain.
- ◆ Service Around the Clock — Multilingual support in EN/ CN/KR/JP, 24/7 fast response, and Turnkey Solutions.



We've delivered projects worldwide, including battery and inverter lines in Korea, the U.S., Mexico, Romania, India, Brazil, and Malaysia. With a focus on innovation and customer satisfaction, we've earned global recognition and multiple awards.



Partner to Global Industry Leaders

— Trusted by Leading Enterprises Worldwide

 LG Energy Solution

 SAMSUNG SAMSUNG SDI

 SK on

 EVE®

 COSMX

AGRATAS
A TATA Enterprise



 CATL

 Envision
远景

 LWINON

ION⁺

 SUNWODA

 NVI

 VEKEN

 DESAY

 Salcomp

 ENPHASE

 Sinocare 三诺

 WINGTEC
闻泰科技

 HUAWEI

 ZTE 中兴

 FOXCONN®

 Goertek

 LUXSHARE ICT
立讯精密

 flex

Production Base



Zhongshan Factory

Located in the core area of the Greater Bay Area, the Zhongshan Factory features over 72,000m² of modern facilities and an annual capacity of 1,100+ units, consistently delivering high-quality manufacturing solutions.

Changzhou Factory

Located in the Yangtze River Economic Belt, the Changzhou Jintan Factory features 63,500+m² of intelligent facilities and annual output of 1,500+ units — delivering high-efficiency, high-quality manufacturing to global customers.

R&D Capability



Innovation Powered by a World -Class Tech Team Fueled by Expertise, Driven by Innovation

We've built a 1,400+ strong elite team, with over 30% dedicated to core R&D—forming a powerful engine for technological innovation.

◆ Expert Team Highlights
150+ Software Engineers
120+ Mechanical Designers
150+ Electrical Engineers
600+ Commissioning Experts

◆ Core Team Strengths
500+ Senior Engineers (Over 5 years experience)
500+ Patents and IP Rights
80+ Advanced Degree R&D Experts (Master's/PhD)
Annual R&D Investment Exceeding USD 16.6 Million

Patents & Certifications

Driven by Innovation, Powered by Patents and Certifications — Earning Global Trust with Proven Excellence

◆ Robust Patent Portfolio
160+ Invention Patents – Core tech under full control
300+ Utility Patents – Continuous application breakthroughs

◆ Trusted Certifications
High-Tech Enterprise (Guangdong)
Industrial Design Center (Guangdong)
ISO 9001 & other global standards



Precision Manufacturing & Rapid Delivery — In-house Machining Facility

**From Raw Material to Final Product
— Precision at Every Step**

- ✓ Core Manufacturing Advantages
- ✓ 200+ Advanced Machining Units
- ✓ Micron-level Precision Capability
- ✓ 60 Million Parts Annually
- ✓ 70% of Key Components Made In-house

Why Do We Choose In-house Machining?

- ✓ Eliminates Outsourcing Quality Risks
- ✓ 50% Shorter Lead Time
- ✓ 20% Lower Overall Cost
- ✓ Value-added Process Optimization Services



Modular Manufacturing · Standardization for Success — Leading a New Era of Industry 4.0 Production Standards

Creating Value for Customers

- ✓ 30% Reduction in Lead Time
- ✓ 100% Product Consistency
- ✓ 50% Lower Maintenance Costs
- ✓ Fast Customization Support

Innovative Manufacturing System

- ✓ Fully Modular Design & Manufacturing
- ✓ Digital Standardized Workflow Management
- ✓ Traceable Quality Assurance
- ✓ Efficient Mass Production

Standardized

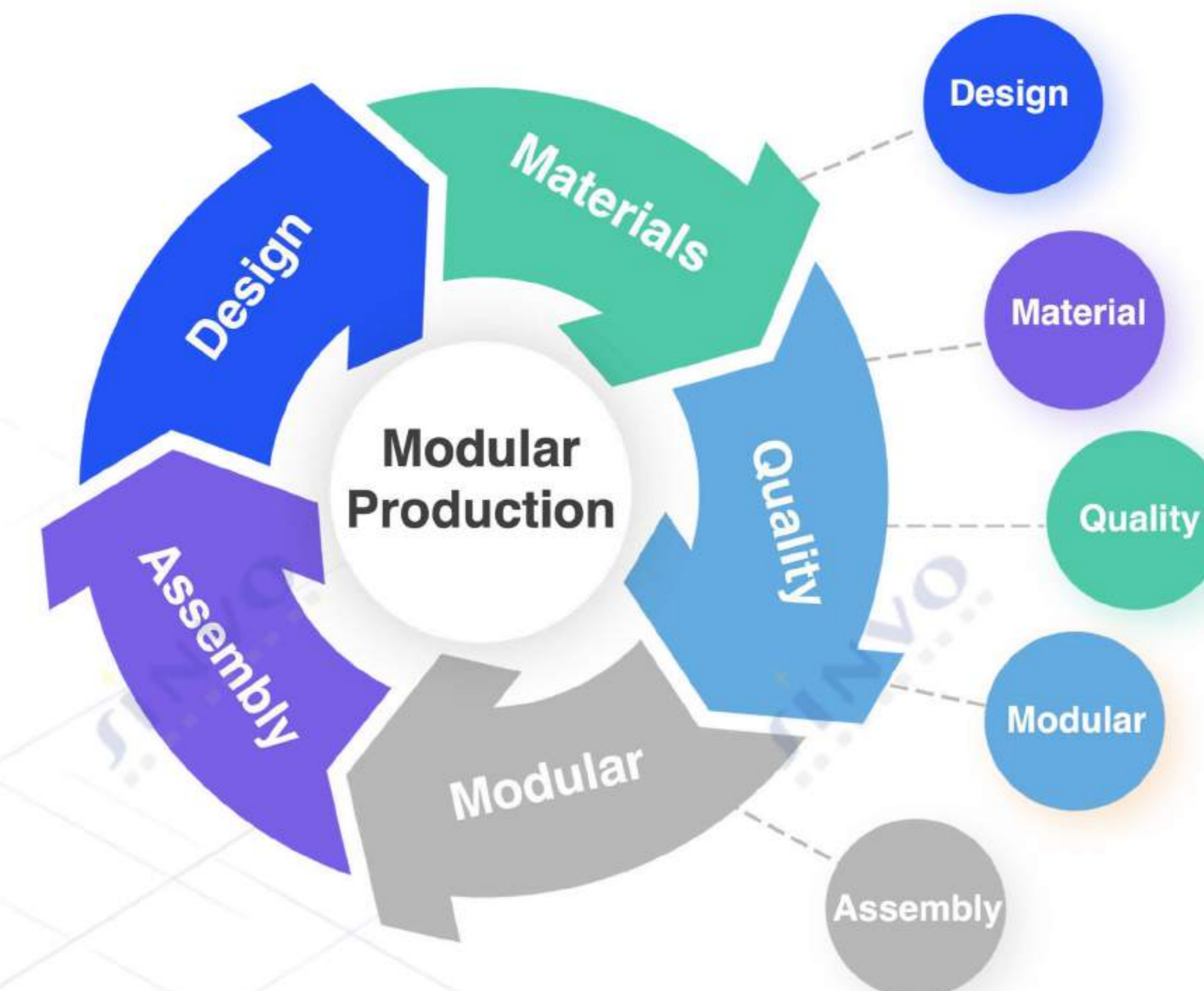
- ✓ Standardized Assembly & Wiring SOPs
- ✓ 40% Faster Assembly
- ✓ 50% Shorter Debugging Time

Modular

- ✓ Full-Lifecycle Modular Design
- ✓ Standardized Mechanical, Electrical & UI Libraries
- ✓ 2,000+ Modules Managed Digitally
- ✓ 100% Traceable Module Codes

Quality

- ✓ IQC – Incoming Quality Control
- ✓ IPQC – In-Process Quality Control
- ✓ OQC – Outgoing Quality Control



Machine & Module Assembly

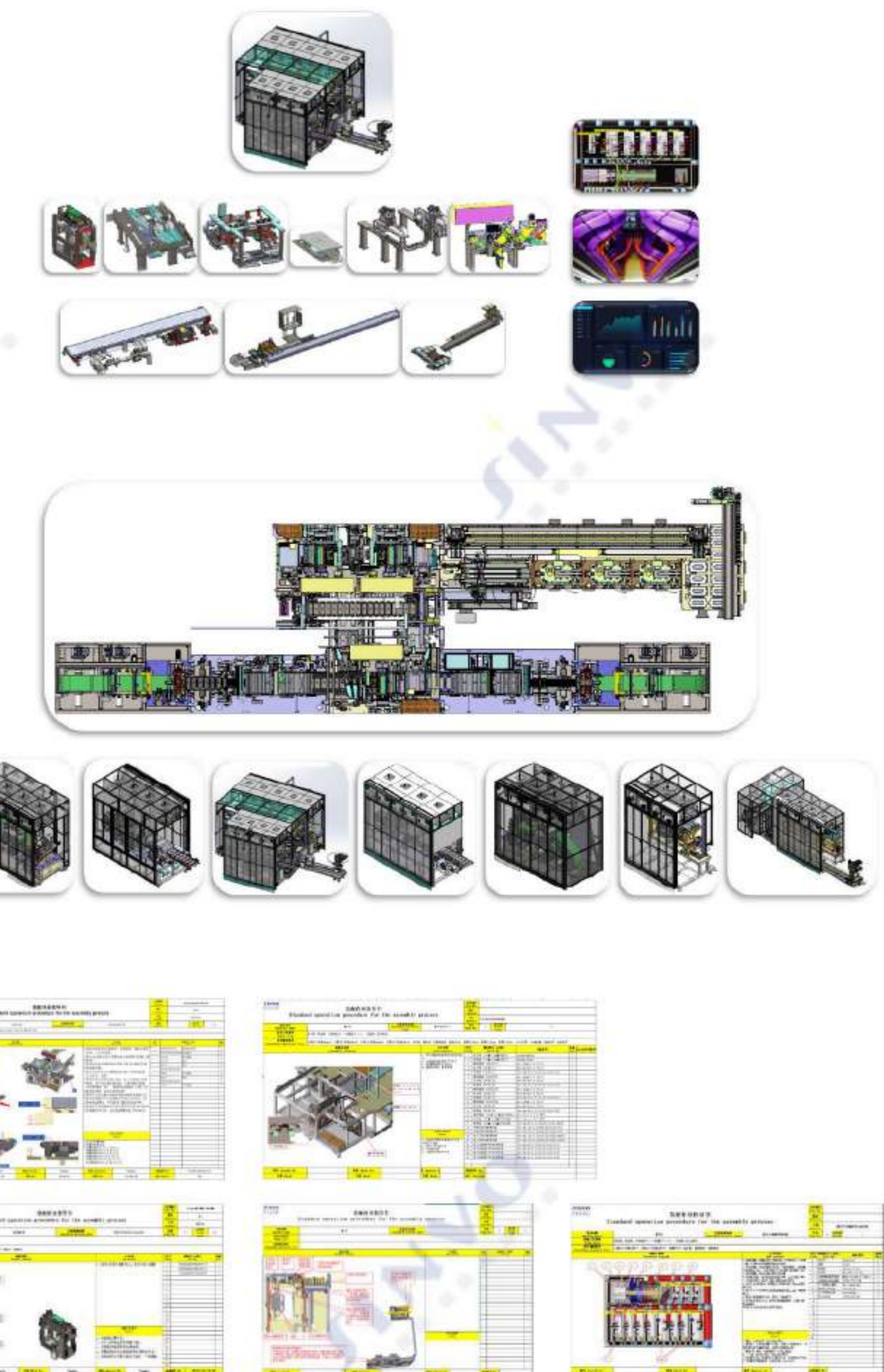
Machine Assembly
Module Assembly

Modular Manufacturing

Mechanical Modularization
Electrical / Wiring / UI Modularization

Standard SOP Management

Mechanical Assembly SOP
Electrical Assembly SOP
Wiring Module SOP
SOP Change & Version Control



Technology Refined · Smarter Tomorrow!

Professional Equipment Solutions

Li-ion Battery — Intelligent Manufacturing Solutions



EV&ESS
Cell

- ◆ High-Speed Stacking Machine for EV&ESS Batteries
- ◆ 590 High-Speed Cutting and Stacking Machine
- ◆ E-TYPE Stacking Machine for EV&ESS Batteries
- ◆ Mylar Wrapping / Sorting Machine
- ◆ Prismatic Battery Module Line
- ◆ Polymer Battery Packing Line
- ◆ Micro Inverter Assembly Line

Laser Applications — Innovative Laser Processes



Laser
Applications

- ◆ Laser Scribing
- ◆ Laser Welding (Steel/Aluminum Prismatic Cells)
- ◆ High-Speed Laser Slitting
- ◆ Laser Perforation (Anode/Cathode) & Laser Cleaning

Medical Devices — Intelligent Manufacturing Solutions



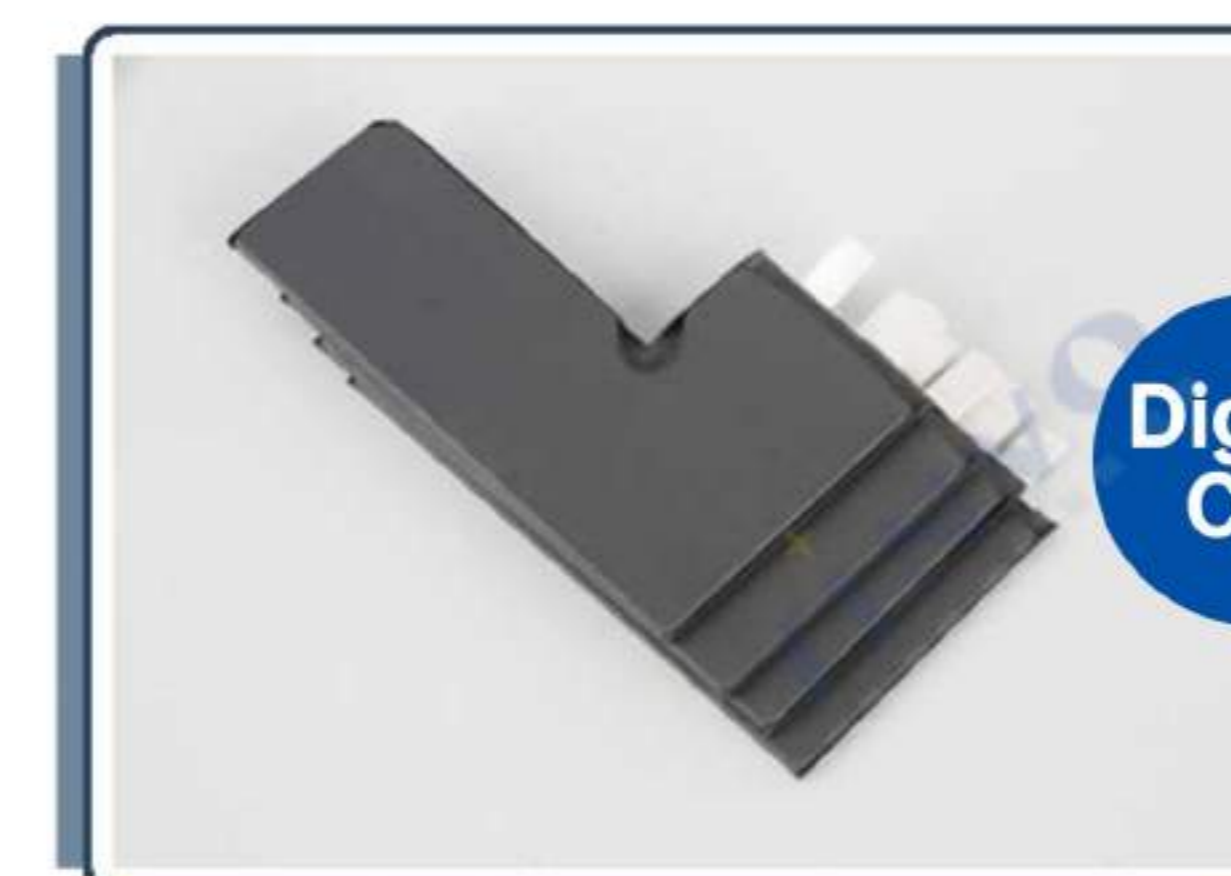
Medical
Product

- ◆ Blood Glucose Meter (CGM) Assembly Line
- ◆ Blood Glucose Meter (CGM) UDI Packaging Line

Smart manufacturing solutions for Li-ion batteries, electronics, and medical devices
— from cell to PACK, slitting to inspection.

Driven by innovation, we cut costs, boost efficiency, and power industry upgrades.

Consumer Electronics — Intelligent Manufacturing Solutions



Digital
Cell

- ◆ Sus Can Battery Production Line
- ◆ High-Speed Stacking Machine For Consumer Cell
- ◆ E - Type Stacking Machine for Consumer Cell
- ◆ UV Glue Dispensing Machine
- ◆ Cell Taping Machine
- ◆ Composite Foil Welding Inspection Machine



Battery
PACK

- ◆ Mobile Phone Battery Pack Line
- ◆ Laptop Battery Pack Line
- ◆ Smart Wearable Battery Pack Line
- ◆ Button Cell Pack Line



3C
Assembly

- ◆ Mobile Phone Assembly Line
- ◆ Mobile Phone Disassembly Line
- ◆ Electronic Pen Production Line



Power

- ◆ Power Charger Assembly Line
- ◆ Power Charger Laser Engraving Packaging Line
- ◆ Connector Auto Pre-Insertion&Crimping Machine
- ◆ Auto Preforming Insertion Machine



Z-TYPE High-Speed Stacking Machine for EV&ESS Batteries

World-Top Speed: Stacking Speed 0.2s/unit

- ◆ 280mm Electrode, 0.2s/unit Stacking — World-Top Speed
- ◆ Sepa traction no friction

Applications

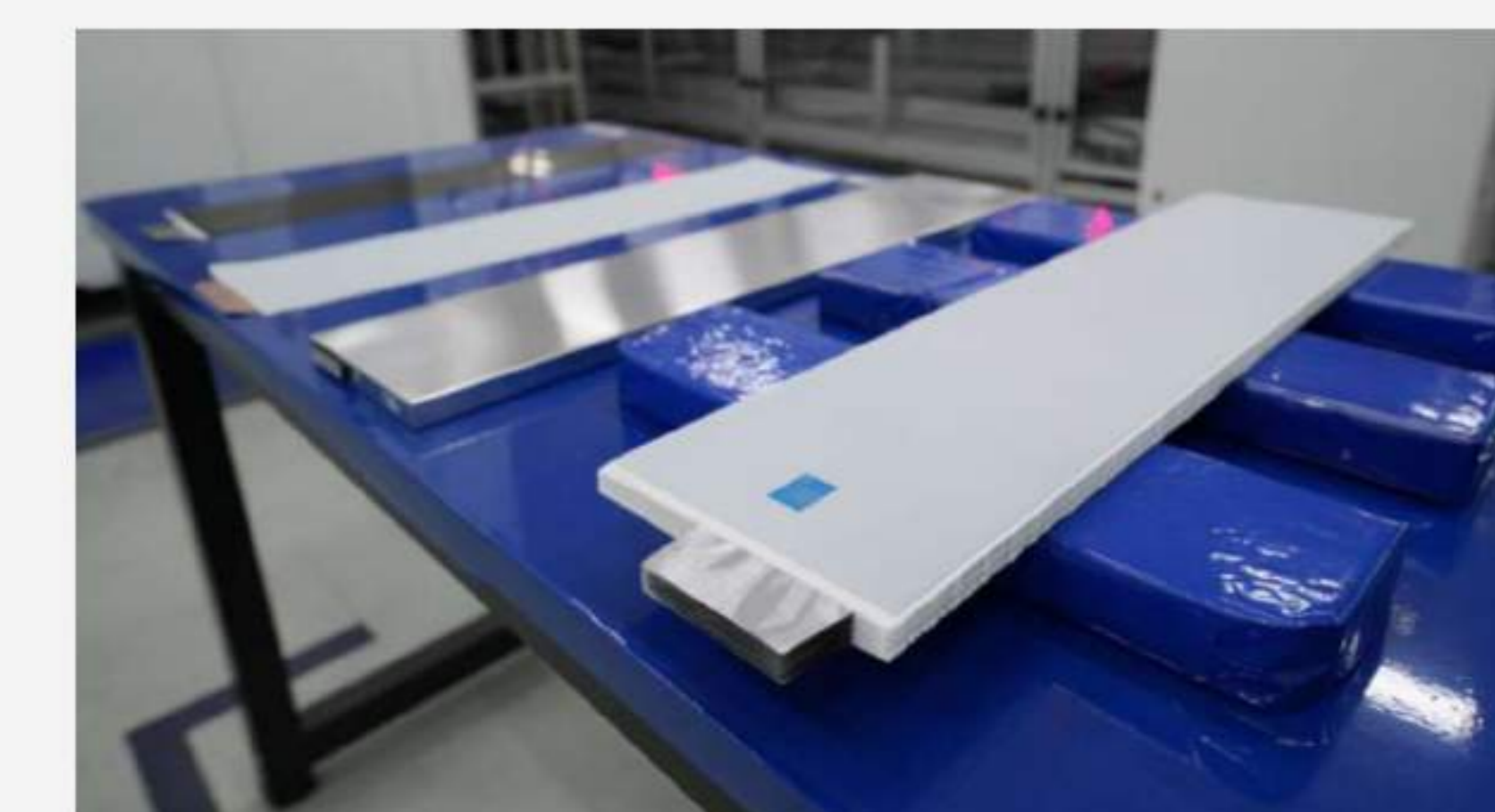


E-TYPE Stacking Machine for EV&ESS Batteries

Stacking Speed ≤ 0.125 s/unit

- ◆ Electrode cleaning & visual alignment
- ◆ Sepa wrinkle elimination with stable tension control
- ◆ Dual-station switching with zero auxiliary time
- ◆ Cutting accuracy: ± 0.2 mm; Cell alignment: $\leq \pm 0.4$ mm
- ◆ Yield $\geq 99\%$; Uptime $\geq 98\%$

Applications

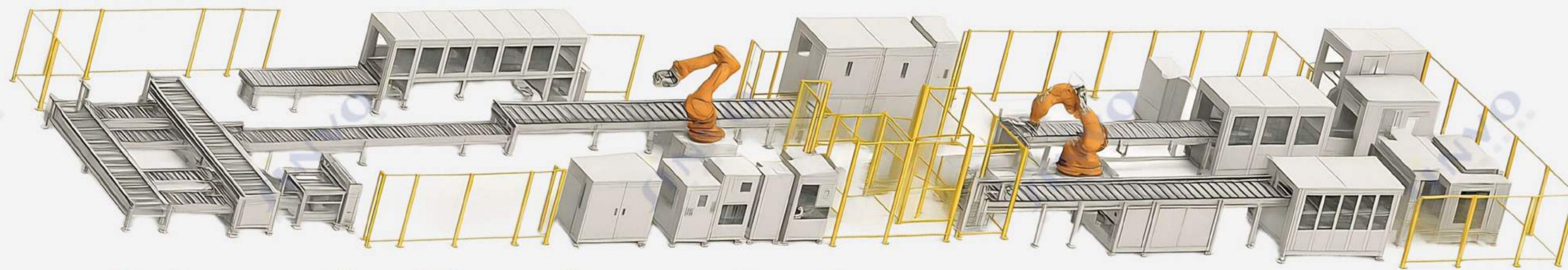


590 High-Speed Cutting and Stacking Machine

- ◆ Max product length: 650mm
- ◆ Single-unit molding > 310 PPM, stacking speed 0.40s/pcs
- ◆ Standardized, modular design & production
- ◆ Yield $\geq 99.5\%$, Uptime 99%

Applications





Prismatic Aluminum Battery Assembly Line Turnkey Solution

- ◆ Straight-line layout for smooth flow and faster rhythm
- ◆ Compact modular units for easy setup and maintenance
- ◆ Full-line automation reduces handling, improves yield and quality

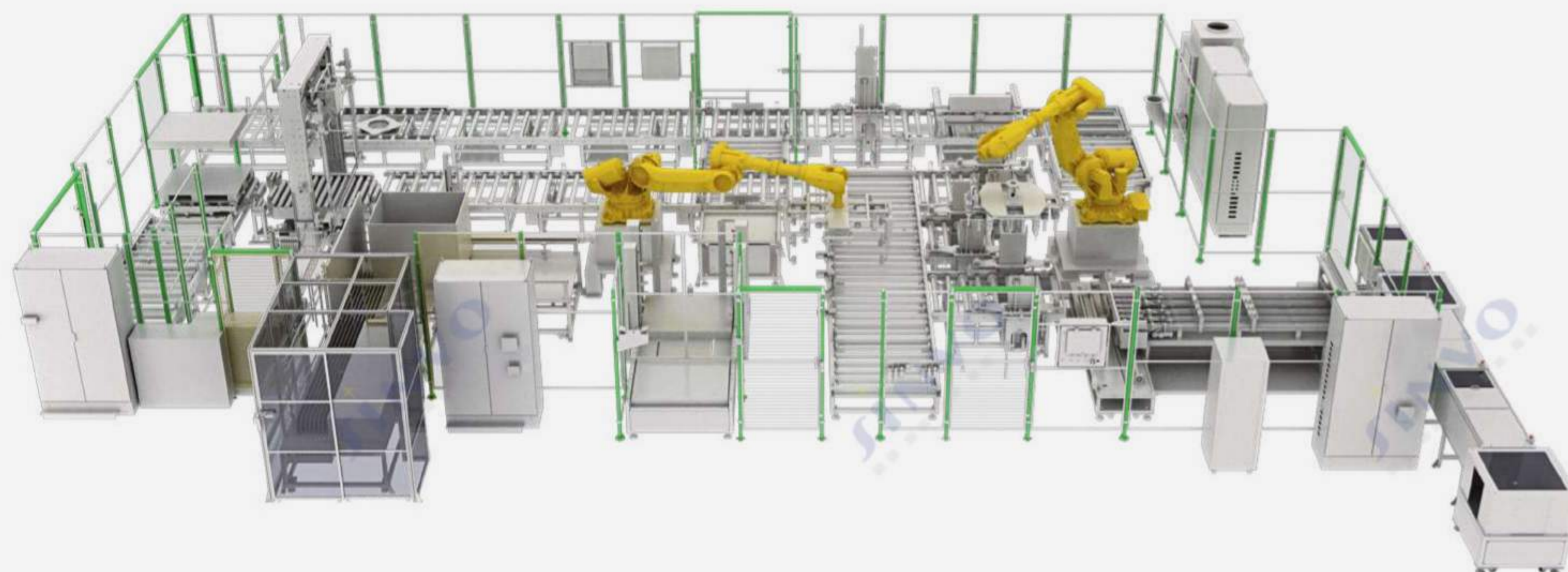
Applications



Mylar Wrapping Machine Industry-Leading Efficiency: 24PPM

- ◆ Compact layout saves space and cuts cost by 20%
- ◆ High throughput: 1.8s/pcs, up to 2000pcs/h
- ◆ $\pm 0.05\text{mm}$ precision with rigid structure and visual correction
- ◆ Modular functional design for easy maintenance

Applications

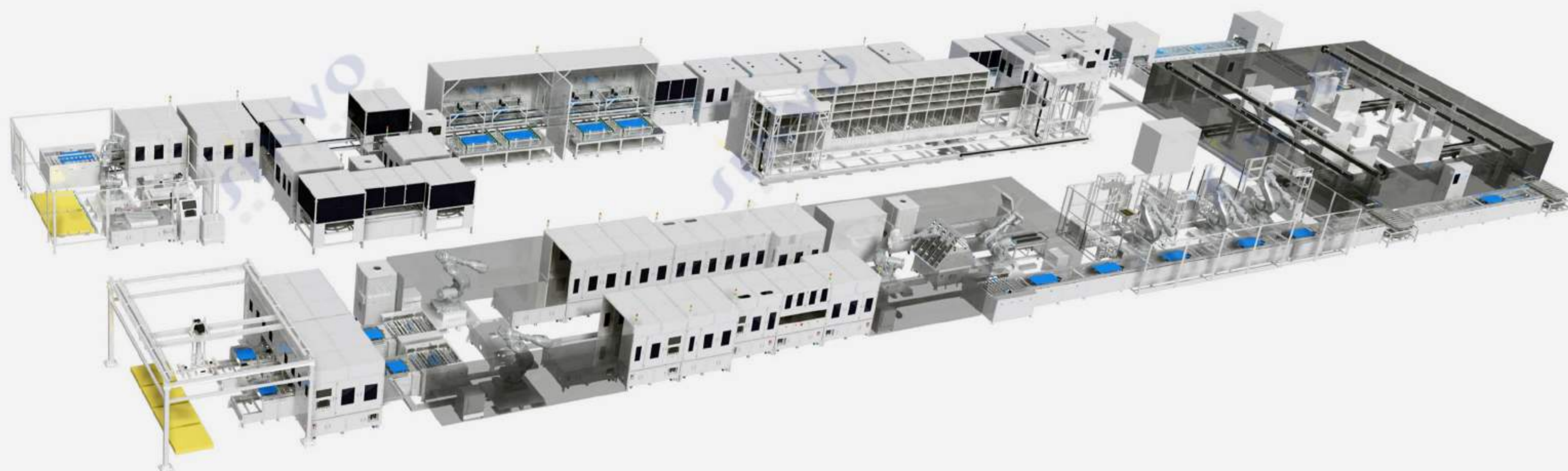


Mylar Sorting Machine Compact Design, High-Efficiency Output

- ◆ Compact layout reduces footprint and lowers cost by 20%
- ◆ High efficiency: 1.8s/pcs, up to 2000pcs/h
- ◆ $\pm 0.05\text{mm}$ precision with rigid frame and visual correction
- ◆ Modular functional design for easy maintenance

Applications



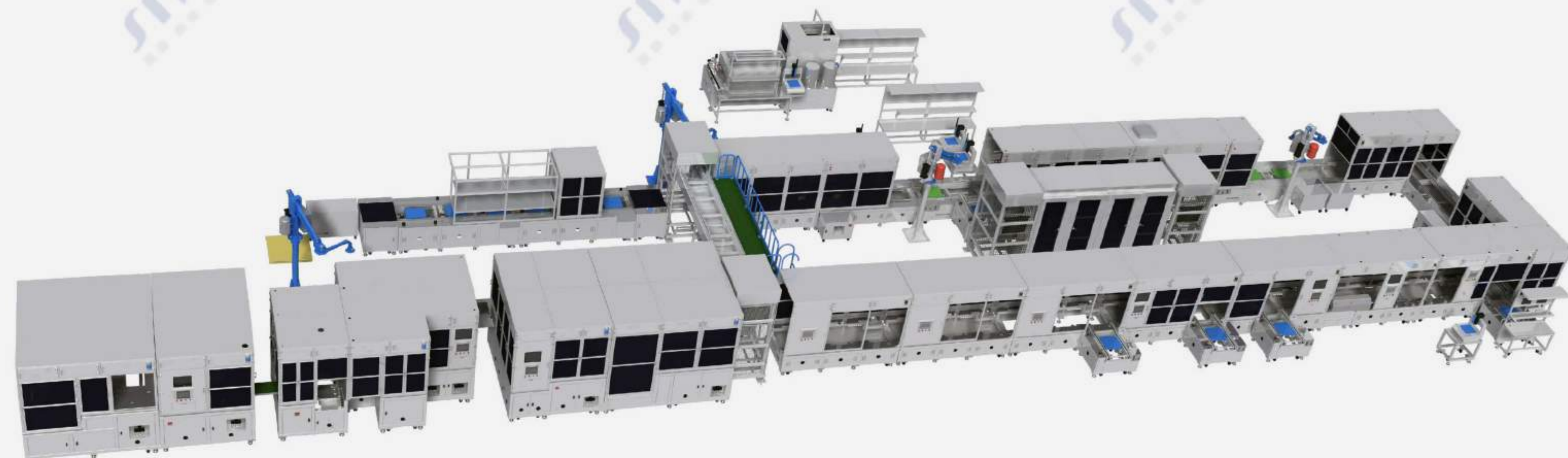
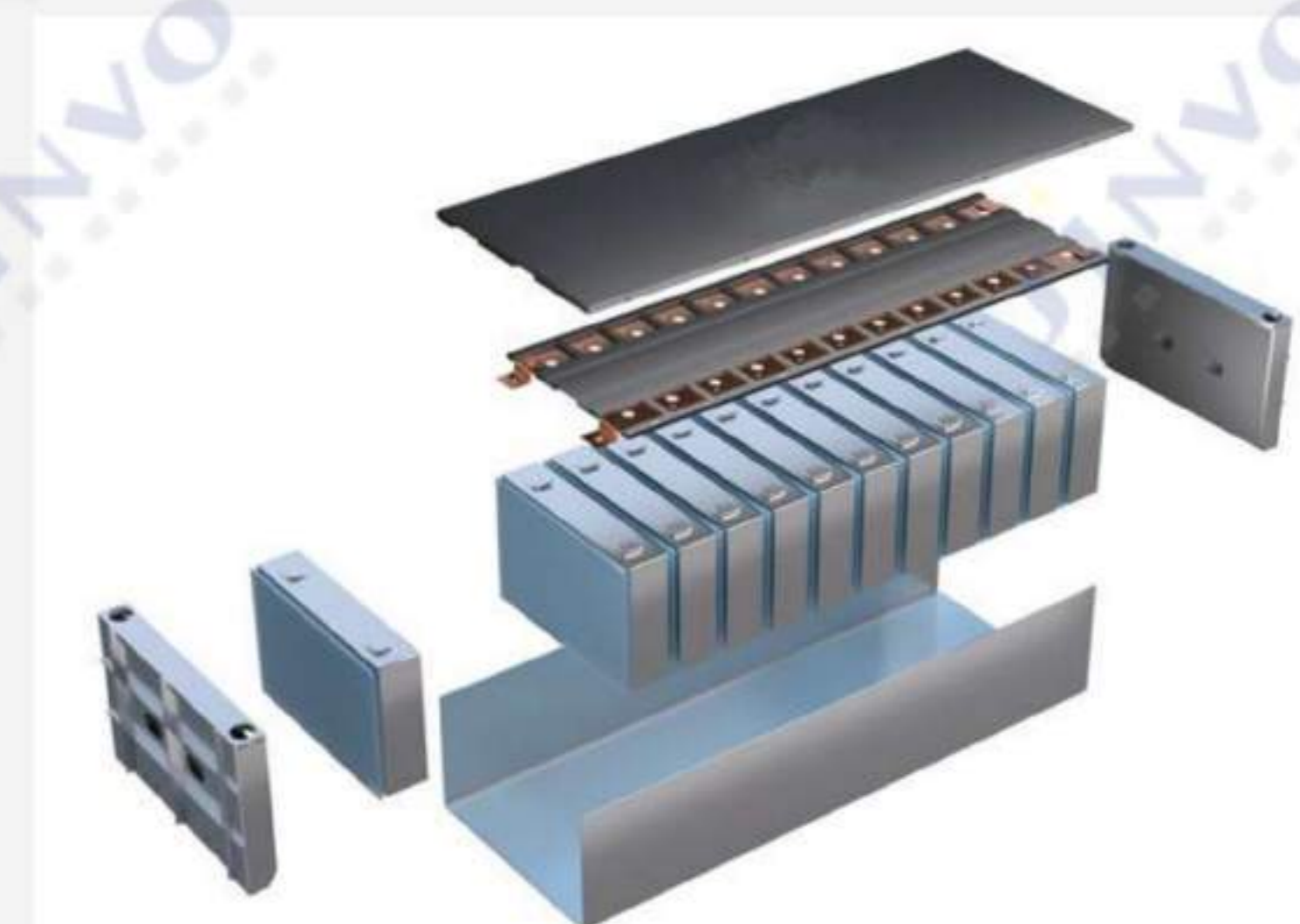


Prismatic Battery Module Line

Fast, Low-Cost Product Switching

- ◆ Flexible production for quick, low-cost model changeover
- ◆ Process: Sorting → Stacking → Plate Assembly → Laser Welding → Adhesive Cleaning → Busbar Welding → Testing
- ◆ Capacity: ≥ 60 UPH (battery modules)
- ◆ Final yield: $\geq 99\%$
- ◆ Equipment failure rate: $\leq 2\%$

Applications

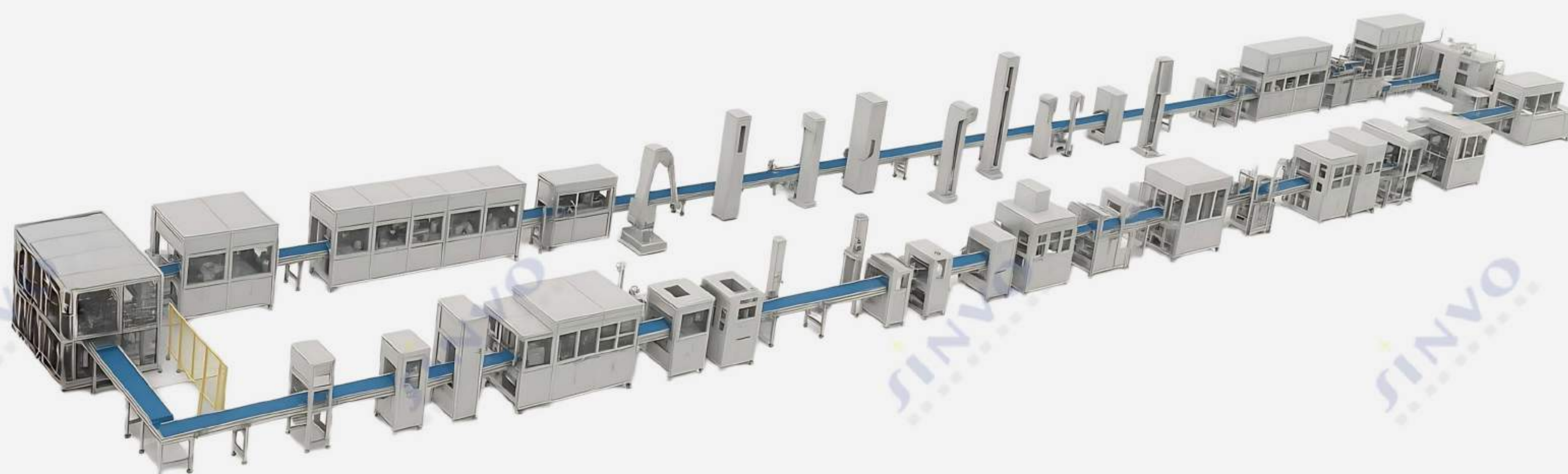
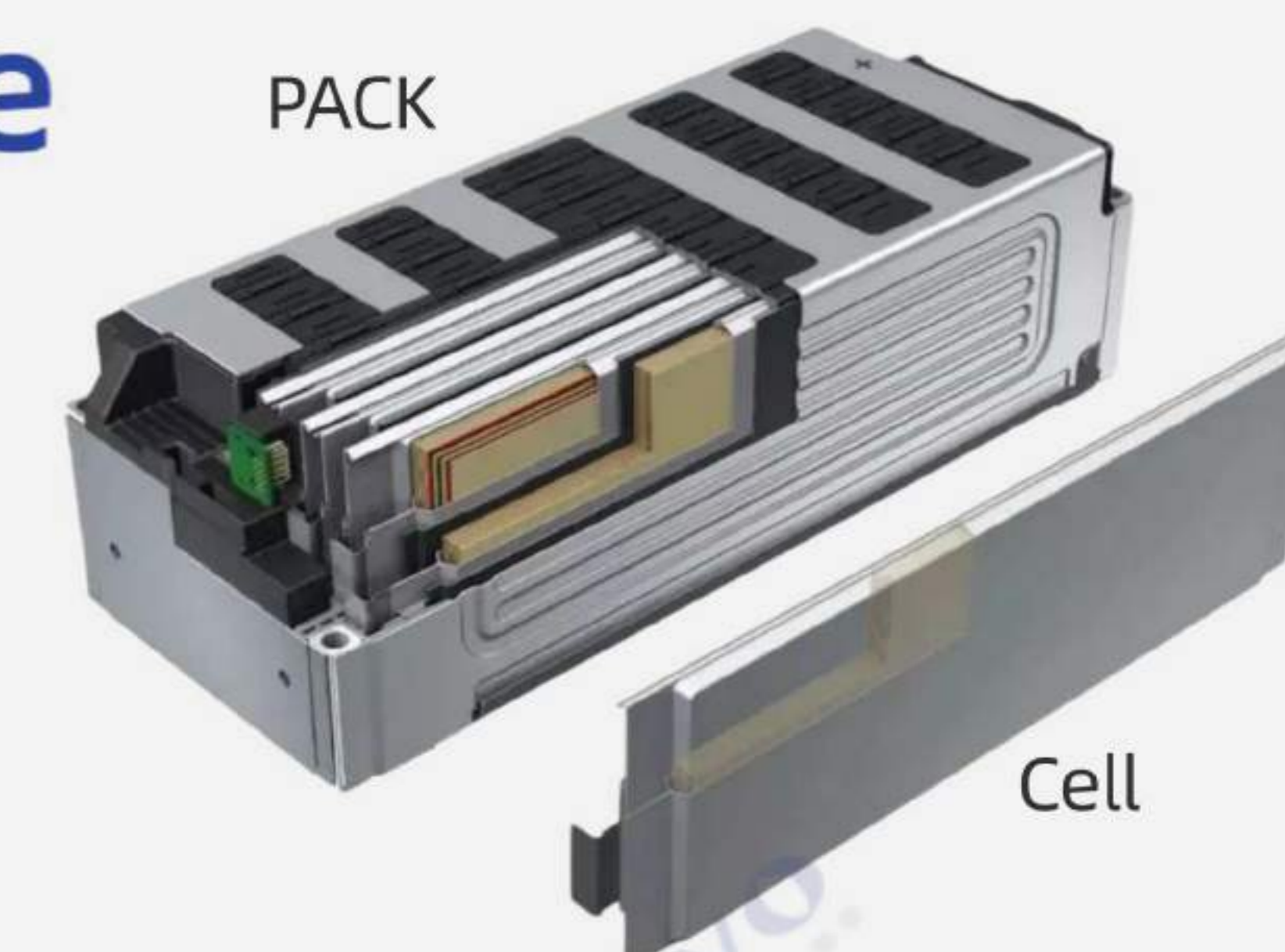


Polymer Battery Packing Line

Fast, Low-Cost Product Switching

- ◆ Flexible production for quick, low-cost changeover
- ◆ High automation, high yield
- ◆ Capacity: ≥ 40 UPH (battery modules); Final yield: $\geq 99\%$
- ◆ Equipment failure rate: $\leq 2\%$

Applications



Battery Activation Line

Full Automation with High-Precision Processing

- ◆ Flexible, compatible production
- ◆ Advanced inspection & quality control
- ◆ Optimized layout for higher efficiency
- ◆ Industrial-grade protection for key stations (e.g. welding, dust removal)

Applications



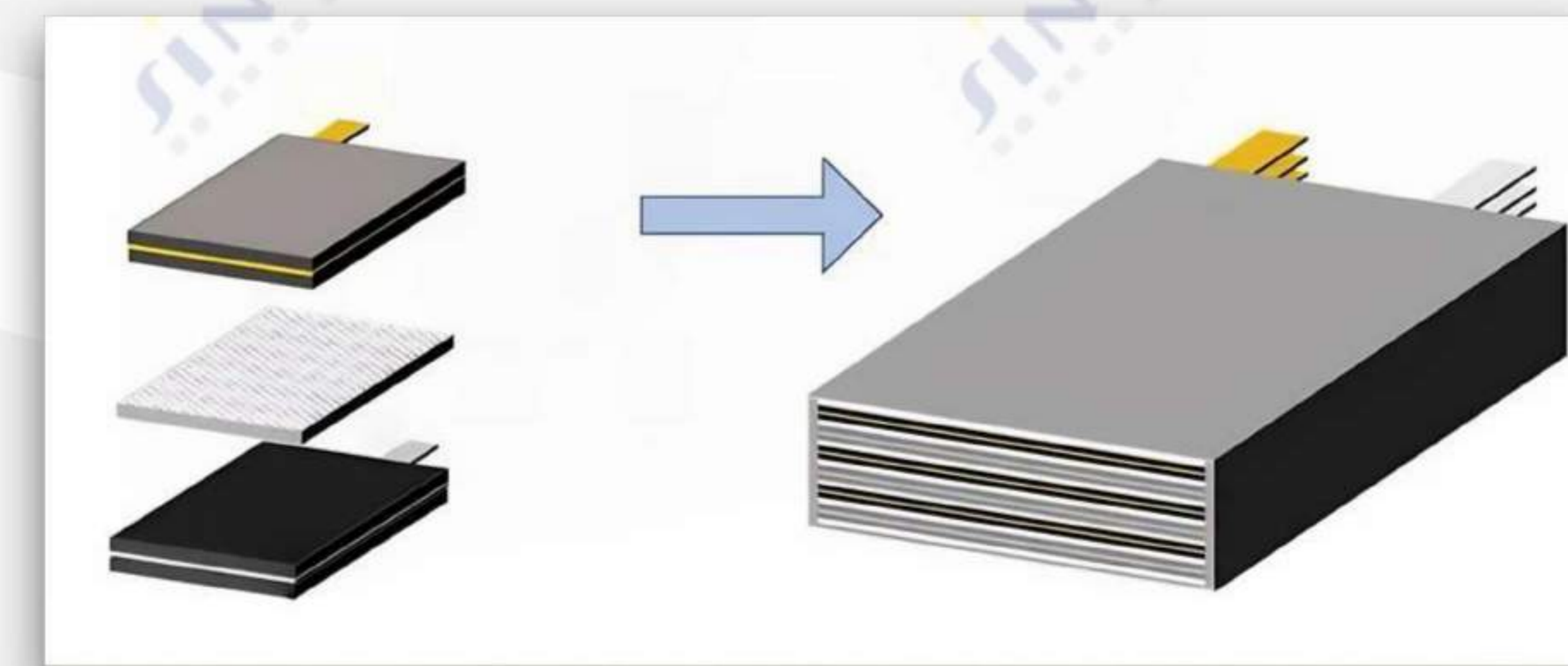


Z - Type High-Speed Stacking Machine For Consumer Cell

World-Top Speed: 0.25s/unit

- ◆ Fast stacking speed: 0.25s/unit
- ◆ Integrated functions: molding, stacking, half-anode pressing, and sepa cutting
- ◆ fit both mold and laser cutting
- ◆ fit split and integrated molding
- ◆ Molding accuracy: $\pm 0.03\text{mm}$; Cell alignment: $\leq \pm 0.1\text{mm}$
- ◆ Yield $\geq 99\%$; Uptime $\geq 98\%$

Applications

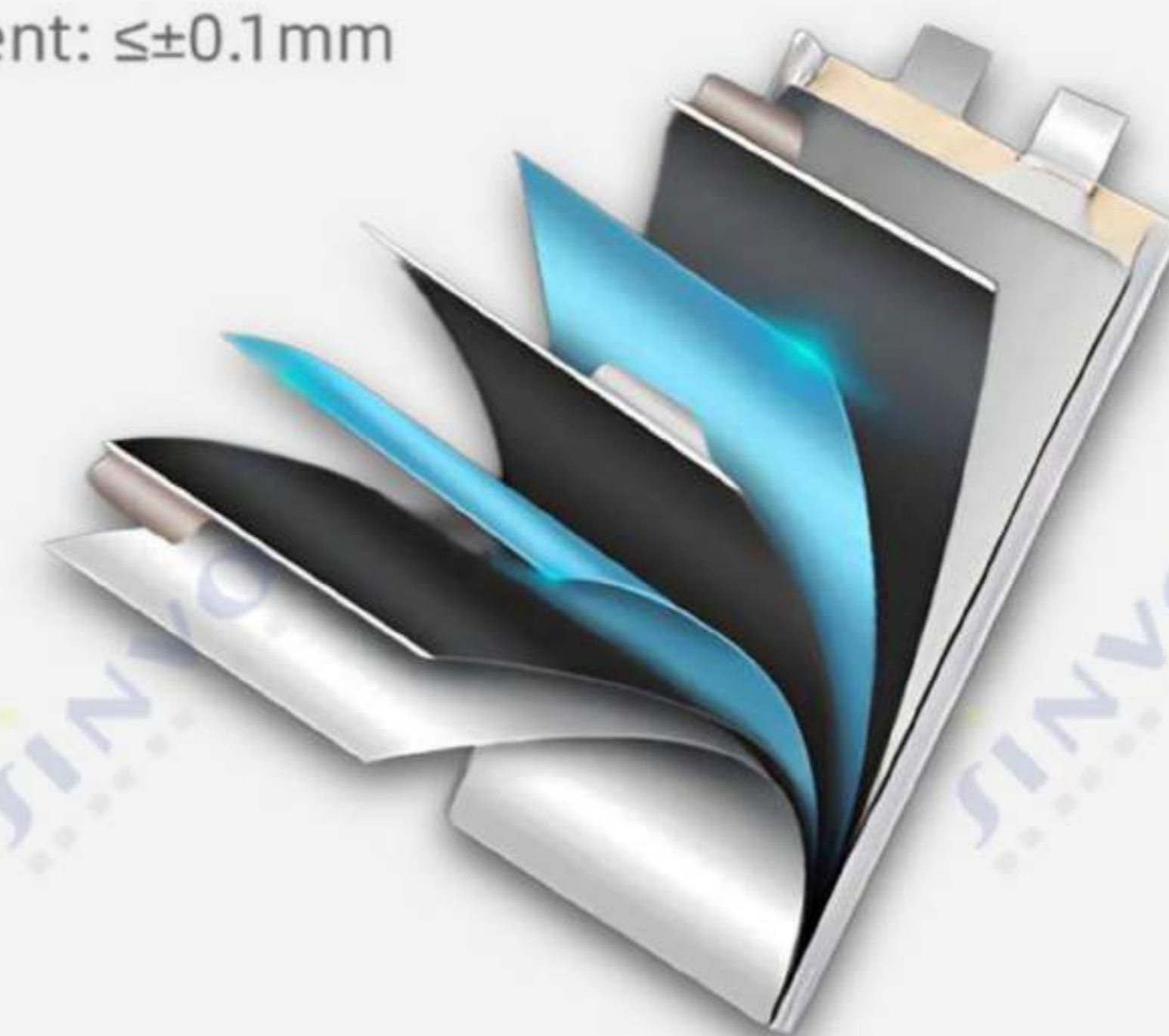


E - Type Stacking Machine for Consumer Cell

Industry-Leading Efficiency: $>18\text{PPM}$

- ◆ Electrode cleaning & visual alignment
- ◆ Eliminates sepa wrinkles and tension instability
- ◆ Fit both mold and laser cutting
- ◆ Fit normal and L-shape cells
- ◆ Molding accuracy: $\pm 0.03\text{mm}$; Cell alignment: $\leq \pm 0.1\text{mm}$
- ◆ Yield $\geq 99\%$; Uptime $\geq 98\%$

Applications





Sus Can Battery Production Line

Turnkey Solution

- ◆ For steel-shell batteries in phones, wearables, and etc.
- ◆ Compatible with regular and irregular products
- ◆ Line efficiency > 20PPM

Applications





Cell Taping Machine

Industry Benchmark · Stable Performance

- ◆ Fit standard and L-Shape cells; flexible multi-machine production
- ◆ Replaces folding process, improving energy density
- ◆ High-precision taping with vision-aligned software
- ◆ Dispensing control with glue path inspection
- ◆ Efficiency ≥ 220 PPM; Yield $\geq 99.5\%$
- ◆ Process Capability: CPK ≥ 1.33

Applications



UV Glue Dispensing Machine

Industry Benchmark

- ◆ High compatibility for various products
- ◆ Replaces folding to boost energy density
- ◆ Precision dispensing with full-size inspection
- ◆ Fast changeover with 100% process check
- ◆ Efficiency ≥ 15 PPM; Yield $\geq 99.9\%$
- ◆ CPK ≥ 1.33

Applications



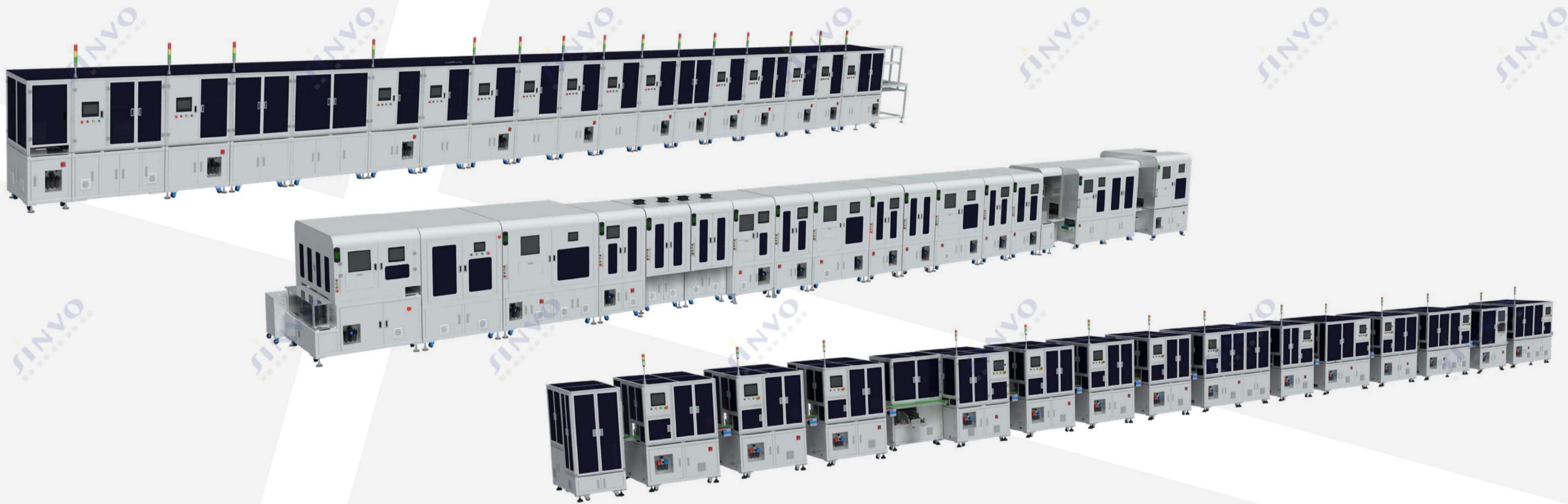
TWF-JR Taping Machine

High Automation · Precision · Modularity

- ◆ Fully automated with integrated inspection
- ◆ Modular design for easy maintenance and expansion
- ◆ Supports diverse processes
- ◆ Compact layout for space optimization

Applications





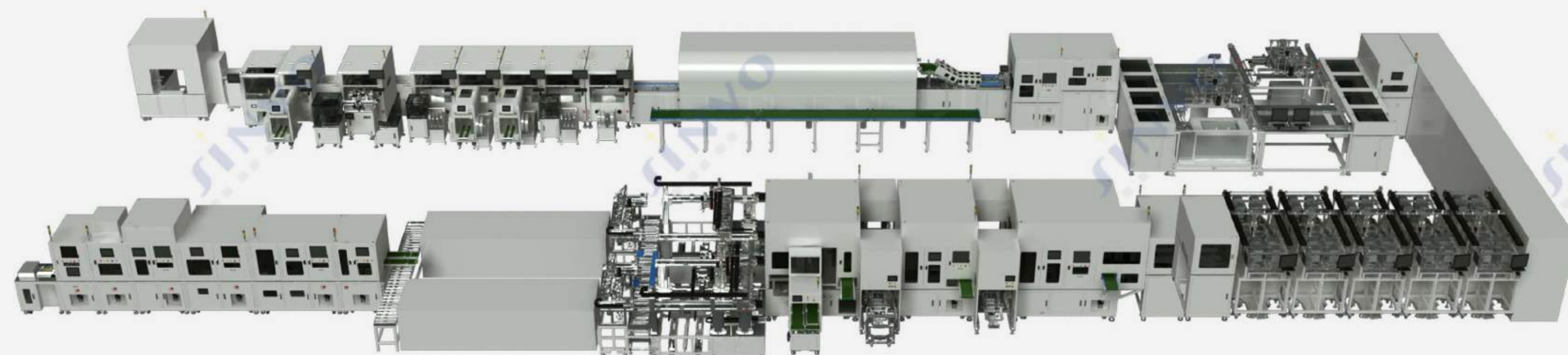
Consumer Electronics Battery Pack Line

High Compatibility and High Automation

- ◆ Flexible capacity for fast, low-cost model changeover
- ◆ For laptops, phones, smartwatches, glasses, and other wearables
- ◆ Wearable line: ≥ 900 UPH; Yield $\geq 99\%$
- ◆ Consumer line: ≥ 720 UPH; Yield $\geq 99\%$
- ◆ Phone line: ≥ 1200 UPH; Yield $\geq 99\%$
- ◆ DT $\leq 2\%$

Applications





Micro Inverter Assembly Line World's First · Fully Automated

- ◆ High automation covering multiple processes
- ◆ Inline test integration, high UPH, ideal for mass production
- ◆ Efficiency ≥ 500 UPH; DT $\leq 2\%$



Applications



Blood Glucose Meter (CGM) Assembly Line Blood Glucose Meter (CGM) UDI Packaging Line

- ◆ Standardized design, CCD high-precision positioning
- ◆ Full-line automation: assembly, traceability, batch delivery with stable quality
- ◆ Yield: $>99.5\%$
- ◆ Lead time: 65 days

Applications



Standardized Platform Modular Production

- ◆ Flexible production for fast, low-cost model switching
- ◆ Applications: button cells, electronic product assembly
- ◆ Efficiency: ≥ 1200 UPH; Final yield: $\geq 99\%$
- ◆ Equipment failure rate: $\leq 2\%$
- ◆ Lead time: ≤ 75 days

Applications



Pioneering Laser Innovation, Powering the Future of Smart Manufacturing!

—— From cutting to welding, we dedicated to precision and speed — driving next generation battery manufacturing.



Laser Ablation

Multi-laser ablation with dual-side cleaning and vacuum positioning — ensures A/B surface purity for downstream quality.



Laser Scribing

Speed $\leq 25\text{m/min}$; depth $\pm 3\mu\text{m}$; width $\pm 5\mu\text{m}$; thermal impact $< 50\mu\text{m}$.

Flexible patterns and sizes — one machine fits multiple electrode types.

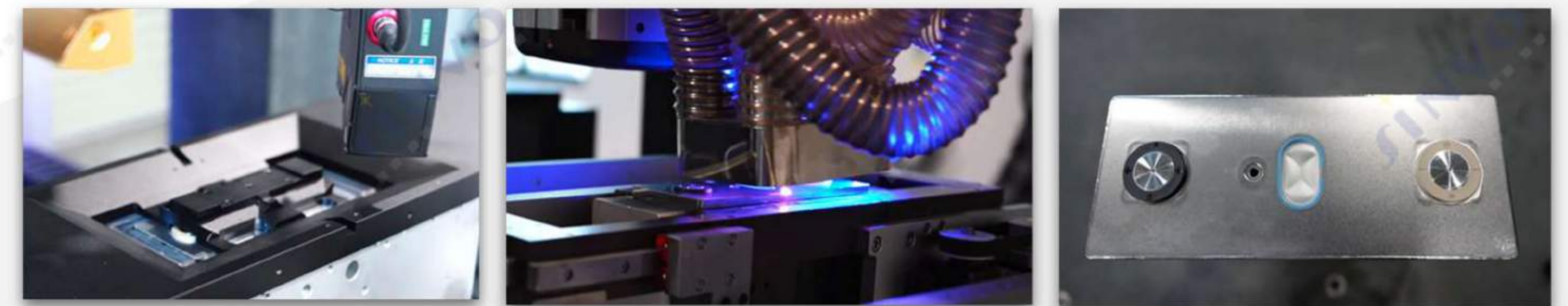


Pioneering Laser Innovation, Powering the Future of Smart Manufacturing!

—— From cutting to welding, we dedicated to precision and speed — driving next generation battery manufacturing.

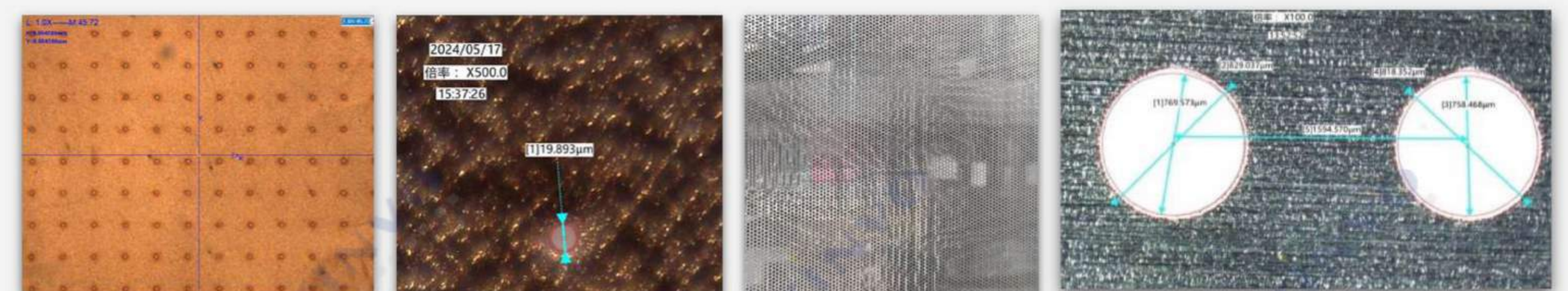
Laser Welding (Steel/Aluminum Prismatic Cells)

Pre-weld + full-weld integration boosts efficiency and saves space. High-precision fixtures support model switching with $\leq 0.05\text{mm}$ gap and $\leq 0.15\text{mm}$ step. Laser vision ensures consistent welds.



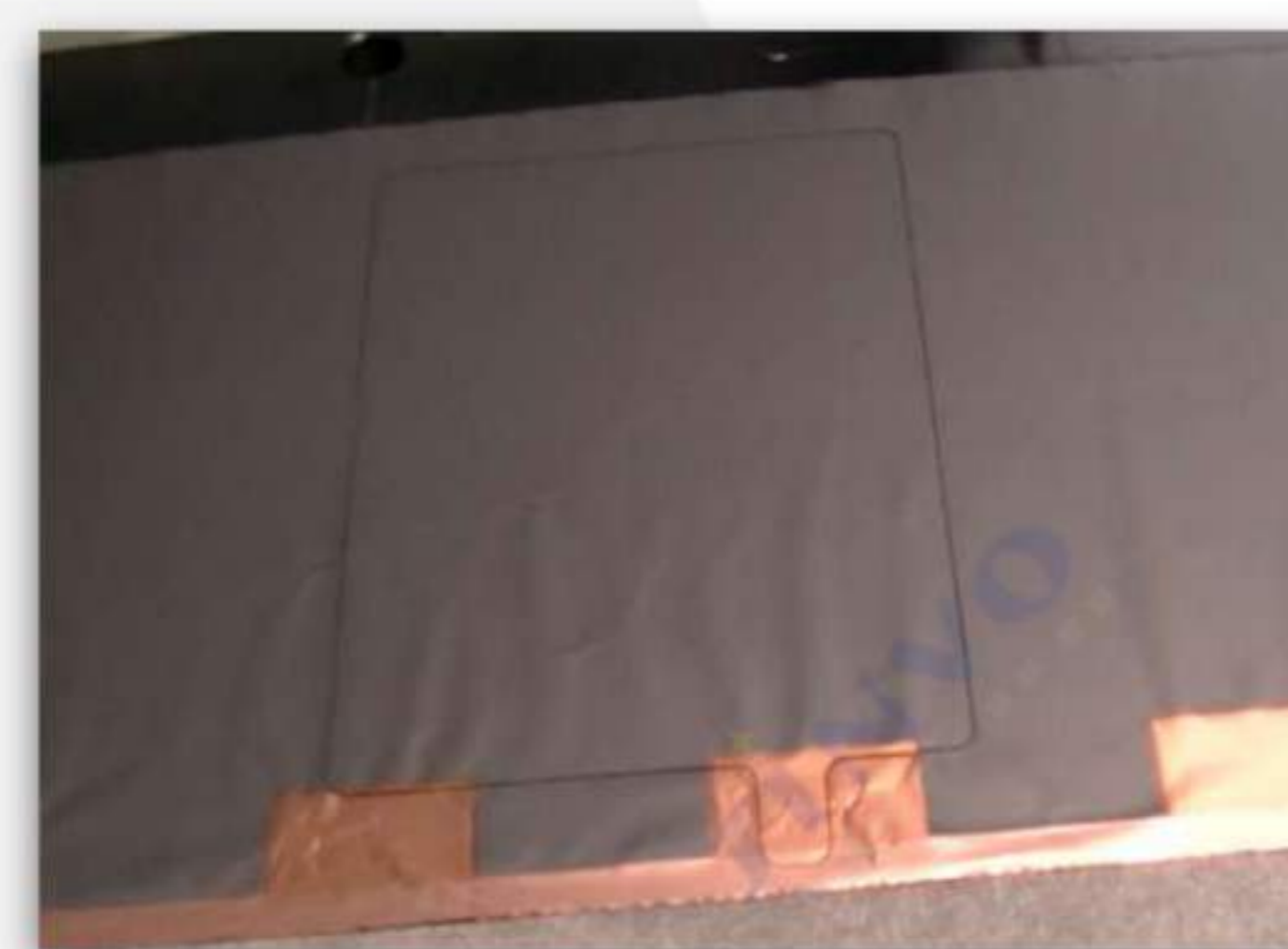
Laser Perforation (Anode/Cathode)

Auto feeding with high-precision perforation; TD accuracy $\pm 0.2\text{mm}$, MD $\pm 0.3\text{mm}$ — compatible with various foil structures.



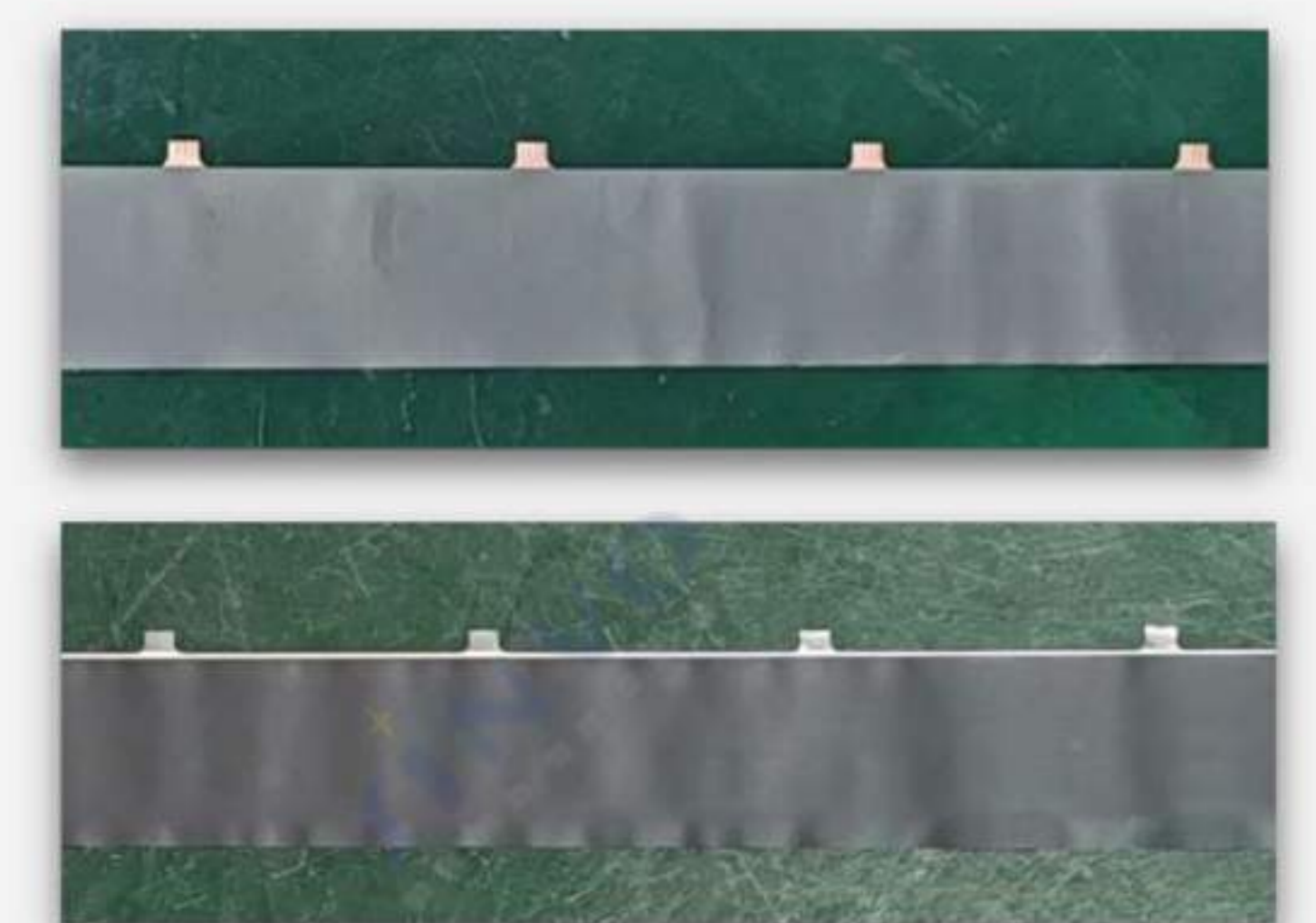
Laser Slitting

Laser slitting precision: $\pm 0.05\text{mm}$; heat-affected zone $\leq 80\mu\text{m}$, foil exposure $\leq 15\mu\text{m}$, burr $\leq 10\mu\text{m}$. Supports high-frequency, short-pulse lasers for flexible full-line production.



High-Speed Laser Mold Cutting

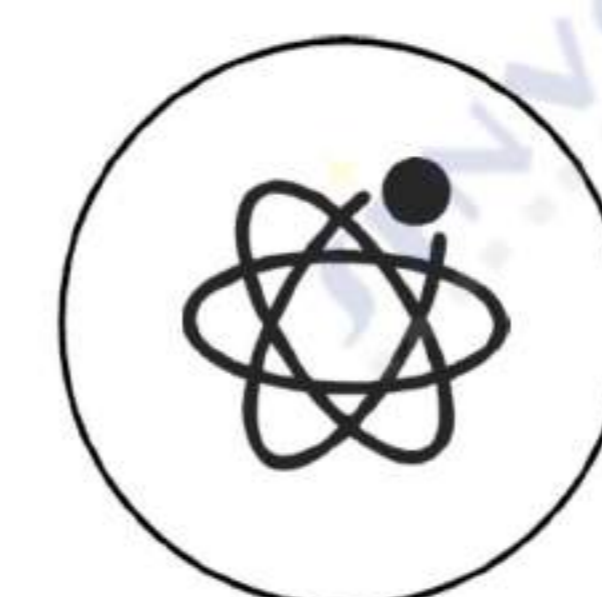
Up to 120m/min , $\pm 0.2\text{mm}$ tab accuracy, $\leq 80\mu\text{m}$ thermal impact, $\leq 15\mu\text{m}$ burr. Efficient dust removal; supports stacking and winding.





Responsibility

Transparent execution with regular updates to keep customers informed.



Commitment

Compliance ensured for safe, regulation-ready equipment.



Value

Smart solutions, cost control, and lasting value for customers.

Cooperation

We strive for long-term partnerships to pursue growth and success together.

Sinvo Automation

Innovation | Profession | Efficiency | Responsibility



Web: www.sinvo.cn Mail: market@sinvo.cn

Zhongshan Sinvo Tel.: +86 0760 8886 7717 / +86 135 3818 9982

Korea Sinvo Tel.: +82 41 581 1688 / +82 10 5386 4303

Zhongshan Sinvo Add.: No. 32, Shagang East Road, Harbor Town, Zhongshan City, Guangdong Province, China

Shenzhen Sinvo Add.: 3/F, Building F, Huafeng International Robot Industrial Park, Bao'an District, Shenzhen, China

Korea Sinvo Add.: Rm507, 110, Jiksan-ro, Jiksan-eup, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea 31035