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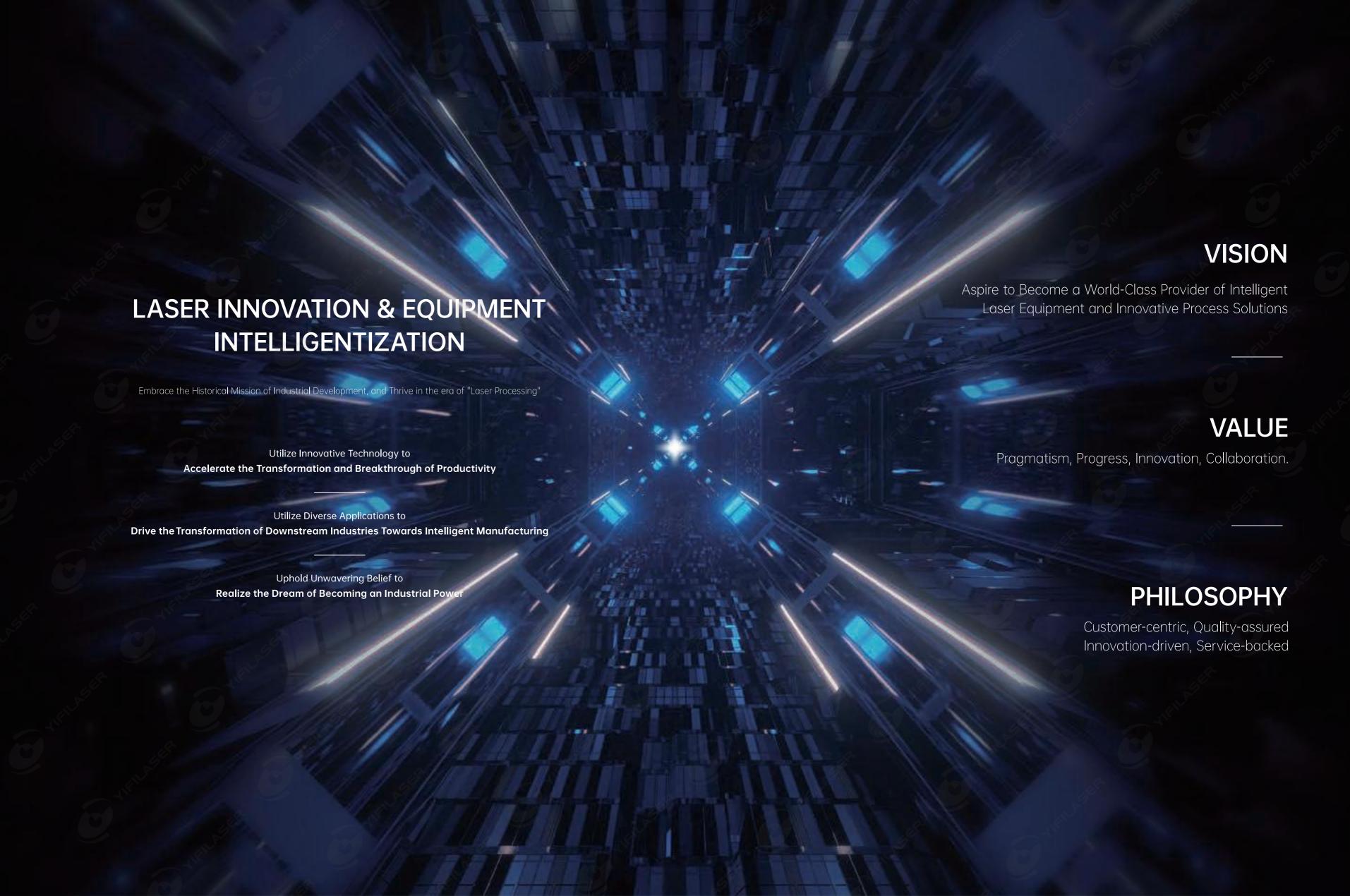
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CORPORATE BROCHURE







COMPANY OVERVIEW

YIFI LASER (688646.SH), founded in 2005 in China Optics Valley, is a Chinese government-certified high-tech enterprise specializing in intelligent precision laser processing equipment. Headquartered in Wuhan, the company operates multiple R&D and manufacturing bases across China, covering a total area of over 150,000 $\,\mathrm{m}^2$.

Driven by continuous innovation ecosystem, YIFI LASER has built a comprehensive technology and product system focused on precision laser processing technology and intelligent manufacturing equipment. The company has made significant breakthroughs and upgrades across the entire value chain — from lasers and laser systems to automated laser workstations, production lines, and turnkey intelligent manufacturing solutions.

YIFI LASER' s core offerings include intelligent laser systems, automated production lines for lithium battery cell and module/pack assembly, solar cell manufacturing equipment, and intelligent logistics solutions. These technologies are widely applied across various sectors, including new energy battery manufacturing, photovoltaics, semiconductors, home appliances, prefabricated buildings, automotive components, as well as the food and pharmaceutical industries.

20 Years	Expertise in Laser & Intelligent Equipment	1500+	Employees 40% R&D Staff	
150,000 m²	Office & Factory Area	50%+	3 -Year Revenue Growth	



Headquarters Base Optics valley·Wuhan



YIFI Intelligence Ezhou·Hubei



Jiangsu YIFI Zhenjiang Jiangsu



Dongguan YIFIDongguang·Guangdong



New Cohesion Wuxi-Jiangsu



Ecotion Zhuhai·Guangdong



MILESTONE

Product R&D Entrepreneurship

P 2005-2010

- YIFI Laser was established in Wuhan, China Optics Valley.
- Self-developed pulsed lasers with independent intellectual property rights achieved mass production.
- Recognized as a "National High-Tech Enterprise".
- Established the Laser Application Testing Center, continuously expanding innovative applications of laser technology.
- Overcame key challenges in multi-tab and tabless battery processing and equipment, launching the cylindrical tabless battery welding machine.

Technology Iteration and Upgrades

P 2011-2014

- Established the South China Branch, fully promoting "Laser + Automation".
- Formed a Lithium Battery Equipment R&D Alliance with the Guangzhou Institute of Advanced Technology, Chinese Academy of Sciences.
- Launched various pilot production lines for lithium battery welding and assembly.
- Achieved a breakthrough in laser vertical welding for prismatic batteries, launching a 24 ppm prismatic battery automatic assembly line.
- Overcame key process challenges in cylindrical tabless battery manufacturing, pioneering the first cylindrical tabless battery automatic production line.

Industry Synergy and Development

P 2015-2018

- Launched the "East China Intelligent Manufacturing Headquarters Base" construction project.
- Delivered the world's first cylindrical tabless battery automatic assembly line.
- Developed the first-generation self-developed flexible five-axis welding station.
- Fully upgraded battery cell and module PACK production lines with intelligent solutions.
- Launched automated assembly lines for home appliances, green buildings, and automotive components.
- Recognized as a Hubei Provincial Enterprise Technology Center.

Capital Growth and Expansion

P 2019-2023

- Successfully listed on the STAR Market.
- Released the 360 ppm cylindrical tabless battery intelligent assembly line.
- Initiated the "Central China Intelligent Manufacturing Headquarters Base" construction project.
- Achieved mass delivery of cylindrical tabless battery intelligent assembly lines.
- National Key Supported Little-Giant Enterprise of Professionalization, Refinement, Specialization and innovation.
- Listed in the Pioneer Technology List of "Sci-Tech Innovation China" by the China Association for Science and Technology.
- Listed as a National-Level Manufacturing "Single Champion Product".

R&D Platform and Ecosystem Building

P 2024-

- Established the YIFI Laser Engineering Technology Research Institute.
- Built an industry chain collaborative innovation
- Invested in Ecotion, establishing the South China R&D and Intelligent Manufacturing Base.
- Strategically acquired New Cohesion, expanding into intelligent logistics sector.
- Recognized as a "National Industrial Design Center".
- Recognized as the Leader of the Hubei New Energy Battery Laser Application Industry Chain.















About YIFI

QUALIFICATIONS

Laser Innovation & Equipment Intelligentization

QUALIFICATIONS

Major Honors

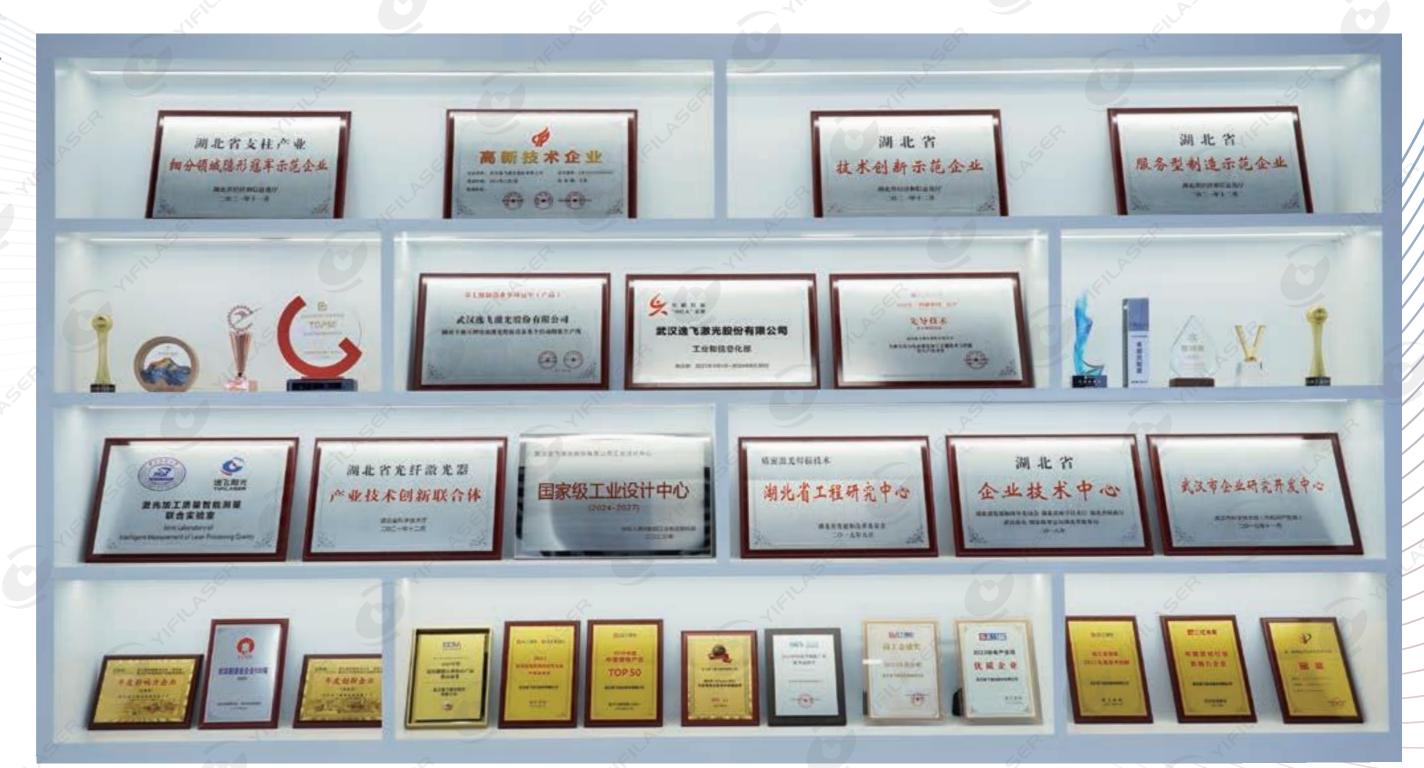
- ▶ National Key Supported Little-Giant Enterprise of Professionalization, Refinement, Specialization and innovation
- National High-Tech Enterprise
- ► National Industrial Design Center
- ▶ National Manufacturing Industry Single Champion Product
- ▶ National Intellectual Property Advantage Enterprise
- ▶ Listed in the Pioneer Technology List of "Sci-Tech Innovation China" by the China Association for Science and Technology
- ▶ Gold Prize of Hubei Province High-Value Patent Competition
- ► Hubei Province Science and Technology Progress Award
- ▶ Hubei Province Technological Innovation Demonstration Enterprise
- ► Hubei Province Service-Oriented Manufacturing Demonstration Enterprise
- ▶ Hubei Province Intellectual Property Application Demonstration Unit
- ► Hubei Province Demonstration Enterprise for Hidden Champion in the Pillar Industry Segments
- ► Top 100 High-Tech Enterprises in Hubei Province

Intellectual Property Rights and Standards

By the end of 2024, the company had filed over **1,000** intellectual property applications, including more than **100** granted invention patents (including 2 U.S. patents).

National and Provincial Projects Highlights

YIFI Laser has undertaken and participated in a total of 23 national/provincial/municipal projects, and It has won 1 Hubei Province Science and Technology Progress Award.



PRODUCT OVERVIEW











Intelligent Equipment for New Energy Batteries







INDUSTRY APPLICATIONS

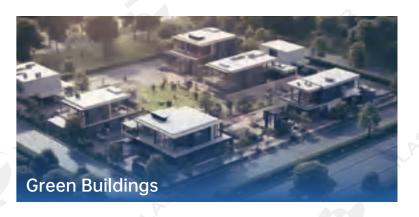














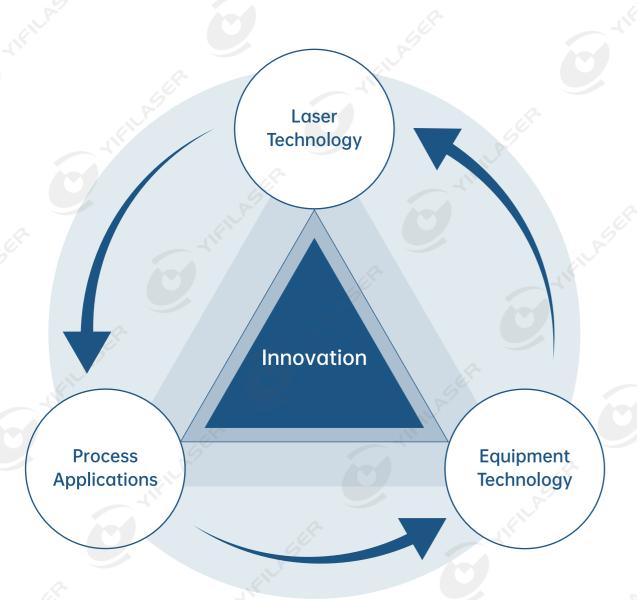


INNOVATION SYSTEM

Innovation is the cornerstone of global intelligent manufacturing, continuously driving new production methods, industrial models, and business paradigms to foster new productive forces and must be embraced as a core strategic imperative by forward-looking enterprises.

YIFI Laser, centered on precision laser processing technology and powered by intelligent manufacturing equipment, is committed to process innovation tailored to real customer scenarios. Through this, we have built a sustainable innovation system and forged a differentiated competitive edge.

Over the past 20 years, YIFI Laser has adhered to an innovation-centric growth strategy, achieving continuous evolution from laser sources, laser welding system automated production lines to intelligent production lines.



CORE TECHNOLOGY & ACHIEVEMENTS

Laser Technology

> Digital Laser Control Technology

Achieves high-precision dynamic adjustment of process and motion parameters in laser processing systems, ensuring product processing accuracy and expanding product application areas.

Multi-Dimensional Adaptive Laser Processing Technology

Improves the adaptive capability of laser processing systems and reduces the precision requirements of laser processing equipment for workpieces.

> High-Precision Laser Spectral Division Technology

Increases laser system utilization, reduces energy consumption by 30%, saves 50% of system space, and effectively lowers production costs.

High-Reflectivity Material Laser Welding Technology

Increases laser processing efficiency by 30% and ensures high-quality welding of high-reflectivity materials such as copper, aluminum, and their alloys.

Process Application Technology

➤ Electrode Cllector Laser Welding Technology

Tackle the difficult problem of laser welding of micron metallic foil(electrode cllector) and realize the material-level connection of full-tab conducting

⇒ Busbar Laser Welding Technology

Overcomes the challenges of welding dissimilar materials such as copper and aluminim, achieving highly flexible busbar welding. Welding efficiency is increased by 15%, and product changeover time is reduced by 90%.

Shell Cover Automated Assembly Technology

High-precision automated shell insertion and flexible assrmbly, improving assembly yield rate and safety performance.

Non-Destructive Tab Forming Technology for Tabless Cells

The tab forming process is dynamically controlled, achieving non-destructive forming with a yield rate exceeding 99.95%

> Module Automatic Stacking Technology

Enables high-precision stacking and assembly of modules with multiple specifications, resulting in an effciency increase of over 10%

Intelligent Equipment Technology

> High-Speed Precision Transfer Technology

Combines transfer efficiency, accuracy, and adaptability, resulting in a 15% increase in overall line efficiency.

> Flexible Tooling Technology

Addresses issues such as poor adaptability, insufficient fault tolerance, and stress deformation introduced by traditional tooling for various specifications specifications of workpieces, resulting in a 75% increase in line efficiency for workpiece changeover.

Multi-Axis Motion Control Technology

Simplifies the design of multi-axis motion mechanisms and enables precise digital motion control for various standalone machines and production lines.

Machine Vision Positioning Technology

Improves equipment compatibility, reduces precision requirements for incoming material specifications and mechanical desigan, and achieces high positioning accuracy.

Information Management Technology of Intelligent Production Line

Realize the visualization of production data, improve the accuracy and timeliness of production data collection and analysis, and provide support for customens relined production management.

ILASER 09



INNOVATION RESEARCH INSTITUTE

Driven by market demand and a commitment to delivering superior products and technical services, the company established the YIFI LASER Engineering Technology Research Institute. The institute focuses on three core functions: technology and component development, engineering and process validation, and analytical testing.

Equipped with over 260 sets of testing and experimental equipment and offering more than 120 specialized analysis services in optics, engineering, intelligent software, and new energy battery technology, the institute supports a wide range of applications. These include laser processing and turnkey production lines for new energy batteries, battery modules/PACKs, consumer electronics, photovoltaics, and hydrogen fuel cells—driving innovation and integration across the entire industry value chain.



R&D Center

5 R&D Focus Areas

recision Optical Components and Systems R&D Laser Process R&D Specialized Laser Equipment R&D Engineering R&D Intelligent Software R&D



Engineering Validation Center

3 Core Functions

Battery Structure Design Validation Cell Assembly Process Validation Battery Module Manufacturing Process Validatio



Analysis & Testing Center

2 Key Fields

Battery Testing Laser Optics & Mechanical Systems

23 Certified Laboratories

120+ Analytical & Testing Subjects

260+ Testing Instruments











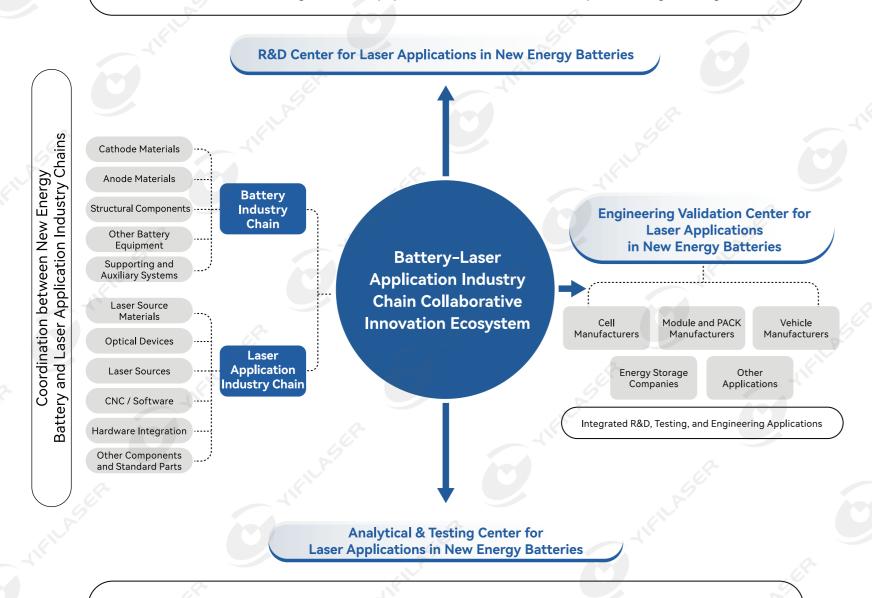


INDUSTRIAL CHAIN COLLABORATIVE INNOVATION ECOSYSTEM

To accelerate the high-quality development of the new energy battery industry, YIFI LASER established the Battery-Laser Application Industry Chain Collaborative Innovation Ecosystem, integrating R&D, engineering validation, and standardized testing into a unified framework.

This ecosystem connects upstream and downstream enterprises, universities, and research institutes, fostering seamless collaboration, promoting process standardization, and accelerating the industrialization of research outcomes.

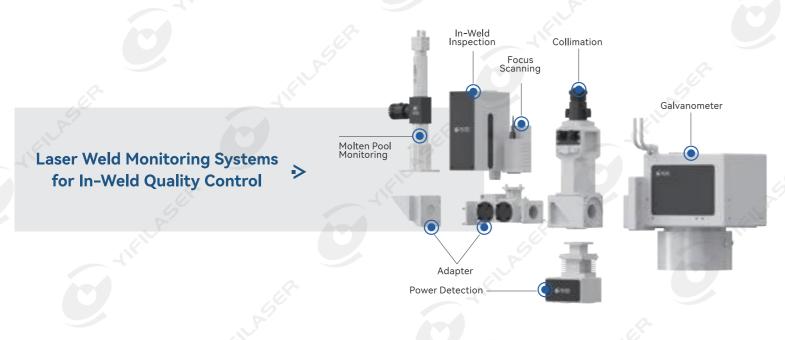
Laser + Laser Processing + Laser Equipment + Smart Software + Optical + Engineering, etc.

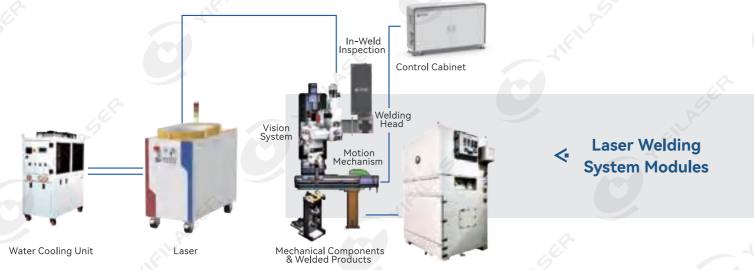


Accredited by CNAS + Certified by SGS, UL, and TUV



CORE COMPONENTS OF LASER SYSTEMS







LASER INTELLIGENT EQUIPMENT

YIFI Laser has been dedicated to the field of laser processing equipment since its establishment, adhering to independent innovation. The main products have evolved from the initial pulse lasers and laser processing machines to gradually upgraded semi-automatic production lines, fully automatic production lines, and intelligent production lines. The product range continues to expand, and downstream applications are constantly being explored.

Based on advanced adaptive laser processing technology, flexible tooling technology, intelligent robotics technology, automated production technology, and intelligent logistics technology, we have innovatively developed a series of products for home appliances and kitchen and bathroom products, including overall cabinets, range hoods, ovens, steamers, microwaves, sinks, dishwashers, washing machine drums, electric kettles, stainless steel water cups/thermos cups, as well as integration in the field of stainless steel, carbon steel, aluminum, and aluminum alloy metal sheets and pipes, for processes such as welding, overlap welding, and stacking welding. Our products offer high welding accuracy, aesthetically pleasing weld seams, high welding strength, and strong scalability, which are widely welcomed in the market.







Automatic Laser Welding Production Lines

✓ Digitalization

Real-time acquisition and recording of key data such as laser energy, focal length, shielding gas flow rate, and system motion parameters.

X Adaptability

High-precision dynamic adjustment of the laser processing system to adapt to the complexity and variability of the processing conditions.

몹 Collaborative Production

Supporting multi-robot collaborative processing to achieve coordinated operations such as handling, assembly, and welding, improving production efficiency.

High Precision

Ensuring assembly and laser processing accuracy through high-precision fixtures and precise motion systems.

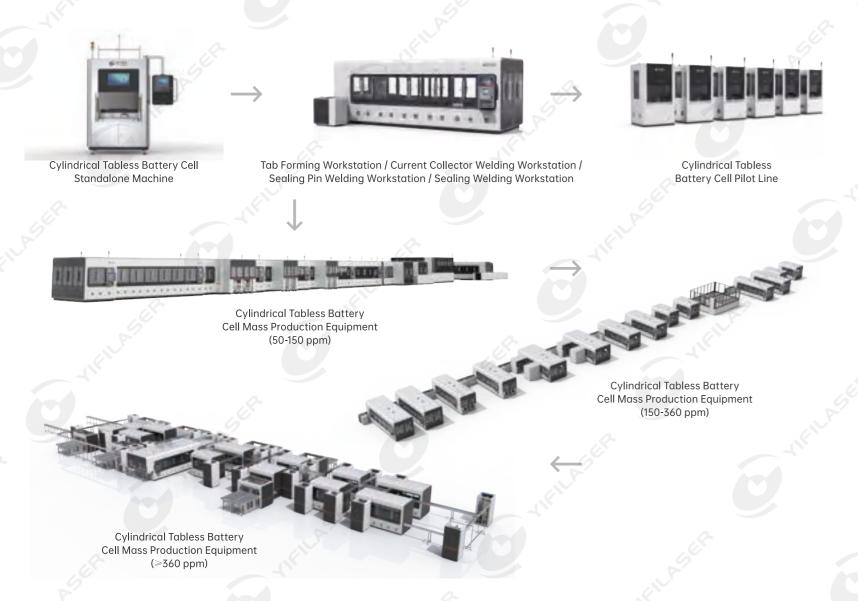
Human-Machine Engineering

Reducing the skill level required for operators and ensuring the production process does not generate harmful substances to the human body.

IFILASER

CYLINDRICAL BATTERY CELL ASSEMBLY SOLUTIONS

In the field of intelligent manufacturing of cylindrical tabless batteries, we have accumulated years of experience and have taken the lead in breaking through two key process technologies: non-destructive forming of tablesss and precision welding of current collectors. We have successfully created a process path for large-scale manufacturing of cylindrical tabless batteries and introduced a complete set of intelligent manufacturing equipment for cylindrical prismatic cell cores. This equipment enables the full coverage of assembly processes, including current collector shaping (flattening), cell encapsulation, cell insertion into casing, current collector welding, cell sealing, sealing pin welding, helium leak testing, and cell stacking. It can meet the efficient, high-quality, and low-cost intelligent manufacturing requirements of cylindrical tabless batteries with diameters of 18/21/26/32/34/40/46/60/80mm and other series. The series of products and technologies fill the gaps in related industries, lead the market development, and achieve a leading market share.



Non-Destructive Tab Forming

Patented technology for non-destructive tab forming for tabless batteries ensures structural integrity and forming quality.

Precision Welding

Precise control of prismatic tab welding depth and heat-affected zone to ensure battery safety.

Full Process Control

Detection and control of the entire process, ensuring the processing quality and safety at each stage.

Equipped with digital online inspection systems and information management systems throughout the production line.

Patent Technology

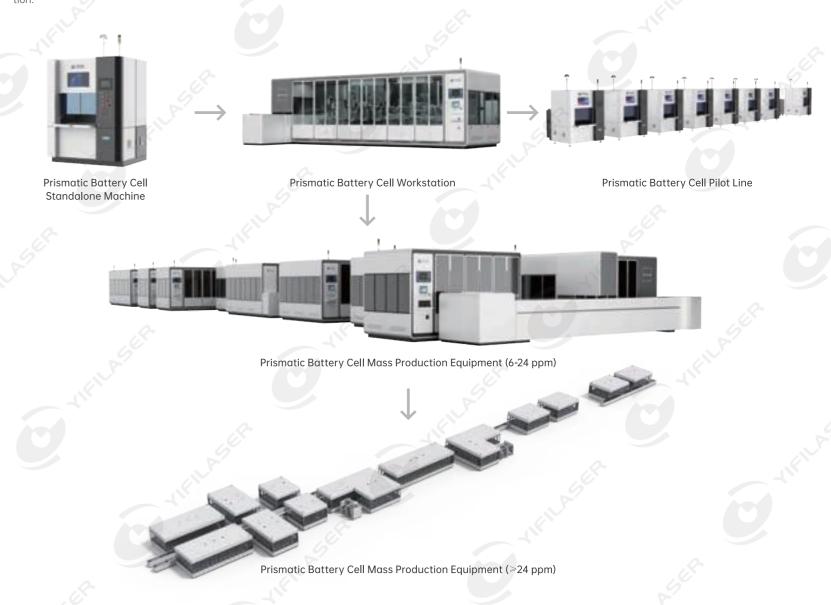
Intelligent

Production

ne Hundreds of patented technologies to guarantee nt product performance and production qualification.

PRISMATIC BATTERY CELL ASSEMBLY SOLUTIONS

In the field of smart manufacturing of Prismatic battery cell, we have broken through the difficult problem of laser precision welding of high anti-reverse materials and dissimilar materials, pioneered the laser precision welding process of aluminium shells, and launched a series of products applicable to the batch and intelligent manufacturing of Prismatic battery cell of various specifications of single-pole, double-pole and multi-pole groups, which comprehensively cover the complete set of assembly processes of Prismatic battery cell, including cold/hot pressing, X-Ray inspection, pole tab welding, welding of adapter tabs, gluing of the combined cores, wrapping of Mylar film, pre-welding of shells, welding of the top cap, welding of sealing pegs, helium leak testing, and loading and stacking of discs, etc, and are equipped with advanced automated and intelligent equipment and technologies, which have resulted in the high qualification rate of the products and the stable quality of the production



© Environmental Control

Effectively control the temperature, cleanliness, air pressure, noise, vibration, and static electricity inside the equipment.

End-to-End Control

Comprehensive process monitoring and control, ensuring the quality and safety of each processing stage.

Remote Maintenance

Utilizing digital twin technology to achieve process visualization and remote equipment maintenance functionality.

Flexible Assembly

Intelligent detection of tooling pressure and workpiece positioning during the assembly process, ensuring the safety of battery cell production.



Equipped with a digitalized online detection system and information management system throughout the production line.

TILASER 17 I

BATTERY SYSTEM ASSEMBLY SOLUTIONS

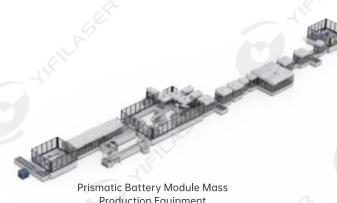
In the field of module/PACK intelligent manufacturing, we have developed multiple flexible process technologies and precision laser welding technologies. This has enabled us to achieve excellent performance and superior quality in automated assembly line products for various specifications of prismatic, cylindrical, and pouch battery modules/PACKs. Our solutions incorporate advanced safety production techniques, flexible tooling technologies, intelligent robotics, adaptive laser welding, and intelligent production line information management. The scope of our solutions covers cell sorting, cleaning, adhesive coating, module stacking, module bundling, structural component assembly, busbar laser welding, module frame (end/side/top/bottom plate) laser welding, FPC harness welding, EOL testing, module off-line, enclosure on-line, module packaging, module fixation, harness installation, BMS assembly, module cover installation, enclosure assembly, PACK air tightness testing, and charge-discharge testing, among other assembly processes. Our solutions support the production of mixed-line configurations for different module types, demonstrating flexibility and intelligence. In terms of production efficiency, yield rate, and other key factors, we have achieved industry-leading standards.



Laser Welding Station



Cylindrical Battery Module Mass **Production Equipment**



Production Equipment



X Adaptive Welding

Equipped with adaptive welding technologies such as workpiece recognition, seam tracking, dynamic focal length adjustment, and adaptive clamping.

Automatic Stacking

Realize high-precision and efficient automatic stacking of modules, as well as precise and reliable compression assembly

Flexible Production

Incorporate flexible production technologies to significantly enhance the reconfiaurability of the entire production line and the compatibili-

Multiple Operation Modes

Support continuous production mode based on convevor lines or discrete production mode based on AGV/AMR

A Intelligent Management

The entire system is equipped with digital online inspection systems and information management systems.

AMHS SYSTEM FOR SEMICONDUCTOR FACTORY

Intelligent Logistics System Solution Provider for All Industries

We specialize in leveraging automated equipment to achieve efficient storage logistics, including high-level rationalization of warehousing, automated retrieval, and simplified operations. Our core components include conveyor systems, sorting systems, stacker cranes, automated storage and retrieval systems (AS/RS), robots, and intelligent warehouse management and control systems.

Through the seamless integration of automated logistics equipment and big data platforms, we enable material transport between processes and workflows, offering design and implementation solutions for building smart factories for manufacturing enterprises.

Solution Planning

- ► Site Survey and Planning
- ► Pre-sales Solution Design
- ► Detailed Implementation Plan
- ► Intelligent Warehousing System

▶ Production Line Automation

► Intelligent Logistics Scheduling

► AMHS System

Equipment

Software System

- ► MES ► LMS / WMS
- ► WCS / ACS
- ► CIM
- ► Software Debugging



Project Implementation

► Equipment Commissioning

► Equipment Installation















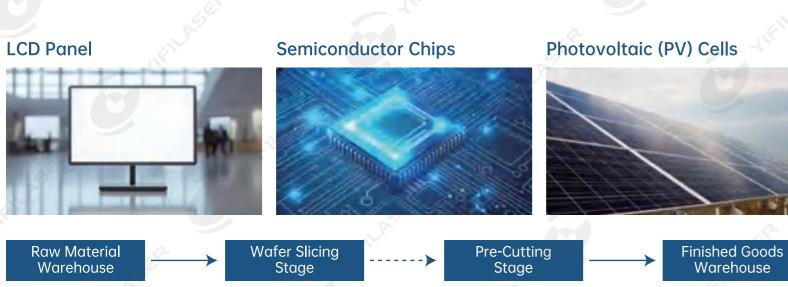
INTELLIGENT FACTORY SOLUTIONS FOR SEMICONDUCTORS

Wafer manufacturing is arguably one of the most complex industries in the world today. The intricate chip manufacturing process and stringent facility environment requirements drive fabs towards higher levels of automation and intelligence. In this evolution, improving factory space utilization, minimizing equipment downtime, enhancing production efficiency, and increasing product yield have become the key concerns for fab operations. Under these demands, Automated Material Handling Systems (AMHS) have increasingly become the indispensable "lifeline" in the construction of semiconductor fabs.

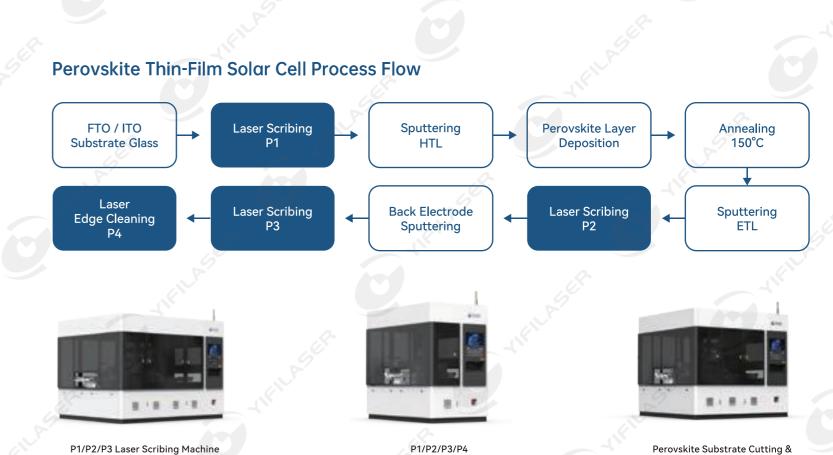
New Cohesion leverages its advanced automation technology and expertise in semiconductor production line material handling to deliver customized AMHS solutions. Our services cover the comprehensive planning and design of AMHS for semiconductor production lines, design, manufacturing, installation, and commissioning of automated material handling equipment, as well as the development of software control systems. We aim to help clients reduce reliance on manual labor, optimize manufacturing processes, improve product yield, and lower production costs, ultimately achieving maximum production efficiency and empowering intelligent manufacturing in semiconductor fabs.

Semiconductors are widely used in various fields, including integrated circuits, consumer electronics, communication systems, photovoltaic power generation, lighting and high-power energy conversion. Based on these application scenarios, our focus extends to the following process segments:





INTELLIGENT MANUFACTURING SOLUTIONS FOR PV CELLS





P4 Laser Edge Cleaning Machine

XBC Battery



All-in-One Laser Scribing Machine

Splitting Machine (P5)

Perovskite Glass Laser Film Removal Machine Laser Drilling Machine (P6)

Perovskite Glass Laser Sealing Welding Machine(P7)

Next-Generation Photovoltaic Perovskite Solar Cell Production Line

INTELLIGENT MANUFACTURING SOFTWARE SYSTEMS

Utilizing Digital Twin Technology for Visualized Operations in Digital Factories

Factory Visualization >>>

Production Line Visualization

>>>

Equipment Visualization

>>>

Equipment Structure Visualization



Using 3D virtual reality technology, the factory can be realistically represented, including the external environment, buildings, internal structures, and individual equipment, with a three-dimensional simulation display. Adjustments can be made from any angle, and scenes can be switched dynamically.



Integrating virtual display technology seamlessly into industrial monitoring systems, the system is based on simulated scenarios of real production lines. It replicates the forms of each production stage and key equipment, reflecting production processes and operational statuses in real time.



Through 3D visualization, the forms of industrial manufacturing equipment are realistically displayed. The structures and processes of production equipment are dynamically showcased, driven by base data. Real-time simulation of equipment is possible by integrating real-time data acquisition.



Supports static/dynamic structure visualization: Static Visualization breaks down equipment structures to display components and structural designs. Dynamic Visualization shows operational states and processes and can play preset scripts for simulation, demonstration, and training purposes.



Energy Management Software LES/WMS Software

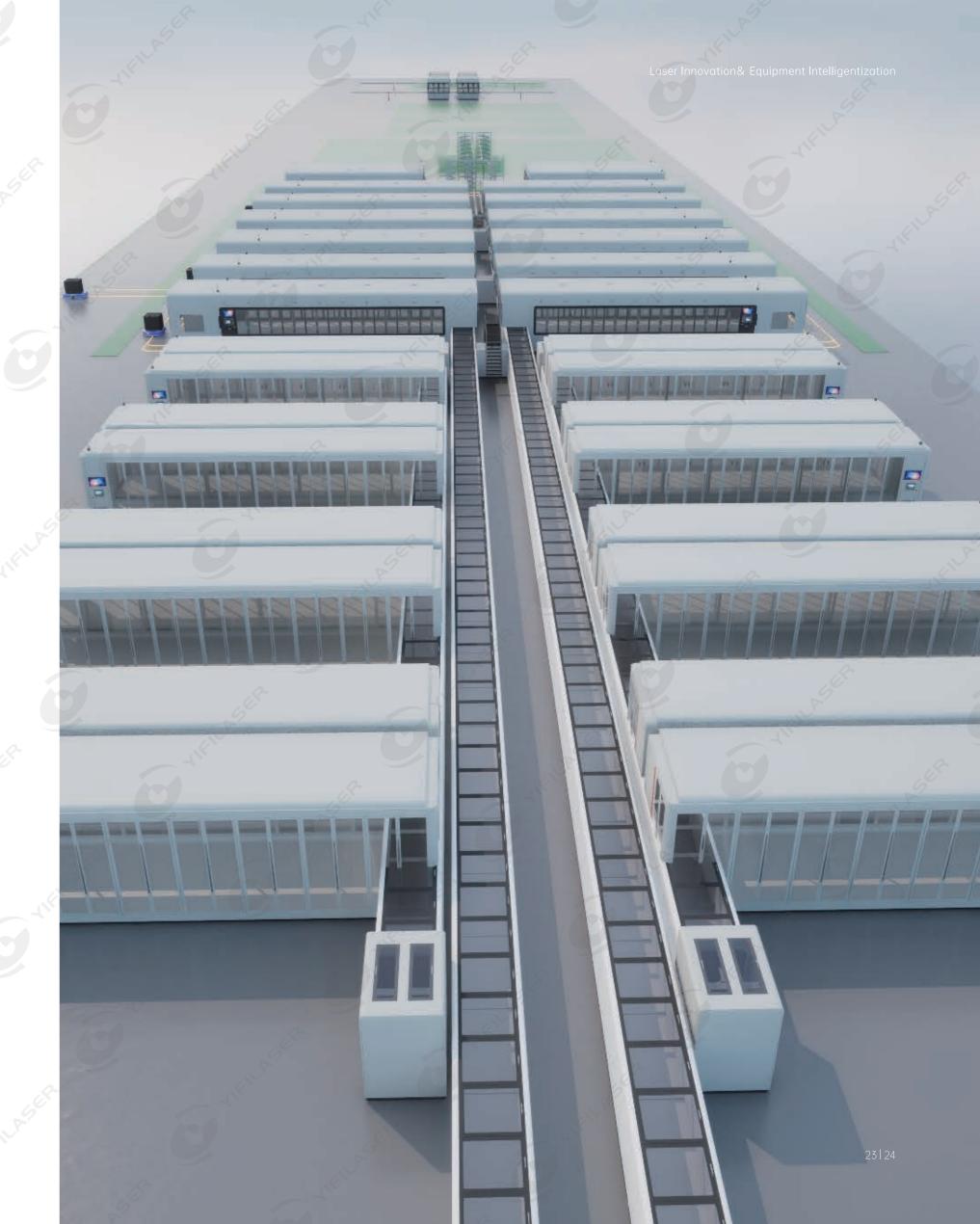
Standard Equipment Interfaces

Modular Installation
Design

WCS Software

Core Equipment: Stacker Cranes, Conveyor Lines, Robotic Workstations PLC Control Programs

Standardized Component Design



COMPREHENSIVE DIGITAL MANAGEMENT SYSTEMS



Collaborative Laser Product Technology Development

Process

Technology

Fauipment

Technology

3D Visual

Marketina

Product Online

Platform

Parametric Design

Intelligent

Logistics Design

Visual Design

BOM (Bill of Materials) Management

Virtual

Prototyping

Product Lifecycle Management (PLM) System

Aaile

Developmen³

Enterprise Resource Planning (ERP) System

Discrete Event Motion/Dynamics

CAE

Virtual Commissioning

SOP

Procedures)

Total Quality

Management

(TQM)

Diaital

Twin

ndard Operat

(Computer-Aided

Process Planning)

Integrated Design

Process Planning

Key Resources

Key Technologies

High-Level Universities Strategic Partner Clients Strategic Cooperation Supplier and Research Institutes YIFI Laser Engineering Technology Research Institute New Energy Battery Laser Application Industry Chain

FULL LIFECYCLE SERVICES AND QUALITY CONTROL

Project Management

International Certification PMP - Full Lifecycle Digital Management of Projects

Digital Full-Process Management Platform



Relying on four intelligent systems—ERP, PDM, MES, and PLM—this platform enables the digital management of the entire process from product research and development to delivery and acceptance, quickly meeting customer needs, efficiently achieving project goals, and ensuring quality completion of delivery and acceptance.

Integrated Production & Delivery, Innovative Mega-Manufacturing System



Integrating production and engineering delivery, innovation runs through the entire manufacturing and delivery system. This integration ensures seamless communication from manufacturing to delivery, enhancing manufacturing and delivery efficiency, and shortening project lead

One Center, Building an Efficient **Execution Network**



Aligned with international PMP project management certification, this approach centers around the project, driving the efficient execution of the entire product lifecycle, including research and development, manufacturing, delivery, and after-sales service. By consolidating efforts, we build a highly cohesive professional team to provide comprehensive project management services to customers.

Domestic and International After-Sales Teams, Professional Services



With separate domestic and international after-sales teams supporting alobal business, and based on decades of after-sales database analysis. we build a comprehensive after-sales system for repairs, returns, and fast response. This ensures professional after-sales services for our cus-

Quality Management

- ► Quality Policy
- ▶ Quality Objectives
- ► Quality Improvement

► Quality Pre-Planning ► Quality Process Planning

Technical

- ▶ Quality Control Plan
- ► Preventive Measures
 - ► Corrective Actions

Information

Support

► Customer Feedback

Organizational Support

► Quality Management

▶ Quality Audit Special Team

Leadership Team

▶ QC Team

Conceptual Support

Systematic Support

► Quality Documentation

► Procedure Documents

▶ Work Instructions

Support

- - ▶ Process Self-Inspection
 - ▶ Process Inspection

Methodological

Support

► Incoming Material Inspection

GLOBAL SERVICES

The company is vigorously advancing its global expansion. Starting in 2007 with the export of self-developed laser welding equipment, it has since achieved the capability to deliver intelligent manufacturing complete line solutions overseas. The global business has expanded to regions such as Southeast Asia, Europe, North America, and South America. The company has actively introduced partners in multiple countries/regions and has established several localized delivery and service points with dedicated teams.

CLIENTS WE ARE SERVING



































































































































