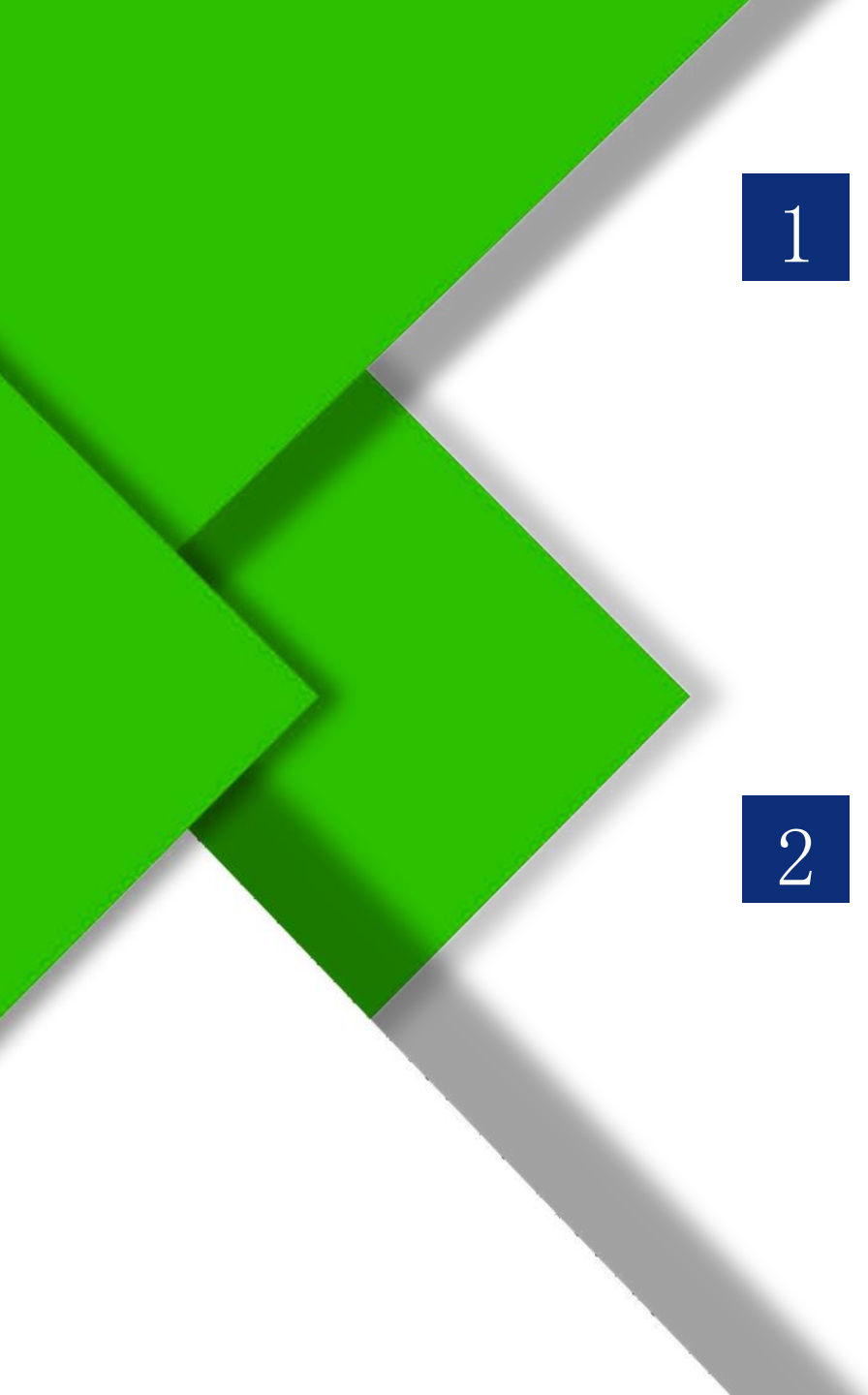


BBS LATECH VIETNAM SEMICONDUCTOR TECHNOLOGY JOINT STOCK COMPANY

BBS Latech Vietnam Semiconductor JSC

Professional Precision Laser Cutting Processing Technology Service Manufacturer



1

Company Profile

- **Company Profile**
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- **Development Goals**
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Production Capacity

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- **Quality Policy**
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- **Partner Clients**

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COMPANY PROFILE

Company Profile

BBS LATECH Vietnam is a high-tech enterprise specializing in the research, production, and business of precision metal products, ultra-micro hole processing, and magnetic steel holders. The company focuses on providing high-precision laser cutting solutions for global customers, addressing the challenges of processing complex components.

Service Sectors:

Medical equipment, semiconductor manufacturing, 3C electronics, consumer electronics, military equipment, aerospace components, electronic parts, medical telecommunications, new energy vehicles (electric cars), precision watch components, industrial blades, textile machinery, and other industries.

Address:

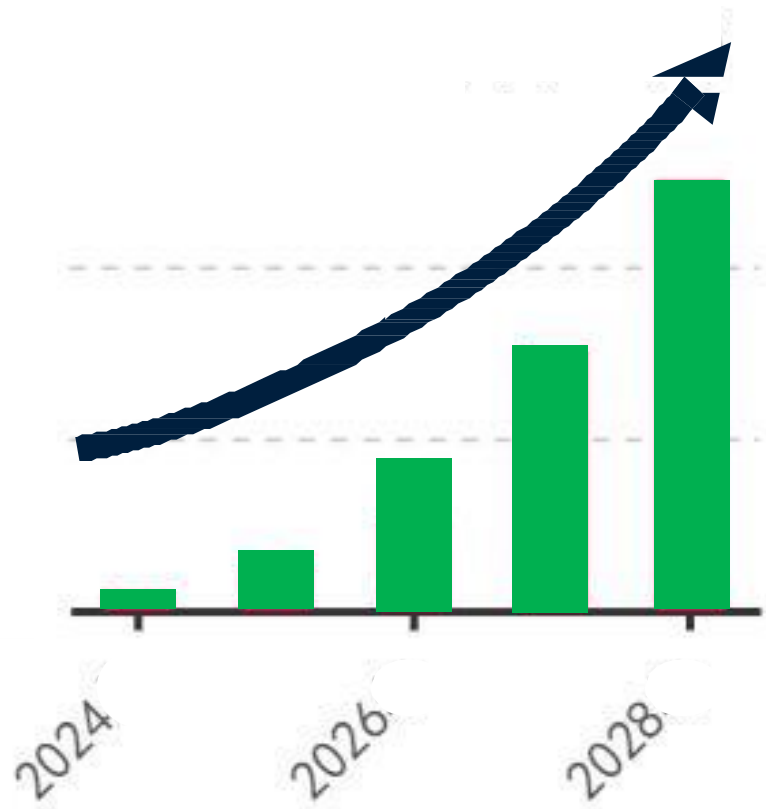
BBS Latech Vietnam Co., Ltd

No. 6, 21A Street, VSIP Bac Ninh Industrial Park, Dai Dong Ward, Tien Du District, Bac Ninh Province, Vietnam

Hotline: +84 981 547 034 | +84 362 171 299



Development Goals:



➤ Endogenous Growth Drivers:

Optimizing production processes and upgrading technology, enhancing market penetration.

Focusing on sustainable performance growth and driving breakthrough development.

➤ Research & Development and Production Capacity Enhancement:

Increasing investment in R&D, adopting advanced equipment and technological talent.

Improving efficiency and quality control to meet the demands of market expansion.

Development Plan:



➤ Domestic Market Strategy:

Vietnam Region

➤ Overseas Market Expansion:

Entering the markets of Thailand, Malaysia, Indonesia, and India by 2028.



/02

Production and Technological Capabilities

Production Capacity

Equipment Status

Equipped with 20 precision laser cutting machines, along with various supporting post-processing equipment including laser marking, laser welding, and leveling.

Delivery Capability

Samples delivered within 3 hours;
100PCS small-batch orders delivered within 6 hours;
Large-volume orders: Batch production with first shipment on the same day.

Supports urgent small/medium-batch orders to large-scale procurement, ensuring immediate response to customer needs

Daily Production Output

Daily production capacity reaches 800,000, easily handling large-volume orders.



Material inventory

- **Full specification coverage**

Daily production output: Capable of processing over 30 metal materials including stainless steel, carbon steel, manganese steel, copper, aluminum, titanium, nickel, tungsten, tungsten-copper alloy, galvanized sheets, etc.

- **Complete thickness specifications**

Sufficient inventory of full-thickness specifications ranging from 0.01~6.0mm, precisely meeting various processing needs

- **Material inventory**

800m² warehouse space with 30-ton ready stock always available



Production equipment

Equipment: Precision laser cutting machines - low power
Quantity: 26 units

Equipment parameters

Features: Specialized in thin sheet precision cutting

Thickness: $\leq 0.6\text{mm}$

Width: 600mm * unlimited length

Materials:

Stainless steel, nickel foil, Kovar foil, and other foils

0.02mm

Minimum slit width

0.025mm

Minimum hole diameter

$\pm 0.01\text{mm}$

Precision



Production equipment

Equipment: Precision laser cutting machines - medium power
Quantity: 16 units

Equipment parameters

Features: Specialized in thick plate precision cutting

Thickness: $\leq 3.0\text{mm}$

Width: 600/800mm * 600/2000mm

Materials: Stainless steel, copper, aluminum, titanium, tungsten, nickel, and various alloys

0.07mm

Minimum slit width

0.08mm

Minimum hole diameter

$\pm 0.02\text{mm}$

Precision



Production equipment

Equipment: Precision laser cutting machines - high power
Quantity: 4 units

Equipment parameters

Thickness: $\leq 6.0\text{mm}$

Width: 600mm * unlimited length

Materials: Stainless steel, copper, aluminum, titanium, nickel, and various alloys

0.1mm

Minimum slit width

0.1mm

Minimum hole diameter

$\pm 0.05\text{mm}$

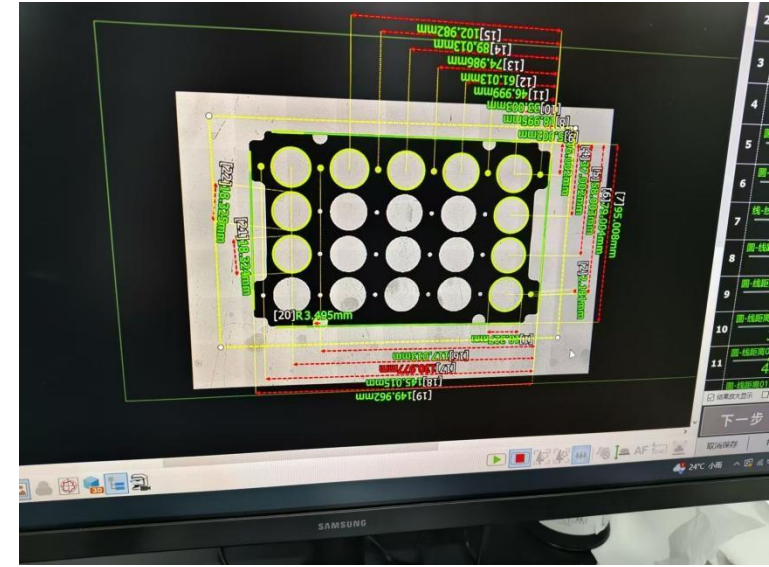
Precision



Equipment parameters

Equipment Categories	Number of machines	Processing thickness capacity of the equipment (reference parameter for stainless steel)	Minimum hole diameter processable by the equipment (reference parameter for stainless steel)	Maximum machining dimensional accuracy of equipment	Processable materials
Low Power Precision Laser Cutter	26	0.01~0.6MM	0.02mm	±10um	Stainless steel, stainless iron, silicon steel, Kovar, nickel-chromium and other thin metal materials
Medium Power Precision Laser Cutter	16	0.7~3.0MM	0.08MM	±20um	Various metals including stainless steel, stainless iron, silicon steel, Kovar, nickel, molybdenum, titanium, tungsten, platinum alloys, as well as hard and brittle materials like polysilicon and ceramics
High Power Precision Laser Cutter	4	3.0MM~6.0MM	0.1MM	±50um	Metals including stainless steel, stainless iron, silicon steel, Kovar, nickel, molybdenum, titanium, tungsten, platinum alloys

Inspection Equipment



Keyence Fully Automatic Image Measuring Instrument

- Capable of measuring 5000 points simultaneously and 1000 identical targets at once. Enables rapid measurement and high-precision batch inspection for shipment.
- Precise measurement with auto-focus to eliminate human error.
- Intuitive operation achieves $\pm 0.1 \mu\text{m}$ high-precision measurement - just one button press after placement.

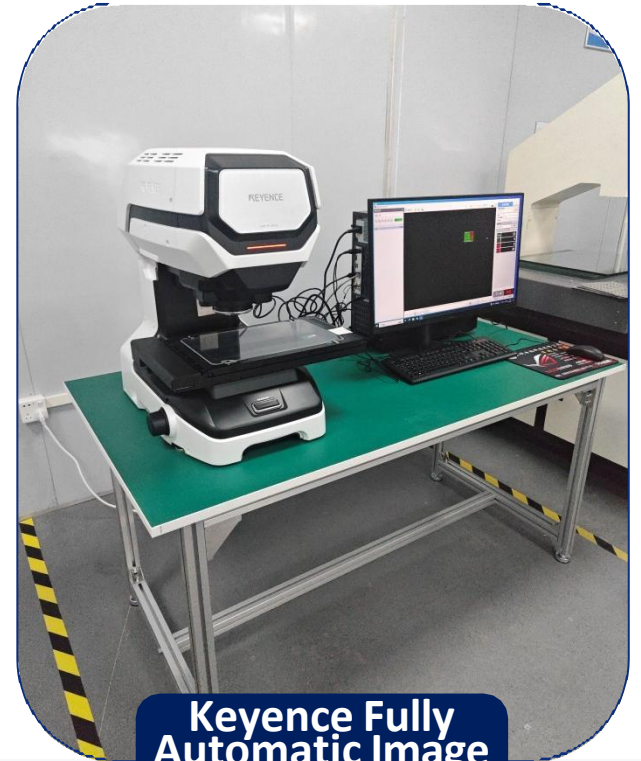
TESTING EQUIPMENT



**3D Measuring
Machine**

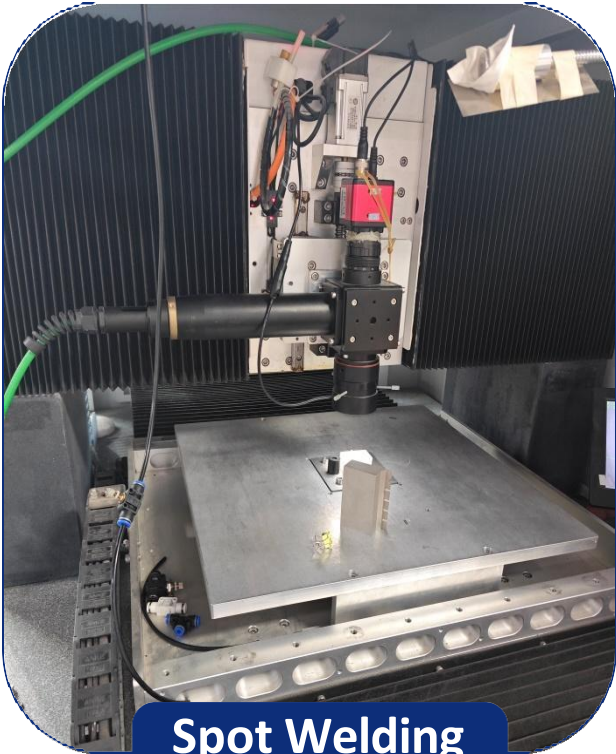


**2.5D Projection
Inspection
Equipment
2 sets**



**Keyence Fully
Automatic Image
Measuring
Instrument 1 set**

Post-Processing Equipment



**Spot Welding
Equipment**
4 sets



**Leveling
Machine**
2 sets



**Marking
Machine**
5 sets

Provides complete post-processing solutions including: full product inspection, burr removal, leveling, spot welding, laser marking



/03

CASE STUDY SHARING

Project Cases

Case 1

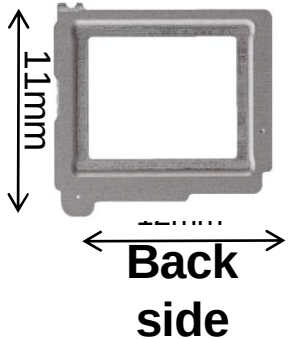
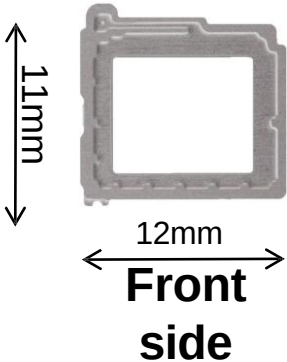
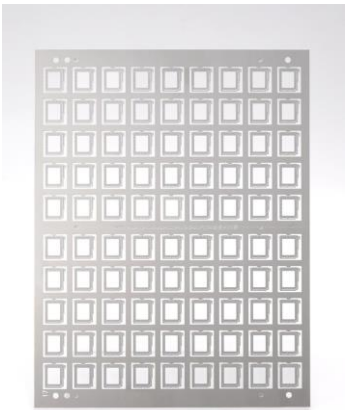
Project Name **Smartphone Camera Module Bracket**

Industry Background Product for leading domestic 3C electronics manufacturer with high precision and quality requirements

Technical Challenges

- Requires double-sided alignment etching with deviation not exceeding $\pm 0.05\text{mm}$, prone to misalignment
- Positioning hole machining precision requirement: $\pm 0.02\text{mm}$
- Extremely fine surrounding cutting lines - conventional laser cutting may cause burnt edges affecting appearance and performance

Image Display



Project Cases

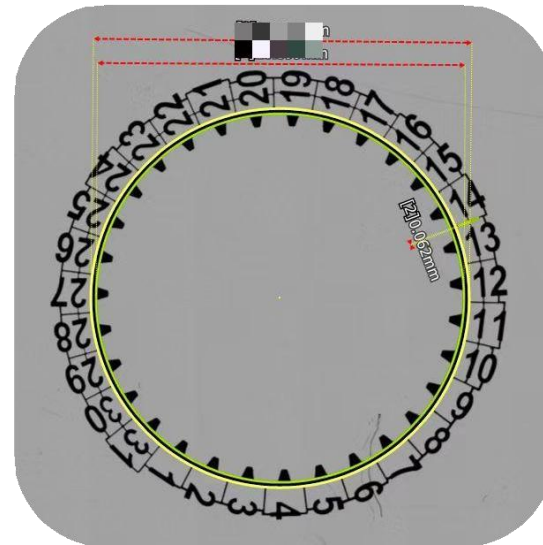
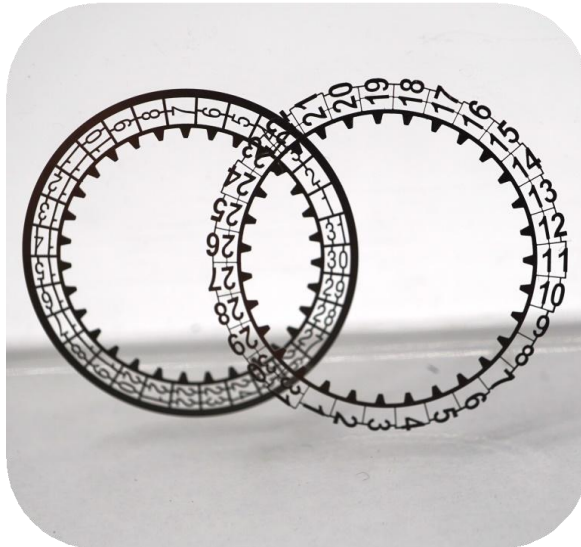
Case 2

Project Name Metal Calendar Ring

Industry Background Precision component for mechanical watches

Technical Challenges Number connecting ribs only 0.06mm; Inner/outer ring concentricity within 0.015mm; Large hollow area with numbers 1-31 requiring zero deformation or creases

Image Display



Project Cases

Case 3

Project Name Precision Micro Gear

Industry Background Precision component for mechanical watches

Technical Challenges Outer diameter 5mm, spacing 0.07mm;Tooth width: 0.1mm, arranged in 92 teeth;No deformation or gear creases

Image Display



Project Cases

Case 4

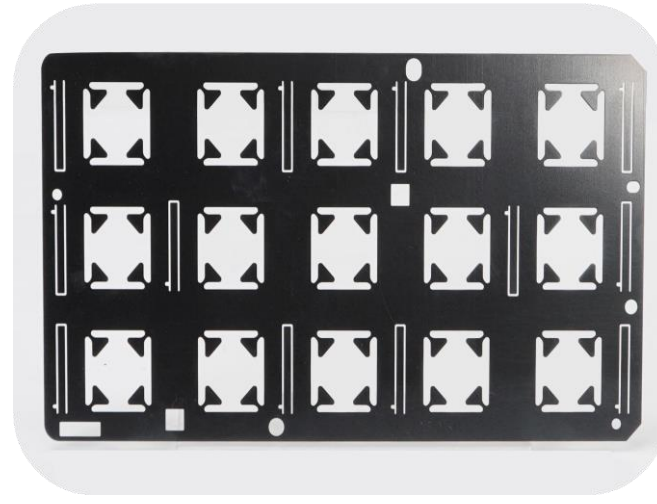
Project Name PCB Reflow Fixture

**Industry
Background** SMT industry

**Technical
Challenges**

- Positioning hole and reference edge precision: Fixture must precisely match equipment track with $\leq \pm 0.02\text{mm}$ hole position tolerance
 - Flatness control: Base plate flatness $\leq 0.1\text{mm}$ to ensure proper PCB contact and heat transfer uniformity
-

**Image
Display**



Project Cases

Case 5

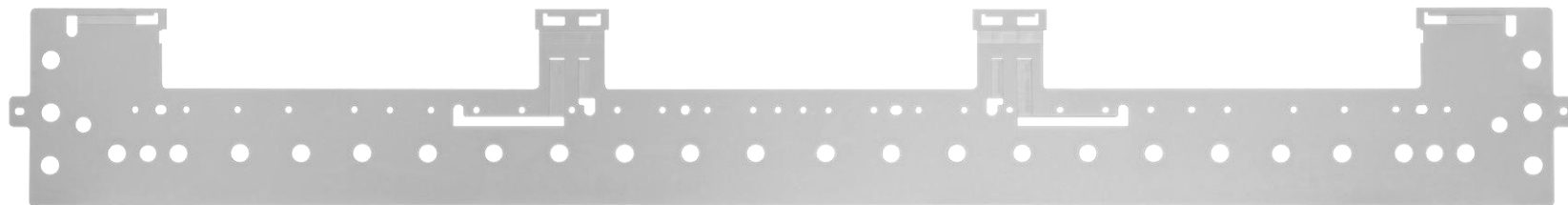
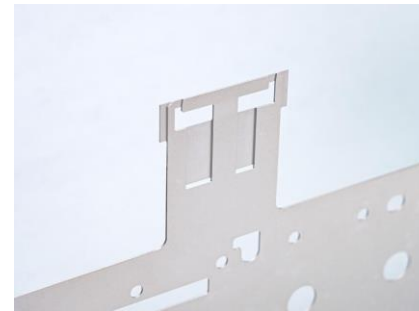
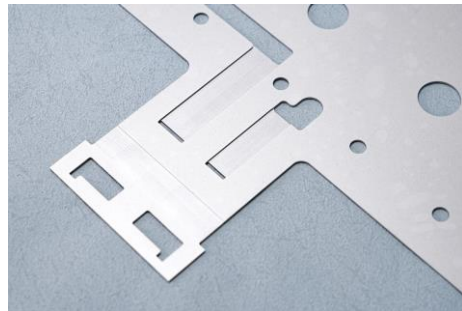
Project Name Coating Head Shim

Industry Background New energy - lithium battery coating industry

Technical Challenges

- Requires processing special-shaped slits and trapezoidal sections while maintaining shape precision and hole consistency
- Ultra-thin shim processing requiring flatness and thickness uniformity

Image Display



Project Cases

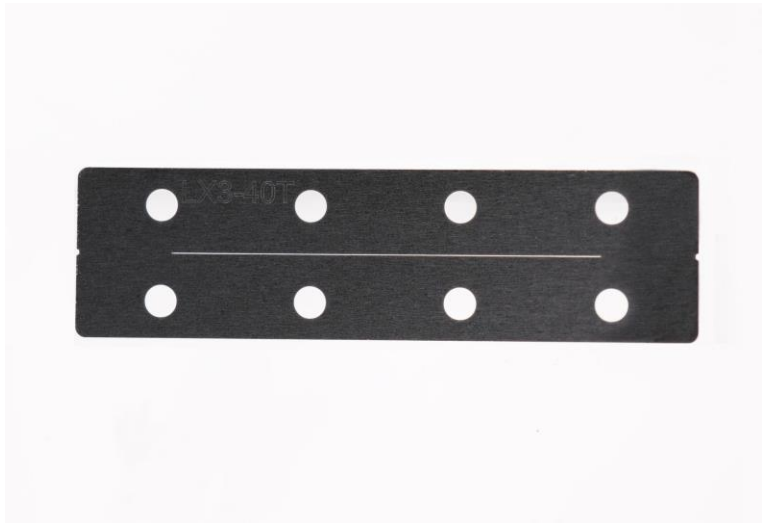
Case 6

Project Name Blackened Slit Plate

Industry Background Optical Slit Aperture Plate

- Technical Challenges**
- Slit Width: 20μm
 - Tolerance: ±3μm (after blackening)
 - Non-reflective surface finish

Image Display



Project Cases

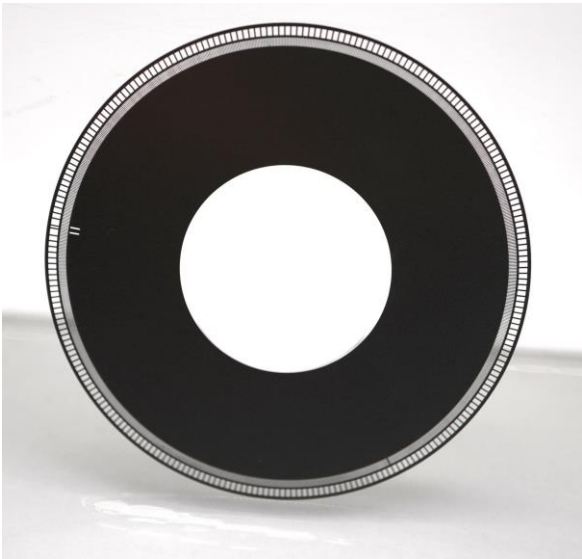
Case 7

Project Name Optical Encoder Disk

Industry Background Optical products

- Technical Challenges**
- Slit width: 0.15mm
 - Rib width: 0.1mm
 - Slits must be perfectly flat without burrs

Image Display



Project Cases

Case 8

Project Name **Extrusion Hook Mold Sheet**

Industry Background Hook-and-loop fastener industry

- Technical Challenges**
- Clean cutting cross-section
 - Concentricity within 0.015mm
 - Consistency across multiple mold sheets (within 10um)
-

Image Display



Project Cases

Case 9

Project Name

**Industry
Background**

Hook-and-loop fastener industry

**Technical
Challenges**

- Clean cutting cross-section
 - Concentricity within 0.015mm
 - Consistency across multiple mold sheets (within 10um)
-

**Image
Display**



Project Cases

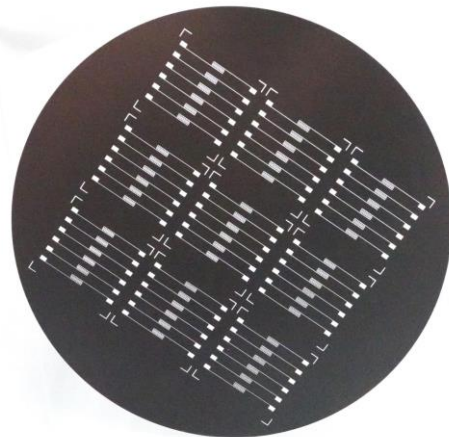
Case 9

Project Name	Interdigitated Electrode - Vapor Deposition Metal Mask
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Industry Background	For preparing high-precision metal electrodes in semiconductor sensors
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Technical Challenges	• Electrode finger width: 0.1mm • Finger spacing: 0.1mm • Surrounding electrode structure requires precise laser quality to prevent residual material deformation
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Image Display



Project Cases

Case 10

Project Name **Test Probe**

Industry Background For advanced semiconductor packaging testing

Technical Challenges

- Line width: 0.1mm
- Spacing: 0.07mm
- Serpentine structure requires spacing maintenance without deformation

Image Display



Project Cases

Case 11

Project Name	Italian Precision Coffee Filter Basket
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Industry Background	High-end precision coffee basket controlling uniform water distribution for extraction
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Technical Challenges	• Hole precision within $\pm 0.025\text{mm}$ • High consistency requirement for filter holes • No burrs on hole walls
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Image Display

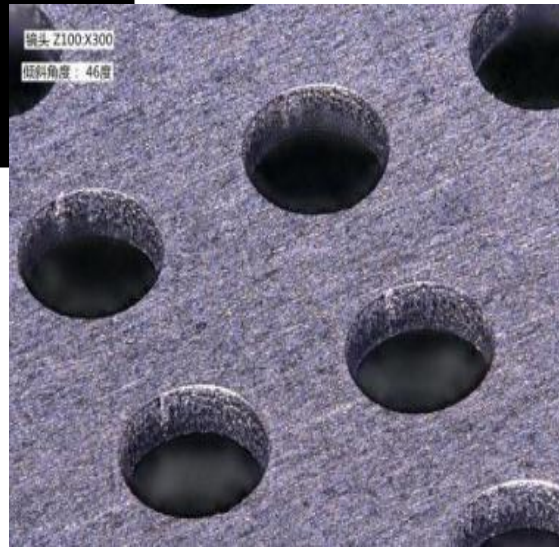


Results Showcase

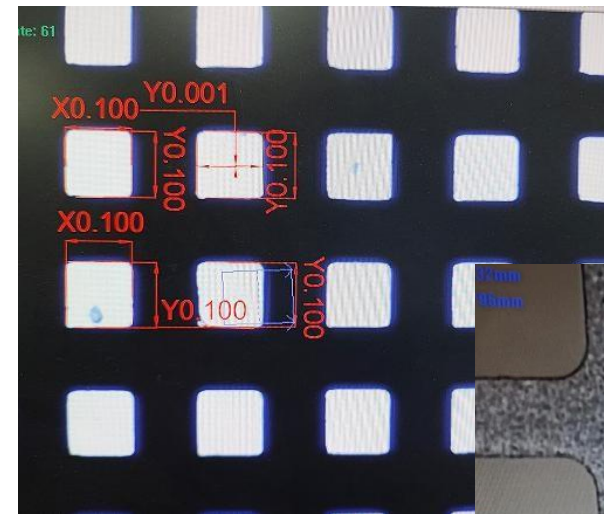
Round Hole Cutting Effects



Hole Diameter: 0.035mm
300x Magnified Effect



Square Hole Cutting Effects

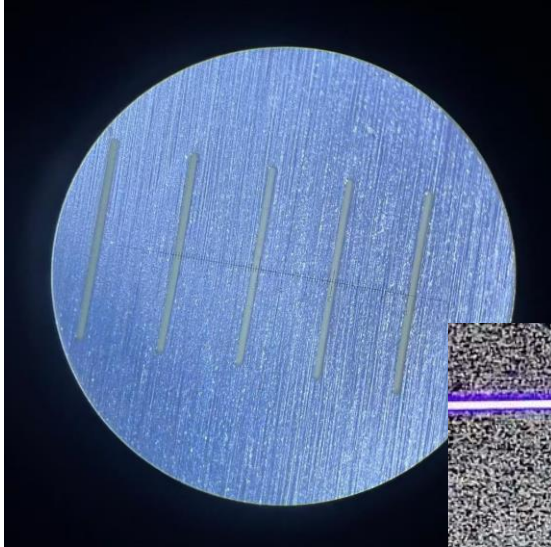


Hole Diameter: 0.1*0.1mm
50x Magnified Effect

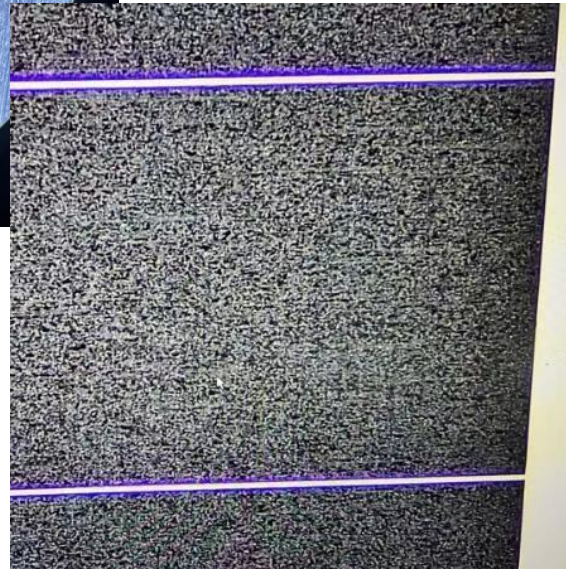


Results Showcase

Slit Cutting Effect



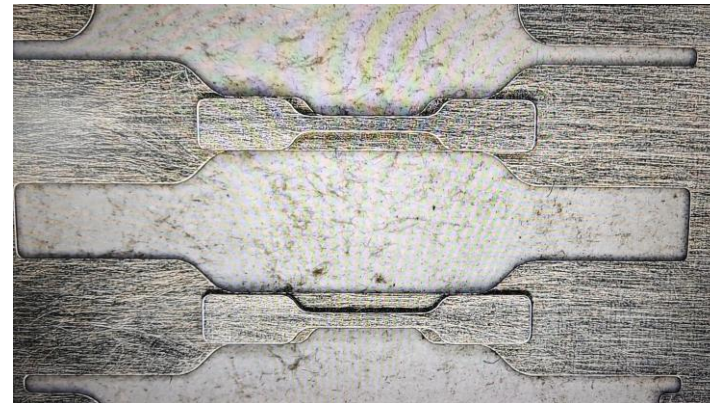
Hole Diameter: 0.03mm
50x Magnified Effect



Laser Spot Welding Effect

Spot Weld 45x
Magnification

Front/Back
Effects





/04

Quality & Service

Quality Management

Target Items	Target Value
Customer Satisfaction	$\geq 98\%$
Process Drawing Accuracy	$\geq 99.9\%$
Shipment Inspection Pass Rate	$\geq 98\%$
Customer Complaint Rate	$\leq 1\%$

Quality Positioning

Current Standards:
Full implementation of ISO 9001 Quality Management System;
Strategic Plan:
Implement IATF16949 Automotive Quality Management Standard by 2026.

Control Dimensions

Direct supply from major material manufacturers + secondary quality inspection
Full-process SOP Process Control System

Technical Assurance

2 sets of 2.5D Projection Inspectors
1 set of Keyence Fully Automatic Projection Inspector
Measurement Error: $\pm 0.1\mu\text{m}$

After-Sales Service

Establish Rapid Response Mechanism
Ensure 0.5-hour response to complaints
Propose solutions within 1 hour.

Partner Clients



THANKS FOR WATCHING

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