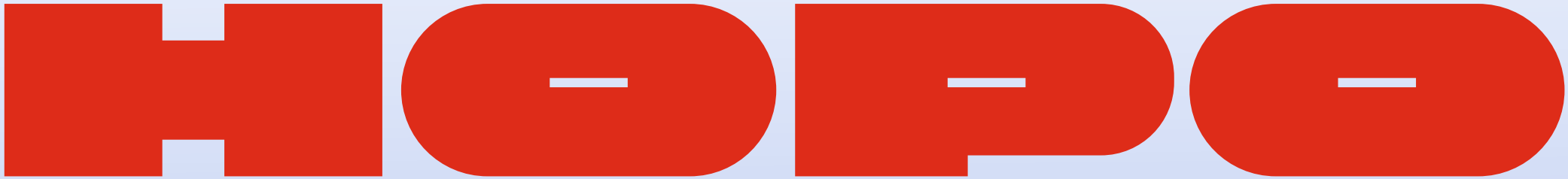
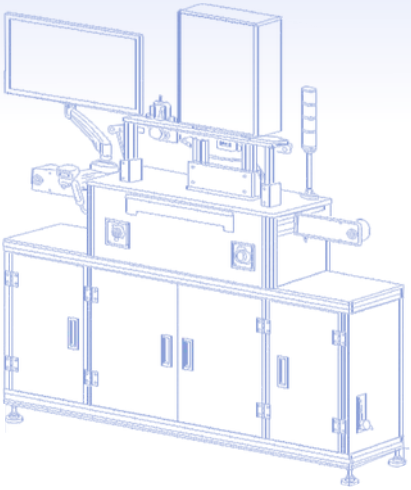
HOPO IS HERE



CONTENTS

Production equipment for resistors, capacitors and inductors, from single machines to complete lines, plus smart factory systems, custom machines and precision spare parts.



01 **Company profile** 3–5

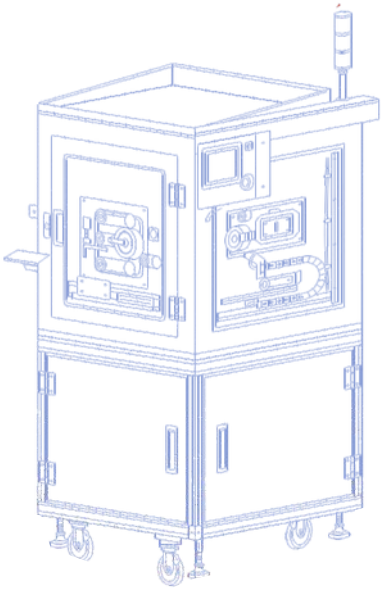
Introduction · Development history · Company culture

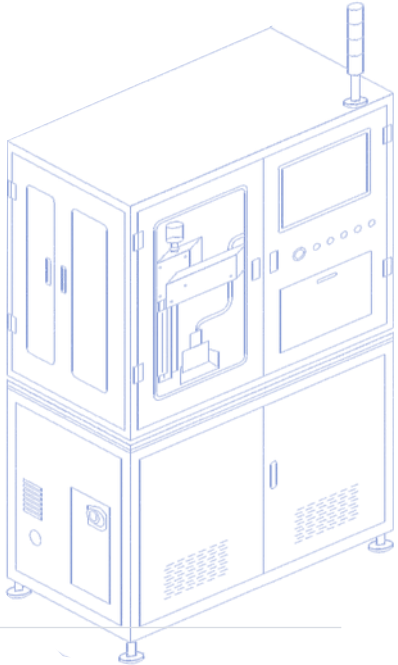
02 **Overall capability** 6–9

Customer distribution · Honorary qualifications · Organizational structure · In-house machining

03 **Product catalogue** 10–31

Resistors · Capacitors · Inductors · Smart manufacturing · Customized equipment · Spare parts





INTRODUCTION TO HOPO

Founded in 2005, **HOPO Technology** specializes in the research, development and production of passive component equipment (for resistors, capacitors and inductors), non-standard automation and intelligent manufacturing equipment, as well as high-precision spare parts. Its products and services are highly recognized by customers.

HOPO holds about 80% of the domestic market and about 30% of the international market for passive component equipment. Its products are widely used in strategic emerging industries such as AI, new energy, 5G communication and automotive, with a customer base in China and abroad.

2005
founded

~80%
share of the domestic market

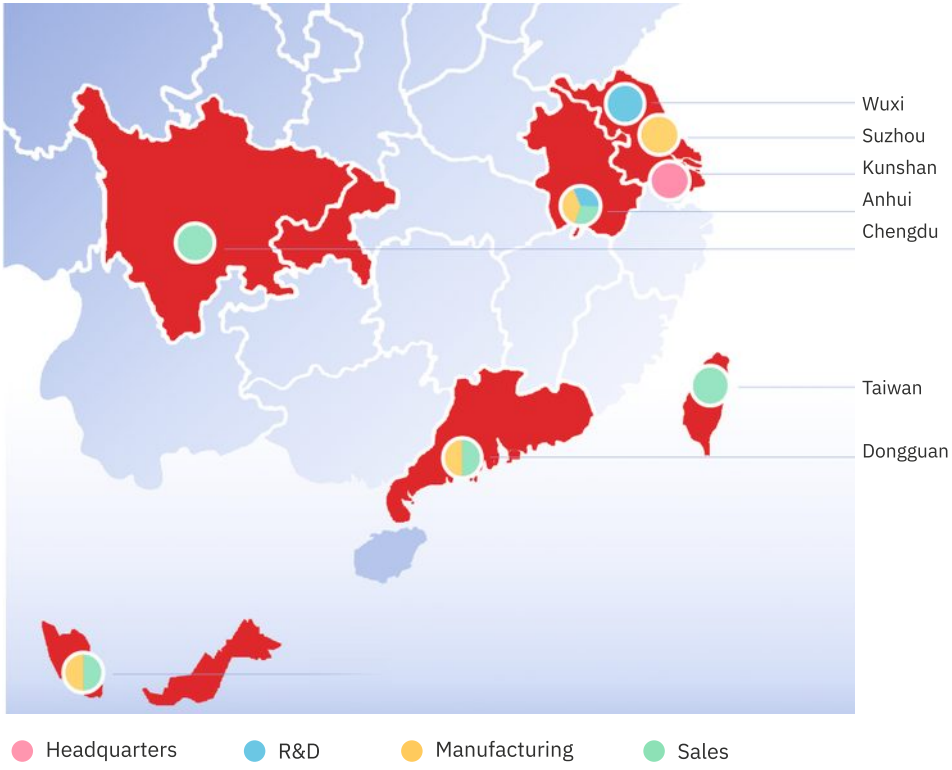
~30%
share of the international market

400
employees, 52% technical staff



HOPO headquarters, Kunshan (Jiangsu, China)

Distribution map





2005/04

F OU ND E D

HOPO Electronics was founded



2009/11

SALES & MANUFACTURING

Kunshan HOPO Electronic Technology Co., Ltd.



2013/10

SALES & MANUFACTURING

Dongguan HOPO Electronics



2016/07

R &D

Wuxi HOPO Yongxin Technology



2016/12

SALES & MANUFACTURING

HOPO Machinery Co., Ltd.



2018/05

SA L ES

HOPO Technology Co., Ltd.



2019/05

SALES & MANUFACTURING

Anhui HOPO Automation Equipment Co., Ltd.



2019/06

MA N U F A C T U R I NG

Suzhou Shifanghai Electronic Technology Co., Ltd.



2019/09

MA N U F A C T U R I NG

Suzhou Jinde Electronic Technology Co., Ltd.



2021/10

H EA D QU A R T ER S

Kunshan HOPO Innovation Electronic Technology Co., Ltd.



2023/12

SA L ES

Chengdu HOPO Electronics

HOPO

EUROPE
Frankfurt am Main

2026

SALES & SERVICE

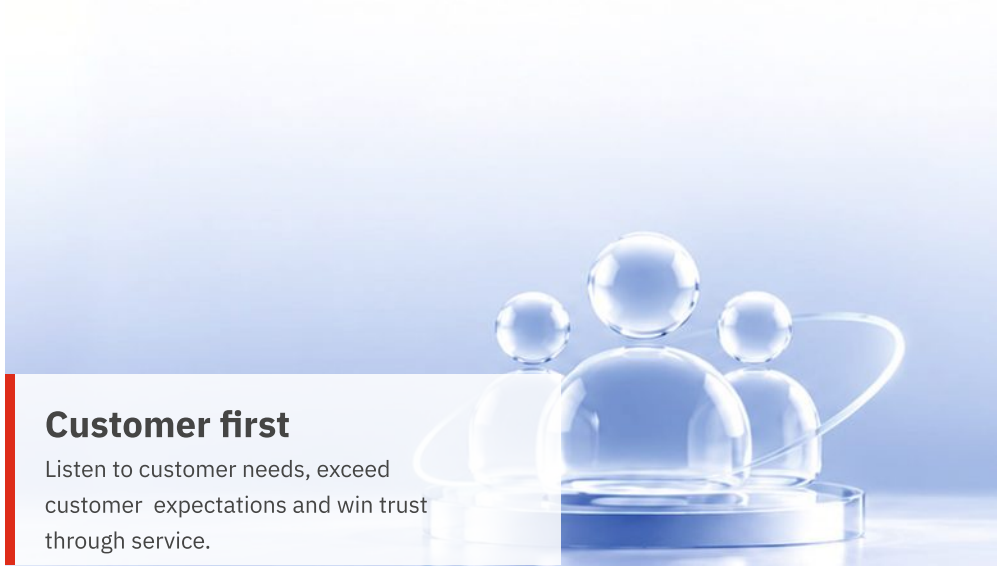
HOPO Europe, Frankfurt am Main (Germany)

COMPANY CULTURE



Innovation

Break away from conventional thinking, keep exploring and innovating, and drive growth with new technologies.



Customer first

Listen to customer needs, exceed customer expectations and win trust through service.



Speed

Respond to the market with agility, implement and execute efficiently, and create value through speed.

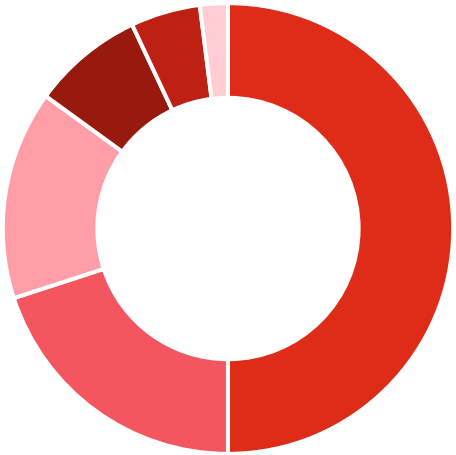


Cost saving

Strive for excellence in management, reduce waste of resources and strengthen competitiveness through saving.

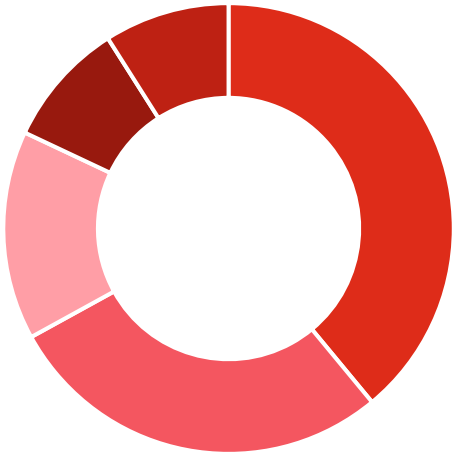
CUSTOMER DISTRIBUTION

Customers by region



China	50%
Southeast Asia	20%
EU	15%
Japan	8%
Korea	5%
America	2%

Sales by equipment type



Resistor equipment (thick film, thin film, metal)	39%
Inductor equipment	28%
MLCC equipment	15%
Tantalum capacitor equipment	9%
Customized equipment	9%

HONORARY QUALIFICATIONS

Corporate honors

- National-level specialized, refined, distinctive and innovative “Little Giant” enterprise
- High-tech enterprise
- Private technology enterprise of Jiangsu Province
- Suzhou service-oriented manufacturing demonstration enterprise
- AAA credit rating enterprise

Recognized centres

- Jiangsu Provincial Enterprise Technology Center
- Leading smart-manufacturing service organization in Jiangsu Province
- Southern Jiangsu National Independent Innovation Demonstration Zone (construction unit)
- Suzhou Chip Resistor Automation Equipment Research Center
- Kunshan science and technology R&D institution

Patents

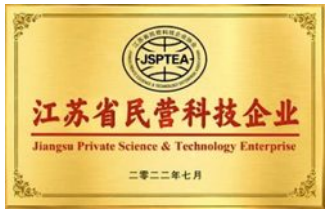
- 64 invention patents
- 47 utility model patents
- 2 design patents
- 16 software copyrights

Certification

- ISO 9001
- CE certification
- Registered trademark





























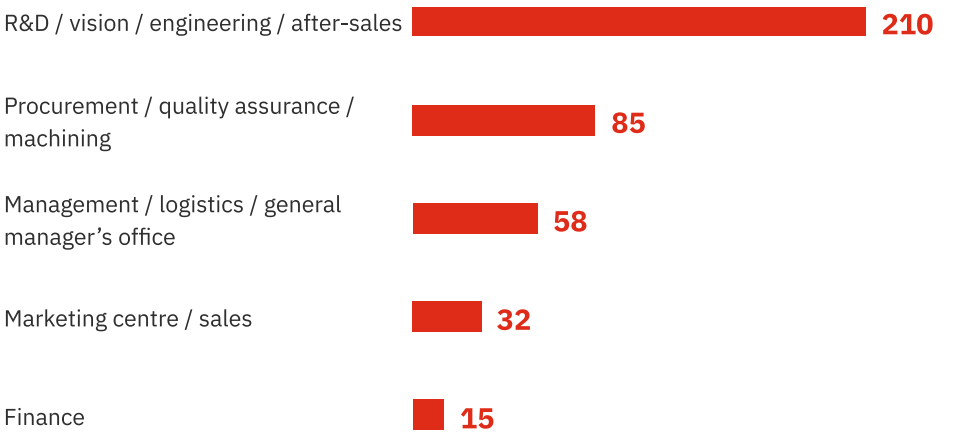
ORGANIZATIONAL STRUCTURE

400
employees in total

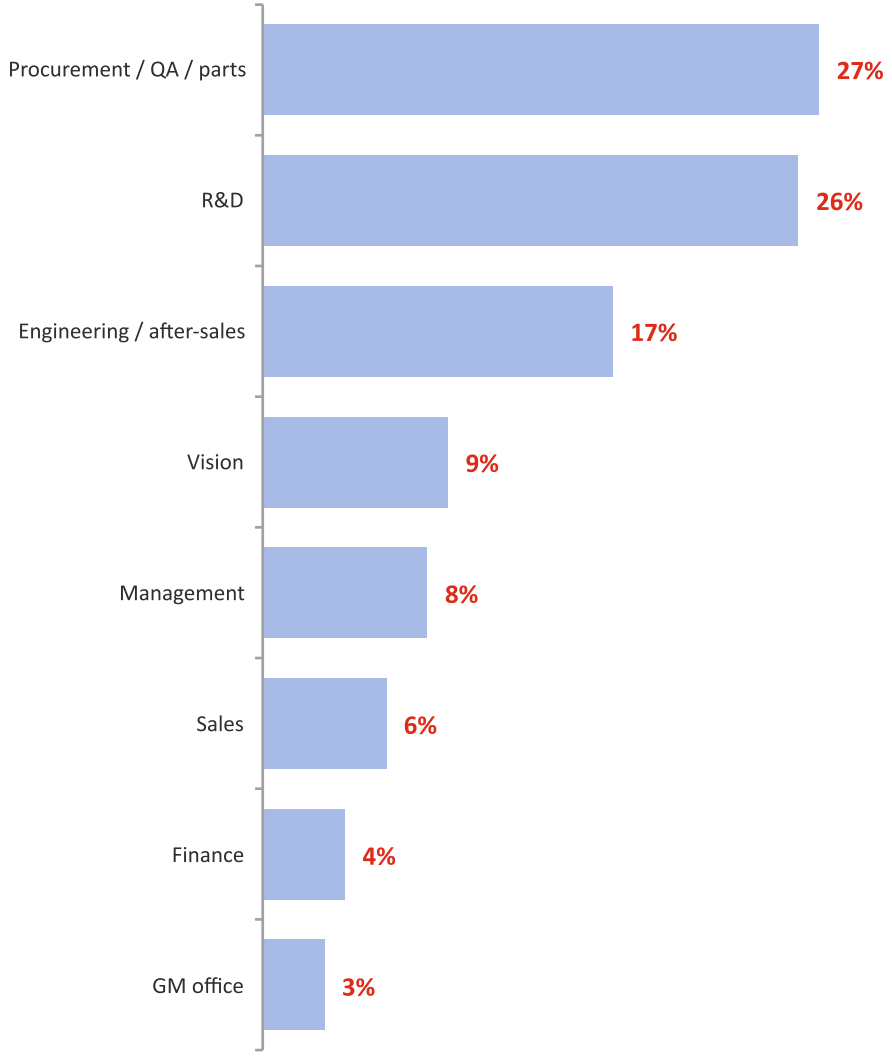
210
technical staff

52%
share of technical staff

Personnel distribution (people)



Share of employees by function



IN-HOUSE MACHINING

Our own machine shop for key parts and spare parts

Machine	Qty
CNC machining centre	11
CNC engraving and milling machine	9
Tapping machine	5
Lathe	5
Milling machine	6
Grinding machine	6
Bench grinder	2
Universal tool grinder	1
Side milling and chamfering machine	1
Angle grinder	1
Bench drill	1

Machine	Qty
Wire cutting machine	4
Wire cutting machine tool	3
High-speed wire EDM machine	1
Low-speed wire EDM machine	1
EDM spark machine	1
CNC punching machine	1
Thread tapping machine	1
Sandblasting machine	1
Ultrasonic cleaner	1
Ceramic removal machine	1

- With our own machining centre we control delivery schedules and fully support customization to customer drawings, including machining of consumables.
- High precision: medium-speed wire EDM reaches a machining accuracy of ±0.01 mm.

PRODUCT CATALOGUE

Equipment for every stage of passive component production

01

pp. 11–15

Resistor manufacturing

- Thick-film resistors
- Thin-film resistors
- Alloy (foil) resistors

02

pp. 16–21

Capacitor manufacturing

- Multilayer ceramic capacitors (MLCC)
- Tantalum capacitors

03

pp. 22–27

Inductor manufacturing

- Integrated molded inductors
- Multilayer chip inductors (MLCI)

04

p. 28

Smart manufacturing

- Intelligent production systems
- Intelligent warehousing

05

p. 29

Customized / non-standard equipment

- For industries such as healthcare, automotive and civil explosives

06

pp. 30–31

High-precision components and consumables

- Spare parts for resistor lines
- Spare parts for taping machines

CHIP RESISTORS: THICK / THIN FILM

Manufacturing process: main equipment



01 Printing



02 Sintering



03 Laser trimming



04 Marking



05 Substrate AOI inspection inspection



06 1st breaking (bar)



07 Vacuum coating (sputtering)



08 2nd breaking (chip)



09 Electroplating



10 Magnetic separation



11 Six-side appearance inspection



12 Test & taping

CHIP RESISTORS: THICK / THIN FILM

Related equipment



01005/0201 25-inch high-precision printing machine



Material receiving / feeding machine



0201/01005 (imperial) arm-swinging stacker



Bar breaking machine



Vibratory-bowl chip breaking machine



End-face silvering machine



White-edge sorting machine



Laser-cut appearance inspection machine

ALLOY (FOIL) RESISTORS

Manufacturing process: equipment list

No.	Process step	Equipment	HOPO model	Supplier
1	Alloy foil pressing	Foil bonding machine	–	HOPO
2	Dry film lamination	Automatic film laminator	PP- TM80	HOPO
3	Exposure	Automatic exposure machine	R- EP5 0	HOPO
4	Developm ent	Development and etching machine	R- DE20	–
5	Rack plating	Electroplating line	Q - EP0 1	–
6	Dry film lamination	Automatic film laminator	PP- TM80	HOPO
7	Exposure	Automatic exposure machine	R- EP5 0	HOPO
8	Developm ent	Development and etching machine	R- DE20	–
9	Etc hing	Development and etching machine	R- DE20	–
10	Dry film stripping	Development and etching machine	R- DE20	–
11	Laser trimming	Laser trimming machine	LTR42 0H	Partner
12	Front electrode printing	Printing press	R- P2 5S	HOPO
13	Protective layer printing	Printing press	R- P2 5S	HOPO
14	Marking (code printing)	Printing press	R- P2 5S	HOPO
15	Sintering	Precision oven	Q - K 450	HOPO
16	Bar breaking	Bar breaking machine	R- BB1 80	HOPO
17	Sputtering	Sputtering machine	R- VS6 50- 3Z	HOPO
18	Chip breaking	Chip breaking machine	R- CB18 0	HOPO
19	Barrel plating	Electroplating line	–	–
20	Test & taping	Test & taping machine · reeling machine	HSQ-3500 · Q-RL3000	HOPO

HOPO supplied by HOPO **Partner** made with a cooperating manufacturer – not supplied by HOPO

ALLOY (FOIL) RESISTORS

Manufacturing process: main equipment, steps 1–12



01 Alloy foil pressing



02 Dry film lamination



03 Exposure



04 Development



05 Rack plating



06 Dry film lamination



07 Exposure



08 Development



09 Etching



10 Dry film stripping



11 Laser trimming



12 Protective layer printing (G2)

ALLOY (FOIL) RESISTORS

Manufacturing process: main equipment, steps 13–19



13 Marking (code printing)



14 Sintering



15 1st breaking (bar)



16 Sputtering



17 2nd breaking (chip)



18 Barrel plating



19 Test & taping

CAPACITORS: MLCC

Manufacturing process: equipment list

No.	Process step	Main equipment	Supplier	Auxiliary equipment by HOPO
1	Batching	Ball mill, bead mill, high-pressure homogenizer	Partner	Mixing tank, slurry rolling rack
2	Tape casting	Casting machine	Partner	
3	Electrode printing	Printing machine	HOPO	
4	Stac king	Stacking machine	HOPO	Electrode layer offset inspection machine, all-in-one four-way bar machine
5	Lam ination	Hydraulic press	–	Vacuum packaging machine, hydraulic press loading and unloading
6	Cutting	Cutting machine	HOPO	Hot-melt glue foaming roller machine, screening machine, hot and cold glue pasting machine
7	Binder burn-out	Binder burn-out oven (400 °C)	–	BBO automatic spreading machine, MBK loading and unloading
8	Sintering	High-temperature furnace (1,100–1,300 °C)	–	
9	Chamfering	Tumbling mill	–	Vibrating screen machine
10	Termination dipping	Dipping machine	HOPO	Copper paste rolling rack
11	Termination firing	Firing furnace	–	
12	Electroplating	Centrifugal electroplating machine	HOPO	Steel ball and chip sorting machine, steel ball irregular-shape screening machine
13	Testing	Test machine	–	
14	Appearance inspection	Six-side appearance inspection machine	HOPO	Vibrating screen machine
15	Test & taping	Measuring and taping machine + reeling m ac hine	HOPO	Vibrating screen machine, automatic reel changer

HOPO supplied by HOPO **Partner** made with a cooperating manufacturer – not supplied by HOPO

CAPACITORS: MLCC

Manufacturing process: main equipment



01 Ball milling



02 Slurry mixing



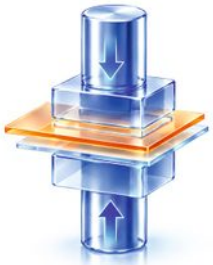
03 Tape casting



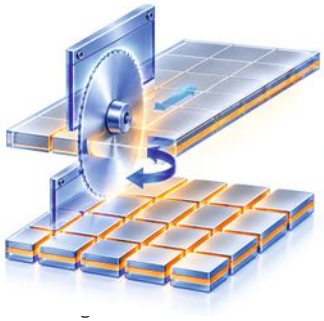
04 Screen printing



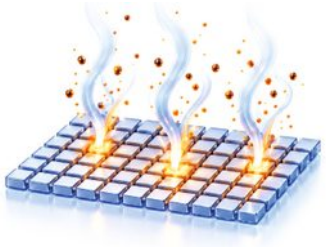
05 Stacking



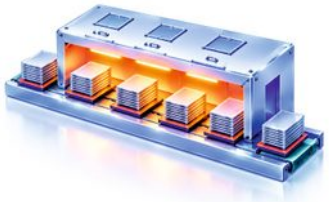
06 Lamination



(



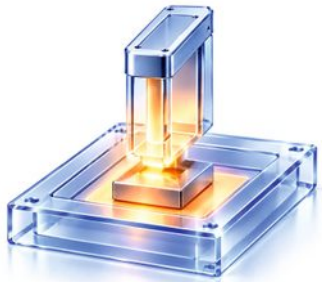
08 Binder burn-out



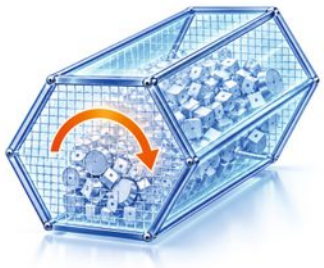
09 High-temperature sintering



10 Chamfering



11 Copper termination & firing



12 Electroplating



13 Testing



14 Appearance inspection



15 Packaging

CAPACITORS: MLCC

Other equipment



One-to-four slitting machine



Vacuum packaging machine



Edge trimmer



Automatic spreading machine



MBK furnace loading and unloading machine

CAPACITORS: TANTALUM

Manufacturing process: equipment list

No.	Process step	Equip ment	Supplier
1	Powder mixing	Powder mixing machine	HOPO
2	Pressing	Forming machine	HOPO
3	Sintering	Vacuum debinding furnace, high-vacuum sintering furnace	–
4	Spot welding	Steel bar cutting machine, high-speed spot welding machine, silicone coating machine	HOPO
5	Form ation	Acid pickling, rinsing, soaking, three-stage boiling, formation machine, oven, heat treatment	HOPO
6	Polym erization	Pre-coating, internal oxidation, monomer and external oxidant impregnation	HOPO
7	Carbon and silver coating	Graphite impregnation machine, silver paste impregnation machine, oven	HOPO
8	Frame welding	Laser stripping machine, bonding machine, frame strip impregnation machine	HOPO
9	Molding	Embossing machine, sandblasting machine	–
10	Marking	Marking machine, cutting machine	HOPO
11	Leakage current pre-test	Electrical performance testing machine	HOPO
12	Aging	Aging machine	–
13	Lead forming	Bending machine	HOPO
14	Appearance inspection	Six-side appearance inspection machine	HOPO
15	Test & taping	Test & taping machine	HOPO
16	Auxiliary equipment	Formation frames, transfer carts, aging carriers, electrical test carriers	HOPO

HOPO supplied by HOPO **Partner** made with a cooperating manufacturer – not supplied by HOPO

CAPACITORS: TANTALUM

Manufacturing process: main equipment



01 Powder mixing



02 Pressing



03 Sintering



04 Spot welding



05 Frame welding



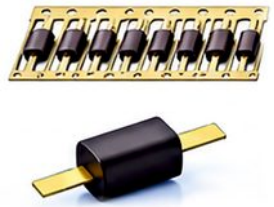
06 Carbon and silver coating coating



07 Polymerization



08 Formation



09 Molding



10 Marking



11 Leakage current pre-test



12 Aging

CAPACITORS: TANTALUM

Other equipment



Steel bar cutting machine



Silicone coating machine



Leaching machine



Three-stage boiling and washing machine



Formation machine



Ion exchanger



High-concentration solution impregnation machine



Reverse bubble washing machine



Cutting machine



Corner-cutting and bending machine



Appearance inspection machine



Coating furnace



Tunnel drying furnace



Laser stripping machine



Frame strip impregnation machine

INDUCTORS: INTEGRATED MOLDING

Manufacturing process: equipment list

Process step	Equipment	Supplier
1 Cold pressing	T-core powder forming machine	–
	Spreader	–
	Molding and curing oven	–
	Material receiving and grinding	–
2 Winding	Single-axis winding machine	HOPO
	Dual-axis winding machine	HOPO
	Four-axis winding machine	HOPO
	Eight-axis winding machine	HOPO
	Flat-wire horizontal winding machine	HOPO
	Round-wire winding machine	HOPO
3 Hot pressing	Fill-core machine	HOPO
	Flexible vision-guided implanting machine	HOPO
	Powder filling machine	HOPO
	Vision inspection system	HOPO
	Servo hot press	HOPO
	Hot pressing automatic connection line	HOPO
	Hot pressing automation unit	HOPO

Process step	Equipment	Supplier
4 Barrel spray coating	Soaking and spin-drying machine	HOPO
	Hot barrel spray coating machine	HOPO
5 Paint stripping	Automatic feeding machine	HOPO
	Laser paint stripping machine	HOPO
	Double-head laser paint stripping machine	HOPO
	L-shaped laser paint stripping machine	HOPO
6 Screen printing	Automatic screen printing machine	HOPO
	Printing machine	HOPO
	Tunnel drying furnace	HOPO
	Material receiving machine	HOPO
7 Electroplating	Electroplating line	–
	Pre-and post-treatment line	–
8 Appearance	Six-side appearance inspection machine	HOPO
9 Test & taping	Withstand-voltage tester	HOPO
	Test & taping machine	HOPO
	Tape labelling machine	HOPO

HOPO supplied by HOPO **Partner** made with a cooperating manufacturer **–** not supplied by HOPO

INDUCTORS: INTEGRATED MOLDING

Manufacturing process: main equipment



01 Cold pressing



02 Winding



03 Hot pressing and forming



04 Barrel spray coating



05 Paint stripping



06 Screen printing



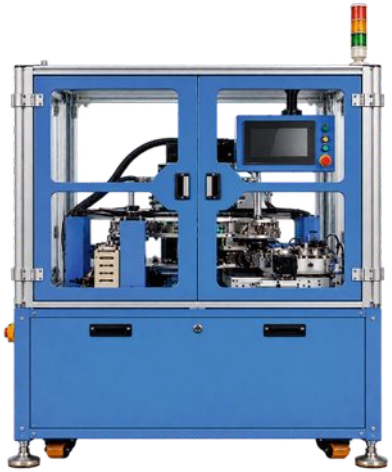
07 Electroplating



08 Test & taping

INDUCTORS: INTEGRATED MOLDING

Related equipment



Fill-core machine



Dual-axis winding machine



Eight-axis winding machine



Soaking and spin-drying machine



Six-side inspection machine



Withstand-voltage testing machine



Double-head laser paint stripping machine machine



Barrel spray coating machine

INDUCTORS: MLCI

Manufacturing process: equipment list

No.	Process step	Main equipment	Supplier	Auxiliary equipment by HOPO
1	Batching	Ball mill, bead mill, high-pressure homogenizer	Partner	Mixing tank, slurry rolling rack
2	Tape casting	Casting machine	Partner	Casting machine for thicknesses above 10 µm
3	Punching	Laser punching machine	–	Edge cutting machine
4	Printing	Printing machine	HOPO	
5	Stac king	Stacking machine	HOPO	
6	Lam ination	Hydraulic press	–	Vacuum packaging machine
7	Cutting	Cutting machine	HOPO	Hot-melt glue foaming roller machine, small long-part screening machine, hot and cold glue applicator, edge trimming machine
8	Binder burn-out	Binder burn-out furnace (400 °C)	–	BBO automatic spreading machine, MBK loading and unloading
9	Sintering	High-temperature furnace (1,100–1,300 °C)	–	
10	Chamfering	Tumbling mill	–	Vibrating screen machine
11	Termination	End-sealing machine	HOPO	Copper paste rolling rack
12	Termination firing	Firing furnace	–	
13	Electroplating	Centrifugal electroplating machine	HOPO	Steel ball and chip sorting machine, steel ball irregular-shape screening m ac hine
14	Testing	Test machine	–	
15	Appearance inspection	Six-side appearance inspection machine	HOPO	
16	Test & taping	Measuring and taping machine + reeling machine	HOPO	Vibrating screen machine, automatic reel changer

HOPO supplied by HOPO **Partner** made with a cooperating manufacturer **–** not supplied by HOPO

INDUCTORS: MLCI

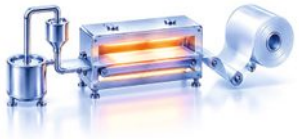
Manufacturing process: main equipment



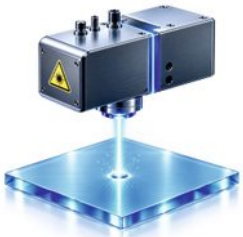
01 Ball milling



02 Slurry mixing



03 Tape casting



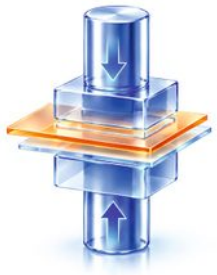
04 Laser drilling



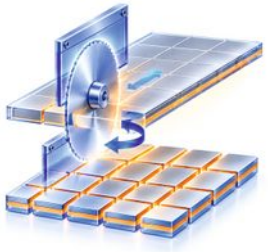
05 Screen printing



06 Stacking



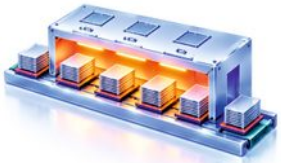
07 Lamination



08 Cutting



09 Binder burn-out



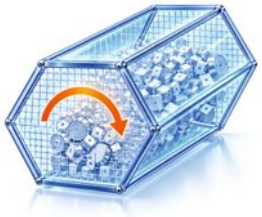
10 High-temperature sintering



11 Chamfering



12 Copper termination & firing



13 Electroplating



14 Testing



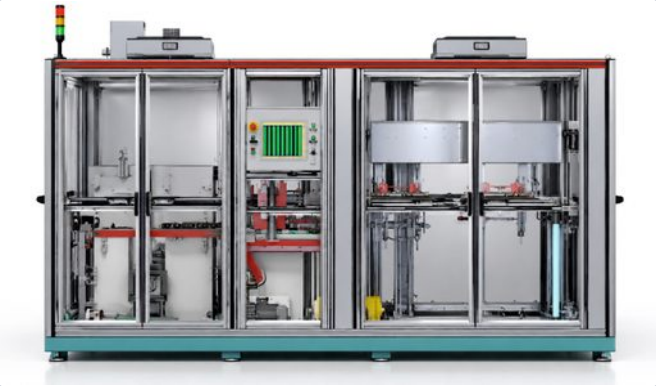
15 Appearance inspection



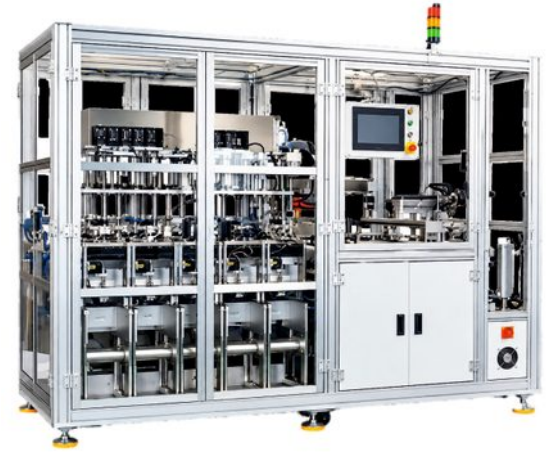
16 Packaging

INDUCTORS: MLCI

Other equipment



Cutting machine



Vacuum packaging machine



Edge trimmer



Spreader



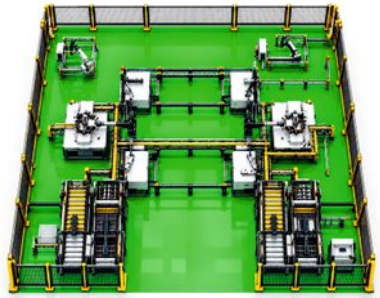
Furnace loading and unloading machine

SMART AND INTELLIGENT MANUFACTURING

Production and warehousing systems for electronics plants

Intelligent production system in the factory



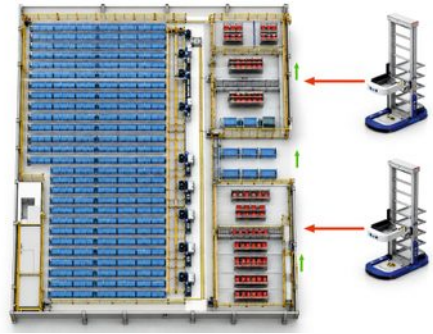




Intelligent warehousing system



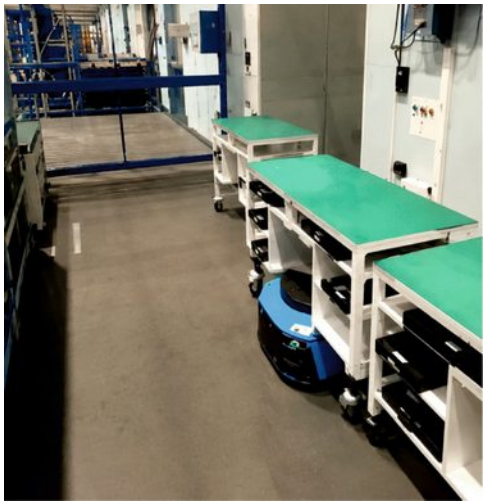
Multi-tier storage racks with material



Multi-layer material box AGV



AGV floor transport



AGV floor transport

CUSTOMIZED EQUIPMENT

Non-standard machines built to the customer's task



PT ceramic spot welding machine



Sleeve inspection equipment



Automatic scraper machine



Automatic batching machine



TCR testing machine



Aging machine

SPARE PARTS: RESISTOR INDUSTRY

Common spare parts and consumables



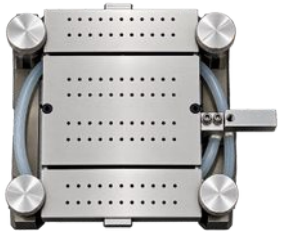
Magazine



Ceramic magazine



Hollow-out magazine



Printing platform



Ceramic positioning wheel



Sponge wheel



01005 jig



89/189 mm jig



Sintering jig



Cleaning wheel



Cleaning film roll



Cleaning tape



Fine screen



Breaking sieve



Lower sieve



Transparent belt



Vacuum suction wheel



Belt

SPARE PARTS: TAPING MACHINES

Common spare parts for test & taping machines



Index table



Needle wheel



Soldering iron



Feeding separation needle



Probe



Insertion guide rail



Probe guide block



Probe fixture



Discharge outlet



Left and right separation pieces



Feeding guide plate



Turntable guide plate



Probe arm



CCD lower lens base



Feeding base



Inspection unit cover plate

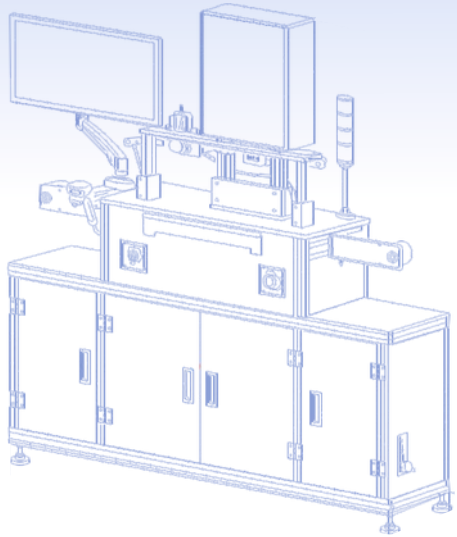


CCD lower lens



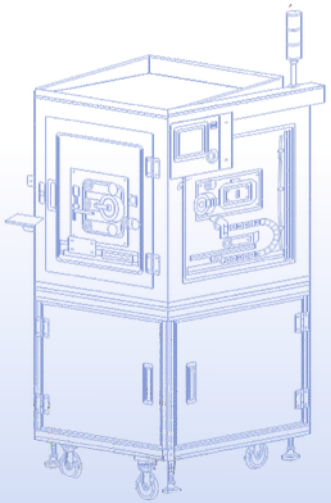
Feeding and pressing block

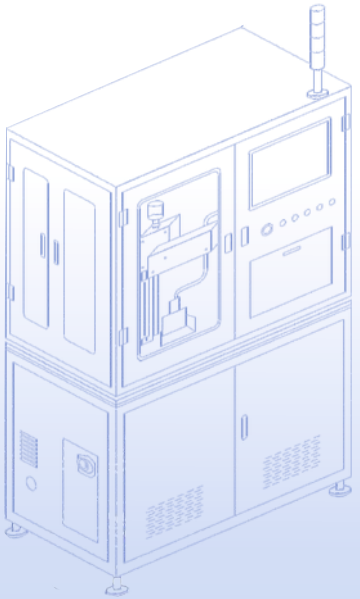
THANK YOU FOR YOUR INTEREST



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