

★ National After sales Service Center



EXE 亿协

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EXE 亿协



**FOCUS ON PCBA Separator Manufacturing Process
SOLUTION PROVIDER**



COMPANY PROFILE

EXE Automation is a state-level high-tech enterprise focusing on the R&D, production, sales and service of high-end PCBA Automatic Milling Cutter Separator. The company has a senior R&D design team and a perfect after-sales service system, and has been recognized by top electronic manufactures at home and abroad.

EXE PCBA Router Machine equipment is mainly used for PCBA cutting and splitting in the high-end manufacturing industry, and the application industry covers SMT, smart phones, smart wearables, WiFi modules, 5G modules, tablet computers, automotive electronics, smart home, medical equipment, aerospace, military products, home appliances etc.

EXE adheres to the business philosophy of "quality first, service first", is proactive and scientifically managed, and always adheres to the world's synchronized technology, internationally certified quality, and innovative spirit of excellence to create the world's top high-end PCBA Automatic Milling Cutter Separator manufacturer.



COMPANY CULTURE

Core positioning

With professional products and dedicated service, we will enhance the competitive advantage of customers and achieve "co-prosperity" with integrity!

Corporate values

Based on professional technologies, provide new products for customers to provide the basis for flexible and changeable process solutions!

Satisfy demand with technology and satisfy customers with service

We always strive to be the technological leader in the PCBA sub board industry!

EXE 880 Offline PCBA Depaneling Machine



The Lower dust suction spindle structure adopts high-speed imported spindle for cutting, and the milling cutter detection system monitors the milling cutter status in real time.



Adopting a high-precision marble working platform, the equipment has strong stability and the platform operates with high precision.

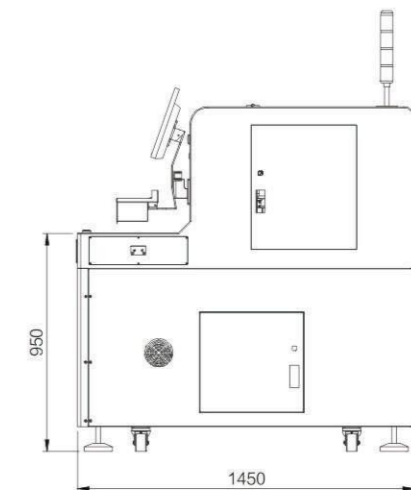
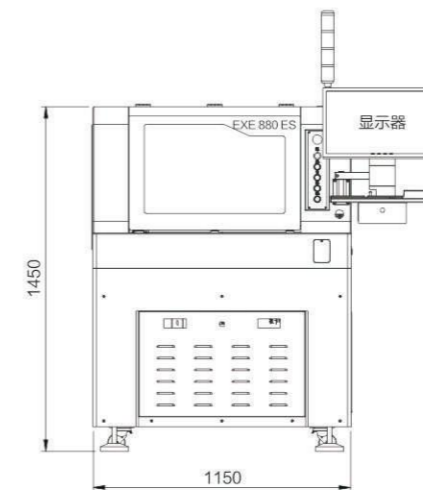


Dual worktable structure, using dual sliding rails and cylinder dual platforms for operation, and can also be converted from dual platforms to single platform for use, increasing the working size.

Product characteristics

- The worktable is a marble double worktable, with strong machine stability and higher efficiency in dividing boards. (Dual work surfaces can be merged into a single work surface for use).
- The dual work surfaces can hold dual fixtures and cut two different products at the same time.
- Adopting high-precision grinding screws and sliding rails to ensure the cutting precision of the equipment.
- The motion is to move in the X-axis and Y-axis directions, and the processing table is fixed.
- The cutting mechanism system uses X-Y-Z three-axis AC servo robotic arms with stable performance.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection.
- Equipped with universal fixtures locate PIN, and be compatible with other brands of tooling fixtures, to reduce subsequent costs.
- Adopting high-speed spindle imported from Japan (Max: 60,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	Standard Size: 300x350mm
	Widening size: 350x450mm
PCB thickness	Widening and Enlarging size: 450x 500mm
	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Japan NSK Spindle 60,000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
Ionizing Air Gun	Ion equilibrium pressure ≤ earth 15V Complies with ESD 12M09158A58
PCB support way	Multi support , special fixture
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

04 Function

	Straight lines, Semicircles, Circular Arc
	Free menu copy from L to R, and R to L
Cutting Function	Rotate copy
	Matrix copy
	Automatic compensation

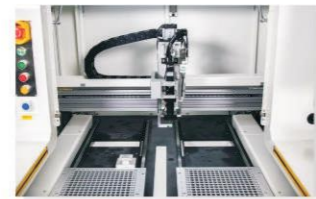
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 1.5KW
Air supply	4-6kg/cm ²
Working temperature	-20°C ~ +45°C
Working humidity	30% - 60%
The machine size	Standard size: 1150mm x 1450mm x 1450mm
	Widening size: 1252mm x 1640mm x 1516mm
	Widening and Enlarging size: 1455mm x 1638mm x 1468mm
weight	ES(860kg) EW(890kg) EX(1070kg)

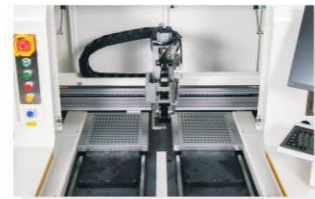
EXE 880F Offline PCBA Depaneling Machine



Dual Y-axis worktable structure, the left and right worktables are driven by servo motors and screw guides, with fast processing speed, high efficiency, strong stability, and greatly improved processing.



The PCB pick-and-place area of the dual Y-axis workbench is equipped with grating safety facilities to avoid manual errors and comply with public safety requirements.

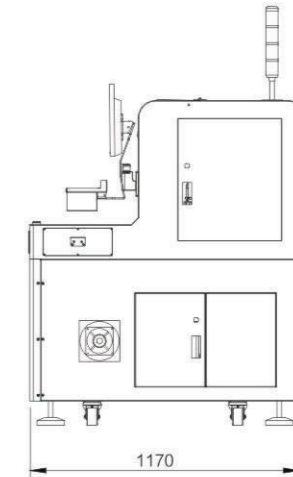
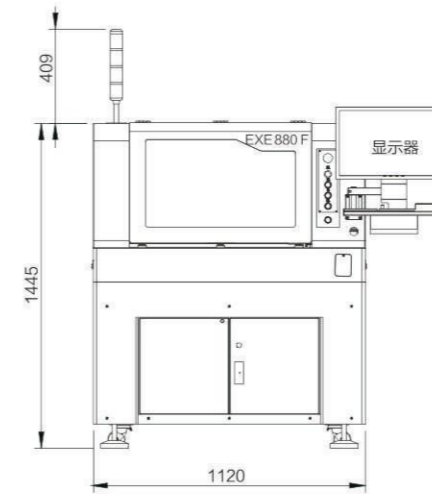


Adopting high-precision marble working platform, the equipment has strong stability and the platform operation accuracy/precision.

Product characteristics

- The worktable is a marble double worktable, with high platform precision, strong stability and higher efficiency in dividing boards. (Dual work surfaces can be merged into a single work surface for use).
- The dual work surfaces can hold dual fixtures and cut two different products at the same time.
- Dual Y-axis worktable structure, the left and right worktables are driven by servo motors and screw guides, with fast processing speed, high efficiency, strong stability, and greatly improved processing.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The PCB pick-and-place area of the dual Y-axis workbench is equipped with grating safety facilities to avoid manual misoperation and comply with public safety requirements.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection.
- Equipped with universal fixtures locate PIN, and be compatible with other brands of tooling fixtures, to reduce subsequent costs.
- Adopting high-speed spindle imported from Japan (Max: 60,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	Standard Size: 300x350mm
	Widening size: 350x450mm
PCB thickness	Widening and Enlarging size: 450x 500mm
	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Japan NSK Spindle 60,000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
Ionizing Air Gun	Ion equilibrium pressure ≤ earth 15V Complies with ESD 12M09158A58
PCB support way	Multi support, special fixture
XYZ Drive way	AC Servo

03 Image

Mark types	The standard shape
	Circular
	Square

04 Function

Cutting Function	Straight lines, Semicircles, Circular Arc
	Free menu copy from L to R, and R to L
	Rotate copy
	Matrix copy
	Automatic compensation

05 Equipment

Power	AC : 220V ± 10% 50/60HZ 1.5KW
Air supply	4-6kg/cm ²
Working temperature	-20°C ~ +45°C
Working humidity	30% - 60%
The machine size	Standard size: 1120mm x 1170mm x 1445mm
	Widening size: 1280mm x 1370mm x 1450mm
	Widening and Enlarging size: 1478mm x 1498mm x 1488mm
weight	ES(690kg) EW(730kg) EX(900kg)

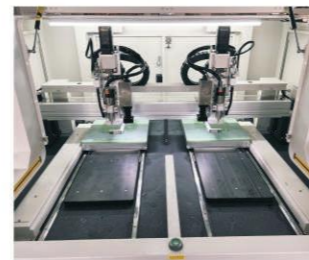
EXE 910 Offline dual-spindle PCBA Depaneling Machine



Adopting high-precision marble working platform, the equipment has strong stability and platform operation precision.



Independent dual spindle, dual working platform structure, improves cutting and splitting efficiency.

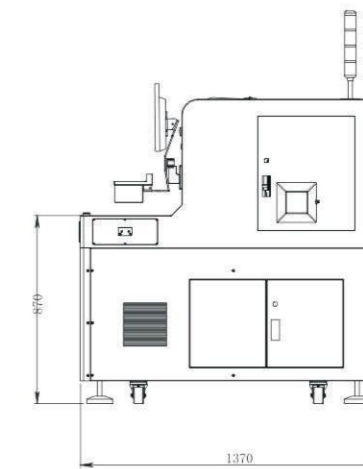
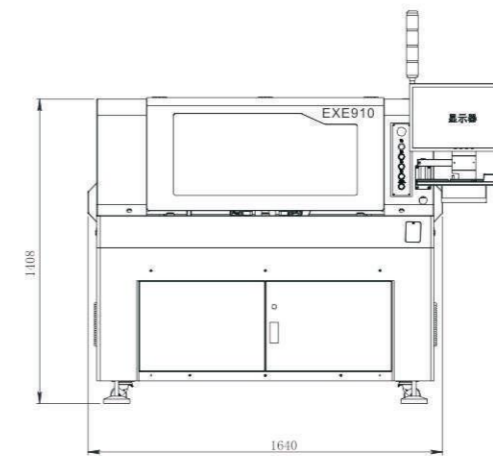


The PCBA pick-and-place area of the independent work platform is equipped with safety grating facilities to avoid manual errors and comply with public safety requirements.

Product characteristics

- Dual-spindle and dual-working platform structure design to improve cutting and splitting efficiency.
- The dual-working platform can be used to cut and split plates simultaneously with independent spindles, which greatly improves the productivity and efficiency of cutting and splitting plates.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent the operation from fooling.
- Adopting high-precision dust-proof module to ensure strong cutting stability and high precision.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection.
- Adopting high-speed spindle imported with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	Widening size : 350x450mm
	Widening and Enlarging size : 450x 500mm
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Japan NSK Spindle 60,000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
Ionizing Air Gun	Ion equilibrium pressure ≤ earth 15V Complies with ESD 12M09158A58
PCB support way	Multi support , special fixture
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

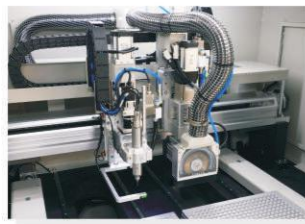
04 Function

	Straight lines, Semicircles, arcs
	Or so copies
Cutting Function	Rotate the copies
	Matrix copies
	Automatic compensation

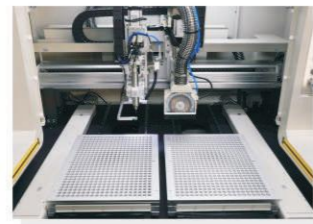
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 2KW
Air supply	4-6kg/cm ²
Working temperature	-20℃~ +45℃
Working humidity	30%~ 60%
The machine size	Widening size: 1640mm x 1370mm x 1408mm
	Widening and Enlarging size: 1758mm x 1500mm x 1438mm
weight	EW(800kg) EX(1200kg)

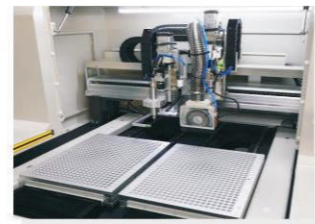
EXE 380 Offline Integrated milling and sawing Depaneling Machine



The milling cutter and saw blade are combined into one to solve the problem of cutting V-groove panels and stamp hole panels. The saw blade axis can be rotated 90 degrees for X,Y bidirectional V-groove panel cutting.



The double Y-axis working platform structure uses servo motors and screw guide rails for transmission on the left and right working platforms, which has fast processing speed, high production efficiency, strong stability, and greatly improves processing efficiency.

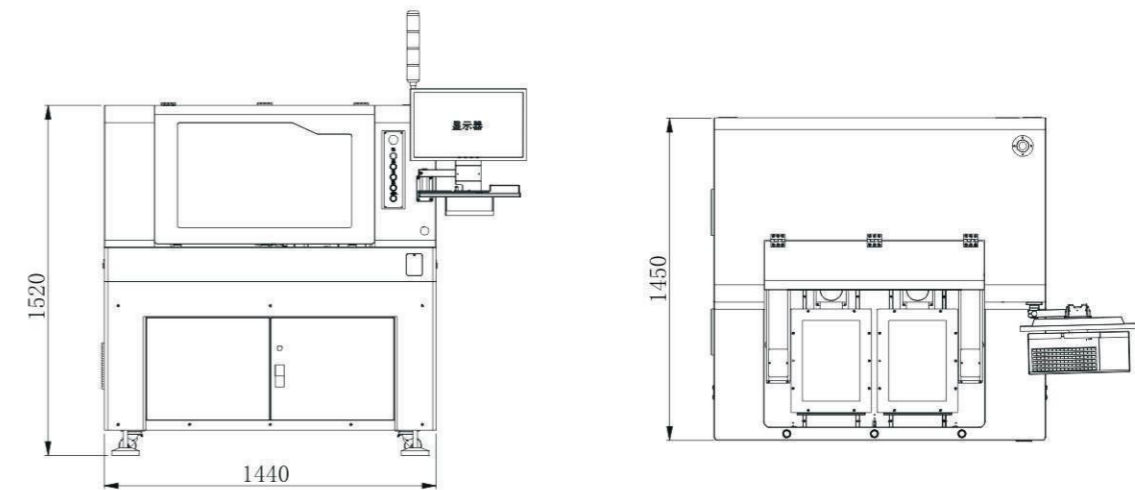


Adopting high-precision marble working platform, the equipment has strong stability and high platform operation accuracy.

Product characteristics

- The worktable is a marble double worktable, with strong machine stability and higher efficiency in dividing boards. (Dual work surfaces can be merged into a single work surface for use).
- The dual work surfaces can hold dual fixtures and cut two different products at the same time.
- Adopting high-precision grinding screws and sliding rails to ensure the cutting precision of the equipment.
- The motion is to move in the X-axis and Y-axis directions, and the processing table is fixed.
- The cutting mechanism system uses X-Y1-Y2-Z six-axis AC servo robotic arms with stable performance.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection.
- Equipped with universal fixtures locate PIN, and be compatible with other brands of tooling fixtures, to reduce subsequent costs.
- Adopting high-speed spindle imported from Japan (Max: 60,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	Standard Size: 350x450mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm
Size of the Saw blade	0.25-0.3mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Japan NSK Spindle 60,000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
Ionizing Air Gun	Ion equilibrium pressure ≤ earth 15V Complies with ESD 12M09158A58
PCB support way	Multi support, special fixture
XYZ Drive way	AC Servo

03 Image

Mark types	The standard shape Circular Square
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04 Function

Cutting Function	Straight lines, Semicircles, Arcs Or so copies Rotate the copies Matrix copies Automatic compensation
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05 Equipment

Power	AC : 220V ± 10% 50/60HZ 2KW
Air supply	4-6kg/cm ²
Working temperature	-20°C ~ +45°C
Working humidity	30% - 60%
The machine size	Standard size: 1440mm x 1450mm x 1520mm
weight	EW(890kg)

EXE 980 Offline lower-cutting PCBA Depaneling Machine



The bottom cutting method is used to separate the boards, which is aimed at products with PCBA high components facing upwards.



The bottom cutting brush is used for follow-up dust collection and the brush is used in sections with a floating structure milling cutter. It is standard equipped with a broken tool detection system.

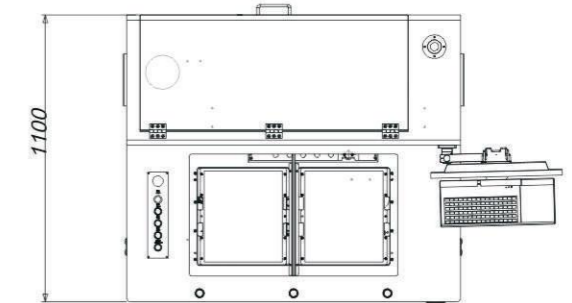
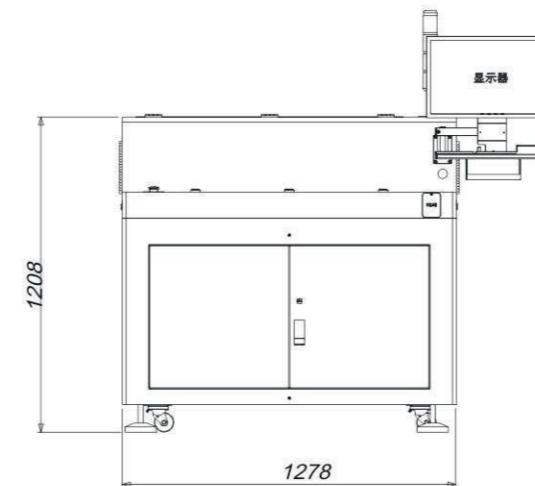


Equipped with a German-imported automatic tool-changing spindle, no manual tool changing is required. The dual working platforms can also be used as dual-large single platforms to solve the problem of panelizing large-size products. The imported high-speed spindle has small cutting stress, high precision, and increased panel cutting efficiency.

Product characteristics

- Dual work surfaces can be merged into a single work surface for use.
- The dual work surfaces can hold dual fixtures and cut two different products at the same time.
- Adopting high-precision grinding screws and sliding rails to ensure the cutting precision of the equipment.
- The motion is to move in the X-axis and Y-axis directions, and the processing table is fixed.
- The cutting mechanism system uses X-Y-Z three-axis AC servo robotic arms with stable performance.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection.
- Equipped with universal fixtures locate PIN, and be compatible with other brands of tooling fixtures, to reduce subsequent costs.
- Adopting automatic tool change high-speed spindle imported from Germany (Max: 10,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	± 0.05mm
Repeated precision	± 0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	Standard Size : 300x350mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Germany NSK Spindle 100000 RPM
Vacuuming way	Downdraft
Type of milling cutter	Right rotation
Ionizing Air Gun	Ion equilibrium pressure ≤ earth 15V Complies with ESD 12M09158A58
PCB support way	Special fixture
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

04 Function

	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
Cutting Function	Rotate copy
	Matrix copy
	Automatic compensation

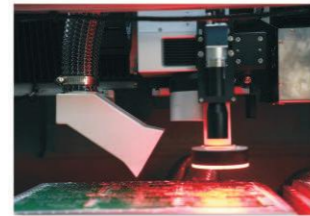
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 1.5KW
Air supply	4-6kg/cm ²
Working temperature	-20℃ ~ +45℃
Working humidity	30% - 60%
The machine size	Standard size: 1278mm x 1100mm x 1208mm
weight	EW(760kg)

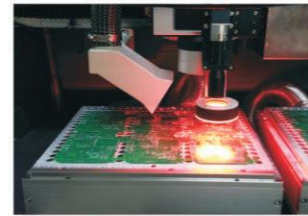
EXE 960 Offline Laser Depaneling Machine



Double Y-axis worktable structure, the left and right worktables are driven by servo motors and screw guides, with fast processing speed, high production efficiency, strong stability, and greatly improved processing.



Adopt imported precision laser, with high panel separation accuracy and fast production efficiency.

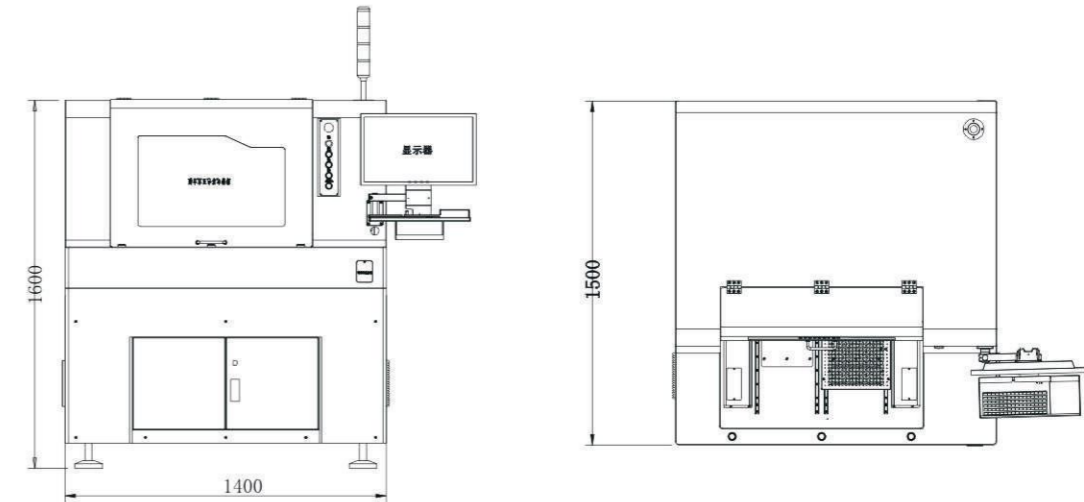


It adopts double-platform vacuum adsorption products, strong cutting product stability and automatic smoke absorption devices.

Product characteristics

- The worktable is a marble double worktable, with high platform precision, strong stability and higher efficiency in dividing boards.
- The dual work surfaces can hold dual fixtures and cut two different products at the same time.
- Dual Y-axis worktable structure, the left and right worktables are driven by servo motors and screw guides, with fast processing speed, high efficiency, strong stability, and greatly improved processing.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The PCB pick-and-place area of the dual Y-axis workbench is equipped with grating safety facilities to avoid manual misoperation and comply with public safety requirements.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting.
- Equipped with universal fixtures locate PIN, and be compatible with other brands of tooling fixtures, to reduce subsequent costs.
- Adopting imported laser cutting has low cutting stress and high precision, which increases cutting efficiency and improves product quality.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±25um
Repeated precision	±2um
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Mirror speed	≥8000mm/s
PCB Size	300x350mm (Customizable size)
Machinable material thickness	≤2mm
Laser power (W)	20W (Optional)
X/Y/Z resolution	1um

02 Control parameters

XYZ control mode	CNC Motion Controller
Platform structure	Marble
CCD light source	Circular light+coaxial light
Locate mode	CCD+Mark
Compensation for price increase and contraction	Linear compensation+single piece compensation
Cooling method	Water-cooling
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

04 Function

	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
Cutting Function	Rotate copy
	Matrix copy
	Automatic compensation

05 Equipment

Power	AC : 220V ± 10% 50/60HZ 1.5KW
Air supply	4-6kg/cm²
Working temprature	-20℃~+45℃
Working humidity	30%-60%
The machine size	Standard size: 1400mm x 1500mm x 1600mm
weight	EW(900kg)

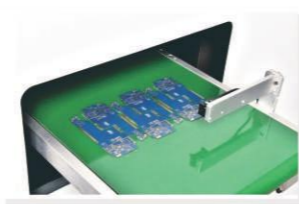
EXE 880AT Online PCBA Depaneling Machine



Precision modular independent vacuum cup pick-and place device, AC servo motor control, high efficiency and strong stability.



Stand PCBA product height measurement system ensures detection of product vacuum placement.

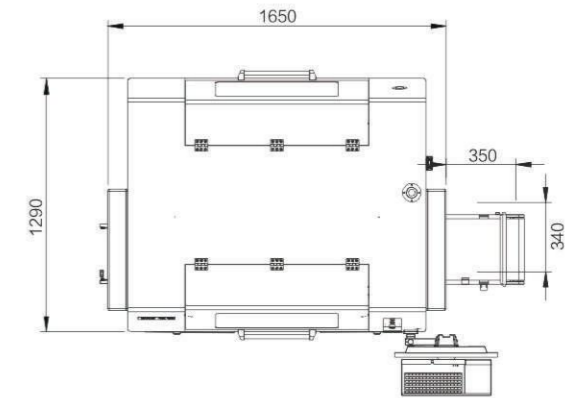
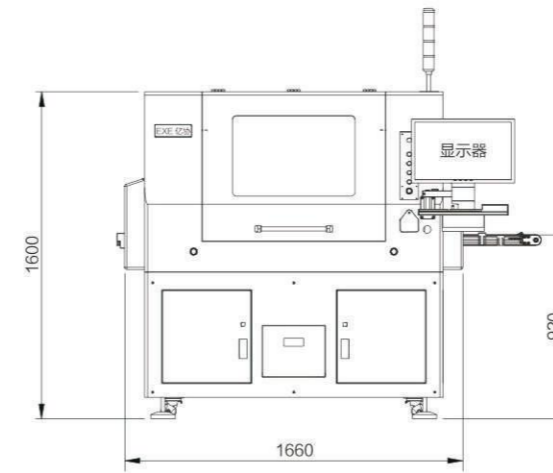


Standard anti-static conveyor belt is used to convey the material.

Product characteristics

- On-line milling cutter splitting machine, automatic board feeding, automatic cutting, and automatic board output greatly improve production efficiency and save labor costs, reflecting a fully automated production line.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent misoperation.
- X-axis and Y-axis adopt high-precision dust-poor modules to ensure strong cutting stability and high precision.
- The standard Japanese imported laser displacement sensor is used to detect whether PCBA products are place flat.
- Automatic material retrieval using vacuum suction cups for picking and placing transplanting.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection and sliding knife detection.
- Adopting automatic tool change high-speed spindle imported from Germany (Max: 10,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	350x300mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Cutting spindle	Germany NSK Spindle 100000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
PCB support way	Special fixture
XYZ Drive way	AC Servo

03 Image

Mark types	The standard shape
	Circular
	Square

04 Function

	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
Cutting Function	Rotate copy
	Matrix copy
	Automatic compensation

05 Equipment

Power	AC : 220V ± 10% 50/60HZ 4KW
Air supply	4-6kg/cm ²
Working temperature	-20°C ~ +45°C
Working humidity	30% - 60%
The machine size	1660mm x 1290mm x 1600mm
weight	EW(970kg)

EXE 910LAT Online Dual-spindle PCBA Depaneling Machine



The upper dust suction brush has a floating structure to increase the service life of the milling cutter.



Automatic tool changing system, realizing automation, saving time, reducing human factors, high precision and strong stability.

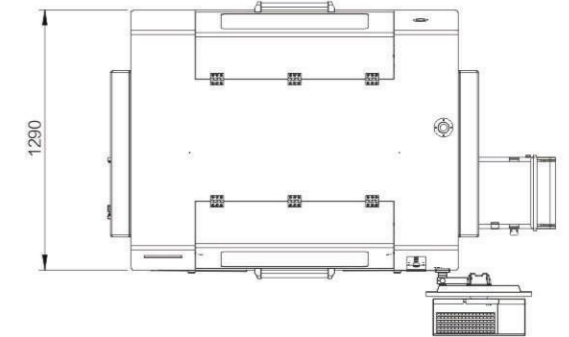
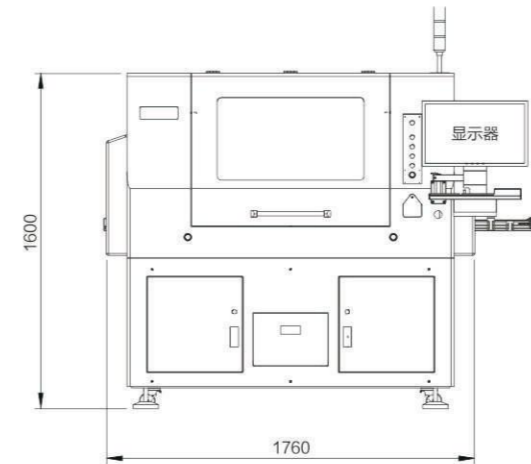


Dual-spindle and dual-working platform structure design to improve cutting and splitting efficiency.

Product characteristics

- On-line milling cutter Depaneling Machine, automatic board feeding, automatic cutting, and automatic board output greatly improve production efficiency and save labor costs, reflecting a fully automated production line.
- Dual-spindle and dual-working platform structure design to improve cutting and splitting efficiency.
- The dual-working platform can be used to cut and split plates simultaneously with independent spindles, which greatly improves the productivity and efficiency of cutting and splitting plates.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent the misoperation.
- X-axis and Y-axis adopt high-precision dust-poor modules to ensure strong cutting stability and high precision.
- The standard Japanese imported laser displacement sensor is used to detect whether PCBA products are place flat.
- Automatic material retrieval using vacuum suction cups for picking and placing transplanting.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection and sliding knife detection.
- Adopting automatic tool change high-speed spindle imported from Germany (Max: 10,000RPM), with small cutting stress, high precision and increased cutting efficiency.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	350x300mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Cutting spindle	Germany NSK Spindle 100000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
PCB support way	Special fixture
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

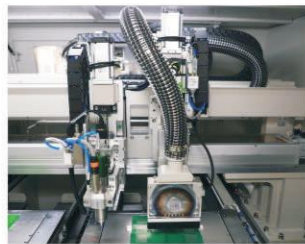
04 Function

	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
Cutting Funtion	Rotate copy
	Matrix copy
	Automatic compensation

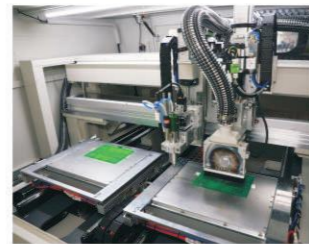
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 4.5KW
Air supply	4-6kg/cm ²
Working temprature	-20℃ ~ +45℃
Working humidity	30% - 60%
The machine size	1760mm x 1290mm x 1600mm
weight	1170kg

EXE 380AT Online Integrated and sawing Depaneling Machine



Adopting a German automatic tool - changing spindle, it has low cutting stress, high precision, and is integrated with the saw blade to solve the V - groove panel cutting problem.



The combination of dual working platforms and an automatic cover plate device ensures strong stability and high precision in cutting and panel splitting, enabling automated operations.

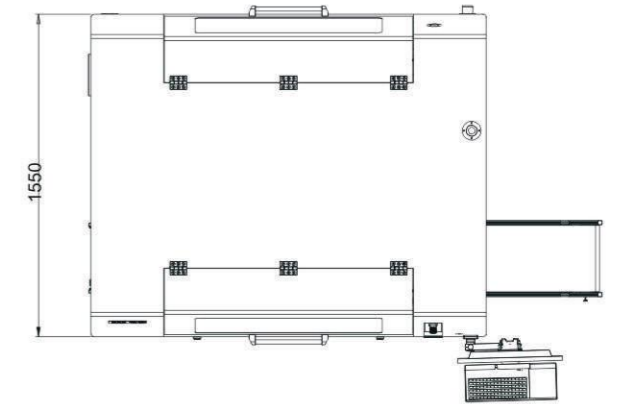
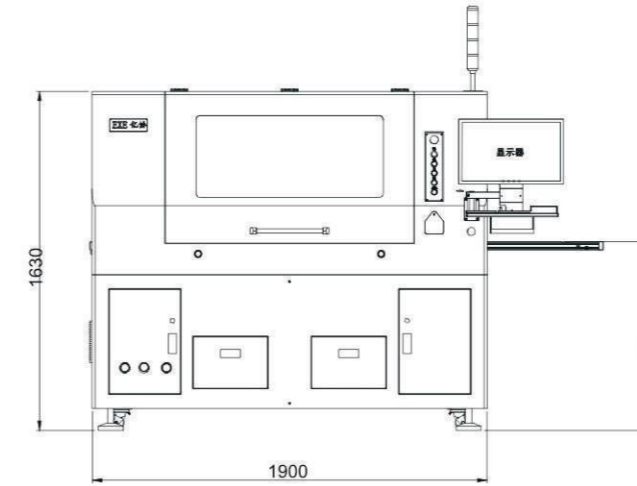


Precision modular independent vacuum cup pick-and-place device, AC servo motor control, high efficiency and strong stability.

Product characteristics

- Online Integrated milling and sawing Depaneling Machine, automatic board feeding, automatic cutting, and automatic board output greatly improve production efficiency and save labor costs, reflecting a fully automated production line.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent misoperation.
- X-axis and Y-axis adopt high-precision dust-poor modules to ensure strong cutting stability and high precision.
- The standard Japanese imported laser displacement sensor is used to detect whether PCBA products are place flat.
- Automatic material retrieval using vacuum suction cups for picking and placing transplanting.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection and sliding knife detection.
- Adopting automatic tool change high-speed spindle imported from Sycotec Germany (Max: 60,000RPM), with small cutting stress, high precision and increased cutting efficiency, and automatic tool changing to achieve full automation.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	± 0.05mm
Repeated precision	± 0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	350x300mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm
Size of the Saw blade	0.25-0.3mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Max speed of spindle motor	Germany NSK Spindle 10,000 RPM
Vacuuming way	Updraft/downdraft (Free option)
Type of milling cutter	Right-handed rotation milling cutter for up per dust collect type Left-handed rotation milling cutter for lower dust collect type
PCB support way	Special fixture
XYZ Drive way	AC Servo

03 Image

Mark types	The standard shape Circular Square
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04 Function

Cutting Function	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
	Rotate copy
	Matrix copy
	Automatic compensation

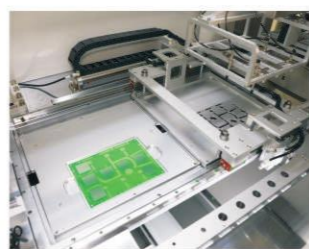
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 4KW
Air supply	4-6kg/cm ²
Working temprature	-20℃~ +45℃
Working humidity	30% - 60%
The machine size	1900mm x 1550mm x 15630mm
weight	1160kg

EXE 980AT Online lower-cutting PCBA Depaneling Machine



Precision modular independent vacuum cup pick-and-place device, AC servo motor control, high efficiency and strong stability.



Dual-fixture single cover plate working platform. The fixture cover plates move left and right for interchangeable use, saving fixture costs and improving production efficiency.

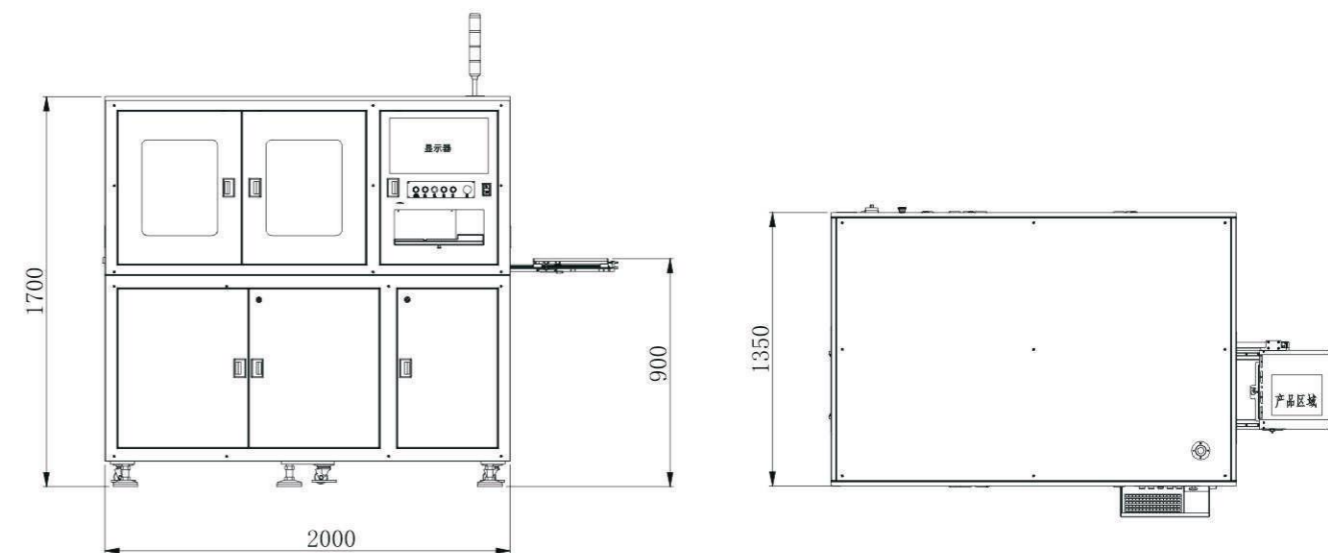


Adopt a precision modular gantry structure and be equipped with an imported German automatic tool-changing spindle, eliminating the need for manual tool changing.

Product characteristics

- Online lower-cutting Depaneling Machine, automatic board feeding, automatic cutting, and automatic board output greatly improve production efficiency and save labor costs, reflecting a fully automated production line.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent misoperation.
- X-axis and Y-axis adopt high-precision dust-poor modules to ensure strong cutting stability and high precision.
- The standard Japanese imported laser displacement sensor is used to detect whether PCBA products are place flat.
- Automatic material retrieval using vacuum suction cups for picking and placing transplanting.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- It has the function of straight lines, arcs and irregular edge cutting, realizes the function of broken knife detection and sliding knife detection.
- Adopting automatic tool change high-speed spindle imported from Sycotec Germany (Max: 10,000RPM), with small cutting stress, high precision and increased cutting efficiency, and automatic tool changing to achieve full automation.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	±0.05mm
Repeated precision	±0.02mm
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Cutting speed	0-100mm/s
PCB Size	350x300mm (Customizable size)
PCB thickness	0.3-6mm
Size of the milling	0.8-3.0mm

02 Control parameters

XYZ control mode	CNC Motion Controller
Cutting spindle	Germany NSK Spindle 100000 RPM
Vacuuming way	Downdraft
Type of milling cutter	Right rotation
PCB support way	Special fixture
XYZ Drive way	AC Servo

03 Image

Mark types	The standard shape
	Circular
	Square

04 Function

Cutting Function	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
	Rotate copy
	Matrix copy
	Automatic compensation

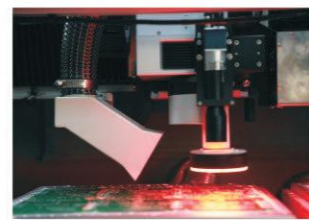
05 Equipment

Power	AC : 220V ± 10% 50/60HZ 4KW
Air supply	4-6kg/cm ²
Working temperature	-20°C ~ +45°C
Working humidity	30% - 60%
The machine size	2000mm x 1350mm x 1700mm
weight	7970kg

EXE 960AT Online Laser Depaneling Machine



Adopt precision modular independent vacuum cup placement device, AC servo motor control, high efficiency and strong stability.



Adopt imported precision laser, with high panel separation accuracy and fast production efficiency.

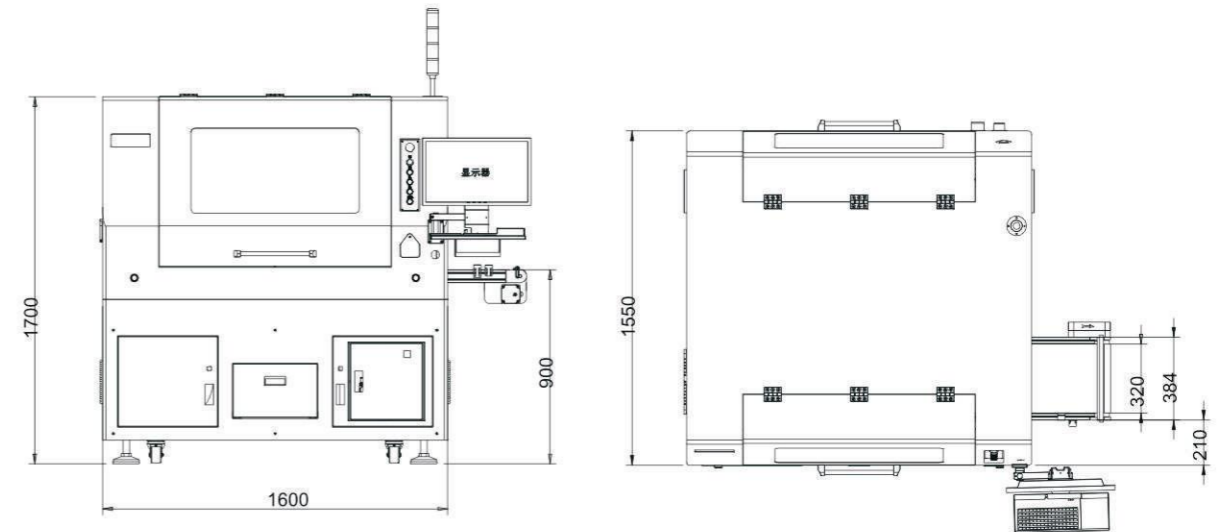


It adopts double-platform vacuum adsorption products, strong cutting product stability and automatic smoke absorption devices.

Product characteristics

- Online Laser Depaneling Machine, automatic board feeding, automatic cutting, and automatic board output greatly improve production efficiency and save labor costs, reflecting a fully automated production line.
- The whole system is equipped with a CCD visual alignment system to improve the cutting accuracy and efficiency and prevent misoperation.
- X-axis and Y-axis adopt high-precision dust-poor modules to ensure strong cutting stability and high precision.
- The standard Japanese imported laser displacement sensor is used to detect whether PCBA products are placed flat.
- Automatic material retrieval using vacuum suction cups for picking and placing transplants.
- Adopt independent CNC dedicated motion controller, the control part is integrated into one, with strong loop control stability, high precision, fast response transmission and strong anti-interference ability.
- The equipment operation adopts Chinese/English interface conversion, and the software design is more user-friendly, which is easy for engineers to operate.
- Adopting imported laser cutting has low cutting stress and high precision, which increases cutting efficiency and achieves full automation.

Product Size



Product Parameters

01 Cutting parameters

Cutting precision	± 25um
Repeated precision	± 2um
Maximum moving speed	X and Y axis 1000mm/s, Z-axis 800mm/s
Mirror speed	≥ 8000mm/s
PCB Size	300x350mm (Customizable size)
Machinable material thickness	≤ 2mm
Laser power (W)	20W (Optional)
X/Y/Z resolution	1um

02 Control parameters

XYZ control mode	CNC Motion Controller
Platform structure	Marble
CCD light source	Circular light+coaxial light
Locate mode	CCD+Mark
Compensation for price increase and contraction	Linear compensation+single piece compensation
Cooling method	Water-cooling
XYZ Drive way	AC Servo

03 Image

	The standard shape
Mark types	Circular
	Square

04 Function

	Straight lines, Semicircles, Arcs
	Free menu copy from L to R, and R to L
Cutting Function	Rotate copy
	Matrix copy
	Automatic compensation

05 Equipment

Power	AC : 220V ± 10% 50/60HZ 1.5KW
Air supply	4-6kg/cm ²
Working temperature	-20℃~ +45℃
Working humidity	30% - 60%
The machine size	1600mm x 1550mm x 1700mm
weight	1260kg

EXE 530 Automatic plate detection and swinging machine



Automatic plating area



Size detection+Automatic plating structure



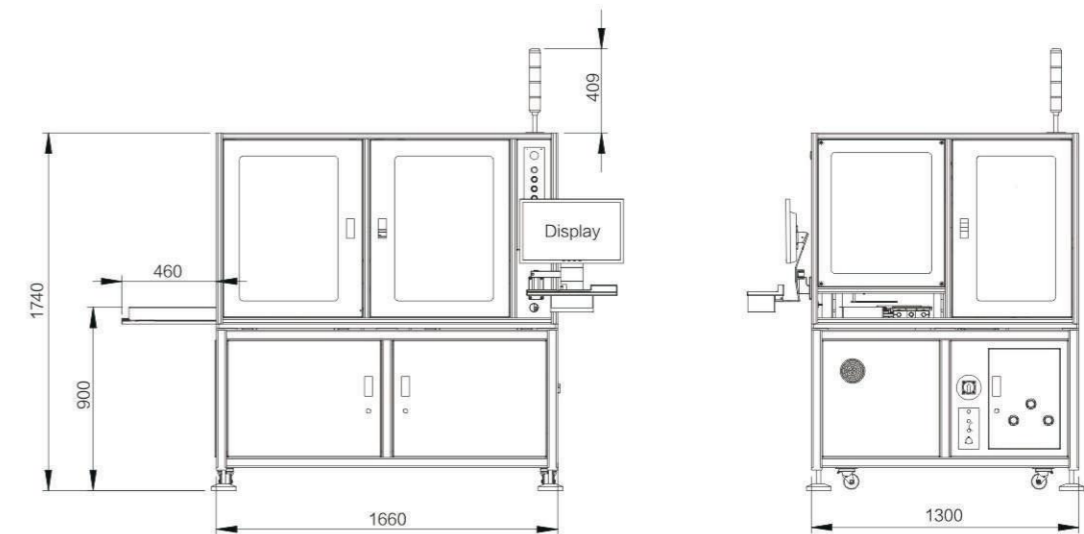
Automatic plating structure



▲ On-line Automatic PCBA Depaneling machine

▲ Automatic plate detection and swinging machine

Product Size



Product characteristics

- Automatic feeding:Automatically feed the products to be placed into the tray according to the signal from the online splitting machine ahead.
- Automatic code scanning:CCD detects product size and also has scanning code function.
- Automatic swing plate:CCD guided suction nozzle automatically picks up OK product tray.
- Automatically distinguish NG code:NG products are automatically placed NG trays,NG code and fork plate are placed in defective boxes.
- Automatic tray stacking:Automatically supply empty Tray and stack finished full trays.
- The AGV automatically feeds the placed empty Tray trays and take away the full Tray trays.
- Adopt multi-axis bus control.
- Gantry structure/ robotic arm structure(optional)

CCD camera organization description

When the product to be tested reaches the CCD inspection position, it is projected by the bottom light source and the front light source, and the top starts to detect the product size and barcode according to the set mechanical coordinates to determine OK products and NG products.

Description of Gantry Handling Mechanism

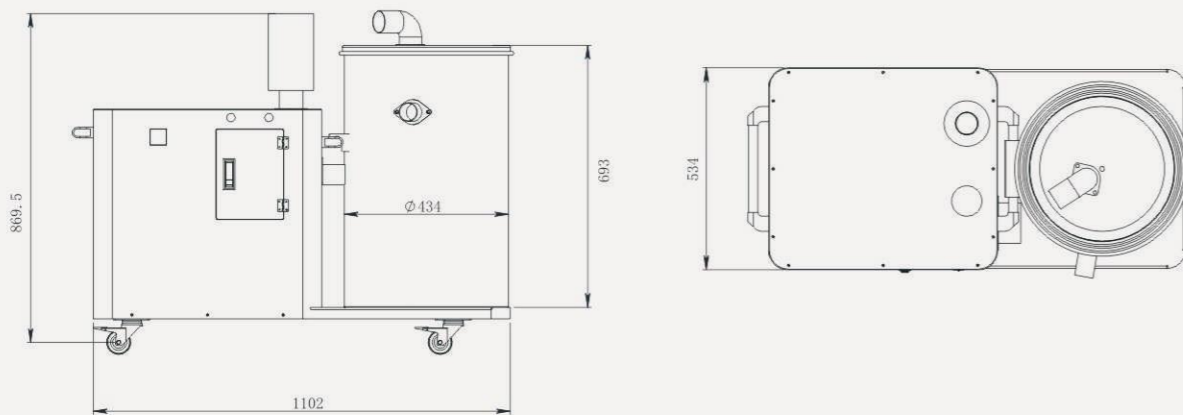
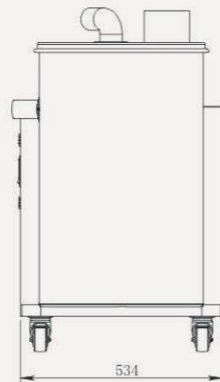
The Gantry Handling Mechanism implements multi-axis control,with X-axis/Y-axis/Z-axis achieve multi-point movement,and an additional rotating axis,which can flexibly control the rotation angle,making the suction nozzle more flexible to use.The suction nozzle can automatically adjust the spacing(10MM-35MM),If it is greater than 35MM, it can suck alternate rows, and the camera guides the precise placement.

Upper Dust Collector



Product Parameters

Vacuum cleaner motor	Updraft (5HP)
voltage	Three-phase power AC380V 50/60HZ
power	4KW
Inlet air volume	6m ³ /min
Inlet velocity	27m/s
Inlet caliber	50mm
Export caliber	120mm
Bag material	100%POLYESTER Needle felt non-woven fabric
Bag size/quantity	330mm*600mm (one)
Noise	< 78db
Size	1102mm*534mm*869mm
Weight	120kg

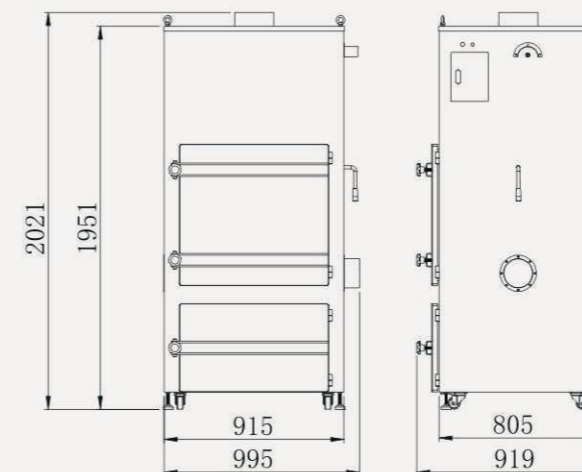
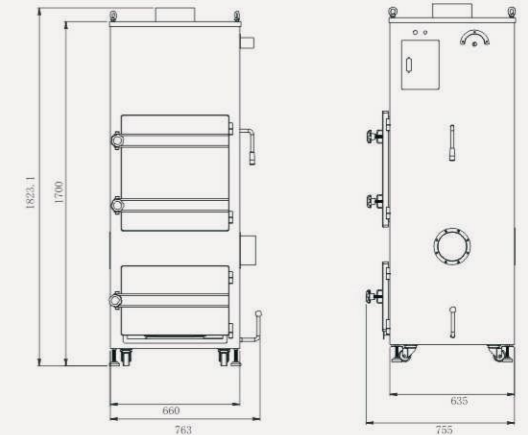


Lower Dust Collector



Product Parameters

Vacuum cleaner motor	Downdraft (3HP)
voltage	Three-phase power AC380V 50/60HZ
power	2.2KW
Inlet air volume	28m ³ /min
Inlet velocity	26m/sec
Inlet caliber	150mm
Export caliber	200mm
Bag material	100%POLYESTER Needle felt non-woven fabric
Bag size/quantity	120mm*620mm (Double-end 8 pieces)
Noise	< 75db
Size	763mm*755mm*1823mm
Weight	165kg



Vacuum cleaner motor	Downdraft (5HP)
voltage	Three-phase power AC380V 50/60HZ
power	4KW
Inlet air volume	35m ³ /min
Inlet velocity	32m/sec
Inlet caliber	150mm
Export caliber	200mm
Bag material	100%POLYESTER Needle felt non-woven fabric
Bag size/quantity	120mm*850mm (Double-end 12 pieces) 120mm*800mm (single-head 4 pieces)
Noise	< 78db
Size	995mm*919mm*2021mm
Weight	315kg

HONOR CERTIFICATE

SOME COOPERATIVE CUSTOMERS



IMPROVE MARKET COMPETITIVENESS WITH QUALITY