

Intelligent Twin Table PCB Router

RT350

RT360

RT360A

RT360L

RT380A



Menu

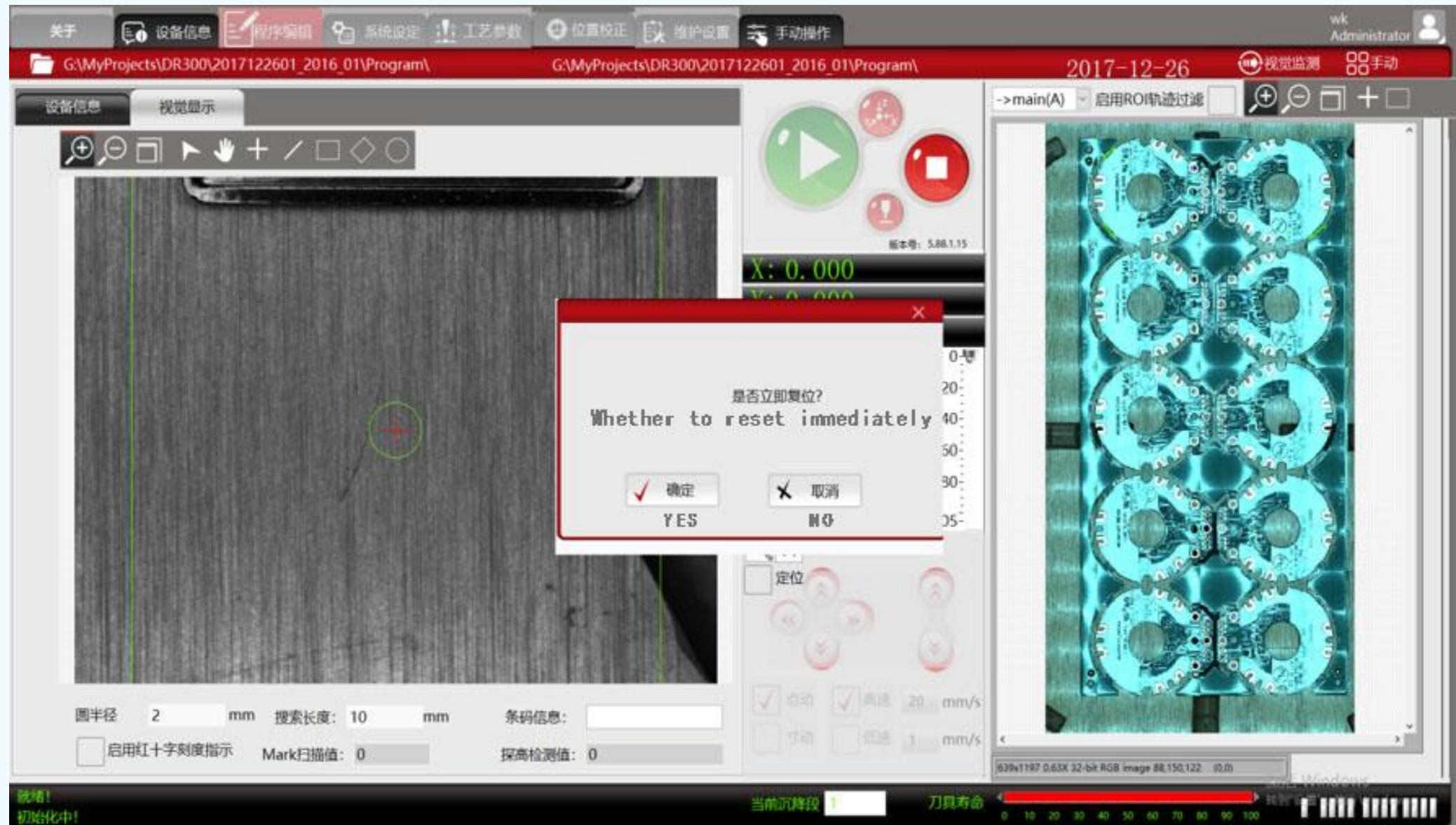
- **Software interface**
- **German brand Basler high speed camera whole board photography programming mode**
- **Equipped with auto routing tool(bit) changing,break tool detection, tool height correction function**
- **Dual countertops work continuously to improve production efficiency**
- **The machine can cut both connection points and v-cut line combined PCB**
- **Application and machine parameters**

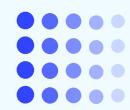
01

Software interface

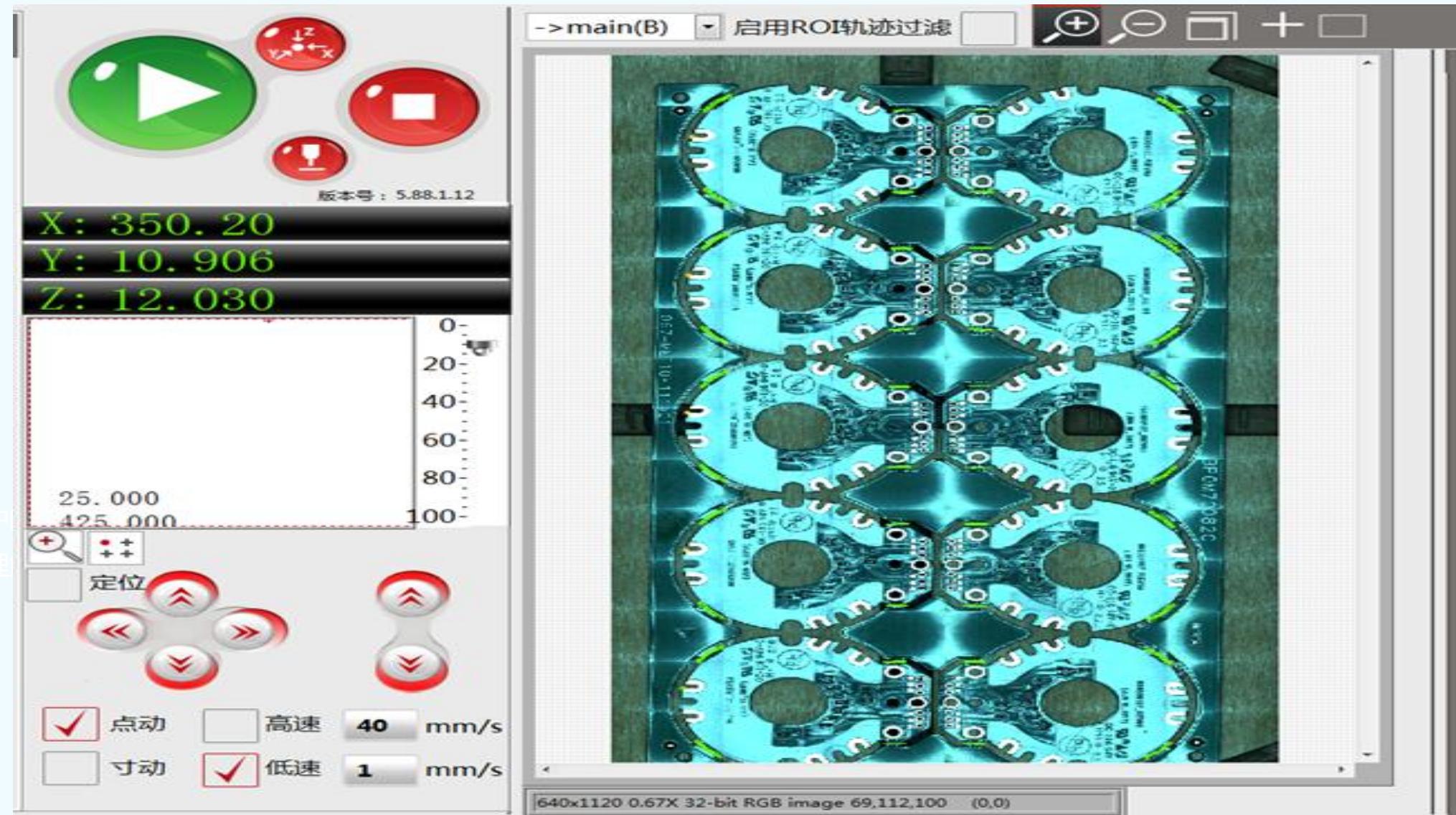


Chinese/English operation interface (switchable)





Physical product panorama display



界面中
用户理



Seven functional menus



Device Information

Displays machine status information, including usage of cameras, light sources, tools, etc.

Program Editor

In this mode, the cutting line can be edited quickly and accurately through the image teaching method.

System Program

In this mode, the user only needs to set the starting point and end point, and the machine will automatically complete the entire cutting process.



Seven functional menus

Manual Mode

In this mode, the user can manually control various actions of the machine, including X/Y axis movement, tool rotation, etc.

Process Parameters

In this interface, you can set various parameters of the machine, including camera parameters, light source parameters, tool parameters, etc.



Position Correction

In this interface, you can set the position. When the position is reached, the machine will automatically detect and stop.

Maintain settings

In this interface, you can view the machine's work log, including production date, working hours, fault records, etc.

02

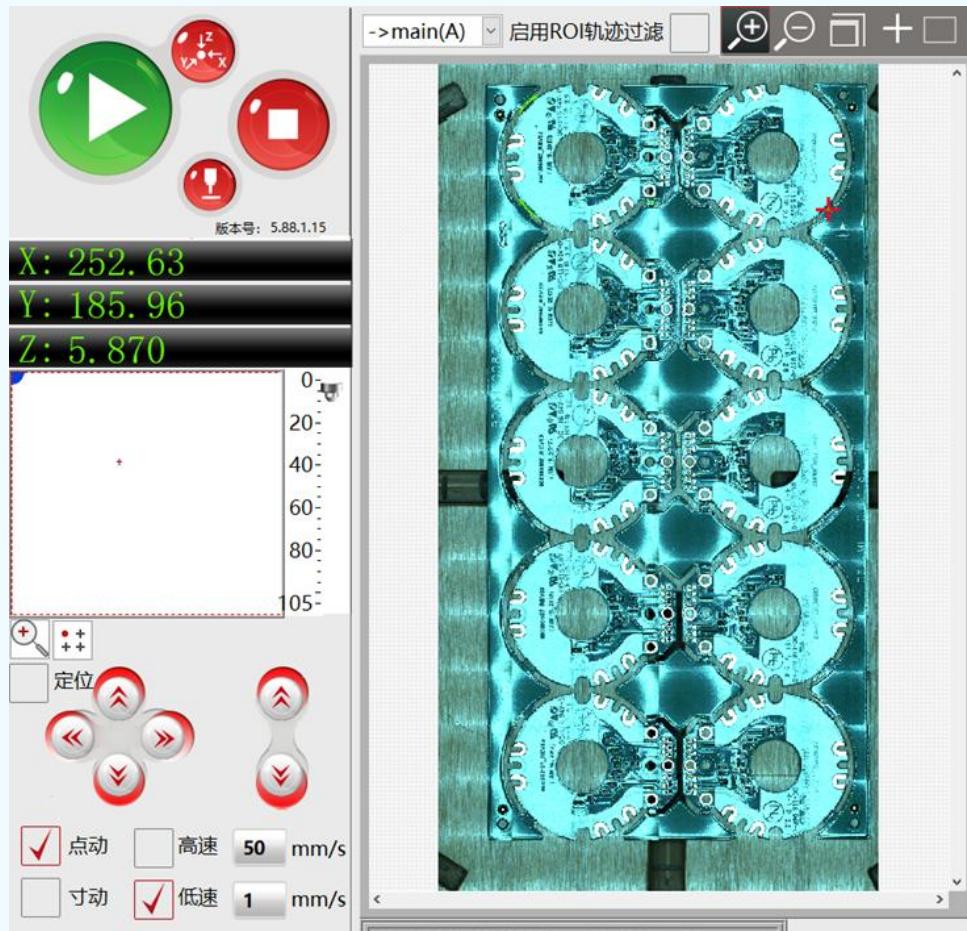
**German brand Basler high speed camera
whole board photography programming
mode.**

**Remote control and debugging can be
realized.**

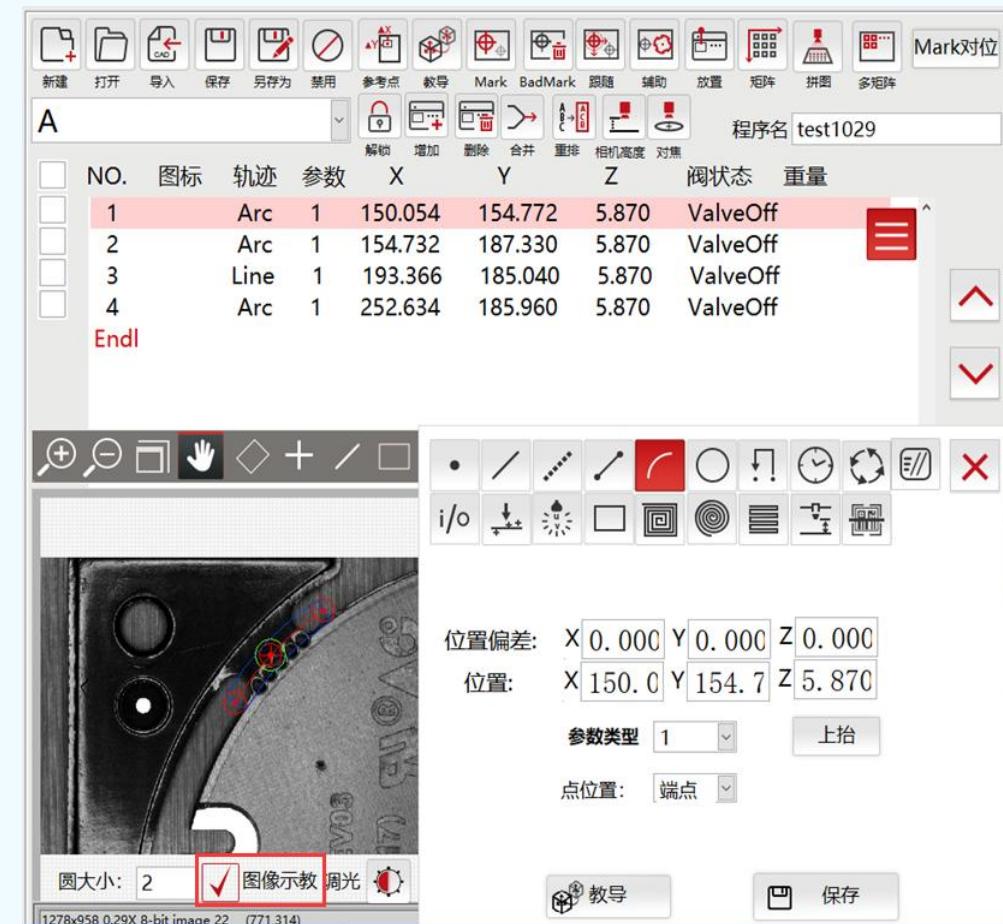




Twin table through the German high speed camera to execute the whole board photography then programming, totally different with traditional programming method. Great reduce the programming time.



Whole panel real PCB image display, fast and accurate positioning the mark point and v-cut line, no need use traditional CCD and XY axis moving to find the mark point and v-cut line.



Advantages of whole panel image programming



01

Fast reach the mark point, then teaching and programming.

02

When programming has errors, can correction through the real pcb image.

03

Through the red and yellow colors in the physical picture display, quickly distinguish machine working steps.

04

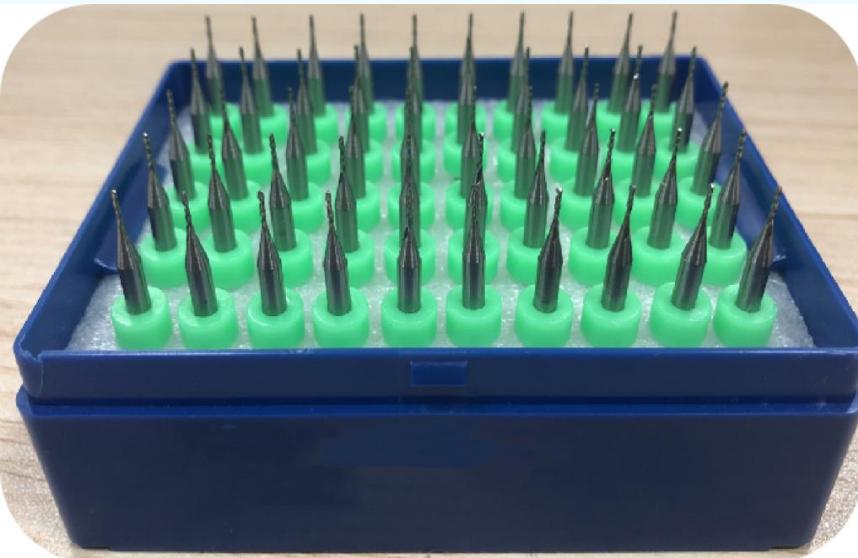
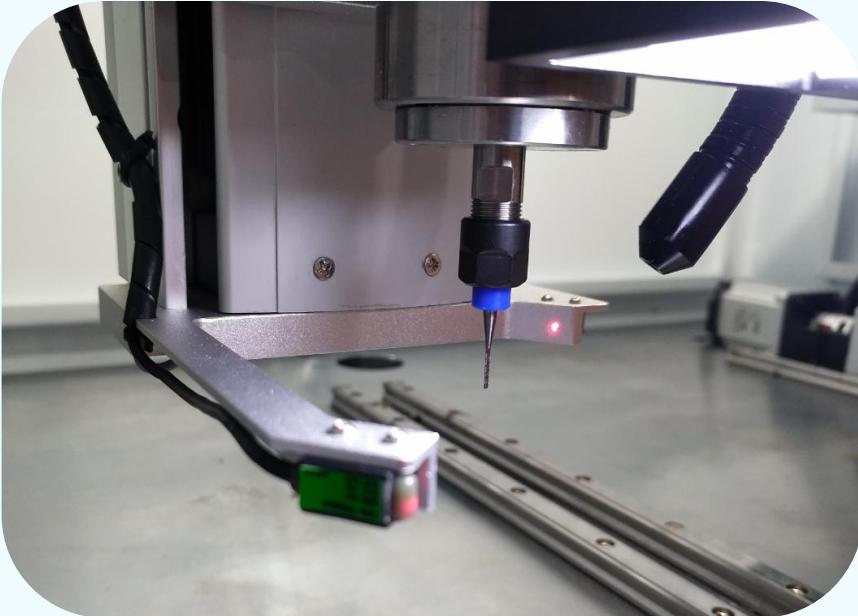
HD display real-time routing data image, convenient technical personnel debugging.

03

**Equipped with auto routing tool(bit)
changing,break tool detection, tool
height correction function.**



Tool breakage detection function, real-time monitoring of tool usage status



01

Tool life management

During the use of the tool, the system will monitor and calculate the tool life. When the tool reaches a certain life, the system will automatically prompt and take corresponding measures, such as automatic tool change or shutdown.

02

Broken tool detection

The system will detect whether the tool is broken or damaged through sensors or signal feedback. If a broken tool is detected, the system will immediately stop running and prompt the operator to handle it.

03

Tool status monitoring

The system will monitor the status of the tool in real time, including the tool's rotation speed, cutting force, cutting temperature, etc. If an abnormal state of the tool is detected, the system will immediately take corresponding measures..



Automatic tool correction function to avoid height deviation problems when changing tools



Tool height sensor

Set a tool height sensor on the machine to monitor the height position of the tool in real time. When the tool is worn or replaced, the sensor detects the height change and feeds it back to the system.



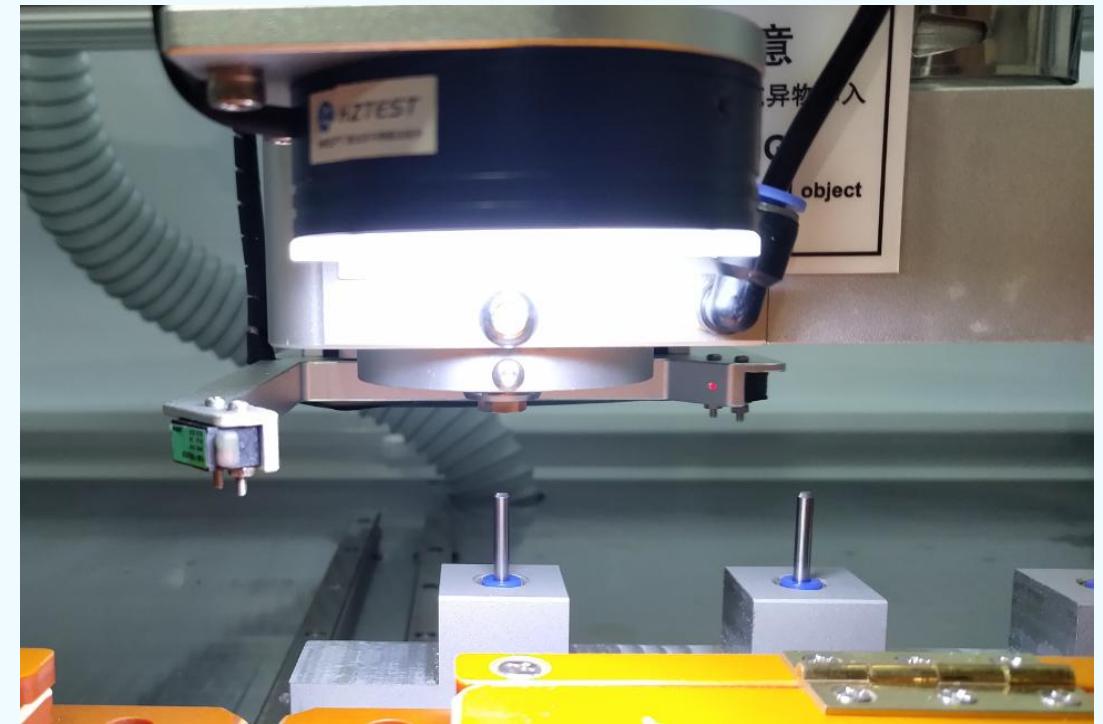
Tool sinking section number monitoring

The system will monitor and calculate the number of sinking segments of the tool. If it is monitored that the number of tool sinking segments exceeds the set value, the system will immediately take corresponding measures, such as alarming or shutting down, to prevent the tool from cutting the PCB board or accidentally cutting the bottom component.



Tool height adjustment

According to the height change fed back by the sensor, the system will automatically adjust the height of the tool to ensure the stability and accuracy of the cutting process.



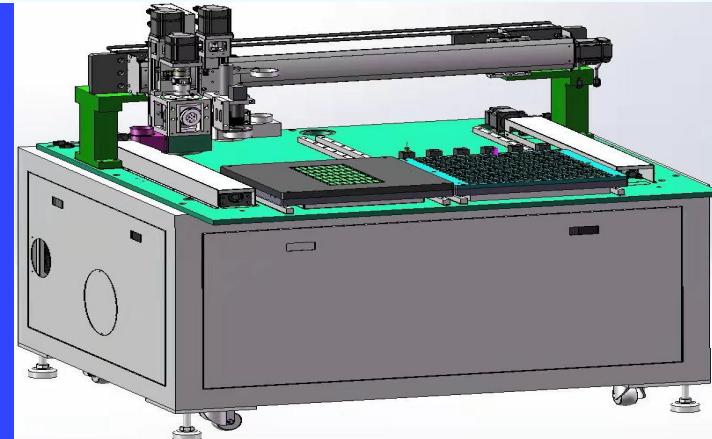
04

Twin table achieve uninterrupted working, can routing connection points and v-cut line at the same time.



Double tabletops work continuously to maximize machine productivity

Through the Twin table working method, more PCB board processing can be completed in one working cycle, thereby maximizing the machine's production capacity.



Through the German Basler high-speed camera whole-board photography programming mode, fast and accurate programming and debugging can be achieved, thereby reducing non-production time and increasing machine productivity.



In the twin table working mode, the machine's space and time resources can be fully utilized to achieve efficient production scheduling and improve the machine's utilization rate and production capacity.





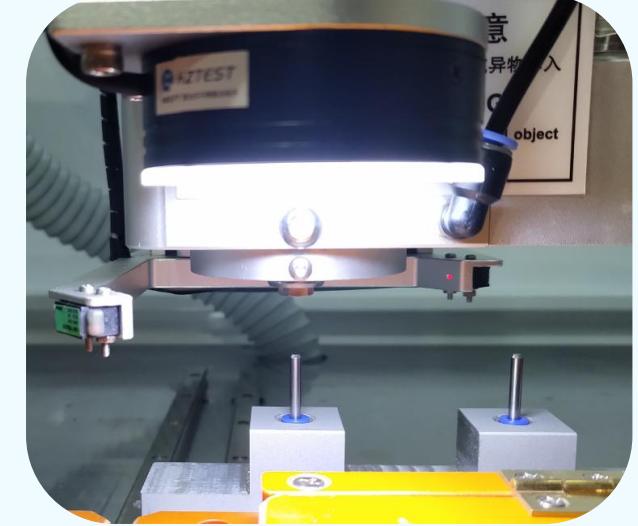
Equipped with safety grating to ensure the safety of operators when picking and placing plates



In the Twin table working mode, the machine is equipped with a safety grating to ensure the operator's safety when picking up and placing PCB boards.



The safety light barrier can detect the operator's body parts and automatically stop the machine to prevent the operator from being injured by the machine.



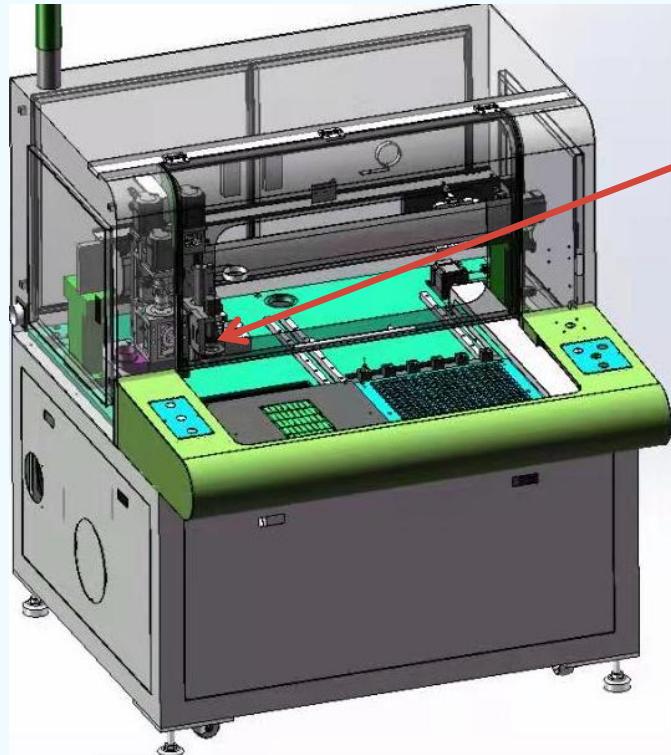
By equipping with safety light barriers, you can protect the health and safety of operators and improve workplace safety and productivity.

05

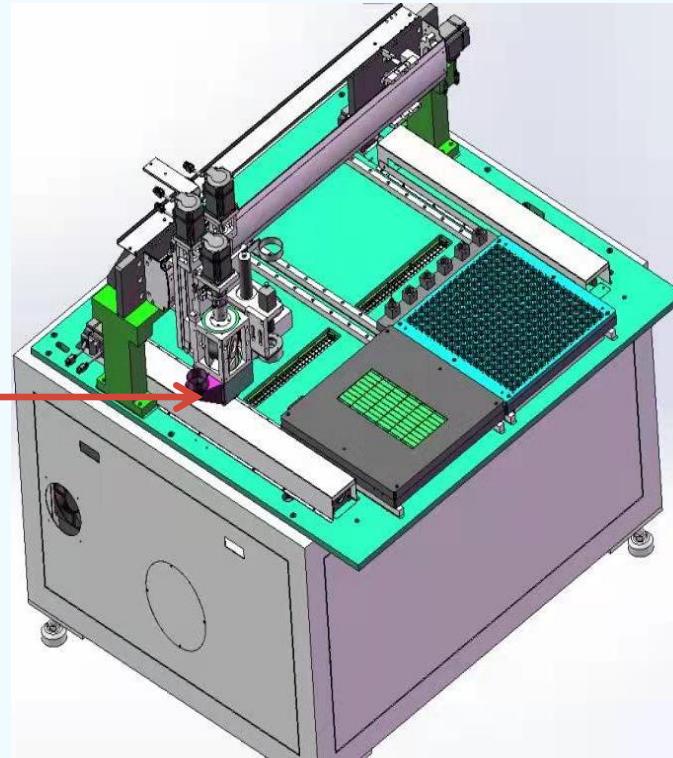
**The machine can cut both connection
points and
v-cut line combined PCB
(Model:RT380A)**



 **Saw and spindle working together,suitable for PCB with both v-cut line and stamp hole connected.**



Routing spindle

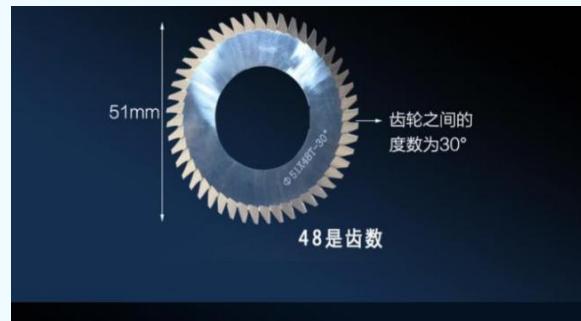
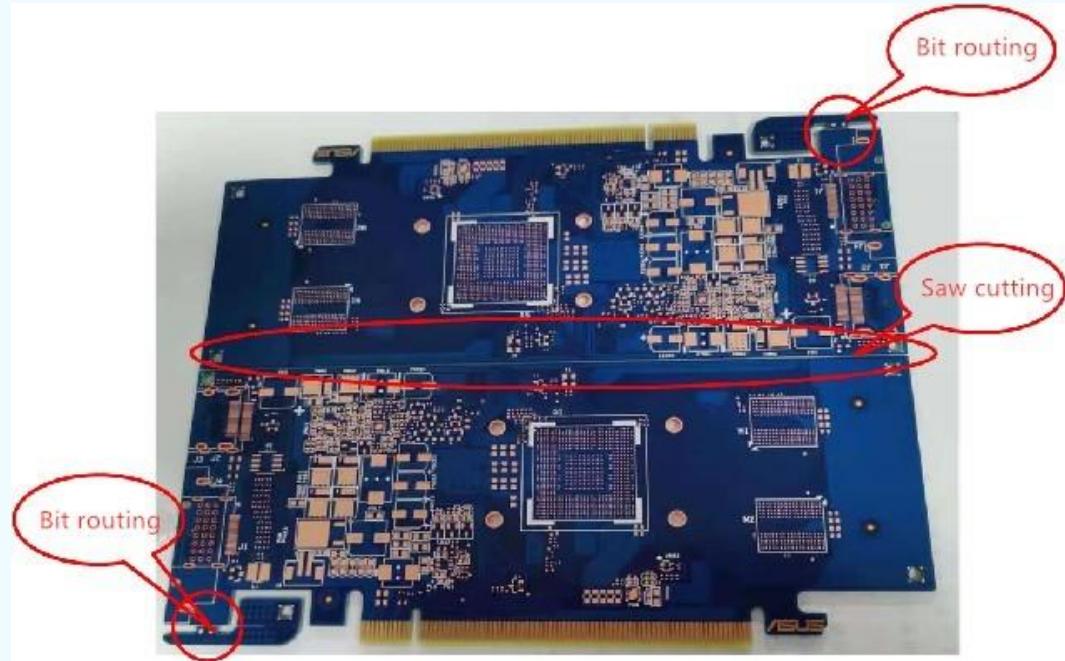


Saw type

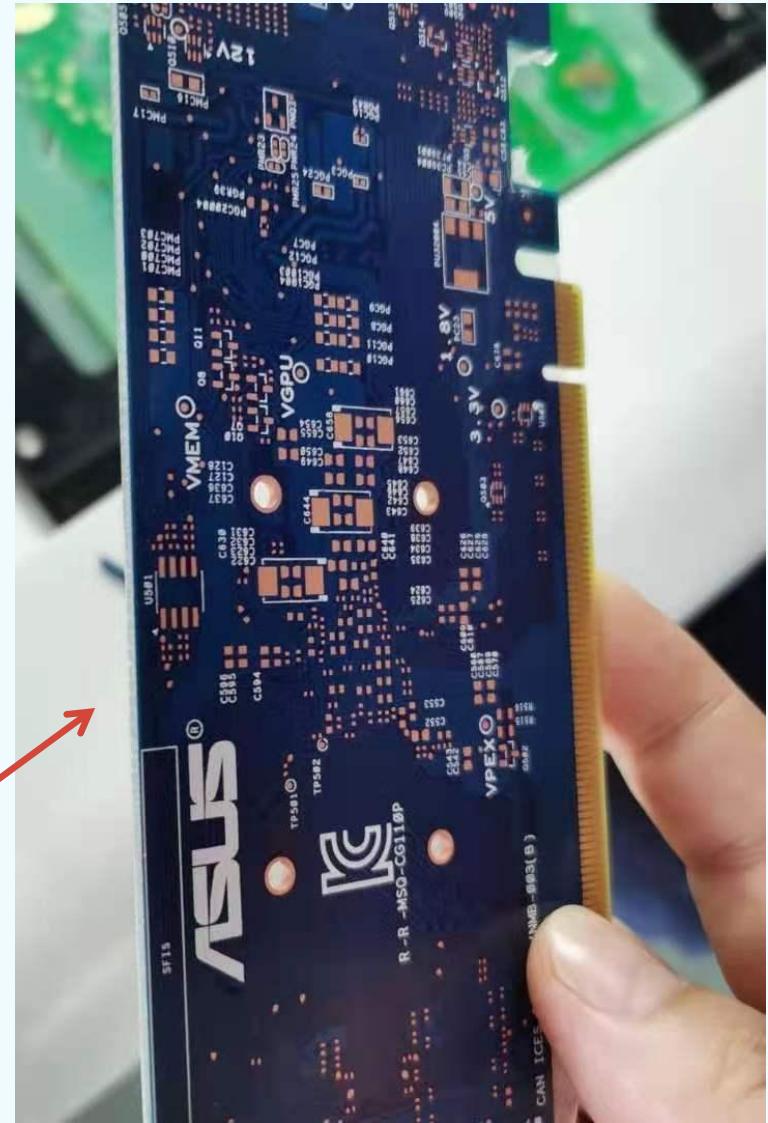
Right side of the high speed spindle
routing the stamp holes(connection
points)

Left side of the spindle motor driven to
cutting the v-cut line products

Cutting samples display



Saw cutting,
flat without
burr.



06

Application and machine paramters



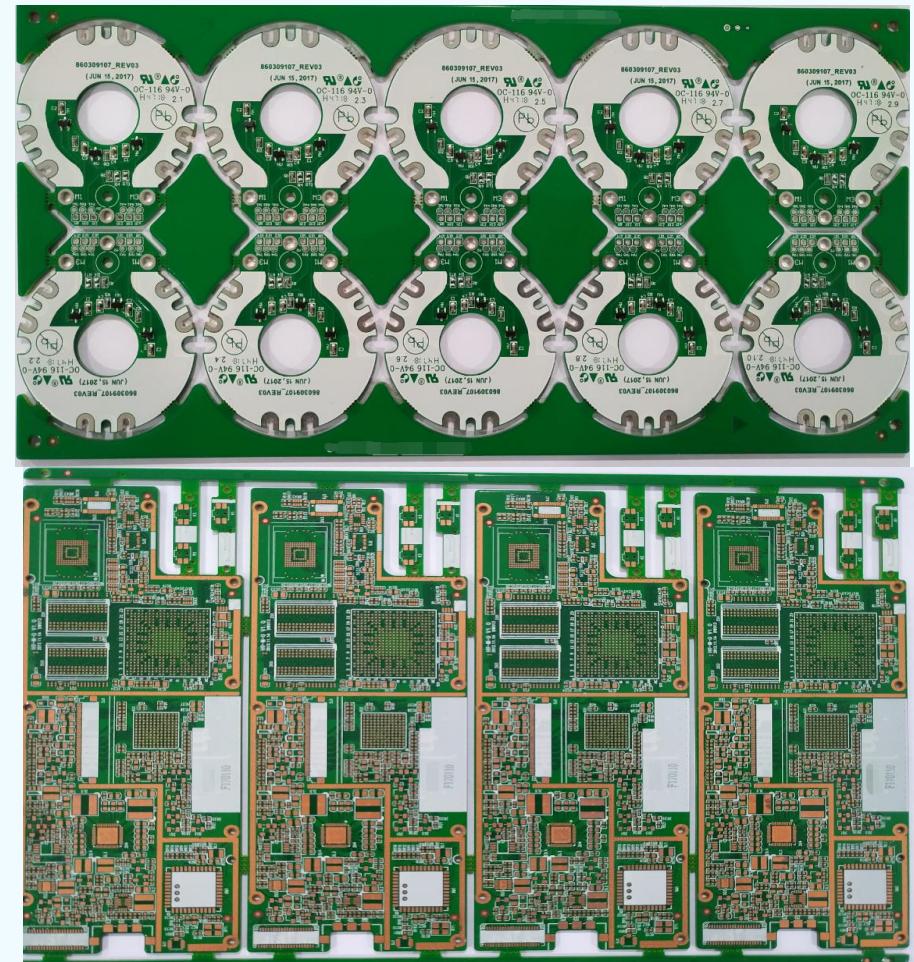
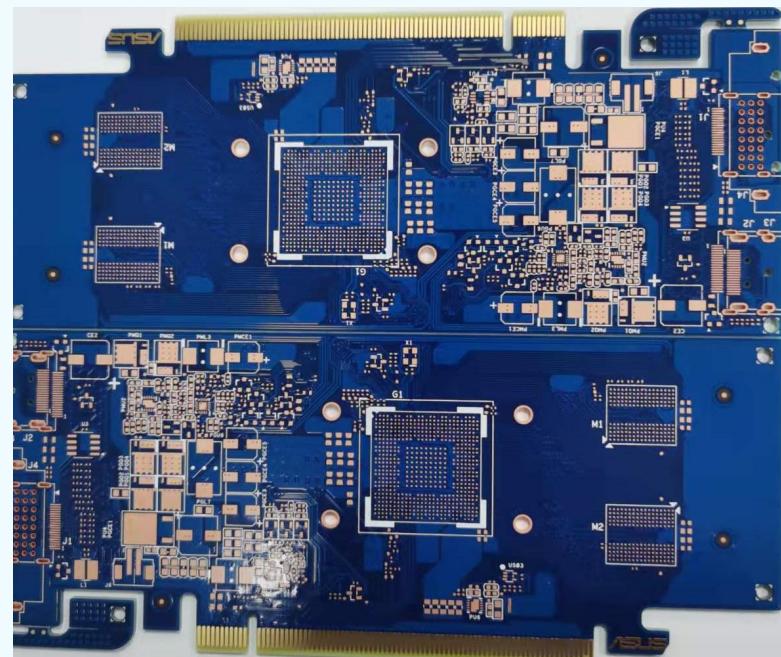
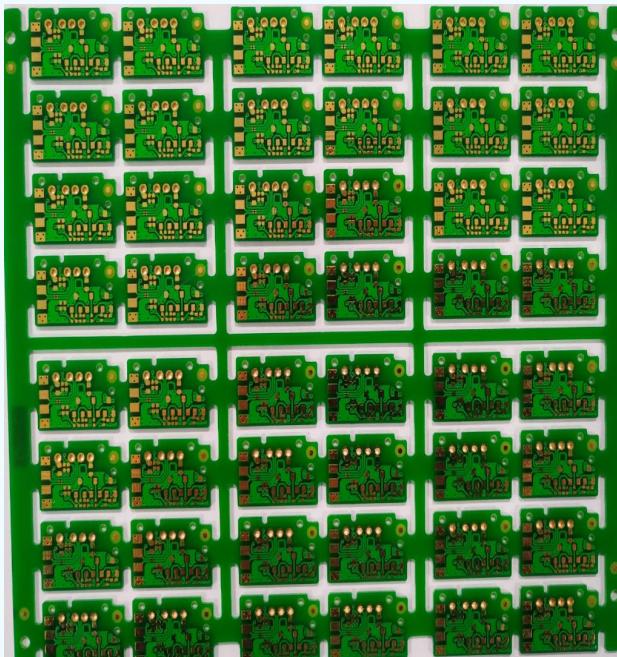


Application and machine paramters

● Application:

Full vision intelligent router is suitable for consumer electronics, home electronics, automotive electronics and other related multi-board PCB cutting operation.

● Routed PCB samples from current client:



Machine model	RT350	RT360	RT360A
PCB cutting size	340*360MM	340*360MM	340*360MM
Cutting object	Lines, points, arcs, circles, etc	Lines, points, arcs, circles, etc	Lines, points, arcs, circles, etc
Cutting table	Twin table	Twin table	Twin table
Cutting accuracy	±0.08MM	±0.05MM	±0.05MM
Repeat accuracy	±0.015MM	±0.01MM	±0.01MM
Max axis moving speed	X,Y1,Y2: 1000mm/s,Z axis:800mm/s	X,Y1,Y2: 1000mm/s,Z axis:800mm/s	X,Y1,Y2: 1000mm/s,Z axis:800mm/s
Spindle	Chinese brand	Chinese brand/NSK spindle (optional)	Japan NSK/Germany Sycotec
Tool change mode	Manual tool change	Manual tool change	Automatic tool change
Spindle routing speed	MAX:60000rpm	MAX:60000rpm	MAX:60000rpm
Tool detection	Automatic tool sinking, tool breaking	Automatic tool sinking, tool breaking	Automatic tool sinking, tool breaking and sliding tool detection
Cutting speed	5~100mm/s adjustable	5~100mm/s adjustable	5~100mm/s adjustable
PCB cutting thickness	0.3-3.0MM	0.3-3.0MM	0.3-3.0MM
Programming method	Whole panel photography,picture drawing line teaching	Whole panel photography,picture drawing line teaching	Whole panel photography,picture drawing line teaching
Control method	PC precision 4 axis control	PC precision 6 axis control	PC precision 6 axis control
X,Y1,Y2,Z servo driver	Chinese servo driver	PanasonicA6 servo driver	PanasonicA6 servo driver
Suitable routing bits size	0.8~3.0MM	0.8~3.0MM	0.8~3.0MM
Power supply	AC220V 50/60HZ single phase	AC220V 50/60HZ single phase	AC220V 50/60HZ single phase
Machine size	L*W*H(1180mm*1180mm*1350mm)	L*W*H(1180mm*1180mm*1350mm)	L*W*H(1180mm*1180mm*1350mm)
Machine weight	800kg	800kg	800kg
Dust cleaner power	3HP	3HP	3HP
Dust cleaer power supply	AC380V 3 phase	AC380V 3 phase	AC380V 3 phase
Dust clear size	L*W*H (665mm*635mm*1610mm)	L*W*H (665mm*635mm*1610mm)	L*W*H (665mm*635mm*1610mm)
Dust cleaner weight	155kg	155kg	155kg
Dust cleaning method	Top side/bottom size cleaning (optional)	Top side/bottom size cleaning (optional)	Top side/bottom size cleaning (optional)

Machine model	RT360L	RT380A
PCB cutting size	450*500MM	350*250MM
Cutting object	Lines, points, arcs, circles, etc	V-groove,stamp hole,circular point,etc
Cutting table	Twin table	Twin table
Cutting accuracy	±0.05MM	±0.05MM
Repeat accuracy	±0.01MM	±0.01MM
Max axis moving speed	X,Y1,Y2: 1000mm/s,Z axis:800mm/s	X,Y1,Y2: 1000mm/s,Z axis:800mm/s
Spindle	Chinese spindle/NSK spindle (optional)	V-blade+Chinese brand spindle
Tool change mode	Manual tool change	Manual tool change
Spindle routing speed	MAX:60000rpm	MAX:60000rpm
Tool detection	Automatic tool sinking, tool breaking	Automatic tool sinking, tool breaking and sliding tool detection
Cutting speed	5~100mm/s adjustable	5~100mm/s adjustable
PCB cutting thickness	0.3-3.0MM	0.3-3.0MM
Programming method	Whole panel photography,picture drawing line teaching	Whole panel photography,picture drawing line teaching
Control method	PC precision 4 axis control	PC precision 6 axis control
X,Y1,Y2,Z servo driver	PanasonicA6 servo driver	PanasonicA6 servo driver
Suitable routing bits size	0.8~3.0MM	0.8~3.0MM
Power supply	AC220V 50/60HZ single phase	AC220V 50/60HZ single phase
Machine size	L*W*H(1350mm*1430mm*1350mm)	L*W*H(1180mm*1180mm*1350mm)
Machine weight	800kg	800kg
Dust cleaner power	3HP	3HP
Dust cleaer power supply	AC380V 3 phase	AC380V 3 phase
Dust clear size	L*W*H (665mm*635mm*1610mm)	L*W*H (665mm*635mm*1610mm)
Dust cleaner weight	155kg	155kg
Dust cleaning method	Top side/bottom size cleaning (optional)	Top side/bottom size cleaning (optional)

Thanks for watching

