

SMT AUTOMATIC VISION PICK AND PLACE MACHINE



**Double Head
Mounting**



**Humanized
Control System**



**Support
Multiple Feeders**



**Double Mark
Point Recognition**



PPM-A320VB

SMT AUTOMATION

PPM-A320VB SMT pick and place machine meet the design concept of multi-material and multi-variety components, which is suitable for small and medium-sized batch production, experimental development, school teaching and other purposes.

12 CORE TECHNOLOGIES

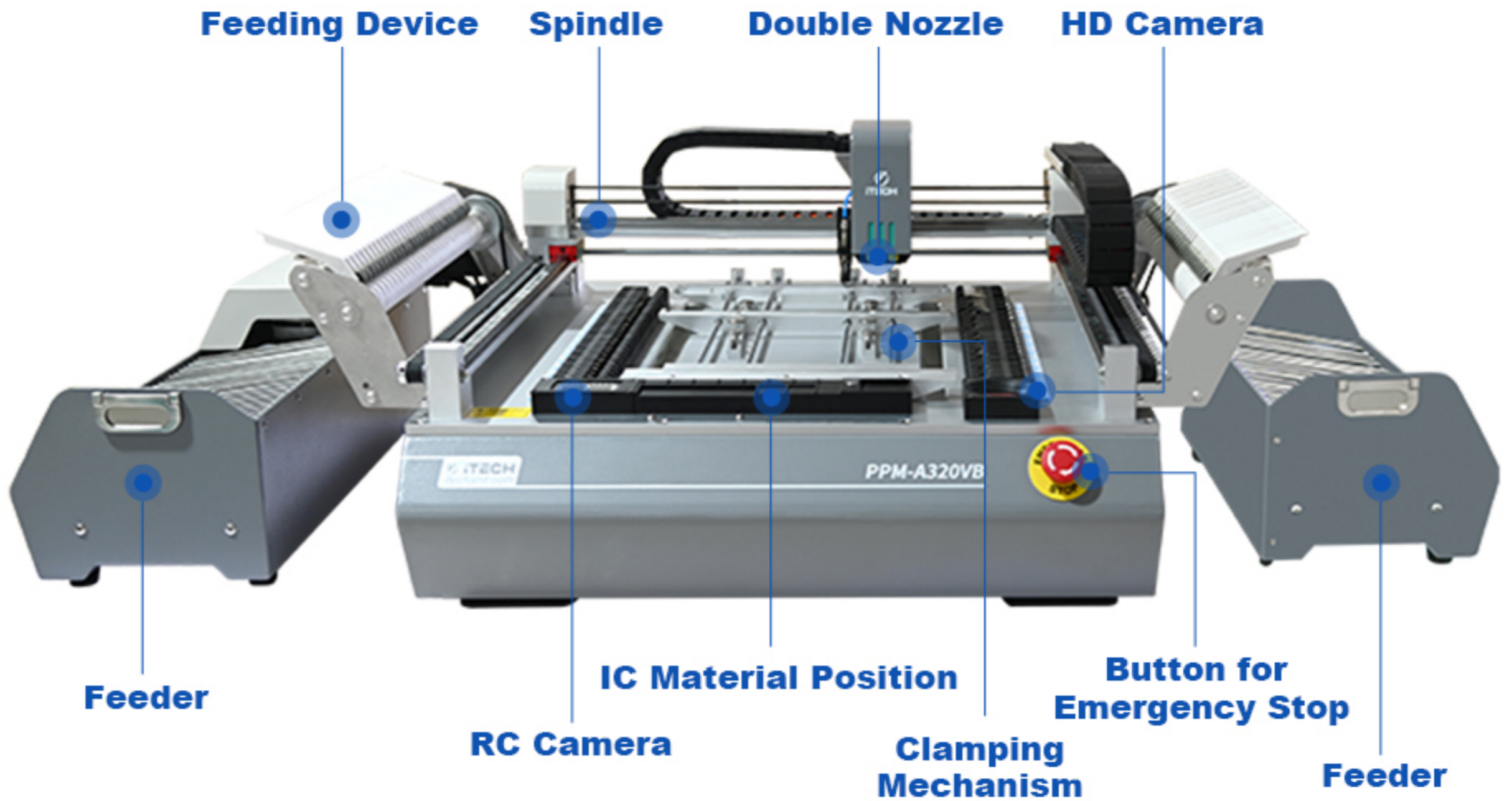
- | 2 Heads
- | 4 Cameras
- | 54 Pcs Feeder
- | Step Servo Motor
- | Industrial Monitor
- | 5500 Pcs/h Mounting

*Please contact us for availability.



PRODUCT STRUCTURE

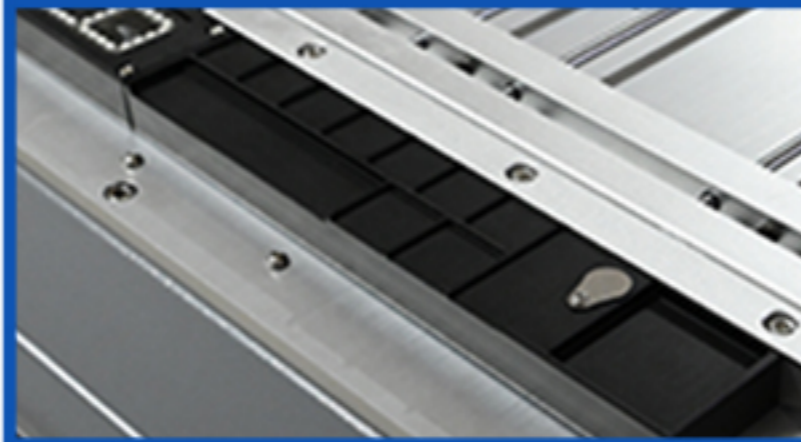
ZHEJIANG HUAQI ZHENGBANG AUTOMATION TECHNOLOGY CO., LTD.



RC Camera



IC Material Position



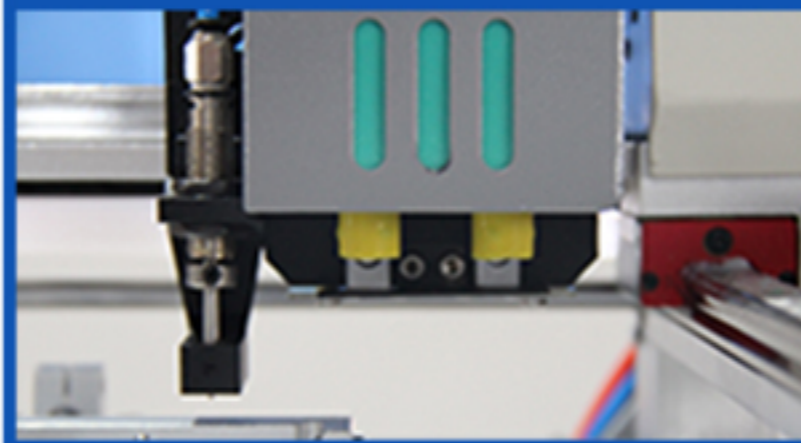
Clamping Mechanism



Spindle



Double Nozzle



HD Camera



Technical Data

Model	PPM-A320VB
Mounting Numbers	2PCS
Mounting Precision	0.025mm
Mounting Angle	0~360°
Mounting Speed	5500pcs/hour
Suction Nozzle Type	Juki Series Nozzle
Applicable Element	RC(0402、0603、0805、1206 etc)
	LED Lamp Beads(0603、0805、3014、5050 etc)
	Chip(SOT、SOP、QFN、BGA etc)
SMD Height	≤5.5mm(Customize ≤11mm)
PCB Minimal Size	10×10mm
PCB Maximum Size	320×450mm
PCB Thickness	≤2mm
Components Wheel Type	8mm、12mm、16mm、24mm、32mm
Front IC Location	10pcs
Back IC Tray	1pc
Vibration Feeder	ITECH Customized Feeder(Optional)
X/Y Axis Moving Range	430×530mm
Z Axis Moving Range	10mm
Z Axis Rotation Angle	0~360°
Visual Camera	CCD High-definition Camera
Numbers of Visual	Parts Camera×3、PCB Camera×1
Recognition Capability	MAX. 22×22mm
PC System	Microsoft WIN7
Operational Software	R & D
Compatible File Format	CSV. TXT. Format
Program Method	Support Online and Offline Ways
Air Pressure	0.4Mpa
Vacuity Degree	-66kpa
Power	230W
Power Supply	AC220V±10% 50Hz
Main Engine Outline Size	L990×W730×H375mm
1#Materials Feeder Outline Size	L235×W700×H245mm
2#Materials Feeder Outline Size	L235×W485×H245mm
Weight	85

PRODUCT ADVANTAGES

ZHEJIANG HUAQI ZHENGBANG AUTOMATION TECHNOLOGY CO., LTD.



CONFIGURATION STEP SERVO MOTOR

Making the position, speed and moment of force closed cycle control and solve the stepper servo motor out of step problems. Eventually achieved High precision positioning and smooth low speed operation requirements.



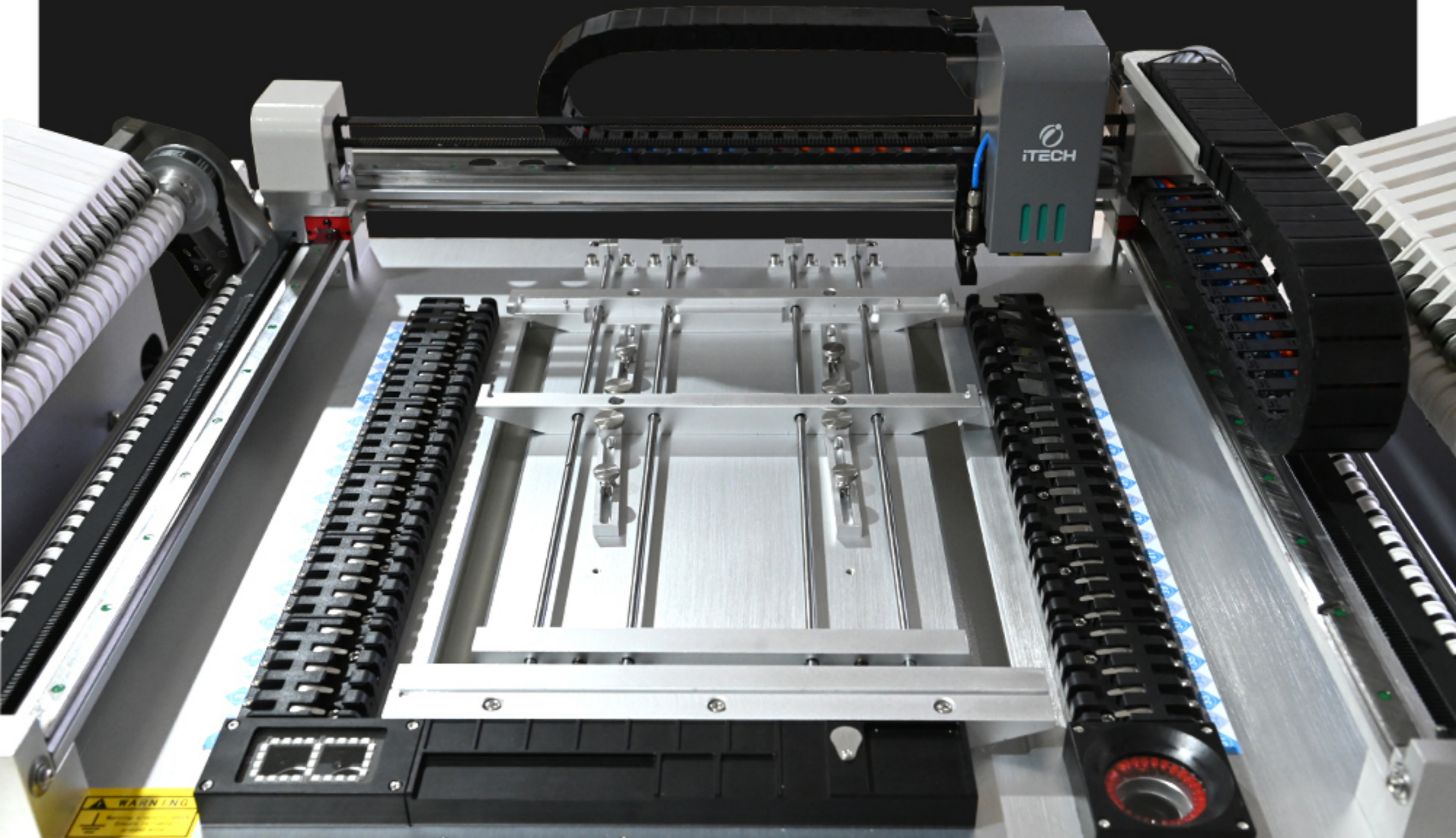
DOUBLE HEAD MOUNTING

DOUBLE MARK POINT RECOGNITION

Realize fast mounting, micro components and integrated IC components.



54 PCS FEEDER



SUPPORT MULTIPLE FEEDERS

Support 54 bit automatic stripping film feeder , TUBE vibration feeder IC tray .Meet diverse needs



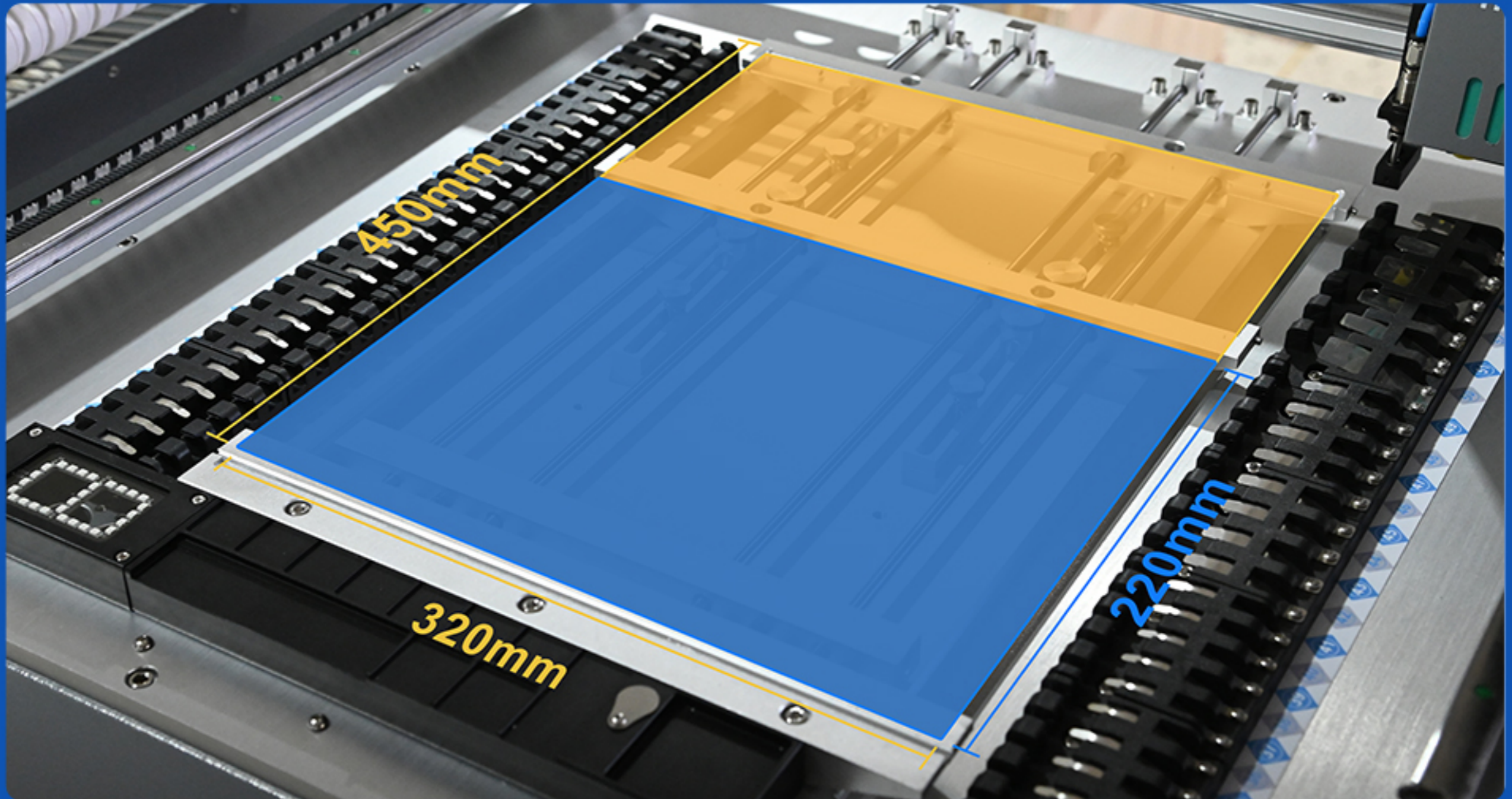
IC Tray



10pcs Front IC Location

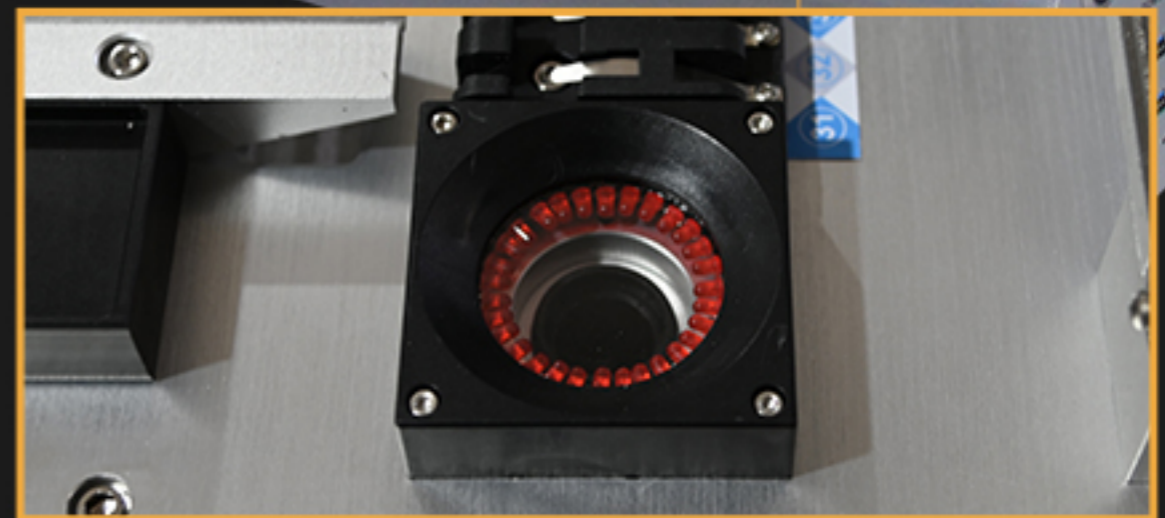
PCB MOUNTING

320*450mm PCB support maximum 320*450mm PCB Suitable for most PCB mounting



FOUR GROUPS OF IDENTIFICATION CAMERAS

Camera classification and identification are adopted for different packaged chips



Double Components Identification Camera

The fast double camera recognition system is adopted for different package chips to improve the efficiency of resistance and capacitance chip recognition

High Precision Identification Camera

High precision identification camera to improve large IC identification and placement accuracy Correction the material offset .

DOUBLE MARK POINT RECOGNITION

Double mark point recognition and positioning function automatically corrects the deviation caused by PCB irregularity and position deviation

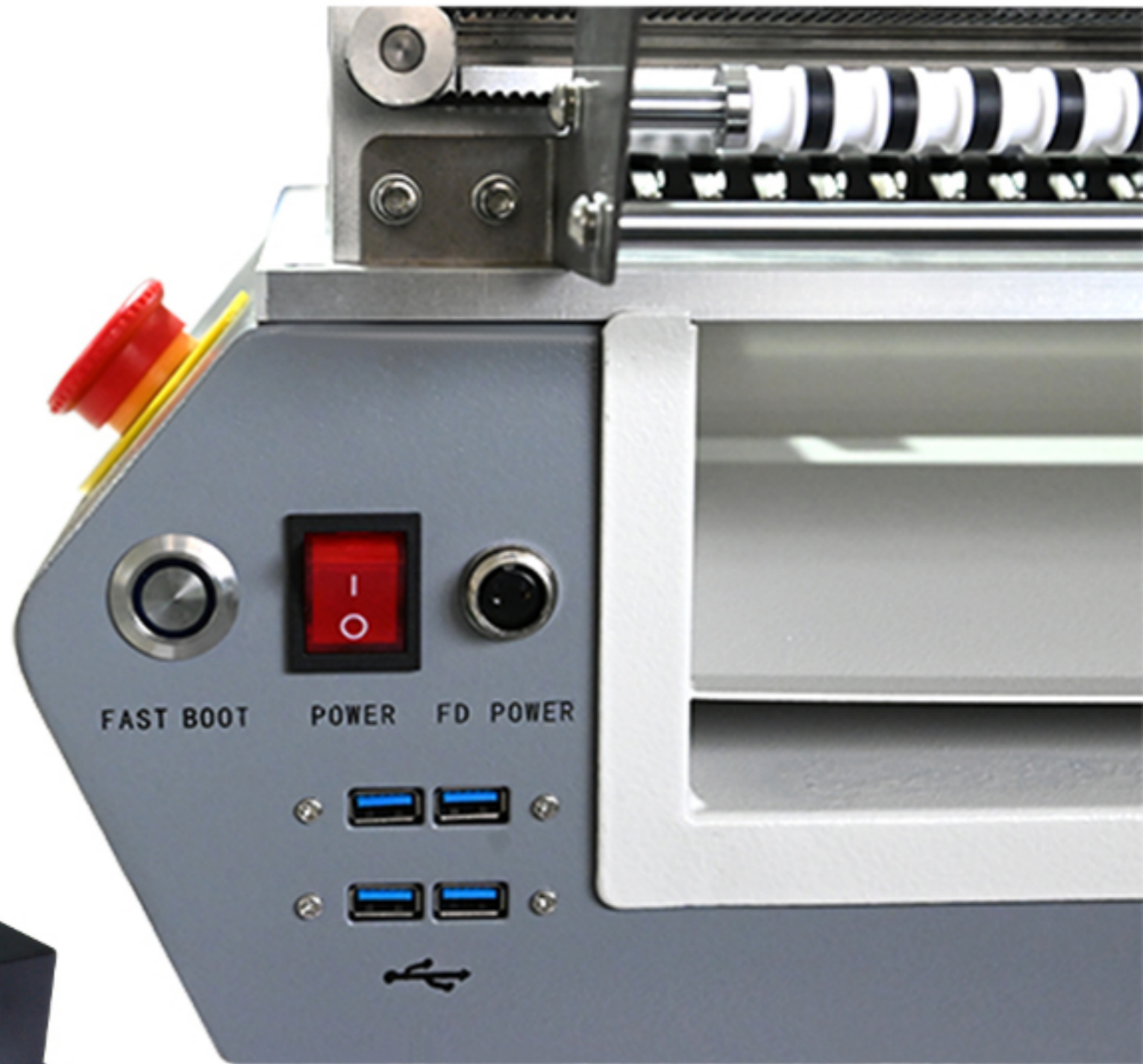
The screenshot displays a CNC control software interface with several key components:

- Coordinates Dialog:** A dialog box titled "coordinates" is open, showing X: 204.096, Y: 167.387, and A: 0.0. It includes a "Goto" button, a "1#Nozzle" dropdown, and directional movement buttons (X-, L, X+, Y+, Y-).
- Explain Panel:** A text box titled "Explain" contains the instruction: "Using these two points can accurately calibrate the angle of horizontal deviation between PCB and the machine; if you do not use such function, you can directly skip this step at the time of starting machine." Below this is a "PCB deviation angle" section with a "Deviati" input field set to 0.000000 and a "Get" button.
- Main Control Area:** Features a "RUN" button, "PAUSE" button, "STOP" button, and "STEP" button. It also includes "Edit" buttons and "OK/Cancel" buttons for the dialog.
- Camera and Settings:** A "PCB Camera" section with checkboxes for "PCB Camera", "ELE Camera", and "2P Camera". It also has "Static" and "Dynamic" checkboxes, a "Zoom" button, and a "Capture" button.
- Status Bar:** At the bottom, it shows "Mach" status with coordinates: "DX:204.111 DY:535.000" and "X:204.111 Y:535.000 Z1:0.000 Z2:0.000".
- Work message:** A text area displaying: "Now PCB:1 No.0 Completed PCB:0 Element:0" and "This time use:0Sec".
- Footer:** Shows "File:LIN.H8" and the date/time "2018-12-4 11:3".

EMBEDDED INDUSTRIAL PC AND WINDOWS SYSTEM



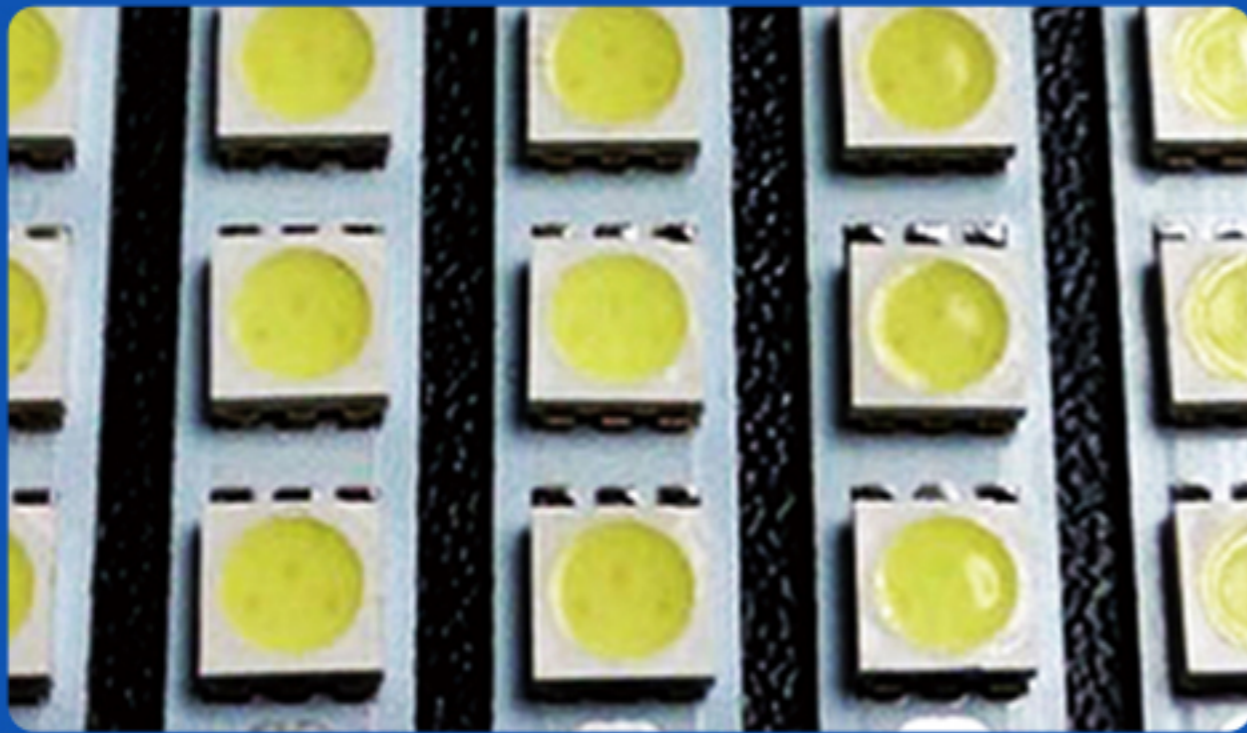
Windows system, simple and convenient operation, performance much more stable



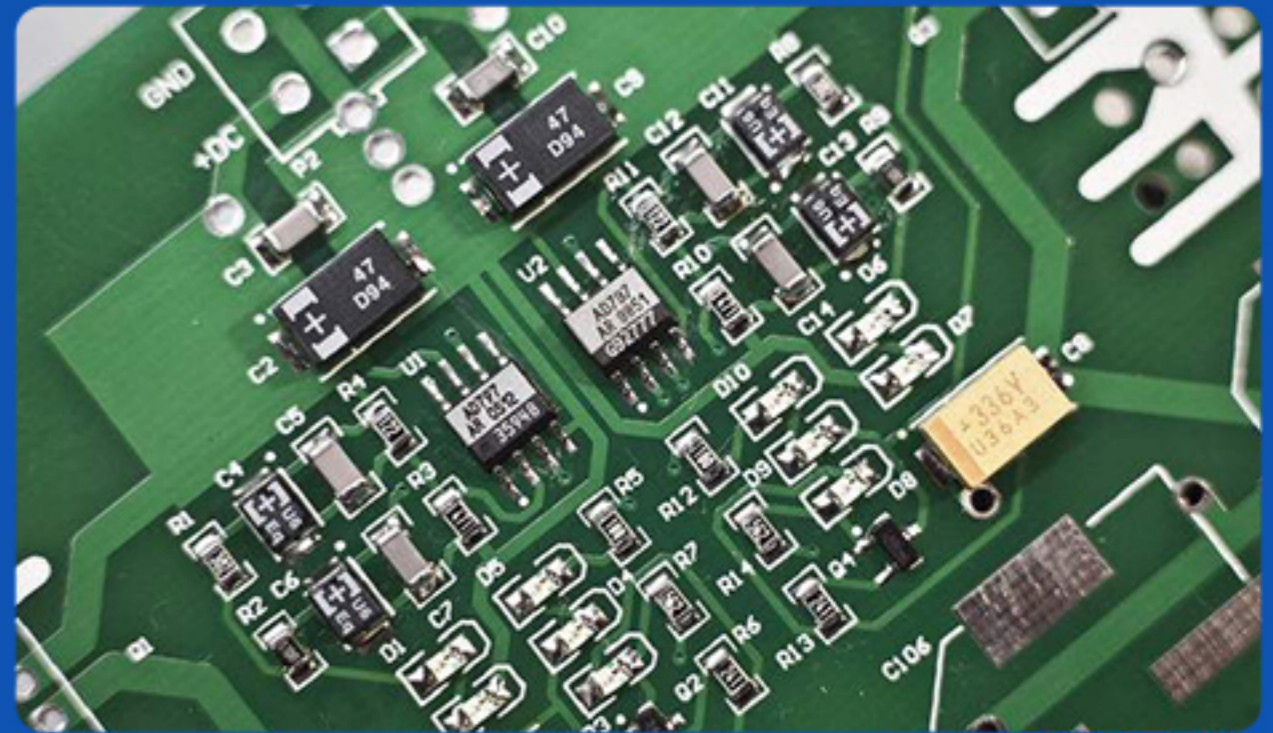
Embedded industrial PC, quality much more stable and reliable

EFFECT PICTURE

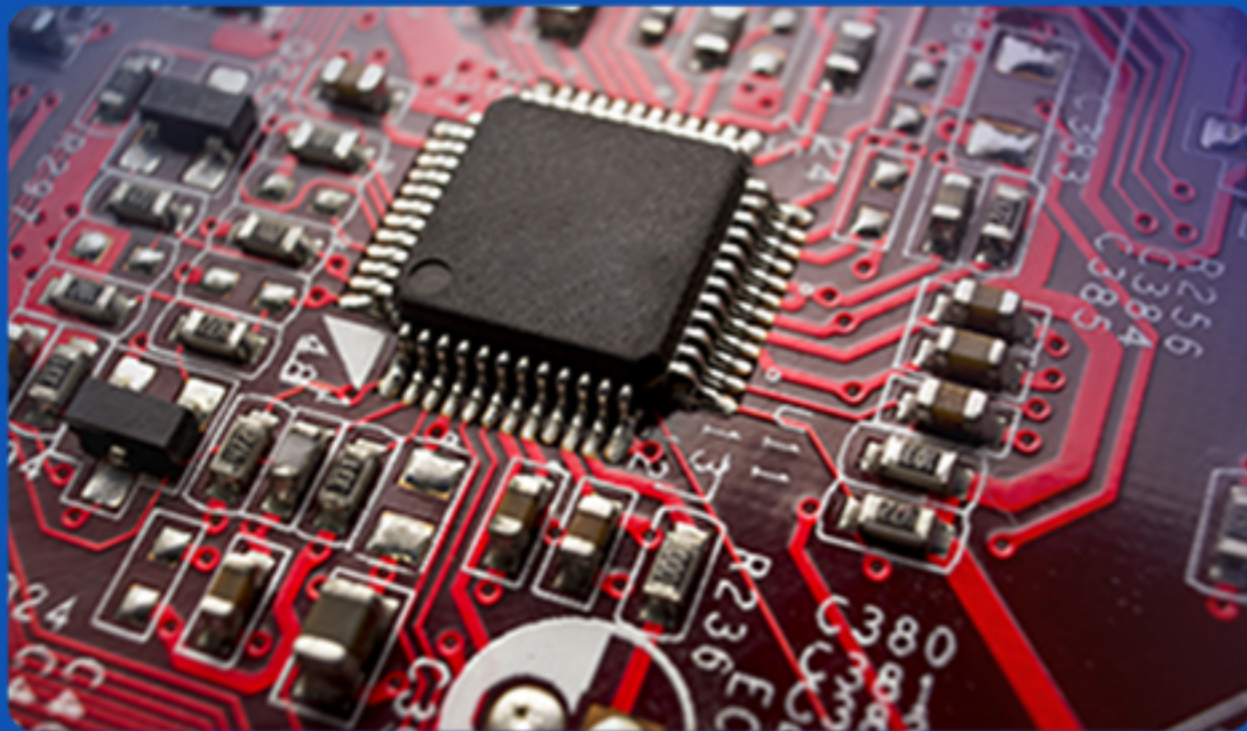
Maximum 5500pcs/h mounting Achieve high speed mounting requirements



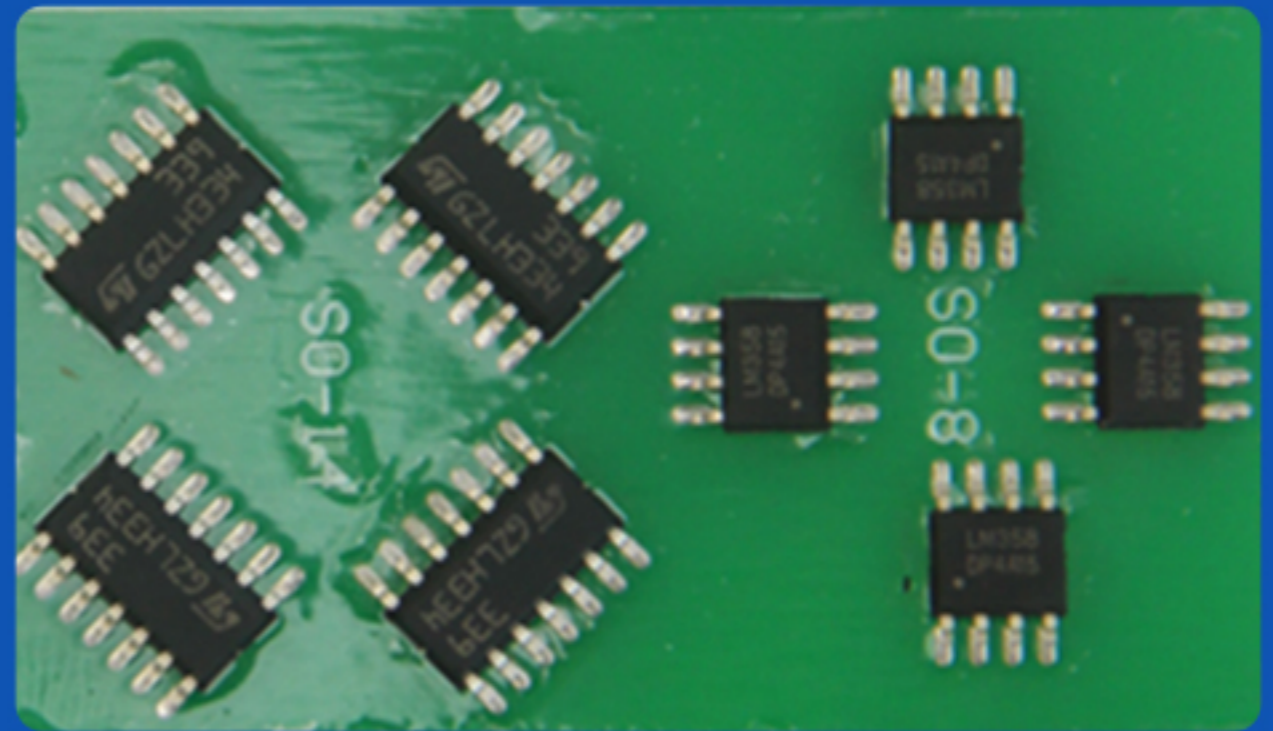
All Kinds of LED Mounting



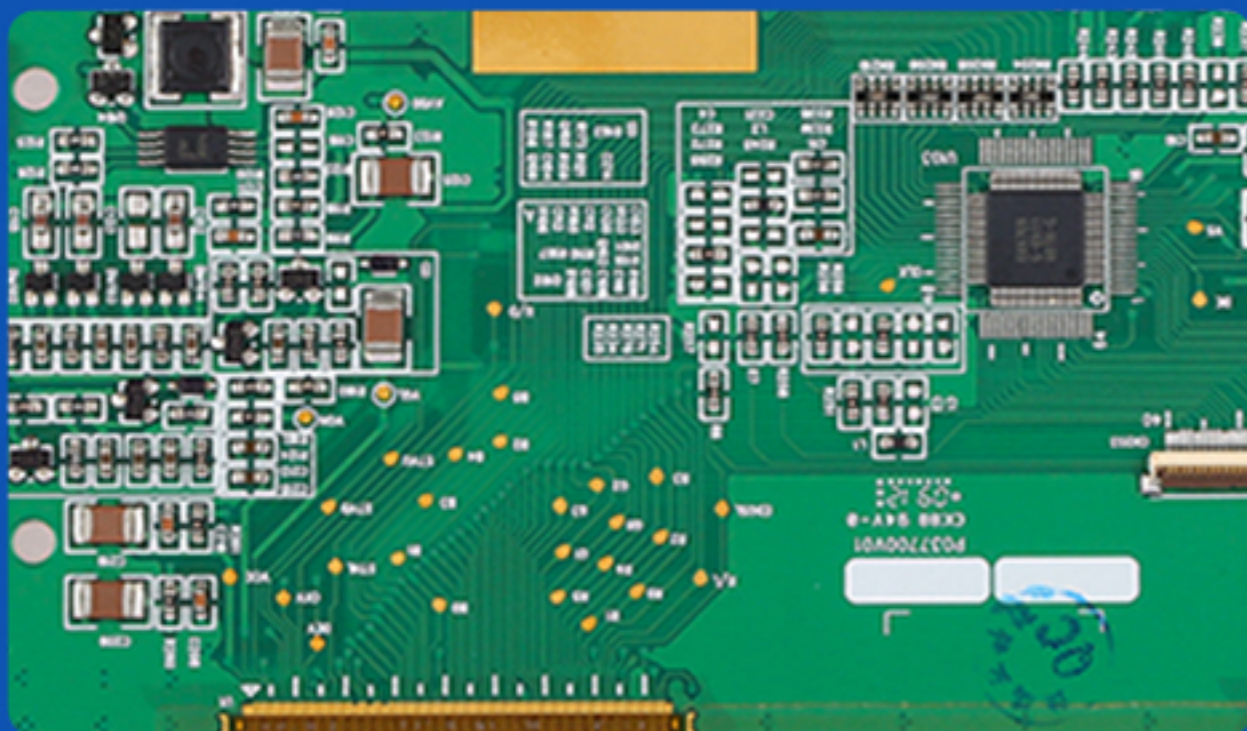
Resistance,Capacitance ,Triode and IC Mixed Mounting



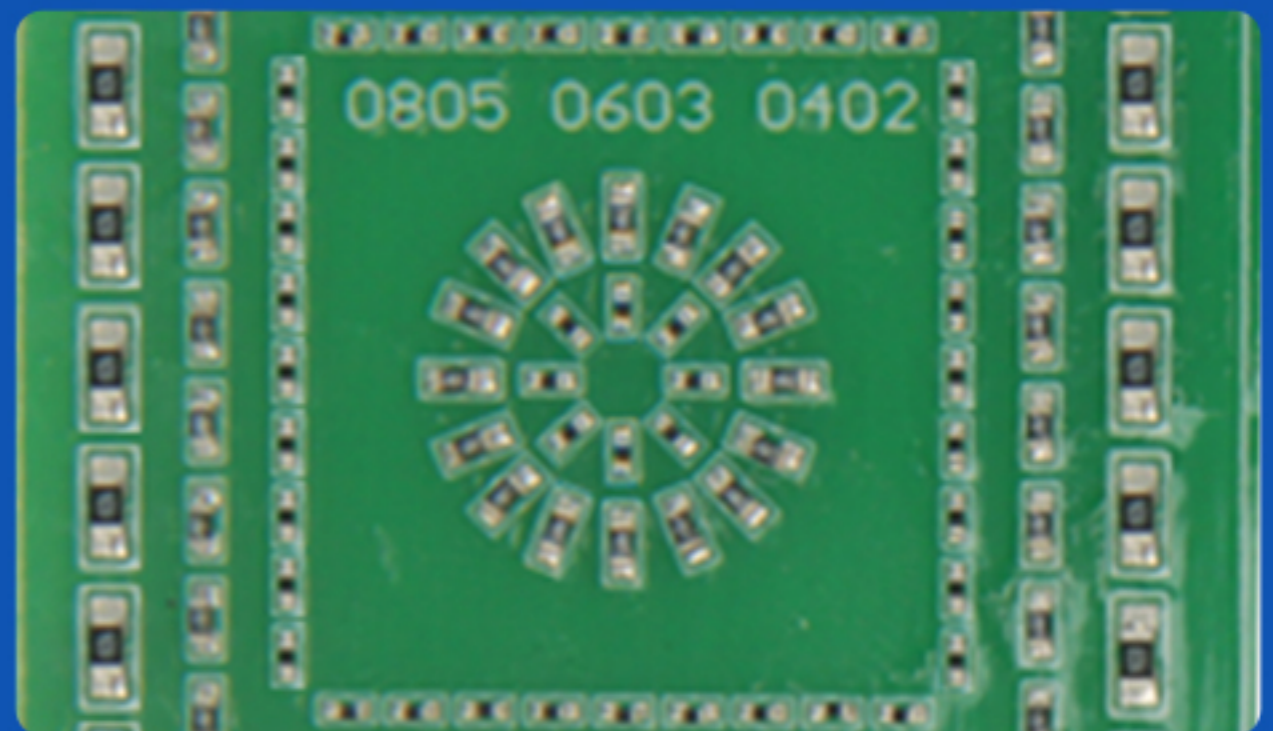
Resistance,Capacitance and IC Mixed Mounting



IC Each Angel Mounting



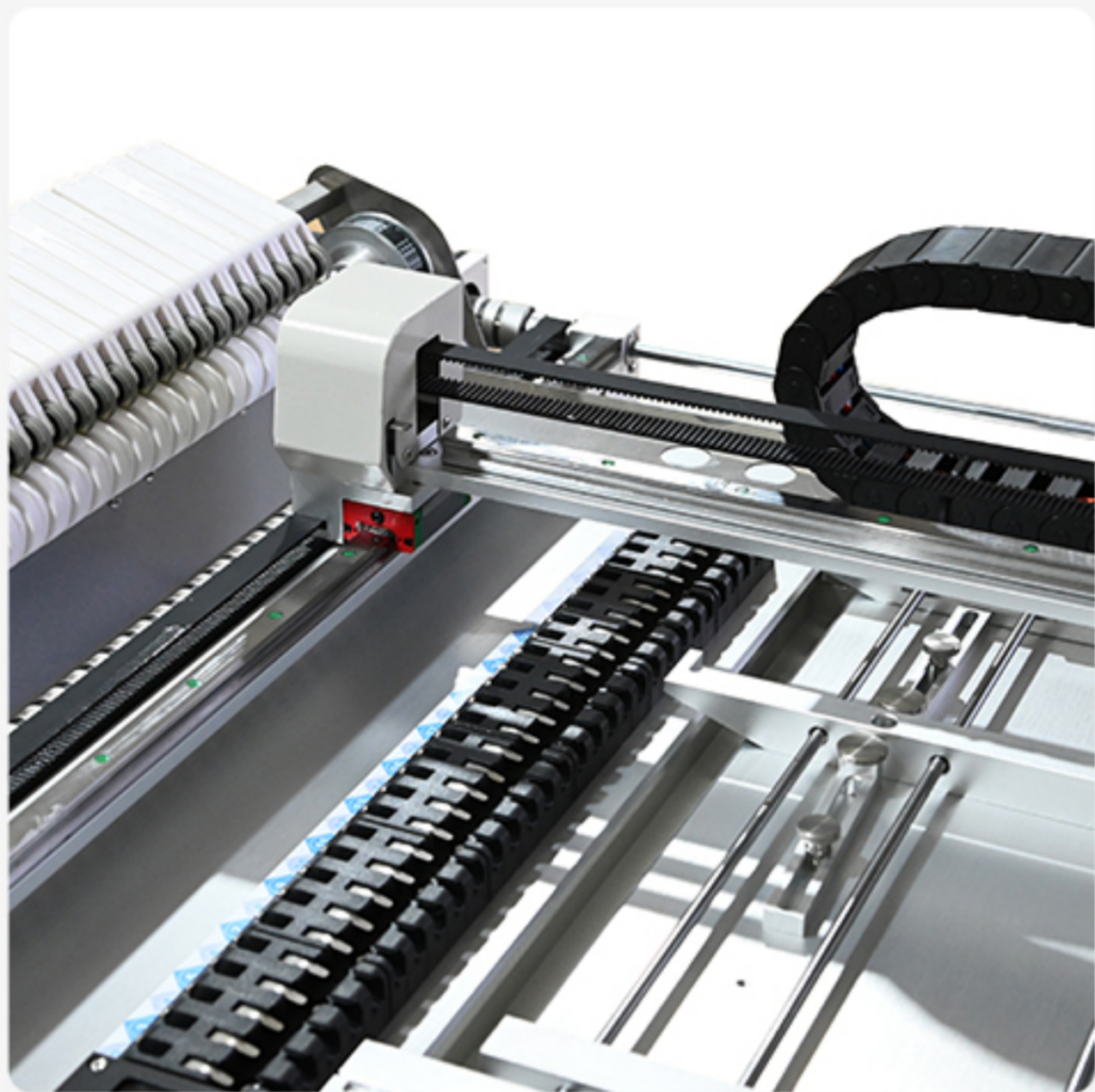
Resistance,Capacitance and Audion Mixed Mounting



0402、0603、0805 Each Angel Mounting

PRODUCT DETAILS

SMT AUTOMATIC VISION PICK AND PLACE MACHINE



01 GUIDE

TAIWAN HIWIN LINEAR GUIDER WAY

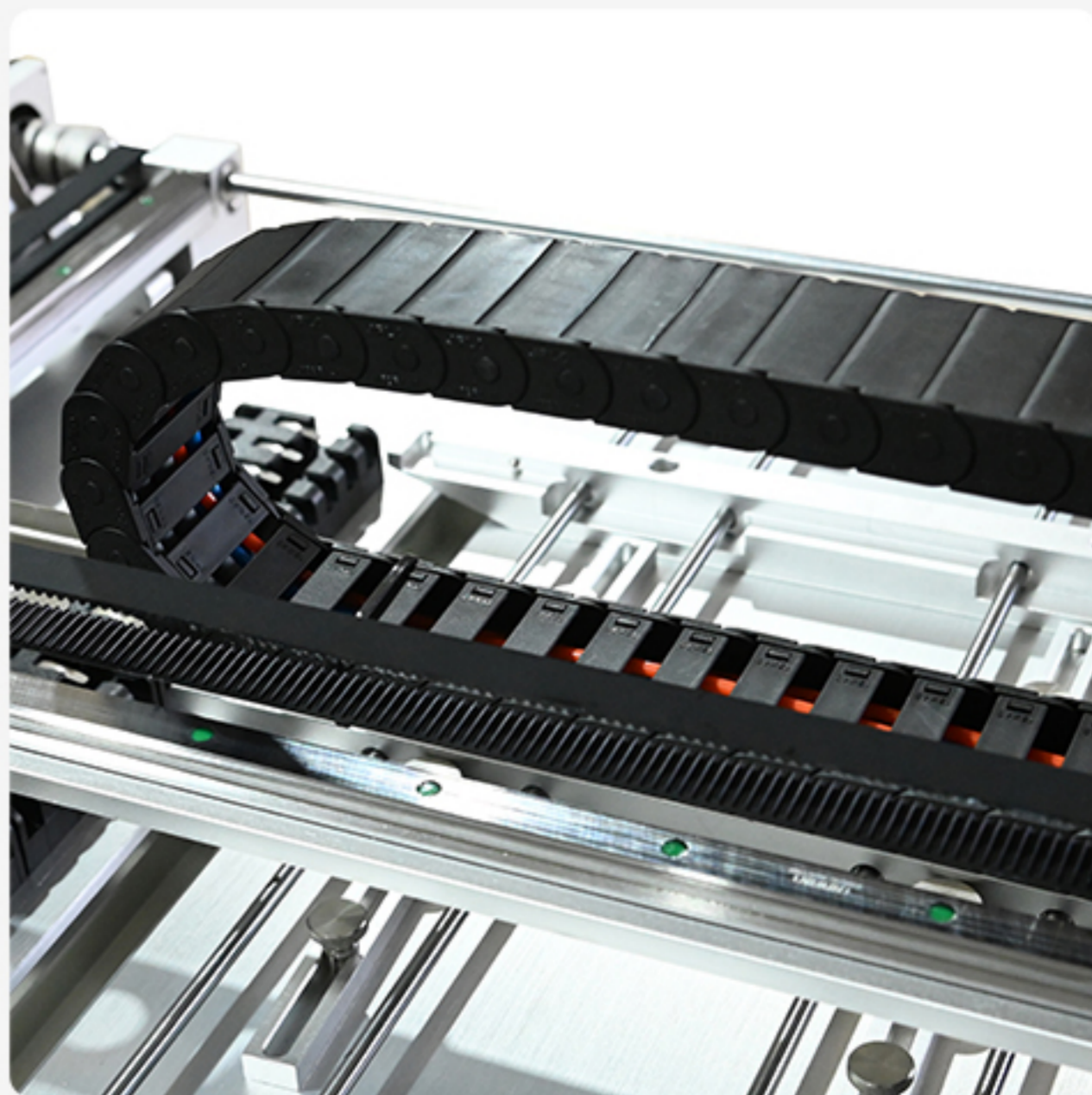
Both XY axis adopts Taiwan HIWIN linear guide rail, more stable and more accurate.



02 TRANSMISSION

TRANSMISSION BELT

Japan UNITTA 15mm width belt With much good wear resistance and aging resistance Not easy to deform and stretch, makes the machine have a high precision





STRIPPING

AUTOMATIC STRIPPING FILM FEEDER

Independent research and development of pneumatic feeding system comparing with other similar products on the market, it perfectly improved the belt problem such as easy to break and and so on.

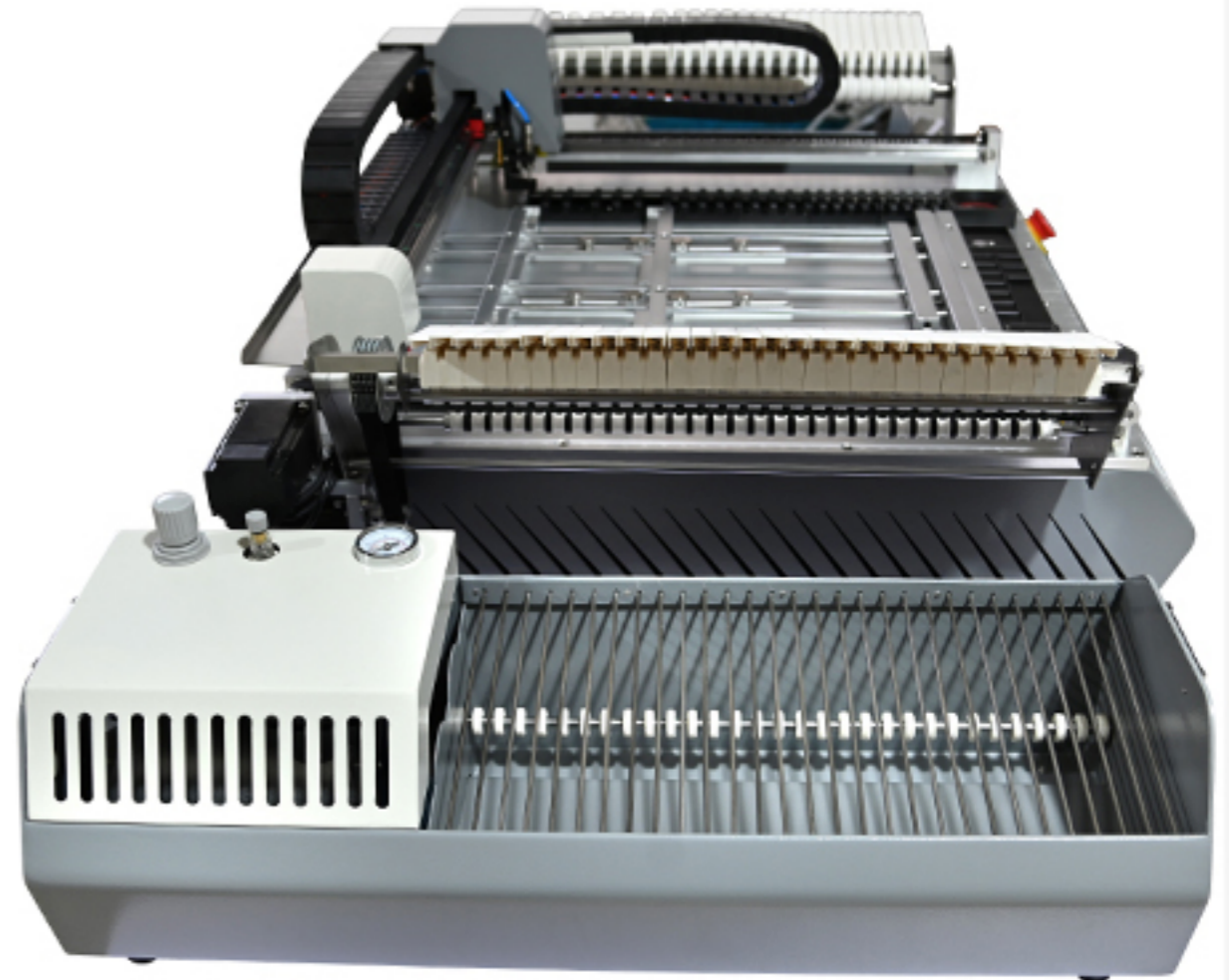


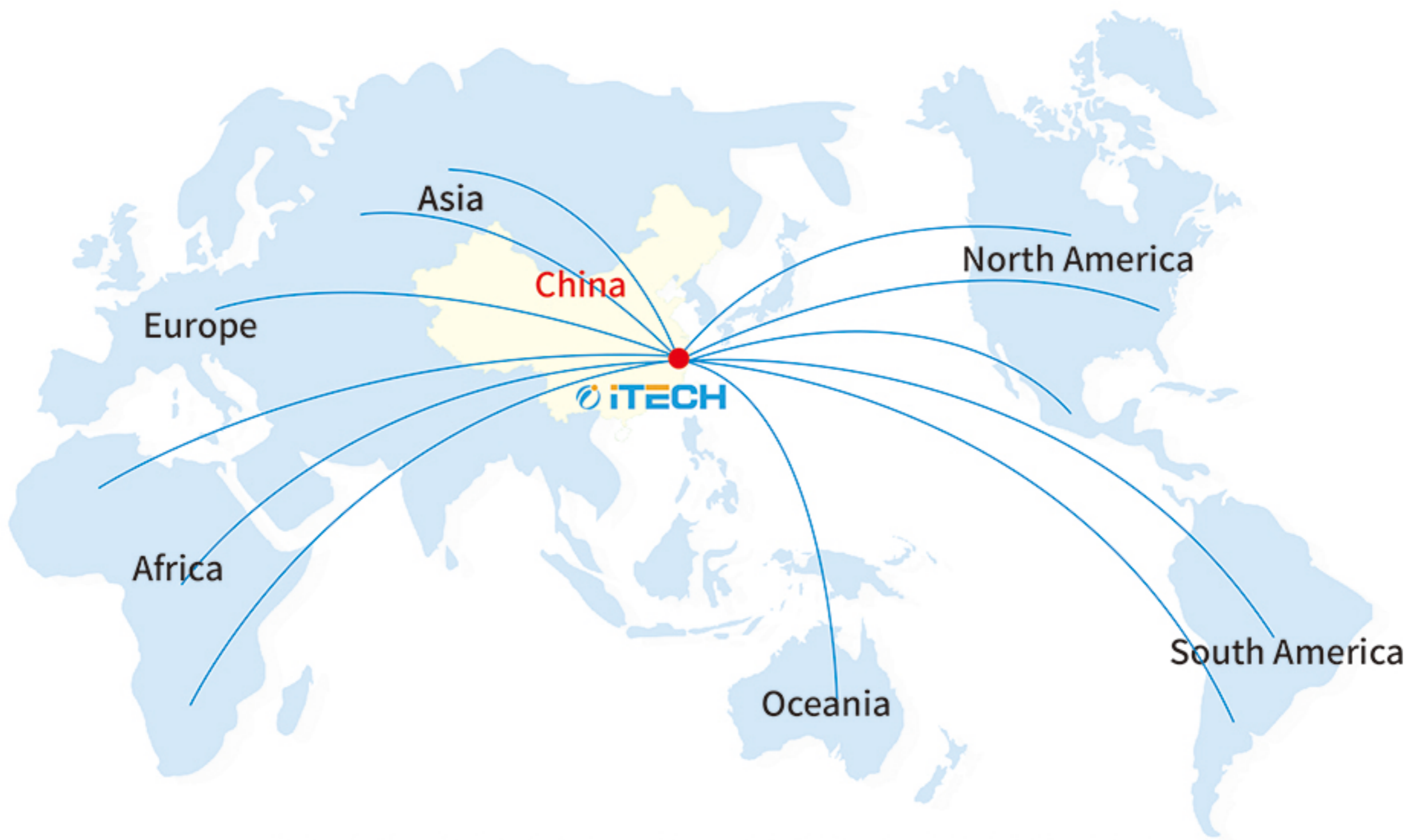
FEED SYSTEM

PATENTED BILATERAL FEED SYSTEM

Solve most of the nylon wheel on the market feeding difficult, return trouble, stripping is not allowed, easy to break and other problems

Patent number: ZL 2015 2 1139348.5





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