

CHM-550 Specifications

Dimensions	980(L)x1050(W)x880mm(H) / 980(L)x1050(W)x1360mm(H) - with base
Weight	190kg
Power Supply	AC220V (50Hz, single phase), 2.1kW
Air Supply	0.5MPa ~ 0.6MPa
Vacuum Generation	Japan PISCO vacuum generator
Mounting Head	4 Heads
Mounting Speed	6500cph(optimal)
Mounting Accuracy	±50μm@μ±3σ/chip
Control Accuracy	5μm
Component Height	12mm
Component Type	0201/0402/0603~5050/SOT/SOP/QFP/QFN/BGA, etc. (resistor/capacitor/diode/triode/LED/IC, etc.)
PCB Thickness	0.6mm~3.5mm
PCB Size	400mm(L)x300mm(W)
PCB Delivery	Manually
Nozzle Change	Automatic nozzle change (13-hole nozzle library)
Control System	Built-in industrial computer (Windows system) equipped with monitor, keyboard, and mouse
Drive System	X&Y axis driven by servo motors; adopting flexible S-curve acceleration and deceleration
Transmission System	Ball screw + linear guide
Feeding System	50 Yamaha 8mm standard pneumatic/electric feeder slots (also suitable for IC tray + stick/tube/vibration feeder)
Vision System	Snapshot camera x 4 (component size applicable: 14mmx14mm); IC camera x 1 (component size applicable: 25mmx25mm); Mark camera x 2

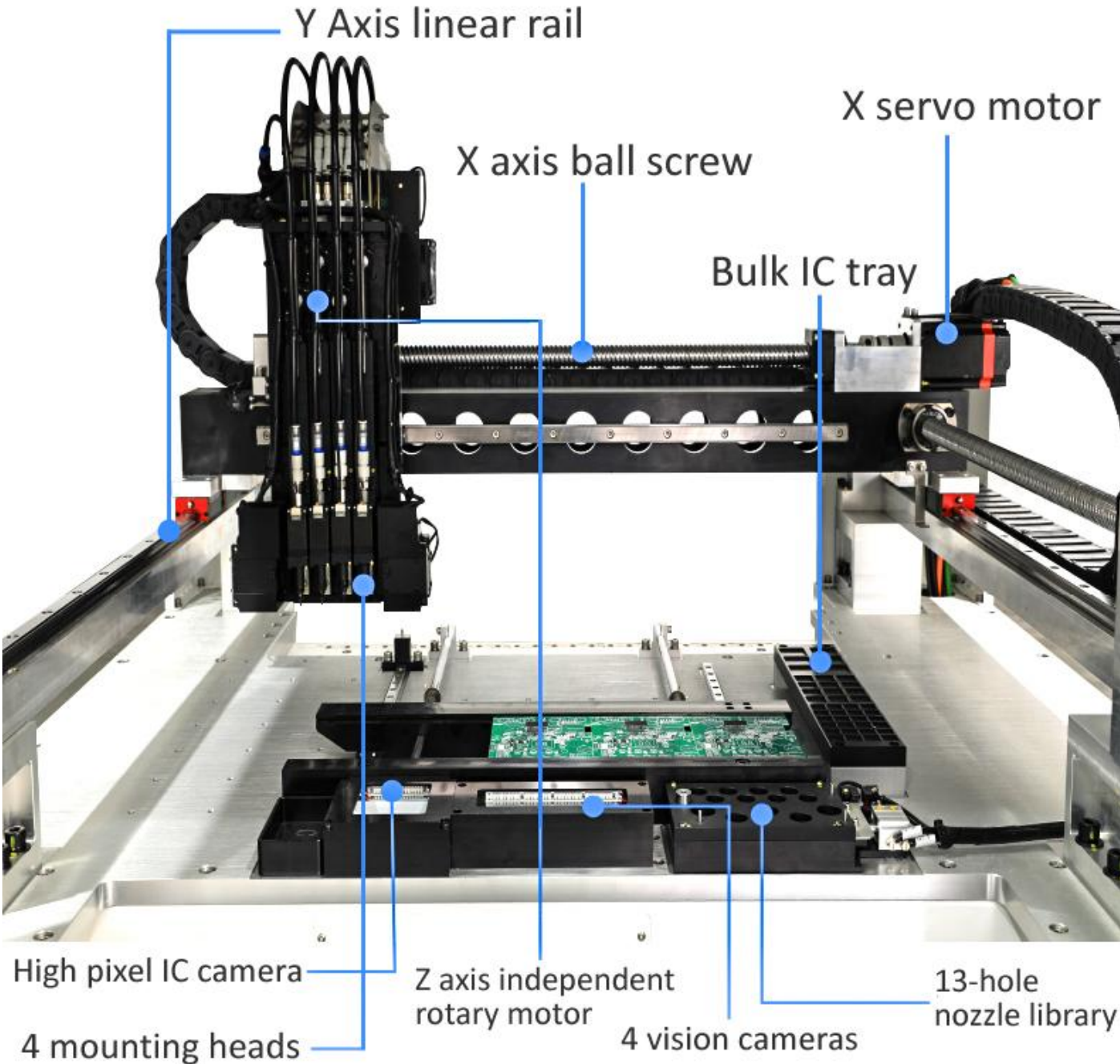


Without base



With base

CHM-550 Machine Structure



01

Transmission hardware

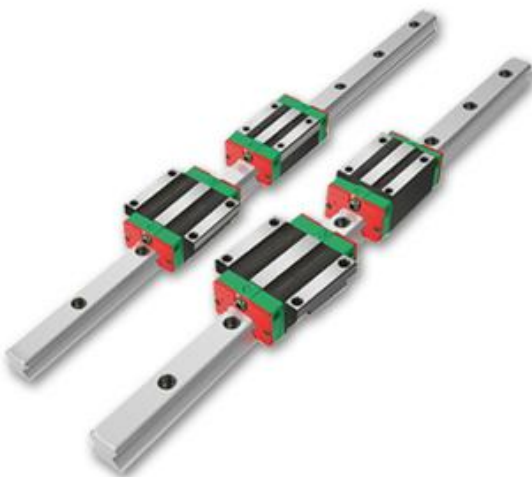


Servo motor

Closed-loop control, more stable.
Low heating, not out of steps, low noise
high pulling torque, moving smooth,
accurate, fast response.

Ball screw

High wear resistance, anti-aging
and no deformation.
Low noise.

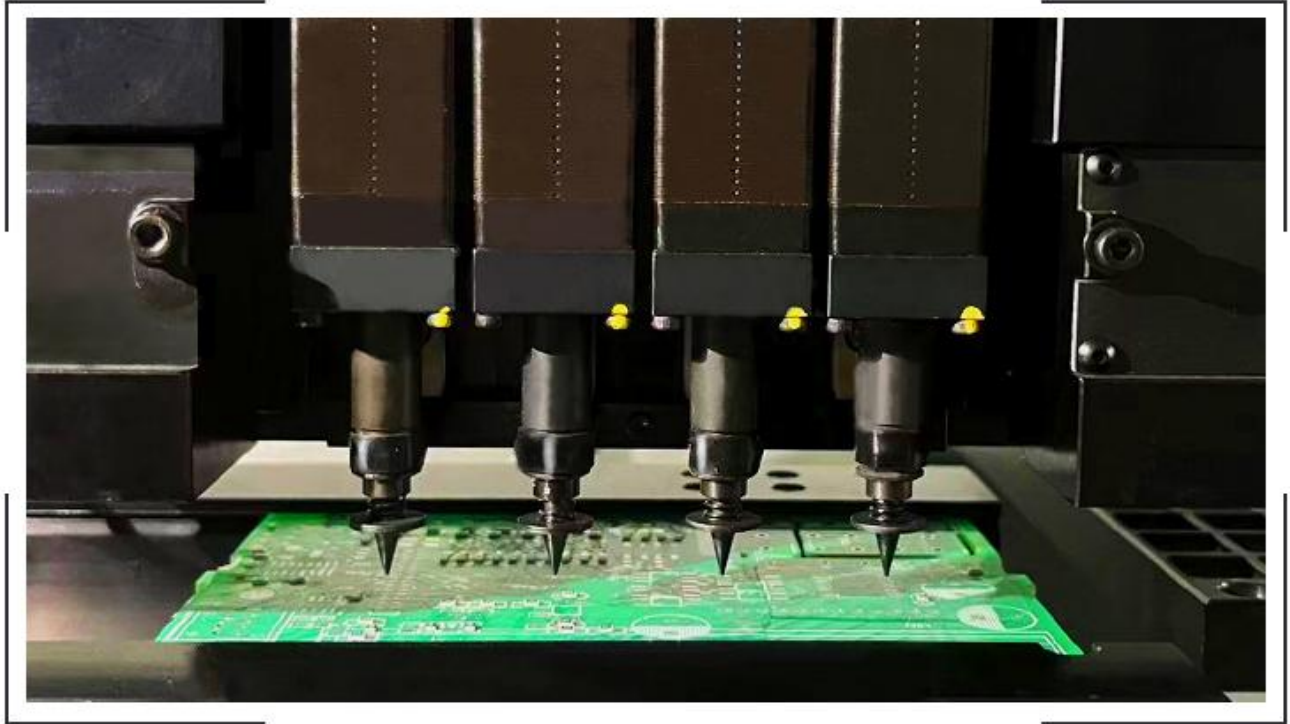


HIWIN linear guide rail

High precision, low noise.
Long lifespan, high rigidity .
High positioning accurate.

02

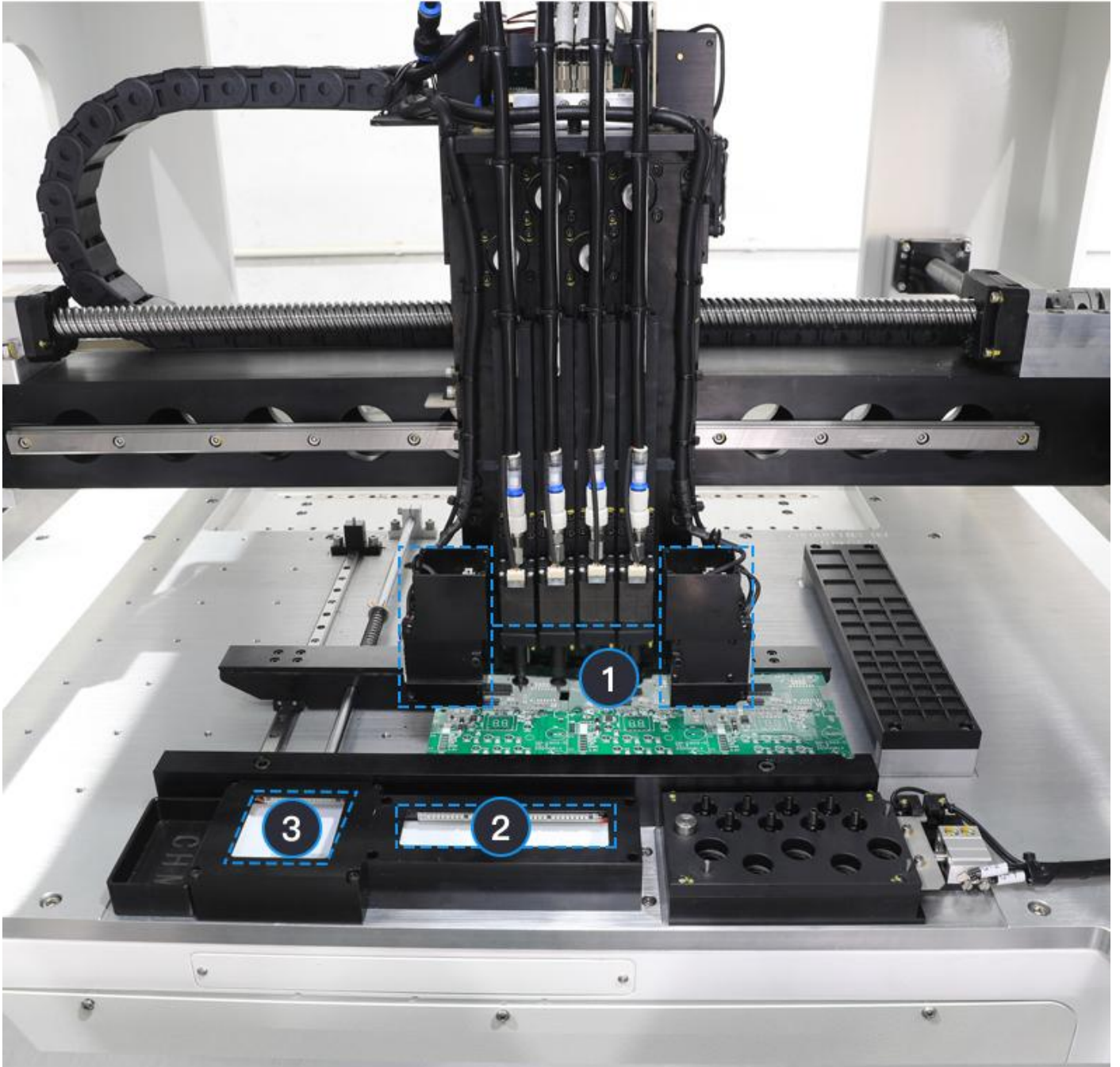
4 Mounting Heads

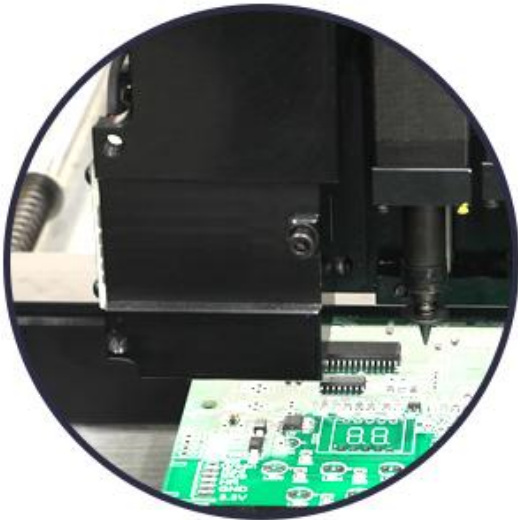


4 independent rotary motor, mounting at any angle.

03

High Pixel Vision Cameras





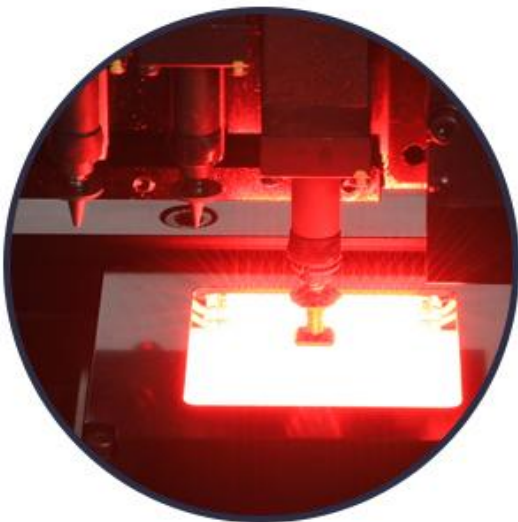
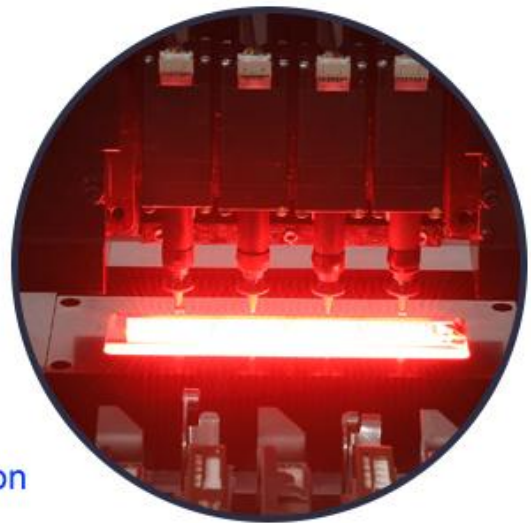
1 Fiducial camera(2pcs) DOWN LOOKING CAMERA

Double mark camera positioning the PCB fiducial point, make sure all components will be placed in the right positions.

2 Vision camera(4pcs) RESISTANCE CAPACITANCE CAMERA

This 4 cameras for Capacitors and Resistors. The cameras can auto correlation the different components picked up by 4 different heads at the same time.

It also has function of **lacking components detection** if the head does not pick component.



3 High pixel IC camera(1pcs) IC CAMERA

IC camera max vision range **25x25mm**

It can auto correlation picking offset, the IC pin recognized by industrial high precision CCD vision system, make sure the mounting more accurate.

High accuracy, 0202 supported, support CPK test.

04

Auto Nozzle Exchange Library



13 holes in nozzle library

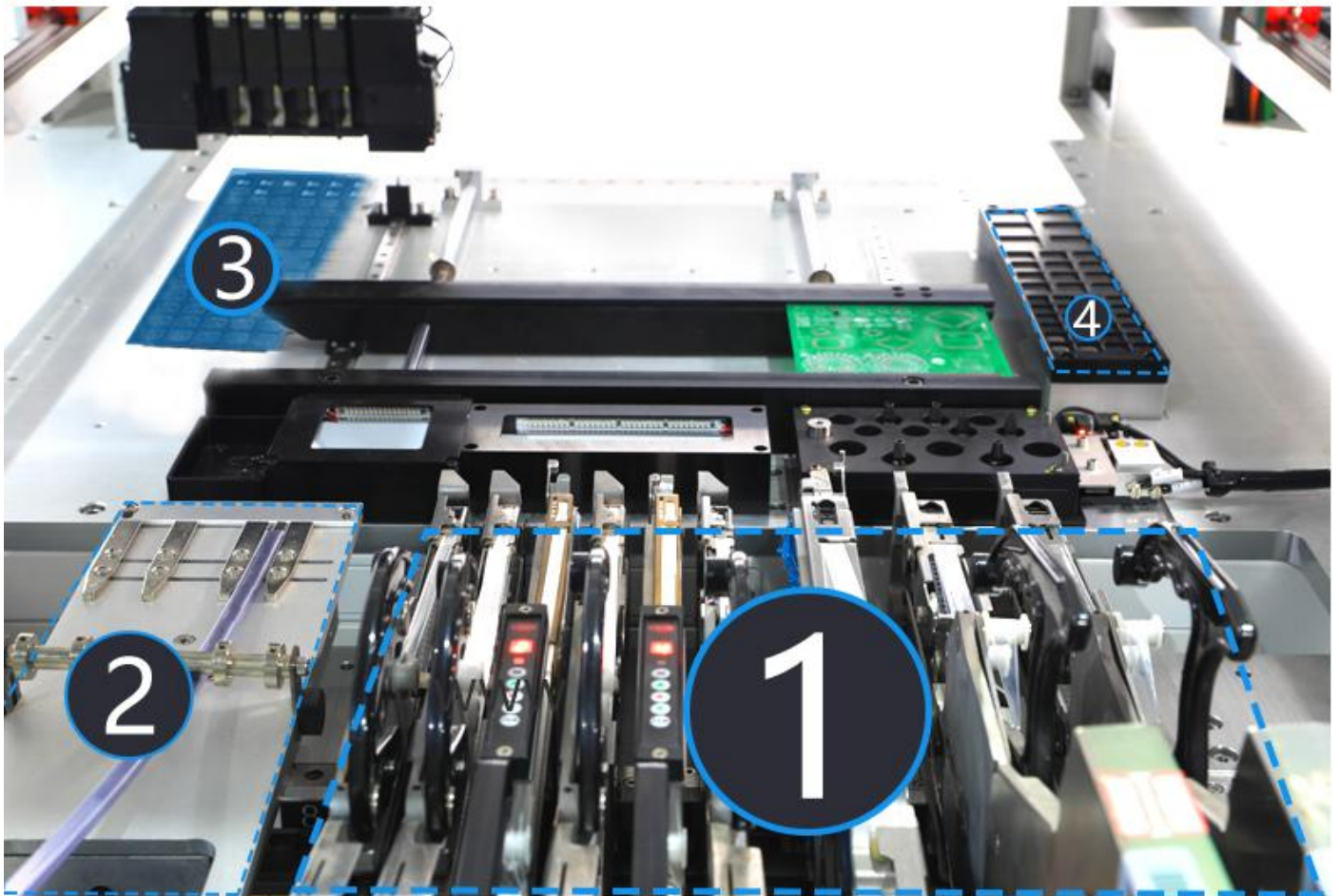
05

PCB Clamping Area



06

Feeding Mode





1

Electric feeder &
Pneumatic feeder
---Both supported



Option:
8mm/ 12mm/ 16mm
24mm/ 32mm/ 44mm

2

Vibration feeder
(Tube feeder/ Stick feeder)

3 tube / 5 tube supported
Amplitude and height can be adjusted



3

Custom IC Tray

Supported one or more IC trays,
only need to aim the first and last component
in software. Very easy and convenient.

4

Bulk IC

52pcs bulk IC positions, very good for
lab researching or teaching.
Very convenient.

