

Equipment Specification

Device Name: COP/COG DDIC Pre-bonding Machine

Device model: EN-801S

1. Structure. Specifications:

Product Material : Aluminum alloy, surface oxidation treatment. Flatness: $\pm 0.02\text{mm}$.

Product size: 650mm*550mm*750mm

Work environment: clean room

Power Supply: AC220V 50/60Hz

Working gas source: 0.4-0.6Mpa, clean and dry compressed air

Device power: 600W

Head size: 33mm*2.0mm (customizable)

Hot pressing accuracy: $\pm 3\ \mu\text{m}$

Equipment weight: $\approx 56\text{kg}$

Working platform size: 180mm*170mm / inclined platform

Packaging size: 660MM*660MM*930MM

Gross weight: $\approx 75\text{kg}$

2. System Configuration:

	Name	Description	Remarks
Navar	4.3 Intelligent All-in-One Touch Screen	Mode switching, parameter settings, system control	
Temperature controlling system	Constant temperature heating method	Settable at 30-300°C	Up and down heating
	Ottonix thermostat	High speed PID operation control	Temperature deviation $\pm 2^\circ\text{C}$
	High speed solid state relay	SSR	
	High temperature insulation block	MISUMI	
	IC discharge head	33mm*2.2mm	Customizable
Counterpoint system	Positioning	Down alignment/manual	
	High resolution CCD	Black and white	Two paths
	High-definition lens with high magnification	Variable focal length	Two paths
	Video controller	ZJWY	ZJWY
	LED light source	Adjustable brightness	
	Secondary light source	Collimated light	
	Camera Position Adjustment	X/Y/Z axis linear module	Caliper adjustment
	High definition liquid crystal display	14inch	
Pressure control	Precision pressure regulating valve	Bonding pressure control	SMC
	Precision pressure regulating valve	Control of self-weight pressure	SMC
	Digital pressure gauge	Precision pressure reading	
Regulatory agency	IC fixed	Vac-sorb	External vacuum pump
	IC position adjustment	Z-axis: servo motor + guide rail	System software settings
	IC tray position adjustment	Y-axis: Linear Platform	
	LCD fixed	Vac-sorb	External vacuum pump
	Face/Slant Platform	Adjustable height	Optional
	COP platform regulation	X-Y- θ -Z linear module adjustment	Caliper adjustment
Actuator	Servo motor	A series	Panasonic servo motor
	Pressing cylinder	SMC low friction cylinder	
	Linear motion control	HIWIN Precision Linear Guide	
	Pneumatic component	Electromagnetic valve	
	Tape	Not have	
	Pressure head level adjustment	Hand movement	
	Leakage protector	32A	Chint

Security mechanism	15A fuse		
	Emergency stop		

III. Equipment Features:

- 1 desktop device, aluminum alloy body, surface oxidation treatment;
- 2 The vision counterpoint system is independently developed, which does not require complex system setup and is easy to operate.
- 3 The corresponding image has high definition, no interference delay, simple and intuitive, and can correct the deformation caused by COP heavy industry.
- 4 The quartz bar base with built-in light source allows real-time monitoring of DDIC alignment accuracy.
- 5 The IC motion system utilizes Panasonic servo motors paired with HIWIN linear guides, delivering precise positioning and exceptional repeatability.
- 6 Based on COP DDIC's heavy-duty process operation design, it emphasizes the adjustability and simplification of every detail.

