

I.C.T High Precision Dispensing System



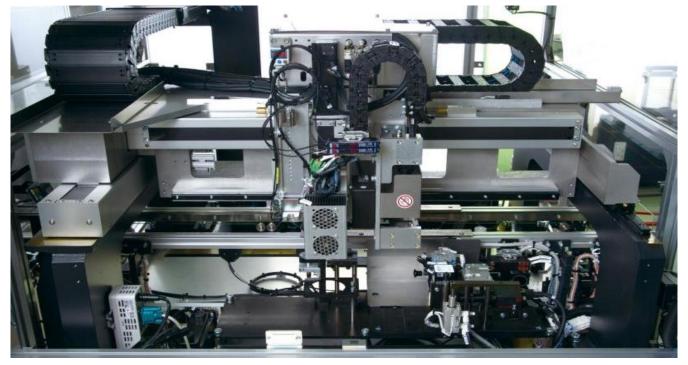
Introduction:

As functionality and performance increase in the electronics field, there is an increasing need for finer and more precise coatings. The HD series machine is a micro-volume, high-speed, high-precision machine that meets the core requirements of artificial intelligence, Internet of Things, CASE, blockchain and other 5G technologies that change life and social fields.

Top advantages:

- 1. Quickly customize a dedicated platform according to customer needs;
- 2. By measuring any three points on the PCB, the plane height is calculated, and the needle height is automatically compensated based on the measured height data;
- 3. Efficient image processing speed reduces visual retrieval and visual inspection time;
- 4. Non-contact laser can detect 1µm warpage of the substrate;
- 5. High-speed micro-spraying of high-viscosity materials, automatic correction and compensation of chip cutting and welding errors;
- 6. Solder paste printing, small amount of high-speed dot spraying, small dot spacing.

Features:



Transmission Structure System



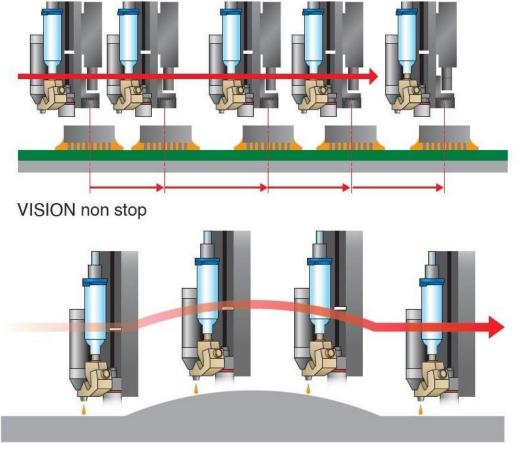
- 1. The machine adopts X Y linear motor drive control, the reciprocating position accuracy is $3\sigma \pm 5$ um (X, Y, Z axis), and the dynamic position accuracy is $3\sigma \pm 3$ um (X, Y axis);
 - 2. Load-type gantry structure ensures the stability and accuracy of the machine during high-speed movement.





Function configuration

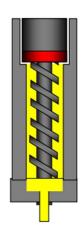
- 1. Customize the exclusive platform to better suit the actual needs of customers;
 - 2. Automatic correction of substrate warp height;
- 3. Penetration monitoring function, with upper and lower dual cameras, can monitor the material penetration under the flipchip in real time throughout the process, and automatically feedback to adjust the next filling.

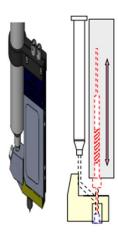


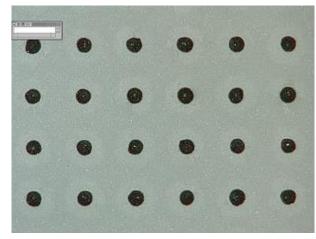
Vision non stop



- 1. Vision non-stop high-speed detection and compensation function, capable of detecting 100 chips per second;
 - 2. Automatically identify chip position deviation and height deviation to compensate for the coating action;
- 3. Dual compensation for path and glue amount, identifying and calculating the amount of glue at overlapping points, reducing the amount of glue added.





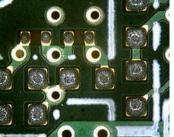


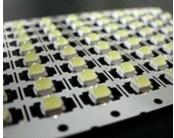
Configuration options and applications

- 1. Different valves are selected according to data requirements. Screw valves are suitable for glue or solder paste with high viscosity, and jet valves are suitable for glue with good fluidity.
 - 2. The smallest solder paste dot that can be printed is 110um, suitable for high-precision ICs and BGAs;

Application:









Semiconductor Packages

Board Mounting

LED back-end Mini-LED

PC hard drive

Specification:

Standard - S

Model	I.C.T- HD330		
Max PCB size	50*70~250*330mm		
Drive	Linear motor		
X / Y repeatability precision- 3 sigma	±5μm		
X / Y max speed	1500mm/sec		
Acceleration	1.5G		
	Repeatability	±1μm	
Picture processing-digital camera	Precision	MAX: 0.03sec/point	
-automaton	Alignment	S	
	Chip master	S	



	Bad mark	S
	Repeatability precision	S
	Non-Stop CCD	S
Height measure system(Laser Type)	Repeatability precision	±1μm
		0.1sec/point
Calibration	Robot-camera	S
	Camera-z	S
	Camera-needle	S
	Needle-z	S
Simply monitor	Dispensing area (OK/NG)	S
	Dispensing perimeter	· ·
	(OK/NG)	S
	Underfill permeation	· ·
	auto-monitor	S
	Bad mark inspection	S
	Height inspection	S
AOI feedback	Dispensing volume feedback	S
	Picture processing feedback	S
	Height measure feedback	S
Needle cleaning	Air blow type	S
	Vacuum type	S
Material discharge	S	
Electronic scales	Accuracy	0.1mg / 0.01mg
	Feedback	OPTION
Heat unit(pre/main/after)	OPTION	
Compressed air	0.4-0.6 Mpa	
Power	AC200V,3ф,20A	
Dimension	1300*1100*1380mm	
Weight	850kg	

^{*} I.C.T keeps working on quality and performance, specifications and appearance may be updated without particular notice.

Thanks for choosing I.C.T.

I.C.T looks forward to win-win cooperation.

Thank you!