

### I.C.T High end Online Dispensing Machine



#### Introduction:

The I.C.T dispensing system has significant strength in cost performance. Being reliable, durable, and concisely designed, it can be applied to PCB and base materials of different specifications. The UFD operating software ensures the stability and reliability of the system. The system is designed for chip sealing, PCB assembly, SMT red glue dispensing, led lens, and medical products. With adjustable track width, it can be applied to more products. We have established wide support and service network to provide complete process solution for the development, manufacturing and product innovation of the customers.

#### Top advantages:

##### High Precision:

The main parts of the automatic high-speed dispenser adopt international top devices, advanced assembly tools, strict assembly technology and process, perfect testing tools, harsh and systematic testing standards, effectively guarantee the repeatable running accuracy of each axis.

##### High efficiency:

Precise glue volume control, precise vision measurement algorithm, advanced 3D spatial interpolation algorithm effectively guarantee the accurate and stable operation of the machine without the need of Z-axis up and down movement.

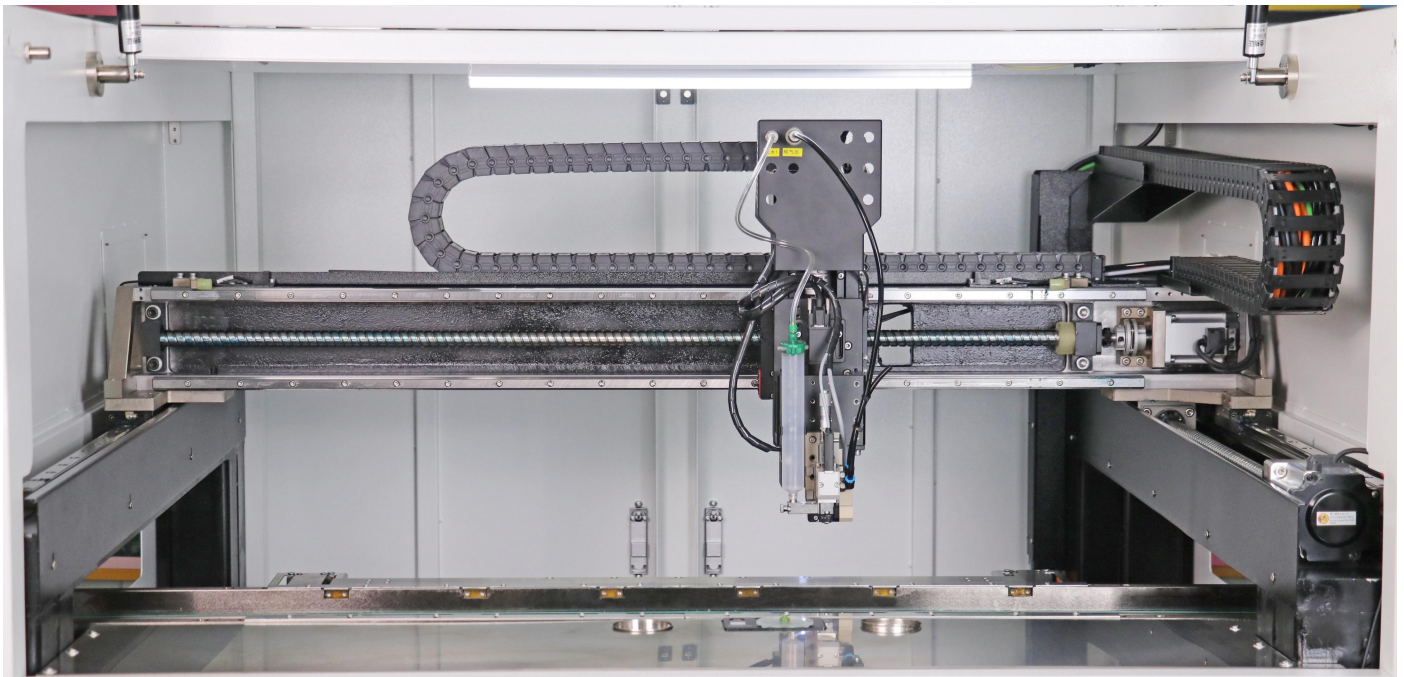
##### High Stability:

Fully automatic high-speed dispenser, the valve body, microbalance, vision, motion module digital communication in series, to achieve real-time data monitoring and digital closed-loop self-control technology of glue weight, glue line length, line width, glue thickness, position, leakage point, etc., in the high-demanding production projects, so that it is able to easily and quickly respond to the complex products of high-precision wrapping, filling, damming, caulking and other applications.

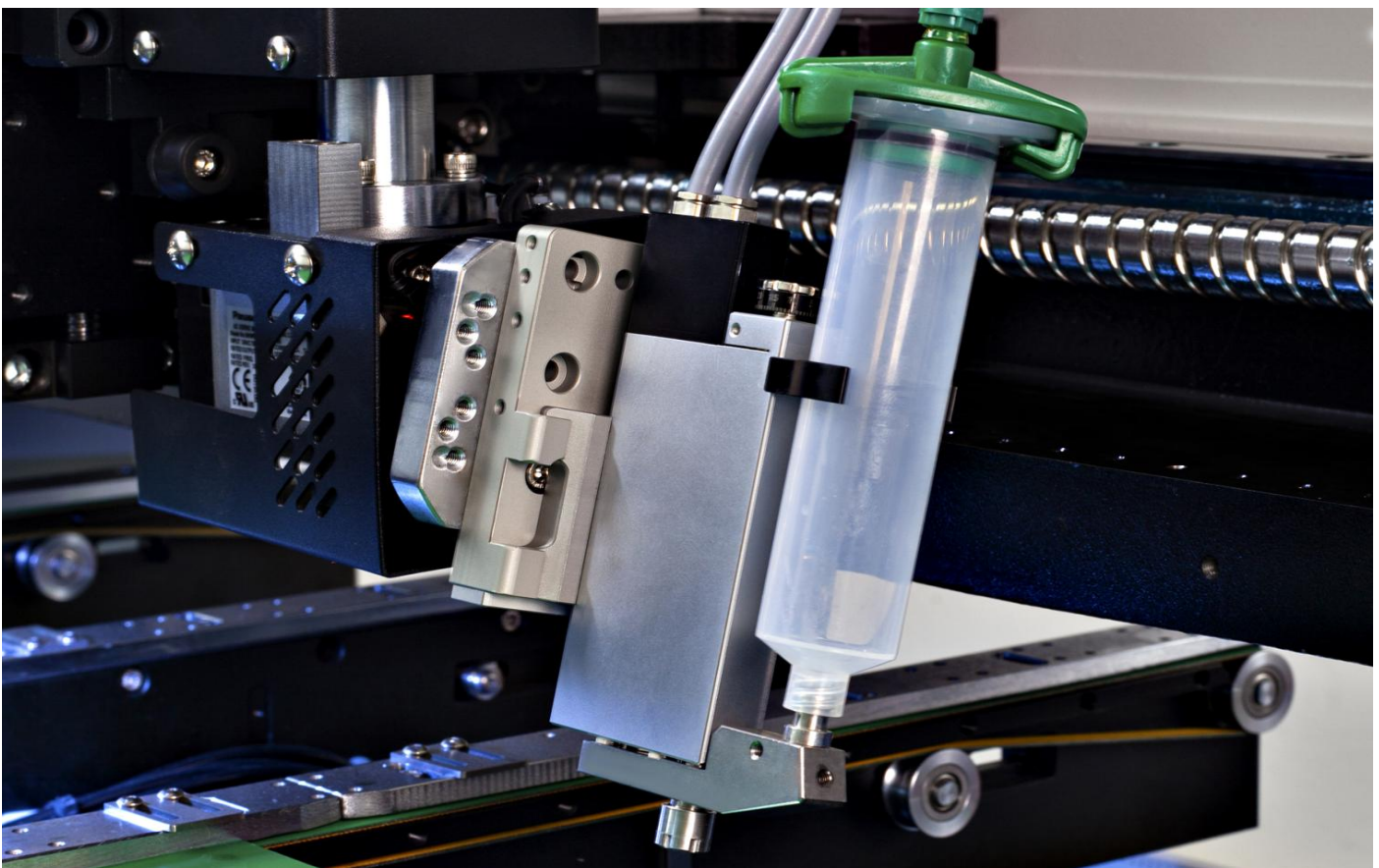
##### Cost Effective:

The fully automatic high-speed dispenser can handle a wide range of different glue dispensing applications and many different substrate sizes;

Features:



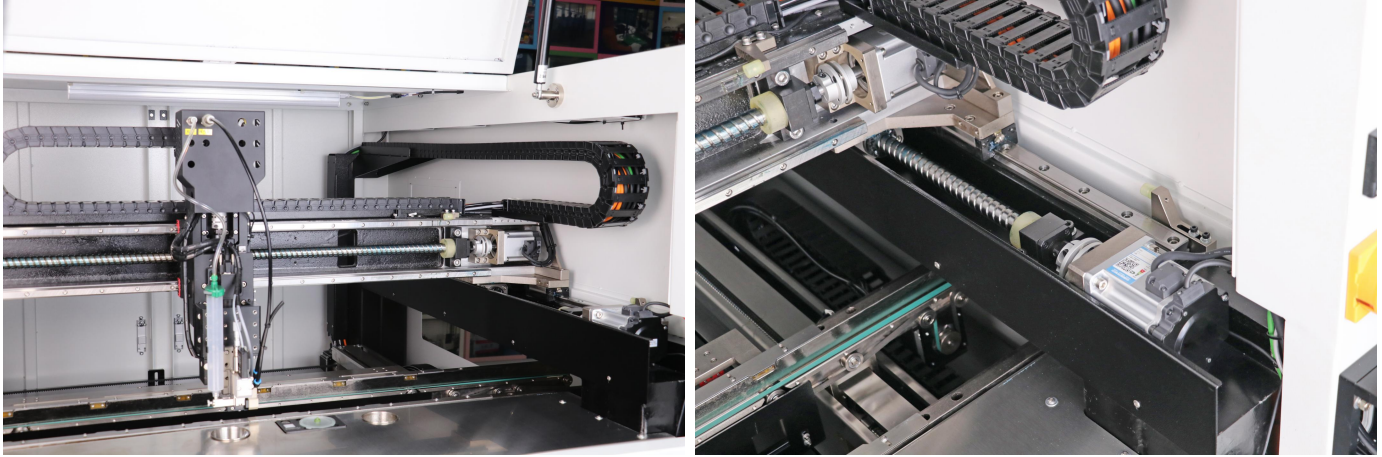
Overview



Dispensing system

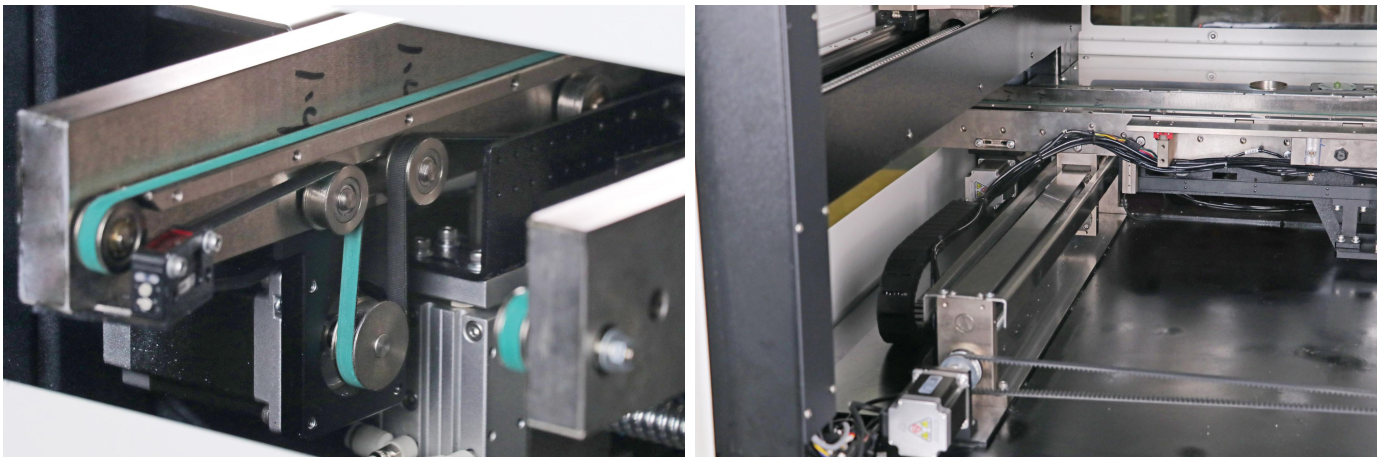
1. Non-contact jet dispensing, avoiding interference between the needle and the workplace, highly flexible;

2. Advanced mechanical design makes daily cleaning and maintenance simple; state-of-the-art nano wear-resistant materials;
3. Injection valve flow channel constant temperature system ensures uniform glue temperature;
4. Option laser for non-contact height detection to reduce height detection time;
5. Option to rotate the structure, more flexible design, adapt to most scenarios.



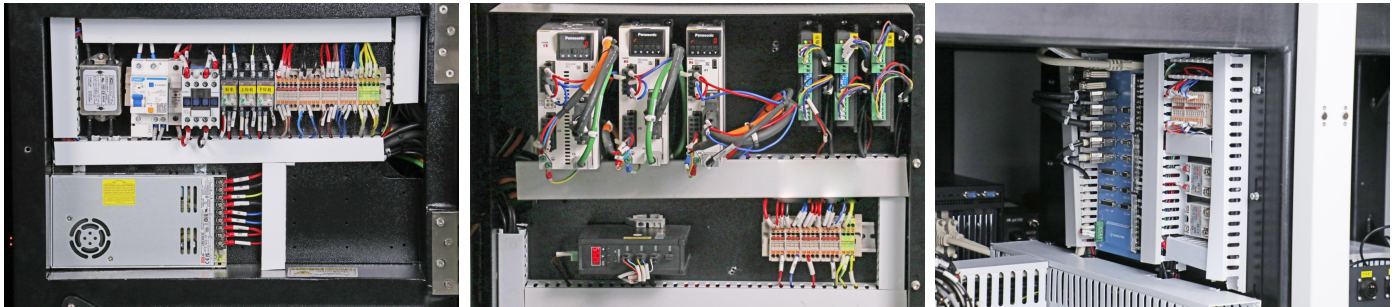
Exercise system

1. High-precision screw rods and slide rails ensure repeatable positioning accuracy and stability of each axis;
2. Mechanical hardware limit device + software limit lock, double protection;



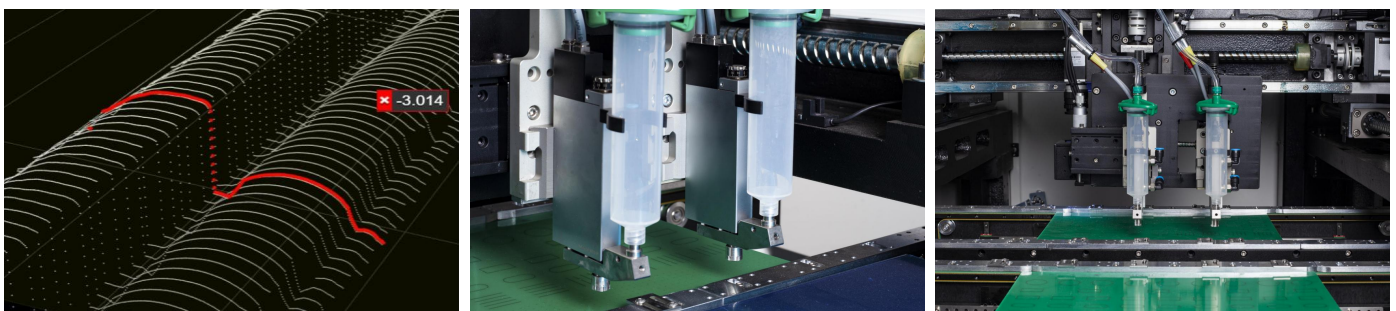
Transmission system

1. Larger anti-static transmission belt, high strength tensile strength, good wear resistance, ensuring smooth transmission;
2. Synchronous servo motor control ensures precise and parallel width adjustment without bell mouth
3. Use thicker support structure members to provide greater load capacity.



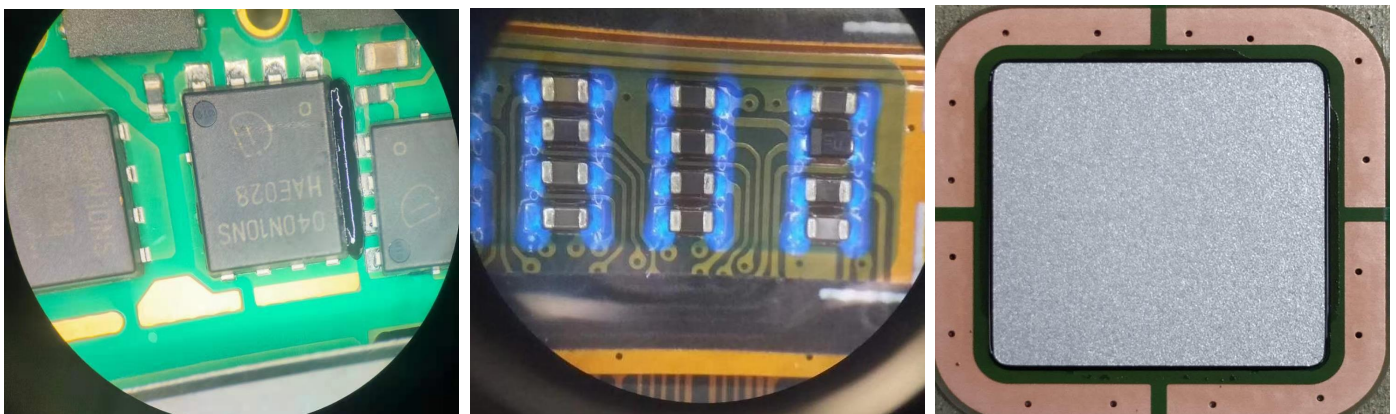
Control System

1. Bus control system that complies with CE standards to ensure system stability and scalability;
2. Modularly designed partitioned architecture, smaller space, one-to-one correspondence to different parts.



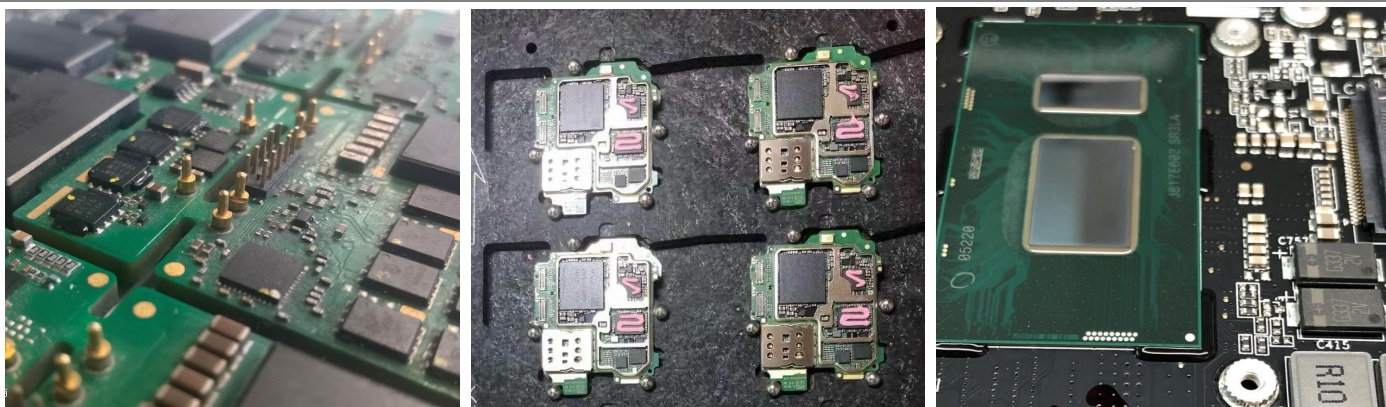
Option function introduction

1. Glue path detection technology can automatically detect, analyze, remind and classify product dispensing effects, process dispensing detection results in batches, provide dispensing quality digital control and improve production efficiency, and realize the necessary technology for Industry 4.0 factories;
2. Dual-valve independent XY-axis real-time automatic correction technology ensures real-time adjustment of dual-valve dispensing accuracy to achieve high-efficiency batch precision dispensing; optional dual-valve asynchronous dispensing;
3. The standard configuration is a one-section single guide rail, with the option of a segmented dual transport mechanism to minimize standby and material waiting time and improve production efficiency; the dual guide rails can meet the simultaneous dispensing of products of the same model or different models.



Application scenario

1. Computer motherboard enclosure; pin encapsulation; fingerprint module bottom filling;



2. Thermal conductive gel; power energy dam; stack packaging;

3. Application scenarios, product processes are different, and different valves need to be matched to meet process requirements.

**Material list:**

No.	Item	Brand	Original
1	Pneumatic component	SMC/AirTAC	China
2	Vacuum component	SMC/AirTAC	China
3	Screw/Rail	THK/HIWIN/TBI	TBI
4	Switch button	Siemens	Germany
5	Step motor	Leadshine	China
6	Sensor	Omron/Panasonic	Japan
7	Motion control card	GOOGOL	China
8	IPC	EVOC	China
9	Servo motor	Panasonic	Japan
10	Dispensing valve	I.C.T	China
11	Visual system	I.C.T	China
12	Camera	HIKVISION	China

**Specification:**

Model	I.C.T-D600
Position accuracy	±0.025mm CPK>1.33 3sigma
Repeated accuracy	±0.01mm CPK>1.33 3Sigma
Valve	Standard injection valve; (option piezoelectric valve)
Running speed	800mm/s
Driving method	Servo motor + high precision screw
Dispensing speed	15 point/S
Dispensing Mode	Airplane Mode
Axis	Three axis X/Y/Z
Max PCB size	50*50mm~600*600mm
PCB thickness	0.4~6mm
Max PCB weight	5kg
Craft Edge	≥2.5mm
PCB height	23mm

Transport height	900±40mm
Transport speed	1500mm/s (Max)
Transport function	L to R; R to L; L to L; R to R
Camera pixels	1.3 million pixels
Field of vision	6*9mm
Light source type	Coaxial or ring light
Type of reference point	Mark or chip body identification
Positioning method	Mark point positioning, body measurement, edge-finding guidance optional.
Max component height	Max 30mm above board, max 45mm below board
Specification of rubber drum	30cc or 50cc
Dispensing travel	X:600mm, Y: 600mm
Cleaning mode	Vacuum cleaning
Power	AC220V±10%, 50/60HZ
Compressed air	4~6kgf/cm <sup>2</sup>
Gas consumption	About 5L/min
Dimension	1045*1460*1480mm
Weight	800kg

\* 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!**