

I.C.T Automatic Visual Soldering Robot I.C.T-VSR400



Soldering Principle:

Operation mode: Multi-axis drive manipulator and software control to achieve precise positioning of the welding head.

Welding method: High temperature eddy current heating with a soldering iron.

Working principle: Fix the soldering iron on the robot, move to the specified welding coordinates, and automatically feed the wire at the tip; the soldering iron is welded at high temperature and engaged with the target.

Introduce:

I.C.T Automatic Visual soldering robot is a soldering robot with soldering wire feeding motion system. high frequency heating system with rapid heat recovery, soldering tip is easy to the exchanged with low cost .Break tin automatic solder wire feeder can reduce flux remaining problem after soldering.

Features:

1. Cost saving: High-efficiency operation is achieved by only one person, one person's efficiency amounts to 3-5 persons efficiency;
2. X,Y,Z,R and soldering wire feeding motion system are all controlled by one combined 5 axis motion control card with PC, so it can integrate all the functions into one software.it makes machine running more stable and easy to operate;
3. X,Y,Z,R axis adopt quality step motor with it's control system, make machine run smoothly and precisely;
4. It is equipped with automatic soldering tip cleaning device ,which can improve soldering quality and prolong lifetime of soldering tip;
5. Windows 7 English operation system, use touchscreen with wireless controller and teach method for programming, working very easy;
6. Break tin solder wire feeding system can pierce holes when feeding solder wire, it can reduce burst tin that causes flux remaining on PCB when soldering under high temperature to improve the soldering quality, solder wire feeding accuracy can reach 0.1mm;
7. High frequency induction heating system has rapid temperature recovery time, heating element adopt silver coil which can ensure long lifetime, soldering tip can be easily changed with lower cost;
8. Self-developed advanced software, fool-style programming with wireless controller like play game, all parameters can be set in one program, such as moving path, solder wire feeding quantity, soldering time etc, very easy to use;
9. Optional smoke cover and smoke extractor can provide a very clean work environment;
10. Various soldering tips can meet different process requirement, customized soldering tips is also available;
11. One worker can operate 2-3 robots, what this worker does is only pick and place fixture;
12. Robot is strictly customized based on requirements on products and soldering, in line with requirements of production line.

TOP Advantage:

1. Spot soldering,drag soldering, automatic cleaning and multi-angle soldering are available;
2. Position calibration, soldering dot array, parameter copy, automatic location and skip are available;
3. Teaching programming enables customers to implement all types of hand soldering upon their requirement;
4. Program calibration achieves workpiece integral coordinate position compensation;
5. Program insertion and deletion make program revised easily and rapidly;
6. Intelligent control system achieves accurate delivery of solder, speed, time, temperature and quantity of solder can be adjusted and

controlled accurately.

Specification:

Model	I.C.T-VSR400
Processing Scope	580*280*80mm
Maximum Jig Size	250*280mm for each table
Solder Wire	Φ0.6~1.2mm
Solder Feeding Speed	1~50mm/s
Feeding Resolution	0.1mm
Move Speed	X,Y: 600~800mm/s, Z: 400mm/s
Repeated Precision	±0.02mm
Temperature Control range	0~550°C
Temperature Control Accuracy	±1°C
Air Pressure Requirement	0.4~0.6MPa
Control Mode	Dedicated motion controller+Industrial computer
Driving Mode	Precision stepping motor+Synchronous belt
Soldering Method	Point Soldering/Drag Soldering
CCD Camera	5M Pixel HD industrial camera
Iron tip Cleaning	Automatic Air cleaning
Working Temperature	Room temp~40°C
Working Humidity	20~90% RH
Dimensions	900*650*1700mm
Power supply	AC220±10%, 50/60Hz, 600W

* 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.