Shenzhen Wisdomshow Technology Co.,ltd

WDS1800 Full Automated BGA Rework Machine Computer Control Easy To Operate

Basic Information

Place of Origin: CHINABrand Name: WDSCertification: CE

Model Number: WDS1800
Packaging Details: Wooden case
Delivery Time: 8-15 working days

Payment Terms: T/T, Western Union, MoneyGram

• Supply Ability: 50 UNITS PER MONTH



Product Specification

Highlight: Full Automated BGA Rework Machine,
WDS1800 BGA Rework Machine,

Full Automated IR Rework Station



Product Description

WDS-1800 description

The WDS-1800 is a fully automated rework station that recognizes Marke point positioning. The WDS-1800 is a fully computerized rework station tailored for users who require high automation and high precision rework. With 1200W pixel vision positioning system, it can automatically identify the coordinates of Marke points to realize accurate positioning; it adopts infrared + gas (including nitrogen or compressed air) mixed heating method, and all the movements are controlled by the software and driven by the motor to complete the integrated rework station for desoldering. Used for desoldering all kinds of chips in various packages. Suitable for any BGA devices, special and difficult rework components. POP, CCGA,BGA,QFN,CSP,LGA,Micro SMD,MLF(Micro Lead Frames)etc.

Independent eight-axis linkage, eight motors drive all movements. Upper and lower temperature zone/PCB movement and visual positioning system X/Y movement can be controlled by computer, easy to operate. With memory function, suitable for batch rework to improve efficiency, high degree of automation.

Separate design of heating head and mounting head with automatic rotation, alignment, welding and automatic dismantling;

4. Independent three temperature zones (upper temperature zone, lower temperature zone, infrared preheating zone), the upper temperature zone and lower temperature zone to realize the automatic movement to any position of the heating area, when the upper heating head reaches the target chip position, the lower heating zone will automatically move to the bottom position of the target chip. The lower temperature zone can automatically lift and adjust the heating position. Realize the PCB on the fixture does not move, the upper and lower heating head can move to the target chip on the PCB.

The extra-large bottom infrared preheating platform adopts the German imported Elstein dark red external heating plate, with fast heating and even preheating, and the preheating area is up to 550*400 mm. when repairing large-size PCBs, the infrared heating has the function of preheating in advance, when starting the equipment, the infrared area will be heated to preheat the PCBs firstly, and the upper and lower hot air will start to heat up when the temperature of the PCBs reaches the set triggering value, which is advantageous to make PCBs preheating firstly and reduce the heat loss caused by PCB heat absorption during the heating process, and effectively prevent PCBs from deformation. The advantage of this is that the PCB is preheated first, which reduces the heat loss caused by heat absorption of the PCB during the heating process, so that the solder balls can reach the melting point faster, and prevents the PCB from being deformed, which improves the success rate of rework.

X,Y direction mobile and the overall unique design, so that the equipment space is fully utilized, with relatively small equipment size to achieve a large area PCB rework, the maximum size of the clamping plate can be up to 640 * 490mm (size can be customized according to demand), no rework dead ends;

Built-in vacuum pump, Φ-axis angle arbitrary rotation, high-precision stepper motor control, precision fine-tuning placement nozzle:

The nozzle automatically recognizes the suction and mounting height, and the pressure can be controlled within the tiny range of 10 grams, with 0-pressure suction and mounting function for smaller chips;

1200W pixel industrial vision camera automatically recognizes Marke point coordinates positioning, accuracy up to 10um, can rework the largest component size 80*80mm;

Electrical system consists of industrial control computer + motion control card + servo system + temperature control module; Real-time temperature curve display, can display the set curve and measured curve, can analyze the temperature measurement curve;

10-segment ascending (descending) ladder temperature control, mass storage of temperature curves (more than 10,000 groups), real-time curve analysis can be carried out;

Various sizes of alloy hot air nozzles, easy to replace, can be rotated 360 ° positioning.

Configuration of 5 temperature measurement ports, with multi-point real-time temperature monitoring and analysis function. Equipped with nitrogen gas inlet, can be connected to nitrogen gas protection welding, so that the rework is more safe and reliable.

Suction rod with manual blowing cooling function, in the process of BGA rework, can be at any time on the chip surface cooling, reduce the temperature difference, and effectively protect the chip from high-temperature damage;

High-power cross-flow fan rapidly cools the PCB, and the specified temperature can be set to stop cooling;

Equipped with 2 sets of light grids, the equipment will stop working immediately if people or other objects cross the grids during the movement of the equipment to ensure the personal safety of the users;

Optional camera to observe the melting point of tin ball side, convenient to determine the curve.

Industrial computer control, intelligent operation software, connecting to the network can realize remote control; can be connected to the MES system;

WDS-1800 Parameter

Power supply	Ac380v±10%,50/60hz
Total power	12000W
Heater power	Upper hot air heating, max. 1200W
	Lower hot air heating, max. 1600W
	Bottom infrared preheating, maximum 7200w, zoned control, preheating area 550*400mm
PCB positioning method	V shape holder&universal jigs
Temperature control method	High-precision K-type thermocouple closed-loop control, upper and lower independent temperature measurement, temperature accuracy of up to ± 1 degree
Electrical Selection	Industrial control computer + temperature control module + motion control card + plc + servo drive
Applicable PCB fixture size	Max630×480mm Min 10×10 mm
Effective preheating area	340*500mm
Applicable Chip Size	Max80×00mm Min 0.6×0.6mm
Applicable pcb thickness	0.3-8mm

Alignment System	1200W Pixel industrial vision camera with automatic recognition of Marke point coordinates for localization
Mounting accuracy	±0.01mm
Temperature measurement interface	5 pcs
Maximum load	300G
Tin point monitoring	External camera to monitor solder ball melting process during soldering (optional)
Feeding device	Automatic component pickup device
Overall dimensions	L1170×W995×H1810mm
Machine Weight	about 580kg



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