Temperature Control ±1°C Accuracy BGA Rework Station Featuring 5 Thermocouple Ports Optimized for Circuit Board Rework Tasks

Our Product Introduction

Basic Information

- Brand Name: Wisdomshow
- Certification: CE
- Model Number: WDS-800D
- Minimum Order Quantity: 1
- Packaging Details: Wooden Case
- Delivery Time: 3-5days
- Payment Terms: TT
- Supply Ability: 200Sets / Month



Product Specification

- Max PCB Size: 650×480mm
- Power Supply: AC220V±10%, 50/60Hz
- Temperature Control: Closed-loop K-type Thermocouple, Upper & Lower Independent Heating, ±1°C Accuracy
- Chip Magnification: 2-50X
- Thermocouple Ports: 5 Pcs
- Total Power: 7500W
- Applicable Chip Size: 0.6×0.6mm-80×80mm
- Placement Accuracy: ±0.02mm



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Product Description

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The Semi Automatic BGA Rework Station is an advanced and reliable solution designed for precision soldering and rework of Ball Grid Array (BGA) components. Engineered to meet the demanding requirements of modern electronics manufacturing and repair, this rework station offers exceptional temperature control, high power output, and precise placement capabilities, making it an indispensable tool for technicians and engineers alike.

One of the standout features of this rework station is its sophisticated temperature control system. Utilizing a closed-loop K-type thermocouple, the device ensures highly accurate temperature regulation with a remarkable ±1°C precision. This closed-loop system continuously monitors and adjusts the temperature, providing stable and consistent heating throughout the rework process. The station is equipped with upper and lower independent heating elements, allowing for tailored thermal profiles that optimize the heat distribution depending on the specific requirements of the PCB and components involved.

The Semi Automatic BGA Rework Station boasts a powerful total power output of 7500W, which supports its efficient heating capabilities. This high power level enables rapid heating and cooling cycles, significantly reducing downtime and increasing productivity. The three heating zone design is a critical aspect of this station, allowing for segmented and controlled heating across different areas of the PCB. Each heating zone can be managed independently, ensuring uniform temperature distribution and preventing thermal damage to sensitive components. This three heating zone configuration enhances the overall reliability and quality of the rework process.

Designed to handle a wide range of PCB sizes, the station accommodates a maximum PCB dimension of 650*480mm. This wide compatibility ensures that users can work on various board sizes without the need for multiple machines, streamlining operations and saving valuable workspace. Additionally, the station is equipped with five thermocouple ports, which enable multiple temperature measurements at various points on the PCB. This multi-point temperature monitoring enhances the accuracy of the thermal profile and provides users with detailed feedback during rework operations.

Precision in component placement is crucial when dealing with BGA packages, and this rework station excels in that regard. It offers an impressive placement accuracy of ±0.02mm, allowing users to align components with exceptional precision. This high level of accuracy minimizes the risk of soldering defects, such as bridging or cold joints, and ensures optimal electrical performance of the reworked device.

The inclusion of an optical alignment system further elevates the usability and efficiency of the Semi Automatic BGA Rework Station. This system provides clear and magnified visual feedback, helping operators to accurately position BGAs and other surface-mount devices before the soldering process begins. The optical alignment system works in tandem with the precise placement mechanisms and the three heating zone control to deliver consistent and high-quality rework results.

In summary, the Semi Automatic BGA Rework Station is a comprehensive solution for high-precision rework tasks. Its advanced temperature control with a closed-loop K-type thermocouple, upper and lower independent heating, and ±1°C accuracy ensures optimal thermal management. The three heating zone design and five thermocouple ports support detailed and uniform heating across large PCBs up to 650*480mm. Coupled with a powerful 7500W output and an optical alignment system, this station guarantees precise component placement with ±0.02mm accuracy. Whether in a production or repair environment, this rework station provides the performance and reliability required for demanding BGA rework applications.

Features:

Product Name: Semi Automatic BGA Rework Station

Temperature Control: Closed-loop K-type Thermocouple with Upper & Lower Independent Heating for precise temperature management

Temperature Accuracy: ±1°C ensuring reliable and consistent hot air heating

Applicable Chip Size: Supports chips ranging from 0.6*0.6mm to 80*80mm

Chip Magnification: Adjustable magnification from 2* to 50* for detailed inspection

Power Supply: AC220V±10%, 50/60Hz compatible with standard power sources

Maximum PCB Size: Accommodates PCBs up to 650*480mm

Designed specifically for efficient and precise BGA rework station operations

Utilizes advanced hot air heating technology to ensure uniform heating and reduce thermal stress

Technical Parameters:

Total Power	7500W
Thermocouple Ports	5 Pcs
Power Supply	AC220V±10%, 50/60Hz
Temperature Control	Closed-loop K-type Thermocouple, Upper & Lower Independent Heating, ±1°C Accuracy
Chip Magnification	2-50X
Max PCB Size	650*480mm
Placement Accuracy	±0.02mm
Applicable Chip Size	0.6*0.6mm-80*80mm
Features	Infrared preheating table, hot air heating, Semi automatic

Applications:

The Wisdomshow WDS-800D Semi Automatic BGA Rework Station is an advanced and reliable solution designed specifically for high-precision electronic repair and manufacturing tasks. Originating from Shenzhen, China, and certified with CE, this rework station guarantees quality and safety for professional use. Its capability to handle motherboards and CPUs with exceptional accuracy makes it an indispensable tool in electronics repair shops and manufacturing facilities.

One of the main application occasions for the WDS-800D is motherboard repair. Thanks to its placement accuracy of ±0.02mm and the ability to accommodate PCBs up to 650*480mm, technicians can perform delicate reballing, soldering, and replacement of BGA chips and other components on large and complex motherboards with confidence. The semi-automatic operation allows for increased efficiency while maintaining precise control.

The WDS-800D is equipped with a sophisticated three heating zone system, featuring upper and lower independent heating controlled by a closed-loop K-type thermocouple. This design ensures uniform temperature distribution and accurate temperature control within ±1°C, which is crucial for preventing damage to sensitive electronic components during the rework process. The three heating zones allow customized heating profiles tailored to different chip sizes and types.

CPU repair is another critical application scenario for this rework station. With a powerful chip magnification range of 2 to 50 times, technicians can closely inspect and align CPUs and other BGA components before and after rework, ensuring optimal placement and solder joint quality. The precise temperature control and reliable power supply of AC220V±10%, 50/60Hz, further support consistent and safe operation during CPU removal and replacement tasks.

The Wisdomshow WDS-800D is ideal for electronics repair centers, research and development labs, and small to medium-scale production environments requiring high precision and repeatability. Its packaging in a sturdy wooden case facilitates secure transportation and storage. With a supply ability of 200 sets per month and a short delivery time of 3-5 days, customers can quickly acquire this essential piece of equipment. Payment terms via TT and a minimum order quantity of just one unit make it accessible for various business sizes and needs.

In summary, the Wisdomshow WDS-800D Semi Automatic BGA Rework Station excels in applications such as motherboard repair and CPU repair, supported by its three heating zone design, precise temperature control, and advanced magnification capabilities. It is a reliable and efficient tool for professionals seeking high-quality rework solutions.

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