

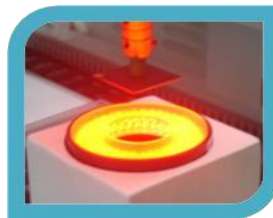
## Full Automatic BGA Rework station ZM-R8650C



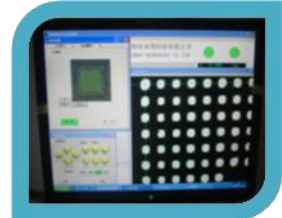
PCB board fixer



BGA picker



BGA positioning



positioning



BGA mount



optical grating safety protect



run show

## Full automatic BGA Rework station ZM-R8650C

### specifications and technical parameters

|    |                      |  |
|----|----------------------|--|
| 1  | Total Power          | 21250W   |
| 2  | Top heater           | 1450W(1st heater)  |
| 3  | Bottom heater        | 2000W(2nd heater)  |
| 4  | 3rd IR heater        | 16000W(the left six IR heating plate can be controlled independently)  |
| 5  | power                | AC 380V±10% 50/60Hz  |
| 6  | Electrical materials | Servo Drive( Panasonic)+ Industrial Host+ Heating plate(Germany)   |
| 7  | Optical system       | Servo Drive+ Automatic Vision Alignment System (Panasonic)   |
| 8  | Temperature control  | K-type thermocouple (Closed Loop), intelligent temperature compensation system, temperature precision within ±1 degree |
| 9  | Positioning          | V-groove PCB support, and with external universal fixture  |
| 10 | PCB size             | Max 670×570mm ; Min 10×10 mm   |
| 11 | BGA chip             | 1×1-100×100mm  |
| 12 | External temp sensor | 6 pcs  |
| 13 | Work Mode            | Computer intelligence operations   |
| 14 | Placement Accuracy   | X, Y axis and the R angle with micrometer adjust, servo drive, accuracy within ± 0.01MM                                |
| 15 | Dimensions           | 1235×1215×1850mm (LCD stand not included)  |
| 16 | Net weight           | 660kg  |

### ZM-R8650 main features:

- ◆ 3 independent control heaters:

The top and bottom heaters of ZM-R8650 can heat PCB from upper and bottom at the same time, and large preheating area can prevent the PCB board from deformation. The top and bottom heaters work independently, controlled by software, it makes the lead-free repair easily. The external sensors can detect temperature precisely, analyze and calibrate the real temperature curve accurately at any time;

#### ◆ **Precise optical alignment system**

ZM-R8650 adopt Panasonic automatic Vision Alignment System, it can get the image of BGA and the PCB through the CCD camera and collect them on the image positioning processing system, calculate the offset position and angle through image processing software, then re-transmission to motor drive of servo controller to correct the position, thus completing the BGA placement. positioning accuracy within  $\pm 0.025\text{MM}$ ; the image can zoom in, zoom out and micro adjust. Equipped with keyboard, mouse and 17" HD LCD monitor;

#### ◆ **advanced intellectualize operation system**

With computer operation, high accuracy K type close-loop thermocouple, and PID parameters automatic adjustment system; the top heater and mount head are designed independently; the X、Y、Z axis and  $\phi$  angle are controlled by Panasonic servo-control system to get accurate aligning point and heating point, with full automatic identify the height of BGA chips and mounting, it is of automatic positioning, mounting, soldering and desoldering function. there are 8 segments rising temperature and 8 active temperatures. and it can save millions of temperature profiles and alignment parameters, for easy option desire profiles according to the different BGA chips.

#### ◆ **Superior safety functions**

With optical grating protection, when the machine is working, if the optical grating signal was blocked, then the machine will stop operation immediately ,it can protect the operator' safety. When the servo motor collide with other objects, it will stop working also. It is of self-protect function; there are three color lamps to monitor the machine working at any time, it is of Superior safety protect function