

# SHENZHEN ZHUOMAO TECHNOLOGY CO., LTD

# ZM-R7220A—BGA rework station with optical alignment











BGA mounting head

CCD optical align lens Touch screen control

Optical alignment system





Laser position

Joystick control

# **Product Application**

- 1. Desolder and solder all the BGA Chip, remove and repair different motherboard BGA IC chip and other components (Lead free & lead available).
- 2. 2. It can cut down the production cost from reworking the bad soldering IC Chip during the PCB assembly procedure. 3.
- 3. With Optical alignment system, you can rework the BGA well easily, and protect your weak eyes.
- 4. It can rework the BGA, LED, IC and other micro chipsets in high precision. Especially suit for high precision motherboard rework, it is designed for precise rework.
- 5. Widely used for BGA reballing chipset repairing in laptop, PS3, PS4, XBOX360, Mobile phone, etc.
- 6. Rework micro BGA, VGA, CCGA, QFN, CSP, LGA, SMD, etc

#### Main features

Large area of infrared carbon fiber Pre-heating system, with the advantage of pre-heating fast and evenly and no light pollution.

Temperature parameters protected by limits of authority, for avoiding error settings.

Ten segments of temperature control process, suitable for all kinds of BGA Rework.

Unlimited storage of the temperature profile, just need press one key to use the profile.

Three K-type sensors available can realize the high precise temperature testing of each point of PCB or BGA, and PC can generate report of curves analysis automatically.

Desoldering and soldering automatically, No need the manual adjustment

Hot air flow can be adjustable to meet the demand of any chips

USB Connection driver-free, PC control

The bottom hot air lifting control available in the front panel, it is convenient to adjust at any time.

Laser positioning available, to make the positioning faster.

#### Features introduce

## • 3 independent control heaters

- ① Top and bottom heaters are hot-air heating, the third IR heater is infrared heating, the top and bottom heaters can heat PCB from upper and bottom at the same time. temperature accuracy within  $\pm 3\,^{\circ}\text{C}$ , there are multi segments can be set at the same time; IR preheating area is adjustable according to desire requests, to make PCB heating evenly.
- ② It can heat PCB board and bga chips at the same time. And the third IR heater can preheat the PCB board from bottom, to avoid PCB from deformation during repair process. The top and bottom heaters heat independently;
- ③ Choose high accurate K type close-loop thermocouple, and PID parameters automatic adjustment system; it can show seven temperature curves and the millions of groups data can be saved through U storage device, with instant curves analysis function and analyzing BGA temperature at any time; the sensor is for precise temperature testing.

#### Precise optical alignment system

Adopt adjustable CCD color optical system, with a beam split, zoom in, zoom out and micro-adjust functions, has automatic chromatism resolution and brightness adjustment system, amplify to 230 X, mounting accuracy within  $\pm 0.02$ mm.

### Multi-function operation system

- ① Adopt high definition human-machine interface, available for setting "set up" and "operate" to avoid error settings, The top heater device and mounting head 2 in 1 design, with automatic identify BGA chips and mounting height, it is of automatic soldering and desoldering function.it can set 6 segments rising temperature and 6 segments activity temperature, and can save N groups temperature profiles. Adopted all kinds of BGA nozzles, with 360° rotation, easy for installation and replacement, customized is available;
- ②V-groove PCB support, with rapid, convenient and accurate positioning, can fit for all kinds of PCB board; Flexible and removable universal fixture has protective effects and no damage to the PCB board, suitable for all kinds of sizes of BGA repair.

### Superior safety functions

With CE certification; after desoldering and soldering, there is alarming. when temperature goes out of control; the circuit will automatically power off, it is of double over-temperature protection function. Temperature parameter has a password to avoid from arbitrary changes, with superior safety protection functions, can protect PCB board components and the machine from damage at any abnormal situation.

## Specifications and technical parameters

• Power: AC 220V  $\pm 10\%$  50/60 Hz

● Total Power: Max 5300W

- Heater power: Top heater 1200 W Bottom heater 1200 W IR heater 2700 W
- Electrical materials: Intelligence Programmable controller, support connect computer
- Temperature control: K-type thermocouple (Closed Loop), independence temperature control, accuracy within  $\pm 1$  °C
- Positioning: V-groove, PCB support

● PCB size: Max  $415 \times 370 \text{ mm}$  Min  $6 \times 6 \text{ mm}$ ● BGA chip: Max  $60 \times 60 \text{ mm}$  Min  $2 \times 2 \text{ mm}$ 

● Dimensions: L680×W640×H960 mm

Sensors: 1 pcWeight: 79kgColor: white