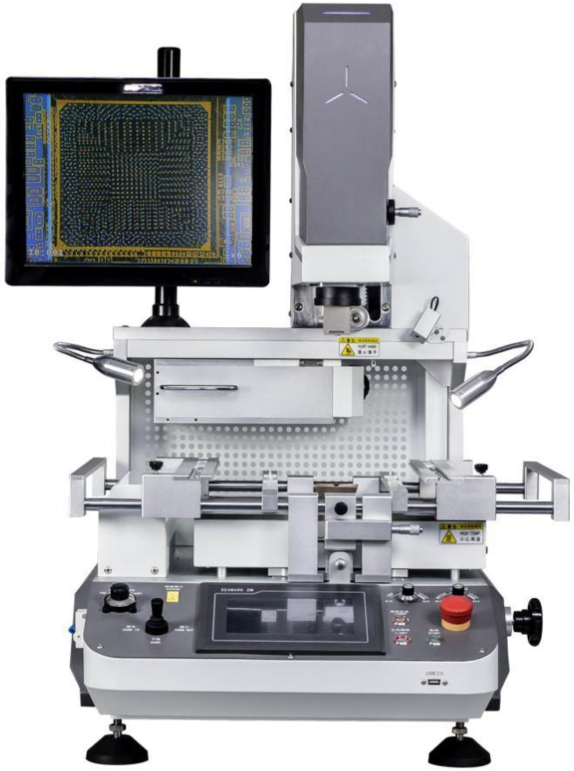
BGA Rework Station ND722R

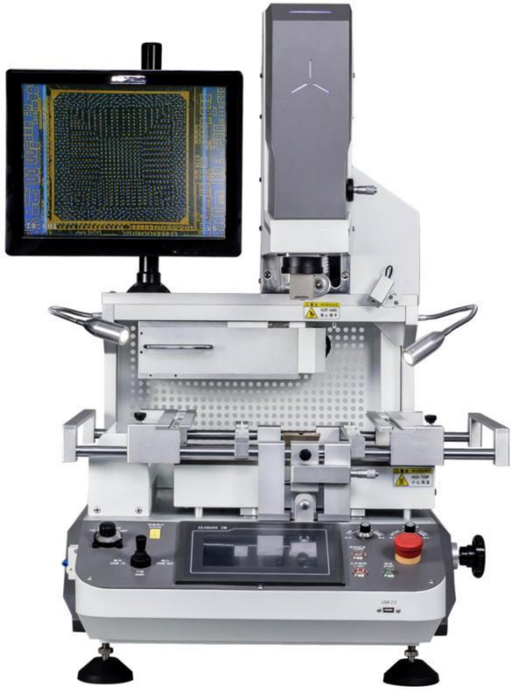
High Automatic BGA Rework Station



Model: ND722R

- Repair Component Type: BGA/QFP/QFN/CSP/SOP,etc
- Component size: 1 ~ 60MM
- Machine Movement: Automatically Remove / Mount Component.
- CCD Optical Alignment System Placing Precision: 0.02MM
- Laser Positioning Function for fast positioning component and PCB.
- Highly Sensitive Mounting Pressure Control to protect PCB from damage.
- Repair Success Rate: 99%+

Technical Specification



Power: AC 220V±10％ 50/60 Hz

Total Power: 5.65KW(Max)

Heater Power: Top heater(1.45KW), Bottom heater (1.2KW), IR Preheater (2.7KW), Other(0.3KW)

PCB Size: 412*370mm(Max);6*6mm(Min)

BGA Chip Size: 60*60mm(Max);2*2mm(Min)

IR Heater Size: 285*375mm

Temperature Sensor: 1 pcs

Operation Method: 7" HD touch screen

Control System: Autonomous heating control system V2（software copyright）

Display System: 15" SD industrial display (720P front screen)

Alignment System: 2 Million Pixel SD digital imaging system, automatic optical zoom with laser: red-dot indicator

Electrical materials：Intelligence Programmable Controller

Positioning: Laser Positioning and V-groove, PCB support

Vacuum Adsorption: Automatic

Alignment Accuracy: ±0.02mm

Temperature Control: K-type thermocouple closed-loop control with accuracy up to ±1℃

Feeding Device: No

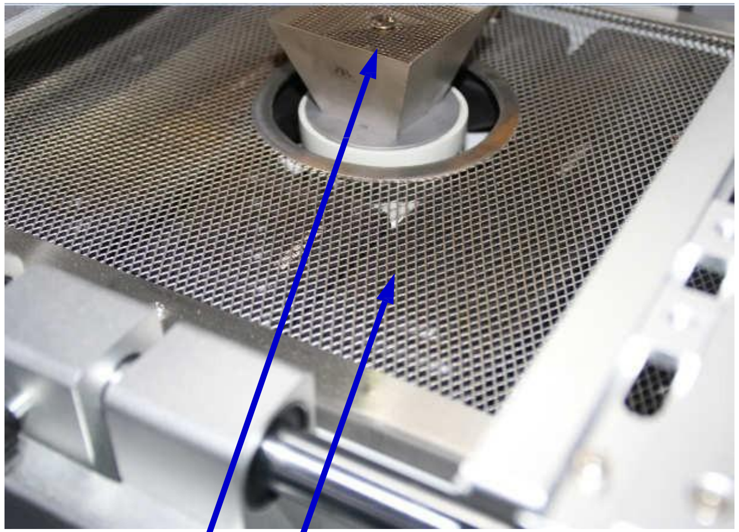
Dimensions: L685*W633*H850mm

Weight: 76KG

Function

- Three independent heating area, Top hot air, Bottom hot air and infrared heating. IR Heaters is to avoid motherboards from deformation and bubble during uneven heat;
- To meet the need of lead and lead free high temperature soldering;
- Temperature precision ± 1℃, to make sure rework success rate up to 99%.

Top Hot Air Heater

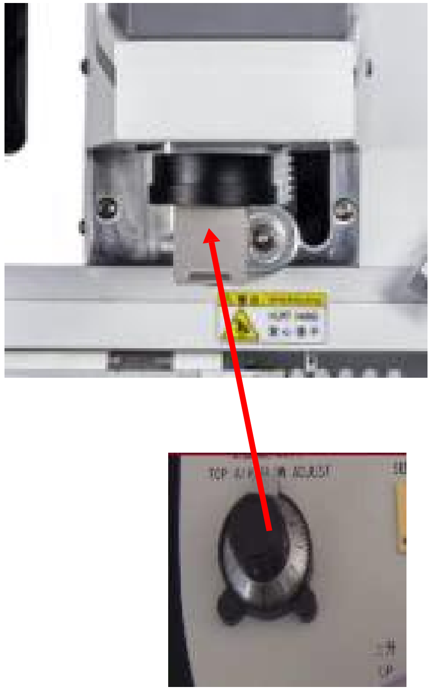


Bottom Hot Air Heater

Infrared Heaters + Protective Fence

Function

- Top Heater “Top air flow adjust “ knob to adjust the speed of the top air.
- Bottom nozzle height adjust for any irregular boards with components on the back.
- Two of the infrared heaters on the very left and right side is powered on/switch according to the size of motherboards.



Top air flow adjust

Bottom Nozzle Height Adjustable Knob

Function

- Top heating and mounting head 2 in 1, serve drive mode, Automatic go down and up.
- Mounting head suckers available for all kinds SMD components, to replace tiny parts Components size 2*2~60*60MM

Top Heating and Mounting Head

Different Size Sucker for different size chip

Function

- Top head automatic remove and mount chips, Inbuilt highly sensitive pressure sensor, to protect the PCB from damage when top head go down.

Automatic Pick & Place

Mounting Pressure Control

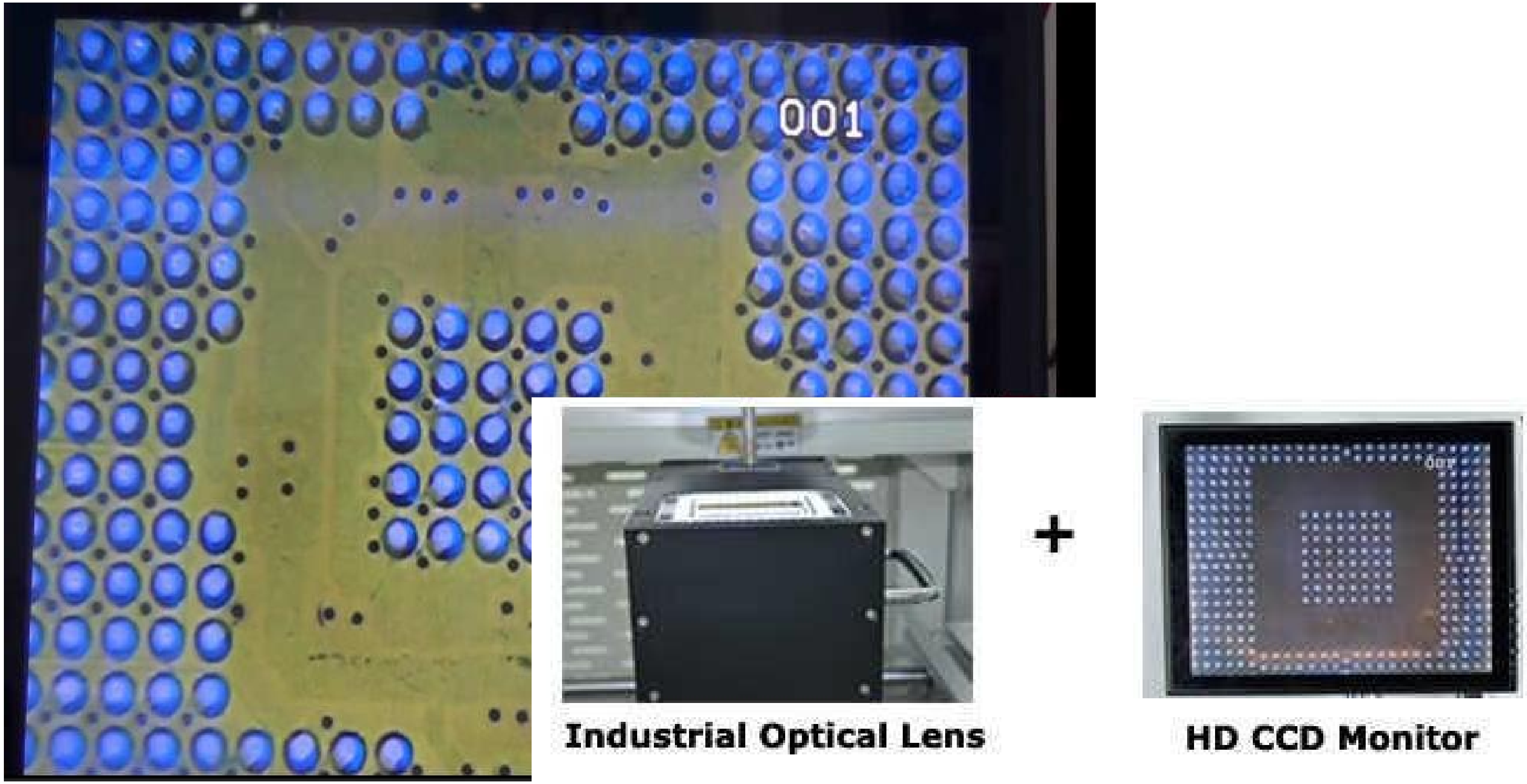
Automatic

Pick & Place

Mounting Head Can feel the Pressure 8g, to protect PCB from damage

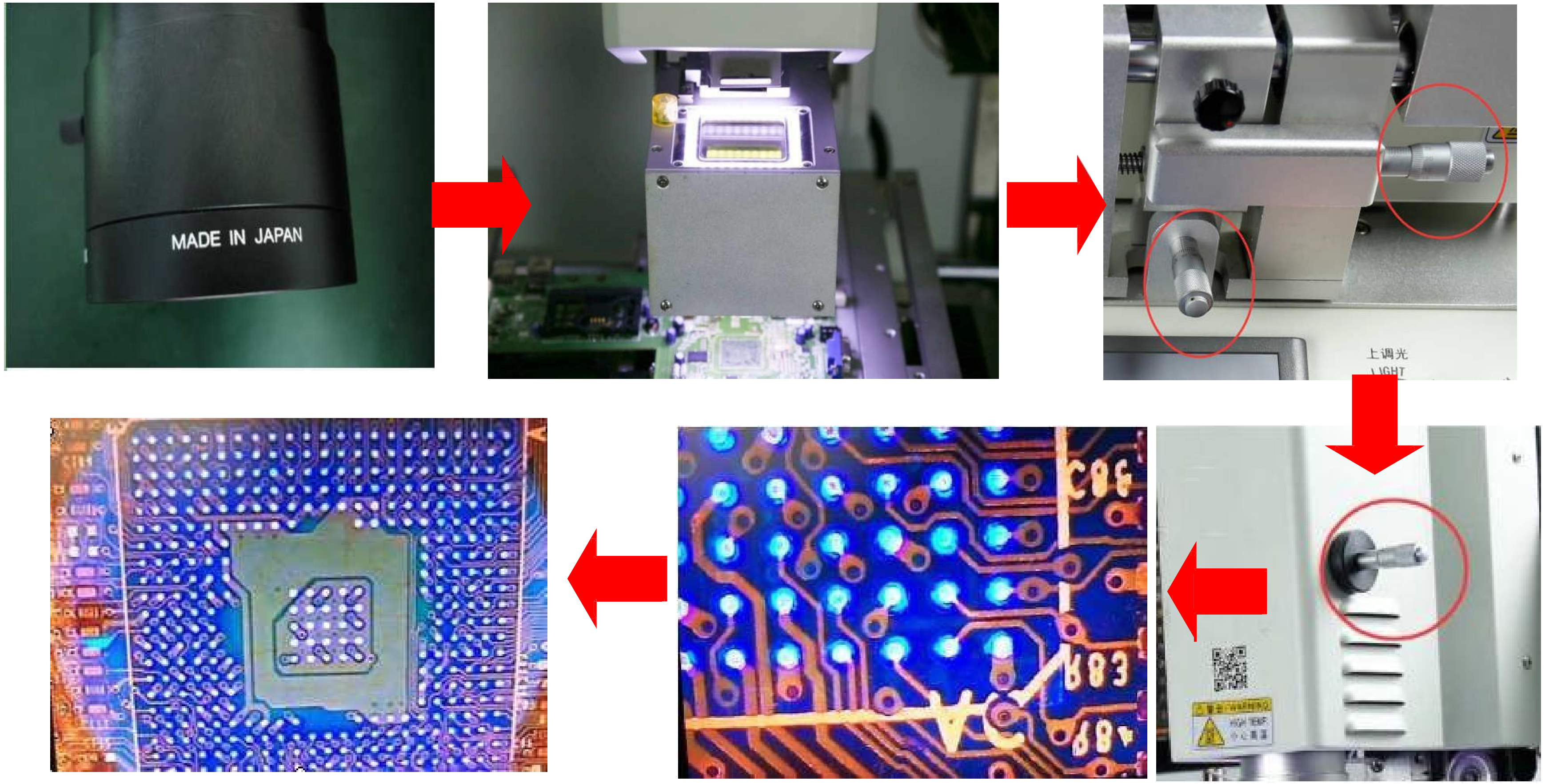
Optical Alighment System

- Optical alignment system is CCD color display, image of PCB pads and BGA chip balls both shown on the high definition LCD monitor.



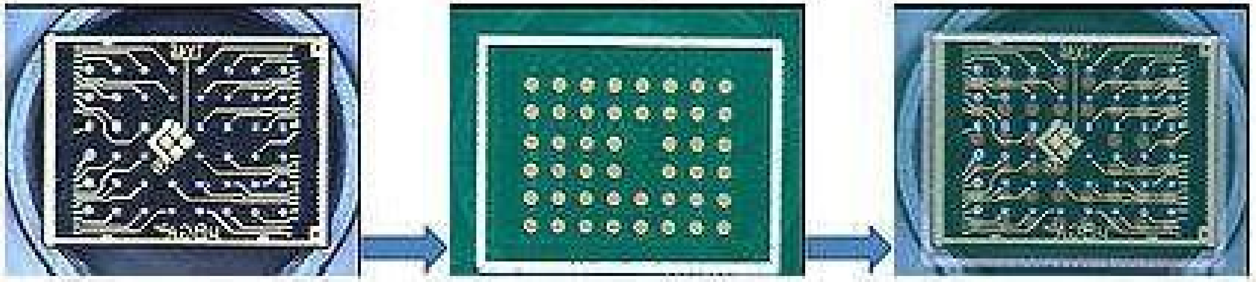
Optical Alighment System

- ◆ Optical alignment system with high speed/definition vedio camera(Japan quality), to catch the clear image of both PCB pads and chip balls.
- ◆ Micro adjustment for BGA angle, PCB back and forth, to keep precision within 0.02mm.
- ◆ Camera auto focus, the image is 54x zoom in, to see each point clearly.

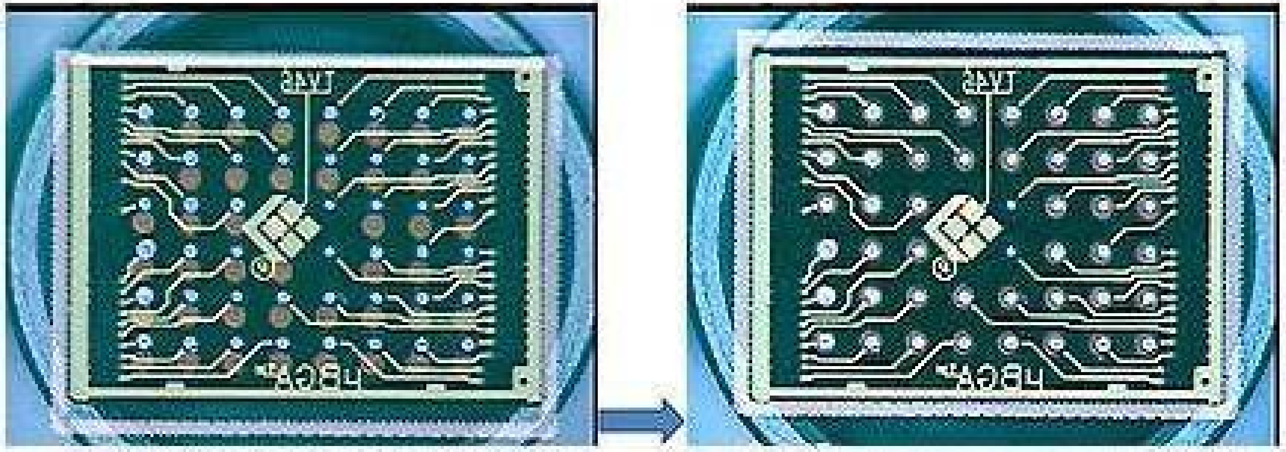


Optical Alighment System

◆ BGA Ballsand PCB Pads imaging



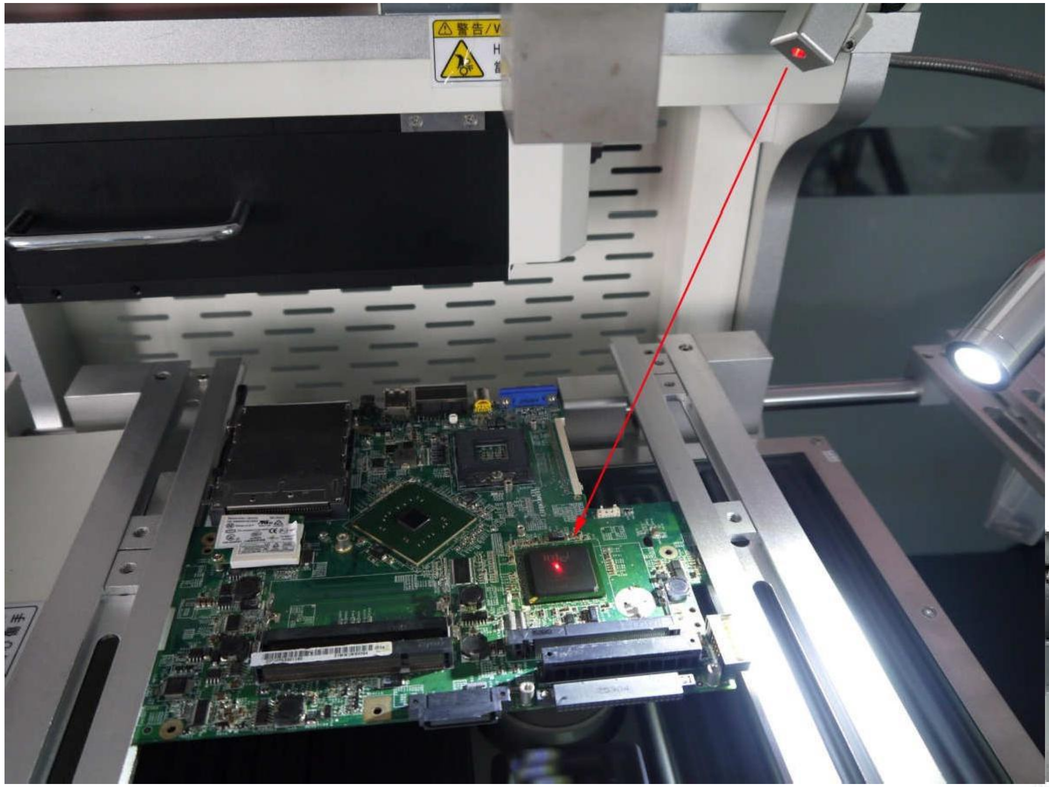
Parts image+board image+both of images.



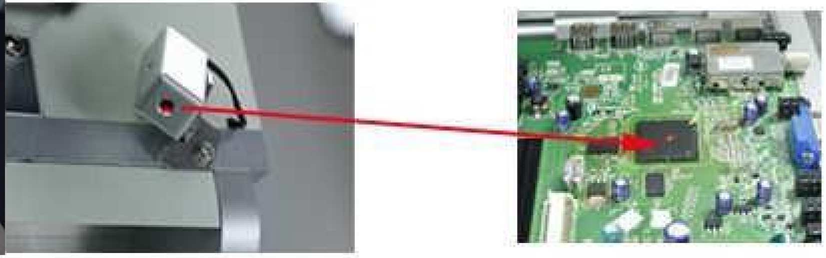
Both of image + adjust = Completion positioning.

Laser Positioning

- Laser Light for Fast PCB positioning, to help you fix PCB in the right place where chip is under the top nozzle .



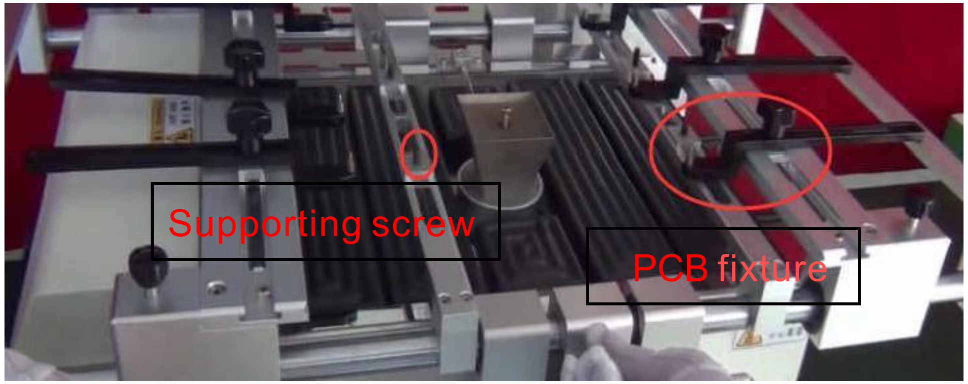
Laser Positioning



Easily to position the motherboard

Motherboard Support

- V-groove support for regular boards; Universal Flexible PCB Fixtures for any shape irregular boards. With supporting screw, to support PCB from all aspect, avoid deformation when welding.
- For PCB size 412*370MM.
- Laser Light for Fast PCB positioning.



Operation Interface

- ◆ 7 inch high definition touch screen with English and Chinese operation interface (optional).
- ◆ 8 segments setup of heating and cooling temperature, temperature curves can be downloaded or printed by USB2.0.
- ◆ 1~50 groups temperature profile can be recorded and renamed.

6 E

160	190	220	240	260	0	0	0	℃
30	30	30	30	30	0	0	0	S
3	3	3	3	3	0	0	0	℃/S
160	190	220	240	260	0	0	0	℃
30	30	30	30	30	0	0	0	S
3	3	3	3	3	0	0	0	℃/S
180	0	0	0	0	0	0	0	℃
240	0	0	0	0	0	0	0	S
3	0	0	0	0	0	0	0	℃/S

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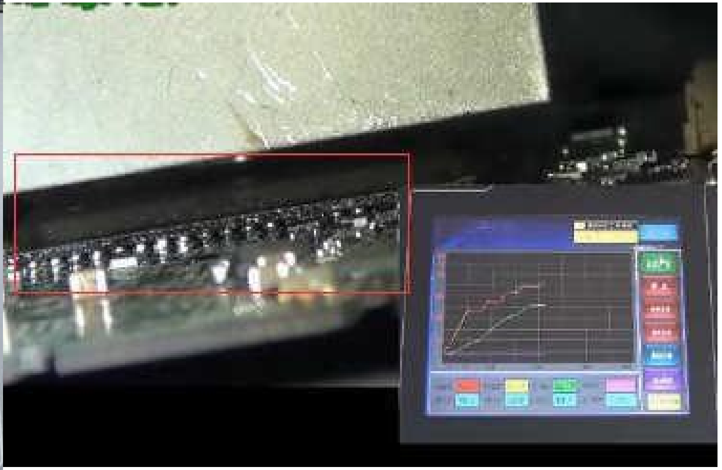
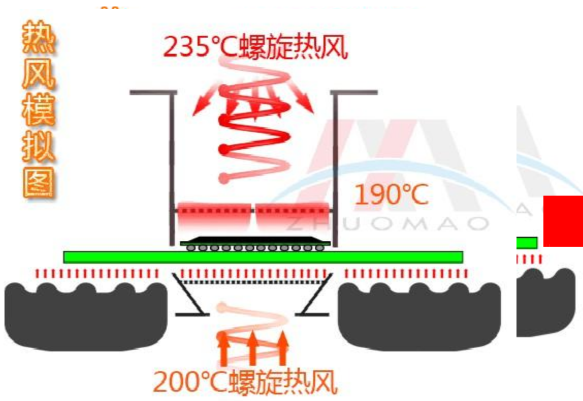
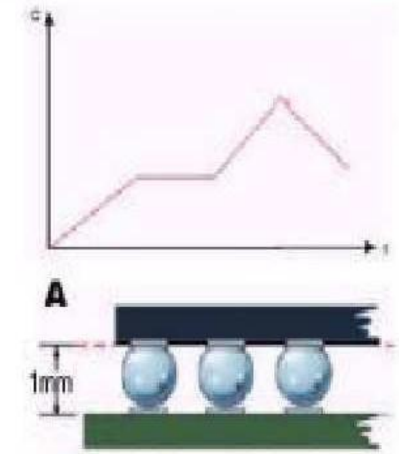
BGA name TEST

top temperature 26.6℃
bottom temperature 27.8℃
IR temperature 26.1℃
top setting 0℃
bottom setting 0℃
IR setting 0℃
run time 0S

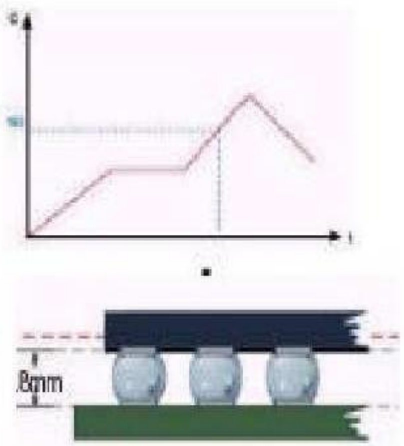


BGA Reflow

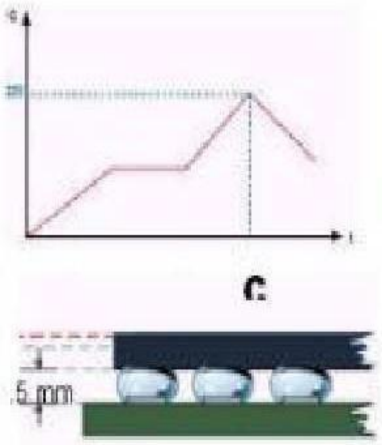




条件A
在回流开始之前



条件B
在焊料熔化点



条件C
在正常的峰值温度

Safety

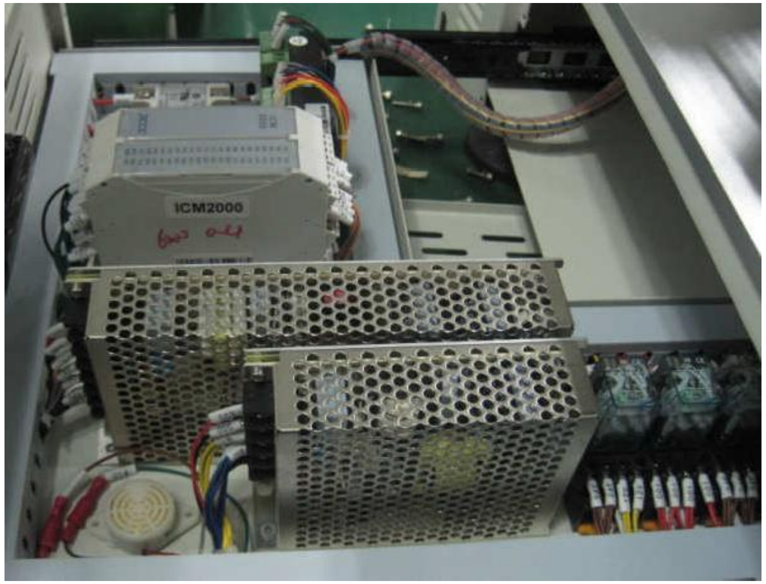
- Powerful crossflow fan to cool the moterboards after removing or soldering.
  To prevent it from deformation and bubble.

Safety

- Equipped with “emergency” stop switch, meet the international safety standards.
- Power short-circuit leakage protection switch.

Internal wiring

◆ Wiring are with wire code, thread, turnking protection.



Component type availability

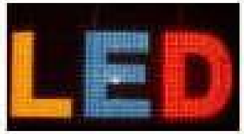
- Rework SMD Component Type: BGA/QFP/QFN/CSP/SOP, etc.
- Component size: 1~ 60MM

BGA

CPU

CSP

iPhone



LED

PS3

QFN

QFP

VGA

XBOX360

Spare Parts

◆ Nozzle size is optional, customized service is available for any size.

◆ Hot air heater and infrared heater (The only possible consumable parts, will send extra one to you.)