

# BGA REWORK STATIONS

# INTEON



# INTRODUCTION



INTEON BGA rework systems allows attractive price and high quality performance for lead free process. INTEON BGA rework systems assure an optimum of process stability by innovative technology. All the electrical system totally match the European quality standard and other international safety standard. We are offering different models to find the best solution for your production even you are manufacturing OEM or small repair service.

## WARRANTY

Best in the industry warranty – 2 years full warranty.

## SUPPORT

For more complex appliances our company offers a well-needed training for set up and usage. We grant the repair of all of the products traded by our company during and after the warranty period. As well as we guarantee the continuous supply of accessories.

## ON-SITE VISIT

In case if any of our products aroused your interest INTEON would be glad to visit your company and hold a presentation of the product of your interest. Major machines also could be observed at our partners' site.

## OFFERS

Most of the prices of our products can be requested on our website and will be sent via email to you. In case of special and more complex machines the prices are given after consultation individually through a price offer. If you are interested in more information or user manuals of our products we recommend you to visit our website ([www.inte-on.com](http://www.inte-on.com)), which is updated continuously with professional information. We also recommend you to visit our office, where you can purchase any of the needed devices and spare parts of the product of your interest.

## BGA REWORKS



IE 5800BGA



Economic type rework station

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IE 6200BGA



Rework station with optical positioning

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IE 6200BGA/LED



Rework station with HD optical positioning

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IE 6800BGA



Automatic rework station with optical positioning  
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# 2 YEAR FULL WARRANTY





# BGA REWORK STATION

## IE-5800BGA



- **High definition touch screen, PLC control**
- **High positioning accuracy and fast maneuverability**
- **3 independent heating areas**



### FEATURES

#### Adopt liner slide

Which makes X,Y,Z axis all can do precision adjustment or fast positioning, with high positioning accuracy and fast maneuverability.

#### High definition touch screen

PLC control, can save multiple groups profile, password protection and modify function, and can save multiple groups profile, equipped with instant temperature curve analysis function.

#### 3 independent heating areas

There are from top to bottom. The 1st and 2nd are hotair heaters, the 3rd is IR preheating, temperature controlled within  $\pm 3^{\circ}$ . Top heater can be adjusted freely. Top and bottom temperature can control many groups and sections of temperature parameters at the same time. The third IR heater can be adjusted the power consumption.

#### Easy to install and change

Offer all kinds of hot-air nozzle, it can rotate  $360^{\circ}$ . With magnet, easy to install and change, customized is available. Bottom IR heater ensure an even heat for PCB board.

#### High-precision K-type thermocouple

Choose imported high-precision K-type thermocouple, closed loop control and automatic temperature compensation system, combined PLC module for the precision control of temperature.

**IE-5800BGA****Flexible fixture for PCB positioning**

Use a V-groove equipped with a flexible fixture for PCB positioning to protect the PCB from deformation when heated or cooled, and it can rework for any BGA package size. Powerful cross-flow fan rapidly cool the PCB board to improve efficiency, also built-in vacuum pump and external vacuum suction pen, pick up the chips rapidly. After finishing disordering & soldering, there is an alarming.

**Automatic power-off protection device**

CE certificate, with emergency stop and Automatic power-off protection device when abnormal accident happens, with a double over-heating protection control.

**IE-5800BGA Specifications**

Total Power	4500W
Power	AC 220 V $\pm 10\%$ 50/60 Hz
Top heater power	800W
Bottom heater power	2nd heater 1200W, 3rd IR heater 2400W
Power supply	AC230V $\pm 10\%$ 50/60Hz
Dimension	L535*W650*H600mm
Positioning	V-groove, PCB support can be adjusted in any direction with external universal fixture
Temperature control	(K Sensor) closed loop, independent heating, precision within $\pm 3^\circ$
PCB size	Max 350*330mm Min 20*20 mm
Electrical selection	Highly sensitive temperature control module, Touch screen
Weight	34kg
Package	Wooden Box
G.W.	51KG
Package dimension	L71*W71*H68cm

# BGA REWORK STATION

## IE-6200BGA



- **Superior safety functions**
- **Precise optical alignment system**
- **3 independent heating system**
- **Multi-function operation system**

### FEATURES

#### Superior safety functions

After finish desoldering and soldering, there is alarming, when temperature goes out of control, the circuit will automatically power off, it is of double excess temperature protection function. Temperature parameter has a password to avoid arbitrary changes, with superior safe protection functions, can protect PCB, components and the machine from damage at any abnormal situation.

#### Precise optical alignment system

With optical alignment system and clear images, components can enlarge up to Maximum 230 times, mounting accuracy within  $\pm 0.01\text{mm}$ , with a beam split, zoom in, zoom out and micro-adjust functions, adopted 12" HD monitor.

#### 3 independent heating system

IE-6200BGA is available heating portion of the PCB board by hot-air circulate both from top and bottom at the same time. With large IR bottom heating, it can completely avoid PCB deformation during reworking period, you can use software to choose freely or use top heater or bottom heater departly and combine freely with top and bottom heater's capacity, to make it easies for rework double BGA, CCGA, QFN, CSP, LGA, SMD etc. External sensor socket is precise detected temperature to analyze and proof on actual temperature curve of BGA at the same time.



## IE-6200BGA

### Multi-function operation system

With touch screen interface, k-type thermocouple, close-loop control and Intelligent temperature compensation with automatically system, integrated design of top heater and sucker point. It can auto identify a high degree of suction and

mounting with automatic soldering and desoldering functions. The temperature can be set to 8 segment and 8 segment constant temperature control, N groups of storage temperature setting parameters according to kinds of BGA chip set.

Model	IE-6200BGA Specification
Total Power	Max 5300W
Power	AC 220 V $\pm$ 10 % 50/60 Hz
Top heater power	1200W (1st heater)
Bottom heater power	1200W (2nd heater)
3rd IR heater	2700W (independent controlling left and right IR heaters)
Hot air temperature	400°C (Max)
Preheating temperature	400°C (Max)
Power supply	AC230V $\pm$ 10% 50/60Hz
Dimension	L640 × W630 × H900mm
Positioning	V-groove + universal fixture
Temperature control	K-type thermocouple (Closed Loop)
PCB size	Maximum: 410 x 370mm, Minimum: 65 x 65mm
Electrical materials	High precision temperature control system
External Temperature sensor	1 piece
Weight	70 kg
Package	Wooden Box

# BGA REWORK STATION

## IE-6200BGA/LED



- **LED suction nozzle**
- **Suitable for LED of tape Packaging and bulk materials**
- **Suitable for multiple micro LED**

### FEATURES

Suitable for LED lamp beads repairing, size of micro LED components not less than 0.6\*0.6mm can be repaired.

Suitable for LED lamp beads of tape packaging and bulk materials. Also any BGA and components which are difficult to repair.

High solution optical alignment system, accurate LED components positioning, ensure precise mounting.

Optical alignment is controlled electrically and rotate automatically.

Mounting head built-in pressure testing device to protect the PCB.

Built-in infrared laser positioning, fast positioning for PCB.

Adopt HIWIN precision guide rail for up and down movement system, ensure reliable and accurate running.

Adopt up and down alignment for top and bottom heater, heating for appointed local zone, prevents PCB to turn yellow.

## IE-6200BGA/LED

Bottom heater up and down manually can adjust the heating height real time.

Adopt ceramics infrared radiator for IR heater, heating stably and uniformly with long serves life.

Human-machine interface has multiple operation mode and permission, soldering, desoldering and mounting manually, easy operation.

High resolution touch screen, which is up to 800\*600 pixels.

Adopt joystick control for alignment system, no need setting complicated parameters.

Adopt Delta double ball bearing flow fan for air supply no need external air source.

Adopt DCCE 8 channel module for temperature control system, automatic PID adjustment.

Monitoring heaters real time, when accident happens, relevant sensors will send signal to PLC which will close output channel and display fault condition. Protect it self automatically.

Adopted 12" HD monitor

Model	IE-6200 BGA LED Specification
Total Power	Max 5300W
Power	AC 230 V ±10 % 50/60 Hz
Top heater power	1200W (1st heater)
Bottom heater power	1200W (2nd heater)
3rd IR heater	2700W (independent controlling left and right IR heaters)
Hot air temperature	400°C (Max)
Preheating temperature	400°C (Max)
Power supply	AC230V±10% 50/60Hz
Dimensions	L640 × W630 × H900mm
Preheating size	370mm ×270mm
Positioning	V-groove, PCB support+laser positioning+universal fixture
Temperature control	K-type thermocouple (Closed Loop)
Chip type	BGA, QGN, CSP, POP, QFN, Micro SMD, LED lamp beads
Available BGA chip	2x2 ~ 80x80mm
PCB size	Maximum: 410 x 370mm, Minimum: 65 x 65mm
Electrical materials	High precision temperature control system
External Temperature sensor	1 piece
Weight	70 kg
Package	Wooden Box

# BGA REWORK STATION

## IE-6800BGA



- Superior safety functions
- Precise optical alignment system
- 3 independent heating system
- Multi-function operation system

### FEATURES

Full Automatic BGA Rework Station with air and nitrogen connection. Expanded mechanic lets you set the machine with the precision and accuracy as any other model perfect for difficult and challenging work.

Soldering takes place under the strictly defined conditions. Both sections of hot air gives the ability to configure up to ten steps per profile. Each step consists of growth, value, and maintaining the temperature for each step.

Three independent heating areas, where the first and second one are a hot-air, and the third one are the quartz heater. By execution of the carbon fiber on the heater, it provide a fast and even heating of board, over a large area by reducing a pressure and temperature required for proper soldering of an element.

Station was equipped with an air distribution system from the tank under pressure. This solution allows you to connect the station to the nitrogen cylinder, which gives a better results by minimizing a contamination of the solder, effect of the surface tension and voiding.

Split Vision System with high magnification, adjustable freely in the XY plane allows a precise positioning of mounted components on the board, using a prism system of integrated optics. This allows us to preview the bottom of the system and its position, relative to the board. In conjunction with micrometer position control board gives the accuracy, unattainable by the manual setting.

The upper module, which consists of hot air flow and vacuum gripper is controlled electronically by servomechanism, made by Panasonic. After launch, it lowers and raise by a predetermined amount. In desoldering mode, suction runs at the end of the process, automatically lifting the system and lowering a head back to the programmed amount. The built-in pressure sensor protects the PCB board from damage.

Device includes a touch screen and microprocessor control of soldering process. Monitor shows a three temperature graphs, giving a view on actual values, there's a possibility of analyzing its process after it has finished, even on PC, by connecting via USB port.

## IE-6800BGA

Model	IE-6800 BGA Specification
Total Power	6800W
Top heating	Hot air of 800W
Bottom heating	Hot air of 800W, IR heater composed of carbon fiber 5000W
Product dimensions	890×790×1000 mm
Preheater size	360×335 mm
PCB dimensions	Max 470×550mm, Min 15×20 mm
Temperature control	4× thermocouple K type with precision of ±2°
Electronics	Servo control system (Panasonic), touch screen, PLC driver (Panasonic)
Positioning system	Split Vision System with enlargement from 10 to 100×, analogue lighting control and PCB positioning
Auxiliary tool	Servo control system, LED lamp, laser pointer
Weight netto	140 kg
Extensions	System for a soldering in a coverage of nitrogen
Equipment	4 nozzles of upper module (28□×28, 31×31, 38×38, 41×41mm), 6 handles for PCB boards, set of suction cups, 4× external thermocouple, auxiliary temperature sensors, auxiliary heating elements (2×hotair, 1×IR), operating manual

# INTEON

## REFLOW OVENS



## CONVEYORS



## BGA REWORKS



## DRY CABINETS



## ESD RACKS



# INTEON

## 2 YEAR FULL WARRANTY

## 5 YEAR FOR HEATER AND BLOWER SYSTEM



**RT Series**

**HIGH CLASS  
ENERGY SAVING**

**RH Series**

**HIGH CLASS  
FLEXIBLE SYSTEM**

**RC Series**

**HIGH CLASS  
ECONOMIC SYSTEM**

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VE-2017/01