Lead Free Reflow Oven GRD-802N

Introduction

Company introduction:

GODZILA is high-tech enterprises focused on the research and development of SMT equipment manufacturing building new-advanced solutions in surface mount (SMT), LED, semiconductor, energy and other areas, providing customers with the entire SMT solutions. Currently GODZILA SMT equipment is representative of high quality, has maintained absolute leading technology in the industry.

GODZILA has made customer-oriented strategic adjustment. GODZILA is narrowing the gap with the imported SMT equipment. As a IPC member company, GODZILA makes a positive contribution to international standard, the annual total capacity of 1200 sets. Full implementation of the IPD process, reliable design and testing throughout the entire product life cycle. GODZILA's continued investment in research and development and great contribution has been unanimously recognized in the field.

Product's introduction:

Lead-free reflow oven GODZILA's mature product after years of market testing. Its unparalleled heating performance and temperature control system meets the requirements of various welding processes; It is GODZILA's crystallization of years technical research and development. Lead-free reflow is high-end reflow products committed to keeping up with market demand to enhance customer's competitiveness. Its new design concept fully meets the needs of increasingly diverse processes, And considering the future direction of the industry, entirely suitable for communications, automotive electronics, home appliances, computers and other consumer electronic products.

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Features:

1. Control System: PC + Siemens PLC control system,accurate temperature control and more stable,ensures temperature stability rate to be more than 99.99%.

2. Hot air system: first-class heating module, the best temperature zone interval design makes optimum temperature uniformity and repeat.The effective utilization and thermal compensation efficiency,it needs less than 20 minutes from temperature control accuracy ± 1 ℃ ambient temperature to a temperature stabilization .

3. Monitoring Software:Windows interface, traditional and simplified Chinese and English online free switch, and operator password management, easy to operate.Operation records, temperature curve measurement and analysis functions, virtual simulation, fault self-diagnosis, process monitoring, automatic generate and save process control documents, substrate transport dynamic display.

4. Cooling System: new cooling zone, quick and easy adjustment, easily reach the cooling requirements of different slopes.

5. Temperature protection: GODZILA using third-party over-temperature protection, multiple layers protection to ensure safe operation.

6. User-friendly design: fault detection (such as heaters abnormal alarm, etc.), regular maintenance reminders, the economy functions and tool-free maintenance, reducing equipment failure rates.

7. Heating module: Transverse reflow design makes temperature from each zone is not influenced by neighbor to ensure accurate temperature curve, while ensuring a high production capacity and heat exchange capacity to achieve high adaptability (to meet the soldering of automotive, communications, electronics, computers and mobile phones consumer electronics.

8. Hot air motor with independently inverter controlled, set operating frequencies depending on different technology to meet a variety of lead-free processes.

9. Machine using zero gas source design, furnace cover with motor lifting, safety rod support, providing significant security.

10. Main parts: Imported main parts ensure equipment runs smoothly and lower the maintenance cost.

11. Customers can choose optional flux processing system according to their own production features to ensure furnace chamber clean.

12. Closed-loop transmission speed control systems, transportation accuracy ± 2mm / min, ensuring more stable transmission speed.

13. Central support, dual transmission, external water-cooling system is optional.

TOP Advantage:

1. Simple: combined with advanced international concepts, based on the Oriental-designed operating system, easy to understand, easy to learn, easy to maintain.

2. Expertise: learn imported reflow oven's advanced design concepts, and the machine core components are using imported top brands.

3. Hedging: Import hardware configuration, low failure rate in production, more than a decade service life.

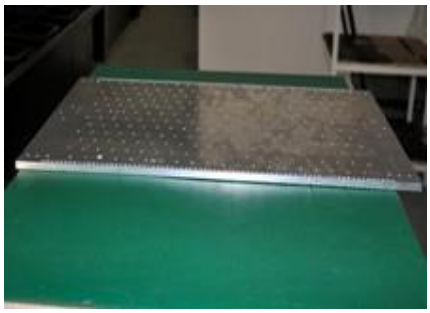
4. Safety: Based on the general rules of international design, close to imported reflow rating, the highest security level.

5. Stable: mature software, hardware and top production processes ensures stability of each equipment.

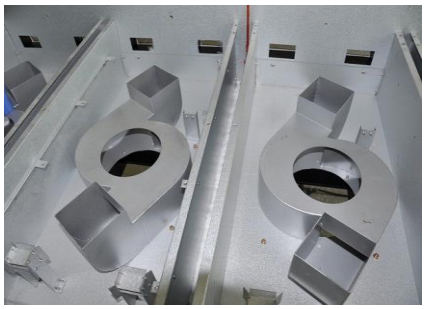
Pictures:

1. Transportation system and rectifying plate structure





2. Chamber and high temperature structure parts


3. Application

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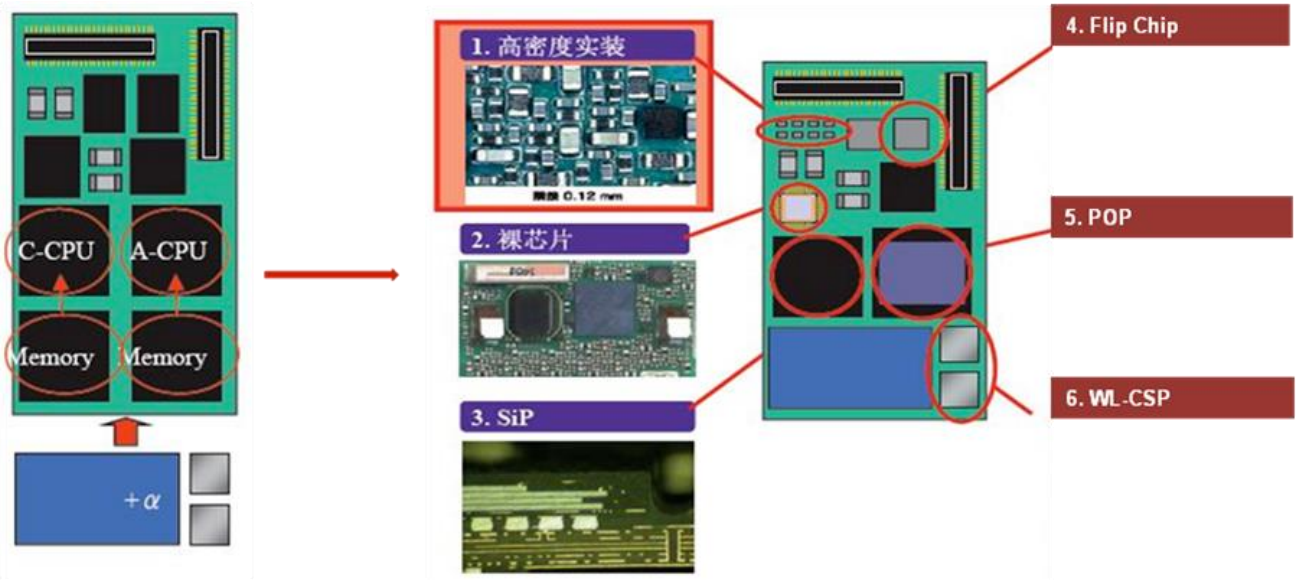
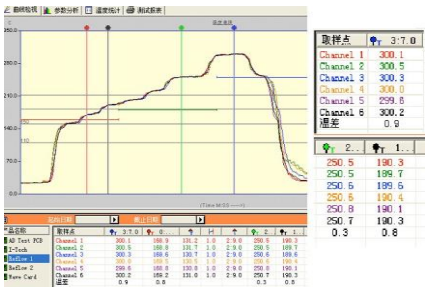
Widely used in high precision products like 01005-QFP, BGA, CSP, Flip,and POP ,automotive electronics, mobile devices, home appliances, communications, LED, semiconductor and other industries.

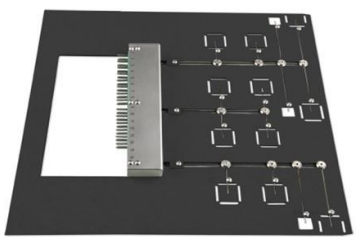


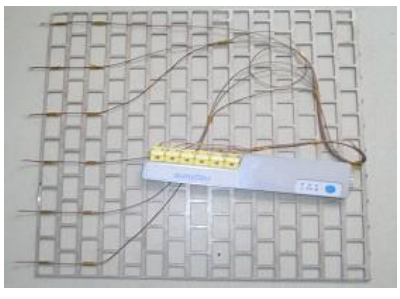
Temperature test

1. Test parameters

1. Temperature control accuracy: compare the measured data with the setted temperature (each temperature zone), takes the maximum value, the value should be less than 1 □.
2. Lateral temperature difference: compare the max tested data with the minimum value (by each temperature zone), the value should be less than 1 □.
3. Thermal compensation capability: the higher over board density, the smaller temperature repeat and better thermal compensation,reference standard ± 2 □.
4. Module effective utilization assessment: Module effective utilization refers to the ratio of the actual efficient hot air time and effective heating theory module, the index is related to that whether need to reduce line speed time to ensure the impact of molten tin time and production capability,"equipment zone effective utilization "preferably should be above 65%, it will be better that can reach 80% or more.
5. Heat exchange efficiency assessments: estimate the tested temperature difference under the same test conditions.







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Specification:

GODZILA Reflow Oven Specifications

S - Standard, O - Option, M - Manual, A - Auto, N/A - Not Availible)

Specifications	GRD802N	GRD1002N	Specifications	GRD802N	GRD1002N
Machine Dimension (L*W*H)mm	5000x1200x1550	5300x1200x1450	Light Indication	Multi-Colour Signal Light	Multi-Colour Signal Light
Weight	Approx.1790KG	Approx.2150KG	Board Dropped Alarm	S	S
Standard Color	Computer Grey	Computer Grey	Electrical SMEMA Interface	N/A	N/A
Number Of Heating Zones	Up8/Bottom8	Up10/Bottom10	Operating System	Window 10	Window 10
Length Of Heating Zones	3200mm	3891mm	Max.Width Of PCB	460mm	460mm
Range of Rail Width	50 mm to 460 mm	50 mm to 460 mm	Temperature Deviation on PCB	± 1.0℃	± 1.0℃
Rail Number	1 Lane or 2 Lane	1 Lane or 2 Lane	Max. Temp. Gap Between Preheat Zones Setting	40℃	40℃
Exhaust Volume	10M³/minx2 Exhausts	10M³/minx2 Exhausts	Temperature Control Precision	± 1.0℃	± 1.0℃
Temp. Control System	PLC+Computer	PLC+Computer	Conveyor Height	900+/-20mm	900+/-20mm
Transmission Agent	Chain + Mesh	Chain + Mesh	Length Of Cooling Zones	800mm	800mm
Electric Supply Required	3phase,380V 50/60Hz	3phase,380V 50/60Hz	Center Support	O	O
Power For Warm Up	30KW	36KW	Siemens PLC	S	S
Power Consumption	8KW	12KW	Lubrication Auto-Afflux	S	S
Warming Time	Approx.25 minute	Approx.25 minute	Ups	S	S
Temp. Setting Range	Room Temp.--300℃	Room Temp.--300℃	Temp. Thermocouple	S	S

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Oil Supply	A and M(Multi mode)	A and M(Multi mode)	Driven Top Hood Opening	A	A
Conveyor Speed Range	300～2000mm/min	300～2000mm/min	Temperature Control Method PID + SSR	S	S
Components Clearance	Top 30mm/ Bottom 25mm	Top30mm/ Bottom 25mm	Number of Cooling Zones	2	2
Conveyor Direction	L→R (Option: R→L)	L→R (Option: R→L)	On Line Editing	S	S
Commutated Element	Aluminum Alloy Plate (8mm)	Aluminum Alloy Plate (8mm)	Max.Temp.Gap Between Preheat & Reflow Setting	80℃	80℃
Fixed Rail Side	Front Fixed (Option:Rear Fixed)	Front Fixed (Option:Rear Fixed)	Max. Temp. Gap Between Reflow Zones Setting	50℃	50℃
Cooling Method	Forced-Air Motor and fan (Standard)	Forced-Air Motor and fan (Standard)	Process Data & Status Storage	S	S
Temperature Alarm	S	S	Rail Structure	Subsection integrated type	Subsection integrated type
Chain Lubrication	A	A	PCB Counter	S	S
Oxygen Analyzer	A	A	Chiller Unit	A	A

Thanks for choosing GODZILA.

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