



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

GWDL-ZQHX

Vacuum Drying Oven Technical Parameters



I. Product Overview: Vacuum

drying ovens are widely used in research and application fields such as biochemistry, chemical pharmaceuticals, medical and health care, agricultural research, and environmental protection.

They are suitable for powder drying, baking, and the sterilization and disinfection of various glass containers. They are ideal for the rapid and efficient drying of heat-sensitive, easily decomposed, easily oxidized substances and items with complex

compositions. II. Product Features:

Main website: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781, 0379-69936789 Address : No.

1 , Xingye 1st Road, Science and Technology Industrial Park, Jianxi

District, Luoyang City , Henan Province

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

1. The outer shell of the product is made of cold-rolled steel plate with electrostatic spraying on the surface. The inner liner has a rounded transition around the perimeter for easy cleaning.
2. A uniquely designed silicone sealing ring is used between the outer door and the cabinet to ensure a vacuum seal. In non-vacuum environments, it can be easily...
Song opened the machine door.
3. The temperature control system adopts a microcomputer PID design, intelligent color LCD display, and has temperature control, timing, and over-temperature alarm functions.
4. The studio has a rectangular structure with a large effective area.
5. The unique double-glazed door design ensures both airtightness and allows for observation of items inside the workshop through the glass windows.

Technical parameters

| | |
|--------------------------|-------------------|
| Category | 250ÿ |
| parameters | |
| Model | GWDL-ZQHX |
| Inner liner dimensions | 600x550x650 |
| (mm) Power | 220V, 50Hz, 3000W |
| supply AC Control range: | RT+10-250ÿ |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact: 13271526781 0379-69936789

Address: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Main station: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781
0379-69936789

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang
City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

| | |
|---|---|
| Temperature sensing | Thermocouple type K, temperature range 0-1320y |
| element, heating | Bundled heating (heating tube surrounds the inner tank) |
| element, heating element installation | Evenly distributed on the top, bottom, left and right sides of the furnace |
| position, temperature | ±1 degree (integrated circuit control, no overshoot) |
| control accuracy, | 0.1y |
| temperature resolution, | ±1y |
| temperature fluctuation, | y±3 degrees (depending on furnace size) |
| furnace | Customer provides |
| temperature | <133Pa |
| uniformity, vacuum pump, | Aluminum |
| vacuum level, rack | 10cm |
| material, rack spacing, | 20KG |
| rack load-bearing capacity, number of partitions (standard configuration/ most) | Three-layer partition |
| Automatic temperature control | <p>Temperature control is achieved through a PID algorithm and self-tuning function, by setting a setpoint.</p> <p>(SV) enables constant temperature control. Units can be freely switched between hours, minutes, and seconds; [Further details needed for accurate translation]</p> <p>The timer has two settings (manual/automatic): Manual mode starts the timer immediately, while automatic mode...</p> <p>The timing will only begin when the temperature reaches the set temperature value.</p> <p>When the time is up, there will be an audible and visual alarm and the machine will automatically shut down.</p> |
| Board material | Galvanized steel outer shell / 201 stainless steel inner chamber |
| and board thickness (mm) | Inner liner 2.5 / Outer liner 1.5 |
| Door opening method | <p>The furnace door opens axially to the side at a 180-degree angle, and the door lock is located on the side of the furnace door using a parallel locking mechanism.</p> <p>Equipped with a spring lock, it can effectively lock in place, ensuring free expansion and contraction due to thermal changes.</p> <p>Effective sealing</p> |
| heating rate | <p>The heating rate is freely adjustable, with an adjustment range of up to 30 degrees Celsius per minute for the fastest heating rate.</p> <p>(Non-linear), slowest heating rate: 1 degree per hour (non-linear)</p> |
| The furnace shell temperature remains | below 45 degrees Celsius during continuous operation without shutting down the furnace. |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact: 13271526781 0379-69936789

Address: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Main station: www.gwdl.com Email: thermo@gwdl.com Contact information:13271526781

0379-69936789

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang

City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

| | |
|---------|---|
| Protect | The system employs an integrated modular control unit, ensuring accurate control precision. It also features dual-loop control and dual-loop protection, providing protection against overshoot, over-adjustment, under-adjustment, thermocouple breakage, phase loss, overvoltage, overcurrent, overtemperature, current feedback, and soft start. |
|---------|---|

Main website: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781, 0379-69936789 Address : No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

| | |
|-------------------------------------|---|
| control | Employing closed-loop technology and thyristor module trigger control, this system uses a phase-shift trigger control method, allowing for continuous adjustment of output voltage, current, or power. It features constant voltage, constant current, or constant power characteristics. The current loop is the inner loop, and the voltage loop is the outer loop. When a sudden load is applied or the load current exceeds the current limit, the output current of the voltage regulator is limited to the rated current range, ensuring normal operation of the output and the voltage regulator. Simultaneously, the voltage loop also participates in regulation, limiting the output current of the voltage regulator to the rated current range, maintaining constant output current and voltage with sufficient adjustment margin. This protects the heating elements from excessive current and voltage surges, achieving safe, reliable, and precise control. |
| Display parameters | Temperature, temperature range number, time period, remaining time, output power percentage, voltage, current, etc. |
| Button | are displayed using imported buttons with a lifespan exceeding 100,000 cycles, and are equipped with LED indicator lights. |
| Temperature profile setting | Employing an intelligent temperature controller, it offers multiple adjustment modes including standard PID, AI-based APID, and MPT. It features self-tuning and self-learning capabilities, excellent control characteristics with no overshoot or undershoot, and 50-segment programmable control. It can achieve temperature rise and fall control with arbitrary slopes and includes programmable/operable commands such as jump (loop), run, pause, and stop, allowing modification of the program at any time during operation. Utilizing an AI-based adjustment algorithm with curve fitting capabilities, it achieves smooth and even curve control. |
| Multiple curve inputs | The furnace features a 50-segment programmable control function, allowing input settings: 50 segments for one curve, 28 segments for two curves, 15 segments for three curves, and 9 segments for five curves. Multiple curves can be input simultaneously and recalled at will. The furnace includes an RS485 |
| Communication interface accessories | communication interface, a crucible tong, and a pair of high-temperature gloves. The furnace comes with a |
| Warranty coverage and period | one-year free warranty; heating elements are not covered by warranty (free replacement within three months for natural damage). |
| | 1. To avoid affecting the lifespan of the electric furnace, we recommend a maximum heating and cooling rate of 10-20y/min (excessive heating will shorten the lifespan of the heating element). |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781, 0379-69936789 Address : No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

| | |
|----------------------|---|
| Precautions | 2. This box furnace does not use a vacuum sealing structure, so flammable and explosive gases must not be introduced. |
| | 3. After a period of use, minor cracks may appear in the furnace chamber of this box furnace. This is normal and will not affect its use. It can be repaired with an alumina coating. |
| | 4. It is not recommended to introduce corrosive gases. If it is necessary to introduce highly corrosive gases such as sulfur, For items like Na, please inform us in advance so we can perform special treatment on the furnace. |
| | 5. High-temperature solution must not leak onto the furnace bottom. To prevent this, a pad or alumina powder can be used for isolation. |
| | 6. The instrument should be placed in a well-ventilated, dry place. |
| Packing list | One electric furnace, one crucible tong, one pair of high-temperature gloves, one instruction manual, one certificate of conformity, one acceptance report (factory inspection report), and one sales delivery note. |
| Shipping Information | 1. The electric furnace is packaged in two layers: it is wrapped in sponge paper, then wrapped in plastic film, and finally fixed with an iron frame as a base. |
| | 2. Free domestic door-to-door delivery (free delivery within city limits) |
| | 3. We will be responsible for any damage that occurs during the transportation of the electric furnace. |
| | 4. Logistics methods: transportation by car, rail, ship (for foreign trade export), and air (for foreign trade export). For nearby locations, our company will arrange dedicated vehicles for transportation (packaging is wooden pallets and cardboard boxes). |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781, 0379-69936789 Address : No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

Random spare parts

坩埚钳



高温手套



2、触摸屏控制系统展示：



GWDL - Introduction to Touchscreen Centralized Control

| | |
|-------------------------------|-------------------------------|
| Project Name | parameter |
| | 7-inch TFT true color display |
| Dimensions Outline Dimensions | 206W*156H*50D(mm) |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact: 13271526781 0379-69936789

Address: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Main station: www.gwdl.com Email: thermo@gwdl.com Contact information:13271526781
0379-69936789

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

| | |
|--|--|
| Resolution, | 800*480 |
| backlight | led |
| power, | 5W |
| weight, | 1Kg |
| language, | You can switch freely between Chinese and English. |
| full-screen display, and operation | Instrument panel, bar chart, historical trends, data reports, alarm information, data export, and work-related functions. Process management, system management, etc. |
| Controlled object: | Temperature, furnace top cover lifting |
| Number of electric furnaces; | 10 units |
| Temperature | Touch screen + high-precision integrated module |
| control: Start-up, | Touch operation |
| Heating, Temporary | Touch operation |
| Heating, Stop | Touch operation |
| Heating: Temperature curve | Touch operation, 30 segments per curve |
| compilation; Temperature curve | Unrestricted (each curve can be named in Chinese or English) |
| storage; Quantity; Real-time status display. | Running curve name, running segment number, segment time, segment running time, digital temperature, real-time Curve, 100% power output |
| Select segment number to start (cross-segment start) | Touch operation |
| Historical curves | Adjustable |
| of measurement range | Stored for approximately 20 months |
| (graphics and text) Data reports | Storage lasts approximately 20 months; multiple displays available simultaneously (can be expanded with a USB flash drive). |
| (Excel) Between historical curves and report records (saved) Interval | Adjustable from 1 second to 3600 seconds, supports simultaneous display of multiple points (USB flash drive can be inserted for expansion). |
| Alarm indicator, | Color change (red) |
| alarm information, language, | Chinese display (alarm time and event description in Chinese) |
| data export interface, | USB (supports mouse) |
| printer interface, | parallel port |
| operation, touch screen, | Password required (operation is prohibited without a password). |
| protection, | RS485 |
| communication port, password. | All touchscreen operations can be password protected, preventing the leakage of parameters and processes, and enabling comprehensive management. |

Main website: www.gwdl.com Email: thermo@gwdl.com Contact: 13271526781 0379-69936789

Address: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Main station: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781
0379-69936789

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province



高新技术企业/专精特新企业
专业的高温加热制造工厂 (-60°C~2600°C)

中国热处理行业协会理事单位
ISO45001:职业健康安全管理体系认证
ISO14001:环境管理体系认证
ISO9001:质量管理体系认证
欧盟CE产品认证



电话/邮箱
13271526781
+86 379-69936789
thermo@gwdl.com

Thank you for contacting us!

Thank you for contacting us! Company Name:

Luoyang Ju Xing Kiln Co., Ltd. Company

Address: No. 1, Xingye Road, Jianxi Science and Technology

Industrial Park, Luoyang City

Contact information: 13271526781, 0379-69936789, thermo@gwdl.com

Website: www.gwdl.com www.gwdlcom.cn www.gwdl.org www.gwdl.cn

Main website: www.gwdl.com Email: thermo@gwdl.com Contact information: 13271526781, 0379-69936789 Address : No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province

Add: No. 1, Xingye 1st Road, Science and Technology Industrial Park, Jianxi District, Luoyang City, Henan Province