



## **Industrial Electric Tube Furnace**

**Tube Furnace and heating process equipment widely using at  
Institutions of higher learning scientific research institutions experimental  
laboratory industrial and mining enterprises**

The equipment designed for pyrolysis, melting, analysis and production ceramics, metallurgy, electronics, machinery, chemical, glass, refractories, for develop new material, special materials, construction materials, the equipment is suitable for institutions of higher learning and laboratory of scientific research institute and industrial and mining enterprises.

## Tube Furnace GWL-GA



### **GWL Series 1200°C-1800°C High Temperature Tube Furnace**

The equipment designed for pyrolysis, melting, analysis and production ceramics, metallurgy, electronics, machinery, chemical, glass, refractories, for develop new material, special materials, construction materials, the equipment is suitable for institutions of higher learning and laboratory of scientific research institute and industrial and mining enterprises.

The control panel equipped with the intelligent adjustment device, power control switch, main working/stop button, voltmeter、ammeter、Computer interface、Observe port /Air inlet port, for convenience to observe the furnace working status, the product using reliable integrated circuit, excellent working environment, anti-interference, the highest temperature of furnace shell temperature is less than 45 can greatly improve the working environment, micro computer program control,programmable setting temperature rise curve, Fully automatic temperature rise / cooling, Temperature control parameters and programs can be modified during operation, which is flexible, convenient and simple in operation.

Temperature Control Accuracy:± 1°C, Temperature Constant Accuracy: ±1°C.Fast Temperature rise rate, Maximum heating rate≤30°C/min. Furnace hearth materials made up by vacuum forming high purity alumina light materials(Will be changing due to the temperature required), High temperature for use, Less heat storage amount, Tolerance the extremely heating and cold、no crack, No dregs, Excellent thermal insulation performance (the energy saving effect is over 60% of the traditional furnace).Reasonable structure, Double layer furnace cover, Air cooling, Greatly shortening the experimental period.



Model	GWL-GA				
Working Temperature	1200 °C	1400 °C	1600°C	1700°C	1800°C
Maximum Temperature	1250 °C	1450 °C	1650°C	1750°C	1820°C
Heating Element	Silicon Carbide Rod		Heating Element		
Furnace Tube Diameter	30mm   50mm   60mm   80mm   90mm   100mm   110mm   150mm				
Length Of Heating Zone	150mm   250mm   300mm   400mm   500mm   600mm   700mm   1000mm   1200mm				
Temperature Rise Rate	Temperature Rise Rate Can Be Modify(1°C/h-30°C/min)				
Rated Voltage	380V				
Temperature Uniformity	±1°C				
Temperature Control Accuracy	±1°C				
Tube materials	1200°C: Stainless steel tube / Quartz tube / Corundum tube				
	1400°C-1800°C: Corundum tube				
Refractories	Import High Purity Alumina Fiber Board				
Standard Accessories	Heating Elements, Specification Certificate, Insulation Brick, Crucible Pliers, Of High Temperature Gloves.  Special crucible for tube furnace, Seal rings				

**Characteristic:**

**Simplicity Operation; Less land occupation.**

- 1、 Temperature accuracy: ±1°C; Constant temperature: ±1°C(Base on Heating zone size ) 。
- 2、 Simplicity for operation, programmable, PID automatic modify, automatic temperature rise, automatic temperature retaining , automatic cooling,unattended operation
- 3、 Furnace tube uses 99 corundum tube or quartz tube 。
- 4、 Furnace surface temperature approach the indoor temperature.
- 5、 double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Powersupply protection and so on)
- 6、 Importing refractory, excellent temperature retaining effect, high temperature resistance.
- 7、 Vacuum degree -0.1Mpa.
- 8、 More gas options ( Oxygen、 Nitrogen、 Argon、 hydrogen and so on)

Furnace Tube Diameter And Length And Atmosphere Can Be Customized, More Details Please Contact Us

Pressure, Tube quality, Flux accuracy Control, Remote Control Can Be Customized

## Open-type Tube Furnace GWL-KQGA



### GWL Series 1200°C-1800°C High Temperature Open-type Tube Furnace

The equipment designed for pyrolysis, melting, analysis and production ceramics, metallurgy, electronics, machinery, chemical, glass, refractories, for develop new material, special materials, construction materials, the equipment is suitable for institutions of higher learning and laboratory of scientific research institute and industrial and mining enterprises.

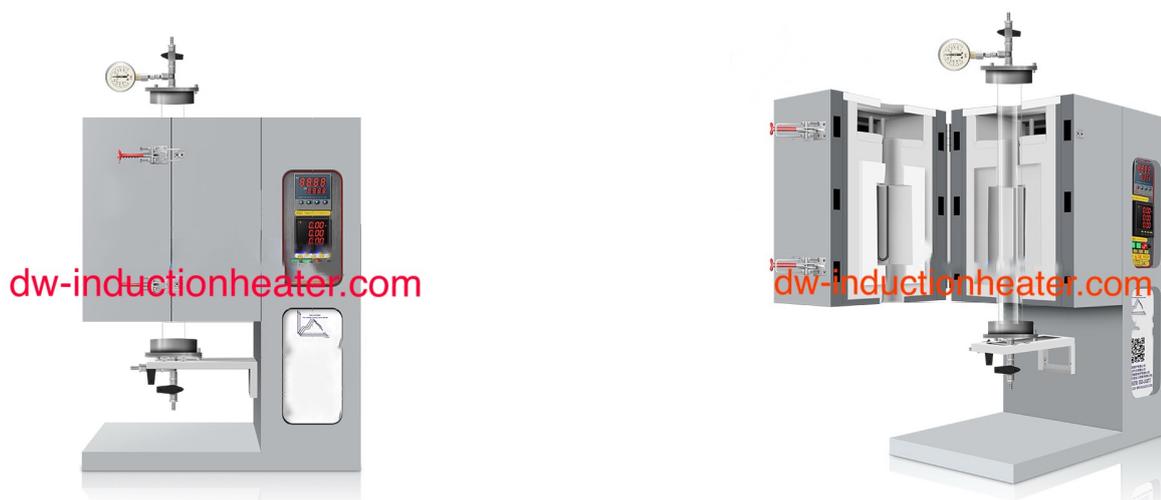
The control panel equipped with the intelligent adjustment device, power control switch, main working/stop button, voltmeter、ammeter、Computer interface、Observe port /Air inlet port, for convenience to observe the furnace working status, the product using reliable integrated circuit, excellent working environment, anti-interference, the highest temperature of furnace shell temperature is less than 45 can greatly improve the working environment, micro computer program control,programmable setting temperature rise curve, Fully automatic temperature rise / cooling, Temperature control parameters and programs can be modified during operation, which is flexible, convenient and simple in operation.

Temperature Control Accuracy:± 1°C, Temperature Constant Accuracy: ±1°C. Fast Temperature rise rate, Maximum heating rate≤30°C/min. Furnace hearth materials made up by vacuum forming high purity alumina light materials(Will be changing due to the temperature required), High temperature for use, Less heat storage amount, Tolerance the extremely heating and cold、no crack, No dregs, Excellent thermal insulation performance (the energy saving effect is over 60% of the traditional furnace). Reasonable structure, Double layer furnace cover, Air cooling, Greatly shortening the experimental period.



Model	GWL-KQGA	
Working Temperature	1200°C	1400°C
Maximum Temperature	1250°C	1450°C
Heating Element	Silicon Carbide Rod	
Furnace Tube Diameter	30mm   50mm   60mm   80mm   90mm   100mm   110mm   150mm	
Length Of Heating Zone	150mm   250mm   300mm   400mm   500mm   600mm   700mm   1000mm   1200mm	
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (1°C/h-30°C/min)	
Rated Voltage	380V	
Temperature Uniformity	±1°C	
Temperature Control Accuracy	±1°C	
Tube materials	1200°C: Stainless steel tube / Quartz tube / Corundum tube	
	1400°C: Corundum tube	
Refractories	High Purity alumina fiber board	
Standard Accessories	Heating Elements 2 Pieces, Specification Certificate, One Piece Insulation Brick, A Pair Crucible Pliers, One Pair Of High Temperature Gloves. One-piece special crucible for tube furnace, Two-piece seal rings	
<p><b>Characteristic:</b></p> <p>Openable; <b>Less land occupation.</b></p> <p>1、 Temperature accuracy: ±1°C; Constant temperature: ±1°C(Base on Heating zone size ) 。</p> <p>2、 Simplicity for operation, programmable, PID automatic modify, automatic temperature rise, automatic temperature retaining , automatic cooling,unattended operation</p> <p>3、 Furnace tube uses 99 corundum tube or quartz tube 。</p> <p>4、 Furnace surface temperature approach the indoor temperature.</p> <p>5、 double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Powersupply protection and so on)</p> <p>6、 Importing refractory, excellent temperature retaining effect, high temperature resistance.7、 Vacuum degree -0.1Mpa.</p> <p>8、 More gas options (Oxygen、 Nitrogen、 Argon、 hydrogen and so on)</p> <p>Furnace Tube Diameter And Length And Atmosphere, Can Be Customized</p>		

### Upright Rotary Open-type Tube Furnace GWL-LKQGA



#### GWL Series 1200°C-1800°C High Temperature Upright Rotary Open-type Tube Furnace

The equipment designed for pyrolysis, melting, analysis and production ceramics, metallurgy, electronics, machinery, chemical, glass, refractories, for develop new material, special materials, construction materials, the equipment is suitable for institutions of higher learning and laboratory of scientific research institute and industrial and mining enterprises.

The control panel equipped with the intelligent adjustment device, power control switch, main working/stop button, voltmeter, ammeter, Computer interface, Observe port /Air inlet port, for convenience to observe the furnace working status, the product using reliable integrated circuit, excellent working environment, anti-interference, the highest temperature of furnace shell temperature is less than 45 can greatly improve the working environment, micro computer program control, programmable setting temperature rise curve, Fully automatic temperature rise / cooling, Temperature control parameters and programs can be modified during operation, which is flexible, convenient and simple in operation.

Temperature Control Accuracy:  $\pm 1^{\circ}\text{C}$ , Temperature Constant Accuracy:  $\pm 1^{\circ}\text{C}$ . Fast Temperature rise rate, Maximum heating rate  $\leq 30^{\circ}\text{C}/\text{min}$ . Furnace hearth materials made up by vacuum forming high purity alumina light materials (Will be changing due to the temperature required), High temperature for use, Less heat storage amount, Tolerance the extremely heating and cold, no crack, No dregs, Excellent thermal insulation performance (the energy saving effect is over 60% of the traditional furnace). Reasonable structure, Double layer furnace cover, Air cooling, Greatly shortening the experimental period.



Model	GWL-LKQGB (With Gas Control Cabinet)			
Working Temperature	1200 °C	1400 °C	1600 °C	1700 °C
Maximum Temperature	1250 °C	1450 °C	1650 °C	1750 °C
Heating Element	Silicon Carbide Rod		Silicon molybdenum rod	
Furnace Tube Diameter	30mm   50mm   60mm   80mm   90mm   100mm   110mm   150mm			
Length Of Heating Zone	150mm   250mm   300mm   400mm   500mm   600mm   700mm   1000mm   1200mm			
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (1°C/h-30°C/min)			
Rated Voltage	380V			
Temperature Uniformity	±1°C			
Temperature Control Accuracy	±1°C			
Tube materials	1200°C: Stainless steel tube /Quartz tube / Corundum tube			
	1400°C-1700°C: Corundum tube			
Refractories	High Purity alumina fiber board	Import High Purity Alumina Fiber Board	Import High Purity Alumina Light Material	
Standard Accessories	Heating Elements 2 Pieces, Specification Certificate, One Piece Insulation Brick, A Pair Crucible Pliers, One Pair Of High Temperature Gloves. One-piece special crucible for tube furnace, Two-piece seal rings			

**Characteristic:**

**Simplicity Operation; Vertical Type; Openable, rotatable, Less land occupation.**

- 1、 Temperature accuracy: ±1°C; Constant temperature: ±1°C(Base on Heating zone size ) 。
- 2、 Simplicity for operation, programmable, PID automatic modify, automatic temperature rise, automatic temperature retaining , automatic cooling,unattended operation
- 3、 Furnace tube uses 99 corundum tube or quartz tube 。
- 4、 Furnace surface temperature approach the indoor temperature.
- 5、 double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Powersupply protection and so on)
- 6、 Importing refractory, excellent temperature retaining effect, high temperature resistance.7、 Vacuum degree -0.1Mpa.
- 8、 More gas options (Oxygen、 Nitrogen、 Argon、 hydrogen and so on)

**Gas Control Cabinet**

## Multi-Station Incline Rotary Tube Furnace GWL-GAXR



### GWL Series 1200°C-1400°C High Temperature Multi-Station Incline Rotary Tube Furnace

The equipment designed for pyrolysis, melting, analysis and production ceramics, metallurgy, electronics, machinery, chemical, glass, refractories, for develop new material, special materials, construction materials, the equipment is suitable for institutions of higher learning and laboratory of scientific research institute and industrial and mining enterprises.

The control panel equipped with the intelligent adjustment device, power control switch, main working/stop button, voltmeter、ammeter、Computer interface、Observe port /Air inlet port, for convenience to observe the furnace working status, the product using reliable integrated circuit, excellent working environment, anti-interference, the highest temperature of furnace shell temperature is less than 45 can greatly improve the working environment, micro computer program control, programmable setting temperature rise curve, Fully automatic temperature rise / cooling, Temperature control parameters and programs can be modified during operation, which is flexible, convenient and simple in operation.

Temperature Control Accuracy:  $\pm 1^{\circ}\text{C}$ , Temperature Constant Accuracy:  $\pm 1^{\circ}\text{C}$ . Fast Temperature rise rate, Maximum heating rate  $\leq 30^{\circ}\text{C}/\text{min}$ . Furnace hearth materials made up by vacuum forming high purity alumina light materials (Will be changing due to the temperature required), High temperature for use, Less heat storage amount, Tolerance the extremely heating and cold、no crack, No dregs, Excellent thermal insulation performance (the energy saving effect is over 60% of the traditional furnace). Reasonable structure, Double layer furnace cover, Air cooling, Greatly shortening the experimental period.



Model	GWL-DWQGA (With Gas Control Cabinet)	
Working Temperature	1200°C	1400°C
Maximum Temperature	1250°C	1450°C
Heating Element	Silicon Carbide Rod	
Furnace Tube Diameter	30mm   50mm   60mm   80mm   90mm   100mm   110mm   150mm	
Length Of Heating Zone	150mm   250mm   300mm   400mm   500mm   600mm   700mm   1000mm   1200mm	
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (1°C/h-30°C/min)	
Rated Voltage	380V	
Temperature Uniformity	±1°C	
Temperature Control Accuracy	±1°C	
Tube materials	1200°C: Stainless steel tube /Quartz tube / Corundum tube	
	1400°C: Corundum tube	
Refractories	High Purity Alumina Fiber Board	
Standard Accessories	Heating Elements, Specification Certificate, Insulation Brick, Crucible Pliers, High Temperature Gloves. Special crucible for tube furnace, Seal rings	

**Characteristic:**

**Simplicity Operation; Multi temperature Zone; Incline, rotatable, Less land occupation.**

- 1、 Temperature accuracy: ±1°C; Constant temperature: ±1°C(Base on Heating zone size ) 。
- 2、 Simplicity for operation, programmable, PID automatic modify, automatic temperature rise, automatic temperature retaining, automatic cooling, unattended operation
- 3、 Furnace tube uses 99 corundum tube or quartz tube 。
- 4、 Furnace surface temperature approach the indoor temperature.
- 5、 double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Powersupply protection and so on)
- 6、 Importing refractory, excellent temperature retaining effect, high temperature resistance.
- 7、 Vacuum degree -0.1Mpa.
- 8、 More gas options (Oxygen、 Nitrogen、 Argon、 hydrogen and so on)

Furnace Tube Diameter And Length And Atmosphere And The Quantity Of Temperature Zone, Can Be Customized, More Details Please Contact Us

Pressure, Tube quality, Flux accuracy Control, Remote Control Can Be Customized



Remark: If the materials or manufacturing technique required vacuum atmosphere environment then discretionary choice gas control cabinet and vacuum pump.

## Gas Control Cabinet

Inlet gas type	2 options can be chosen (1-10 type gas can be chosen)
Mixture	adjusting the values of each Inlet flowmeter.
Valve	Imported stainless steel valve (ordinary valve, stainless steel valve, solenoid valve and so on can be choose)
Flowmeter	2 pieces 0-300 ml/Min (According to the quantity of air inlet, Mass flowmeter and Floating ball flowmeter and so on also can be selected)
Pressure test	Positive pressure/negative pressure double indicator pointer piezometer (digital display vacuum piezometer can be chosen)
Vacuum pump	Double rotary vane vacuum pumps Pumping speed 2L/min
Air pipeline	Special PV hose for gas (clean stainless-steel tube can be used according to the demand of gas)
Pressure protection	The system is specially made to prevent the danger of closure of the exhaust port, the blockage of the exhaust port and the excessive pressure of the furnace tube. The signal is obtained by the electric contact pressure meter or pressure sensor then the drive control module will close the electromagnetic inlet valve and starts the electromagnetic exhaust valve and the alarm. to ensure the furnace can be used properly and safely.
Gas leak alarm	Base on gas atmosphere, to prevent the gas leak; Gas leakage alarm detected (indoor) air toxic, dangerous and other gas content exceeds a certain value, then the drive control module will shut-down the furnace, closes the inlet valve and open the air exhaust, to get the better and safety working environment.
<b>Pressure, Tube quality, Flux accuracy Control, Remote Control Can Be Customized</b>	