## Lifting Furnace



## 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.

### www.gwdl.net

Made In China

Email: sales@gwdl.com



#### China Made

Guoju with 200 employees have been developing and producing industrial furnaces for many different applications for over 10 years. As a furnace manufacturer, Guoju offers the widest and deepest range of furnaces. Around 1000 satisfied customers in more than 34 Provinces offer proof of our commitment to excellent design, quality and cost efficiency. Short delivery times are ensured due to our complete inhouse production and our wide variety of standard furnaces.

#### Excellent Quality, High Reputation

product has the advantages of automatic control, fast heat, energy saving, simple operation, programmable microcomputer control, automatic temperature control, temperature control precision and high precision of constant temperature, the furnace shell temperature is close to indoor temperature etc., we got excellent feedback from our customers! After years of development the company has a maturity high temperature kiln production line, and also has a Middle or high scientific research team, it is a specializes in the research and production and marketing integrated private enterprise. Our company based on the principle of seeking truth from facts innovation first and user foremost, keep introduced advanced technology and modern management experience from domestic and international, and also made the rigorous process standard and strict quality control system and testing method.

### Sales and Service Network - Close to you

All type furnace and kiln have the high level of automation, are of domestic leading position, sold to 20 provinces, cities, autonomous regions, special economic regions, state major university, state major laboratory, institute of Chinese academy of sciences, Chinese institutions of higher learning, which has been exported to North America, Russia, Philippines, Japan and other countries. Also have the high reputation in the same industry.

#### Customer Service and Spare Parts

The staff of our company's customer service department will be eager to answer all the questions which you ask. Due to our complete inhouse production, we can dispatch most spare parts from stock over night or produce with short delivery time.

## High Temperature Miniature Lift Experimental Furnace (GWL-TSC)



#### GWL Series 1200°C-1800°C High Temperature Miniature Lift Experimental 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-TSC					
Working Temperature	1200°C	1400°C	1600°C	1700°C	1800°C	
Maximum Temperature	1250°C	1450°C	1650℃	1750°C	1820°C	
Heating Element	Silicon Ca	rbide Rod	S	ilicon Molybdenum Ro	od	
Diameter Of Furnace Hearth		100	) MM   120 MM   250 I	MM		
Height Of Furnace Hearth		100 MM   120 MM   300 MM				
Loading Platform Lift Method	Screw Mandrel Lift (Lifting Speed Adjustable)					
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.					
Refractories Of Loading Platform		Import High Ten	nperature light heat ins	sulation material		
Loading platform capacity			1-2Kg			
Rated Voltage			220V/380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy	±1°C					
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature Gloves.					

Open Model: Bottom Open;

- 1. Temperature accuracy:  $\pm 1^{\circ}$ C; Constant temperature:  $\pm 1^{\circ}$ 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

### **High Temperature Lift Experimental Furnace**

### (GWL-SL)



#### GWL Series 1200°C-1800°C High Temperature Lift Experimental 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-SL				
Working Temperature	1200°C	1400°C	1600°C	1700°C	1800℃
Maximum Temperature	1250°C	1450°C	1650℃	1750℃	1820°C
Heating Element	Silicon Ca	arbide Rod	S	ilicon molybdenum ro	d
Diameter Of Furnace Hearth	200 MM   250 MM   300 MM  500 MM				
Height Of Furnace Hearth	300 MM  500 MM   800 MM				
Loading Platform Lift Method	Screw Mandrel Lift (Lifting Speed Adjustable 5s to 1min)				
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.				
Refractories Of Loading Platform		Import High Ten	nperature light heat ins	sulation material	
Loading platform capacity			1-10 Ton		
Rated Voltage			220V/380V		
Temperature Uniformity			±1°C		
Temperature Control Accuracy			±1°C		
Ctondard Accessories	Heating Elements	s, Specification Certific	cate, Heat Insulation B	rick, Crucible Pliers, H	ligh Temperature
Standard Accessories	Gloves.				
Characteristic:					

### Open Model: Bottom Open;

- 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

### High Temperature Experimental Lift Furnace (GWL-TS-1)



#### GWL Series 1200℃-1800℃ High Temperature Experimental Lift 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  $\leq$  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-TS-1					
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 Ca	arbide Rod	Silicon molybdenum rod			
Dimension Of Furnace Hearth		200*200*200 MM   300*300*300 MM   500*500*500 MM				
Loading Platform Lift Method	Manual hydraulic					
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.					
Refractories Of Loading Platform		Import High Ten	nperature light heat in	sulation material		
Loading platform capacity			300-500 Kg			
Rated Voltage			380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy			±1°C			
Standard Accessories	Heating Elements	s, Specification Certific	cate, Heat Insulation E	Brick, Crucible Pliers, H	High Temperature	
Stanuaru Accessones	Gloves.					

#### Open Model: Bottom Open;

- 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

### High Temperature Pusher Lift Furnace (GWL-TS-2)



### GWL Series 1200°C-1800°C High Temperature Pusher Lift 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-TS-2				
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 Ca	rbide Rod	S	ilicon Molybdenum Ro	od
Dimension Of Furnace Hearth	200*200*200 MM   300*300 MM   500*500*500 MM				
Loading Platform Lift Method	Manual hydraulic				
Loading Platform Passes In And Out	Manual or Electric (Can be Customized)				
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.				
Refractories Of Loading Platform		Import High Ten	nperature light heat ins	sulation material	
Loading platform capacity			300-500 Kg		
Rated Voltage			380V		
Temperature Uniformity			±1°C		
Temperature Control Accuracy	±1℃				
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature				
Standard Accessories	Gloves.				

#### Open Model: Bottom Open;

1. Temperature accuracy:  $\pm 1^{\circ}$ C; Constant temperature:  $\pm 1^{\circ}$ 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold

 Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

### High Temperature Pusher Lift Furnace (GWL-FSS)





#### GWL Series 1200°C-1800°C High Temperature Pusher Lift 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-FSS				
Working Temperature	1200°C	1400°C	1600°C	1700°C	1800°C	
Maximum Temperature	1250°C	1450℃	1650℃	1750°C	1820°C	
Heating Element	Silicon Ca	rbide Rod	S	Silicon molybdenum ro	d	
Dimension Of Furnace Hearth		800*500*500 MM   1200*600*600 MM   2000*700*800 MM				
Loading Platform Lift Method	Screw Mandrel					
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.					
Refractories Of Loading Platform		Import High Temperature light heat insulation material				
Loading platform capacity			300-500 Kg			
Rated Voltage			380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy			±1°C			
Standard Accessories	Heating Elements	s, Specification Certific	cate, Heat Insulation E	Brick, Crucible Pliers, H	ligh Temperatur	
Stanuaru Accessones	Gloves.					

### Characteristic:

### Open Model: Bottom Open;

- 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

### Large Scale Screw Mandrel Lift Furnace

### With Touch Screen Control System

(GWL-SS)



### GWL Series 1200°C-1800°C High Temperature Large Scale Screw Mandrel Lift Furnace With Touch Screen Control System

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-SS			
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 Ca	arbide Rod	S	Silicon molybdenum ro	d	
Dimension Of Furnace Hearth	500*500*500 N	1M  800*500*500 MM	800*800*800 MM   1	200*750*600 MM  130	00*600*600 MM	
Loading Platform Lift Method	Screw Mandrel					
Loading platform passes in and out	Electric screw mechanical Drive (Pass in and out speed adjustable)					
Quantity Of Loading Platform	1 to 3 (Can Be Customized)					
Temperature Rise Rate	Temperature	Rise Rate Can Be Mo	dify(30°C/min 1°C/h	), Company Sugges	t 10-20°C/min.	
Refractories Of Loading Platform		Import High Ten	nperature light heat in	sulation material		
Loading platform capacity		100	0 Kg( Can be customi	zed)		
Rated Voltage			380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy	±1°C					
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature					
Stanuaru Accessories	Gloves.					

Open Model: Bottom Open;

- 1. Temperature accuracy:  $\pm 1^{\circ}$ C; Constant temperature:  $\pm 1^{\circ}$ 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Touch screen control						
Screen Dimension	7inch; 10inch; 14inch TFT True Color					
Appearance Dimension	206W*156H*50D(mm), 280W*200H*50D(mm)					
Display Resolution	800*480					
Background Light	LED					
Power Rating	5W					
Weight	1KG					
Operation Language	Chinese/English (Switch freely)					
	Dashboard, Photo Column, Historical Trend, Data Report, Alarm					
Screen Display And Operation	Information, Data Export, Process Flow, System Management, etc.					
Control Objective	Temperature, Pressure, Flux And Liquid Level and so on					
Temperature Control	Touch Screen & High Precision Integrated Module					
Start Temperature Rise						
Pause Temperature Rise						
Stop Temperature Rise	1 <u>-</u>					
Loading Platform Passed In And Out	Touch operation					
Loading Platform Raise And Fall						
Start、Pause、Stop、Program						
Flow Chart	Base on furnace structure or process flow					
Temperature Curve Formulation	Touch to operation, 30 segments of each curve					
Storage Quantity Of Temperature Curve	Unlimited (each curve can be named in English or Chinese)					
Deel Aime Dianlay	Name of operation curve, Operation Code, Segment time, Segment					
Real-time Display	running time、digital temperature、real-time curve、power output 100%					
Selection Segment No. To Start Segment (Cross Segment Start)	Touch to Operation					
Curve range	Can Be Modify					
Curve Record	Storage Around 20 Month					
Data Report (EXCEL)	Multipoint simultaneous display (USB Extension Support)					
History output Report record (cours) time interval	1s-3600s Can be modify, Multi point simultaneous display					
History curve, Report record (save) time interval	(Usb Extension Support)					
Alarm Instructions	Color Change(Red)					
Alarm Information Language	Chinese Display (Alarm Description and time)					
Data Output Port	USB					
Printer Interface	Parallel Port					
Touch Screen Safety Protection	Password Control (Without password cannot doing operation)					
Communication Interface	RS485					
Furnace Hearth Can Be Customize	ed, More Details Please Contact Us					

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## High Temperature Pusher Lift Furnace (GWL-YS-1)



### GWL Series 1200°C-1800°C High Temperature Pusher Lift 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-YS-1			
Workir	ng Temperature	1200℃	1400℃	1600℃	1700°C	1800°C	
Maximu	um Temperature	1250℃	1450℃	1650°C	1750°C	1820°C	
Hea	ating Element	Silicon Ca	Silicon Carbide Rod Silicon molybdenum rod				
Dimension	Of Furnace Hearth		800*500*500 MM   1200*600*600 MM   2000*700*800 MM				
Loading P	Platform Lift Method			Manual hydraulic			
Loading Platfo	orm Passes In And Out		Manual c	r Electric (Can be Cu	stomized)		
Tempe	rature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h), Company Suggest 10-20°C/min.					
Refractories	Of Loading Platform	Import High Temperature light heat insulation material					
Loading	platform capacity	300-500 Kg					
Ra	ited Voltage	380V					
Temper	rature Uniformity	±1℃					
Temperatu	re Control Accuracy			±1℃			
Standa	ard Accessories	Heating Elements	s, Specification Certific	cate, Heat Insulation E Gloves.	Brick, Crucible Pliers, H	ligh Temperature	
Characteristic:		I					
Open Model: B	ottom Open;						
8. Temperatu	ire accuracy: ±1°C ; Const	ant temperature: ±1°	C(Base on Heating zo	ne size)。			
9. Simplicity f	or operation, programmabl	e, PID automatic mod	dify, automatic temper	ature rise, automatic t	emperature retaining,	automatic cooling,	
unattended	d operation						
10. Cooling str	ucture: Double Layer Furn	ace Shell, Air Cooling.					
11. Furnace su	urface temperature approac	ch the indoor temperat	ure.				
12. double laye	er loop protection. (over ten	nperature protection, o	ver pressure protection	n, over current protect	ion, thermocouple prot	ection, Power supply	
protection	and so on)						
13. Importing r	efractory, excellent tempe	erature retaining effect	, high temperature re	sistance, Tolerance th	ne extreme heat and co	old	

 Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

## High Temperature Pusher Lift Furnace (GWL-AJST)



### GWL Series 1200°C-1800°C High Temperature Pusher Lift 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:  $\pm 1^{\circ}$ C, Temperature Constant Accuracy:  $\pm 1^{\circ}$ C. Fast Temperature rise rate, Maximum heating rate  $\leq 30^{\circ}$ 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.

GWL-AJST Model Working Temperature 1700°C 1200°℃ 1400°℃ 1600°C 1800°C 1250°C 1450°C 1650°C 1750°C 1820°C Maximum Temperature Heating Element Silicon Carbide Rod Silicon molybdenum rod **Dimension Of Furnace Hearth** 800\*500\*500 MM | 1200\*600\*600 MM | 2000\*700\*800 MM Loading Platform Lift Method Manual hydraulic | Electric Screw Mandrel (Can be customized) Loading Platform Passes In And Out Manual or Electric (Can be Customized) **Temperature Rise Rate** Temperature Rise Rate Can Be Modify (30°C/min | 1°C/h), Company Suggest 10-20°C/min. **Refractories Of Loading Platform** Import High Temperature Light heat insulation material Loading platform capacity 300-500 Kg Rated Voltage 380V **Temperature Uniformity** ±1℃ **Temperature Control Accuracy** ±1℃ Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature Standard Accessories Gloves.

#### Characteristic:

#### Open Model: Bottom Open;

- 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. Cooling structure: Double Layer Furnace Shell, Air Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us

## Vacuum Atmosphere Screw Mandrel Lift Furnace (GWL-ZKSS)



#### GWL Series 1200°C-1800°C High Temperature Vacuum Atmosphere Screw Mandrel Lift 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-ZKSS			
Working Temperature	1200°C	1400°C	1600℃	1700°C	1800℃	
Maximum Temperature	1250°C	1450°C	1650℃	1750℃	1820℃	
Heating Element	Silicon Ca	rbide Rod	5	Silicon Molybdenum Ro	bd	
Dimension Of Furnace Hearth	800*500*500	MM   800*800*800 MM	1300*600*600 MM  1	300*750*600 MM 150	0*800*800 MM	
Loading Platform Lift Method		Screw Mar	drel Lift (Lifting speed	adjustable)		
Vacuum Degree			-0.1MPa			
Temperature Rise Rate	Temperature	Rise Rate Can Be Mo	dify(30°C/min 1°C/h	), Company Suggest	10-20°C/min.	
Water cooling		Equip c	rculating water pump a	and tank		
Refrectories Of Loading Distarm	Vacuum forming high purity alumina light material and hollow ball material, to ensure the heat pre					
Refractories Of Loading Platform			and bearing capacity			
Loading platform passes in and out		Electric screw mecha	nical drive(Pass in and	out speed adjustable)		
	The system is specia	lly made to prevent the	e danger of closure of t	he exhaust port, the b	lockage of the	
	exhaust port and the	excessive pressure of	the furnace tube. The	signal is obtained by t	he electric contac	
Protection	pressure meter or pre	essure sensor then the	drive control module	will close the electroma	agnetic inlet valve	
	and starts the electro	magnetic exhaust valv	e and the alarm. to en	sure the furnace can b	e used properly a	
	safely.					
Rated Voltage			380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy			±1°C			
Standard Accessories	Heating Elements, S	pecification Certificate	, Heat Insulation Brick	, Crucible Pliers, High	Temperature Glov	

- 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. Cooling structure: Air + Water Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen, Nitrogen, Argon, hydrogen and so on)
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.
- 9. 2 of Loading Platforms Can be customized. (More efficient and energy-efficient)

Furnace Hearth, Vacuum Degree Can Be Customized, More Details Please Contact Us

Email: /ale/@gwdl.com

## Vacuum Atmosphere Lift (Screw Mandrel) Furnace

(GWL-ZQSS)



#### GWL Series 1200°C-1800°C Vacuum Atmosphere Lift (Screw Mandrel) 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-ZQSS				
Working Temperature	1200°C	1400°C	1600℃	1700℃	1800°C	
Maximum Temperature	1250°C	1450°C	1650°C	1750°C	1820°C	
Heating Element	Silicon Ca	arbide Rod		Silicon molybdenum ro	b	
Dimension Of Furnace Hearth	200*150*1	50 MM 300*200*200 M	M  400*200*200 MM 5	00*300*200 MM 500*3	00*300 MM	
Vacuum Degree			-0.1MPa			
Temperature Rise Rate	Temperature	e Rise Rate Can Be Mo	odify(30°C/min 1°C/h	), Company Suggest	10-20°C/min.	
Water cooling		Equip circulating water pump and tank (300L)				
Loading Platform Lift Method		Screw Mar	ndrel Lift (Lifting speed	adjustable)		
Loading platform passes in and out			Hydraulic / Mechanica	I		
Loading Capacity			1-3 Ton			
Rated Voltage			380V			
Temperature Uniformity			±1°C			
Temperature Control Accuracy			±1°C			
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature Gloves.				emperature Gloves.	
Characteristic:						

#### Operational Simplicity, Screw mandrel lift, Excellent precision.

- 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. Cooling structure: Air + Water Cooling.
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen, Nitrogen, Argon, hydrogen and so on)
- 8. Furnace lining materials: 1200°C: High purity alumina fiber board; 1400°C: High purity alumina contains zirconium fiber board; 1600°C:Import high purity alumina fiber board; 1700-1800°C: Imported German MESCHUPP vacuum forming high purity alumina poly light material.
- 9. 2 of Loading Platforms Can be customized. (More efficient and energy-efficient)

Furnace Hearth, Vacuum Degree, And Lift Method Can Be Customized, More Details Please Contact Us

### Vacuum atmosphere Lift Furnace

### (Furnace inside with agitation)

(GWL-VSF-SR)



## GWL Series 1200°C-1800°C Vacuum atmosphere Lift Furnace (Furnace inside with agitation)

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:  $\pm 1^{\circ}$ C, Temperature Constant Accuracy:  $\pm 1^{\circ}$ C. Fast Temperature rise rate, Maximum heating rate  $\leq 30^{\circ}$ 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-VSF-SR					
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	U Type Silicor	n Carbide Rod	U Type S	ilicon molybdenum ro	d	
Diameter Of Furnace Hearth		200 r	nm   300mm   500mm  800mm	1		
Height Of Furnace Hearth		300mm   500mm   800mm  1000mm				
Lift Method		Screw Mandrel				
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/h) Company Suggest 10-20°C/min.					
Vacuum Degree		-0.1Mpa(Can Cu	stomize As 1Pa, -1Pa, -0.01Pa	a and so on)		
Rated Voltage			380V			
Temperature Uniformity			±1℃			
Temperature Control Accuracy			±1℃			
Furnace Lining Materials	High Purity Alun	nina Fiber Board	Import Morgan Light Material	Import High Purity M	lorgan Light Material	
Rotation Speed		1-50r/min				
Standard Accessories	Heating Elements 2	Heating Elements 2 Pieces, Specification Certificate, One Piece Heat Insulation Brick, A Pair Crucible Pliers, One				
	Pair Of High 1	emperature Gloves. Or	ne-piece special crucible for tul	be furnace, Two-piece	e seal rings	

#### Furnace hearth with agitation; High Temperature uniformity.

- 1. Temperature accuracy:  $\pm 1^{\circ}$ C; Constant temperature:  $\pm 1^{\circ}$ 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. Cooling structure: Double layer furnace shell, air cooling and water cooling
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen, Nitrogen, Argon, hydrogen and so on)

Furnace Hearth And Atmosphere Can Be Customized, More Details Please Contact Us

Web: www.gwdl.net

# Lift Tube Furnace



### GWL Series 1200°C-1800°C Lift 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.

Email: sales@gwdl.com

Model	GWL-GAS						
Working Temperature	1200°C	1400°C	1600°C	1700°C	1800°C		
Maximum Temperature	1250°C	1450℃	1650℃	1750℃	1820℃		
Heating Element	Silicon Car	bide Rod		Silicon molybdenum r	od		
Diameter Of Tube	30mm  50	mm  60mm  80mm  9	0mm  100mm  110mr	m  150mm (Can be Cu	ustomized)		
Length Of Heating Zone	150mm  250mm  30	0mm  400mm  500mr	n  600mm   700mm  1	000mm  1200mm(C	Can be Customized)		
Tube Materials	Below 1400°C: Stainless Steel Tube /quartz glass tube / corundum tube						
		Above 1400°C: Corundum tube					
Lift Method		Electric Machinery Lift (Lift Speed adjustable)					
Temperature Rise Rate	Temperature	Rise Rate Can Be Mo	odify(30°C/min 1°C/	h) Company Sugges	t 10-20°C/min.		
Vacuum Degree		-0.1Mpa (Can Cust	omize As 1Pa, -1Pa,	-0.01Pa and so on)			
Rated Voltage			380V				
Temperature Uniformity			±1°C				
Temperature Control Accuracy			±1°C				
Standard Accessories	Heating Elements	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature					
		Gloves. Specia	al crucible for tube fur	nace, seal rings			

- 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. Cooling structure: Double layer furnace shell, air cooling and water cooling
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen, Nitrogen, Argon, hydrogen and so on)
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Tube Dimension Can Be Customize , More Details Please Contact Us.

### High Temperature Automatic Lift Glass Softening Furnace

(GWL-SS)



### GWL Series 1200°C-1800°C High Temperature Automatic Lift Glass Softening 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-SS						
Working Temperature	1200°C	1400°C	1600°C	1700°C	1800℃		
Maximum Temperature	1250°C	1450°C	1650°C	1750℃	1820℃		
Heating Element	Silicon Carbide Rod		Silicon molybdenum rod				
Cubage Of Crucible	1.6L/3L/5L/10L/17L						
Quantity Of Loading Platform	Can be customized						
Loading Platform Capacity	1-50KG						
Lift Method	Electric Machinery Lift (Lift Speed adjustable)						
Temperature Rise Rate	Temperature Rise Rate Can Be Modify (30°C/min   1°C/H) company Suggest 10-20°C/min.						
Rated Voltage	380V						
Temperature Uniformity	±1°C						
Temperature Control Accuracy	±1°C						
Optional Function	Control software and hardware; Touch Screen Control Temperature Controller; Exhaust Port or View Port,						
	and So on.						
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature						
	Gloves						

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. Cooling structure: Double layer furnace shell, air cooling
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen、Nitrogen、Argon、hydrogen and so on)

Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C:
Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us.

### 6 Meters Large Scale Lift Furnace

### (With Touch Screen Control System)

(GWL-SS)



#### GWL Series 1200°C-1800°C High Temperature 6 Meters Large Scale Lift 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-SS					
Working Temperature	1200°C	1400°C	1600℃	1700°C	1800°C	
Maximum Temperature	1250°C	1450°C	1650℃	1750°C	1820°C	
Heating Element	Silicon Carbide Rod		Silicon molybdenum rod			
Furnace Hearth Dimension	1300*750*600 mm  1300*600*600 mm  1500*800*800 mm  2500*800*800mm  5000*800*600 mm					
Quantity Of Loading	1 or 2					
Platform						
Loading Platform Capacity	1000 KG(Can be customized)					
Lift Method	Electric Machinery Double Screw Mandrel Lift (Lift Speed adjustable)					
Temperature Rise Rate	Temperature Rise Rate Can Be Modify(30°C/min   1°C/h)Company Suggest 10-20°C/min.					
Rated Voltage	380V					
Temperature Uniformity	±1°C					
Temperature Control	±1°C					
Accuracy						
Optional Function	Control software and hardware; Touch Screen Control Temperature Controller; Exhaust Port or View Port, and					
Optional Function	So on.					
Standard Accessories	Heating Elements, Specification Certificate, Heat Insulation Brick, Crucible Pliers, High Temperature Gloves					
Characteristic:						
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						

- 2. Simplicity for operation, programmable, PID automatic modify, automatic temperature rise, automatic temperature retaining, automatic cooling, unattended operation
- 3. Cooling structure: Double layer furnace shell, air cooling
- 4. Furnace surface temperature approach the indoor temperature.
- 5. double layer loop protection. (over temperature protection, over pressure protection, over current protection, thermocouple protection, Power supply protection and so on)
- 6. Importing refractory, excellent temperature retaining effect, high temperature resistance, Tolerance the extreme heat and cold
- 7. More gas options (Oxygen, Nitrogen, Argon, hydrogen and so on)
- Furnace hearth materials: 1200°C: High Purity Alumina Fiber Board; 1400°C: High purity alumina (Contain zirconium) fiberboard; 1600°C: Import High Purity Alumina Fiber Board; 1700°C-1800°C: High Purity alumina polymer fiber board.

Furnace Hearth Can Be Customized, More Details Please Contact Us.

Touch screen control				
Screen Dimension	7inch; 10inch; 14inch TFT True Color			
Appearance Dimension	206W*156H*50D(mm), 280W*200H*50D(mm)			
Display Resolution	800*480			
Background Light	LED			
Power Rating	5W			
Weight	1KG			
Operation Language	Chinese/English (Switch freely)			
Screen Display And Operation	Dashboard, Photo Column, Historical Trend, Data Report, Alarm			
	Information, Data Export, Process Flow, System Management, etc.			
Control Objective	Temperature, Pressure, Flux And Liquid Level and so on			
Temperature Control	Touch Screen & High Precision Integrated Module			
Start Temperature Rise	Touch operation			
Pause Temperature Rise				
Stop Temperature Rise				
Loading Platform Passed In And Out				
Loading Platform Raise And Fall				
Start、Pause、Stop、Program				
Flow Chart	Base on furnace structure or process flow			
Temperature Curve Formulation	Touch to operation, 30 segments of each curve			
Storage Quantity Of Temperature Curve	Unlimited (each curve can be named in English or Chinese)			
Real-time Display	Name of operation curve, Operation Code, Segment time, Segment			
	running time、digital temperature、real-time curve、power output 100%			
Selection Segment No. To Start Segment (Cross Segment Start)	Touch to Operation			
Curve range	Can Be Modify			
Curve Record	Storage Around 20 Month			
Data Report (EXCEL)	Multipoint simultaneous display (USB Extension Support)			
History curve, Report record (save) time interval	1s-3600s Can be modify, Multi point simultaneous display			
	(Usb Extension Support)			
Alarm Instructions	Color Change(Red)			
Alarm Information Language	Chinese Display (Alarm Description and time)			
Data Output Port	USB			
Printer Interface	Parallel Port			
Touch Screen Safety Protection	Password Control (Without password cannot doing operation)			
Communication Interface	RS485			

8

Luoyang Guoju International Trade Co.,Ltd