

KINTEK FURNACE

# Atmosphere Furnace Catalog

Contact us for more catalogs of High Temperature Furnaces, etc.



## KINTEK FURNACE COMPANY PROFILE

## >>> About Us

Kintek Furnace is a technology-driven innovator specializing in precision hightemperature laboratory equipment, including muffle furnaces, tube furnaces, vacuum furnaces, atmosphere-controlled systems, and advanced CVD/PECVD solutions. Designed for materials science, chemical research, and thermal processing applications, our robust, energy-efficient systems prioritize precision, safety, and repeatability in extreme heat environments, empowering researchers and industrial labs to achieve groundbreaking results.





## Mesh Belt Controlled Atmosphere Furnace Inert Nitrogen Atmosphere Furnace

Item Number: KT-MB



#### Introduction

KINTEK Mesh Belt Furnace: High-performance controlled atmosphere furnace for sintering, hardening & heat treatment. Customizable, energy-efficient, precise temperature control. Get a quote now!

Learn More

Model	КТ-МВ20	КТ-МВЗО	КТ-МВ35	КТ-МВ60	КТ-МВ65
Working temperature	RT-1000°C				
Control accuracy	±1℃				
Heating element	FEC heater				
Mesh belt width	200mm	300mm	350mm	600mm	650mm
Effective height	50mm	60mm	80mm	80mm	80mm
Hot zone quantity	7	7	8	9	12
Overall length	7200mm	7200mm	7200mm	7650mm	13380mm
Customer design sizes and requirement is acce	pted				



## 1200°C Controlled Inert Nitrogen Atmosphere Furnace

Item Number: KT-12A



#### Introduction

KINTEK 1200°C Controlled Atmosphere Furnace: Precision heating with gas control for labs. Ideal for sintering, annealing, and material research. Customizable sizes available.

Learn More

Furnace model		KT-12A / KT-12A Pro	
Max. temperature		1200°C	
Constant work temperature		1100°C	
Vacuum pressure		0.1Mpa	
Vacuum valve		Needle valve	
Furnace tube material (if applicable, t	ypically for tube furnaces)	High purity quartz (Note: This is a muffle furnace, chamber material is key)	
Chamber material		Japan alumina fiber	
Heating element		Cr2Al2Mo2 wire coil	
Heating rate		0-30°C/min	
Temperature sensor		Build in K type thermal couple	
Temperature controller		Digital PID controller / Touch screen PID controller (KT-12A Pro)	
Temperature control accuracy		±1°C	
Temperature uniformity		±5℃	
Electric power supply		AC110-220V, 50/60HZ (customizable)	
Standard Chamber Sizes (Customization	on Available)		
Chamber size (mm)	Effective volume (L)	Chamber size (mm)	Effective volume (L)
100×100×100	1	300x300x400	36
150x150x150	3.4	400x400x400	64
150x150x200	4.5	500x500x500	125
200x200x200	8	600x600x600	216
200x200x300	12	800x800x800	512

Customer design sizes and volume accepted. <u>Contact us</u> to discuss your specific requirements.

No.	Description	Quantity
1	Furnace	1
2	Thermal block(s) / Sample tray(s)	1 set
3	Crucible tong	1



4	Heat resistant glove	1 pair
5	Operation manual	1



## 1400°C Controlled Inert Nitrogen Atmosphere Furnace

Item Number: KT-14A



#### Introduction

KT-14A Controlled Atmosphere Furnace for labs & industry. 1400°C max temp, vacuum sealing, inert gas control. Customizable solutions available.

Learn More

Furnace model		KT-14A		
Max. temperature		1400°C		
Constant work temperature		1300°C		
Vacuum pressure		-0.1Mpa (relative to atmosphere)		
Vacuum valve		Needle valve		
Chamber material		Japan alumina fiber	Japan alumina fiber	
Heating element		Silicon Carbide (SiC)		
Heating rate		0-20°C/min (adjustable)		
Temperature sensor		S-type thermocouple	S-type thermocouple	
Temperature controller		Digital PID controller / Optional Touch screen PID controller		
Temperature control accuracy		±1°C		
Temperature uniformity		±5°C (in defined uniform zone)		
Electric power supply		AC110-220V, 50/60HZ (configurable)		
Standard Chamber Sizes (Custom s	izes available)			
Chamber size (WxDxH mm)	Effective volume (L)	Chamber size (WxDxH mm)	Effective volume (L)	
100x100x100	1	300x300x400	36	
150x150x150	3.4	400x400x400	64	
150x150x200	4.5	500x500x500	125	
200x200x200	8	600x600x600	216	
200x200x300	12	800x800x800	512	

Custom designed sizes and volumes are accepted. Contact us with your specific dimensional requirements.

No.	Description	Quantity
1	Controlled Atmosphere Furnace (KT-14A)	1 unit
2	Thermal block(s) / Hearth plate	1 set
3	Crucible tong	1 piece
4	Heat resistant gloves	1 pair

5

Operation manual

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## 1700°C Controlled Inert Nitrogen Atmosphere Furnace

Item Number: KT-17A



#### Introduction

KT-17A Controlled Atmosphere Furnace: Precise 1700°C heating with vacuum & gas control. Ideal for sintering, research & material processing. Explore now!

Learn More

Furnace model		KT-17A		
Max. temperature		1700°C		
Constant work temperature		1600°C		
Vacuum pressure		-0.1Mpa	-0.1Mpa	
Vacuum valve		Needle valve		
Chamber material		Japan alumina fiber	Japan alumina fiber	
Heating element		Molybdenum Disilicide		
Heating rate		0-20°C/min		
Temperature sensor		B type thermal couple		
Temperature controller		Digital PID controller/Touch screen PID controller		
Temperature control accuracy		±1°C		
Temperature uniformity		±5°C		
Electric power supply		AC110-220V,50/60HZ		
Standard Chamber Sizes Stocks				
Chamber size (mm)	Effective volume (L)	Chamber size (mm)	Effective volume (L)	
100x100x100	1	300x300x400	36	
120x120x130	2	400x400x400	64	
150x150x200	4.5	500x500x500	125	
200x200x200	8	600x600x600	216	
200x200x300	12	800×800×800	512	
Customer design sizes and volume is acc	epted			

No.	Description	Quantity
1	Furnace	1
2	Thermal block	1
3	Crucible tong	1
4	Heat resistant glove	1



Operation manual

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## **Controlled Inert Nitrogen Hydrogen Atmosphere Furnace**

Item Number: KT-16AH



#### Introduction

Discover KINTEK's Hydrogen Atmosphere Furnace for precise sintering & annealing in controlled environments. Up to 1600°C, safety features, customizable.

Learn More

Furnace model		KT-16AH	
Max. temperature		1600°C	
Constant work tempera	ture	1500°C	
Vacuum pressure		0.1Mpa	
Vacuum valve		Needle valve	
Chamber material		Japan alumina fiber	r
Heating element		Molybdenum wire	
Heating rate	Heating rate 0-20°C/min		
Temperature sensor B type the		B type thermal cou	ple
Temperature controller Touch screen PID controller		controller	
Temperature control accuracy ±1℃			
Temperature uniformity		±5℃	
Electric power supply		AC110-220V,50/60	HZ
Standard Chamber Size	s Stocks		
Chamber size (mm)	Effective volume (L)	Chamber size (mm)	Effective volume (L)
150x150x200	4.5	300x300x400	36
200x200x300	12	400x400x400	64

Customer design sizes and volume is accepted

Standard Temperature controlling	<ul> <li>PID automatic control via SCR (Silicon Controlled Rectifier) power control with phase angle fired, current limiting resistor.</li> <li>51 programmable segments for precise control of heating rate, cooling rate and dwell time.</li> <li>Built in PID Auto-Tune function with overheating &amp; broken Thermocouple broken protection.</li> <li>Over temperature protection and alarm allows for operation without attendant</li> </ul>
Optional of Temperature controlling	<ul> <li>Software (Furnace can be operated by PC by installing a control software)</li> <li>Touch screen temperature controller</li> </ul>
Furnace structure	Double layer steel casing with dual cooling fan, surface temperature below 60°C



Furnace door	Power cutting off when furnace door open
Warranty	<ul> <li>For this hydrogen furnace, One year limited warranty with life time support. (Consumable parts such as heating elements and crucibles are not covered by the warranty, please order the replacement at related products)</li> <li>ATTENTION: Any damages caused by the use of corrosive and acidic gases are not under the coverage of One Year Limited Warranty.</li> </ul>
Hydrogen Furnace Using Attentions	<ul> <li>Cooling rate shall also not exceed 10°C/min.</li> <li>Toxic or explosive gases are not recommended for use with this furnace without necessary safety controls and supervision.</li> <li>Small cracks may appear on the surface of the refractory ceramics over extended use. This is a normal occurrence and the cracks may be repaired with alumina coating.</li> <li>Refractory door block must be inserted before closing door.</li> </ul>





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