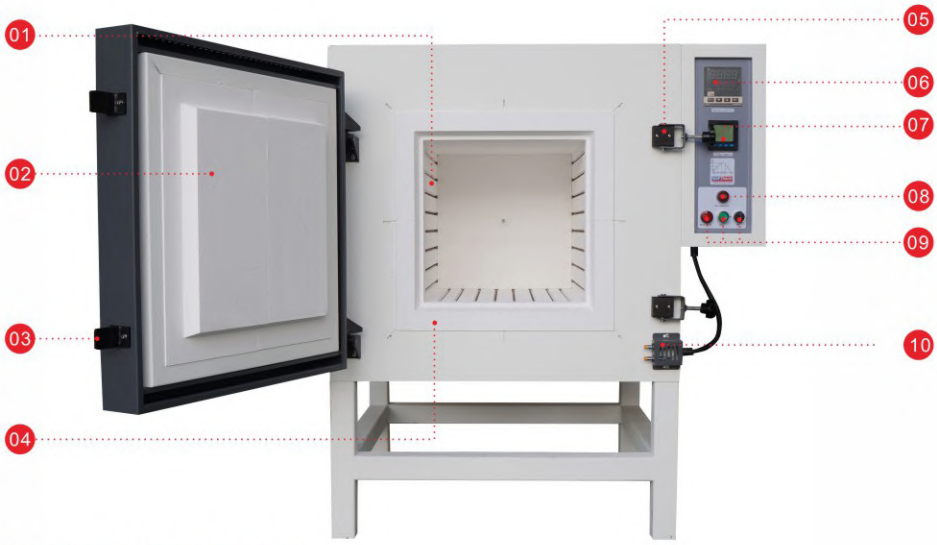
STD-64-12

1200°C little Industrial Furnace

Main Features

>Integrated Structure with elegant design.
>Chamber Materials: Vacuum forming ceramic fiber,which has the advantage of no powder drops off with high temperature , and saving energy more than 50%.
>SHIMADEN (Japan) Microprocessor based self-tuning PID control provides optimum thermal.
>Long life type N thermocouple.
>CE compliant.
>Exhaust chimney is an optional device and available for customer.
>The furnace can be equipped with inert gas devices with float flowmeter.
>Built-in RS485 port and USB adaptor as optional setting for computer control, it need to add extra fees.

Furnace Inner Chamber with Sample Loading



01 HRE Resistance Wire
02 Ceramic Inuslation Door
03 Door Lock
04 Alumina Ceramic Fiber Lining Board
05 Steel Fastener
06 Shimaden PID Controller
07 Digital Ammeter
08 Sound-light Alarm
09 Operating Buttons
10 Proximity Switch

Technical Parameters

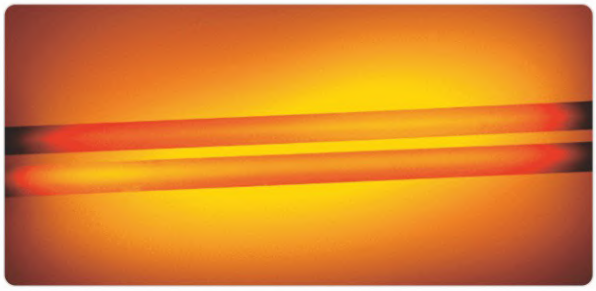
Model	STD-45-12	STD-64-12	STD-80-12	STD-96-12	STD-150-12	OEM
Chamber Size (WxDxH)mm	300x500x300	400x400x400	400x500x400	400x600x400	500x600x500	Any size
Type	Stand Box type heat treatment equipment					
Usage	Ideal for tempering, hardening, gravimetric analysis, sintering, quantitative analysis and other heat treatment processes					
Furnace Structure	Alumina Ceramic Chamber, PID Temperature control system, Heating elements, Furnace shell ,Main Electric Parts and other relative accessories					
Max Temperature	1200˚C					
Continue Temp.	1100˚C					
Power Supply	380V/12KW	380V/15KW	380V/15KW	380V/18KW	380V/20KW	
Heating Element	High quality alloy resistance wire (HRE)					
Chamber Material	High temperature polycrystal alumina ceramic fiber plate					
Temp. Precision	±1˚C					
Thermocouple	N type, tested from the back-wall center of the chamber					
Temp Controller	SHIMADEN (Japan) brand intelligent microcomputer PID controller can program 4 groups 32 segments					
Electronic Parts	SCHNEIDER (France) electronics brand					
Heating Rate	≤ 25˚C/min (suggest 15-20˚C/min for longer life using of furnace)					
Safety Protection	Overheat and Thermocouple-break Alarm; Leakage circuit breaker					
Certification	ISO9001 /CE/ SGS					
Furnace Shell	High quality cold-rolled steel sheets CNC processing					
Insulation	High quality thermal insulation material to ensure a good uniformity					
Standard Packing	One pair of high temperature gloves, One pair of crucible tongs, one catalog and one English operation manual					
Optional	Paperless recorder, Stainless steel exhaust valve, Quartz /Alumina crucibles					
Warranty	One year, life long technical supports (Consumable parts such as thermocouple and heating elements are not covered by the warranty, please order replacements at related products respectively					

STD-80-14

1400°C little Industrial Furnace

Main Features

>Integrated Structure with elegant design.
>Chamber Materials: Vacuum forming ceramic fiber,which has the advantage of no powder drops off with high temperature , and saving energy more than 50%.
>SHIMADEN (Japan) Microprocessor based self-tuning PID control provides optimum thermal.
>Long life type S thermocouple.
>CE compliant.
>Exhaust chimney is an optional device and available for customer.
>The furnace can be equipped with inert gas devices with float flowmeter.
>Built-in RS485 port and USB adaptor as optional setting for computer control. it need to add extra fees.



SIC Rod heater heating

01 SiC Rod Heater
02 Ceramic Insulation Door
03 SS304 Door Handle
04 Alimina ceramic fiber lining board
05 Steel fastener
06 Shimaden PID controller
07 Ammeter
08 Timer（Optional）
09 Sound-light alarm
10 Operating Buttons
11 5mm thickness mild steel sheet

Technical Parameters

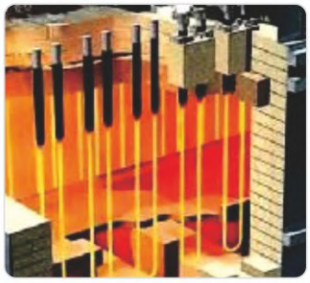
Model	STD-36-14	STD-45-14	STD-64-14	STD-80-14	STD-96-14	OEM
Chamber Size (WxDxH)mm	300x400x300	300x500x300	400x400x400	400x500x400	400x600x400	Any size
Type	Box type heat treatment equipment					
Usage	Ideal for tempering, hardening, gravimetric analysis, sintering, quantitative analysis and other heat treatment processes					
Furnace Structure	Alumina Ceramic Chamber, PID Temperature control system, Heating elements, Furnace shell ,Main Electric Parts and other relative accessories					
Max Temperature	1400˚C					
Continue Temp.	1300˚C					
Power Supply	380V/12KW	380V/15KW	380V/18KW	380V/20KW	380V/21KW	
Heating Element	Silicon Carbide Rods (SIC)					
Chamber Material	High temperature polycrystal alumina ceramic fiber plate					
Temp. Precision	±1˚C					
Thermocouple	S type, tested from the back-wall center of the chamber					
Temp Controller	SHIMADEN (Japan) brand intelligent microcomputer PID controller can program 4 groups 32 segments					
Electronic Parts	SCHNEIDER (France) electronics brand					
Heating Rate	≤ 25˚C/min (suggest 15-20˚C/min for longer life using of furnace)					
Safety Protection	Overheat and Thermocouple-break Alarm; Leakage circuit breaker					
Certification	ISO9001 /CE/ SGS					
Furnace Shell	High quality cold-rolled steel sheets CNC processing					
Insulation	High quality thermal insulation material to ensure a good uniformity					
Standard Packing	One pair of high temperature gloves, One pair of crucible tongs, one catalog and one English operation manual					
Optional	Paperless recorder, Stainless steel exhaust valve, Quartz /Alumina crucibles, extra Heaters					
Warranty	One year, life long technical supports (Consumable parts such as thermocouple and heating elements are not covered by the warranty, please order replacements at related products respectively)					

STD-36-17

1700°C Small Industrial Furnace

Main Features

>Integrated Structure with elegant design.
>Chamber Materials: Vacuum forming ceramic fiber with advantage of no powder drops off in high temperature and energy saving.
>Heater : It use high grade MoSi2 (Molybdenum Disilicide Heaters) heating element.
>YUDIAN brand Microprocessor PID controller or any other brand as option.
>Long life type B thermocouple.
>CE compliant.
>Exhaust chimney is an optional device and available for customer.
>The furnace can be equipped with inert gas devices with float flowmeter.
>Built-in RS485 port and USB adaptor as optional setting for computer control, it need to add extra fees.



1700˚C MoSi2 Rod Heater Chamber

01 Alimina ceramic fiber lining board
02 Ceramic Insulation Door
03 Digital PID Controller
04 Optional SS304 lining
05 MoSi2 Rod Heaters
06 Door steel fastener
07 Voltmeter& Ammeter
08 Operating Buttons

Technical Parameters

Model	STD-36-17	STD-45-17	STD-96-17	OEM
Chamber Size (WxDxH)mm	300x400x300	300x500x300	400x600x400	Any size
Type	Box type heat treatment equipment			
Usage	Ideal for tempering, hardening, gravimetric analysis, sintering, quantitative analysis and other heat treatment processes			
Furnace Structure	Alumina Ceramic Chamber, PID Temperature control system, Heating elements, Furnace shell ,Main Electric Parts and other relative accessories			
Max Temperature	1700˚C			
Continue Temp.	1600˚C			
Power Supply	380V/15KW	380V/18KW	380V/24KW	
Heating Element	MoSi2 Rods			
Chamber Material	High temperature polycrystal alumina ceramic fiber plate			
Temp. Precision	±1˚C			
Thermocouple	B type, tested from the back-wall center of the chamber			
Temp Controller	YUDIAN brand Microprocessor PID controller or any other brand as option			
Electronic Parts	SCHNAIDER (France) electronics brand			
Heating Rate	≤ 15˚C/min (suggest 10˚C/min for longer life using of furnace)			
Safety Protection	Overheat and Thermocouple-break Alarm; Leakage circuit breaker			
Certification	ISO9001 /CE/ SGS			
Furnace Shell	High quality cold-rolled steel sheets CNC processing			
Insulation	High quality thermal insulation material to ensure a good uniformity			
Standard Packing	One pair of high temperature gloves, One pair of crucible tongs, one catalog and one English operation manual			
Optional	Paperless recorder , Stainless steel exhaust valve, Quartz /Alumina crucibles, extra Heaters			
Warranty	One year, life long technical supports (Consumable parts such as thermocouple and heating elements are not covered by the warranty, please order replacements at related products respectively)			

STD-200-12A

Large Size Industrial Furnace

Main Features

>For large size industrial furnace we have 1200°C ,1400°C , 1700°C type

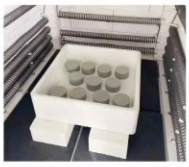
>Integrated Structure with elegant design, We generally use electric lift upwards door for large size door, but manual door is available.

>Chamber Materials: high solid refractory brick with shock resistance

>Long life type N/S/B thermocouple according to different temperature.

- **Three Sides Heating : Left + Right + Bottom**
- **Five Sides Heating : Left + Right + Bottom+Rear+Door**
  (With best temperature uniformity in chamber)

Five Sides Heating Furnace



1200˚C Industrial Furnace

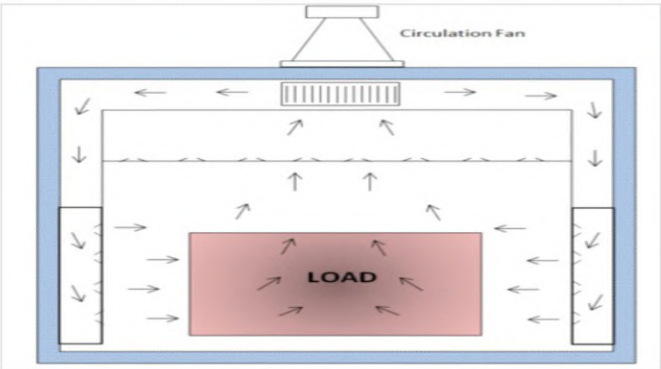
1400˚C Industrial Furnace

1700˚C Industrial Furnace

Technical Parameters

Model	Chamber Size W*D*H(mm)	Volume(L)	Max Temp(°C)	OperateTemp(°C)	Voltage(V)	Heating Element	Controller Accuracy
STD-150-12A	450*530*590	150L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-200-12A	500*530*720	200L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-300-12A	550*700*780	300L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-450-12A	600*750*1000	450L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-660-12A	600*1100*1000	660L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-1000-12A	800*1000*1250	1000L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-1500-12A	900*1200*1400	1500L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-2200-12A	1000*1400*1600	2200L	1200˚C	1100˚C	380 V	HRE WIRE	±1°C
STD-96-14	400*600*400	96L	1400˚C	1300˚C	380 V	SIC ROD	±1°C
STD-150-14	450*530*590	150L	1400˚C	1300˚C	380 V	SIC ROD	±1°C
STD-200-14	500*530*720	200L	1400˚C	1300˚C	380 V	SIC ROD	±1°C
STD-64-17	400*400*400	64L	1700˚C	1600˚C	380 V	MoSi2 ROD	±1°C
STD-96-17	400*600*400	96L	1700˚C	1600˚C	380 V	MoSi2 ROD	±1°C
STD-150-17	450*530*590	150L	1700˚C	1600˚C	380 V	MoSi2 ROD	±1°C
STD-200-17	500*530*720	200L	1700˚C	1600˚C	380 V	MoSi2 ROD	±1°C
STD-288-17	600*800*600	288L	1700˚C	1600˚C	380 V	MoSi2 ROD	±1°C

Hot Air Circulation Furnace >>



Hot Air Circulation System

The Overview Of Hot Air Circulation Furnace

Air circulation furnace is equipped with thermal circulation fan and stainless steel deflector in the working chamber. This kind of design provide a perfect temperature uniformity for heated product. Therefore it is an ideal choice for hardening, tempering, annealing etc heat treatment. And most welcomed by metal models and other metal materials.

Main Features

> SAFTHERM air circulation furnace can heat up to be Max 850°C.
> The structure can be customized to be manual axially door, auto lifting door, car bottom loading, double door design etc. according to users' technical process.
> Chamber material can be chosen between ceramic fiber modules and light mullite brick.
> Furnace top install hot circulation fan and an can make the forced circulation.
> On the left and right side in the chamber, stainless steel deflector installation strengthen the convection and insulation effect.
> SAFTHERM has wide range of working chamber size also can be customized according to the actual needs of users.

Maintenance of air circulation furnaces

> Furnace operators should understand the simple structure and working characteristics of air circulation furnaces.
> The heat treatment furnace must cut off the heating power when loading and unloading the workpiece to ensure the safety of the operator.
> The oxides and other residues in the furnace should be removed frequently and the maintenance work should be performed at least once every two weeks.
> It is strictly forbidden to heat the workpiece with corrosive, volatile and explosive atmosphere in the furnace, so as not to cause unnecessary accidents.
> Transmission parts should be checked frequently and lubricated.
> Regluarly record the condition of the parts including thermocouples, heating element, chamber lining and motor fan, contact with manufacturer for professional suggestions when necessary.

Model	STDR-96-10	STDR-288-10	STDR-640-10	STDR-1200-10	STDR-2160-10
Chamber Volume	96L	288L	640L	1200L	2160L
Chamber Size WxLxH (mm)	400x600x400	600x800x600	800x1000x800	1000x1200x1000	1200x1500x1200
Max Temperature	850℃				
Continue Temp.	750℃				
Heating Element	High quality Alloy Resistance Wire (HRE)				
Chamber Material	High quality light-weight mullite brick				
Temp Controller	SHIMADEN (Japan) brand PID controller can program 4 groups 32 segments or any brand				
Electronic Parts	SCHNEIDER (France) electronics brand				
Heating Rate	⩽ 25℃/min (suggest 15℃/min for longer life using of furnace)				
Safety Protection	Overheat and thermocouple-break alarm				
Furnace Shell	high quality cold-rolled steel sheets CNC processing				
Insulation	High quality thermal insulation material to ensure a good uniformity				