Mfg. : Heaters, Sensors, Control Panel, Instruments & Automation Oven, Furnace, Bath & Hot Air Blower





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CIN No. U29119GJ2002PTC041475



# **Electrical Furnace**

Temperature Upto 1700°C













# 1200°C Sideopen Box Furnace Series



Model: SIPL-1200 P.

#### Purpose

Widely used in sintering and annealing in lab, sintering for ceramics, used in denture processing industry for heating, presintering for Zirconium.

#### Feature:

Maximum Temperature: 1200℃

Five Heating Surfaces (Left, Right, Front, Back, Bottom) can achieve a more uniform of the chamber temperature

K type thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

Ventilation opening on the top of furnace, to discharge the corrosive gas and water, to enhance the service life of heating element.

Model	Cha	mber Size	e(mm)	Maximum	Volume	Voltage	Power	Temperature	Net	Electrical
Wodo	D	w	Н	(℃)	(L)	voltago	(kw)	Control Accuracy	Weight (KG)	Connection (break switch)
SIPL-1200P	100	100	100	1200	1.87	AC: 230v 50/60Hz	0.8	±1°C	12	10A
	150	150	150	1200	3.4	AC: 230v 50/60Hz	2.5	±1°C	28	16A
	300	200	200	1200	12	AC: 230v 50/60Hz	4	±1°C	45	40 A
	300	300	300	1200	36	AC: 230 v 50/60Hz	5	±1°C	72	63A
	400	300	300	1200	38	AC: 415v 50/60Hz	8	±1°C	95	63A
	450	450	450	1200	125	AC: 415v 50/60Hz	18	±1°C	175	63A
	610	610	610	1200	227	AC: 415v 50/60Hz	28	±1°C	240	63A

Supply voltage and wattage also design as per requirement of customer.



### 1400°C Sideopen Box Furnace Series



Modelt SIPL-1400 P

#### Purpose

Widely used in sintering and annealing in lab, sintering for ceramics, used in denture processing industry for heating, presintering for Zirconium.

#### Feature

Maximum Temperature: 1400℃

Two Heating Surfaces (Left,Right) can achieve a more uniform of the chamber

temperature

SiO2 Heating Element

S type thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

Ventilation opening on the top of furnace, to discharge the corrosive gas and water, to enhance the service life of heatingreent.

Model	Chan	nber Siz	ze(mm)	Maximum	Volume	Voltage	Power	Temperature	Net	Electrical
Wodel	D	W	Н	(°C)	(L)	voitage	(kw)	Control Accuracy	Weight (KG)	Connection (breakswitch)
SIPL-1400 P	130	120	120	1400	1.87	AC: 230v 50/60Hz	1.5	±1°C	65	10A
SIPL-1400 P	150	150	150	1400	3.4	AC: 230v 50/60Hz	2.5	±1°C	72	16A
SIPL-1400 P	200	200	200	1400	12	AC: 230v 50/60Hz	4	±1°C	86	40 A
SIPL-1400 P	300	200	200	1400	36	AC: 230v 50/60Hz	5.5	±1°C	95	63A
SIPL-1400 P	400	300	300	1400	38	AC: 415v 50/60Hz	10	±1°C	120	63A
SIPL-1400 P	450	450	450	1400	125	AC: 415v 50/60Hz	20	±1°C	185	63A
SIPL-1400 P	610	610	610	1400	227	AC: 415v 50/60Hz	40	±1°C	210	63A



# 1700°C Side open Box Furnace Series



Model: SIPL-1700 P

Purpose:

Widely used in sintering and annealing in lab, sintering for ceramics, used in denture processing, especially fortechnical ceramic (ceramic dental bridge)

Feature:

Maximum Temperature: 1650°C Material of Chamber: Al2O3 Fiber

Two Heating Surfaces (Left,Right) can achieve a more uniform of the chamber

temperature

MoSi2 Heating Element B type thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

Ventilation opening on the top of furnace, to discharge the corrosive gas and water, to enhance the service life of heating element.

Model	Cha	mber Size	(mm)	Maximum	Volume	Voltage	Power	Temperature	Net Weight	Electrical
	D	W	Н	(℃)	(L)	ronage	(kw)	Control Accuracy	(KG)	Connection (break switch)
SIPL-1700 P	130	120	120	1700	1.87	AC: 220v 50/60Hz	2	±1°C	70	32A
SIPL-1700 P	150	150	150	1700	3.4L	AC: 220v 50/60Hz	3	±1°C	90	32A
SIPL-1700 P	200	200	200	1700	12L	AC: 220v 50/60Hz	5	±1°C	120	32A
SIPL-1700 P	300	200	200	1700	36L	AC: 220v 50/60Hz	7.5	±1°C	140	42A
SIPL-1700 P	400	300	300	1700	38L	AC: 380v 50/60Hz	15	±1°C	300	63A
SIPL-1700 P	500	500	500	1700	125L	AC: 380v 50/60Hz	28	±1°C	450	63A
SIPL-1700 P	610	610	610	1700	227L	AC: 380v 50/60Hz	60	±1°C	820	100A

Supply voltage and wattage also design as per requirement of customer.



# 1800°C Sideopen Box Furnace Series



Model: SIPL-1800 P

Purpose:

Widely used in sintering and annealing in lab, sintering for ceramics, used in denture

processing especially fortechnicalceramic (ceramic dental bridge)

Feature

Maximum Temperature: 1750℃ Material of Chamber: Al2O3Fiber

Two Heating Surfaces (Left, Right) can achieve a more uniform of the chamber

temperature

MoSi2 Heating Element B type thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

Ventilation opening on the top of furnace, to discharge the corrosive gas and water, to enhance the service life of heating element.

Model	Char	mber Size	mm)	Maximum	Volume	Voltage	Power	Temperature	Net Weight	Electrical
	D	W	Н	(°C)	(L)		(kw)	Control Accuracy	(KG)	Connection (break switch
SIPL-1800 P	130	120	120	1750	1.87	AC: 230v 50/60Hz	2	±1°C	70	32A
SIPL-1800 P	150	150	150	1750	3.4	AC: 230v 50/60Hz	3	±1°C	90	32A
SIPL-1800 P	200	200	200	1750	12	AC: 230v 50/60Hz	5	±1°C	120	32A
SIPL-1800 P	300	200	200	1750	36	AC: 230v 50/60Hz	7.5	±1°C	140	42A
SIPL-1800 P	400	300	300	1750	38	AC: 415v 50/60Hz	15	±1°C	300	63A
SIPL-1800 P	450	450	450	1750	125	AC: 415v 50/60Hz	28	±1°C	450	63A
SIPL-1800 P	610	610	610	1750	227	AC: 415v 50/60Hz	60	±1°C	820	100A



# 1200<sup>°</sup>C Atmosphere Vacuum Furnace Series



#### Purpose:

The furnace facilitate operation of firing cycles where atmosphere condition can be altered during operation cycle, from oxidizing, (such as air to inert atmosphere), or argon/nitrogen to rough vacuum.

This type of furnace makes multiatmosphere process in one cycle possible: binder burn out in air and parts sintering under vacuum or inert gas atmosphere.

These furnaces are designed for accurate air/inert gas flow rate control, accurate temperature control, excellent temperature uniformity, long lasting performance and safe operations.

It is ideal for laboratories and small scale production for temperatures up to 1100

#### Feature

Maximum Temperature: 1100°C Material of Chamber: Al2O3 Fiber

Two Heating Surfaces (Left, Right) can achieve a more uniform of the chamber temperature

Fe-Cr-Al Alloy doped by Mo

K type thermocouple

	Char	mber Size	mm)		7		35	Temperature	Net	Electrical	Vacuum	Maximum
Model	D	W	Н	Maximum (℃)	Volume (L)	Voltage	Power (kw)	Control Accuracy	Weight (KG)	Connection (break switch)	mechanical pump(Pa)	(MPa)
	130	120	120	1200	. 1	AC:230; 50/60Hz	1.5	±1°C	160	32A	10	0.5MPa
	150	150	150	1200	3.4	AC:230; 50/60Hz	2.5	±1°C	260	32A	10	0.5MPa
	200	200	200	1200	12	AC:230; 50/60Hz	4	±1°C	290	32A	10	0.5MPa
SIPL-BA1200 P	300	250	250	1200	36	AC:230; 50/60Hz	5	±1°C	380	42A	10	0.5MPa
	400	300	300	1200	38	AC:230; 50/60Hz	8	±1°C	640	63A	10	0.5MPa
	450	450	450	1200	125	AC:415;50/60Hz	18	±1°C	860	63A	10	0.5MPa
	610	610	610	1200	227	AC:415;50/60Hz	28	±1°C	1200	63A	10	0.5MPa

Supply voltage and wattage also design as per requirement of customer.



### 1400°C Atmosphere Vacuum Furnace Series



#### Purpose:

The furnace facilitate operation of firing cycles where atmosphere condition can be altered during operation cycle, from oxidizing, (such as air to inert atmosphere), or argon/nitrogen to rough vacuum.

This type of furnace makes multiatmosphere process in one cycle possible: binder bum out in air and parts sintering under vacuum or inert gas atmosphere.

These furnaces are designed for accurate air/inert gas flow rate control, accurate temperature control, excellent temperature uniformity, long lasting performance and safe operations.

It is ideal for laboratories and small scale production for temperatures up to 1350°C

#### Feature

Maximum Temperature: 1350°C Material of Chamber: Al2O3 Fiber

Two Heating Surfaces (Left, Right) can achieve a more uniform of the chamber temperature SiO2 Heating element

No.	Cha	mber Size	mm)	2	-11	Note and the		Temperatur	Net	Electrical	Vacuum	Maximum
Model	D	w	н	Maximum (°C)	Volume (L)	Voltage	(kw)	e Control Accuracy	Weight (KG)	Connection (break switch)	mechanical pump(Pa)	Pressure (MPa)
	100	100	100	1350	1	AC:230;50/60Hz	1.5	±1°C	200	32A	10	0.5MPa
	150	150	150	1350	3.4	AC:230;50/60Hz	2.5	±1°C	220	32A	10	0.5MPa
	200	200	200	1350	12	AC:230;50/60Hz	4	±1°C	280	32A	10	0.5MPa
SIPL-BA 1600 X	300	200	200	1350	36	AC:230;50/60Hz	5.5	±1°C	390	42A	10	0.5MPa
	400	300	300	1350	38	AC:230;50/60Hz	10	±1°C	650	63A	10	0.5MPa
	450	450	450	1350	125	AC: 415; 50/60Hz	20	±1°C	840	63A	10	0.5MPa
	610	610	610	1350	227	AC 415; 50/60Hz	40	±1°C	1300	63A	10	0.5MPa



# 1700°C Atmosphere Vacuum Furnace Series





#### Purpose:

The furnace facilitate operation of firing cycles where atmosphere condition can be altered during operation cycle, from oxidizing, (such as air to inert atmosphere), or argon/nitrogen to rough vacuum.

This type of furnace makes multiatmosphere process in one cycle possible: binder burn out in air and parts sintering under vacuum or inert gas atmosphere.

These furnaces are designed for accurate air/inert gas flow rate control, accurate temperature control, excellent temperature uniformity, long lasting performance and safe operations.

It is ideal for laboratories and small scale production for temperatures up to 1650°C

#### Feature

Maximum Temperature: 1650°C Material of Chamber: Al2O3 Fiber

Two Heating Surfaces (Left, Right) can achieve a more uniform of the chamber

temperature

MoSi2 Heating element Stype thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

0.00000	Char	nber Size	mm)	ACYC + (900 87/20)	10071010404	1100-110025	PRO 7 (Sercio)	Temperat	Net	Bectrical	Vacuum	Maximum
Model	D	w	н	Maximum (°C')	Volume (L)	Voltage	(kw)	ure Control Accuracy	Weigh t (KG)	Connection (break switch)	mechanical pump (Pa)	Pressure (MPa)
SPL-BA-1700 P	130	120	120	1650	1	AC:230 ; 50/60Hz	1.8	±1°C	200	32A	20	0.5MPa
SPL-BA-1700 P	150	150	150	1650	3.4	AC:230 ; 50/60Hz	3	±1°C	260	32A	20	0.5MPa
SPL-BA-1700 P	200	200	200	1650	12	AC:230 ; 50/60Hz	5	±1°C	320	32A	20	0.5MPa
SPL-BA-1700 P	300	200	200	1650	36	AC:230 : 50/60Hz	7.5	±1°C	450	42A	20	0.5MPa
SPL-BA-1700 P	400	300	300	1650	38	AC:230 : 50/60Hz	15	±1°C	700	63A	20	0.5MPa
SPL-BA-1700 P	500	500	500	1650	125	AC:415; 50/60Hz	28	±1°C	980	63A	20	0.5MPa
SPL-BA-1700 P	610	610	610	1650	227	AC:415; 50/60Hz	60	±1°0	1500	63A	20	0.5MPa

Supply voltage and wattage also design as per requirement of customer.



### 1100°C Vacuum Tube Furnace Series



#### Purpose

Widely used in sinteringand annealing. Especially apply to technical ceramic

#### Feature.

Maximum Temperature: 1150 ℃

Ring heating can achieve a more uniform of the chamber temperature

K type thermocouple

Material of Chamber: Al2O3Fiber

SiO2 Heating element

Double layer steel case with air cooling keeps exterior safe to touch.

Model	Maximum (°C)	Tube Dia (mm)	Temperature Zone(mm)	Uniform Temperature Zone(mm)	Tube Length (mm)	Power	Voltage	Tube Material	Net Weight (KG)
	1150	25	200				AC:230V 50/60Hz	1000000	25
	1150	30	200				AC:230V 50/60Hz	High Purity	25
SGSL-1200 P	1150	40	200	100	700	1kw	AC 230V 50/60Hz	Quartz	25
X - P	1150	50	200				AC 230V 50/60Hz		25



### 1400°C Vacuum Tube Furnace Series



#### Purpose

Widely used in sintering and annealing Especially apply totechnical ceramic and battery material.

#### Feature

Maximum Temperature: 1400°C

Two heating surfaces(front and back)can achieve a more uniform of the chamber temperature

Stype thermocouple

Material of Chamber: Al2O3Fiber

SiO2 Heating element

Double layer steel case with air cooling keeps exterior safe to touch.

Model	Maximum (°C)	Tube Dia (mm)	Temperature Zone(mm)	Uniform Temperature	Tube Length (mm)	Power (kw)	Voltage	Tube Material	Net Weight (KG)
				Zone(mm)					
		50. 60. 80. 100	300	150	1000. 1200. 1500	4	AC:230V 50/60Hz		80
		50, 60, 80, 100	300	150	1000. 1200. 1500	4	AC:230V 50/60Hz	High	80
SGSL-1400P	1400	50. 60. 80. 100	300	150	1000. 1200. 1500	4	AC:230V 50/60Hz	Purity Quartz	80
		50, 60, 80, 100	300	150	1000. 1200. 1500	4	AC:230V 50/60Hz		80

Supply voltage and wattage also design as per requirement of customer.



# 1600°C Vacuum Tube Furnace Series



#### Purpose:

Widely used insintering and annealing Especially apply to technical ceramic

#### Feature:

Maximum Temperature: 1600℃

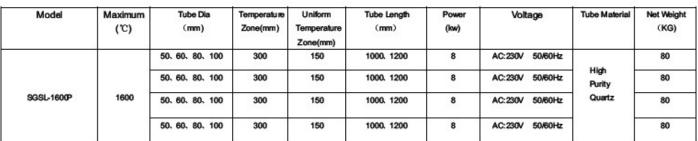
Two heating surfaces(front and back)can achieve a more uniform of the

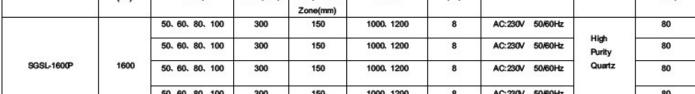
chamber temperature B type thermocouple

Material of Chamber: Al2O3 Fiber

MoSi2 Heating element

Double layer steel case with air cooling keeps exterior safe to touch.









### 1100°C Vacuum Tube Furnace(Non-Standard)





#### Purpose

This equipment is developed and manufactured specially for larger workpiece and production of quantities of thermal treatment. The height of quantz tube is 152mm, with length of heating zone be 1100mm. It is mainly used in production of LED phosphor powder, substrate material and battery material. It can make accurate control of temperature raise, constant and decrease, the accuracy can be £1°CWith larger tube diameter and length of heating zone, it make constant production of higher efficiency. It can work under atmosphere as well as vacuum, to meet the production technology of variety of materials. The equipment include the two way gas control system, control system of constant tube internal pressure, it can achieve the full-automatic operation without human attendance.

#### Feature

Ø152mm Large diameter Tubet100mm Super long Temperature Zone air cooling keeps exterior safe to touch

Model	Maximum (°C)	Tube Dia (mm)	TemperatureZone (mm)	Uniform Temperature Zone(mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	NetWeight (KG)
SGSL1100 R3	1100	152	1100	800	1650	13	380V 50/60Hz	High Purity Quartz	400

Supply voltage and wattage also design as per requirement of customer.



### 1600°C Vacuum Tube Furnace Series



#### Purpose:

Widely used insintering and annealing Especially apply to technical ceramic

#### Feature:

Maximum Temperature: 1600℃

Two heating surfaces(front and back)can achieve a more uniform of the chamber temperature

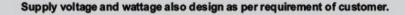
B type thermocouple

Material of Chamber: Al2O3 Fiber

MoSi2 Heating element

Double layer steel case with air cooling keeps exterior safe to touch.

Model	Maximum (°C)	Tube Dia (mm)	Temperature Zone(mm)	Uniform Temperature Zone(mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	Net Weight (KG)
		50. 60. 80. 100	300	150	1000. 1200	8	AC:230V 50/60Hz	500000	80
		50, 60, 80, 100	300	150	1000. 1200	8	AC:230V 50/60Hz	High Purity	80
9GSL-1600P	1600	50. 60. 80. 100	300	150	1000. 1200	8	AC:230V 50/60Hz	Quartz	80
		50, 60, 80, 100	300	150	1000. 1200	8	AC:230V 50/60Hz		80





# 1100°C Vacuum Tube Furnace(Non-Standard)





#### Purpose

This equipment is developed and manufactured specially for larger workpiece and production of quantities of thermal treatment. The height of quartz tube is 152mm, with length of heating zone be 1100mm. It is mainly used in production of LED phosphor powder, substrate material and battery material. It can make accurate control of temperature raise, constant and decrease, the accuracy can be ±1°CWith larger tube diameter and length of heating zone, it make constant production of higher efficiency. It can work under atmosphere as well as vacuum, to meet the production technology of variety of materials. The equipment include the twoway gas control system, control system of constant tube internal pressure, it can achieve the full-automatic operation without human attendance.

#### **Feature**

Ø152mm Large diameter Tubel100mm Super long Temperature Zone air cooling keeps exterior safe to touch

Model	Maximum (°C)	Tube Dia (mm)	TemperatureZone (mm)	Uniform Temperature Zone(mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	Net Weight (KG)
SGSL1100 R3	1100	152	1100	800	1650	13	380V 50/60Hz	High Purity Quartz	400

Supply voltage and wattage also design as per requirement of customer.



### 1100°C Vacuum Tube Furnace (Non-Standard)





#### Purpose

This equipment is developed and manufactured specially for larger workpiece and production of quantities of thermal treatment. The height of quartz tube is 350mm, with length of heating zone be 4000mm. It is mainly used in production of LED phosphor powder, substrate material and battery material. It can make accurate control of temperature raise, constant and decrease, the accuracy can be ±1°C. With larger tube diameter and length of heating zone, it make constant production of higher efficiency. It can work under atmosphere as well as vacuum, to meet the production technology of variety of materials. The equipment include the two-way gas control system, control system of constant tube internal pressure, it can achieve the full-automatic operation without human attendance.

#### Feature

Ø152mm Large diameter, Tubel 100mm Super long

Model	Maximum (°C)	Tube Dia (mm)	Temperatur∉one (mm)	Uniform Temperature Zone (mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	Net Weight (KG)
SGSL-1100VII	1100	350	4800	4000	6000	45	415 V 50/60Hz	High Purity Quartz	1200



# 1100°C Rotary Vacuum Tube Furnace(Non-Standard)





#### Purpose

The Max temperature reach 1100 °C, the features of the equipment, while sintering, the tube can be rotated, which make sinter of powder sample much more uniform.

Designed three heating zone,can achieve a more uniform of the chamber temperature

Material of Chamber: Al2O3Fiber

Material of Tube:SS310

Ring heatingcan achieve a more uniform of the chamber temperature

K type thermocouple

Double layer steel case with air cooling keeps exterior safe to touch.

Model	Maximum (°C)	Tube Dia (mm)	Temperature Zone (mm)	Uniform Temperature Zone (mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	RPM	Net Weight (Kg)
SOTF-1100P	1200	150, 200, 250	900	600	1200, 1500.	15	AC:230V 50/60Hz	SS310S	0-30n	300

Supply voltage and wattage also design as per requirement of customer.



# 1400°C Tilting-type Rotary Vacuum Tube Furnace





#### Purpose

The Max temperature reacH000°C, the features of the equipment, while sintering, the tube can be rotated, whildtake sinter of powder sample much more uniform.

Material of Chamber: Al2OFiber Material of Tube High Purity Al2O3

Ring heating an achieve a more uniform of the chamber temperature

S type thermocouple

Model	Maximum (°C)	Tube Dia (mm)	Temperature Zone (mm)	Uniform Temperature Zone (mm)	Tube Length (mm)	Power (kw)	Voltage	Tube Material	RPM	Tilt Angle	Model
9GSL-1200P	1200	50. 60. 80. 100	440	200	1000. 1200	4	AC:23S0V 50/60Hz	High Purity Al2O3	0-30n	≤45°	120



### 1500°C Plasma Enhancement CVD



#### Purpose

1500 ℃three-zone-PECVD( Plasma Enhanced Chemical Vapor Deposition) tube furnace system, consists of 500W RF plasma source, 1500 ℃- three zone tube furnace, multi channels precision mass flow meter with gas mixing tank, and high quality vacuum system.

The PE-CVD furnace is an ideal and affordable tool to deposit SiC thin films, graphene or grow nanowire from a gas state (vapor) to a solid state.

#### Feature

Maximum Temperature 1500°C

Continuous Working Temperature 1400°C

Three Temperature Zone controlled by three temperature control with 30-segement programmable

Length of each heating zone :200mm

Length of whole heating zone:600mm

With a pair of stainless steel vacuum flange, which include a quartz observing window and with liquid injection orifice

Туре	Max. Temperatur	Tub	e I	Length of	Uniform Temperature	Length o	of Ou	er Size(r	nm)				Net Weight
.,,,,,	e (°C)	Diame (mr	100	(mm)	Zone (mm)	Tube (mm)	Length	Width	Height	Power	Voltage	Material of Tube	(KG)
90TF-1500 P3PE	1500°C	50-1	00 20	00+200+200	100+100+100	1500	1900	600	1490	11KG	AC:230V 50/60H	High Purity Quartz	240
RF Power Output Po	ower RF Frequ	iency	Reflection Power	Match	RF Interface	Cooling	Power Supp	ly Nois	Gas	Flow Met	er Gas Flow Meter	Gas Flow Meter MFC 3	Gas Flow Meter MFC 4
5 -500 W ± 1%	13.56M ± 0.005	5	200W	Automatic	50Ω N-type	Air Cooling	AC208-240V 50/60Hz	<50 c	iB 0	~100sccm	0~200sccm	0~200sccm	0~500sccm

Supply voltage and wattage also design as per requirement of customer.



# 1200°C PECVD Tube Furnace with Pre-Heater



#### Purpose

GSL-1200X is a dual zone PE-CVD tube furnace system which consists of 500W RF plasma source, speed controlled slidable mechanism,-a preheater for sublimating the solid material and a high quality oil less vacuum pump. Such a PE-CVD furnace is a new tool to grow nanowire and for CVD coating of a wide range of materials.

#### Features:

Maximum working temperature is up to 1200 ℃

Long lasting operation temperature is up to 1100 °C

Three zones is of three separate 30 segment programmable temperature controllers Length of each heating zone be 200mm

Length of the whole heating zone be 600mm

With high Purity quartz tube

With a pair of stainless steel vacuum flange, which include a quartz observing window and with liquid injection orifice

Туре	Max. Temperature	Tu	1 112	Length of Heating	Unifo		Length of	of	Oute	r Size(n	nm)	Power	Voltage	Material of Tube	Net Weight
	(°C)		nm)	(mm)	(mn		(mm)	ı	ength	Width	Height	rowei	voitage	material of Tube	(KG)
SOTF-1500P2PE	1500C	50-	100	200+200+20	100+10	0+100	1500		1900	600	1490	11KG	AC:230V 50/60H	High Purity Quartz	260
RF Power Output F	ower RF Frequ	iency	Reflec	Mato	h	RF erface	Cooling	Pow	er Supply	Nois		s Flow Met	er Gas Flow Mete	r Gas Flow Meter MFC 3	Gas Flow Mete
5 -500W ± 1%	13.56M ± 0.005		200	W Autom	atic	0Ω type	Air Cooling		08-240V V60Hz	<50 0	iB (	)~100sccm	0~200sccm	0~200sccm	0~500sccm



# 1700°C CVD System



#### Purpose

Tube furnace CVD system, equipped with twin-rotary-vane vacuum pump, with four channels precision mass flow-controllers, the maximum temperature is up to 1700°C vacuum upto 5×10°Torr, it can mix 1-4 gases. The fur nace is new tool to research a CVD coating of variety of thin film.

#### Features:

Maximum working temperature is up to 1650 ℃

Long lasting operation temperature is up to 1600°C

High purity alumina tube with vacuum gauge, with resistance regulation, to ensure precision and convenient.

Double Shell Design with cooling system to Ensure Outside Furnace Temperature lower than 80  $^{\circ}$ 

Gas flow meter: MFC1 0-100sccm
Gas flow meter: MFC2 0-200sccm
Gas flow meter: MFC3 0-200sccm
Gas flowmeter: MFC4 0-500sccm

_	Max.		Length of	Uniform			ter Size	(mm)					Net
Туре	Temperature (°C)	Tube Diameter (mm)	Heating (mm)	Temperat ure Zone (mm)	Length of Tube (mm)	Length	Widt h	Height	Power	Voltage	Material of Tube	(Pa)	Weight (KG)
9GSL-1200P	1200	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-120 0X	1200
SGSL-1400P	1400	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-140 0X	1400
SGSL-1600P	1600	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-160 0X	1600

Supply voltage and wattage also design as per requirement of customer.



# 1200℃ Sliding Tube Furnace for Fast Heating/ Cooling



#### Purpose

OTF-1200X is a slideable tube furnace with 50mm quartz tube, and maximum working temperature up to 1200°COne pair of sliding rail is installed on the bottom of the furnace allow sliding by hand, to achieve max. heating and cooling rates up to 100°C/min. For fastest heating, the furnace may be pre-heated to a desired temperature and then be slid to the sample's position. As for fastest cooling, the furnace can be slid to another side after completion of sample heating. Moreover, the heating and cooling rates may reach 10°C/s under vacuum or inert gas. This furnace is ideal for rapid thermal processing at the lowest cost.

#### Features:

Double Shell Design with cooling system to Ensure Outside Furnace Temperature lower than 60%

Sliding rail installed on the bottomallow slide by hand.

Vacuum flange installed on the both ends of tube, the vacuum is up to  $10^{\circ}$  Torr by molecular pump, up to  $10^{\circ}$  Torr by mechanical pump.

One thermocouple with diameter 1/4" is inserted through the vacuum flange, to monitor the real temperature inside the tube.

Time	Max.	Tube	Length of	Uniform	Length of Tube		uter Size(	mm)				Net Weight
Туре	Temperature (°C)	Diameter (mm)	Heating (mm)	Zone (mm)	(mm)	Length	Width	Height	Power	Voltage	Material of Tube	(KG)
SOTF-1200P	1150	50	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	65
SOTF-1200P	1150	60	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	70
SOTF-1200P	1150	80	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	79
SOTF-1200P	1150	100	200+200	100+100	1200	1400	450	550	1-2	C:230V 50/60Hz	High Purity Quartz	86



# 1700°C CVD System



#### Purpose

Tube furnace CVD system, equipped with twin-rotary-vane vacuum pump, with four channels precision mass flow-controllers, the maximum temperature is up to 1700°C vacuum upto 5×10°2 Torr, it can mix 1-4 gases. The furnace is new tool to research a CVD coating of variety of thin film.

#### Features:

Maximum working temperature is up to 1650 ℃

Long lasting operation temperature is up to 1600°C

High purity alumina tube with vacuum gauge, with resistance regulation, to ensure precision and convenient.

Double Shell Design with cooling system to Ensure Outside Furnace Temperature lower than 60 °C.

 Gas flow meter: MFC1
 0-100sccm

 Gas flow meter: MFC2
 0-200sccm

 Gas flow meter: MFC3
 0-200sccm

 Gas flowmeter: MFC4
 0-500sccm

-	Max.		Length of	Uniform			ter Size	(mm)					Net
Туре	Temperature (°C)	Tube Diameter (mm)	Heating (mm)	Temperat ure Zone (mm)	Length of Tube (mm)	Length	Widt h	Height	Power	Voltage	Material of Tube	(Pa)	Weight (KG)
SGSL-1200P	1200	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-120 0X	1200
SGSL-1400P	1400	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-140 0X	1400
SGSL-1600P	1600	50. 60. 80. 100	300	200	1000. 1200	1250	600	1680	4	AC:230V 50/60Hz	High Purity Alumina	GSL-160 0X	1600

Supply voltage and wattage also design as per requirement of customer.



# 1200° Sliding Tube Furnace for Fast Heating/ Cooling



#### Purpose

OTF-1200X is a slideable tube furnace with 50mm quartz tube, and maximum working temperature up to 1200°COne pair of sliding rail is installed on the bottom of the furnace allow sliding by hand, to achieve max. heating and cooling rates up to 100°C/min. For fastest heating, the furnace may be pre-heated to a desired temperature and then be slid to the sample's position. As for fastest cooling, the furnace can be slid to another side after completion of sample heating. Moreover, the heating and cooling rates may reach 10°C/s under vacuum or inert gas. This furnace is ideal for rapid thermal processing at the lowest cost.

#### Features:

Sliding rail installed on the bottomallow slide by hand.

Vacuum flange installed on the both ends of tube, the vacuum is up to  $10^{\circ}$  Torr by molecular pump, up to  $10^{\circ}$  Torr by mechanical pump.

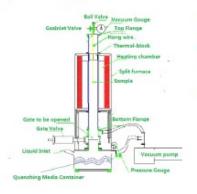
One thermocouple with diameter 1/4" is inserted through the vacuum flange, to monitor the real temperature inside the tube.

Туре	Max.	Tube	Length of	Uniform Temperature	Length of Tube		uter Size(	mm)	1.1			Net Weight
lype	Temperature (°C)	Diameter (mm)	Heating (mm)	Zone (mm)	(mm)	Length	Width	Height	Power	Voltage	Material of Tube	(KG)
SOTF-1200P	1150	50	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	65
SOTF-1200P	1150	60	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	70
SOTF-1200P	1150	80	200+200	100+100	1200	1400	450	550	1-2	AC:230V 50/60Hz	High Purity Quartz	79
SOTF-1200P	1150	100	200+200	100+100	1200	1400	450	550	1-2	C:230V 50/60Hz	High Purity Quartz	86



# 1200°C Vertical Open-Type Vacuum Tube Quenching Furnace





#### Purpose

Vertical open-type tube quenching furnace, with 100mm diameter quartz tube, is equipped with a sealed fluid container for quenching of samples. The temperature ranges from max. 1200°C to ice water or oil. It can be used to research the transformation of materials and property of microstructural.

- Double Shell Design with cooling system to Ensure Outside Furnace Temperature lower than  $60^{\circ}\!\mathrm{C}$
- Vertical open-top structure make the installation easier.
- The sealed fluid container is connected with 100mm diameter quartz tube by sluice valve, to ensure the sample fall into the container without pollution.

Type	Max.	Tube Diameter	Length of	Uniform	Length of Tube	Ou	ter Size(	mm)		11 8/12/19	14 ( 200) 141	Net Weight
**	Temperature (°C)	(mm)	(mm)	Temperature Zone (mm)	(mm)	Length	Wdth	Height	Power	Voltage	Material of Tube	(KG)
SOTF-1200P	1150	50	440+440	200+200	1000.1200.1500	450	560	1400	3-6	AC:230V 50/60Hz	High Purity Quartz	46
SOTF-1200P	1150	60	440+440	200+200	1000.1200.1500	450	560	1400	3-6	AC 230V 50/60Hz	High Purity Quartz	58
SOTF-1200 P	1150	80	440+440	200+200	1000.1200.1500	450	560	1400	3-6	AC:230V 50/60Hz	High Purity Quartz	69
SOTF-1200P	1150	100	440+440	200+200	1000.1200.1500	450	560	1400	3-6	C:230V 50/60Hz	High Purity Quartz	75

Supply voltage and wattage also design as per requirement of customer.



# 1200 °C Vertical Open-Top Vacuum Furnace



#### Purpose

The vertical furnace is equipped with import resistance wire, long life K type thermocouple and 30 Segmenteasy use programmable temperature controller. With epen top structure, it is much easier for take and place the sintering sample; Max. Temperature can reach 1150°C, keep long lasting performance under 1100°C, with temperature accuracy ±1°C. The furnace is designed for small volume, light weight, temperature uniformity, low outside furnace temperature, faster heat up and energy efficiency, this make it ideal for universities, scientific research institutions, industrial and mining enterprise, and any production scale applications.

#### Features

Double Shell Design with cooling system to Ensure Outside Furnace Temperature lower than 60°C Vertical operator structure make the installation easier.

Г	Types	Chamber	Size mm)	Max.	Volume	Voltage	Power	Temperature		Outer Size(m	nm)	Net
		Diameter	Height	Temperature (°C)	(L)		(kw)	Accuracy	Length	Width	Height	Weight (KG)
	SKSL-1200 P	240	240	1200	13	AC: 230V 50/60Hz	4	±1°C	520	520	240	75



# 1700 °C Lift Type Sintering Furnace



#### Purpose

The type of furnace is widely used indenture processing industry for zirconia sintering, it also can be used in powder metallurgy industry for sintering and annealing of high-temperature materials.

#### Features

Touch screen control system, make the operation much easier, faster and more humanization. It is ideal for sintering in denture processing industry, popular for high temperature sintering and metal annealing in colleges, scientific research institutions, industrial and mining enterprise.

With the round-type chamber, heating elements are installed uniformly on the circumference, which achieve a more uniform chamber temperature.

The furnace body is of bottom-loading automatic lift structure, it is much easier and safer to take or place the sintering sample, especially for high temperature sintering of zirconium dioxide dental crowns, to achieve better consistency and permeability.

With scientific structure, The furnace is the mainstream equipment in zirconia sintering industry.

Types	Chamber 5	Size(mm)	Max.	E1000	Power	Temperature		Outer Size(n	nm)	Max. Heat Rate	Electrical	Net Weight
	Diameter	Height	Temperature (°C)	Voltage	(KW)	Accuracy	Length	Width	Height	(℃, min)	Connection	(KG)
STSL-1200P	120	200	1200	AC: 230V 50/60Hz	1.5	±1°C	550	430	860	15	Air Switch 16A	65
STSL-1500P	120	200	1400	AC: 230V 50/60Hz	1.6	±1°C	550	430	860	15	Air Switch 16A	65
STSL-1700P	120	200	1650	AC: 230V 50/60Hz	2	±1°C	550	430	860	25	Air Switch 32A	76
STSL-1800P	120	200	1700	AC: 230V 50/60Hz	22	±1°C	550	430	860	10	Air Switch 32A	76

Supply voltage and wattage also design as per requirement of customer.



### Customization







1100℃ Mini Box Furnace

1700°C Box Furnace

1100°C Box Furnace















Tube Furnace

1600 °C OpenTop Vacuum 1200 °C Tilting-type Rotary Vacuum Tube Furnace

1200 ℃ Vertical VacuumTube Furnace with Three Heating Zone