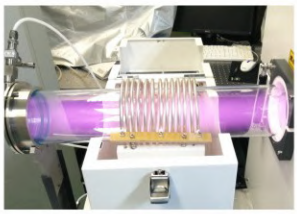
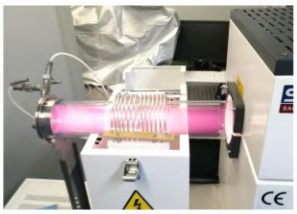
PECVD Tube Furnace >>

Product Application:

PECVD system consists of tube furnace, vacuum acquisition, flow control, and RF power supply. With 13.56Mhz radio frequency output, the gas containing the atoms of the film is ionized to form plasma in the vacuum body. The strong chemical activity of the plasma is used to improve the reaction conditions and make the film composed of The gaseous substance undergoes a chemical reaction to realize a new preparation technology for the growth of thin film materials, and finally a few pieces of the desired thin film are deposited, which is suitable for the deposition of SiO2 and SiNx thin films at 1200C.





Product Application:

> Tube furnace can choose different tube diameter and length of constant temperature zone, both ends of furnace tube are equipped with high vacuum stainless steel sealing flange;
> Vacuum system can choose different vacuum pumps according to test requirements, rotary vane vacuum pump vacuum≤5Pa, molecular pump vacuum unit $1x10^{-4}$Pa;
> The gas supply system can choose 3-channel float manual and 3-channel automatic mass flow system.
> Vacuum measurement is digital compound vacuum machine or Pirani vacuum gauge.
> Power output optional 200W,300W,and 500W
> The thermostat has built-in RS485 digital communication port and USB adapter for optional configuration, which can be connected to PC for remote control and monitoring, the control and monitoring system can also save or export the test results

Technical Parameters

Model	STGP-40-12	STGP-60-12	STGP-80-12	STGP-100-12
Reactor Quartz Tube (mm)	Φ40X1200mm	Φ60X1200mm	Φ80X1200mm	Φ100X1200mm
Type	Benchtop			
Max Temperature	1200℃			
Continue Temp.	1100℃			
Heating Zone	300mm/440mm			
Power Supply	220V/1.8KW	220V/1.8KW	220V/2.6KW	220V/2.6KW
Heating Element	HRE Resistance Wire			
Chamber Material	Polycrystalline inorganic alumina ceramic fiber material prepared by wet vacuum filtration molding			
Tube Material	Quartz tube			
Temp Precision	±1℃			
Thermocouple	N type			
Temp Controller	SHIMADEN(Japan)brand intelligent microcomputer PID controller can program 4 groups 32 segments			
Heating Rate	1-25℃/min Free adjustment			
Furnace Structure	Furnace temperature control integrated structure, furnace opening and closing; double shell, air circulation heat insulation			
Sealing Performance	Both ends of the furnace tube are equipped with stainless steel metal flanges and matched with high-temperature PTFE gaskets, which can work under vacuum with a vacuum degree of ≤5pa (rotary vane vacuum pump)			
Rf Power Supply	Frequency: 13.56 MHz±0.005%, power: 5-500W, power stability: ±0.5%			
Gas Control	Optional 3-channel float manual flow meter, range 60-600ml/min; 3-channel automatic mass flow meter, range 1-500sccm			
Atmosphere Performance	Both ends of the flange are equipped with air inlets and outlets. The pressure gauge. The precision needle valve can adjust the short-term and air output. It can pass in protective gases			
Safety Protection	Equipped with an air circuit breaker on the equipment, it will automatically bounce when a short-circuit leakage occurs, which can protect the safety of equipment and operators			
Furnace Shell	High quality cold-rolled steel sheets CNC processing			
Certification	ISO9001 /CE/ SGS/TUV			