



Large Vacuum Sintering Furnace Constant Temperature Field Optimization Design

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: OEM
- Certification: CE Certification
- Model Number: OEM
- Minimum Order Quantity: Negotiable
- Price: Negotiable
- Packaging Details: Carton, pallet, wooden case or according to customer's package requirements
- Delivery Time: 30 working days
- Payment Terms: 30% deposit + 70% T/T before shipping
- Supply Ability: 20 sets per month



Product Specification

- Name: Vacuum Sintering Furnace
- Design: Temperature Field Optimization Design
- Dimension(L*W*H): Custom
- Cooling Method: Internal Circulation Cooling
- Max Operating Temp: 2380 ° C
- Type: Resistive Type
- Highlight: **vacuum tempering furnace, high vacuum furnace**

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Product Description

Large Vacuum Sintering Furnace Constant Temperature Field Optimization Design

Vacuum Sintering Furnace is specially adapted to the automated production equipment of silicon carbide pressureless (normal pressure) sintering. The equipment adopts the constant temperature field optimization design, which has the functions of removing the forming agent-vacuum sintering-pressureless sintering in the furnace once. The furnace can adapt to various atmospheres and is suitable for the production of silicon carbide and silicon nitride. The process is simple, the pressure in the furnace, the vacuum and the atmosphere are effectively and accurately controlled. The temperature field in the furnace is uniform and the design of the sintering chamber is reasonable. It is an advanced ultra-high temperature sintering equipment capable of sintering without pressure and low vacuum.

Vacuum Sintering Furnace use:

Mainly used for vacuum, atmosphere sintering of silicon carbide, ceramics, cemented carbide, powder metallurgy, tungsten, molybdenum, AlNiCo permanent magnet, SmCo5, Sm2Co17 and aluminum alloy shed, titanium alloy and other alloy materials.

Main performance and technical parameters:

Maximum operating temperature: 2380 °C

Common temperature: 2280 °C

High temperature zone volume: 200-2000mm × 300-4000mm; or square

Heating method graphite tube squirrel cage structure

Temperature control accuracy: ±1 °C

Temperature control mode: WRe5/26 thermocouple (0-1700 °C) + US RATEK dual colorimetric infrared thermometer (1000-3200 °C)

Power adjustment mode thyristor phase shift adjustment

Cooling method

Cooling water temperature <35°C

High-precision thermocouple partition temperature measurement to ensure temperature measurement accuracy;

The digital display intelligent temperature control system is used to complete the temperature measurement and temperature control process with full automatic high precision. The system can heat up according to the given heating curve and can store four different heating curves for 40 sections.

The device has a measurement record function, which can record 10,000 times of data, and the data can be queried through the historical curve; Adopting Taiwan imported power regulator, very complete thyristor overload, short circuit and overvoltage protection;

Multi-channel data acquisition of the whole machine, and display and operation on the man-machine interface, the operating parameters of the whole machine are clear at a glance and easy to operate;

Furnace body: double-layer water-cooled structure, can pump vacuum under vacuum; has vacuum pipe interface, increase vacuum failure valve, inflating hole;

Uniform temperature: graphite rod combined heating method, good temperature uniformity;

Convenient operation: the furnace body is horizontal, front and rear double doors, convenient for loading and unloading, and easy to operate.

Volume (L)	150	274	452	769
Rated Temperature (°C)	2280	2280	2280	2280
Limit Temperature (°C)	2380	2380	2380	2380
Effective Heating Zone (Mm)	Φ400X1200	Φ500X1400	Φ550X1600	Φ700X2000
Power (KW)	180	250	300	500
Temperature Control Method	Japanese island electric thermostat	Japanese island electric thermostat	Japanese island electric thermostat	Japanese island electric thermostat
Heating Method	Resistance heating	Resistance heating	Resistance heating	Resistance heating
Vacuum System	Spool valve vacuum pump + Roots vacuum pump (vacuum degree requirements high with oil diffusion pump)			
Sintering Atmosphere	N2, Ar2 and other gases			
Rated Power Supply Voltage (V)	380			
Rated Heating Voltage (V)	According to the design, the pre-furnace transformer is configured.			
Vacuum Limit (Pa)	40 (vacuum cold state)			

