

## **Laboratory Vacuum Tilt Rotary Tube Furnace**

**Item Number: KT-RTF** 

Precautions for equipment use



## Introduction

Discover the versatility of Laboratory Rotary Furnace: Ideal for calcination, drying, sintering, and high-temperature reactions. Adjustable rotating and tilting functions for optimal heating. Suitable for vacuum and controlled atmosphere environments. Learn more now!

Learn More

• The furnace tube is made of 310S heat-resistant stainless steel. • PLC centralized control is adopted to simplify operation, and it is equipped with a 7-inch touch screen for real-time display of various data, which is intuitive and clear; • Equipped with an alarm function, which can realize unattended sintering; • It is equipped with a material level monitor to monitor the material condition, and is equipped with a vibrator to facilitate better introduction of materials. 1650\*760\*1720mm / • High-purity Al2O3 fiber refractory insulation material has excellent insulation effect and Weight 300KG effectively reduces the power consumption of equipment; • Adopt advanced and stable dynamic sealing system to ensure that the equipment can be used in vacuum and atmosphere;  $\bullet$  The furnace body can be tilted from -14° (discharging) to 2° (feeding), which is convenient for loading and unloading operations; Stainless steel auger • Sintering process curve setting: dynamic display of setting curves, multiple process curves can be pre-stored for equipment sintering, and each process curve can be set • Sintering can be scheduled to realize unattended sintering process curve sintering; • Display information such as sintering power and voltage in real time and record Control System sintering data, and can be exported to realize paperless recording; • It can realize remote control and observe equipment status in real time; • Temperature correction: the difference between the main control temperature and the sample temperature, and the nonlinear correction is carried out throughout the sintering process. Heating element Mo doped Fe-Cr-Al alloy gasification outlet Air outlet flaring design to avoid blockage • When the furnace temperature of the equipment is ≥300°C, it is forbidden to open the furnace to avoid injury; • When the equipment is in use, the reading of the absolute pressure gauge should not

- exceed 0.15MPa to prevent equipment damage caused by excessive pressure;
- $\bullet$  When used under vacuum, the operating temperature of the equipment shall not exceed 600°C.

Furnace model	KT-RTF12	KT-RTF14	KT- RTF16
Max. temperature	1200°C	1400°C	1600℃
Constant work temperature	1100℃	1300°C	1500℃



Heating rate	0-20°C/min	0-10°C/min			
Furnace tube material	High purity quartz	Al2O3/Si3N4			
Rotary speed	0-20rpm				
Tilting angle	-5-30 degree				
Furnace tube diameter	30 / 40 / 60 / 80 / 100 / 120 / 150 / 230 / 280 mm				
Single heating zone length	300 / 450 / 600 / 800 mm				
Vacuum sealing solution	SS 304 flange with O ring				
Chamber material	Japan alumina fiber				
Heating element	Cr2Al2Mo2 wire coil	SiC	MoSi2		
Temperature sensor	K type	S type	B type		
Temperature controller	Digital PID controller/Touch screen PID controller				
Temperature control accuracy	±1°C				
Electric power supply	AC110-220V,50/60HZ				
Different tube material and size and heating zone length can be customized					