

1700°C STD series Industrial Box Furnace

1700°C industrial furnace (box type resistance furnace) mainly provides high temperature heat treatment environment for industrial, research institutes, factories and other industrial laboratories, and is applied to new materials such as metal materials, ceramic materials, nano materials, and semiconductor materials.



Features

Furnace shell

1. High quality cold-rolled steel sheets CNC processing.
2. Energy efficient insulation keeps exterior safe to touch.
3. Side-opening door structure, the door opens to the right, easy to operate.

Chamber material

1. Furnace material is 1400°C high-purity Light Mullite bricks.
2. Adopt high quality alumina polycrystalline fiber with good insulation and durability properties.
3. High quality 1800 degree fiber alumina as refractory lining.
4. Ceramic fiber insulation for fast heat-up and reduced energy consumption—rise time to 1100°C takes only 50 minutes.
5. Vertical heating elements evenly distributes on two sides of the chamber which give an ideal temperature uniformity.

Heating System

1. High quality MoSi₂ heating body, safely and firmly installed on both sides of the furnace chamber, free thermal radiation heating in the furnace cavity, energy saving and efficient.
2. Two-side heating (left and right sides), so as to realize good uniformity in the furnace.
3. Can be customized for the highest temperature of 1750 °C and 1800 °C high-temperature furnace, applied to ceramic materials sintering.

Temperature controller

1. High quality HRE alloy resistance wire, Excellent temperature uniformity.
2. Control system integrated in the furnace base, Defined application within the constraints of the operating instructions.
3. Feature single setpoint digital control, LED display of actual temperature v.a set point.
4. Intelligent microcomputer PID controller can program 30 segments.

Safety precautions

1. Overheating & Broken thermocouple protection.
2. Leakage circuit breaker.
3. Automatic power off when furnace door opens (optional function).
4. Over-temperature protection and alarm allow for operation without attendant(s).
5. Microprocessor-based PID control with self-tuning capability to prevent overshooting of set temperature.

Parameters

Model	STD-64-17	STD-96-17	STD-150-17	STD-200-17	STD-288-17	STD-640-17	STD-1200-17
Chamber size(WxLxH)mm	400×400×400	400×600×400	450×530×590	500×530×720	600×800×600	800×1000×800	1000×1200×1000
Chamber volume	64L	96L	150L	200L	288L	640L	1200L
Power supply	380V/18KW	380V/25KW	380V/30KW	380V/40KW	380V/50KW	380V/80KW	380V/150KW
Max temperature	1700°C						
Working temperature	1600°C						
Temperature precision	±1°C						
Thermocouple	B type (Temperature measurement range : 50-1800°C)						
Heating rate	≤15°C/min (suggest 10°C/min for longer life using of furnace)						
Configuration	<ol style="list-style-type: none"> 1. One furnace body 2. One set of temperature controller system 3. Three-meter power line 4. One thermocouple 5. One pair of crucible stongs 6. One pair of high temperature furnace gloves 7. An instruction book 						
Optional Accessory	<ol style="list-style-type: none"> 1. Alumina crucibles 2. Paperless recorder 3. Exhaust chimney 						