

### Technical Specification

(Demander) For the development of production needs, we need to order one transformer solidification furnace.  
 Provide a set of technical solutions and quotations for the selection of suppliers and demanders.

#### 一)、 Technical

<b>Transformer, bushing curing furnace</b>	
QTY	1pcs
Power	Three-phase four-wire system (or three-phase five-wire system) 380V 50hz
Rails	The height of trolley from ground to rail surface is 380 mm, and the height of trolley is 125 mm. The guide rail in the furnace does not need to expose movable docking between the trolley and the guide rail in the furnace.
Temperature range	Ambient temperature—200℃
Indoor compartment	Superstructure height 600 mm depth 1000mm bilateral bracket of both side load 200 kg
surface temperature	≤Ambient temperature+20℃
Temperature fluctuation	≤±1℃
Temperature uniformity	≤±2.5%
temperature stability	≤2℃
Heating Power	18KW
Blast power	0.75kw×2 pcs
Exhaust mode	Manual exhaust and exhaust handle is set on top side of furnace.
Inner chamber size	1500*1500*1500mm[W×D×H][Height refers to the height above the trolley]
Furance size	2020*1700*2205mm {W*D*H}
<b>Furnace body structure</b>	
Shipping	Shipping the whole furance with frame
Furance colour	Conventional color, that is, the door is orange, the furnace body is grey.
Paint treatment:	spraying amino self-drying paint on the surface of external gallboard. The paint is made of domestic brands. W61 series silicone heat-resistant paint (320 C) is sprayed on the inner gallbladder/inner gallbladder skeleton/air duct plate/trolley panel/trolley skeleton surface. Chassis Surface Sprayed with Black 851 Moistureproof Coating

Gate structure	<p>Opening mode: Manual opposite door is used on the front, and the door is composed of left and right doors.</p> <p>The door lock adopts adjustable lock structure with lamb horn handle, and the surface is chrome plated.</p> <p>Two sets of upper and lower door hinges, a total of 4 sets, surface chrome plating treatment</p> <p>Protective cushion with 1 nylon protective cushion on top and bottom of each door to prevent excessive impact of the door</p> <p>Door panel and door frame: Q235 cold rolled steel plate is joined together after rust removal and rust prevention treatment.</p> <p>Door bottom plate: Q235 cold-rolled steel plate spliced after rust-removing and rust-proof treatment</p> <p>Inside the door skeleton: Q235 channel steel, angle steel, square pipe, etc. are welded after rust removal and rust prevention treatment.</p> <p>Heat preservation material: high density and high quality aluminium silicate cotton filled with heat preservation</p> <p>Door seal: asbestos rope</p>
External biliary plate	Cold-rolled steel sheet made of delta 1.5 Q235 is welded/riveted after rust-removing and rust-proof treatment.
Inner plate	Welding/Riveting/Thread Connection of Cold Rolled Steel Plate with Material of Delta 1.2 Q235 after Rust Removal and Antirust Treatment
Air duct plate	The material of the cold rolled steel sheet is delta 1.2 Q235. After rust removal and rust prevention treatment, the air flow regulating plate is double louvers, which is used to adjust the air flow and is beneficial to uniform temperature.
External biliary framework	Q235 channel steel, angle steel and other sections are welded after rust removal and rust prevention treatment.
Inner tank frame	Q235 channel steel, angle steel and other sections are welded after rust removal and rust prevention treatment.
chassis	235 channel steel, angle steel and other sections are welded after rust removal and rust prevention. Four movable climbers are installed on both sides of the chassis for the handling, installation and positioning of the furnace body.
Thermal insulation material	High density and high quality aluminium silicate cotton insulation, high temperature resistance 600°C , The coefficient of thermal conductivity is 0.0048 $\lambda$ m/°C。
sealing material	石棉绳及硅酸铝棉毡 Asbestos rope and Aluminum silicate cotton felt
<b>Exhaust system</b>	
System subject	The material is Q235 cold rolled steel plate, which is welded/riveted after rust removal and rust prevention.
Exhaust Tpye	It can be divided into manual/automatic control mode. The automatic control mode can set the exhaust interval time by itself.

Other instructions	The size of flange interface of exhaust valve is provided, and the external air duct is solved by the buyer according to the actual situation of workshop.
<b>Hot air circulation system</b>	
Thickness of Insulation Layer	Considering the temperature outside the furnace and energy saving, the insulation layer thickness of the furnace body is 100 mm and the insulation layer thickness of the gate is 132 mm.
Insulation Material Layout	The position of the heater is insulated by aluminium silicate cotton felt and the rest is insulated by aluminium silicate cotton felt.
Volute of wind turbine	Wind wheel volute and air duct nozzle are made of Q235 cold-rolled steel plate. They are all treated by rust removal and rust prevention and welded.
Heater	Star connection 220V 50Hz U-shaped Safe Low Load Electric Heat Pipe , Material is stainless steel
Heater Position	Installed in the air ducts on both sides of the furnace body
<b>Trolley System</b>	
Trolley system	1400*1300 【W*D】
Load capacity	3T
Traction mode	Manual traction
Trolley panel	Q235 3mm thick cold-rolled steel plate, 40 mm around the edge spraying high temperature silver powder paint
Trolley frame	Section steel, such as channel steel, is welded after rust removal and rust prevention (install 10 mm steel plate on the back of trolley)
Wheel assembly	Four sets of heat-resistant wheels, made of cast steel
<b>Electronic Control System</b>	
Control Cabinet	Wall-mounted control box, the panel of electronic control cabinet is composed of main control instrument, over-temperature alarm instrument, current voltmeter and button switch. The surface of the control cabinet is powder coating spray treatment Beautiful, generous, can be used in high temperature and humidity environment;
Electrical components	They all adopt famous brand products such as Schneider, Omron, Shanghai People, etc.
Master control table	The intelligent program instrument of Xiamen Yudian AI518P can compile 30 sections of program with self-tuning function of PID and RS485 computer communication interface. , More than one heating curve can be set. The measurement accuracy is 0.2, and the temperature curve is controlled. With PT100 temperature sensor, the instrument has passed the appraisal of the metrology department.
Alarm table	The alarm meter adopts Xiamen Yudian AI508 intelligent digital display instrument with PT100 temperature sensor. When the temperature exceeds a certain set temperature, sound and light alarms will be issued, and the heating power supply will be automatically cut off to effectively protect the safety of equipment and products.

Heating control	Beijing Ximaden SSR solid state relay contactless regulation + Beijing Ximaden ZA-P three-phase cycle wave controller, using photoelectric isolated input stage, TTL level compatible input, automatic power regulation, zero-crossing trigger mode, has no contact, no mechanical moving parts, no spark, no action noise, vibration resistance, long life characteristics.
Safety control and protection	<p>Electric motor and heating interlocking device, that is, blast before heating, to prevent the heater from burning out</p> <p>There are two independent over-temperature alarm systems. When the temperature in the furnace is abnormal, the sound and light alarm will be issued, and the heating power supply will be cut off automatically.</p> <p>Short-circuit protection and over-current protection to prevent motor from burning and jumping</p> <p>Short-circuit protection of electric heater to prevent short-circuit of electric heater</p> <p>Controlling line protection to prevent short circuit and accidents</p> <p>Air switch to prevent short circuit caused by overload of main circuit</p> <p>Follow-up power failure prevention to prevent damage to baking products caused by increased baking time after power failure</p>

#### Configuration List of Major Electrical Components

Serial number	name	Specifications	Manufacturer
1	Intelligent Temperature Controller	AI518P	Xiamen Yudian
2	Alarm table	XMTA	Yuyao Instrument Factory
4	AC contactor	LC1-D	Schneider
5	Air switch	DZ 系列	Zhejiang JiaKong Technology Co. Ltd.
6	Temperature sensor	PT100	Yuyao Temperature Instrument Factory
7	Intermediate relay	RXL	OMRON
8	Thermal relay	T16	ShangHai Renmin Electrical Apparatus
9	Buttons, Knobs	LA series	Schneider
10	Fuse	NGT	Delixi
11	Solid state relay	H3120	Beijing Ximaden
12	radiator	B140s	Beijing Ximaden

#### Accessory

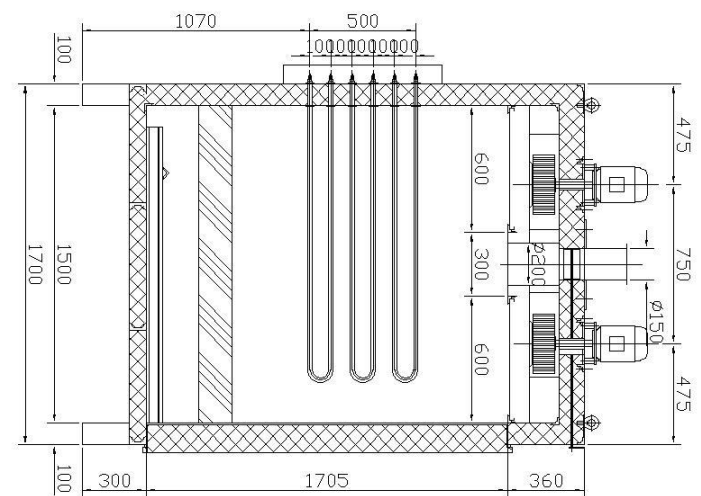
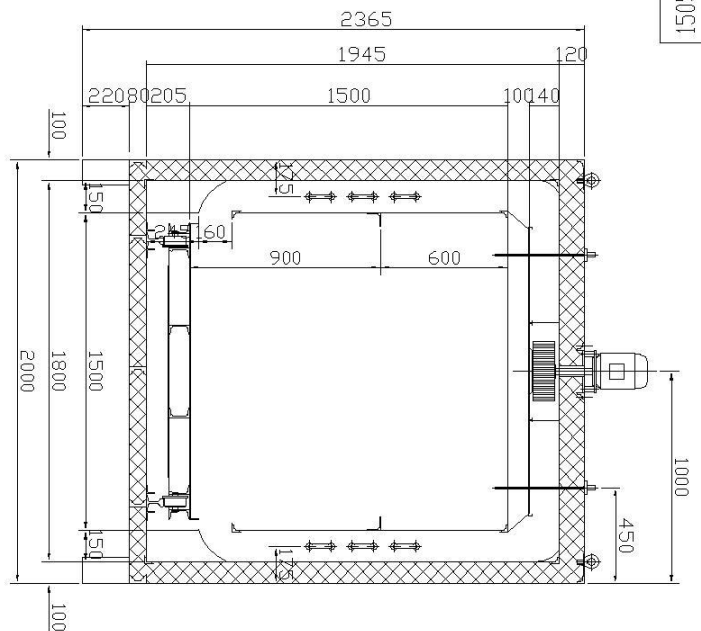
Intake valve	There are many intake valves at the top, which can adjust the intake manually according to the amount of baked goods.
Exhaust valve	According to the amount of volatile matter in furance, the supplier will leave flange interface, and the external exhaust pipe will be made by the supplier.
files	<p>Instructions for the Use of Curing Furnace 1/1</p> <p>Electrical schematic diagram and list of electrical appliances 1</p>

	copy/table Instrument Instructions 1 Set/Table
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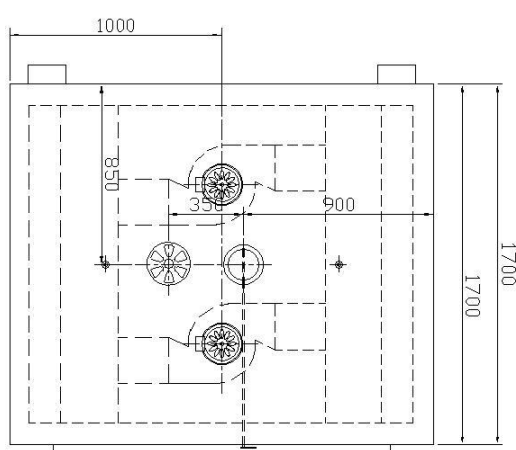
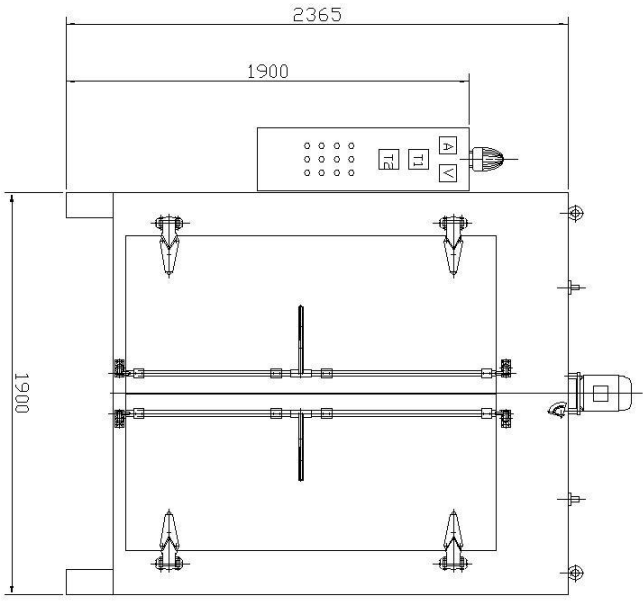
**Remarks:** Unmentioned implementation is in accordance with GB5170-85 and JB/T5520-91 standards.

二)、 Price and delivery date

Price and delivery date	
Price	Thirty-three thousand RMB (including tax)
Price	¥32000.00/set
Delivery date	Delivery conditions 30 days after the entry into force of the contract



- 技术参数
- 1、内室尺寸1500\*1500\*1500(宽\*深\*高)  
商指台车面以上尺寸
  - 2、使用温度范围 室温~200℃(任意可调);
  - 3、温度均匀度 $\leq\pm 2.5\%$ (指最高使用温度,空炉测试);
  - 4、温度波动度 $\leq\pm 1\%$ ;
  - 5、温度误差 $\leq\pm 1\%$ ;
  - 6、加热功率3Kw\*6根=18Kw(两侧加热);
  - 7、表面温升 $\leq$ 室温+25℃(大门及进气部分向外100mm测试)
  - 8、升温时间 $\leq 90\text{min}$
  - 9、鼓风功率0.75Kw\*2台;
  - 10、手动排气
  - 11、电器控制:壁挂式控制柜
  - 12、设备颜色:常规颜色
  - 13、电气配置:详见技术协议



专用服务号

请 图

查 表

印 照 图 号

床 图 号

委 字

日 期

制 图	设 计	审 核	工 艺	制 造	安 装	维 护	备 用
						比例	1:1.7
						井 盖 第 张	
						互感器专用固化炉	

