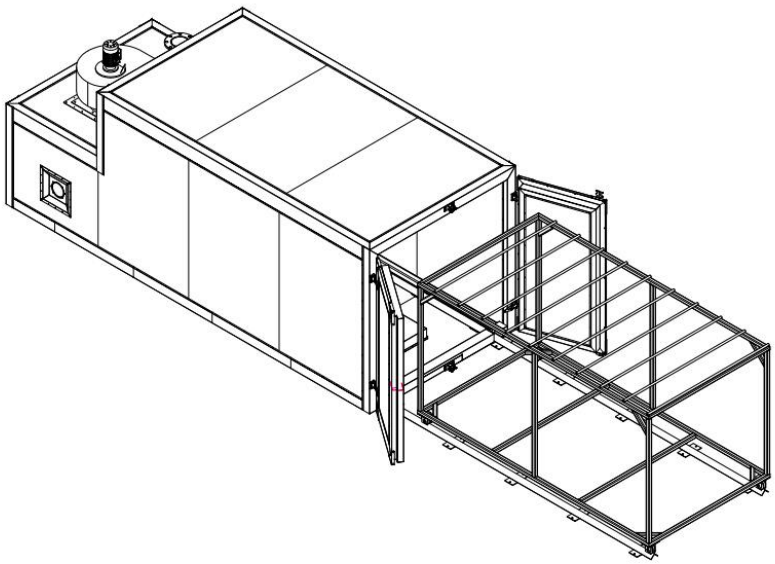
GAS OVEN
OPERATION MANUAL



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Recommendation:This operating manual includes the use of this equipment,repairs and maintenace of a detailed description.To ensure your personal and property safyty,installation and before the initial start,please read the entire contents of this operating manual !

1. PRODUCT DESCRIPTION

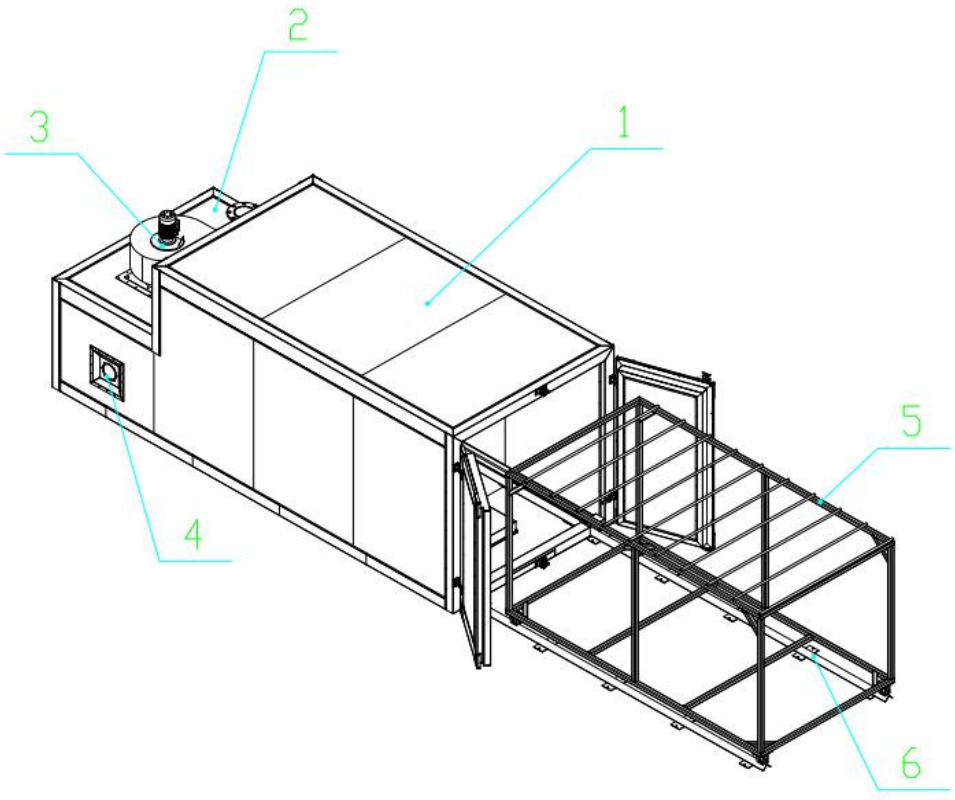
1.1 APPLICATION

Oven is mainly used in the production process of the powder curing process .the completed powder coating work-pieces placed inside the oven ,the powder coating under curing temperature conditions,chemical reactions,and cross-linked cured film,become a certain physical and mechanical properties,chemical resistance is also very good polymer compound coating.

1.2 Composition and Schematic

Gas oven components：

Gas oven consists of a drying chamber (rock wool board insulation material, metal outer edge, built-in air duct),
Heating chamber (burner, heat exchanger),
Insulation circulating fan, trolley and other components.



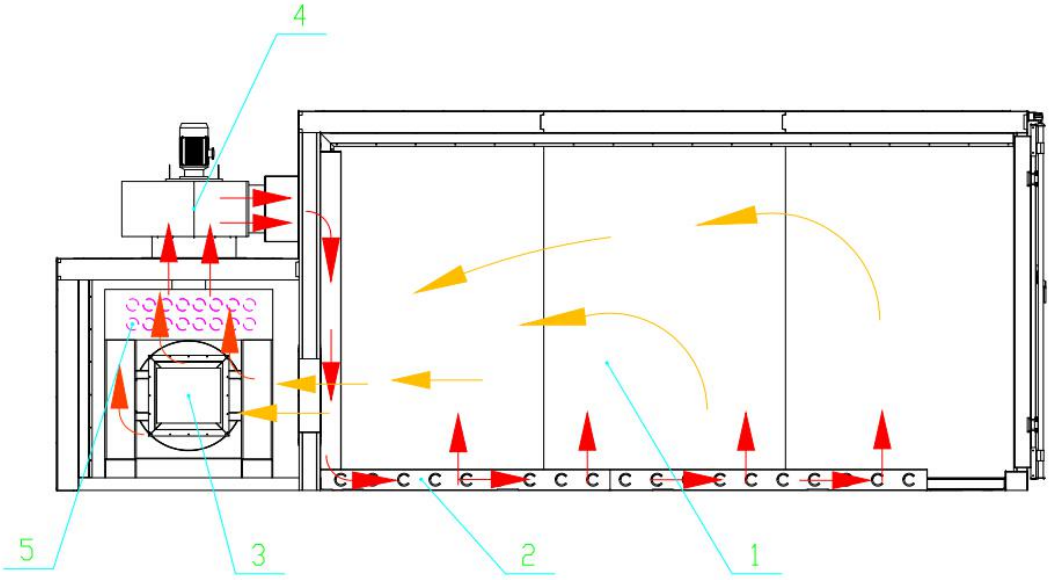
Item	Components	Quantity
1	oven body	1
2	consumption room (inside heating exhcanger)	1
3	Fan motor	1
4	burner installation position	1
5	Inside trolley	1
6	outside trolley track	2

1.3Technical Parameters

a) Interior dimensions：3200×1650×1700mm（L×W×H）
b) Operating temperature：180~220℃
c) Temperature uniformity: ± 7 °C
d) Temperature control accuracy: ±3°C
e) Total power: 2.5Kw; input voltage: 415V, 50Hz

1.4Working principle and diagram

When oven is started work, the circulation fan starts (4) to drive air cycle in the oven as shown by the arrows. The heat generated by burner (3) is transferred to the circulating air (heat transfer medium) through the wall of the heat exchanger (5) to heat up the circulating air, and the circulating air passes through the built-in air duct (2) to transfer the uniform heat to the object to be heated in the oven (1).The entire process is controlled by the electrical to achieve constant temperature heating and regular production.



No	Component	Function
1	Oven Chamber	Place heating objects or drying objects inside, keep warm
2	Air duct	Guide the hot air to flow evenly in the oven
3	burner	Generate heat through flame
4	Fan motor	to circulate the air and generate the circulating wind in oven
5	heating extranger	Transfer heat to circulating wind

2. Installation and precautions

Before installation and initial start-up, please familiar with the corresponding contents of the operation manual.

2.1 Installation site requirements

a) The ground must be smooth。

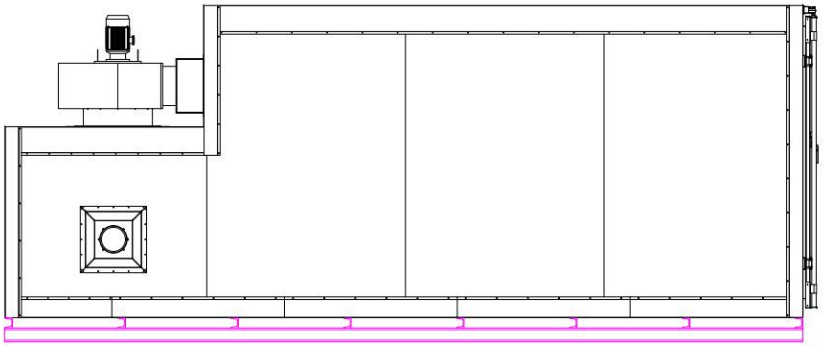
b) good Ventilated， less dust place。

c) Do not install in wet areas。

d) Do not install under flammable or corrosive gas.

e) Before installation,Be sure to remove the fixing bracket on the bottom of the oven which installed for transportation

Note: pay attention to the direction when using a forklift,the heavy side is the combustion chamber.



f) Connect the burner with main body in correct way as indicated in the burner using instructions.And connect the corresponding gas pipeline and power line **Note: Before installing and using the burner,must be ready and familiar with the corresponding using manual instructions.**

g) Install smoke jets to prevent exhaust gases from contaminating the indoor air during combustion.

h) Install outside trolly rail well to match oven insie rail,in order to make inside trolley moved more smoothly.

i) The ambient temperature can't be too high, preferably between 0--40°C

j)

Check inside air duct if it's smooth,with or without clogging,Meanwhile, open the air outlet (shown below) installed on the air duct at the bottom of the oven to ensure each outlet has enough and same air output.

2.2Installation interval requirements

a) The oven front and back should be about 1meter away from the wall in order to normal operation and post-maintenance.

b) Between the machines should be separated away 1

c) meter in order to facilitate air circulation and personnel maintenance.

d) External dimensions of the oven: 4619×1856×1803mm（L×W×H）

2.3 Installation and commissioning

a) Install and fix the oven according to the requirements of 2.1 and 2.2

b) Please connect the power, zero line,earth line into the controller cabinet in correct way.

c) Turn on the power switch, the power switch light is on

d) Turn on the wind switch, then the heat preservation circulating fan starts to run, and the oven liner has strong wind blowing out (Please pay attention to the running direction of the heat preservation fan, and the bottom air duct blows out the strong wind, which is normal)

e) Turn on the heating switch and check if the burner is properly ignited

2.4 Installation and Precautions

a) Please supply the power according to the specifications of the appliance.

b) The voltage variation rate must be controlled at the rated value ±10V.

c) Detecting whether the 3phase power is shortage, the device can not be broken phase operation.

d) Pay attention to the direction of operation of the fan. The bottom

side of the duct is a strong wind, which is normal.

e) Do not connect ground wires to gas or water pipes.

f) The burner shall be installed correctly according to the instructions. The gas source and pressure shall meet the conditions.

WARNING: The user must maintain proper grounding of all system components

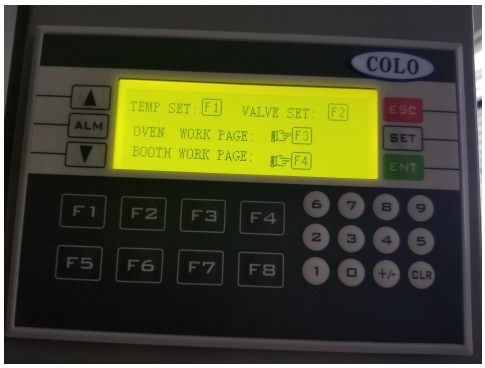
3. Operation and precautions

3.1 Operation process

Please follow "2. Installation and precautions" in the instruction manual to connect the power phase number and phase supply , and install the power. After confirming the power supply is installed correctly, oven can be turned on in the following way:

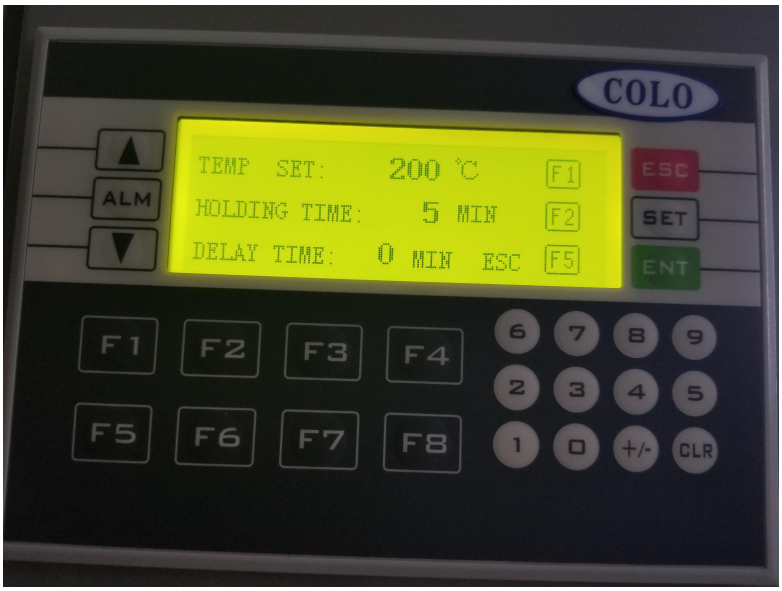
1) Open the oven door,push the inside trolley with parts to be cured into the oven,then close the door,be carefull not to hit the thermal couple which is mounted on the left side wall. (Temperature sensor).

2) Press the start switch and the power light will turn on. The display will show a welcome message (as shown above).



3) Press ▼ button in the upper left corner to enter the function menu (shown above)

Function menu explanation:

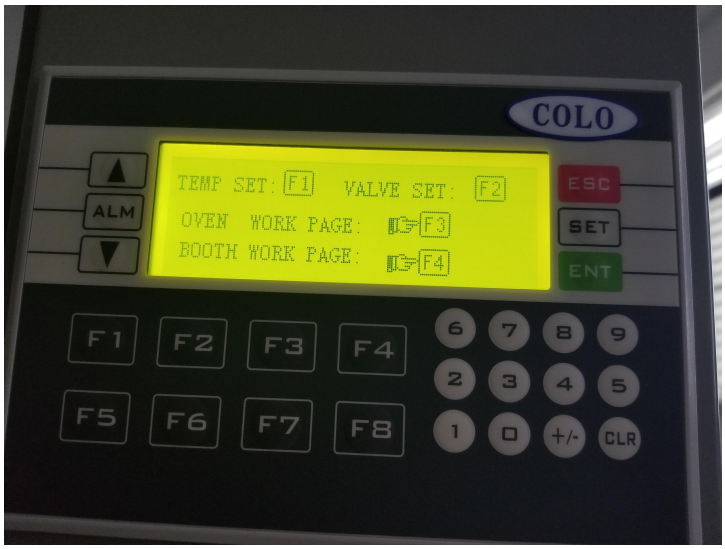


Press F1 enteroven temp set page.

Press F3 enter oven work page

4) Oven temperature setting (no need to set the next time after setting is complete). Click F1 enter the (shown above) interface

After the above interface appears, click the SET button in the upper right corner to select the temperature or holding time to be modified. After setting, click ENT to save.,click ESC to return to the function menu (as shown below).

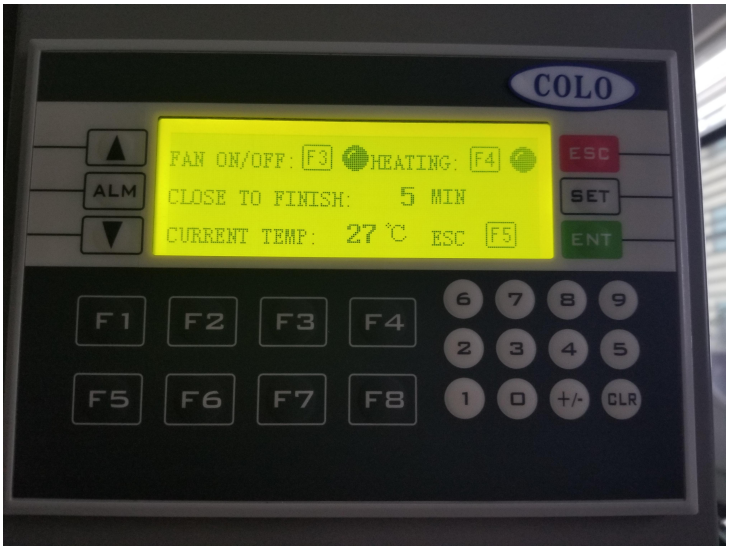


5) Start on the oven. Click the button F3 to enter the oven operation interface (as shown below)

6) You must first press the F3 button to start the thermal cycling fan. After the fan starts, press button F4. The burner automatically starts the ignition. After ignition, the burner automatically enters the following process:

During burner working,the oven warms up,when temperature reaches to your setted temperature,the burner is turn off,timing begins.In the timing process, the computer automatically controls the temperature, when the temperature is lower than the set temperature, the combustion engine automatically ignites and warms up again, when the temperature reaches,the burner is automatically turned off,which is to Keep the oven temperature constant at the set temperature. When the timer expires, the burner shuts off automatically.

After completion, wait until the oven's internal temperature drops slightly and then open and remove the cart (carefully burned).



3.2 Operation Attentions

1) When first time use the oven, it may have a little odor or white smoke, because it's new product. After baking for a period of time, it will automatically disappear without affecting the performance of the machine.
2) Do not place explosives, pressurized containers or flammable substances in the oven. Combustible materials include: flammable materials, oxides, pyrophoric materials, and flammable gases. Failure to do so may result in explosion and serious industrial disasters.
3) The maximum operating temperature of this oven is 300°C, over-temperature use is strictly prohibited.
4) When the oven is operating at high temperature,carefully to check whether the door is closed to prevent the hot air from blowing the operator.
5) The equipment must be properly grounded.
6) Do not operation with power during maintenance, it must cut off the power supply before maintenance.
7) The oven should be used in a personal care, attention should be paid to the fire source and flammable and explosive materials

which is near the oven.

8) Oven burner must first turn on circulation fan when ignition.

4.Daily Maintenance

 **Warning: It is forbidden to carry out electrified operation during maintenance. The total power supply must be cut off for maintenance.**

4.1 Precautions

1. **Explosive flammables are not allowed in the oven.**
2. **The air inlet and outlet in the oven must not be blocked to ensure the normal operation of the fan.**
3. **A small amount of air leakage in the oven is a normal phenomenon, avoid explosion in the oven due to excessive pressure.**
4. **The baking temperature must not exceed the specified temperature of the machine.**
5. **Do not block the air duct and air vents to ensure normal air supply ducts.**
6. **If abnormal sound is heard during the baking process, the work should be stopped immediately. Check the motor and air impeller to avoid burning the motor.**
7. **The electrical control box should be overhauled regularly.**

Because the contactor is frequently switched on and off, so it should be replaced regularly to prevent the contacts from being burned and killed.

4.2 Troubleshooting

1.no wind or small wind

1） Check if the wind impeller is reversed. If it is reversed, change over any two power line.

2） Check if the fan relay is working. If damaged, replace it in time.

3）Check if the air duct is blocked.

4）Check if the fan motor burns out. If damaged, replace the new motor.

5）Check if the power supply is phase shortage

2. Temperature can not raised

1）Check if the burner is working normal

2）Check the gas source

3） Check whether the thermocouple sensor temperature display is normal,replace it if it is damaged.