

# **USER** MANUAL

Gas Deck Oven: GDO-1D-2T, GDO-1D-3T, GDO-2D-4T, GDO-2D-6T, GDO-3D-6T, GDO-3D-9T



These products are a new generation gas baking ovens improved and developed by our company basing on its elaborate design integrated with extensive experiences in many years of baking oven manufacturing. The products have a novel style and practical structure together with the features of energy saving. high efficiency, security and reliability, and also are known as the optimal devices for baking food such as bread, cake & cookies, and Chinese style moon cake.

#### I. Performances and Features

- 1. This baking oven can be controlled and operated independently. The temperature inside the oven is adjustable within the range of 20~400°C. The adjustment of temperature consists of upper flame adjustment and bottom flame adjustment. Two operation modes, namely Timing Mode and Automation Mode are foreseen for the discretional choice of customers.
- 2. One independent nozzle is equipped on the upper part and the lower part of the oven respectively. The mixture, after having been mixed sufficiently in an appropriate proportion of air to gas, will be forced into the nozzles. The mixed gas will then completely burst into blue naked flame and the oven will be heated up. Thanks to the completely burning of the mixture and the semi-vapor thermal convection, no food pollution occurs and the quality of baking food will be assured.
- 3. This baking oven has been equipped with advanced electronic ignition units and electronic flame-monitoring devices, therefore, in case of situations such as failing to ignite, flame accidentally gonging out, gas having been used up, etc., the valve of gas can be automatically closed within 0.5 seconds, meanwhile, the relevant audio and video alarm will be sent out, these functions are very secure and super reliable.
- 4. Thanks to the view port on the door and lighting lamps inside the oven hearth, the customers will be very clear at a glance about the entire process and progress of the baking.
- 5. The thermal efficiency of the oven is very high. Compared with an electric baking oven with the same power, not only the expenses needed for expansion of electric power capacity and installation of distribution cables and wires, will be eliminated, but also less gas will be consumed, hence, a perfect cost-efficient result could be achieved.



### II. Basic Technical Parameters

Туре	Gas	Gas	Heat	Electricals	Electric	Temperature	Overall	Production	Weight
		Pressure	Load		Input Power	Range	Dimension	Capacity	(kg)
		(Kpa)	(MJ/h)		(W)	(°C)	L×W×H (mm)	(kg/h)	
GDO-1D-2T	LPG	2.8	8.3	220V/50Hz	60	20~400	1340x900x660	20	128
GDO-1D-3T	LPG	2.8	12.5	220V/50Hz	60	20~400	1760x900x660	30	150
GDO-2D-4T	LPG	2.8	16.6	220V/50Hz	120	20~400	1340x900x1380	40	250
GDO-2D-6T	LPG	2.8	25	220V/50Hz	120	20~400	1760x900x1370	60	290
GDO-3D-6T	LPG	2.8	25	220V/50Hz	180	20~400	1340x900x1775	60	297
GDO-3D-9T	LPG	2.8	37.5	220V/50Hz	180	20~400	1760x900x1775	90	470

Notes: 1. The capacity is expressed in bread;

2. The parameters are subject to change without additional notice.

## **III.** Transportation and storage

Handle with care during transportation, loading or unloading of the baking ovens which should be protected from strong vibration. In general, the baking ovens with packaging should not be stored at the open air place for a long-term period, but should be stored in a drafty warehouse where the relative humidity is no more than 85% and where there is no corrosive gas. The oven should not be upended, and necessary rainproof measure should be foreseen and taken when it has to be temporarily stored in the open air.

## IV. Environment of installation and operation

- 1. The baking ovens should be mount firmly. Customers should purchase flexible metal conduit at their own expenses and connect it to the smoke exhaust vent on the top-rear side of the oven. The other end of the flexible metal conduit should protrude 30 cm out of the wall with the exit of the conduit facing downwards so as to prevent rain and objects from enter into it and the smoke occurs during the baking can vent out of the room.
- 2. The spacing between ventilation grid on the right side (the side with a electric control panel) or the top side or the rear side of the baking oven and the other objects should not be less than 10cm.

Fresh air will be consumed during operation of the ovens, in consideration of this reason, ventilation fans should be installed at a proper place of the workshop in order to insure the indoor ventilation and fresh air, and prevent the carbon monoxide (CO) from causing any hazard of toxic gases.

- 3. A grounding terminal is equipped on the rear side of the device, which should be reliably connected to an earth wire conforming to relevant regulations on security and safety via copper-core wire with section no less than 2.5 mm<sup>2</sup>.
- 4. Make use of the accessory gas pressure governor valve, or else, the baking oven will not be in proper operation. Connect the gas pipe to the gas entrance on the right side of the oven in



the sequence: gas bottle-pressure reducing valve-gas pipe-baking oven, fix it with pipe retainers, and check for the leak tightness of each and every connectors.

5.Flammable matter or explosive chemicals should not be placed at locations near the baking oven, the interval between the gas bottle and the baking oven should not less than 3m, it will be better if the length of flexible pipe is shorter than 1m, and check carefully for gas leakage of each pipe connectors and any damage or displacement of the components during transportation.

6. The electric voltage for the control system and lighting of this baking oven is 220V AC. Voltage regulators should be foreseen in case that the local voltage is not stable.

7. The electrical connection should be switched off when cleaning the baking oven. Washing the baking oven with water-jetting pipe is strictly prohibited.

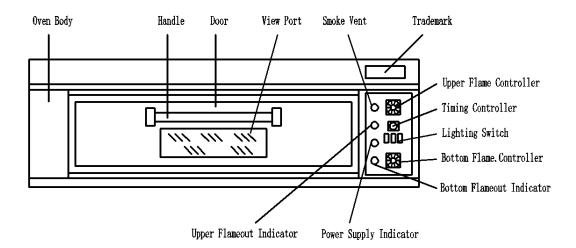
## V. Operation Methods and Important Notices

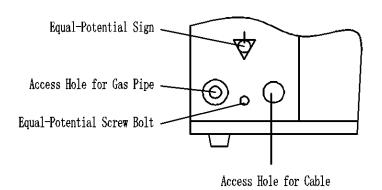
- 1. Switch on the power supply after the above mentioned checks have been performed, open the valve on the gas bottle, turn the knobs of temperature controllers for upper temperature bottle temperature to the desired values respectively, then press the "Automation" button, (in case that the oven is put into operation for the first time, the gas supply could be temporarily stopped, make an observation of the electric components and the pulse ignition to see if they are in order), then initiate the fan, a little later after the pulse ignition beside the nozzle inside the oven hearth ignite, open the gas valve, the nozzle is ignited. The burning, ignition and flameout are controlled by the temperature controllers according to the set temperature values, and the constant temperature is achieved automatically; press the "timing" button, set the necessary time duration for the timer, the baking oven will be in automatic operation with the temperature being constant and the time duration conforming to the set value; when the "stop" button is pressed, the relevant layer will be out of operation; when the "lighting" switch is turned on, the lamp inside the oven hearth will light, and the situation inside the baking oven can be observed via the view port.
- 2. In case the baking oven finish its operation under the timing mode, the button "automation-timing" needs to be pressed once again if it is needed to be put into another operation under timing mode, or else, the oven will not successfully get into timing operation mode.
- 3. The baking oven has been checked and inspected in accordance with the adopted standards, it is not necessary to readjust it once again. When it is initiated for the first time, the door of the oven needs to be opened and the nozzle may probably not be ignited until you repeat the ignition for several times. Observe the flame carefully when burning, flame with light blue color will be the best, otherwise the vent (inside the control panel) of the fan should be adjusted. The occurrence of purple flame together with the phenomenon so called "spot-flame" deviation indicates that the amount of air is too large, so the vent should be reduced; The occurrence of green flame or not all the nozzles being ignited indicates that the amount of wind is not enough, so the vent should be enlarged.



4. The flame monitoring system of the baking oven will give off a "toot" alarm in case of gas shortage or ignition failure, meanwhile, the indicator lamp on left side of the temperature controller will light, the gas valve will be closed immediately, in that case, turn the knob of the temperature controller to "0" position first, then turn it once again to the set temperature, and re-ignite the oven. If the ignition fails for 3 sequential times, open the door and re-ignite the oven after 30 seconds. If the ignition is not successful, please refer to the Faults and Troubleshooting, and re-ignite the oven after the fault has been removed.

5. In order to insure that the food is heated equably, a flame-regulating plate is equipped on the upper part of the oven hearth. If the color of flame is not uniform during baking and it has been found out that this is not due to the reason of baking plate or places of food, move forwards or backwards the flame-regulating plate to a proper position; if the color of flame near the door is darker, move the flame-regulating plate towards the inner side, otherwise, move the flame-regulating plate towards the outer side.

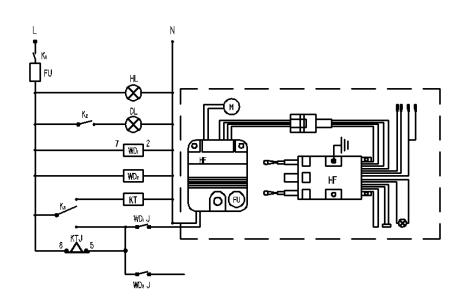






# **VI.** Electrical Principle Diagram

K1-Power Supply switch
K2-Lighting switch
K3-Operation Selection Switch
HL-Power Indicator
DL-Lighting Lamp
WD-Temperature Controller
KT-Timer
FU-Fuse, 2A
HF-High Voltage Controller
M-Fan



This drawing is for your reference only, and is subject to change without additional notice.



## **Ⅲ.** Breakdown and Remedy

BREAKDOWN	POSSIBLE CAUSE	REMEDY		
Failing to ignite, the ignition anode spark, with a smell of gas.	<ol> <li>The amount of air is too large (e.g., in a winter morning or when the gas bottle has just been replaced by a new one.</li> <li>Check the gas pressure.</li> <li>The ignition pin has been moved.</li> <li>The nozzles have jammed.</li> </ol>	<ol> <li>Press the air entrance in order to reduce the air entering into.</li> <li>Check and replace it.</li> <li>The pinpoint should be aimed at the ignition hole, and should be about 5 mm away from the hole.</li> <li>Disassemble the coppery gas nozzle and clean it.</li> </ol>		
Ignite successfully, but the flame is extinct soon and an alarm is given off.	<ol> <li>Flame-sensing pin has been moved or has been damaged.</li> <li>The electronic ignition controller is broken.</li> </ol>	<ol> <li>Adjust or replace the flame-sensing pin.</li> <li>Replace the electronic ignition controller.</li> </ol>		
Malfunction of temperature control. Jumpiness of flame and off flame.	<ul><li>Error of the temperature controller.</li><li>1) The air flow of the fan is not adjusted to a proper level.</li><li>2) Check the amount of gas to see if it is enough.</li></ul>	Replace the temperature controller.  1) Adjust the air flow of the fan.  2) Change the gas bottle.		
The color of flame is not uniform.	<ol> <li>Check for the tightness of the door.</li> <li>The flame-regulating plate on the upper part of the oven hearth is not in a proper position.</li> </ol>	<ol> <li>Close the door properly.</li> <li>Move the flame-regulating plate forwards or backwards according to the color of flame.</li> </ol>		

## **Ⅷ.** Routine Maintenance

- 1. When the operation is over, close the gas valve first, and then switch off the electric power supply.
- 2. Pay attention to the cleaning of the oven body, get rid of the waste inside the oven hearth and always keep it clean. Disconnect the electric power supply when cleaning the oven. Cleaning the oven with water jetting is strictly prohibited.
- 3. Frequently check the electric wire, gas pipe and connectors, replace the damaged parts or components in time.



## IX. Remarks

This product is a kind of gas-fired device suitable for baking food. Excellent performances of this device will be achieved under appropriate operation and maintenance. Please read this Operation Manual carefully before operation.

Marketed globally by:

## TRUFROST COOLING PRIVATE LIMITED

1215, 12th Floor, Tower B, Emaar Digital Greens, Golf Course Extn. Road,
Sector 61, Gurugram – 122102 (India)
T. +91-124- 4246560 info@trufrost.com

www.trufrost.com