



# Instruction manual

Model: BD-06WT/NT  
Name: 6KG Coffee Roaster



# Warranty Instruction

**Thank you for choosing Guangzhou Bide General Equipment Co., Ltd.!** and we thank you for the trust and openness that has shown us.

Before starting the machine, we recommend you read carefully the instruction that explain how the use, clean and maintain the machine. We remain at your disposal for any information.

**IMPORTANT :** The warranty is one year from the day you purchase the roster. During the warranty, if the roster breaks down during normal operation, our company will response for repairs of the roster for free.

Under the circumstances below, we don' t offer free repair during warranty.

- 1.The damage by fire, earthquake, flood, typhoon, lightning, other natural disasters, Abnormal voltage, pollution, and .chemical erosion.
- 2.The damage by using the roster under rugged environment ( Fumes, dust, moisture, outdoor, etc), or unfollowing the instruction.
- 3.The damage by improper installation of power and gas.
- 4.The damage by falling, transformation, collision, self dismantling repair, etc.
- 5.The damage by replacement of counterfeited parts and components, or cleaning machine in a wrong way.

Model NO.	BD-06WT/NT ( Gas )
Roasting Type	Semi-hot blast &Half Direct Fire
Heating Type	LPG or Natural Gas
Power	1600W
Roasting Time	10-15mins
Weight	615KG
Votage&Frequency	Single phase AC 220V 50-60Hz
Outside Dimension	2200*1300*2200mm
Roasting Capacity	3-6kg / Batch
Drum Rotation Speed	55-65 circles (61circles/min)-standard
Drum Power	0.37KW
Cooling Mix Rate	10.8 circles/min
Cooling Mix Power	0.12KW
Exhaust Motor Power	0.55KW
Exhaust Pipe Diameter	Φ100mm
Cooling Motor Power	1.1KW
Cooling Pipe Diameter	Φ102mm
Package Dimension	2020 * 1120 * 1830 mm
Package Weight	720KG

# Catalog

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# 1. Device Information

## (1) Device Uses

◆ This device is specialized in batch green coffee bean.

◆ indoor Use

(If use at outdoor , it could cause failure baking, machine failure, accident)

◆ Can not be used in batch other thing except green coffee bean.

## (2) Device feature

◆ Semi-direct fire and semi-blast coffee roasting machines utilized the design of Double drum, double insulation shell and stable radiant heat and rich hot to puffed the coffee bean.

◆ High thermal efficiency utilized could made deep roaster within 15 minutes as well as keep the inherent taste and aroma.

◆ Using an exhaust valve to control the displacement, you can bake their own unique flavor.

◆ Using high-power fan for fast cooling, cooling time is about 2 minutes.

◆ Equip with a safety control system, if the machine reaches the set temperature the machine automatically stop heating. After the temperature dropped 10 °C (could change according to the customer requirements), continue automatic heating . It allows devices to maintain a constant temperature.

# 2.Safety Precautions

## (1) General safety information

- ◆ When using the device with a good protection gloves
- ◆ When a device fails, turn off the power and gas supply equipment, do not use.
- ◆ Equipment must be used with single-phase 220V power supply ground wire, Do not turn on the power if there is no ground wire
- ◆ Before release the coffee beans, remember to start cooling stirring, open cooling damper then cooked beans could be putted out, in order to avoid making the stainless steel of the cooling tray damage variants.
- ◆ In the cooling coil mixing process, can not put your hand on the position of stirring blade rotation .
- ◆ Within the drum during rotation, can not put hand inner of the drum after the release coffee bean' s door opened.
- ◆ After the device is heated, the body shell, the surrounding of perspective window, the hopper base, semi-cylindrical part of the dust, and all of the exhaust pipe has a high temperature, can not touch or use a cloth to clean, to avoid burns.
- ◆ When checking or cleaning the equipment, you must cut off the power and gas supply.
- ◆ Inside and around the machine Do not store flammable.
- ◆ Power lines and gas pipes do not touch the hot surface of the machine.

## (2) Security tag



### 1) Be careful of electric shock

This label indicates electrical shock caution.

We must cut off the power if there exists any hazard of fire injury or electric shock or fire injury hazard exists before use.



### 2) Drive parts

This label indicates Note Drive site.

It will occur injuries at the part of drive. Please add the safety device when using it and turn on the power switch



### 3) Caution burns

This is a careful burns flag.

Due to surface hot, do not touch.



### 4) Note Fire

This is the note that fire signs.

Attention of electric safety and gas leak.

Do not store combustible materials around here.

### **(3) Safety devices**

#### **1) Driving wheel cover**

- ◆ Equip the protective cover on the drive wheel configured at the place of drum and Distribution Box
- ◆ the protective cover can not be opened when the machine using

#### **2) Prevent overheating device (factory set to 250 ° C)**

- ◆ When the drum temperature reaches the set temperature, the machine automatically stops heating, gas type baking will stop gas supply. Drop by 10 °C, it will automatically resume heating, gas type baking opportunity to restore the gas supply and automatic ignition.

#### **3) Prevent electric leakage devices**

- ◆ The machine cut off the power automatically when the short circuit and leakage and other electrical anomalies

## **3. Installation**

### **(1) Transport**

#### **1) Package**

- ◆ The use of wooden packaging, after removed the packaging, in accordance with local state regulations, recycling or disposal.
- ◆ confirm roaster dust collector, simple chimney, manual, random tools

#### **2) Transport**

- ◆ Weight about 615kg
- ◆ using trolleys on the ground.



## **(2) Pre-installation check**

### **1)Check Item**

- ◆ Power supply and plug

Using ordinary GB three-pin plug.

- ◆ Gas Pressure

Using the household low-pressure liquefied petroleum gas

- ◆ Exhaust conditions

Selecting the location of the exhaust pipe where less bends. ,if not use the existing ventilation facilities, according to the size of the exhaust pipe to decide the location of the hole

## **3) Preparation before installation roaster**

### **1) Equipment Placement**

- ◆ Baking machine placed on the flat ground.

### **2) Exhaust duct**

- ◆ This baking equipment must be placed in a dry, well-ventilated place away from short exhaust, ventilation ducts should not be shared with other food machines, if used central ventilation facilities, it will cause the exhaust changes baked
- ◆ Must have ventilation or window within one meter radius of the machine, if ventilation is not good, it will happen worker poisoning, suffocation and other accidents
- ◆ This device uses the exhaust pipe at  $\Phi 102\text{mm}$ .

### **3) The gas supply(Only applicable to gas baking machine)**

- ◆ gas type baking machine using family low-pressure liquefied petroleum gas
- ◆ Gas consumption:**0.8kg**

### **(3)Installation**

#### **1) The installation conditions**

- ◆ The ground is flat.
- ◆ Exhaust:The ventilation or the window near the machine within one meter.
- ◆ Exhaust condition:The length of the exhaust pipe, the structure of the environment can affect baking effect.
- ◆ Need about 30cm--1m space around the machine.
- ◆ Installation location to avoid moisture and direct sunlight

#### **2) Power supply and air supply connections**

- 1) The power supply connection:use the correct voltage, consistent with marked on machine

- 2) Parameter:

Power:AC 220V 50Hz 1600w

Air pressure: Maximum 1.2KP

### 3)Connection method

- ◆ Insert the three-pin plug in household tripod socket with ground.
- ◆ Gas hose connection: use dedicated gas hose(diameter  $\varnothing 9\text{mm}$ ), one end links to roasting machine on the back of the trachea joints, air supply valve at the other end, joint with pipe hoop banding. Gas hose mustn't place on the machine, skim the shell or through the bottom of the machine. Rigid bending is not allowed either.
- ◆ Liquified petroleum gas pot must be with qualified pressure reducing valve(rated pressure: 2800KPA), the distance between roaster and gas pot shouldn't less than 100cm, and the advisable hose length is 100 cm to 150 cm.
- ◆ Connected with natural gas, maximum is less than 1.2KPA), the distance btween roaster and gas should not less than 100cm.
- ◆ Leak test: Use soap coated in the pipe joint, open the air supply valve, if there are air bubbles, it means leak; Close the air supply valve, moderate tone tight coupling (or nut) to try again, until the rear can be used without any leakage.

# 4. Equipment Operation

## (1) general requirements

### 1) Operator

Must be educated or experienced in roasting

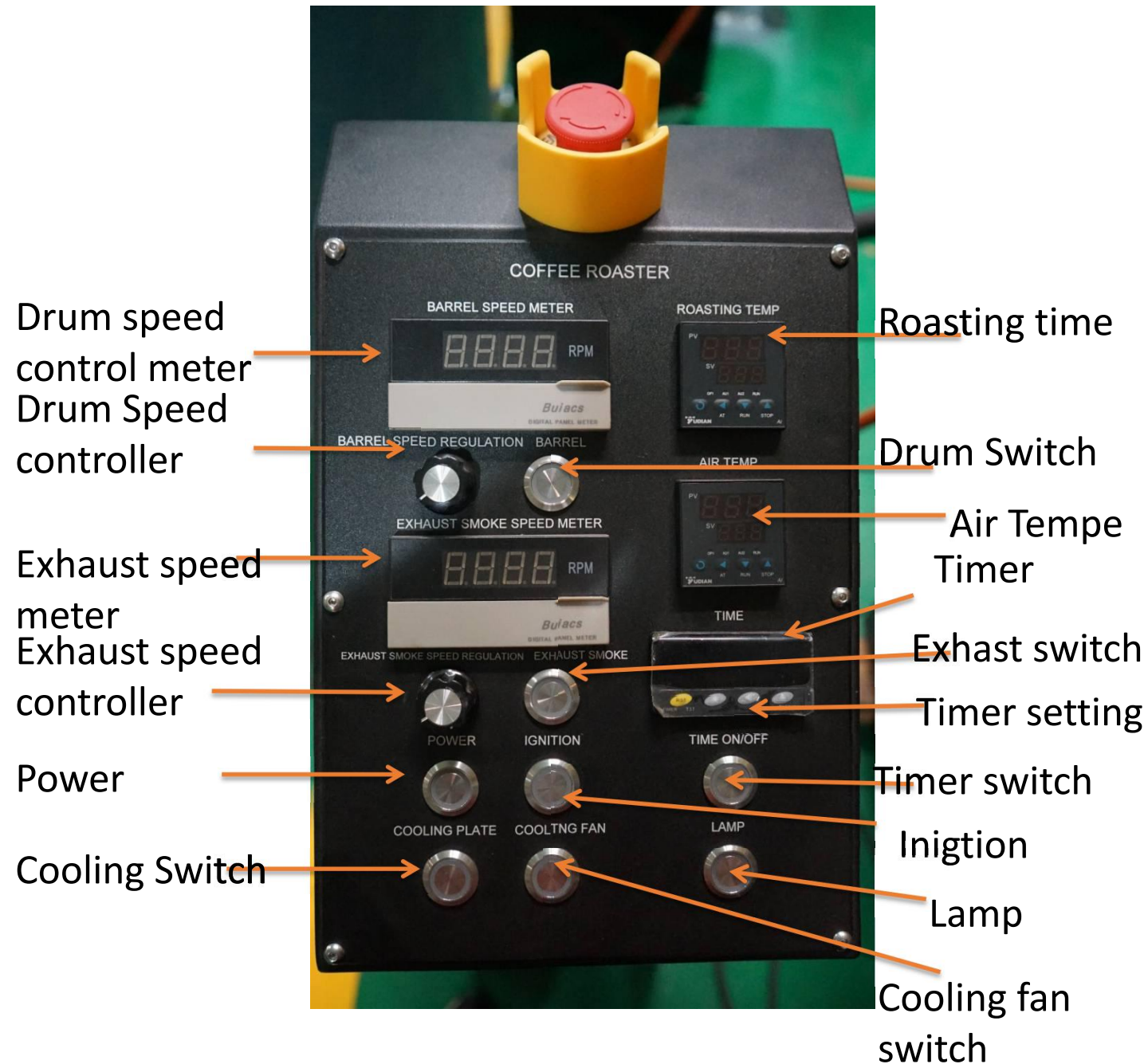
### 2) Precautions

- ◆ Confirm the power supply & gas source are connected.
- ◆ Power plug and gas pipe do not touch the surface of the machine.
- ◆ Check the temperature, exhaust, humidity inside and outside the machine before operation.
- ◆ Don't do any operations with electricity box switch
- ◆ Check crushed beans drawer, cooling plate, cooling pipe and if chaff collector drawer is clean before operation.

## (2)Equipment structure



# Control Panel



#### A: Power

Turn on it,the machine will be under the working,the drum will move ,and the exhaust motor too.

#### B: Cooling

Turn on the stirring arms will start to stir.

#### C: Timer

Turn on it,it will start computing time until reach the setting time,the buzzer will ding ding ding ~~

#### D: Roasting time

Press the setting key,using shift key and ascending key to preset roasting time ,press the setting key again, the setting is done.The roasting time will be zero after pressing the RST .

#### E: Roasting temperature

Showing the temperature in the drum,it will automatically stop supplying gas when the temperature reaches setting one,when the temperature reduce 10c,the machine will supply the gas and fire automatically.

Pressing shift key, down key and up key can set the temperature.

(NOTE:In genera,please do not use the Mode Key,due to the machine has set the proper parameter .)

#### F: Hot blast temperature

Showing the hot air temperature before the hot air into the drum.Setting it will not influence the machine to work.

#### G: Ignition

Press to turn on “igniter” ,and after 5’ , electromagnetic valve will connect the gas supply to fire ,and the indicator light will be lighted.

Press to turn off “stop” ,the electromagnetic valve will stop connecting the gas supply and extinguish, the indicator light will turn off .If firing is unusual , the igniter buzzer will ding ding ~~.

#### H:Drum Motor Switch

Turn on it ,then the Drum moves

#### I:Exhaust Motor Switch

Turn on it ,then the Exhaust Motor works

## ② Gas Power adjustment guidance



### ◆ Gas Pressure Adjustment Knob

**To left : turn down pressure,  
heating power low**

**To right: turn up pressure,heating  
power strong**



## **(4) Roasting operation**

1. Making sure the machine is clean and under the normal situation. Turn on the main power (back of the electric cabinet)
2. Setting the highest roasting temperature on the roasting thermometer, and the roasting time  
**(Note: If all of the setting is done when you received machine, and that setting meets your request on roasting, then no need to do these steps before every starting on.)**
3. Turn on the “operation” switch  
Turn on the “start” switch to preheating  
**(NOTE: “Start” switch Can Not be turn on if the operation switch don’t be turned on firstly. Or the Drum will be deformed, and the residual gas will cause the potential danger.)**
4. Adjust the exhaust flow at 5 or 6 scale, turn up the power, during the temperature up to 180°C-190°C, preheating within 15-20 minutes, turn down the power, when the temperature down to 150°C, then start to roast.

5.Many different ways of roasting,low temperature roasting,high temperature roasting,the second roasting(Same batch,same beans) ,all of them are up to the operators.

**Such as:**Roasting from low to high temperature environment ,this kind way of roasting.

When the preheated temperature down to 150°C,dump the green beans into drum,adjust the power into half,starting the low temperature roasting,almost 7-10 minutes to evaporate the moisture in the green beans slowly and fully. When you observe the color of beans changed,turn up the power to rise temperature soon.

**(This machine quite works,only can hear the sound of the beans touch the drum)**

when you hear the first crack,observe the beans' color through the glass,and take out the beans by samplers to observe **(If you also find there are same chaff and smoke out from the sample hole,you need to turn up the exhaust air flow to control that issue)**,after finishing the first crack, turn down the power to reduce the speed of rise temperature, making the beans finish the second crack completely. Then open the cooling air flow,make sure it is fully open,adjust the exhaust air flow at 1 scale,turn on the cooling tray arms, let the roasted beans out,within 3-5minutes cooling,one batch is done.

6.During the cooling process,you can dump another batch green beans into the next roasting,just like before what you did to roasting consecutively.After first roasting,the temperature is high in the drum,the next roasting process will be finished in the shorter time than first batch.

7.If you keep roasting into 24KG green beans,please turn off the chaff collector cyclone switch,clean the drawer and put it back where it should be,then keep enjoy roasting process.

8.If you wanna finish roasting,please **DO NOT** turn off the main power of the roasting machine firstly .For the electric type one,firstly turn off the heating switch,for Gas type one,firstly turn off the gas open switch,after the temperature down to 80°C,then turn off the power which is back of the back of the electric cabinet.Then do the clean job to prepare for next roasting when you want.

# 5.Cleaning and maintain

## 1) Clean the parts



Broken Beans  
and Chaff  
Drawer



Cooling Tray



Exhaust pipe



Chaff Collector

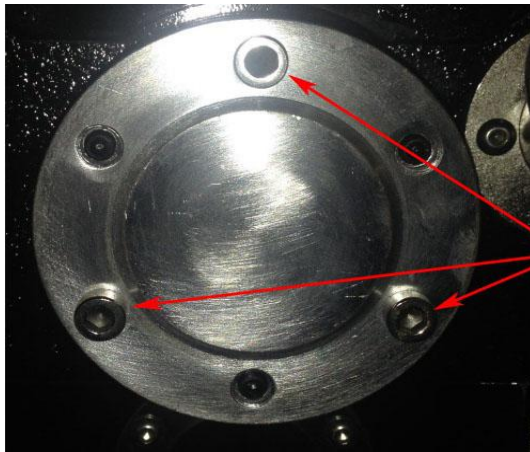
- a、 The roasting total capacity up to 24kg,turn off the chaff collector cyclone switch,pull out the drawer,clean up the chaff,then put it back to the original place.Turn on the switch,keep roasting.
- b、 Clean the chaff collector cyclone when you finish and stop the roasting .
- c、 Clean the area under the cooling tray,there will collect some coffee beans' residue,or it will influence the cooling system.Besides that the conveyer belt and cooling motor also should be clean and adjusted.
- d、 If the machine working hour up to one month,please loose the screws which are used to fix exhaust pipe by Allen key ,dismantle the exhaust pipe to clean,making sure the pipe is clear in side (For exhaust smoke and chaff,keep the roasted beans flavors)

## 2) Daily maintain

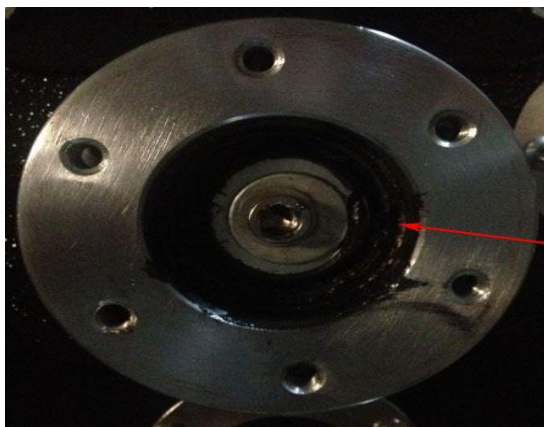
a、 when the machine working hour up to 150 hours, the bearing (Back or Front of the roaster )should be added the food grade grease resistant to high temperatures .Making sure to lubricate the bearing completely,to be durable.

**NOTE:When you add the grease,please make sure you have turned off the power ,and the machine is under the room temperature,do this operation to avoid harm .**

b 、 Loose three screws of the front pedestal cap by Allen key before adding the grease.Taking out the cap,adding the grease on bearing balls ,making sure grease is smeared evenly.



three screws on the front pedestal cap



Adding the food grade grease resistant to high temp.

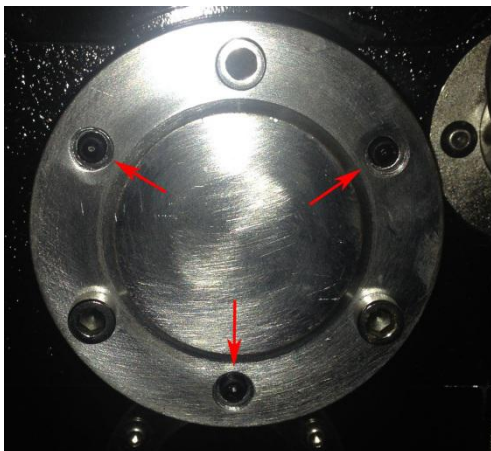
c. Loose the screws on the back panel, then you can see the back bearing is at the back of the roaster. See below picture, then you need to inject the grease into the round point.



d、 The front bearing bearing seat can adjust the space between drum and the front front panel .

Loose the 3 three screws(In the picture) ,turn left the space will be smaller,turn right the space will bigger,when the adjustment is okay for you,do not forget to tighten the three screws that you loosed before

**(NOTE:Only can operate when there is the friction between drum and the front front panel )**



## 6.Troubleshooting

Erro and Solve	Solution
vibrating and drive sound	Clean the exhaust motor and exhaust pipe.
metal scratching sound	Adding the grease on the front or back bearing,also observe the pace between drum and the front front panel if it is needed to adjusted.
chaff and smoke out from the sample hole	Checking the exhaust motor,exhaust pipe and chaff collector cyclone if they are blocked.
sparks and yellow smoke leak out	Checking exhaust motor and exhaust pipe if there are chaff in it
CAN NOT ignition	Checking the Gas cylinder valves if it is unscrewed,Or Screwing and unscrewing the Gas cylinder valves. Checking if there is any Gas in Gas cylinder .
temperature wrong	The thermocouple is damaged,need to change a new one.

**Guangzhou Bide General Equipment Co., Ltd.**

TEL: +86 (020) 22884832

Web: [www.gzbideli.com](http://www.gzbideli.com)

Address: No.10 The Fourth Street Fuyong Industry Zone  
Shadu Road Shawan Town Panyu District Guangzhou City