



ISO9001:2008
certificated quality
management system

CB
Scheme



Intertek
3170143

Intertek
3170143



Model: _____

Date: _____

S/N: _____

(Please read the manual carefully before operating the machine.)

INSTALLATION NOTES

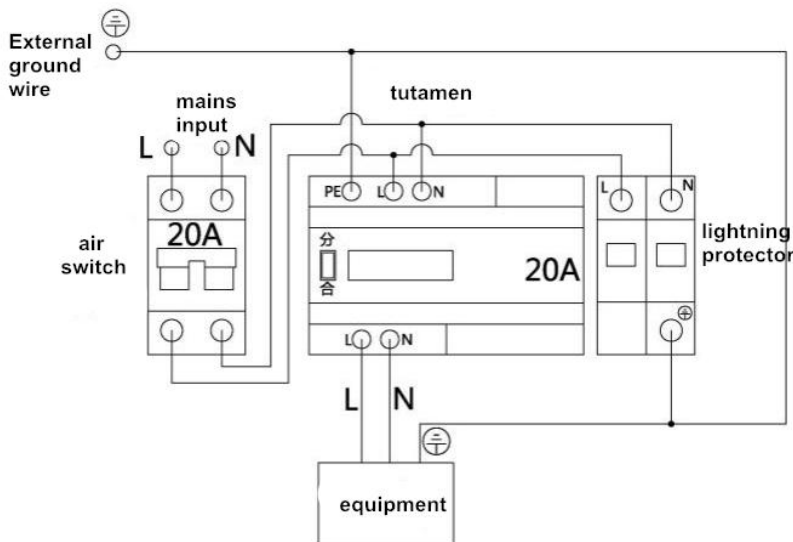
Note: In order to protect the operator from injury, external power source of ice cream machine must be connected to the earth leakage circuit-breaker. See the picture below.



When installed indoors, the machine should be placed far from sprinkler heads and wetness, otherwise it will result in severe shock .

Air-cooled machine

Please leave a space about 50cm at least around the machine, this will make the air flow through the condenser adequately. If there is lack of space, refrigerating capacity will be cut down, which may cause the perpetual damage to the compressor.



Electrical connections

To install the ice cream machine in accordance with the electrical specifications of the rated power, current and voltage on the nameplate label .

Caution:

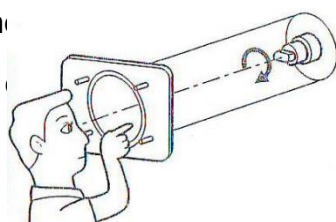


This machine must be accurately grounded!
Otherwise it will cause an electric shock and serious bodily injury!



When you look into the freezing cylinder, the stirring shaft must rotate in a clockwise direction.

Note: The following steps should be followed by professional repair technicians. When phase reversal happens, the live wires "L1" and "L" should be exchanged to install.



professional repair technicians. When phase reversal happens, the live wires "L1" and "L" should be exchanged to install.

SAFETY MEASURES



Important note: Violating the safety regulations may result in heavy casualties. Failure to comply with this warning will damage the machine and its components. Component damage will increase spending on the spare parts and maintenance.

Safe operation



Do not operate the ice cream machine before read the instructions carefully. Failure to follow this instruction will cause damage to the machine or operator.



- Do not operate the ice cream machine that is improperly grounded .
- Do not repair the ice cream machine before disconnect the mains, otherwise it will cause an electric shock. Please contact with local agent or find a professional repair personnel when necessary.

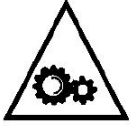
Failure to follow these instructions could result in electrical shock or damage to the machine, please consult the electrician for the correct operation when you are confused .



Please do not clean the machine by the water faucet or inside machine, otherwise it will cause a severe shock.



The machine must be placed on horizontal plane, otherwise it may cause injury to persons or damage to machine.



●Do not allow untrained persons to operate the machine.

- Before disconnect the power supply, do not disassemble the throat block, the agitating shaft or transmission shaft.
- Do not dive objects or fingers into the throat block discharge outlet.

NOTE: Failure to follow these instructions can lead to serious injury because of dangerous moving parts.



Be careful when you disassemble the agitating shaft (disconnect the power supply before the operation), otherwise it may cause injury.

PRECAUTION

●Precaution before using the ice cream machine:

1. The machine is inevitably subject to shocks in the transportation and is used after 24 hours at best.
2. There are different adaptations of different models on environment temperature, and it's necessary to avoid the sun and be away from heat.
3. It is suggested that ice cream slurry should be kept at 25°C.
4. The machine should be placed in good ventilation and on horizontal plane.
5. The rotation direction of the agitating shaft should be in clockwise when you face to the machine.
6. The air inlet of the machine (left / right / back board) must be maintained proper ventilation.
7. It's best to clear the dirt on the condenser once a month.

8. Notices for air-cooled machine:

Leaving a space about 50cm at least around the machine can make air move in. The machine under part can not place anything, which can ensure cooling.

9. The machine can not work when it's short of material in the hopper.
10. Please disconnect the power supply when the machine is not used for a long time.

●Notices for the power line:

- a) Power socket must be equipped with ground wire, or the ground wire must be connected the connector which is near the power line and on the back of the machine.
- b) The cross-sectional area of power line must be larger than 4.0 square millimeters

when the voltage is between 220 volts and 240 volts, which can ensure steady stream of electricity. According to the large starting current, the electric current should load the power capacitance.

c) The cross-sectional area of power line must be larger than 2.5 square millimeters when the machine is volts, which can ensure steady stream of electricity. According to the large starting current, the electric current should load the power capacitance.

Note:

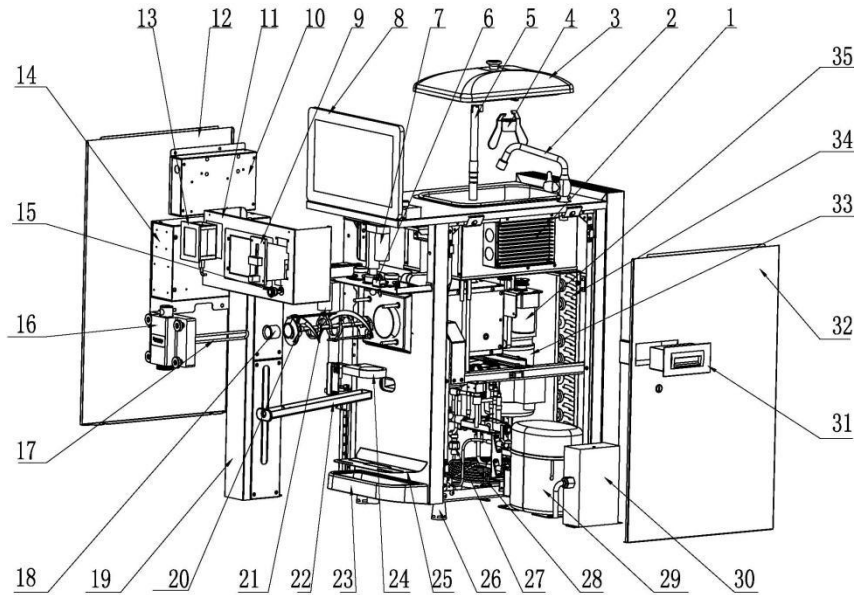
1. The current capacity of main power cord becomes low or overload, which will drop voltage. Then the machine can not be used normally and even becomes damaged.
2. If the power cord need to be replaced, you have to find the professional maintenance personnel to replace the power cord that meets the criteria.

Warm tips:

The machine is designed to work normally indoors with the normal temperature (between 21°C and 28 °C).

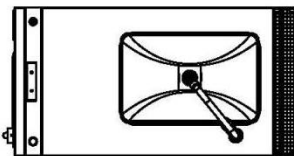
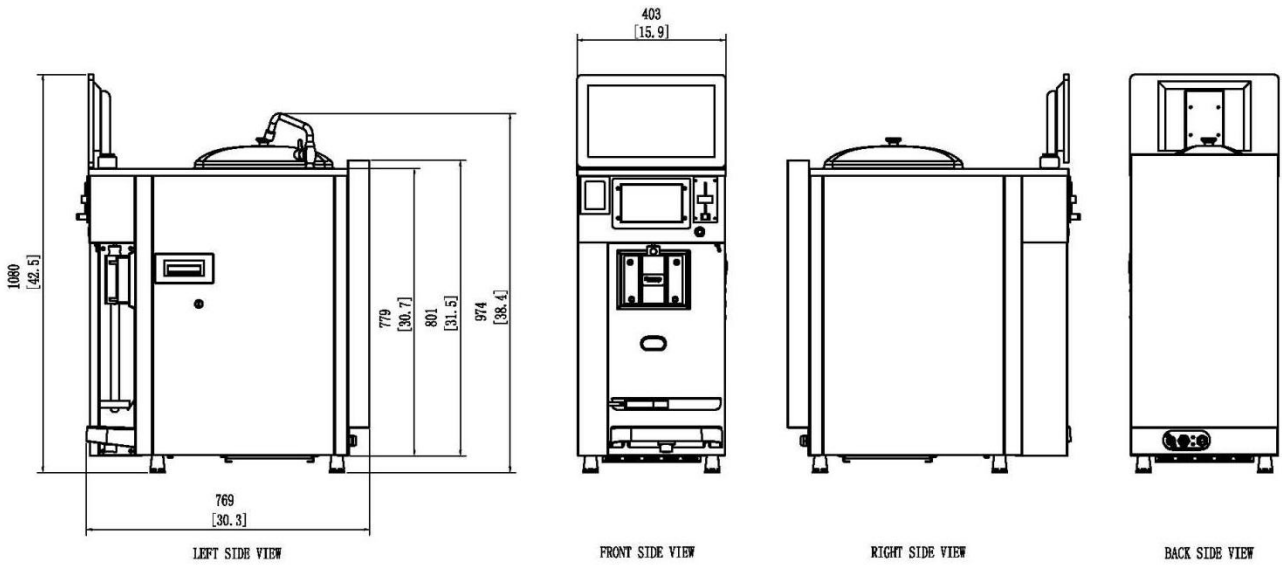
When the temperature is higher than or equal to 32 °C, the production output may reduce and the ice cream may be abnormal.

MACHINE STRUCTURE



Ref. No.	Description	Quantity	Ref. No.	Description	Quantity
1	Converter electricity box	1	19	Left rear corner post	1
2	Tap	1	20	Stirring shaft	1
3	Hopper lid	1	21	Long push rod	1
4	Mixer	1	22	Material collecting trough	1
5	Gravity pipe	1	23	Material collecting tray	1
6	Switch	1	24	Cone holder	1
7	Short push rod	1	25	Lid of material collecting tray	1
8	Advertising screen	1	26	Rubber feet	4
9	Coin acceptor	1	27	Solenoid valve	2
10	Power box	1	28	Axial flow fan	1
11	Plate(cover the keyboard)	1	29	Compressor	1
12	Left side plate	1	30	Capacitance	1
13	Code scanner	1	31	Token box	1
14	Circuit board box	1	32	Right side plate	1
15	Reset switch	1	33	Gear motor	1
16	Throat block	1	34	Condenser	1
17	Stirring shaft core	1	35	Stirring motor	1
18	Locating sleeve	1			

Overall dimensions(see the picture below)



NOTE:
 1. THE DRAWING HAVE ADOPTED THE FIRST-ANGLE PROJECTION.
 2. FIGURES IN PARENTHESSES INDICATE INCH.

Technical parameters

model	Dimension (mm)	Net weight (Kgs.)
HM116	769 × 403 × 1080	145

Electrical parameters

model	voltage	Rated current(MIN)	power
HM116	Single phase, three-wine system, 220V/ 50Hz,	8A	1500W

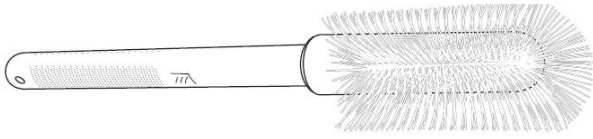
Brush package + attachment



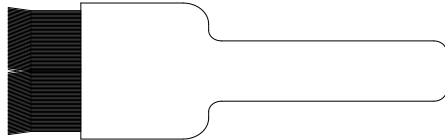
Clean the transmission shaft sleeve,
 blanking stopper and blanking outlet.



Clean the throat block.



Clean the cylinder.

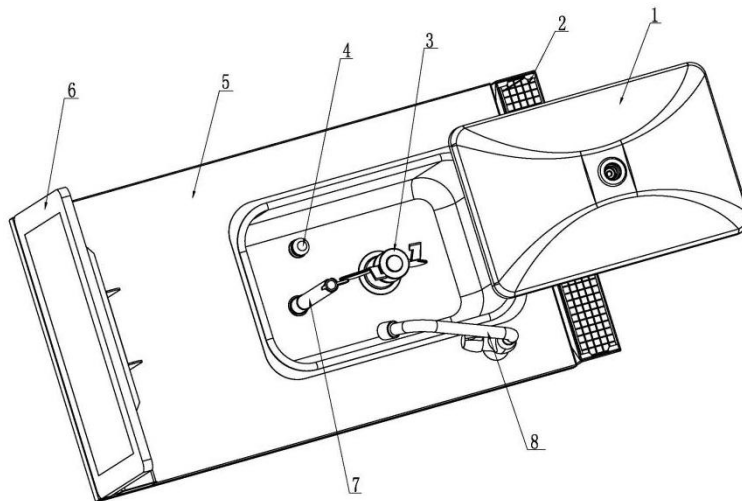


Clean the hopper and outlet of throat block.



Lube.

Installation sketch of top board



Ref. No.	Description	Quantity
1	Hopper lid	1
2	Air outlet	1
3	Mixer	1

4	Liquid-level sensor	1
5	Top board	1
6	Advertising screen	1
7	Gravity pipe	1
8	Tap	1

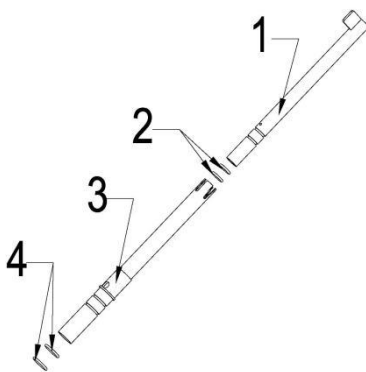
Gravity pipe instruction

After the hopper is cleaned, lube should be cover the sealing rings of expansion tube and then the expansion tube is installed in the blanking hole of hopper. The air intake on expansion tube is adjustable as needs: $\phi 4$, $\phi 6$, and $\phi 8$.

Note:

1)At the first production, the air intake must be closed as the cylinder is full of ice cream slurry. When the production is finished, the air intake must be adjusted as you needs. (The expansion rate is lower in turn as the blanking hole becomes larger.)

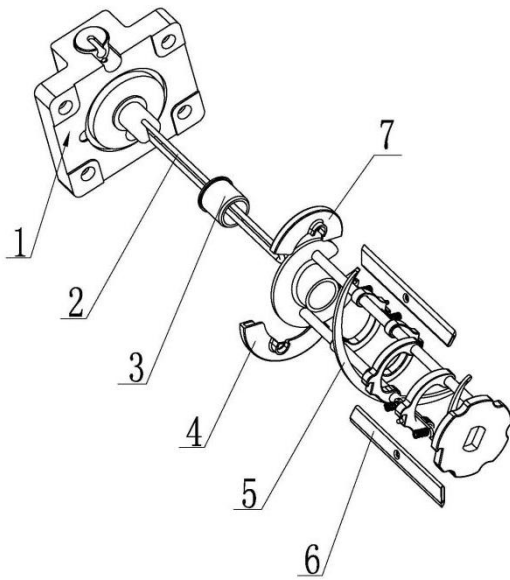
The ice cream slurry can not flow into cylinder when it's too thick, which make the machine work abnormally.



Ref. No.	Description	Quantity
1	Inner pipe	1
2	Sealing ring $\phi 16 * \phi 2$	2
3	Outer pipe	1
4	Sealing ring $\phi 22 * \phi 2$	2

Module's disassembly and installation

The structure diagram and installation of stainless steel stirring shaft

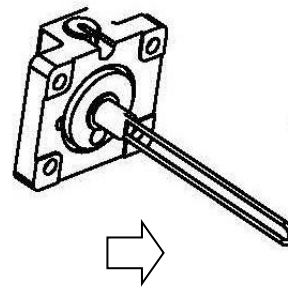
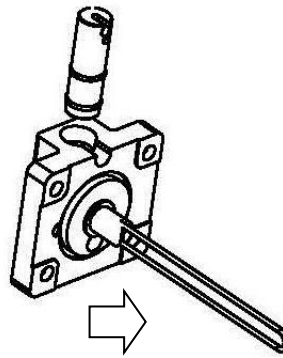
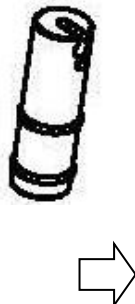
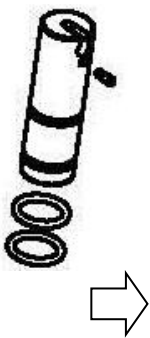


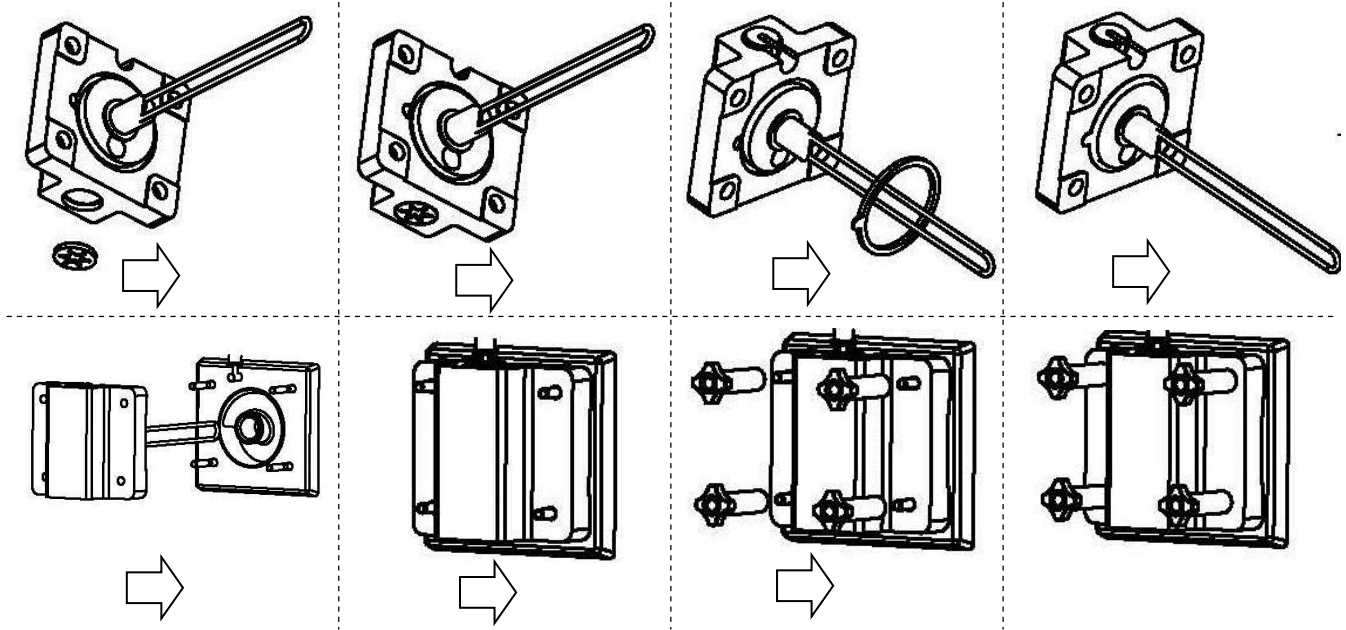
Ref. No.	Description	Quantity
1	Throat block	1
2	Shaft core	1
3	Locating sleeve	1
4	Sheath A for front scrapper	1
5	Stainless steel stirring shaft	1
6	Plastic scrapper	2
7	Sheath B for front scrapper	1

When you install the stirring shaft, two orifices of plastic scrapper should be positioned to the locks and pressed in. (Note: the sharp side of the plastic scrapper must be outward.)

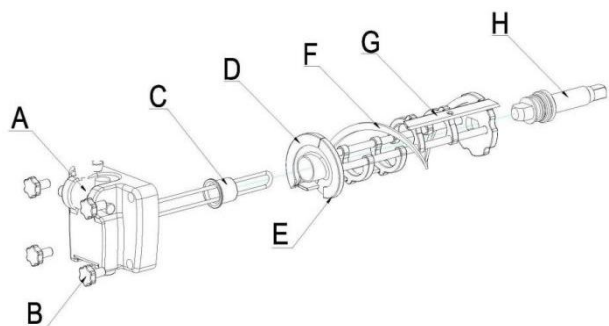
It can not be installed if sheath A and sheath B can not be exchanged. And the locating sleeve should be installed into the shaft core.

Installation of throat block





Installation and disassembly of stainless steel stirring, transmission shaft and sealing gasket



Ref. No.	Description	Quantity
A	Throat block	1
B	Fixing bolt	4
C	Locating sleeve	1

D	Sheath B of stirring shaft	1
E	Sheath A of stirring shaft	1
F	Stainless steel stirring shaft	1
G	Plastic scrapper	2
H	Transmission shaft module	1

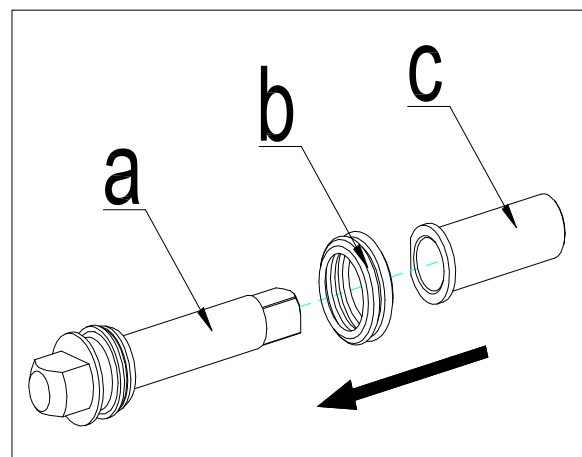
Installation steps of stirring shaft

1、Stirring shaft installation

a, transmission shaft b, sealing gasket
c, plastic sleeve

1-1) Before stirring shaft installation, the surface of transmission shaft and plastic sleeve must be covered evenly with lube , but sealing gasket must be covered on internal surface.

1-2) Sealing gasket and plastic sleeve must be installed into transmission shaft in



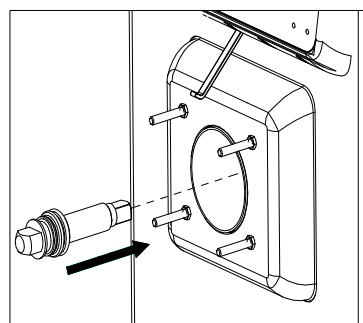
turn.(see chart, right)

Note: In installation, the bulge side of the plastic sleeve must be toward the transmission shaft.

1-3) Insert the transmission shaft module into the coupling.

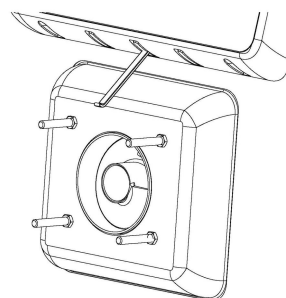
In installation, rolling the module left and right is to aim at the hole of the coupling. And the shaft end should be inserted into the coupling.

Note: If the transmission shaft is correctly inserted into the coupling, you will feel the springback.



1-4) Push the stirring shaft into the cylinder.

Rolling the module left and right is to ensure that the stirring shaft is located at the transmission shaft position. If the installation is correct, the stirring shaft won't be out of the cylinder.



Usage(module cleaning)

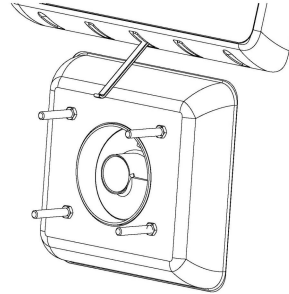
Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.

- Clean all parts of the machine with disinfectant by the adjusted ratio.
- Wipe all parts with clean and disinfected towel after cleaning.

Usage(Installation after cleaning)

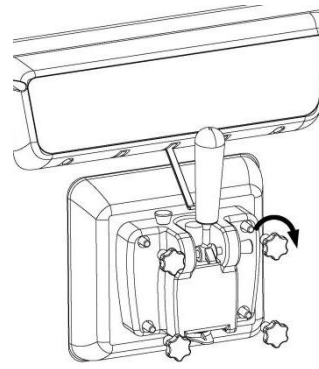
1. Install the stirring shaft

Push the stirring shaft into the cylinder, to ensure the stirring shaft is located above the transmission shaft position, then rotate slightly the stirring shaft, until it is placed in the correct position. If installed correctly, the stirring shaft will no extend to the cylinder.



2. Install the throat block

Diagonally tightening the four fixing bolts is to fix the throat block in the front of the cylinders.(see the picture on the right)



Usage(cleaning)

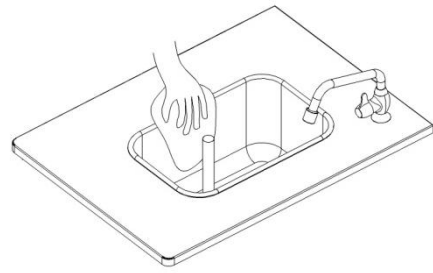
1. Pour clean room temperature water into 2/3 hopper , press on the cleaning icon or defrost icon.(see the picture on the right)



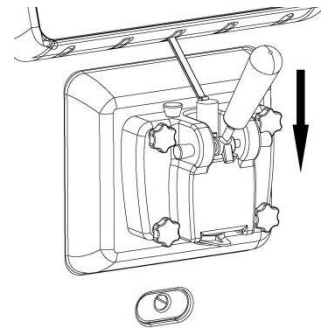
2. About 3 minutes later, it will stop defrosting when the temperature of ice cream slurry is 15°C. Or the machine can stop defrosting when you click on defrost icon or stop icon.



3. When ensuring that the machine stops, you clean the hopper with towel.



4. Put a bucket under the outlet of throat block and then click on cleaning icon to drain away water.
Note: do not click on refrigeration button when clean the machine.

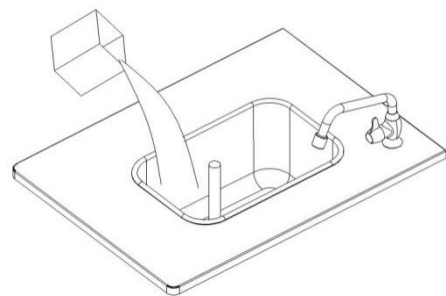


Usage(Disinfection)

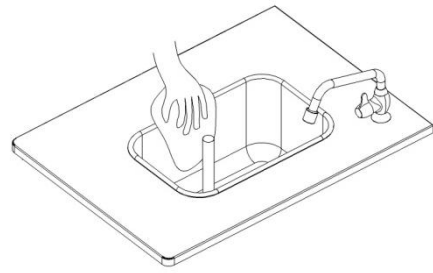
Step 1 : Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.



Step 2 : Pour the disinfectant into hopper.
Note: you have disinfected the hopper and parts, so you have to clean and disinfect your hands before you continue the following steps.



Step 3 : Clean the hopper with towel or brush.



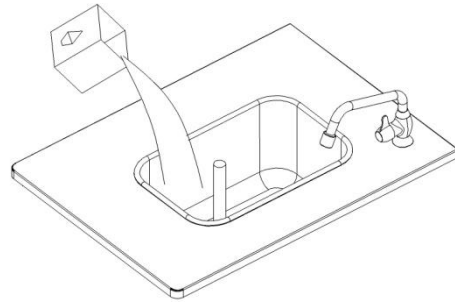
Step 4 : Clicking on cleaning button is to make the disinfectant circulated, which must be 5 minutes at least.

Step 5 : Put a bucket under the outlet of throat block and pull down the handle to drain away water.

Step 6 : After disinfection, pour the warm water into hopper and repeat the steps from step 3 to step 5.

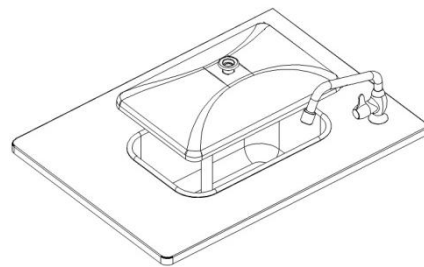
Usage(production)

Step 1 : pour the fresh ice cream slurry into hopper.



Step 2: Install the gravity pipe and close the hole of gravity pipe. You put a measuring glass on the bottom of the throat block , then you pull down the handle to let the slurry flow into the measuring glass. When the fluid level is close to at 300mL on the scale, you should push up the handle and pour the slurry into hopper.

Step 3 : put the lid on the hopper.



Step 4: click on the refrigeration icon to produce ice cream. When the production finishes, you should adjust the hole of gravity pipe and the size of holes you want depends on your actual selling situation.

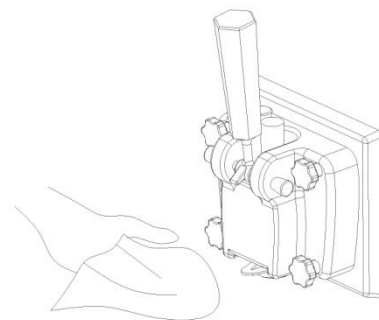
Usage (Pasteurization)

Shutdown every day

Once a day necessary : pasteurization is that the slurry in cylinder and hopper must be heated to kill bacteria when the temperature reached a specific range and then the temperature must drops to certain degree(lower temperature), which can protect the slurry from decay.

Important : the slurry in hopper is one-third the height of hopper at least.

Step 1 : clean the throat block, area nearby the bottom of throat block, front board and the place soiled by the food or steam.



Step 2 : click on pasteurization icon, the machine entry the pasteurization program. Heating treatment consists of three stages: heating, heat preservation and freshness preservation.



Do not remove the parts and feed the slurry when it is heating, because the slurry is very hot and heavy pressure is in cylinder.

Note : after heating, the color of pasteurization icon is still red, but it will entry the freshness preservation. If you want to stop the program, click on stop icon.

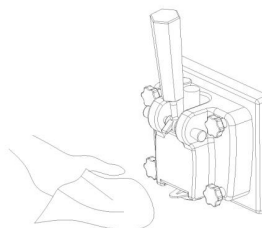
Usage (Everyday preparatory work)

Step 1 : Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.

Step 2 : clean the outlet of throat with disinfected brush.

Note : in order to effective disinfection, each part should be cleaned for 60 seconds at least in disinfectant with brush.

Step 3 :clean the throat block, area nearby the bottom of throat block, front board and the place soiled by the food or steam.



Step 4 : when the above steps are finished, you click on stop icon. Please check whether there is any error message on screen or not. If some error messages are on screen, it is necessary to troubleshoot before turning on the machine.

After repairing the breakdown, please operate the machine according to the **Usage (production)**.

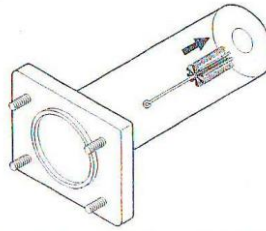
Cleaning with brushes

Step 1: Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.

Step 2: all the parts removed should be rinsed thoroughly with brushes.And it is necessary to clean up all the lube and slurry on the parts.

Finally, all the parts should be rinsed thoroughly with warm water and put on the clean and dry place to be airing.

Step 3: clean the bearing housing in the back of cylinder with brushes.



Step 4: wipe all the outside surface of the machine with clean and disinfected towel.

In cleaning and disinfection, you must be strictly followed to cleaning and disinfection schedule which is put forward by the local administrative department. During the cleaning and disinfection, please pay attention to the following points:



The machine must be cleaned and disinfected thoroughly every week.

And the parts must be rinsed thoroughly with brushes.

Bearing housing, cylinder and throat block unit must be rinsed thoroughly.

Prepare the cleaning fluid and disinfection properly and read the instruction of the label carefully. High concentrations of cleaning fluid may corrode the parts and it is difficult to rinse thoroughly with the low concentrations of cleaning fluid.

General maintenance

1. Replace the broken or loose gaskets.

Check the condenser whether there is dirt on it. The dirt will reduce the efficiency and production capacity, so it is necessary to clean the condenser with soft brushes.



Caution: You must cut off the power before cleaning the condenser. Or it may result in electric shock.

ICE CREAM PRODUCTION KEYBOARD



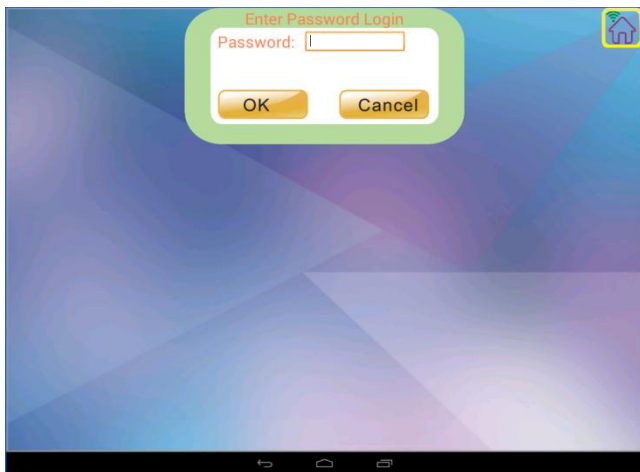
Key	Feature Instruction	Key	Feature Instruction
	Produce ice cream		Cylinder mixing
	Pre-cooling		Stop
	Heat treatment (Pasteurization)		Defrost
	Lift up the left plunger tappet		Drop down the left plunger tappet
	Lift up the cone tray tappet		Drop down the cone tray tappet
	Stop tappet running		Test icon for producing ice cream

Operating instructions




(Figure 1)

1、 After the machine power on, and keyboard displays the interface (Figure 1):



(Figure 2)

2、 Press 3 times the key  (Figure 1), and enter into the interface (Figure 2).

The initial password: "admin" and "user" (Note: Password "admin" have permission to enter the menu of machine work mode, sell record, sell set, machine set; and "user" can only enter the menu of machine work mode and sell record.)




(Figure 3)

3、 After input password, then press the key “OK” to enter the interface (Figure 3), to run the procedure of cleaning, ice cream production, pre-cooling, heat treatment (Pasteurization), manual control running plungers and tappets, parameter setup, and etc.



1) Production (with gravity pipe)


Firstly, removing the gravity pipe and the slurry flow into the cylinder. After the cylinder is full of slurry, you install the gravity pipe and adjust the hole into off state. Secondly, you click on the icon to lift up the plug and slurry flow into a measuring glass about 250mL.

Finally, you click on the icon . After production, you can adjust the hole of gravity pipe you want. And in Figure 3, you can see these :”ice cream --well done”.

2)When you use the gravity, slurry can’t be too thick. Or, slurry can not flow into cylinder, which makes the machine work abnormally.

(with air pump)

Firstly you should press  to feed the raw material. After feeding, you press  to start production. When it is finished, you can see such message “ice cream-ready”on display screen.


After production, click on the icon  into the picture below





Click on the ice cream icon and select one of mode to pay.




Put in the coins or scan the QR code, there will be a icon “OK” on the screen. Put the cup on the holder and click on the icon”OK” or press on the circle button which is under the coin acceptor.

Click on the icon , the stirring shaft will work and stop after 5 minutes. When it is working, you can click on this icon, it will stop.


Click on the icon , it will thaw the ice cream and stop automatically. When it is working, you can click on this icon, it will stop.

Click on the icon , the pre-cooling system will work and the slurry will get cooling.

Click on the icon . ticking the blank means entering into pasteurization mode. Without ticking the blank, it will enter into freshness mode.

Pasteurization mode : when the slurry in the cylinder and hopper heats up to 75°C, it will enter into the freshness mode automatically.

Freshness mode: the slurry in the cylinder and hopper gets cooling and is keep in low

temperature. When you click on the icon , it will stop freshness.

(2) Clicking on the sales record, you can see the past sales and business volume.

序号	方式	料位	冰淇淋	单价	重量	辅料	辅料价	重量	折扣	小计	卡号/订单	金额/交易额	交易时间
719	代售	HL	草莓口味	3.0	0.0	0	0.0	0.0	0.0	3.0	0	0.0	2016-05-18 13:17:02
718	代售	HL	香蕉口味	3.0	0	0	0.0	0.0	0.0	3.0	0	0.0	2016-05-18 13:16:47
717	代售	M	混合雪糕	2.0	0	0	0.0	0.0	0.0	2.0	0	0.0	2016-05-18 13:16:07
716	代售	L	左雪糕	1.5	0	0	0.0	0.0	0.0	1.5	0	0.0	2016-05-18 13:15:21
715	代售	M	混合雪糕	0.94	0	0	0.0	0.0	0.0	0.94	0	0.0	2016-05-18 10:44:45
714	微信	L	左雪糕	0.03	0	0	0.0	0.0	0.0	0.03	FFFFFFFF_WJ_25	0.0	2016-05-18 10:44:07
713	微信	M	混合雪糕	0.04	0	0	0.0	0.03	0.0	0.04	FFFFFFFF_WJ_25	0.03	2016-05-18 10:42:50
712	代售	L	左雪糕	3.0	0	0	0.0	0.0	0.0	3.0	0	2.0	2016-05-18 10:34:19
711	代售	L	左雪糕	3.0	0	0	0.0	0.0	0.0	3.0	0	2.0	2016-05-18 10:33:25
710	代售	R	右雪糕	6.0	0	0	0.0	0.0	0.0	6.0	0	0.0	2016-05-18 10:32:07
709	代售	M	混合雪糕	4.0	0	0	0.0	0.0	0.0	4.0	0	0.0	2016-05-18 10:31:50
708	代售	L	左雪糕	3.0	0	0	0.0	0.0	0.0	3.0	0	0.0	2016-05-18 10:31:34
707	代售	L3	左雪糕	1.0	0	0	0.0	0.0	0.0	1.0	0	0.0	2016-05-18 10:30:25
706	代售	L3	左雪糕	1.0	0	0	0.0	0.0	0.0	1.0	0	0.0	2016-05-18 10:30:07
705	现金	L	左雪糕	1.0	0.0	0	0.0	0.9	0.1	0.9	0	2.0	2016-05-17 11:26:56
704	现金	M	混合雪糕	2.0	0.0	0	0.0	1.8	0.2	1.8	0	2.8	2016-05-17 11:27:08
703	现金	R	右雪糕	3.0	0.0	0	0.0	2.7	0.3	2.7	0	3.5	2016-05-17 11:26:28
702	现金	L	左雪糕	1.0	0.0	0	0.0	0.9	0.1	0.9	0	1.4	2016-05-17 11:25:50
701	现金	L	左雪糕	1.0	0.0	0	0.0	0.9	0.1	0.9	0	1.3	2016-05-17 11:25:17
700	现金	M	混合雪糕	2.0	0.0	0	0.0	1.8	0.2	1.8	0	2.1	2016-05-17 11:17:03

合计: 403.41 现金: 231.54 代币: 30.54 微信: 76.49 支付宝: 0.05
 页数: 1/7 记录数: 135 测试: 36.0 [出错: 7.91/3][其他支付: 8.96/9]

2016-04-19 2016-05-19
 - 00:00 + - 23:59 + 销售查询 上一页 下一页 网付查询

机器状态 销售记录 售卖设置 机器设置

Figure 4

(3) Clicking on sales setting, you can set the sales mode, the weight of ice cream and topping and the quantity of coins the customers should pay for.

冰淇淋口味1 冰淇淋口味2 冰淇淋口味3 折扣设置 时段 口味1 口味2 口味3

口味名称 左雪糕 混合雪糕 右雪糕 现金: 00:00 到 24:00 0.1 0.2 0.3

币数/价格 3 1.5 4 2.0 6 3.0 网付: 00:00 到 00:00 0.15 0.25 0.35

冰淇淋大小 - 12 + - 11 + - 17 + 二杯: 00:00 到 24:00 0.2 0.3 0.4

代币数: 2 3 4 周一 周二 周三 周四 周五 周六 周日

辅料名称 辅料1 辅料2 辅料3 果浆1 果浆2 果浆3

币数/价格 0 0.0 0 0.0 0 0.0 0 0.0

辅料大小 - 3 + - 3 + - 5 + - 15 + - 15 + - 15 +



代币数: 0 0 0 0 0 0

价格/每币 0.5 客服电话: 13888888888 保存售卖设置

支付选项: 硬币接收 纸币接收 支付宝 微信支付 退市功能 辅料多选

机器状态 销售记录 售卖设置 机器设置

Figure 5

(4) clicking on machine setting, you can set the hardness of ice cream and the temperature of pre-cooling mode. Click on the icon  is to turn on wifi, click on the icon  is to search wifi.

机器编号: FFFFFFFF 自动制冷 09:00 自动保鲜 00:00  WLAN  

机器类型: HM966 左计量模式 锁定计量参数 右计量模式 HM 信号LV:66|已连接|

单相220V(50Hz) 电流保护恢复 HOMMY 信号LV:57|未连接|

左硬度设置 预冷温度 右硬度设置

- 7 + - 4 + - 7 +

修改密码 3G Mobile

机器状态 销售记录 售卖设置 机器设置

Figure 6

Error code instruction

Error code	Cause	treatment
E1	Compressor is overloaded.	Check the compressor and thermal relay.
E2	Motor is overloaded.	Check the motor and thermal relay.
E3	Refrigeration pressure is too high.	Check the refrigeration system
E4	The temperature sensor of hopper is faulty.	Check the connector and the wire of sensor whether they are damaged.
E5	The temperature sensor of cylinder is faulty.	Check the connector and the wire of sensor whether they are damaged.
E8	Lack of phase or phase dislocation	Check the power and wire.

Note: When the sensor is contacted badly, the temperature sensor occurs disconnection.

Correct Usage

NO.	Operation	Result	Treatment
1	when you wash the part, you don't remove the gasket and wash it.	some dregs and lube can not be cleaned thoroughly.	you should remove the gasket and clean it thoroughly with towel.
2	The parts soak in chlorine-containing disinfectant for long time.	some parts are corroded and damaged.	Use the specified lube.
3	do not use the specified lube.	the parts can not be removed as the lube gets hardened.	use the specified lube.
4	do not coat the lube on the transmission shaft.	it causes abnormal noise and leaking slurry.	use the specified lube.
5	do not coat the lube on the gasket of plug.	it damages the gasket and causes leaking slurry.	use the specified lube(the gasket and throat block need not be coated with lube)
6	the plastic scrapers are not installed correctly on the stirring shaft.	it damages the plastic scraper and the ice cream becomes soft.	install the plastic scraper correctly according to the instruction.
7	the plastic scrapers are over-wear.	it causes the ice cream becomes soft	replace the plastic scraper regularly.
8	do not install the plastic sleeve of stirring shaft	it damages the main parts	install the plastic sleeve correctly

9	the fixing nuts of throat block are not tightened.	it cause leaking slurry from the side of throat block.	tighten the fixing nuts
10	click on the refrigeration icon when the cylinder is full of water.	the water is frozen in the cylinder, which results in damaging the main parts such as stirring shaft and so on.	do not click on the refrigeration icon when the cylinder is full of water.
11	when it is in material feeding program, the water in cylinder can not drain completely.	When it is in refrigeration program, it makes the noises. After refrigeration, ice cream is not puffed and may not drain out.	The water should be drained out completely. If ice cream can't drain out, it should be thawed until it can drain out. As the ice cream can drain out, you should click on refrigeration icon to make the ice cream frozen again. After you make several cups of ice cream, the material feeding program should stop.
12	when the cylinder is full of slurry, the machine enters into refrigeration program.	the puffing rate of ice cream is 0%, and the ice cream flows out from the gravity pipe.	you should pour 1.2L slurry and then install the gravity pipe with closed hole. After refrigeration, you can open the small, middle or large hole which depends on the selling speed.
13	do not disinfect the plugs, throat block, nuts and so on.	When it is in pasteurization program, the temperature of these parts can not be warming, which accelerates bacterial reproduction.	Use the disinfectant to sterilize.
14	do not clean the hopper lids thoroughly.	it accelerates bacterial reproduction.	After washing the lids, you should use the disinfectant to sterilize such as ethyl alcohol.
15	do not check and clean the sink.	You can not discover that the slurry leaks from transmission shaft, which leads to leaking inside the machine and costs much money on maintenance.	Check it every day and clean the sink. If the slurry leaks more than what the rules allowed, you should replace the circle gaskets in the cylinder.
16	do not wash the hands before you replace the gravity pipe.	this will pollute the parts which have been sterilized. And it also results in disqualification on Escherichia coli.	It is easier to be polluted by bacteria on gravity pipe. So, people who operate the machine must wash their hands thoroughly and sterilize by alcohol.

TROUBLESHOOTING GUIDE

Troubleshooting guide (1):

NO.	Trouble	Possible cause	Solution
1	The machine doesn't work and the screen displays error code" E8"	①Lack phase sequence. ②stirring shaft's negative direction rotation ③main circuit board doesn't work.	① check the power supply and wires ②、③replace the parts.
2	Stirring motor does not work normally and the screen displays error code" E2"	① low voltage ②main stirring motor does not work. ③main circuit board does not work. ④a . c . Contactor does not work. ⑤over-current relay does not work.	①improve the power supply ②replace the motor ③check the wires and plugs, or replace the circuit board. ④、⑤replace the parts
3	the compressor does not work properly.	①low voltage ②the compressor is broken. ③over-current relay does not work. ④main circuit board is broken.	①improve the power supply. ②replace the compressor ③replace the over-current relay. ④ check the wires and plugs, or replace the main circuit board.
4	the mixer does not run	①the motor of mixer is broken. ②main circuit board is broken. ③the mixer cover is broken.	Replace the parts.
5	stirring motor works continuously.	①the main circuit is broken.	Replace the parts.
6	ice cream is too soft and the machine keep working on refrigeration.	① the slurry is not enough in the cylinder. ② ice cream becomes soft ③ the plastic scrappers are damaged. ④ The room temperature is above 40°C. ⑤the space for exhaust is not enough ⑥leak refrigerant ⑦ the settings of hardness is incorrect. ⑧the temperature sensor is broken.	① pour more slurry into the hopper. ②unfreeze and pour some new slurry in the hopper , then refrigerate again ③replace the plastic scrappers ④ 、⑤ improve the location condition ⑥ repair the leak and fill in refrigerant according to the nameplate parameter. ⑦reset ⑧ replace the sensor of the cylinder and circuit board

● Troubleshooting guide (2):

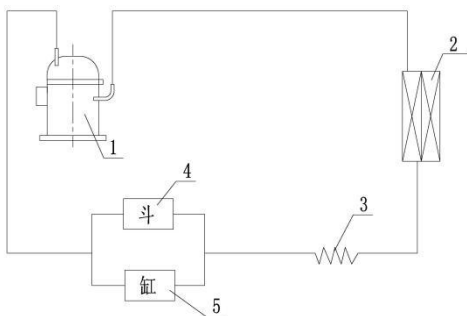
NO.	Trouble	Possible cause	Solution
1	the machine can not refrigerate	①leak refrigerant ②refrigerant is not enough. ③compressor is broken. ④ the sensors for cylinder and hopper are broken. ⑤Solenoid valve for cooling is broken. ⑥a . c . Contactor for compressor is broken. ⑦main circuit board is broken. ⑧sensor connector for cylinder and hopper is loose.	① repair the leak and fill in refrigerant according to the nameplate parameter. ②fill in moderate refrigerant ③~⑦replace the parts ⑧adjust the sensor connector
2	ice cream is not dispensed pull down the handle,	①lack of ice cream in the cylinder ②close the slurry intake of gravity pipe ③ ice cream slurry which has been used might block the hole of gravity pipe ④ice cream is too hard ⑤ the position to install the microswitch is incorrect. ⑥the microswitch is broken. ⑦a.c. Contactor of stirring motor is broken. ⑧the stirring motor is broken. ⑨main circuit board is broken.	① remove the gravity pipe, the slurry in the hopper feed into the cylinder ②open the slurry intake or remove the gravity pipe ③④ enter into thaw program first and then refrigeration program ⑤correct the installation position ⑥~⑨replace the parts
3	ice in the ice cream makes it look rough	①do not clear the residual water thoroughly during operation ②the plastic scrappers are damaged.	① make 5 to 6 cups of ice cream and pour the new slurry into hopper ②replace the parts
4	slurry freeze on the wall of hopper and the thickness is above 10mm.	①the sensor of hopper is broken after check. ② the plastic scrappers are damaged or forgot to install.	①、②replace the parts
5	the liquid level of slurry is above the level sensor, but the indicator	①the wires of level sensor is loose. ②the sensor is covered with dirt ③main circuit board is broken.	①confirm the wires connection ② the surface of sensor should be publishing or replaced. ③replace the parts

	light flickers		
6	leak slurry from the bearing of stirring shaft	①annual gasket is worn-out. ②the bearing is worn-out. ③the bearing sleeve is worn-out. ④sealing gasket is worn-out. ⑤fixing nuts of bearing are loose. ⑥main shaft and connecting shaft does not work on the same level.	①~④replace the parts ⑤tighten the nuts ⑥ Remove the gear reducer, main shaft and connecting shaft, and install them again.

Troubleshooting guide (3):

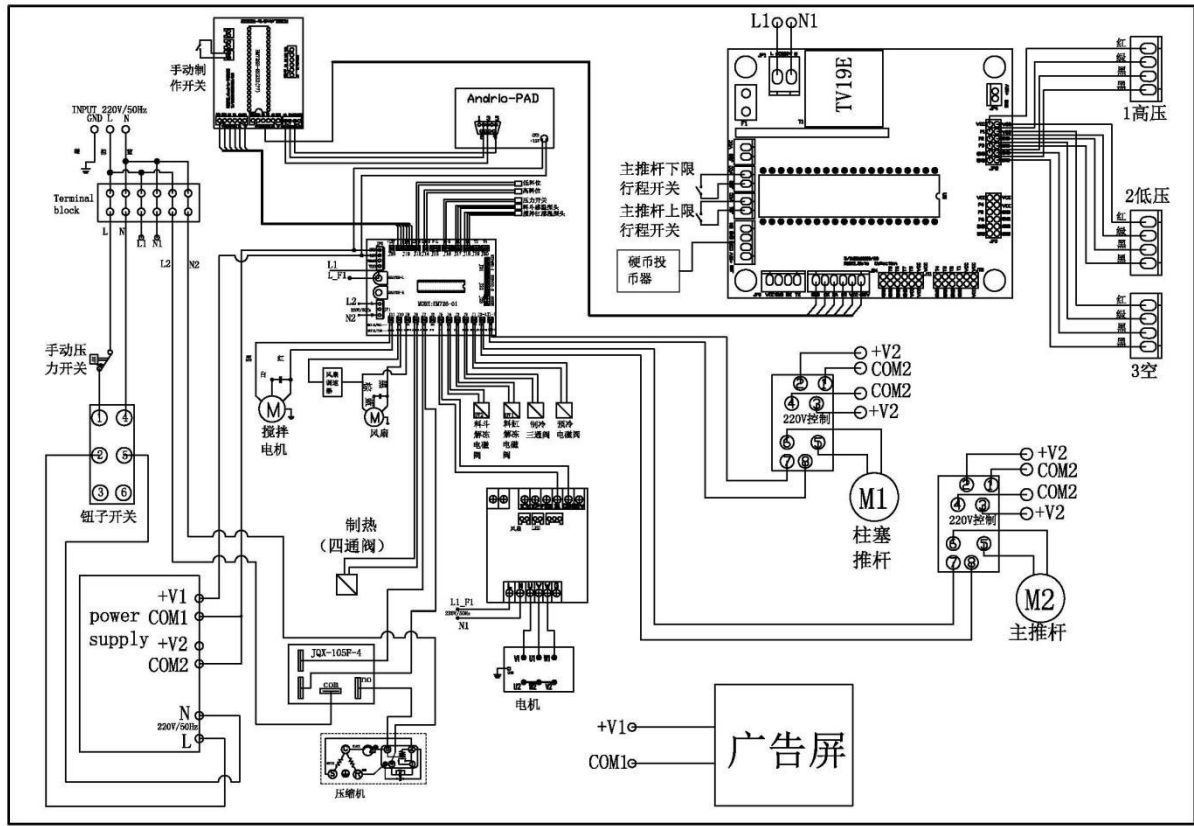
NO.	Trouble	Possible cause	Solution
1	leak slurry from throat block	①the nuts of throat block are loose. ②the installation of throat block is incorrect. ③O-gasket of throat block comes off ④O-gasket of throat block is worn-out.	①tighten the nuts ② tighten the two nuts on a diagonal ③ prevent the O-gasket from coming off during the throat block installation. ④replace the parts
2	the bearing sleeve can not be removed.	①do not use the lube. ②do not remove to clean during one-week cleaning	①use the lube ②clean
3	the stirring shaft can not be removed.	①stirring shaft and bearing sleeve are not on the same level.	①adjust the the position of stirring shaft and bearing sleeve.
4	abnormal sound	①lack of slurry in the cylinder ② the machine enter into refrigeration program when the water is full of water. ③the bearing sleeve is worn-out ④the plastic scappers are worn-out. ⑤the stirring shaft is broken. ⑥the pipes and plates resonate. ⑦some slurry flow into stirring motor.	①、②read the manual ③~⑤replace the parts ⑥correct the parts ⑦ clear the slurry in the motor or replace the motor.
5	odors	①scorched belt ②deteriorated slurry in the drain-pipe ③the slurry leaks from bearing and is rotted ④ because of slow cleaning, the slurry in hopper becomes deteriorated.	① replace the belt and adjust the tightness. ②clean the drain-pipe or replace ③clean the inside parts of machine and repair the bearing ④please see the manual above.

schematic diagram of refrigeration system



- 1、 compressor
- 2、 condenser
- 3、 throttling gear
- 4、 hopper
- 5、 cylinder

Circuit Diagram



SPARE PART REPLACEMENT

Spare parts	3 months	6 months	1 year
Lamina in air pump	•		
Sealing o-ring for side plug	•		
Sealing gasket for center plug	•		
Sealing gasket in the back of throat block	As needs		
Sealing gasket for transmission shaft	•		
Sealing gasket for cylinder	•		
Sealing o-ring for transmission shaft	•		
Sheath A for front scrapper (for stirring shaft)	•		
Sheath B for front scrapper (for stirring shaft)	•		
Plastic scrapper for stirring shaft	•		
Locating sleeve for stirring shaft	•		
Plastic axis sleeve	•		
Sealing gasket (13 style) for transmission shaft	•		
Sealing ring for inner pipe (for expansion tube)	•		
Sealing ring for outer pipe (for expansion tube)	•		
Sealing gasket for hopper lid	•		
Brushes		As needs	At least

The company reserves the right to the improvement of all models, subject to change, without notice!