DZ SERIES VACUUM PACKAGING MACHINE

OPERATE INSTRUCTION

Contents

For	eword/Description/Responsibilities…1	8. Failure Analysis and solutions
1.P	roduct instruction	1) Machine failure and solution28
1)	Application2	2)Vacuum pump failure & solution~29
2)	Product Features······2	3) Solenoid valve failure & solution-30
3)	Work Principle 2	4). Sealing problem and solutions ···· 30
4)	Product Model Name·····2	9. Equipment storage
5)	Main parameters ······3	1)short time storage·····30
2. S	afety	2)Long time storage······30
Rea	ady to use·····9	3) Start machine after storage31
1)	Safety precautions9	10.Warranty Card
2)	Use of the environment······· ··· 10	1) Guarantee and warranty card31
3.H	landling equipment	
1)	Equipped with carton packaging10	
2)	Equipped with wooden packaging ·····10	
4.Ir	nstallation	
1)	Installation condition11	
2)	Installation Environment12	
3)	Filling Oil12	
4)	Electrical connection ······13	
5)	Connection inflation system14	
6)	Connecting vacuum system·····15	
5.S	tart-up & Debugger	
1)	control panel······15	;
2)	Turn on the power16	5
3)	Check the pump motor rotation direction	n·····16
6.S	tandard operation and parameter setting	gs
1)	Standard operating procedures	······17
2)	Control program cycle description	······18
3)	parameter settings·····	······20
4)	Optimal parameters·····	······21
5)	Packaging liquid products	······22
6)	Best packaging·····	······22
7.N	Nachine maintenance	
1)	Standard maintenance schedules	······23
2)	Vacuum pump maintenance·····	······23
3)	Vacuum pump oil······	······26
4)	Replace high temp. tape, electric heating	g wire······26
5)	Replace silicone·····	······27
6)	Replace the seals	······28

Foreword

Thanks for you choose to buy DZ series vacuum packing machine! This manual contains the following:

- Product instruction
- Safety Precautions
- Handling and storage
- Installation and commissioning
- How to use
- Care and maintenance
- Troubleshooting
- Spare parts

This specification describes the installation and use of the product, including the following details: product handling, storage, installation, startup, operation conditions, maintenance

, Troubleshooting and maintenance.

Attention:

- Before using the product, please be sure to carefully read this manual and fully understand
- Ensure that the final use of the product or equipment operating personnel management with this specification
- Keep after reading this manual, and always place readily accessible place for easy reference.
- If you have any questions, please contact the manufacturer or supplier.

Responsibility

- This specification is carefully edited for any problem or misunderstanding among the consequences of the manufacturer does not assume any responsibility.
- Manufacturer is not responsible for any damage or problems not adopted the provisions of parts caused.
- The manufacturer reserves the right to modify parameters or accessories, without prior notice.
- Manufacturer All rights reserved. Without written permission is prohibited reproduction of any portion of this specification.

Terminology

- High temp. Tape: PTFE coated fabrics, has the characteristics of high temperature resistance and non-stick, usually called high temp. tape.
- Heating plate: a combination of aluminum (or heating plate), electric flat wire, high temp.tape and other parts made collectively heating plate

1- Product instruction

1). Application:

Vacuum packaging machine has excellent features, easy maintenance, simple operation, wide application and so on. Apply to the composite film or plastic composite film and other flexible packaging materials. Solid, liquid, powder mushy food, food, fruit, aromatic seeds, drugs, chemical products, electronic products, precision instruments products, rare and precious metals and other items vacuum packaging, the packaged product can prevent oxidation, mildew, insects, rotting, damp, sustainable prolong the shelf life of items.

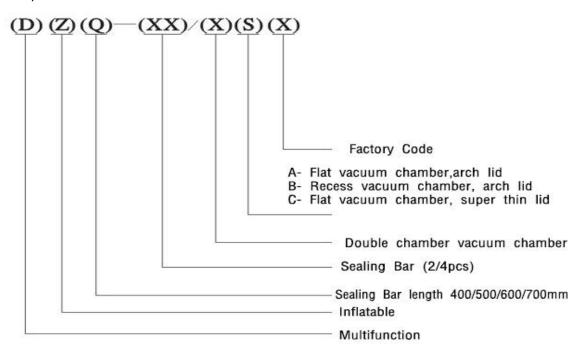
2). Product Features:

- The machine easy to use, from pressure the vacuum lid, vacuum or after filling evacuation (optional) gas, heat sealing, label printing, cooling and vacuum deflated to cover open, full automatic process control.
- Sealing temperature to be controlled by the adjustment time, a very wide range of different materials for a variety of bags
- With emergency stop button on the control panel, such as found in the packaging process is abnormal, press the emergency stop button to interrupt the packaging process.

3).Work Principle:

Put the bag into the vacuum chamber, pressure the vacuum chamber lid, start the machine, run the vacuum pump, between the vacuum chamber and the vacuum chamber lid form a sealed vacuum space. Evacuation is complete, if have the inflatable function, the first vacuum chamber is inflated. Then use a vacuum chamber with the outside atmospheric pressure, driven by the balloon is heated sealing plate against the spring force drops, the pinch sealing bag fitted with electric hot plate flat, coupled with the low voltage and high current electric make heating wire hot, sealing the bag, then cooled, the vacuum packaging process is completed

4). Product Model Name:



5). Main parameters



Model	DZ-260/PD
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	370W
Sealing power	200W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	1pcs
Chamber size (LXWXH)	390X285X50mm
Sealing length	260mm
Sealing width	10mm
Vacuum pump rate	14.4m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	500x340x360mm
Net weight	35kgs

Setting section:

- 1, connect voltage, power indicator light on, cycle display "

 on the panel, which indicates the standby state, then can set parameters.
- 2, Press "set" button, vacuum light on, enter into set parameters of vacuum, press the "+" "-" button. To select the vacuum time (range 0-9.9 seconds)
- 3, after finished set vacuum time, press the "Set" button and indicator light filled with nitrogen gas into nitrogen filling time setting mode, press "+" "-" button to select the nitrogen filling time (range 0-9.9 seconds), Note: Some models without nitrogen filling function but with a cutout feature, this setting my incision time. Most models are neither functional nor nicked with nitrogen function, this setting does not show,hidden suction set (work) into the seal after the completion of the set (work) status
- 4, after enter into sealing status, heat indicator light, press the "+" "-" to set the heating time (range 0-9.9 seconds) should be set to gradually increase the short to long heating time until get the perfect sealing effect.
- 5, heating time selected, press" set" button to setting, enter into the cooling time setting state, cooling indicator light, press the "+" "-" button to select the cooling time (range 0-9.9 seconds).
- 6, after the cooling time selected, press" set", then the panel display "ED", means the temperature setting state.
- 7. Press the temperature selection button and choose the appropriate temperature, the corresponding temperature indicator light (temperature high, medium and low block) press" set "button to setting. Meantime, all the settings have been completed, the power indicator light flashed, that enter the work status, can start work. Note: The parameter settings and machine work can't operate in same time, can not be setting when the machine work status, if want parameters to be adjusted, press the stop button (emergency stop button), the machine in standby mode, press the setting button, follow above steps to set the required parameters.







Model	DZ-400/2E
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	900W
Sealing power	500W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	420X435X70mm
Sealing length	400mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	540x490x950mm
Net weight	110kgs
Distance of sealing bar	340mm



Model	DZ-500/2E
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	1000W
Sealing power	750W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	525X525X70mm
Sealing length	500mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	650x575x960mm
Net weight	125kgs
Distance of sealing bar	425mm



Model	DZ-400/2E
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	900W
Sealing power	500W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	400X435X70mm
Sealing length	400mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	540x490x950mm
Net weight	110kgs
Distance of sealing bar	340mm

1, set the vacuum time: Press" SET" shown below;

Parameter setting; 1 vacuum time setting 2 cooling time setting 3 heating time setting

Press" ENVERLOP "(sealing selection) button display as follows;

Vacuum time setting; the current setting is: 40S, press ADD (increase) to increase, Press DEC (decrease) to reduce,

After modification press ENVERLOP (sealing selection) button to confirm save.

2, Heating time setting;

Press the SET, press ADD (increase) to add to the display as follows:

Parameter settings: ① vacuum time setting ② heating time setting ③ Cooling time setting: Press ENVERLOP (sealing selection) button is show below:

Heating time set, the current setting value; 10s, press ADD (increase) to increase, press DBL (reduction) to reduce, modify the finished press ENVERLOP (hot key) button to save.

3, Cooling time setting: Press SET, press ADD (increase) to add to the display as follows:

Parameter settings: ①vacuum time setting ②heating time setting ③cooling time setting: Press ENVERLOP (sealing selection) button display as follows: cooling time setting, the current setting value: 20s, press ADD (increase) to increase, press the DEL (reduction) to reduce, after completing press ENVERLOP (sealing selection) button to confirm save.

4, System language selection: Press SET , press ADD (increase) to add to the display as follows:

Parameter settings: ①vacuum time setting ②heating time setting ③cooling time setting ④system language selection: Press ENVERLOP (sealing selection) button show below:

1 Chinese, 2 English. Press ADD (increase) to increase, press the DEL (reduction) to

reduce, modify subsequent ENVERLOP (sealing selection) for save.

5, Rest factory settings: Press SET, press ADD (increase) to add to the display as follows: Parameter settings: ①vacuum time setting ②heating time setting ③cooling time setting ④system language selection⑤restore the factory settings, Press ENVERLOP (sealing selection) button show below:

Are you sure you want to restore the factory settings?if yes, then press "sure".if not, press ENVERLOP (sealing selection) button and press SET again to exit.

6, about the system: Press SET, press ADD (increase) to add to the display as follows:

Parameter settings: 4 language selection 5 Restore factory settings, 6 About

System: Press ENVERLOP (sealing selection) button confirm the display as follows: firmware version: V3.04, press ENVERLOP (sealing selection) button or SET to exit.



Model	DZ-600/2E
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	1000W
Sealing power	1000W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	630X630X100mm
Sealing length	600mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	760x690x980mm
Net weight	135kgs
Distance of sealing bar	530mm



Model	DZ-400/2SA
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	1000W
Sealing power	750W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	460X460X100mm
Sealing length	400mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1050x560x920mm
Net weight	180kgs
Distance of sealing bar	350mm



Model	DZ-400/2SB
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	1000W
Sealing power	750W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	460X460X100mm
Sealing length	400mm
Sealing width	10mm
Vacuum pump rate	20m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1050x560x920mm
Net weight	180kgs
Distance of sealing bar	400mm



Model	DZ-500/2SA
Voltage	AC 380V/50Hz 220V/50Hz
Motor power	2000W
Sealing power	1200W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	550X520X100mm
Sealing length	500mm
Sealing width	10mm
Vacuum pump rate	40m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1200x570x920mm
Net weight	230kgs
Distance of sealing bar	420mm



Model	DZ-500/2SB
Voltage	AC 380V/50Hz 220V/50Hz
Motor power	1500W
Sealing power	1200W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	540X420X40mm
Sealing length	500mm
Sealing width	10mm
Vacuum pump rate	40m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1250x650x950mm
Net weight	230kgs
Distance of sealing bar	440mm



Model	DZ-600/2SA
Voltage	AC 380V/50Hz 220V/50Hz
Motor power	2000W
Sealing power	1500W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	650X520X100mm
Sealing length	600mm
Sealing width	10mm
Vacuum pump rate	40m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1400x580x920mm
Net weight	285kgs
Distance of sealing bar	420mm



Model	DZ-600/2SB
Voltage	AC 380V/50Hz 220V/50Hz
Motor power	1500W
Sealing power	1500W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	670X540X40mm
Sealing length	600mm
Sealing width	10mm
Vacuum pump rate	40m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1450x650x980mm
Net weight	285kgs
Distance of sealing bar	440mm



Model	DZ-600/4SC
Voltage	AC 380V/50Hz 220V/50Hz
Motor power	2000W
Sealing power	2300W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	4pcs
Chamber size (LXWXH)	1450X830X80mm
Sealing length	600mm
Sealing width	10mm
Vacuum pump rate	100m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1450x830x850mm
Net weight	360kgs
Distance of sealing bar	280mm



Model	DZ-500/2E L:1040MM
Voltage	AC 220V/50Hz 110V/60Hz
Motor power	2000W
Sealing power	750W
Ultimate vacuum pressure	1KPa
Sealing Bars for each chamber	2pcs
Chamber size (LXWXH)	1000X520X170mm
Sealing length	500mm
Sealing width	10mm
Vacuum pump rate	40m³/h
Material for vacuum chamber	Stainless steel
Dimension (LXWXH)	1040x575x980mm
Net weight	230kgs
Distance of sealing bar	900mm

2.Safety

1). Ready to use:

This specification describes in detail the product handling, storage, installation, startup, operation conditions, maintenance, troubleshooting and maintenance and installation of the machine, it is recommended by a trained professional.

Make sure to follow the maintenance instructions

Before using the machine, make sure to read this manual and fully understand.

If you have any questions, please contact the manufacturer or supplier.

2). Safety precautions:

Make sure the machine using the power supply voltage, frequency, avoid errors. No matter three phase four-wire (AC380v/50Hz) or single-phase (AC220v/50Hz) power supply, yellow and green wire to ground protection, can not be removed.

Avoid power cord compression, pull, roll receivable power cord not allow use.

Do not use in corrosive, big powder place.

Do not arbitrarily replace parts on the machine.

Please keep the machine clean inside and outside, as well as the removal of the vacuum chamber adhesive material.

When the machine is not in use should be cut off the power.

Please change the vacuum pump oil.

Save them for future reference.

The product according to the latest technical and safety standards for manufacturing, if used improperly, may be dangerous or damage, safety precautions Keywords "Danger", "Warning", "Caution" notes.

E.g:



Danger! Ignore the major issues of this security will lead to serious or even fatal injury.



Warning! Ignore the major issues of this security will lead to serious or even fatal injury.



Be careful! This security will ignore the major issues cause personal injury or property damage.

3). Use of the environment:

This product is designed to run at room temperature, the indoor environment. If the harsh environmental conditions (such as ambient atmosphere is corrosive, ambient temperature is above 33° C or below 5° C), please contact the manufacturer or supplier.

This product is in operation, the vacuum pump oil can be separated to the maximum extent, but not complete separation.



Be careful! Harmful to health!

Excluded vacuum residual oil present in the gas there. Long-term inhalation of gases harmful to health Use of this product room must have good ventilation.

3. Handling equipment:

- 1). Equipped with carton packaging

 If the machine with the included expansion pad cartons:
- Remove the paper liner inside to start expansion

If the machine with a foam material carton packaging:

- Remove the foam material within the first from the carton.
- 2). Equipped with wooden packaging
 If the chassis is bolted to the wooden box:

Unscrew the fastening bolts and wooden products chassis.

If the lock on a wooden box with fixed chassis:

Remove the locking band





Be careful! Do not walk under lifting objects,

Note: Please use additional tape or sling system in place lifting machine, pay attention to the position of the center of gravity of the machine.

Make sure the sling safe and reliable system that is still in the machine.

It will be held on the hanger hook with safety locks.

stay and work.

Lifting crane.

Note: floor machines are fitted with casters, it can be driven on a flat ground.

Casters such as having a locking mechanism, loosen the caster before moving the machine locking mechanism.



CAUTION! Damage to the machine!

- 1 Tilt filled with oil vacuum pump will result in a large amount of oil into the pump chamber.
- (2) Start vacuum pump, if the pump cavity of excess oil, may damage the vacuum pump.
- (3) After vacuum oiling and can no longer handle.

Note: Before transporting the machine, make sure that the vacuum pump oil drained.

4.Installation

Before operation, please read this manual carefully. With this manual book, learn how to install, startup, maintenance and use of the machine. Machine problem because without reference to the specification and cause, the manufacturer will not be liable.

Manufacturers hope customer can buy use this long-term trouble-free after buy it. If you have any questions, please feel free to contact manufacturers and suppliers.

1).Installation condition



Be careful! Damage to the machine!

If the machine does not meet the prerequisites installed, it will damage the machine. Risk of injury!

Be sure to observe the machine installation prerequisites.

Make sure that the installation environment meets the basic regulations.

2).Installation environment

- Surroundings not have flammable, explosive gas.
- ullet Ambient temperature: 5-30 $^{\circ}$ C . If you need to operate the machine in any other environment, please contact the manufacturer or supplier.
- Environmental pressure: standard atmospheric pressure.
- Make sure the power environment meets the requirements (see the nameplate on the machine).
- Must keep moving or transporting the machine upright, tilt the machine may damage the vacuum pump.
- Make sure the machine horizontal position, which is one element of insecurity machine running.
- To ensure cooling, must be sufficient space around the machine can be well ventilated, preferably 10cm interval.
- Do not expose the machine to direct heat or steam in the vicinity of the device (such as a steamer or stove)
- Ensure there is enough time to change the fluid or replacement of wearing parts.

3). Filling Oil



Be careful! Damage to the machine!

New machine does not contain new vacuum pump oil.

Oil-free vacuum pump that is running in a short time can damage the vacuum pump Before the machine starts, it must determine the pump has been filled with oil.

Note: To prevent vacuum pump oil transit storage tank overflowed into the oil mist filter, vacuum pump must be free of oil transportation.



Be careful! Damage to the machine!

Injection vacuum pump oil from other locations may damage the vacuum pump. Vacuum pump oil should only filling hole injection.



Be careful! Scald!

When the pump working, the fuel tank filled with oil mist high temperature and pressure.

if filling hole open, there is risk of injury from hot oil mist.

Only the vacuum pump stops running, it can be rotated filler plug

The vacuum pump is running, you must tighten the oil filler plug.

Remove the rear cover.

- Use the correct size wrench to remove the oil filler plug.
- Inject the right amount of the right pump for oil, vacuum pump please refer to the "special vacuum pump oil" section.
- Ensure that the oil level mirror 1/2 to 2/3 to 3/4 between the oil level.
- Make sure the filler plug is installed in the ring and intact, be sure to replace if necessary.
- Good spin-filler plug
- Wait a few minutes.
- Check the oil level in the oil level between 1/2 to 3/4 of the mirror, if the oil level is less than 1/2 of the oil level glass, please refueling.
- If the oil level in the oil level between 1/2 to 3/4 of the mirror, install the machine cover.

4). Electrical connection





Danger! Click dangerous!

Make sure that your outlet has a protective ground wire.

Be careful! Power does not match the damage to the machine!

Please check the power parameters of the machine, refer to the machine nameplate.

Observe the accident prevention measures and safe handling guidelines promulgated by the State.

Power Ground

- Check whether the use of the power supply voltage and a predetermined voltage on the rating plate is consistent.
- When the electrical connections to the three-phase power supply, check the direction of rotation of the vacuum pump.
- Ensure that the machine is properly connected to a grounded outlet, in order to avoid fire or electric shock (yellow-green ground wire to wire)
- The cable must be able to move freely, to avoid the squeeze.
- Once the cable is damaged, replace it immediately.
- Machine fails or requires maintenance, do not turn off the power.
- If the machine is idle for a period of time, please put away power.

If you are using a single-phase power connector machine

- Plug the power cord with an accurate terminals of the machine (if have)
- Connect the other end of the power socket.

If you are using three-phase power machines

- The power supply is connected to the power supply box accurate.
- Connecting the ground wire.



CAUTION! Damage to the machine!

Pump motor rotation wrong direction, in a short time will damage the vacuum pump. Before starting machine, make sure that the pump rotation direction is correct.

For three-phase motor pump configuration

- Signage vacuum pump according to the direction of rotation determines the direction of rotation vacuum pump.
- Turn on the power switch, less press the vacuum lid, the vacuum pump motor (Refer to "Start" section).
- If possible, check the vacuum fan motor, determine the direction of rotation of the fan can be downwards.
- If you can not check the direction of rotation of the motor of the vacuum pump, carefully listen to the sound operation of the vacuum pump, vacuum operated in reverse will be issued a "buzzing" noise, and to check vacuum gauge, vacuum pump can not be operated in reverse vacuum.

If you need to change the direction of rotation of the vacuum pump:

Exchange three-phase power wire any two wire (three-phase motors)

5). Connection inflation system (for inflatable vacuum packaging machine)





Warning! Danger of explosion!

Do not use flammable or other oxygen-containing components of more than 20% of the gas mixture.

Otherwise there is a risk of explosion.



Be careful! Damage to the machine!

Origin shall not exceed one atmosphere pressure, otherwise it will damage the machine.

 Never use flammable or other mixed gas containing oxygen, otherwise there will be an explosion hazard. Missed this provision caused by an accident or damage, the manufacturer will not bear what responsibility.

- Air tank must be properly closed when no function or use inflatable machine is not used, you must turn off the main switch of tank.
- Pressure valve on the gas cylinder must set the value of not more than atmospheric pressure (0.1Mpa), otherwise it will damage the machine.
- Inflatable tubular threaded joint diameter machine is 8mm. Connector is located on the back of the machine or pulled noodles.

For cylinders used in case of doubt, please contact the manufacturer or supplier.

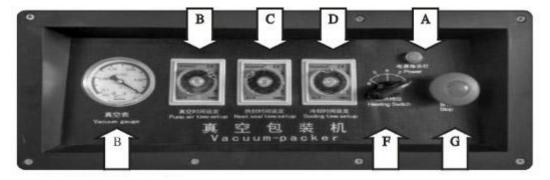
Note: If you make too many pneumatic vacuum of 0.06Mpa above, began sealing function, the sealing function may not be completed properly.

6). Connect the vacuum system (for external vacuum pump set)

- If you buy inside pump vacuum machine, you do not need to proceed with the operation.
- If you purchased an external vacuum type machine, before using the proper connecting pump.

5. Start-up & Debugger

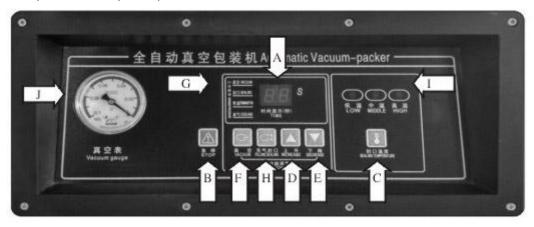
Control panel
 Button panel presentation



DZ series panel (without gas filled function)

No.	Name Description	
Α	Power indicator	shows the power status of the machine, it will be light on
		when machine connect voltage
В	Vacuum time Relays Used to set the time vacuum, range from 0-60 secon	
С	Sealing time relays Setting the sealing time, range of 0-6 seconds.	
D	Cooling time relays Setting the Cooling time, range of 0-6 seconds.	
E	Vacuum meter Show the vacuum chamber vacuum degree	
F	Sealing temp.adjust	Adjust sealing temperature.
G	Emergency switch	Press it machine stop work immediately

Computer board panel presentation



No.	Name	Description
		Display program running function status, decreasing the digital display.
		Display the selected machine parameter settings, a digital
Α	Display panel	display.
		Standby Display "_"
		Deflated display state " 🗆 🗆 "
		Program run is completed the display "Ed".
В	Emergency Stop	Press it machine stop work immediately,and turn to loose
	- 07	air function, vacuum cover auto jump up
С	Temp. adjust	Press 1time-low temp. Press 2time-medium temp.press3
	. ,	time-high temp. Press 4time- stop heat.
		Press the button once to adjust the parameters of the
D	Up adjust	selected function program increased by one unit.
		Press and hold the button does not release value at a rate
		of about 5 per second value increases.
		Press once, the parameters of the selected function
Е	Down adjust	program is reduced by one unit each.
		Press and hold the button does not release value at a rate
		of about 5 per second values decrease.
F	Vacuum time adj.	Press enter into vacuum time adjust,up and down buttons
G	Dunning indicator	to adjust the vacuum time in the range of (0-99) seconds. Indicator lights (red) when machine during the operating
G	Running indicator	Press enter into sealing time adjust, up and down buttons
Н	Sealing time adj.	to adjust the sealing time in the range of (0-6) seconds.
		When machine work, indicator light (red) when machine do
		sealing function.
1	Temp.light	When using the temperature selector button to select a
'	icinp.iigiit	value temperature, the corresponding temperature
		indicator light (red)
J	Temp. meter	shows the vacuum chamber pressure.
	Temp. meter	3110413 the racadin chamber pressure.



Be careful! scald!

Machine hot plate sealing surface temperature up to 200° C. Even after cooling, the surface still has a high temperature.



Harmful to health!

Vacuum resid exhaust gas there.

Long-term inhalation of gases harmful to health.

Use of this product room must have good ventilation.

6.Standard operation ¶meter setting





Be careful! Injured!

Please refer to this manual to operate the machine. Shall not remove necessary protection covers or housing.

- Do not place this machine for packaging that will be drawn during the vacuum in the vacuum or damaged product.
- If you operate the machine and function in doubt, when instructions not to provide relevant information, please contact the manufacturer or supplier.
- If the machine is not operating properly, or makes strange noises, immediately turn off the power, stop the machine and run it off.
- event of failure, please contact the manufacturer or supplier.
- 1). standard operating procedures
- Turn the power switch to turn on the machine, or machine power indicator light displays "-."
- it must be used in vacuum-packed bags, before use of packaging materials bags need to be sterilized.
- Put products into bag, select the appropriate product bag, do not choose too large relative to the product bag. Ensure hygienic conditions during operation. Packaging materials, products, and the hand is better in dry conditions.
- Place the bag into the vacuum chamber or plate on(if have). The bag opening must be put on a hot plate or silicone. If the product than the heating plate silicone or much lower, insert the pad provided by the random (if have), so you can make the operation easier and reduces cycle time.
- For inflation system, put the bag opening in the gas fill nuzzle.

- Many bag can be placed on a hot plate or silicone in once, just make sure heating plate silicone or longer than the bag. Bags can not be stacked with each other. If the machine has a more of heating plates or silicone, these heating plates or silicon strips can be used in same time.
- Set the correct machine parameters. Refer to "Control Panel" section.
- Pressure vacuum chamber lid, the machine will automatically complete all the set procedures, including evacuation, inflatable (if have), sealing and cooling. When the last bleed function is completed, the vacuum chamber lid opens automatically.
- After the cycle, the packaged product is removed from the machine.
- You can press the emergency stop button to stop the machine when completely necessary. After pressing the emergency stop button, the machine will stop all work performed bleed function immediately, vacuum chamber lid opens automatically.
- Like This cycle.

Note: If the machine power outage or other unexpected events occur during operation, then the vacuum chamber lid can not be automatically opened, the machine immediately after the re-energized to perform gas discharge function, the vacuum chamber lid opens automatically.

Note: If the machine location high altitude, atmospheric pressure decreases, the vacuum gauge indicated value will be reduced accordingly.

2).Control program cycle description

- Button version control panel procedure described
- computer board control panel procedure described

No.	Process	Description	
1	Close vacuum	Machine starts running	
	chamber lid		
2	Vacuum process	 Machine running, starting with vacuum function, the air out of the vacuum chamber. vacuum time relay "ON" indicator lights. vacuum meter pointer began to move slowly to the left. When the "UP" vacuum relay indicator lights, vacuum is complete. 	
3	Inflation process (if have)	 Once the vacuum function is completed, the gas filled function starts, to inflate the bag inflation time relay "ON" indicator lights. vacuum table pointer slowly moves to the right. When inflating time relay "UP" indicator lights, inflatable complete 	
4	Sealing Process	 Finished gas filled functions (if have), the sealing function will start running. Sealing time relay "ON" indicator lights. vacuum meter pointer remain intact. When sealing time relay "UP" light, cooling is completed. 	

5	Cooling process	 Sealing is finished, the cooling function will start running cooling time relay "ON" indicator lights. vacuum meter pointer remain intact. When the cooling time of the relay "UP" lights, complete cooling. 	
6	Deflation process	 Once cooling completed, deflation function starts, the atmosphere into the vacuum chamber reaches atmospheric pressure in line with the outside world, then the vacuum chamber lid will open their own. vacuum meter pointer to move sharply to the right. 	
7	Complete	 vacuum meter pointer back to the right to reach the 0, vacuum chamber lid open automatically. all the time relay indication light off. product has been packaged. 	
No.	Process	Description	
1	Close vacuum	Machine starts running	
	chamber lid	Work indicator light on	
2	Vacuum process	 Machine running, starting with vacuum function, the air out of the vacuum chamber. (Vacuum function)front indicator lights. Display:time reduce from setting time one second by one Vacuum meter pointer move to left slowly 	
3	Inflation process (if have)	 Once the vacuum function is completed, the gas filled function starts, to inflate the bag(if have) (Inflation function) front indicator lights. Display: the time reduce from setting time (max.9.9 second) by 0.1 second Vacuum meter pointer start move to right slowly 	
4	Sealing Process	 Finished gas filled functions (if have), the sealing function will start running. (Sealing)front indicator lights. Display:the time reduce from setting time (max.6 second)by 0.1second Vacuum meter pointer keep stable 	
5	Cooling process	 Sealing is finished, the cooling function will start running cooling (Cooling) front indicator lights. 	
6	Deflation process	 Once cooling completed, deflation function starts, the atmosphere into the vacuum chamber reaches atmospheric pressure in line with the outside world, then the vacuum chamber lid will open their own. Display: "□□" vacuum meter pointer quickly move to right 	

		•	vacuum meter pointer back to the right to reach the 0,
7	Complete		vacuum chamber lid open automatically.
'	Complete	•	Display show "Ed" work process finished
		•	product has been packaged.

Note: When the sealing process has just begun, vacuum gauge pointer may swing it, this is not a malfunction.



Be careful! Damage to the machine!

Parameter setting unreasonable may cause damage or shorten the life of the machine.

3). parameter settings

- parameter setting unreasonable may cause damage or shorten the life of the machine.
- parameter settings unreasonable may not complete all the correct procedures or proper seal.
- If you are the operations and functions of the machine have questions, please contact the manufacturer or supplier.

Note: only the machine stops running, can set the parameters.

For the use of computer board machine, if you did not complete the parameter settings pressure vacuum chamber lid, the machine is not running.

Relay panel parameter settings:

Time parameter settings:

DZ series (not available inflatable function) panel has three relay time relay can be adjusted, respectively, the vacuum time, sealing time, cooling time. Rotation time relay adjustment knob to the appropriate scale location.

Sealing voltage setting:

There are machines low, medium, or high sealing voltage options, respectively, for thinner or thicker vacuum bags. When sealing voltage set to "0" position, the machine will not be heated sealing.

computer board panel program settings:

No.	Sample	Operate	Display
1	Power on	Show "-" or "Ed"	Show "-" or "Ed"
2	. 1923/06 1925-062/198 1923/06 1923/06	Function is selected, the corresponding function lights (red). It is vacuum time, inflation time (if any), sealing time, cooling time.	Display the selected parameter setting functions.
3		Press once, the parameters of the selected function program to increase per unit of time. Press and hold the button does not release value at a rate of about 5 per	Display the selected parameter setting functions.

		second value increases.	
		Press the function selection button	
4	10000	one or more times, until all the	Display " " or "Ed"
4	(think)	features of all the lights go out, the	Display "-" or "Ed"
		machine will save the parameters.	

Each function parameter adjustment range:

Function name	Parameter range	Adjustment	Unit
Vacuum	0-99	1	Second
Inflatable	0-9.9	0.1	Second
Sealing	0-6	0.1	Second
Cooling	0-6	0.1	Second

Select temperature setting

No.	Sample	Operate Display	
1	Power on	Show "-" or "Ed" Show "-" or "Ed	
2	6.18	Press one time the display right indicator	Show "-" or "Ed"
	1000	show high-medium-low temperature	SHOW - OF EU
		When using the temperature selector	
	1141040	button to select a certain temperature, the	
3	(961800.00)	corresponding temperature indicator light	Show "-" or "Ed"
3	-	(red).	SHOW - OF EU
	(MCRIC INC)	If the high, medium and low three lights are	
		off, it will not be sealed.	

4). Optimal parameters

Vacuum time should be determined according to the number or size of the vacuum chamber and the volume of the material. usually, the vacuum function can be set at between 20 and 40 seconds. If the degree of vacuum does not reach the following 0.06Mpa began sealing, the sealing function may not be completed properly.

- special packaging for the product may be appropriate to extend the vacuum time. For example, a relatively high moisture content of the packaging, and other liquids.
- inflatable function (if have) parameters to be set according to the actual situation.
- If the inflatable too much, vacuum lid opens automatically, the program will automatically terminate.
- If Inflatable excessive vacuum reaches 0.06Mpa above began sealing, the sealing function may not be completed properly.
- sealing function parameters can be set between 1-3 seconds.
- If the bags are exceptionally thick or very thin, the temperature can be adjusted to select high-grade or low-grade.
- Note: If the sealing time parameter is too long, the temperature of the heating plate will be a sharp rise, which will greatly shorten the heating plate and silicone life.
- sealing function parameters have a great impact on the sealing quality, need to slowly adjust from low to high.
- cooling function parameters according to the thickness of the case of the bag

disposed between 1-3 seconds.

- 5). for packaging liquid products
- machine for packaging liquid products, such as soups, sauces, etc., when the packaging of such products, pay attention to prevent spillage.
- liquid will arrive when the temperature reaches a certain value or low pressure boiling point, the temperature of the liquid product in high vacuum packaging will soon reach boiling point, and thus the degree of vacuum may be lower.
- Before we recommend to cool the liquid packaging products to ensure the best vacuum effect of the product.

6.the best packaging

- use the correct style, good quality vacuum bag.
- pocket to leave enough space at least 30mm.
- flat vacuum bag placed on a hot plate or silicone.
- If the product is lower than the heating plate or silicone lot, to the vacuum chamber in the correct number pad (if have).

7. Machine maintenance



maintenance.



Warning! Risk of electric shock!

You must be completely disconnected from the mains before machine

To prolong the life of the machine, the prevention of failure to achieve the best packaging effect, the machine's daily maintenance is necessary, if the machine is more frequent use (more than 4 hours per day), it is recommended every six months to maintain a professional, not a day more than four hours, then once a year full maintenance (depending on the location, the environment and on the product).

- Machine must be completely disconnected power before Maintenance, the power plug is removed from the wall-mounted socket.
- If the machine is not operating properly or emit a lot of strange noises, turn off the power immediately and contact the manufacturer or supplier.
- Do not carry out high-pressure cleaning. High pressure cleaning machine can severely damage electronic devices and other parts.
- Do not allow water to enter the vacuum chamber of the vacuum pump exhaust nozzle or vent, otherwise would cause irreparable damage to the vacuum pump.
- non-professionals can not carry out large-scale maintenance.
- must be maintained when moving or transporting the machine upright state level, tilt the machine may damage the vacuum pump.
- summer or daily work continuously for more than 10 hours to respond to a vacuum pump to take measures such as air or water.
- If you do not follow the instruction manual machine maintenance resulting in malfunction or damage, the manufacturer assumes no responsibility.

1).standard maintenance of the Periodic Table

Cycle time	Maintain the content	
Day	 With a damp cloth to clean the vacuum chamber, vacuum chamber lid and chassis per day, it is possible to remove the foreign matter adhered to the heating plate. The cut material using a high pressure cleaner. 	
Week	 Check the vacuum pump oil level and oil, such as oil or insufficient fuel or oil change should deteriorate. Check the heating plate is damaged, once the sealing quality deterioration or linoleum / electric flat yarn no longer stick to the hot plate, please replace the high temp. tape / electric heating wire Check the pump cover ring, ring once damaged or stretched, please change. 	
6 month	 Check the pump filter is saturated, if saturated, replace the filter. At least once every six months to change the vacuum pump oil. 	
Year	 Replace every sealing balloons or cylinders. 	

- 2). vacuum pump maintenance (hereinafter are XDZ-020 rotary vane vacuum pump, for example)
- pump routine maintenance to ensure proper operation and extend the service life is very important.
- If the machine is frequently used, it is recommended at least once a year to pump comprehensive inspection. If you have questions or suggestions, please contact the manufacturer or supplier.

Fuel / oil change



Be careful! polluted environment!

Used oil should be handled in accordance with environmental regulations.



Be careful! scald!

Pump run time, the surface temperature up to 70° C.

Do not touch the operation of the vacuum pump, if necessary, stop the machine running, allowed to cool

Wear heat-protective gloves.

- New machine does not contain vacuum pump oil, if the machine is first used, must refuel.
- Check the vacuum pump oil Color

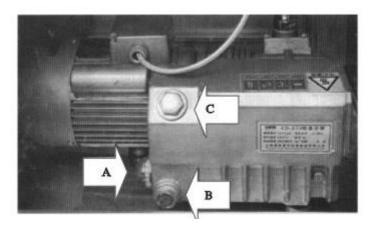
Vacuum pump oil should be bright, clear, cloudy or not there is a bubble, the oil still has not disappeared precipitated white substance described oils contain foreign material, must be replaced vacuum pump oils contain foreign substances or blackened.

• life of vacuum pump oil

Vacuum pump oil service life depends on the work environment, extracting clean, dry gas, generally every 500 operating hours or every six months to be replaced once the vacuum pump oil.

- Check at least once a week the oil level and oil. Can be viewed via the oil level glass, the oil level is too low need to refuel.
- replacing vacuum pump oil at the same time, we recommend also to replace the vacuum pump oil mist filter.

Before oil change, please let the pump run a few minutes, the pump and the oil will reach the right temperature, so that the oil can better absorb moisture and impurities and filtered. High temperature allows the pump in the moisture to evaporate, reduce the chances of rust arise.



A: Oil mirror place

B: put oil place

C: filling hole

Take out Oil:

- Open the chassis cover.
- Put the tank or tray in bottom of "B"
- Take the oil drain plug with the proper size wrench.
- Put out oil
- After take out oil, put the drain plug back.
- Used oil should be handled in accordance with environmental regulations.

Note: When you unscrew the oil drain plug, the oil flows out through the drain hole (below must put a oil pan).

After the oil is done and, if possible, the vacuum pump is inclined slightly exhausted all residual oil.

Fill oil:



Be careful! Damage to the machine!

The correct type of oil and fuel is very important for the vacuum pump.

Using the wrong vacuum pump oil or adding too much oil will damage the pump.

- New machine must fill oil.
- when the oil level low or take out old oil need to fill the oil
- Must use the correct size wrench to remove the filler plug.
- Injected about the right amount of the right pump for oil, vacuum pump oil, refer to specific "dedicated vacuum pump oil" section.
- Ensure that the oil level in the oil level between 1/2 to 3/4 of the mirror.
- Make sure the filler plug is installed in the ring and in good condition, be sure to replace if necessary.
- spin good filler plug.
- Wait a few minutes.
- Check the oil level in the oil level between 1/2 to 3/4 of the mirror, if the oil level is less than 1/2 of the oil level glass, please refueling.
- If the oil level in the oil level between 1/2 to 3/4 of the mirror, install the machine cover.
- Check the oil level every week, if the oil level is less than 1/2 of the oil level glass, please right amount of fuel.

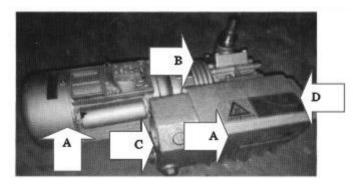
Replace the filter



Be careful! polluted environment

Contaminated filters must be handled separately from other waste in accordance with applicable regulations.

There is a vacuum pump or more filters for absorbing and filtering oil mist, after a period of time, the filter becomes wet (saturated), need to be replaced once the filter is saturated, the machine will not reach maximum vacuum degree.



A: Three-phase motor

B: Pump

C: Oil tank

D: Mist filter

When changing vacuum pump suggest to replacement mist filter too

• Mist filter normal maintenance cycle in 6-12 months.

Replacing the mist filter:

- Open the casing back cover, find a vacuum pump.
- Unscrew the four screws on the filter cover, remove the filter cover and the spring.
- removed the old oil mist filter, replaced with a new oil mist filter.
- Replace the spring and the filter cover.
- The housing cover back onto the chassis.
- Mist filter should be discarded in accordance with environmental regulations.

3). Vacuum pump oil

Operating temperature of the machine for the selection of the type of oil is very important. The following table shows the relationship between ambient temperature, fuel and oil types.

Here you can select several standard types of oil brands: Shell ICP (Vitrea), Great Wall special vacuum pump oil.

Vacuum pump oil	VM32	VM68	VM100	
Viscosity grade ISO-VG	32	68	100	
Temperature (°C)	<5 5-20 12-30			
The amount of (L)	Reference pumps Instructions			

Note: For low ambient temperatures, the vacuum pump oil use at high temperatures, will lead to increased pump vanes and pump wear affect pump life.

Note: If the machine is not used under normal ambient temperatures, please contact the manufacturer or supplier.

4). Replace the high temp. tape, electric heating wire





Be careful! scald!

Machine heating plate at a surface temperature of heating up to 200 $\,^{\circ}$ C. Even after cooling, the surface may still have a high temperature.

Sealing quality is good or bad to some extent depends on the heating plate and silicone maintenance situation.

The main routine maintenance work: Use a damp cloth on a hot plate and silicone daily cleaning every week and check the heating plate silicone, if the heating plate side is uneven or poor sealing quality, please change the electric flat, cloth or silicone.

Heating plate structure

- heating plate linoleum, electric heating wire average maintenance cycle is at least once every 3 months. (Premise: the machine is routine use of a standard vacuum packaging materials, packaging and standard products.)
- Replace cloth or electric heating wire:
- Pull heating plate fixing pins, remove the heating plate assembly.
- folded down linoleum plate.
- Remove the cloth heating panel.
- If you only need to replace the cloth, Wipe the heating plate with a clean oil by then, the new linoleum glued to the heating plate.
- Loosen the locking screw heating plate fixed on the block.
- out of the heated strip gasket.
- extraction electric heating wire.
- epoxy ring ends the same way removed.
- Remove the old electric heating wire following PTFE strips.
- wipe grease on a hot plate with a clean cloth.
- The new PTFE strips glued on a hot plate.
- cut a new piece of electric flat, longer than the length of the heating plate plus length of about 15cm.
- The flat wire end through electric heating plate fixed block slot, plug back on the heating strip gasket, and then tighten the locking screw.
- Connect the other end of the flat wire from the electric heating plate fixed block is located on the other side of the groove lira.
- Using forceps tension electric flat, while the plug back on the heating strip gasket and tighten the screws, tighten the screws to ensure that the former electric heating wire
- Tensioning and straightening
- The excess copper flat wire electric block removed.
- Cut a new piece of cloth, flat stick on a new electric heating wire. Ensure cloth attached to a flat heating plate without wrinkles.
- Replacing the cloth plate,
- The heating plate back into the machine.

5).the replacement of silicone

Must be checked once every week for wear or damage silicone, silicone once becomes uneven, to be replaced immediately silicone.

- Average maintenance cycle for silicone at least once every six months.
- Silicone silicone is stuck in the seat, you can unscrew the four screws directly withdrawn after the pressure of the support plate.
- Release the pressure of the support plate screws and remove the pressure of the support plate.

- The old silicone withdrawn from the silicone base.
- Cut a length as the old silicone new silicone, to ensure consistent size.
- The new silicone loaded silicone base, and attach the batten support plate.
- Silicone must be completely flat on the silicone in the seat. After the silicone is smooth in place is very important, there is not tension phenomenon.

Description: silicone rubber textured side of the plane. But the other side is textured with a fixed hole. Printing particles can be installed for printing labels. Select the desired side of silicone use.

6), Replace the seals

Seal ring is to seal the vacuum chamber is maintained sealed during operation, this machine can achieve the degree of vacuum is important. Due to different pressures, seals wear out and must be replaced regularly.

Check the seals at least once a week to see if there is wear or damage.

- The average maintenance cycle of the sealing ring at least once every six months.
- Seal is stuck in the vacuum chamber lid tank may be made directly out. Please ring the length of the new measure under the old seal strip, too long or too short can cause the lid can not be closed or leak.
- The new seal into the vacuum chamber lid groove.
- Ring should be placed flat, no tension phenomenon, the end must be cut straight, compact when packed to prevent leakage.

8. Failure Analysis and solutions

1). Machine failure and solutions

Problem status	Caused by reason	Solutions	
Machine not work,	No connect voltage	Power on	
control panel not	Mainly circuit fuse broken	Replacement right size fuse	
show information	Power switch touch point loose	Check-fixed-or replacement	
	Vacuum chamber inside limited	Adjust or replacement new	
Control panel	switch position not right or broken	limited switch	
start,machine not	Setting parameter	Finished parameter setting	
work	Machine inside problem	Contact manufacture or supplier	
Vacuum cover can't automatic open	Pneumatic spring or pull spring problem	Check-fixed-or replacement	
	Pump running wrong direction	Correct the direction(3 phase voltage)	
Can't reach limited	Vacuum time setting short	Extend vacuum time	
vacuum degree,machine vacuum speed	Vacuum pump oil not enough or oil not clean	Check oil level,fill oil or replacement oil(notice oil type and oil volume)	
slow	Tube leak	Replacement	
	Tube connected place loose	Checking and tighten	
	Gas bag or cylinder leak	Checking and tighten	

	Leak air air seal wearing	Replacement seal		
	Mist filter saturation	Replacement mist filter		
Can't sealing or sealing not good	Bag not put in the heating plate well	Put the bag in right place		
	Sealing time too long or too short	Reduce or extend sealing time		
	Heating time choose not right	Choose suitable heating time		
	Silicon strip broken or dirty	Cleaning or replacement		
	High temp. Tape broken or dirty	Cleaning or replacement		
	Bag inside not clean	Cleaning bag		
Can't fill air or fill	Filling air time too short or too	Reduce or extend filling air		
	long	time		
	Air tank empty or limited to empty	Replacement air tank		
air not good	Air tank not open	Open air tank		
(if have)	Filling air parameter setting wrong	Check pressure meter if in 0.1MPa(1-ATO) Warning! Mixed air any time can't more than 0.1MPa		
Vacuum chamber	Heating plate reset position not			
vacuum degree is	good.	Adjust reset,flexible		
normal, but still	Heating plate and silicone strip	Adjust distance.		
have air in bag	distance too big or too small			

2.) Vacuum pump problem and solutions

Problem status	Caused by reason	Solutions	
Pump start electric	Pump oil too full or oil type not	Checking oil type and oil	
	right	level	
current or work electric current	At low temperatures, the viscosity	Replacement suitable	
overloading	of oil is too high	vacuum pump oil	
Overloading	Exhaust filter stuck	Clean or replace the filter	
Dumn tomporature	Pump oil full or less	check and adjust the oil level	
Pump temperature	Padiating not good	clean bad fins, improved	
high when running	Radiating not good	ventilation environment	
	Transmission parts badly worn or	identify defective parts	
Abnormal noise	loose	repaired in time	
pump operation	running in the wrong direction	Correct direction	
	running in the wrong direction	(three-phase power)	
	Pump too much oil	Take out more oil	
Smoke or exhaust	Exhaust filter install not in	Install again or replacement	
vents droplets	position or broken	motan again of replacement	
	Exhaust filter stuck	Cleaning or replacement	

3).the solenoid valve Troubles

Problem status	Caused by reason	Solutions	
Seal defective	sealing area is soiled	Clear	
	Sealing surface damage	repair or replacement	
	Sealing rubber damaged	Replacement	
Solenoid valve can not open and close or open and close inflexible	Control fuse burn broken	Replacement	
	Connect wire not well	Repair	
	Rectifier diode breakdown	Replacement	
	coil burned	Replacement	
	Armature lift dirt	Replacement	
	Spring Rusty stuck or broken	Replacement	
	low voltage	Check the power supply	

4). Sealing problem and solutions

Problem status	Caused by reason	Solutions	
	Saaling time not choose	Choose suitable sealing	
	Sealing time not choose	temp.	
	Sealing time too long or too short	Short sealing time or extend	
	Vacuum degree not reach and	Checking vacuum degree	
Can't coaling	start sealing	can't more than 0.06Mpa	
Can't sealing	Heating wire damaged	Replacement	
	Heating transformer damaged	Replacement	
	Sealing contactor fault	Repair or replacement	
	Sealing solenoid valve failure	Repair or replacement	
	Heat seal stuck	Repair	
	Silicone strip broken or dirty	Clean or replacement	
Sealing not well	High temp. Tape broken or dirty	Clean or replacement	
	Bag inside not clean	Clean bag inside	
	Heating wire loose	Tighten it	
	Cooling time too short	Extend it	
	Temperature choose not right	Setting suitable temp.	

9. Equipment storage

- 1, short time storage
- → Turn off the power switch, unplug the power cord away.
- ♦ Pressure vacuum cover.
- ♦ If possible, put a plastic bag and dust.
- ♦ Store in a dry, dust-free, shock-proof room.
- 2. Long time storage

Machine at the factory, the interior has been done anti-corrosion treatment, eliminates the need for protection of oil for processing. If bad storage conditions (such as atmospheric corrosive environments, high temperature or frequent temperature changes), available protective oil treatment. If you have any questions, please contact the manufacturer or supplier.

→ Turn off the power switch, unplug the power cord away.

- ♦ Close the lid of the vacuum chamber.
- ♦ Put a plastic bag and dust.
- ♦ If possible, keep the original packaging.
- ♦ If you need transportation, vacuum pump oil must be drained.
- ♦ Store in a dry, dust-free, shock-proof room.
- 3. Start machine after storage
 In accordance with this specification, "Installation", "start" section operate.

10. Warranty Card

- 1). From the date of our company's machine sold, according to state regulations, guarantee bellow:
- 1) after user buy the machine, you must read the manual, to operate.
- 2)the warranty period: mechanical parts warranty for one year. Electrical components warranty for six months.
- 3)in the warranty period, users do not follow the instruction manual for proper operation, use, maintenance or privately removable parts warranty does not cause damage to the list. But the company is still to repair, at its own expense by the user.
- 2).after user buy machine, please check invoice and warranty card for machine number if same, if not same, please contact to manufacture or supplier for correct it 3.the user please take good care of the purchase invoice and warranty card, not make it lost, unauthorized alteration invalid. Please present a valid warranty card and purchase invoice maintenance.

User/com	pany Name				
Address					
TEL				FAX	
Post code				Contact person	
Distributo	or				
Model		Series No.			
Purchase	date			Invoice date	
	Date	Maintenance fault	М	aintenance status	Maintenance worker
3					
lain:					
Maintenance records					
nce					
recc					
ords					

NOTE: The warranty card must have a stamp by sell company/manufacture/distributor.