



合格证编号:
CERTIFICATE No:

产品合格证

CERTIFICATE

Q/SZ0610-01 (Table 13)

Product name: **XD 系列单级多旋片真空泵**

Product name: XD Series Single-stage Multi Rotary Vane Vacuum Pump

Product number:

XD-010	☐	XD-020	☐	XD-040	☐
XD-063	☐	XD-100	☐	XD-160	☐
XD-202	☐	XD-250	☐	XD-302	☐

Machine number: _____

Production date: 20____Year (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

(11) (12) month

Inspector: _____

Inspection Supervisor: _____

上海真空泵厂

Ltd.

Warm Reminder: Please paste the pump purchase invoice or copy of the invoice on the back of the back cover to avoid losing it. This will facilitate your consultation or repair.

Safety Warning

Respected User:

1. The safety mentioned here refers to: personal, equipment, and environmental safety during the installation, use, care, maintenance, and repair of this product.
2. The power supply to the pump must be cut off during installation, maintenance and repair.
3. The power supply used by this product, unless otherwise specified, is three-phase, 50HZ, 380v and single-phase, 50HZ, 220v. Therefore, when installing and connecting the power supply, please check the marking on the motor nameplate. If you need to use a 60HZ power supply, please make a request when ordering.
4. Our products are designed and manufactured in a three-phase four-wire system in accordance with relevant national regulations. It is recommended that you ground the shell of the equipment separately when installing the equipment to ensure safety.
5. The vacuum pump can only evacuate closed containers, so please pay attention to the position of the inlet and exhaust ports when installing, and do not connect them reversely.
6. Conventional vacuum pump products are not suitable for pumping out flammable, explosive and corrosive gases. If your process requires this, please make a request when ordering.
7. The vacuum pump products in this manual are not suitable for extracting gases containing dust, particles and large amounts of water vapor. If necessary, filtering and other processing must be performed in front of the air inlet of the pump, otherwise serious consequences will occur. If your process requires this, please inform our company when ordering, and we will configure suitable products for you.
8. When installing and using, be careful not to have any facilities or behaviors that restrict the exhaust of the vacuum pump.
9. Note that ZJ and ZJB Roots pumps cannot be used alone and must be equipped with a backing pump. Our technical personnel will design and configure them for you. Improper configuration may cause damage to the pump (other pump models can be used alone).
10. The gas discharged by the vacuum pump is the gas required to be extracted by your production process. If the gas extracted may pollute the environment, please consider adding a processing device for the discharged gas. It is also not allowed to discharge the gas directly into a closed room or in unventilated buildings. The gas you emit must comply with relevant national or local regulations and standards.
11. For vacuum pump units equipped with a backing pump, it is strictly prohibited to continue

running the main pump after the backing pump is stopped. It is also strictly prohibited to start the main pump before the backing pump is started.

12. It is strictly forbidden to touch the heating surface of the vacuum pump during operation.
13. If your vacuum pump stops running for more than two weeks after being used for a period of time, please do the following maintenance before stopping use:
 - Drain processing gases and liquids from the pump;
 - Clean the inner cavity of the pump with antiseptic;
 - Empty and dry it again to prevent the pump cavity from freezing and rusting when the temperature drops, and cut off the power supply.

Please note the following before starting the machine: You must turn the pump by hand before turning on the power.

14. When the new pump you purchase cannot be installed and put into use immediately within three months, you must turn the pump by hand before starting it. Pay attention to the direction of the motor before turning on the power.

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上海真空泵厂有限公司

SHANGHAI VACUUM PUMP WORKS CO., LTD

上海上真真空设备销售有限公司

SHANGHAI VACUUM EQUIPMENT SALES CO., LTD

地址：上海市青浦区外青松公路 3516 号

Address: NO.3516, Waiqingsong Road, Qingpu District, Shanghai, China

生产基地：浙江省湖州市泗安工业园区

Production Base : Si'an Industrial Park, Huzhou City, Zhejiang Province, China

总机：+086-021-59745974

Tel: +086-021-59745974

传真：4006251818-9978

Fax: 4006251818-9978

邮编：201709

Postal Code: 201709

电子邮箱：shzkbc@shzkbc.com

E-mail: shzkbc@shzkbc.com

公司网址：www.shzkbc.com

Official Website: www.shzkbc.com

Preface

This instruction manual is only applicable to the single vacuum pump and does not apply to the composite technology of the vacuum pump unit. However, this instruction manual is still applicable to the single pump on the vacuum pump unit.

Our company was founded in 1934 and is the birthplace of China's first vacuum pump. It is our company's consistent philosophy to provide users with high-quality products and strive to provide you with customer service for the entire service life of the product. The full-service life includes making you understand the working principle of the vacuum pump, the correct installation method of the equipment, the operation process of maintenance, equipment operation training, etc. It also includes providing you with vacuum technology solutions to relieve you of possible problems caused by being unfamiliar with the use of vacuum pumps and vacuum technology. Please be sure to read this instruction manual carefully.

In addition to keep maintaining product quality, our company also pays attention to technological innovation. The structure and appearance of our several products have obtained national patents. Due to the time point in the preparation of this manual, if there is any discrepancy between the product shape, product structure and this instruction manual, we will modify it in future reprints. Thanks for your understanding.

I. Structural Principles and Scope of Application

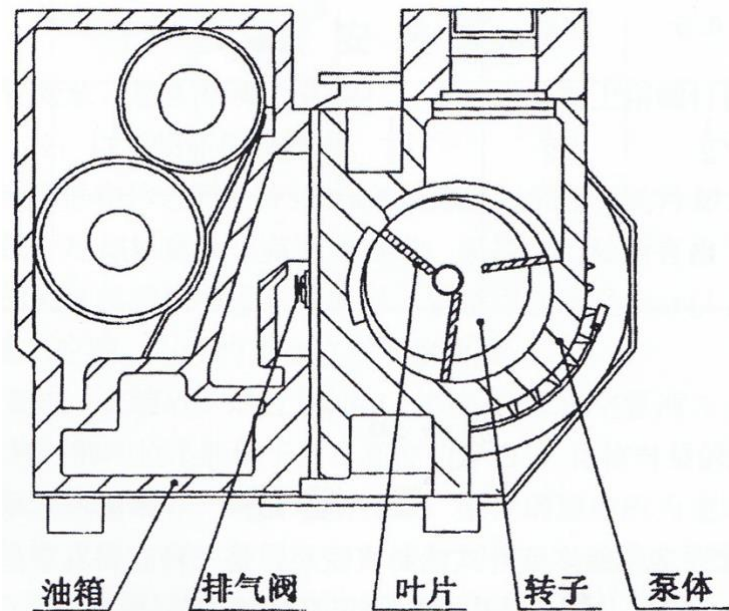
1. Structural Principles

XD series vacuum pump is a single-stage multi-rotary vane oil-sealed vacuum pump. Its rotor is designed eccentrically in the pump body and is tangent to the inner surface of the pump cavity. There are three rotary vanes designed in the rotor slot that can slide radially. The centrifugal force when the rotor rotates causes the rotor vanes to contact the pump cavity. The inner walls of the pump are always in contact, and the rotary vane divides the pump chamber into three working chambers whose volumes can be changed periodically. The periodic changes in the volume of the working chamber allow the pump to complete the work process of suction and exhaust, thereby extracting the working medium in the container until the ultimate pressure of the vacuum pump is reached.

This series of vacuum pumps has the following features:

- i. Direct power transmission, compact structure and light weight.
- ii. Air cooling, no water required, flexible and convenient use.

- iii. Simple operation, low use and maintenance costs.
- iv. The multi-rotor structure enables smooth operation, low noise and small vibration.
- v. It has been equipped with an oil and gas separator, which can effectively eliminate the tiny oil mist in the exhaust gas.
- vi. Designed with an automatic oil circulation system so that there is no need to add oil frequently.
- vii. It is designed with an automatic suction valve. When the pump stops working, the suction valve automatically isolates the pump from the pumped system, which can effectively prevent pump oil from returning to the pumped system.
- viii. The pumping efficiency is high, and the pumping rate is still high when the inlet pressure is close to the ultimate pressure.
- ix. It can work within a wide inlet pressure range of 105-102 Pa.



From left to right: Oil Tank, Exhaust Valve, Blade, Rotor, Pump Body

2. Scope of Application

This model of vacuum pump is suitable for vacuum packaging, vacuum forming, and vacuum suction. It plays a major role in material transportation and material handling.

It cannot be used in dusty, corrosive, high-oxygen, flammable, explosive, or toxic gas environments. If you need to work under a higher inlet pressure for a continuous long time, please mention such condition when placing your order.

II. Main Technical Performance and Specifications

Model Index	XD-010	XD-020	XD-040	XD-063	XD-100	XD-160	XD-250	XD-302
Pumping rate (m³/h)	10	20	40	63	100	160	250	300
Ultimate pressure (Pa)	2×10 ²							50
Noise (dB)	71	74	77		80	84	87	87
Motor power (kw)	0.37	0.75	1.1	1.5	3	4	7.5	
Motor speed (r/min)	1400	2800	1420		1440			
Oil consumption (L)	0.5		1	2		6	9	
Net weight (kg)	16	19	60	62	75	145	200	230

Note: Recommended oil brand: "Shangzhen" No. 1 vacuum pump oil (N100 vacuum pump oil).

III. Installation Instructions

1. After unpacking, please check the contents of the box according to the "Packing List" and check the appearance of the pump to avoid possible damage during the transportation.
2. Please be sure to remove the protective packaging at the inlet and exhaust ports during installation.
3. The pump should be installed in a dry, ventilated and clean place, and a space of more than 300mm should be maintained between walls or other objects during installation. From delivery to use, the pump should be stored in the specified place (dry, clean, vibration-free room). If the storage time exceeds four years or the pump has not been stored in the specified place for more than two years, the bearings need to be cleaned before being put into use (to prevent the lubricant from drying out and failing) and add lubricant.
4. The pump and motor should be installed horizontally on the foundation. If the pump feet have mounting bolt holes, they should be fixed with anchor bolts. After tightening the anchor bolts, the level of the pump and motor must be rechecked to avoid tilting due to uneven floors.

Note: After the horizontal re-inspection, turn the belt by hand to check whether the pump rotates flexibly.

5. All connecting pipes must be free of leaks and must be cleaned first. There must be no foreign matter such as iron filings, rust, welding slag, dust, etc. Therefore, it is recommended to install a fine mesh filter in the air intake pipe.
6. The diameter of the pipe connecting the pumped container should be greater than or equal to the diameter of the air inlet of the pump, and the installation distance and number of elbows of the pipe should be minimized. The leakage of the pipe should be checked after installation. If a rubber pipe is used for connection, it should be desulfurized.
7. The diameter of the pipe connecting the exhaust port of the pump should be equal to or smaller than the

diameter of the air inlet of the pump. Otherwise, the exhaust pressure will increase and cause leakage in the sealing part of the pump.

8. For belt-driven pumps, please note that the large and small pulleys must be in the same vertical plane, and the triangle belt should be moderately tight.

9. When the pump is in working conditions containing dust: in order to prevent the pump from being damaged by dust, particles, or chemical gases, it is recommended that you install a suitable filter at the air inlet of the pump.

10. When the pump is in a working condition containing a large amount of steam: the extracted condensable gas will condense in the colder pipeline. Therefore, in order to prevent the condensed liquid from flowing back to the pump cavity, a condensation device and a drain valve should be installed during pipeline installation.

11. When the extracted gas is corrosive: you must propose nickel plating or other treatment measures when ordering.

12. When the temperature of the extracted gas is high ($\geq 35^{\circ}\text{C}$): you must cool it before the air inlet of the pump.

13. When the extracted gas contains a large amount of liquid: you must install a gas-liquid separator in front of the air inlet of the pump.

14. When starting with a clear atmosphere, starting frequently, extracting high-pressure gas for a long time, or when the gas ballast is turned on, a small amount of oil mist will be discharged. You can use a pipe to connect the exhaust port to lead the oil mist away from the work area or install a suitable oil mist filter.

15. The pump has a device to improve oil return after shutdown and to keep the pump port in a vacuum state for a short time to facilitate next startup. However, for situations where oil return causes trouble due to process reasons, it is recommended that you install an electric or manual vacuum stop valve and vacuum charging valve at the air inlet of the pump. For the installation method, see Chapter 1, Section 1 "Structural Principles" Attention Clause. It requires that the new pump should not return oil to the air inlet of the pump within 4 hours after it is shut down.

16. If you install the pump in the chassis, be sure to leave an air inlet channel for the cooling fan of the pump and motor, and an exhaust channel for the exhaust outlet of the pump.

17. For the convenience of transportation, some series of pumps do not contain oil in the pump cavity. Please inject vacuum pump oil through the oil filler port after installation. The oil level should be above

1/2 of the oil window.

18. Installation inspection

After installation, all pipelines, especially the suction side pipelines, must be thoroughly cleaned to prevent welding slag, scale, rust, etc. from entering the pump. After installation or maintenance, check to ensure:

- The pump bearings should be adequately lubricated.
- The entire machine (pump head and motor) is installed and adjusted correctly.
- The drive elements are adjusted correctly according to their nature and are installed without axial stress (e.g. pre-tensioning of pulley drives, radial and axial stress of couplings).
- All fastening bolts and connecting elements are reliably combined.
- Correct protection against contact with rotating parts (e.g. coupling guard).

Note: If the oil level is too high, oil will spray; if the oil level is too low, abnormal exhaust sounds will occur. If abnormal exhaust sound occurs, refuel to a point 5mm above the center line of the oil level.

Install the power cord and switch according to the markings on the motor nameplate and junction box. Please pay attention to the direction of the motor. The fan should rotate clockwise when viewed from the fan end of the motor.

19. Preparation before test run

What is stated here only applies to a drained or dry pump (i.e. when starting up for the first time or after repairs or when restarting after a long shutdown in operation).

Initial technical status: All pumped gas and working fluid pipelines must be connected correctly, all valves and gate valves are closed, and there should be no gate valves and check valves on the exhaust side.

20. Start

It is recommended to follow the steps below to start:

Check whether the bolts of flanges, joints and valves on the pipeline are tightened.

Open the suction line gate valve, if installed.

Open the gate valve on the exhaust line, if installed.

When flushing the shaft seal externally: Open the sealing fluid valve.

Open the working fluid valve immediately after starting the motor.

- **Check operation when starting work**

After starting, read the status value of pressure or flow. Better to make a record.

When the pump is just started, check the temperature of the components (especially bearings and

shaft seals, etc.) until the temperature reaches a stable state, and keep records.

21. Shut down

1) Turn off the motor, close the sealing fluid valve, and close the intake pipe gate valve.

2) Once the work stops, immediately close the exhaust pipe gate valve, if installed.

Note: If it is frost season, the liquid in the pump body, separator and all pipelines needs to be drained.

22. After you turn on the power, when looking from the fan end of the motor, the motor should rotate clockwise. If you find that it rotates in the opposite direction, you can connect any two of the three power cords interchangeably.

23. Safety protection:

WARNING: Rotating parts such as couplings, free shaft extensions and V-belt drives must be protected against contact. In installations prone to explosion hazards, the drive elements and their contact protection must be specially designed to prevent sparks and static electricity.

Note: The temperature of the parts close to the bearings can exceed 70°C. Therefore, no contact with these parts is allowed. Temperature-sensitive parts, such as electrical components, cannot come into contact with them, otherwise they must be protected.

IV. Instructions for Use

1. Check whether the oil level of the pump is at the center line of the oil mark before starting it every day.

It is normal for the oil level line to fluctuate after starting the machine.

2. Check the pump oil before starting the machine every day to see if the color of the pump oil is normal.

If it turns black or white (emulsified), replace the vacuum pump oil in the pump immediately. The replacement method is: unscrew the oil drain plug, put the pump oil from the tank into the container you prepared, tighten the oil drain plug, then unscrew the refill screw plug, and add new vacuum pump oil to the center line of the oil mark. It is recommended that the oil is filtered when you refuel to prevent debris from entering the pump and blocking the oil passage.

3. Check whether the oil seal is damaged every six months.

4. Check the bearings for wear every year.

5. After running for 1000-1500 hours, all friction surfaces of the vacuum pump must be inspected. For rotary vane pumps, inspect the inner wall of the pump cavity. If any wear or roughening is found, repair it in time.

6. After 2500-3000 hours of operation, it is recommended to disassemble, inspect, repair, clean and adjust the clearance of the pump.
7. When the pump is running in a vacuum system, please refer to Article 10 of the "Safety Warning" when turning on and off the pump.
8. If the air inlet of the pump is equipped with a solenoid valve or vacuum stop valve and a vacuum charging valve, the solenoid valve or vacuum stop valve should be turned on and off at the same time as the pump.
9. After the pump has been running for 30 minutes, see the corresponding column of Chapter 2 "Main Technical Performance and Specifications" for the ultimate vacuum parameters of the pump.
10. When the ambient temperature is high, the oil temperature in the pump cavity will also increase, the viscosity of the vacuum pump oil will decrease, and the saturated gas will increase. At this time, the ultimate pressure will decrease. It is recommended that you strengthen ventilation and heat dissipation of the pump or replace the vacuum pump oil with a higher grade.
11. When the relative humidity is high or the pumped gas contains a lot of condensable gases, please close the suction port and run it for 15-20 minutes to allow the pump to reach a better working temperature.
12. When starting up, the machine should be idle for more than 15 minutes in winter and should be idle for more than 5 minutes in other seasons.

V. Maintenance

1. Change oil

- After the new pump has been running for 100 hours, please replace the vacuum pump oil, and then replace it every 1000-1500 hours.

Recommended vacuum oil brand: "Shangzhen" special oil.

- If the vacuum pump oil does not turn black or white, replace the vacuum pump oil every 6 months.
- How to change the oil: Start the pump and run it for 30 minutes. When the vacuum pump oil becomes thinner, stop the machine and drain the oil from the oil drain hole, then open the air inlet. Run for 10-20 seconds. At this time, slowly add a small amount (30-50 ml) of new vacuum pump oil from the air inlet. If the vacuum pump oil flowing out is very dirty, repeat the process until cleaner vacuum pump oil flows out.

Note: Do not use cleaning fluid for flushing; do not mix diesel, gasoline and other oils with high saturated vapor

pressure to avoid lowering the ultimate pressure.

2. Safety matters when repairing pumps and piping systems

Make sure that the repairs to be performed will not have adverse consequences on the system.

Make sure that the motor is switched off and cannot be started accidentally.

Make sure there is no pressure in the corresponding piping system and there are protective measures.

Make sure that the pumped or supplied media does not cause any dangerous situation when opening the piping system.

3. Regular inspection

In order to detect and correct possible faults as soon as possible, regular and careful maintenance and inspections are very necessary to avoid further harm.

1) Since working conditions vary greatly, only the usual inspection and maintenance cycles can be recommended. These inspection and maintenance cycles must be changed based on the specific installation site and taking into account factors such as the degree of shoddy working conditions, frequency of equipment startup, and load.

2) If the pump rotates by a belt, the tightness of the belt should be checked. An adjustment should be made 8 hours after the initial startup, and periodic adjustments should be made thereafter.

3) Under normal operating conditions, it is recommended to check the pump every month. The inspection items are as follows:

There is no obvious contamination in the pumped medium or working fluid (see Cleaning).

The technical data meet the requirements (power and temperature, etc.).

No obvious leaks occurred.

Whether the pump runs smoothly and whether the bearing rotation noise is normal.

There are no foreign objects in the valves, filters and screens; otherwise, remove them and determine the next inspection cycle.

When the cleaning cycle of the exhaust chamber or filter screen and filter is not very short, maintenance under specified operating conditions can be carried out together with the addition of lubricating oil or the replacement of lubricating oil.

In addition to the above inspections, you also need to check during the inspection process:

The rotor components are within the allowed clearance.

All fastening bolts are not loose.

Note: The rotary vane can be removed, but the rotor is a spliced whole and cannot be disassembled.

4. Cleaning

It is recommended to flush at appropriate intervals to remove foreign matter accumulated in the pump, for example, open the valve on the discharge line for a short time or open the drain blockage for a short time.

The conditions inside the pump can be checked by opening the inspection hole cover on the pump cover. If there is excessive scale accumulation under certain operating conditions, the pump must be flushed at regular intervals, first with a suitable solvent and then with water.

All filters and filter fluids installed in the pipeline must be cleaned or replaced periodically.

The next cleaning cycle must be determined based on the degree of contamination of the screen or filter in the pump exhaust chamber or pipeline during the first inspection.

Note: Disassembly and installation work should be performed by masters with experience in repairing equipment.

When disassembling the pump for maintenance or cleaning, attention must be paid to the disassembly steps to avoid damaging the pump parts.

Before disassembly, please mark the assembly positions of the components to reduce the possibility of mis-assembly and shorten your running-in time.

Try not to hit with a brute force heavy hammer, and the removed parts must not be damaged or lost.

5. Bearing lubrication

Under normal operating conditions and the ambient temperature is less than 40°C, the lubrication cycle of the grease is 4000 hours.

The grease replacement cycle and grease addition cycle are suitable for situations where the load is normal, the operating vibration is low, the ambient gas is roughly neutral, and the high-grade roller bearing grease in the application table is selected. These greases contain lithium grease as a thickener and mineral oils as basic composition, which satisfy the defined lubrication intervals. Greases containing different thickeners and base oils cannot be mixed.

Lubrication and re-oiling: Before lubricating the bearings, wipe the grease nozzle clean, then use an oil gun to press in the grease while rotating the shaft evenly to make the new grease evenly distributed in the bearing. The bearing temperature will increase significantly at first. Once the excess grease is squeezed out, the bearing temperature will return to normal. Fill the bearing spaces with grease. To avoid overfilling

with grease, do not grease the bearing cap.

6. Assembly steps

Note: Before assembly, the surface of each friction pair should be coated with clean vacuum pump oil, and the assembly O-ring should be embedded in the groove.

1) Install the advanced rotor vane into the advanced rotor slot, install the advanced rotor components into the stator, and install the advanced end fixed cover. It is recommended to erect the pump based on the end face of the pump body.

2) Install the low-stage rotary vane into the low-stage rotor slot, install the low-stage rotor components into the stator, and install the low-stage end fixed cover.

Note: Before installing the stator, push the rotating vane by hand. The rotating vane should remain free of jamming and slide smoothly in the rotor slot.

3) Install the coupling and rotate it by hand. There should be no stagnation and obvious weight difference.

4) Install the return valve impeller and other parts of the return valve. The flat surface of the return valve head should be aligned with the oil hole of the inlet nozzle. Gently block and rotate the rotor with your hand. The oil hole should open and close in time. Adjust the valve head and the maximum opening height of the valve head plane is 0.8-1.2mm.

5) Install the exhaust valve, oil baffle and other parts.

6) Install the pump assembly, coupling and motor on the support. There should be light transmission between the coupling and the transmission ring at the pump end, and tighten the set screws.

7) Insert the air inlet nozzle and gas ballast valve and tighten them with screws.

VI. Causes of Faults and Troubleshooting Methods

Fault	Reason	Method of exclusion
Insufficient pumping speed	1. Insufficient pipeline conduction capacity 2. The overflow valve is leaking (equipped with overflow valve series vacuum pump)	1. Increase the diameter of the pipeline 2. Clean the overflow valve
Ultimate vacuum fails to meet technical requirements	1. Air leakage in pipelines and systems 2. Pump leaks 3. The overflow valve is leaking 4. Oil seal wear 5. The vacuum pump oil is contaminated or the brand does not match 6. The air inlet filter is clogged 7. Oil pipe leakage	1. System check and eliminate Clean pipes and pipe valves 2. Check the pump for leaks 3. Clean the overflow valve 4. Replace the oil seal 5. Replace or filter the vacuum pump oil and start gas ballast purification 6. Clean the air inlet filter 7. Replace the oil pipe or reassemble the oil pipe

Fault	Reason	Method of exclusion
	8. The rotary vane is stuck or damaged 9. O-ring rubber aging 10. The oil hole is clogged	8. Replace the rotary vane 9. Replace the O-ring 10. Loosen the oil nozzle pressure plate, pull out the oil inlet nozzle, and clear the oil hole.
Motor overload	1. Air inlet pressure is too high 2. The rotor end face is in single-sided contact with the pump chamber end face 3. The relief valve is stuck, causing the outlet pressure to be too high	1. Adjust and control inlet pressure 2. Adjust rotor end clearance 3. Clean relief valve
Pump outer wall overheating	1. Inlet pressure too high 2. Poor cooling 3. Insufficient pump oil 4. The rotor is in contact with the end face of the pump chamber 5. Poor lubrication of bearings and oil seals 6. Pump oil deteriorates	1. Adjust and control the inlet pressure 2. Unblock or increase the cooling water flow 3. Add pump oil to near the center line of the oil window 4. Disassemble, inspect and repair 5. Adjust the oil volume 6. Change oil
Abnormal sound and loud noise	1. Inlet pressure too high 2. Bearing wear 3. Rotary vane wear	1. Adjust and control inlet pressure 2. Replace bearings 3. Replace the rotary vane
There is a loud exhaust sound	1. The oil level is too low to seal the exhaust valve. 2. The external pipes at the pump port, containers and test instrument pipes and joints are leaking, and there is gas discharged from the exhaust port.	1. Add oil 2. Find air leakage points and eliminate them
Severe early wear of bearings	1. Lubricating oil is contaminated 2. Not enough lubricant	1. Change lubricating oil 2. Add lubricant
Pump cannot start	1. Insufficient voltage 2. Pump or motor stuck 3. The ambient temperature is too low and the vacuum pump oil viscosity is too high	1. Measure voltage 2. Separate the pump and motor and perform a manual turning test 3. Heat the pump oil
Pump stuck	1. Pump without lubricant 2. Broken rotary vane 3. The motor turns incorrectly for a long time 4. Bearings lack lubricating oil for a long time	1. Add lubricant 2. Replace the rotary vane 3. Check and correct motor steering 4. Check, replace and oil bearings

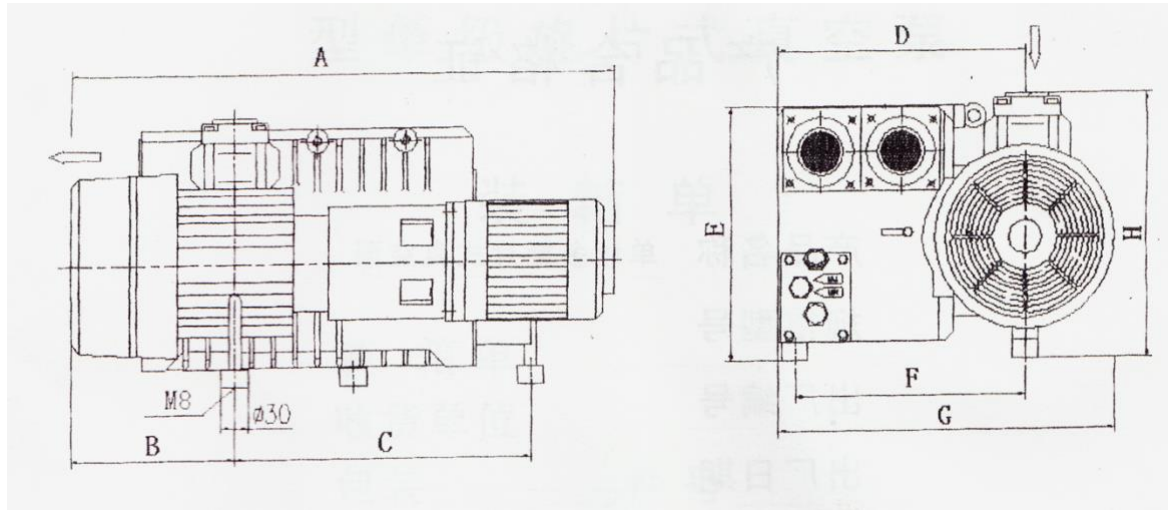
VII. Appearance and Installation Location and Dimensions

Unit: mm

Model Size	XD-010	XD-020	XD-040	XD-063	XD-100	XD-160	XD-250
A (total length)	410	410	600	655	725	835	1013
G (total width)	265	265	300	430	430	540	540
H (total height)	180	180	280	295	295	410	415
C (base center distance, corresponding to A direction)	210	210	337	325	350	390	516
F (base center distance, corresponding to G direction)	131	131	325	273	273	304	304
B	60	60	150	150	180	240	240
D	/	/	195	295	295	/	/

E	/	/	270	285	285	/	/
Air inlet d in (inch)	G1/2		G1 1/2	G1 1/4		G2	G3

Appearance Graph (the appearance and dimensions are for reference only):



VIII. Packing List

Model	Pump (including motor)	Manual	100# Vacuum Pump Oil/ Quantity
XD-010	1(1)	1	0.5L/1 bottle
XD-020	1(1)	1	0.5L/1 bottle
XD-040	1(1)	1	1 liter/1 bottle
XD-063	1(1)	1	2 liters/1 bottle
XD-100	1(1)	1	2 liters/1 bottle
XD-160	1(1)	1	6 liters/1 bottle
XD-250	1(1)	1	9 liters/1 bottle
XD-300	1(1)	1	9 liters/1 bottle



Product Quality and Warranty

Dear Respected User:

Hello!

In order to safeguard your legitimate rights and interests, repay your concern and love for the "Shangzhen" brand, and to better provide you with after-sales service, our company will comply with the relevant provisions of the "Product Quality Law" of the People's Republic of China. With this warranty and valid invoices, we will provide you with high-quality after-sales service. Our company promises the following:

The warranty period for the whole machine is one year, including three months for the rubber parts. The warranty period is calculated from the date of issuance of the invoice. During the warranty period, repairs are mainly performed.

After our company receives your repair information, we will arrive within 24 hours in cities located in Zhejiang Province and within 72 hours in other provinces and cities, except for special reasons such as weather and natural disasters. For users outside China, our arrival time will be discussed accordingly.

One of the following scenarios does not fall within the scope of our warranty, but the company can provide paid services:

- 1、 The product does not meet the factory technical specifications due to your use;
- 2、 Due to your production process, corrosive gases such as dust, ammonia, acid, etc. enter the pump chamber;
- 3、 Without the consent of the company, you disassemble it yourself, resulting in the product not meeting the factory technical specifications;
- 4、 No sales or valid invoice;
- 5、 The product model and machine number filled in the three-guarantee warranty are inconsistent with the product sent for repair;
- 6、 Exceeding the warranty period.

SHANGHAI VACUUM PUMP WORKS CO., LTD

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Warranty

Product Name		Product Number		Quantity	
Product Number		Invoice Date		Date of Manufacture	

Purchase Unit Name		Certificate Number		Invoice Number	
Quality Issues					
Your Usage Conditions					

Unit (signature): _____ Unit address: _____

Postal code: _____ Telephone: _____

Contact person: _____ Contact mobile phone: _____

To facilitate our door-to-door service for you, please fill in the walking route in detail:

Repair date: _____ Year _____ Month _____ Day

Information Feedback Form



Dear Respected User:

Hello!

Thank you for using our company's products. In order to provide you with after-sales service in a more timely and effective manner, please fill out the "Information Feedback Form" after receiving the goods and mail, fax or email it to our company. Appreciate!

Company Name				Postal Code	
Company Address				Contact Person	
E-mail		Telephone		Fax	
Product Model	Product Number	Certificate Number	Purchase Date	Quantity	Supplier Name

Remark					

SHANGHAI VACUUM PUMP WORKS CO., LTD

Address: NO.3516, Waiqingsong Road, Qingpu District, Shanghai, China

Postal Code: 201709

Tel: 021-59745974-8108

Fax: 4006251818-9978

Complaints hotline: 021-59745974-8123

Email: shzkbc@shzkbc.com