



上海真空泵厂有限公司 上海上真真空设备销售有限公司

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一站式 真空解决方案服务商

One-stop Vacuum Solution Service Provider



上海真空泵厂有限公司
SHANGHAI VACUUM PUMP WORKS CO., LTD.

ABOUT US

企业介绍

上海真空泵厂有限公司于1934年创立，是中国真空泵产业的开创者，也是中国第一台真空泵的诞生地。公司总部位于上海市，拥有3万平方米的生产基地，分布于上海市青浦区和浙江省湖州市泗安工业园区。

作为真空技术领域的领先企业，上海真空泵厂专注于研究、开发和生产真空获得设备及真空应用设备，并为客户提供定制化的真空解决方案。公司的产品线涵盖了罗茨泵、旋片泵、水环泵、罗茨气冷泵等多种类型的真空设备。

公司的产品广泛应用于我国核工业、航空航天、生物制药、精细化工、深冷行业、军工设备、冶金、食品、环保等高科技领域。上海真空泵厂是诸如中国铀业、中广核集团、中国人民解放军63836部队、上海航天精密机械研究所、大连中科院等知名单位的合格真空设备供应商。

除了国内市场，上海真空泵厂的产品还出口至北美、南美、澳洲、东南亚等多个国家和地区。公司凭借多年的经验和卓越的工程实力，为全球客户提供高性能的真空解决方案，为推动科学、工业和技术的发展做出贡献。

Shanghai Vacuum Pump Factory, established in 1934, is the pioneer of China's vacuum pump industry and the birthplace of the first vacuum pump in China. The company is headquartered in Shanghai and has a 30,000 square meter production base located in Qingpu District, Shanghai, and Si'an Industrial Park in Huzhou, Zhejiang Province.

As a leading enterprise in the field of vacuum technology, Shanghai Vacuum Pump Factory focuses on the research, development, and production of vacuum acquisition equipment and vacuum application equipment, providing customized vacuum solutions for customers. The company's product line includes various types of vacuum equipment such as Roots pumps, rotary vane pumps, liquid-ring pumps, gas circulation-cooled Roots vacuum pumps.

The company's products are widely used in high-tech fields such as nuclear industry, aerospace, biopharmaceuticals, fine chemicals, cryogenics, military equipment, metallurgy, food, and environmental protection in China. Shanghai Vacuum Pump Factory is a qualified vacuum equipment supplier to well-known units such as China National Uranium Corporation, China General Nuclear Power Group, the 63836 unit of the People's Liberation Army, Shanghai Aerospace Precision Machinery Research Institute, and Dalian Institute of Chemical Physics.

In addition to the domestic market, the company's products are also exported to North America, South America, Australia, Southeast Asia, and other countries and regions. With years of experience and excellent engineering strength, Shanghai Vacuum Pump Factory provides high-performance vacuum solutions to global customers, contributing to the development of science, industry, and technology.



WHY US 企业优势

90+ yrs

真空行业经验
Vacuum Industry Experience

130+

产品规格
Product Specifications

100+ Million

年均产能
Annual Average Production Capacity

20000+ m²

生产基地占地面积
Manufacturing Base Area

ENTERPRISE HISTORY

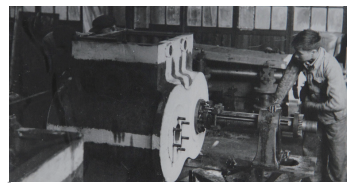
企业史记



1934年

1934年中国第一家真空泵厂
永固机器厂成立

In 1934, China's first vacuum pump
factory Everlasting Machinery Plant
was founded.



1944年

申光机器厂成立

In 1944, Shen Guang Machinery Plant
was founded.

中国第一台定片油封真空泵-101
型真空泵在申光机器厂诞生

In 1944, China's first stater seal
vacuum pump '101 type' vacuum
pump was invented by Shen Guang
Machinery Plant.



1954年

永固机器厂、申光机器厂相继
公私合营，二厂合并成立上海
真空泵厂

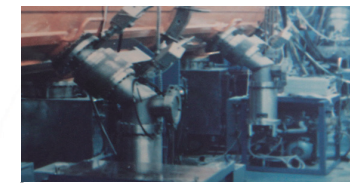
In 1954, Everlasting Machinery Plant
and Shen Guang Machinery Plant
successively formed public-private
partnerships. The two plants merged
and founded Shanghai Vacuum
Pump Factory.



1980年

中国第一台机械增压泵于上海
真空泵厂诞生

In 1960, China's first mechanical
booster pump came into being at
Shanghai Vacuum Pump Factory.



1970年

中国第一台专为高能加速器配
套的450升/秒立式分子泵和溅
射离子泵于上海真空泵厂诞生

In 1970, China's first 450 L/s vertical
molecular pump and sputter ion
pump assorted for high-energy accel-
erator came into being at Shanghai
Vacuum Pump Factory.



1980年

中国第一台1200升/秒溅射离
子泵于上海真空泵厂诞生

In 1980, China's first 1200 L/s sputter
ion pump came into being at Shang-
hai Vacuum Pump Factory.



1936年

中国第一台真空泵V5型活塞
真空泵在永固机器厂诞生

In 1936, China's first V5 type piston
vacuum pump came into being at
Everlasting Machinery Plant.



1944年

中国第一台定片油封真空泵-101
型真空泵在申光机器厂诞生

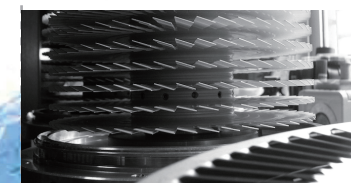
In 1944, China's first stater seal
vacuum pump '101 type' vacuum
pump was invented by Shen Guang
Machinery Plant.



1957年

中国第一台旋片泵于上海真空
泵厂诞生

In 1957, China's first Rotary-vane
vacuum pump came into being at
Shanghai Vacuum Pump Factory.



1964年

中国第一台涡轮分子泵于上海
真空泵厂诞生

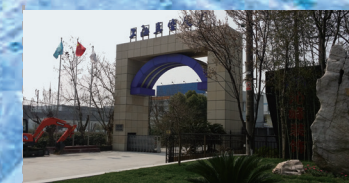
In 1964, China's first turbo molecular
pump came into being at Shanghai
Vacuum Pump Factory.



1974年

中国第一台高速直联泵于上海
真空泵厂诞生

In 1974, China's first high-speed
mono block pump came into being
at Shanghai Vacuum Pump Factory.



2006年

上海真空泵厂更名为上海真空
泵厂有限公司

In 2006, Shanghai Vacuum Pump
Factory changed its name to Shang-
hai Vacuum Pump Works Co., Ltd.

传承
HERITAGE

专精
EXPERTISE

创新
INNOVATION

ENTERPRISE HONOR

企业荣誉



我们能够为您提供全方位专业真空解决方案
We can provide you with comprehensive professional vacuum solutions

HONOR

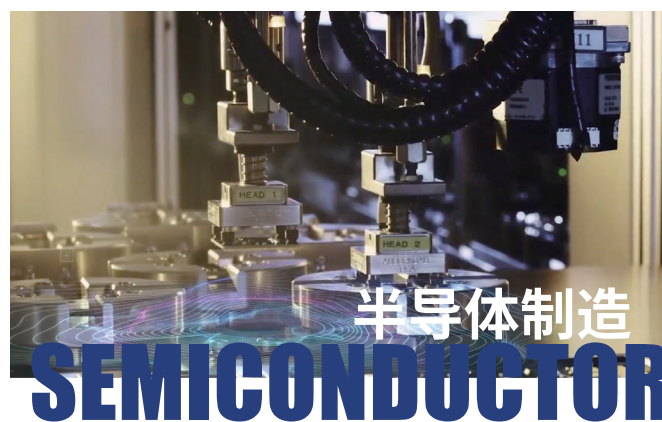
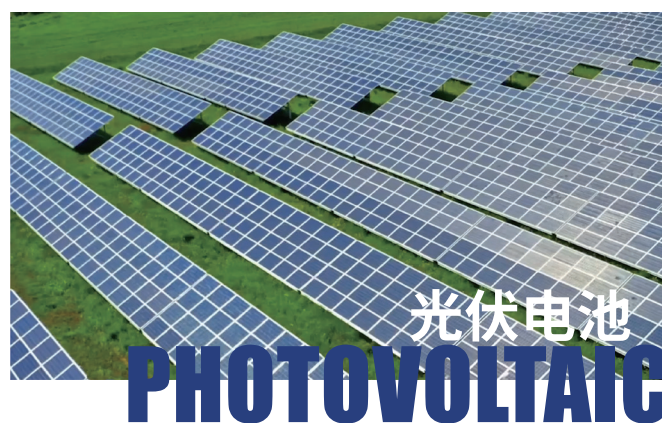
CASE INVOLVED

涉及案例



APPLICATION FIELDS

应用领域

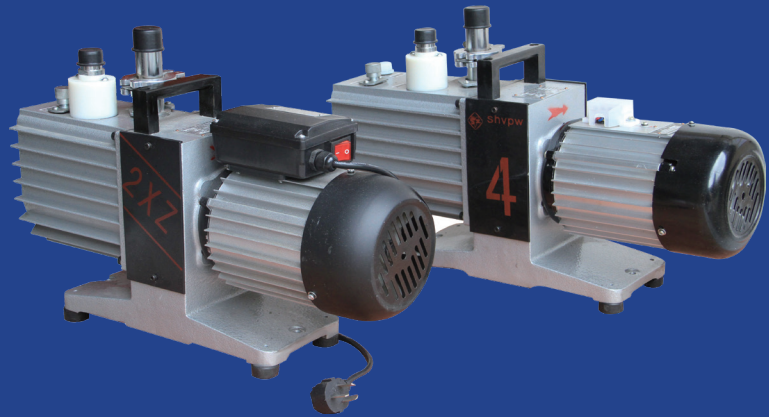


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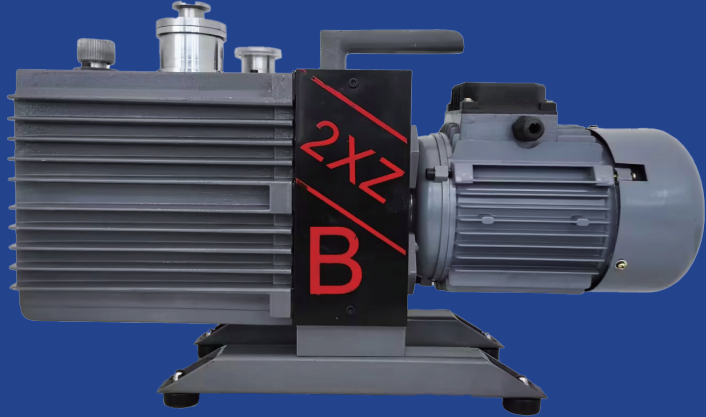
2XZ型 直联旋片真空泵



Model 2XZ Direct-coupled Rotary Vane Vacuum Pump

直联旋片真空泵是在旋片式真空泵的基础上经过结构、材料和制造工艺上重大改革后的一种新泵种。
The direct-coupled rotary vane vacuum pump is a new type of pump that has undergone major reforms in structure, materials and manufacturing processes based on the rotary vane vacuum pump.

2XZ-B型 直联旋片真空泵



Model 2XZ-B Direct-coupled Rotary Vane Vacuum Pump

该泵采用了本厂获国家专利权的先进结构，极限真空度高，抽气速率高。
Model 2XZ-B adopts the advanced structure patented by our factory. It has high ultimate vacuum and high pumping rate.

产品详情 / Product Details

直联泵具有体积小、质量轻、振动小、噪音低等特点，适用于安装在精密仪器设备上使用。
Direct-coupled rotary vane vacuum pumps have the characteristics of small size, light weight, small vibration, and low noise, and are suitable for installation on precision instruments and equipment.

直联泵采用三相或单相交流电机直联驱动。可单独使用，亦可作为各类真空系统的前级泵。
Direct-coupled rotary vane vacuum pumps are directly driven by three-phase or single-phase AC motors. Can be used alone or as a back-pump for various vacuum systems.

直联泵附有气镇装置，可以抽出含有一定数量的可凝性气体。直联泵不能应用于抽出尘埃及腐蚀性、易爆性气体，不得用作压缩泵、输送泵使用。
The direct-coupled rotary vane vacuum pump is equipped with a gas ballast device, which can pump out a certain amount of condensable gas. This type of vacuum pump cannot be used to extract dust or corrosive or explosive gases, and must not be used as compression pumps or transfer pumps.

特点 / Features

- 01 体积更小、重量更轻
Smaller size and lighter weight
- 02 噪音更低、振动更小
Lower noise and less vibration
- 03 停泵防返油、起动方便
No oil returns when pump stops; Easy to start
- 04 快卸法兰入口连接、并带嘴
Quick release flange inlet connection with spout

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model		2XZ-2	2XZ-4	2XZ-8
抽气速率 / Pumping Rate (L/S)		2	4	8
极限分压 / Partial Pressure Limit (≤Pa)	气镇关 / Gasballast Valve Close	0.06		
	气镇开 / Gasballast Valve Open	1.33		
极限全压 / Ultimate Total Pressure (Pa)		0.75		
电机功率 / Motor Power (kw)		0.37	0.55	1.1
进气口口径 / Air Inlet Diameter (mm)		KF25		KF40
转速 / Rotating Speed (r/min)		1400		1420
泵温升 / Pump Temperature Rise (≤℃)		40		60
用油量 / Oil Consumption (L)		0.61	0.8	1.8
噪音 / Noise (≤dB)		68	70	76
重量 / Weight (kg)		20	23	48.5
尺寸 / Dimensions (mm)		488x155x280	528x155x280	590x235x456

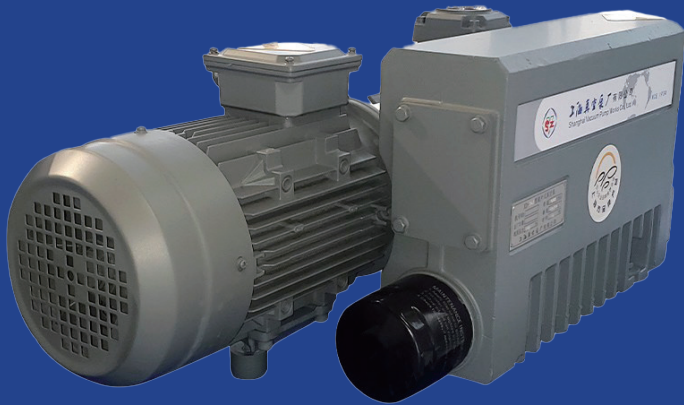
特点 / Features

- 01 2XZ 升级版
Upgraded version of Model 2XZ
- 02 极限真空度高
抽气速率高
High ultimate vacuum
High pumping speed
- 03 不喷油
停泵不返油
No oil spray
No oil returns when pump stops
- 04 噪音低
体积小、重量轻
Low noise
Compact size
Light weight
- 05 气镇
性能好
Excellent gas ballast performance
- 06 换油
周期长
Long oil change intervals
- 07 风冷
泵温低
Air-cooled
Low pump temperature
- 08 性能一致性好
运转可靠
Consistent and reliable operation

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model		2XZ-2B		2XZ-4B	
频率 / Frequency (Hz)		50Hz	60Hz	50Hz	60Hz
抽气速率 / Pumping Rate (L/S)		2	2.4	4	4.8
极限分压 / Partial Pressure Limit (≤Pa)	气镇关 / Gasballast Valve Close	0.02			
	气镇开 / Gasballast Valve Open	1.3			
极限全压 / Ultimate Total Pressure (Pa)		0.75			
电机功率 / Motor Power (kw)		0.37		0.55	
进气口径 / Air Inlet Diameter (mm)		KF25			
转速 / Rotating Speed (r/min)		1430	1750	1430	1750
泵温升 / Pump Temperature Rise (≤℃)		35	40	40	45
用油量 / Oil Consumption (L)		1.1		1.5	
噪音 / Noise (≤dB)		54/67		55/68	
重量 / Weight (kg)		26		34	
尺寸 / Dimensions (mm)		482x170x303		523x170x303	

XD型 单级多旋片真空泵



Model XD Single-stage Rotary Vane Vacuum Pump

产品详情 / Product Details

该泵适用于对真空度要求不高，要求操作可靠及维护方便的场合。目前该泵普遍应用于各类食品的真空包装、橡胶和塑料工业的真空吸塑，印刷工业的纸张传送、各类铸件的真空浸渍防漏、真空夹具、真空干燥、真空过滤、真空动力试验及医院手术室的真空吸引等真空处理。

Model XD Single-stage Rotary Vane Vacuum pump is suitable for occasions where high vacuum degree requirements are not necessary, but reliable operation and easy maintenance are required. Currently, this pump is widely used in various applications such as vacuum packaging of food products, vacuum forming in the rubber and plastic industries, paper transport in the printing industry, vacuum impregnation for leak prevention in various castings, vacuum fixtures, vacuum drying, vacuum filtration, vacuum power experiments, and vacuum suction in hospital operating rooms, and other vacuum processes.

特点 / Features

- 能够在进气口压力为 5x10⁴Pa 的情况下长期连续工作
- 噪音低，振动小，无需底脚螺栓
- 机内油水分离器可有效分离出气体中的油，避免环境污染
- 电机直接驱动
- 结构紧凑，质量轻，采用风冷
- 操作方便容易安装维护
- Able to work continuously for a long time under the condition of air inlet pressure of 5x10⁴Pa.
- Low noise and low vibration. No need for foot bolts.
- The oil-water separator in the machine can effectively separate the oil in the gas and avoid environmental pollution.
- Direct motor drive.
- Compact structure; light weight; air-cooled.
- Easy to operate, install and maintain.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	XD-010	XD-020	XD-025	XD-040	XD-063	XD-100	XD-160	XD-202	XD-250	XD-302
抽气速率 / Pumping Rate (m³/h)	10	20	25	40	63	100	160	202	250	300
极限分压 / Partial Pressure Limit (≤Pa)	200	200	200	200	50	50	50	50	50	50
电机功率 / Motor Power (kw)	0.37	0.75	0.9	1.5	2.2	3	4	4.5	5.5	7.5
转速 / Rotating Speed (r/min)	1440	2880	2880	1450	1450	1450	1450	1450	1450	1450
最大蒸汽处理量 / Maximum Steam Handling Capacity (kg/h)	/	0.4	0.4	0.6	1	1.5	2.5	4	4.5	5
噪音 / Noise (≤dB)	62	64	65	64	65	66	71	73	73	75
用油量 / Oil Consumption (L)	0.5	0.5	0.5	1.25	2	2	5	5	7	7
进气口口径 / Air Inlet Diameter (mm)	1/2"	1/2"	1/2"	1 ¼"	1 ¼"	1 ¼"	2"	2"	2"	2"
重量 / Weight (kg)	16	18	20	48	58	72	158	158	195	211
尺寸 / Dimensions (cm)	42x23.5x20		47x23.5x20	65x30x28	65x43x29.5	72x43x29.5	86x50x43	86x50x43	98x56x45	101x56x44

2X型 双级旋片真空泵



Model 2X Two-stage Rotary Vane Vacuum Pump

产品详情 / Product Details

- 可单独使用，也可作为前级泵
- 可用于真空冶炼、真空焊接、真空浇注、真空干燥、化工制药、电真空器件等工业
- 可在环境温度 5°C-40°C 范围内和进口压强小于 1330Pa 的条件下，允许长时间连续工作
- 不能抽除含氧过高、有毒的、有爆炸性的、有腐蚀性的、对泵油起化学反应的、含有颗粒尘埃的气体，也不能用作传输泵使用
- 在 6650Pa 到大气压的进口压强下连续工作时间，不得超过 3min
- Can be used independently or as a backing pump.
- Can be used in vacuum smelting, vacuum welding, vacuum pouring, vacuum drying, chemical pharmaceuticals, electric vacuum devices and other industries.
- It can operate continuously for a long time under the condition that the ambient temperature is within the range of 5°C-40°C and the inlet pressure is less than 1330Pa.
- Gases that contain too much oxygen, are toxic, explosive, corrosive, chemically react with pump oil, and contain particulate dust cannot be extracted, nor can they be used as a transfer pump.
- The continuous working time under the inlet pressure from 6650Pa to atmospheric pressure shall not exceed 3 minutes.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	2X-4C	2X-8	2X-15	2X-15G	2X-30A	2X-30G	2X-70A	2X-70G	2X-100
抽气速率 / Pumping Rate (L/S)	4	8	15	20	30	40	70	80	100
极限分压 / Partial Pressure Limit (Pa)	6x10 ⁻²								
极限全压 / Ultimate Total Pressure (Pa)	0.75								
电机功率 / Motor Power (kw)	0.55	1.1	2.2		3		5.5		7.5
进气口口径 / Air Inlet Diameter (mm)	KF25	DN40			DN65		DN80		
转速 / Rotating Speed (r/min)	420	320		415	450	580	420	460	575
泵温升 / Pump Temperature Rise (≤℃)	40								
用油量 / Oil Consumption (L)	1	2	2.8		3		4.2		
噪音 / Noise (≤dB)	75	78	80		82	85	86		90
重量 / Weight (kg)	59	158	202		236		338		360
尺寸 / Dimensions (cm)	49x31x41	79x43x54	79x53x54		78x50x56		91x65x70		

SZX型 单级旋片真空泵

Model SZX Single-stage Rotary Vane Vacuum Pump



该型号为自主研发, 并获得发明、实用新型、外形等9项国家专利。
This model was independently developed and has obtained 9 national patents for invention, utility model, and appearance.

SZX-2型 双级旋片真空泵

Model SZX-2 Two-stage Rotary Vane Vacuum Pump



该型号为自主研发, 并获得发明、实用新型、外形等12项国家专利。
This model was independently developed and has obtained 12 national patents for invention, utility model, and appearance.

产品详情 / Product Details

相较于 XD 系列单级旋片真空泵, 该型号极限真空更高; 相较于 H、2H 系列滑阀真空泵, 该型号震动更小且配有可调消音针阀来控制噪音。可作为主泵单独使用, 也可作为增压泵的前级泵。
Compared with the XD series single-stage rotary vane vacuum pump, this model has a higher ultimate vacuum. Compared with the H and 2H series sliding valve vacuum pumps, this model has less vibration and is equipped with an adjustable muffler needle valve to control noise. It can be used alone as a main pump or as a backing pump for a booster pump.

自带温控水量调节阀、油水分离装置; 适用于被抽取气体中含有较高水蒸气的工况, 每小时可抽除水蒸气 5.6-14 公斤。
It is equipped with a temperature-controlled water volume regulating valve and an oil-water separation device. It is suitable for working conditions where the extracted gas contains a high amount of water vapor and can extract 5.6-14 kg of water vapor per hour.

该型号适用于煤油气相干燥、真空浸渍、真空干燥及脱水、真空冶金等应用场景; 当作为前级泵使用时, 配合增压泵更适合作为真空炉的真空抽气系统。
This model is suitable for applications such as kerosene vapor drying, vacuum impregnation, vacuum drying and dehydration, vacuum metallurgy, etc. When used as a backing pump, it is more suitable to be the vacuum exhaust system for a vacuum furnace in combination with a booster pump.

特点 / Features

- 01

极限真空度高
Higher ultimate vacuum degree
- 02

噪音更低、振动更小
Lower noise and less vibration
- 03

自带油水分离装置
Equipped with an oil-water separation device
- 04

结构简单, 维护方便
Simple structure;
Easy maintenance

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	SZX-1250	SZX-1550	X-150
抽气速率 / Pumping Rate (L/S)	70	150	150
极限分压 / Partial Pressure Limit (Pa)		1.3	
极限全压 / Ultimate Total Pressure (Pa)		5	
电机功率 / Motor Power (kw)	7.5	15	15
进气口径 / Air Inlet Diameter (mm)	80	100	100
转速 / Rotating Speed (r/min)	450	345	345
重量 / Weight (kg)	700	1100	1100
水蒸气抽除 / Water Vapor Extraction (kg/h)	7	14	14
噪音 / Noise (≤dB)	80	85	85
用油量 / Oil Consumption (L)	20	45	45
最高油温 / Maximum Oil Temperature (≤℃)	80	80	80
冷却水需要量 / Cooling Water Requirement (≥L/h)	120	200	200
尺寸 / Dimensions (mm)	850x660x908	1925x990x1130	1925x990x1130

产品详情 / Product Details

相较于 2X 系列双级旋片真空泵, 该型号具有更低噪音、更低振动、抗污染、维护更方便等特点。可作为主泵单独使用, 也可作为增压泵的前级泵。该型号适用于太阳能电池组件层压封装、真空冶炼、真空镀膜、真空干燥、化工制药、电真空器件等真空应用行业。
Compared with the 2X series two-stage rotary vane vacuum pump, this model has the characteristics of lower noise, lower vibration, better pollution resistance and easier maintenance. It can be used alone as a main pump or as a backing pump for a booster pump. This model is suitable for vacuum application industries such as solar cell module lamination packaging, vacuum smelting, vacuum coating, vacuum drying, chemical pharmaceuticals, and electric vacuum devices.

抽气效率高: 入口压力小于 100Pa 时, 比市场上同类产品效率高出 50%; 噪音低: 噪音低于 75db, 远远低于国标 86db。
High pumping efficiency: when the inlet pressure is less than 100Pa, the efficiency is 50% higher than similar products on the market. Low noise: the noise is less than 75db, far lower than the national standard of 86db.

振动烈度小: 创新的产品结构设计, 改变震动源, 振动烈度最大点≤3mm/s, 平均振动烈度 <2.6mm/s, 小于市场同类产品平均振动烈度 >20mm/s。
Low vibration intensity: innovative product structure design changes the vibration source; the maximum vibration intensity point is ≤ 3mm/s; the average vibration intensity is <2.6mm/s. It is lower than the average vibration intensity of similar products on the market >20mm/s.

抗污染性强: 对所抽取的气体内含含有可凝性气体或有一定污染介质的工况, 可选配副油箱或强制油净化系统, 仅需定时排放污染油、定时更换净化系统滤芯, 并补充油液, 维护方便。在太阳能电池组件层压封装场合, 比其他同类真空获得设备, 具有更高的抗污染性。
Strong anti-pollution performance: For working conditions where the extracted gas contains condensable gas or certain polluting media, an auxiliary oil tank or a forced oil purification system can be selected. It only needs to discharge the polluted oil regularly, replace the purification system filter element regularly, and replenish the oil, which is convenient for maintenance. In the case of solar cell module lamination packaging, it has higher anti-pollution performance than other similar vacuum acquisition equipment.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	SZX-2270
抽气速率 / Pumping Rate (L/S)	80
极限分压 / Partial Pressure Limit (Pa)	0.06
极限全压 / Ultimate Total Pressure (Pa)	0.75
电机功率 / Motor Power (kw)	5.5
进气口径 / Air Inlet Diameter (mm)	DN80
转速 / Rotating Speed (r/min)	470
泵温升 / Pump Temperature Rise (≤℃)	40
用油量 / Oil Consumption (L)	5.5
噪音 / Noise (≤dB)	75
平均振动烈度 / Average Vibration Intensity (mm/s)	2.6
重量 / Weight (kg)	300
尺寸 / Dimensions (mm)	880x490x970



ZJB / ZJ 型 罗茨真空泵

Model ZJB / ZJ Roots Vacuum Pump

三种密封方式可供选择 / Three Sealing Options Available

- 01

骨架密封
Skeleton Seal
- 02

机械密封
Mechanical Seal
- 03

磁流体密封
Magnetic Fluid Seal

产品详情 / Product Details

该型号普遍适用于真空脱气、真空冶炼、真空干燥、真空热处理等工艺中，也可用于化工、食品、医药、电力设备等工业中的蒸发、蒸馏干燥等生产过程。大型泵型更适用于钢水的真空处理、空间模拟、低密度风洞装置等。

This model is generally used in vacuum degassing, vacuum smelting, vacuum drying, vacuum heat treatment and other processes, and can also be used in evaporation, distillation and drying in chemical, food, medicine, power equipment and other industries. Large pumps are more suitable for vacuum treatment of molten steel, space simulation, low-density wind tunnel devices, etc.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model		ZJB-30Z	ZJB-70	ZJB-150B	ZJB-300B	ZJB-600B	ZJB-1200C	ZJB-2500A	ZJB-5000G	ZJ-20000
抽气速率 / Pumping Rate (L/S)		30	70	150	300	600	1200	2500	5000	20000
极限分压 / Partial Pressure Limit (Pa)		3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	3x10 ⁻²	1x10 ⁻¹
最大压差 / Maximum Pressure Difference (Pa)		5300	5300	8x10 ³	8x10 ³	5x10 ³	5x10 ³	3x10 ³	1x10 ³	3x10 ³
转速 / Rotating Speed (r/min)		1440	2870	2870	2890	2920	2930	1470	2950	1300
电机功率 / Motor Power (kw)		1.5	1.5	3	4	7.5	11	22	22	110
进气口径 / Air Inlet Diameter (mm)		80	80	100	160	200	250	320	320	600
出气口径 / Air Outlet Diameter (mm)		50	50	80	100	160	200	250	250	500
最大零流量压缩比 / Maximum Zero Flow Compression Ratio		≤25	≤25	≤40	≤40	≤45	≤45	≤50	≤50	≤45
阀控压差 / Valve Controlled Pressure Difference (Pa)		/	/	5300	4300	3500	2700	2700	1350	/
噪音 / Noise (≤dB)		≤75	≤75	≤75	≤75	≤80	≤80	≤85	≤85	≤94
用油量 / Oil Consumption (L)	前盖 / Front Cover	0.2	0.2	2.5	2	3.25	5.5	9	9	稀油润滑装置供油
	后盖 / Rear Cover				2.5	3.5	8	12	12	
冷却水流量 / Cooling Water Usage (L/h)		/	/	/	/	60	90	180	180	500
重量 / Weight (kg)		100	100	215	480	503	1580	2980	2980	13500
尺寸 (带电机) / Dimensions (Motor Included) (mm)		736X340X279	736x340x279	919x401x385	1010x462x415	1232x586x540	1530x716x630	2002x1005x840	2002x1005x840	2880x3280x2220
推荐配置前级泵型号 / Recommended Backing Pump Model		2XZ-4	2XZ-8	2X-15	2X-30A	2X-70A	X-150A / SZX-1550	ZJB-600A + X (H)-150A		客户工艺



产品详情 / Product Details

该型号在 1x10³Pa-1Pa 压力范围内有较大抽速，填补了双级旋片泵在这个压力范围的抽速减弱缺陷，同时也可以作为增压泵使用。

This model has a large pumping speed in the pressure range of 1x10³Pa-1Pa, which fills the disadvantage of the two-stage rotary vane pump in the pressure range of reduced pumping speed, and can also be used as a booster pump.

该型号不仅有运行时过载保护作用，还可以提高在较高入口压力（较低真空度）时的抽速。

This model not only has overload protection during operation, but also can increase the pumping speed at higher inlet pressure (lower vacuum degree).

溢流阀调整进气口和排气口的压力，使运行更加安全可靠。

The relief valve adjusts the pressure at the inlet and outlet to make the operation safer and more reliable.

两个转动部件（叶轮）间有一定间隙，互不接触、摩擦，因此不需要润滑油。由于转动部件完全对称，有很好的平衡性。转动部件支撑在四个轴承上，因此运转时机械振动小，噪音极低。

There is a certain gap between the two rotating parts (impellers), so they do not touch or rub each other, and therefore do not require lubrication. Since the rotating parts are completely symmetrical, they have good balance. The rotating parts are supported on four bearings, so the mechanical vibration is small and the noise is extremely low during operation.

ZJBYC型 直驱罗茨真空泵

Model ZJBYC Direct Drive Roots Vacuum Pump



技术创新 / Innovated Design

常规罗茨真空泵的驱动通过联轴器联接电机与泵体，运行震动相对较大；而 ZJBYC 系列罗茨真空泵采用嵌入式设计，实现泵与电机一体化，消除联轴器结构，大幅降低因联轴器导致的设备故障率，有效提升传动效率，运行震动相对减小。

The conventional Roots vacuum pump is driven by a coupling that connects the motor to the pump body, resulting in relatively higher operational vibration. In contrast, the ZJBYC series Roots vacuum pump adopts an embedded design, integrating the pump body and the motor, eliminating the coupling structure, significantly reducing equipment failure rates caused by the coupling, effectively improving transmission efficiency, and reducing operational vibration.

静密封设计 / Static Seal Design

ZJBYC 系列产品采用嵌入方式，将常规罗茨真空泵的骨架油封结构转变为屏蔽罩的静密封，取消了传统油封、油杯设计，用户日常使用无需维护，彻底解决常规罗茨真空泵因油封老化导致的漏油和漏气的问题。

The ZJBYC series products adopt the embedded design, replacing the conventional Roots vacuum pump's shaft seal structure with a static seal of a shielded cover. This eliminates the traditional oil seal and oil cup design, requiring no maintenance during daily use. It thoroughly resolves the oil leakage and gas leakage issues caused by oil seal aging in conventional Roots vacuum pumps.

节能高效 / Energy Efficiency

ZJBYC 系列产品比常规罗茨真空泵的综合运行能耗节省 50% 以上，其运行轴功率 80% 时间都处于不到额定功率 50% 负载下运行，因此，根据永磁电机能效特性使用上节能效果相对显著，为用户提供更高效的能耗解决方案，大幅降低运行成本。

The ZJBYC series products save over 50% in overall operational energy consumption compared to conventional Roots vacuum pumps. During operation, 80% of the time, the shaft power operates under less than 50% of the rated power. Therefore, based on the energy efficiency characteristics of the permanent magnet motor, the energy-saving effect is relatively significant, providing users with a more efficient energy consumption solution and substantially reducing operating costs.

超静音运行 / Ultra-Quiet Operation

ZJBYC 系列罗茨真空泵采用水冷电机，通过去除风扇、联轴器以及泵体与电机一体化的设计，有效去除噪音源，大幅降低泵的运行噪音。

The ZJBYC series Roots vacuum pumps use a water-cooled motor. By removing the fan, coupling, and with the perfect integrated design of the rotor and motor, the noise sources are effectively eliminated, significantly reducing the operating noise of the pump.

外形紧凑 / Compact Design

ZJBYC 系列罗茨真空泵外形长度比常规罗茨真空泵更紧凑，整体自重更轻，节省使用空间，有效的提升用户生产空间的利用率。

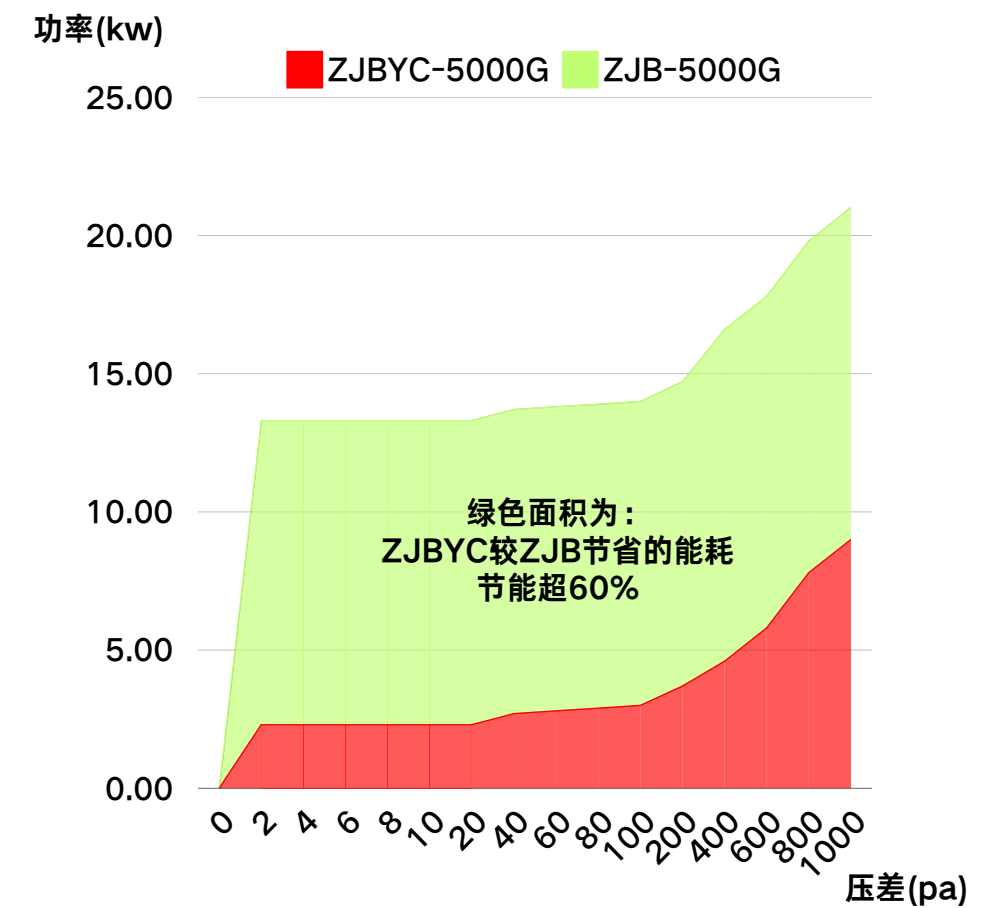
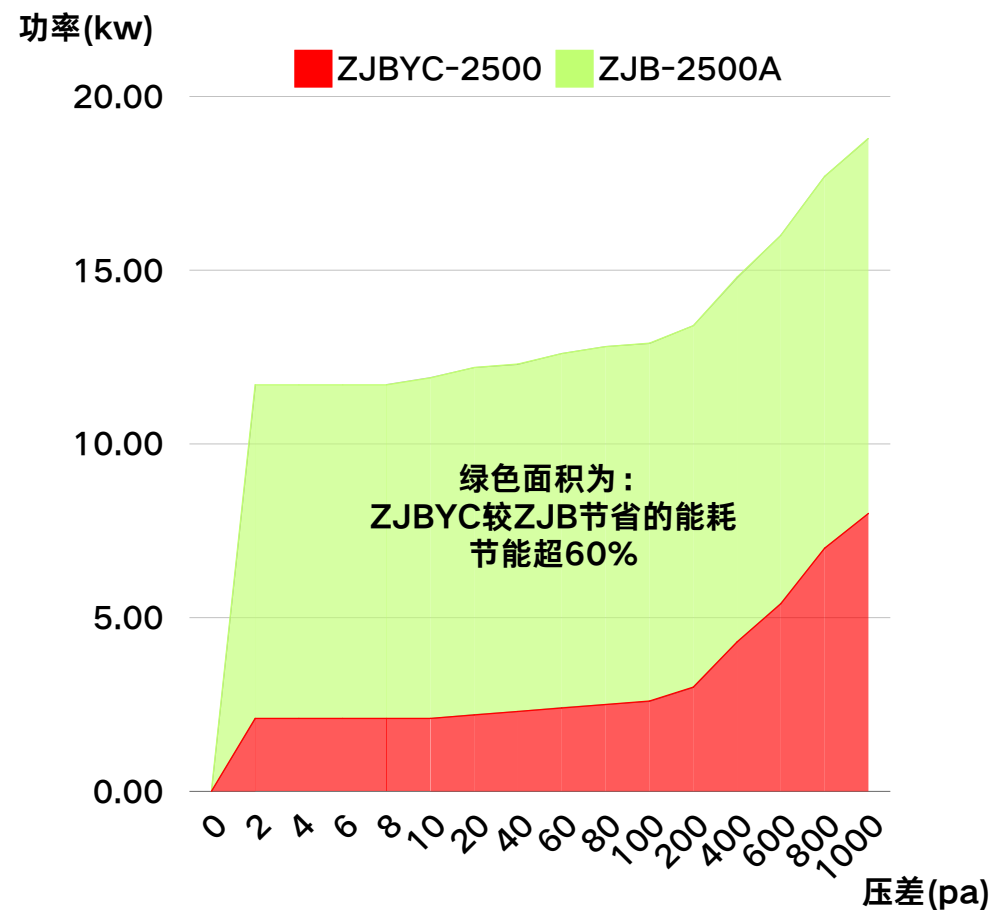
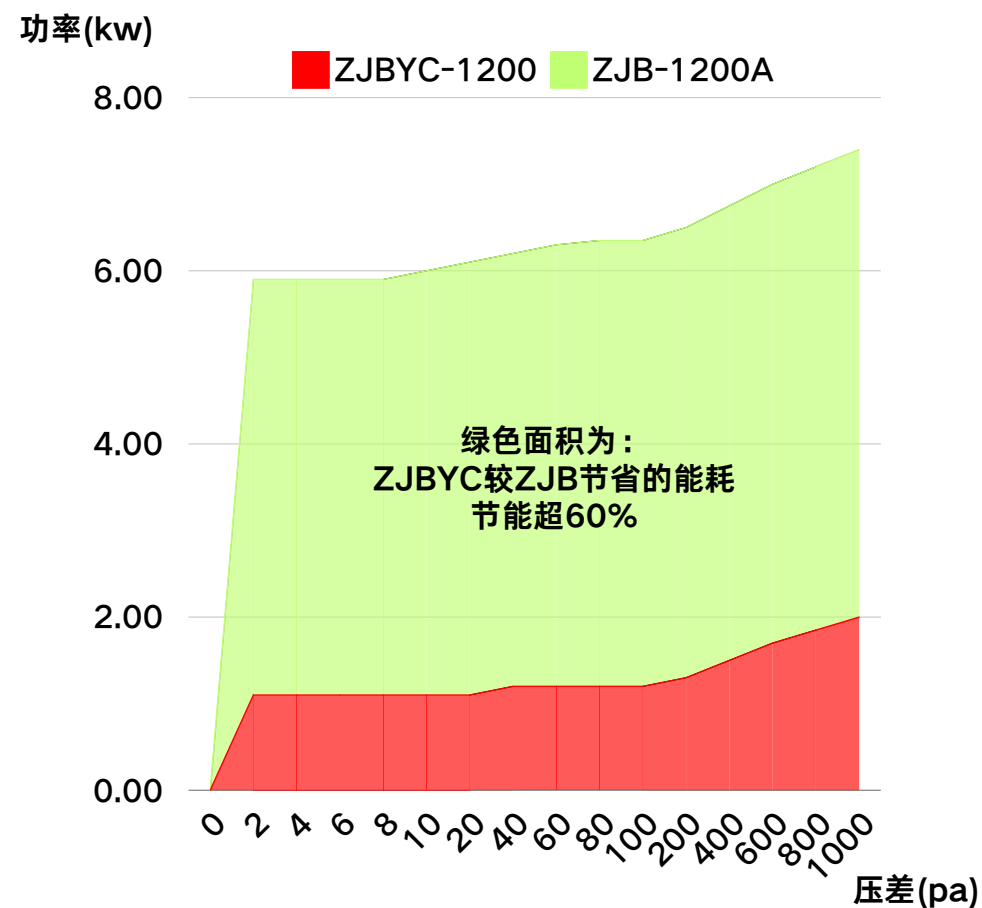
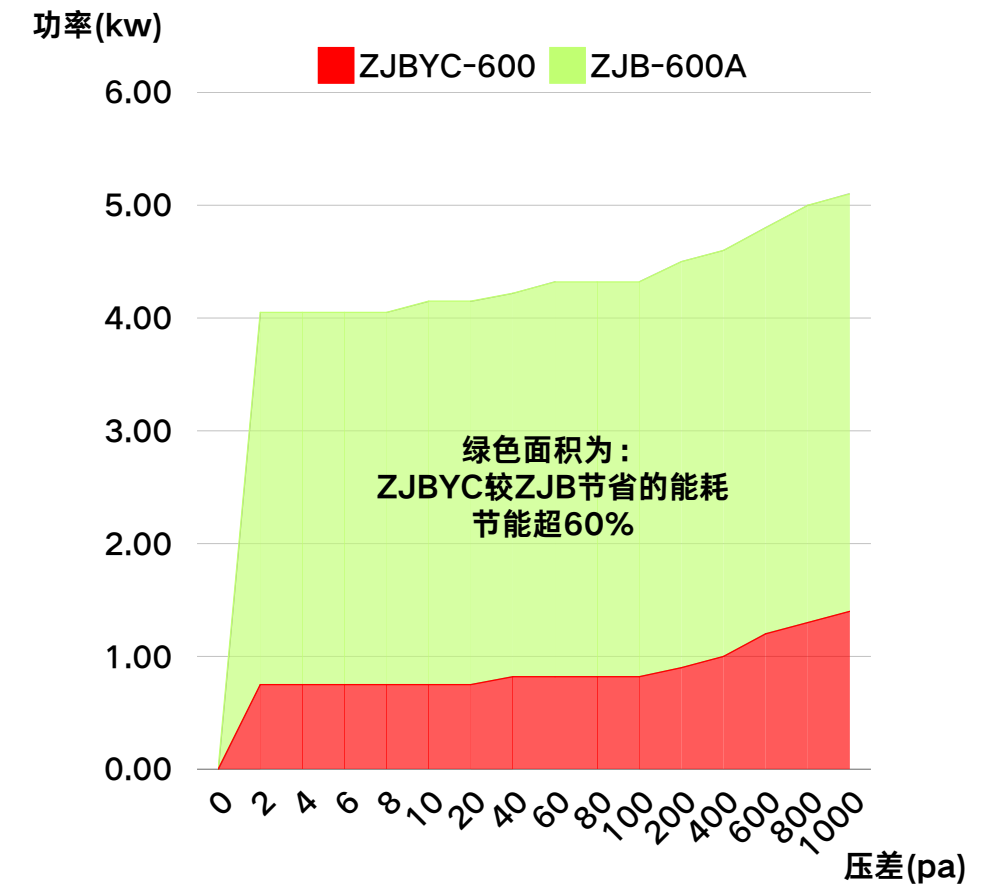
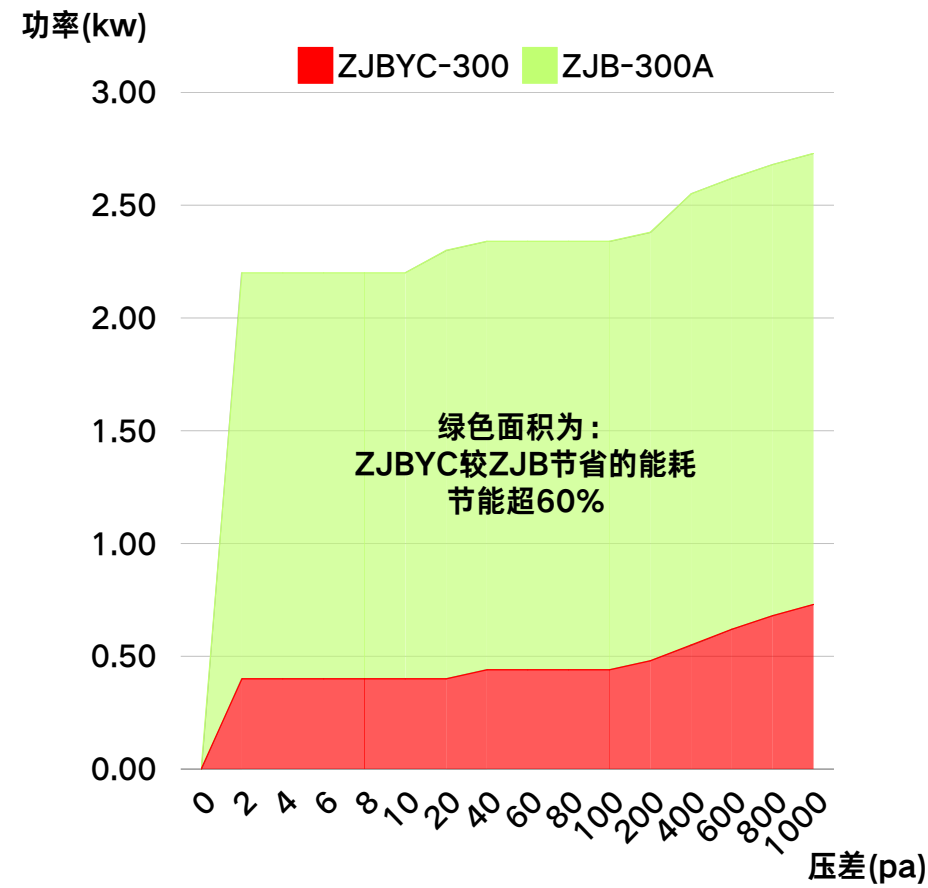
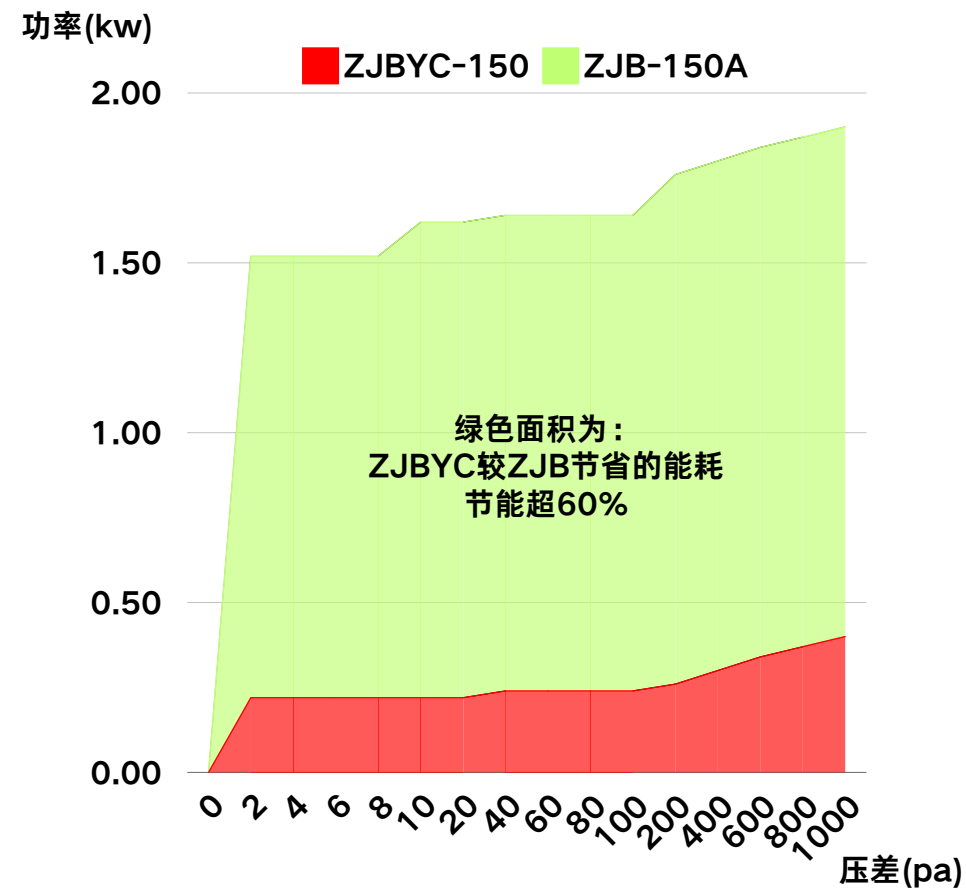
The ZJBYC series Roots vacuum pumps have a more compact external length compared to conventional Roots vacuum pumps, are lighter in weight, save space, and can effectively improve the utilization rate of user production space.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model		ZJBYC-150	ZJBYC-300	ZJBYC-600	ZJBYC-1200	ZJBYC-2500	ZJBYC-5000G
抽气速率 / Pumping Rate (L/s)		150	300	600	1200	2500	5000
极限压力 / Ultimate Pressure (Pa)		≤ 3x10 ⁻²					
阀控压差 / Valve Controlled Pressure Difference (Pa)		5300	4300	3500	2700	2700	1350
最大允许压差 / Maximum Allowed Pressure Difference (Pa)		8x10 ³	8x10 ³	5x10 ³	5x10 ³	3x10 ³	1x10 ³
零流量极限压缩比 / Zero-flow Ultimate Compression Ratio		40	40	45	45	50	50
电机功率 / Motor Power (kw)		2.2	4	7.5	11	22	22
转速 / Rotating Speed (r/min)		3000	3000	3000	3000	1500	3000
进气口口径 / Air Inlet Diameter		DN100	DN160	DN200	DN250	DN320	DN320
排气口口径 / Air Outlet Diameter		DN80	DN100	DN160	DN200	DN250	DN250
冷却水流量 / Cooling Water Usage (L/h)		18	30	60	150	300	300
冷却接口尺寸 / Cooling Interface Diameter (mm)	电机 / Motor	Φ12	Φ16	Φ16	Φ16	Φ16	Φ16
	泵 / Pump	/	/	Φ12	Φ12	Φ12	Φ12
噪音 / Noise (dB)		≤ 65	≤ 65	≤ 65	≤ 70	≤ 75	≤ 75
重量 / Weight (kg)		200	450	480	692	1400	1400
用油量 / Oil Consumption (L)	前盖 / Front Cover	2.5	2	3.25	5.5	9	9
	后盖 / Rear Cover	2.5	2.5	3.5	8	12	12
推荐配置前级泵型号 / Recommended Backing Pump Model		2X-15	2X-30A	2X-70A	X-150 /SZX1550	ZJB-600B +X(H)150	ZJB-1200C +X(H)150



ZJBYC型 直驱罗茨真空泵能耗对比



ZJC型 磁力耦合罗茨真空泵

Model ZJC Magnetic Coupling Roots Vacuum Pump



产品详情 / Product Details

磁力耦合罗茨真空泵改变了传统罗茨真空泵的密封模式，无需传统密封所必须的润滑液以及冷却液，因此无磨损损耗。该型号密封寿命长久，且我司的屏蔽罩采用航空非金属材料，因此无涡流热产生，且无磁力损耗。

The magnetically coupled Roots vacuum pump changes the sealing mode of traditional Roots vacuum pumps, eliminating the need for the lubricants and coolants required by conventional seals, thus avoiding wear and tear. This model has a long seal life, and our shield is made of aerospace non-metallic materials, resulting in no eddy current heat generation and no magnetic loss.

传统罗茨泵的动密封结构经由磁力耦合转变为屏蔽罩的静密封，更可靠，泄露量更低；该型号利用磁力耦合属于柔性传动，因此较常规联轴器启动冲击更低，更柔和。

The dynamic sealing structure of the traditional Roots pump is converted into a static sealing of the shield through magnetic coupling, making it more reliable with lower leakage. This model uses magnetic coupling for flexible transmission, resulting in lower and smoother start-up impact compared to conventional couplings.

该型号对中性要求低，且无刚性连接。因此，磁力耦合罗茨真空泵的震动会更低、更稳定。该型号推荐运用于易燃易爆工况及对密封维护不便的工况。

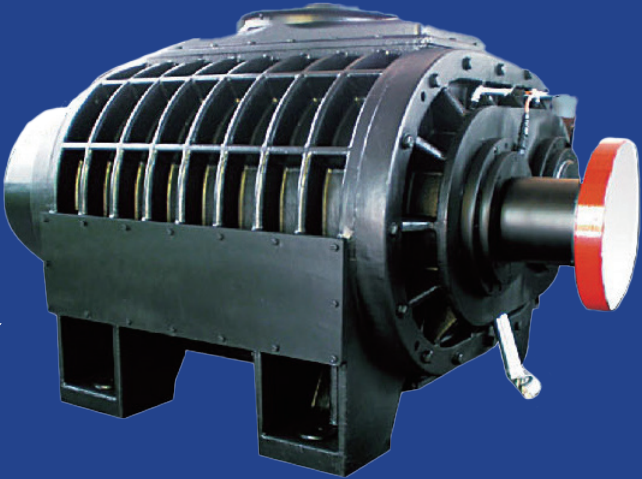
This model has low requirements for alignment and no rigid connection. Therefore, the magnetically coupled Roots vacuum pump has lower vibration and more stability. This model is recommended for use in flammable and explosive conditions, as well as in situations where seal maintenance is inconvenient.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	ZJC-150A	ZJC-300A	ZJC-600A	ZJC-1200B	ZJC-2500A
抽气速率 / Pumping Rate (L/S)	150	300	600	1200	2500
极限全压 / Ultimate Total Pressure (Pa)	< 0.3				
电机功率 / Motor Power (kw)	3	4	7.5	11	22
转速 / Rotating Speed (r/min)	2880	2890	2920	2930	1470
噪音 / Noise (dB)	< 75		< 80		
旁通阀抬起压力 / Bypass Valve Lift Pressure (Pa)	5300	4300	4300	3500	2700
极限压差 / Ultimate Pressure Differential (Pa)	8000	8000	5000	5000	3000
零流量极限压缩比 / Zero-flow Ultimate Compression Ratio	40	40	45	50	50
冷却方式 / Cooling Method	风冷	风冷	水冷	水冷	水冷
冷却水流量 / Cooling Water Usage (L/h)	N/A		60	90	180
水路接口 / Waterway Interface	N/A		G1/4"	G1/4"	G1/4"
进气口口径 / Air Inlet Diameter	DN100, GB/T6070	DN160, GB/T6070	DN200, GB/T6070	DN250, GB/T6070	DN300, GB/T6070
排气口口径 / Air Outlet Diameter	DN80, GB/T6070	DN100, GB/T6070	DN160, GB/T6070	DN200, GB/T6070	DN250, GB/T6070
用油量 / Oil Consumption (L)	5	6	8	30	40
重量 / Weight (kg)	215	300	450	900	2100
备注：电压要求 380V, 冷却水要求水温 <35°C, 供水压力 <0.4MPa, 进回水压差 >0.2MPa;					
Note: Voltage requirement is 380V, cooling water temperature <35°C, water supply pressure <0.4MPa, and water inlet-outlet pressure difference >0.2MPa.					

ZJL型 气体循环冷却罗茨真空泵

Model ZJL Gas Circulation-cooled Roots Vacuum Pump



产品详情 / Product Details

该型号可与前级泵串联使用，也可以单独使用。该型号与自身或普通罗茨泵串联使用，对被抽系统无油污染。

This model can be used in series with a backing pump or alone. It can also be used in series with itself or a Roots pump, which will cause no oil pollution to the pumped system.

采用机械密封结构，并配合 XYHZ-40 稀油站使用，提供了一个洁净无油的真空抽气环境。

It adopts mechanical seal structure and is used with XYHZ-40 thin oil station to provide a clean and oil-free vacuum pumping environment.

外置冷却器，泵可在很高的压差下工作而不发生热过载。

With an external cooler, the pump can operate at very high differential pressures without thermal overload.

该型号适用于极限压力不高而需要较大抽速的快速抽真空场合，以及需要获得清洁无油污染的抽真空场合。

This model is suitable for quick vacuuming occasions where the ultimate pressure is not high but a higher pumping speed is required, as well as for vacuuming occasions where clean vacuuming without oil pollution is required.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	ZJL-70	ZJL-100	ZJL-150	ZJL-300	ZJL-400	ZJL-600
抽气速率 / Pumping Rate (L/S)	70	100	150	300	400	600
极限全压 / Ultimate Total Pressure (KPa)	25	20	16	13	20	16
电机功率 / Motor Power (kw)	7.5	11	18.5	37	45	75
转速 / Rotating Speed (r/min)	740	960	1470	2950	980	1480
最高入口压力 / Ultimate Inlet Pressure (Pa)	1x10 ⁵					
最高出口压力 / Ultimate Outlet Pressure (Pa)	1x10 ⁵					
最大耗水量 / Maximum Water Consumption (L/h)	650	890	1600	3000	4200	6000
进气口口径 / Air Inlet Diameter (mm)	100	100	100	125	200	200
出气口口径 / Air Outlet Diameter (mm)	100	100	100	125	160	160
尺寸（不带电机）/ Dimensions (Motor Not Included) (mm)	490x480x360	490x480x360	490x480x360	490x480x360	1157x720x580	1157x720x580

型号 / Model	ZJL-800	ZJL-1200	ZJL-2500	ZJL-3750	ZJL-7500	ZJL-10000
抽气速率 / Pumping Rate (L/S)	800	1200	2500	3750	7500	10000
极限全压 / Ultimate Total Pressure (KPa)	20	13	16	13	20	16
电机功率 / Motor Power (kw)	90	132	250	380	800	1000
转速 / Rotating Speed (r/min)	980	1480	980	1480	1000	750
最高入口压力 / Ultimate Inlet Pressure (Pa)	1x10 ⁵					
最高出口压力 / Ultimate Outlet Pressure (Pa)	1x10 ⁵					
最大耗水量 / Maximum Water Consumption (L/h)	10000	14000	20000	30000	50000	80000
进气口口径 / Air Inlet Diameter (mm)	250	250	400	400	550	550
出气口口径 / Air Outlet Diameter (mm)	250	250	400	400	550	550
尺寸（不带电机）/ Dimensions (Motor Not Included) (mm)	1164x1075x875	1164x1075x875	1967x1340x1140	1967x1340x1140	2651x1760x1510	2651x1760x1510

H型 单级滑阀真空泵

Model H Single-stage Sliding Valve Vacuum Pump



产品详情 / Product Details

H 型单级滑阀真空泵分为单级单缸、单级三缸。单级单缸滑阀泵由平衡轮平衡；单级三缸滑阀泵内部设计无需平衡轮，抗震耐用、运行稳定、使用寿命相对更长久。配置充气阀防止泵腔积油，配置气镇阀防止真空油因水份乳化。独立供油系统使轴承润滑洁净。

Model H single-stage sliding valve vacuum pump is divided into single-stage single-cylinder and single-stage three-cylinder models. The single-stage single-cylinder sliding valve pump is balanced by a flywheel; the single-stage three-cylinder sliding valve pump is designed internally without the need for a flywheel, making it shock-resistant, durable, stable in operation, and with a relatively longer service life. It is equipped with a charging valve to prevent oil accumulation in the pump chamber and a gas stabilization valve to prevent vacuum oil from emulsifying due to moisture. The independent oil supply system ensures that the bearing lubrication is clean.

HL-150、HF-150、H-160 较 H-150 更加节能，占地面积更小，震动更小。HF-150 型号增加了副油箱，实现了水油分离，大大降低了泵腔里真空油被污染概率。

The HL-150, HF-150, and H-160 models are more energy-efficient than the H-150, occupying less space and producing less vibration. The HF-150 model includes a secondary oil tank, which achieves water-oil separation, significantly reducing the likelihood of vacuum oil contamination in the pump chamber.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	H-70B	H-100	H-150	HL-150	HF-150	H-160
抽气速率 / Pumping Rate (L/s)	70	100	150	150	150	160
极限压力 / Ultimate Pressure (Pa)	≤ 0.5					
极限全压力 / Ultimate Total Pressure (Pa)	≤ 3					
转速 / Rotating Speed (r/min)	1055	520	450	450	450	520
电机功率 / Motor Power (kw)	5.5	7.5	15	11	11	11
进气口口径 / Air Inlet Diameter (mm)	80	80	100	100	100	100
出气口口径 / Air Outlet Diameter (mm)	55	76	80	80	80	80
冷却水用量 / Cooling Water Consumption (Kg/h)	240	350	700			
重量 / Weight (kg)	435	650	730	680	860	980

型号 / Model	HL-175	HF-175	H-200	H-225	H-300	H-8A
抽气速率 / Pumping Rate (L/s)	175	175	200	225	300	150
极限压力 / Ultimate Pressure (Pa)	≤0.5					
极限全压力 / Ultimate Total Pressure (Pa)	≤ 3					
转速 / Rotating Speed (r/min)	515	515	520	520	450	360
电机功率 / Motor Power (kw)	11	11	15	15	22	18.5
进气口口径 / Air Inlet Diameter (mm)	100	100	150	100	150	150
出气口口径 / Air Outlet Diameter (mm)	80	80	80	80	100	80
冷却水用量 / Cooling Water Consumption (Kg/h)	700				1500	700
重量 / Weight (kg)	690	880	1100	1100	1900	1960

2H型 双级滑阀真空泵

Model 2H Two-stage Sliding Valve Vacuum Pump



产品详情 / Product Details

2H 型双级滑阀真空泵极限真空度较 H 型单级滑阀真空泵高一个数量级。三缸平衡的结构设计使滑阀泵的运转更加平稳、震动小。轴承具有独立供油系统，轴承润滑洁净。配置充气阀，在停机时将泵腔里的真空油压回至油箱，保护导轨和滑阀，确保在二次启动时负荷减少，启动顺畅。配置气镇阀，可气镇出少量可燃性气体，减少泵油乳化的情况。

Model 2H two-stage sliding valve vacuum pump has a maximum vacuum degree that is an order of magnitude higher than that of the model H single-stage sliding valve vacuum pump. The balanced three-cylinder structural design allows for smoother operation and reduced vibration of the sliding valve pump. The pump features an independent oil supply system, ensuring clean lubrication of the bearings. It is equipped with a charging valve that returns the vacuum oil in the pump chamber back to the oil tank during shutdown, protecting the guide rails and sliding valve, and ensuring a smoother start with reduced load during reactivation. Additionally, it includes a gas stabilization valve to discharge small amounts of condensable gases, minimizing the emulsification of pump oil.

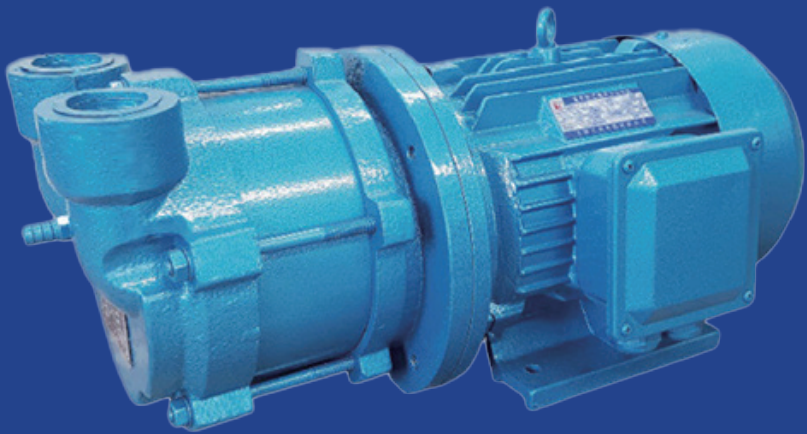
主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	2H-30B	2H-50	2H-70B	2H-80	2H-100	2H-120B
抽气速率 / Pumping Rate (L/s)	30	50	70	80	100	120
极限压力 / Ultimate Pressure (Pa)	≤ 0.05					
极限全压力 / Ultimate Total Pressure (Pa)	≤ 1					
转速 / Rotating Speed (r/min)	510	1055	600	880	375	450
电机功率 / Motor Power (kw)	4	5.5	7.5	7.5	11	11
进气口口径 / Air Inlet Diameter (mm)	63	80	80	80	100	100
出气口口径 / Air Outlet Diameter (mm)	50	76	76	76	80	80
冷却水用量 / Cooling Water Consumption (Kg/h)	350				700	
重量 / Weight (kg)	295	347	630	620	620	980

型号 / Model	2H-130	2H-150B	2H-160	2H-180	2H-250	2H-300
抽气速率 / Pumping Rate (L/s)	130	150	160	180	250	300
极限压力 / Ultimate Pressure (Pa)	≤ 0.05					
极限全压力 / Ultimate Total Pressure (Pa)	≤ 1					
转速 / Rotating Speed (r/min)	520	450	555	628	490	580
电机功率 / Motor Power (kw)	11	15	15	15	22	22
进气口口径 / Air Inlet Diameter (mm)	100	150	100	100	150	150
出气口口径 / Air Outlet Diameter (mm)	80	80	80	80	100	100
冷却水用量 / Cooling Water Consumption (Kg/h)	700					
重量 / Weight (kg)	980	1100	1100	1100	1800	1800

SZ型
单级水环真空泵

Model SZ Single-stage
Liquid Ring Vacuum Pump



2S型
双级水环真空泵

Model 2S Two-stage
Liquid Ring Vacuum Pump



产品详情 / Product Details

水环式真空泵主要用于粗抽真空、抽气量大的工艺过程中，在化工、石油、轻工业部门得到了普遍的使用。
Liquid-ring vacuum pumps are mainly used in processes requiring rough vacuum and high pumping capacity, widely utilized in sectors such as chemical, petroleum, and light industries.

该型号主要用于抽气、输送空气及其它气体，特别适用于抽吸含有大量水蒸汽或可凝性气体，腐蚀性气体。例如化工行业的蒸馏、浓缩、干燥，塑料制品行业的真空除气、成型，皮革行业的真空干燥，饮料行业的真空浓缩，轻纺、造纸行业的真空脱水等。
This model is primarily employed for evacuating, transporting air, and other gases, particularly suitable for handling large amounts of water vapor or condensable gases, as well as corrosive gases. Applications include distillation, concentration, and drying in the chemical industry; vacuum degassing and molding in the plastics industry; vacuum drying in the fur industry; vacuum concentration in the beverage industry; and vacuum dewatering in the textile and paper industries.

特点 / Features

- 01

可抽腐蚀性气体
Capable of extracting
corrosive gases
- 02

可抽含有灰尘的气体
Capable of extracting
gases containing dust
- 03

可抽气水混合物
Capable of extracting
gas-water mixtures
- 04

可配为机组使用
Can be configured
as a vacuum unit
- 05

维护简单、使用方便
Easy to maintain;
Convenient to use
- 06

性能稳定
Stable and reliable operation

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	SZ-0.5	SZ-1	SZ-2
抽气速率 / Pumping Rate (m³/min)	0.65	1	2
极限全压 / Ultimate Total Pressure (≤Pa)		4x10³	
电机功率 / Motor Power (kw)	1.5	2.2	4
进气口 / 排气口口径 / Air Inlet/Outlet Diameter	G1"	G1 1/2"	G1 1/2"
转速 / Rotating Speed (r/min)	2840	2840	2890
重量 / Weight (kg)	40	55	80
进水口口径 / Water Inlet Diameter	G1/4"	G1/4"	G1/2"
补充水用量 / Water Supplement Requirement (m³/h)	0.23	0.25	0.45
尺寸 / Dimensions (mm)	440x255x194	491x270x212	561x305x234

产品详情 / Product Details

本型号双级水环真空系统做成同轴相串联的两级泵，两级之间的通道由中间盘和连接管配成，因此结构比较紧凑。电动机和泵部分通过联轴器传动。泵和电动机安装在同一个公共底座上。按轴封结构分为普通泵和 A 型泵。
This model features a two-stage liquid-ring vacuum system designed as a coaxially connected two-stage pump. The air passage between the two stages is formed by an intermediate disc and connecting pipe, resulting in a relatively compact structure. The transmission between the motor and the pump is achieved through a coupling, with both the pump and the motor mounted on a common base. Based on the shaft seal structure, it is divided into standard pumps and Type A pumps.

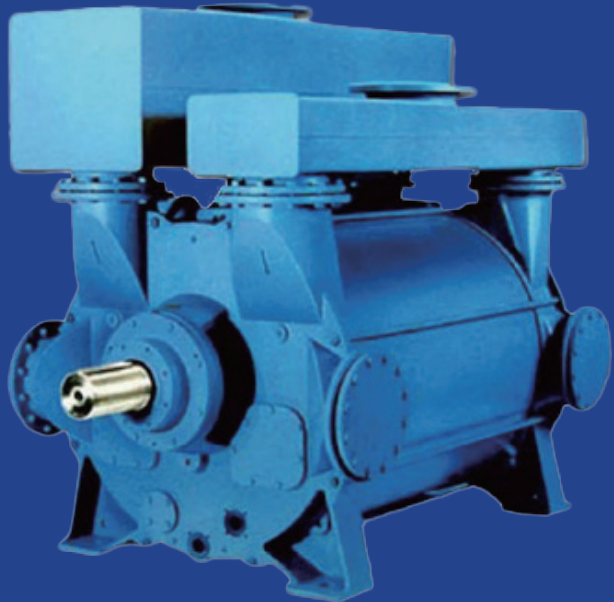
本型号泵主要用来抽吸、输送空气及其他气体。例如用在化工行业的真空蒸馏、干燥，轻纺工业、造纸工业的真空脱水等。它作为机械增压泵的前级泵封，可以大大提高机械增压泵的使用范围。
This model pump is mainly used for extracting and transporting air and other gases. It is applied in vacuum distillation and drying in the chemical industry, as well as vacuum dewatering in the textile and paper industries. As a foreline pump for mechanical booster pumps, it can significantly expand the application range of mechanical booster pumps.

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	2S-185	2S-230	2SK-12	2SK-25
抽气速率 / Pumping Rate (L/s)	35	70	200	400
极限全压 / Ultimate Total Pressure (≤Pa)	3500			
电机功率 / Motor Power (kw)	5.5	11	30	55
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	50	50	65	100
转速 / Rotating Speed (r/min)	1440	1450	1470	980
重量 / Weight (kg)	185	420	605	1200
进水口口径 / Water Inlet Diameter (inch & mm)	1/2"	3/4"	3/4"	2"
尺寸 / Dimensions (mm)	1233x370x440	1505x450x610	1775x550x660	2360x660x920

2BEA型 水环真空泵

Model 2BEA Liquid Ring Vacuum Pump



2BVA型 水环真空泵

Model 2BVA Liquid Ring Vacuum Pump



产品详情 / Product Details

该型号普遍使用于真空蒸馏，真空干燥，真空过滤，真空浸渍，真空浓缩，真空消毒，回收气体，真空脱水，负压吸引，真空运输，真空合成，真空分离等制作工艺中。

This model is widely used in various processes such as vacuum distillation, vacuum drying, vacuum filtration, vacuum impregnation, vacuum concentration, vacuum sterilization, gas recovery, vacuum dewatering, negative pressure suction, vacuum transportation, vacuum synthesis, and vacuum separation.

特点 / Features

01

结构简单，易于维护
Simple structure; easy to maintain

02

多领域适用
Applicable in multiple fields

03

多规格可选
Available in multiple specifications

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	2BEA102	2BEA103	2BEA152	2BEA153	2BEA202
抽气速率 / Pumping Rate (m³/h)	235	340	465	600	760
最低吸入绝压 / Minimum Suction Absolute Pressure (mbar)	33(-0.098Mpa)				
电机功率 / Motor Power (kw)	7.5	11	15	18.5	22
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	65	65	100	100	125
转速 / Rotating Speed (r/min)	1450	1450	1450	1450	970
重量 / Weight (kg)	311	363	481	533	875
进水口口径 / Water Inlet Diameter (inch)	3/4"	3/4"	3/4"	3/4"	1"
尺寸 / Dimensions (mm)	1303x325x790	1458x325x790	1520x460x865	1570x460x865	1804x660x1160

型号 / Model	2BEA203	2BEA252	2BEA253-592	2BEA253-740	2BEA353
抽气速率 / Pumping Rate (m³/h)	1120	1700	1850	2450	5300
最低吸入绝压 / Minimum Suction Absolute Pressure (mbar)	33(-0.098Mpa)				
电机功率 / Motor Power (kw)	37	45	55	75	160
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	125	150	150	150	250
转速 / Rotating Speed (r/min)	980	740	592	740	590
重量 / Weight (kg)	1065	1693	2190	2215	4750
进水口口径 / Water Inlet Diameter (inch)	1"	1¼"	1¼"	1¼"	1¼"
尺寸 / Dimensions (mm)	2052x660x1160	2277x750x1425	2702x750x1425	2702x750x1425	3222x1060x1856

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	2BVA2060	2BVA2061	2BVA2070	2BVA2071	2BVA5110
抽气速率 / Pumping Rate (m³/h)	27	52	80	110	165
极限真空度 / Ultimate Pressure (mbar)	33(-0.098Mpa)				
电机功率 / Motor Power (kw)	0.81	1.45	2.35	3.85	4
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	G1"	G1"	G1 1/2"	G1 1/2"	50
转速 / Rotating Speed (r/min)	2880	2880	2850	2860	1450
重量 / Weight (kg)	20	22	31	42	78
进水口口径 / Water Inlet Diameter (inch)	G3/4"	G3/4"	G3/4"	G3/4"	G3/4"
排水口口径 / Water Outlet Diameter (inch)	G1/4"	G1/4"	G1/4"	G1/4"	G3/8"
尺寸 / Dimensions (mm)	455x186x195	476x186x195	545x223x234	566x223x235	637x340x202

型号 / Model	2BVA5111	2BVA5121	2BVA5131	2BVA5161	2BVA6110
抽气速率 / Pumping Rate (m³/h)	230	280	400	500	165
极限真空度 / Ultimate Pressure (mbar)	33(-0.098Mpa)				
电机功率 / Motor Power (kw)	5.5	7.5	11	15	4
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	50	65	65	80	50
转速 / Rotating Speed (r/min)	1450	1450	1430	970	1450
重量 / Weight (kg)	100	145	165	252	120
进水口口径 / Water Inlet Diameter (inch)	G3/4"	G3/4"	G3/4"	G3/4"	G3/4"
排水口口径 / Water Outlet Diameter (inch)	G3/8"	G3/8"	G3/8"	G3/8"	G3/8"
尺寸 / Dimensions (mm)	675x340x212	771x380x217	850x382x249	1022x450x303	1190x325x381

型号 / Model	2BVA6111	2BVA6121	2BVA6131	2BVA6161
抽气速率 / Pumping Rate (m³/h)	230	280	400	500
极限真空度 / Ultimate Pressure (mbar)	33(-0.098Mpa)			
电机功率 / Motor Power (kw)	5.5	7.5	11	15
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	50	65	65	80
转速 / Rotating Speed (r/min)	1450	1450	1430	970
重量 / Weight (kg)	150	210	280	390
进水口口径 / Water Inlet Diameter (inch)	G3/4"	G3/4"	G3/4"	G3/4"
排水口口径 / Water Outlet Diameter (inch)	G3/8"	G3/8"	G3/8"	G3/8"
尺寸 / Dimensions (mm)	1237x325x401	1368x347x415	1495x377x467	1625x479x526

型号 / Model	2BVA6060	2BVA6061	2BVA6070	2BVA6071
抽气速率 / Pumping Rate (m³/h)	27	52	80	110
极限真空度 / Ultimate Pressure (mbar)	33(-0.098Mpa)			
电机功率 / Motor Power (kw)	1.1	1.5	3	4
进气口 / 排气口口径 / Air Inlet/Outlet Diameter (mm)	1"	1"	1 1/2"	1 1/2"
转速 / Rotating Speed (r/min)	2880	2880	2850	2860
重量 / Weight (kg)	35	40	50	60
进水口口径 / Water Inlet Diameter (inch)	G3/8"	G3/8"	G3/8"	G3/8"
排水口口径 / Water Outlet Diameter (inch)	G1/4"	G1/4"	G1/4"	G1/4"
尺寸 / Dimensions (mm)	700x200x212	716x200x212	815x250x257	841x250x257

W型
往复真空泵

Model W Reciprocating Vacuum Pump



产品详情 / Product Details

往复式真空泵排气量较大，多用于真空浸渍、钢水真空处理、真空蒸偶、真空蒸发、真空浓缩、真空结晶、真空干燥、真空过滤及混凝土的真空作业等方面抽出气体。

The reciprocating vacuum pump has a large exhaust capacity and is mostly used for vacuum impregnation, vacuum steel treatment, vacuum distillation, vacuum evaporation, vacuum concentration, vacuum crystallization, vacuum drying, vacuum filtration, and vacuum operations in concrete work to extract gases.

往复式真空泵对于抽除腐蚀性气体或含有颗粒状灰尘的气体是不适用的。被抽气体中如果含有灰尘,在泵的进口处必须加装过滤器。

The reciprocating vacuum pump is not suitable for extracting corrosive gases or gases containing particulate dust. If the extracted gas contains dust, a filter must be installed at the pump's inlet.

特点 / Features

01

体积小、维修简单
Compact size; easy to maintain

02

具有水冷却结构
Equipped with water cooling structure

03

宜在较高压强范围内使用
Suitable for use within a higher pressure range

主要数据与规格 / Main Technical Performance and Specifications:

型号 / Model	W3	W4-1	W5-1	W-70	W-150	W-300
抽气速率 / Pumping Rate (L/S)	55	100	200	70	150	300
极限全压 / Ultimate Total Pressure (≤Pa)	1330			2600		
电机功率 / Motor Power (kw)	5.5	11	22	7.5	15	30
进气口 / 排气口径 / Air Inlet/Outlet Diameter (inch & mm)	2	4	5	4	5	180
转速 / Rotating Speed (r/min)	300	530	430	360	300	285
重量 (不含电机) / Weight Without Motor (kg)	600	600	1100	600	1100	3000
进水口 / 排水口径 / Water Inlet/Outlet Diameter (inch & mm)	1/2"	1/2"	3/4"	1/2"	3/4"	3/4"
尺寸 / Dimensions (mm)	1402x615x640	1486x495x520	1801x668x650	1573x503x720	1946x654x812	2475x756x1138

CUSTOMER NOTICES
客户须知

在选择真空泵时，正确选型将直接影响到泵的使用寿命和企业的效益。实践表明，同一工况下的不同选型，其安装的使用寿命有几倍～百倍之差，因此我们特别提醒：无论选择何种真空泵，均可参照本样本。或请专业人员推荐，以获得满意效果。

When selecting a vacuum pump, choosing the correct model will directly impact the pump's service life and the efficiency of the enterprise. Practice shows that, under the same working conditions, the service life of pumps with different model selections can vary from several times to even a hundredfold. Therefore, we would like to specially remind you: No matter which type of vacuum pump you choose, you may refer to this catalog, or consult professional personnel for recommendations to achieve optimal performance.

如果需要我们协助选型，请提供以下信息：
If you need our assistance in selecting the right model, please provide the following information:

- 您的系统所需要的实际工作真空度；
The actual working vacuum level required by your system;
- 抽到工作目标真空度的抽气时间；
The time required to reach the target vacuum level;
- 其系统真空的抽气体成份；
The composition of the gases to be extracted by the vacuum system (or vacuum tank);
- 被抽气体介质的名称、温度、浓度；
The name, temperature, and concentration of the extracted gas;
- 是否有易燃易爆有毒气体及其酸碱性；
Whether the gas contains any flammable, explosive, or toxic components, and its pH level;
- 是否含有纤维、颗粒物、粘性物质；
Whether the gas contains fibers, particulates, or sticky substances;
- 其真空泵前端是否有需要排放的防护装置；
Whether a protective device needs to be installed at the inlet of the vacuum pump;
- 其真空泵排出的气体、液体是否需要回收；
Whether the gas or liquid discharged by the vacuum pump needs to be recycled;
- 是否有冷却水的水静压力≥0.4MPa、水温度≤20℃；
Availability of cooling water with a static pressure of ≥0.4 MPa and water temperature of ≤20℃;
- 对真空泵轴封轴封、电机及其电控系统的特殊要求。
Special component requirements for the vacuum pump seals, motors, and their electronic control systems.

计量单位换算/Measurement Unit Conversion

本样本所用压强单位为Pa (帕)
The pressure unit used in this catalog is Pa (Pascal)

1mbar(毫巴)=100Pa(帕) =0.75torr (托) 1mbar=100Pa

1torr(托)=133 Pa (帕) 1torr =133 Pa

真空区域划分/Vacuum Area Division

真空区域 / Vacuum Area	压力 / Pressure	
	帕 / Pa	托 / Torr
低真空 / Low Vacuum	10 ⁰ - 10 ²	760 - 1
中真空 / Medium Vacuum	10 ² - 10 ⁻¹	1 - 10 ⁻³
高真空 / High Vacuum	10 ⁻¹ - 10 ⁻⁵	10 ⁻³ - 10 ⁻⁷
超高真空 / Ultrahigh Vacuum	≤ 10 ⁻⁵	≤ 10 ⁻⁷

Customized Vacuum Systems

真空机组定制

我们根据客户的工况、需求与具体参数，提供完全定制化的真空泵解决方案，确保系统的高效运行与长期稳定。

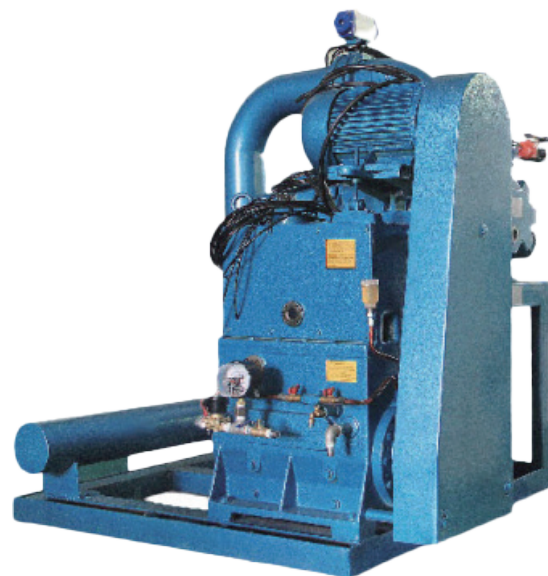
We offer fully customized vacuum pump solutions tailored to your specific working conditions, needs, and parameters, ensuring optimal system efficiency and long-term stability.

以罗茨真空泵为主泵，旋片或滑阀真空泵为前级泵并配有电磁阀，管路等组成的成套真空获得设备具有结构紧凑、操作方便、抽气能力大、抽气时间短等特点。该类型真空机组广泛应用于真空冶金、真空脱气、真空镀膜以及空间模拟、低密度风洞等装置中，以抽除非腐蚀性气体。还可用于医药、食品、电子、化工等工业的蒸馏、蒸发、干燥等生产过程。对于某些会有较多水分、粉尘的工艺则必须配备过滤装置或冷凝器等，还可增加一台双级水环泵作粗抽，使大量水分、粉尘由水环泵抽除，即可延长机组的正常使用寿命。

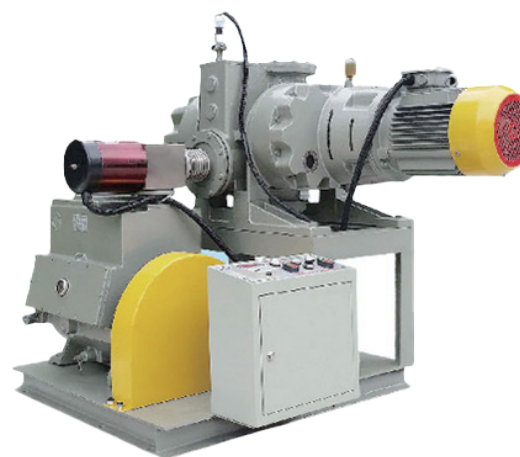
The complete vacuum acquisition system consists of a Roots vacuum pump as the main pump, a rotary vane or slide valve vacuum pump as the fore pump, and is equipped with solenoid valves, pipelines, etc. It has features such as compact structure, easy operation, high pumping capacity, and short pumping time. This type of vacuum unit is widely used in vacuum metallurgy, vacuum degassing, vacuum coating, as well as space simulation, low-density wind tunnels, and other systems to remove non-corrosive gases. It is also applicable in the distillation, evaporation, and drying processes in industries such as pharmaceuticals, food, electronics, and chemicals. For processes that involve a large amount of moisture or dust, a filtration device or condenser must be equipped. Additionally, a two-stage water ring pump can be added for rough pumping to remove a large amount of moisture and dust, thereby extending the normal service life of the unit.



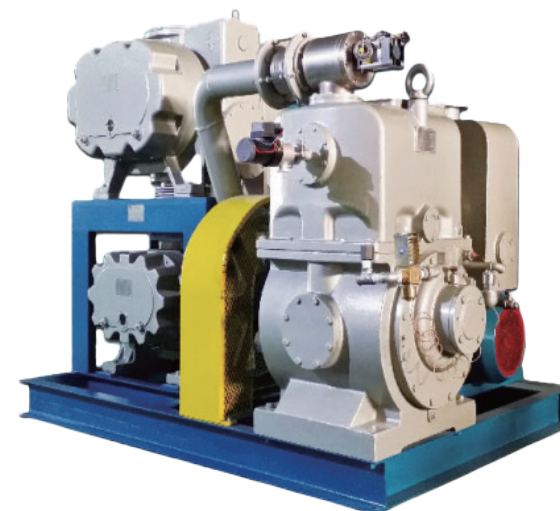
配置PLC智能控制
Equipped With PLC Intelligent Control



罗茨-旋片/滑阀泵真空机组
Roots-Rotary Vane/Slide Valve Pump Vacuum Unit



Model SZX single-stage rotary vane vacuum pump is used as a fore pump in conjunction with a booster pump, making it suitable for vacuum furnace pumping systems. It is applicable for the lamination and encapsulation of solar cell modules. In the lamination process, it effectively removes condensable gases and gel-like particles generated by the EVA cross-linking chemical reaction, providing better anti-contamination performance than other types of fore pumps. It is also suitable for metallurgical ingot casting and solar photovoltaic polysilicon ingot casting. The product has minimal mechanical vibration, and its low vibration will not negatively impact crystal growth.



罗茨-旋片-油扩散泵真空机组普遍应用于电子工业、冶金工业、化学工业、原子能工业以及宇航等科研技术领域。真空烧结炉，各种真空镀膜机以及真空电子束焊机、各类真空电炉、电子显微镜、各种电子射线、加速器、宇宙空间模拟容器所需的高真空环境均可用该系列真空机组来实现。

The Roots-Rotary Vane-Oil Diffusion Pump Vacuum Unit is widely used in the electronics industry, metallurgy industry, chemical industry, atomic energy industry, and aerospace research and technical fields. High vacuum environments required for vacuum sintering furnaces, various vacuum coating machines, vacuum electron beam welding machines, various vacuum electric furnaces, electron microscopes, various electron rays, accelerators, and space simulation containers can all be achieved using this series of vacuum units.

SZX 型号单级旋片真空泵作为前级泵配合增压泵使用适合作为真空炉的真空抽气系统。适用于太阳能电池组件层压封装，对层压封装工艺中 EVA 交联化学反应产生凝成的可凝性气体及胶状颗粒，比其他类型的前级泵具有更好的抗污染性；适用冶金铸锭、太阳能光伏多晶硅铸锭。产品机械振动极小，产品的低振动不会对晶体生长产生不良影响。



罗茨-旋片-油扩散泵真空机组
(LNG槽罐液罐抽空与检测)
Roots-Rotary Vane-Oil Diffusion Pump Vacuum Unit
(LNG Tank and Liquid Container Evacuation and Detection)

该机组采用油做工作介质，对于怕油污染的真空环境，其使用受到了一定限制。但采用五氯酚苯基乙醚或五氯酚苯基硅氧烷为工作液，返油就会得到很大改善。也可以采用水冷挡板，再装一个简单的液氮阱，可使返油率小于 $5 \times 10^{-6} \text{mg/cm}^2/\text{min}$ 。因而可更普遍地应用于光学工业、电子工业、真空冶金、航天及原子能工业中。

This unit uses oil as the working medium. For vacuum environments sensitive to oil contamination, its use is somewhat limited. However, using pentachlorophenyl acetate or pentachlorophenyl siloxane as the working fluid greatly improves the oil backstreaming issue. Additionally, a water-cooled baffle and a simple liquid nitrogen trap can be installed, reducing the oil backstreaming rate to less than $5 \times 10^{-6} \text{mg/cm}^2/\text{min}$. Therefore, it can be more widely used in the optical industry, electronics industry, vacuum metallurgy, aerospace, and atomic energy industries.

Customized Vacuum Systems

真空机组定制

定制化服务包括选择泵类型、系统优化、特殊工况处理等，确保满足不同应用场景的严格要求。

Our customization services include pump type selection, system optimization, and handling of special working conditions, ensuring the system meets the stringent demands of various application scenarios.

如有具体需求，请联系我们的销售人员，我们将竭诚为您提供最优质的服务和定制解决方案。

For specific requirements, please contact our sales team. We are dedicated to providing you with the best service and customized solutions.

液环泵真空机组

Liquid Ring Pump Vacuum Unit



应用于水务工程真空引水
Applied in Water Engineering
for Vacuum Water Intake



2BEA, 2BVA, SZ, 2S, 2SK 系列液环真空泵，除与罗茨泵或气冷泵组成 2-4 级罗茨液环或罗茨气冷液环机组外，亦可独立组成液环泵闭环或开环真空机组（含防爆型）。可抽取含有大量水蒸气和微小固体颗粒（大颗粒可配置过滤器）的气体，这是其他形式真空泵（压缩机）所不可比拟的。由于气体的压缩过程是等温压缩，所以适合于抽吸、压送易燃、易爆及有毒、有味气体。可选择配置汽水分离器、循环换热器、冷却机、过滤器、冷却循环水储液器、具有手动、自动、遥控等功能的电控柜（常规或防爆）。

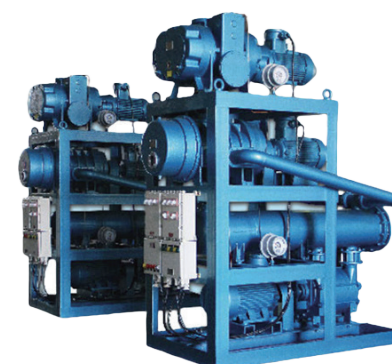
The model 2BEA, 2BVA, SZ, 2S, and 2SK liquid ring vacuum pumps can be configured into 2-4 stage Roots-liquid ring or Roots-air cooled liquid ring vacuum units, in combination with Roots pumps or air-cooled pumps, and can also independently form closed-loop or open-loop liquid ring vacuum units (including explosion-proof types). They can extract gases containing large amounts of water vapor and fine solid particles (larger particles can be removed with a filter), which is not possible with other types of vacuum pumps or compressors. Since the gas compression process is isothermal, it is suitable for extracting, compressing, and conveying flammable, explosive, toxic, and odorous gases. Optional configurations include steam separators, circulating heat exchangers, cooling machines, filters, cooling water storage tanks, and electrical control cabinets (either conventional or explosion-proof), with manual, automatic, or remote control functions.

罗茨-液环泵真空机组

Roots-Liquid Ring Pump Vacuum Unit

以罗茨真空泵为主泵，以双级液环式真空泵为前级泵的自动启闭、自动过载保护的成套真空获得设备特别适用于抽除含较多蒸气及有一定腐蚀性的气体的工业流程中。例如：制药业的真空蒸馏、真空蒸发、脱水结晶、轻纺工业的涤纶切片干燥、食品工业的冷冻、干燥等工艺均可采用。

The complete vacuum acquisition system, with a Roots vacuum pump as the main pump and a two-stage liquid ring vacuum pump as the fore pump, features automatic start-stop and automatic overload protection. It is especially suitable for industrial processes that involve the removal of large amounts of vapor and corrosive gases. For example, it can be applied in processes such as vacuum distillation and vacuum evaporation in the pharmaceutical industry, dehydration crystallization, drying of polyester chips in the textile industry, and freezing and drying in the food industry.



以 ZJL 型气体循环冷却罗茨真空泵为主泵中间泵，以 2SK 或 2BEA 型双级水环式真空泵为前级泵的真空获得设备能在高压比、高压差下正常工作，大大缩短了对系统的预抽时间，获得较低的预抽压力。

The vacuum acquisition system, using a model ZJL gas circulation cooling Roots vacuum pump as the main and intermediate pump, and a model 2SK or 2BEA two-stage liquid ring vacuum pump as the fore pump, can operate normally under high compression ratios and high pressure differences. This greatly shortens the pre-pumping time for the system and achieves lower pre-pumping pressure.



应用于精细化工行业
Applied in Fine Chemical Industry



应用于食品冷冻干燥工艺
Applied in Food Freeze Drying Process

气体循环冷却罗茨-液环泵真空机组

Gas Circulation Cooling Roots-Liquid Ring Pump Vacuum Unit



应用于废油提纯、生物柴油提纯
Applied in Waste Oil Purification
and Biodiesel Purification