Hygienic Rotary Lobe Vacuum Pump for Sanitary Food and Beverage Applications

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Aipu
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Export Standard Packaging
- Payment Terms: T/T, L/C

Product Specification

- Flow Range: 0.52-183.9m³/min
- Material: HT250
- Vacuum Degree: -9.8~-50kPa
- Models: ZG
- Highlight: **hygienic rotary lobe vacuum pump**, **hygienic rotary lobe vacuum pumps**, **food rotary lobe vacuum pump**

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Product Features

Product Overview
Designed to meet the stringent hygiene requirements of the food and beverage industry, this hygienic rotary lobe vacuum pump provides reliable, contamination-free vacuum performance for a wide range of sensitive processing and packaging applications. Leveraging a sanitary, oil-free design, this vacuum pump ensures the utmost in cleanliness and product purity, making it an ideal choice for manufacturers focused on consumer safety and regulatory compliance.
Key Technical Features

High speed (up to 4000-5000r/min), high efficiency, small size, light weight, compact structure.
Adopting an air-cooled structure, a single-stage pressure of 98kPa does not require cooling water.
The impeller adopts advanced structure, three blade type, high area utilization coefficient, integrated blade shaft structure, good rigidity, ensuring high pressure, large flow rate, and smooth operation of the fan at high speed.
The assembled high-efficiency soundproof cover can be matched according to user needs, reducing the fan sound to below 85dB (A) or even lower.
The casing adopts a special structural design to ensure reliable operation under high pressure and reduce operating noise.
Adopting precision hard toothed helical synchronous gears, keyless connection, reliable positioning, smooth operation, low noise, high strength, and long service life.
The bearings are heavy-duty and operate reliably at high temperatures and speeds.
The axial fixation of the bearing adopts a locking disc, which avoids the weakening of the shaft strength caused by traditional round nuts and stop pads, and makes the shaft strength higher.
The fuel tank is made of aluminum alloy material, with good heat dissipation effect and light weight.
Special sealing ring, with good sealing effect and long service life.
The fan host can be used both vertically and horizontally, making it easy to replace foreign models.
The intensive unit has a compact structure, innovative design, and reliable performance. The belt tensioning adopts a self tensioning structure, which is easy to use and maintain.
The pulley is made of ductile iron material, allowing for high rotational speed. The pulley is connected to the shaft using standard expansion sleeves, ensuring reliable connection and easy maintenance.
The intensive unit is equipped with a fan specific relief valve, which is used in conjunction with an electromagnetic valve. When there is no bypass vent valve in the pipeline system, the fan can also be started and stopped under no-load, making it convenient for users to use.
Key Advantages
Hygienic, contamination-free vacuum performance for sensitive food and beverage applications
Oil-free design eliminates risk of product adulteration from lubricant carryover
Energy-efficient operation and quiet running characteristics for workplace safety
Smart control and monitoring functions support industry-leading food safety practices

Scope of application

It is suitable for sewage treatment industry, petrochemical industry, food and drug industry, textile industry, metallurgy industry, cement and construction materials industry, printing and dyeing industry and other industries.

Market Distribution

We have 42 offices throughout the country, in addition to Taiwan Province, 33 provinces in the country's ad-ministrative regions have a sound sales and service network. We can provide you with pre-sale, in-sale and after-sales service in a timely and convenient manner, understand your needs, and constantly improve the service and quality system while meeting the customized needs of customers.

High Performance Aerodynamic Design Methodology for Wide Service Conditions

By studying the influence of impeller and volute flow on efficiency and working stability, the R&D team proposed a flow control method and a pneumatic optimization design method to improve the performance of the main engine, which greatly improved the efficiency of the main engine.

Manufacturing & Equipment Base

has built laboratories, R& D buildings, processing workshops, etc., with internationally advanced and China leading high-precision processing equipment.
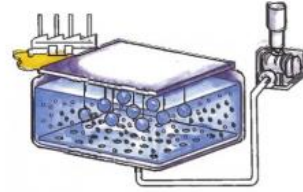
Examples of uses

■水泡浴 Foaming in Bath

■燃烧炉
Combustion a Fireplace

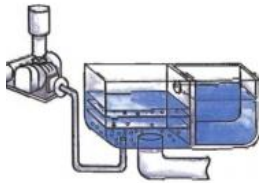■电镀槽搅拌
Stirring in Plated Vessel

■公寓大楼的污水处理（曝气）
Waste water Aeration in Condominiums

■工厂废水和畜产废水处理（曝气）
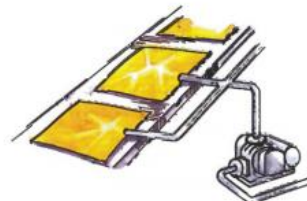Waste Water Aeration for Shop and
Livestock Industries

■养鱼用 Fish Care

■冲洗 Back Washing

■粉体输送（水泥、饲料、小片状物）
Transport of Particles

■食品真空包装
Vacuum Pack for Foods

ZG 系列罗茨真空泵性能表
ZG Series Roots Type Vacuum Pump Performance Data

真空泵型号 Model	转速 rpm r/min n	理论流量 Theoretical Capacity m³/min Qth	-9.8kPa Qs	La	Po	-19.6kPa Qs	La	Po	-29.4kPa Qs	La	Po	-39.2kPa Qs	La	Po	-49kPa Qs	La	Po	电机极数 Motor Pole
ZG-50V	1450	1.68	1.09	0.57	1.1	0.80	0.85	1.1	0.52	1.12	1.5							4
	2000	2.32	1.73	0.73	1.1	1.44	1.11	1.5	1.16	1.49	2.2	0.88	1.87	2.2				4
	2500	2.9	2.31	0.92	1.1	2.02	1.40	2.2	1.74	1.87	2.2	1.46	2.34	3				2
	3000	3.48	2.89	1.17	1.5	2.60	1.74	2.2	2.32	2.31	3	2.04	2.87	4				2
	3500	4.06	3.47	1.46	2.2	3.18	2.13	3	2.90	2.79	4	2.62	3.45	4	2.29	4.12	5.5	2
	4000	4.64	4.05	1.76	2.2	3.76	2.52	3	3.48	3.27	4	3.20	4.03	5.5	2.87	4.79	5.5	2
	4500	5.22	4.63	2.05	3	4.34	2.91	4	4.06	3.76	5.5	3.78	4.61	5.5	3.45	5.46	7.5	2
	5000	5.8	5.21	2.25	3	4.91	3.19	4	4.64	4.14	5.5	4.36	5.09	7.5	4.03	6.04	7.5	2
ZG-65V	1450	2.83	2.00	0.76	1.1	1.59	1.22	1.5	1.20	1.69	2.2							4
	2000	3.9	3.07	0.99	1.1	2.66	1.62	2.2	2.28	2.26	3	1.88	2.90	4				4
	2500	4.88	4.05	1.35	1.5	3.63	2.14	3	3.25	2.94	4	2.85	3.74	5.5				2
	3000	5.85	5.02	1.66	2.2	4.61	2.61	3	4.23	3.57	4	3.83	4.52	5.5	3.38	5.48	7.5	2
	3500	6.83	6.00	2.17	3	5.58	3.28	4	5.20	4.40	5.5	4.80	5.51	7.5	4.35	6.63	7.5	2
	4000	7.8	6.97	2.42	3	6.56	3.70	5.5	6.18	4.97	5.5	5.78	6.25	7.5	5.33	7.52	11	2
	4500	8.78	7.95	3.08	4	7.53	4.52	5.5	7.15	5.95	7.5	6.75	7.39	11	6.30	8.82	11	2
	5000	9.75	8.92	3.64	4	8.51	5.24	7.5	8.13	6.83	7.5	7.73	8.42	11	7.28	10.02	11	2
ZG-80V	2000	7.27	5.94	1.88	2.2	5.31	3.07	4	4.76	4.25	5.5	4.21	5.44	7.5				4
	2300	8.37	7.05	2.36	3	6.44	3.72	5.5	5.89	5.09	7.5	5.35	6.45	7.5				2
	2500	9.09	7.80	2.78	4	7.19	4.26	5.5	6.65	5.74	7.5	6.11	7.22	11	5.52	8.70	11	2
	2800	10.2	8.91	3.26	4	8.31	4.92	5.5	7.78	6.57	7.5	7.24	8.23	11	6.66	9.89	11	2
	3000	10.9	9.66	3.78	5.5	9.06	5.55	7.5	8.53	7.33	11	8.00	9.10	11	7.42	10.88	15	2
	3300	12.0	10.8	4.45	5.5	10.2	6.41	7.5	9.67	8.36	11	9.14	10.31	11	8.57	12.27	15	2
	3500	12.7	11.5	5.17	7.5	10.9	7.24	11	10.4	9.32	11	9.90	11.39	15	9.33	13.46	15	2
	3800	13.8	12.6	5.95	7.5	12.1	8.20	11	11.6	10.45	15	11.0	12.70	15	10.5	14.95	18.5	2
	4000	14.6	13.4	6.37	7.5	12.8	8.74	11	12.3	11.10	15	11.8	13.47	15	11.2	15.84	18.5	2
ZG-100V	2000	10.9	9.04	2.58	3	8.14	4.35	5.5	7.35	6.13	7.5	6.55	7.90	11				4
	2300	12.6	10.7	3.14	4	9.83	5.18	7.5	9.05	7.22	11	8.26	9.27	11				2
	2500	13.6	11.8	3.72	5.5	11.0	5.94	7.5	10.2	8.16	11	9.41	10.38	15	8.55	12.60	15	2
	2800	15.3	13.5	4.39	5.5	12.7	6.87	11	11.9	9.36	11	11.1	11.84	15	10.3	14.33	18.5	2
	3000	16.4	14.6	5.06	7.5	13.8	7.73	11	13.0	10.39	15	12.3	13.05	15	11.4	15.72	18.5	2
	3300	18.0	16.3	6.33	7.5	15.5	9.26	11	14.7	12.19	15	14.0	15.12	18.5	13.2	18.05	22	2
	3500	19.1	17.4	7.31	11	16.6	10.41	15	15.9	13.52	15	15.1	16.63	18.5	14.3	19.73	22	2
	3800	20.7	19.1	8.57	11	18.3	11.95	15	17.6	15.32	18.5	16.8	18.69	22	16.0	22.07	30	2
	4000	21.8	20.2	9.55	11	19.4	13.10	15	18.7	16.65	18.5	18.0	20.20	22	17.2	23.75	30	2
ZG-125V	1150	12.5	10.0	3.45	4	8.8	5.50	7.5	7.8	7.54	11	6.8	9.59	11				4
	1450	15.8	13.3	4.6	5.5	12.1	7.2	11	11.1	9.8	11	10.1	12.3	15				4
	1750	19.1	16.6	5.82	7.5	15.5	8.93	11	14.5	12.05	15	13.4	15.17	18.5	12.3	18.28	22	4
	2000	21.8	19.4	7.2	11	18.2	10.7	15	17.2	14.3	18.5	16.2	17.9	22	15.1	21.4	30	2
	2300	25	22.7	8.80	11	21.6	12.89	15	20.6	16.99	22	19.6	21.08	30	18.5	25.18	30	2
	2600	28.3	26.0	10.3	15	24.9	15.0	18.5	23.9	19.6	22	23.0	24.2	30	21.9	28.9	37	2
	2800	30.5	28.2	11.49	15	27.1	16.47	18.5	26.2	21.46	30	25.2	26.45	30	24.2	31.43	37	2
	3000	32.7	30.4	12.5	15	29.3	17.9	22	28.4	23.2	30	27.5	28.6	37	26.4	33.9	37	2

进口流量是指在各真空度下,进口温度为20℃,出口为绝压101.325kPa的进口空气流量
Performance based on inlet air at standard temperature of 20℃, and discharge at an ambient pressure of 101.325kPa.

ZG 系列罗茨真空泵性能表
ZG Series Roots Type Vacuum Pump Performance Data

真空泵型号 Model	转速 rpm r/min n	理论流量 Theoretical Capacity m³/min Qth	-9.8kPa Qs	La	Po	-19.6kPa Qs	La	Po	-29.4kPa Qs	La	Po	-39.2kPa Qs	La	Po	-49kPa Qs	La	Po	电机极数 Motor Pole
ZG-150V	1150	20.1	16.2	5.5	7.5	14.5	8.8	11	12.9	12.0	15	11.4	15.3	18.5				4
	1450	25.3	21.6	6.8	7.5	19.9	11.0	15	18.4	15.1	18.5	16.9	19.2	22				4
	1750	30.5	27.0	8.4	11	25.3	13.4	15	23.9	18.4	22	22.4	23.4	30	20.8	28.3	37	4
	2000	34.9	31.4	11.3	15	29.8	17.0	18.5	28.4	22.7	30	27.0	28.4	37	25.5	34.1	37	2
	2300	40.1	36.8	14.2	18.5	35.2	20.7	30	33.9	27.3	30	32.5	33.8	37	31.0	40.4	45	2
	2600	45.3	42.1	16.8	18.5	40.6	24.2	30	39.3	31.6	37	38.0	39.0	45	36.5	46.4	55	2
	2800	48.8	45.7	18.6	22	44.2	26.6	30	42.9	34.5	45	41.7	42.5	55	40.2	50.5	55	2
	3000	52.3	49.3	20.2	22	47.8	28.7	37	46.6	37.3	45	45.3	45.8	55	43.9	54.3	75	2
ZG-175V	1150	27.14	23.4	7.0	11	21.5	11.5	15	19.7	15.9	18.5	17.9	20.3	30	15.9	24.8	30	4
	1450	34.22	30.4	8.8	11	28.6	14.4	18.5	26.8	20.0	22	25.0	25.6	30	23.0	31.2	37	4
	1750	41.3	37.5	11.4	15	35.6	18.1	22	33.9	24.9	30	32.1	31.6	37	30.1	38.3	45	4
	2000	47.2	43.4	14.7	18.5	41.5	22.4	30	39.8	30.1	37	38.0	37.9	45	36.0	45.6	55	4
	2300	54.28	50.5	18.2	22	48.6	27.0	30	46.9	35.9	45	45.1	44.8	55	43.0	53.7	75	2
	2600	61.36	57.6	21.0	30	55.7	31.1	37	54.0	41.1	45	52.2	51.1	75	50.1	61.1	75	2
	2800	66.08	62.3	23.8	30	60.4	34.6	45	58.7	45.4	55	56.9	56.2	75	54.8	67.0	75	2
	3000	70.8	67.0	25.6	30	65.1	37.1	45	63.4	48.7	55	61.6	60.3	75	59.6	71.9	90	2
ZG-200V	970	44.0	38.3	9.9	11	35.7	17.1	22	33.3	24.3	30	30.9	31.5	37				4
	1250	56.7	51.2	14.2	18.5	48.6	23.5	30	46.3	32.7	37	44.0	42.0	55	41.4	51.3	75	4
	1450	65.8	60.4	18.0	22	57.9	28.7	37	55.6	39.5	45	53.3	50.2	55	50.8	61.0	75	4
	1600	72.6	67.3	21.5	30	64.8	33.3	37	62.6	45.2	55	60.3	57.1	75	57.8	69.0	75	4
	1750	79.3	74.2	25.6	30	71.7	38.6	45	69.5	51.6	75	67.3	64.5	75	64.9	77.5	90	4
	1900	86.1	81.1	30.7	37	78.6	44.8	55	76.5	58.9	75	74.3	73.0	90	71.9	87.1	110	4
	2050	92.9	88.0	35.2	45	85.6	50.4	55	83.5	65.6	75	81.3	80.8	90	78.9	96.1	110	4
ZG-250V	970	56.0	49.5	12.7	15	46.4	21.8	30	43.8	31.0	37	41.2	40.2	45	38.3	49.4	55	4
	1250	72.2	65.9	19.4	22	62.9	31.2	37	60.4	43.1	55	57.8	54.9	75	55.1	66.7	75	4
	1450	83.8	77.5	25.1	30	74.7	38.8	45	72.2	52.5	75	69.7	66.3	75	67.0	80.0	90	4
	1600	92.5	86.4	30.6	37	83.6	45.8	55	81.1	60.9	75	78.7	76.0	90	76.0	91.2	110	4
	1750	101.1	95.2	35.2	45	92.4	51.7	75	90.0	68.2	75	87.6	84.8	90	85.0	101.3	110	4
	1900	109.8	104.0	41.9	55	101.0	59.8	75	98.9	77.8	90	96.5	95.8	110	93.9	113.7	132	4
	2050	118.5	112.8	50.4	55	110.1	69.8	75	108.1	89.2	110	105.5	108.5	132	102.9	128	160	4

进口流量是指在各真空度下,进口温度为20℃,出口为绝压101.325kPa的进口空气流量
Performance based on inlet air at standard temperature of 20℃, and discharge at an ambient pressure of 101.325kPa.

Yixing Aipu Air System Equipment Co., Ltd

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