

Products And Systems



Wechat official account

VACCULEX VACUUM EQUIPMENT (ZHEJIANG) CO.,LTD

Sales Center: Room 304, Block B, Lane 777, Yinxiang Road, Shanghai

Factory Address: 27-2, Xinbei Road, Lincheng Town, Changxing County, Huzhou City, Zhejiang Province

After Sales Service: 0572-6297232

Website: www.vacculex.com

E-mail: Eddy@vacculex.com



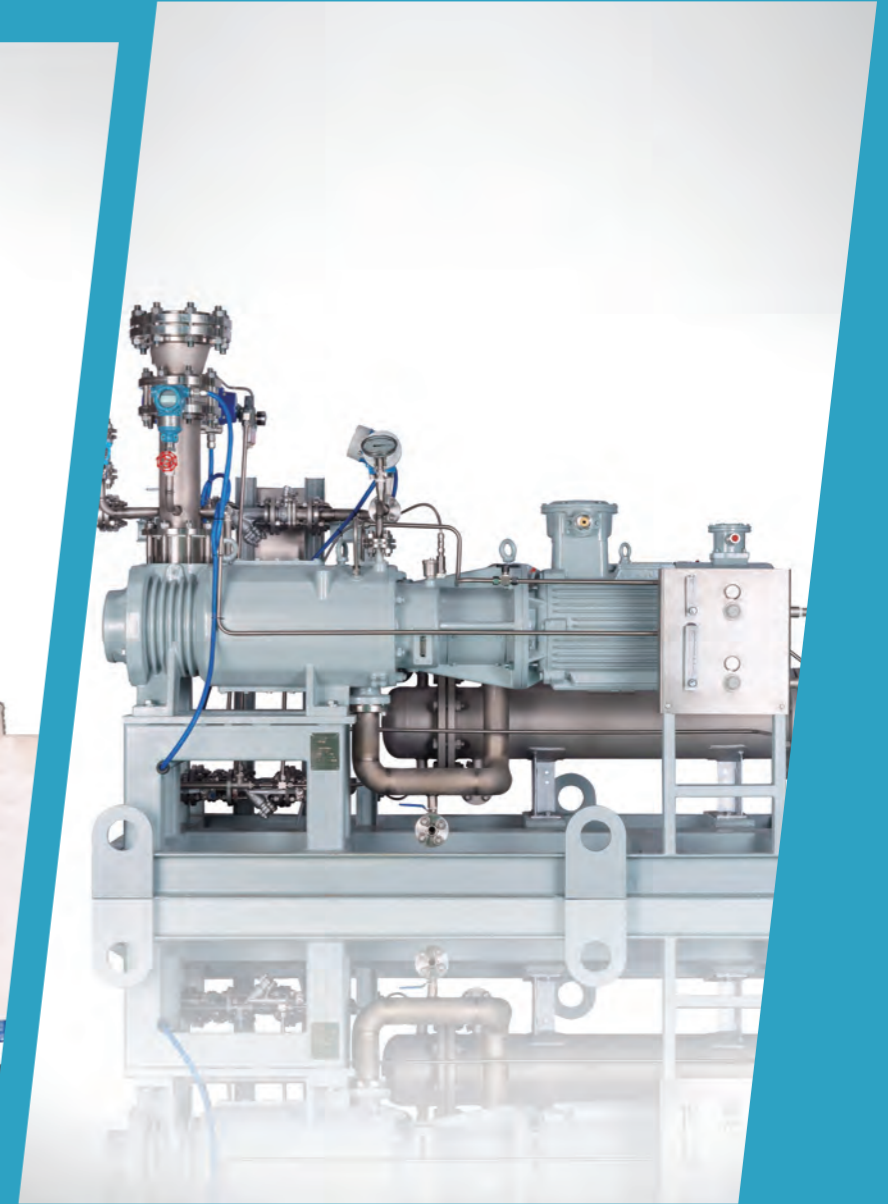
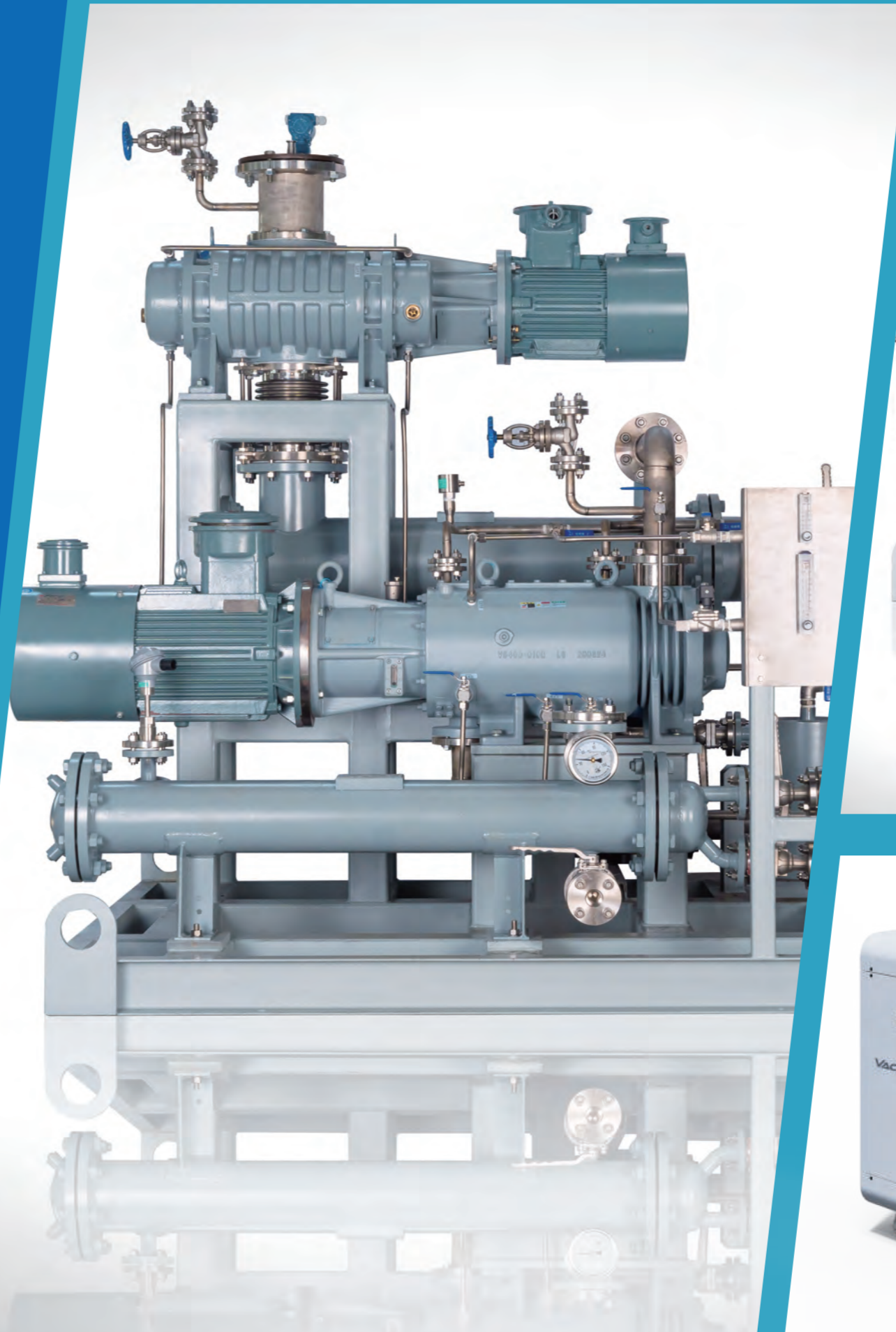
ABOUT US

Vacculex, as one of the largest manufacturers of roots vacuum pump (also called mechanical vacuum booster) and screw vacuum pump in China, kept specializing in vacuum research. Vacculex vacuum products and systems are dedicated to the top products in the global vacuum market.

Vacculex vacuum products and systems have been serving chemical, pharmaceutical, food & beverage, agriculture, power & energy etc. market applications for a long time, have processed flammable, explosive, highly toxic, polymeric and more complex gases. The food people eat, the clothes they wear, the houses they live in, the cars they drive and the products they use are all related to Vacculex. As an invisible champion vacuum equipment supplier in the industry, Vacculex is certified to ISO 9001, ISO 14001, ISO 45001 and CE. Generations of Vacculex people work hard for the belief of "vacuum for a better life".

Our proud products include: zero-leakage, precision temperature controlled, patented anti-condensation, internal screw cooling dry screw vacuum pumps covering application range 100 to 3000 m³/h pumping speed; zero-leakage, high exhaust temperature, high differential pressure, high performance Roots vacuum pumps covering application range 100 to 110,000 m³/h pumping speed; two-stage liquid ring vacuum pumps with higher pumping speed, better vacuum, anti-cavitation and high quality than single-stage; standard units of dry vacuum pumps with zero pollution, zero leakage, zero emission and zero installation; dry screw vacuum systems, roots screw vacuum systems, liquid ring vacuum systems, liquid ring roots vacuum systems, slide valve roots systems and rotary vane roots systems, etc.

VACUUM FOR A BETTER LIFE



Vaccum For A Better Life

Service Market



Chemical



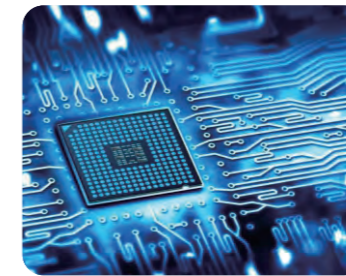
Food



Pharmaceutical



Steel



Semiconductor



Clean Energy

Mission:

Vacuum for a better life

The markets vacculex serve are the basic markets that sustain people's lives with steady long-term growth and significant contribution to our lives. Our products are based on reliability, durability and longevity, and we continue to innovate to meet the demanding needs of our customers in applications that continue to change.

Vision:

To be a world leading enterprise in vacuum solutions field.

As an exceptional group driven by outstanding employees, guided by our mission vacuum for a better life, we will work together in a process of continuous improvement to

- Create an exceptional company
- Build healthy growing family
- Make great impact on the surroundings

Value:

The values we espouse are the cornerstone of achieving our missions and visions.

Integrity and dedication: Keeping promises and satisfying customer needs. We insist on the persistent pursuit of professionalism and strive for excellence in doing every little thing well.

Continuous innovation: Paying attention to the challenges faced by our customers' business, listening to their real needs, providing high-quality products and services and innovative solutions through continuous improvement in manufacturing process, technology R&D, and service process, to help our customers keep improving their business and winning the market.

Teamwork: Teamwork towards success, we respect each member, we collaborate with each other to grow together and achieve extraordinary business.

Win-win value: Realizing the personal value of our employees in the process of creating value for our customers, creating value for the world around us, to achieve a win-win situation for customers, company, individuals and society.

Product Picture



VSP Dry Screw Vacuum Pump



MB Roots Vacuum Pump



VLRC Liquid Ring Vacuum Pump



SE Dry Vacuum Unit



S0 Dry Vacuum Unit



MS Multistage Roots Vacuum Pump



RB Roots Blower



Roots&Liquid Ring Vacuum System



Roots&Screw Vacuum System

VACCUM FOR A BETTER LIFE

CATALOGUE



01 VSP Series Dry Screw Vacuum Pump

03 MB Series Roots Vacuum Pump

06 RB Series Roots Blower

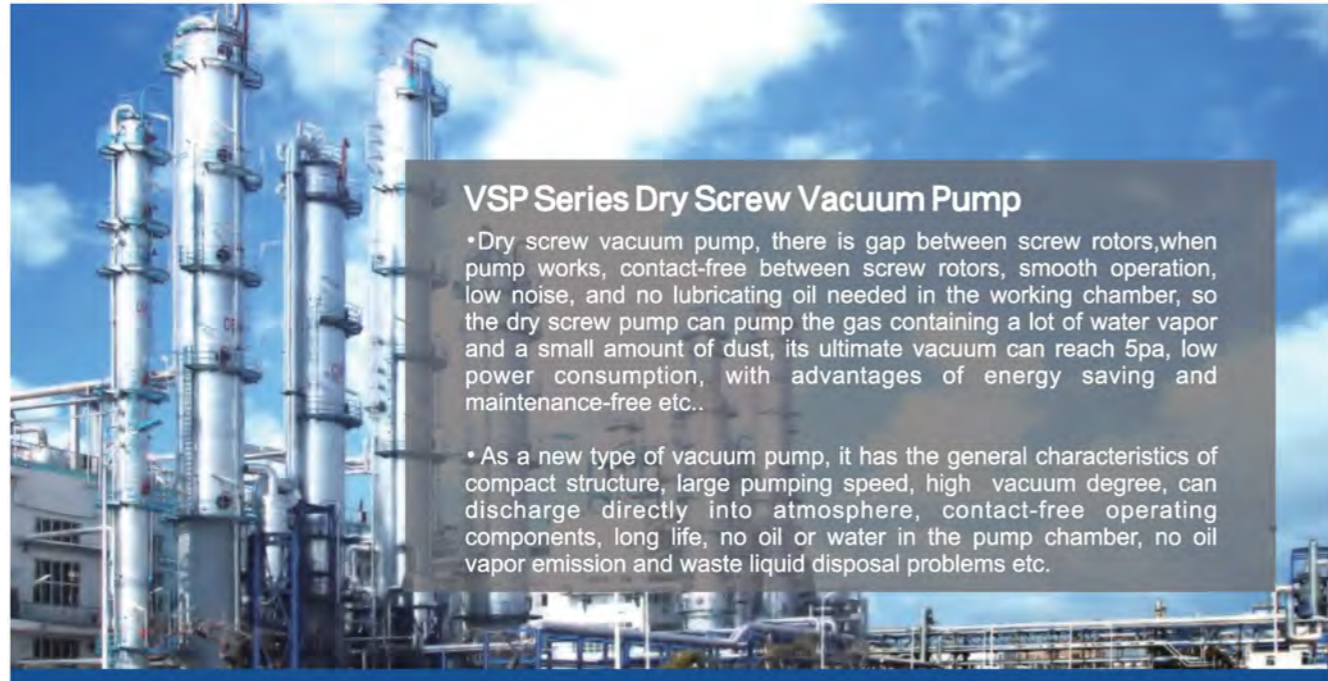
09 VLRC Series Liquid Ring Vacuum Pump

11 Non-standard Units

13 Standard Units

VACCULEX

Product Introduction



Product Characteristics

- Variable pitch, high ultimate pressure, large pumping capacity and fast exhaust.
- Energy-saving design, 30% reduction in power consumption.
- Special profile design, few medium gas condensation.
- Spiral jacket cooling, low exhaust temperature, no carbonization, anti-seize, long service life.
- Internal no oil or water, no waste oil wastewater treatment, facilitating solvent recovery.
- Configurable gas seal, inlet purging, steam cleaning, solvent cleaning.
- Corrosion-resistant coating treatment for flow parts, strong anti-corrosion ability



Typical Application

Oil and gas recovery, solvent recovery, API, DPC (diphenyl carbonate), DMC (dimethyl carbonate), VOC exhaust gas recovery, aerospace, iron and steel metallurgy, vacuum high-speed rail.



Phenolic Resin



PBAT (thermoplastic biodegradable plastic)

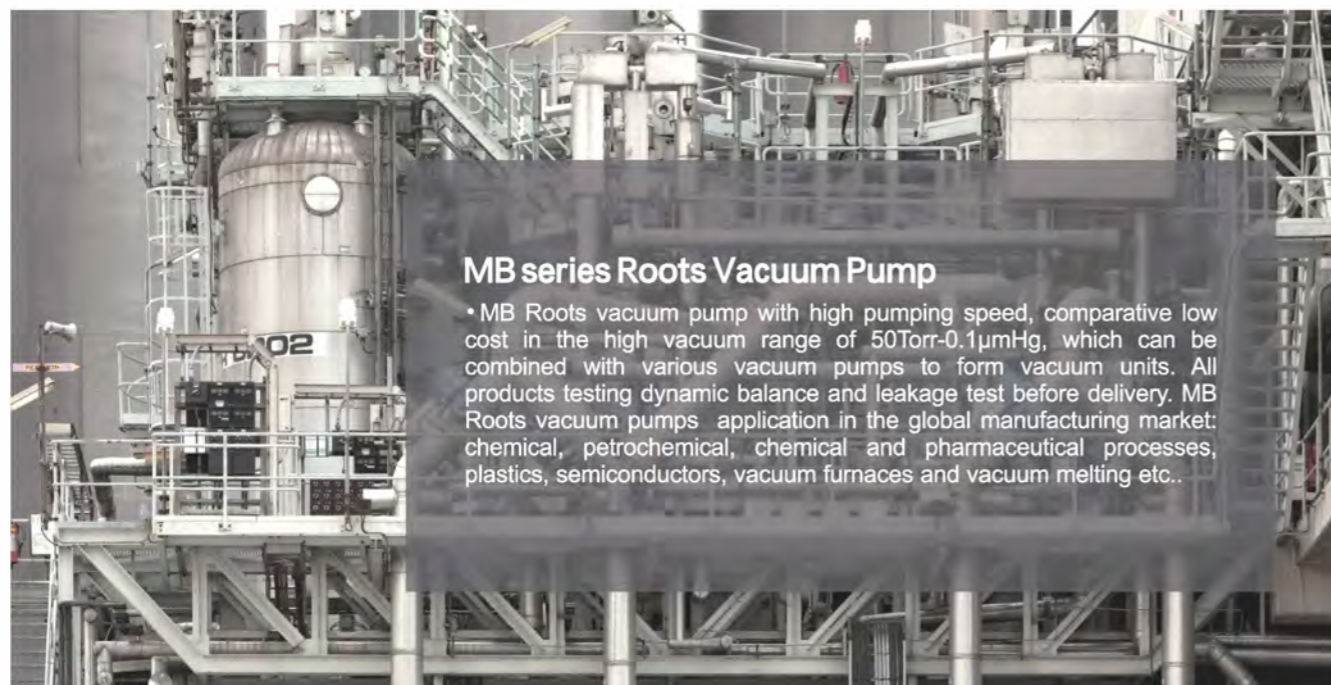


Waste oil recovery

Table Of Performance Parameters

Model	Unit	VSP150		VSP300		VSP400		VSP800		VSP1500		VSP3000	
		50	60	50	60	50	60	50	60	50	60	50	60
Frequency	Hz	50	60	50	60	50	60	50	60	50	60	50	60
Exhaust Volume	m ³ /h	110	130	250	300	330	400	660	800	1250	1500	2250	2700
	L/s	30.5	36.1	69.4	83.3	91.6	111.1	183.3	222.2	347.2	416.6	625	750
Ultimate Vacuum	Torr	5 × 10 ⁻¹	5 × 10 ⁻²	7.5 × 10 ⁻²	7.5 × 10 ⁻³	7.5 × 10 ⁻²	7.5 × 10 ⁻³	7.5 × 10 ⁻²	7.5 × 10 ⁻³	5 × 10 ⁻¹	5 × 10 ⁻²	5 × 10 ⁻¹	5 × 10 ⁻²
	Pa	67	6.7	10	1	10	1	10	1	67	6.7	67	6.7
Motor Power	Kw	3	4	7.5	7.5	11	11	18.5	18.5	37	37	55	55
Power Consumption 7.5 Torr (0.001mpa) Working Condition	Kw	1.8	3.3	4.8	5.9	6.2	6.9	10.4	12.4	24.7	30.4	30.6	45.2
Rotation Speed	rpm	3000	3600	2900	3500	2900	3500	2900	3500	1450	1750	1450	1750
Exhaust Method		BottomExhaust		BottomExhaust		BottomExhaust		BottomExhaust		SideExhaust		SideExhaust	
Inlet Connection	JIS 10k	JIS40		JIS50		JIS65		JIS100		JIS125		JIS150	
Exhaust Connection	JIS 10k	JIS40		JIS40		JIS50		JIS65		JIS80		JIS100	
Cooling Water Flow	l/min	5 ~ 10		10 ~ 15		10 ~ 15		15 ~ 20		30 ~ 40		40 ~ 50	
Cooling Water Connection	NPT	NPT3/8		NPT1/2		NPT1/2		NPT1/2		NPT 1		NPT 1	
Gearbox Oil Level	L	1		2		2		2.5		8		10	
Seal Purge Gas	l/min	5 ~ 15						15 ~ 25					
Total Length	mm	711		940		977		1143		1632		1844	
Total Height	mm	275		330		365		410		520		672	
Width (Bottom Exhaust)	mm	286		376		400		460		640		754	
Pump Weight	Kg	155		340		450		580		1600		2500	

Product Introduction



Product characteristics

- Five-point bearing design, double oil tanks, high stability.
- Nitrogen gas barrier to block gas from entering the oil tank; prolonging service life.
- Suitability for high temperature, high differential pressure and high vacuum environments, robust design, high reliability.
- Standard materials and various coatings available.
- Internal coating protection against corrosion, especially suitable for petrochemical, chemical and pharmaceutical industries.
- Optional single-point mechanical seal, oil slinger ring seal, eliminating cross contamination, reducing oil consumption.
- Optional five-point mechanical seal, labyrinth seal, completely eliminating cross-contamination, reducing oil consumption.



Typical Application

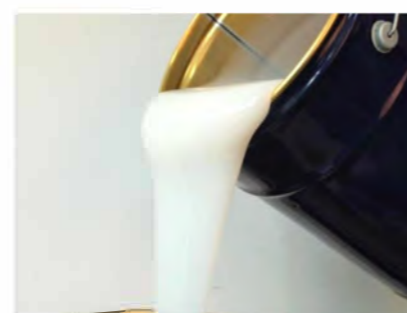
PC (polycarbonate board), PBAT (thermoplastic biodegradable plastic), flavors and fragrances, belt drying, molecular distillation



Abs Plastic



Ps Polystyrene Resin



Organic Silicon

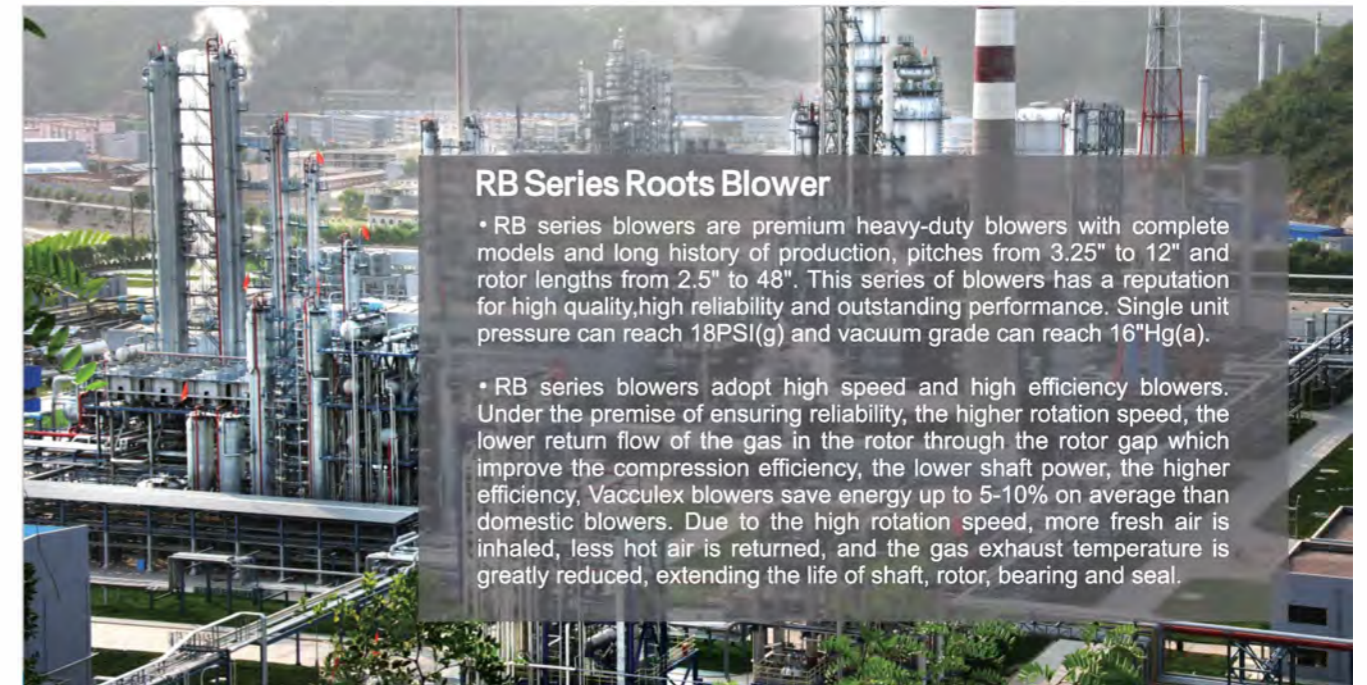
Table Of Performance Parameters

Model	Unit	MB100	MB200	MB400	MB540	MB720	MB850	MB1200	MB1600	MB2000	MB2700
Max. Pumping Speed	m ³ /h	170	340	680	920	1220	1450	2040	2720	3400	4590
	L/s	47	94	189	256	339	403	567	756	944	1275
Nominal Pumping Speed	m ³ /h	135	270	540	740	980	1100	1640	2190	2720	3700
	L/s	38	75	150	206	272	306	456	608	756	1028
Ultimate Full Pressure	Torr	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴
	Pa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Motor Power	Kw	2.2	2.2	2.2	4	4	7.5	7.5	7.5	7.5	11
Suggested Rotation Speed	rpm	1450	2900	2900	2900	2900	2900	2900	2900	2900	2900
Max. Rotation Speed	rpm	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
Inlet Flange	ANSI	3"	3"	4"	4"	4"	6"	6"	6"	8"	10"
Outlet Flange	ANSI	3"	3"	4"	4"	4"	6"	6"	6"	8"	10"
Cooling Water Flow	l/min (15°C)	0.8	0.8	0.95	0.95	1.5	1.5	1.9	1.9	1.9	2.8
Cooling Water Connection		1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT
Lubricant Volume	L	0.95	0.95	0.95	1.42	1.42	3.79	3.79	3.79	3.79	3.79
Total Length	mm	607	607	706	718	794	765	854	930	1031	1183
Total Height	mm	377	377	377	380	380	508	508	508	508	508
Width	mm	285	285	285	337	337	432	432	432	432	432
Pump Weight	Kg	73	73	88	118	136	204	236	263	310	358

Table Of Performance Parameters

Model	Unit	MB2900	MB3600	MB4500	MB5400	MB7300	MB7900	MB10000	MB27000	MB60000
Max. Pumping Speed	m³/h	4930	6120	7820	9350	12400	16000	21600	47430	116380
	L/s	1369	1700	2172	2597	3444	4444	6000	13176	32328
Nominal Pumping Speed	m³/h	4750	5910	7560	5640	7500	12860	17380	39500	97000
	L/s	1319	1642	2100	1567	2083	3572	4828	10980	26940
Ultimate Full Pressure	Torr	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴	7.5 × 10 ⁻⁴
	Pa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Motor Power	Kw	15	15	18.5	22	22	30	30	55	110
Suggested Rotation Speed	rpm	2900	2900	2900	1450	1450	1450	1450	1000	1000
Max. Rotation Speed	rpm	3000	3000	3000	2400	2400	1800	1800	1200	1200
Inlet Flange	ANSI	10"	12"	12"	14"	16"	14"	20"	24"	32"
Outlet Flange	ANSI	10"	12"	12"	14"	16"	14"	20"	24"	32"
Cooling Water Flow	l/min (15°C)	3.8	3.8	3.8	5.7	5.7	7.6	9.5	33	50
Cooling Water Connection		1/4 NPT	1/4 NPT	1/4 NPT	3/8 NPT	3/8 NPT	3/4 NPT	3/4 NPT	G 1	G 1
Lubricant Volume	L	7.5	7.5	7.5	30	30	38	38	60	100
Total Length	mm	1280	1380	1507	1560	1780	2047	2505	2176	3039
Total Height	mm	651	651	651	781	781	747	747	1420	1800
Width	mm	585	585	585	720	720	954	954	1518	1640
Pump Weight	Kg	578	658	726	1162	1474	2450	3110	5070	10400

Product Introduction



Product characteristics

- Five-point bearing design improves the bearing force condition during belt driving.
- Double oil tank design provides excellent cooling and lubrication to the bearings at both ends, ensuring low operating temperatures
- Synchronous gears mounted on the drive side, eliminating torsional stresses along the drive shaft.
- Helical gear design to ensure synchronous, silent and reliable operation.
- Multiple seal forms available: lip seal, mechanical seal and labyrinth seal.
- Optional gas-tight design to ensure that the outlet gas is completely oil-free.



Typical Application

Tail gas conveying, MVR (steam recompression), material handling, double Roots standard unit



Tail gas conveying



Steam recompression



Material handling

Table Of Performance Parameters

Model	Unit	RB3206	RB3210	RB4009	RB4012	RB5507	RB5511	RB5514
Flow Range	m³/h	36-374	63-626	83-845	148-1159	168-1350	258-1991	833-2587
Shaft Power	kw	0.8-3.0	0.9-21	1.3-34	1.5-38	1.9-52	2.2-62	2.6-71
Max. Rotation Speed	rpm	4000	4000	4000	4000	3800	3800	3800
Max. Vacuum Degree	mbar	508	508	576	508	576	576	508
Max. Pressure	mbar(g)	1034	1034	1241	1034	1241	1172	896
Inlet Flange	ANSI	3"	4"	4"	4"	6"	6"	6"
Outlet Flange	ANSI	3"	4"	4"	4"	6"	6"	6"
Cooling Water Flow	l/min (15°C)	0.8	0.95	0.95	1.5	1.5	1.9	1.9
Cooling Water Connection		1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT
Lubricant Volume	L	0.95	0.95	1.42	1.42	3.79	3.79	3.79
Total Length	mm	504	604	635	710	709	798	874
Total Height	mm	377	377	380	380	508	508	508
Width	mm	249	249	322	322	425.5	425.5	425.5
Pump Weight	Kg	73	88	118	136	204	236	263

Table Of Performance Parameters

Model	Unit	RB5518	RB7017	RB7021	RB7026	RB9027	RB1230	RB1248
Flow Range	m³/h	595-3335	1022-4772	1331-5913	1788-7334	1054-9036	1311-15411	2217-15764
Shaft Power	kw	3.0-70	5.4-169	6.2-182	1.3-180	6.0-276	9.0-287	11-199
Max. Rotation Speed	rpm	3800	3000	3000	3000	2400	1800	1400
Max. Vacuum Degree	mbar	508	508	508	508	508	406	339
Max. Pressure	mbar(g)	689	1034	1034	827	1034	620	413
Inlet Flange	ANSI	8"	10"	12"	12"	14"	14"	20"
Outlet Flange	ANSI	8"	10"	12"	12"	14"	14"	20"
Cooling Water Flow	l/min (15°C)	1.9	3.8	3.8	3.8	5.7	7.6	9.5
Cooling Water Connection		1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	3/8 NPT	3/8 NPT	G 1/4
Lubricant Volume	L	3.79	7.5	7.5	7.5	30	38	38
Total Length	mm	874	1268	1368	1495	1560	2047	2505
Total Height	mm	508	651	651	651	781	747.4	747.4
Width	mm	425.5	368	368	368	460.4	704.9	704.9
Pump Weight	Kg	310	578	658	726	1162	2450	3110

Product Introduction



VLRC Series Liquid Ring Vacuum Pump

• VLRC series liquid ring vacuum pump is one of the longest used Vacculex vacuum pumps, is ideal for pumping moist mixed gases as well as for pumping tiny droplet gases. The pump have standard material configurations, all cast iron or 316SS stainless steel options, usually optional water cooling or air cooling system.
 • Complete engineering system solutions include instrumentation, control devices, piping and valves, self-circulating systems, and operating fluid recirculation systems for selection.
 • VLRC liquid ring vacuum pumps can pump at pressures as low as 4 Torr (5.3 mbar). However, low pressure operating performance can be limited by the saturated vapor pressure of the operating fluid, which can be water, oil or process fluid.

Product Characteristics

- Two-stage compression, each stage impeller with small compression ratio.
- Can achieve larger maximum differential pressure.
- Can achieve higher exhaust back pressure, with higher reliability during operation.
- Small temperature rise of operating fluid and less influence of water temperature on inlet pressure and suction volume.
- More effective avoidance of cavitation by two-stage compression, long service life, low vibration and noise.
- Pumping speed curve is flat, its efficiency of inlet pressure can keep about 90% under 50 torr, while the efficiency of single-stage pumps drops to 50%. It is very favorable for roots pump operation when form a unit with the roots pump.



Typical Application

PC (polycarbonate board), PBAT (thermoplastic biodegradable plastic), flavors and fragrances, belt drying, molecular distillation



ABS Plastic



PS Polystyrene Resin



Organic Silicon

Table Of Performance Parameters

Model	Unit	VLRC75	VLRC100	VLRC125	VLRC200	VLRC300	VLRC350	VLRC425	VLRC600	VLRC825	VLRC1000		
Frequency	Hz	50	60	50	60	50	60	50	60	50	60		
Max. Pumping Speed	m ³ /h	105	126	144	239	199	239	279	335	425	510		
Rotation Speed	r/min	1450	1750	1450	1750	1450	1750	1450	1750	1450	1750		
Matching Power	kW	4	4	5.5	5.5	7.5	7.5	11	11	15	18.5		
Max. Back Pressure	bar	1.5						1.5					
Max. Allowable Differential Pressure Between Inlet And Outlet	bar	1.5	1.5	1.5	1.2	1.3	1.5	1.1	1.5	1.1	1.8		
Hydrostatic Test (Gauge Pressure)	bar	3						3			3		
Moment Of Inertia Of Rotating Parts When Full Water	kg·m ²	0.05	0.05	0.06	0.09	0.16	0.32	0.38	1.57	2.23	2.65		
Noise At 80 mbar Inlet Pressure	dB(A)	69	74		74		82	85	82	85	79		
Max. Suction Temperature	Dry Gas	°C	120	120		120		200		200			
	Saturated Gas	°C	93	93		93		100		100			
Heat Exchanger Max.Pipe Resistance	bar	0.2						0.2					
Operating Fluid	Operating Fluid Max. Allowable Temperature	°C	100			80		80		80			
	Max. Viscosity	mm ² /s	90			90		90		90			
	Max. Density	kg/m ³	1200						1200		1200		
	Liquid Volume To Shaft Centerline	liter	4	5.5	5.5	7	10	16	19	36	47	54	
Liquid Consumption (Inlet Pressure 33 mbar)	15°C Operating Fluid	L/min	19	23	26	30	45	45	45	117	117		
	15°C Operating Fluid+Cooling Water	L/min	38	45	53	60	90	90	90	234	234		
Coolant Connection	''	G1/2	G3/4	G3/4	G1	G1	G1	G1	G2				
Inlet Connection		ANSI 1 1/2"	ANSI 1 1/2"	ANSI 1 1/2"	ANSI 2"	ANSI 2"	DN65		DN 100				
Exhaust Connection	mm	40	40	40	50	50	65		100				
Pump Shaft Center Height	mm	165	175	175	210	210	225	225	320	320	320		
Total Length	mm	613	654	713	754	852	976	1042	1235	1385	1485		
Total Height	mm	321	406	406	486	486	573	573	776	776	776		
Width	mm	302	324	324	429	429	395	395	590	590	590		
Pump Weight	kg	91	104	116	163	184	228	250	485	620	690		

Note: the parameters are based on the following working conditions: (1) Inspiratory medium: dry gas, 20 °C (2) Working fluid: water, 15 °C exhaust pressure: 1013mbar (atmospheric pressure) suction capacity is the flow under the pump inlet pressure, and the maximum fresh water consumption is the flow under the lowest inlet pressure.

Roots / Liquid Ring Vacuum Unit



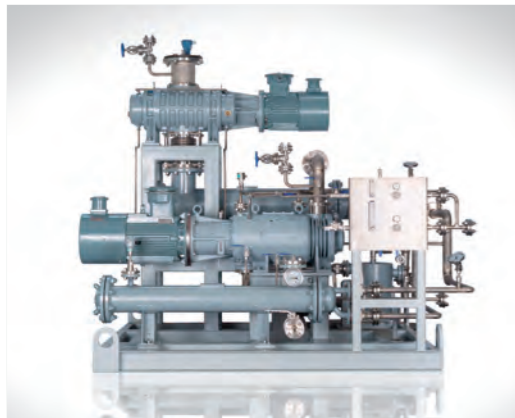
• Vacculex Roots/Liquid ring vacuum units are suitable for pumping moist gas mixtures at low pressures. The sealing operating fluid can be water, oil or process liquid. Systems with oil as the operating fluid can avoid corrosion and also avoid vaporization of the sealing fluid at higher temperatures. When the operating fluid is a process fluid, contamination of the process gas with water or oil can be avoided. Vacculex offers a wide range of two or three stage vacuum units, complete engineering system solutions including instrumentation, condensers, control devices, pipelines and valves, partial or complete operating fluid circulation systems, etc.

• Typical applications: ABS plastics, PS polystyrene resins, silicones, PC (polycarbonate board), PBAT (thermoplastic biodegradable plastics), flavors and fragrances, belt drying, molecular distillation.

Product Picture



Roots&Screw Vacuum System



Vacculex Roots/Screw vacuum units have the remarkable features of large pumping capacity, high ultimate vacuum pumping degree and low outlet temperature. It can operate without oil, water and other sealing operating fluids, which can replace conventional liquid ring, slide valve, reciprocating and other vacuum units in most applications. It has the significant advantages of low operating cost, low energy consumption, no waste liquid discharge and long service life. For easily condensable, flammable, explosive or highly toxic gases, it can be specially equipped with auxiliary facilities such as nitrogen seal purging, on/off gas purging, steam cleaning and solvent flushing to improve the overall stability and safety of equipment operation.

Typical applications: phenolic resin, waste oil recovery, oil and gas recovery, PBAT, solvent recovery, API, DPC, DMC, VOC tail gas recovery, flavor and fragrance.

Product Picture



Roots Blower Unit



• Vacculex adopts high speed and high efficiency motor, for roots blower, under the premise of ensuring reliability, the higher the rotational speed, the lower the return flow of the gas in the rotor through the rotor gap which improve the compression efficiency, the lower the shaft power, the higher the efficiency, Vacculex blowers save energy up to 5-10% on average than domestic blowers.

• Due to the high speed, more fresh air is inhaled and less hot air is returned, the gas exhaust temperature is greatly reduced, extending the life of the shaft, rotor, bearing and seal.

• Typical applications: tail gas conveying, MVR (steam recompression), material conveying.

Product Picture



SE Series Dry Pump Unit



Compound system of semiconductor dry pump unit, high pumping capacity, high ultimate vacuum pumping degree, improving production efficiency, low operating cost, low energy consumption, low outlet temperature, optional side exhaust or bottom exhaust, no waste liquid discharge, small footprint, long service life.

- Zero pollution - pure dry design, zero pollution to the pumping medium
- Zero leakage - excellent seal design, zero leakage between oil tank and pump chamber
- Zero discharge - no oil and water in the flow channel, no waste oil and waste water discharge
- Zero installation - simple operation, easy to use, easy maintenance

Typical applications: semiconductor, photovoltaic, plasma, drying, coating, petrochemical, metallurgy, food.

Product Picture



S0 Series Dry Pump Unit



The Industrial dry pump unit fully replace liquid ring vacuum pump single vacuum pump, complete system, multi-stage roots of the composite system, Vacculex provides you with a variety of different ways to combine, according to the the site needs, to provide you with the perfect solution.

Through five-point bearing design, double oil tank, improve stability; nitrogen gas barrier, block gas into the tank, prolong service life, internal coating protection, prevent corrosion, optional single-point mechanical seal, oil slinger ring mechanical seal, eliminate cross-contamination, reduce oil consumption.

Typical applications: semiconductor, vacuum-thermoform industry, electronics industry, paper industry, paper tray industry, foam industry, textile industry, printing industry, photoelectric industry.

Product Picture



Certificate



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



ATEX & CE