



干式螺杆真空泵 SCREW DRY VACUUM PUMP

VPS-C系列 VPS-C Series

变螺距螺杆泵 Variable Pitch Screw Pump
能耗降低30% Power Consumption Reduced by 30%
出口温度更低 Low Discharge Temperature



VACUUM PUMP SOLUTION
OIL & WATER FREE DRY SCREW VACUUM PUMPS

C系列干式真空泵（变螺距螺杆泵）

C Series

Dry Vacuum Pump

(Variable Pitch Screw Pump)



优异的抗腐蚀气体及其所夹带液体的处理能力，真空度可达 10^{-3} 托。
Excellent corrosive gas and entrained liquid handling capabilities and realizing 10^{-3} torr vacuum degree

- ▶ VPS的C系列干式真空泵包含所有P系列的传统优势（极限真空度高、耐腐蚀能力强及冷却效果优秀等）
- ▶ VPS dry vacuum pump includes the standard advantage of the P Series model and following details (Low ultimate pressure, corrosion resistance, cooling effect, etc.)

极限真空度高

Low Ultimate Pressure

干式螺杆真空泵能在大气压至极限压力的全范围内持续运行，单泵运行极限真空度可以达到1Pa，并且效率极高。

The dry vacuum pumps can operate continuously in all the ranges of pressure from atmosphere to the ultimate pressure, and it can reach at 0.0075Torr(1Pa) by itself and has a high efficiency

防腐蚀设计

Corrosion Resistance Design

经过特殊涂层（PTFE、PFA、Ni、NIFA、PEEK）处理可以用于输送有毒、有腐蚀性和可凝性的气体。通过气镇（氮气冷却）降低气体的压力来防止腐蚀性气体冷凝。

- Suitable for pumping toxic, corrosive and condensable gas by special coating (PTFE, PFA, Ni, NIFA, PEEK)
- Preventing condensation of corrosive gas through lowering vapor pressure by the gas ballast (N₂ cooling purge)

If you have any problem with your Vacuum pumps or Vacuum System, call VPS for the solution



CERTIFICATION

冷却效果 Cooling Effect

- 无需冷却气体
- 独特的夹套水冷结构
- 出口温度降至符合或接近T4要求
- No cooling gas necessary
- Unique hydrodynamic spiral jacket structure
- Reducing discharge temperature greatly & close to T4 requirement

能耗 Power Consumption

- 变螺距结构设计
- 能耗降低30%
- Variable pitch screw design
- Power consumption reduced by 30%

VPS-C系列干式螺杆真空泵特点 Characteristics

VPS-C Series Dry Vacuum Pump

密封结构可靠耐用

- 采用机械密封和唇形密封
- 干式真空泵专用机械密封
- 机械密封前设有空气和氮气气障保护，防止粉尘及其他杂质进入泵内

Reliable seal structure

- Mechanical seal and lip seal applied
- Dry vacuum pump exclusive mechanical seal
- Use of air & N2 purge in front of Mech.seal for protection from dust & etc.

采用变螺距螺杆

- 合理的泵温升设计防止涂层损坏
- 节能设计降低能耗30%

Applied variable pitch screw

- Prevention of coating damage by pump temperature rise
- 30% reduction in power consumption by energy-saving design

高真空度

- 最高真空度达到0.0075Torr(1Pa)
- 真空度高，提高抽气效率
- 真空度从大气压到1Torr(133Pa)保持稳定的抽速

Vacuum degree improvement

- Reaches the maximum vacuum degree 0.0075torr(1Pa)
- Increase pumping volume from high vacuum
- Maintaining stable volume from atmospheric pressure up to 1torr(133Pa)

螺旋式夹套冷却结构

- 螺旋式夹套具有优良的冷却效果
- 运行温度低
- 通过少量的冷却液量就可以控制泵内温升

Spiral coolant jacket

- Excellent cooling efficiency of the spiral jacket
- Low operating temperature
- Controlling temperature inside the pump with a small amount of coolant

通畅的排气口结构

- 气体通路短，可使气体快速排出
- 可以顺畅地排出泵内因冷凝产生的积液
- 卓越的液体处理能力

Smooth discharge structure

- Short gas path through the pump makes quick gas discharge
- Smooth condensate draining within the pump
- Excellent liquid handling ability

IEC法兰 (NEMA可选)

- C法兰设计便于安装，降低了噪音，解决了联轴器校准问题
- 增大的螺纹防止变形和振动

IEC Flange (NEMA optional)

- Mostly C-flange design simplifies mounting reduce noise level and eliminate shaft alignment
- Rib enhancement for deformation and vibration prevention

防止润滑脂泄漏

- 三联唇型密封
- 优化润滑空间，防止润滑脂泄漏

Grease leakage prevention

- Triple single lip seal
- Applied the optimized grease space

设备材质

- 腔体：球墨铸铁（特氟龙涂层，标配PTFE涂层）
- 螺杆：球墨铸铁（特氟龙涂层，标配PTFE涂层）
- 轴封
 - 进气口（后端）：双唇密封+单唇密封
 - 出气口（前端）：机械密封+唇形密封
 - 驱动端：油封
- 轴承
 - 进气口（后端）：滚柱轴承
 - 出气口（前端）：双滚珠轴承
 - 驱动端：单滚珠轴承
- O型圈：氟橡胶

Material of construction

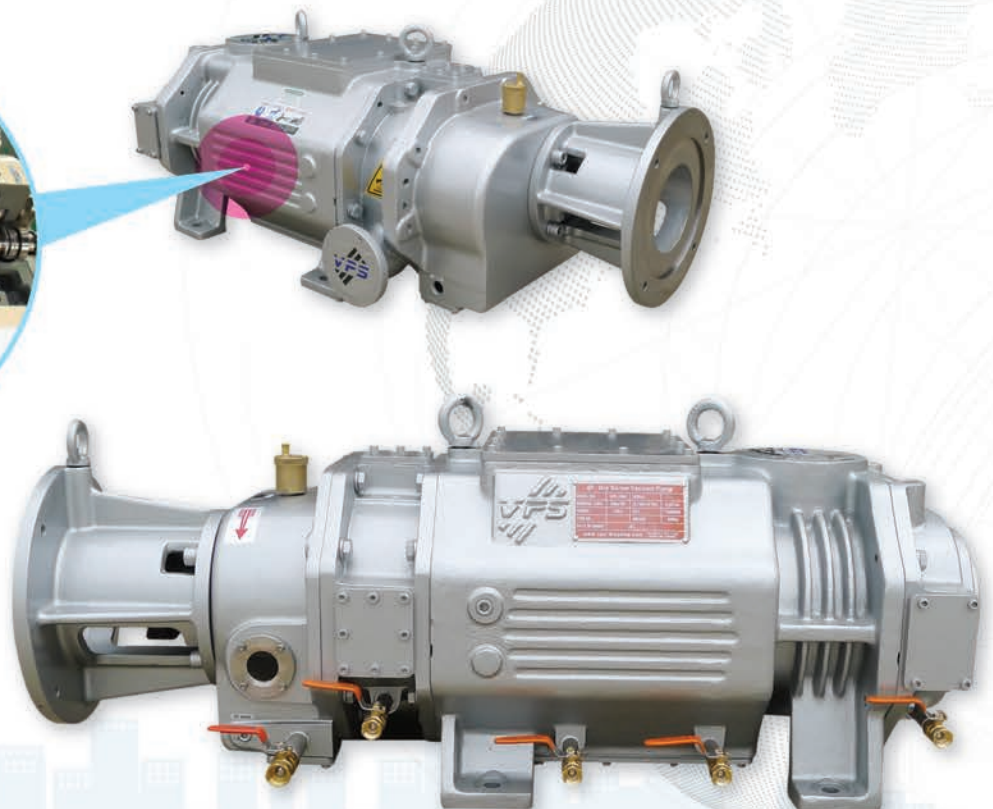
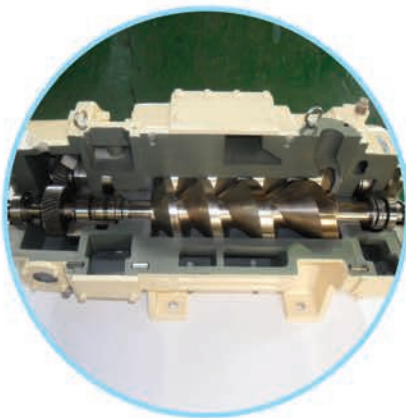
- Casing : Ductile Iron(Teflon Coated, PTFE)
- Screw : Ductile Iron(Teflon Coated, PTFE)
- Shaft Seals
 - Suction(Rear) : Double Lip Seal & Single Lip Seal
 - Discharge(Front) : Mechanical Seal & Lip Seal
 - Drive End : Oil Seal
- Bearings
 - Suction(Rear) : Roller Bearing
 - Discharge(Front) : Angular Double Ball Bearing
 - Drive End : Single Ball Bearing
- O-ring : Viton

其它可选材质如下

- 特殊涂层-加厚特氟龙(PFA)，聚醚醚酮(PEEK)，镍氟龙(NIFA)，镀镍等
- 特殊O型圈，如全氟醚O型圈
- 特殊机型密封，如哈氏合金，耐蚀高镍
- 特殊材质-不锈钢，钛材

However, the followings are also available ;

- Special coatings – Teflon(PFA), NIFA, Ni Plated, etc.
- Special O-rings such as Kalrez
- Special Mech. Seals like Hastelloy, Ni-resist
- Special material – Stainless Steel, Titanium



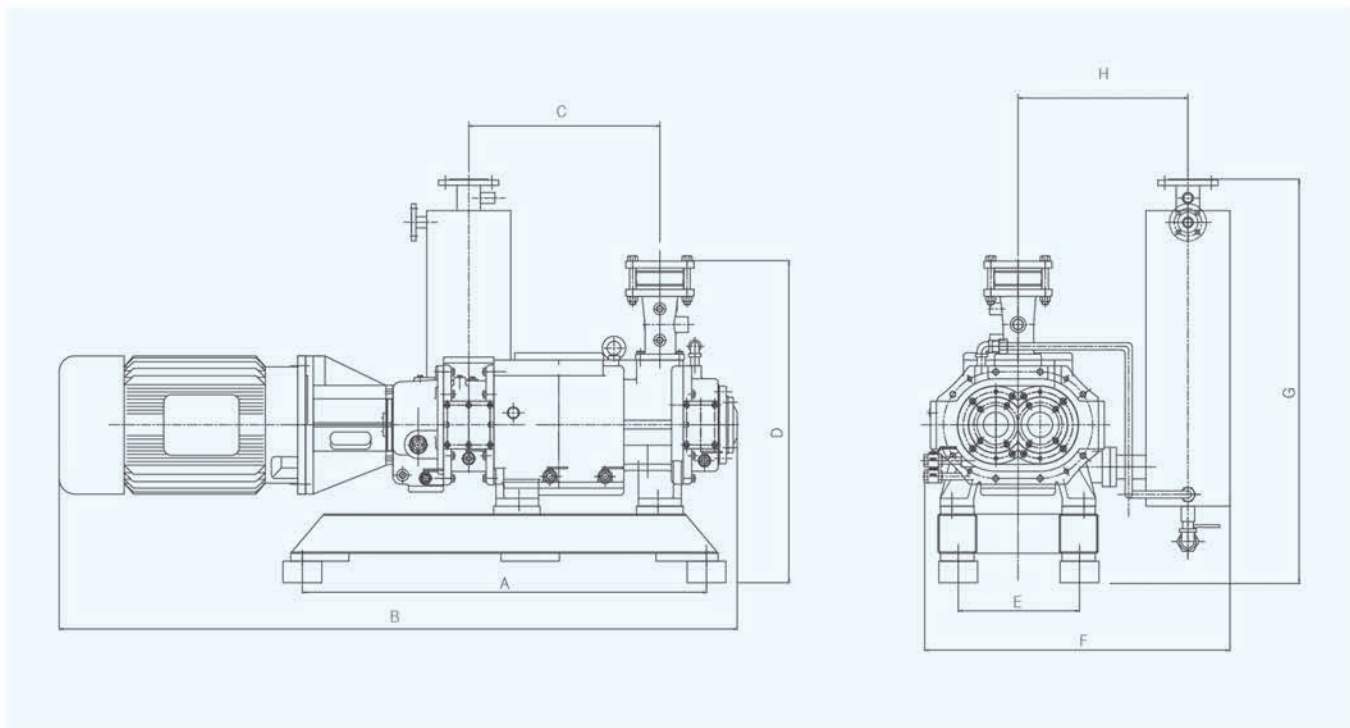
技术参数 Technical Data

VPS-C系列干式螺杆真空泵 VPS-C Series Dry Vacuum Pump

规格

SPECIFICATION

Model		VPS-C200	VPS-C350	VPS-C450	VPS-C650	VPS-C900	VPS-C1500	VPS-C1800	VPS-C2700
Specification									
理论抽速 Nominal Displacement	M ³ /Hr	160 / 200	280 / 350	360 / 450	540 / 650	750 / 900	1250 / 1500	1500 / 1800	2250 / 2700
	CFM	94.2 / 117.7	164.8 / 206	211.9 / 264.8	317.9 / 382.6	441.4 / 529.7	735 / 882.8	882.8 / 1095.4	1324 / 1589
	ℓ/min	2667 / 3333	4667 / 5833	6000 / 7500	9000 / 10800	12500 / 15000	20833 / 25000	25000 / 30000	37500 / 45000
极限压力 Ultimate Pressure	mbar	0.04 / 0.013	0.013 / 0.01	0.013 / 0.01	0.013 / 0.01	0.013 / 0.01	0.13 / 0.07	0.13 / 0.07	0.13 / 0.07
	torr	0.03 / 0.01	0.01 / 0.0075	0.01 / 0.0075	0.01 / 0.0075	0.01 / 0.0075	0.1 / 0.05	0.1 / 0.05	0.1 / 0.05
	Pa	4.0 / 1.33	1.33 / 1.0	1.33 / 1.0	1.33 / 1.0	1.33 / 1.0	13.3 / 6.7	13.3 / 6.7	13.3 / 6.7
电机功率 Power(50/60Hz)(kW)		5.5	7.5	11.0	15.0	18.5	37.0	37.0	55.0
口径 Port Size	入口 Suction(A)	40	50	65	80	100	125	125	150
	出口 Discharge(A)	40	40	50	65	65	80	80	100
冷却水 Cooling Water(L/Min)		5	10	10	15	15	20	20	28
齿轮油 Gear Oil Front(L)		1.0	1.0	1.2	2.0	2.0	5.3	5.3	7.4
泵转速 Rotation(50/60Hz)(RPM)		2900/3450					1450 / 1750	2900/3450	1450 / 1750
重量(Kg,泵体) Weight Pump Only(kg)		220	320	410	550	630	1350	1200	2500



外形尺寸及性能曲线 Dimensions & Curve

VPS-C系列干式螺杆真空泵 VPS-C Series Dry Vacuum Pump

外形尺寸

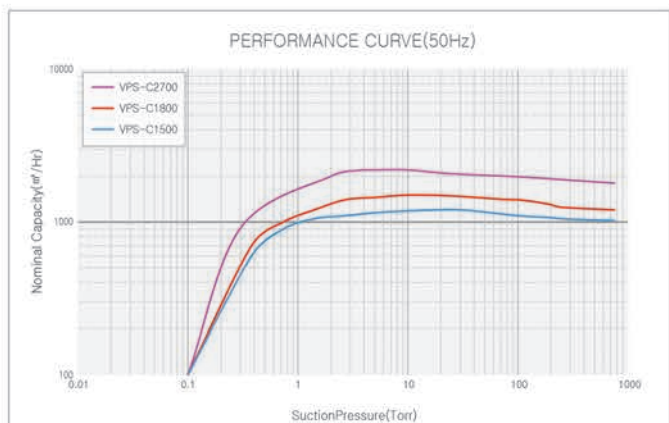
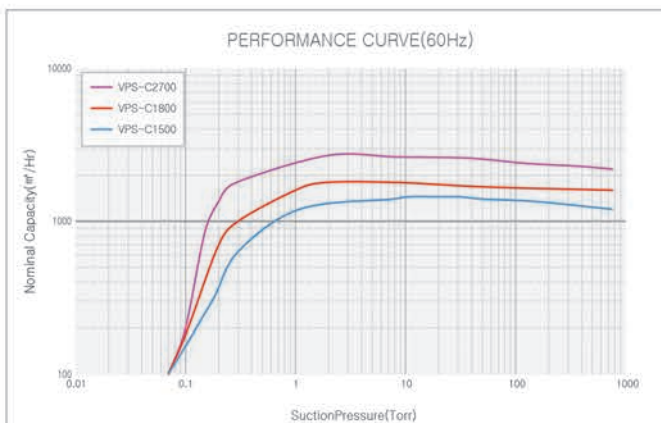
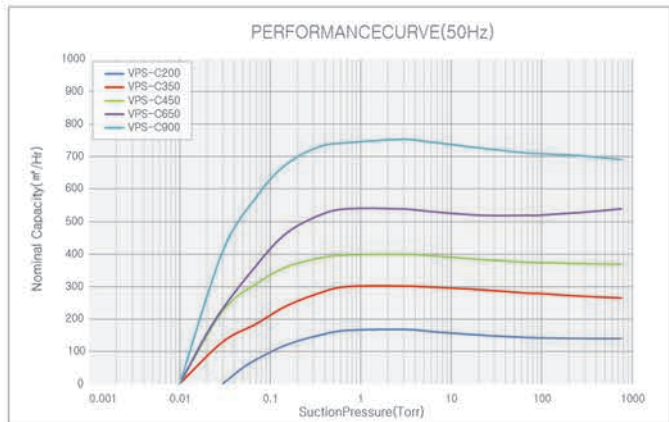
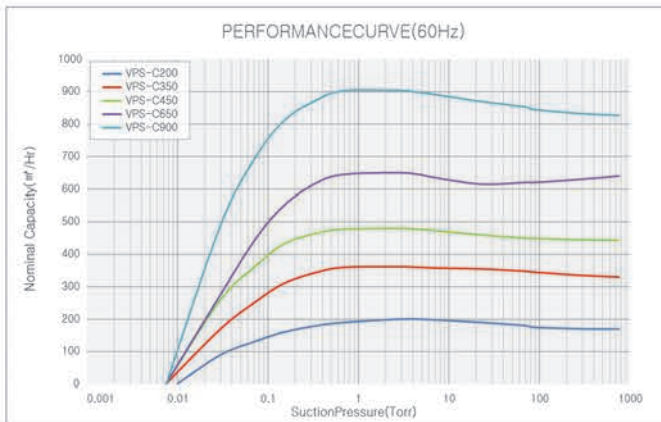
DIMENSIONS

MODEL	A	B	C	D	E	F	G	H	REMARK
VPS-C200	740	1270	357	696	260	654	908	350	
VPS-C350	940	1400	443	795	282	769	927	420	
VPS-C450	1040	1745	492	819	312	786	1027	437	
VPS-C650	1240	1792	555.5	912.5	402	939	1163	520	
VPS-C900	1240	1905	555.5	912.5	402	939	1163	520	

MODEL	A	B	C	D	E	F	G	H	REMARK
VPS-C1500	1755	2210	761.6	825.5	760	1282	1470	675	
VPS-C1800	1750	2059	647.8	969	740	1185	1393	588	
VPS-C2700	1700	2398	871	1028	600	1412	1500	818	

性能曲线

PERFORMANCE CURVE





VACUUM PUMP SOLUTION
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