www.vps-drypump.com

SCREW DRY VACUUM PUMP

VPS-C Series

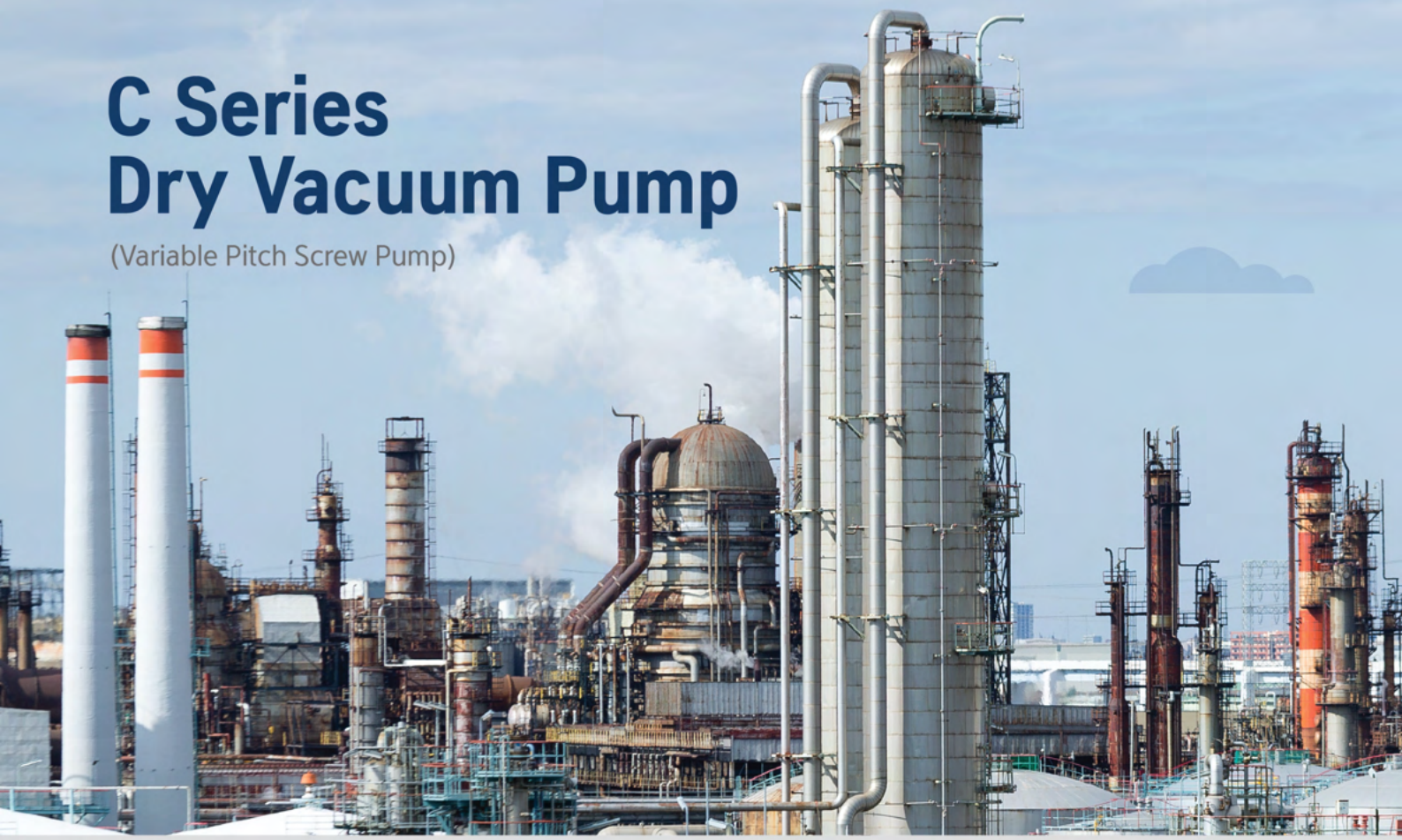
Variable Pitch Screw Pump
Power Consumption Reduced by 30%
Low Discharge Temperature

VPS
VACUUM PUMP SOLUTION
OIL & WATER FREE DRY SCREW VACUUM PUMPS

VPS VACUUM PUMP SOLUTION

C Series
Dry Vacuum Pump

(Variable Pitch Screw Pump)



Excellent corrosive gas and entrained liquid handling capabilities and realizing 10^{-3} torr vacuum degree

▶ VPS dry vacuum pump includes the standard advantage of the P Series (Single Pitch) model and following details
(Low ultimate pressure, corrosion resistance, cooling effect, etc.)

Low Ultimate Pressure

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

Corrosion Resistance Design

- 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(N_2 cooling purge).

ACCREDITED®
MSCB-113

G-CERTI
SYSTEM SERVICE
ISO 9001:2015
ISO 14001:2015
GK-0430-QC-EC

CNAS
中国认可
检测
MANAGEMENT SYSTEM
CNAS C104-M

CERTIFICATION

Cooling Effect

- No Cooling Gas necessary.
- Unique hydrodynamic spiral jacket structure.
- Reducing discharge temperature greatly & close to T4 requirement

Power Consumption

- Variable pitch screw design
- Power consumption reduced by 30%

Characteristics of

VPS-C Series Dry Vacuum Pump

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.

Applid variable pitch screw

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

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)

Spiral coolant jacket

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

Smooth discharge structure

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

IEC Flange (NEMA Optional)

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

Grease leakage prevention

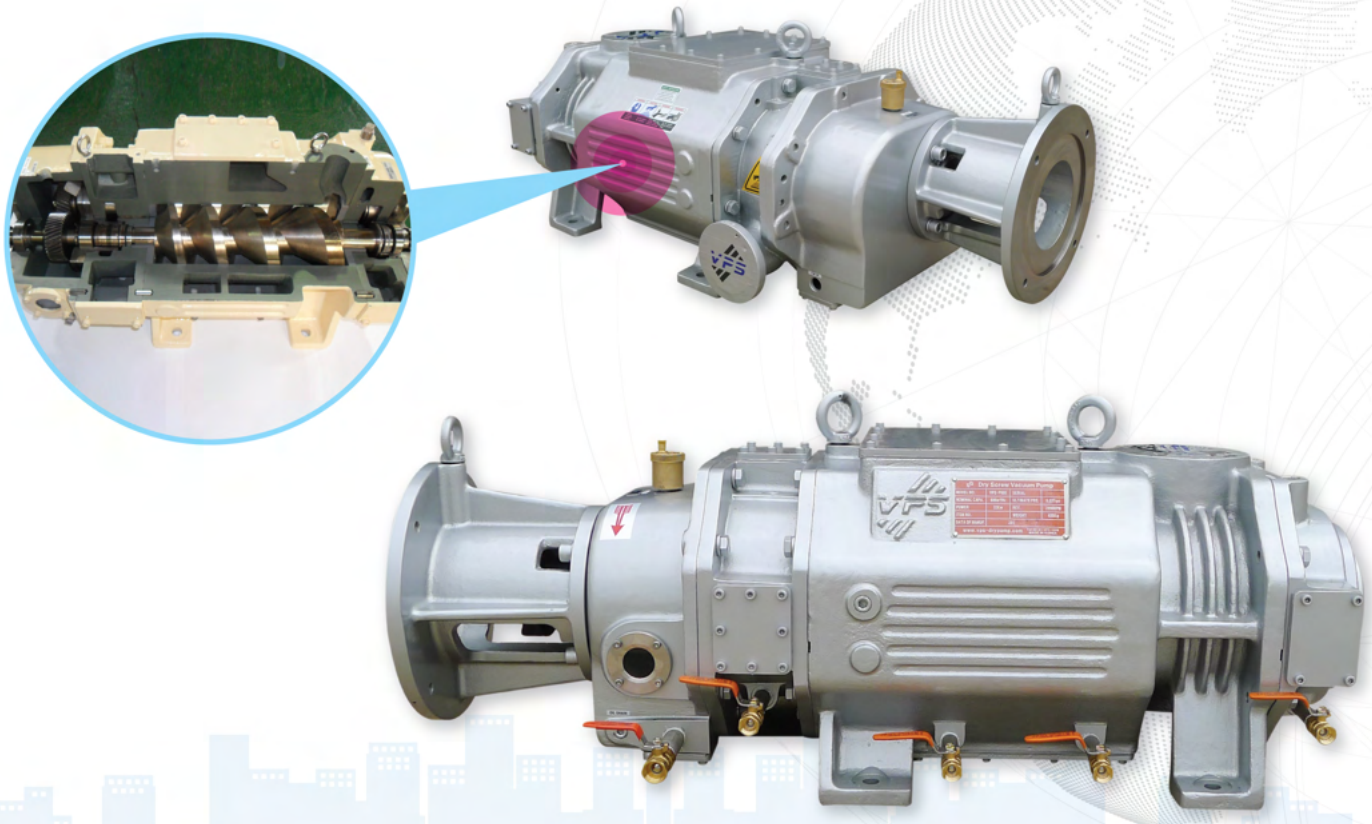
- Triple single lip seal
- Applied the optimized grease space

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

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

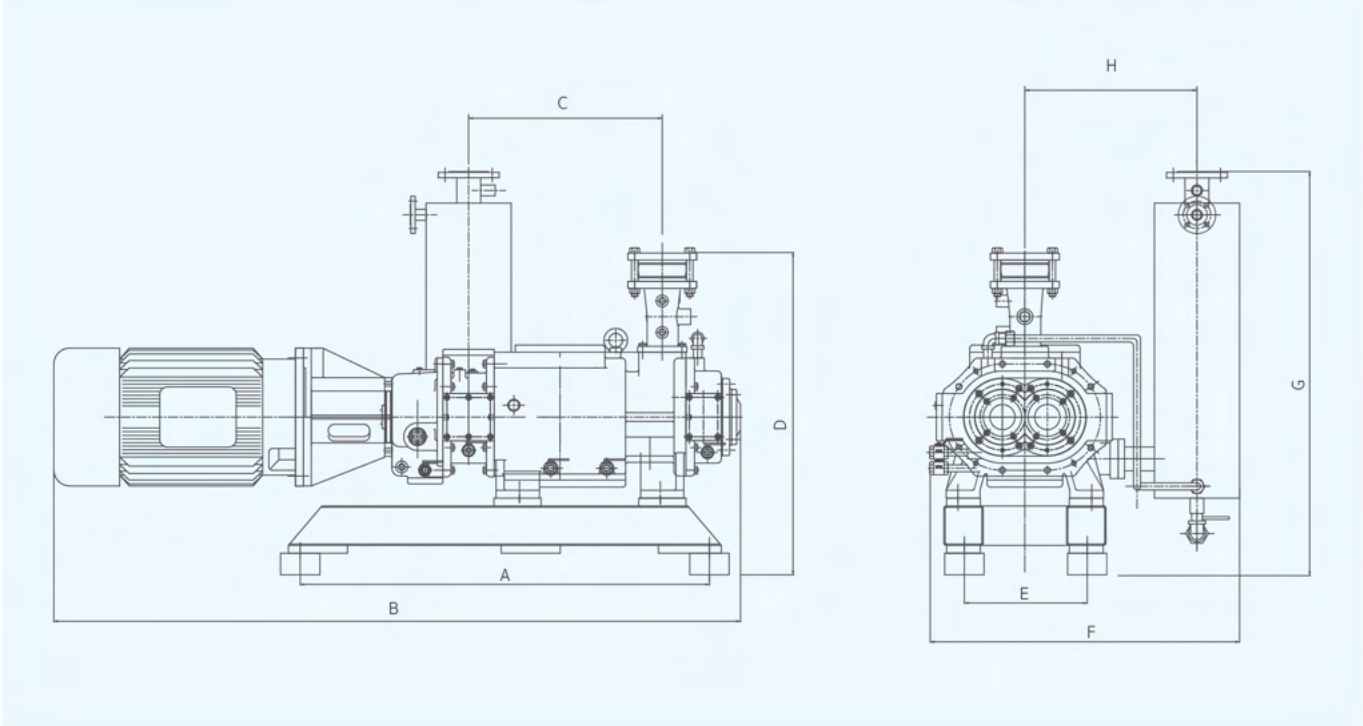


Technical Data

VPS-C Series Dry Vacuum Pump

SPECIFICATION

Specification \ Model		VPS-C200	VPS-C350	VPS-C450	VPS-C650	VPS-C900	VPS-C 1500	VPS-C 1800	VPS-C 2700
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
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
Power(50/60Hz)(kW)		5.5	7.5	11.0	15.0	18.5	37.0	37.0	55.0
Port Size	Suction(A)	40	50	65	80	100	125	125	150
	Discharge(A)	40	40	50	65	65	80	80	100
Cooling Water(L/Min)		5	10	10	15	15	20	20	28
Gear Oil Front(L)		1.0	1.0	1.2	2.0	2.0	5.3	5.3	7.4
Rotation(50/60Hz)(RPM)		2900/3450					1450 / 1750	1450 / 1750	1450 / 1750
Weight Pump Only(kg)		220	320	410	550	630	1200	1350	1850



Dimensions & Curve

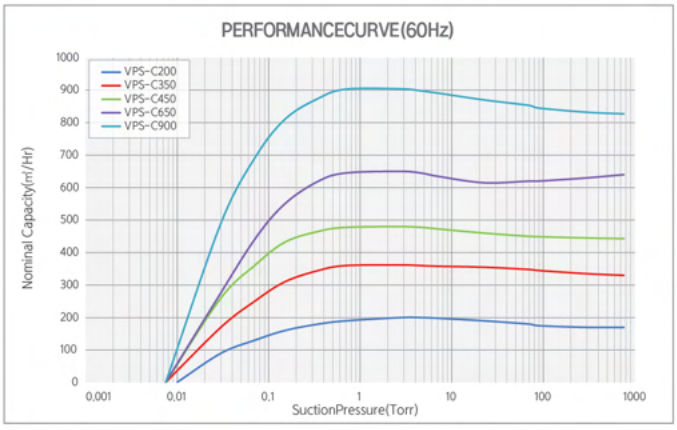
VPS-C Series Dry Vacuum Pump

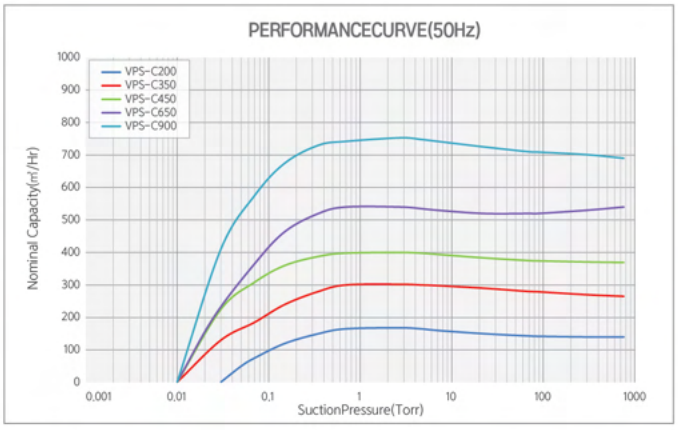
DIMENSIONS

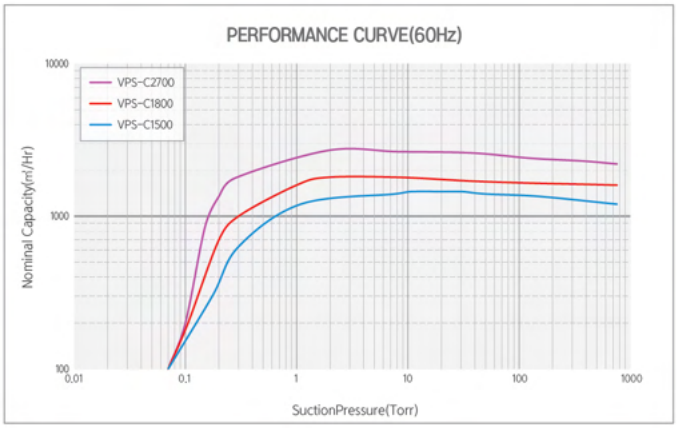
MODEL	A	B	C	D	E	F	G	H	REMARK
VPS-C200	740	1270	357	696	260	654	908	350	
VPS-C350	940	1400	443	795	282	769	927	420	
VPS-C450	1040	1745	492	819	312	786	1027	437	
VPS-C650	1240	1792	555.5	912.5	402	939	1163	520	
VPS-C900	1240	1905	555.5	912.5	402	939	1163	520	

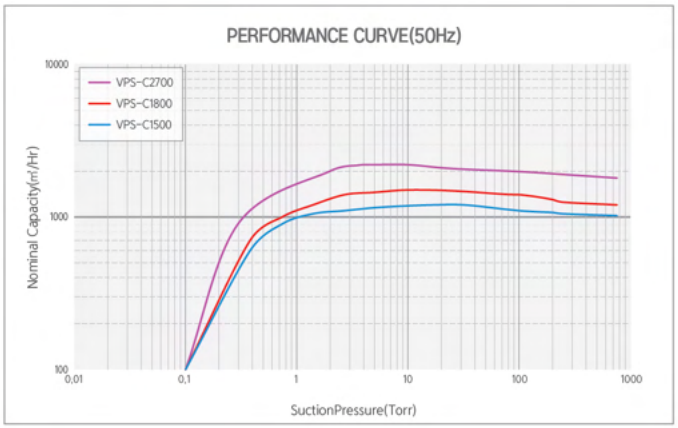
MODEL	A	B	C	D	E	F	G	H	REMARK
VPS-C1500	1755	2210	761.6	825.5	760	1282	1470	675	
VPS-C1800	1750	2059	647.8	969	740	1185	1393	588	
VPS-C2700	1700	2398	871	1028	600	1412	1500	818	

PERFORMANCE CURVE









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