www.kinetic.co.th

Registered
ISO 9001:2000 / ISO 14001:2004

WSVP SERIES

Any device which can induce a pressure difference between the two regions in the space is called a pump. The pump which creates the vacuum in the certain system is called a vacuum pump.

WOOSUNG VACUUM CO., LTD.

WSVP Series

DESIGN & OPERATING PRINCIPLES

진공 펌프의 목적

밀폐된 용기에 있는 공기분자를 펌프를 통해 배기시키는 것임. 즉, 용기내기체밀도를 감소시키는 것이 펌프의 목적이고 기체밀도가 작으면 작을 수록 좋은 진공이라 할 수 있겠다.

What is a vacuum pump?

To create a vacuum in a system it is necessary to move all of the molecules of gas out of the system. The molecules will move only if there is a pressure difference between the two regions of the space. The low pressure region is the space with the smaller number of molecules, while the high pressure region is the space with the larger number of molecules.

날개회전식 펌프

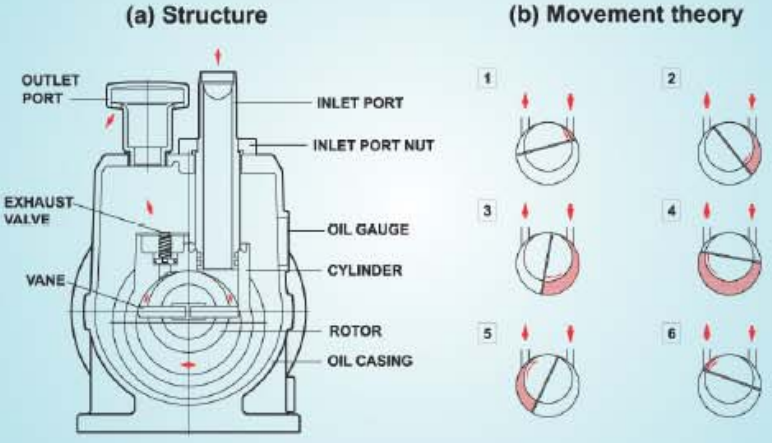
WSVP 펌프의 구조는 그림 1-1(a)와 같이 베인홈이 파져 있는 로타와 편심되어 있는 실린더 앞, 뒤의 커버로 이루어져 있다. 그림 1-1(b)는 동작 원리를 나타낸 것이다. ①과 같이 흡입구를 지나기 직전까지 계속 되다가 날개가 흡입구를 지나는 그림 ④와 같이 흡입된 기체는 날개 사이에 갇히게 된다. 그림 ⑤와 같이 밸브를 지나서부터는 압축되기 시작한다. 충분히 압축되어 약 850Torr 이상이 되면 밸브가 열려서 압축된 기체들은 배기밸브를 통하여 밖으로 배출된다.

Rotary Vane Vacuum Pump.

Like as Figure-1-1 (a), WSVP pump is composed of the rotor with two blades grooved and the front, back of cylinders being the eccentric shape. The drawing of Figure-1-1(b) is shown design principle, as like Figure ①, the air is inhaled cylinder through the Inlet port. At this process continues just before passing by the Inlet port, the inhaled air confined between blades like as Figure ④ for the blade to pass the Inlet port. After passing by the outlet valve like as Figure ⑤, it starts compressed. As the exhaust valve is opened after compression (about over 850 Torr), the compressed air is extruded by the exhaust valve.

SIMPLIFIED PUMP STRUCTURE SKETCH

FIG 1-1



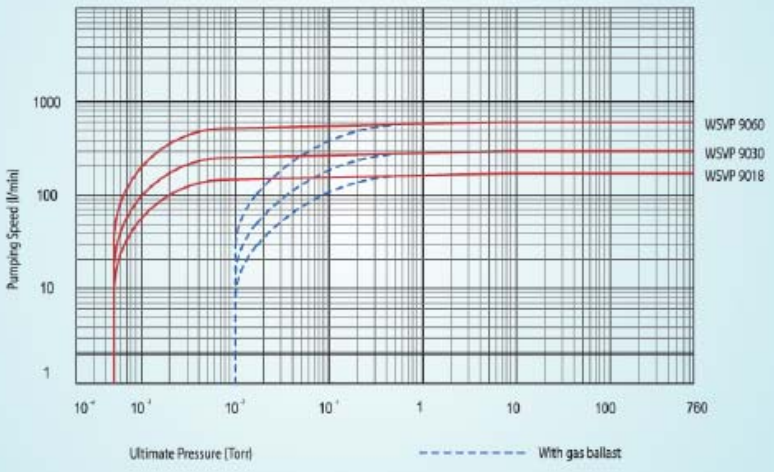
WSVP Series

TECHNICAL DATA & PUMPING SPEED CURVE

TECHNICAL DATA

		Unit	WSVP9018	WSVP9030	WSVP9060
Displacement speed		ℓ /min	180	300	600
Ultimate Pressure	with gas ballast	Torr	1×10^{-2}	1×10^{-2}	1×10^{-2}
	without gas ballast	Torr	5×10^{-4}	5×10^{-4}	5×10^{-4}
Inlet Port		mm	φ32	φ32	φ46
Outlet Port			PF1 "	PF1 "	PF1½ "
Motor power		kW	0.4	0.75	0.75
Rotational speed of pump		R.P.M.	600	600	600
Oil Filling		ℓ	1.8	2	4
Weight(include motor)		kg	32(50)	32(60)	51(80)

PUMPING SPEED CURVE



항시 점검 사항

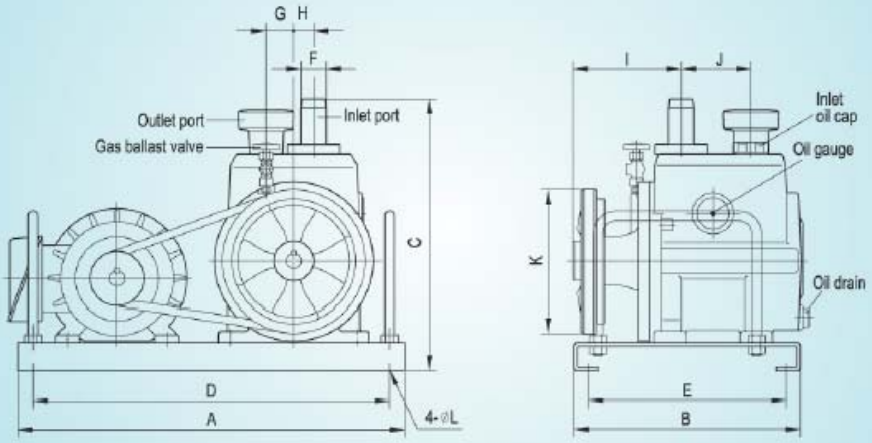
1. 유량의 적정 여부
2. 밸트의 장력상태 및 노후 정도
3. 오일 누유 여부

Checking Points

1. Prefer quantity of vacuum oil
2. Tension and worn out of V-belts
3. Wherever vacuum oil leaks

WSVP Series

OUTSIDE DIMENSION



(UNIT : mm)

MODEL	A	B	C	D	E	F	G	H	I	J	K	L
WSVP9018	488	285	342	450	200	ϕ32	35	25	135	88	ϕ171	ϕ13
WSVP9030	545	310	365	515	274	ϕ32	40	30	145	100	ϕ171	ϕ13
WSVP9060	610	350	424	580	310	ϕ46	50	35	171	110	ϕ210	ϕ13

주의사항

모든 부품이나 진공오일은 순정품이나 제조자가 추천한 제품을 사용하기 바라며, 만약 불량품을 사용하여 발생한 고장에 대해서는 책임을 지지 않습니다.

Attention

All spare parts and vacuum oil should be used genuine ones or suitable recommended by manufacturer. If any troubles from customers used defective parts, we don't have a responsibility.

Representative Office:-
KINETIC ENGINEERING CO., LTD.
2, Soi Pracha-U-Thit 56, Pracha-U-Thit Rd.,
Tungkru, Tungkru, Bangkok Thailand 10140
Tel: +662 873 5550 (Auto) Fax: +662 873 5552
E-mail: sales@kinetic.co.th *http://www.kinetic.co.th*