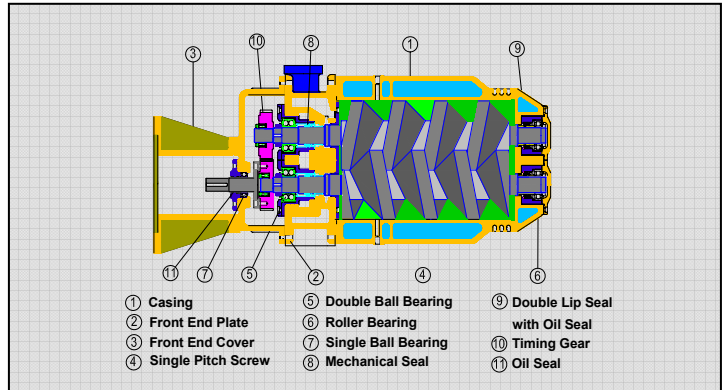


SDP Screw Dry Vacuum Pumps

Design Principles

- ▣ Non-contacted two screw rotors rotate on parallel shafts.
- ▣ SDP series eliminated several drawbacks of existing single pitch type screw pumps, for instance the movement of gasses inside appear more freely, chances of overheating is reduced and operation is more stable.



Features and Benefits

- ▣ **Reduced discharge time**
The screw type rotors with the design of optimum compression ratio reduces pumping time therefore faster exhausting speed of processed gasses was achieved.
- ▣ **Stable performance**
Absence of lubricant in the casing achieved stable performance.
- ▣ **Strong against corrosion**
Every surface contacted with gases is highly hardened and specially coated for protection from corrosion.
- ▣ **Interchangeable mechanical seal and lip seal**
No oil leak is generated due to using mechanical seal. Flexible substitution with lip seal is available as well.
- ▣ **Flange with ISO standard**
On-site installation of ISO standard motor flange simply.
- ▣ **Highly stiffened gear with high accuracy**
Quiet operation and low vibration at high speed due to high stiffness gear.
- ▣ **Excellent durability**
Outstanding ability to handle residues results in long maintenance intervals. Distinguished durability is resulted from perfectly optimized design.
- ▣ **Low operation cost**
Reduced consuming amounts of power, cooling water, nitrogen by using optimum screw type of rotors for single stage pump.
- ▣ **Low maintenance cost**
Easy installation with simple structure of the pump owing to selecting single body casing.

Applications

- **Chemicals**
 - Organic Chemical Plants
 - Petrochemical Plants
 - Fine Chemical Plants
 - Polymer : Polymerizations, Dryer, Extruder
 - Inorganic Chemicals
- **Food Processing**
 - Oil Deodorizations
 - Dryer
 - Concentrations
- **Pharmaceutical**
 - Raw Material Processing
 - Dryer, Refinery

Typical SDP Screw Dry Vacuum Pump



- ① Pump Module
- ② Motor
- ③ Base Frame
- ④ Suction Port
- ⑤ Inlet Check Valve
- ⑥ Exhaust Silencer
- ⑦ Inlet
- ⑧ Exhaust

Technical Data

Description	Unit	SDP200	SDP350	SDP450	SDP850	SDP1700	*SDP2500	*SDP3500
Nominal capacity (50/60Hz)	m ³ /hr	167/ 200	292/ 350	375/ 450	708/ 850	1,417/ 1,700	2,083/ 2,500	2,916/ 3,500
Rotating speed (50/60Hz)	rpm	2,900/ 3,500	2,900/ 3,500	2,900/ 3,500	2,900/ 3,500	1,450/ 1,750	1,450/ 1,750	1,450/ 1,750
Ultimate vacuum (50/60Hz)	torr	0.25/0.2	0.06/0.05	0.03/0.02	0.02/0.01	0.5/0.1	0.5/0.25	0.5/0.25
Standard motor (50/60Hz)	kw	5.5/7.5	7.5/11	11/15	19/22	31/37	46/55	55/75
Power at ultimate pressure(50/60Hz)	kw	3.1/4.7	6.4/9.4	9.4/12.8	16.2/18.7	24.8/29.6	37/44	53/64
Gas flow(Gas purge)	Sl/min	5	10	10	15	20	25	30
Cooling water flow	Sl/min	2	3.5	7	10	30	36	36
Oil capacity	liter	1.2	1.4	1.8	3.5	5.0	6.3	8
Inlet connection	ANSI #150	1 ½B	2B	2 1/2B	4B	5B	5B	6B
Outlet connection	ANSI #150	1 ½B	1 1/2B	2B	2 1/2B	3B	3B	4B
Dimensions L W H	mm	710	830	878	990	1,172	1,231	1,385
		466	520	546	485	760	695	842
		427	438	450	655	806	528	585
Weight	kg	198	285	362	540	1,035	1,300	1,530

* Consult Factory

Screw Dry Vacuum Pumps Speed Curves

