



# 銘昇真空泵浦

水封式真空泵浦

NASH VACUUM PUMP

老達利式真空泵浦

ROTARY VACUUM PUMP

油封式真空泵浦

OIL SEALED VACUUM PUMP

乾式真空泵浦

DRY VACUUM PUMP



銘昇電機

## 水封式真空泵浦

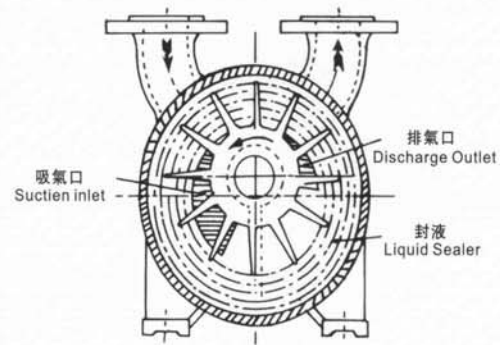
NASH VACUUM PUMP

### 水封式泵浦原理：

本機型利用圓形外殼配合偏心轉子，當轉子轉動時泵中的水受到離心力影響，緊附在外殼的內壁上，形成兩葉片間空間的變化，內中的氣體則受到壓縮而排出，如此周而復始，水封泵亦稱納氏泵(Nash Pump)，單段式真空度最高可達60 Torr，雙段式真空度最高可達25 Torr，全絕熱效率為30~35%。

### THE PRINCIPLE OF NASH PUMP

The pump is applying the round housing and couple with eccentric rotor, During the rotor rotates, and the centrifuge force will effected the water in the pump, Rest on the liner wall of the housing and generated the space change between the two rotor blades. The inner gas will be compressed and discharged. So that and go on. The water sealed pump is called the nash pump. The vacuum degree for single stage pump can be reached 60 Torr, And for two stage pump can be reached 25 Torr. The absolute heat efficiency is 30~35%.



### 特點：

- 1、此機型利用液封活塞原理，以水為液封，故含水份或蒸氣之真空系統，尤其適用之。
- 2、低溫壓縮，對易爆之氣體安全性高。
- 3、排氣口加裝消音器，運轉時無噪音之慮。
- 4、內部無金屬面接觸，故不需加油潤滑，保養費用低廉，完全無油煙。
- 5、軸封部分，為防止漏水，可應客戶需求，裝置機械軸封。

### 適用於：

- 真空蒸餾分析
- 真空含浸
- 真空濃縮
- 真空脫氣
- 真空結晶及冷卻
- 真空吸附搬運
- 真空乾燥
- 真空輸送
- 真空成型
- 真空鑄造
- 纖維工業
- 保力龍及造紙工業
- 其它化學工業等

### FEATURES:

- 1、The pump is applying the principle of liquid sealed piston and use water for sealer, so that, the vacuum system of water and vapor will be suitable especially.
- 2、To compress in low temp, top safety for easy bombed gas.
- 3、The discharge outlet be installed the muffler, notrouble for noise in rotating.
- 4、There are no metal surface to contact in inner, so that, no lubricating oil be poured, low maintenance cost and no oil smoke perfectly.
- 5、In order to prevent the water leakage, in central shaft, the shaft sealing can be installed the machinery seal by the customer request.

### SUITABLE FOR:

- Vacuum distilling analysis
- Vacuum impregnation
- Vacuum shrinkage
- Vacuum deaerating
- Vacuum crystal and cooling
- Vacuum absorbing conveyance
- Vacuum drying
- Vacuum conveyance
- Vacuum forming
- Vacuum casting
- Fiber industry
- Polyon & paper mill
- Chemical industry and etc.,

## 單段式(SW系列) SINGLE-STAGE (SW SERIES)

DWP-1/2~DWP-1



DW-1~DW-3



SW-3~SW-10



SW-15~SW-25



SW-801~SW-803



### 規格表SPECIFICATIONS:

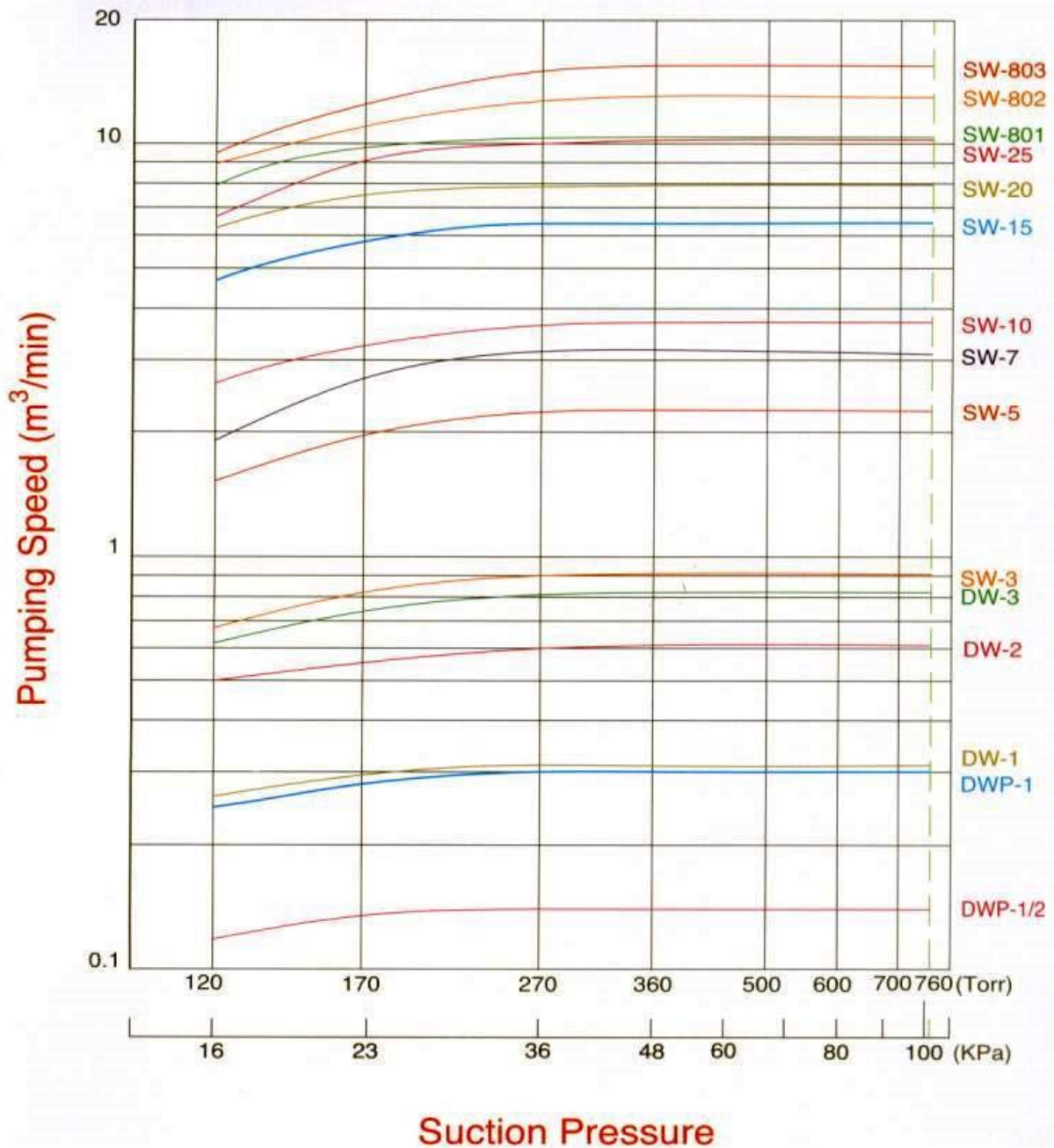
型式 Model	馬力 Power (HP)	迴轉速 Speed (rpm)	排氣速度 Pumping speed (m <sup>3</sup> /min)				吸入口徑 Inlet (inch)	排出口徑 Outlet (inch)	入水口徑 Liquid in orifice (inch)	液封水量 Water supply (L/min)
			-640mmHg (120 Torr)	-590mmHg (170 Torr)	-490mmHg (270 Torr)	-400mmHg (360 Torr)				
DWP-1/2	1/2	3500	0.118	0.135	0.14	0.14	1	1	1/4	6
DWP-1	1	3500	0.25	0.275	0.3	0.3	1	1	1/4	7
DW-1	1	3500	0.258	0.284	0.31	0.31	1	1	1/4	7
DW-2	2	3500	0.5	0.553	0.6	0.61	1	1	1/4	8
DW-3	3	3500	0.612	0.738	0.81	0.819	1	1	1/4	9
SW-3	3	1750	0.68	0.82	0.9	0.91	1 1/2	1 1/2	1/2	16
SW-5	5	1750	1.51	1.97	2.22	2.26	2	2	1/2	18
SW-7	7 1/2	1750	1.88	2.71	3.1	3.1	2	2	1/2	20
SW-10	10	1750	2.65	3.25	3.65	3.7	2	2	1/2	25
SW-15	15	1750	4.6	5.8	6.35	6.4	2	2	3/4	40
SW-20	20	1750	6.3	7.5	7.85	7.91	2	2	3/4	50
SW-25	25	1750	6.5	9.1	10	10.24	3	3	1	50
SW-801	25	1400	7.9	9.83	10	10.3	3	3	1 1/4	55
SW-802	30	1520	8.96	10.7	12.6	13	3	3	1 1/4	65
SW-803	40	1750	9.35	12.5	15.1	15.5	3	3	1 1/4	75

## 單段式(SW系列) SINGLE-STAGE (SW SERIES)

- 單段式最高真空度可達60Torr，理想操作壓力150Torr以上。  
The ultimate vacuum of SW Type reaches as high as 60 Torr and the ideal operating pressure over than 150 Torr.
- SW系列真空幫浦試驗條件如下/The performance of the SW Type Vacuum Pump is indicated on the basis as follow :  
入口空氣溫度/Suction Air Temperature:20°C  
出口壓力/Discharge Pressure:1atm  
封液溫度/Sealing Liquid Temperature:15°C

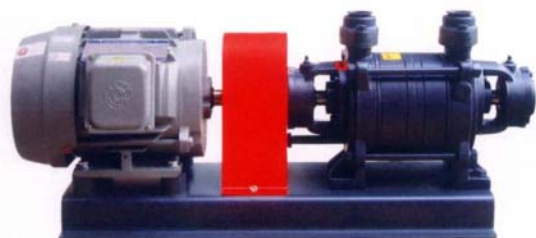
### 單段式性能曲線圖

### Performance Curve of Single-Stage



## 雙段式(SWV系列) TWO-STAGE (SWV SERIES)

DWV-2~DWV-3



SWV-3~SWV-10



SWV-5D~SWV-20



SWV-801~SWV-804



### 規格表SPECIFICATIONS:

型式 Model	馬力 Power (HP)	迴轉速 Speed (rpm)	排氣速度 Pumping speed (m <sup>3</sup> /min)				吸入口徑 Inlet (inch)	排出口徑 Outlet (inch)	入水口徑 Liquid in orifice (inch)	液封水量 Water supply (L/min)
			-720mmHg (40 Torr)	-695mmHg (65 Torr)	-670mmHg (90 Torr)	-650mmHg (110 Torr)				
DWV-2	2	3500	0.39	0.47	0.48	0.49	1	1	1/4	7
DWV-3	3	3500	0.62	0.75	0.77	0.77	1	1	1/4	8
SWV-3	3	1750	0.71	0.88	0.91	0.9	1 1/2	1 1/2	1/2	16
SWV-5	5	1750	1.35	1.71	1.75	1.75	2	2	1/2	18
SWV-5D	5	1750	1.45	1.92	1.95	1.96	2	2	3/4	18
SWV-7	7 1/2	1750	2.0	2.45	2.73	2.75	2	2	1/2	20
SWV-7D	7 1/2	1750	2.2	2.9	3.20	3.30	2	2	3/4	20
SWV-10	10	1750	2.30	2.92	3.35	3.35	2	2	1/2	25
SWV-10D	10	1750	3.2	3.9	4.3	4.3	2	2	3/4	25
SWV-15	15	1750	4.5	5.5	5.61	5.83	2	2	3/4	40
SWV-20	20	1750	5.61	6.73	7.4	7.5	2	2	3/4	40
SWV-801	25	1170	7.85	9.7	10.2	10.12	3	3	1 1/4	50
SWV-802	30	1260	9.42	10.74	10.96	10.9	3	3	1 1/4	55
SWV-803	40	1520	10	12.4	13.23	13.32	3	3	1 1/4	65
SWV-804	50	1680	10.5	14.2	15.75	15.72	3	3	1 1/4	75

## 雙段式(SWV系列) TWO-STAGE (SWV SERIES)

- 雙段式最高真空度可達25Torr，理想操作壓力150Torr以下。  
The ultimate vacuum of SWV Type reaches as high as 25 Torr and the ideal operating pressure below 150 Torr.
- SWV系列真空幫浦試驗條件如下/The performance of the SWV Type Vacuum Pump is indicated on the basis as follow :  
入口空氣溫度/Suction Air Temperature:20℃  
出口壓力/Discharge Pressure:1atm  
封液溫度/Sealing Liquid Temperature:15℃

雙段式性能曲線圖  
Performance curve of two-stage

