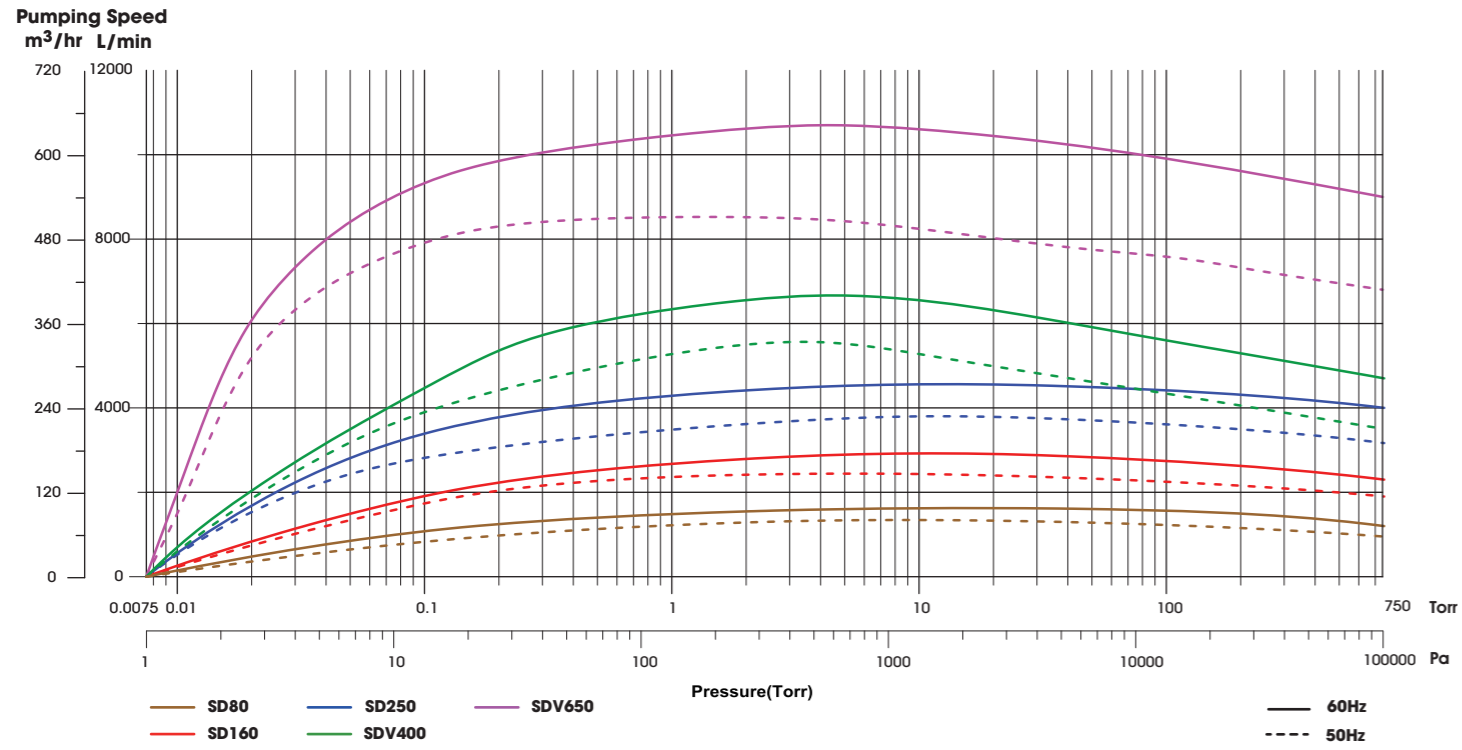
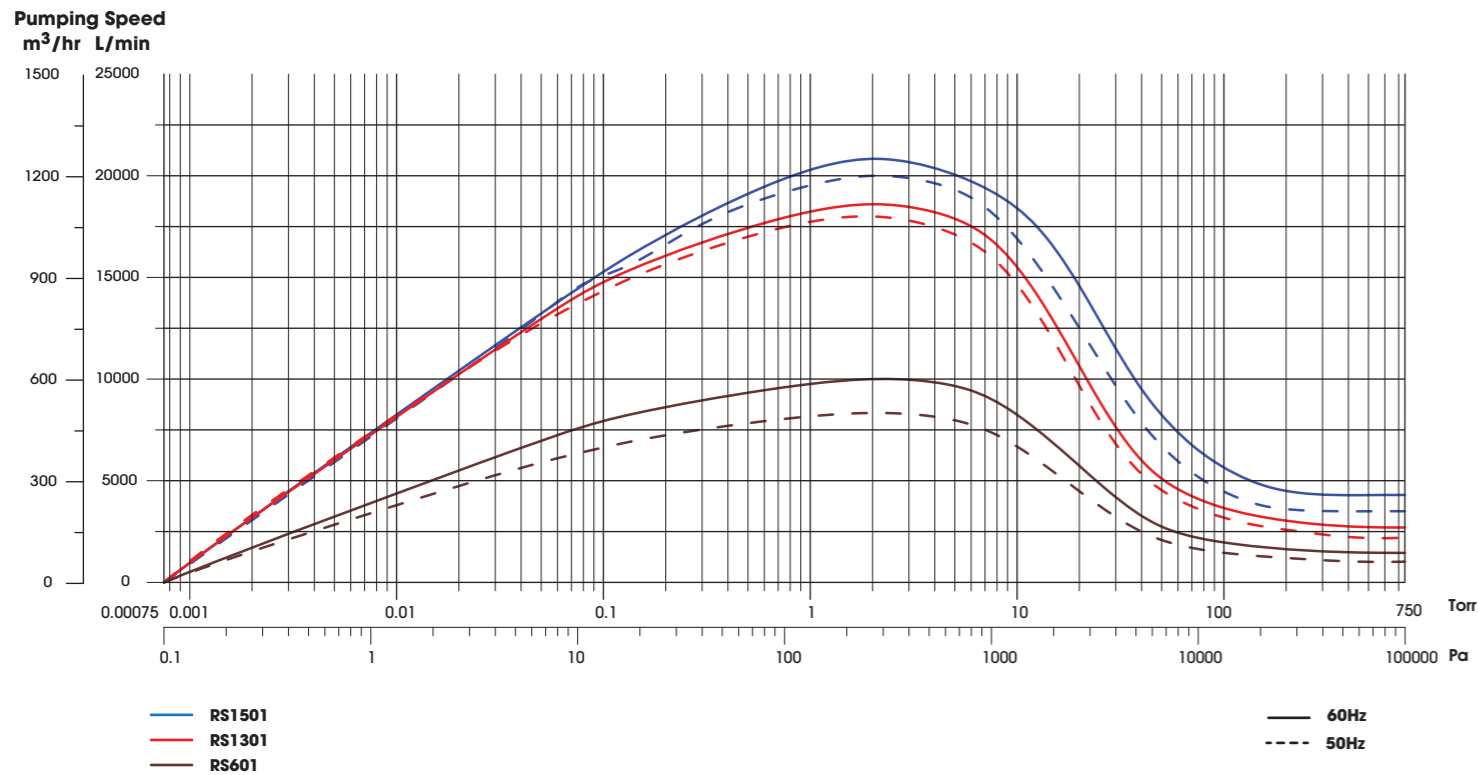


抽速效率曲線



抽速效率曲線



**銳昇興業有限公司 Rising Sun Vacuum Co., Ltd.**

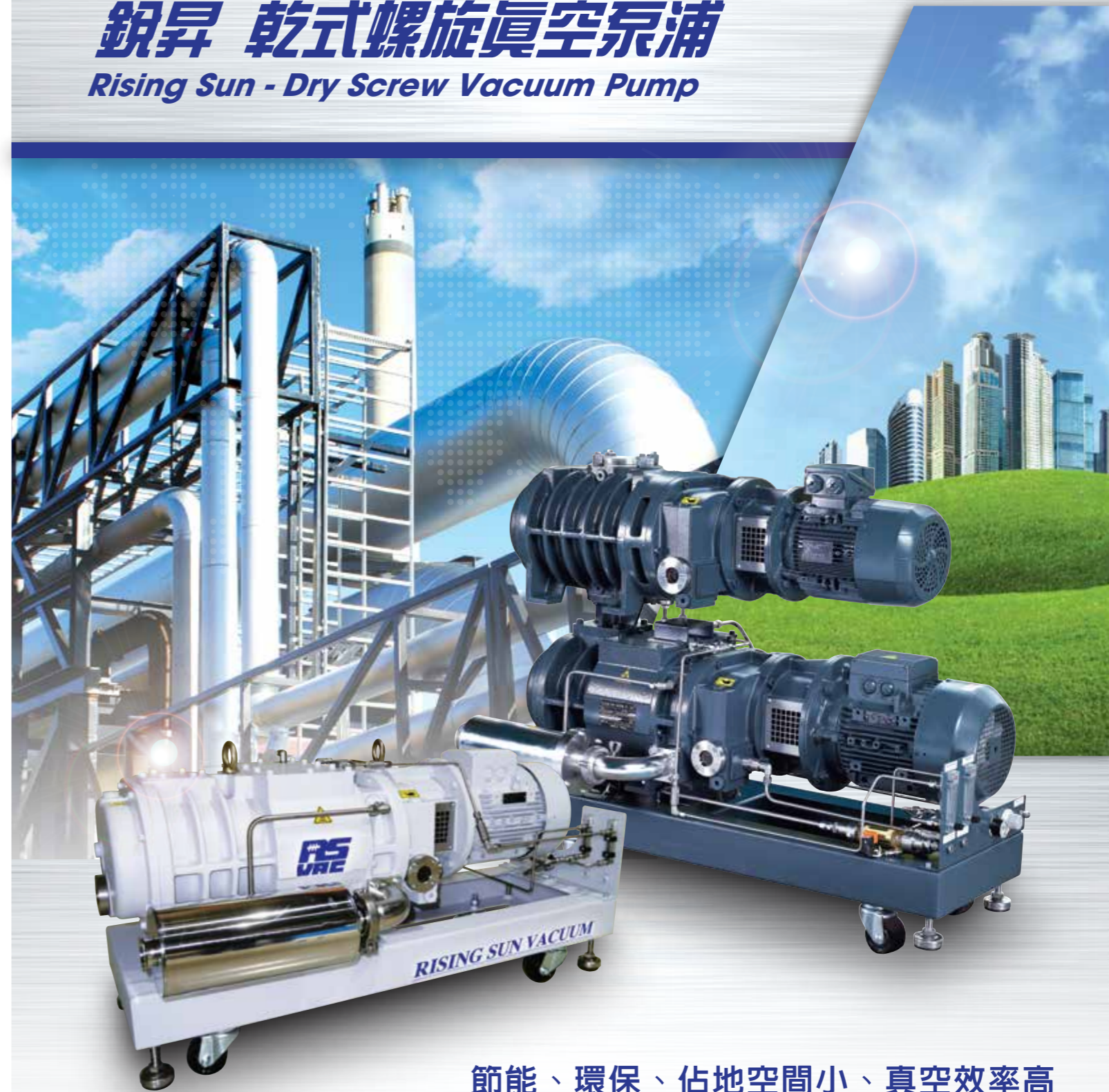
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中國大陸總代理：天津弘智盛業機械有限公司 地址：天津市西青區中北工業園（北園）銀霞路6號。(300380)  
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DESIGNHOUSE 04-23758797 201609.1000



**銳昇 乾式螺旋真空泵浦**  
 Rising Sun - Dry Screw Vacuum Pump



**節能、環保、佔地空間小、真空效率高**

Energy saving, Space saving  
 Environmental friendly, High efficiency vacuum pumping

**銳昇興業有限公司** Rising Sun Vacuum Co., Ltd.

## 乾式螺旋真空泵的優點

### 1. 極限真空度高

單泵終極壓力可達 $7.5 \times 10^{-3}$  torr以上。

### 2. 節能兼具環保

運轉平穩，低震動、低耗功，無廢水、廢油產生。

### 3. 製程潔淨度高

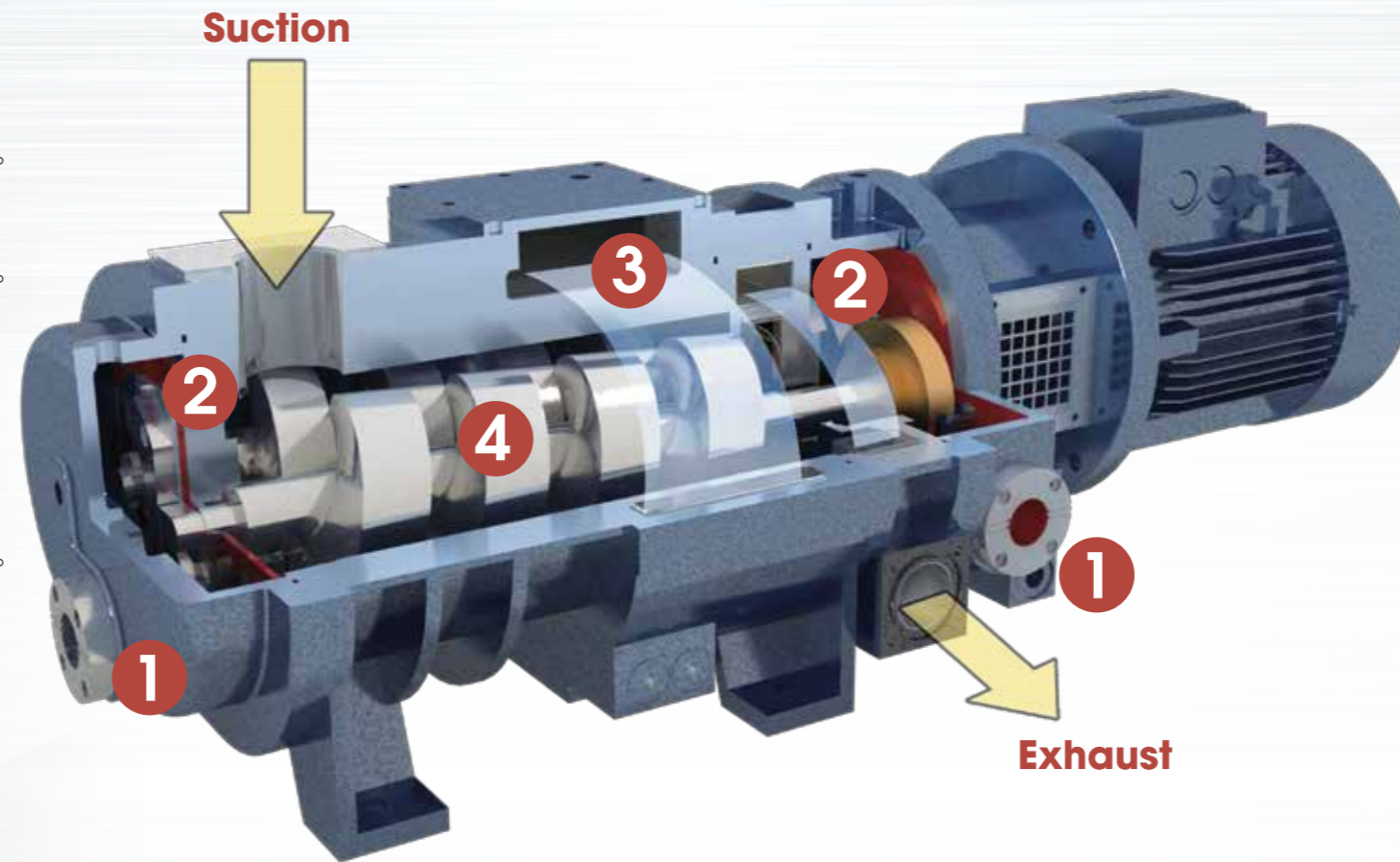
泵腔內無水、無油，製程物不受水氣、油氣污染。

### 4. 排汗能力強

螺旋轉子具良好輸送功能，能有效將製程排出泵浦外。

### 5. 應用範圍廣

適用於含有大量水氣及酸鹼氣體製程，堅固耐用。



## Advantages of dry screw vacuum pump

### 1. Good ultimate pressure

Ultimate pressure  $7.5 \times 10^{-3}$  torr can be achieved by one pump unit.

### 2. Energy saving and environmental friendly

Stable operation, steady vibration, low power consumption, neither water nor oil is polluted.

### 3. The cleanest vacuum process

There's neither water nor oil in chamber, and so processes aren't polluted by steam or oil gas.

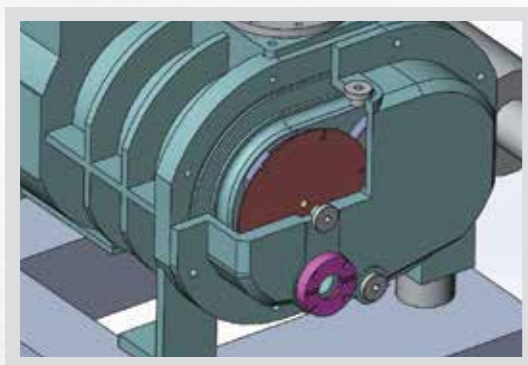
### 4. Powerful blow down ability

A pair of rotors has transmission function that can blowdown processes.

### 5. Wide range of application

Durable and reliable structure can bear to process with huge steam, and corrosive gas.

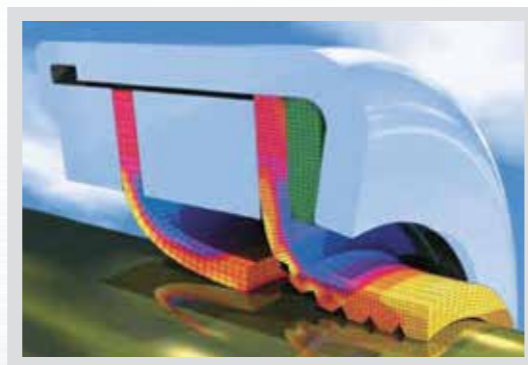
## 銳昇真空泵浦設計特點 Design features of Rising Sun vacuum pump



### 1 軸承潤滑：

兩端軸承採用飛濺式潤滑設計(油浴)，無須定期補充油脂，能持續潤滑並兼備冷卻效果，軸承壽命大幅提升。

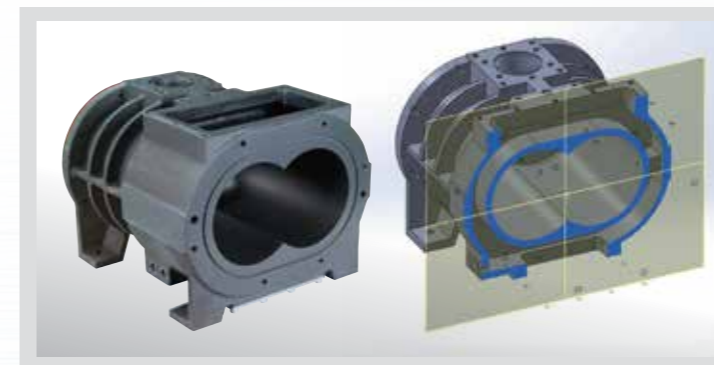
Bearings at both sides with splash lubrication design, no need to add grease regularly, significantly increasing bearing service life.



### 2 軸封設計：

採用LIP Seal (唇形軸封)設計，可有效隔絕汙染物進入油箱，延長軸承使用壽命。

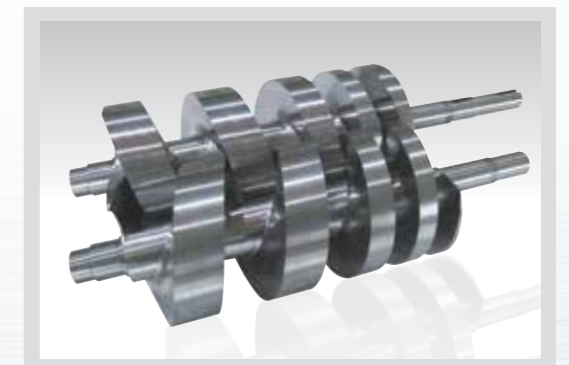
Adopting LIP Seal design can effectively prevent contaminants from entering the tank to reduce contaminated.



### 3 冷卻系統：

直接水冷設計(非間接水冷)，能有效降低泵體溫度，提高相關零件壽命。全機體冷卻水循環道，皆coating防腐蝕塗層(鐵氟龍)。

Direct water-cooling design (not indirect cooling) significantly reduces the pump temperature, and extends the service life of relevant parts. The whole of cooling channels are all with anti-corrosion coating.



### 4 螺旋轉子：

採一體成型加工，結構剛性強，運轉穩定性高。

The screw rotor is integrated formed, which can enhance its rigidity and stability.

## 銳昇真空泵浦的開發技術 Technical ability of Ringing Sun

SD系列乾式螺旋真空泵適用於化學、工業、製藥及任何無油運轉的應用環境需求，精密的轉子加工技術，提供高效率的抽氣性能，機體直接水冷設計泵體溫度低，先進的轉子平衡技術，在高速運行下仍然可保持低的振動值，有效延長零件壽命，降低維護及保養成本，依使用環境需求不同，亦可提供防爆機組選擇。

SDV系列「變導程螺旋真空泵浦」為創國內之先，同步歐美技術所開發之節能型真空泵浦，除了包含原SD系列的所有優勢外，其核心技術「變導程螺旋轉子」透過縝密的線型計算，能將氣體有效地壓縮排送，可顯著降低出口排氣溫度；設計結構緊湊，大幅縮小佔地空間；相較於定導程螺旋真空泵浦，更能節省30%以上的電能消耗。

SD series dry screw vacuum pumps are designed for chemical, industrial, pharmaceutical and any application that demand oil-free condition. Precise technology of screw rotor machining, provides high efficient pumping performance. Direct water cooling design keeps the pump at low temperature. Advanced technology of rotor balance ensures the pump is kept in low vibration while high performance running, extends components' service life, and reducing maintenance costs. Besides, according to various demands for special circumstance, explosion proof system is also available.

SDV series – Variable pitch screw vacuum pump, including all features of SD series, its key technology of variable pitch screw generates lower process gas discharge temperature, reduces space occupation by compact structure design, and consumes 30% less power than competitive dry screw pump.

## 穩定、可靠、客製化、低維護成本的特性 Stable, Reliable, Customize, Low maintenance cost

銳昇致力開發適用於嚴苛製程的乾式螺旋真空泵浦，以符合化工、製藥、和傳統等產業之應用需求為目標，期許泵浦在低耗能、低汙染、低維護成本的特性外，能以高效率抽速、低真空壓力的優勢，協助客戶在製程中提升產品品質。

目前依嚴苛製程的不同需求採用之特殊規格：提供多種「耐磨耗鍍層」、「過濾和清洗裝置」、「雙道軸封結構」、「馬達脫離支架」，以客製化的規格配置，協助客戶延長泵浦維護保養時間、與製程物卡死時，簡化現場的排除程序。

Rising Sun has devoted to develop vacuum pump for harsh industrial applications, like chemical, biopharmaceutical industry and etc. To aim at customers' special manufacturing process, we can provide customized specification to prolong maintenance period and simplify procedure of troubleshooting, such as "wear-resistant coating", "filter and clean system", "second line seal protection", "emergency release system".



## 銳昇客戶使用實績 (環保、節能、低維護成本的效益) Customer examples

### 化工業 Chemical industry



### 氣體製造業 Specialized industrial gas



### 製藥業 Biopharmaceutical industry



### 食品業 Food industry



### 冷凍乾燥 Vacuum freeze dryer



### 熱處理 Vacuum heat treatment



## 產品應用範圍 Application

- 化工工業 Chemical industry  
中央真空、清潔真空、乾燥、蒸餾、過濾、結晶、溶劑/蒸汽回收  
Central vacuum, Clean vacuum, Distillation, Filtration, Crystallization, Solvent / Vapor recovery
- 冶金工業 Metallurgical industry  
真空熱處理、表面硬化、精煉、燒結  
Vacuum heat treatment, Surface harden treatment, Refine, Welding
- 機械工業 Mechanical industry  
精密鑄造、真空斷熱 Precise casting, Vacuum insulation
- 太陽能產業 Solar industry  
長晶爐 Crystal growth furnace
- 生技製藥 Biopharmaceutical industry
- 真空鍍膜、塗層 Vacuum coating
- 食品工業 Food industry  
真空乾燥、真空包裝 Vacuum drying, Vacuum packaging

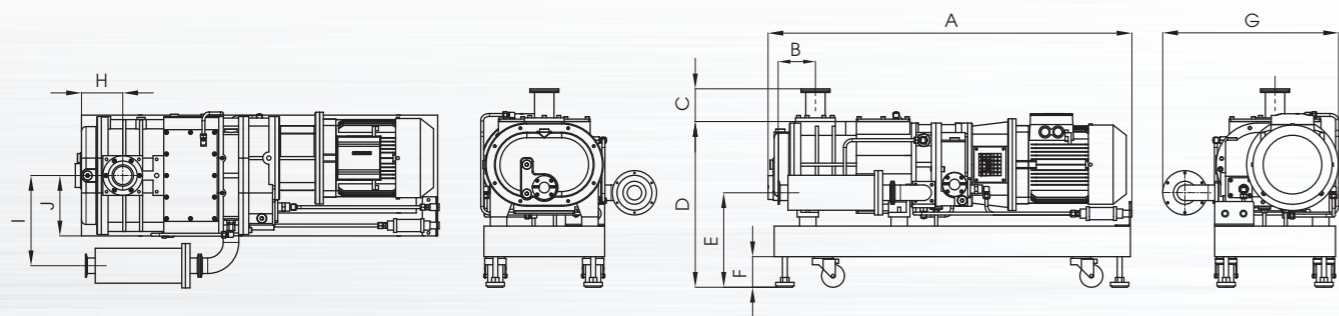
# 技術規格表 Technical Data

項目 Item		機型 Model	單位 Unit	SD80	SD160	SD250	SDV400	SDV650
抽氣速率 Pumping Speed(50/60Hz)			L/min	1300/1600	2430/2920	3800/4560	5560/6670	9000/10835
			m <sup>3</sup> /hr	80/96	145/175	228/273	333/400	540/650
			cfm	47/57	85/103	134/161	196/235	318/382
終極壓力 Ultimate Pressure			Torr	7.5x10 <sup>-3</sup>				
			mbar	1x10 <sup>-2</sup>				
			Pa	1				
馬達 Motor	頻率 Frequency		Hz	50/60Hz				
	電壓 Voltage		V	220V/380V				
	額定功率 Rated Power		kW	4.0 kW(50Hz)	5.5 kW(50Hz)	7.5kW(50Hz)	11kW(50Hz)	18.5kW(50Hz)
				4.6 kW(60Hz)	6.3 kW(60Hz)	8.6kW(60Hz)	12.6kW(60Hz)	21.3kW(60Hz)
底壓耗功 Ultimate Pressure Power		kW	3.5 kW(50Hz)	5.1 kW(50Hz)	6.2kW(50Hz)	6.0kW(50Hz)	7.9kW(50Hz)	
			3.8 kW(60Hz)	5.8 kW(60Hz)	7.2kW(60Hz)	7.1kW(60Hz)	8.9kW(60Hz)	
管路連接 Connection	入氣口 Inlet			KF50	KF50	ISO63	ISO63	ISO100
	排氣口 Outlet			NW40	KF50	KF50	KF50	ISO63
冷卻水 Cooling Water	最低流量 Min. Flow		L/min	3				5
	最高壓力 Max. Pressure		kg/cm <sup>2</sup>	4				
	壓力差 Pressure Dif.		kg/cm <sup>2</sup>	1				
	溫度Temp.		°C	10~40				
	接頭 Connection			PT 3/8"				PT 1/2"
氮氣(選配) N2	壓力 Pressure		MPa	0.05~0.2				
	流量 Flow		slm	6~10(Sealing)				
				0~50(Dilute) <sup>註</sup>				
接頭 Connection			Swagelok 1/4"					
潤滑油 Oil	型號 Brand			Krytox 1525 / Fomblin Y LVAC 25/6				
	用量 Quantity		L	0.45	1	1	1	2
尺寸 Dim.	長x寬x高 LxWxH		mm	1047x474x594	1125x575x672	1190x575x649	1456x600x679	1515x728x777
重量 Weight			kg	200	300	330	400	680
噪音 Noise			dB	80				85
操作溫度 Operation Temp.			°C	5~40°C				
操作濕度 Operation Moisture			RH	<90%				

註：稀釋流量依不同的製程做調整

## 規格/尺寸圖 Dimension

單位 Unit : mm



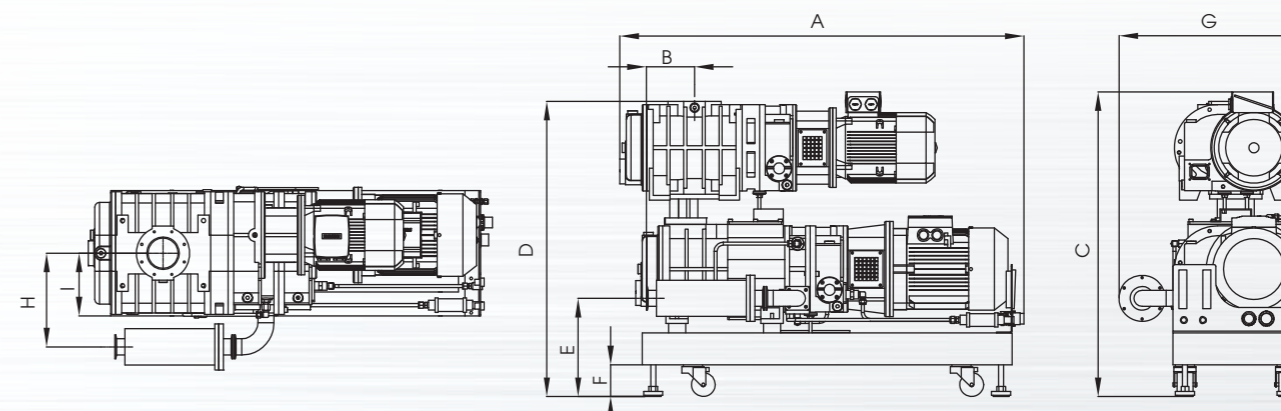
	A	B	C	D	E	F	G	H	I	J
SD80	1047	160	130	464	274	100	475	108	240	170
SD160	1125	181	100	542	309	100	575	130	295	198
SD250	1190	122	107	542	309	100	575	135	295	198
SDV400	1456	76	107	572	326	100	599.5	127.5	295	215
SDV650	1515	123	100	677	367	107	728	175	380	277

項目 Item		機型 Model	單位 Unit	RS601	RS1301	RS1501
抽氣速率 Pumping Speed(50/60Hz)			L/min	8300/10000	20500/22000	22800/24180
			m <sup>3</sup> /hr	500/600	1230/1320	1368/1450
			cfm	294/353	724/777	805/854
終極壓力 Ultimate Pressure			Torr	7.5x10 <sup>-4</sup>		
			mbar	1x10 <sup>-3</sup>		
			Pa	0.1		
			Pa	0.1		
馬達 Motor	頻率 Frequency		Hz	50/60Hz		
	電壓 Voltage		V	220V/380V		
	額定功率 Rated Power		kW	4.0+4.0kW(50Hz)	5.5+4.0kW(50Hz)	7.5+4.0kW(50Hz)
				4.6+4.6kW(60Hz)	6.3+4.6kW(60Hz)	8.6+4.6kW(60Hz)
底壓耗功 Ultimate Pressure Power		kW	5.0kW(50Hz)	6.0kW(50Hz)	7.3kW(50Hz)	
			5.5kW(60Hz)	6.9kW(60Hz)	8.4kW(60Hz)	
管路連接 Connection	入氣口 Inlet			ISO100	ISO100	ISO100
	排氣口 Outlet			NW40	KF50	KF50
冷卻水 Cooling Water	最低流量 Min. Flow		L/min	3		
	最高壓力 Max. Pressure		kg/cm <sup>2</sup>	4		
	壓力差 Pressure Dif.		kg/cm <sup>2</sup>	1		
	溫度Temp.		°C	10~40		
	接頭 Connection			PT 3/8"		
氮氣(選配) N2	壓力 Pressure		MPa	0.05~0.2		
	流量 Flow		slm	6~10(Sealing)		
				0~50(Dilute) <sup>註</sup>		
接頭 Connection			Swagelok 1/4"			
潤滑油 Oil	型號 Brand			Krytox 1525 / Fomblin Y LVAC 25/6		
	用量 Quantity		L	0.45+0.45	1+1.35	
尺寸 Dim.	長x寬x高 LxWxH		mm	1047x474x840	1163x575x974	1223x575x974
重量 Weight			kg	380	510	540
噪音 Noise			dB	80		
操作溫度 Operation Temp.			°C	5~40°C		
操作濕度 Operation Moisture			RH	<90%		

註：稀釋流量依不同的製程做調整

## 規格/尺寸圖 Dimension

單位 Unit : mm



	A	B	C	D	E	F	G	H	I
RS601	1047	244.5	840	794	274	100	475	240	170
RS1301	1213	211	959	929	309	100	575	295	198
RS1501	1273	152	959	929	309	100	575	295	198