



ISO 9001 2000國際品質認證

本機型榮獲專利字號
新型第101792號(凹凸緣設計)
新式第086802號(沉水式設計)
新型第134273號(齒立式設計)

高品質 低噪音

沉水式魯氏鼓風機

Minimal Vibration and Low Noise
Submersible Roots Blower

ISO 9001



專業製造魯氏鼓風機

Specializing in the manufacturing of Roots blowers

科技研發 與時俱進 開創新局



專利—是肯定我們研發的成果及領先業界的榮耀



魯氏鼓風機結構改良



全水冷式鼓風機



直立式鼓風機



無軸式離心泵浦結構改良



無軸封離心泵



全水冷式鼓風機



直立式鼓風機



魯氏鼓風機結構改良



迎賓大廳



落實教育訓練規劃·不斷充實員工專業技能



精密的CNC電腦加工設備



完善的組立生產線



嚴格的零配件品管·確實掌握品質



高度標準化製品庫存·確保客戶交期



規格化零配件管理·零配件供應無虞



完整的測試品管·提供產品最佳保證

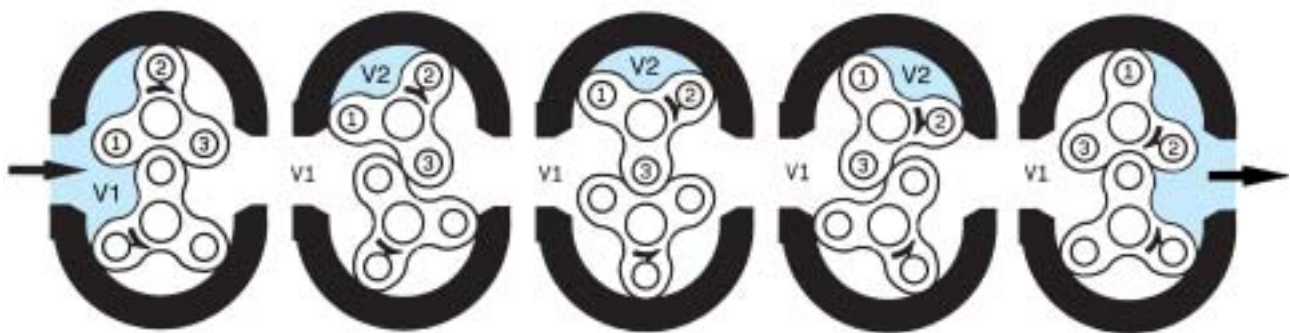
鼓風機特點：

- 一、本公司生產之鼓風機氣室與側蓋採凹凸緣密合，以提高鼓風操作強度且防止螺栓固定時引起偏心現象而影響鼓風機之壽命。
- 二、本公司葉輪採用最先進之四軸加工一次加工法，以減少人為誤差，提昇葉輪之精密度，並提高鼓風機之效率。

The Characteristic of the TRUN-DEAN Blower:

- * The air compartment and the side cover of our blower has a flange and groove rim, which can not only strengthen the blower's operational functions but also prevent eccentric phenomenal resulting from the fastening of the stud, which may shorten the life of the blower.
- * To reduce man-made errors, enhance the precision of the leave-wheel, and to promote the blower efficiently, our rotor uses the most advanced--one time work process Four- Shaft method.

鼓風機動作原理：



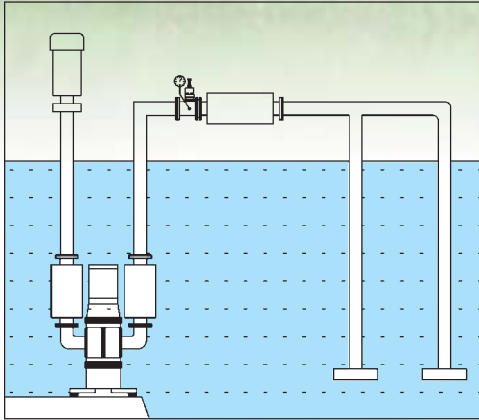
魯氏鼓風機之動作原理為機體氣室內裝置兩組葉輪，以相反方向迴轉時，吸入側因容積V1變化而產生低壓，為平衡壓力而吸入空氣，而形成容積V2之空氣，再由吐出側送出空氣，由吐出口之阻力而產生高壓。由於兩葉輪間保有一定之間隙，因此兩葉輪並無相互摩擦，所以不必在葉輪間添任何潤滑劑，即可高速運轉排送潔淨空氣，亦可用於真空用途。

Principle of the Blower Operation:

There are two sets of rotors in the air compartment of the blower body, when the rotors operate in opposite directions they suck in air to balance the pressure created due to the volume V1 change on the inlet side. And the air of the volume V2 will be sent out thru the outlet side and the high pressure will be created thru the outlet mouth.

Also, there is no need to apply any lubrication between the two rotors because of the existing gap between them which gives no worry about the possibility of friction. It runs well at high speed and produces clean air. It also can be used in vacuum circumstances.

沉水式魯氏鼓風機之優點 Features of the Roots blower

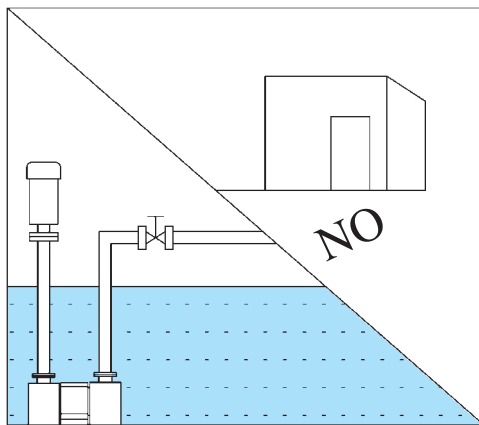


寧靜

運轉中之鼓風機，因置放在水中，故聲音在空氣與水之介面被折射入水中，而不傳入空氣中，同時水與槽壁亦同樣折射回去而達到減音之效果。

Quietness

Because of its submersibility under water, there will be not much noise from the machine when in use.

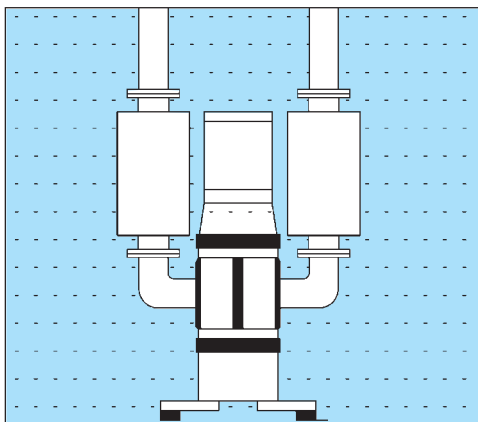


不需製作防音設備

沉水式鼓風機因置於水中，即達到減音之效果，故不需另製作防音罩或防音廠房，同時鼓風機置放於水槽中，不佔用空間，所以能有效利用空間。

No need for a silencer

Because it is under water, the created noise will be very low; there will be no need for a silencer. Under-water can mean space-saving.



構造堅實、安心使用

馬達與機體為直結式（沒有傳統型調整皮帶之困擾）。馬達與機台本身全以 O 型環圈閉封，絕無進水之虞。馬達若因過熱停機，請清潔外殼，以達散熱之效果。

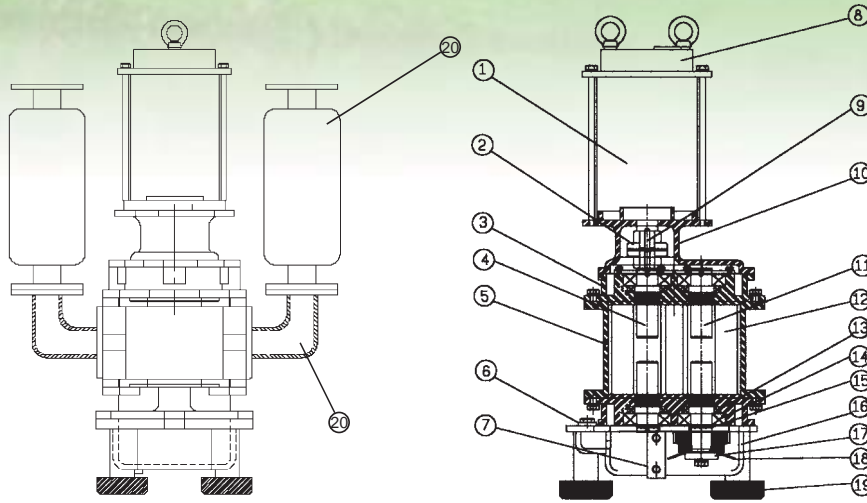
Strong structure, Worry free

- ✦ The direct connection between the motor and the blower can avoid the inconvenience of traditionally-done belt adjustment.
- ✦ The O-ring closure of the motor and the machine means worry free on the water leakage.
- ✦ Because of the overheat result the motor stopped, just cleanse outer surface to make the cooling back.

裝置簡單、配管短、省工時、不佔空間、不需防音設備…即達成無噪音之生活空間
Easy installation; easy assembly; labor-and-space saving; quietness.

沉水式魯氏鼓風機結構圖

Structural Diagram for the Submersible Blower



編號 NO.	名稱 Name	材質 Material	編號 NO.	名稱 Name	材質 Material
1	馬達外殼 Casing of Motor	SUS304	12	葉輪 Rotor	FC250
2	聯軸器 Coupling	FCD500	13	TC 油封 TC oil Seal	NBR
3	軸承座 Bearing Base	FC250	14	軸承 Bearing	SUJ2
4	主動軸 Drive Shaft	S45C	15	扣環 " S " Ring	SK7
5	本體 Main Body	FC250	16	齒輪油箱 Gear Bbox	FC250
6	入油栓塞 Lubrication Plug	SS400	17	墊圈 Washer	S45C
7	洩油栓塞 Oil drain Plug	SS400	18	甩油片 Oil splasher	SS400
8	馬達蓋 Motor Cover	NBRJ	19	防震墊片 Vibration Cushion	Rubber
9	鍵 Key	S45C	20	彎管接頭 Pipe Flange	FC250
10	連接座 Connecting Base	FC250	21	齒輪 Gear	SNCM21
11	被動軸 Driven Shaft	SCM440	22	消音器 Silencer	SS400

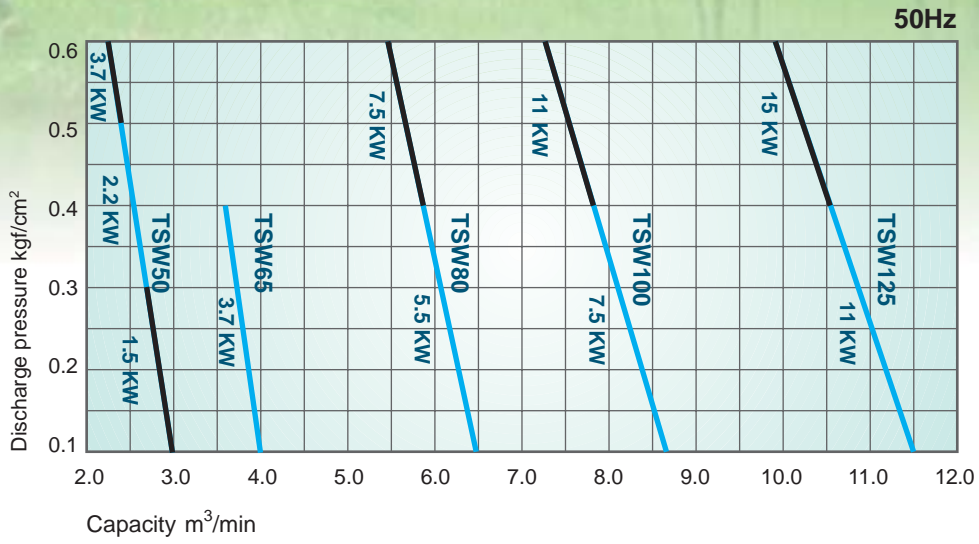
另有不銹鋼材質 · 價格另議

TSW 系列沉水式魯氏鼓風機性能表

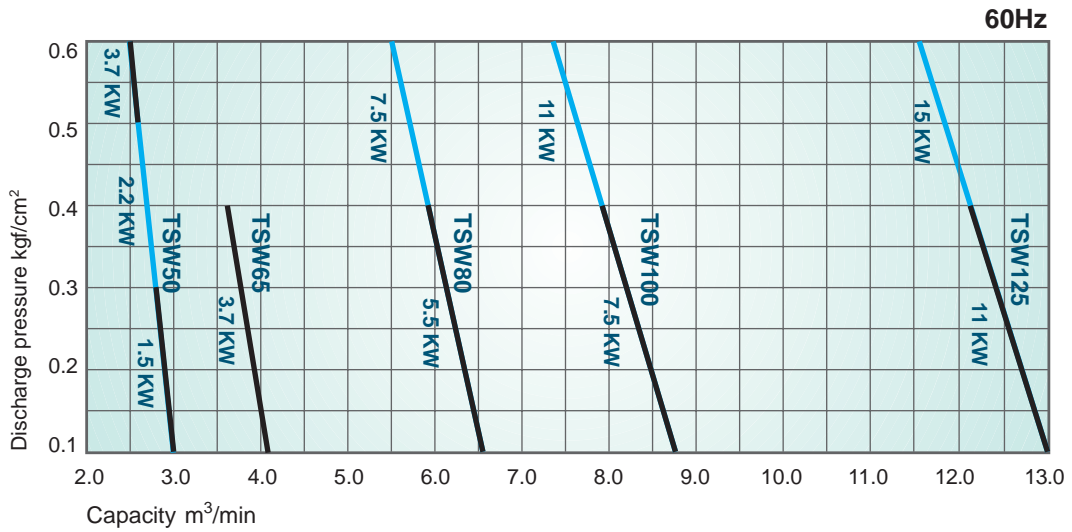
Function Table for the TSW Serise Submersible Blower

機型 Model	口徑 Bore	出力 Power HP	壓力 Kgf/cm ² 風量 m ³ /min						Pressure kgf/cm ² Capacity m ³ /min						重量 Weight (kg)
			50 Hz						60 Hz						
			0.1	0.2	0.3	0.4	0.5	0.6	0.1	0.2	0.3	0.4	0.5	0.6	
TSW50	2"	1.5	2.94	2.84	2.74				3.04	2.94	2.83				115
TSW50	2"	2.2	2.94	2.84	2.74	2.64	2.53		3.04	2.94	2.83	2.73	2.62		
TSW50	2"	3.7	2.94	2.84	2.74	2.64	2.53	2.44	3.04	2.94	2.83	2.73	2.62	2.52	
TSW65	2.5"	3.7	3.99	3.85	3.71	3.56			4.09	3.95	3.75	3.59			130
TSW80	3"	5.5	6.47	6.27	6.07	5.87			6.59	6.39	6.19	5.99			210
TSW80	3"	7.5	6.47	6.27	6.07	5.87	5.68	5.48	6.59	6.39	6.19	5.99	5.81	5.62	
TSW100	4"	7.5	8.66	8.36	8.07	7.79			8.75	8.46	8.17	7.89			280
TSW100	4"	11	8.66	8.36	8.07	7.79	7.50	7.22	8.75	8.46	8.17	7.89	7.61	7.34	
TSW125	5"	11	12.44	12.22	11.89	11.45			12.99	12.66	12.33	12.01			400
TSW125	5"	15	12.44	12.22	11.89	11.45	11.12	10.79	12.99	12.66	12.33	12.01	11.67	11.34	

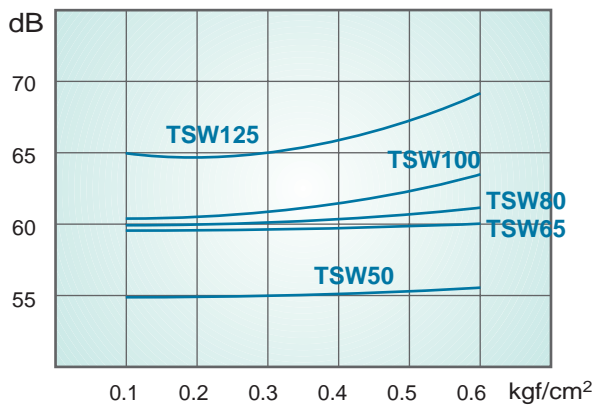
性能曲線圖 Performance-Curves



性能曲線圖 Performance-Curves

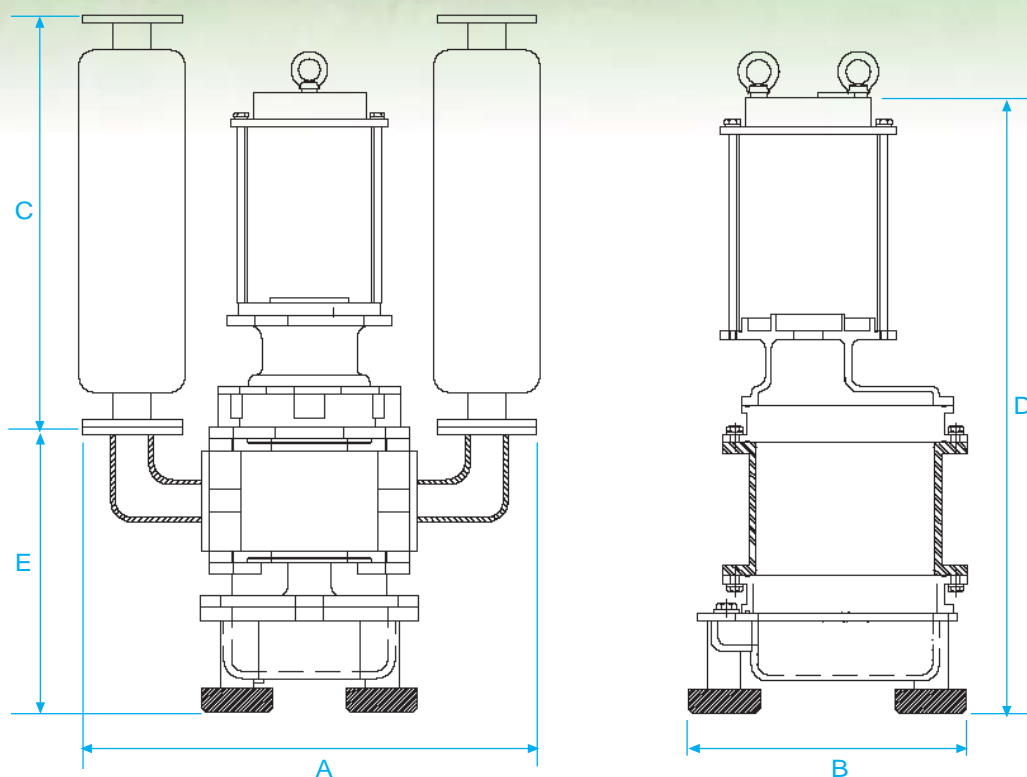


噪音值 Noise Levels



外型尺寸圖

Dimensions

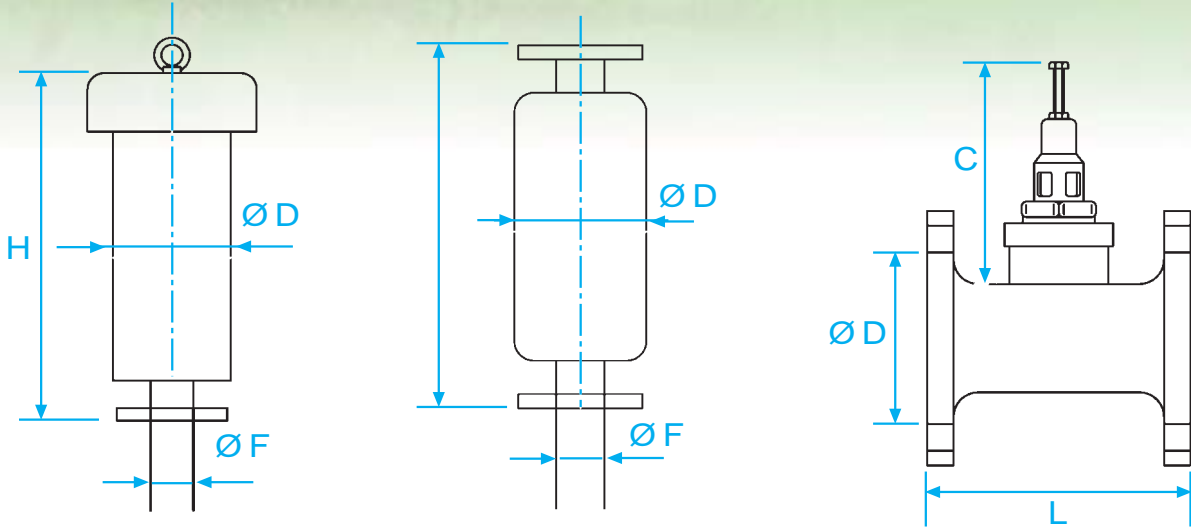


Unit/mm

型號 Model	出力 KW	A	B	C	D	E
TSW 50	1.5	650	340	765	775	360
TSW 50	2.2	650	340	765	775	360
TSW 50	3.7	650	340	765	775	360
TSW 65	3.7	675	340	780	835	390
TSW 80	5.5	775	425	780	870	420
TSW 80	7.5	775	425	780	870	420
TSW 100	7.5	880	425	840	870	500
TSW 100	11.0	880	425	840	870	500
TSW 125	11.0	955	425	1470	1090	560
TSW 125	15.2	955	425	1470	1090	560

附件尺寸

Dimensions of the Accessories



入口消音器 Suction Silencer

TYPE	H	F	D	Weight KG
SS-50	765	50	166	13
SS-65	780	65	216	13
SS-80	780	80	216	23
SS-100	780	100	268	23
SS-125	1395	125	321	59

Unit/mm

出口消音器 Discharge Silencer

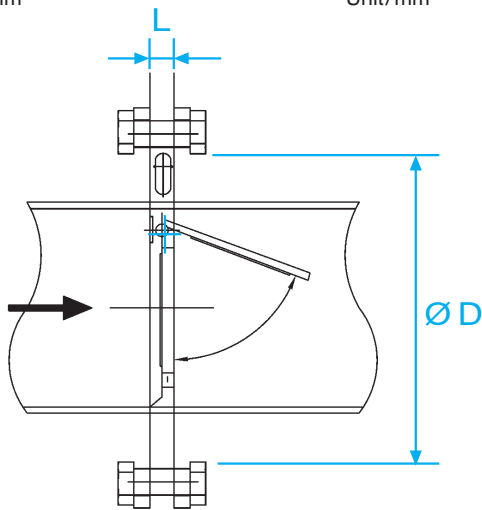
TYPE	H	F	D	Weight KG
DS-50	480	50	166	14
DS-65	480	65	216	24
DS-80	780	80	208	24
DS-100	780	100	268	31
DS-125	780	125	321	45

Unit/mm

短管安全閥 Short Pipe Safety Valve

TYPE	L	D	C	Weight KG
TJ-50	160	50	132	7
TJ-65	160	65	132	10
TJ-80	160	80	150	12
TJ-100	160	100	150	17
TJ-125	200	125	150	20

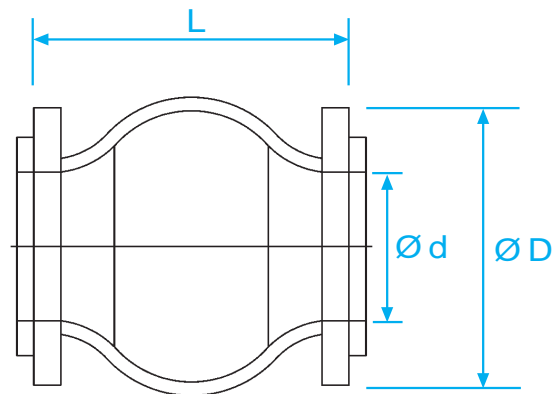
Unit/mm



逆止閥 Check Valve

TYPE	D	L
AC-50	106	16
AC-65	125	16
AC-80	133	16
AC-100	158	16
AC-125	189	16

Unit/mm

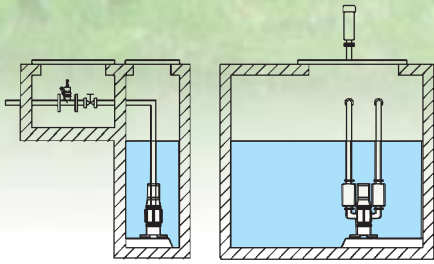


防震接頭 Flexible Joint

TYPE	D	d	L	Weight KG
FJ-50	155	50	85	4
FJ-65	175	65	110	5
FJ-80	185	80	110	6
FJ-100	210	100	110	8
FJ-125	250	125	165	10

Unit/mm

可使用之場所 Where to use



放流槽、消泡槽、鼓風槽

優點：1. 裝置淺、檢修容易。2. 換油可於放水後於槽內進行。

注意：1. 必需保持最低水位。2. 水溫需保持於 32 °C 以下。

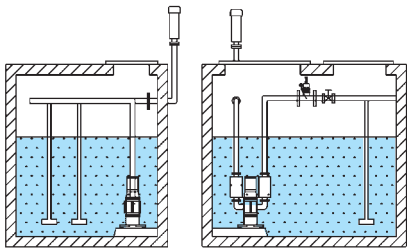
Passage trough, Foam-removing trough, Blow trough

Advantage: 1. Shallow water installation easy for maintenance.

2. The oil change can be easily done in the trough after the water is out.

Caution: 1. Must keep the minimum water level.

2. Must keep the water temp below 32 °C .



曝氣槽

優點：1. 配管短、裝置易。2. 不需要鼓風機裝置場所。

注意：1. 裝置不要妨害旋迴流之位置。2. 汽泡不要直接衝刺到鼓風機。

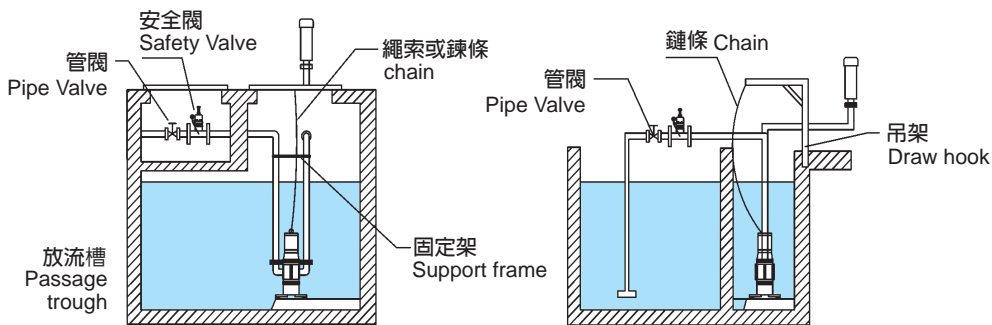
Air-puffing trough

Advantage: 1. Easy assembly parts.

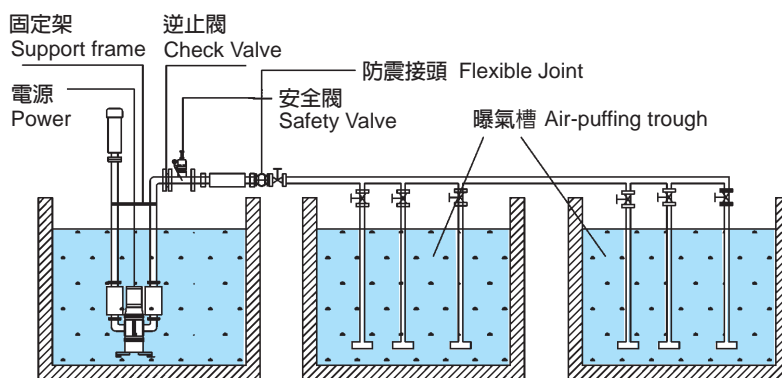
2. Doesn't require a similar place next to the blower for installation.

Caution: 1. During installation, keep away from the return current.

2. Bubbles should not enter the blower.



安裝示意圖 Installation diagram



裝置要點

1. 用繩索或鍊條裝置機台，降於槽底並安置於基面上（不需使用固定螺栓）。
2. 不可將繩索鍊條拉緊，其尾端固定於掛鉤上。
3. 吸進及排出之管路，請用固定架固定，以防止鬆動。
4. 為方便裝置及管理，故需吊架及吊架孔，使用時插入吊架孔，不用時移開。
5. 開始運轉時，安全閥全開再調整至使用之壓力。

Installation

1. Lower the body into the trough bottom with the chain.
2. Don't tighten the chain; fix its end to the hook.
3. Fix the inlet and outlet pipes with pipe clips.
4. To remove easily, keep a hook with a hole for use.
5. To start, keep the safety valve to its fullest then adjust.

裝置注意事項

Things to note for installation

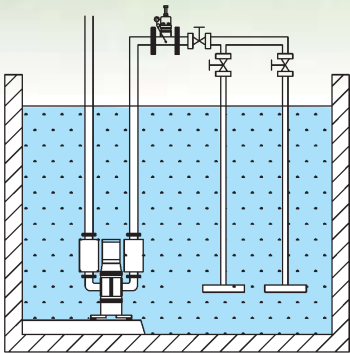


Diagram 1

1. 為確認動作及調整，應裝置於容易檢修之地方，為防止鼓風機停機時產生逆流，請裝置逆止閥並儘量裝置於曝氣槽水面以上之位置。
2. 如有污泥及塵埃...等堆積之可能，請提高鼓風機裝置之基面。
3. 污泥如堆積於馬達及鼓風機之周圍，將使馬達散熱不易，造成故障或燒燬之可能，因此如有污泥堆積之可能時，應另製一管路攪拌鼓風機周圍使污泥不附著其上。（如左圖之裝置）

為了安全起見，裝置鼓風機，請加裝漏電斷路系統。

1. Find a place for easy access to the machine, and to avoid the return wind current when the machine stops, a stop-return tap is necessary, which should be located higher than the air-puffing trough.
2. Raise the machine base to avoid any possible dust .
3. If the machine has to be in a dusty surrounding to keep the cooling function normal a special device (see the graph) should be around the blower to avoid the dust.

For safety reason there should be an emergency leak-brake valve when the machine is installed.

進氣排氣注意事項

Notice on the air intake and out take

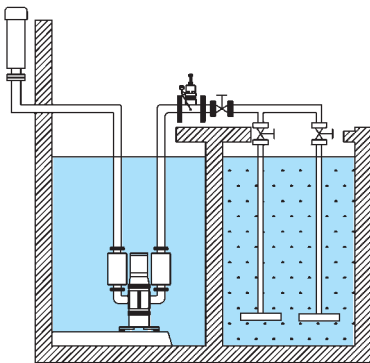


Diagram 2

1. 進氣消音器應豎立，並置於室外使其不吸入槽內之潮濕空氣，如圖（一）。
2. 進氣消音器應裝置於離於地面 1m 以上，並且開闊之地方，以便如有塵埃堆積，易於清理。
3. 圖（二）之裝置儘量避免之，因消音器易吸入槽內之濕空氣，而使氣室因過於潮濕，致使葉輪生銹產生故障之慮，應避免之。
4. 預備機因長久之放置，有可能產生生銹卡死之情況，故請每週予以運轉 30 分鐘，若置於潮濕之地點，請每日實施之。

1. The air inlet muffler should be vertically installed and should be placed outdoors to avoid the indoor damp air (sec diagram 1).
2. The air inlet muffler should be at least 1 M above the ground and in an open space for easy clean work later.
3. In diagram 2, the device should be away from damp air.
4. Keep a regular weekly check of 30 minutes warm up, or daily 30 minutes in damping place on the spare machine.

沉水式魯氏鼓風機

讓您擁有

更安靜的環境



本公司另有專業製造

魯氏鼓風機

TH系列	1HP-300HP
THS系列	10HP-250HP
THW系列	15HP-300HP
THL系列	20HP-300HP



魯氏真空鼓風機 THV系列 2HP-250HP

環形高壓鼓風機 TS系列 1/2HP-15HP

透浦式鼓風機

TN系列	1/2HP-5HP
TR系列	1/2HP-5HP
TNF系列	1/4HP-5HP
TNE系列	1/4HP-5HP



無軸封耐酸鹼泵浦 TMD系列 1/12HP-3HP



各式鼓風機目錄備索 歡迎洽詢



專業製造生產鼓風機 · 產品齊全 · 並有特殊用途之規格材質

Specializing in the manufacturing of blowers; wide varieties of products; and special order with specific designs.

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