



# SAR

表面式曝氣機  
HIGH SPEED FLOATING  
SURFACE MECHANICAL AERATOR

泵浦 曝氣系統 廢水處理機械

TAF水泵實驗室認證合格廠  
品質管理系統ISO 9001



綠色 · 安全 · 永續經營

## 川源股份有限公司

GSD INDUSTRIAL CO., LTD.

## 功能說明 INTRODUCTION

- ▶ SAR表面式高速曝氣機是利用馬達直接帶動軸流式葉輪，將廢水由進水導管吸入經導流板向四周噴出形成傘狀水幕，液體於飛行途中和空氣接觸時會產生很大的介面面積達到氧傳輸之功能，前述水體以衝擊方式回到池子時，液面會產生亂流及大量的氣泡，亦會使水中含氧增加。
- ▶ The SAR high speed surface floating mechanical aerator is designed to maximize the two most important functions of any aeration device—oxygen transfer and mixing of wastewater. The wastewater is pumped through the unit in a manner which creates the most advantageous spray pattern for introducing oxygen into the liquid. At the same time, this pumping action creates a tank velocity pattern which ensures the mixing of contents and thus the oxygen dispersion.

## 特點 FEATURES

- ▶ 不論新舊工廠皆能快速安裝。
- ▶ 高效的氧氣轉移和混合方式。
- ▶ 維護成本低且堅固耐用。
- ▶ Allow rapid installation in both new and old plant.
- ▶ Efficient oxygen transfer and mixing pattern.
- ▶ Low maintenance, robust design.

## 用途 APPLICATIONS

SAR用於如以下各種廢水處理應用中：

- ▶ 曝氣池和曝氣管
- ▶ 批次式活性污泥法
- ▶ 平衡罐
- ▶ 瀉湖

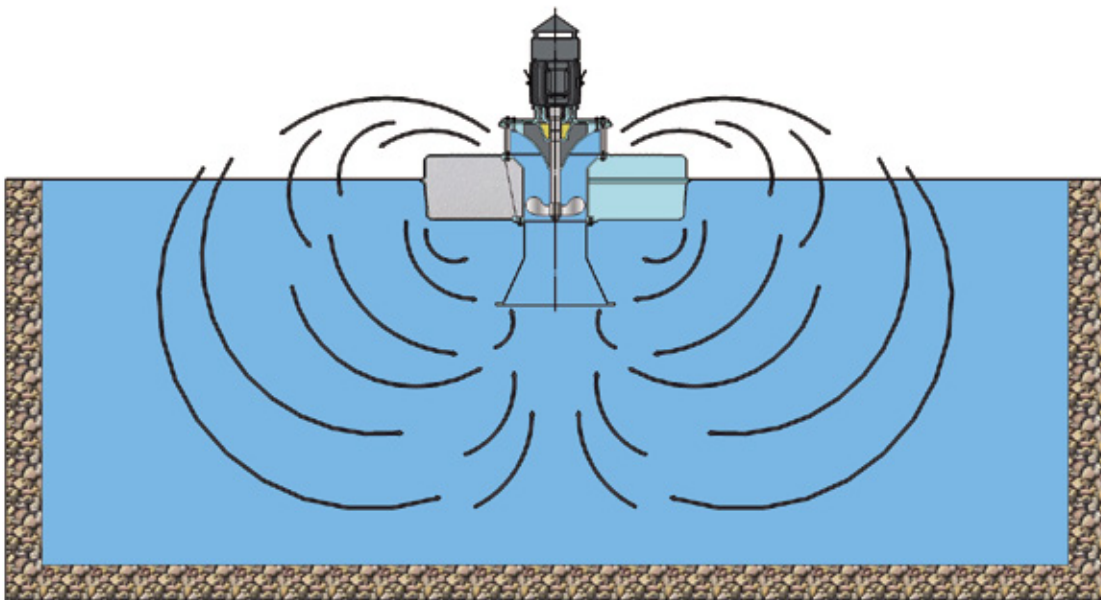
The SAR high speed surface floating mechanical aerator is used in a wide range of wastewater treatment application. Such as following:

- ▶ Aeration tanks and lanes
- ▶ SBRs
- ▶ Balance tanks
- ▶ Lagoons

## 型號說明 PRODUCT NUMBER DESCRIPTION

**SAR - 6 30 A**

極數(空白：4極；A：6極) POLE(Blank:4P；A:6P)  
 額定動力 RATED POWER(kW)  
 頻率(5:50Hz；6:60Hz) Hertz (5:50Hz；6:60Hz)  
 標準型式SAR PUMP TYPE



## 標準結構圖 CONSTRUCTIONS

▶ **電機和主軸**

電機是TEFC ( 完全封閉的風扇冷卻 ) ，配備不銹鋼主軸。

▶ **葉輪**

葉輪經過動態平衡測試的，固定在不銹鋼軸上。

▶ **導水板**

導水板可盡量減少水流中的能量損失，並實現高效曝氣所需的水平噴霧方式順暢流動。

▶ **浮筒**

浮筒由耐腐蝕的材料製成，填充高密度聚氨酯，可確保穩定性。

▶ **固定點**

SAR曝氣機設計為固定在3點或4點上。固定點位於浮標上。

▶ **進水管**

經研發可支持曝氣機並使用防渦流裝置

▶ **Motor and shaft**

The motors are TEFC(Totally Enclosed Fan Cooled) type. Equipped with stainless steel shaft.

▶ **Impeller**

The impeller is dynamically balanced and directly fixed to the stainless steel shaft.

▶ **Water guide panel**

The water guide panel minimize energy loss and high efficient surface oxygen transtation.

▶ **Floating**

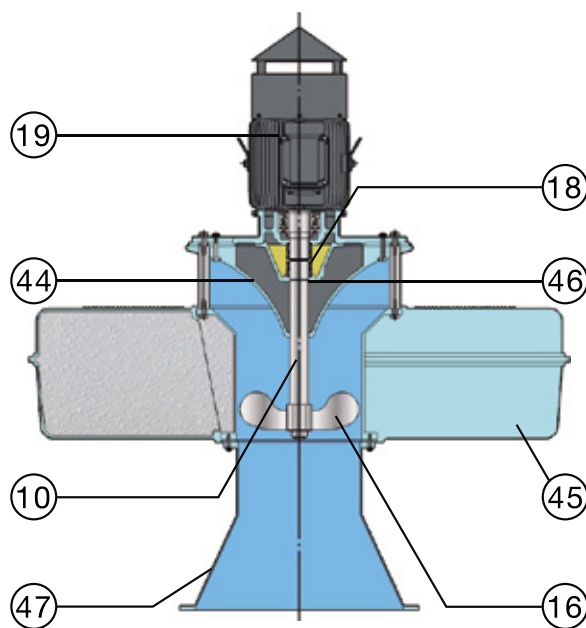
The floating is made in totally corrosion resistant material and the hull is completely filled with high densityclosed cell polyurethane foam ensure maximum stability under all operating conditions.

▶ **Mooring**

The SAR aerator is designed to be anchored in 3 or 4 point. Proper mooring point are located on the floating.

▶ **Water inlet pipe**

An anti-vortex device design in water inlet pipe.



NO.	名稱DESCRIPTION	MATERIAL	NO.	名稱DESCRIPTION	MATERIAL
19	馬達Motor		18	機械軸封Mechanical Seal	
44	導水板Water Guide Panel	FRP	46	軸封蓋Seal Cover	FC200
10	主軸Shaft	SUS410	45	浮筒Floating	FRP
47	進水導管Water Inlet Pipe	FC200 / SUS304	16	葉輪Impeller	SCS13

## 60Hz標準規格表 60Hz SPECIFICATIONS

60HZ	MOTOR		AERATOR			
TYPE	HP	RPM	OC-HR*	MD	MZ	Depth
SAR-61.5	2	1800	2.1	6	12	2
SAR-62.2	3	1800	3.2	9	18	2
SAR-63.7	5	1800	5.2	12	24	2-3
SAR-65.5	7.5	1800	7.6	15	30	2-3
SAR-67.5	10	1800	10.6	17	34	2-3
SAR-611	15	1800	15.2	19	38	2-3
SAR-615	20	1800	20.2	23	46	3-4
SAR-619	25	1800	26.2	25	50	3-4
SAR-622	30	1800	30.3	28	56	3-4
SAR-630	40	1800	41.4	32	64	3-4
SAR-630-A	40	1200	45.6	36	72	3-4
SAR-637-A	50	1200	56.2	38	76	3-4

## ▶ OC-HR

每小時溶氧能力。

對於所有曝氣機，氧氣的輸送效率會根據運行條件而變化。

## ▶ MD：

可完全混合的直徑，以米為單位。

## ▶ MZ：

氧氣可完全傳散的直徑，以米為單位。

## ▶ 深度：

標稱工作深度，與MD有關。

## ▶ OC-HR

Kgs Oxygenation Capacity per Hour.

With all aerators, the oxygen transfer efficiencies vary according to operating conditions.

## ▶ MD:

Diameter of complete mixing in meter.

## ▶ MZ:

Diameter of complete oxygen dispersion in meter.

## ▶ Depth:

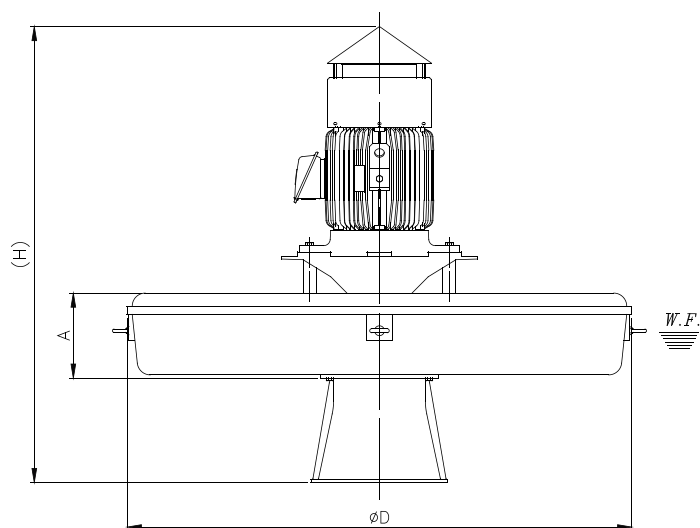
Nominal operating depth in metr of complete mising, relted to MD.

## 50Hz標準規格表 50Hz SPECIFICATIONS

50HZ	MOTOR		AERATOR			
	HP	RPM	OC-HR*	MD	MZ	Depth
SAR-51.5	2	1500	2.1	6	12	2
SAR-52.2	3	1500	3.2	9	18	2
SAR-53.7	5	1500	5.2	12	24	2-3
SAR-55.5	7.5	1500	7.6	15	30	2-3
SAR-57.5	10	1500	10.6	17	34	2-3
SAR-511	15	1500	15.2	19	38	2-3
SAR-515	20	1500	20.2	23	46	3-4
SAR-519	25	1500	26.2	25	50	3-4
SAR-522	30	1500	30.3	28	56	3-4
SAR-530	40	1500	41.4	32	64	3-4
SAR-519-A	25	1000	30.1	27	55	3-4
SAR-522-A	30	1000	34.8	31	62	3-4

- ▶ OC-HR  
每小時溶氧能力。  
對於所有曝氣機，氧氣的輸送效率會根據運行條件而變化。
- ▶ MD：  
可完全混合的直徑，以米為單位。
- ▶ MZ：  
氧氣可完全傳散的直徑，以米為單位。
- ▶ 深度：  
標稱工作深度，與MD有關。
- ▶ OC-HR  
Kgs Oxygenation Capacity per Hour.  
With all aerators, the oxygen transfer efficiencies vary according to operating conditions.
- ▶ MD:  
Diameter of complete mixing in meter.
- ▶ MZ:  
Diameter of complete oxygen dispersion in meter.
- ▶ Depth:  
Nominal operating depth in metr of complete mising, relted to MD.

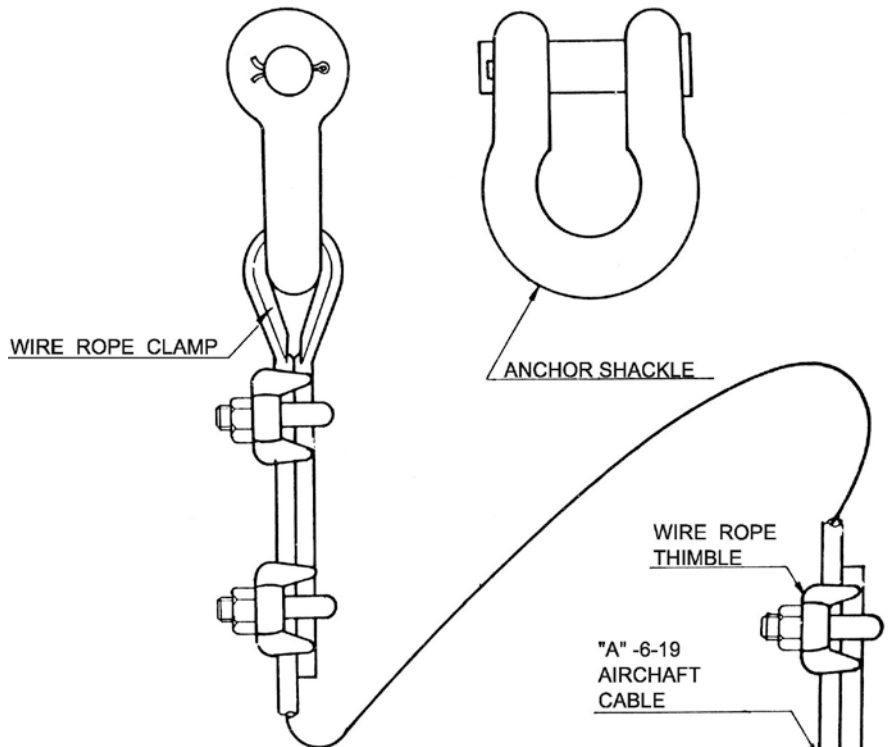
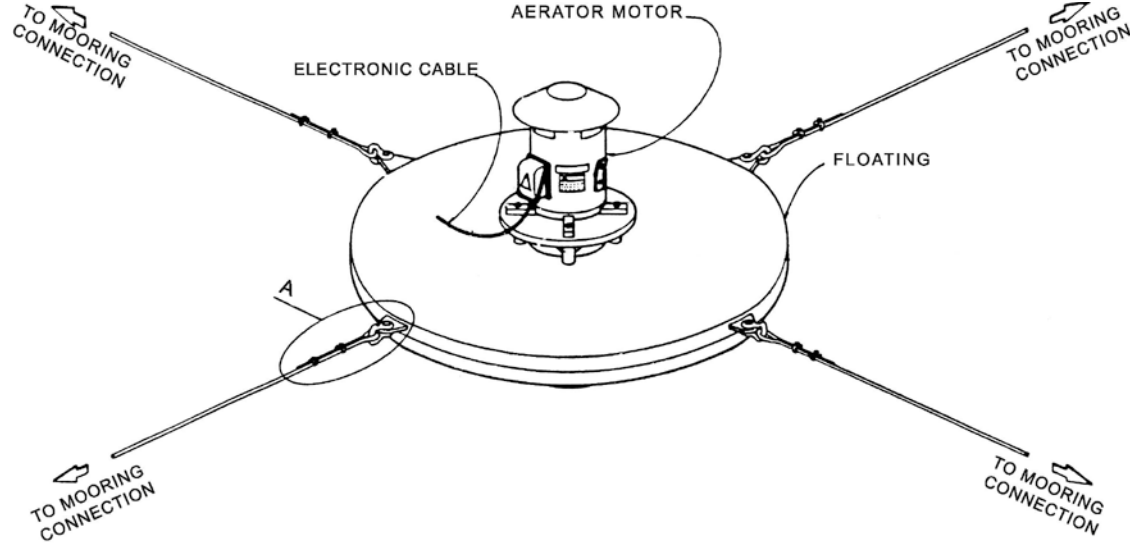
## 外型尺寸 DIMENSIONS



Unit: mm

TYPE	Hz	HP	Pole	RPM	A	D	H
SAR-61.5	60	2	4	1800	130	1300	885
SAR-62.2	60	3	4	1800	130	1300	890
SAR-63.7	60	5	4	1800	130	1550	915
SAR-65.5	60	7.5	4	1800	250	1550	1160
SAR-67.5	60	10	4	1800	250	1550	1200
SAR-611	60	15	4	1800	260	1800	1465
SAR-615	60	20	4	1800	260	1800	1510
SAR-619	60	25	4	1800	260	1800	1640
SAR-622	60	30	4	1800	260	1800	1640
SAR-630	60	40	4	1800	360	1800	2060
SAR-630-A	60	40	6	1200	543	2270	2110
SAR-637-A	60	50	6	1200	543	2270	2145
SAR-51.5	50	2	4	1500	130	1300	885
SAR-52.2	50	3	4	1500	130	1300	890
SAR-53.7	50	5	4	1500	250	1550	1110
SAR-55.5	50	7.5	4	1500	250	1550	1160
SAR-57.5	50	10	4	1500	250	1550	1200
SAR-511	50	15	4	1500	260	1800	1465
SAR-515	50	20	4	1500	260	1800	1510
SAR-519	50	25	4	1500	260	1800	1640
SAR-522	50	30	4	1500	260	1800	1640
SAR-530	50	40	4	1500	360	1800	2060
SAR-519-A	50	25	6	1000	360	1800	2060
SAR-522-A	50	30	6	1000	360	1800	2060

# 安裝示意圖 INSTALLATION DIAGRAM



MOORING CABLE SPECIFICATIONS

HP	CABLE DIA	CABLE SIZE	BREAKING STRENGTH	MATERIAL
2 ∟ 10	φ 4mm	6 x 19	880KGS	SUS 304
15 ∟ 30	φ 5mm		1380KGS	
40 ∟ 100	φ 63mm		2180KGS	







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GSD INDUSTRIAL CO., LTD.



Changeable Market 以卓越的行動力  
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