

JA Submersible jet aerator

JA 沉水喷流式曝气机 JA Submersible jet aerator

特点

■高效率溶氢

独特的混气室设计, 吸入空气量多, 与水混合均匀, 产 生气泡细而多,溶气率高。

■充分的搅拌

叶轮产生压力经喷嘴孔口产生强劲水流与空气混合喷 射, 使氧在水中移动效率高, 同时达到良好搅拌效果, 可保持活性污泥浮游必须流速。

■安静无噪音

本机组设计水中运转方式, 低回转数、低噪音: 陆上空 气进气导管可加装消音设备, 此外无须其他消音室设 备,降低成本。

■易安装维护

自动着脱装置与不附着脱装置二种可供选择,安装简 单维护容易,节省操作费用。

■适用范围广

使用范围用途广,工业污水处理,畜牧业排水处理,一 般污水下水道曝气工程,使用活性污泥法处理工厂排 水设施之曝气槽,单独使用或组合使用皆可。

构造说明

本沉水喷流曝气机使用曝气设计专用泵,与气泡产生 部和自动着脱装置组成一体。

■曝气专用泵

曝气设计专用泵,使用不阻塞污物型高效能叶轮,不阻 塞、寿命长。

■气泡产生部

由进气导管、喷嘴座、混气室、扩散管所组成,水流 经连接于泵出口之喷嘴座高速射入混气室,空气由进 气导管引导至混气室与水流结合,经扩散管排出。

■自动着脱装置

由引导管、引导板、着脱本体所组成,当机组维护时, 可依着脱装置直接将泵浦从水中经引导管至槽外。

Features

High efficiency oxygen dissolving

It has unique design for gas mixture chamber whose intake air quantity is big. It can be mixed well with water, and can produce minute and plenty of air bubble with high air dissolving rate.

Intensive mixing

The pressure produced by impeller through jet hole produces forceful water flow, which realizes jet after mixed with air to make oxygen move efficiently in water and at the same time achieve good mixing effect, which can maintain the flow rate necessary for activated sludge floating.

Ouiet and noise-free

The machine unit is designed to run in water with low winding number and low noise: overland air-intake duct can be additionally equipped with silencing equipment. Cost can be reduced since no other anechoic room is required.

Easy for installation and maintenance

There are two types for your selection: equipped with or without automatic attach device. Easy for installation and maintenance, saving operation cost.

■ Wide range of service

It is widely used in industrial wastewater treatment, effluent treatment of livestock husbandry and general foul sewer aeration engineering. Activated sludge method is applied to treat aeration tank of effluent facilities of factory. It can be used either individually or in a combined

Constructive specification

This submersible jet aerator adopts specially designed pump of aeration, which forms the integral unit air bubble generating section and automatic attach device.

Special aeration pump

Special aeration pump uses high-performance impeller, which does not block fouls. Therefore, it has long service life.

Air bubble generating section

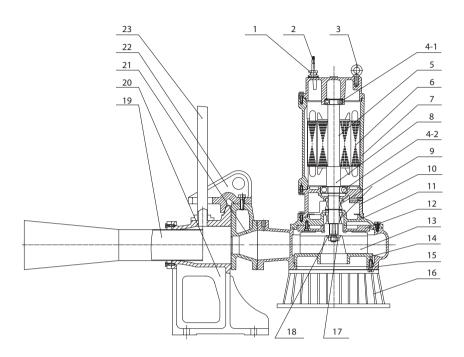
This section is composed of air-inlet duct, nozzle holder, gas mixture chamber and divergent pipe. Water is pumped into gas mixture chamber at high speed from nozzle holder connected to pump outlet. Air is inducted into gas mixture chamber through air-inlet duct and is mixed with water flow, then exhausted through divergent pipe.

Automatic attach device

This equipment is composed of induction duct, directing plate, the attachunit. During maintenance of equipment, the pump can be directly pulled out from water through induction duct along with the attach device.



结构简图及材质 Construction and material



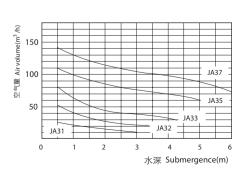
NO.	名称	Name	材质 Material
1	电缆密封装置	Sealing equipment of cable	
2	电缆	Cable	
3	吊环	Flying rings	
4	轴承	Bearing	
5	转子	Rotor	
6	定子	Stator	
7	马达本体	Motor unit	FC200
8	主轴	Main shaft	SUS420
9	机械密封	Mechanical seal	
10	中承	Medium bearing	FC200
11	油箱	Oil tank	FC200
12	内盖	Inner cap	FC200

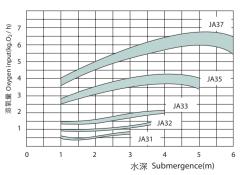
NO.	名称	Name	材质 Material
13	叶轮	Impeller	FC200
14	磨擦盘	Friction disk	FC200
15	泵体	Pump body	FC200
16	滤底座	Filter seat	FC200
17	叶轮螺母	Impeller nut	SS34
18	止动垫圈	Locked spacer	SS34
19	扩散管	Divergent pipe	SUS304
20	着脱	Attach device	FC200
21	喷嘴座	Nozzle holder	FC200
22	引导板	Directing plate	FC200
23	进气管	Air intake pipe	SS34

性能曲线 Performance curves



不阻塞污物型高效能叶轮 High-performance impeller, without blocking fouls

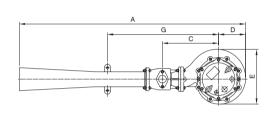


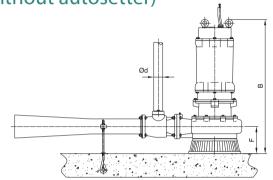


性能规格表 Specifications

	型号 功率Power 极数 人		空气量-水深	供氧量 Air transfer capacity	曝气槽	₹寸Basin	适合水深 Workable water depth		
Туре	hp	kW	Pole	Air capacity-water depth m³ /h-m	kg.O₂/h	L(m)	W(m)	H(m)	(m)
JA-31-50	1	0.75	4	11-2	0.35-0.45	3	2	4	1-3
JA-32-80	2	1.5	4	22-3	1.0-1.2	4	3.5	4	1-3
JA-33-80	3	2.2	4	37-3	1.75-1.95	5	5	4.5	1.5-3.5
JA-35-100	5	3.7	4	75-3	3.5-3.95	6	6	5	2-4
JA-37-100	7.5	5.5	4	103-3	5.3-5.9	7	7	6	2-5

无着脱式外形尺寸 Dimensions (without autosetter)

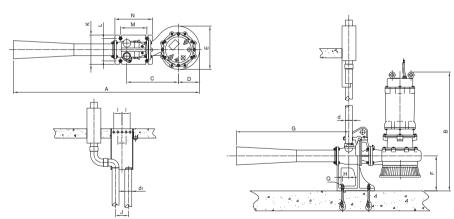




型号	尺寸 Dimensions(mm)										
Туре	Α	В	С	D	Ε	F	G	Ød	Weight (kg)		
JA-31-50	1099	597	246	135	270	129	556	Ø32	55		
JA-32-80	1343	642	319	153	308	145	669	Ø40	81		
JA-33-80	1343	719	319	153	308	145	669	Ø40	103		

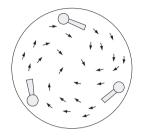
型号	尺寸 Dimensions(mm)										
Туре	Α	В	С	D		F		Ød	Weight (kg)		
JA-35-100	1526	770	379	182	376	182	749	Ø50	141		
JA-37-100	1526	831	379	182	376	182	749	Ø50	182		

附着脱式外形尺寸 Dimensions (with autosetter)

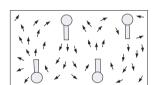


型号	尺寸 Dimensions(mm)										重量 Weight							
Туре	Α	В	С	D	Ε	F	G	н	ı	J	К	L	М	N	Q	d	d1	(kg)
JA-31-50	1099	718	266	135	270	250	698	34.5	100	70	180	140	155	220	M12	32A	32A	71
JA-32-80	1384	777	360	153	308	280	871	47	70	90	220	170	190	260	M16	40A	40A	121
JA-33-80	1384	854	360	153	308	280	871	47	70	90	220	170	190	260	M16	40A	40A	143
JA-35-100	1586	888	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	50A	50A	201
JA-37-100	1586	949	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	50A	50A	242

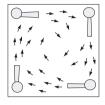
配置参考图 Reference diagram of configuration



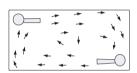
圆形池 Round tank



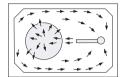
长方形池 (长:宽=2:1) Rectangular tank (Length:Width=2:1)

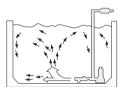


正方形池 Square tank

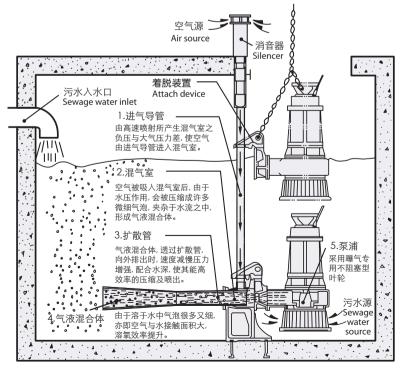


长方形池 (长:宽=5:1) Rectangular tank (Length:Width=5:1)





系统流程图 System flowchart



1.Air-intake duct

Air is taken into gas mixture chamber through air-intake duct due to the pressure difference between negative pressure in gas mixture chamber caused by high-velocity jet and atmospheric pressure.

2.Gas mixing chamber

After being drawn into gas mixing chamber, air is compressed into plenty of air bubbles, which are mingled in water flowforming gas-liquid compound body under the action of hydraulic pressure.

3. Divergent pipe

When gas-liquid compound body is discharged outwards through divergent pipe, its flow rate will slow down and pressure will rise along with the depth of water so that itcan be compressed and ejected efficiently.

4.Gas-liquid compound body

Oxygen dissolving efficiency increases due to that there are large quantity of minute air bubbles in water; which means the contact area between air and water is large.

5.Pump

This pump adopts special unblocking type impeller for aeration.

如蒙洽询请指示下列各项:

For further details, please fulfill the chart below.

客户: Customer	承办人员: Undertaker								
工程名称:			工程地点:						
电话: Telephone			传真: Fax						
*当地状况	海拔(m) Elevation		最高相对湿 <u>l</u> Max relative						
Local condition	当地大气压力(MPa) Local atmospheric pressure				高气温(˚C) ix air tempe	rature			
	污水类型 Wastewater type				理工艺 eatment pro	ocesses			
	* 曝气时间(H/day) Aeration time				处理量(m³/este water d	d) aily valume			
			进水 Inlet			出水	Effluent		
	COD(mg/l)								
污水情况 Water quality	BOD(mg/l)								
	NH₃-N(mg/I)								
	рН								
	温度(飞) Temperature								
	其他Others								
	使用场所 Use location	口调 ³ Reg	节池 gulating reservoir		口曝气池 Aeration	口其 tank Ot	他 hers		
*曝气机参数 JA's parameters	空气量(m³/min) Air capacity				貳量(kgO₂/h solved oxyg				
	水深(m) Water depth			其他 Oth					
	→ π/	长Le	ength				,		
	方形 Rectangle or square(m)	宽 Width							
*水池参数 Aeration tank's paraneters		高He							
	圆形 Circle(m)	直径 Diameter 高 Height							
	其他 Others								
其它要求 Other requirements		•							

备注: 1.以上资料请尽可能完整填写。 2.项目前加注"*"者,请务必填写。

Notes: 1. Please fill in the parameter lists as complete as possible.

2. The item with " * " must be filled.