川源（中国）机械有限公司
GSD Industrial Co.,Ltd.

JA
沉水喷流式曝气机

JA Submersible jet aerator

www.gsd.net.cn

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特点

▪高效率溶氧
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，使氧在水中转移效率高，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. Air can be mixed well with water, and it 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.

▪ Quiet 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, aeration tank of effluent facilities of factory applied with activated sludge method. It can be used either individually or in a combined way.

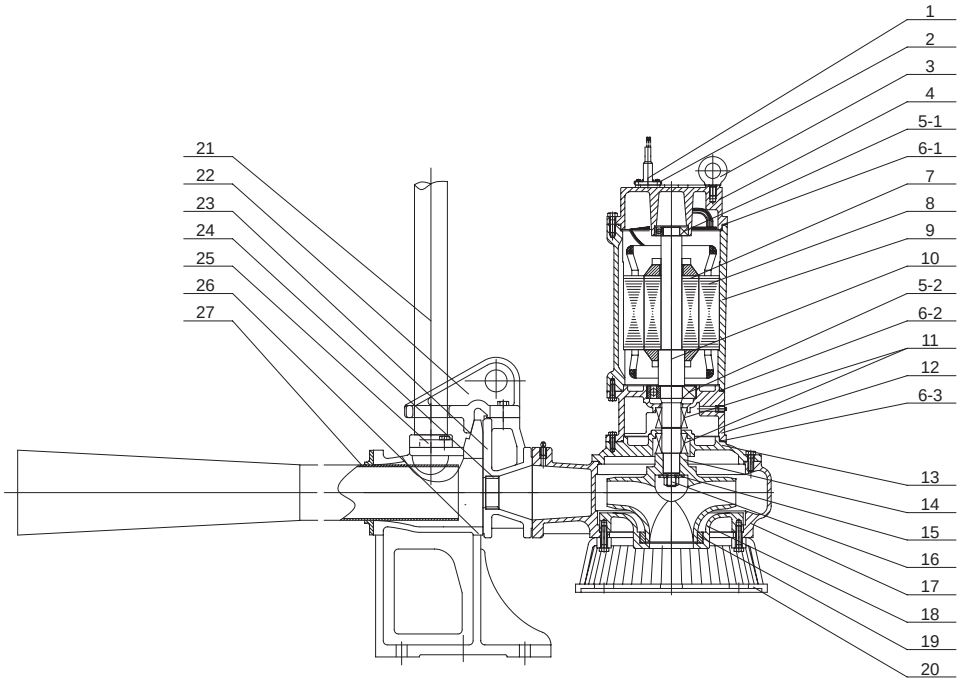
Constructive specification
This submersible jet aerator adopts specially designed aeration pump, which forms the integral unit with air bubble generating section and automatic attach device.

▪ 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 attach-unit. 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



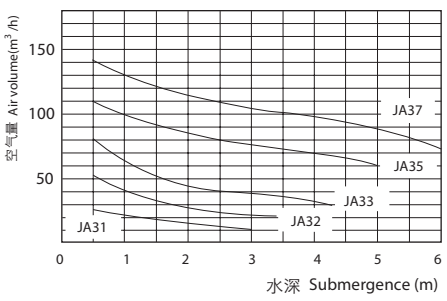
NO.	名称	Name	材质 Material	
			GB	JIS
1	水密头电缆	Watertight cable	橡胶	
2	电缆压盖	Sealing equipment of cable	0Cr19Ni9	SUS304
3	吊环	Flying ring		
4	马达盖	Motor cover	HT200	FC200
5	轴承	Bearing		
6	O型圈	O-ring	橡胶	
7	转子	Rotor		
8	定子	Stator		
9	马达本体	Motor casing	HT200	FC200
10	主轴	Shaft	2Cr13	SUS420J1
11	机械密封	Mechanical seal		
12	中承座	Bracket	HT200	FC200
13	油箱盖	Oil tank cap	HT200	FC200
14	叶轮	Impeller	HT200	FC200

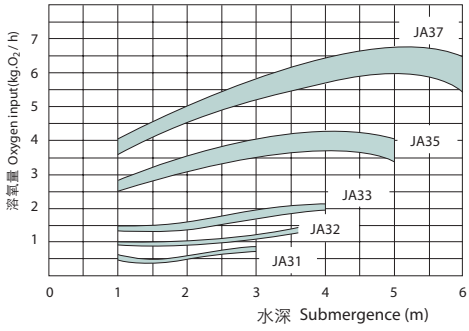
NO.	名称	Name	材质 Material	
			GB	JIS
15	止退垫圈	Locked spacer	0Cr19Ni9	SUS304
16	叶轮螺母	Impeller nut	0Cr19Ni9	SUS304
17	泵体	Pump casing	HT200	FC200
18	泵体底盖	Bottom cover	HT200	FC200
19	密封环	Sealing ring		
20	滤底座	Strainer	HT200	FC200
21	进气管	Air intake pipe		
22	引导板	Directing plate	HT200	FC200
23	喷嘴座	Nozzle holder	HT200	FC200
24	喷嘴套管	Nozzle sleeve	0Cr19Ni9	SUS304
25	元宝法兰	Shoe-shaped flange	HT200	FC200
26	着脱架	Attach device	HT200	FC200
27	喷管	Divergent pipe	0Cr19Ni9	SUS304

性能曲线 Performance curves

不阻塞污物型高效能叶轮

High-performance
impeller, without blocking fouls

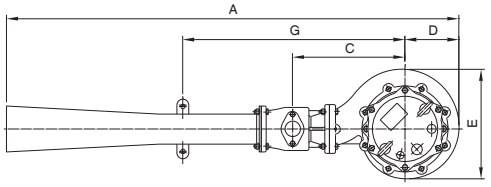


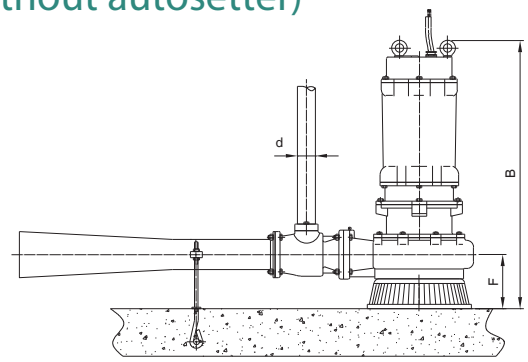


性能规格表 Specifications

型号 Type	功率 Power		极数 Pole	空气量–水深 Air capacity-water depth m^3/h-m	供氧量 Oxygen transfer capacity $kg.O_2/h$	曝气槽尺寸 Basin dimensions			适合水深 Workable water depth (m)
	hp	kW				L(m)	W(m)	H(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	5.5	4	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)

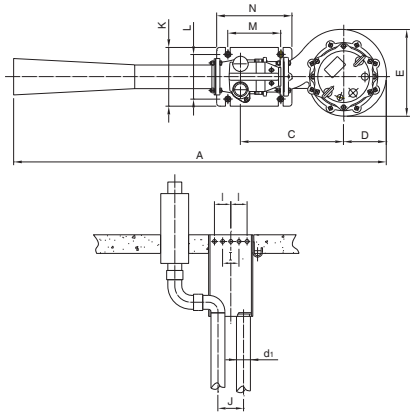


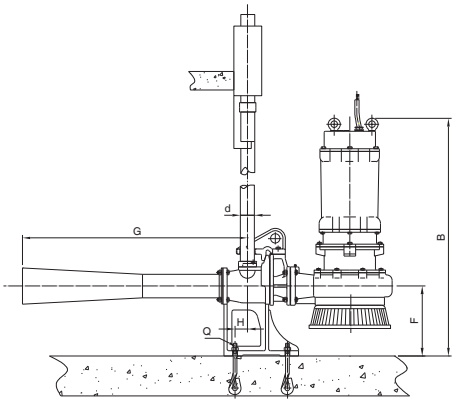


型号 Type	尺寸 Dimensions(mm)								重量 Weight (kg)
	A	B	C	D	E	F	G	d	
JA-31-50	1099	597	246	135	270	129	556	DN32	55
JA-32-80	1343	642	319	153	308	145	669	DN40	81
JA-33-80	1343	719	319	153	308	145	669	DN40	103

型号 Type	尺寸 Dimensions(mm)								重量 Weight (kg)
	A	B	C	D	E	F	G	d	
JA-35-100	1526	770	379	182	376	182	749	DN50	141
JA-37-100	1526	831	379	182	376	182	749	DN50	182

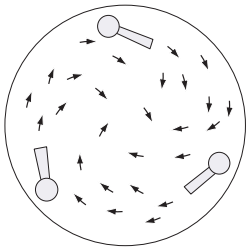
附着脱式外形尺寸 Dimensions (with autosetter)



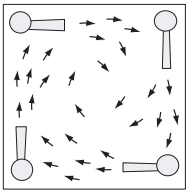


型号 Type	尺寸 Dimensions(mm)																	重量 Weight (kg)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Q	d	d_1	
JA-31-50	1099	718	266	135	270	250	698	34.5	100	70	180	140	155	220	M12	DN32	DN32	71
JA-32-80	1384	777	360	153	308	280	871	47	70	90	220	170	190	260	M16	DN40	DN40	121
JA-33-80	1384	854	360	153	308	280	871	47	70	90	220	170	190	260	M16	DN40	DN40	143
JA-35-100	1586	888	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	DN50	DN50	201
JA-37-100	1586	949	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	DN50	DN50	242

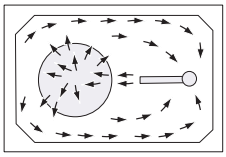
配置参考图 Reference diagram of configuration

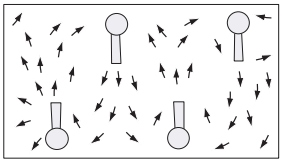


圆形池 Round tank

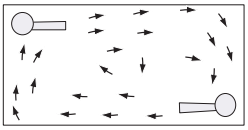


正方形池 Square tank

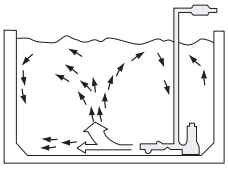




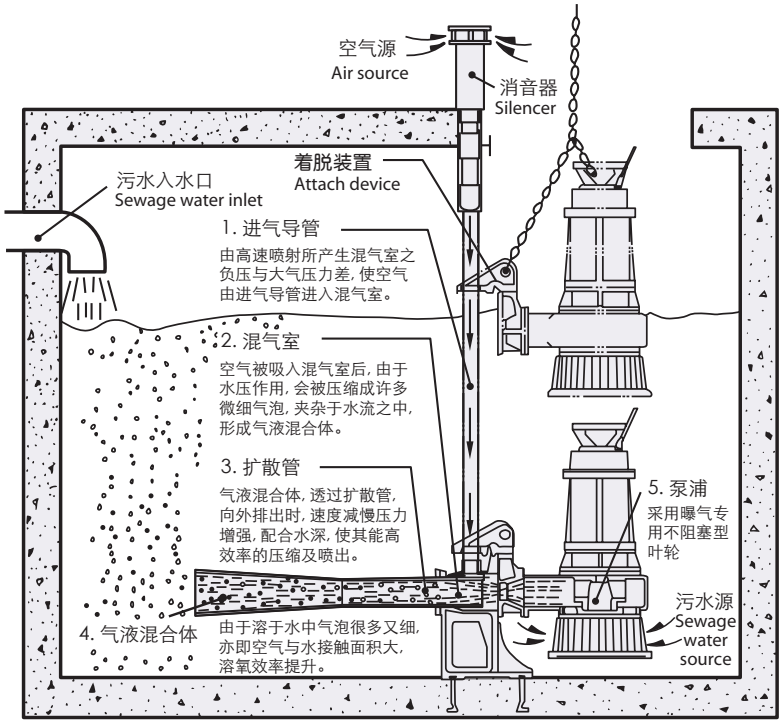
长方形池 （长:宽=2:1）
Rectangular tank
(Length:Width=2:1)



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 flow forming gas-liquid compound under the action of hydraulic pressure.

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

4. Gas-liquid compound
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
Name of project _____

工程地点
Address of project _____

电话
Telephone _____

传真
Fax _____

当地状况 Local condition	海拔 (m) Elevation		最高相对湿度 (%) Max relative humidity	
	当地大气压力 (MPa) Local atmospheric pressure		最高气温 (℃) Max air temperature	
	污水类型 Wastewater type		处理工艺 Treatment process	
	* 曝气时间 (H/day) Aeration time		日处理量 (m^3/d) Waste water daily volume	

污水情况 Water condition		曝气池进水 Aerating tank Inlet	曝气池出水 Aerating tank effluent
	COD (mg/l)		
	BOD (mg/l)		
	NH_3-N (mg/l)		
	pH		
	温度 (℃) Temperature		
	其他 Others		

*曝气机参数 JA's parameters	使用场所 Use location	□ 调节池 Regulating reservoir	□ 曝气池 Aeration tank	□ 其他 Others
	空气量 (m^3/min) Air capacity		溶氧量 (kgO_2/h) Dissolved oxygen	
	水深 (m) Water depth		其他 Others	

*水池尺寸 Tank's dimensions	方形 Rectangle or square (m)	长 Length	
		宽 Width	
		高 Height	
	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.

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We reserve the right to change content without notice.
CY-G7