

JET&JAS Aeration System

JET&JAS 射流式曝气装置 JET&JAS Aeration System



简介

整个系统主要由射流式曝气机、循环水泵及鼓风机所组成。该曝气装置将由循环水泵所输送之液体,经由液体管、内喷嘴到喷嘴混合室与由空气管所压送之空气混合均匀后,呈喷射流经外喷嘴射出。为达循环水与空气之均匀供应与混合,以提高曝气机之效率,故特别设计液体管与空气管分开(X型),且每一空气支管单独与每一组喷嘴配合连接。喷射式曝气装置喷嘴之作用原理如下图:

General

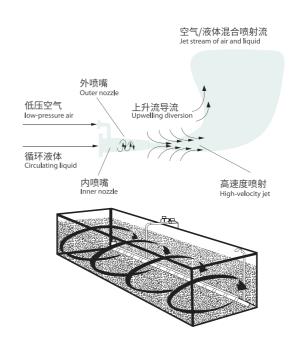
Aeration is often considered to be the heart of the effluent treatment system at most wastewater treatment plants. The correct selection of an aeration system is crucial because the operation of the aeration system requires about 80% of the total operating power cost for a wastewater treatment plant. In addition, during periods of low service demands, air flow rates can be reduced by controlling and varying the blower output. By regulating the air flowing to the aeration system, oxygen transfer rates can be controlled without affecting the mixing efficiency or solids suspension and additional energy savings are achieved. Practical for very deep tanks that the deep is 15m in Taiwan.

特件

整个系统主要由射流式曝气机、循环水泵及鼓风机所组成。该曝气装置将由循环水泵所输送之液体,经由液体管、内喷嘴到喷嘴混合室与由空气管所压送之空气混合均匀后,呈喷射流经外喷嘴射出。为达循环水与空气之均匀供应与混合,以提高曝气机之效率,故特别设计液体管与空气管分开(X型),且每一空气支管单独与每一组喷嘴配合连接。喷射式曝气装置喷嘴之作用原理如下图:

Characteristics

JET&JAS Aeration System consists of jet aerator, recirculation pump and blower. JET&JAS Aeration System pumps the fluid into aerator through inner nozzle. At the same time, JET&JAS Aeration System blows air into aerator through outer nozzle. For well mixed, JET&JAS Aeration System has a special design, buffer zone in which air and fluid will be mixed completely. Please see the figure below.



用途

适用于调匀池及任何好氧性之生物处理系统,如各种活性污泥法,氧化沟、氧化塘或空气量之多寡做 脱氮、硝化等处理程序。

特点

- 高传氧效率,低动力消耗。
- 除沉水式循环水泵外,水中无运转配件。
- ■适用于变动的水位。
- ■可分开控制氧量之传输及搅拌。
- 使用于深层曝气及高MLSS之场合,相对于其它 曝气系统所需之反应池容积较小,节省空间。
- ■抗腐蚀之配件。
- 系统简单,故安装费用低。
- ■自清式反冲洗系统,以克服异物阻塞时停机须泄 清池水之困扰。
- 沉水式设计,能防止热能散失,无冰冻之顾虑,于各季节均能维持生物活动力。

Applications

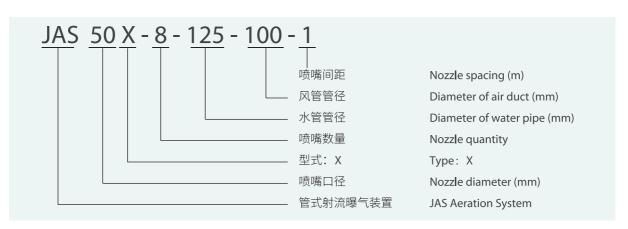
JET & JAS Aeration System will be utilized in equalization tank and aeration system. For example, activated sludge process, oxidation ditch, aerated lagoon and SBR. JET aeration system would be also utilized in denitrification & nitrification, if air flow will be controlled.

Features

- High oxygen transfer efficiency.Low power consumption.
- No moving parts in the water except recirculation pump.
- Apply to the fluctuant water level.
- Oxygen transmission and mixing can be controlled separately.
- Apply to deep aeration and high MLSS situation. Saving more space compared with other aerating systems.
- Corrosion resistant parts.
- Simple system, low-cost for installation.
- When the machine is blocked, to avoid stopping and emptying tank, the self-cleaning backwashing system could be used.
- Submersible design can prevent heatloss, no frozen, micro organism can keep their activity in every season.

型号说明 Type description



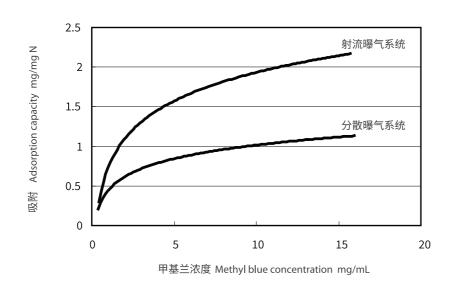


注:当JAS做纯搅拌,不需要风管时,风管管径项用000表示。 Note: When JAS does pure stirring without air duct, the diameter of air duct is indicated by "000".

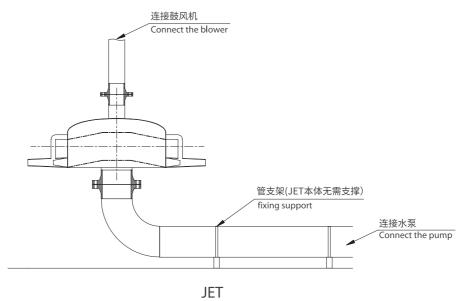
喷嘴规格表 Nozzle specification

型号说明	Model description	JET50	JET65	JET80
外喷嘴口径	Outer nozzle diameter (mm)	50	65	80
喷嘴数量 (双数)	Nozzle quantity	4 - 12	4-12	4 - 12
单个喷嘴液体流量	Fluid flow of each nozzle (m/min)	0.68 - 1.16	1.16 - 2.00	1.65 - 2.83

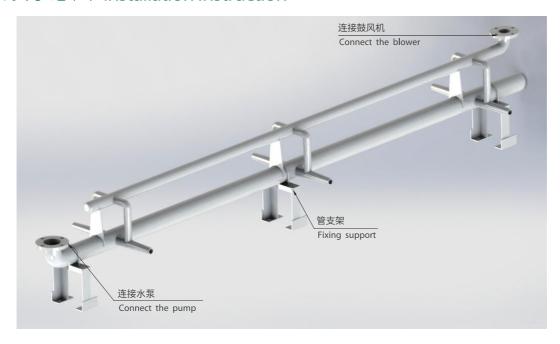
射流曝气系统和分散曝气系统中有机物的生物吸附能力 Bio-adsorption capacity of Organic Compounds in JET/JAS Aeration System and Dispersed Aeration System



安装示意图 Installation Instruction

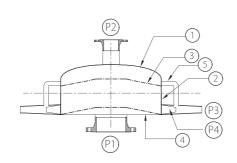


安装示意图 Installation Instruction

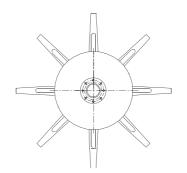


JAS

结构简图及材质 Construction and material



JET-X



No.	名称	Name	材质 Material
P1	入水口	Water inlet	SUS304 / SUS316 / SUS316L / FRP
P2	进气口	Air intake	SUS304 / SUS316 / SUS316L / FRP
P3	外喷嘴	Outer nozzle	SUS304 / SUS316 / SUS316L / FRP
P4	内喷嘴	Inner nozzle	SUS304 / SUS316 / SUS316L / FRP
1	外端板	External end cover	SUS304 / SUS316 / SUS316L / FRP
2	外桶身	External body	SUS304 / SUS316 / SUS316L / FRP
3	内端板	Internal end cover	SUS304 / SUS316 / SUS316L / FRP
4	底板	Base plate	SUS304 / SUS316 / SUS316L / FRP
5	气管支管	Air manifold	SUS304 / SUS316 / SUS316L / FRP

备注: 材质依水质情况调整

欢迎索取以下产品型录

To find out more about following products, please visit www.gsd.net.cn

3	泵系列 Pump Series	潜水泵系列 陆上泵系列 特种泵系列 Submersible pump series On land pump series Special pump series
99	搅拌推流系列 Mixing and flow propeller	搅拌机系列 推流器系列 Mixing series Flow propeller series
	供氧曝气系列 Aeration equipment series	曝气机系列 曝气盘系列 曝气管系列 Aerator series Disc diffusers Tube diffusers
	风机系列 Blower Series	磁悬浮鼓风机 空气悬浮鼓风机 三叶罗茨鼓风机系列 Maglev turbo blower Turbo blower Three-lobe roots blower series
	污泥处理设备 Sludge treatment equipment	带式脱水机 厢式压滤机 叠螺式脱水机 污泥干化设备 浅层高效气浮设备 Belt filter press Box filter press Screw press Mud scraper Dissolued air flotation clarifier
	智能化系列 Intelligent series	智能设备 水务设备健康管理 水务系统工艺优化智联管理 Intelligent equipment Health management for water equipment Intelligent management for water system process
	反应器及套装设备 Reactor and package equipment	芬顿反应系统 MBR生物膜反应器 预制泵站 一体化污水处理设备 Fenton reaction system MBR biofilm reactor Prefabricated pumping station Intelligent Compact Unit
0	耗材药剂及相关设备 Consumables,reagents and related equipment	生物绳 PAC 聚合氯化铝 PAM 聚丙烯酰胺 泡药设备 Biological rope PAC polyaluminum chloride PAM polyacrylamide Automatic dispensing dissolvers

GSD 的经营理念 Business Philosophy G-Green 绿色 S-Safe安全 D-Development 永续经营



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