

● 用途 Applications

新型潜水射流曝气机结构紧凑，操作维护简单，安装方便、快捷，在保持低成本特点的同时，性能得到了大幅度的提高，无须压缩空气的条件下，潜水曝气深度可以达10m，气泡更细密，提高了氧气与曝气介质的接触面积，有效提高了氧的转移率。配套的无阻塞潜水电泵，采用独特的密封技术，大大提高了潜水射流曝气的可靠性。

The new type jet aerator has compact structure; operation and maintenance are simple, easy and fast in installation. The performance has been greatly improved while the cost is low. Under the condition that no air compressed, the immisible aeration depth can be 10m; the bubble is denser, which improves the compact area of oxygen and aeration media and the transmission efficiency of oxygen. The matched no-blocking immersible pump is sealed based on unique technology, which has greatly enhanced the jet aeration reliability.

● 工作原理及构造 Working Principle and Strucure

潜水射流曝气机主要由WQ型潜水排污泵、文丘里管、扩散管、进气管及消音器等组成。工作原理为：潜水电泵产生的水流经过喷嘴形成高速水流，在喷嘴周围形成负压由进气管吸入空气，形成液气混合流高速喷射而出，夹带许多气泡的水流在较大面积和深度的水域里涡旋搅拌，完成曝气。

The immersible jet aerator is mainly composed of type WQ immersible sewage pump, Venturi tube, diverging pump, air intake and muffler. Its operation principle is the flow made by immersible pump flow though the nozzle to form high seed water flow and negative pressure around the nozzle, the intake inhales air and form liquid-gas mixture flow jet stream, the flow with a great number of bubbles eddys and are mixed and the aeration complete.

● 特点 Features

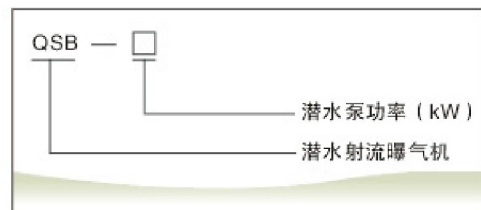
潜水射流曝气机使水体搅动与充氧同时进行，气泡细密，即可获得较高的氧转移率，又具有叶轮无堵塞优点。强有力的单向推流，造成有效的对流循环，且电机负载随水位的变化很少，因此，更适合在水位变化较大的池中应用。无须压缩空气的条件下，最大潜水曝气深度可以达到10m。成本低，安装、维护简便便利。主要范围有：

- 1、深水曝气；
- 2、生化池的曝气兼搅拌；
- 3、污泥曝气兼搅拌；
- 4、高浓度有机废水处理工艺。

The immersible jet aerator makes water mixing and oxygenation at the same time, the bubbles are dense, the device can achieve high oxygen transfer efficiency, and the impellers are non-clogging too. Strong one-way flow results in an effective convection cycle, and the electrical load with very little change in the water level, therefore, more suitable for water level changes in the larger pool applications. Under the condition no compressed air appears, the greatest aeration immersible depth can be achieved 10m. Low cost, installation and maintenance are simple convenience. Key working fields are:

1. Shaft aeration.
2. Aeration and mixing for biochemical tanks.
3. Aeration and mixing for sludge.
4. High concentrated organic wastewater treatment progress.

● 型号示例 Type and Its Indication



● 技术性能参数 Technical Parameters

潜水射流曝气机可在下列条件下正常连续运行：

- 1、最高介质温度不超过40℃；
- 2、介质的PH值在5-9；
- 3、介质密度不超过1150kg/m³。

The immersible jet aerator can work normally and continually under the following conditions:

1. The maximum medium temperature not exceeding 40℃.
2. Medium PH value is in the rage of 5-9.
3. Medium density not exceeding 1150kg/m³.

● 订货说明 Requirements for Order

1. 对照应用场合和工艺要求，详细注明型号规格。
 2. 电控箱、吸气管、支架（如需吊柱）及预埋件等应另外订货。
 3. 不注明设备材料（分不锈钢、碳钢）和防腐要求，表示按内部关键材料为不锈钢，其余按碳钢普通防腐订货。
1. Note the type and specification in detail according to applications and process requirements.
 2. Electric cabinets, inhalation tubes, bear frame (if a davit is needed) or embedded parts should be ordered separately.
 3. Stainless steel in inner key part and ordinary anticorrosion carbon steel were supplied if no special requirements on materials of equipment (stainless steel or carbon steel) and anticorrosion.

| 型 号 | QSB0.75 | QSB1.5 | QSB2.2 | QSB3 | QSB4 | QSB5.5 | QSB7.5 |
|------------------------------|---------|--------|--------|------|------|--------|--------|
| 功率 (kW) | 0.75 | 1.5 | 2.2 | 3 | 4 | 5.5 | 7.5 |
| 转速 (r/min) | 2900 | 2900 | 2900 | 2900 | 2900 | 1470 | 1450 |
| 额定电流 (A) | 2.9 | 3.7 | 5 | 6.4 | 8.2 | 12.4 | 16.3 |
| 额定电压 (V) | 380 | | | | | | |
| 频率 (HZ) | 50 | | | | | | |
| 绝缘等级 | F | | | | | | |
| 进气量 (m ³ /h) | 10 | 22 | 35 | 50 | 75 | 85 | 100 |
| 充氧能力 (kgO ₂ /h) | 0.50 | 1.26 | 2.30 | 2.80 | 3.75 | 6.00 | 7.90 |
| 进气管径DN (mm) | 32 | 32 | 50 | 50 | 50 | 50 | 50 |

表中进气量充氧能力是在标准试验条件下（20℃水温，气压101.325kPa）曝气机潜水深度3m，试验介质为清水时的试验值。如潜水深度或进气量大于表中的数值，需用户提供潜水深度和进气量，以使本公司设计和提供优化的设备。

在中度污水中，充氧能力乘以0.85后作为设计依据。