

## ● 用途 Applications

转盘曝气机主要用于氧化沟曝气，对污水进行充氧。我公司生产的该型曝气机盘片进行了优化设计，采用玻璃钢模压成形，较传统转盘的充氧动力效率、水平推流效果均有很大提高。

The Aerator with rotating plates is mainly used for the sewage's aeration in oxidation ditch. Our company is a manufacturer of this type aerators disc design optimized for use fiberglass molding shape. The Aerator improves its efficiency in aerating power and its horizontal propelling, which is much more than the traditional kind of the Aerator.

## ● 工作原理及构造 Working Principle and Strucure

转盘均布有无数轮的牙、泼水瓣、储气沟、离心槽，盘片在传动装置的驱动下快速旋转，将水抛入空中与空气接触，空气迅速溶入水中，达到充氧的目的。

轮牙：主要起推动作用。

泼水瓣：使水雾与氧气充分混合，处于饱和状态，再落入池中，形成流线形，阻力小，泼水效果好，充分起到泼水的作用。

储气沟：强制将沟内的气泡带入水中并切割打碎，使之充分与池内的水混合。

离心槽：将停留在盘片处的“死水”在离心力的作用下沿离心槽射出，并和空气充分接触。

There are numerous cogs, petal, sprinkler, oxygen storage ditch and centrifugal trough, driven by the transmission device, the tray rotates fast, splashes water into air, and the air dissolves quickly in the water so the aeration is happening.

Cogs: mainly for propelling.

Petal Sprinkler: helps the moisture mix thoroughly with air, then the staturated water drops in the tank, with water being streamlined and lower resistance, it starts to splash water effectively.

Oxygen Storage Ditch: forces the bubbles in the ditch to go into the water, pricks them and lets them to mix thoroughly with water in the tank.

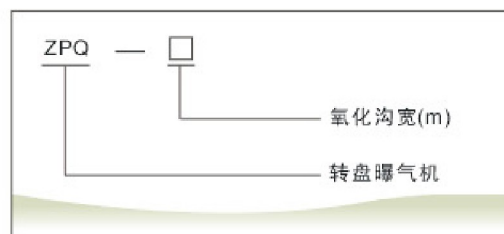
Centrifugal Trough: sprays water staying on the tray by use of centrifugation so that the water can touch air thoroughly.

## ● 特点 Features

1. 传动机构采用进口减速机配特制联轴器，运行可靠。
2. 盘片采用复合玻璃钢模压成型，耐腐蚀，寿命长达10年以上。
3. 安装维护方便，运行费用低。
4. 充氧能力不够时，可加装盘片，增加充氧能力。
5. 可用一台驱动电机拖动两台转盘，中间采用双出轴减速机拖动，负荷平衡。
6. 可根据氧化沟宽度灵活布置，并可根据溶解氧自动控制运行。

1. Transmission device of the Aerator includes imported reducer and specially made shaft coupling and runs reliably.
2. The compound molding of glass fiber reinforced plastic is used to produce trays, and the trays are corrosion-resisting and have a long service life of over 10 years.
3. Easy and simple in installation and maintenance, low in operation cost.
4. When the handling capacity of the Aerator is not sufficient, trays may be added to increase the capacity.
5. A motor can be utilized to drive two aerators, between which a double shaft decelerator is adopted for driving to make load balance.
6. The Aerator can be installed according to width of the oxidation ditch, and can be run automatically along with the dissolving degree of oxygen in the water.

## ● 型号示例 Type and Its Indication



参 数 型 号	氧化沟宽 (m)	盘片数 (片)	电机功率 (kW)	充氧能力 (kgO <sub>2</sub> /h)
ZPQ-3	3	10	7.5	17.5
ZPQ-4	4	15	11	26.5
ZPQ-5	5	19	15	33.5
ZPQ-6	6	24	18.5	42
ZPQ-7	7	28	22	49
ZPQ-8	8	32	30	56
ZPQ-9	9	36	30	63
ZPQ-10	10	40	37	70
ZPQ-11	11	44	37	77

## ● 技术性能参数 Technical Parameters

1. 一般转速：50-56r/min。
2. 盘片浸没深度：460mm。
3. 盘片直径：Φ1320mm。
4. 单盘的清水充氧能力：0.9-2.0kgO<sub>2</sub>/h。
5. 转盘的动力效率：1.8-2.7kgO<sub>2</sub>/kW·h。
6. 转盘安装密度一般为3-4片/m。
7. 单机最大沟宽为11m；中间加支承时，不超过15m。

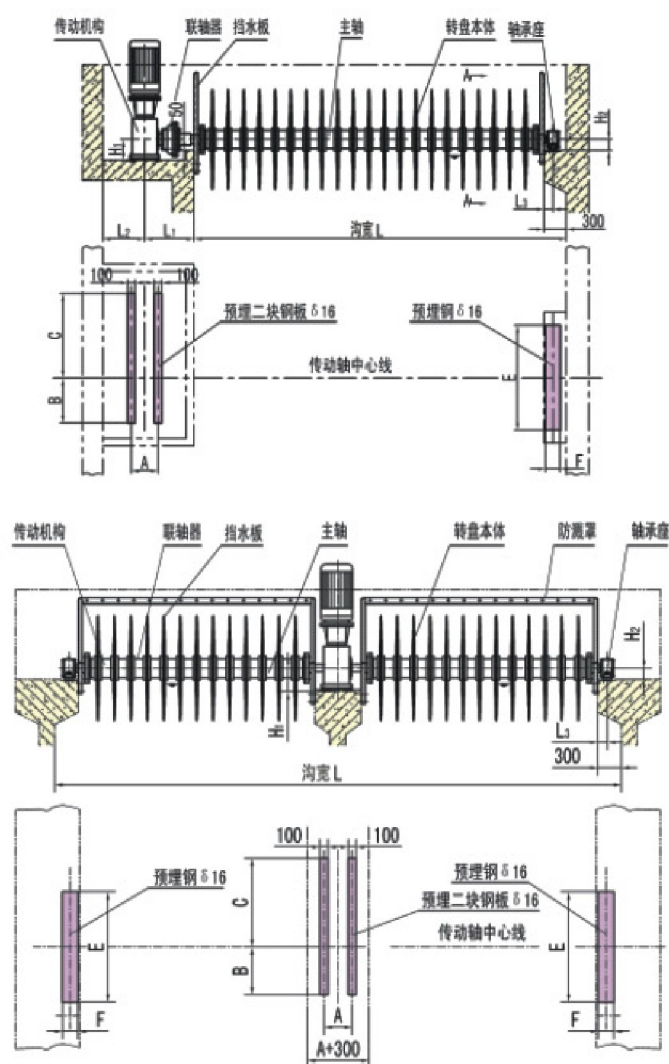
1. General rotating velocity: 50-56r/min.
2. Immersion depth about the plates: 460mm.
3. Diameter about the plate: Φ1320mm.
4. Single plate's oxygenation capacity: 0.9-2.0kgO<sub>2</sub>/h.
5. The power efficiency of the rotating plate: 1.8-2.7kgO<sub>2</sub>/kW·h.
6. Generally, the installation density of the plate is 3-4 plates every m.
7. The largest width of the ditch of single aerator is 11m, when there is support, not more than 15m.



**ZPQ型转盘曝气机** TYPE-ZPQ AERATOR WITH ROTATING PLATES

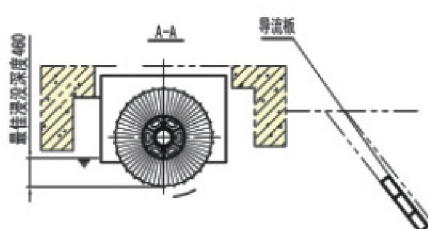
### TYPE-ZPQ AERATOR WITH ROTATING PLATES

### ●外形与安装尺寸表 Shape and Size



(mm)

型 号	尺 寸	L1	L2	L3	H1	H2	A	B	C	E	F
ZPQ-3		480	400	100	132	125	400	200	300	520	160
ZPQ-4		480	400	100	132	125	400	200	300	520	160
ZPQ-5		560	420	110	160	125	500	280	410	560	180
ZPQ-6		560	420	110	200	125	550	330	460	560	180
ZPQ-7		560	420	110	200	125	550	330	460	560	180
ZPQ-8		560	420	120	200	145	550	330	460	580	200
ZPQ-9		560	420	120	200	145	550	330	460	580	200
ZPQ-10		700	480	120	225	145	600	350	550	580	200
ZPQ-11		700	480	120	225	145	600	350	550	580	200



## ● 订货说明 Requirements for Order

1. 订货时注明沟宽,盘片密度超过本公司规定时,请注明盘片密度或总盘片数,但过多将影响充氧量。
  2. 盘片一般为玻璃钢材质,若需要其它材质,请注明材质型号。
  3. 如需要整体式的防溅罩(玻璃钢)时,请注明。
  4. 如需在池内配套导流板来增加充氧效果时,请注明。
  5. 本机传动机构一般为立式减速机,需要卧式结构时,请注明。
  6. 本机充氧量为清水试验数据,当用于污水时,充氧量可能因水质差异而不同,选取时请增加一定的余量。
  7. 本机浸没深度一般为460mm,工作深度增加时,需增加功率,请注明浸没深度值,但最大不超过500mm。
1. When ordering, please specify the ditch width. If the density of the plates exceeds our factory's specification, please specify the density and number of disks. But too many plates will affect the oxygen-filling amount.
  2. Usually the plates are made of glass fiber reinforced plastic, when other material plates need, please note that.
  3. When the integrated splash prevention cover (glass fiber reinforced plastic) is in need, note that.
  4. When the diversion plate needs to be added to the tank to strengthen dissolving of oxygen, note that.
  5. Usually the transmission mechanism of the Aerator is a vertical decelerator, when a horizontal one is in need, note that.
  6. The quantity of oxygen is gained after being tested on clear water; the data may vary when the water changes into waste water, so raise the data to a certain degree when ordering the Aerator.
  7. Usually the Aerator is submerged at a depth of 460mm; not more than 500mm, when the depth increases, its power grows, please note the depth when ordering the Aerator.