



● 用途 Applications

CQF型高效浅层气浮装置是一种先进气浮系统，成功地运用“浅池理论”和“零速”原理进行设计，集凝聚、气浮、撇渣、沉淀、刮泥于一体，是一种高效节能的水质净化设备。广泛用于工业污水处理系统中（如：造纸、食品、电镀、制革、针织、毛纺、屠宰、石油、化工等），尤其适用于造纸行业中的纤维回收；也可用于给水上，对原水进行预处理（如：除藻、降浊）；还可用于生物污泥的浓缩处理。

The device is an advanced air floatation equipment, it is designed by using "Swallow Tank Theory" and "Principle of Zero-Rate", and joints functions of condensing, floating, skimming off, setting into a whole, and is really a high efficient and energy-saving water purification equipment, it's widely used in treatment of waste water from industries(e.g. Paper making, food, electroplating, hides processing, knitting, printing and dyeing, wool spinning, slaughtering, petroleum, chemical industry and so on) especially for recovery of fiber in paper making; also used for water supply, for pre-treating original water(e.g. removing alga, reducing turbidity), as well as in treatment of concentrating of biological sludge.

● 型号示例 Type and Its Indication



● 工作原理及构造 Working Principle and Strucure

利用溶气系统向水中溶入大量的空气，形成溶气水，进入待处理水中，减压释放后在水中形成大量的微细气泡，气泡与水中的杂质、絮粒相互粘附，形成比重小于水的浮体，从而快速浮出水面，经刮渣装置撇除后，完成固、液两相分离，使水质得到净化。

主要由池体、撇渣装置、工作桥与行走装置、布水布气装置、集水装置、集电装置组成。

After water with dissolved air, which is formed by adding a large amount of air to water, comes into the water to be treated, a large number of small bubbles are formed in the water after the system pressure decreases, the bubbles adhere to the foreign substances and the floc Particles in the water to form a new floating substance whose density is less than water's, and the new substance floats on water quickly. After dregs on the surface are skimmed off, the solid phase is separated from the liquid one, and water is purified.

The device is mainly composed of tank body, device for skimming, working bridge and walking device, distribution of water and air, water collector and integrated circuit.

● 特点 Features

1. 采用“浅池理论”与“零速原理”设计，高效节能，体积小，安装方便。
2. 停留时间短（3~5min），表面负荷率高（9.6~12m³/m²·h）。
3. 采用调速电机拖动，适应性强，工艺条件好。
4. 采用溶气水与原水完全分开布水的方式，配专用释放器，处理效果好，SS去除率高达90%以上，出渣含固率可达3~4%。
5. 自动化程度高，管理方便，运行可靠。

1. The "Swallow Tank Theory" and "Principle of Zero-Rate" are used to design makes the device high efficient, energy-saving, occupy less area and installed conveniently.
2. Short resident time (3-5min) and high surface load rate (9.6-12m³/m² · h).
3. Driven by the speed-change motor, the Device has a good adaptability and can adjust itself to more conditions of processes.
4. With the water with dissolved air and the original water being separately and well distributed, and equipped with specific releaser, the Device has a good effect, the removal rate off SS is as high as over 99%, the rate of solid in discharge dregs can reach 3-4%.
5. High degree in automation, easy in management, reliable in operation.

● 订货说明 Requirements for Order

1. 注明主体材质。
2. 提供场地平面图及标高，若为钢筋砼池，提供土建图。
3. 若需要加药装置、溶气系统、泵、阀门、流量计及检测仪表等，订货时请注明。
4. 订全套气浮系统时，请索取详细资料。

1. Note material of the primary body.
2. Supply us with plane and elevation of the place, and also with civil construction diagrams when the tank has a structure of steel and concrete.
3. When agent-feeding device, air-adding system, pump, valves, flow meter and other meters, and etc, are in need, note them.
4. Detailed material is on request when the complete set of the air floatation system is ordered.

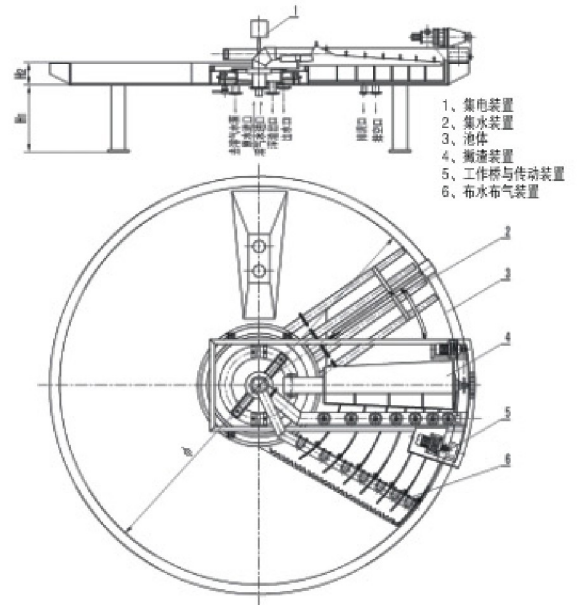




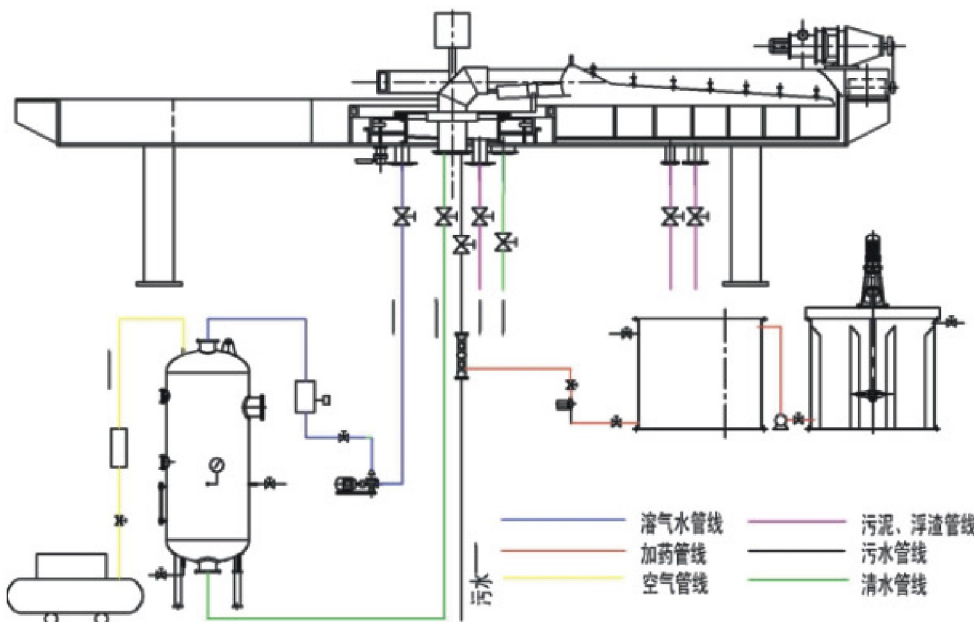
● 技术性能参数及外形尺寸表 Technical Parameters Shape and Size

参数 池径Φ (mm)	处理量 (m ³ /h)	行走 功率 (kW)	撇渣 功率 (kW)	H ₁ (mm)	H ₂ (mm)	进水管 DN (mm)	出水管 DN (mm)
2300	15	0.55	0.37	1150	850	80	80
3200	35			1250	850	80	80
4100	65			1350	900	125	125
4800	95	0.75	0.53	1450	900	150	150
5500	130			1480	950	150	150
6300	180			1560	950	200	200
6600	210	1.1	0.75	1560	950	250	250
7400	250			1600	950	300	250
8600	330			1800	950	350	300
10200	480	1.5	1.1	1840	950	400	350
10400	540			1840	950	450	400
11300	600			1860	950	450	400
12100	730	2.2	0.75	1920	985	500	450
13200	850			1980	985	550	500
14300	1000			2070	985	600	550
15300	1200	1.1	0.75	2070	985	650	600
16400	1350			2200	985	700	650
17500	1500			2200	985	750	700

注：处理量含30%溶气水。



● 气浮系统典型工艺图 Typical Process Drawing for Air Flotation System



注：溶气水回流比为15%~30%，根据水中SS量的多寡来确定，一般取25%，溶气水工作压力为0.3~0.5MPa。

Note: The reflux ratio of the water with dissolved air is between 15% and 30%. It is determined by the amount of SS in the water and usually is 25%; working pressure in the water is between 0.3MPa ~ 0.5MPa.