Integrated river water purifier

Applications

The integrated water purifier is applicable to the water quality purification of water supply projects such as rivers, lakes and reservoirs with surface water as the source, the reuse of reclaimed water, and the water quality purification of coal mine tailings water, coal washing water, baths, swimming pools, car washes, papermaking, printing and dyeing, electroplating and other industrial wastewater.

Applicable raw water turbidity: ≤ 3000mg / L
Applicable raw water temperature: normal temperature
Turbidity of purified water outlet water: ≤ 3mg / L
Design surface load of sedimentation area: 7-8m3 / h.m2
Design filtering speed of filtering area: 8-10m / h
Filter washing strength: 14-17l / s.m2
Flushing duration: T = 4-6min (adjustable)

Matters needing attention:

1. Influent water quality: coliform group no more than 2000cfu / 100mL, turbidity no more than 20NTU, oxygen consumption not more than 6mg/L.
2. Raw water beyond the scope of application shall not be prepared for drinking water with such water quality treatment equipment.

Product Description

1. The purification process of the integrated river water purifier is the same as the urban water supply plant. It has: coagulation tank, sedimentation tank, filter, water quality stabilization device, backwash device, water pump and electrical control cabinet.

2. The integrated water purifier achieved the requirements of automatic operation from a series of operation procedures, such as reaction, flocculation, sedimentation, sludge collection, sludge discharge, water collection, water distribution, filtration, backwash, sewage discharge, etc.

3. The high concentration flocculation layer can make the impurity particles in the raw water have sufficient collision contact and adsorption probability, so it can adapt to the water temperature and turbidity of various raw water, and the removal rate of impurity particles is high. It also has the function of removing algae under certain conditions.

4. The quick sludge concentration chamber and adjustable automatic sludge discharge system can ensure the timely removal of excess sludge impurities, so as to ensure the stable removal rate of impurity particles.

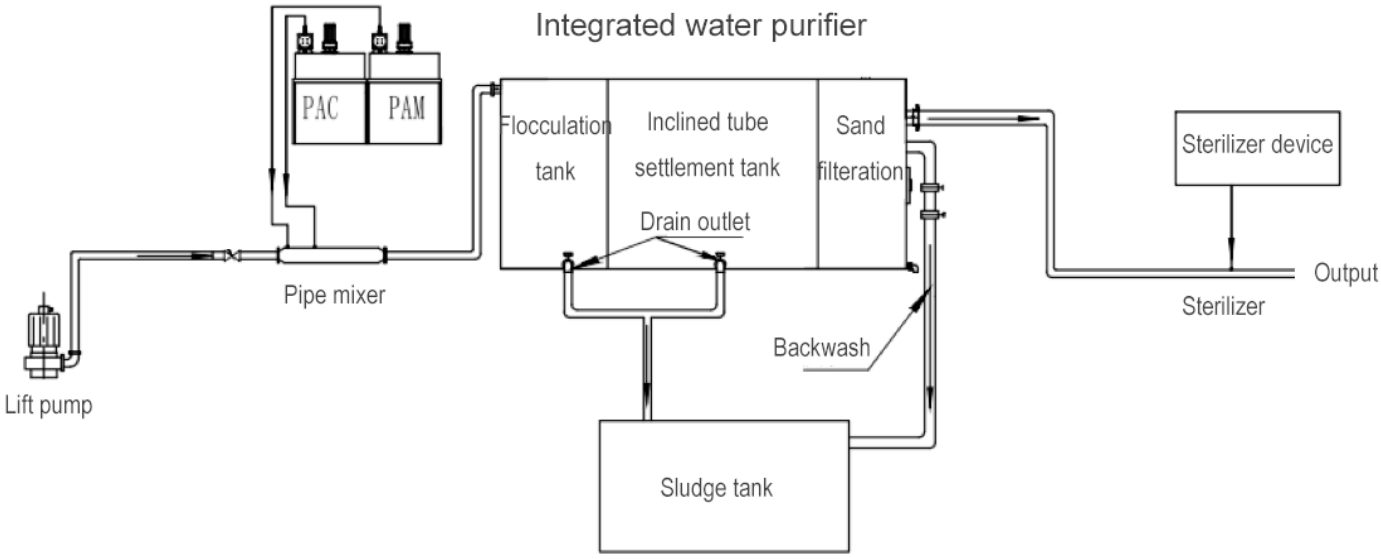
5. High efficiency flocculation and sedimentation effect to keep the quality of the precipitated water in good condition all the time.

6. The automation of the water purification system not only ensures the efficient filtration of the water purification system (when the turbidity of the raw water is less than 3000mg / L, the turbidity of the filtered water can be kept below 3mg / L) but also can automatically backwash, which can save a lot of capital construction investment, daily operation, maintenance and repair costs.

9. It is convenient for expansion, reuse, relocation or mobile use.

Treatment process

PAC, PAC dosing -> Flocculation tank -> Inclined tube settlement tank -> Sand filteration tank -> Chlorine dioxide sterilizer



1. **Coagulation tank:** the raw water added with coagulant enters into the coagulation tank through the water inlet pipe, stirred by a special mixer, so that the suspended solids in the water fully contact with the coagulant and react to form alum. The water purification device is mixed with a mixer, which is not affected by the change of water volume.

2. **Sedimentation tank:** after coagulating with coagulant, the water forms alum and flows to the sedimentation tank of the equipment for sedimentation. The sedimentation tank adopts inclined tube sedimentation method and completes solid-liquid separation through sedimentation in trapezoid inclined plate sedimentation chamber. The settled sludge is discharged into the sludge hopper.
3. **Filter:** after sedimentation, the water flows to the filter for filtration. The filter structure: the bottom is water distribution pipe, the upper part is quartz sand, and finally the clean water flows to the clean water tank for disinfection and treatment, and reaches the drinking water standard.

More equipment photo:


出水口
一体化净水器
反洗口
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