



Overview

This plant is geographically based near Xuanwu Lake, center of Nanjing City. Jiangsu Kaimi Membrane Technology Co.,Ltd undertook the responsibilities of design, construction, equipment integration, installation, commissioning, operation, etc. The construction of Xuanwu Lake Water Purification Plant was completed and put into operation within 3 months. The classic garden architectural design of the plant perfectly blends in with Xuanwu Lake's natural scenery. Covering an area of about 1500m², the plant is designed to a purification capacity up to 30,000m³/day.

The plant mainly applies the world advanced



Koch Puron Submerged Hollow Fiber MBR System and facultative FBBR (fixed-bed bio-film) patented technology to constructing closed or semi-closed integrated equipment with different functions.

Project Brief

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| Project Location | Jiangsu, China |
| Treatment Capacity | up to 30,000m ³ /D |
| Started at | March of 2019 |
| Main Technologies | Koch Puron MBR PSH1800 Facultative FBBR |

| Item | Unit | Inlet Water | Outlet Water |
|--------------------|------|-------------|--------------|
| COD | mg/L | 100 - 150 | < 40 |
| BOD ₅ | mg/L | 50 - 80 | < 10 |
| SS | mg/L | 180 - 700 | 0 |
| NH ₃ -N | mg/L | 10 - 20 | < 1.5 |
| TP | mg/L | < 5 | < 0.4 |

Process Advantages

An Integrated MBR System with High Impact Resistance

- High and stable quality of water output: the filtration accuracy of MBR membrane module is up to 30nm, and the rate of permeate suspension and turbidity are close to zero.
- Membrane elements with high mechanical strength, great antifouling performance and long service life.
- The concentration of microorganisms in the bioreactor is 2~3 times higher than conventional technology, up to 8,000mg/L.
- The membrane module has a high packing density and small footprint, can save the construction land by 30-50% compared to conventional technology.
- Less produced sludge, and the residual sludge discharge is 66.7% less than that of other technologies.

The Effective Combination of Biofilm reactor and MBR Technology

Applications

- Low Concentration Sewage Water Purification
- High Concentration Industrial Wastewater Treatment
- Integrated Rural Sewage Treatment
- Small Scale Municipal Sewage Treatment Plant



Jiangsu Kaimi Membrane Technology Co., Ltd

