

Untreated Sewage Treatment Technology during Rainfall Using Micro-bubble and Three-stage Bulkhead Type Flotation Plant

New Technology	Untreated Sewage Treatment Technology during Rainfall Using Micro-bubble and Three-stage Bulkhead Type Flotation Plant	Certificate	GT-15-00060
Model Name	-	Application Part	Water Quality
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1. Outline

- Technology that can process 1000 tons in 15 minutes using micro-bubbles and three-stage bulkhead floatation plant, while conventional biological treatment technology takes 12 hours

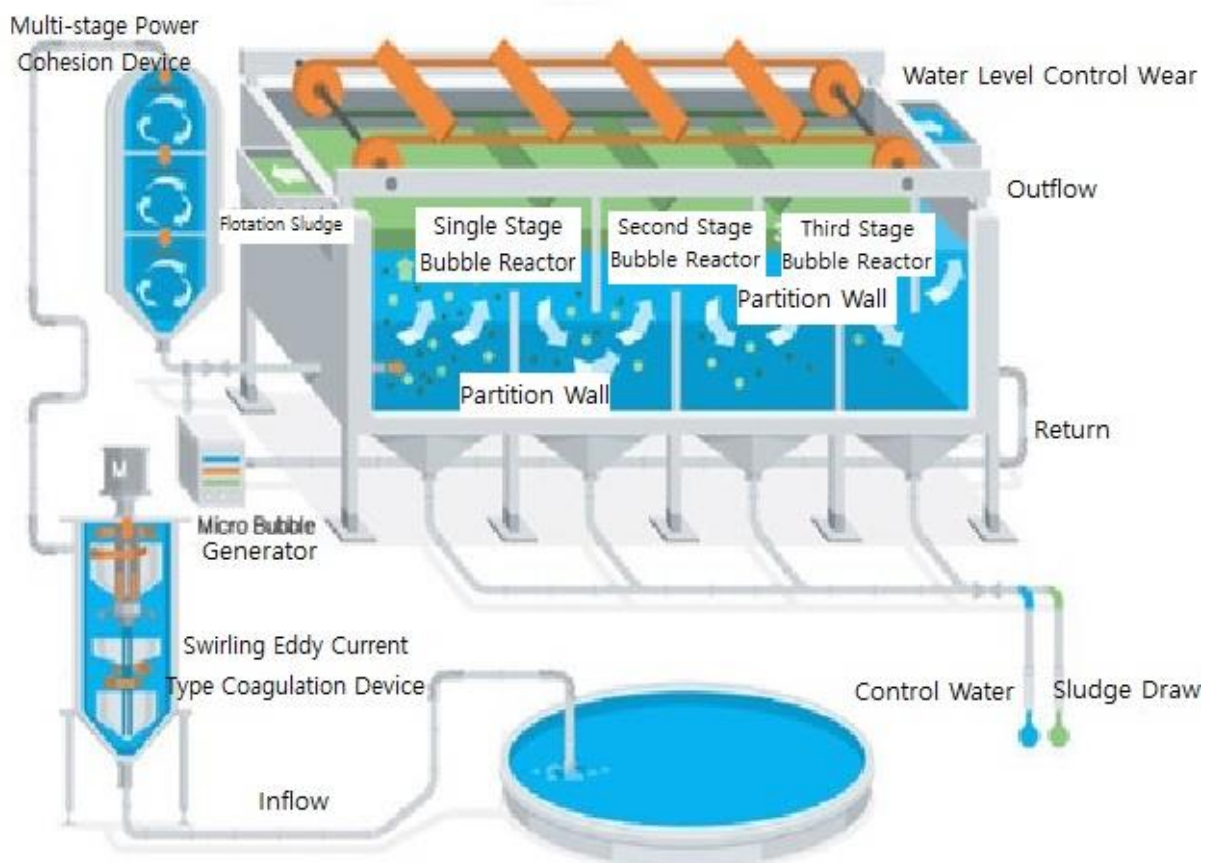
2. Characteristic

- In-line high-speed coagulation system enables coagulation treatment within 10 seconds by swirling eddy type, reducing drug input by more than 30%
 - Prevent secondary pollution of water quality caused by over-dosage of medicines
 - Reduction effect of odor due to fast processing speed
- Dual-time micro-bubble generation technology generates low-pressure, high-efficiency bubbles (less than 2.5 kgf / cm) to remove fine sludge
 - Improvement in water treatment efficiency by removing fine sludge
- The high-efficiency floating technology ensures sufficient bubble coating retention time by the partition wall using the first domestic three-stage up-and-down lifting principle, and the floating sludge effluent is zeroed through the electric water level control software
- With the inflow of sewage mixed with rainwater and wastewater during rainfall, untreated sewage is discharged when the treated capacity of the sewage treatment plant is exceeded, thereby preventing pollution with faster processing time compared to the

conventional method that polluted rivers

- When installing a facility of 1000 tons, the required area is 48m², accounting for only 40% of the existing required area, and the construction cost is 90% lower than the conventional method, which is very economical
- Compared to the treatment time, the concentration of suspended solids (SS) is less than 1 ~ 3ppm (60ppm by the Ministry of Environment), which makes water quality improvement easier
- Excellent for algae removal
- Effective in improving the water quality by preventing the eutrophication through removing the total phosphorus and replacing the filter
- Can be applied as a side stream instead of replacing existing sewage treatment plants

3. Introduction



[Picture 1] Technology Principle and Process Diagram

4. Application

- Application Part: Water Quality
- Development Stage: Development Complete
- Technology Application Part
 - Excellent Processing Facility