Demonstration of Treatment Performance Improvement Technology for Final Settling Tanks

Implementer: The consortium of METAWATER Co., Ltd., JS, and Matsumoto City

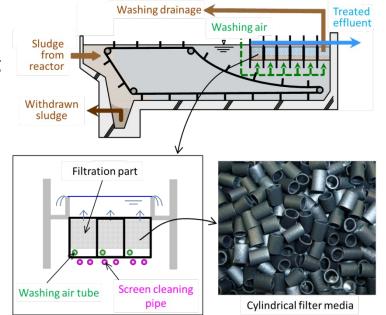
Final settling tank containing filtration part improves treatment performance quantitatively and qualitatively

Technology Overview

- A filtration part in the downstream of the final settling tank: improves treatment performance
- Cylindrical filter media with a small pressure loss: enables operation with the conventional water level differences
- ③ Prefabricated filtration part: enables reducing on-site works and great time shortening of water flow stopping



The upper part of filtration area



Benefits

- No expansion of the final settling tank is required: solve the problem of the shortage of treatment capability caused by merging of WWTPs
- No rapid filtration facilities are required

Achievements

Quantitative improvement

- Increase the treatment quantity twice as the conventional process while having the equivalent water quality
- Reduce the construction cost by 58% compared to the extension of final settling tank

Qualitative improvement

- Achieve BOD

 ≤ 10mg/L and equivalent water quality to that of the rapid filtration process
- Reduce the construction cost by 71% compared to the new construction of rapid filtration facilities