

# CSBR

## OVERVIEW

CSBR system has been developed to combine the strengths of A2O and SBR process. It increases the removal efficiency of nitrogen and phosphorus in the feed water. This stable system is ideal for any types of wastewater treatment projects and is often used for municipal sewage and industrial wastewater.

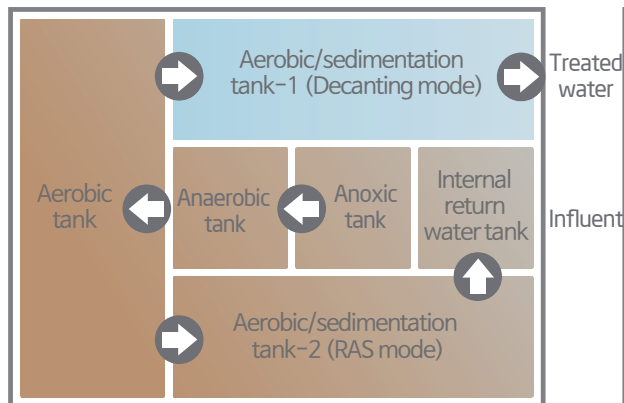
## FEAUTRES

1. Stable Process with High Efficiency
  - CSBR continuously discharges treated water without changing the water level, while alternately running aerobic/ sedimentation tanks, therefore, increasing overall system efficiency.
  - Coway EnTech has patents for CSBR engineering methods and main equipment. Its stability has been proven through treating a large amount of sewage and wastewater.
2. Excellent Response to Feed water Quality Variations
  - The flexible operation of the system guarantees stable and efficient process.
  - Utilizing unique feature of the CSBR system, the nitrogen and phosphorus removal rate can be maximized
3. Convenient Operation & Maintenance
  - PLC & MMI programs enable automatic operation
  - The air infuser in the system eliminates the down-time
  - A fixed effluent discharger releases treated water continuously

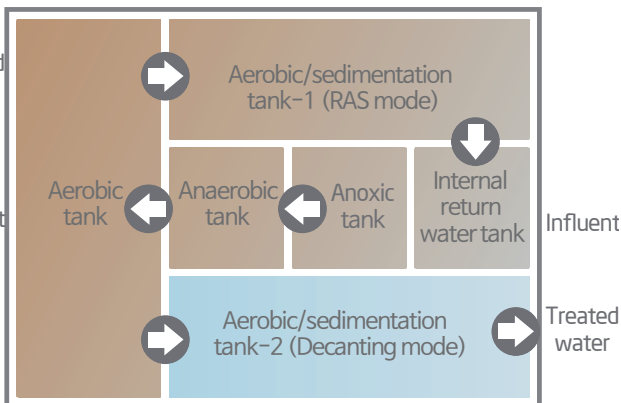
# CSBR

## PROCESS

Step1



Step2



## Functions of Reactors

**Aerobic/Sedimentation Tank 1**  
Discharge of treated water

**Anoxic Tank**  
Nitrate in the internal return water is removed by denitrification by using the influent organic substances as a substrate. The ideal conditions for phosphorus discharge is provided.

**Internal Return Water Tank**  
Denitrification has been improved by returning nitrified nitrate from the aerobic sedimentation tank in aerobic condition to the anoxic tank.

**Anaerobic Tank**  
Phosphorus is discharged by using the organic substances in the influent sewage as a substrate.

**Aerobic Tank**  
Removal of organic substances by oxid  
Nitrification of orga  
and ammonia nitro

**Aerobic/Sedimentation**  
The removal of organic substances and nitrogen has been improved with anoxic, aerobic, and pre-sedimentation reaction conditions.

