

"ONE TANK REACTOR"- PLANT

Hirschsprung near Dresden (Germany-Saxonia)



- Start-up-date: December 1999
- Connection Load: Designed for 1,600 population equivalents (p.e.)
BOD₅-load: 96,0 kg/d
Daily sewage: 440,0 m³/d
- Sewer Concept: Separated system (rainwater and sewage are discharged by different sewer systems).
- Effluent Results: BOD₅ = < 10 mg/l
CSB = < 60 mg/l
NH₄-N = < 10 mg/l
- Plant Concept: Extended aeration (SBR-technology), simultaneous sludge stabilization, nitrification, denitrification
- Technical features
 - Two parallel operating SBR-systems (computer-controlled) including sludge storage tank for the thickening of excess waste sludge.
 - Pretreatment of the incoming sewage by a compact station including fine screen with dewatering scrow.
 - Alternating fill-up of the two reactors (automatically operated).
 - Fine-bubble aeration by compressed air with membrane rubber pipes (deep installation) and rotary piston blowers, operating according to the oxygen concentration.
 - Decanting of the purified wastewater by specially developed free flow system (Biogest-design) resulting in low operation costs.
 - Realization of the reactors and the sludge storage tank by rectangular waterproof concrete tanks.

