

"ONE TANK REACTOR"-PLANT Leppersdorf near Dresden (Germany-Saxonia)



- Start-up date: May 1994
- Connection Load: Designed for 1,600 population equivalents (p.e.)
BOD₅-load: 100 kg/d
- Plant concept: Extended aeration (sequenced batch technology) Simultaneous sludge stabilization, nitrification, denitrification, Organic sludge age > 20 days
- Sewer concept: Separated system (rainwater is separately discharged).
- Effluent results: BSB₅ = < 5.0 mg/l
CSB = < 30.0 mg/l
NH₄-N = < 0.5 mg/l
P_{total} = < 3.0 mg/l
- Technical features: One stage SBR-system with inlet-equalization tank, sludge storage tank (retention period 180 days) and effluent buffer lagoon.

Pretreatment of the incoming sewage by use of an automatic screen, being followed by a pista-sand trap.

Discharge of the pretreated sewage by a pumping station, sized as an inlet buffer tank.

Aeration and oxygen-supply by use of a floating surface-aerator (type BSK 1600). Speed control according to the oxygen requirement.

Discharge of the purified wastewater by use of a decanting pump.

Circular tank constructions out of waterproof concrete (B 35). Tank height 5.0 m, tank diameter 15 m.

