

## "ONE TANK REACTOR"- PLANT **MAXEN** near Dresden (Germany-Saxonia)



- Start-up-date: September 1993
- Connection Load: Designed for 1,000 population equivalents (p.e.)  
 BOD<sub>5</sub>-load: 60 kg/d  
 Daily sewage: < 300 m<sup>3</sup>/d
- Sewer Concept: Separated system ( rainwater is separately discharged)
- Effluent Results: BOD<sub>5</sub> = < 4.0 mg/l  
 CSB = <18.0 mg/l  
 NH<sub>4</sub>-N = < 0.4 mg/l  
 P<sub>total</sub> = < 3.0 mg/l  
 (Average figures of the last operation years.)
- Plant Concept: Extended aeration (SBR-technology), simultaneous sludge stabilization, nitrification, denitrification. organic sludge age > 25 years
- Technical features
  - One stage SBR-system with inlet pumping station and sludge storage tank (retention period 180 days).
  - Treatment of coarse material by use of a macerating turbine.
  - Aeration and oxygen supply by use of a floating surface aerator (type CROWN 1250). Speed control according to the oxygen requirement by a frequency converter.
  - Discharge of the purified wastewater by use of a decanting pump.
  - Square tank construction out of waterproof concrete (B35) - completely imbedded under ground.
  - Operation building includes the control room and one toilet. Covers the inspection entrance of the One-Tank-Reactor.

