

# Proposal for Wastewater Treatment Plants

## Sequencing-Batch-Reactors

Capacity:  
 10.000 – 100.000 person equivalent  
 2.000 – 20.000 m<sup>3</sup>/d



Effluent parameters at water temperatures of 12°C

COD	≤	75 mg/l
BOD <sub>5</sub>	≤	25 mg/l
NH <sub>4</sub> -N	≤	10 mg/l
Total N	≤	18 mg/l

European gross cost estimate

10.000 PE	1.000.000 EUR
100.000 PE	8.000.000 EUR

Operating costs for 100.000 PE

Electricity:	1,600 kW/d
Amount of surplus sludge:	120 m <sup>3</sup> /d
Maintenance staff:	3 skilled persons

Design for 100.000 PE

The sewage treatment plant consists of four Sequencing Batch Reactors (diameter Ø 42 m. height = 10 m) with aeration turbines, mixers and surplus sludge pumps. Supernatant decanter and two sludge silos for 60 d (diameter Ø 30 m. height = 10 m). The pre-treatment includes two series of (non-roofed) mechanical screens and an aerated grit chamber.

The operating building is designed as massive construction containing all controlling equipment.

