

person

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CEO of PPU-Umwelttechnik GmbH  
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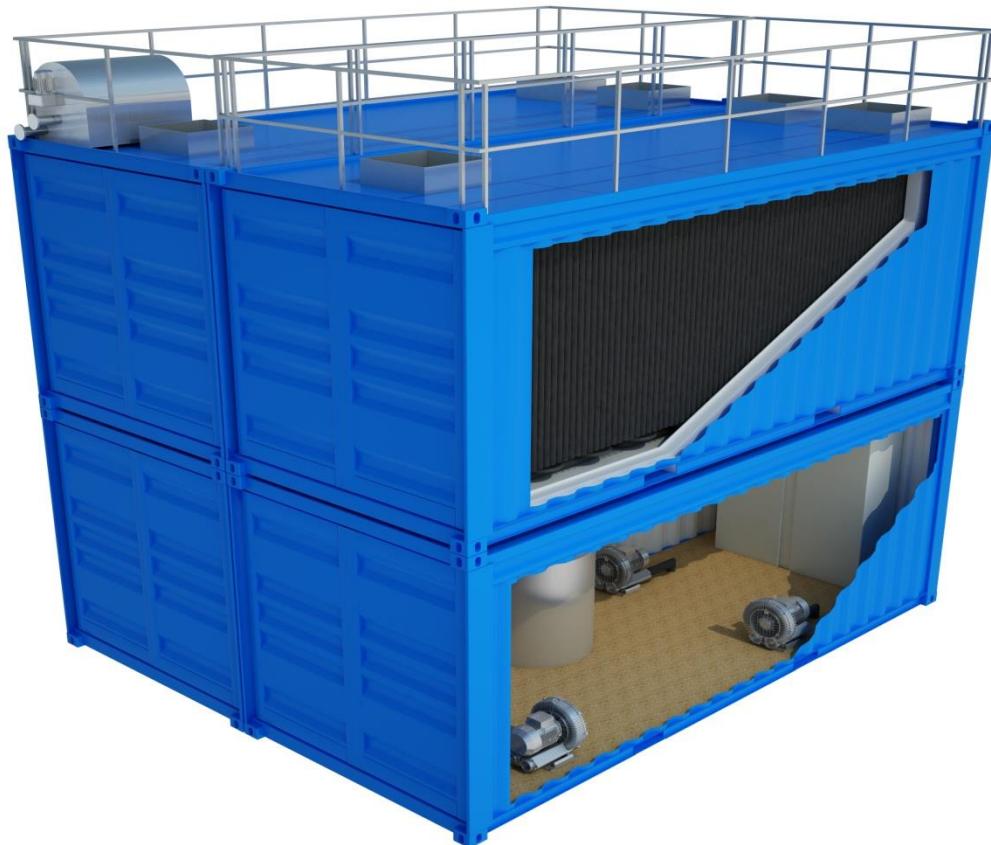
**standardized products**

**ClearFox ® nature**

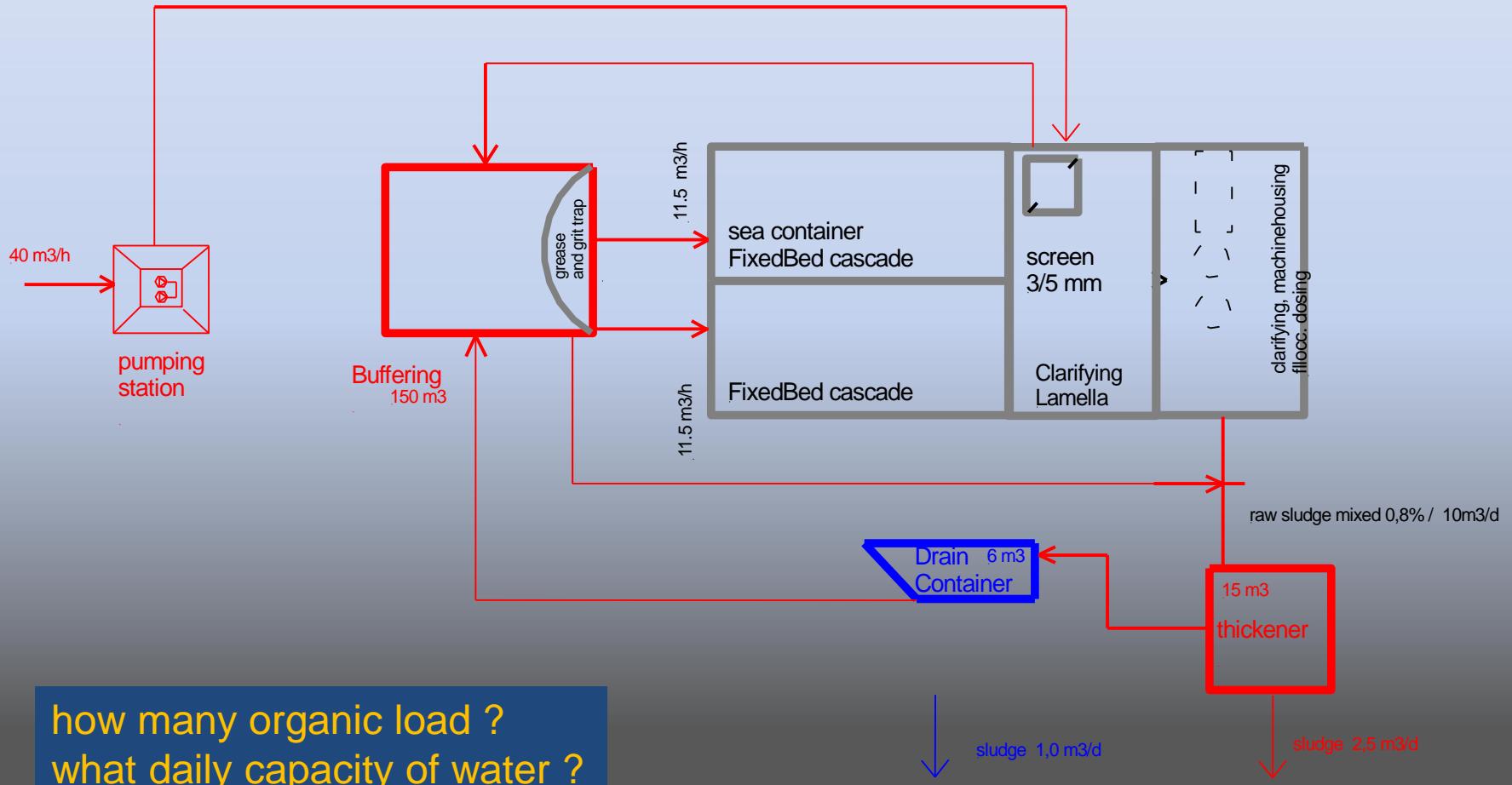
**ClearFox ® Fixed Bed Reactor**

**ClearFox ® Container treatment systems**

**ClearFox ® Sequencing Batch Reactor KIT**



## container treatment



## designing aspects for the container systems

- daily load in regard to BOD or p.e.  
and hydraulics
  - specific water consumption: 250 l/p.e. ?
  - specific BOD load : 60 gramm/p.e. ?

## designing aspects for the container systems

### ■ pretreatment of the water

- screen ?
- settling ?
- buffer aeration ?

## designing aspects for the container systems

- nitrogen load, N:BOD:P ratio  
COD:BOD ratio in general
  
- any tankers or just sewer ?
- any industrial part ?
- biological part in load (Inert-COD)

## designing aspects for the container systems

- totally sewage effluent requirement
  - COD, BOD – carbon elimination % ?
  - nitri/denitrification – N- totally?
  - other nutrients

## designing aspects for the container systems

- temperature for aeration  
and water depth
  
- buffer size for equilizing

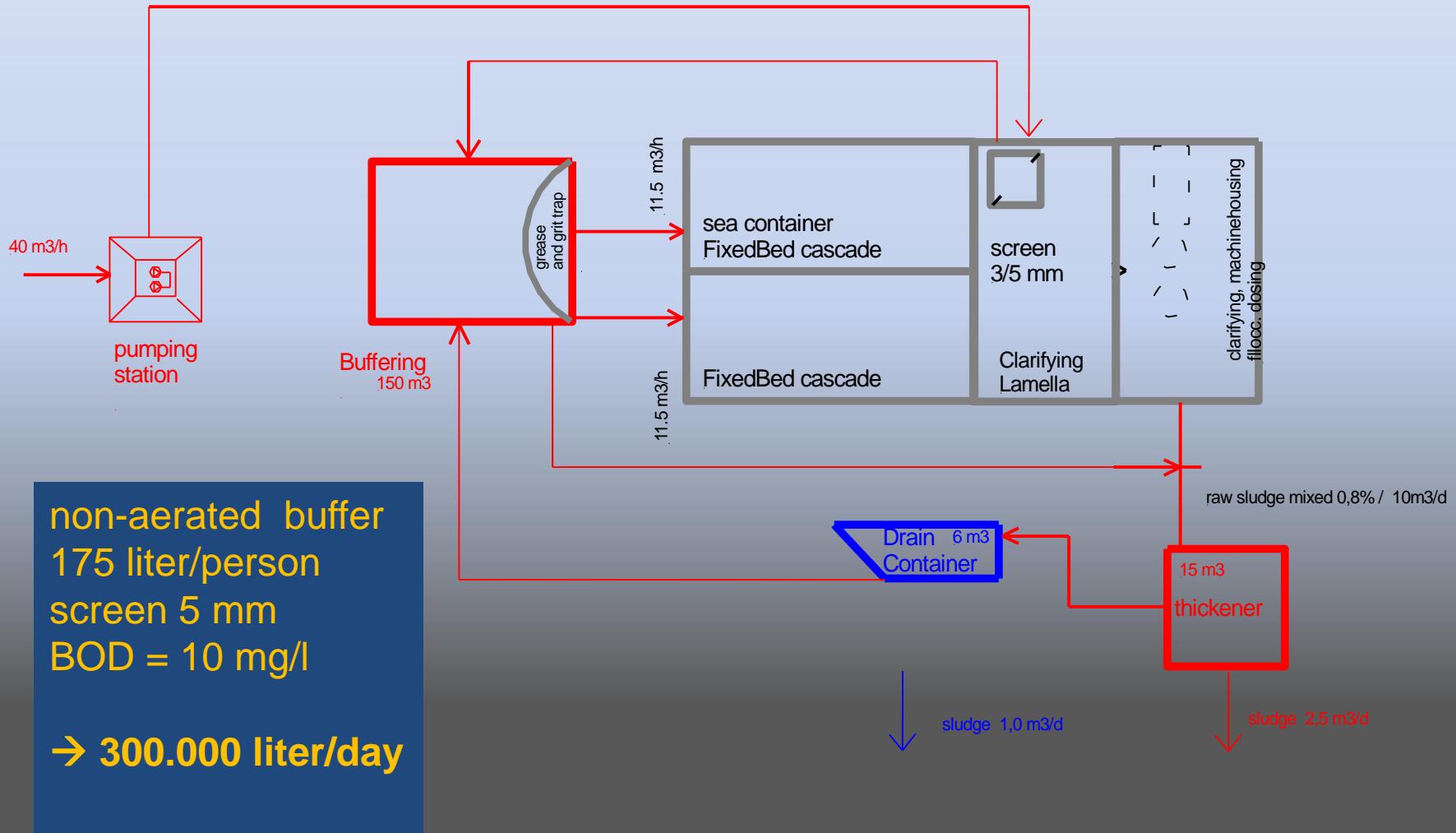
## designing aspects for the container systems

- Daily water
- sludge treatment
- 
- backflushing of the biofilm
- big field of application

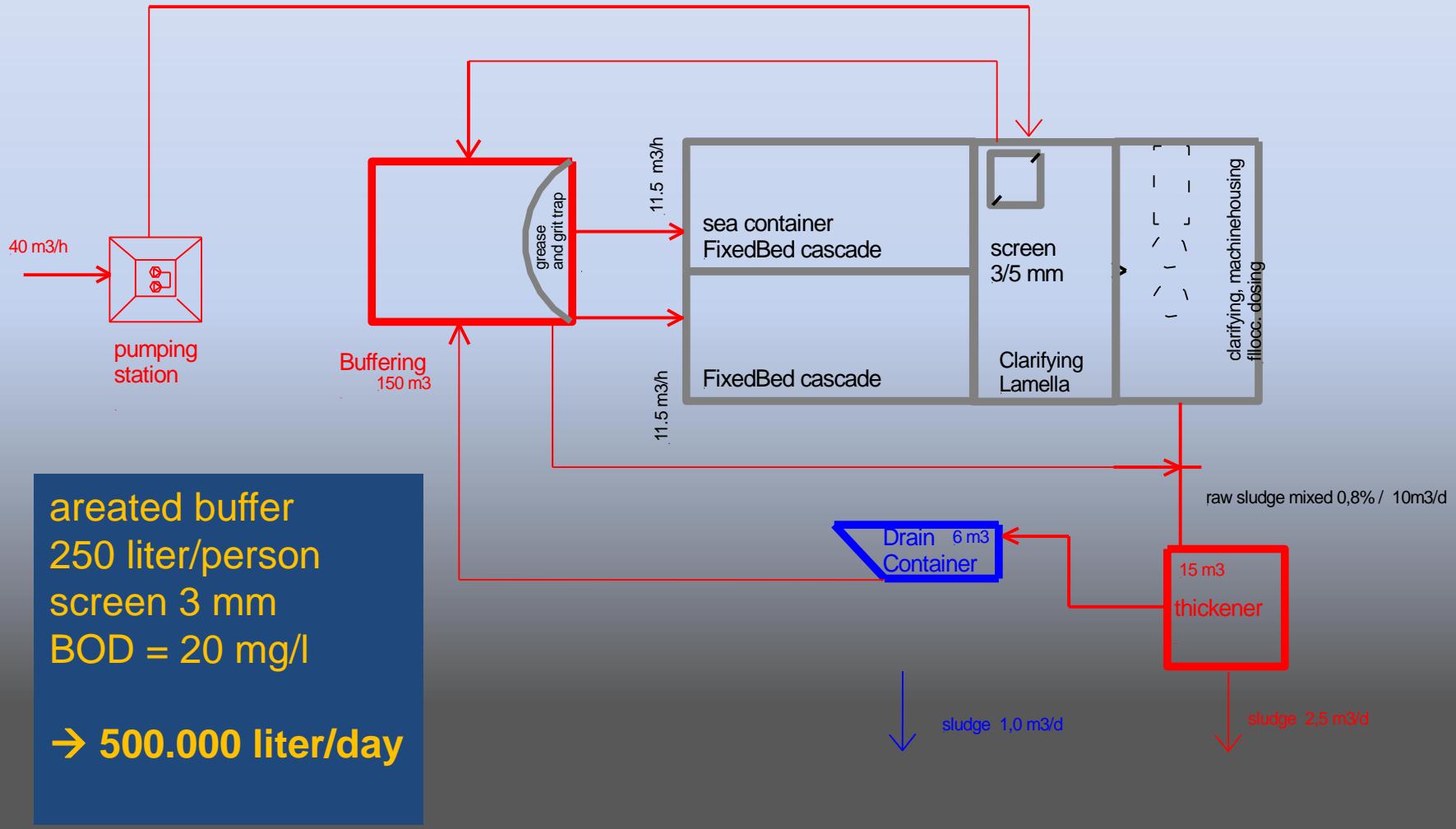
## design variables with influence on size of container

- surface area,surface loading
- retention time (equilizing)
- pre clarifying
- input concentration (pretreatment)
- cascades, parallel or inline
- backflushed or not
- recirculation rate

## capacity example 2



## capacity example 2



resumee

## Resumee:

Container treatment systems are pre-engineered, but always there is a need for detail designing

**ClearFox®**  
[... be clever ]



شكراً لك على الاهتمام