

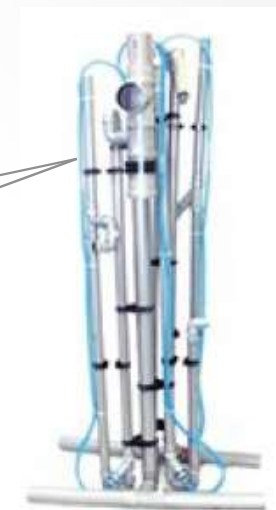
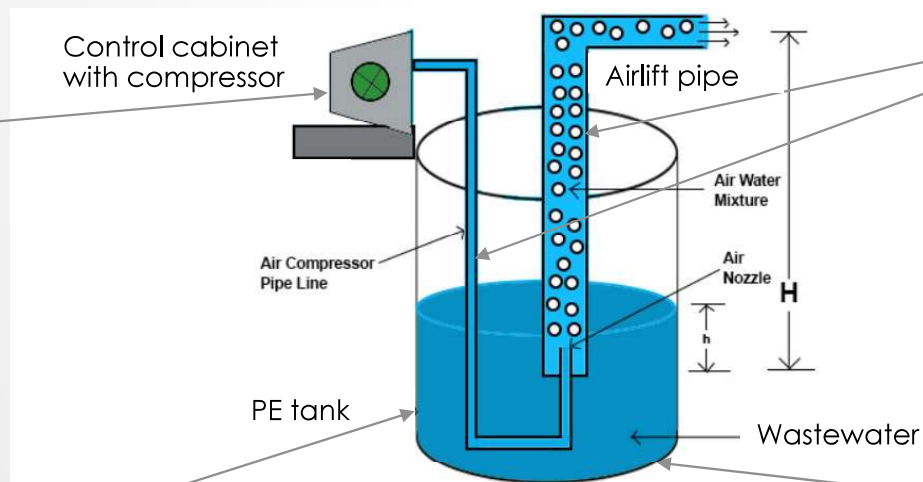
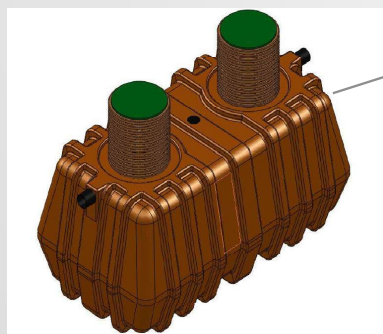
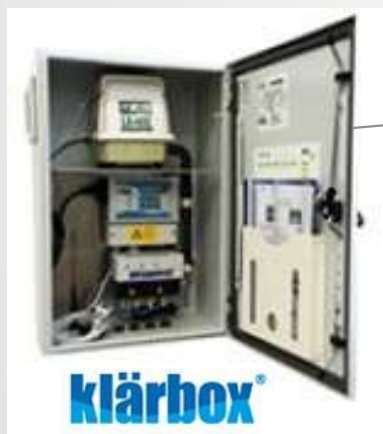
WASTEWATER TREATMENT SYSTEM SBR

- **Advantages** of the Rotons **SBR** solution:
 - **Modular** design, **high quality** materials & **German** technology;
 - High purification grade – **90...98%** of BSP_5 , suspended solids, phosphorus & nitrogen removal;
 - Minimal electricity consumption (for example **0.4 kWh** using 4 PE unit);
 - No electrical pumps & no mechanical parts in the wastewater;
 - Sludge removal is necessary only once in a 5 year period;
 - SBR system is designed as double chamber **compact** horizontal PE tank and is **CE certified**;
 - **Hydrostatic** measurement, **magnetic** valve control & **compressed air** supply for **airlift** unit



WASTEWATER TREATMENT SYSTEM SBR

Operating principle



Different Symbols in the diagram:

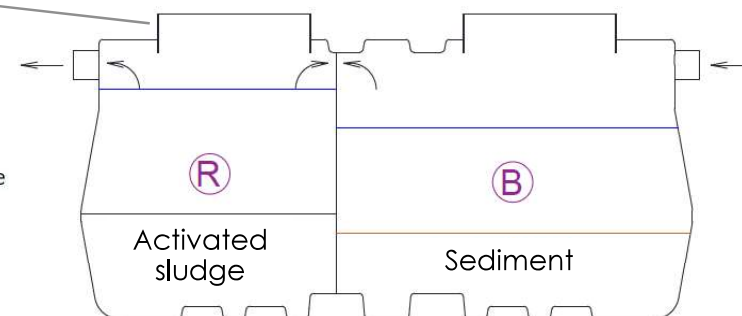
h – distance between the nozzle tip and static water level.

H – distance between the nozzle tip and center point of the end of the delivery pipe where the water gets discharged.

H - h (difference of H and h) – Useful Liftnull

R – Reactor

B – Buffer zone



WASTEWATER TREATMENT SYSTEM **SBR**

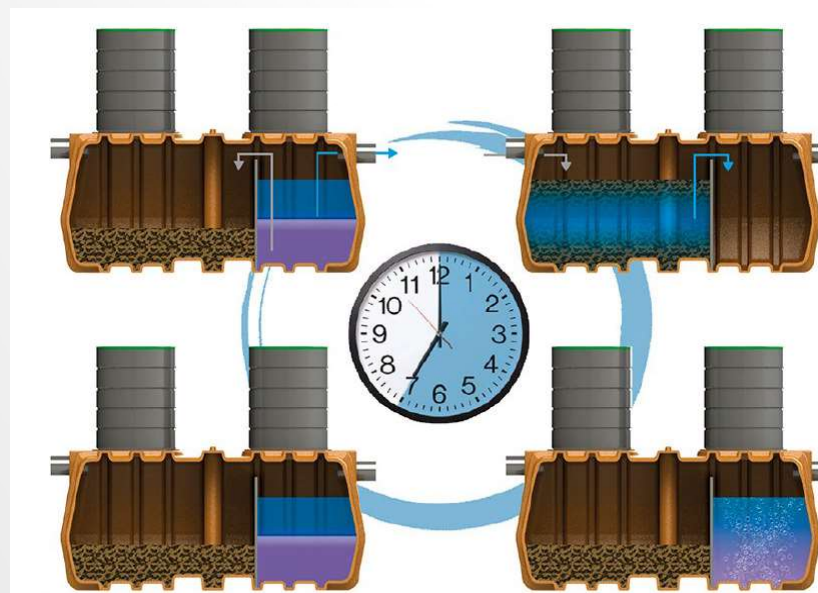
Process description

4. Clear water removal phase

Clear water is removed and excess sludge is returned back to the primary treatment tank, then the new cycle begins

3. Sedimentation phase

Sludge sedimentation is in process while clear water stays on top of the tank



1. Loading phase

Wastewater flows into SBR reactor from primary treatment tank with automatically controlled intervals

2. Processing phase

Wastewater is circulating and air is injected while bacteria stays properly fed with oxygen