



Floating Scum Baffle Type SWTW

The floating scum baffle type SWTW of BIOGEST® AG is used for targeted retention of solids on relief thresholds in separating / discharge structures of combined sewage systems.

The floating body of the floating scum baffle type SWTW-V (vertical) is in dry weather in lowest position on the sole of the building. The floating body of the floating scum baffle type SWTW-R (radial) is in dry weather located on the overflow wall.

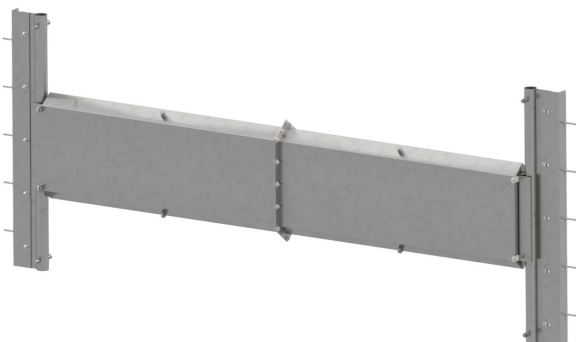
Functionality

The BIOGEST® floating scum baffle consists of one or multiple balanced floating bodies with a constant immersion depth

The type SWDS-V (vertical) has a wall-mounted guide system with smooth-running Teflon bearings and lateral sealing system. The type SWTW-R (radial) has linkage arms with wall or ceiling bearings to fix the baffle system to the building. On both sides are rubber lips to seal the baffle with the building wall. Due to the specific arrangement of the floating body and the immersion of the floating scum baffle, floating matters are effectively retained, even at lowest rising water level. Especially on deep water levels the SWTW has an advantage, as he secured at any water level the retention of floating matters.

Functional description

1. With rising water level and the floating baffle in low position, floating particles will be retained right at the beginning.
2. The floating particles swim up with the rising water level. Likewise, the baffle swims up with the rising water level and retain the floating particles on the foul side.
3. During overflow discharge the floating baffle is at highest position and hold back the floating particles effectively on the foul side. The water discharge over the overflow weir happens without discharge of floating particles.
4. The water level drops again. The floating scum baffle sinks with the water level and the floating particles remains on the foul water side.
5. The floating scum baffle is in low end position again.



Areas of application

Many modern municipal wastewater treatment systems are based on combined sewer systems, where rainwater and domestic wastewater are collected. Especially in case of high water arise like during extreme storm water condition, it is necessary to intercept this water into a receiving stream to protect the wastewater treatment plant against overloading. The easiest and most cost-efficient solution are retention basins at the pre-clarifier, placed in front of the real wastewater treatment plant. Coarse solids can be discharged into pre-clarifier in the form of suspended or floating matter during the relief process. To prevent this, relief structures are equipped with baffles to retain floating matter and solid matter. However, conventional fixed baffles are not able to fully serve this purpose. Therefore floating scum baffles are used as they have a much better solid retention rate.



The advantages

- ◆ Effective retention of floating solids by floating baffle
- ◆ Compact application due to modular arrangement
- ◆ Installation possible even through very small access openings
- ◆ Operation without external energy
- ◆ High flexibility with regards to different geometries by adaptive system versions
- ◆ Ideal for large and fluctuating water levels
- ◆ Adjustable immersion depth with water ballast possible
- ◆ Excellent price-benefit-ratio
- ◆ Low maintenance