

HydroSelf[®] Gate Flushing System

High efficiency flushing for tanks
and sewer channels

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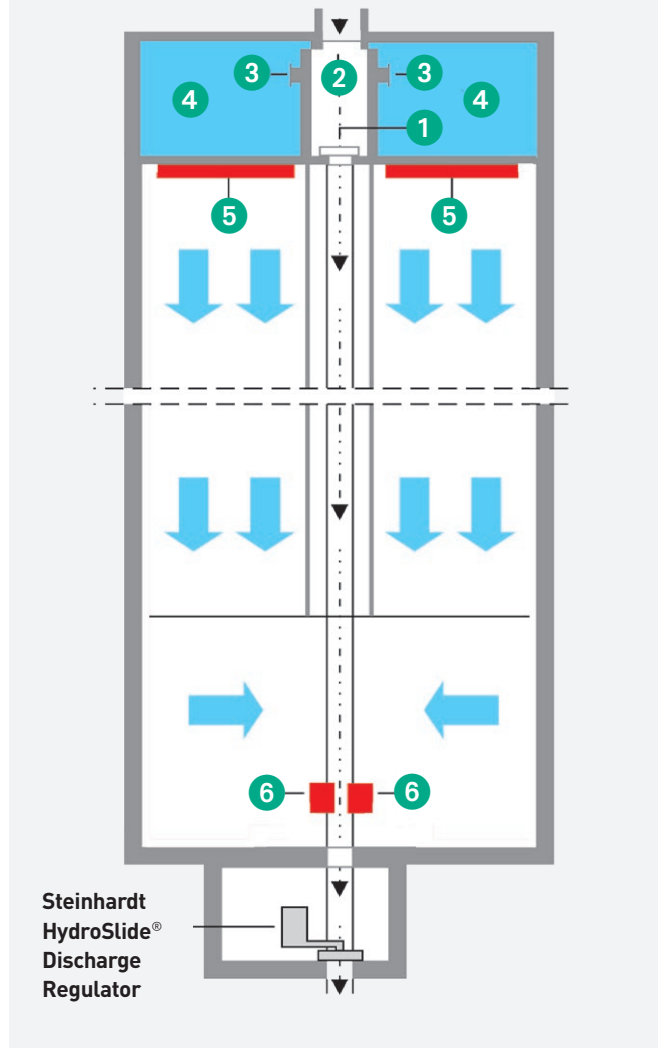
The System

The **HydroSelf® flushing system** uses retained water to clean the floor of storage tanks with extremely high efficiency. This system is simple in construction but effective in operation. It can be supplied with electrically-powered systems whose power-pack maximum power consumption is 0.75 kW. **The HydroSelf®** produces a high energy flushing wave re-suspending the settled debris and carrying it to the receiving sump.

The Functioning

Highly-polluted water flows through the pre-throttle **1** to the outlet. Should the incoming flow rate exceed the outlet flow, impounding will begin at the outlet. The floats switch **6** transmits the signals about the fill level (empty / filled) in the sump area to the flushing gate control system. During filling, the flushing gates **5** are locked. Now the pre-throttle causes incoming water to impound more quickly in the pre-chamber **2** than in the remaining retention system. The use of flap valves **3** causes the water to flow into the storage chambers **4** to enable charging of the flushing chambers to occur even with partial filling of the retention tank. After each filling, including partial fillings, the flushing gates are unlocked when the water level is at its lowest. The gates flush one after the other so that the receiving sump volume is minimised and there is no backwash in the tank. If the pre-throttle is closed, it is possible to flush manually. If an electrical power source is available, Steinhardt can offer a PLC control with optimised remote effect. A single flushing wave is sufficient to flush long tanks and channels reliably, even with use of low storage chambers.

HydroSelf® Flushing system in a throughflow tank



HydroSelf® Flushing System in storage sewers

The Advantages

- environmentally-friendly cleaning, no fresh water supply,
- cleans long channels efficiently with a single flush
- flushes even after partial filling, manual flushing option
- flexible sizing
- practically maintenance-free
- suitable for retrofit
- proven at home and abroad