

## FLOW CONTROL EQUIPMENT

### + SCHÜTZ.PLUS PENSTOCKS

#### + SHZ+QS WALL TYPE PENSTOCKS

SCHÜTZ.PLUS (SHZ+) Penstock are used for different applications such as isolation or regulation with permanent operational reliability in water and wastewater treatment plants.

SHZ+QS is four side sealed penstock designed to be assembled on the wall of a chamber or a tank to isolate square, rectangular or round apertures. It is consisting of an open frame and a slide with sealing moving within the frame. The drive system is located on a pillar, which is assembled on operation floor and fixed to the slide by means of an extended spindle.

Assembly is mostly realized by anchoring the frame on the wall. There is also an alternative design in which one side or both lateral profiles of the frame may be embedded within the recesses in the concrete structure. In addition, one side or two sides may be fixed by anchoring on lateral walls may be a solution to fit in existing structures.

Frame invert is commonly anchored on the wall as done for lateral profiles. SHZ+QS has alternative frame invert designs, which can also be embedded within the recess of the concrete structure. In addition, the frame invert can directly be anchored on bottom slab of the channel for existing structures.

Profiled rubber is located along both lateral edges and top edge as well as bottom of the slide forming four-sided sealing all around the aperture when slide is closed. Independent from direction of water pressure the pre-stressed sealing ensures tightness. Maximum leakage rate is lower than the maximum allowable recommended values in internationally valid standards; DIN 19569-4, AWWA C-561 and BS 7775.

SHZ+QS is opening in upwards direction. Both rising and non-rising spindle designs may be used with single or double spindles. There are multiple choices of drive units: Hand wheel, manual operated gearbox, electrical actuator and pneumatic or hydraulic pistons may be used to operate the equipment.

