

SSR Screw-conveyor Scum Remover



success guaranteed!

for all kinds of floating scum

for fluctuating water levels

for sedimentation tanks and clarifier equipments of all types and sizes

for self-controlled and self-regulating operation

for minimum maintenance

for maximum satisfaction in all plants



SSR Screw-conveyor Scum Remover
Tschuda System

SSR Screw-conveyor Scum Remover...

according to the patented Tschuda System.

... is a precise and effective coercive removal system for all kinds of sedimentation tanks, which guarantees the reliable removal of floatables of any kind and thickness. Unsinkable floating dual-function conveyor components rotating at the water surface form the floating weir for collecting the floating scum with their central pipes and also act as the coercive conveying system with their forward bent screw blades transporting all the floatables and the scum to the sip and suction unit. Designed according to hydraulic principles and connected to the floating screw conveyor elements, the sip and suction unit guarantees an adjustable and afterwards steady suction volume even at fluctuating water levels. Continuous operation of the screw conveyor elements and discontinuous operation of the sludge pump allow a pre-concentrated removal of all floating scum. The conveying elements are driven with low power consumption (0.12 kW) via a maintenance-free synthetic chain and a stainless steel safety clutch to prevent mechanical damage.

... for all kinds of floating scum



Due to the floating design and the consistent overflow height of the sip and suction unit the setting of the desired effluent volume on the one hand and the setting of the desired mixture ratio of scum to water to air can be adjusted in a wide range. Floatables of all consistencies and thicknesses are effectively and quickly removed by the submersible pump.

... for fluctuating water levels

The weight balanced HDPE swivel arm mountings of the floating screw conveyor elements allow and ensure the maintenance-free and consistent function of the sip and suction unit even at water level fluctuations up to 500 mm, e.g. due to variations of flow rate or the effect of wind.



... for sedimentation tanks and clarifier equipments of all types and sizes



„for the paper industry, with an overhead sludge pipe“



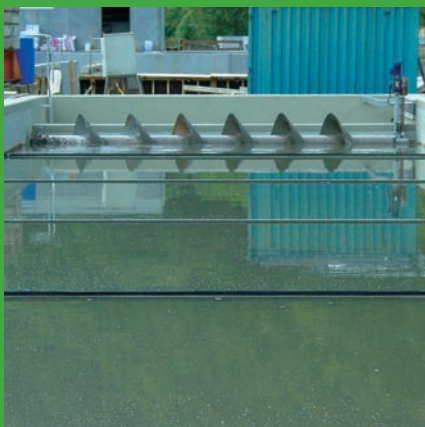
„with a tubular bridge construction and radial submerged effluent pipes“



„with suction scrapers and effluent troughs“



„in combination with submerged scrapers with a central drive unit and circular submerged effluent pipes“



„in rectangular tanks with chain and flight scrapers“

The possibilities of the Tschuda System are unlimited. The modular design and the standardised mounting elements allow the simple and flexible installation in any kind of sedimentation tank, on any kind of scraper bridge and in combination with any kind of outlet. The system is ideally suited for refitting existing scrapers and tanks, as it automatically compensates any existing constructional inaccuracies by the floating design.

... for self-controlled and self-regulating operation

Precise self-adjustment to fluctuating water levels in combination with the sludge pump allows a fully self-regulating operation with efficient and self-controlled pumping of the desired concentration of sludge / water / air. In addition to the continuous operation for large volumes of floatables or for the incident of a process upset, the system can also operate fully self-regulating at regular intervals. Using the system with temporally delayed activation of the submersible pump in comparison to the rotation of the screw conveyor elements even enables to pre-concentrate the scum.

... for minimum maintenance

All used materials are selected with respect to exceptional durability and minimum maintenance. Stainless steel is used for all components, HDPE for the maintenance-free bearings, HDPE and POM for the maintenance-free drive chain and drive sprockets, water- and weatherproof elastomers for the seals. Industry-standard materials are only used for the submersible pump and the drive motor.

Due to the system's floating design the bearings are not under load and the maintenance consists of periodic visual inspections and the sludge pump's annual oil change. Therefore the pump can be raised without loosening any parts by the use of lifting booms, rail guides and special elastomer seals at the suction and pressure joints.

