Clean water - we take care of it for you.





## TAS - Automatic sludge water discharge system

A reliable and efficient solution to reduce sludge

## Effects of sludge water zones

During the thickening process in sludge tanks and sludge towers, thin water layers often form, which hinder an effective pre-thickening process and thus reduce the sludge content significantly. As a consequence, the costs for further sludge treatment increase and the biological cleaning process is negatively impacted.

## **CONDITIONS FOR TAS**

- TAS can be applied to nearly all forms of sludge, including pre-sewage sludge, primary sludge, surplus sludge or sludge from the digestion tank.
- It offers optimum results for municipal as well as industrial wastewater treatment plants.



Suction entity, swiveling boom with covered gear box and control unit with touchscreen.

### **BENEFITS OF TAS**

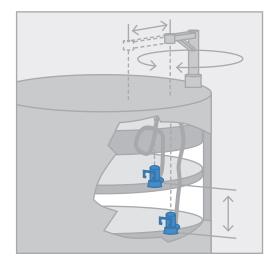
- improve the degree of thickness of the sludge
- increase the storage capacity of the sludge
- obtain significant cost savings associated with further sludge processing, subsequent sludge transport or sludge disposal
- improve the operational safety of the biological purification process by pre-selecting the sewage density which can vary over the course of the day
- reduce time-consuming manual input to discharge sludge water

# floating sludge sludge water thin sludge sludge water thin sludge sludge water thin sludge thick sludge

Principle of a thickener tank

## **HOW IT WORKS**

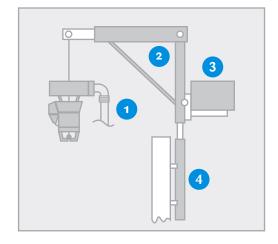
- For the detection of sludge water layers, the automatic sludge water discharge system moves up and down within the filled part of the tank, driven by the suction unit.
- As soon as a layer of sludge water is detected, the suction unit initiates the sucking process until the layer is completely eliminated. This process is automatically repeated in each layer of sludge water detected.
- Once the entire tank has been assessed, the suction unit returns to its default waiting position until the next manual, automatic or remote start is initiated.



The suction unit moves up and down within the tank. The ultrasonic sensor detects layers of thin sludge water.

## **TECHNOLOGICAL KEY FACTS**

- ultrasonic technology
- Siemens SIMATIC S7-1200 control system
- with or without explosion protection



Principle of the hoist

- 1 suction pump
- 2 swivel arm
- 3 gear box with cover
- 4 tank attachment

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