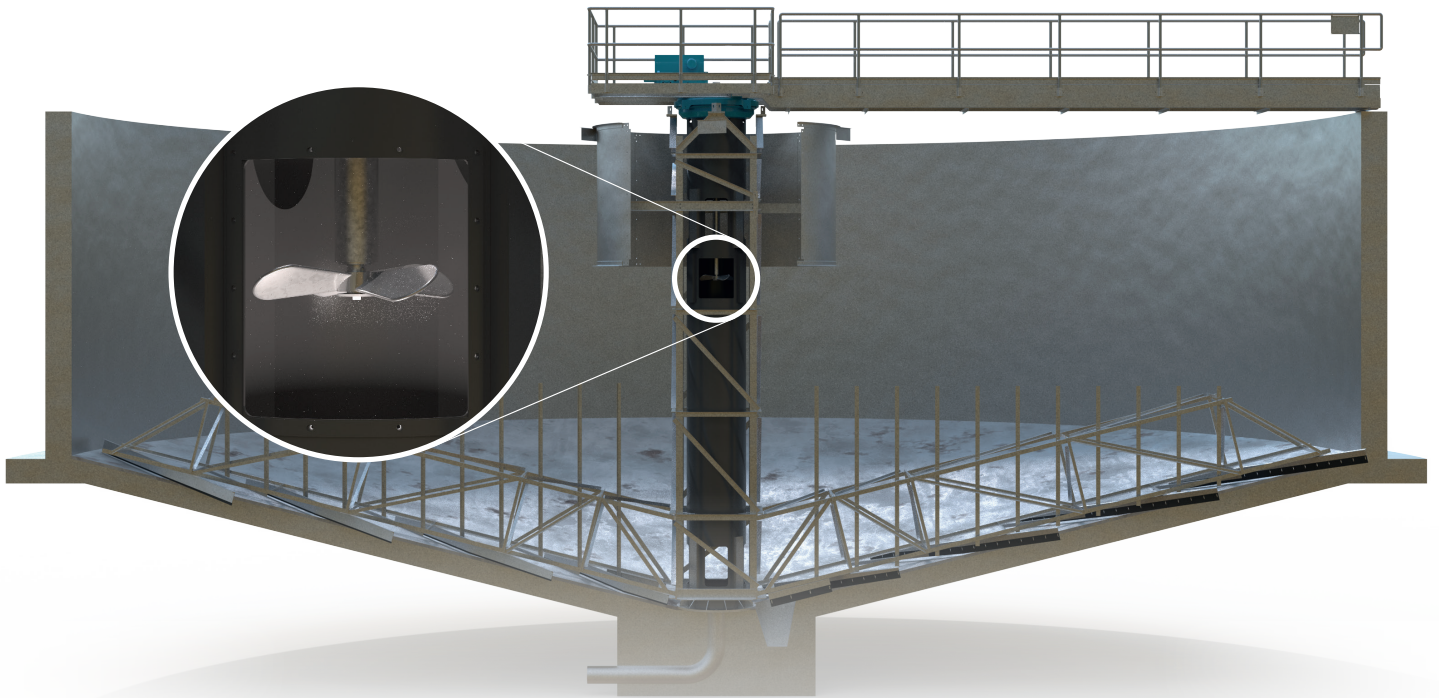


SEDIMENTATION

SBT

SLUDGE BLEND THICKENER



Bringing water to life

SLUDGE BLEND THICKENER

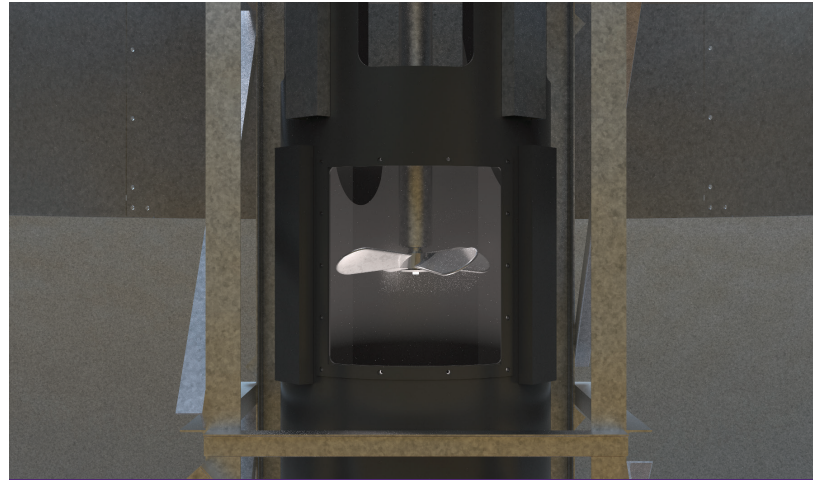
Maintain consistent feed solids to dewatering process with homogenous underflow solids concentration.

CURRENT CHALLENGES WITH DEWATERING SYSTEMS

Achieving the driest cake solids is crucial for a cost-effective dewatering process. The drier the cake solids, the fewer truckloads and waste, resulting in significant savings. Sounds simple, right? Unfortunately, it's not that easy for operators. They constantly juggle variables like polymer dosages and equipment speeds to manage variations in incoming feed solids concentrations, all to achieve acceptable cake solids. Missteps in these adjustments can even damage the equipment.

Standard thickeners, which feed dewatering equipment, lack the ability to control sludge bed consistency. To address this, some plants with the budget and space have added separate sludge mixing tanks to prepare the sludge before dewatering. However, many plants without these resources continue to struggle.

That is why Ovivo developed the Sludge Blend Thickener (SBT). The SBT keeps the sludge bed mixed, preventing stratification, ratholing, and rake arm overload/binding. This innovative solution ensures consistent feed solids, making the dewatering process more efficient and reliable.



KEY BENEFITS

- **IMPROVES DOWNSTREAM DEWATERING PROCESS:**
Provides more consistent sludge feed concentrations to dewatering which results in higher cake solids concentrations.
- **REDUCED OPERATOR ATTENTION:**
Minimize the need for constant monitoring and adjustments.
- **WASTE REDUCTION:**
Decrease waste generation, contributing to a more sustainable process.
- **MINIMAL CAPITAL COSTS**
- **NEW OR RETROFIT CAPABLE**
- **REDUCES RISK OF RAT-HOLING AND RAKE ARM OVERLOAD/BINDING**

Experience the transformative impact of the Sludge Blend Thickener and elevate your dewatering process to new heights.

WHAT IS IT?

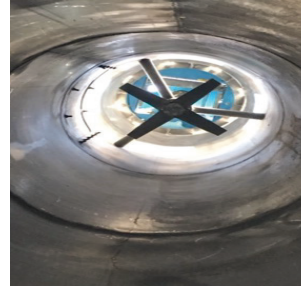
By leveraging proven recirculation and mixing technology used for decades in solids contact clarifiers, Ovivo has revolutionized thickener performance.

Our simple, yet effective approach significantly enhances sludge bed solids consistency, ensuring optimal thickener efficiency and reliability.

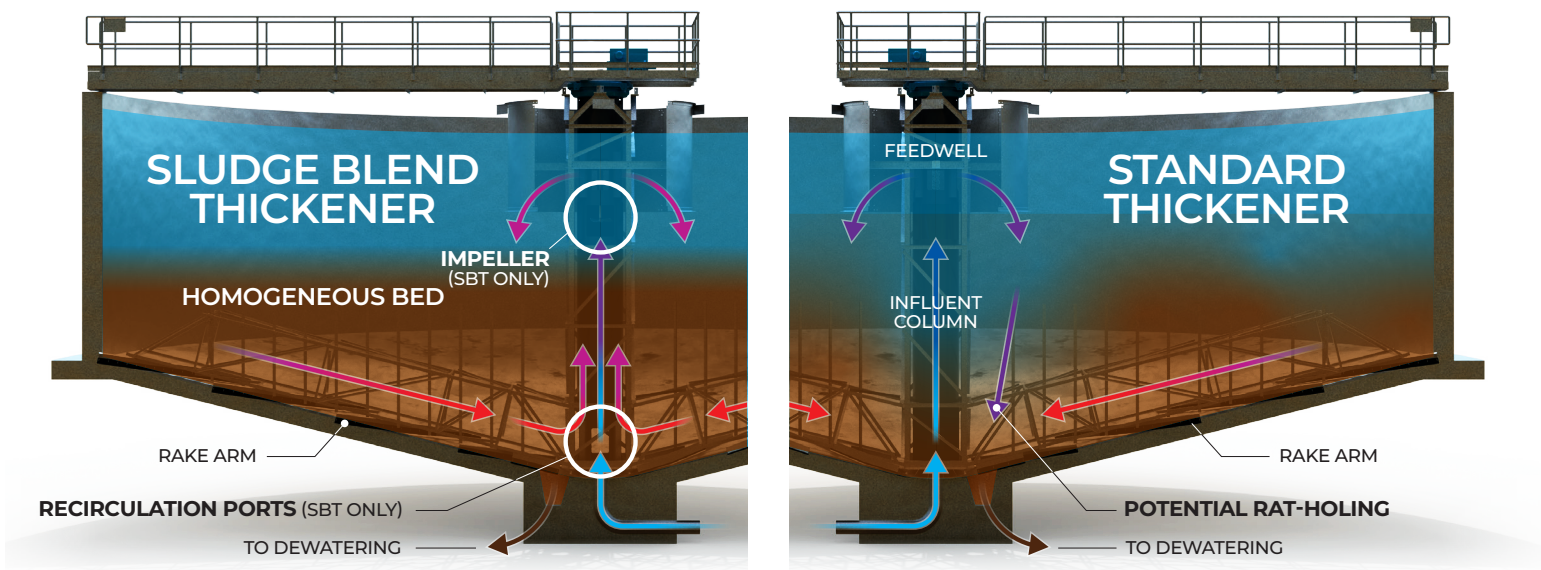
HOW IT WORKS

The influent flow to the thickener is brought up through the bottom as shown below (side feed can also be done) and continues up the column and out the influent ports inside the feedwell.

As particles settle, they are guided toward the center by the rake arms. An impeller located in the center column gently pulls the sludge back through the bottom center column ports, where it mixes with the influent, ensuring a homogenized sludge bed.



SIDE BY SIDE COMPARISON

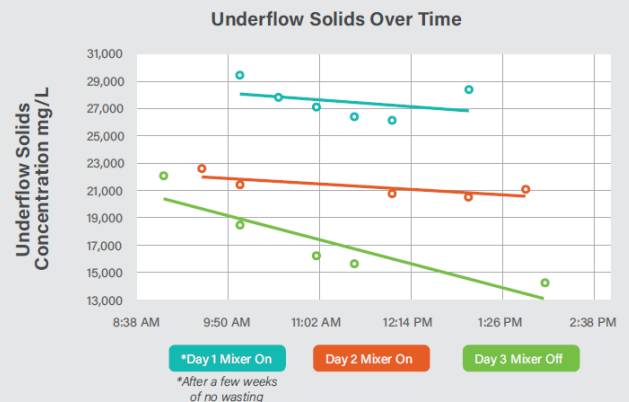


PROVEN PERFORMANCE

DATA FROM FIRST INSTALLATION AT EDINBURG, TX

The graph below illustrates the real-time Underflow Sludge Concentration being sent to the dewatering equipment. Notice how, with the Sludge Blend Thickener running with the mixer on (represented by blue and orange), the sludge solids concentrations remained consistently within an optimal range.

Conversely, when the mixer was off (operating as a standard thickener without recirculation), the sludge concentration dropped significantly over time. This clearly demonstrates the effectiveness of the Sludge Blend Thickener technology.



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