

ZICKERT Shark™

Compact Solids Removal Mechanism



WESTECH®

 **SWIRE WATER**

Solutions for Rectangular Sedimentation Tanks

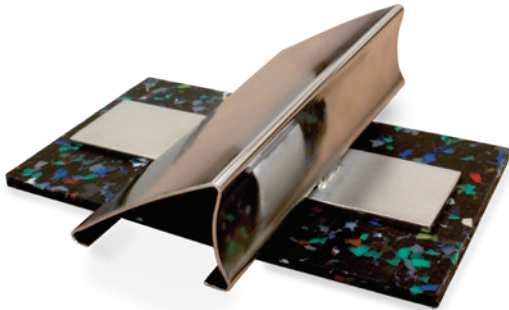
Quality with Experience

The ZICKERT Shark™ sludge scraper is specially designed for continuous sludge removal without disturbing the sludge blanket or interrupting the sedimentation process. Thousands of customers worldwide have seen the benefits of applying this system.



Hydrodynamically Designed

The transportation dynamics are based on the forward and return movement of the scraper blades. The concave faces of the blades transport the sediment toward the sludge pit or siphon pipes.



The mechanism is all stainless steel and rides on HDPE slide strips. Once installed, the mechanism is an integrated frame for adding strength and decreasing wear.

Simple to Install and Maintain

The ZICKERT Shark is simple to install and only requires two people for assembly. With four moving parts, required maintenance is significantly reduced.

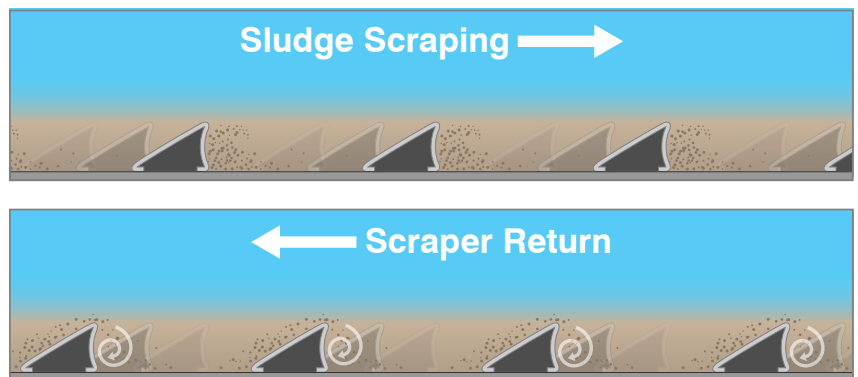


Drive Options

The scraper mechanism can be provided with an electric or hydraulic drive. Either drive option includes a protection device to prevent overload events.

Sludge Thickening

The oscillating motion of the scraper sections create a thickening effect for the solids. This motion increases the solids concentration while transporting the solids toward the sludge pit. It also reduces the volume of sludge to be pumped and dewatered.



The wedge-shape on the back of the blade and the increased speed of the return stroke allow for minimal disturbance of the sludge blanket.

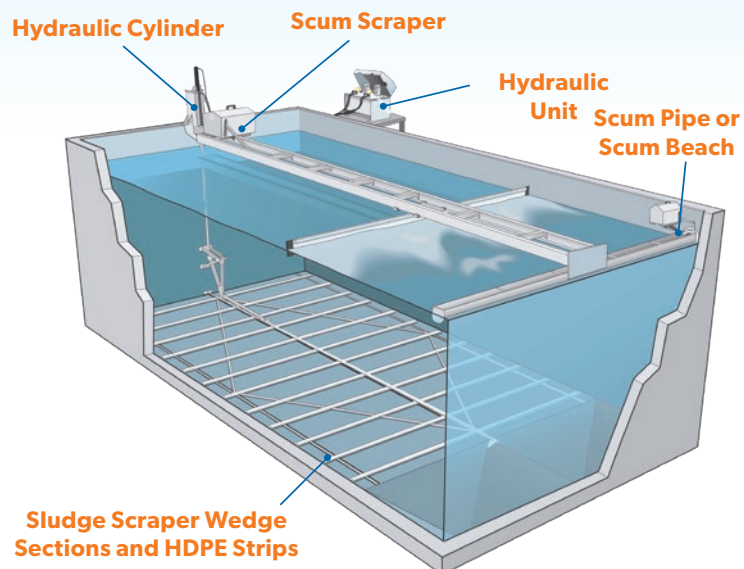
Easy to Retrofit Existing Tanks

The scraper mechanism provides the same results whether it is pushed or pulled. This flexibility allows several options when it comes to locating the drive unit.

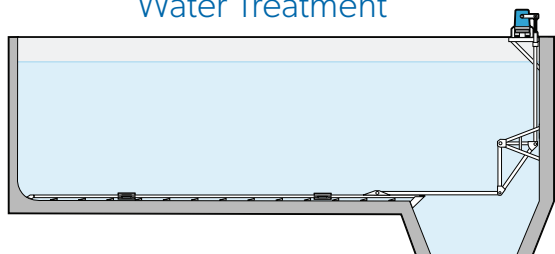
Additionally, the mechanism is fully customized to meet varying tank widths, lengths, and geometry. The oscillating motion of the mechanism allows the system to work around support columns that would otherwise obstruct a conventional clarifier.



The ZICKERT Shark can be adapted to meet widely varying needs for both municipal and industrial applications. Contact WesTech's sales team for design assistance.

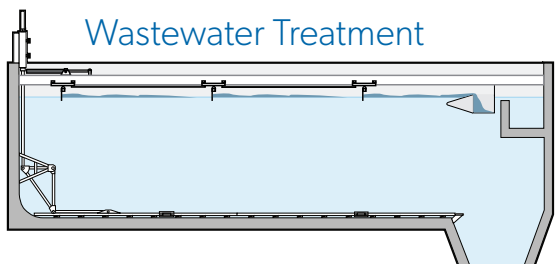


Water Treatment



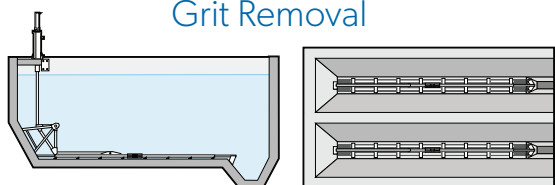
The ZICKERT Shark has been applied to numerous water treatment processes. The design of the mechanism provides a cost-effective stainless steel system. The mechanism can be set on a timer to allow for additional thickening of the chemical solids. The low profile of the mechanism makes it ideal when using plate or tube settlers.

Wastewater Treatment



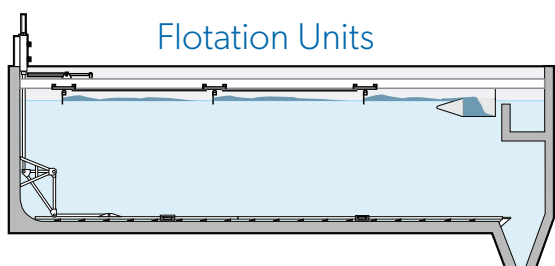
The ZICKERT Shark is ideal for primary and secondary clarifiers. The flexibility of the design makes it easy to eliminate the troubles of a chain and flight. The addition of the ZICKERT Scum Skimmer provides for scum removal over the entire surface of the clarifier.

Grit Removal



Due to the low profile and high strength of the ZICKERT Shark, the oscillating motion has proven to be effective for grit removal systems. The scraper mechanism is adaptable to many different layouts. When combined, the ZICKERT Shark Sludge Scraper and Surface Skimmer can be applied in aerated grit and grease removal systems.

Flotation Units

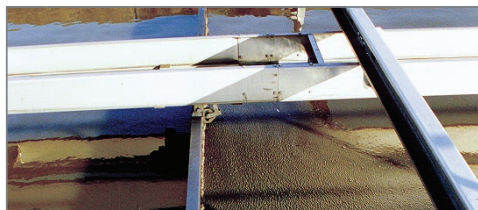


The effectiveness of the ZICKERT Scum Skimmer has proven to be a simple and reliable solution for dissolved gas flotation units and oil/water separators. The adjustable skimmer and float box provide the flexibility for solids removal. The ZICKERT Shark can be applied to pretreatment, thickening, or refinery processes.

A Complete Sludge Removal System

Scum Skimmer

The unique design of the ZICKERT Scum Skimmer is ideal for applications where surface scum occurs. The Skimmer provides for complete surface cleaning with each stroke.



Scum Pipe or Scum Trough with Beach

The ZICKERT Shark can be completed with a manual or automated rotating scum pipe. The operation of the ZICKERT skimmer device also allows for the use of a scum trough with a scum beach to minimize the dilution of surface solids.

Tank Cover

For covering the sedimentation tanks, the ZICKERT Shark can include an arched, low-profile PVC cover. The cover can be used in cold climates, for odor control, or to prevent algae growth.



Siphon Sludge Pipe

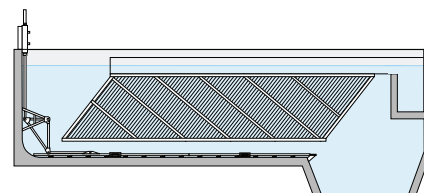
These siphon tubes make it easy to retrofit tanks. The differential head in the siphon trough pulls accumulated solids from the sedimentation tank without the need of cross-collectors or conveyors.

ZICKERT Shark Technical Specifications

Drive Mechanism	Electrical or Hydraulic
Slide Plates	HDPE 1000
Material Quality	304 Stainless Steel or 316 Stainless Steel

SuperSettler™

ZICKERT Shark is ideal for installations under plate settlers and tanks with obstructions.



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