

SuperSettler™

High-Rate Sedimentation Technology



WestTech®

 **SWIRE WATER**

High Rate Settling

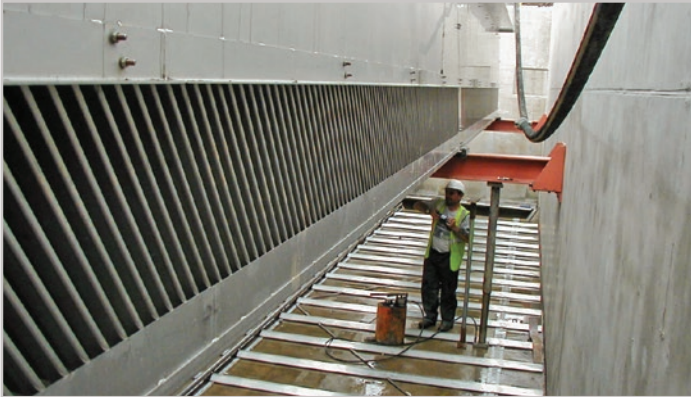


WesTech's SuperSetter™ is the world's leading high rate sedimentation system

Our inclined plate settlers, pioneered by Nordic Water Products, are designed to maximize settling efficiency with minimal footprint. With over 35 years of experience and over 6,000 installations in municipal and industrial treatment plants, WesTech's equipment will meet or exceed your application needs.

We Deliver Options

At WesTech, we understand that water quality and process needs vary from location to location. Our engineers have developed standard models with multiple options which can be tailored to your application. WesTech provides full support from design to installation and through operations and optimization.



Standard Materials and Configuration

Plates: SS, PVC, and FRP

Frames: SS and FRP

Tanks: SS and FRP

Plate Spacing: 50, 80, and 100mm

Plate Length: 2.5m

Equipped to Perform in Any Application

Our plate settlers provide a high degree of separation and clarification performance in a wide variety of water treatment applications.

Municipal Applications

- **Filtration Pre-treatment**
- **Backwash Water Treatment**
- **Primary and Secondary Settling**
- **Tertiary Treatment**

Industrial Applications

- **Metal Hydroxide Wastewater**
- **Industrial Process Water**
- **Pressure / Vacuum Filtrate Clarification**
- **Specific Minerals Applications**

Process Flexibility

The SuperSettler™ is available in four standard versions and can also be customized to fit your equipment requirements. Whether used in a concrete basin or steel tank, equipped with a sludge discharge scraper or combined with flocculation, the SuperSettler™ will meet your specific process and application needs.

Model LS Plate Settler

The LS model plate settler is available in eight standard sizes. It features our specially engineered plate pack combined with a conical sludge hopper in a single tank. Optional items include a flash/floc tank with mixers and a sludge scraper.

Model LT Plate Settler

The LT model plate settler is available in six standard sizes. Each integrates an inclined plate separator with a sludge thickening tank equipped with a sludge scraper. These units are engineered for flows and applications with high solids content and thickened underflow. Optional items include a flash/floc tank with mixers.

Model LP Plate Pack Assembly

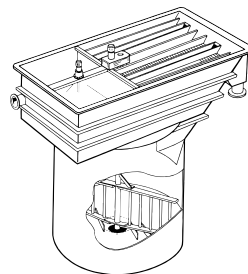
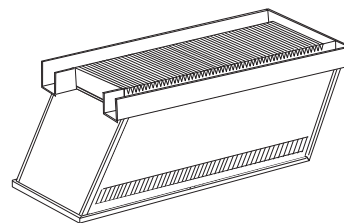
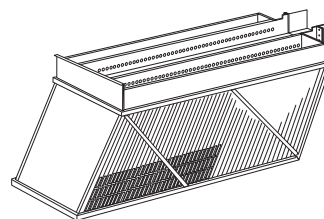
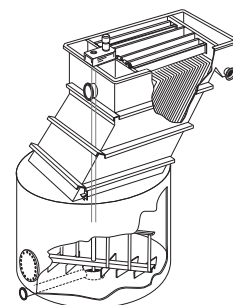
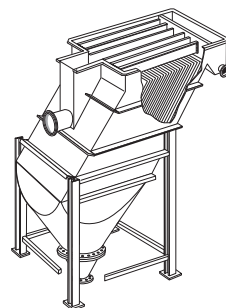
The LP model plate pack comes in six standard sizes. These plate packs feature completely submerged plates with a central collection launder. Launderers come with submerged orifices or v-notch weirs and the option of embedment flumes. The versatile LP model is able to fit into most sedimentation basins.

Model LPS Plate Pack Assembly

The LPS model plate pack has launders located on the sides of the plates and incorporates v-notch weirs. The plates extend above the water surface and are individually removable. This is our most economical option per square foot of projected area.

Customized Models

Along with our standard line of inclined plate settlers, we provide customized models to fit your specific application in terms of capacity, dimensions, and materials of construction.



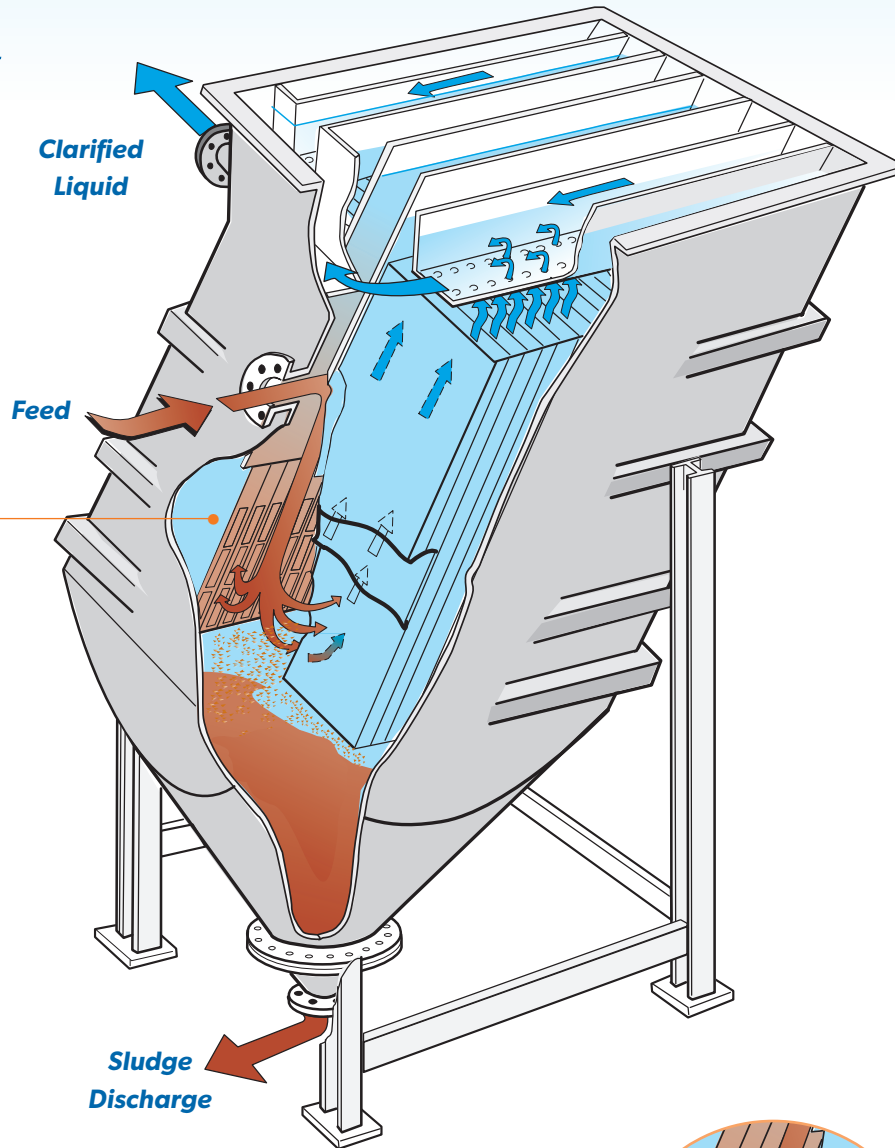
Stand-Alone Units

Plate Packs

Custom

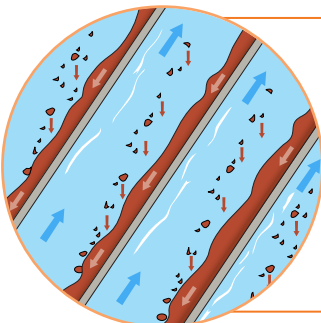
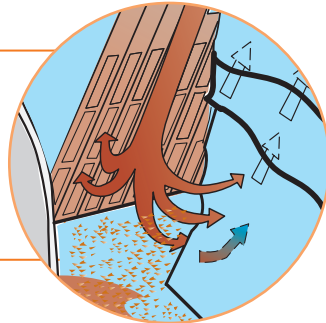
SuperSettler™

Stand-Alone Unit



UNINTERRUPTED SETTLING

By allowing the liquid to enter the plate assembly through the side, rather than underneath, the SuperSettler™ minimizes disturbance of settled material.

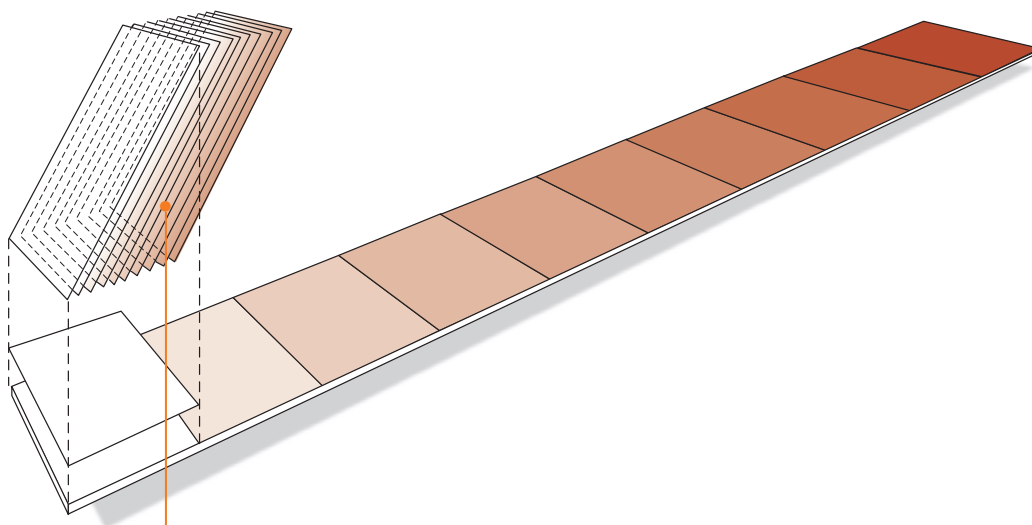
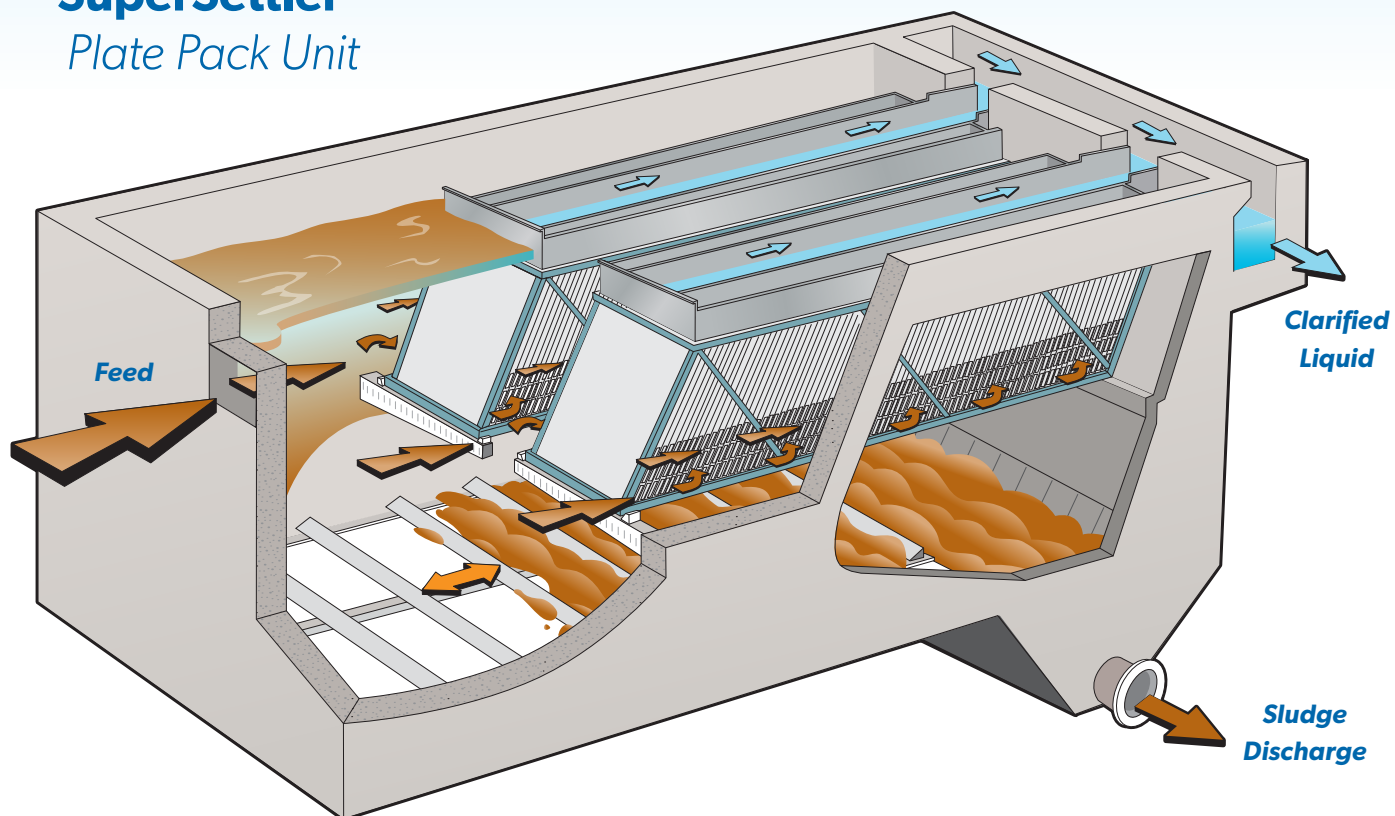


ENHANCED SEPARATION

Openings at the top of the plate assembly are designed to create a pressure drop across the collection channels, ensuring that the flow is uniformly distributed between the plates. This patented flow control feature enhances separation performance by utilizing the full area of the plates.

SuperSettler™

Plate Pack Unit



SETTLE WITH LESS SPACE

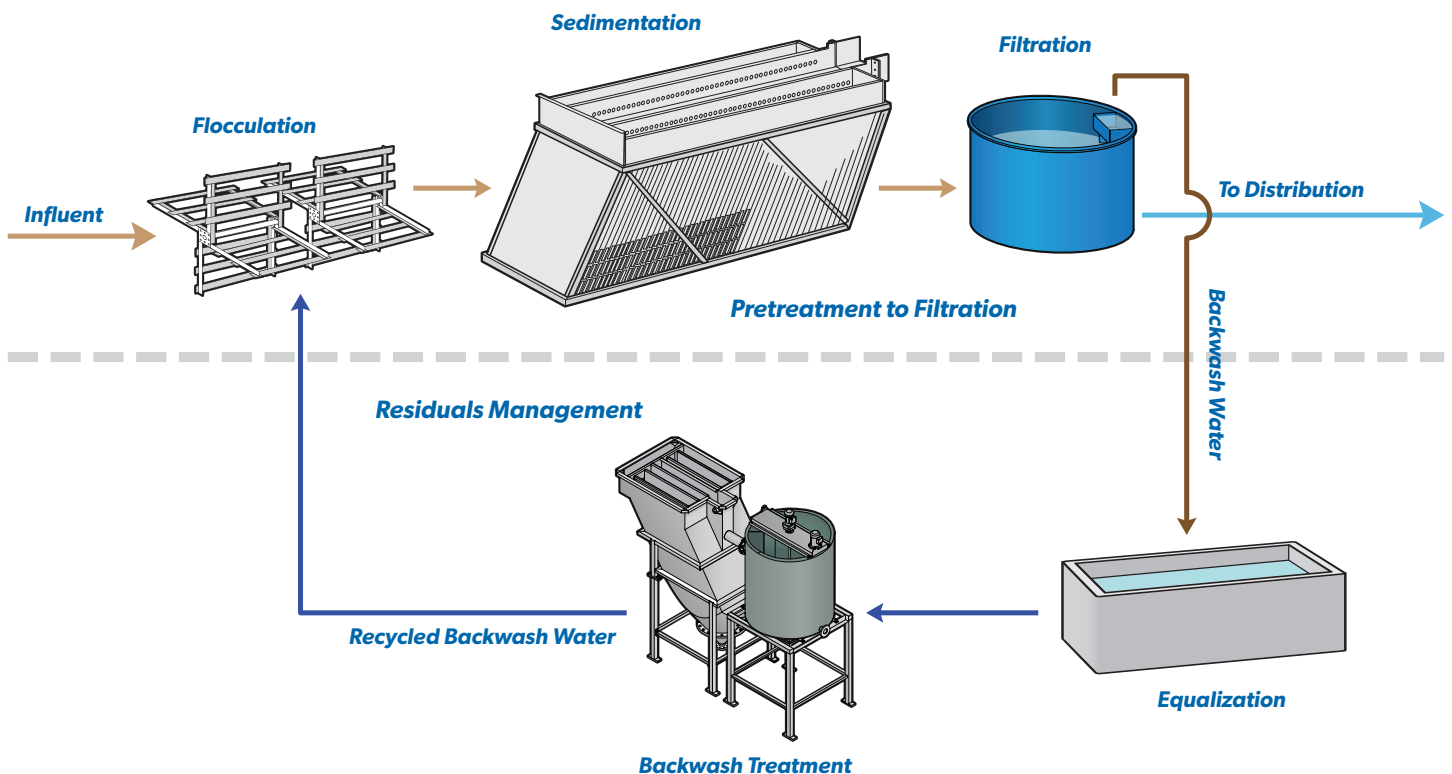
Designed for facilities with limited space, the SuperSettler™ features a footprint 1/10 the size of a traditional settling tank.

Drinking Water



Pretreatment to Filtration

LP and LPS model SuperSettler™ plate packs are an excellent pretreatment option prior to filtration. Utilizing inclined plates minimizes overall basin surface area for new installations and maximizes overall capacity of existing basin upgrades.



Residuals Management

The LS and LT stand-alone SuperSettler™ units are a smart choice for spent filter backwash water treatment. These compact systems fit well into any site and include options for chemical mixing, flocculation, and sludge thickening.

Wastewater Treatment



SuperSettler Tertiary Treatment at Rosenholms WWTP, Sweden in operation since 1977

SuperSettlers™ have been successfully used in primary, secondary, and tertiary wastewater clarifiers for decades. Extensive pilot experience and hundreds of installed units have proven the SuperSettler™ as a viable option for increasing capacity and effectiveness of sedimentation basins for wastewater treatment applications.

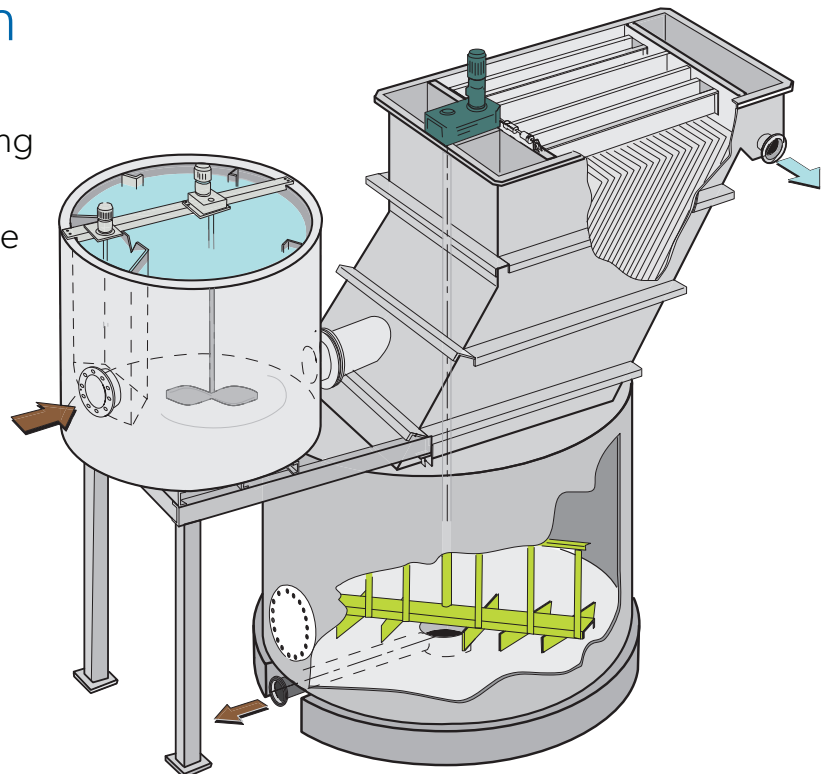
- **Upgrade Existing Rectangular Basins**
- **Increase Plant Capacity**
- **Reduce Overall Settling Basin Footprint**

| | | Influent | Effluent | % Removal |
|---|-------------------|----------|----------|-----------|
| Rosenholms WWTP, SE Tertiary Treatment With Chemicals | Phosphorus (mg/l) | 4.0 | 0.35 | 91 |
| Caister WWTP, UK Primary Settling Without Chemicals | TSS (mg/l) | 339 | 124 | 63 |
| | COD (mg/l) | 613 | 307 | 50 |
| | BOD (mg/l) | 237 | 113 | 52 |

Industrial Configuration

The SuperSettler™ can be configured for industrial applications to meet demanding environments. These configurations provide exceptional settling performance for numerous industrial processes.

- **Compact Package Unit**
- **Flocculation Tank with Mixers**
- **Sludge Scraper**
- **Plate Packs in Circular Clarifiers / Thickeners**
- **Sludge Hopper or Flat Bottom**
- **Carbon Steel Tanks Available**





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