

SuperSettler™ Inclined Plate Settler

Product and Application Summary

Overview: The efficient design of the SuperSettler™ inclined plate settler utilizes lamella plates and shallow depth sedimentation to minimize the clarifier footprint. Pioneered by Nordic Water Products, the SuperSettler is available in both inclined plate packs and stand-alone settler units.

Our inclined plate packs are designed for installation on support beams in rectangular concrete basins. After the inlet flow enters the basin it is directed to inlet ports on the side of each inclined plate. Outlet launders at the top of the plate packs collect the clarified water as solids settle out on the plates and then the basin floor. The ZICKERT Shark™ is an ideal sludge removal device for SuperSettler basins.

Stand-alone units are designed as complete package units for smaller flow rates. The inclined plates are installed in stainless steel tanks with either a hopper or a sludge thickening bottom. Flocculation tanks and mixers are also available.

Package SuperSettler clarifiers are excellent for small flows (less than 700 gallons per minute) and compact footprints. Most of our installations are used for filter backwash water treatment. WesTech is partnered with Nordic Water Products –the original inventors of lamella technology.

- Applications:**
- Backwash Water Treatment
 - Pretreatment
 - Surface Water Clarification
 - Phosphorus Removal
 - Numerous Industrial Applications

Application Range: The packaged SuperSettler is generally suitable for flows up to 700 gallons per minute. For larger flows plate packs can be placed in a concrete basin.

- Misapplications:**
- Sludge Thickening
 - Lime Softening
 - Oil/Water Separation
 - Tilted Plate Interceptor (TPI)
 - Corrugated Plate Interceptor (CPI)
 - Horizontal Plate Clarifier
 - DAF

- Advantages:**
- Small footprint
 - Pre-assembled units = low installation cost
 - Comes with integral rapid mix + flocculation
 - Great package unit for backwash treatment
 - Standard sizes from 50 to 600 gpm

- Installations:**
- 30 as WesTech Engineering
 - 85 as General Filter (Siemens/Zimpro)
 - >5000 by Nordic Water Products (WesTech is the North American distributor for Nordic WP)

- Configurations:**
- Plate Pack “PSP” – used for large flows in concrete basins
 - Conical hopper “PSS” – hopper scraper is optional
 - Thickener bottom “PST” – for thickened underflow
 - Flocculation tank with integral rapid mixer
 - Accessories: Lids, walkways, ladders, control panel, instrumentation, hopper scraper, chem feed.

FAQ's: What are the standard sizes?

Model	Projected Area	Nominal Flowrate
PSS15, PST15	161 ft ²	50 gpm
PSS25, PST25	269 ft ²	90 gpm
PSS40, PST40	430 ft ²	140 gpm
PSS60, PST60	646 ft ²	215 gpm
PSS80, PST80	861 ft ²	290 gpm
PSS100, PST100	1076 ft ²	360 gpm
PSS120	1292 ft ²	430 gpm
PSS165	1776 ft ²	590 gpm

What about larger units?

Larger units are custom built based on the General Filter (Zimpro) design. Larger non-standard sizes are more difficult to ship, and require extensive field welding and assembly, resulting in increased installation costs, whereas the standard units are almost entirely shop assembled.

What is the material of construction?

Standard:

- 304 stainless steel
- 316 stainless steel

Custom:

- FRP
- Polypropylene
- Painted carbon steel

Images:

