ionbeng

Innovative Solutions, For A Better Tomorrow.

Inclined Plate Settler/Clarifier

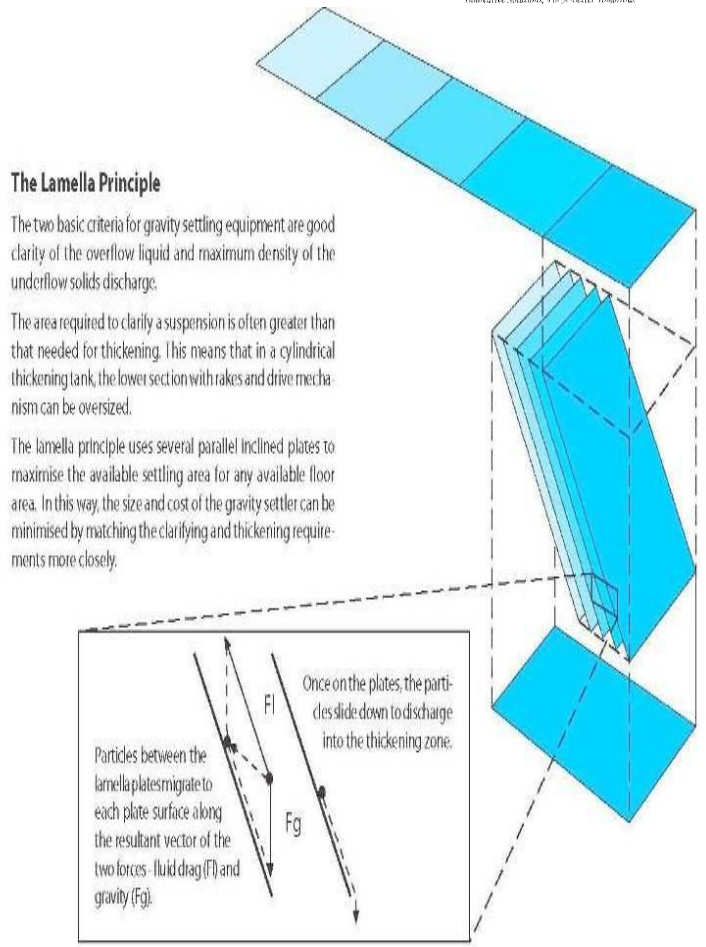
Inclined Plate Settler

The Inclined Plate Settler (IPS) consists of two main compo nents, the upper tank containing the lamella plates inclined at 55° and the lower conical or cylindrical sludge tank.

The feed for the IPS enters through vertical chambers on either side of the lamella packs and passes into each plate gap through slotted feed ports. Clarification takes place above the suspension inlet so there is no mixing of the clarified fluid with the incoming feed.

Above each pack is a full-length overflow launder fitted with throttling holes to create a slight hydraulic back pressure on the incoming feed stream. This method of feed control guaran-tees equal distribution to all lamella chambers with minimum turbulence at the entry points.

The solids settle onto and slide down each lamella plate to the sludge tank where the solids are further thickened and compressed with the assistance of the raking system.



Advantages

- Heavy duty construction of tank, sludge hopper and lamella plate packs, as well as the rake system. Rake lifting mecha-nism as option
- Positioning of specifically designed feed ports for optimum ratio between clarification and thickening area
- Wide spacing of lamella plates to handle high density feed pulps and coarse solid particles
- No short circuiting or surface turbulence
- Integrated flocculator with variable speed stirrer

Lower installation costs

- Delivered as one-piece unit or in prefabricated sections

Product Presentation

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Lower installation costs

- Delivered as one-piece unit or in prefabricated sections
- Smaller foundations
- Less floor space
- Square outline for easier planning and construction

Flexibility for plant changes or extensions

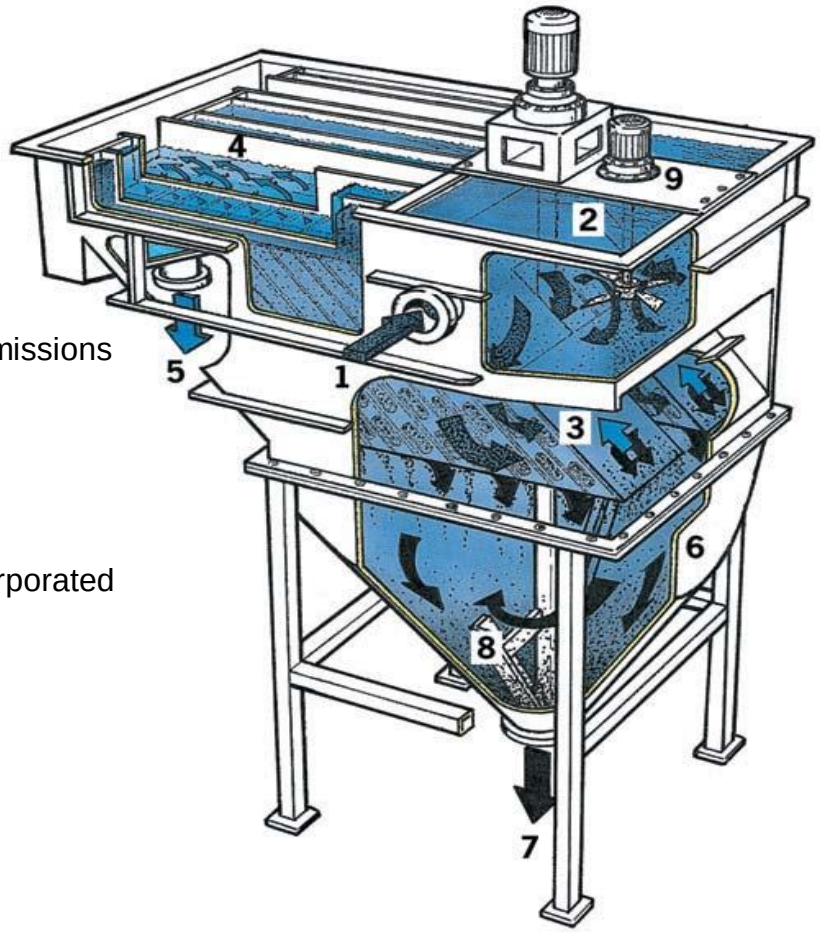
- Can be installed in any system
- Easy to relocate to adapt to process changes

Simplified in-plant installation

- Shorter pipework runs
- High level installation for gravity feed to downstream processes
- Easier supervision

Product Presentation

1. *Feed inlet*
2. *Flocculation chamber*
3. *Lamella plate packs*
4. *Overflow launders*
5. *Overflow outlet*
6. *Sludge hopper*
7. *Underflow outlet*
8. *Rake with drive unit*
9. *Flocculation agitator*



Small internal volume and surface area

- Easily insulated against heat loss or toxic fume emissions
- Evaporative losses are minimized.

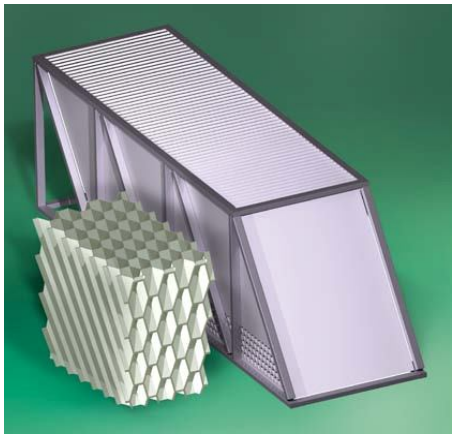
Simple construction of sheet steel and standard profiles

- Special materials and coatings can easily be incorporated
- Easy to maintain

Product Presentation

Customer Support Services

- Water and wastewater evaluation
- Design and construction
- Installation
- Start-up assistance
- Training
- Field service



Efficient Design

Ionberg clarifiers and settling tanks are custom designed to meet and exceed the specific design flow and removal efficiencies required for each of our customer's applications and processes. **Ionberg** g can also provide a process simulation for difficult or unique applications. We will individually analyze each customer's liquid, flows, and process to determine design parameters for every installation.

Ionberg is a single source solution for highly durable and efficient wastewater and clean water technologies and systems. Our team of engineers and certified tradesmen can design, fabricate, assemble, and quality test our equipment under one roof. This reduces cost and provides a seamless solution for virtually any clarification/ sedimentation application.

Product Presentation

Construction Features

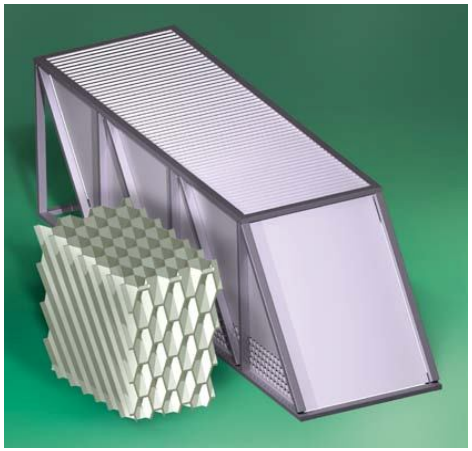
•**Inclined Plates** – Constructed from PVC, stainless steel or FRP for potable, wastewater and industrial applications

•**Tube Materials** – Potable grade PVC for water treatment applications

•**Tanks** – Stainless steel, carbon steel, FRP, plastic and concrete

•**Launder** – Inboard, outboard, or radial launders available for effluent collection

• **Weir** – V-notch adjustable weirs will be



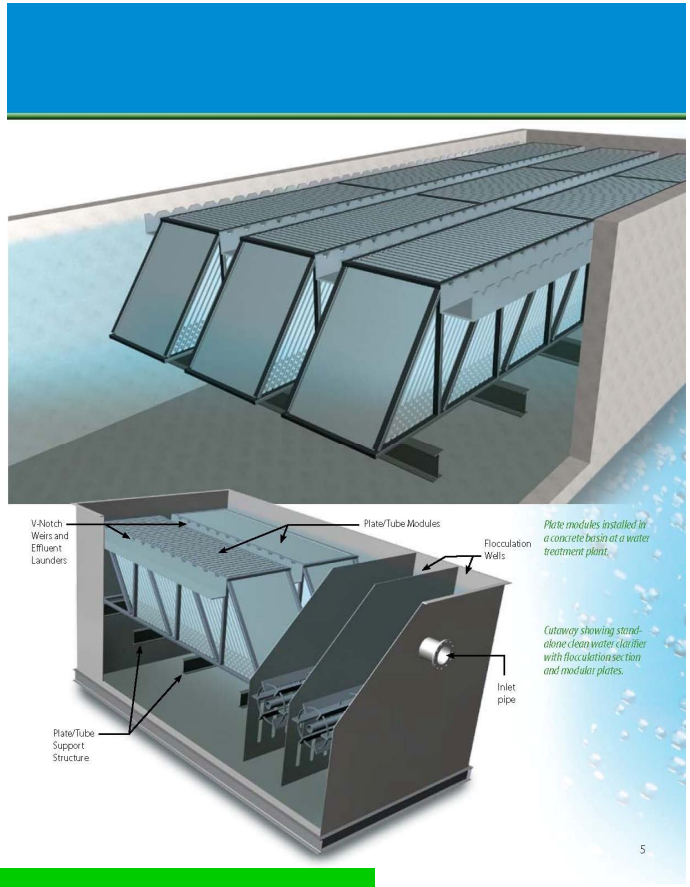
Adding inclined settling surface technology to an existing clarifier can increase water treatment flow by as much as 75%.

- **Walkways, Railing & Stairways** – Built in-house according to OSHA and Indian standards
- **Sludge Removal** – By gravity drain, suction pump, drag conveyor, screw conveyor, or application
- **Flocculation Mechanisms** – Drives for impellers, paddle wheels, and other mechanisms are conservatively selected to handle even the most demanding loads
- **Complete Electrical Controls** – For stand alone operation or connection with a plant's centralized control or monitoring system

Product Presentation

Ideally Suited For

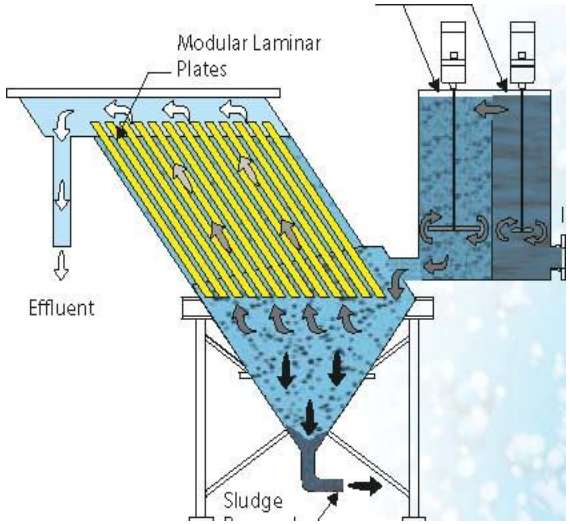
- Chemical processing
- Coolant systems
- Food processing
- Foundry operations
- Glass plant operations
- Industrial waste management
- Metal Working
- Oil refining
- Paper making
- Plastic manufacturing
- Plating and coating processes
- Steel processing
- Storm water systems



Product Presentation

Features

- Wide range of construction materials including mild steel, specialty coatings, stainless steel, fiberglass, plastics, and other materials to meet specific customer needs.
- No moving parts in the clarifier section reduces equipment cost and practically eliminates operating cost when compared with a centrifugal separator.
- A unique modular design allows easy removal of individual laminar plates from the clarifier for inspection or complete plate modules if desired.
- Complete electrical controls are available to meet customer requirements.
- Filter media not required.
- Capacities from1KLpH to 5,00,000KLpH with a single unit.
- Pyramid bottom, sludge thickener, drag conveyor, screw conveyor and many other sludge handling options available.



Product Presentation