

# **INDION®** Lamella Clarifier

### The big advantage of being small

INDION Lamella Clarifier provides an effective answer for clarification of water and waste water.

The Lamella Clarifier achieves solid-liquid separation by directing the liquid between a series of inclined plates called lamella. The settling surface of each plate is equivalent to its horizontal projection. Lamellas are normally spaced approx. 50 mm apart, with the result that large settling surfaces are concentrated within a relatively smaller footprint.



Stacking the inclined plates results in the separator having up to ten times the clarification area of a conventional circular settling tank occupying the same floor space. In other words, for the same liquid flow, the lamella clarifier would occupy 1/10<sup>th</sup> of the floor area of a conventional clarifier.

Standard models are available in different sizes based on flow rates and settling area.

#### **Features**

- Flow entry: The flow enters from both sides of the plate. Distribution and entry velocities are minimum to optimise the hydraulic flow regime, resulting in full plate utilisation, maximum efficiency and better effluent quality.
- Weir take-off: A weir launder provides an effective weir length. The weir has orifices on either side of the plates.



- Removable plates: Individual plates are easily removable even during operation, making the unit very simple to maintain, without shutdown. The design offers flexibility to handle changes in influent characteristics.
- Hopper arrangement: Several options are available for sludge storage and its further disposal. The standard arrangement is a hopper bottom with a structural support frame. The second option is to mount the lamella clarifier on top of a thickener to achieve higher solids concentration & higher sludge consistency.

### **Advantages**

- The design ensures laminar, stable flow and excellent effluent quality
- Modular design
- Occupies 1/10<sup>th</sup> of the space required by conventional clarifiers
- No moving parts, easy to maintain
- The Material of Construction (MOC) can be mild steel or Reinforced Cement Concrete (RCC) depending on the size
- The plates can be lifted easily and cleaned without operation shutdowns

## **Applications**

- Ash/scrubber waste treatment
- Brine clarification
- Clarification of water
- Coal and other mineral separation
- Filter backwash water recovery
- Food and dairy processing and waste treatment
- Iron removal
- Metal hydroxide separation
- Mill scale separation
- Municipal water and waste treatment
- Phosphorous acid waste treatment
- Plating and finishing waste treatment
- Semi-conductor process waste treatment

These are the major applications. However, INDION Lamella Clarifier can be used in almost every industry for solid-liquid separation. Laboratory & pilot plant capabilities and trained technical experts ensure the optimum size of INDION Lamella Clarifier to suit your requirements.



Installation in India of 2 x 100% Lamella Clarifiers with flocculation tanks. Each clarifier is rated for a maximum flow of 240 m $^3/h$ 

To the best of our knowledge, the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional / branch offices for current product specifications.

**INDION**<sup>®</sup> is the registered trademark of Ion Exchange (India) Limited.



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