

KROFTA LAMELLA COUNTER-FLOW CLARIFIER

KROFTA's INCLINED-PLATE LAMELLA CLARIFIERS ARE DESIGNED FOR THE REMOVAL OF SETTLEABLE SOLIDS FROM WATER. COMPLETELY LAMINAR FLOW CONDITIONS ARE ESTABLISHED ACROSS THE PLATEPACK MEDIA WHILE THE WATER FLOWS FROM INLET TO OUTLET SIDE FOR FAST SOLID SETTLING.



EFFICIENCY

We Guarantee minimum 90% reduction in Total Suspended Solids. No moving part, no energy required with almost no maintenance.



DESIGN

We design Lamella Clarifiers as per the flowrate & settling velocity. Very Compact design, saves more than 85% of space compared to conventional sedimentation tanks



EXPERIENCE

Vast expertise & more than 38 years of experience with 100s of Industries references



RESEARCH

Highly qualified Research & Development team for regular technology & equipment enhancement

NEW KROFTA LAMELLA CLARIFIER

- ENGINEERING & DESIGN
- FABRICATION & INSTALLATION
- START-UP & COMMISSIONING

ABOUT KROFTA ENGINEERING LIMITED, INDIA

KROFTA ENGINEERING LIMITED, INDIA is a world leader in Lamella Clarifiers, Oil-Water Separators & DAF Technology with vast experience of more than 38 years & expertise in water & wastewater treatment, with Full-Fledge **STATE OF THE ART** manufacturing facility near New Delhi.

KROFTA India have over **1000 installations** of our equipments successfully operating in all diverse industrial segments.



[/company/kroftaengineering](https://www.kroftaengineering.com)

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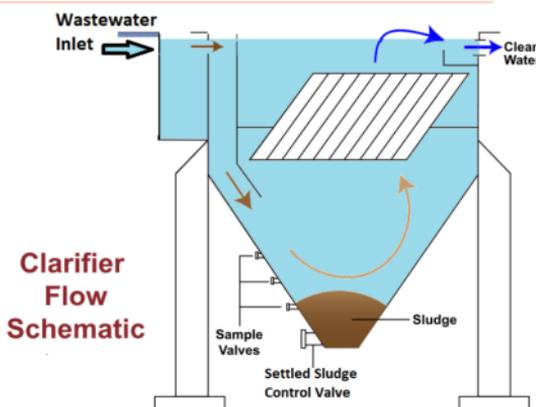
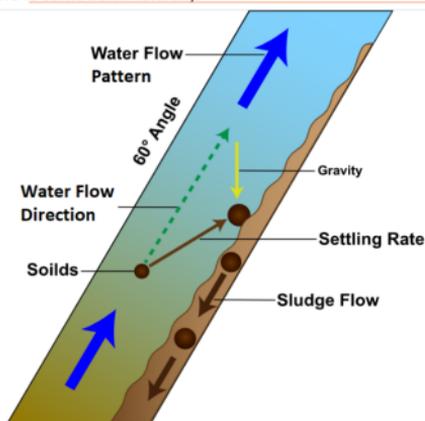


PRINCIPLE & PROCESS DESCRIPTION OF LAMELLA CLARIFIER



Inclined Plate Lamella Clarifiers are designed to remove suspended solids from water. These clarifiers are used in a wide variety of water & wastewater applications. Lamella clarifiers are Counter-flow plate settlers. Water containing suspended solids, flows in vertical direction between equally spaced plates in platepacks. The gap between two plates varies in between 40-100 mm depending upon the concentration of suspended solids to prevent clogging in platepacks. The inclined plates provide a large projected settling area in a compact form. This technology is greatly beneficial compared to conventional clarifier because of the **space savings, settling efficiencies, and the reduced cost of construction.**

Wastewater flows into the Clarifier at the top of the tank. Depending upon the type of wastewater application **Coagulants** and **Flocculants** are added to improve the settling velocity. **Coagulants**, coagulates the wastewater containing suspended solids by adjusting the charges. **Flocculants** binds-up all the coagulated suspended solids & improves the settling & clarity. This will make the solids heavier and easier to settle. The coagulated & flocculated wastewater flows via baffle at the bottom of the unit. This is where the settling process begins. Water flows up through the plates while the solids settle down at the bottom of the clarifier. **Total Suspended Solids (TSS)** will naturally settle down over a period of time due to gravity, but this process is speed up and improved by having **Inclined Plates**. Water flows up the plate at a 50-60° angle. Gravity will force the solids to settle onto the plates. The particles collect on the plates will become heavier due to **particle agglomeration** & slides down onto the plates & then to clarifier bottom hopper. This process creates a counter flowing pattern, where the solids are separated from the water into two separate zones. The water flows in the upward direction zone & the sludge flows in the downward direction zone. This method reduces drag and friction creating a faster settling process than if the solids were to settle down naturally.



APPLICATIONS OF LAMELLA CLARIFIER

POWERPLANT, RIVER WATER TREATMENT, POST BIOLOGICAL TREATMENT, MEMBRANE FILTERS PRETREATMENT, MUNICIPAL WASTEWATER TREATMENT, PROCESS WATER, MINES, GROUNDWATER, ETC

STEEL, STAINLESS STEEL & CONCRETE ARE PRIMARY MATERIAL OF TANK CONSTRUCTION

