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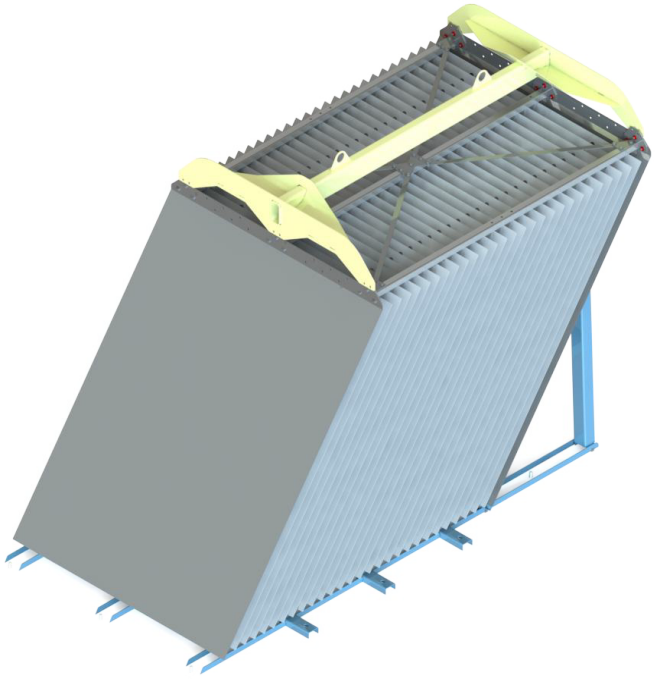
ECOLAM

LAMELLA SEPARATOR

PRODUCER
NEOWATER technologies



HIGH PERFORMANCE, MINIMAL FOOTPRINT

The lamella sedimentation technology reduces the required structural footprint to as little as 10% of that needed for traditional sedimentation tanks. This makes it an excellent choice for increasing the capacity of existing water treatment plants or for installations where space is limited or costly.

The ECOLAM model is available in a range of standard sizes to meet diverse needs. It can be an independent lamella separator with a conical sludge hopper, plate packs for horizontal and radial sedimentation tanks, or a compact (containerized) mobile unit.

ECOLAM lamella systems form the foundation of sustainable and efficient water treatment, making them essential for a wide range of industries.

MAIN FEATURES AND APPLICATIONS:

ECOLAM systems deliver exceptional performance across a wide range of water treatment tasks. Designed with a focus on efficiency and versatility, they are ideally suited for:

- **Pre-Treatment:** Preparing water for subsequent processes.
- **Backwash Water Treatment:** Efficient handling of filter backwash streams.
- **Wastewater Settling:** Ensuring effective separation in sedimentation processes.
- **Tertiary Treatment:** Enhancing water quality during advanced treatment stages.
- **Sludge Thickening:** Concentrating sludge for easier handling and transportation.
- **Industrial Process Water:** Supporting water recycling and reuse in various industrial processes.
- **Chemical Industry:** Purification and thickening during chemical production processes.
- **Metallurgical Industry:** Removal of mill scale and water recovery at rolling mills.
- **Power Plants:** Treating water from dust scrubbers to meet strict recirculation standards.
- **Electroplating Wastewater Treatment:** Efficient management and treatment of complex wastewater.
- **Metalworking:** Treating wastewater from surface treatment processes.
- **Agricultural Industry:** Recirculating water during potato and vegetable processing.
- **Pulp and Paper Industry:** Reliable clarification for paper production operations.

FEATURES AND BENEFITS

Advanced Plate Design for Improved Sedimentation

- Significantly higher flow capacity with minimal footprint compared to traditional sedimentation systems.
- Superior settling performance without the need for additional space.
- Excellent hydraulic design ensures uniform flow distribution across all plates, maximizing efficiency.

Proven Rational Design

- Efficient solid-liquid separation with minimal or zero energy consumption.
- Simple design with few or no moving parts ensures reliable operation and an extended economic lifespan.
- Customizable to meet specific project conditions and environmental requirements, with material options including stainless steel, fiberglass-reinforced plastic (FRP), and others.

Production

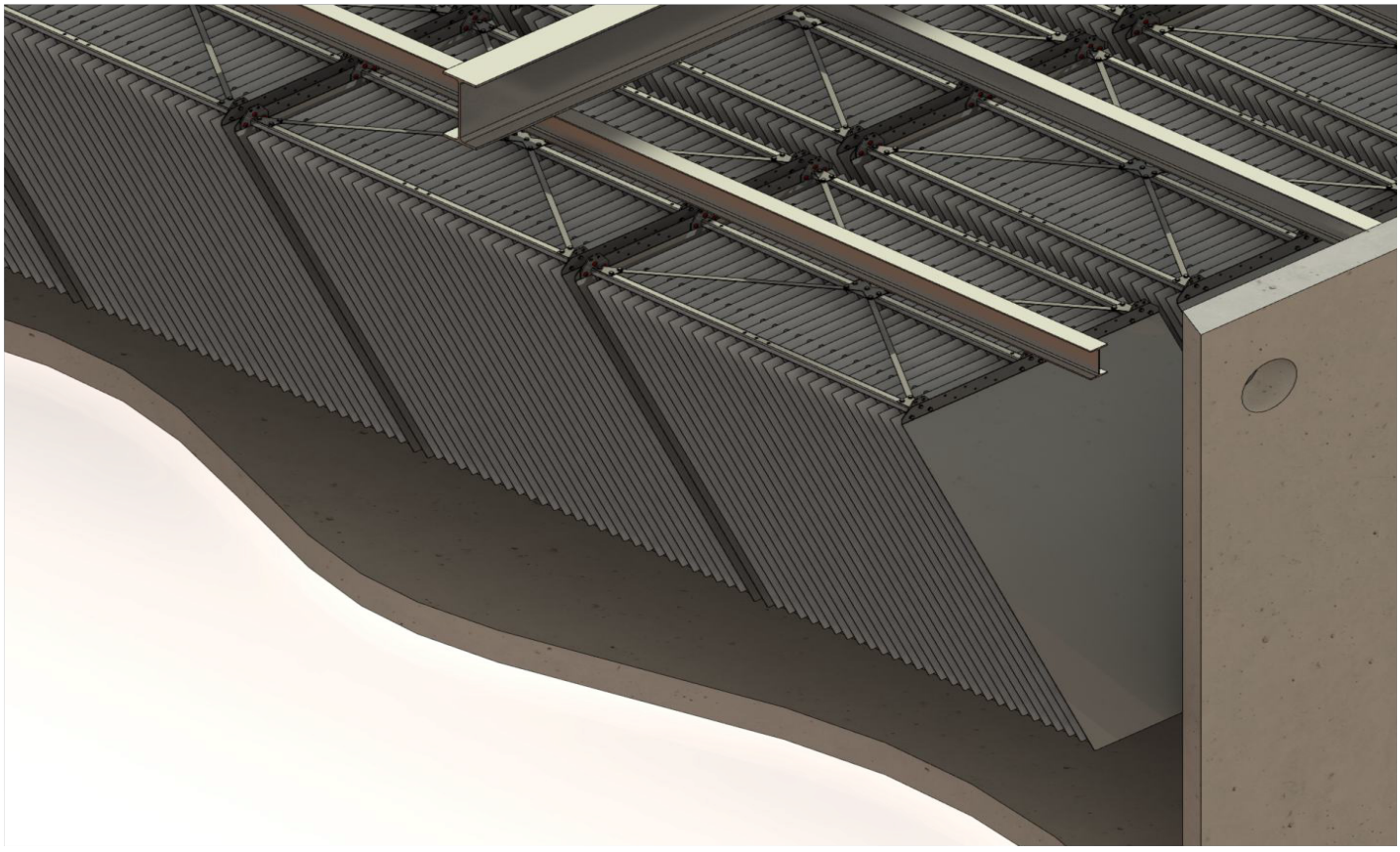
Plate packs are manufactured in accordance with the EU Machinery Directive 2023/1230, including European standards EN ISO 12100, Parts 1 and 2, and EN ISO 14121-1. Production also complies with European standards EN287, EN ISO 14731, and EN ISO 1567. Before delivery, the equipment is inspected to ensure all dimensions meet the highest standards.

Surface Treatment

All stainless steel components are pickled and passivated.

Transportation and Handling

The module is transported in a horizontal position on a truck or in a container. Unloading and installation can be performed using a crane. Lifting eyes are provided to facilitate installation.



ECOLAM F40 / 120 / 180

General Information

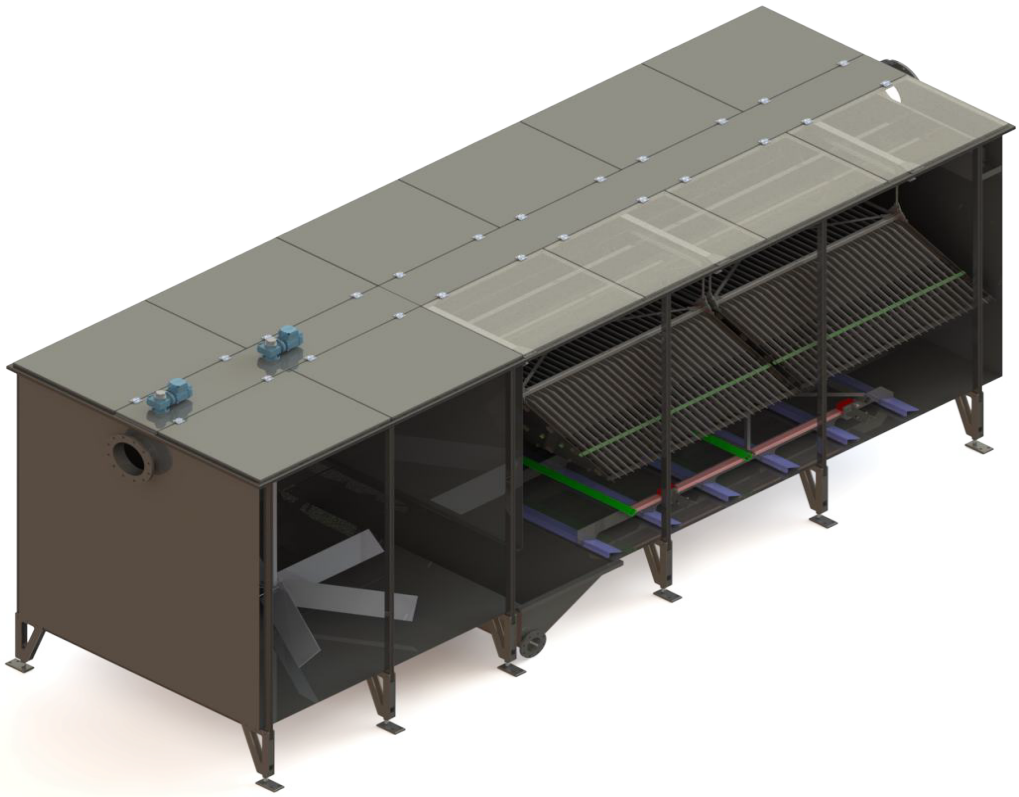
The module consists of a rectangular separator tank with a bottom hopper. The internal components of the separator tank include a flocculation chamber, settling plates, and trays for collecting the clarified liquid.

The tank is equipped with connections for the inlet and outlet of the clarified liquid. The separator can be integrated with a flocculation chamber, which is equipped with an internal agitator and a rapid mixer.

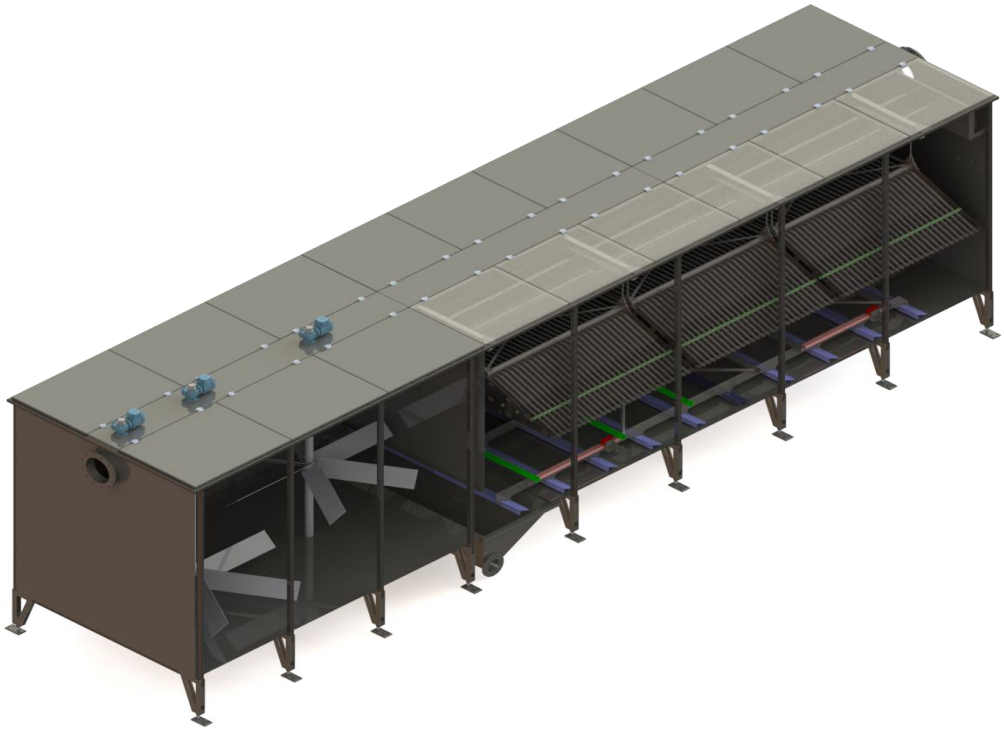
The module's support legs are fitted with plates that have adjustable bolts for leveling the separator. ECOLAM F120 and F180 models are equipped with easily removable support legs to ensure safe and reliable transportation.

ECOLAM F40

ECOLAM F40 / 120 / 180



ECOLAM F120



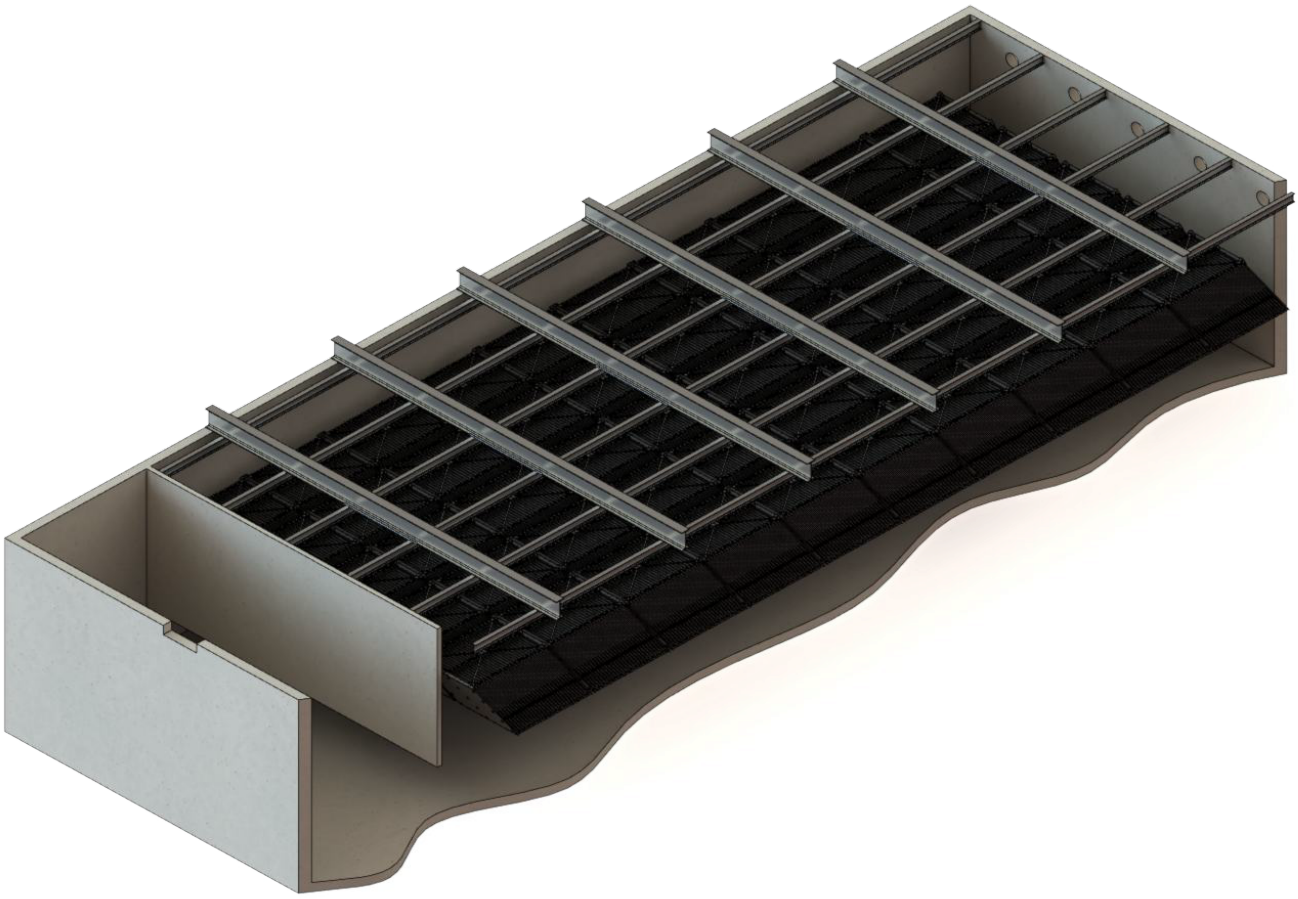
ECOLAM F180

ECOLAM B40

General Information

The ECOLAM plate pack is a counterflow sedimentation unit designed for installation in concrete or steel tanks. The device consists of a rigid, self-supporting steel frame into which sedimentation plates are separately installed.

Clarified water is discharged into collection troughs, ensuring maximum settling area with minimal height. Plate packs can be easily combined and installed in one or more rows, providing the required settling area and maximizing the efficient use of the tank.

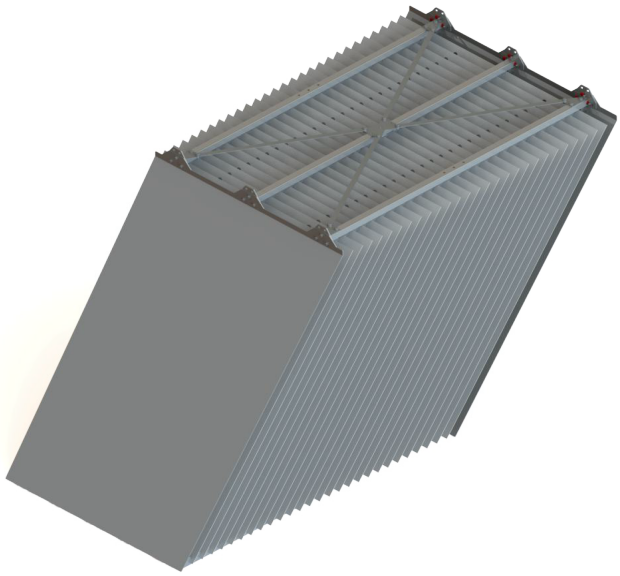


ECOLAM B40

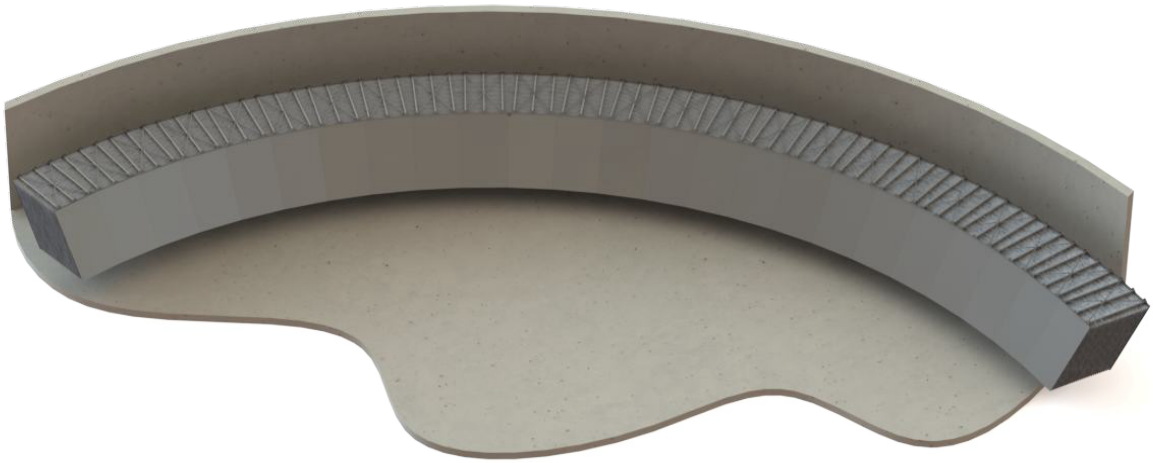
ECOLAM R30

General Information

The ECOLAM R30 model is designed for installation in circular sedimentation tanks, enhancing the efficiency of liquid settling. When assembled, the plate packs form a continuous ring along the outer wall of the sedimentation tank.



ECOLAM R30



ECOLAM R30