

DELTA TREATMENT SYSTEMS

COMMERCIAL FBBR Wastewater Treatment System

FCOPOD® COMMERCIAL FBBR

The ECOPOD submerged fixed film system is a continuation of Delta Treatment Systems' tradition of combining simplicity and technological excellence to create innovation. The ECOPOD is a fixed bed bio-reactor (FBBR), designed to significantly reduce nitrogen, BOD, and TSS utilizing microbiology present in the wastewater.

Wastewater enters a primary, pretreatment tank where trash, scum, and settleable solids are separated. The clarified wastewater enters the ECOPOD from the primary tank, through an effluent filter, where it is introduced into a robust aerobic environment. An external air blower provides oxygen to promote the development of a biofilm capable of digesting biodegradable waste into carbon dioxide and water.

The ECOPOD houses an engineered plastic media specifically designed to act as a structural support that facilitates biofilm growth. The media is completely contained and submerged in the reactor, which works as a treatment and mixing zone. There are no moving mechanical parts in the ECOPOD. In this system, conditions are very favorable to attached growth bacteria, meaning common process disruptions such as sludge bulking or washouts are eliminated. The ECOPOD offers a complete aerobic treatment solution utilizing the developed biofilm on the media support by simultaneously reducing cBOD, TSS, and ammonia concentrations typical of commercial wastewaters. This sets the stage for up to 50% total nitrogen removal when carbon is present since denitrification can proceed in the anoxic zones surrounding the ECOPOD reactor system within the larger housing tank.



30,000 gallon decentralized treatment system



Fiberglass tank options are available in a variety of horizontal and vertical configurations/sizes.



Easily installed into precast or cast-in-place concrete tanks



Electric control console provides complete and simple operation

Why Use ECOPOD FBBR?

- Exceptional cBOD and TSS treatment
- Simple design and self-contained
- Easy to operate and maintain
- No diffusers or moving parts to service inside the tank
- Lower sludge production reduces sludge removal costs
- No mixed liquor suspended solids; eliminates possible washouts
- Suitable for seasonal or intermittent use
- No external clarifier required or return activated sludge pump
- Low operation and maintenance cost
- Design and engineering assistance available

ECOPOD Versatility

ECOPOD advanced wastewater treatment system is a submerged fixed film system designed to treat 1,500 GPD to 250,000 GPD of domestic wastewater.

The system is designed to meet your individual project treatment goals. It can be built to serve as the complete treatment system or in conjunction with another technology to provide secondary or tertiary treatment. Additionally, the system can be configured to work with virtually any dispersal method or direct discharge. Ask your Engineered System Consultant about a complete package using our standard designs or customized solutions tailored to the project needs.

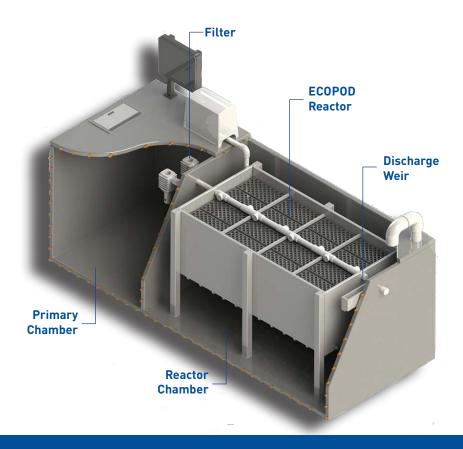
Tank Fabrication Options

- Steel
- Stainless steel
- Fiberglass
- Concrete utilizing pre-cast tanks sourced locally to project site, if available, or cast-in-place tanks

ECOPOD for Specific Uses

ECOPOD units are engineered to treat a wide range of wastewater flows and characteristics. The Delta Treatment Systems team have designed ECOPOD systems for variety of applications, including:

- Schools
- Campgrounds, RV and trailer parks
- High strength waste commercial applications (i.e. fast food restaurants, taverns, hatcheries, etc.)
- Apartment complexes and subdivisions
- Retail stores
- Office buildings
- Small towns and rural communities
- Lagoon replacement/enhancement



Delta Solutions – Serving a Multitude of Applications







Retail

High Strength Waste

Subdivisions





RV Parks/Campgrounds

Schools



For more information and access to ECOPOD Standard Commercial Designs visit www.deltatreatment.com or scan the QR code for quick access.



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