

## ALL NEW BATCH REACTOR



Introducing BioGraS™, a game-changing system pioneered and continuously developed by Ariescor Water in 2022 to revolutionize environmental sustainability.

BioGraS™ stands as the most compact and advanced high-rate biological system in the Philippines, boasting minimal electricity usage and near-zero chemical dependency, solidifying its position as a leader in eco-conscious solutions. Its small footprint guarantees effortless integration into any environment, outshining the current biological and advanced oxidation technologies while lowering capital and maintenance costs. With its odorless operation, BioGraS™ delivers unparalleled convenience and effectiveness.

### System Standard Features

- Compliance to DENR Administrative Order 2016-08 & 2021-19
- Dramatically Low Footprint (50% reduction in space requirements of SBR, MBBR, AOP)
- Automated system (does not require trained personnel)
- Excellent Biological Nutrient Removal Technology (BNR)
- Flexible Operation (minimum of 3 hours of treatment per batch)
- Minimal to Zero chemical consumption
- 30-40% reduction in power consumption
- Possess simultaneous Transfer & Draw system
- Denser and compact sludge, Fastest Settling Time (minimum of 15 minutes)
- Zero Sludge Handling Capability
- Can be incorporated after Septic Tank (Septic Tank serves as Pre-Holding Tank)
- 3 Years System Warranty

### Available Options

- Tank Materials: Concrete, Carbon Steel, Stainless Steel - 304/316
- Construction of Pre-Holding Tank and Sludge Digester Zone
- Septic Tank can be utilized as Holding Tank and Sludge Digester
- Chlorine, Ozone or UV for Disinfection
- Oil & Grease Separator/AriescorDAF/ClariDenSR™ as Pre-Treatment for Commercial/Industrial Applications
- Manual/Mechanical/Automated Head Works including Bar Screen, Grit Removal for Municipal and Large Capacity Industrial Wastewater Treatment Plant
- Addition of Tertiary Filtration, UF/RO for Water Re-use

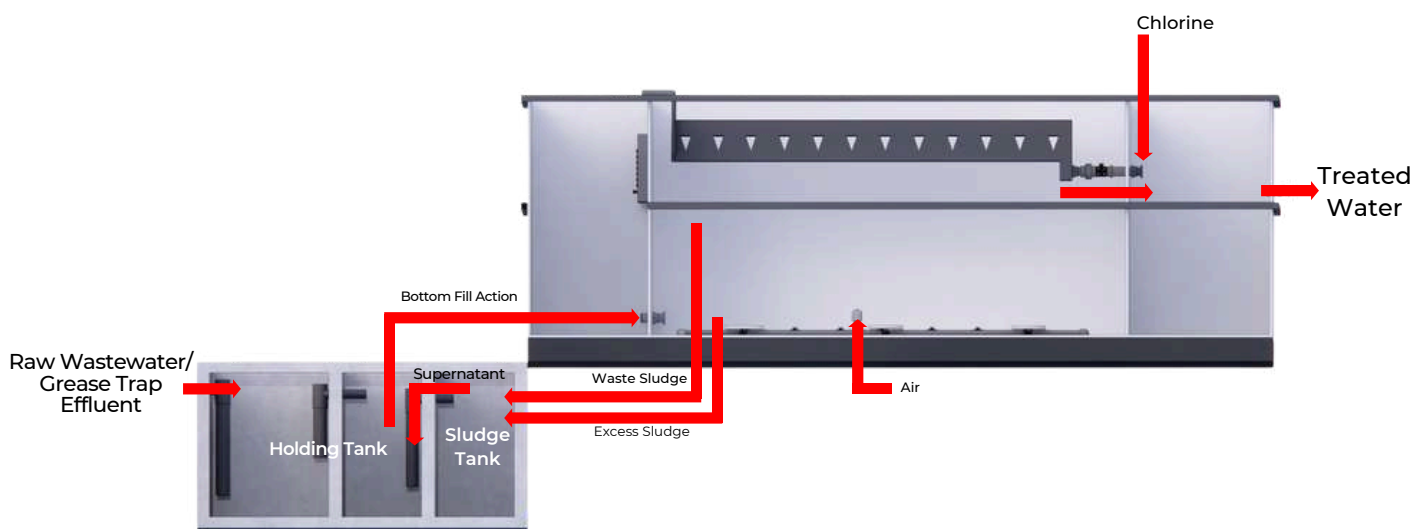


## ADVANTAGES OF BIOGRAS™ SYSTEM

- Excellent effluent quality
- Excellent sludge compactness which can reduce high capacity and interval of sludge treatment and disposal requirement
- Lowest space requirement compared to the traditional technologies including Conventional Activated Sludge (AAO, MLE), Sequencing Batch Reactor (SBR), Moving Bed Biofilm Reactor (MBBR), and Advance Oxidation Process
- Reduction in chemical dosing through the advance simultaneous Fill and Decant system aiding for the Phosphorus Accumulating Organism (PAO) to thrive and perform a Pure-Biological Nutrient Removal System
- Reliable Technology references all over the Philippines

Item	SBR	AOP	BioGraS™
Capital Investment	High	Medium	Low
Operation Cost and Complexity	Medium	Low	Lowest
Footprint	Large Footprint	30% Less	80% Less
Chemical Usage	80-90% less	High usage	90-100% less
Membrane and Filtration Usage	N/A	Included	N/A
Nutrient Removal Efficiency	Requires Coagulant/Filtration for Ammonia & Phosphate Removal	Requires Filtration & RO for Ammonia & Phosphate removal	N/A

## BIOGRAS™ SCHEMATIC



# Project Highlights

## ARAUULLO UNIVERSITY (SOUTH CAMPUS)

Designed to treat 15 m<sup>3</sup> of domestic sewage with the same design principle of BioGraS™ to provide the smallest footprint and Very Low-Cost Sewage Treatment Plant in the market. It has an additional Tertiary Treatment System to reuse the water for flushing and landscaping.

**Industry: Education**

**Capacity: 15 m<sup>3</sup>/day**

**Scope: Design and Build**

**Location: Cabanatuan, Nueva Ecija**

**Total Area: 10 sqm**



## KUYA J'S RESTAURANT - BACLARAN

Designed and commissioned to treat food and commercial wastewater for a limited space quick service restaurant. Ariescor Water's Mobile STP – BioGraS™ is used to solve heavy load of parameters with limited spaces that is normally designed with large sizes of tanks.

**Industry: Quick Service Restaurant**

**Capacity: 10 m<sup>3</sup>/day**

**Scope: Design and Build**

**Location: Baclaran, Manila City**

**Total Area: 4 sqm**



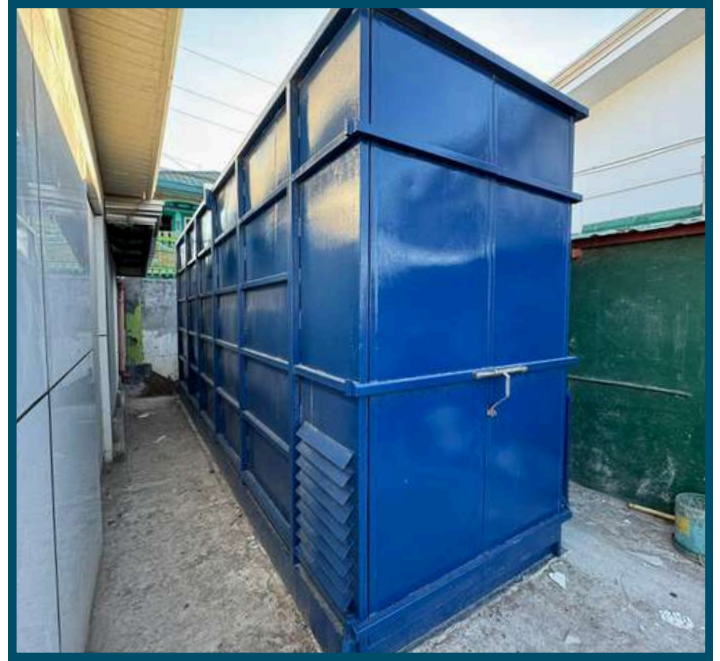
# ARIESCOR® WATER

BRINGING WATER EVERYWHERE

## LIMAY DIALYSIS CENTER

Constructed to treat sewage for Limay Municipality's Dialysis Center. Using BioGraS™ technology addresses the project location's limited space and offers a simpler treatment process for easier maintenance and automated function.

**Industry: Hospital**  
**Capacity: 20 m<sup>3</sup>/day**  
**Scope: Design and Build**  
**Location: Limay, Bataan**  
**Total Area: 9 sqm**



## ELISON HOTEL

Erected to treat domestic sewage coming from the hotel rooms and laundry area using the simple process of BioGraS™.

**Industry: Hotel and Laundry**  
**Capacity: 10 m<sup>3</sup>/day**  
**Scope: Design and Build**  
**Location: Balanga, Bataan**  
**Total Area: 6 sqm**



## CLMC BUILDING

Designed to treat 30 m<sup>3</sup> of domestic sewage with the new design principle of BioGraS to provide the smallest footprint and Very Low-Cost Sewage Treatment Plant in the market.

**Industry: Office Building**

**Capacity: 30 m<sup>3</sup>/day**

**Scope: Design and Build**

**Location: Mandaluyong City**

**Total Area: 12.6 sqm**



## KERITH BROOKS TRADING

The first prototype of the BioGraS™. Designed to treat 5 m<sup>3</sup> of animal feed wastewater, this compact and modular SBR is the smallest footprint in the market that minimizes clients CAPEX and OPEX.

**Industry: Animal Feeds and Vegetable Oil Manufacturing**

**Capacity: 5 m<sup>3</sup>/day**

**Scope: Design and Build**

**Location: Pandi, Bulacan**

**Energy Consumption: 3.3 kW/day**

**“Expandable up to 10 m<sup>3</sup>/day”**

**Total Area: 4 sqm**

