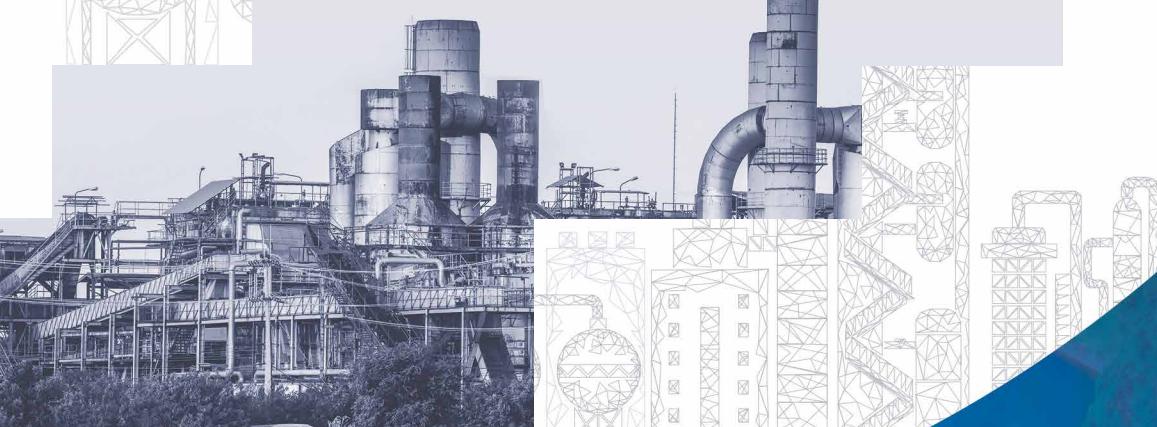


# COMPANY PROFILE

# ENVIRONMENTAL SOLUTION

## FOR WATER AIR AND CLEAN ENERGY

  
PREMIER  
PRODUCTS



# CONTENTS

4

FRP Water Storage

6

FRP Wastewater Treatment

17

Water Solution

20

PP Service

22

FRP CR Tank, Pipes, Lining

26

Air Pollution Treatment

30

Clean Energy



## Premier Products Public Company Limited

Premier Products Public Co., Ltd. was established on December 2nd, 1975 to operate as a manufacturer and distributor of environmental products. The Company started with the manufacture and distribution of wastewater treatment products under the "SATS" brand with technology from Matsushita Electric Works Ltd. of Japan.

This made Premier Products Public Co., Ltd. the first and only company in Thailand to manufacture and sell to general consumers. The Company was continuously successful in marketing these products, making septic tanks widely called as "SATS tanks" until now

# 1975

### The Foundation of Premier Products PCL.

Premier Products was founded to produce environmental products such as wastewater treatment tanks and developed further products in the wastewater treatment category. Premier Products has further developments on water storage systems to become the one-stop shop for Water Solutions

# 1978

### Initiate products in the clean energy group

Initiate Solar Cell Products for Private Sector Customers and retail. In addition, there is also electricity generation with Solar Farm to sell to the government. which is managed by Infinite Green Company Limited (Infinite Green)

### Initiate products in the building materials group

Developed GRC (Glass Fiber Reinforced) products Concrete) and product development for the industry including soundproof walls and various products from FRP (Fiberglass Reinforced Plastic) and FRA materials. (Fiberglass Reinforced Acrylic)

# 2011

### listed on the stock exchange is a public company

with a registered capital of 300 million baht to respond to the expansion of the business sector and domestic investment This enables the company to develop its competitiveness at the international level. and enter the international market stably

# 2013



## CUP-SHAPED

- High Quality tanks made from high quality polymers and fibreglass
- No chemical residue  
No harmful substances used
- Extremely strong, and resilient  
to use outdoor for a long time
- Opaque tank, algae cannot  
form inside
- Food Grade  
Safe for use for consumption
- Valve and joints are made  
from POM, therefore no  
rusting



Water storage tank for usage and consumption. Manufactured using Fibreglass Reinforced Plastic, using high quality fibreglass that is extremely strong, therefore the tank is very durable and has a long lifespan. Safe to use and rust-free, this product has passed testing according to international standards.



## UNDERGROUND WATER TANK

- High Quality tanks made from high quality polymers and fibreglass
- No chemical residue  
No harmful substances used
- Special Designed for  
Underground Pressure
- Food Grade  
Safe for use for consumption

# BIG TANK



## Big Tank Vertical Above Ground (VT-AG)

High quality, large scale water tanks, or the Big Tank, will take care of any water storage needs without any leakage problems or the cracking of concrete walls. Suitable for usage in residential, office, or even up to the industrial scale and large-scale enterprises.



- High Quality tanks made from high quality polymers and fibreglass with **Filament Winding Technology**
- Extremely strong, and resilient to use outdoor for a long time
- Food Grade Safe for use for consumption
- No chemical residue No harmful substances used
- ประยุกต์พื้นที่ เพื่อแรงดัน น้ำในการใช้งาน
- Special Design with Sub Frame Sandwich Structure

- High Quality tanks made from high quality polymers and fibreglass
- Extremely strong, and resilient to use outdoor for a long time
- Food Grade Safe for use for consumption
- No chemical residue No harmful substances used
- Special Design with Sub Frame Sandwich Structure



## Big Tank Horizontal Above / Underground (HT-AG/UG)



# ECO TANK EXTRA

## AERATION SEPTIC TANK



High quality prefabricated wastewater treatment tank with the anaerobic filter made from reinforced polymer and fibreglass, which gives 100% more strength than PE as a material ensuring long durability and service life. Suitable for installation in houses, offices buildings or small factories. This treats wastewater according to the principles of environmental engineering standards, allowing the treated wastewater to pass the regulation outflows according to law.



High Quality tanks made from high quality polymers and fibreglass



Designed specifically to be able to withstand the pressure of being buried with extra compressive strength



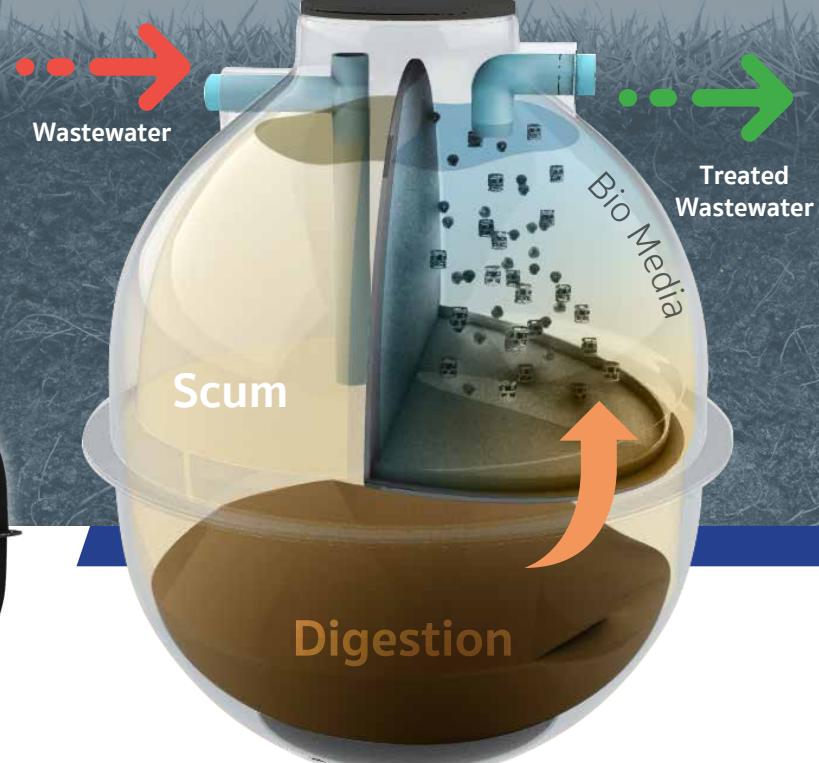
Passes the regulated effluent standard set by the government

### FULLY EFFICIENT TREATMENT

FIBREGLASS  
STRONG AND DURABLE



### SUITABLE FOR ALL TYPES OF HOUSING



# SAVE SPACE



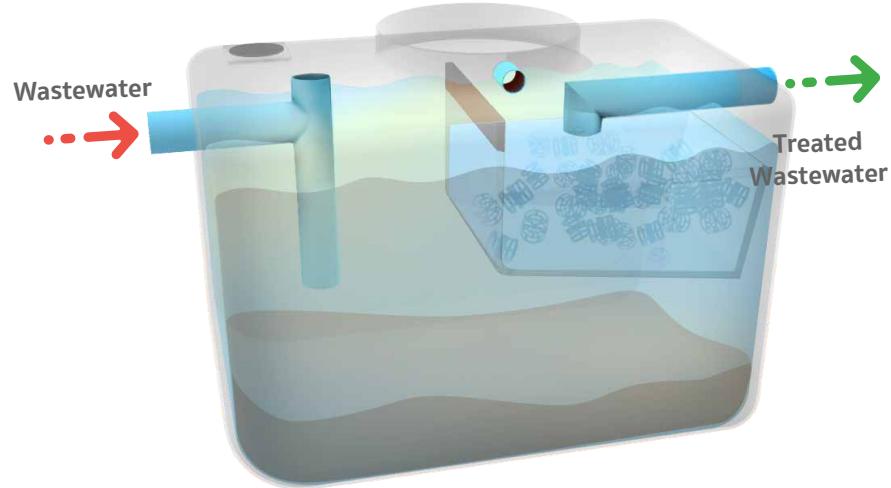
High Quality tanks made from high quality polymers and fibreglass



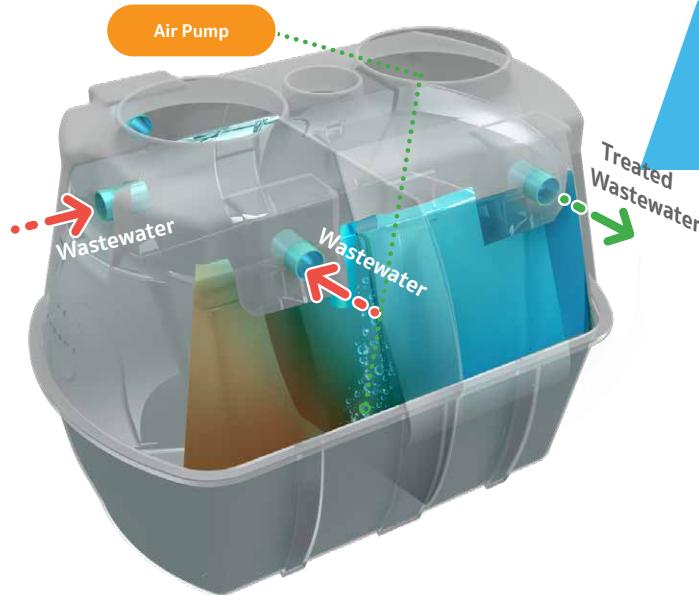
Designed specifically to be able to withstand the pressure of being buried with extra compressive strength



Passes the regulated effluent standard set by the government



Septic tank Flat anaerobic filter Answer the problem of installation in confined spaces, lightweight but still has the property of treating waste water. according to the standards suitable for the building or a small residence



## SATS

### AERATION SEPTIC TANK



Passes the regulated effluent standard set by the government



There is a chlorine disinfection system before the waste water is released into the water source.

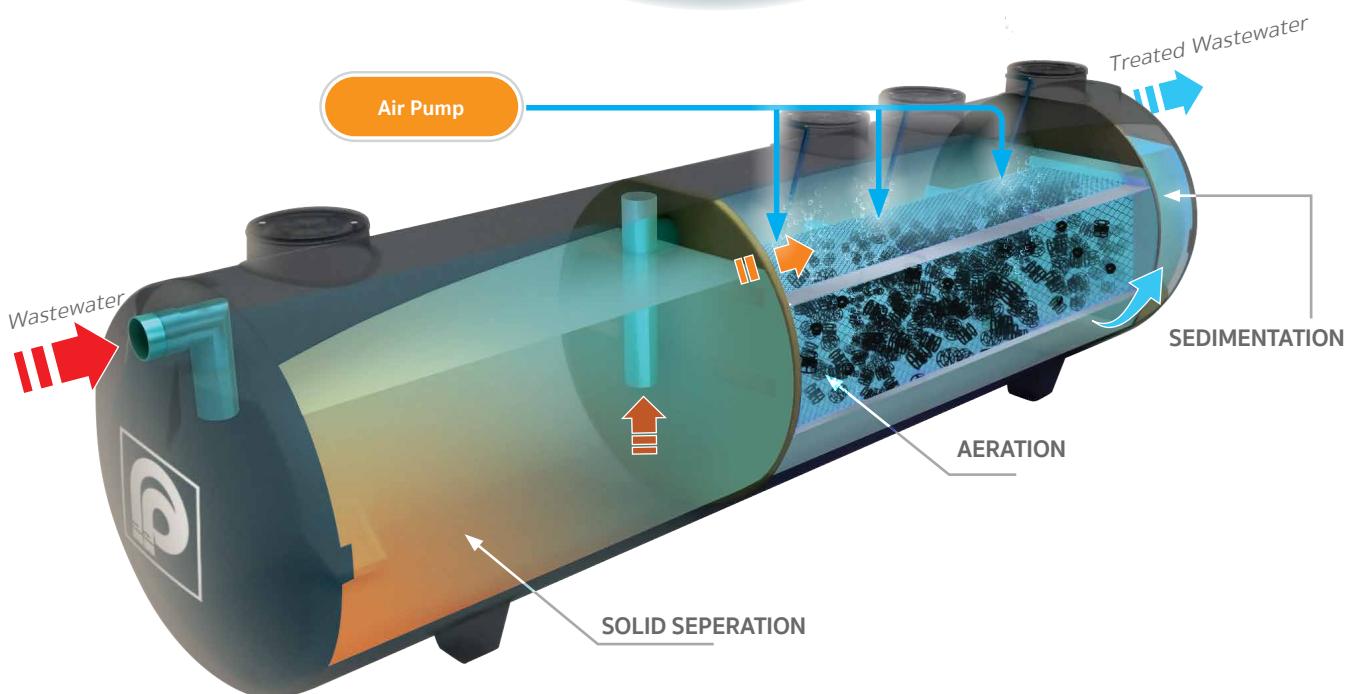


High Quality tanks made from high quality polymers and fibreglass

Aerated high efficiency prefabricated septic tank It is the first model in Thailand (Activated Sludge System) Suitable for wastewater treatment from homes. small building

# SUPER SATS

## AERATION SEPTIC TANK



High-efficiency septic tank, Activated Sludge (Fixed film) system, septic filter system, aerated biological media. allow microorganisms to decompose organic matter Turn wastewater into quality water that meets the criteria. Suitable for domestic wastewater Large buildings, condominiums, industrial plants



High Quality tanks made from high quality polymers and fibreglass



Passes the regulated effluent standard set by the government

# EASY GREASE

## AUTOMATIC GREASE TRAP AND SEMI-AUTOMATIC



### AGR AUTO GREASE REMOVER

Innovation to trap fat and melt fat with automatic system (Fully Automatic) and have Heater to help melt fat. Convenient, easy to manage fat save manpower time and effectively reduce the problem of fat in the wastewater treatment system, Suitable for shopping malls, restaurants, resorts, hotels, industrial factories.



Fully Automatic



Automatic heat dissolving system



Automatic grease draining system reduces the burden of administration.



Increase efficiency of the wastewater treatment system

### MGR MANUAL GREASE REMOVER

Innovative grease trap and drain system and semi-automatic valve system. Easy to use and effectively reduce the problem of fat in the wastewater treatment system. Suitable for shopping malls, restaurants, resorts, hotels, industrial factories.



semi-automatic control



Release the grease with the valve system to save the fat scooper.



Increase efficiency of the wastewater treatment system



# GREASE TRAP

*Food waste trap from kitchen. Reduce the problem of clogged pipes*

primary wastewater treatment system (Pre-Treatment) trap solids, food waste and separate fat from waste water. before releasing water into the collective sewage system to ensure the quality of the effluent the standard is suitable for installation under the sink or buried in the ground in shops, restaurants and homes.

 Effectively traps fat hydraulic design water separation system and trap fat apart

 Strong and durable with fiberglass, not weakening or collapsing when exposed to heat from water during use.

 Easy to dispose of food waste Stainless steel food scraps are difficult to rust. Food waste can be easily discarded.

 It has a sealed lid for easy maintenance. Easy to clean and use



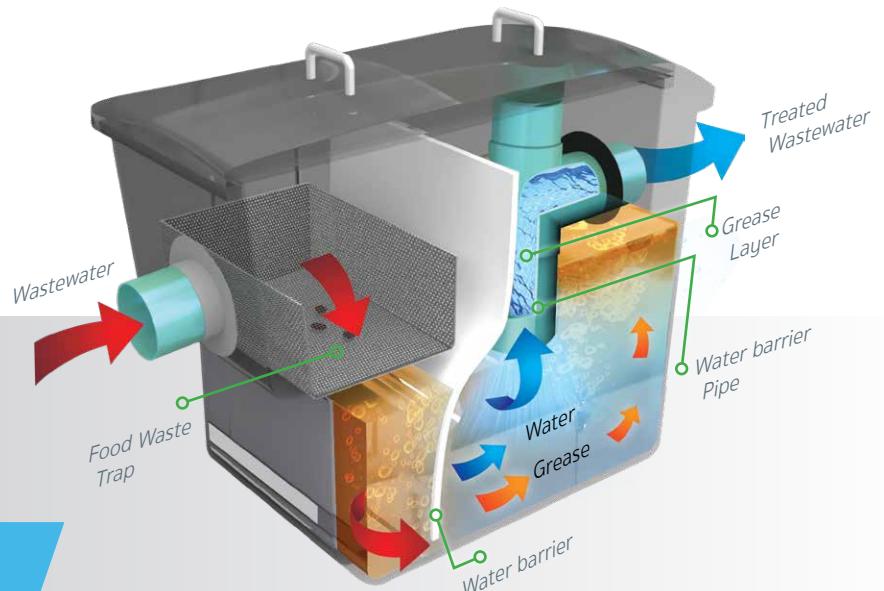
GT - AG



GT - UG



GREASE TRAP GT200-6000



# AEROMAX - AMC

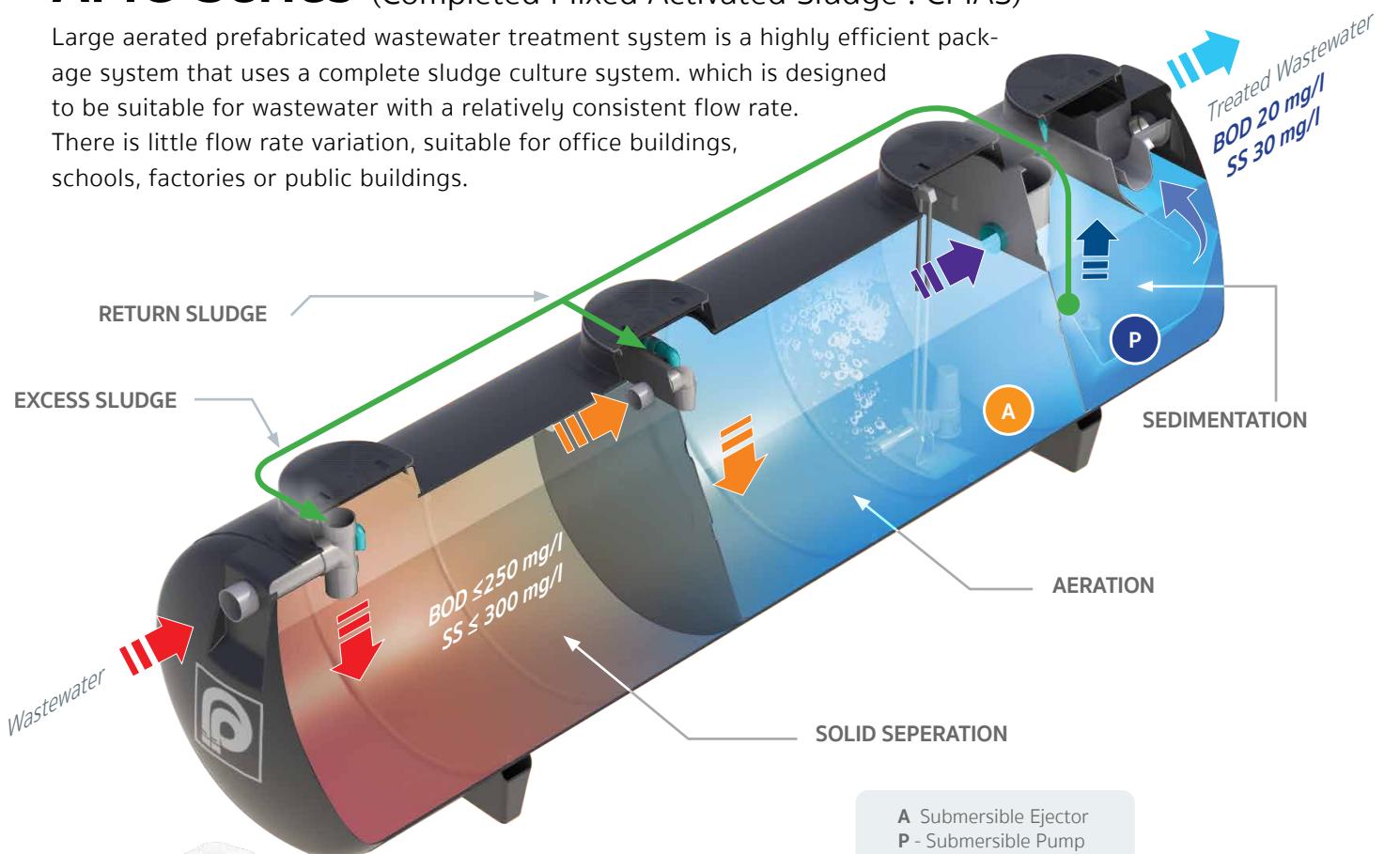
## Completed Mixed Activated Sludge



### AMC Series (Completed Mixed Activated Sludge : CMAS)

Large aerated prefabricated wastewater treatment system is a highly efficient package system that uses a complete sludge culture system, which is designed to be suitable for wastewater with a relatively consistent flow rate.

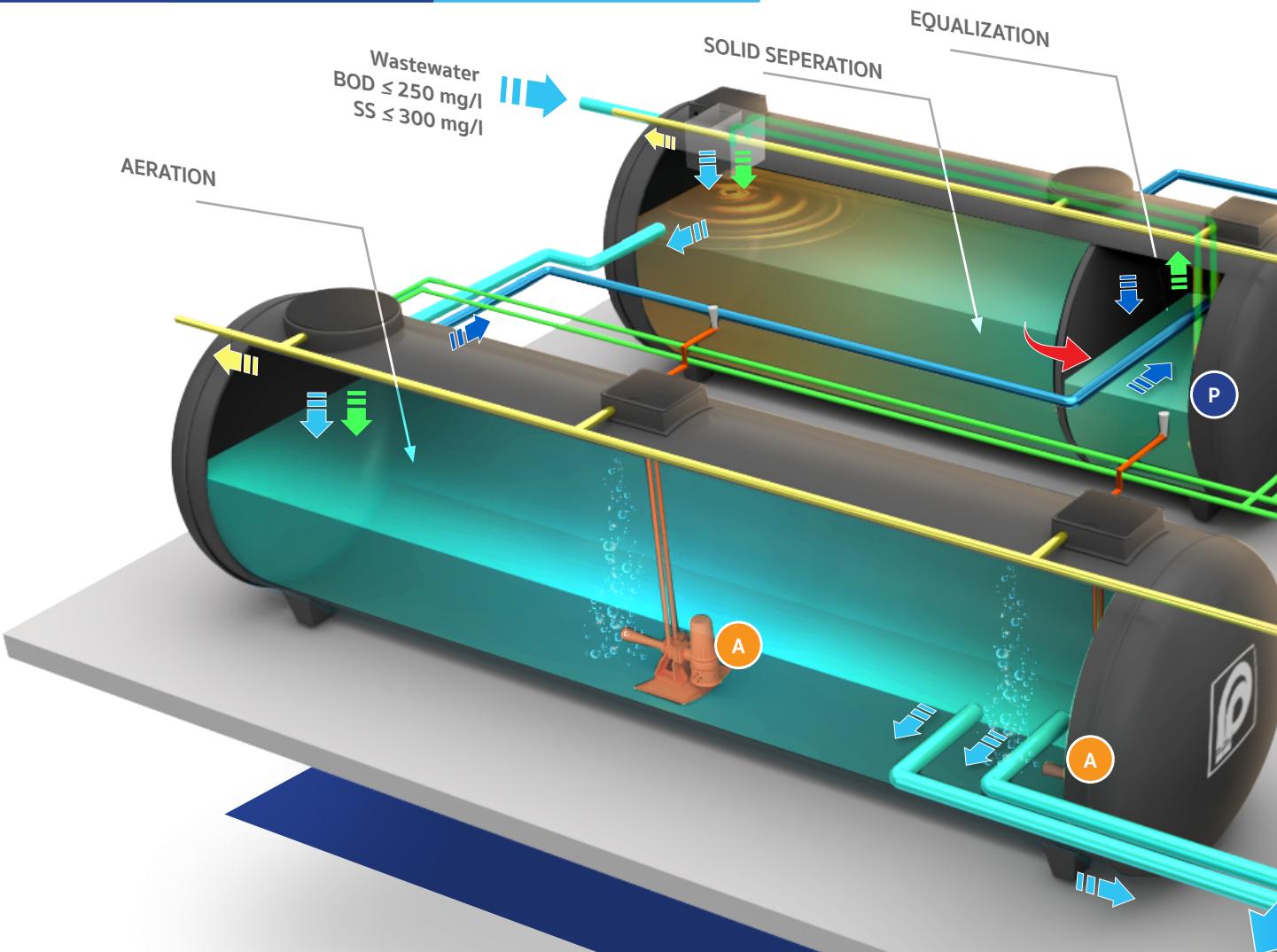
There is little flow rate variation, suitable for office buildings, schools, factories or public buildings.



- ✓ high performance suitable Office buildings, schools, factories, public buildings
- ✓ Design the system to suit the application. with water expert engineers from PP
- ✓ High Quality tanks made from high quality polymers and fibreglass with **Filament Winding Technology**
- ✓ with aeration system technology for microorganisms to decompose organic matter in wastewater

# AEROMAX - AME

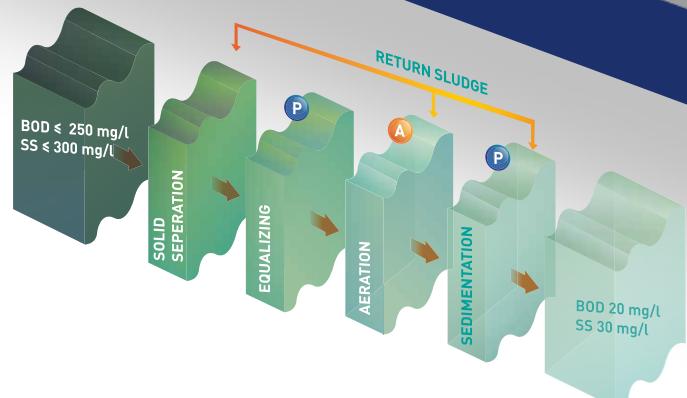
## Completed Mixed Activated Sludge



### SYSTEM INFORMATION

- MAIN WATER PIPE
- RETURN SLUDGE PIPE
- SLUDGE OVERFLOW PIPE
- VENTILATION PIPE
- AIR INLET PIPE

A Submersible Ejector  
P Submersible Pump





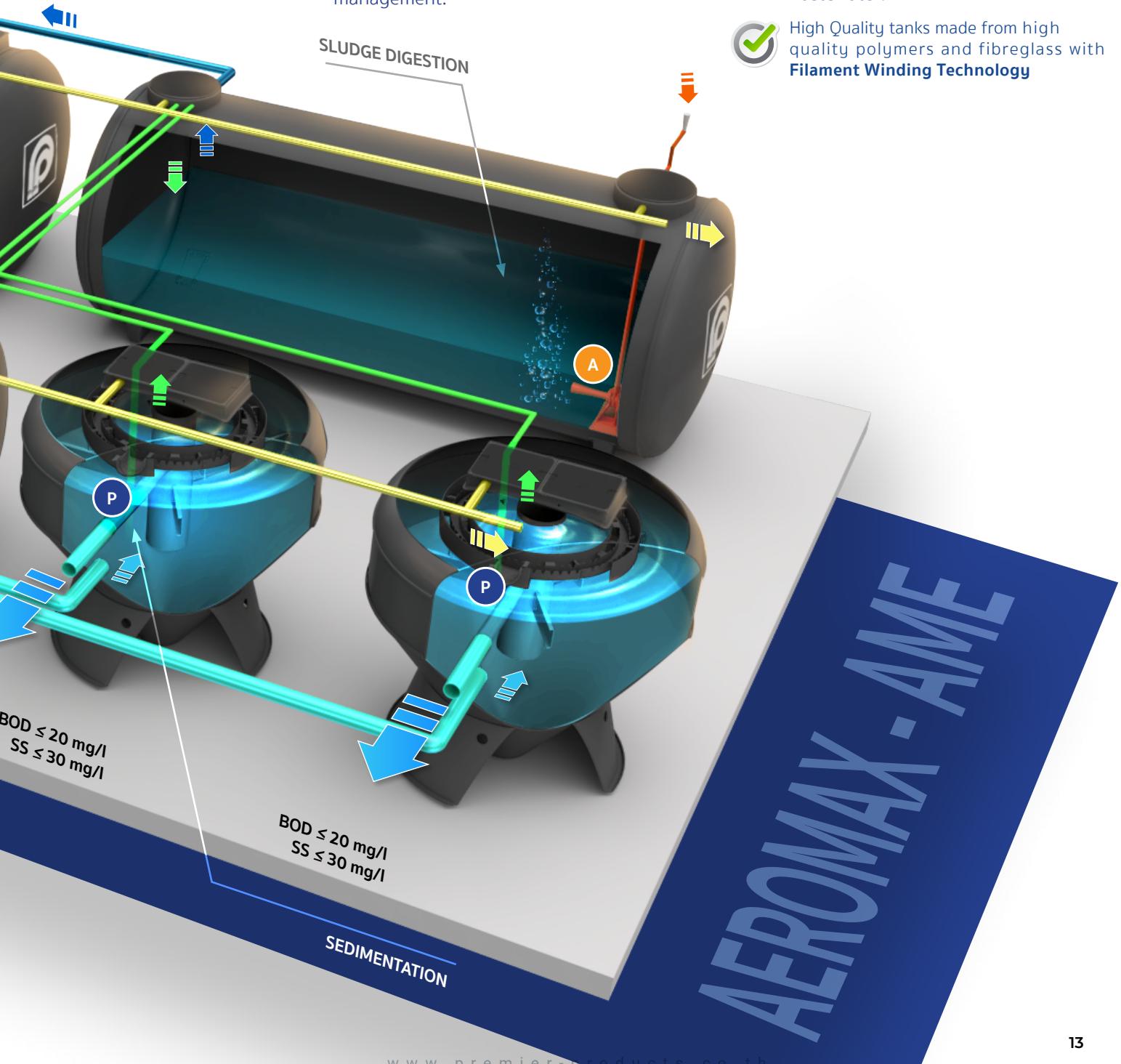
# AME Series

(Completed Mixed Activated Sludge : CMAS)

A large aerated prefabricated wastewater treatment system is a highly efficient package system. that uses a complete mixing sludge system It is designed to support the rapid changes in organic matter (Shock Load).

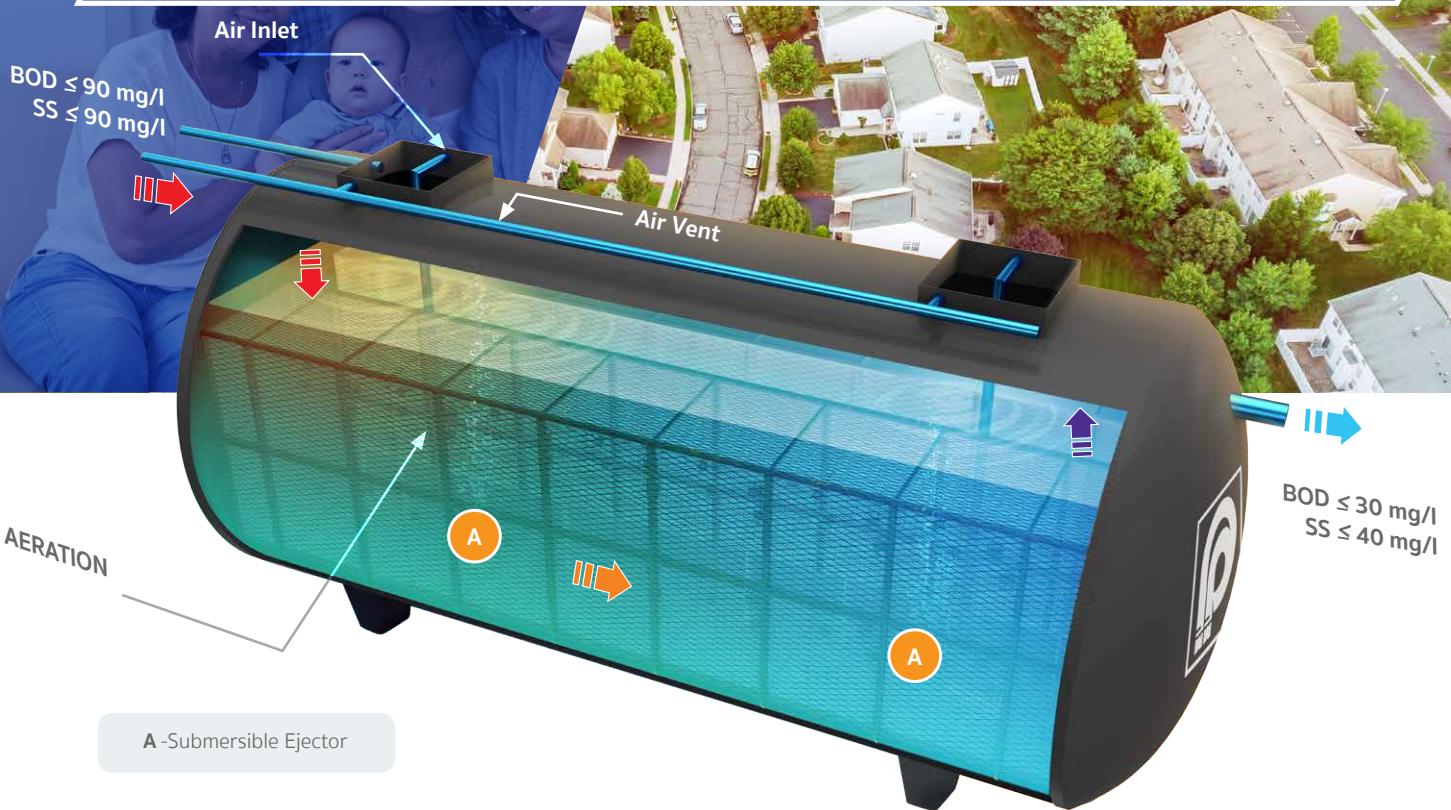
suitable for support unstable wastewater There is a high variation in flow rate. Suitable for office buildings, schools, factories or public buildings with unstable wastewater.

- The most efficient wastewater treatment support heavy traffic every moment
- The system is designed to be suitable for use by engineers who specialize in wastewater management.
- Reduce working time Construction
- Install an aeration system for microorganisms to decompose organic matter in wastewater.
- High Quality tanks made from high quality polymers and fibreglass with **Filament Winding Technology**



# AEROMAX - PCA

## WASTEWATER TREATMENT FOR HOUSING ESTATES



### PCA Series (Polishing Contact Aeration Tank)

Aerated prefabricated combined wastewater treatment system which is a system designed to be compatible with the system Pre-treatment of the village allotted or others where the wastewater has undergone preliminary treatment and the BOD is not very high (not more than 90 mg/liter), the wastewater volume ranges from 50-500 cubic meters/day in order to obtain the quality of the effluent that meets the criteria standard



Bio media is used To be a medium for the adhesion of microorganisms (Fixed Film)



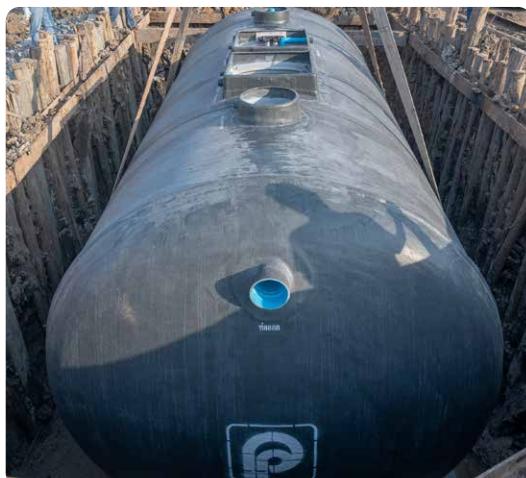
Compatible with pre-treatment systems



Strong, durable with fiberglass, not weakening or collapsing, can bear pressure well, taking care of the design by engineers.

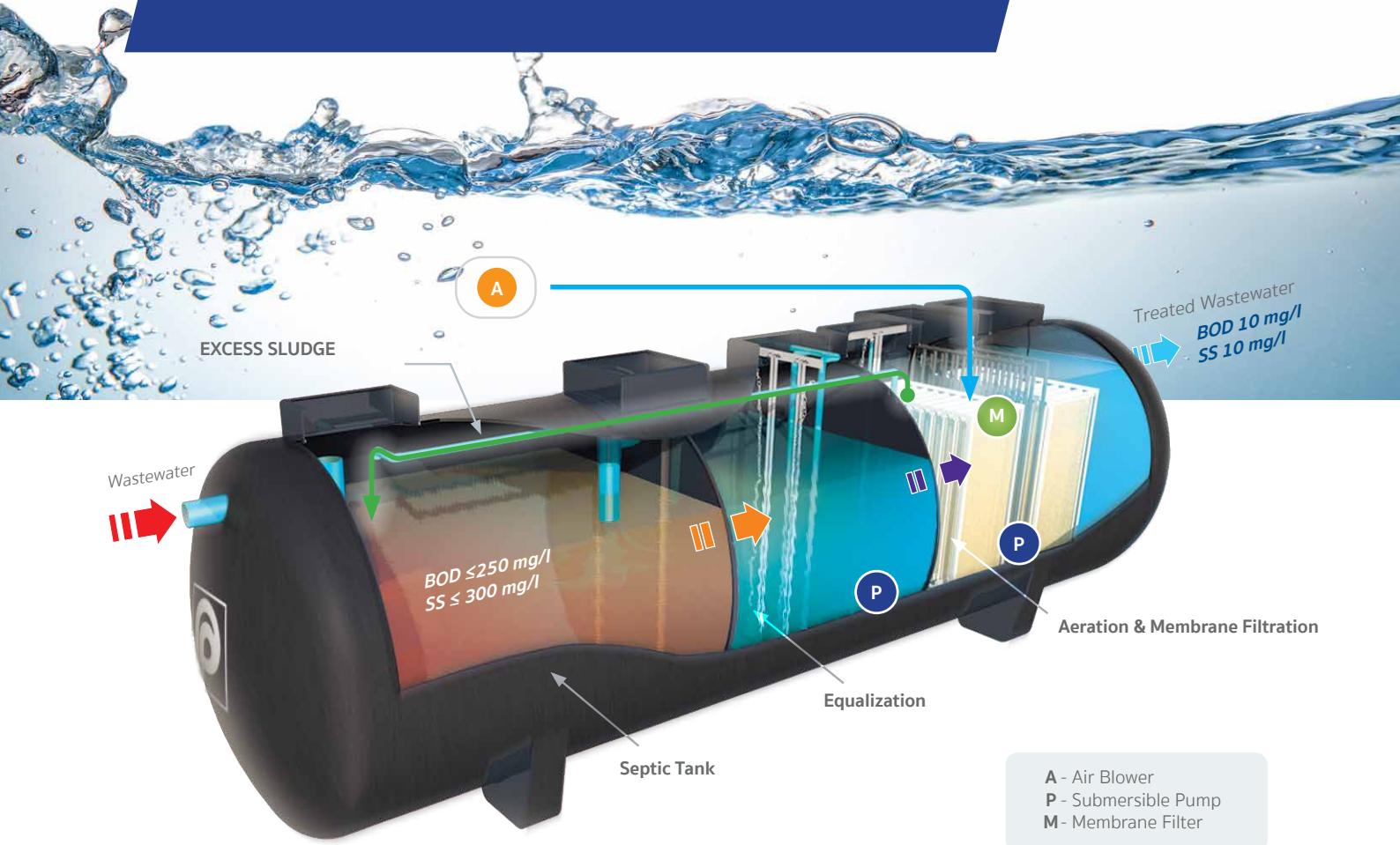


Design the system to suit the application with environmental expert engineers from PP.



Model: PCA- 500

## AERATION TANK WITH MEMBRANE



High efficiency wastewater treatment system Combining biotechnology with Membrane bioreactor (MBR) water filtration, designed to focus on treated water quality. Can be recycled (Water Reuse or (Water Recycle) or can be used to improve the quality with Reverse Osmosis (RO), Ultra Filtration (UF) and disinfection systems such as UV, Ozone. The Biofil system can be used with buildings. all types



Filtering quality Micron level detail



Cost savings from 20-40% of water recycling



Requires less installation space than conventional systems, saving structural costs



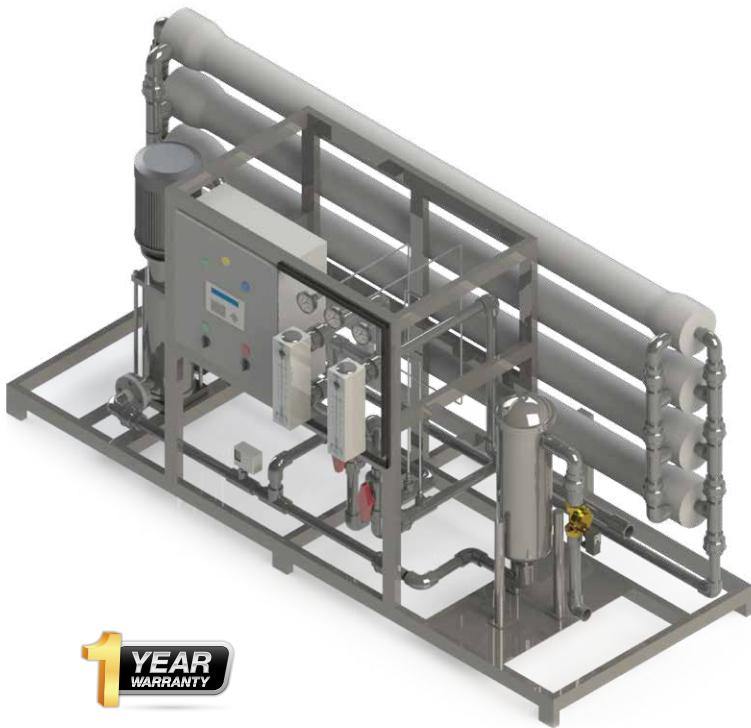
Easy to control with PLC (Programmable Logic Controller)



**MAXFIL - UF**  
**Ultrafiltration Membrane System**

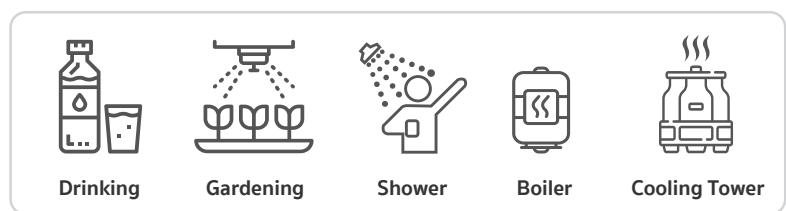
Water filtration system combines clean water production technology. and recycled water By filtering water through a membrane (Ultra Filtration Membrane) that is extra small. It can filter impurities well such as germs, bacteria or viruses that are larger. Membrane Membrane Suitable for improving water quality from natural raw water sources or treated water. Water can be reused in daily life, saving and conserve water resources in the future

-  Filtered, high quality and consistent performance
-  save space Easy to install, takes up less installation space.
-  You can adjust a variety of formats as needed or suitability
-  Easy to control with Programmable Logic Controller
-  Long service life without worrying about maintenance

**MAXFIL - RO**  
**Reverse Osmosis Membrane System**

water filtration system using high pressure When pressure is pushed through a Ro-Membrane, only small water molecules can pass through the membrane. Contaminants such as bacteria, viruses, pesticides, heavy metals and toxins are removed. The resulting purified water is kept in a container. and the contaminated water will be discarded.

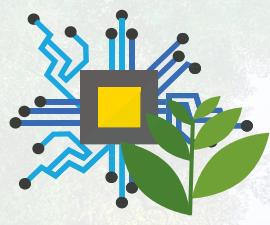
-  Filter the solution, contaminants in the water for consumer use.
-  used in the production process In many industries that require high quality water
-  Used with Boiler, it can greatly reduce the amount of waste water blowdown.
-  Easy to control with Programmable Logic Controller



# WATER SOLUTION

Sustainable water management for buildings and industry are paramount to the sustainable development of world population due to the ever-increasing need for sources of water for consumption, daily usage such as hygiene to large scale usage for agricultural and industrial usage. Us at Premier Products realizes the importance of water, by giving importance with the environment and nature.

## 9 Reasons Why You Must Choose Us?



Usage of environmentally friendly, advanced methods of production



World Standard product warranty



Global network of partners



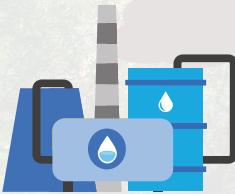
The product has been certified for quality from leading international institutes.



Specializing in comprehensive water management for more than 40 years



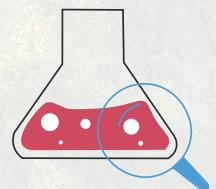
Available 24 hours



There are water management products covering all systems.



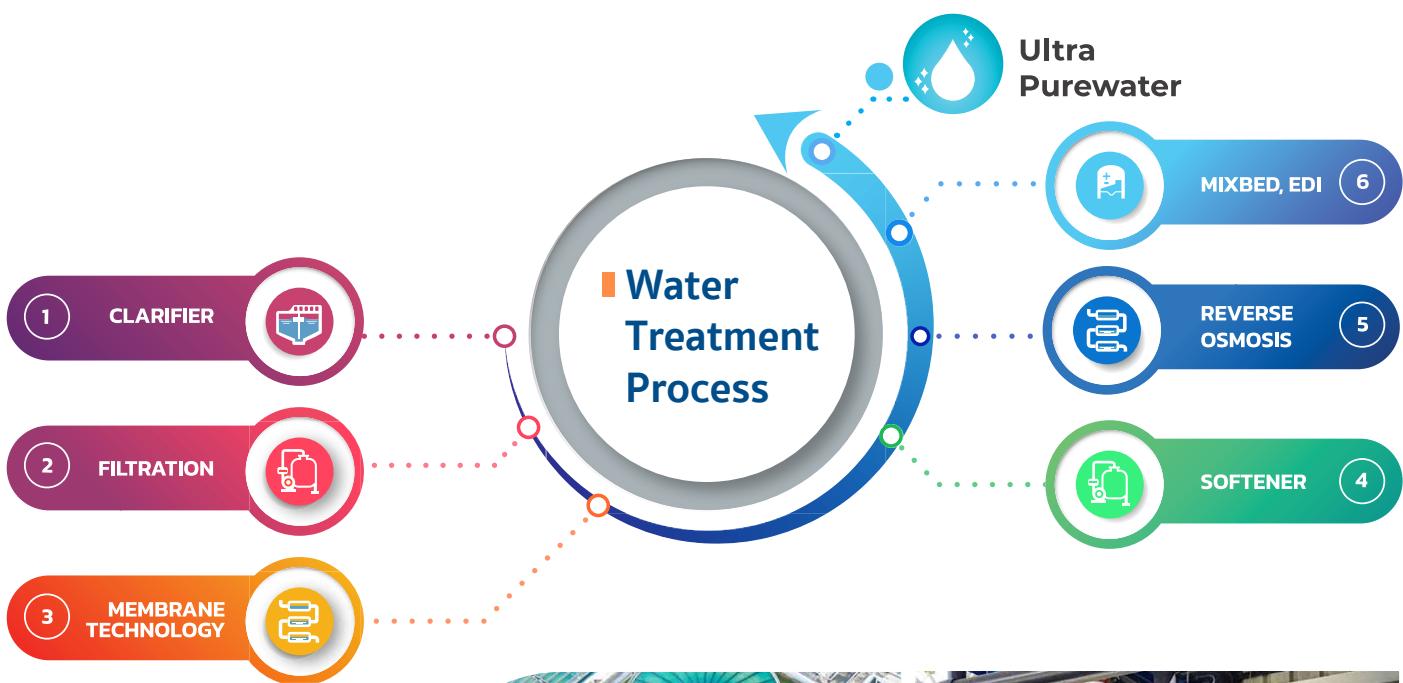
Professional management and comprehensive services



There is a research and development unit with a laboratory.



# WATER TREATMENT SYSTEM



## Our Equipments

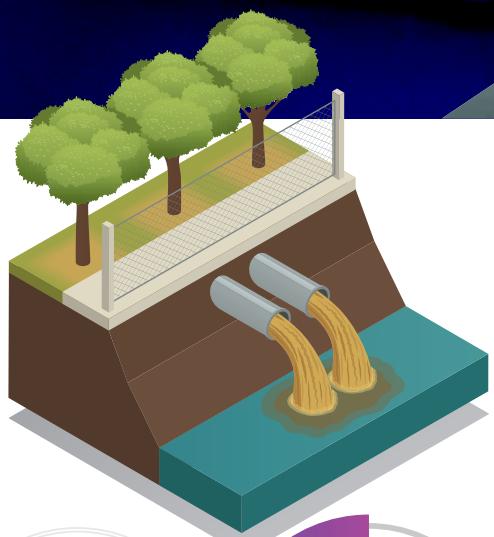
- Clarifier
- Filtration System  
(Sand Filter, MMF, A/C Filter)
- Filtration Membrane (MF, UF)
- Softener
- RO System
- Mixbed, EDI
- Ultra Pure Water System





# WASTEWATER TREATMENT SYSTEM

Reusing waste water that has been used come through the healing process to ensure that the wastewater meets the legal standards or the requirements of industry standards



## Our Solution

- Chemical Treatment
- Oxidation & Reduction System
- Coagulation System
- Dissolved Air Floatation
- Biological Treatment
- Anaerobic
- Activated Sludge
- Membrane Bioreactor

Wastewater Treatment & Recycle Process

Wastewater

Recycle Water



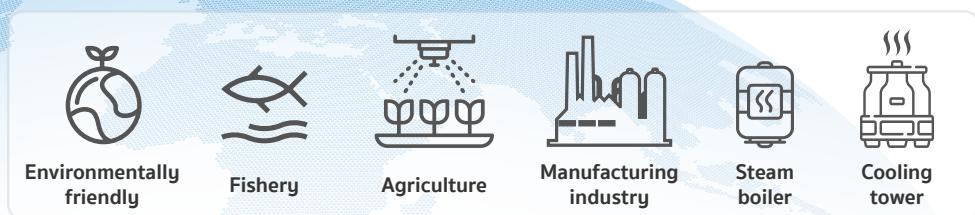
# WASTEWATER RECYCLE SYSTEM

## Our Equipments & Other Services

- Pumps
- Filter Press
- Screw Press
- Belt Press
- Resin
- Membrane
- Sand & Gravel
- Activated Carbon
- Anthracite
- Dewatering Equipment

Reusing treated wastewater for maximum benefit for environmental conservation save water resources and cost

### Benefits from treated water and its uses





## SERVICE CARE



### CONSULTATION AND TROUBLESHOOTING

Premier Products, part of the Premier Group, has been operating for over 45 years and has been distributing quality environmental products since its inception and is certified with the standard ISO 9001:2015. Premier Products is always ready and willing to be consulted and solve problems relating to wastewater or optimizing an already existing wastewater treatment plant



### EXPERT ENGINEERS AND TECHNICIANS

Services for troubleshooting, improvement and retrofitting existing systems to increase quality of wastewater treatment for effective use. Consultation services on general issues with wastewater treatment systems. Managed systematically according to the principles of sanitation engineering. The water laboratories that are used are certified by the department of Industrial Works and has the complete range of equipment required to test the waters.



# OUR SERVICE

-  All types of water pump repair services, genuine parts from TSURUMI.
-  Maintenance services for small and large wastewater treatment systems
-  Clean water reserve products
-  Consultation and analysis of water quality testing by laboratory



**HOT LINE 02-301-2327**



## REPAIR AND RENOVATION FOR TSURUMI PUMPS

Troubleshoot and repairs for all types of pumps such as; TSURUMI Pump, TSURUMI Submersible, Submersible Injector, Submersible Aerator, Air blower, and sludge sweepers using original parts from TSURUMI. We are always ready for service.



## FOR THE SMALL WASTEWATER TREATMENT SYSTEMS

Checks for wastewater treatment system tanks that are set up in households and small offices for if they are in working order with no odor.

## CLEANING SERVICES FOR WATER TANKS

The water tank for consumption should be cleaned at least every 6 months if the water tank is not cleaned at all. tiny creatures that slithered into will grow more and more, causing the tap water to be contaminated with impurities without knowing. Water tanks are often the main reason for water failures. (from the recommendation of the Metropolitan Waterworks Authority)



## FOR THE LARGE WASTEWATER TREATMENT SYSTEMS

Troubleshoot and advises wastewater management. Modify and improve the wastewater treatment system as well as starting up and commissioning. Advise and supervise the treatment of wastewater as well as controlling the water quality analysis using a laboratory that has been certified by the Department of Industrial Works. We can provide training to educate onsite staff responsible for the operation of the wastewater treatment plant



## Chemical Resistant Tanks

Chemical resistant tanks made from special resin that can withstand chemicals by their manufacturing process such as hand lay-up, Auto Spray and Filament Winding. We can also offer tanks that use a special type of unsaturated polyester resin and vinyl ester.



- Used to safely contain various chemicals without affecting the environment
- Made to order tanks can be specifically designed for projects
- Technology in design and production from Kao Corporation and Thai Mitsui Specialty Chemicals Co., Ltd, Japan

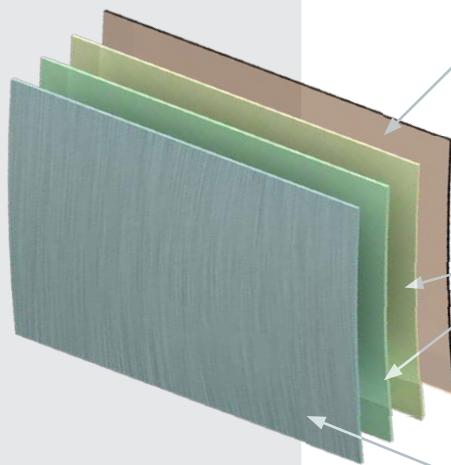


# **Chemical Resistant Tank under compliance of international standards**



**Auto Spray & Filament Winding**

**Materials layer**



## **Structure of CR-FRP**

- **Corrosion resistant** is a chemical contact layer corrosion resistant Made from polyester or vinyl ester. Which is reinforced with fine glass fiber (Surfacing Veil, Nexus Veil) according to the nature of the packing chemicals.
- **Structure** Chopped StandMat type glass fiber reinforced resin.
- **Main Structure** (Filament Winding) to enhance strong along the tank wall The thickness depends on the tank size. Pressure and specific gravity of the chemical contained
- **External Layer** Fiberglass layer coated with polyester resin or vinyl ester resin then coated with Filament Winding

## **Manufacturing and Engineering standards**

1. Manufactured using modern machines with Auto Spray and Filament Winding from the United States
2. Technology transfer in the design and manufacture from Kao Corporation and Thai Mitsui Toatsu Co. Ltd from Japan
3. Engineering designs are according to international standards
4. Standards used in design and testing
  - Standard External Pressure Test: JIS J4101
  - Standard Tensile Test: ASTM D 638
  - Standard Tensile Test: ASTM D 790
  - Standard Tank Designs according to: ASME RTP-1, BS 4994, ASTM D 3299, JIS K 7012

In addition to the standard cylindrical shape, we can also produce horizontal tanks, rectangular, conical or other specially shaped tank as required for customer use

# FRP PIPES & FITTINGS



**Fiberglass pressure pipe** is flexible and made from resin and reinforced fiberglass, resistant to chemicals and heat. Produced by wrapping fiberglass and all materials in a continuous spiral (Filament Winding) in order to achieve quality and the same strength and durability throughout the pipe.



## Production standard and engineering design

1. Hand Lay Up, Auto Spray and Filament Winding production methods.
2. Engineering design is according to international standards with a Safety Factor value of not less than 10 times.
3. Standards used in design and testing.

3.1 Reinforced plastic pipe design and equipment from water pressure are according to ASTM D 2992

3.2 The structure design of the pipe is according to the standard JIS K 7013, BS 4994.

3.3 Tensile test as standard ASTM D 638

3.4 Bending test as standard ASTM D 790

3.5 External pressure test as standard ASTM D 2412

- ✓ Resistant to chemical corrosion, long lasting and does not rust like metal
- ✓ High strength, engineering designed according to international standards
- ✓ Electrical and thermal insulation and stronger than other plastic materials

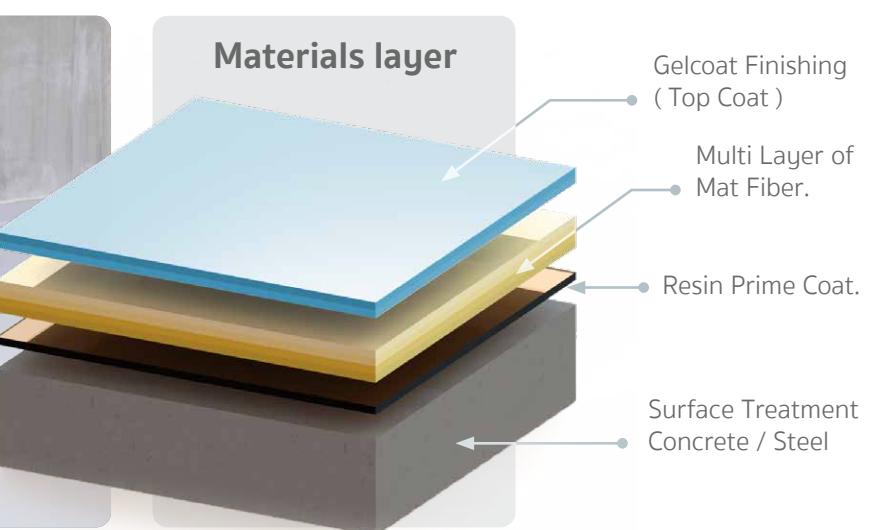


# FRP LINING



**Fiberglass Coating** is suitable for protecting the surface from being corrosion or decay from chemicals; or coated to repair the surface cracks, leaks, deterioration or to extend the service life. The coating materials are fiberglass and resin both regular and special types that are resistant to chemical corrosion, both acid and alkali.

- ✓ Resistant to chemical corrosion, long lasting and does not rust like metal
- ✓ Electrical and thermal insulation, easy to maintain, high surface flexibility.
- ✓ Can be applied on concrete and metal surfaces especially the metal tank. Can be used to repair.



## Production standard and engineering design

Tensile test as standard ASTM D 638.  
Bending test as standard ASTM D 790.  
Test for leaks by PIN-HOLE TEST tool.  
Skin thickness test by THICKNESS METER tool



# WET SCRUBBER

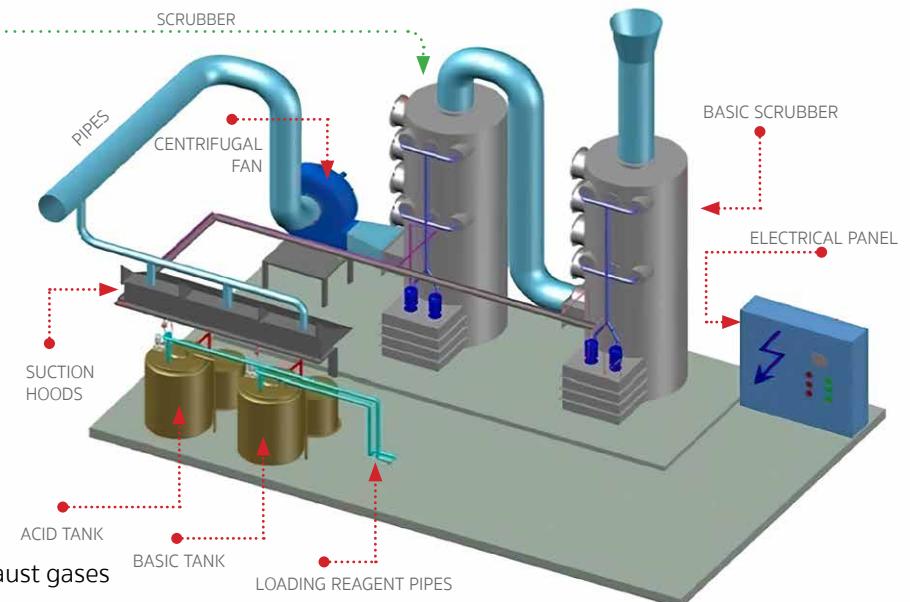


Air Scrubber Systems, the removal of gases and acidic or chemical vapors. It is operated using contact between the exhaust air and liquid, either water or a chemical solution which is sucked into the system and then through the middle layer is packing media to increase the surface area between polluted air and water. Water droplets are sprayed and dispersing with polluted air. This causes the contaminant masses, which was extinguished by the liquid falling into the bottom and non-harmful gases released into the atmosphere.

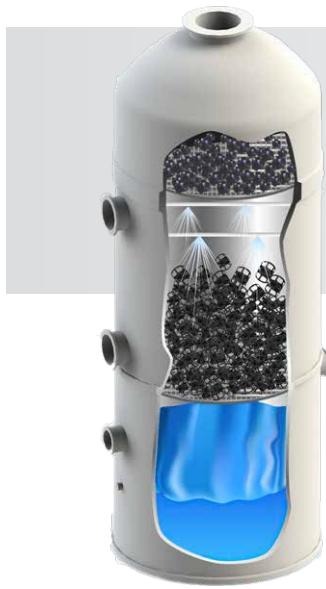


## Why should you use a WET SCRUBBER?

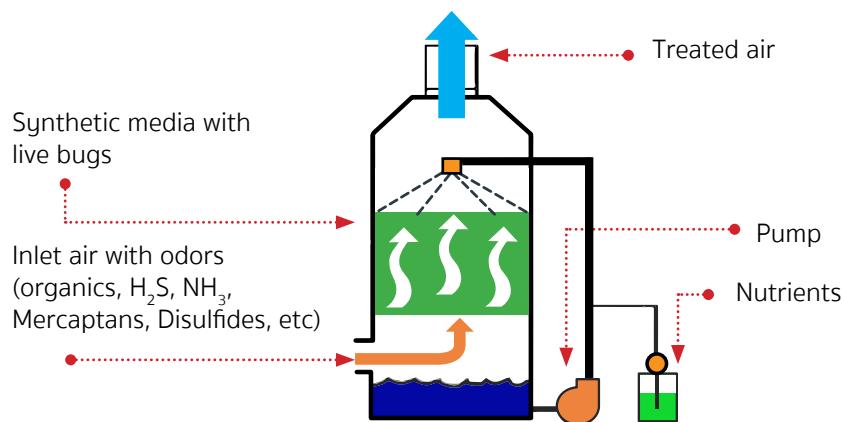
- Can be used with hot, humid air
- Low operating and maintenance costs
- High particle retention efficiency for large and small particles
- The system size is small and easy to control
- Able to treat air pollution in the forms of gas particles and exhaust gases



# BIO SCRUBBER



**Biological waste air treatment system or Bio Scrubber** is a system that is used to treat polluted air by using biological processes, easily capable of eliminating volatile organic compounds or VOC. Ability to treat odors from the sewage or high concentration odors such as hydrogen sulfide. Using the process of biological digestion by microorganisms, polluted air is treated.



## Benefits of BIO SCRUBBER



Does not use a lot of chemicals in the system nor does it contribute to environmental pollution



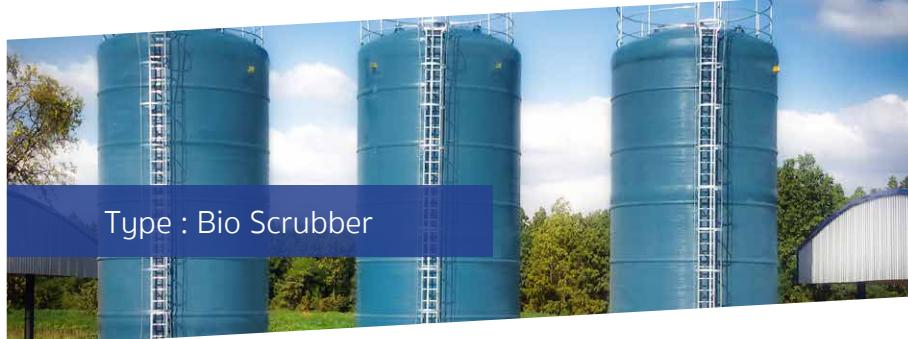
Low operation and maintenance costs



Very small amount of wastewater that has to be released

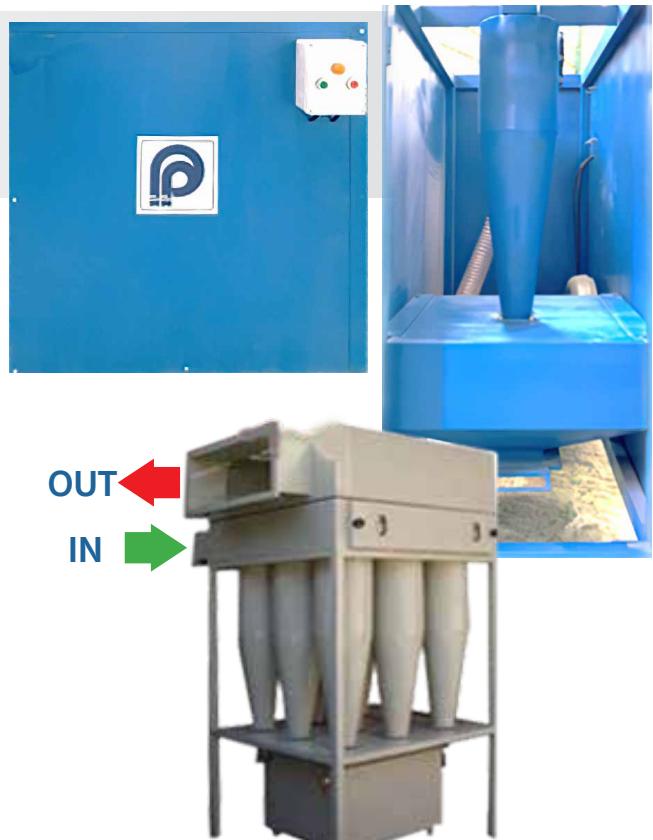


Water from the digestion process can be reused again in the system

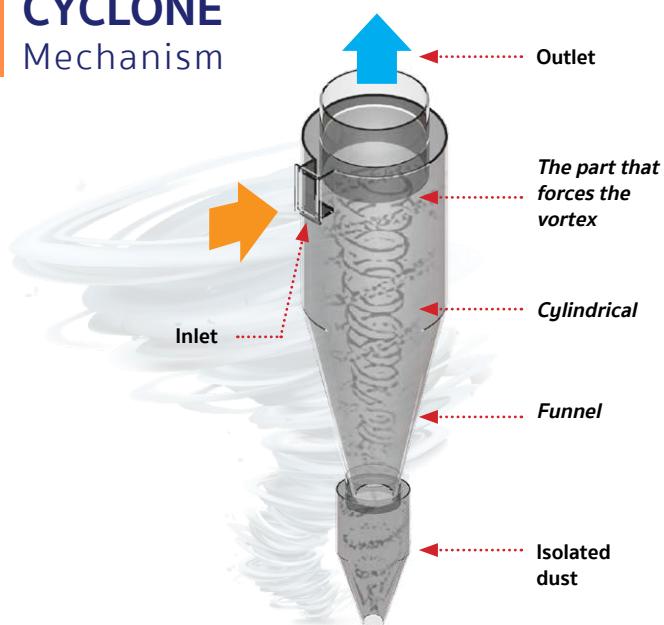


# MULTI CYCLONE

**Cyclone Dust Suppression System** Cyclone Dust Collection System uses centrifugal force to separate the dust from the air by vortexes formed inside the cyclone



## CYCLONE Mechanism



## Why use the MULTI CYCLONE



Can treat almost any type of large dust



Low cost of operation and maintenance



High efficiency for extracting large dust particles



Easy to build and maintain



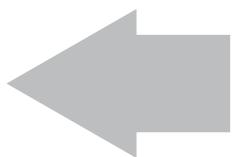
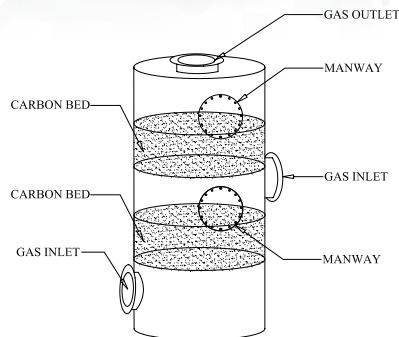
Can be used for high temperature dust



# ADSORPTION TOWER



**Activated Carbon - Adsorption Process** There is an odor treatment process where odor causing substances are absorbed by activated carbon. This system may be used as the primary system. Or may be used to supplement the smell treatment with other systems. in case of wanting to reduce the cost of replacing batteries Chemicals are trapped on the surface of the activated carbon. which has a small hole and has a large surface area When the substance is captured until the battery is saturated, the chemicals must be removed to allow the battery to be used again (Regeneration).



## Activated Carbon Advantages

1. Easy to control and maintain
2. High efficiency in organic treatment and can absorb a lot of odor-causing substances
3. Suitable for the treatment of large volume polluted air. and low odor concentration



## Activated Carbon Disadvantages

1. If the substance to absorb high concentration Must change the activated carbon powder regularly or adjust the condition (Regeneration).
2. Adsorption is an exothermic reaction. Therefore, it may cause the activated carbon to overheat.
3. The efficiency decreases if the incoming air is very hot (should not exceed 50°C)
4. The time spent touching must be adjusted according to the condition of the odor absorption rate



# CLEAN ENERGY

# FOR A SUSTAINABLE ENVIRONMENT

clean energy business The company has been certified and many awards from leading institutions both nationally and globally by adhering to the principles of good governance for sustainable business and society by commitment Develop quality and environmental standards Along with developing knowledge for sustainability in employees and society for being an industrytrue environment

## SOLAR PANEL

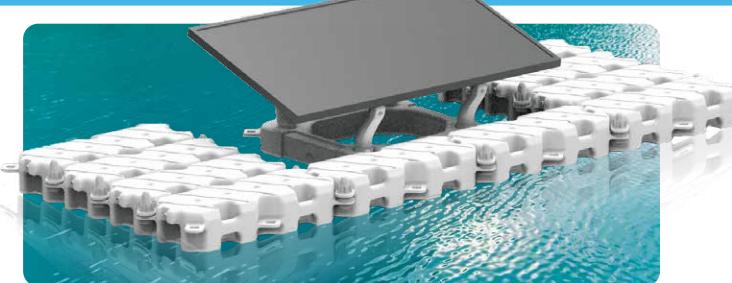


Solar Panel Distributor of solar panels from the world's leading brands that suitable for homes to large factories. The use of the surveyor team, we will be able to customize the system to your usage requirements.

## SOLAR INVERTER



## SOLAR FLOATING



Besides being installed on a roof. There is also a floating platform that can be used to install the solar panels. Suitable for factories with medium to large water areas. Designed by a team of water experts and skilled engineers that ensure you can install this correctly.

## MOUNTING STRUCTURE

Mounting Structures are between solar panels and the roof of a house or a factory. It can be installed on any roof.



# ONE STOP SERVICE

-  We have been in business for more than 45 years, can trust our warranty and after-sales service.
-  International product standards from the world's leading brands
-  We have a team of professional clean energy engineers. It gives a good understanding of the solar energy system and has water-based expertise

-  We have branch centers spread across the country. Provides fast and thorough service with a professional team to give advice.
-  Payment terms are flexible. You can consult the payment terms to suit your budget.
-  Complete range of services from surveyance, design, consulting, installation, as well as after-sales service.



**CREATING SOLUTION FOR  
SUSTAINABLE LIVING  
AND THE ENVIRONMENT**



Premier Products Public Company Limited

Headoffice  
No. 2 Premier Place  
Premier 2 Alley, Srinakarin Road  
Nong Bon, Prawet,  
Bangkok 10250  
Tel 02-301-2100-1  
Fax 02-398-1301

✉ : sale@pp.premier.co.th  
🌐 : www.premier-products.co.th

07/2021

**For more ☎ 02-301-2100-1**



**Environment Department**  
☎ 02-301-2257  
LINE @PP.WTPROFESSIONAL



**Clean Energy**  
☎ 02-301-2311  
LINE @PREMIER.ENERGY