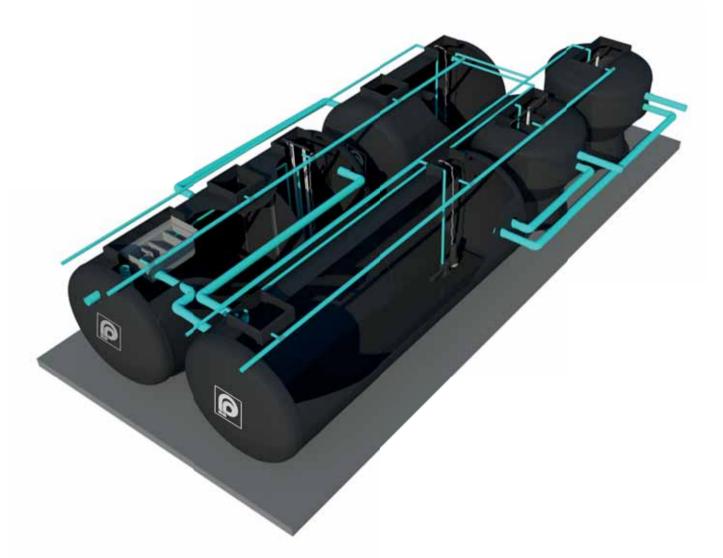


# **SATS : AME Series**



Large Biological Wastewater Treatment AS System (Activated Sludge System)

### SATS Large Biological Wastewater Treatment Plants

### Wastewater Treatment with Completely Mixed Activated Sludge (CMAS)

With years of expertise in designing wastewater treatment system, PP. has developed the AME Series using a completely mixed activated sludge (CMAS) system for treating wastewater at the flow rate of 40-600 cubic meters per day. The product's prominent feature is its ability to efficiently treat wastewater with a high variation in flow rate and strength.

The AME series' distinctive feature is that it can stabilize the flow rate of wastewater to aeration tank, resulting in increased treatment efficiency and consistency of the tank. The activated sludge and the wastewater will be completely mixed throughout the entire aeration tank. Thus, the AME Series is suitable for treating all types of domestic wastewater.

# **AME Series**

(Flow rate 40 ~ 600 m<sup>3</sup>/Day ) is suitable for domestic wastewater treatment of all activities.

# AME Series's highlight feature offer superior wastewater treatment

#### 1. Solid Separation Process

- > The process is designed to collect and store wastewater before discharging to equalization process in order to reduce concentration of BOD.
- > To separate and store both heavy & light sludge in the wastewater

#### 2. Equalization Process

- > The process will stabilize the concentration of BOD to establish an environment favorable to the growth of aerobes.
- > The flow rate and characteristic of wastewater will be stabilized before being pumped into the aerator.

#### 3. Aeration Process

- > A biological wastewater treatment process with aerobic bacteria is recognized as the most efficient wastewater treatment method.
- > A submersible ejector adds oxygen to the water and ensures the water and oxygen are thoroughly mixed in order to create an environment favorable to microbial growth.

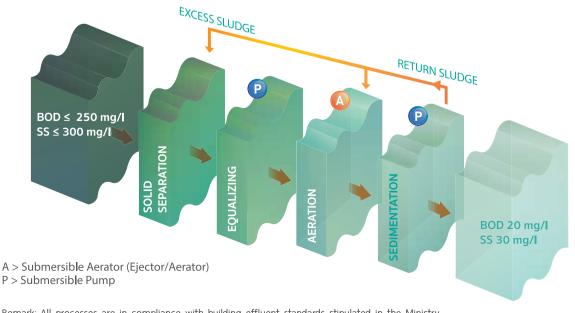
#### 4. Sedimentation Process

- > This process separates treated water from sludge and discharges it to drainage system.
- > Baffle plate will slow down the flow of sedimentary water to increase the efficiency of sedimentation, resulting in better quality of effluent.
- > Sludge recirculation will help draw sludge at the bottom of a slope tank to aeration tank to activate aerobes. Excess sludge will be pumped into sludge digestion tank.

#### 5. Sludge Digestion Process

>

Excess sludge obtained from sedimentation process will be digested by submersible ejector for odorless air, increasing a period to pump out or use the sludge as fertilizer.



Remark: All processes are in compliance with building effluent standards stipulated in the Ministry of Science Technology and Environment's announcement under Section 55 of the Promotion and Conservation of National Environmental Quality Act B.E. 2535

#### Aeromax : AME



Constituent										
Specifications Flow rate (m³/day)	AME-150	AME-200	AME-250	AME-300		AME-400			AME-600	
	30	40	50	60	70	80	90	100	120	140
BOD influent (mg./l)	250	250	250	250	250	250	250	250	250	250
BOD load (kg/day)	7.50	10.00	12.50	15.00	17.50	20.00	22.50	25.00	30.00	35.00
BOD effluent (mg./l)	20	20	20	20	20	20	20	20	20	20
Number of Users										
Residence (Person)	150	200	250	300	350	400	450	500	600	700
Office (Person)	450	600	750	900	1050	1200	1350	1500	1800	2100
Factory (Person)	600	800	1000	1200	1400	1600	1800	2000	2400	2800
Education Institute (Person)	600	800	1000	1200	1400	1600	1800	2000	2400	2800
Hotel (Room)	30	40	50	60	70	80	90	100	120	140
Hospital (Bed)	30	40	50	60	70	80	90	100	120	140
Capacity (m <sup>3</sup> )										
Solid Separation and Equalization Part (m <sup>3</sup> )	10.63	14.52	17.49	20.12	23.55	26.98	30.41	33.85	27.17	30.77
Aerated Part (m³)	11.01	12.66	16.18	19.38	22.68	25.98	29.29	32.59	31.93	37.21
Sedimentation Part (m <sup>3</sup> )	4.38	7.20	7.20	7.20	7.20	7.20	7.20	7.20	14.40	14.40
Sludge Holding Part (m <sup>3</sup> )	-	-	-	-	-	-	-	-	19.75	22.64
Total Volume of AME Series (m <sup>3</sup> )	26.02	34.38	40.87	46.70	53.43	60.16	66.90	73.64	93.25	105.02
Weight of Empty Tank (kg)	1,640	2,400	2,750	3,300	3,650	4,000	4,300	4,650	6,350	6,950
Size (Meter)										
Diameter (Meter)	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Length of Tank (Meter): The 1 <sup>st</sup> tank	6.55	6.45	7.90	4.80	5.55	6.30	7.05	7.80	6.45	7.25
Length of Tank (Meter): The 2 <sup>nd</sup> tank	-	-	-	4.80	5.55	6.30	7.05	7.80	7.65	8.85
Length of Tank (Meter): The 3 <sup>rd</sup> tank	-	-	-	-	-	-	-	-	4.65	5.35
Length of Tank (Meter): The 4 <sup>th</sup> tank	-	-	-	-	-	-	-	-	-	-
Length of Tank (Meter): The $5^{th}$ tank	-	-	-	-	-	-	-	-	-	-
Length of Tank (Meter): The 1 <sup>st</sup> sedimentation tank	-	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Length of Tank (Meter): The 2 <sup>nd</sup> sedimentation tank	-	-	-	-	-	-	-	-	2.50	2.50
Length of Tank (Meter): The 3 <sup>rd</sup> sedimentation tank	-	-	-	-	-	-	-	-	-	-
Height of Tank (Meter)	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Pipe Size of Inlet and Outlet (Inch)										
Inlet and Outlet Pipe	6	6	6	6	6	6	6	6	6	6
Air Suction Pipe	1 ¼	1 ¼	1 ¼	2	2	2	2	2	1 ¼;2	1 ¼;2
Ventilation Pipe	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3
	, –	, -	, -	,-	, –	, -	, -	, -	, -	, -

Remark : > PP's environmental engineers will provide advice on the use of products. In addition to the above, they can customize wastewater treatment tanks to meet client needs.



AME-800	AME-900	AME-1000	AME-1200	AME-1400	AME-1600	AME-1800	AME-2000	AME-2200	AME-2400	AME-2600	AME-2800	AME-3000
160	180	200	240	280	320	360	400	440	480	520	560	600
250	250	250	250	250	250	250	250	250	250	250	250	250
40.00	45.00	50.00	60.00	70.00	80.00	90.00	100.00	110.00	120.00	130.00	140.00	150.00
20	20	20	20	20	20	20	20	20	20	20	20	20
800	900	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
2400	2700	3000	3600	4200	4800	5400	6000	6600	7200	7800	8400	9000
3200	3600	4000	4800	5600	6400	7200	8000	8800	9600	10400	11200	12000
3200	3600	4000	4800	5600	6400	7200	8000	8800	9600	10400	11200	12000
160	180	200	240	280	320	360	400	440	480	520	560	600
160	180	200	240	280	320	360	400	440	480	520	560	600
35.26	38.85	51.15	54.22	61.58	68.97	76.16	84.48	91.77	98.73	106.48	113.77	121.53
42.49	48.21	53.22	69.89	72.6	83.46	93.33	106.54	116.46	125.47	136.28	145.29	156.11
14.40	14.40	18.96	18.96	37.92	37.92	37.92	37.92	37.92	56.89	56.89	56.89	56.89
26.27	29.75	20.35	31.42	44.40	50.39	56.75	63.30	69.76	76.21	81.74	88.20	94.66
118.42	131.21	143.68	174.49	216.50	240.74	264.16	292.24	315.91	357.30	381.39	404.15	429.19
7,570	8,220	9,500	11,240	14,500	15,900	17,300	12,900	20,630	23,950	25,270	26,520	27,900
2.50	2.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
8.25	9.05	8.30	9.90	7.30	8.10	8.90	9.80	10.60	6.80	7.40	7.85	8.40
10.05	11.35	6.45	8.30	8.60	9.80	10.90	6.45	7.00	5.10	5.35	5.70	6.00
6.05	6.80	-	-	5.35	6.00	6.70	6.45	7.00	7.50	8.10	8.60	9.20
-	-	-	-	-	-	-	7.40	8.10	7.50	8.10	8.60	9.20
-	-	-	-	-	-	-	-	-	8.80	9.40	10.10	10.80
2.50	2.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2.50	2.50	-	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
-	-	-	-	-	-	-	-	-	3.50	3.50	3.50	3.50
2.80	2.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
6	6	6;8	6;8	6;8	6;8	6;8	6;8	6;8	6;8	6;8	6;8	6;8
1 ¼;2	2	1 ¼;2	2	2	2	2	2	2	2	2	2	2
2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3	2;3

> AME Series can be installed both above-ground and underground. In case of above-ground installation, approximate height of all wastewater treatment tanks will increase by 5 centimeters.
> PP reserves the right to change information or details stated in this leaflet without prior notice.

## Premier Products Public Company Limited is Thailand's No. 1 in water systemsand wastewater treatment systems.

Over the past 42 years, Premier Products PP. has been determined to improve wastewater quality in Thailand and is currently the leader in large- and small-scale wastewater treatment systems as well as other eco-friendly products. PP. continues to develop its products through investments in machinery and R&D in line with its commitments to expanding business and developing the quality of life of the Thai people simultaneously.

PP's wastewater treatment system can be installed even in areas where basic infrastructure for wastewater management is not available.

The company's products can treat wastewater from households, factories and all types of buildings in order to help preserve environment and water resources. PP offers a wide range of environmental products across Thailand and they have contributed to reducing pollution in rivers and water source for four decades.

As part of the wastewater treatment business, PP has developed high expertise in effluent treatment, increased the capability of its 'ready-to-install' wastewater treatment systems, and advanced its comprehensive wastewater management systems to ensure maximum benefits to customers.



#### **Recommend related products**

#### Maxfil, a water filter with a Membrane filtration system

With membrane filtration system, Maxfil, a high potential water filter, can eliminate iron, hardness, suspended solid, bacteria, virus and particles of metal ions. Maxfil is equipped with advanced technology manufactured by standard industrial factories.









of Tsurumi Sewage Pump with No.1

sales in the market. The firm also

provides all types of wastewater

treatment equipment which come

along with installation and

maintenanceservices by veteran



PP. provides design and maintenance services for all types of existing problematic wastewater treatment systems. The services will be adjusted to suit each client's demand by teams of experienced engineers and technicians who are ready to resolve customer



Ultrafiltration

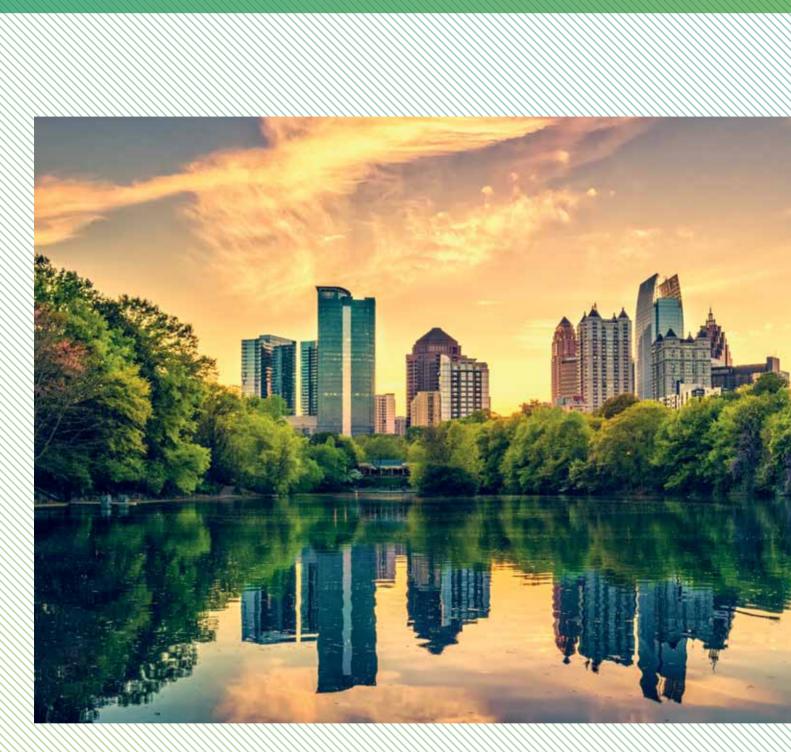
Reverse Osmosis

Aerator

technicians.

Tsurumi Sewage Pump

- For more information, please visit www.premier-products.co.th







Manufactured, distributed and serviced by Premier Products Public Company Limited Head Office: No.2 Premier Place, Soi. Premier 2, Srinakarin Road, Nong Bon, Pravet, Bangkok, 10250 Tel: 02-301-2100-1 Fax: 02-398-1301

#### Northeastern Office

Khon Kaen Tel. (043) 241-689 Fax. (043) 241-690

Contact us Tel. : 0 2301 2223 www.premier-product.co.th

#### Northeastern Office

Chiang Mai Tel. (053) 251-377-9 Fax. (053) 251-379

#### Southern Office Phuket

Tel. (076) 608-642 Fax. (076) 608-643

#### Hat Yai Tel. (074) 367-112-4, 237-591 Fax. (074) 367-111

PP reserves the right to change information or details stated in this leaflet without prior notice.