



A Simple & Effective Wastewater Treatment System for Construction Site

> 一个简单而有效的 建筑地盘污水处理系统

> > Minimal space High efficiency

> > > 占地小 效率高







KBI Contracts & Marketing Pte Ltd Blk 20 Woodlands Link, #05-40 Singapore 738733 Tel : 6752 8062 Fax: 6752 0165 Email: sales@kbi.sg **AquaSed** is a system that is capable of treating large volume of highly turbid wastewater discharged from construction sites. This system can treat the wastewater to comply with the discharge standards ensuring the construction work is uninterrupted.

At present, many construction sites are using sedimentation tanks to reduce the discharge of suspended solids in their effluent. However, this method is generally not satisfactory and inadequate, because:

- 1. It is not feasible to set up effective sedimentation tanks due to limited space available.
- 2. The effluent of construction works is always siltclay laden and cannot be separated effectively by sedimentation.

We are fully aware of the constraints and has developed a real solution, *AquaSed*, to tackle the wastewater problems arising in different type of construction sites. *AquaSed* uses low cost chemical agent to enhance sedimentation. Based on the principle of chemical coagulation, the removal efficiency for suspended solids can be higher than 90%.

Moreover, the system incorporates tilt plate device to facilitate solid sedimentation, thereby minimizing the size of the system. It can be readily accommodated in construction sites of various sizes.



Before and After treatment



Treatment Processing

Advantages of AquaSed

Minimal Space required for installation(80% less than that of the conventional sedimentation system)

High Solids Removal Rate (suspended solids in effluent can be reduced to less than 30mg/L)

Treated effluent can be reused for other activities

Low Chemical Cost

Neutralisation Unit can be installed with the system to adjust the pH value of effluent to comply with discharge standards

Automatically Discharged for Settled Sludge to ensure treatment performance

Simple, Continuous And Automated Operation

Highly Mobile. System can be put on a truck to become a mobile treatment station and transport easily to different locations

Low Operating Costs

Specification

		Capacity (m ³ /hr)	*Weight (ton)	System Dimension (mm)	Inlet dia(mm)	Discharge dia(mm)	Dosing Pump Cap		Effluent
S/N	Model						P1	P3	(mg/l)
1	KA-08	8-10	1.0	1600L x 1600W x 2500H	50	80	7.6 LPH	4 LPH	≤50
2	KA-10	10-15	1.5	1900L x 1900W x 2500 H	50	100	7.6 LPH	7.6 LPH	≤50
3	KA-20	20-25	2.5	2950L x 2300W x 2900H	80	100	17 LPH	7.6 LPH	≤50
4	KA-30	20-30	2.5	3200L x 2300W x 2900H	80	150	17 LPH	18 LPH	≤50
5	KA-40	30-40	3.5	3900L x 2300W x 2900H	80	150	17 LPH	18 LPH	≤50
6	KA-50	40-50	4.5	5200L x 2300W x 3000H	80	150	90 LPH	28 LPH	≤50
7	KA-60	50-60	4.5	5700L x 2300W x 3000H	80	150	90 LPH	28 LPH	≤50
8	KA-80	60-80	5.5	6500L x 2300W x 3200H	100	200	90 LPH	60 LPH	≤50
9	KA-100	90-120	6.5	7100L x 2300W x 3400H	150	200	90 LPH	120 LPH	≤50

1) Standard Models Material : Metal body Colour : Blue

*Remark : Subject to empty plant.

2) System consists of :

- Treatment tank & sedimentation tank
- Motor Mixer KA-20 & above, Static Mixer KA-10 & below
- Chemical dosing unit
- Discharge weir
- Control panel with/without programmed PLC (for auto/ manual control)
- Electrical valve or Air valve for auto sludge discharge (air compressor supply separately) For Model KA-10 and below only manual sludge discharge
- Filtration media
- Level sensor or float sensor for auto operation

3) Power consumption :

To be powered by main supply of 20A / 400VAC / 3 phase / 50Hz unless otherwise specified

4) Type of chemical used :

Clarifloc 1 (C1) - Flocculant (Polymer) Clarifloc 2 (C2) - Coagulant (PAC) (MSDS for C1 & C2 to be provided)

5) Operating process :

- Refer to flow Schematic Diagram attached.

6) Optional :

- Ph sensor for treatment process neutralization .

