

What is a Clarifier?

Multi-Compartment Clarifiers are essential in many water recovery systems and help as a first-step in the treatment process for both water reuse or discharge. Functionally, they force the water to dwell for a period of time in the multiple chambers of the clarifier and to change direction or flow path. This process forces sediment to drop out and allows oils, which might free float, to separate from the water and rise to the surface. Solids and oils can thereby be trapped in the compartments for later removal.

The traditional method for adapting a clarifier to an application is to locate a concrete vault, which is separated into a minimum of three compartments, into in the ground and allow the water to reach the clarifier by gravity flow. The water can then flow downstream and be discharged to sewer or be pulled from the cleanest chamber for further filtration for reuse.

Disadvantages associated with Below Ground Clarifier Systems:

1. Clarifiers require permitting to be installed and permits to operate.
2. Clarifiers require frequent inspection by government regulators
3. Clarifiers are large, heavy and typically have to be installed by a contractor.
4. Clarifiers are not easy to clean. They often require a hazardous materials company to pump them out on a regular basis.
5. Pumping our clarifiers can be expensive.
6. You cannot just remove the free floating oil and sludge build-up very easily and leave the water.
7. Clarifiers cannot be readily moved to another location. It's difficult to do, not cheap and may require additional permits.
8. Abandoning a clarifier is not easy to do either. Permits are required, and governmental agency notification is mandatory, or it may not even be allowed.

How can you get around these issue?

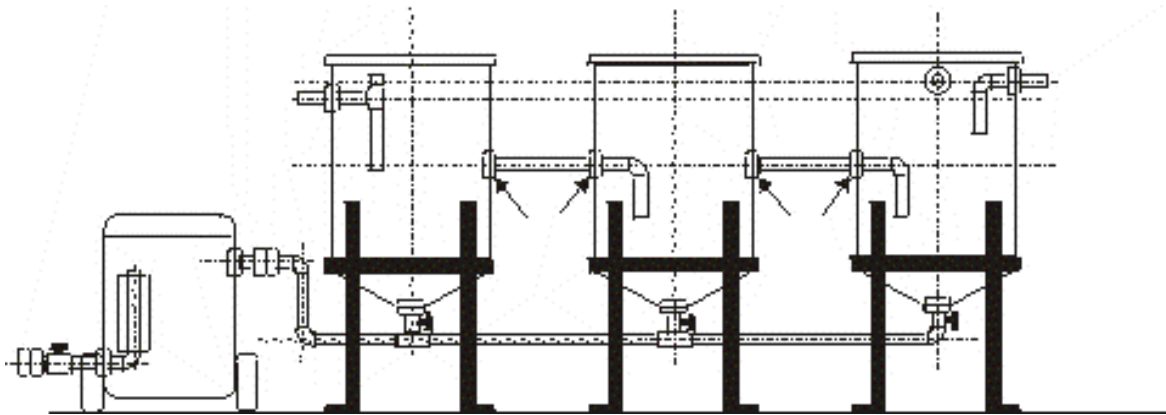
An alternative to many of the problems associated with operating a Below Ground Clarifier is to utilize an **Above Ground Clarifier**.

A simple Above Ground Clarifier consists of a minimum of three tanks located above ground and plumbed together in such a manner as to achieve the similar dwell time and flow directional changes as would be experienced in a below ground system. Unlike a below ground system, water usually cannot reach the tanks by gravity and will most likely need to be pumped into the tanks.

Advantages of an Above Ground Clarifier System:

1. Installation permits may not be required.
2. Operational permits may not be required.

3. They are inexpensive to purchase and inexpensive to operate as compared to traditional below ground options.
4. They are easy to install and can be relocated easily.
5. They are easy to maintain and clean.
6. Abandoning these systems is usually not a problem. They can be "retired from service" without obtaining permits or advising governmental agencies.
7. Use Permitting is not usually required.
8. Pumping out Above Ground Clarifiers is not usually required.
 1. Conical shaped tanks allow sediment to be easily purged into an above ground sludge hopper.
 2. Free-floating oils can be easily accessed from the tops of the tanks and removed.
 3. Water can be used for longer periods of time.
9. Options can be easily added to ENHANCE solids settling and oil water separation.



Model AGC-600 Shown -- 600 Gallon Capacity

| MODEL NUMBER | TANK CAPACITY | TOTAL CAPACITY | LENGTH | DEPTH | HEIGHT |
|--------------|----------------|----------------|--------|-------|--------|
| AGC-300 | (3) 100 Gallon | 300 Gallon | 14' | 42" | 60" |
| AGC-600 | (3) 200 Gallon | 600 Gallon | 18' | 48" | 80" |
| AGC-825 | (3) 275 Gallon | 875 Gallon | 20' | 48" | 75" |

Clarifiers are available in 1 to 6 stage tank designs

Clarifier Options:

Oil Coalescers in one or more tanks
 With Oil Bleed-off Valves in all tanks
 With Stainless Steel Stands for all tanks (standard is painted steel stands)
 With ALL POLY Tanks and Stands
 Ozonation/Aeration for odor and bacteria control for one or more tanks
 Auto Timed Sediment Dump Valves

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