

**Innovative Concept for
Solids Removal by Flotation**

CLARIFY YOUR WASTEWATER ECONOMICALLY AND EFFICIENTLY



CAF® - CAVITATION AIR FLOTATION

CAF® can cut your waste treatment cost by 40%-90%

Make sure that your wastewater treatment is simple and trouble-free. The CAF System is an innovative system for the removal of solids from liquid waste. Design simplicity makes the unit easy to operate, easy to maintain, economical to use.

CAF is a Cavitation Air Flotation process. Microbubbles are injected into the wastewater without first having to dissolve the air. Only air passes through the ejection nozzles, therefore no blockage can occur. You have no need for air compressors, pumps, and pressure tanks.

The system is a self-contained, rectangular unit therefore space requirement is

minimal. Site preparation, construction and costs are at a minimum.

There are four sections: an aeration section with cavitation aerator, flotation (clarification) area, solids discharge chamber, and clarified effluent channel and adjustable weir section.

Wastewater enters a baffled aeration section. Here, the cavitation aerator (2 HP) draws ambient air down a shaft and injects microbubbles directly into the wastewater. The bubbles

fasten to the particles, flow upward and support the particle at the surface.

The floated solids, (fats, oils, grease, suspended, colloidal

solids) are removed by a scraping mechanism, which propels the sludge up a metal beach into a discharge channel. There, collected solids are transferred to a container for disposal. Both mechanisms are driven by a 1/2 HP gear motor.

Recirculation tubes from the aeration chamber continually recycle substantial volumes of liquid. This eliminates deposition on the bottom and assures continual circulation of tank contents.

Clarified water gravity flows to an adjustable weir section, which controls the water level of the main tank. From the weir, the effluent is discharged.

HydroCaL

**SAVE ON YOUR SEWER BILL
 SAVE ON YOUR ELECTRIC BILL
 SAVE ON MAINTENANCE**



HydroCal's Cavitation Aerator injects microbubbles directly into the wastewater to make the solids rise.



Scrapers move a thick sludge blanket to the auger area.

FEATURES AND BENEFITS

- Simple operation** means quick start-up and minimal maintenance time required.
- Economically priced** means low capital outlay.
- 2.5 HP** means low operational costs.
- Efficient design** saves space compared to other, conventional systems.
- Automatic operation** means minimal operator time.
- Sturdy construction** gives you years of reliable service.
- Simple installation** means lower initial cost.
- Desinged** to customer requirements.

MACHINE SPECIFICATIONS

Construction	Stainless Steel, Mild Steel.
Models	10 to 5000 gpm. Multiples of these units have capacity for larger flows.
Dimensional footprint	Self-contained rectangular tank for saving space.
Cavitation Aerator	Stainless Steel shaft with coated steel housing - Stainless Steel optional.
Aerator motor	2 hp or 3 hp.
Scrapers	Chain mounted, driven by a cog and drive shaft system.
Scraper bar	Stainless Steel.
Scraper/Auger motor	1/2 HP, 1/3 HP for small systems, 3/4 HP for large systems.
Auger	Stainless Steel, Mild Steel, or as required.
Drain connection	As required.

