

DISSOLVED AIR FLOTATION

RECTANGULAR



DISSOLVED AIR FLOTATION (DAF)

Kusters Water / Hi-Tech offers a complete line of dissolved air flotation (DAF) systems. Ideally suited for liquid-solid separation in many industries, including separation of free oils and grease. The Hi-Tech DAF units are designed for effective removal of total suspended solids (TSS), biochemical oxygen demand (BOD) and fats, oils and grease (FOG).

Tank designs are offered in standard sizes based on flow rates. Materials of construction available include: Epoxy coated steel, 304 SS and 316 SS. All chain and flight components are non-metallic, low maintenance.

HIGHLY EFFICIENT

80 to 90% Capture of Suspended Solids Without Chemical Addition

90 to 98% Capture of Solids With Chemical Addition (Typically a Polymer)

3.5 to 5.5% Float Thickness (WAS - Solids Concentration)

85 to 90% Air Dissolution Capability

80 to 90% Oil and Grease Removal

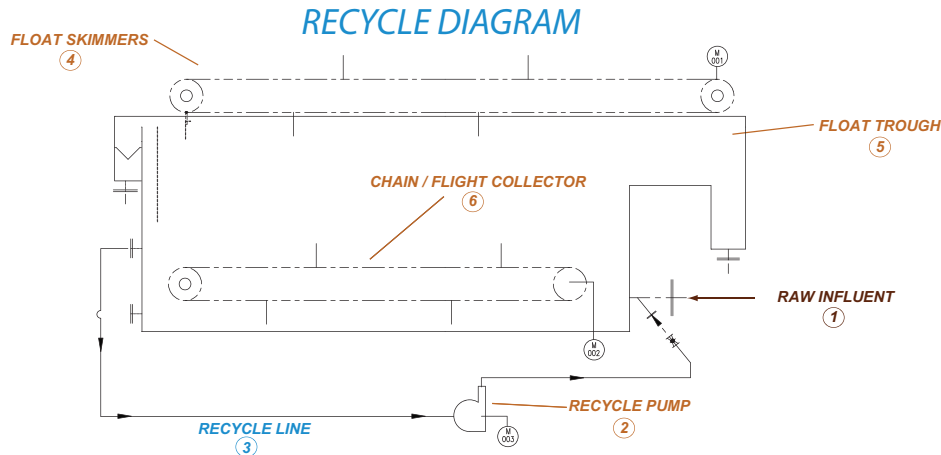
50 to 80% B.O.D. Reductions



Water and Wastewater Equipment by: WASTE-TECH HI-TECH

PRINCIPLE OF OPERATION

Raw influent (1) is introduced into the DAF cell, 20-100% of the clarified effluent is recycled (3) with the recycle pump(s). Air dissolution occurs within the specially designed multi-phase recycle pump (2) or using a conventional air dissolution system including an air compressor, recycle pump and air dissolution tank. The recycled air/water mixture is then injected at the point of raw influent and into the DAF cell, allowing the microscopic bubbles to attach to the suspended solids. The floated solids accumulate on the surface of the DAF. A non-metallic surface skimmer (4), with multiple collection flights, collects the floated solids and pushes them into the float collection trough (5) located at the adjacent end of the DAF cell. The clarified water exits the tank. Heavier solids that settle to the tank floor are collected and removed via a chain and flight system or auger (6).



Shop assembled and loaded for transit.



Lower Chain and Flight System.



DAF Unit Using Conventional Recycle System.

PROVEN APPLICATIONS

Aircraft Maintenance
Algae Removal
Automotive
Ballast Water Treatment
Canning
Chemical Processing
Cheese Processing

Durable Goods
Food Processing
Heavy Metals Removal
Landfills
Meat Packing
Mining
Pet Foods

Poultry Processing
Power Plants
Prepared Foods
Pulp And Paper
Railroads
Refinery
Rendering

Seafood Processing
Snack Foods
Sludge Thickening
Stockyard And Feedlot
Tanning
Textile
Trucking Industry

For more information call **864.576.0660**
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