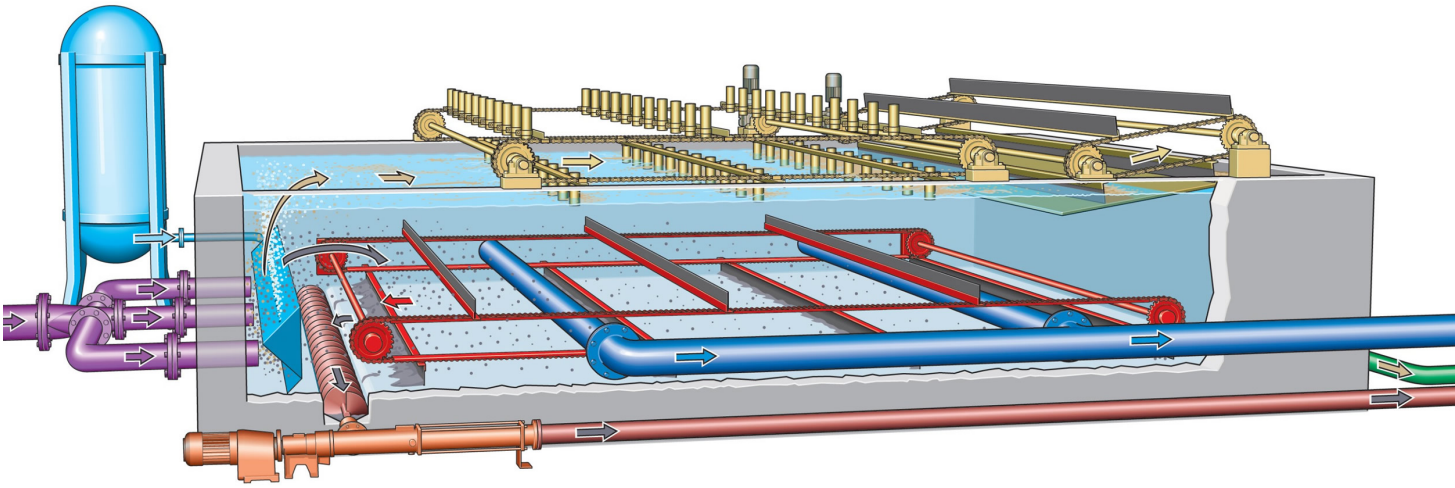
BASIC FLOAT – Dissolved Air Flotation (DAF) Clarifier



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BASIC FLOAT Dissolved Air Flotation (DAF) Clarifier

Technology

The Basic Float is a conservative standard Dissolved Air Flotation (DAF) Clarifier for which the tank can be executed in concrete or steel.
A portion of the treated stream is saturated with pressurized air in a saturator (dissolving vessel). When that saturated stream is returned and released to the flotation tank at atmospheric pressure, the dissolved air comes out as a cloud of fine micro-bubbles. Those bubbles attach to flocs (coagulated/flocculated solids) and lift them to the surface where they form a sludge blanket. Floated sludge is removed by a surface paddle/scraper while any heavier settleable solids are removed by a bottom scraper to a sludge hopper.

Features

- Rectangular concrete or fabricated steel tank.
- Typical compartments (in flow order): influent inlet/flocculation (sometimes external rapid mix + floc), DAF flotation zone, surface floated sludge collection by paddle scraper
- Length-to-width ratio depending on layout and installation space
- Diffused inlet baffle and distributor header to reduce velocity and distribute flow uniformly across the cell width
- Recycle stream is introduced to the flotation tank through a pressure-reduction valve and a fine-bubble distribution
- The slow-speed rotating arm with paddle blades/flights gently skims the floating sludge toward longitudinal sludge troughs/hoppers located on the tank end
- Collected surface floated sludge drops into a collection trough and is pumped (sludge pump) or gravity-conveyed to a sludge holding tank or dewatering unit
- Bottom scraper executed as continuous chain scraper or rake running near the tank bottom to collect any heavier, settleable sludge and to prevent dead zones
- The bottom scraper sweep solids to a central longitudinal hopper or to end hoppers where a sludge pump (submersible or dry pit) evacuates sludge

Why to buy

- Classical Dissolved Air Flotation clarifier for execution with concrete or steel tank
- Cost Effective Equipment if large installation space is available





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Typical & Proven Process

- Water Clarification applications for Paper and other Industries.
- Closing of water loops and reduction of freshwater consumption
- Clarification of primary and secondary mill effluent
- Other industrial applications for food, oil, or chemical industry – please ask for details

See the following Products as well

- Universal Dissolving System
- Circular Sedimentation Tank
- Tauro TAL
- Elephant
- Dinoscreen
- LimeTrap
- DeltaPurge
- Vulcano
- GyroSand

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