

CDC DAF system



CDC DAF the technology for removal of fluid (e.g. oil) and/or solid particles from water/waste water. The separators make use of gravitation.

Because of the differences in density between water and it's contaminants, a separation can be achieved.

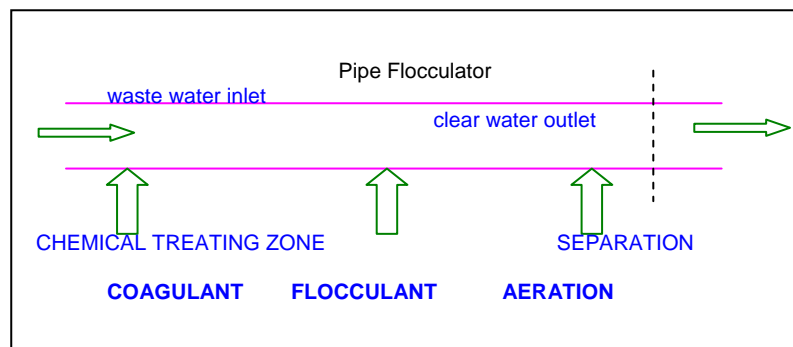
However, due to slight differences in density, it frequently occurs that the contaminants can not be separated. Small particles (dispersed or emulsified) can be made separable by means of physicochemical treatment (coagulation, flocculation and coalescence). The adherence of micron sized air bubble to solid particles results in a sufficient difference in density in order to effect fast flotation and efficient separation

THE CDC DAF ADVANTAGES OF DESIGN

- High separation efficiency, with the large separation area corrugated plate.
- Optimal flotation layer (sludge) dewatering by unique concentrating system.
- Compact systems easy to operation and low energy consumption.
- Low maintenance and long life due to the use of stainless steel.
- If desired, available in materials other than stainless steel in conformity with customer's specifications.
- Standard system with short delivery times, for any desired capacity.

TECHNICAL INFORMATION

Flocculation, which in case of colloidal solutions, is necessary to bring solid particles in to a separable form, proceeds, in general, in accordance with the diagram shown as below.



- The construction, start-up and service by chemical dynamics specialists.
- All equipment can be provided in local.

CDC DAF APPLICATIONS

CDC DAF, system can be applied both with and without chemical pretreatment (Flocculation).

Without chemical pretreatment for applications such as

- Removal oil in refineries.
- Fat separation in slaughterhouses.
- Final treatment of "production" water at oil production fields.
- Biologically activated sludge flotation.

With chemical pre-treatment

- Slaughterhouses
- Meat-packing industry
- Rendering plants
- Papermaking industry
- Vegetable oil processing industry
- Oil production fields
- Desalters
- Tank cleaning
- Refineries
- Laundries
- Biologically activated sludge flotation
- Purifications of fruit juices.

The our service team can help you to find a good solution for your specific problem on the basis of their comprehensive experience and know-how. Test programmes indicate and/or determine what possibilities there are in your case.

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The mixing and reaction between chemicals and contaminant particles take place in a pipe, by means of controlled, calculated turbulence. The air need for flotation is dissolved in a sub-flow of the purified water. A special multiple stage pump is used for mixing and increasing the pressure. Upon relief of the pressure, in specially designed valves, microscopically small air bubbles are released, which, upon mixing with the wastewater, adhere to the solid particles. In the CDC DAF separator, the rising particles form a flotation layer, which is optimally dewatering by means of the DAF concentrator and discharge system. Particles with a lower floating power are separated between the sheets and reach the flotation layer later through the tops of

the corrugated sheets. Settling material is carried off via the troughs of the corrugated sheets to the sludge compartment and subsequently removed via a sandtrap system.



@ Perfect Companion manufacturer of ("Smart Heart" dog food)
CAP. 15 cubic meter/hour



@ Minor Cheese Co., Ltd.
CAP. 20 cubic meter/hour



@ Pan Orient Vichienburi
Oil Drilling Field
CAP. 5 cubic meter /hour



@ Bangkok Agro Product PCL
Dried Egg Industries (CP) Nakornayok Banna
CAP. 10 cubic meter /hour