

Dissolved Air Flotation

After screening, the remaining suspended solids, fat, oil and grease can efficiently be separated from the waste water by Redox' Dissolved Air Flotation (DAF), applying different plate pack configurations. Depressurising a part of the treated water, which has been

recycled and super saturated with air, generates the micro air bubbles. These micro air bubbles are released and adhere to the suspended particles, fat, etc., which consequently will rise to the surface of the flotation unit. A special scraper/thickening mechanism dewateres the floating materials to a maximum dry solid content before being discharged into the skimming compartment.



Fig. 3 Flotation system, type KCL 120, capacity 300 m³/hr., including pipe flocculator

Redox has developed a wide range of highly efficient and compact stainless steel flotation units. Most units are executed with a stainless bottom auger to remove settled solids. Settling solids like sand are collected in one, blockage free, sediment compartment where they are transported by the bottom auger to a discharge point. The discharge of these settled materials is completely automatic by means of a pneumatic actuated butterfly valve.

The units can be executed with a unique clogg-free aeration system, ensuring easy operation and maintenance.

Typical industries for DAF applications

- Red meat/Poultry industry
- Fish industry
- Dairy industry
- Other food industries
- Textile industry
- Paper/Pulp industry
- Petro-chemical industry
- Other industries with (high) solids loaded effluents

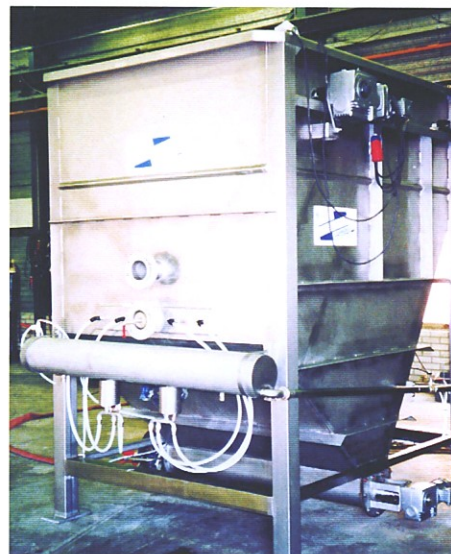


Fig. 4 Flotation system, type KWF 50 with bottom auger