JacopaDAF™ Technology
Dissolved Air Flotation (DAF)

Key Features & Benefits:

- DAF designed for primary and tertiary treatment
- Heavy-duty scraper system designed for continuous use.
- Robust construction designed to suit each application.
- Stainless steel construction.

How We Create Value:

- Most reliable dissolved air system on the market.
- Most flexible system on the market.
- Counter-Current sludge removal system with high loading capacity.
- Cost-effective design removes and thickens solids automatically.

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Dissolved Air Flotation (DAF)

The JacopaDAF™ system is a clarification process for the separation of solids, grease and oils. It works by producing a stream of micro-fine air bubbles that attach to solids and float them to the surface, where they can be removed by a surface scraping mechanism.

DAF is ideally suited to particles and flocs that are of neutral density, slow-settling or buoyant. This is particularly relevant to food and other industries where wastewater frequently carries large volumes of low density solids, unsuited to settling. DAF also takes up considerably less space than settling methods: generally less than 25% of the equivalent surface area is required.

For efficient separation of solids with a wide-range of densities, incorporating economy of space, DAF is the most appropriate process to employ for many trade waste applications. Our high-quality systems are specially engineered to suit each application. Most are constructed from stainless steel, although other materials can be used to suit unusual or highly corrosive environments.

A JacopaDAF™ system is just one of the separation systems that form part of a complete wastewater treatment plant. Generally the design also incorporates: collection wells, pumping systems, primary screening, chemical dosing systems, equalizing tanks, sludge dewatering, electrical control systems, instrumentation and secondary treatment methods. Jacopa are specialists in the design and construction of complete treatment plants, incorporating DAF and a wide range of other proprietary products.

Our extensive knowledge and understanding of the processes that generate potable water and wastewater is critical to the successful implementation of DAF systems as a treatment stage.

JacopaDAF™ Technology Features and Benefits

Integrated Chemical Reaction Tanks:

The JacopaDAF™ system can be manufactured with any number of chemical reaction tanks for upstream pH control or coagulation. The reaction tank is constructed in stainless steel, with a retention time to suit each application. High quality mixers, pH controllers and dosing line connectors are all fitted as standard.

Heavy Duty Scrapers:

The surface scraper is based on a six-sprocket guide system, ensuring accurate tracking of the scraper blades over the beach. Extra heavy-duty roller chains, sprockets and drive motor/ gearbox are designed for continuous duty. Scraper blades can be any composition (rubber, MOPE).

True Dissolved Air Process:

Treated water from the base of the DAF is mixed with compressed air in a Dissolved Air Saturator (DAS). At the entry to the DAF, the pressure is released to ensure production of uniformly sized micro-bubbles that are key to optimizing bubble attachment.

Unique Counter-Current Scraping:

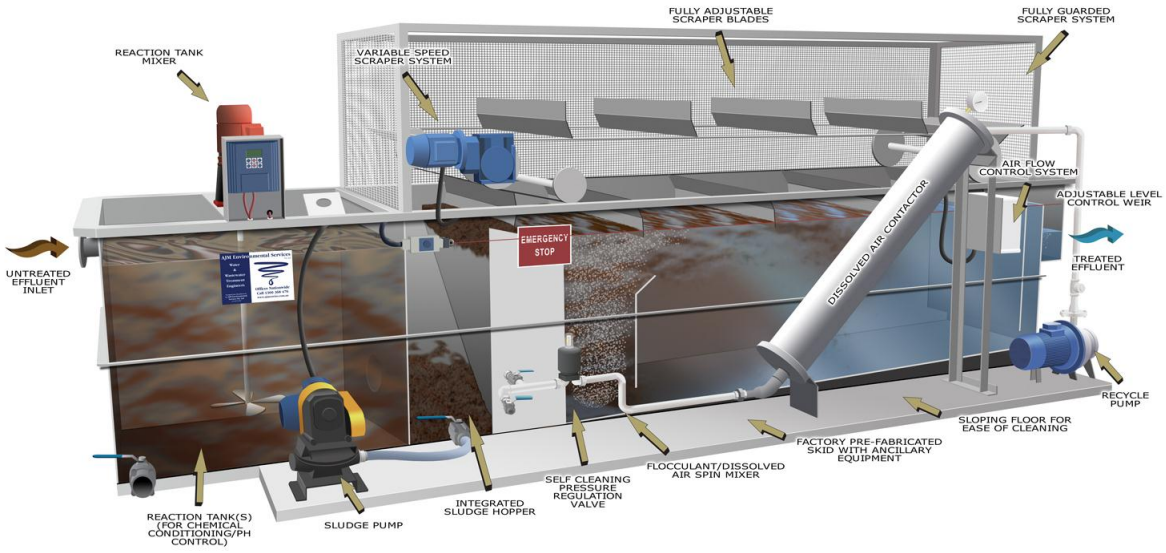
The EnviroDAF™ system features a unique counter-current sludge removal system. Unlike co-current or circular systems, the reversed profile of the counter-current system allows a constant lift of air bubbles under the sludge blanket in the removal zone, resulting in vastly improved performance.

Built off site:

The pre-assembled system is usually supplied as pre-tested units to simplify installation.

Bottom Sludge Removal:

For ease of cleaning, the DAF systems are designed with a sloping base to allow any settled solids to be drained. On any DAF systems our hopper bottom is a proven method of automatically removing solids.



JacopaDAF™ Technology
Range of Capabilities

Capacities and Sizes*				
Model	**M3/hr**	**Length (mm)**	**Width (mm)**	**Height (mm)**
12	2.0 - 7.0	2830	1000	1800
26	7.5 - 12.5	3300	1200	1800
38	12.0 - 18.0	3650	1500	1800
48	12.5 - 20.0	4350	1500	1800
710	20.0 - 30.0	4850	2000	1800
110	40.0 - 60.0	5900	2500	2085
150	60.0 - 80.0	7400	2500	2085
190	70.0 - 100.0	9100	2750	2085
240	100.0 - 150.0	9300	3500	2800
340	150.0 - 200.0	10400	4000	2800
420	225.0 - 300.0	12400	4000	2800
600	300.0 - 400.0	13900	5000	2800

* Dimensions and capacities are only a guide and are subject to change. Please confirm with Jacopa prior to using the above.

Applications:

For the following industries & applications, an JacopaDAF™ system is usually the most appropriate separation device for wastewater treatment:

- Industrial fog removal chemical reclamation
- Municipal tertiary treatment
- Raw water primary treatment