



DISSOLVED AIR FLOTATION (DAF)

Compact, low maintenance DAF units engineered for a wide range of solids and fats/oils removal requirement.

OVERVIEW

Enviro Concepts DAF systems are engineered to efficiently remove suspended solids, fats and oils, BOD, COD and heavy metals from a wide variety of water and wastewater sources.

These units are pre-engineered, pre-assembled and factory tested minimising site installation and start-up time. Simple connections and easy to set up controls make these units ready for quick on-line service.

The DAF unit emits minute air bubbles which bind with the oils/fats, precipitated metals and suspended solids increasing their ascending ability. This results in a floating sludge layer that can easily be removed by a mechanical scraper.

APPLICATIONS

FEATURES

- Mild Steel or Stainless 304 and 316
- Containerised, Skid Mount or Standalone
- Single, Multiple or No Chemical Injection
- Low Wear Mechanical Scraper
- Level Control Weir
- Feed and Discharge Water Pumps
- Efficient Air Diffusion and Mixing Zone

- Wash Bays for Cars, Trucks, etc
- Mine Vehicles and Equipment Wash Downs
- Mechanical and Panel Beating Workshops
- Industrial Wash Processes
- Sea Water Desalination
- Storm and Ground Water Treatment
- Restaurants and Hotels
- Grease Trap Waste Treatment
- Food Industry Wastewater
- Activated Sludge Systems
- Sludge Thickening

SPECIFICATION

Feed Water Source	Industrial wastewater, wash bay effluent, meat processing effluent, etc.
Flow Capacity	5 to 200 m ³ /hr
Max. Suspended Solids	2,000 mg/L
Dry Weight	Approx. 1.5 to 5.5 Tonne
Power Requirements	1.1 to 2.2 kW (for the Water), 1.1 to 22.0 kW (for the pumps), 0.55 to 4.0 kW (for the air)
Dosing Chemicals	EnviroCoag, EnviroFloc, EnviroBase
Operating pH	6 to 10 pH
Operating Temperature	Below 40 deg C
Particle Size	Maximum Input of 1.0 mm
Suspended Solids Reduction	Up to 95% (with Coagulation/Flocculation)
BOD & COD Reduction	Up to 80% (with Coagulation/Flocculation)
Fats, Oils and Grease Reduction	Up to 95% (with Coagulation/Flocculation)

MODEL RANGE & TECHNICAL DATA

Model	Capacity	Power (kw)			Dimensions (m)			Pipe Connections (DN)		
	(m ³ /h)	Pump	Air compressor	Skimming Motor	L/L ₁	W/W ₁	H	Inlet (a)	Outlet (b)	Sludge Out (c)
DAF006	~6	1.1	0.55	0.2	2.8/3.6	1.7/2.3	2.1	80	80	100
DAF010	~10	1.5	0.55	0.2	3.7/4.5	1.9/2.6	2.4	100	100	100
DAF020	~20	3	0.75	0.2	4.7/5.6	2.5/3.1	2.4	150	150	150
DAF030	~30	3	0.75	0.2	5.5/6.5	2.6/3.3	2.4	150	150	150
DAF040	~40	5.5	0.75	0.2	6.8/7.5	3/3.6	2.5	200	200	150
DAF050	~50	5.5	0.75	0.2	7.1/7.8	3/3.6	2.5	200	200	150
DAF070	~70	7.5	1.5	0.2	9.0/10.0	3.1/3.7	2.7	250	250	150
DAF100	~100	15	2.2	0.2	11.3/12.3	3.3/4.0	2.7	300	300	200
DAF150	~150	18.5	3	0.2x2	10.0/11.0	6.7	2.7	250x2	250x2	200x2
DAF200	~200	22	4	0.2x2	11.0/12.0	7.3	2.7	300x2	300x2	200x2