

PRODUCT DATA SHEET



DAF Clarification

water | wastewater | sewage

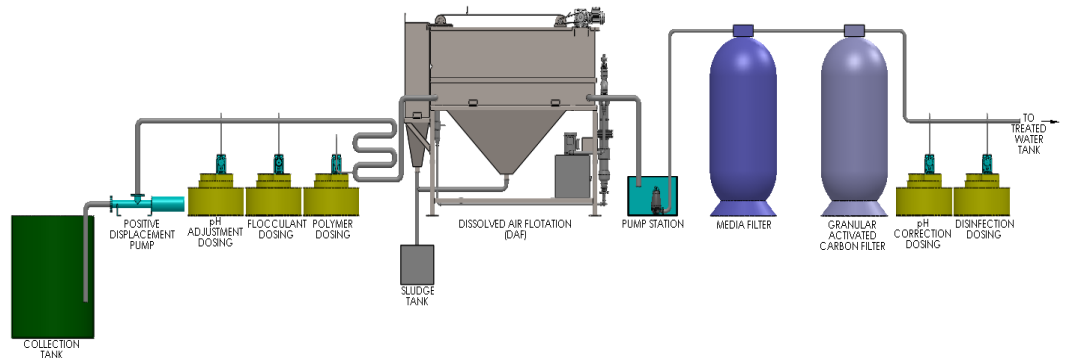
OVERVIEW

The MAK Dissolved Air Flotation (DAF) system is a superior counter current system designed to achieve maximum treatment efficiency in a compact footprint. It is able to remove a variety of contaminants to meet trade waste or reuse requirements. Each system is sized based on the hydraulic loading rate, Total Suspended Solids (TSS) and Fats, Oil and Greases (FOG) levels. The surface loading rate that can be applied is dependent on each application. If in doubt, please contact MAK Water for clarification of sizing.

STANDARD PROCESS

The DAF separates the suspended solids and lighter liquid contaminants (eg FOG and hydrocarbons) from the water by moving them to the surface of the DAF vessel and then scraping them off the surface. A pressurised stream of air-saturated water is mixed with the flocculated water and with the release of pressure, a cloud of very fine air bubbles carries the suspended solids and lighter liquids to the tank surface. Clean water overflows from the DAF tank, via an under/over-weir to sewer or to the next stage of the treatment process. The overflow level is adjustable and controls the level in the DAF flotation section. The sludge on the surface of the DAF is scraped into a sludge hopper by a mechanical scraper. The DAF system is automated via a programmable logic controller (PLC) mounted within a control cabinet on the system.

ADDITIONAL FLOW RATES AND CUSTOMISED SOLUTIONS ARE AVAILABLE. JUST ASK US.



STANDARD SPECIFICATIONS

Parameter	Units	DAF 1.0	DAF 1.5	DAF 3.5	DAF 10	DAF 20	DAF50	DAF100	DAF200
DAF Flow Rate	m ³ /hr	1.0	1.5	3.5	10	20	50	100	200
Total Inlet Solids	mg/L	10,000							
FOG Removal	%	85~95 (Application Dependent)							
TSS Removal	%	70~99 (Application Dependent)							
COD Removal	%	20~80 (Application Dependent)							
BOD Removal	%	20~80 (Application Dependent)							
Power Consumption	kW	2	3	4	7	12	25	44	84
Footprint	m	2.2 x 2.0	2.2 x 2.0	3.0 x 2.5	4.0 x 3.0	4.0 x 3.0	6.0 x 5.0	9.0 x 5.0	10.0 x 6.0

STANDARD INCLUSIONS + OPTIONS

✓ = Standard Supply, o = Optional Supply, - = Not Available

Equipment	DAF1.0	DAF1.5	DAF3.5	DAF10	DAF20	DAF50	DAF100	DAF200
Skid Mounted Plant & Equipment	✓	✓	✓	✓	✓	-	-	-
Feed Pump	Standard	✓	✓	✓	✓	✓	✓	✓
	Submersible	o	o	o	o	o	o	o
Pre-Treatment	Flocculent Dosing	o	o	o	o	o	o	o
	Polymer Dosing	o	o	o	o	o	o	o
	pH Adjustment	o	o	o	o	o	o	o
PLC Control System with HMI	✓	✓	✓	✓	✓	✓	✓	✓
On Board Air Compressor	o	o	o	o	o	o	o	o
Treated Water Recycling for Saturator	o	o	o	o	o	o	o	o
Saturator Feed - Potable Water Top Up	o	o	o	o	o	o	o	o
Flow Based Chemical Dosing	o	o	o	o	o	o	o	o
Containerised System, c/w A/C & Lights	o	o	o	o	-	-	-	-
Container Insulation (walls & ceiling)	o	o	o	o	-	-	-	-
Container Non-slip Floor Coverings	o	o	o	o	-	-	-	-
Container Side Access Door	o	o	o	o	-	-	-	-
Additional Pre DAF Treatment	o	o	o	o	o	o	o	o
Additional Post DAF Treatment	o	o	o	o	o	o	o	o
Premium Instrument Package	o	o	o	o	o	o	o	o
Sludge Pump	o	o	o	o	o	o	o	o

Instrumentation	Standard Package	Premium Package
Pressure Gauges	✓	✓
pH Transmitter (4-20mA)	✓	✓
Pressure Reducing Valve	✓	✓
Flow Switch	-	✓
Flow Transmitter (4-20mA)	-	✓
Sludge Hopper Level	-	✓
Remote Monitoring & Control Capabilities	-	✓

MODEL SELECTION

- 01.0** 1.0 m³/hr flow rate
- 01.5** 1.5 m³/hr flow rate
- 03.5** 3.5 m³/hr flow rate
- 010** 10 m³/hr flow rate
- 020** 20 m³/hr flow rate
- 050** 50 m³/hr flow rate
- 100** 100 m³/hr flow rate
- 200** 200 m³/hr flow rate
- XXX** Custom flow rate
- XX** Skid mounted
- CX** Containerised - standard
- CF** Containerised - with floor coatings
- CP** Containerised - with floor coatings & insulation
- X** Standard feed pump
- S** Submersible feed pump
- X** Pre DAF treatment - without
- C** Pre DAF treatment - custom
- X** Post DAF treatment - without
- C** Post DAF treatment - custom
- X** Standard instrument package
- P** Premium instrument package, c/w remote monitoring
- C** Custom instrument package
- Sludge pump**
- X** Without
- C** Custom



Disclaimer: MAK Water is continuously updating and improving its products and services, so please contact us for more detailed information or to confirm specifications. MAK Water takes no responsibility for any errors resulting from the use of information contained within this document.

DAF - - - - -

NEED A QUOTE?
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 AND EMAIL TO...
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