

UCD[®] DAF

Separation by flotation
Aquadaf[®] and Rictor[®] technologies
Surface water

Functioning

Coagulation-flocculation

Addition of a coagulant and water passing through a double coagulation compartment and then into a hydraulic type flocculation chamber.

Flotation

- Admission of the flocculated water into the pressurized water injection zone.
- Expansion of the pressurized water through a series of nozzles and creation of a cloud of microbubbles.
- High rate flotation and water clarification thanks to a patented perforated floor.

Accumulation of sludge

Accumulation of surface flocs producing a thick layer of sludge and removal by hydraulic (periodic overflow) or mechanical (motorized scraper) methods.

Applications

- Removal of low-density particulate pollution (colloids, color, algae, etc.)
- Waters with high organic content, algae, and cyanobacteria
- Water from dams, rivers, and eutrophied lakes
- Cold water clarification
- Raw water turbidity < 30 NTU (peaks at 200 NTU)
- Pre-treatment for seawater desalination
- Possible use in tertiary dephosphatation or treatment of dirty filter wash water

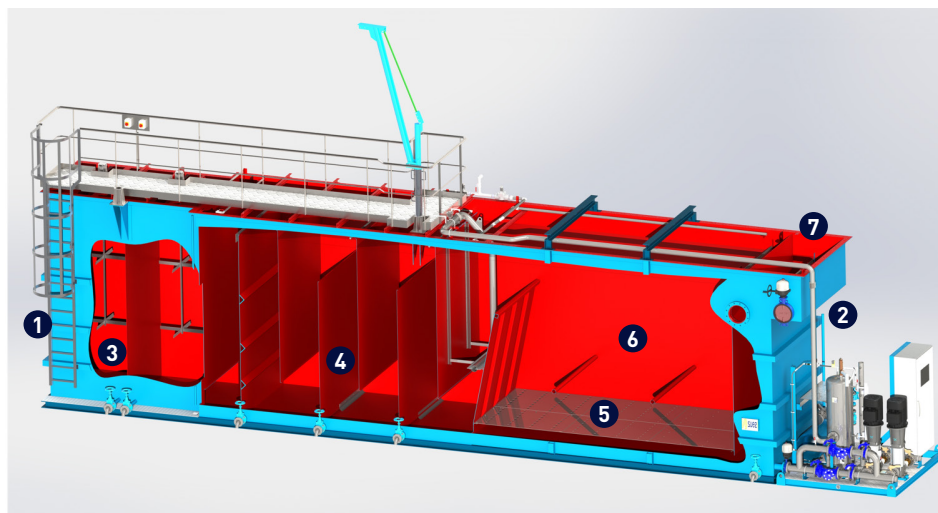


Performance

- High speed clarifier offering increased capacity for existing (rehabilitation) or new installations
- Turbidity of the clarified water from 1 to 4 NTU depending on the raw water
- Sludge extraction from 20 to 40 g/L
- Approximately 90% algae removal

Technical characteristics

UCD® DAF model	Unit	25	50	75	100	150	200	250	300
Main technical specs									
Production / day (24h/24)	m ³ /d	600	900	1200	1800	3600	4800	6000	7200
Instant flowrate (T=5 to 15°C)	m ³ /h	25	50	75	100	150	200	250	300
Consumed power	kW	5.4	6.8	6.8	9.8	9.8	12	12.9	15
Total tank length	m	4	4.4	5.6	7.6	7.6	11.4	12.7	14.2
Total tank width	m	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total tank height	m	3.1	3.1	3.1	3.15	3.15	3.35	3.6	3.8



1. Raw water
2. Treated water
3. Coagulation
4. Flocculation
5. Aquadaf® Floor Technology
6. Flotation zone
7. Sludge removal

Benefits

Aquadaf: Technology that can also be used in sea applications, in osmosis pre-treatment and in tertiary treatment.

UCDs® contribute to the following Sustainable Development Goals:



Contact

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