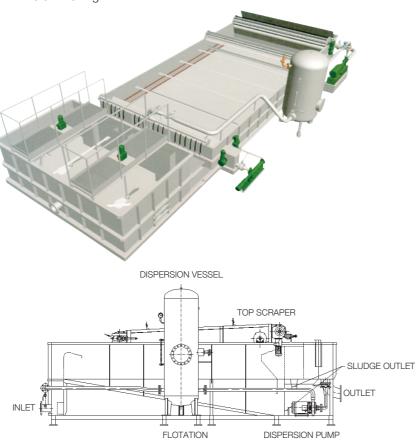
## FLOOTEK DAF UNITS

## PURAC DISSOLVED AIR FLOTATION

### Standard units, capacities in m<sup>3</sup>/h

Mod	del Size	Capacity	
SFC	2	6-14	
SFC	3	9-21	
SFC	4,5	14-32	
SFC	6,5	20-46	
SFC	9	27-63	
SFC	12	36-84	
SFC	16	48-112	
SFB	20	60-140	
SFB	25	75-175	
SFB	30	90-210	
SFB	35	105-245	
SFB	40	120-280	
SFB	45	135-315	
SFB	50	150-350	
SFB	55	165-385	
SFB	60	180-420	
SFB	65	195-455	
SFB	70	210-490	
SFB	75	225-525	
SFB	80	240-560	
SFBE	90	270-630	
SFBE	) 100	300-700	
SFBE	) 110	330-770	
SFBE	) 120	360-840	
SFBE	) 130	390-910	
SFBE	) 140	420-980	
SFBE	) 150	450-1050	
SFBD	0 160	480-1120	

Under the brand Flootek, Purac undertakes delivery of ready-made skid mounted DAF units of stainless/acid-proof steel that are prepared for swift and simple plug-in installation. The units are widely used for wastewater treatment, mainly within the food industry, oil refineries, pulp and paper mills, and metal finishing.





## Superior separation of suspended solids

Developed and refined since 1950s, the Purac Dissolved Air Flotation technique is an effective and rapid method for separation of particles from water and wastewater.

- Guaranteed performance
- Low investment
- Compact design

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Please contact us for more information about the Purac proven process and improved leading edge technologies.



## PURAC DAF CLASSIC

## PURAC FLOFILTER

### **Dissolved Air Flotation (DAF)**

Water flowing into the DAF tank is injected with a high-pressure air/water solution, derived from recycling some 10% of the plant flow through an air/water saturation system. Regulation of pressure release valves causes the pressure of the recycled water to suddenly drop. This pressure change creates micro-bubbles that attach to the flocculated material and rapidly carry it to the surface, forming a stable floating sludge.

### Sludge Removal

Surface sludge is removed by a chain-driven flight scraper into a trough from where it is transported to storage.



Chain-driven flight scraper for surface sludge removal.

# **3.** Distribution and reaction chamber 4. Saturation unit 5. Floated sludge scraper 6. Sludge trough 7. Clear water channel 8. Bottom sludge scraper

### **Applications**

Purac DAF Classic system is a widely used particle separation solution in waterworks, industrial and municipal wastewater treatment, for sludge thickening, as well as for treatment of industrial effluents in the food, pulp, and paper industries.

### Effective

Removal of suspended solids is excellent, typically >95%.

### Compact

A hydraulic load of up to 15 m/h can be processed in environments with space limitations.

### Robust

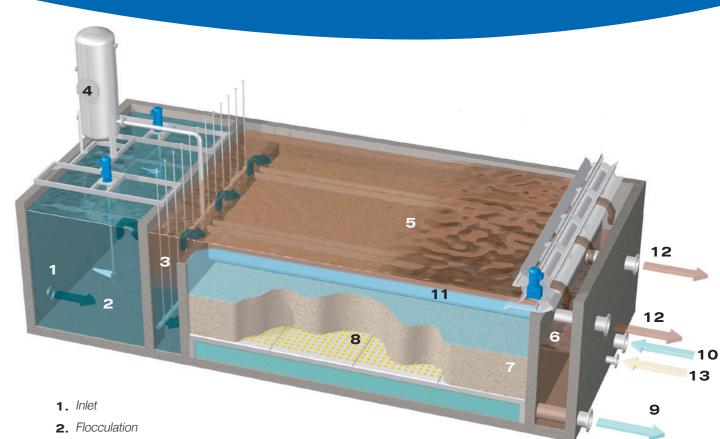
Wide variations in flow and solid loadings can be easily handled.

### Low Sludge Volume

The floating sludge has a high dry solids content (3-6%). There is no need for further sludge thickening.

### 1. Inlet

2. Flocculation



- 3. Distribution and reaction chamber
- 4. Saturation unit
- **5.** Floated sludge scraper
- 6. Sludge trough **10.** Backwash water inlet
- 7. Filter media
- **11.** Dirty backwash water channel

9. Clear water outlet

- **12.** Dirty backwash water outlet
- **13.** Backwash air inlet

### Purac Flofilter™

### **Combined flotation and filtration**

After flocculation/DAF, the water gravitates through the filter bed, which removes the remaining contaminants to the required level. The Purac Flofilter is an established, well-proven technique for treatment of surface waters, operating as a constant level filter with an outlet-modulating valve during this phase.

Flofilter is a compact and efficient plant as it combines flotation and filtration in one treatment basin. In addition to this two-stage processing, Flofilter offers other major advantages: rapid start-up, shut down and response; low volume output of sludge; excellent algae removal; and low backwash consumption (2-3%) of feed flow rate based on one wash per day.

Filter backwashing can be initiated by a timer or loss of head. Conventional air scour water wash techniques are employed for filter washing.

**8.** Filter bottom with nozzles





Flofilters under backwash and in operation.