

# DAFAST



**3<sup>RD</sup> GENERATION OF FLOTATION:  
MORE VELOCITY, LESS FOOTPRINT, MAXIMUM PERFORMANCE**

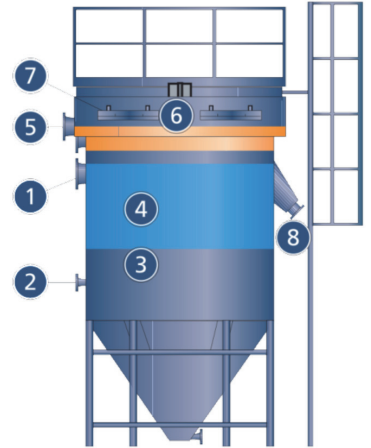
DAFAST (Dissolved Air Flotation – Fast) is a third generation float that achieves ascending speeds of up to 20 mph (versus 3-4 mph for conventional DAFs), thanks to its turbulent microbubble filter system design.

### ADVANTAGES

- High level of suspended solids removed, thanks to:
  - a) Separate recirculation and waste.
  - b) Greater efficiency of the “bubble filter”.
- Optimisation of the space needed to achieve very high speeds.
- No blockages inside the float, as there are no lamellas or restricted speed zones.
- Greater dryness of sludge.
- Convenient purging of decanted matter, thanks to the float’s conical base.
- Free pressurization system for blockages with minimal maintenance for the formation of microbubbles with a standard centrifugal pump with a large flow of solids.
- No chains or complicated sludge dredging mechanisms.

### FUNCTIONING

1. Inlet of the waste to be treated.
2. Inlet of pressurised water.
3. Microbubble diffusers.
4. Microbubble layer (filter).
5. Outlet of clarified water.
6. Sludge layer.
7. Surface sludge scrapers.
8. Outlet of floating sludge.



### APPLICATIONS

1. Industrial wastewater:
  - Food and beverage.
  - Slaughterhouses and meat industries.
  - Dairies.
  - Canned vegetables.
  - Beverage, soft drinks and juices.
  - Canned fish.
  - Oil Industries.
  - Industry chips and snacks.
  - Oil & Gas: refineries, petrochemical, water congenital
  - Chemical and Pharmaceutical Industry.
  - Energy Sector.
  - Mining.
  - Leachate and waste.
  - Manufacture of paper.
  - Textiles.
2. Sludge thickening.
3. Water purification.
4. Substitution of settlers.

### MATERIALS

- aqualia industrial offers different options according to the application and water characteristics:
- Body and internals in AISI304 or 316.
  - Body in AISI304 or 316 and internals in AISI304 or 316.
  - Body and internals in carbon steel with epoxy coating.



### MODELS (Standard equipments)

DAFAST MODELS	** MAX. FLOW (m³/h) (SS = 300 ppm; Velocity = 16 m/h)	**MAX. FLOW (m³/h) (SS = 1000 ppm; Velocity = 16 m/h)	Diameter (m)	High (m)	Empty weight (Kg)	Operation weight (Kg)	PRESSURIZATION SYSTEM	
	MODEL	Recirculation Flow (m³/h)						
DAFAST-10	11	10	1,00	3,35	500	2.500	F5	1,90
DAFAST-12	17	15	1,20	3,48	550	3.500	F10	3,54
DAFAST-13	20	18	1,30	3,66	600	4.200	F20	6,15
DAFAST-16	32	29	1,65	4,16	900	7.500	F30	9,99
DAFAST-17	36	33	1,75	4,32	1.100	8.750	F45	14,90
DAFAST-20	47	45	2,00	4,57	1.250	11.750	F60	21,40
DAFAST-25	74	67	2,50	5,20	1.750	19.250	F75	24,00
DAFAST-30	108	95	3,00	5,60	2.200	28.000	F100	29,90
DAFAST-35	146	135	3,50	6,32	3.100	43.000	F125	37,50
DAFAST-40	190	170	4,00	6,63	3.250	57.000		
DAFAST-45	240	216	4,50	7,80	8.500	100.000		

\*\*Flow according to the specified solids load. In other situations, please, consult.

\*\*\*Models and pressurization systems according to the solids load.