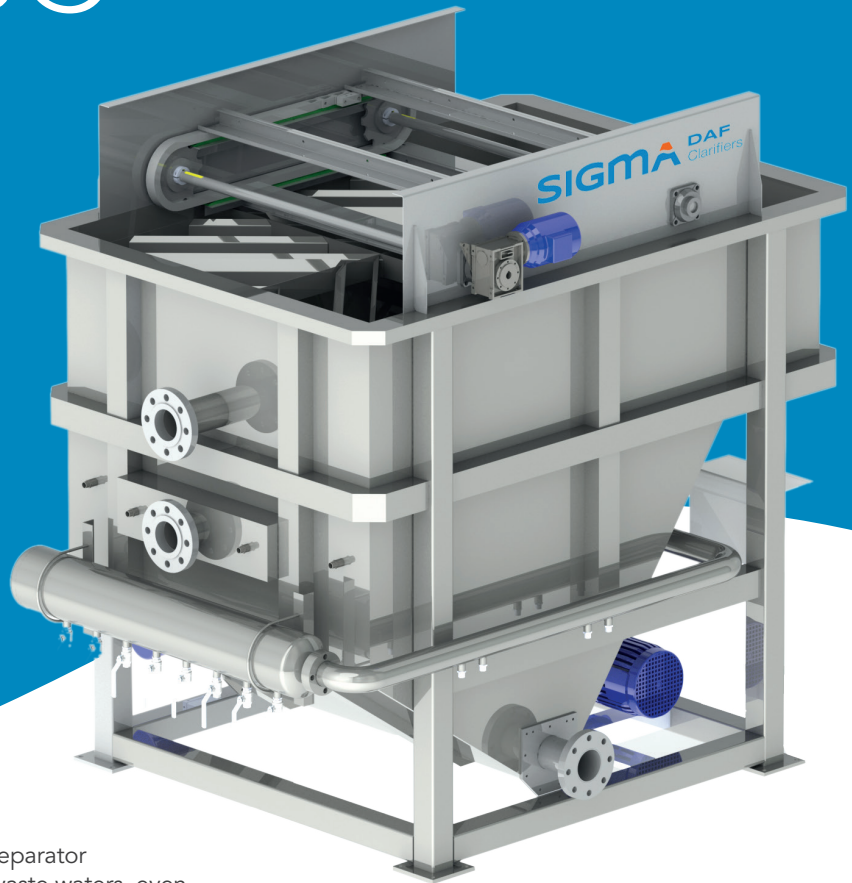


DAFFPBC

This is the perfect compact equipment to treat big water flow and low load of suspended solids.



Overview

The FPBC flotation system is a high-built separator designed to treat low to medium loaded waste waters, even those containing low buoyancy particles.

The system is based on the counter-current flow principle, through an inclined corrugated plate pack. Water is introduced into the system in a cross-flow configuration which effectively reduces the distance that solids have to travel to be separated effectively. Within the compact separator, a thin layer plate pack has been installed to obtain a maximum separating surface area. The separation velocity is determined by the flow (Q) and the effective plate surface (S), therefore particles which achieve a higher rising velocity (by micro bubble aeration) than the overflow rate (Q/S), will be separated.

Due to the application of the plate separating technology, maximum separation efficiency is obtained with very low overflow rates, making the separators compact and effective.

Dissolved Air Flotation (DAF) technology is utilised to remove oils, grease, solids and suspended flocculants that do not possess sufficient buoyancy to float; or where an emulsion of oils and solids (with increased density) require air flotation to enhance the separation process.

The use of micro-bubbles (30 to 50-micron range) increases efficiency, as smaller bubbles easily adhere to equal-sized or larger particles, boosting the overall effectiveness of the system.

Unique system characteristics

The FPBC is a high-performance system with distinguishing features. It includes a single movement separator, which rotates against the hydraulic flow of the water, helping to minimise the skimming distance of the floated sludge and

eliminating solids carry-over. It creates a sludge with a dry solids content 3 to 4 times greater than conventional systems. The result of which, is a reduction in the need for and scale of any future treatment, such as de-watering or drying, consequently resulting in reduced follow-on costs.

The bottom sludge within the system is held in place as it thickens and partially de-watered by the shaftless auger system. This enables the operator to control the sludge thickness, eliminates the early-removal of solids and reduces the build-up of sludge. The residual sludge is then transported to a central discharge point and removed via an automatic pneumatic valve. This discharge cycle is self-cleaning, and any particles adhered to the walls or sides of the system will loosen and follow their initial flow path.

Key features

- Effective separation surface compared to other systems with low investment costs
- Compact system
- Unique sludge de-watering and removal system, producing a highly concentrated sludge
- Efficient laminar flow regime
- Low maintenance and easy to operate
- Custom built

Industrial applications

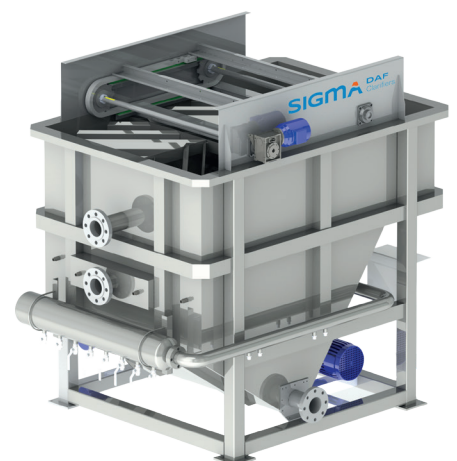
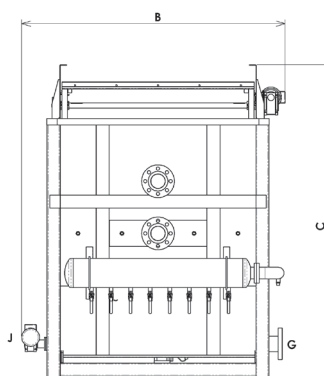
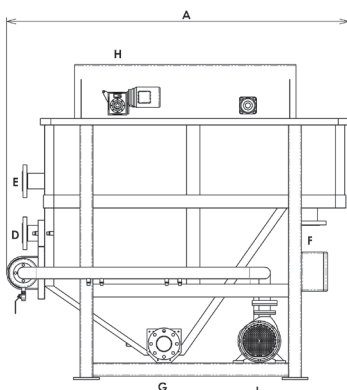
- Mineral oil and petrochemical industries
- Textile production
- Poultry, red meat and fish processing plants
- Fast food manufacture

DAFFPBC



Type	Hydraulic capacity (m³/hr)	Projected Surface (m²)	Free Surface (m²)	Lenght A (mm)	Width B (mm)	Height C (mm)	Power (Kw)	Weight Empty (Kg)	Weight Full (Kg)
FPBC 5 (*)	15	6	1	2300	1100	2100	3	450	1500
FPBC 10 (*)	10	8	1,5	2300	1400	2100	3	550	2700
FPBC 15 (*)	15	12	2	2300	1600	2100	5.5	750	3700
FPBC 20	20	16	2.5	2900	1400	2800	5.5	850	5500
FPBC 35	35	25	3	2900	2000	2800	7.5	1150	7000
FPBC 50	50	37	3,5	3500	2000	2800	7.5	1500	9000
FPBC 75	75	63	4	4400	2000	4000	13	2000	13000
FPBC 100	100	75	5	4800	2000	4000	15	2100	15000
FPBC 125	125	96	6	4800	2400	4000	15	2600	17000
FPBC 150	150	115	8	4800	3000	4000	18	3200	18900
FPBC 175	175	134	9	5800	3400	4000	25	3700	22000
FPBC 200	200	160	11	6300	3400	4000	25	4300	25000
FPBC 250	250	200	13.1	6600	3400	4000	25	5200	27000

(*) without bottom screw



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